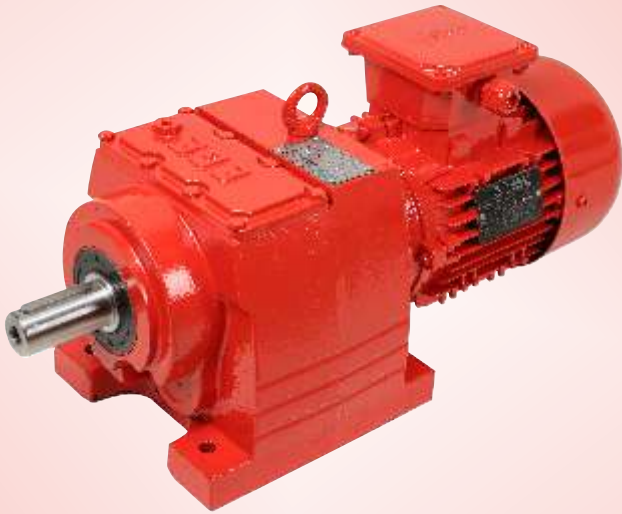




# EGGE

## REDÜKTÖR



Monoblok Redüktörler Ürün Katalođu  
Monoblok Reducers Product Catalogue

MRA / MRF SERİSİ - MRA / MRF SERIES  
MTA / MTF SERİSİ - MTA / MTF SERIES





" Ege Redüktör Makine San. ve Tic. Ltd. Şti." üretim hayatına 1987 yılında 200 m2 alan ve 4 kişilik kadrosuyla Manisa' nın Turgutlu ilçesinde başlamıştır ve üretimine 1992 yılında " Ege Redüktör Makine San. ve Tic. Ltd. Şti."adını alıp, bugün 1000 m2 kapalı alan 25'i teknik olmak üzere toplam 30 kişilik deneyimli kadrosuyla, CNC ve Üniversal tezgahlarıyla devam etmektedir.

Kurulduğumuz günden itibaren müşterilerimize en kaliteli ürünü en kısa zamanda ve en uygun fiyata teslim etmeyi kendimize ilke olarak kabul ettik. Bunu sağlayacak her türlü yeniliği yakından takip ederek bünyemize dahil ediyoruz.

İmalat sektöründe faaliyet gösteren firmamızın amacı, hızla gelişen günümüz teknolojisine uyum sağlayabilen, uzun ömürlü redüktörler imal etmektir. Sektördeki gelişmeleri yakından takip etmek ve bu gelişmelere dahil olabilmek amacı ile yurt içi ve yurt dışı fuarlarımızla sık sık sizlerle buluşuyoruz. Böylece görüşlerinizi ve eleştirilerinizi de değerlendirme imkanını da elde etmiş oluyoruz. Bu sayede her geçen gün sektörün ihtiyaçlarına cevap veren ve büyüyen bir oluşum içindeyiz.

Ege Redüktör ailesi olarak konveyör-bant imalatçılarından plastik imalatçılara kadar geniş bir müşteri yelpazesine; "Motor Akupleli, Helisel Dişlili", "Sonsuz Vidalı", "Delik Milli" ve "Yatık Paralel Milli" tip redüktörlerden oluşan ürün çeşitlerimizle, satış ve satış sonrası yedek parça, bakım seçenekleriyle cevap verebilmek için çalışmaktayız.

Seçiminizi kolaylaştırmak ve redüktörlerle ilgili merak ettiklerinize cevap vermesi amacı ile uzman kadromuzun hazırladığı bu kataloğu sunmaktan kıvanç duyarız.

" Ege Redüktör Makine San. ve Tic. Ltd. Şti." was established in 1987 in Manisa - Turgutlu, its staff consisted of 4 men and it was settled on an area of 200 m2. In 1992 it changed its title into " Ege Redüktör Makine San. ve Tic. Ltd. Şti." , it maintains its production with CNC and Universal workbenches, its personnel consists of experienced staff of 30 men of which 25 men are technicians in indoor area of 1000 m2.

Our principle is to deliver the best product in the shortest time possible for the best prince, since our first day. We follow each innovation which supplies the former mentioned occasions, and include it into our structure.

The purpose of our company which is operating in the production sector, is to produce durable gearboxes which can adapt itself to the rapidly developing current technology. We attend in local and foreign fairs with the aim to follow up closely the developments in the sector, and to be a part of the developments. This causes us to get the possibility to evaluate your opinions and criticisms. Each day we become more competent in supplying the needs of the sector, and maintain growing.

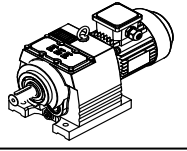
As the Ege Redüktör family we strive to reply the needs of a vast range of clients which range from conveyor band producers to plastic producers, with an assortment of gearboxes as "Helical Geared and Motorized" , "Worm Geared" , "Hollow Shaft" , and "Horizontal Parallel Shaft" , solid and post-sale spare parts, upkeep.

We're proud to present you this catalogue which was prepared by our team of experts with the aim to reply your questions about gearboxes and to ease your choice.

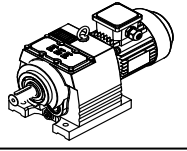
Saygılarımla ,

**Mak. Müh. İsmail ULCAY**

**Genel Müdür**



|   |       |       |    |
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## TANITIM

Makine imalatı ve sanayide kullanılan redüktörlerimizin; sessiz çalışmasını, uzun ömürlü ve yüksek verimli olmasını sağlayan gövdeler ve dişli grubu elemanları, ileri teknoloji ile donatılmış geniş makine parkımızda bulunan CNC Dik İşlem Merkezleri, CNC Torna, Dişli Profil Taşlama, Silindirik, Taşlama ve Sonsuz Vida Taşlama tezgahlarında yüksek hassasiyetle işlenmektedir.

Gelişen teknoloji ve ihtiyaçlar, mevcut ürünlerin optimizasyonunu ve yeni ürünlerin tasarımını zorunlu kılmıştır. Bu sebeple AR-GE çalışmalarına önem veren firmamızın bu yöndeki yatırımları gün geçtikçe artmakta, CAD (Bilgisayar Destekli Tasarım) ortamında yeni modeller tasarlanmakta ve bu yeni ürünlerin gövdeleri ve dişli gruplarının analizleri CAE yardımıyla yapılmakta böylece gövde ve dişli mukavemetleri hızlı ve güvenilir şekilde tespit edilmektedir.

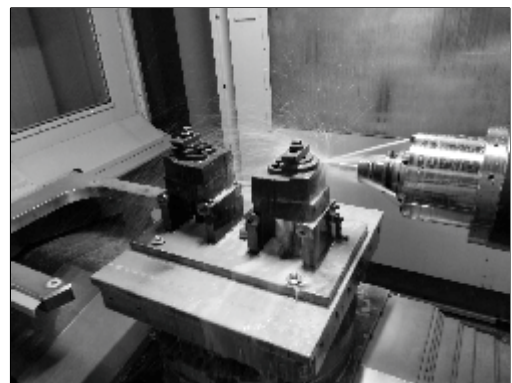
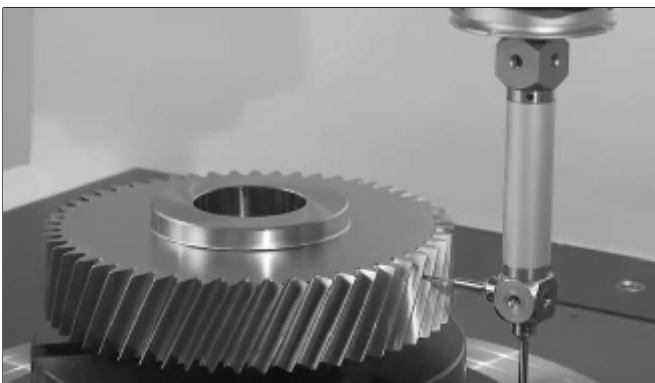
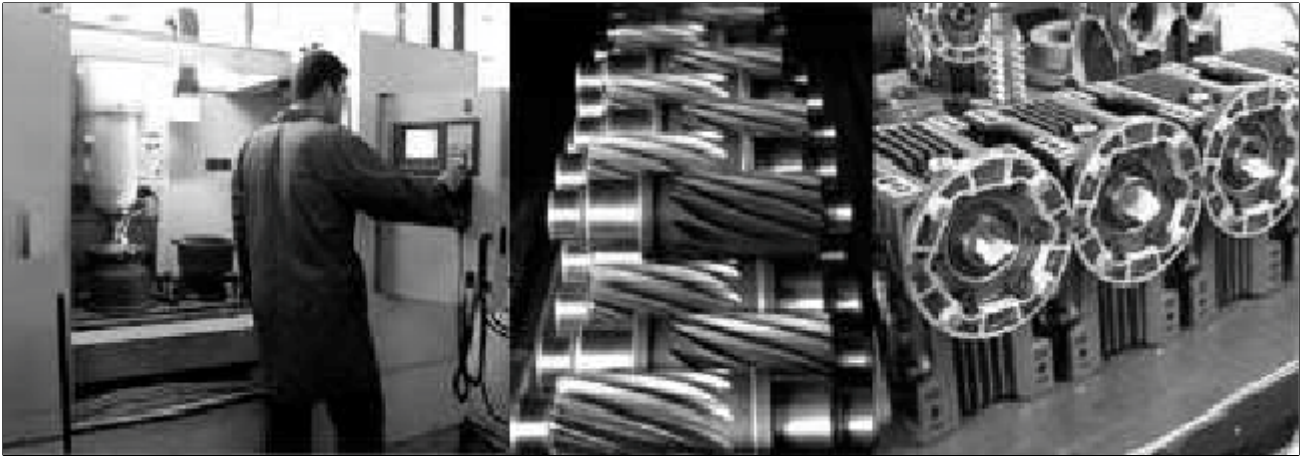
İç pazarda kalitesiyle, hızlı hizmet anlayışı, müşterilerine verdiği güven, hızlı hizmet anlayışı ve sağladığı ürün garantisıyla hızla yükselen EGE REDÜKTÖR markası, Avrupa' ya ve Orta Doğu ülkelerine yaptığı ihracatlarla yurt dışı pazarında da kendini kanıtlayarak aranan bir marka haline gelmiştir.

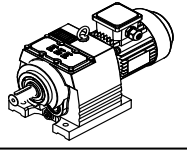
## INTRODUCTION

The trunks and gear group elements which cause the gearboxes (which are used for the production of machine industry) to operate silently, and to be long lasting and be productive are present in our vast machine park which is equipped with high technology. The worm gear grinding workbenches are processed with high sensitivity.

The developing technology and requirements have made the designation of new products and the optimization of available products mandatory. Because of this increases the investments of our company in order to display achievements in the field of research and development which is highly esteemed by the company. New models are designed with CAD and analysis of gear groups of the new products are made with the help of CAE; this causes the resistance of the trunks and gear groups to be determined in fast and secure way.

The brand "Ege Redüktör" has experienced a rapid achievement with its quality which displays itself in the local market, and its rapid service perceptiveness. It has also turned out to be a prominent brand, by having proved itself in the foreign market by carrying out exportations to countries in Europe and the Middle East.





## GENEL BİLGİLER

Seri üretimimizi oluşturan çeşitli hizmet ihtiyaçlarını karşılayan başlıca ürünler;

1. Monoblok Gövdeye Sahip Ayalı/Flanşlı Seçenekleri Bulunan Helisel Dişli Yardımı İle Aktarım Yapan Giriş Ve Çıkış Milleri Aynı Düzlemde Ve Birbirine Paralel Uzanan Motorlu (Yada Motorsuz) Redüktörler ~ MRA ~ MRF ~ MTA ~ MTF
2. Ayaklı / Flanşlı Helisel Dişlili Motorlu ( ya da Motorsuz) Redüktörler ~ A-F-T
3. Sonsuz Vidalı Döküm ve Alüminyum Gövdeli Redüktörler ~ ERS
4. Delik Şaftlı Tek ve Çift Kademeli Redüktörler ~ EP
5. D Tip Monoblok Gövdeli Delik Şaftlı Redüktörler ~ED
6. Yatık Paralel Milli ve Yatık Paralel Milli Ekstruder Tip Redüktörler ~ K ve EK redüktörler olarak sıralanmaktadır.

“Ege Redüktör Markası” ile üretilen redüktörlerin gövdeleri; pik ve alüminyum döküm olmak üzere iki çeşittir. Alüminyum enjeksiyon gövdeler; ETİ-AL 171 malzemesinden ve metal enjeksiyon makinelerinde, pik döküm gövdeler ise GG24 malzemededen imal edilmektedir.

Redüktörlerde kullanılan “Helisel Dişliler” ve “Sonsuz Vidalar” 8620 (21NiCrMo2) sementasyon çeliğinden imal edilmekte ve 58 ~ 60 HRC değerinde sertleştirilmektedir.

Dişlilere sementasyon işlemi uygulandıktan sonra profilleri taşlanarak, redüktörlerin sessiz çalışması, uzun ömürlü yüksek verimli ve yüksek mukavemetli olması sağlanır.

Sonsuz vida çark dişlileri; GGG50 sfero çıkış mili üzerine CuSn12 Bronz alaşımının dökülmesiyle elde edilen yekpare bir yapıdır. Bu yapı sayesinde farklı yönde etki eden yüklere karşı oldukça mukavim sistem elde edilmiş olur.

Redüktörün çalışma sıcaklığı -30 0C' den düşük 60 0C' den yüksek olması durumunda özel keçeler kullanılması gerekmektedir.

**0 °C' nin altında çalışan redüktörlerin de özel gereksinimleri vardır.**

## GENERAL INFORMATIONS

The main products which composes our serial manufacture to handle with various duty requirements compiled as;

1. “Monoblok” Gearbox Can Be Connected To The Machine By Using The Foot Or Flange On The Gearbox. The Input And Output Shafts Are Parallel To Each Other And On The Same Plane. The Gearbox Can Be Motorized (Or Non Motorized) ~ MRA ~ MRF ~ MTA ~ MTF
2. Foot / Flange Mounted Helical Geared Motorized ( or Non - Motorized ) Gearboxes ~ A-F-T
3. Worm Geared Gearboxes With Cast Iron and Aluminum Injection Body
4. Hollow Shaft, Single or Double Stage Gearboxes ~ EP
5. D Type Hollow Shaft Gearboxes With Monoblock Body ~ ED
6. Horizontal Parallel Axle and Extruder Parallel Axle Type Gearboxes ~ K and EK

The bodies of the gearboxes manufactured as the trade mark of “Ege Redüktör Mak. San” are two types as cast iron and aluminum die casting. Aluminum injection bodies are made by the material ETI-AL 171 and by die casting moulding, cast iron bodies are made by the material GG24.

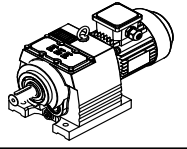
The “Helical Gears” and “Worm Gears” used in the gearboxes are made by 8620 (21NiCrMo2) case hardening steel and hardened to the value of 58 ~ 60 HRC.

After case hardening the gears the teeth profiles are grinding so the gearboxes become silent, long lifed, high efficiency.

Worm gear cogwheels are monobloc bodies made by, over GGG50 output shaft, CuSn12 Bronze alloy. By this body we have a quite durable system to the loads which effects from different directions.

When the temperture of the gearboxes operating ambient is lower than - 30 0C and higher than 60 0C then special seals must be used.

**The gearboxes which work under 0 °C needs special requirements. These are:**



## ✓ TİP TANIMLAMALARI:

### **Monoblok Gövdeli Ayaklı/Flanşlı Helisel Dişli Redüktörler:**

Bu tip redüktörlerimiz; on üç farklı boyda ana gövde tipine sahiptir. Ayaklı ve flanşlı olmak üzere iki ana çeşide ayrılan ürünümüz her iki çeşit içinde 0,12 kw-160 kw güç aralığında toplamda 6 kademeye ulaşan aktarmalı ve çift redüktörlü seçenekleri ile 0,1 d/d-500 d/d devir aralığında geniş ürün yelpazesine sahiptir.

**MRA...** Monoblok tip, ayaklı, motorlu, helisel dişli redüktörler / Monoblock type helical geared motors, foot mounted.

**MRF...** Monoblok tip flanşlı motorlu helisel dişli redüktörler / Monoblock type helical geared motors, flange mounted.

**MTA...** Monoblok tip mil girişli, ayaklı motorsuz helisel dişli redüktörler / Monoblock type helical geared units with solid input shaft, foot mounted.

**MTF...** Monoblok tip mil girişli, flanşlı, motorsuz helisel dişli redüktörler / Monoblock type helical geared units with solid input shaft, flange mounted.

**MNFA...** Monoblok tip, helisel redüktörler, motorsuz, IEC B5/B14 flanşlı, ayaklı / Monoblock type helical geared units with IEC B5/B14 motor flange, foot mounted

**MNF...** Monoblok tip, helisel redüktörler, motorsuz, IEC B5/B14 flanşlı, çıkış flanşlı / Monoblock type helical geared units with IEC B5/B14 motor flange, flange mounted

**MVA...** Monoblok tip, helisel redüktörler, IEC B5/B14 flanşlı, motorlu, ayaklı / Monoblock type helical geared motors with IEC B5/B14 motor flange, foot mounted

**MVF...** Monoblok tip, helisel redüktörler, IEC B5/B14 flanşlı, motorlu, flanşlı / Monoblock type helical geared motors with IEC B5/B14 motor flange, flange mounted

**MRFA...** Monoblok tip, helisel redüktörler, ayaklı, çıkış flanşlı, motorlu / Monoblock type helical geared motors, foot mounted, with output flange

**MNFA...** Monoblok tip, helisel redüktörler, ayaklı, çıkış flanşlı, motorsuz, IEC B5/B14 flanşlı / Monoblock type helical geared units, foot mounted, with IEC B5/B14 flange, with output flange

**MVFA...** Monoblok tip, helisel redüktörler, ayaklı, çıkış flanşlı, motorlu, IEC B5/B14 flanşlı / Monoblock type helical geared motors, foot mounted, with IEC B5/B14 flange, with output flange

**MTFA...** Monoblok tip, helisel redüktörler, ayaklı, çıkış flanşlı, motorsuz, giriş milli / Monoblock type helical geared units, foot mounted, with solid input shaft, with output flange

**MRB...** Monoblok tip, helisel redüktörler, agitator boğazlı, motorlu / Monoblock type helical geared motors, with agitator output flange

**MNB...** Monoblok tip, helisel redüktörler, agitator boğazlı, motorsuz, IEC B5/B14 flanşlı / Monoblock type helical geared units, with agitator output flange with IEC B5/B14 flange

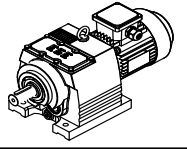
**MVB...** Monoblok tip, helisel redüktörler, agitator boğazlı, motorlu, IEC B5/B14 flanşlı / Monoblock type helical geared motors, with agitator output flange with IEC B5/B14 flange

**MTB...** Monoblok tip, helisel redüktörler, agitator boğazlı, motorsuz, mil girişli / Monoblock type helical geared units, with agitator output flange, with solid input shaft

## ✓ TYPE DESCRIPTIONS:

### **Monoblock house Foot / Flange Mounted Helical Geared Reducers:**

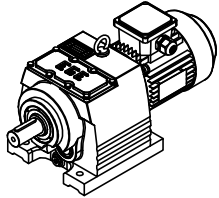
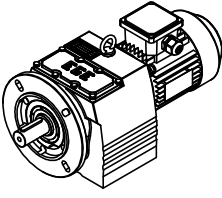
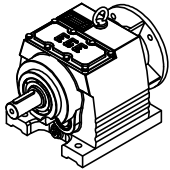
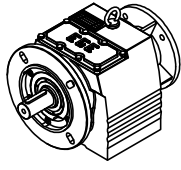
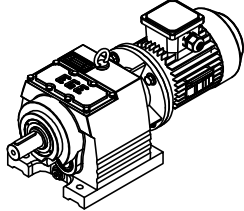
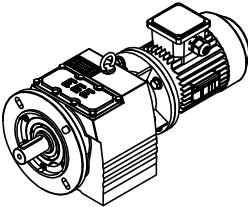
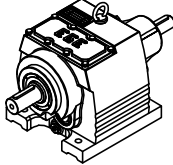
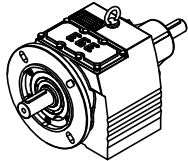
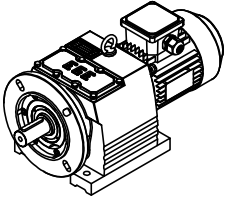
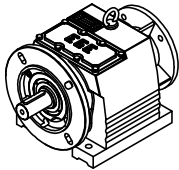
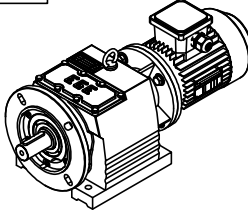
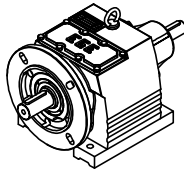
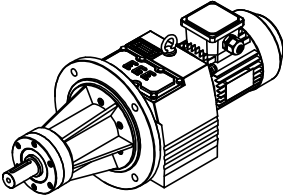
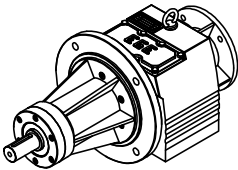
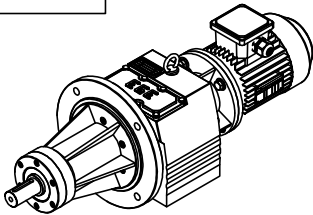
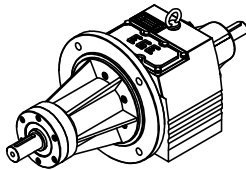
In our these type gearboxes; there are thirteen main bodies. The gearbox can be connected to the machine by using the foot or flange on the gearbox. 0.12 kw ~ 160 kw power range; 0,1 r.p.m ~ 500 r.p.m. Gained by stages, motorized and non-motorized options.

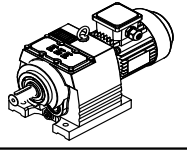


✓ **TİP TANIMLAMALARI / TYPE DESCRIPTIONS :**

Tip / Type :  
**M R A 2 0 3 / 90 L**

|                        |  |
|------------------------|--|
| Redüktör Tipi          |  |
| Gearbox Type           |  |
| Redüktör Özelliği      |  |
| Gearbox Specialty      |  |
| Gövde Büyüklüğü        |  |
| Hose Sizing            |  |
| Kademe Sayısı          |  |
| Stage                  |  |
| Motor Tipi - Büyüklüğü |  |
| Motor Size             |  |

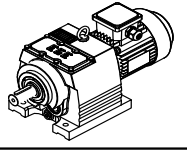
|   |   |  |   |
|---|---|--|---|
| MRA...  | MRF...  | MNA...   | MNF...  |
|   |   |  |  |
| MVA...  | MVF...  | MTA...   | MTF...  |
|  |  |  |  |
| MRFA...   | MNFA...   | MVFA...  | MTFA...   |
|  |  |  |  |
| MRB...  | MNB...  | MVB...   | MTB...  |
|  |  |  |  |



### Motor Büyüklüğüne Göre Çevrim Oranları / Combinations of Ratio According to Motor Size:

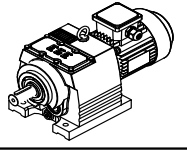
| TİP<br>TYPE | KADEME<br>STAGES | 63                | 71                | 80                | 90               | 100              | 112             | 132             |
|-------------|------------------|-------------------|-------------------|-------------------|------------------|------------------|-----------------|-----------------|
| MRA002      | 2                | 3,58 - 11,09      | 3,58 - 11,01      | 3,58 - 11,01      | 3,58 - 11,01     |                  |                 |                 |
| MRA003      | 3                | 13,45 - 44,96     | 13,45 - 44,64     | 13,45 - 31,64     | 13,45 - 14,49    |                  |                 |                 |
| MRA102      | 2                |                   | 12,99 - 15,76     | 4,52 - 15,76      | 3,89 - 15,76     |                  |                 |                 |
| MRA103      | 3                | 34,79 - 49,90     | 17,12 - 49,90     | 17,12 - 44,06     | 17,12 - 24,56    |                  |                 |                 |
| MRA172      | 2                |                   |                   | 10,95 - 20,67     | 3,34 - 22,73     | 3,34 - 14,40     | 3,34 - 6,52     |                 |
| MRA173      | 3                | 49,21 - 98,73     | 25,79 - 98,02     | 25,79 - 57,07     | 22,95 - 46,82    |                  |                 |                 |
| MRA202      | 2                |                   |                   | 15,84 - 22,73     | 5,73 - 22,73     | 3,46 - 19,86     | 3,46 - 10,68    |                 |
| MRA203      | 3                | 67,21             | 35,59 - 67,21     | 25,95 - 67,21     | 22,95 - 35,59    | 22,95            |                 |                 |
| MRA272      | 2                |                   |                   |                   | 11,81 - 25,58    | 4,48 - 21,17     | 4,48 - 15,88    |                 |
| MRA273      | 3                | 113,5 - 139,52    | 59,93 - 138,52    | 30,11 - 138,52    | 30,11 - 72,47    | 25,24 - 36,11    | 18,77           |                 |
| MRA275      | 5                | 150,07 - 833,23   | 252,15 - 358,26   |                   |                  |                  |                 |                 |
| MRA276      | 6                |                   |                   |                   |                  |                  |                 |                 |
| MRA282      | 2                |                   |                   |                   | 14,14 - 30,01    | 3,60 - 24,93     | 3,11 - 18,83    | 3,11 - 14,14    |
| MRA283      | 3                |                   | 84,57 - 137,88    | 41,46 - 137,88    | 41,46 - 96,45    | 30,45 - 53,47    |                 |                 |
| MRA284      | 4                | 240,42 - 434,20   | 240,42 - 431,09   |                   |                  |                  |                 |                 |
| MRA285      | 5                | 494,94 - 1215,43  |                   |                   |                  |                  |                 |                 |
| MRA286      | 6                |                   |                   |                   |                  |                  |                 |                 |
| MRA372      | 2                |                   |                   |                   | 18,23 - 23,05    | 8,15 - 23,05     | 6,76 - 20,37    | 3,70 - 16,01    |
| MRA373      | 3                |                   | 96,74 - 157,73    | 47,42 - 157,73    | 47,42 - 138,69   | 24,97 - 61,17    | 21,39 - 34,83   | 18,46 - 24,97   |
| MRA374      | 4                | 369,86 - 527,74   | 275,02 - 523,97   | 275,02            |                  |                  |                 |                 |
| MRA375      | 5                | 537,44 - 1390,37  |                   |                   |                  |                  |                 |                 |
| MRA376      | 6                |                   |                   |                   |                  |                  |                 |                 |
| MRA472      | 2                |                   |                   |                   |                  |                  | 15,17 - 21,88   | 6,7 - 21,88     |
| MRA473      | 3                |                   |                   | 90,48 - 218,96    | 90,48 - 218,96   | 30,56 - 139,51   | 25,36 - 72,21   | 25,36 - 55,15   |
| MRA474      | 4                |                   | 295,92 - 674,33   | 346,00 - 529,82   |                  |                  |                 |                 |
| MRA475      | 5                | 941,48 - 2540,50  | 1285,53           |                   |                  |                  |                 |                 |
| MRA476      | 6                |                   |                   |                   |                  |                  |                 |                 |
| MRA572      | 2                |                   |                   |                   |                  |                  | 22,74 - 26,68   | 12,35 - 26,68   |
| MRA573      | 3                |                   |                   |                   |                  | 31,00 - 167,29   | 31,00 - 134,42  | 31,00 - 81,46   |
| MRA574      | 4                |                   | 291,19 - 574,79   | 144,34 - 574,79   | 144,34 - 402,04  |                  |                 |                 |
| MRA575      | 5                | 1140,42 - 2796,31 | 963,86 - 4758,26  |                   |                  |                  |                 |                 |
| MRA576      | 6                | 2870,16 - 4433,47 |                   |                   |                  |                  |                 |                 |
| MRA672      | 2                |                   |                   |                   |                  |                  |                 | 20,49 - 22,90   |
| MRA673      | 3                |                   |                   |                   |                  |                  | 110,53 - 196,57 | 29,84 - 149,08  |
| MRA674      | 4                |                   |                   | 280,96 - 442,11   | 215,93 - 500,29  |                  |                 |                 |
| MRA675      | 5                |                   | 730,31 - 2578,41  | 874,39 - 1259,29  |                  |                  |                 |                 |
| MRA676      | 6                |                   | 2831,82 - 3341,76 |                   |                  |                  |                 |                 |
| MRA772      | 2                |                   |                   |                   |                  |                  |                 |                 |
| MRA773      | 3                |                   |                   |                   |                  |                  |                 | 67,33 - 208,78  |
| MRA774      | 4                |                   |                   | 418,09 - 594,80   | 273,80 - 594,80  | 190,92 - 594,80  |                 |                 |
| MRA775      | 5                |                   | 983,98 - 4811,13  | 983,98 - 2032,25  | 983,98 - 1252,35 |                  |                 |                 |
| MRA776      | 6                |                   | 5201,16 - 5948,64 |                   |                  |                  |                 |                 |
| MRA872      | 2                |                   |                   |                   |                  |                  |                 |                 |
| MRA873      | 3                |                   |                   |                   |                  |                  |                 | 98,61 - 110,15  |
| MRA874      | 4                |                   |                   |                   |                  | 107,58 - 446,33  | 174,65 - 390,66 | 125,67 - 345,60 |
| MRA875      | 5                |                   | 1521,25 - 1923,94 | 915,67 - 1923,94  | 537,64 - 1335,88 | 718,60 - 1210,27 |                 |                 |
| MRA876      | 6                |                   | 2107,91 - 7231,55 | 2107,91 - 3891,52 |                  |                  |                 |                 |
| MRA972      | 2                |                   |                   |                   |                  |                  |                 |                 |
| MRA973      | 3                |                   |                   |                   |                  |                  |                 |                 |
| MRA974      | 4                |                   |                   |                   |                  | 344,10 - 510,01  | 215,99 - 510,01 | 172,05 - 510,01 |
| MRA975      | 5                |                   |                   | 1368,00 - 2027,56 | 662,41 - 2027,56 | 546,83 - 1213,61 | 546,83 - 662,41 | 546,83 - 662,41 |
| MRA976      | 6                |                   |                   | 2836,07 - 5356,36 | 2836,07          |                  |                 |                 |





## Motor Büyüklüğüne Göre Çevrim Oranları / Combinations of Ratio According to Motor Size:

| TİP<br>TYPE | KADEME<br>STAGES | 160            | 180            | 200           | 225           | 250           | 280           | 315           |
|-------------|------------------|----------------|----------------|---------------|---------------|---------------|---------------|---------------|
| MRA002      | 2                |                |                |               |               |               |               |               |
| MRA003      | 3                |                |                |               |               |               |               |               |
| MRA102      | 2                |                |                |               |               |               |               |               |
| MRA103      | 3                |                |                |               |               |               |               |               |
| MRA172      | 2                |                |                |               |               |               |               |               |
| MRA173      | 3                |                |                |               |               |               |               |               |
| MRA202      | 2                |                |                |               |               |               |               |               |
| MRA203      | 3                |                |                |               |               |               |               |               |
| MRA272      | 2                |                |                |               |               |               |               |               |
| MRA273      | 3                |                |                |               |               |               |               |               |
| MRA275      | 5                |                |                |               |               |               |               |               |
| MRA276      | 6                |                |                |               |               |               |               |               |
| MRA282      | 2                |                |                |               |               |               |               |               |
| MRA283      | 3                |                |                |               |               |               |               |               |
| MRA284      | 4                |                |                |               |               |               |               |               |
| MRA285      | 5                |                |                |               |               |               |               |               |
| MRA286      | 6                |                |                |               |               |               |               |               |
| MRA372      | 2                |                |                |               |               |               |               |               |
| MRA373      | 3                |                |                |               |               |               |               |               |
| MRA374      | 4                |                |                |               |               |               |               |               |
| MRA375      | 5                |                |                |               |               |               |               |               |
| MRA376      | 6                |                |                |               |               |               |               |               |
| MRA472      | 2                | 3,23 - 17,04   | 3,23 - 13,40   |               |               |               |               |               |
| MRA473      | 3                | 17,82 - 21,48  |                |               |               |               |               |               |
| MRA474      | 4                |                |                |               |               |               |               |               |
| MRA475      | 5                |                |                |               |               |               |               |               |
| MRA476      | 6                |                |                |               |               |               |               |               |
| MRA572      | 2                | 4,32 - 22,74   | 4,32 - 18,92   | 4,32 - 14,37  |               |               |               |               |
| MRA573      | 3                | 26,22 - 39,50  |                |               |               |               |               |               |
| MRA574      | 4                |                |                |               |               |               |               |               |
| MRA575      | 5                |                |                |               |               |               |               |               |
| MRA576      | 6                |                |                |               |               |               |               |               |
| MRA672      | 2                | 7,82 - 22,90   | 3,74 - 22,90   | 3,25 - 17,71  | 3,25 - 11,83  |               |               |               |
| MRA673      | 3                | 26,34 - 60,68  | 26,34 - 38,83  |               |               |               |               |               |
| MRA674      | 4                |                |                |               |               |               |               |               |
| MRA675      | 5                |                |                |               |               |               |               |               |
| MRA676      | 6                |                |                |               |               |               |               |               |
| MRA772      | 2                | 21,14          | 14,37 - 21,14  | 9,50 - 21,14  | 6,08 - 14,37  | 6,08 - 14,37  |               |               |
| MRA773      | 3                | 22,35 - 133,02 | 22,35 - 75,89  | 22,35 - 34,47 | 17,19 - 30,74 | 17,19 - 22,35 |               |               |
| MRA774      | 4                |                |                |               |               |               |               |               |
| MRA775      | 5                |                |                |               |               |               |               |               |
| MRA776      | 6                |                |                |               |               |               |               |               |
| MRA872      | 2                |                |                |               | 4,27 - 9,97   | 4,27 - 9,97   | 4,27 - 9,97   |               |
| MRA873      | 3                | 40,06 - 110,15 | 40,06 - 110,15 | 13,85 - 74,60 | 11,45 - 45,57 | 11,45 - 34,12 | 11,45 - 27,06 |               |
| MRA874      | 4                |                |                |               |               |               |               |               |
| MRA875      | 5                |                |                |               |               |               |               |               |
| MRA876      | 6                |                |                |               |               |               |               |               |
| MRA972      | 2                |                |                |               |               | 14,23 - 16,04 | 7,02 - 16,04  | 7,02 - 16,04  |
| MRA973      | 3                | 54,14 - 186,91 | 36,84 - 166,70 | 29,14 - 90,46 | 17,93 - 69,23 | 17,93 - 54,14 | 17,93 - 36,84 | 17,93 - 22,67 |
| MRA974      | 4                |                |                |               |               |               |               |               |
| MRA975      | 5                |                |                |               |               |               |               |               |
| MRA976      | 6                |                |                |               |               |               |               |               |



### ✓ **SERVİS FAKTÖRÜ:**

Redüktörlerin çalışma şartlarına bağlı olarak üzerlerine gelen farklı kuvvetler nedeniyle farklı yüklerle maruz kalırlar. Uzun yıllar boyu gözlenen çalışma şartlarına bağlı olarak yapılan hesaplamalar; güç kaynağı ile tahrik edilen tarafta bulunan makina ve makina elemanlarının cinsine göre farklı değerlerde emniyet katsayılarını kullanma zorunluluğunu gündeme getirmiştir.

İşte bu redüktörün, çalıştığı şartlar ile uyumlu olması için gerekli olan emniyet katsayısı "Servis Faktörü" dür.

#### Servis faktörünü etkileyen parametreler:

1. Yük Sınıfı
2. Saatteki Start Sayısı
3. Günlük Çalışma Süresi
4. Redüktörün Tahrik Tipi

olarak sıralanabilir. Bu özelliklerden de anlaşılacağı gibi servis faktörü, bir redüktörün karakteristiğini ortaya koyan bir kavramdır.

### ✓ **SERVICE FACTOR:**

Gearboxes exposure different types of loads causing different operating conditions. Experiences of a long time period has shown us to consider diferent values of service coefficient due todifferent power supply and machine equipment.

The safety coefficient which is important for concordance of operating conditions and gearboxes called "Service Factor".

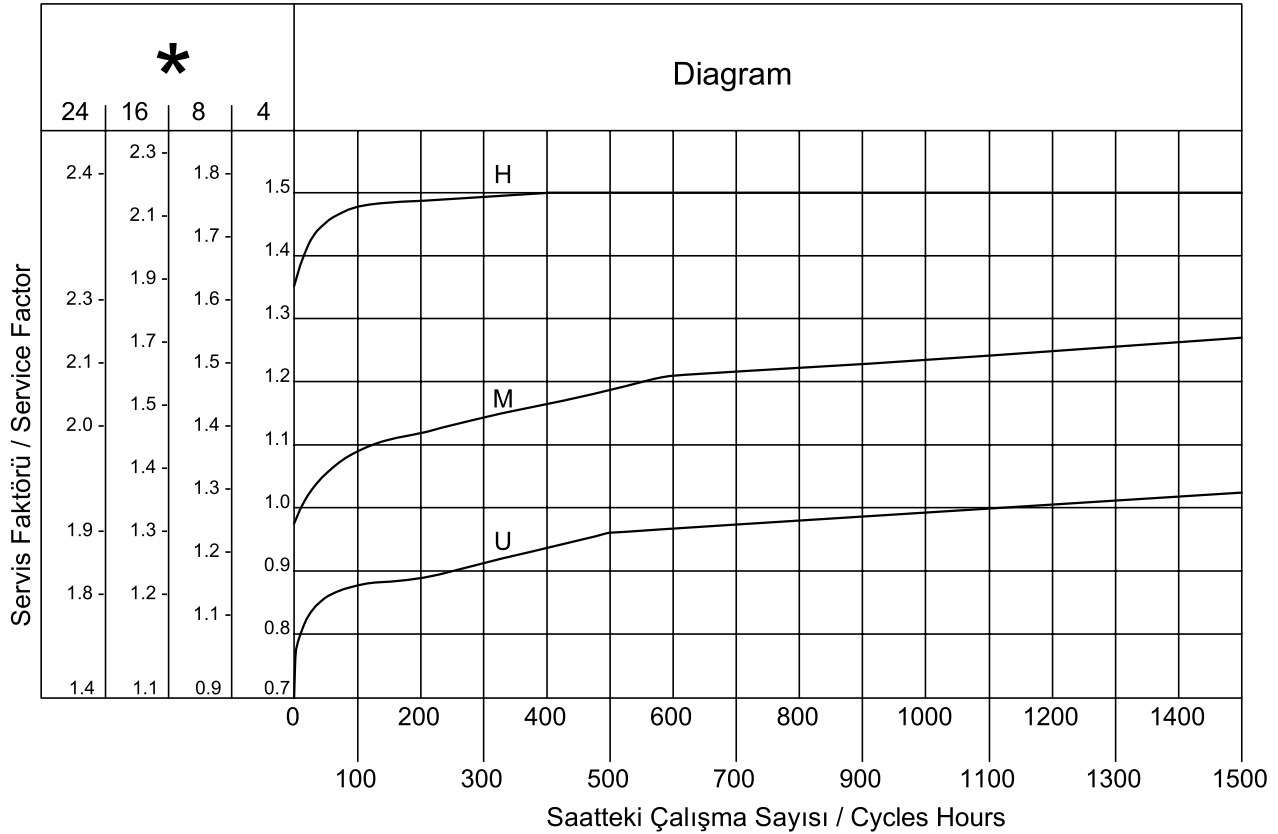
#### The parameters which effects service factor:

1. Load classification
2. Number of start per hour
3. Daily operating time
4. Type of gearboxes turning on

As understood by these parameters, service factor is a concept which explains the character of a gearbox.

\* Günde Çalışma Süresi (saat / gün)

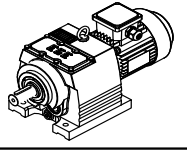
\* Operating Time Hours (hours / day)



**U** : Düzgün ve sabit yükler / Uniform loads

**M** : Orta darbeli yükler / Moderate loads

**H** : Ağır darbeli yükler / Heavy shock loads



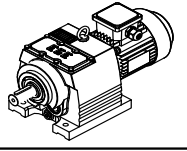
### ✓ YÜK SINIFLANDIRMASI:

| <u>Krenler</u>                   |                                | <u>Hatte Makineleri</u>   |                                     |
|----------------------------------|--------------------------------|---------------------------|-------------------------------------|
| U                                | Kaldırma Dişlileri             | M                         | Hız Ayarlı Silindirler              |
|                                  | Planga Dişlileri               |                           | Sabit Silindirler                   |
| M                                | Bomlu Vinç Dişlileri           |                           | Sarma Makaraları                    |
|                                  | Yana Döndürme Dişlileri        |                           | Tel Çekme                           |
| H                                | Yürütme Dişlileri              |                           | Çubuk Kesme Makineleri              |
|                                  |                                |                           | Döner Tablalar                      |
|                                  |                                |                           | Kabuk Sıyırma                       |
|                                  |                                |                           | Plaka Haddeleme                     |
|                                  |                                |                           | Silindir Haddeleme                  |
|                                  |                                |                           | H Soğuk Haddeleme                   |
| <u>Pompalar</u>                  |                                | <u>İnşaat Makineleri</u>  |                                     |
| U                                | Santrifüj Pompalar (İnce Sıvı) | M                         | Beton Mikserleri                    |
| M                                | Santrifüj Pompalar (Yarı Sıvı) |                           | Ağır Yük Asansörleri                |
| H                                | Basıncılı Pompalar             | <u>Kağıt Makineleri</u>   |                                     |
|                                  | Yana Döndürme Dişlileri        | H                         | Islak Presler                       |
|                                  | Kağıt Hamur Makineleri         |                           |                                     |
|                                  | Kurutma Silindirleri           |                           |                                     |
|                                  | Perdahlama Silindirleri        |                           |                                     |
|                                  |                                |                           | <u>Taş ve Kil İşleme Makineleri</u> |
| H                                | Çekiçli Değirmenler            |                           | Döner Fırınlr                       |
|                                  | Döner Fırınlr                  |                           | Dövücü Değirmenler                  |
|                                  | Dövücü Değirmenler             |                           | Kırıcılar                           |
|                                  | Kırıcılar                      |                           | Kürelî Değirmenler                  |
|                                  | Kürelî Değirmenler             |                           | Tuğla Presi                         |
|                                  | Tuğla Presi                    |                           | Tüp Değirmenler                     |
| Tüp Değirmenler                  |                                | <u>Tekstil Makineleri</u> |                                     |
| M                                | Basma ve Boyama Makineleri     |                           | Kalenderler                         |
|                                  | Dokuma Tezgahları              |                           | Mikserler                           |
|                                  | Hallaç Makineleri              |                           | Ekstruderler                        |
|                                  | Harman Makineleri              |                           | Hamur Karma Makineleri              |
|                                  | Taneleme (Debegat) Makineleri  |                           | H Silindirler                       |
| <u>Yağ Sanayi</u>                |                                | <u>Kauçuk Makineleri</u>  |                                     |
| M                                | Besleme Pompaları              | M                         | Agitatörler                         |
|                                  | Döner Delme Tehçizatları       |                           | Kurutma Merdaneleri                 |
|                                  |                                |                           | Mikserler ve Silindirler            |
| <u>Yiyecek Sanayi</u>            |                                | <u>Kimya Sanayi</u>       |                                     |
| M                                | Kutu Bıçaklar                  | M                         | Agitatörler                         |
|                                  | Kutu Kaplama                   |                           | Kurutma Merdaneleri                 |
|                                  | Mayalama Tekneleri             |                           | Mikserler ve Silindirler            |
| H                                | Kenar Açma                     | <u>Konveyörler</u>        |                                     |
| M                                | Kutu Bıçaklar                  | M                         | Bant Cepli Konveyörler              |
|                                  |                                |                           | Çelik Bantlı Konveyörler            |
|                                  |                                |                           | Dökme Yüklü Kayışlı Konveyörler     |
| H                                | Kutu Kaplama                   | H                         | Yük Asansörleri                     |
|                                  |                                |                           | Parça Yüklü Kayışlı Konveyörler     |
| <u>Çamaşır Yıkama Makineleri</u> |                                | <u>Food Industry</u>      |                                     |
| M                                | Döner Kurutucular              | M                         | Cane Knives                         |
|                                  | Yıkama Makineleri              |                           | Cane Crushers                       |
|                                  |                                |                           | Mach Tubs                           |
|                                  |                                | H                         | Cane Mills                          |
| <u>Laundries</u>                 |                                | <u>Chemical Industry</u>  |                                     |
| M                                | Tumblers                       | M                         | Agitators                           |
|                                  | Washing Machines               |                           | Drying Drums                        |
|                                  |                                |                           | Mixers and Rolling Mills            |
| <u>Conveyors</u>                 |                                | <u>Conveyors</u>          |                                     |
| M                                | Band Pocket Conveyors          | M                         | Band Pocket Conveyors               |
|                                  | Steel Belt Conveyors           |                           | Steel Belt Conveyors                |
|                                  | Belt Conveyors                 |                           | Belt Conveyors                      |
| H                                | Hoists                         | H                         | Hoists                              |
|                                  | Bulk Belt Conveyors            |                           | Bulk Belt Conveyors                 |

### ✓ LOAD SPECIFICATION:

| <u>Cranes</u>        |                                    | <u>Metal Rolling Mills</u> |                              |
|----------------------|------------------------------------|----------------------------|------------------------------|
| U                    | Hoist Gears                        | M                          | Roller Adjustments Drives    |
|                      | Lifting Gears                      |                            | Roller Straightened          |
| M                    | Defrocking jib Gears               |                            | Winding Machines             |
|                      | Slowing Gears                      |                            | Wire Drawing Benchs          |
| H                    | Travelling Gears                   |                            | Billet Shears                |
|                      |                                    |                            | Rollers Tables(heavy)        |
|                      |                                    |                            | Descaling Machines           |
|                      |                                    |                            | Sheet Mills                  |
|                      |                                    |                            | Manipulators                 |
|                      |                                    |                            | H                            |
| <u>Pumps</u>         |                                    | <u>Building Machines</u>   |                              |
| U                    | Centrifugal Pumps ( light liquids) | M                          | Concrete Mixers              |
| M                    | Centrifugal Pumps ( semi liquids)  |                            | Hoist                        |
| H                    | Pressure Pumps                     | <u>Paper Machines</u>      |                              |
|                      | Plunger Pumps                      | H                          | Wet Presses                  |
|                      | Pulpers                            |                            |                              |
|                      | Drying Cylinders                   |                            |                              |
|                      | Glazing Cylinders                  |                            |                              |
|                      |                                    |                            | <u>Textile Machines</u>      |
| H                    | Hammer Mills                       |                            | Printing and Dyeing Machines |
|                      | Rotary Ovens                       |                            | Looms                        |
|                      | Rotary Ovens                       |                            | Willow                       |
|                      | Beater Mills                       |                            | Batchers                     |
|                      | Breakers                           |                            | Tanning Vats                 |
|                      | Ball Mills                         |                            |                              |
| Brick Presses        |                                    | <u>Rubber Machinery</u>    |                              |
|                      |                                    | M                          | Calenders                    |
|                      |                                    |                            | Mixers                       |
|                      |                                    |                            | Extruders                    |
|                      |                                    |                            | Pug Mills                    |
|                      |                                    | H                          | Rolling Mills                |
| <u>Oil Industry</u>  |                                    | <u>Chemical Industry</u>   |                              |
| M                    | Pipeline Pumps                     | M                          | Agitators                    |
|                      | Rotary Drilling Equipment          |                            | Drying Drums                 |
|                      |                                    |                            | Mixers and Rolling Mills     |
| <u>Food Industry</u> |                                    | <u>Conveyors</u>           |                              |
| M                    | Cane Knives                        | M                          | Band Pocket Conveyors        |
|                      | Cane Crushers                      |                            | Steel Belt Conveyors         |
|                      | Mach Tubs                          |                            | Belt Conveyors               |
| H                    | Cane Mills                         | H                          | Hoists                       |
|                      |                                    |                            | Bulk Belt Conveyors          |
| <u>Laundries</u>     |                                    | <u>Conveyors</u>           |                              |
| M                    | Tumblers                           | M                          | Band Pocket Conveyors        |
|                      | Washing Machines                   |                            | Steel Belt Conveyors         |
|                      |                                    |                            | Belt Conveyors               |
|                      |                                    | H                          | Hoists                       |
|                      |                                    |                            | Bulk Belt Conveyors          |

**U** : Düzgün ve sabit yükler / Uniform loads  
**M** : Orta darbeli yükler / Moderate loads  
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## ✓ YAĞLAMA:

Redüktörde kullanılacak yağ; redüktörün kullanım ortamına, yapılan işleme, devir sayısına bağlı olarak seçilmelidir.

Kullanılan yağın karakteristiğini belirleyen etmenler:

1. Yağ Bazı
2. Viskozite
3. Katkı Maddeleri

### 1. Yağ Bazı:

Kullanılan yağ sentetik ya da mineral bazlı olabilir.

Sentetik yağların maliyeti, mineral bazlı yağlara göre yüksek olup avantajları aşağıda belirtilmiştir.

1. Düşük sürtünme katsayısına sahiptir böylece yüksek verimle çalışır.
2. Kimyasal yapısını uzun zaman korur, bu da yağ ömrünün uzamasını sağlar.
3. Daha iyi viskozite içeriğine sahip olmasıyla değişik sıcaklık şartlarına daha iyi uyum sağlar.

Madeni yağların, sentetik yağlara tercih edilmesinin sebebi; sentetik yağlarda gözlenen kolay tutuşabilme, zehirlenme, her malzemeyle uyum sağlayamama, her katkıyı içinde çözümlenememe ve yüksek fiyat gibi dezavantajlara sahip olmamasıdır.

### 2. Viskozite:

Redüktörlerde kullanılan yağın viskozitesi ilk çalışma anında yüksektir. Eğer mümkünse, yağ viskozitesini düşürmek amacıyla, redüktör yüksüz olarak birkaç dakika çalıştırılmalıdır.

Kullanılan yağın viskozitesi redüktörün sıcaklığına ve hızına bağlı olarak değişir.

Yüksek viskozite; düşük devirli ve/veya yüksek sıcaklıkta çalışan redüktörler için tavsiye edilir.

Düşük viskozite ise yüksek dönme hızı ve/veya düşük sıcaklıkta çalışan redüktörler için tavsiye edilir.

### 3. Katkı Maddeleri:

Tüm mineral yağlar; aşınmayı, oksidasyonu ve köpürmeyi önlemek amacıyla katkı maddesi içerirler. Bu katkı maddeleri, çalıştıkları ortam ve makina elemanları için (özellikle yağ keçeleri) bir sorun teşkil etmezler.

**Tüm redüktörlerimiz, gerekli yağ miktarları doldurularak sevk edilir.**

## ✓ LUBRICATION:

The lubricant used in the gearbox must be chosen for the workin ambient, process and the r.p.m.

The parameters which effects on lubricant

1. Lubricant base
2. Viscosity
3. Additive mater

### 1. Lubricant Content:

The lubricant can be synthetic or mineral content.

Synthetic lubricant is expensive but have the advantages as told below.

1. Its friction coeffeciant is lower so works with high efficiancy.
2. Keeps its chemical structure for long time so it means lond life lubricant.
3. Concordance of various temperture conditions by having a better viscosity content.

Mineral lubricants are prefered to synthetic lubricants have the disadvantage of catching fire easily, botulism, missolve the additives, high cost, mismatch the other maters.

### 2. Viscosity:

At the begining the viscosity of the lubricant higher. If it is possible to decrease the viscosity gearbox should be turned on for while.

The viscosity of the lubricant changes according to the temperture and speed.

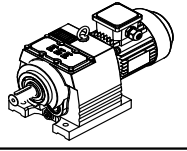
High viscosity; it is recommended for low r.p.m. and / or high temperture of operating ambient.

Low viscosity; it is recommended for high r.p.m. and / or low low temperture of operating ambient .

### 3. Additive Maters:

All the lubricants contain additives to prevent corrosion, oxidation, frothing. These additives don't cause any problem neither for the operating ambient nor the machine element (esp. for the seals)

**All of our gearboxes sent to the customers after filling in enough lubricant.**



## ✓BAKIM:

Mineral yağ kullanılması durumunda; yağ, ilk kullanımdan 500 - 1000 çalışma saati sonra değiştirilmeli ve redüktörün iç kısmı iyi bir şekilde temizlenmelidir. Yağ seviyesi 4000 çalışma saatinden sonra düzenli olarak kontrol edilmelidir ve gerekli ise yağ ilave edilmelidir.

Sentetik yağ kullanılmış ise yağ 12.500 çalışma saatine kadar sorun çıkarmadan çalışır.

Eğer yüksek neme maruz ortamda uzun süre kullanılmadan muhafaza edilecekse bu durumda redüktör yağla doldurulmalı ve tekrar kullanılacağı zaman kullanım seviyesine indirilmelidir.

Çalışma sırasında redüktörün içindeki hava, çalışma şartlarına bağlı olarak genişler ve bu genişleme sonucunda basınç ve buna bağlı olarak sıcaklık artışı gözlenir. İşte bu artışı önlemek amacıyla "havalandırma tapası" kullanılır. Bu yüzden havalandırma tapalarının çalışır durumda olması redüktör ömrü için çok önemlidir.

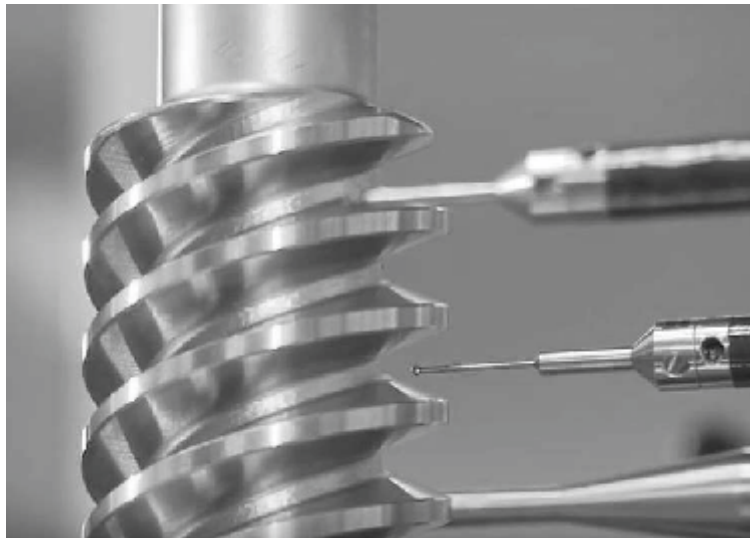
## ✓ MAINTENANCE:

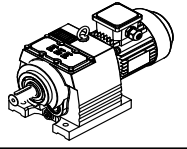
In the case of using mineral lubricant, the lubricant should be changed after 500 - 1000 operating hour period and the inside of the gearbox should be cleaned as well as possible. The level of the lubricant should be checked regularly after a 4000 operating hour period and if it is necessary lubricant should be added.

If the lubricant is synthetic, there isn't any problem by 12.500 operating hour period.

If the gearboxes will kept in the moisture ambient then the reducer should be filled by lubricant and the lubricant level must be decrease when it will be used.

During the operation the air in the gearbox, expands depending on the operating conditions, and this expanding causes the increase of both pressure and temperature. To these events "ventilation plug" is used. Because of this operating of ventilation plug is very important for the gearbox life.












## ✓ YAĞ TIPLERİ / OIL TYPES :

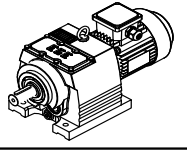
### YAĞLAR Lubricant

| YAĞ CİNSİ<br>LUBRICANT                  | KULLANIM SICAKLIĞI<br>USAGE TEMPERATURE | ISO VİSKOZİTE<br>SINIFI<br>ISO VISCOSITY<br>CLASS |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|--|---|---|---|---|
| <b>MINERAL YAĞLAR</b><br>Mineral Oil    | 0.....+ 100                             | ISO VG 680  | Gravis MF 680   | Degol 3G 680  | Energol GR-XP680  | Spartan EP 680   | GEM 1 680   | Mobilgear Gear 636  | Omala 680   | Alpha SP 680  |
|   | 0.....+ 100                             | ISO VG 460  | Gravis MF 460   | Degol 3G 460  | Energol GR-XP460  | Spartan EP 460   | GEM 1 460   | Mobilgear Gear 634  | Omala 460   | Alpha SP 460  |
|   | 0.....+ 100                             | ISO VG 320  | Gravis MF 320   | Degol 3G 320  | Energol GR-XP320  | Spartan EP 320   | GEM 1 320   | Mobilgear Gear 632  | Omala 320   | Alpha SP 320  |
|   | -5.....+ 100                            | ISO VG 220  | Gravis MF 220   | Degol 3G 220  | Energol GR-XP220  | Spartan EP 220   | GEM 1 220   | Mobilgear Gear 630  | Omala 220   | Alpha SP 220  |
|   | -5.....+ 100                            | ISO VG 150  |   | Degol 3G 150  | Energol GR-XP150  | Spartan EP 150   | GEM 1 150   | Mobilgear Gear 629  | Omala 150   | Alpha SP 150  |
|   | -5.....+ 100                            | ISO VG 100  |   | Degol 3G 100  | Energol GR-XP100  | Spartan EP 100   | GEM 1 100   | Mobilgear Gear 627  | Omala 100   | Alpha SP 100  |
| <b>SENTETİK YAĞLAR</b><br>Synthetic Oil | -20.....+ 140                           | ISO VG 680  |   | Degol 3S 680  | Energol SG-XP680  |  | Syntheso D 680 EP   | Gylgoyle HC 680   |   |   |
|   | 20.....- 140                            | ISO VG 460  | SP 460  | Degol 3S 460  | Energol SG-XP460  | Glycolube EP 460   | Syntheso D 460 CP   | Gylgoyle HC 460   | Tivola SD   | Alphasyn PG 460   |
|   | -25.....- 140                           | ISO VG 320  |   | Degol 3S 320  | Energol SG-XP320  | Glycolube EP 320   | Syntheso D 320 EP   | Gylgoyle HE 320   |   | Alphasyn PG 320   |
|   | -25.....- 140                           | ISO VG 220  | SP 220  | Degol 3S 220  | Energol SG-XP220  |  | Syntheso D 220 EP   | Gylgoyle HF 220   | Tivola WB   | Alphasyn PG 220   |
|   | -30.....- 140                           | ISO VG 150  |   | Degol 3S 150  | Energol SG-XP150  |  | Syntheso D 150 EP   |   |   | Alphasyn PG 150   |
|   | -30.....- 140                           | ISO VG 100  |   |   | Energol SG-XP100  |  | Syntheso D 100 EP   |   |   |   |

### GRESLER

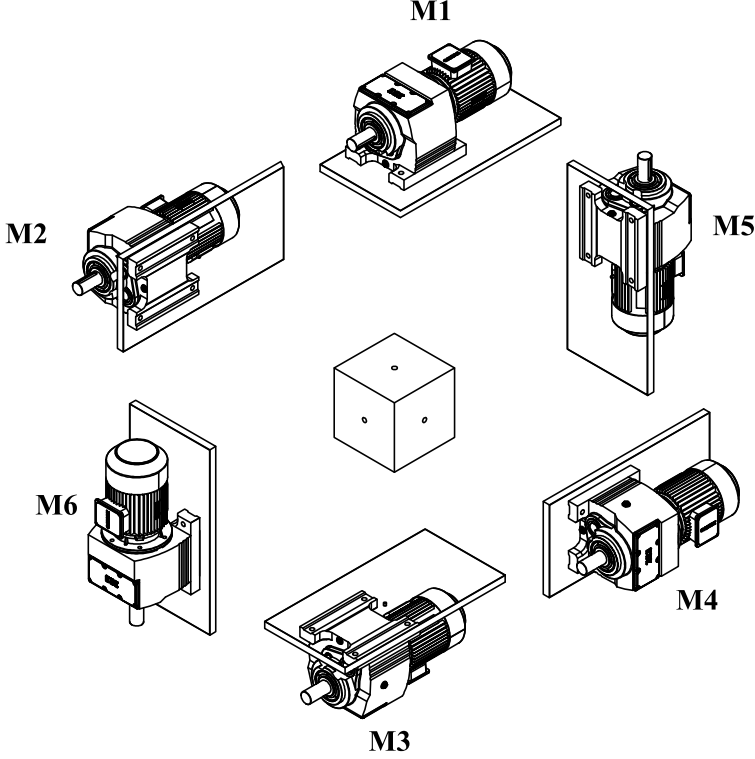
#### Grease

| YAĞ CİNSİ<br>LUBRICANT                      | KULLANIM SICAKLIĞI<br>USAGE TEMPERATURE |  |  |  |  |  |  |  |
|---|---|---|---|---|--|---|---|---|
| <b>MINERAL GRESLER</b><br>Mineral Grease    | -20.....+ 120                           | Degol BG 680  | Energol GR-XP680  | Spartan EP 680  | GEM 1 680  | Mobilgear Gear 636  | Omala 680   | Alpha SP 680  |
| <b>SENTETİK GRESLER</b><br>Synthetic Grease | -30.....+ 100                           | Degol BG 460  | Energol GR-XP460  | Spartan EP 460  | GEM 1 460  | Mobilgear Gear 634  | Omala 460   | Alpha SP 460  |



✓ **MONTAJ POZİSYONLARI / MOUNTING POSITIONS :**

**MRA SERİSİ :**



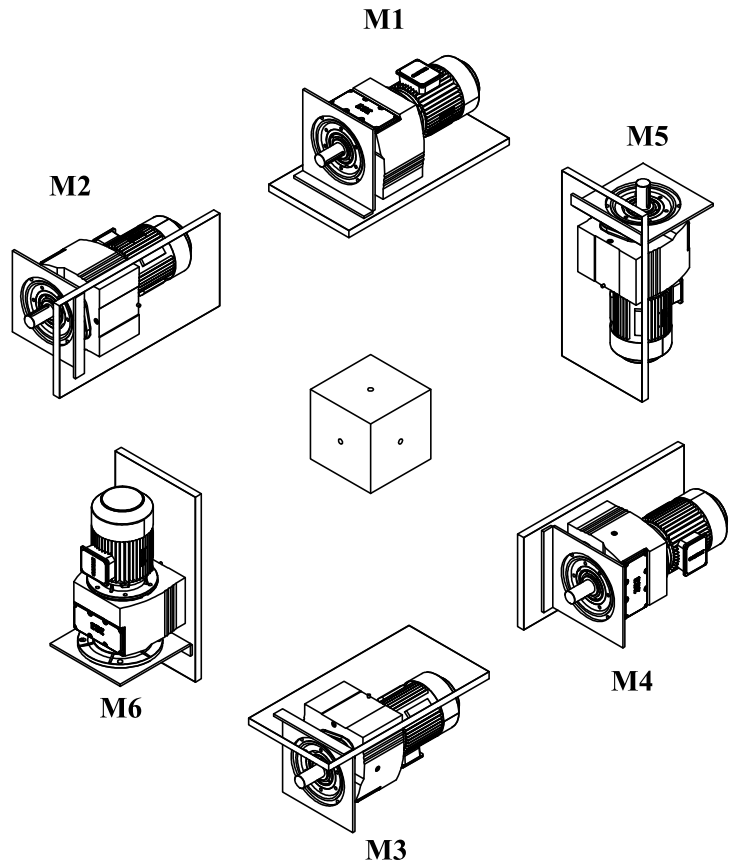
M1....M6 'ya kadar belirtilen montaj pozisyonları redüktörün duruş yönü referans alınarak belirlenmiştir. Montaj yüzeyleri bağlayıcı değildir.

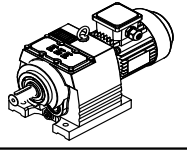
*Figured mounting positions of M1 to M6 are determined as reference of directional position of the gearbox. Mounting surfaces are not binding.*

**MRF SERİSİ :**

M1....M6 'ya kadar belirtilen montaj pozisyonları redüktörün duruş yönü referans alınarak belirlenmiştir. Montaj yüzeyleri bağlayıcı değildir.

*Figured mounting positions of M1 to M6 are determined as reference of directional position of the gearbox. Mounting surfaces are not binding.*



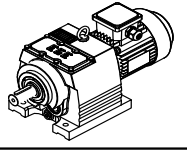


✓ **GÖVDE BÜYÜKLÜĞÜNE VE ÇALIŞMA POZİSYONLARINA GÖRE YAĞ MİKTARLARI :**  
✓ **Lubricant Volume According To Working Positions and Reducer Size :**

| TİP<br>TYPE                | Pozisyon / Position<br>M1 | Pozisyon / Position<br>M2 | Pozisyon / Position<br>M3 | Pozisyon / Position<br>M4 | Pozisyon / Position<br>M5 | Pozisyon / Position<br>M6 |
|----------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| MRA 002 / 3<br>MRF 002 / 3 | 0.4 / 0.35                | 0.6 / 0.55                | 0.5 / 0.5                 | 0.6 / 0.55                | 0.5 / 0.4                 | 0.5 / 0.4                 |
| MRA 102 / 3<br>MRF 102 / 3 | 0.65 / 0.6                | 0.95 / 0.8                | 0.7 / 0.7                 | 0.95 / 0.8                | 0.7 / 0.7                 | 0.7 / 0.7                 |
| MRA 172 / 3<br>MRF 172 / 3 | 0.7 / 0.65                | 0.95 / 0.9                | 0.8 / 0.8                 | 0.95 / 0.8                | 0.8 / 0.7                 | 0.8 / 0.7                 |
| MRA 202 / 3<br>MRF 202 / 3 | 1.2 / 1.1                 | 2.1 / 2                   | 2 / 1.9                   | 2.1 / 2                   | 1.4 / 1.3                 | 1.4 / 1.3                 |
| MRA 272 / 3<br>MRF 272 / 3 | 1.1 / 1                   | 2 / 1.7                   | 1.9 / 1.5                 | 2 / 1.7                   | 1.3 / 1.2                 | 1.3 / 1.2                 |
| MRA 282 / 3<br>MRF 282 / 3 | 1.7 / 1.6                 | 3 / 2.85                  | 2.8 / 2.5                 | 3 / 2.85                  | 2.6 / 2.4                 | 2.6 / 2.4                 |
| MRA 372 / 3<br>MRF 372 / 3 | 2 / 1.9                   | 3.4 / 3.3                 | 3.1 / 3                   | 3.4 / 3.3                 | 2.8 / 2.6                 | 2.8 / 2.6                 |
| MRA 472 / 3<br>MRF 472 / 3 | 4.5 / 4                   | 8 / 7.6                   | 7.5 / 7                   | 8 / 7.6                   | 5.5 / 5                   | 5.5 / 5                   |
| MRA 572 / 3<br>MRF 572 / 3 | 7/6                       | 12.8 / 11.7               | 11.5 / 10.5               | 12.8 / 11.7               | 8 / 7.5                   | 8 / 7.5                   |
| MRA 672 / 3<br>MRF 672 / 3 | 10 / 8.5                  | 22.5 / 20                 | 20 / 18                   | 22.5 / 20                 | 11 / 11                   | 11 / 11                   |
| MRA 772 / 3<br>MRF 772 / 3 | 20 / 18                   | 35 / 32                   | 30 / 28                   | 35 / 32                   | 22 / 20                   | 22 / 20                   |
| MRA 872 / 3<br>MRF 872 / 3 | 28 / 20                   | 53 / 45                   | 45 / 39                   | 53 / 45                   | 30 / 28                   | 30 / 28                   |
| MRA 972 / 3<br>MRF 972 / 3 | 53 / 50                   | 90 / 87                   | 82 / 80                   | 90 / 87                   | 70 / 65                   | 70 / 65                   |

| TİP<br>TYPE        | Pozisyon / Position<br>M1 | Pozisyon / Position<br>M2 | Pozisyon / Position<br>M3 | Pozisyon / Position<br>M4 | Pozisyon / Position<br>M5 | Pozisyon / Position<br>M6 |
|--------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
|                    | R/A                       | R/A                       | R/A                       | R/A                       | R/A                       | R/A                       |
| MRA 284<br>MRF 284 | 1.6 / 0.25                | 2.85 / 0.25               | 2.5 / 0.25                | 2.85 / 0.25               | 2.4 / 0.25                | 2.4 / 0.25                |
| MRA 374<br>MRF 374 | 1.9 / 0.25                | 3.3 / 0.25                | 3 / 0.25                  | 3.3 / 0.25                | 2.6 / 0.25                | 2.6 / 0.25                |
| MRA 474<br>MRF 474 | 4 / 0.4                   | 7.6 / 0.4                 | 7 / 0.4                   | 7.6 / 0.4                 | 5 / 0.4                   | 5 / 0.4                   |
| MRA 574<br>MRF 574 | 6 / 0.50                  | 11.7 / 0.50               | 10.5 / 0.50               | 11.7 / 0.50               | 7.5 / 0.50                | 7.5 / 0.50                |
| MRA 674<br>MRF 674 | 8.5 / 0.90                | 20 / 0.90                 | 18 / 0.90                 | 20 / 0.90                 | 11 / 0.90                 | 10.5 / 0.90               |
| MRA 774<br>MRF 774 | 18 / 1                    | 32 / 1                    | 28 / 1                    | 32 / 1                    | 20 / 1                    | 20 / 1                    |
| MRA 874<br>MRF 874 | 20 / 2.15                 | 45 / 2.15                 | 39 / 2.15                 | 45 / 2.15                 | 28 / 2.15                 | 28 / 2.15                 |
| MRA 974<br>MRF 974 | 50 / 7                    | 87 / 7                    | 80 / 7                    | 87 / 7                    | 65 / 7                    | 65 / 7                    |
| MRA 275<br>MRF 275 | 1 / 0.4                   | 1.7 / 0.6                 | 1.5 / 0.5                 | 1.7 / 0.6                 | 1.2 / 0.5                 | 1.2 / 0.5                 |
| MRA 285<br>MRF 285 | 1.6 / 0.7                 | 2.85 / 0.95               | 2.5 / 0.7                 | 2.85 / 0.95               | 2.4 / 0.7                 | 2.4 / 0.7                 |
| MRA 375<br>MRF 375 | 1.9 / 0.7                 | 3.3 / 0.95                | 3 / 0.7                   | 3.3 / 0.95                | 2.6 / 0.7                 | 2.6 / 0.7                 |
| MRA 475<br>MRF 475 | 4 / 1.2                   | 7.6 / 2.1                 | 7.01 / 2.1                | 7.6 / 2.1                 | 5 / 1.4                   | 5 / 1.4                   |
| MRA 575<br>MRF 575 | 6 / 1.2                   | 11.7 / 2.1                | 10.5 / 2                  | 11.7 / 2.1                | 7.5 / 1.4                 | 7.5 / 1.4                 |
| MRA 675<br>MRF 675 | 8.5 / 2                   | 20 / 3.4                  | 18 / 3.1                  | 20 / 3.4                  | 11 / 2.8                  | 10.5 / 2.8                |
| MRA 775<br>MRF 775 | 18 / 2                    | 32 / 3.4                  | 28 / 3.1                  | 32 / 3.4                  | 20 / 2.8                  | 20 / 2.8                  |
| MRA 875<br>MRF 875 | 20 / 2                    | 45 / 3.4                  | 39 / 3.1                  | 45 / 3.4                  | 28 / 2.8                  | 28 / 2.8                  |
| MRA 975<br>MRF 975 | 50 / 4.5                  | 87 / 8                    | 80 / 7.5                  | 87 / 8                    | 65 / 5.5                  | 65 / 5.5                  |
| MRA 276<br>MRF 276 | 1 / 0.4                   | 1.7 / 0.55                | 1.5 / 0.5                 | 1.7 / 0.55                | 1.2 / 0.4                 | 1.2 / 0.4                 |
| MRA 286<br>MRF 286 | 1.6 / 0.6                 | 2.85 / 0.8                | 2.5 / 0.7                 | 2.85 / 0.8                | 2.4 / 0.7                 | 2.4 / 0.7                 |
| MRA 376<br>MRF 376 | 1.9 / 0.6                 | 3.3 / 0.8                 | 3 / 0.7                   | 3.3 / 0.8                 | 2.6 / 0.7                 | 2.6 / 0.7                 |
| MRA 476<br>MRF 476 | 4 / 1.1                   | 7.6 / 2                   | 7 / 1.9                   | 7.6 / 2                   | 5 / 1.3                   | 5 / 1.3                   |
| MRA 576<br>MRF 576 | 6 / 1.1                   | 11.7 / 2                  | 10.5 / 1.9                | 11.7 / 2                  | 7.5 / 1.3                 | 7.5 / 1.3                 |
| MRA 676<br>MRF 676 | 8.5 / 1.9                 | 20 / 3.3                  | 18 / 3                    | 20 / 3.3                  | 11 / 2.6                  | 10.5 / 2.6                |
| MRA 776<br>MRF 776 | 18 / 1.9                  | 32 / 3.3                  | 28 / 3                    | 32 / 3.3                  | 20 / 2.6                  | 20 / 2.6                  |
| MRA 876<br>MRF 876 | 20 / 1.9                  | 45 / 3.3                  | 39 / 3                    | 45 / 3.3                  | 28 / 2.6                  | 28 / 2.6                  |
| MRA 976<br>MRF 976 | 50 / 4                    | 87 / 7.6                  | 80 / 7                    | 87 / 7.6                  | 65 / 5                    | 65 / 5                    |

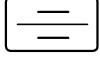




✓ **GÖVDE BÜYÜKLÜĞÜNE VE ÇALIŞMA POZİSYONLARINA GÖRE YAĞ MİKTARLARI :**  
✓ **Lubricant Volume According To Working Positions and Reducer Size :**

**SEMBOLLER :**

Yağ Seviye Tespit / Oil Level



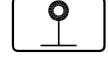
Yağ Boşaltma / Oil Drain Plug



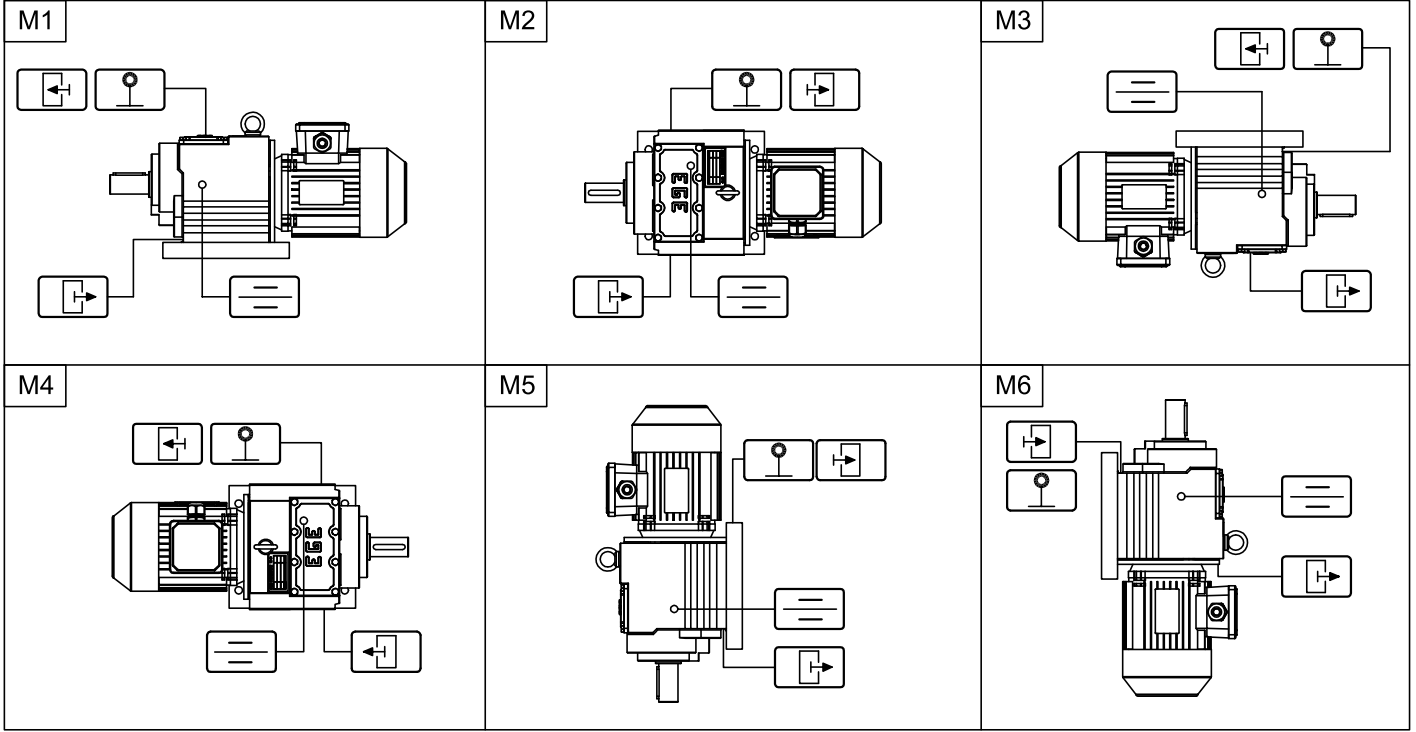
Yağ Doldurma / Oil Filling



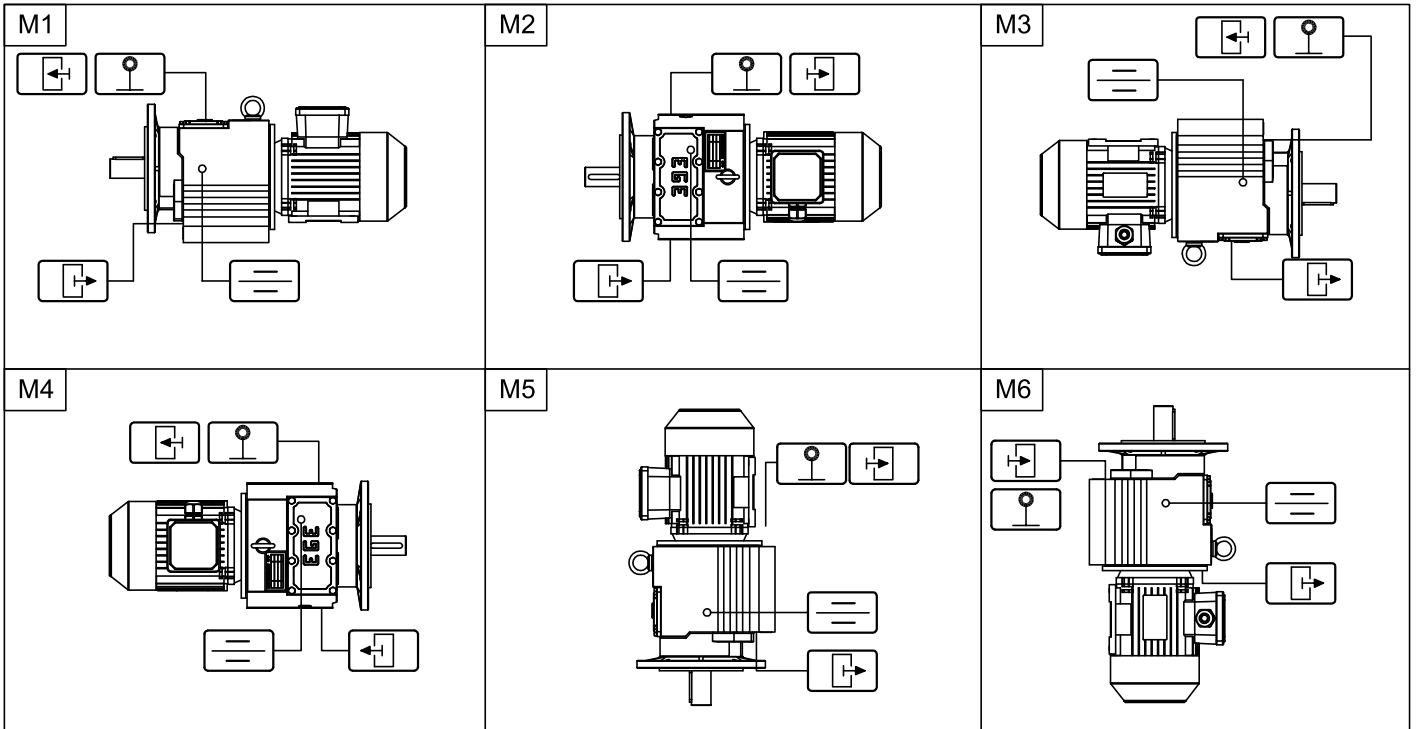
Havalandırma / Vent Plug

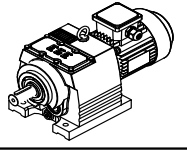


**MRA SERİSİ :**



**MRF SERİSİ :**



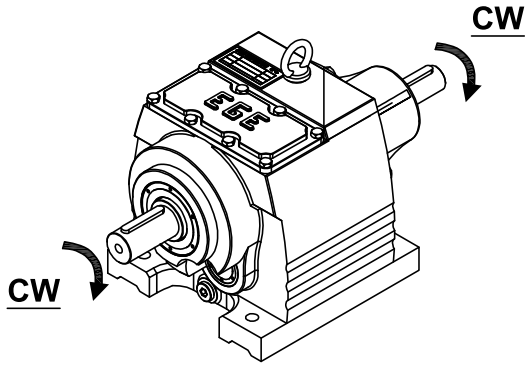


✓ REDÜKTÖR DÖNÜŞ YÖNLERİ / Direction of Rotation:

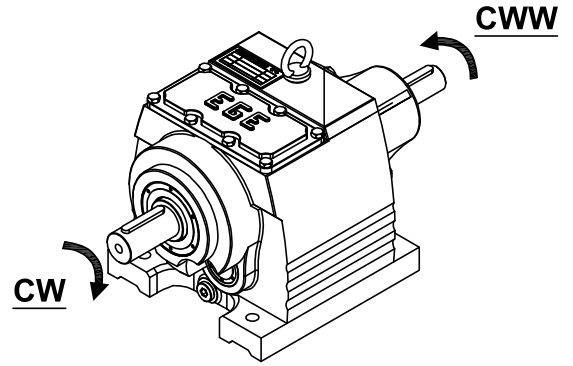
CCW : Saat Yönünün Tersi

CW : Saat Yönü

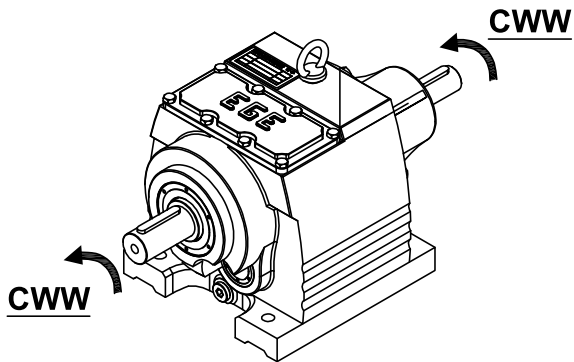
2-4-6 Kademe / 2-4-6 Stage



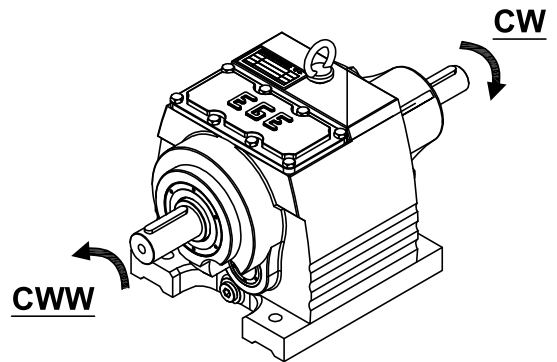
3-5 Kademe / 2-4-6 Stage

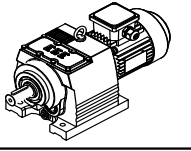


2-4-6 Kademe / 2-4-6 Stage

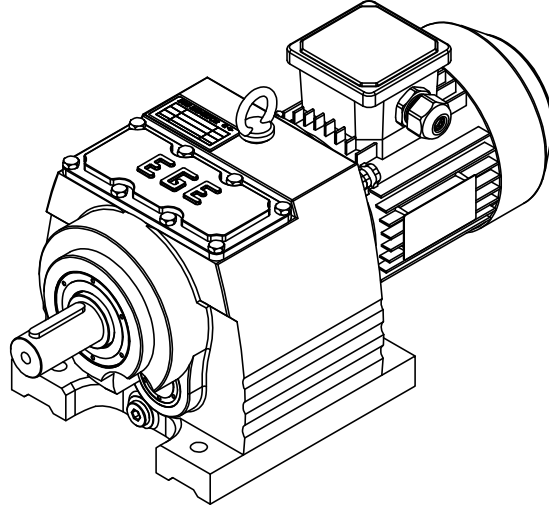


3-5 Kademe / 2-4-6 Stage





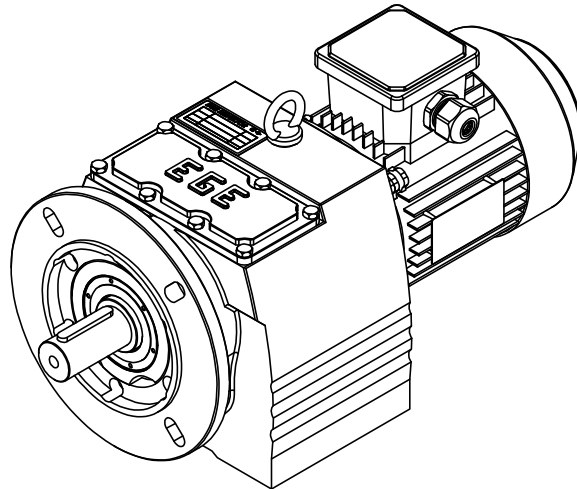
MRA...

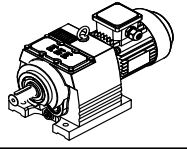


# Güç-Devir Tabloları

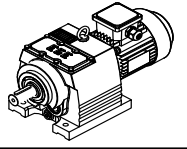
## Performance Tables

MRF...

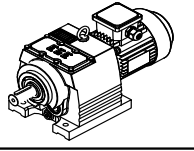




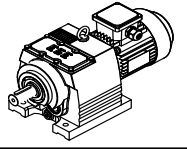
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type  |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|------------------------|
| 0,12kW<br>0,18 HP                    | 1400                                     | 0.3                                       | 2849                                 | 4433.47                    | 1.0                                     | MRA576/63<br>MRF576/63 |
|                                      |  | 0.5                                       | 1833                                 | 2870.16                    | 1.5                                     |                        |
|                                      | 1400                                     | 0.5                                       | 1793                                 | 2756.08                    | 1.6                                     | MRA575/63<br>MRF575/63 |
|                                      |  | 0.8                                       | 1108                                 | 1687.15                    | 2.5                                     |                        |
|                                      |  | 1.1                                       | 821                                  | 1268.42                    | 3.4                                     |                        |
|                                      | 1400                                     | 0.6                                       | 1645                                 | 2540.50                    | 0.9                                     | MRA475/63<br>MRF475/63 |
|                                      |  | 0.7                                       | 1305                                 | 2004.69                    | 1.1                                     |                        |
|                                      |  | 0.9                                       | 1080                                 | 1642.49                    | 1.3                                     |                        |
|                                      |  | 1.0                                       | 908                                  | 1396.45                    | 1.6                                     |                        |
|                                      |  | 1.2                                       | 823                                  | 1212.92                    | 1.8                                     |                        |
|                                      |  | 1.5                                       | 622                                  | 941.48                     | 2.3                                     |                        |
|                                      | 1400                                     | 1.0                                       | 896                                  | 1390.37                    | 0.9                                     | MRA375/63<br>MRF375/63 |
|                                      |  | 1.4                                       | 642                                  | 994.24                     | 1.2                                     |                        |
|                                      |  | 2.1                                       | 452                                  | 680.75                     | 1.8                                     |                        |
|                                      |  | 2.6                                       | 350                                  | 537.44                     | 2.3                                     |                        |
|                                      | 1400                                     | 2.7                                       | 358                                  | 527.74                     | 2.2                                     | MRA374/63              |
|                                      |  | 3.8                                       | 252                                  | 372.52                     | 3.2                                     | MRF374/63              |
|                                      | 1400                                     | 1.2                                       | 822                                  | 1215.43                    | 0.7                                     | MRA285/63<br>MRF285/63 |
|                                      |  | 1.6                                       | 561                                  | 869.15                     | 1.0                                     |                        |
|                                      |  | 2.1                                       | 444                                  | 673.93                     | 1.3                                     |                        |
|                                      |  | 2.8                                       | 319                                  | 494.94                     | 1.8                                     |                        |
|                                      | 1400                                     | 3.2                                       | 288                                  | 434.20                     | 2.0                                     | MRA284/63<br>MRF284/63 |
|                                      |  | 4.3                                       | 218                                  | 325.66                     | 2.7                                     |                        |
|                                      | 1400                                     | 1.7                                       | 547                                  | 833.23                     | 0.7                                     | MRA275/63<br>MRF275/63 |
|                                      |  | 2.3                                       | 388                                  | 602.89                     | 1.0                                     |                        |
|                                      |  | 3.3                                       | 273                                  | 421.50                     | 1.5                                     |                        |
|                                      |  | 4.2                                       | 220                                  | 334.85                     | 1.8                                     |                        |
|                                      |  | 5.5                                       | 169                                  | 253.97                     | 2.4                                     |                        |
|                                      |  | 6.4                                       | 143                                  | 217.42                     | 2.8                                     |                        |
|                                      |  | 7.7                                       | 120                                  | 181.48                     | 3.3                                     |                        |
|                                      |  | 9.3                                       | 99                                   | 150.07                     | 4.1                                     |                        |
|                                      | 1400                                     | 10.0                                      | 105                                  | 139.52                     | 3.8                                     | MRA273/63<br>MRF273/63 |
| 11.5                                 |  | 95  | 121.88                               | 4.2                        |   |                        |
| 12.2                                 |  | 91  | 114.32                               | 4.4                        |   |                        |
| 1400                                 | 14.2                                     | 74  | 98.73                                | 2.4                        | MRA173/63<br>MRF173/63                  |                        |
|                                      | 17.2                                     | 61  | 81.42                                | 2.9                        |   |                        |
|                                      | 20.3                                     | 51  | 68.83                                | 3.5                        |   |                        |
|                                      | 24.4                                     | 43  | 57.48                                | 4.2                        |   |                        |
|                                      | 28.2                                     | 38  | 49.57                                | 4.8                        |   |                        |



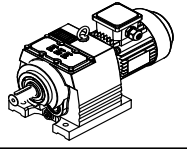
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type  |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|------------------------|
| <b>0,12kW<br/>0,18 HP</b>            | 1400                                     | 31.1                                      | 34                                   | 44.96                      | 2.2                                     | MRA003/63<br>MRF003/63 |
|                                      |  | 35.1                                      | 30                                   | 39.85                      | 2.5                                     |                        |
|                                      |  | 43.9                                      | 24                                   | 31.87                      | 3.1                                     |                        |
|                                      |  | 49.6                                      | 21                                   | 28.25                      | 3.6                                     |                        |
|                                      |  | 58.3                                      | 18                                   | 24.02                      | 4.2                                     |                        |
|                                      |  | 68.1                                      | 16                                   | 20.56                      | 4.7                                     |                        |
|                                      |  | 77.3                                      | 14                                   | 18.12                      | 5.4                                     |                        |
|                                      |  | 103.4                                     | 10                                   | 13.55                      | 7.5                                     |                        |
|                                      | 1400                                     | 126.3                                     | 9                                    | 11.09                      | 5.9                                     | MRA002/63<br>MRF002/63 |
|                                      |  | 142.5                                     | 8                                    | 9.83                       | 6.9                                     |                        |
|                                      |  | 161.7                                     | 7                                    | 8.66                       | 8.3                                     |                        |
|                                      |  | 179.4                                     | 6                                    | 7.81                       | 11.0                                    |                        |
|                                      |  | 203.6                                     | 5                                    | 6.88                       | 14.2                                    |                        |
|                                      |  | 234.5                                     | 5                                    | 5.98                       | 14.5                                    |                        |
|                                      |  | 252.6                                     | 4                                    | 5.55                       | 18.6                                    |                        |
|                                      |  | 308.5                                     | 3                                    | 4.54                       | 24.8                                    |                        |
|                                      |  | 360.7                                     | 3                                    | 3.89                       | 26.1                                    |                        |
|                                      |  | 388.6                                     | 3                                    | 3.61                       | 21.8                                    |                        |
| <b>0,18kW<br/>0,25 HP</b>            | 900                                      | 0.1                                       | 10807                                | 7152.09                    | 1.1                                     | MRA876/71<br>MRF876/71 |
|                                      |  | 0.2                                       | 8558                                 | 5507.36                    | 1.4                                     |                        |
|                                      |  | 0.2                                       | 6802                                 | 4388.94                    | 1.8                                     |                        |
|                                      |  | 0.3                                       | 5331                                 | 3402.53                    | 2.3                                     |                        |
|                                      |  | 0.4                                       | 3894                                 | 2433.13                    | 3.1                                     |                        |
|                                      | 900                                      | 0.2                                       | 9150                                 | 5883.28                    | 0.8                                     | MRA776/71<br>MRF776/71 |
|                                      |  | 0.2                                       | 8118                                 | 5201.16                    | 0.9                                     |                        |
|                                      | 900                                      | 0.2                                       | 7767                                 | 4758.26                    | 0.9                                     | MRA575/71<br>MRF575/71 |
|                                      |  | 0.2                                       | 6168                                 | 3771.72                    | 1.1                                     |                        |
|                                      |  | 0.3                                       | 4330                                 | 2654.08                    | 1.6                                     |                        |
|                                      |  | 0.5                                       | 2846                                 | 1771.87                    | 2.5                                     |                        |
|                                      |  | 0.7                                       | 2008                                 | 1238.59                    | 3.5                                     |                        |
|                                      | 900                                      | 0.3                                       | 4412                                 | 2831.83                    | 0.9                                     | MRA676/71<br>MRF676/71 |
|                                      |  |   |                                      |                            |   |                        |
|                                      | 900                                      | 0.4                                       | 4124                                 | 2550.08                    | 1.0                                     | MRA675/71<br>MRF675/71 |
|                                      |  | 0.5                                       | 3031                                 | 1867.41                    | 1.3                                     |                        |
|                                      |  | 0.6                                       | 2293                                 | 1416.72                    | 1.7                                     |                        |
|                                      |  | 0.8                                       | 1784                                 | 1100.63                    | 2.2                                     |                        |
|                                      |  | 1.0                                       | 1363                                 | 864.78                     | 2.9                                     |                        |
|                                      | 1400                                     | 0.5                                       | 2945                                 | 2912.06                    | 1.0                                     | MRA576/63<br>MRF576/63 |
|                                      |  |   |                                      |                            |   |                        |



| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type  |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|------------------------|
| <b>0,18kW<br/>0,25 HP</b>            | 1400                                     | 0.5                                       | 2881                                 | 2796.31                    | 1.0                                     | MRA575/63<br>MRF575/63 |
|                                      |  | 0.9                                       | 1574                                 | 1488.84                    | 1.8                                     |                        |
|                                      |  | 1.2                                       | 1183                                 | 1140.42                    | 2.4                                     |                        |
|                                      | 900                                      | 1.6                                       | 964                                  | 574.79                     | 2.9                                     | MRA574/71<br>MRF574/71 |
|                                      |  | 2.3                                       | 651                                  | 402.04                     | 4.3                                     |                        |
|                                      | 1400                                     | 0.8                                       | 1854                                 | 1738.63                    | 0.8                                     | MRA475/63<br>MRF475/63 |
|                                      |  | 1.0                                       | 1458                                 | 1386.47                    | 1.0                                     |                        |
|                                      |  | 1.1                                       | 1322                                 | 1204.25                    | 1.1                                     |                        |
|                                      | 900                                      | 1.5                                       | 996                                  | 603.34                     | 1.5                                     | MRA474/71<br>MRF474/71 |
|                                      |  | 2.1                                       | 716                                  | 442.52                     | 2.0                                     |                        |
|                                      |  | 3.1                                       | 482                                  | 295.92                     | 3.0                                     |                        |
|                                      | 1400                                     | 1.6                                       | 920                                  | 845.80                     | 0.9                                     | MRA375/63<br>MRF375/63 |
|                                      |  |   |                                      |                            |   |                        |
|                                      | 900                                      | 1.7                                       | 849                                  | 523.97                     | 0.9                                     | MRA374/71<br>MRF374/71 |
|                                      |  | 2.5                                       | 598                                  | 369.86                     | 1.3                                     |                        |
|                                      | 1400                                     | 2.6                                       | 576                                  | 523.97                     | 1.4                                     | MRA374/63<br>MRF374/63 |
|                                      |  | 3.7                                       | 404                                  | 369.86                     | 2.0                                     |                        |
|                                      | 900                                      | 5.8                                       | 277                                  | 157.73                     | 2.9                                     | MRA373/71<br>MRF373/71 |
|                                      |  | 6.6                                       | 244                                  | 138.69                     | 3.3                                     |                        |
|                                      | 900                                      | 2.1                                       | 711                                  | 431.09                     | 0.8                                     | MRA284/71<br>MRF284/71 |
|                                      |  | 2.8                                       | 533                                  | 323.33                     | 1.1                                     |                        |
|                                      | 1400                                     | 3.2                                       | 462                                  | 431.09                     | 1.3                                     | MRA284/63<br>MRF284/63 |
|                                      |  | 4.2                                       | 350                                  | 323.33                     | 1.7                                     |                        |
|                                      |  | 5.7                                       | 262                                  | 240.42                     | 2.2                                     |                        |
|                                      | 900                                      | 8.0                                       | 201                                  | 114.12                     | 2.9                                     | MRA283/71<br>MRF283/71 |
|                                      |  |   |                                      |                            |   |                        |
|                                      | 1400                                     | 3.3                                       | 438                                  | 418.49                     | 0.9                                     | MRA275/63<br>MRF275/63 |
|                                      |  | 4.1                                       | 354                                  | 332.45                     | 1.1                                     |                        |
|                                      |  | 5.4                                       | 271                                  | 252.15                     | 1.5                                     |                        |
|                                      | 900                                      | 7.5                                       | 212                                  | 121.01                     | 1.9                                     | MRA273/71<br>MRF273/71 |
| 9.5                                  |  | 168                                       | 95.36                                | 2.4                        |   |                        |
| 1400                                 | 9.9                                      | 160                                       | 138.52                               | 2.5                        | MRA273/63<br>MRF273/63                  |                        |
|                                      | 11.3                                     | 146                                       | 121.01                               | 2.7                        |   |                        |
|                                      | 12.1                                     | 140                                       | 113.50                               | 2.9                        |   |                        |
| 900                                  | 13.5                                     | 116                                       | 67.21                                | 2.3                        | MRA203/71<br>MRF203/71                  |                        |
|                                      | 16.5                                     | 96  | 55.07                                | 2.8                        |   |                        |
| 1400                                 | 20.4                                     | 80  | 67.21                                | 3.4                        | MRA203/63<br>MRF203/63                  |                        |
|                                      |  |   |                                      |                            |   |                        |
| 900                                  | 10.5                                     | 148                                       | 86.55                                | 1.2                        | MRA173/71<br>MRF173/71                  |                        |
|                                      | 13.3                                     | 120                                       | 68.33                                | 1.5                        |   |                        |

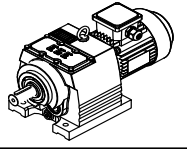


| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type  |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|------------------------|
| <b>0,18kW<br/>0,25 HP</b>            | 1400                                     | 14.0                                      | 113                                  | 98.02                      | 1.6                                     | MRA173/63<br>MRF173/63 |
|                                      |  | 16.9                                      | 93                                   | 80.84                      | 1.9                                     |                        |
|                                      |  | 20.0                                      | 79                                   | 68.33                      | 2.3                                     |                        |
|                                      |  | 24.0                                      | 66                                   | 57.07                      | 2.7                                     |                        |
|                                      |  | 27.8                                      | 57                                   | 49.21                      | 3.1                                     |                        |
|                                      | 900                                      | 18.2                                      | 89                                   | 49.90                      | 1.4                                     | MRA103/71<br>MRF103/71 |
|                                      |  | 22.1                                      | 74                                   | 41.16                      | 1.6                                     |                        |
|                                      | 1400                                     | 27.5                                      | 59                                   | 49.90                      | 2.0                                     | MRA103/63<br>MRF103/63 |
|                                      |  | 33.3                                      | 49                                   | 41.16                      | 2.4                                     |                        |
|                                      |  | 39.4                                      | 41                                   | 34.79                      | 3.0                                     |                        |
|                                      | 900                                      | 20.4                                      | 78                                   | 44.64                      | 1.0                                     | MRA003/71<br>MRF003/71 |
|                                      |  | 28.8                                      | 55                                   | 31.64                      | 1.4                                     |                        |
|                                      | 1400                                     | 30.7                                      | 52                                   | 44.64                      | 1.5                                     | MRA003/63<br>MRF003/63 |
|                                      |  | 43.3                                      | 37                                   | 31.64                      | 2.1                                     |                        |
|                                      |  | 48.9                                      | 32                                   | 28.04                      | 2.3                                     |                        |
|                                      |  | 57.5                                      | 28                                   | 23.84                      | 2.7                                     |                        |
|                                      |  | 65.2                                      | 24                                   | 21.00                      | 3.1                                     |                        |
|                                      |  | 72.3                                      | 22                                   | 18.94                      | 3.4                                     |                        |
|                                      |  | 76.2                                      | 21                                   | 17.98                      | 3.5                                     |                        |
|                                      |  | 82.1                                      | 19                                   | 16.69                      | 3.9                                     |                        |
|                                      |  | 94.5                                      | 17                                   | 14.49                      | 4.4                                     |                        |
|                                      |  | 101.9                                     | 16                                   | 13.45                      | 4.6                                     |                        |
|                                      | 1400                                     | 124.5                                     | 13                                   | 11.01                      | 5.7                                     | MRA002/63<br>MRF002/63 |
|                                      |  | 140.5                                     | 11                                   | 9.75                       | 6.7                                     |                        |
|                                      |  | 159.4                                     | 10                                   | 8.60                       | 7.4                                     |                        |
|                                      |  | 176.9                                     | 9                                    | 7.75                       | 8.2                                     |                        |
|                                      |  | 186.1                                     | 9                                    | 7.36                       | 8.3                                     |                        |
|                                      |  | 200.7                                     | 8                                    | 6.83                       | 9.3                                     |                        |
|                                      |  | 231.1                                     | 7                                    | 5.93                       | 10.6                                    |                        |
|                                      |  | 248.9                                     | 6                                    | 5.50                       | 12.4                                    |                        |
| 304.1                                |  | 5   | 4.51                                 | 14.9                       |   |                        |
| 355.5                                |  | 5   | 3.85                                 | 14.9                       |   |                        |
| 383.0                                | 4  | 3.58                                      | 18.6                                 |                            |   |                        |
| <b>0,25kW<br/>0,34 HP</b>            | 1400                                     | 0.2                                       | 10287                                | 7231.55                    | 1.2                                     | MRA876/71<br>MRF876/71 |
|                                      |  | 0.3                                       | 6543                                 | 4437.70                    | 1.8                                     |                        |
|                                      |  | 0.4                                       | 5053                                 | 3440.33                    | 2.4                                     |                        |
|                                      |  | 0.6                                       | 3606                                 | 2460.16                    | 3.3                                     |                        |
|                                      |  | 0.7                                       | 3071                                 | 2107.91                    | 3.9                                     |                        |
|                                      | 1400                                     | 0.2                                       | 8802                                 | 5948.64                    | 0.8                                     | MRA776/71<br>MRF776/71 |
|                                      |  |   |                                      |                            |   |                        |

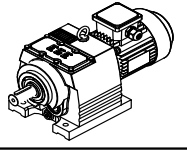


| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type  |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|------------------------|
| <b>0,25kW<br/>0,34 HP</b>            | 1400                                     | 0.3                                       | 7127                                 | 4811.13                    | 1.0                                     | MRA775/71<br>MRF775/71 |
|                                      |  | 0.4                                       | 4616                                 | 3103.23                    | 1.5                                     |                        |
|                                      |  | 0.6                                       | 3448                                 | 2323.64                    | 2.0                                     |                        |
|                                      |  | 0.8                                       | 2669                                 | 1791.55                    | 2.6                                     |                        |
|                                      |  | 0.9                                       | 2372                                 | 1589.36                    | 3.0                                     |                        |
|                                      |  | 1.0                                       | 2122                                 | 1417.13                    | 3.3                                     |                        |
|                                      | 1400                                     | 0.4                                       | 4887                                 | 3341.76                    | 0.8                                     | MRA676/71<br>MRF676/71 |
|                                      |  | 0.5                                       | 4193                                 | 2863.29                    | 1.0                                     |                        |
|                                      | 1400                                     | 0.5                                       | 3826                                 | 2578.41                    | 1.0                                     | MRA675/71<br>MRF675/71 |
|                                      |  | 1.1                                       | 1862                                 | 1259.29                    | 2.1                                     |                        |
|                                      |  | 1.6                                       | 1311                                 | 874.39                     | 3.1                                     |                        |
|                                      | 1400                                     | 1.9                                       | 1088                                 | 730.31                     | 3.7                                     | MRA675/71<br>MRF675/71 |
|                                      |  | 0.7                                       | 2829                                 | 1896.82                    | 1.0                                     |                        |
|                                      |  | 1.1                                       | 1857                                 | 1259.36                    | 1.5                                     |                        |
|                                      | 900                                      | 1.6                                       | 1367                                 | 574.79                     | 2.0                                     | MRA574/71<br>MRF574/71 |
|                                      |  | 2.3                                       | 923                                  | 402.04                     | 3.0                                     |                        |
|                                      | 1400                                     | 2.4                                       | 870                                  | 574.79                     | 3.2                                     | MRA574/71<br>MRF574/71 |
|                                      |  | 2.8                                       | 751                                  | 485.79                     | 3.7                                     |                        |
|                                      | 1400                                     | 1.1                                       | 1945                                 | 1285.53                    | 0.7                                     | MRA475/71<br>MRF475/71 |
|                                      |  |   |                                      |                            |   |                        |
|                                      | 900                                      | 1.5                                       | 1411                                 | 603.34                     | 1.0                                     | MRA474/71<br>MRF474/71 |
|                                      |  | 2.1                                       | 1015                                 | 442.52                     | 1.4                                     |                        |
|                                      | 1400                                     | 2.0                                       | 1047                                 | 674.33                     | 1.4                                     | MRA474/71<br>MRF474/71 |
|                                      |  | 2.6                                       | 801                                  | 529.82                     | 1.8                                     |                        |
|                                      |  | 4.0                                       | 528                                  | 346.00                     | 2.7                                     |                        |
|                                      | 900                                      | 2.2                                       | 964                                  | 421.77                     | 0.8                                     | MRA374/71<br>MRF374/71 |
|                                      |  |   |                                      |                            |   |                        |
|                                      | 1400                                     | 3.3                                       | 642                                  | 421.77                     | 1.2                                     | MRA374/71<br>MRF374/71 |
|                                      |  | 4.2                                       | 504                                  | 326.97                     | 1.6                                     |                        |
|                                      |  | 5.0                                       | 423                                  | 275.02                     | 1.9                                     |                        |
|                                      | 900                                      | 6.6                                       | 340                                  | 138.69                     | 2.4                                     | MRA373/71<br>MRF373/71 |
|                                      |  | 8.2                                       | 274                                  | 111.65                     | 2.9                                     |                        |
|                                      | 1400                                     | 8.7                                       | 255                                  | 157.73                     | 3.1                                     | MRA373/71<br>MRF373/71 |
|                                      |  |   |                                      |                            |   |                        |
|                                      | 900                                      | 2.5                                       | 842                                  | 368.70                     | 0.7                                     | MRA284/71<br>MRF284/71 |
|                                      |  |   |                                      |                            |   |                        |
| 1400                                 | 3.2                                      | 651                                       | 431.09                               | 0.9                        | MRA284/71<br>MRF284/71                  |                        |
|                                      | 4.3                                      | 493                                       | 323.33                               | 1.2                        |   |                        |
|                                      | 5.7                                      | 368                                       | 240.42                               | 1.6                        |   |                        |
|                                      |  |   |                                      |                            |   |                        |

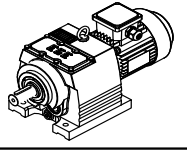




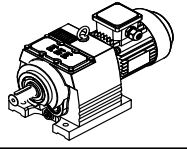
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type  |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|------------------------|
| <b>0,25kW<br/>0,34 HP</b>            | 900                                      | 6.6                                       | 336                                  | 137.88                     | 1.7                                     | MRA283/71<br>MRF283/71 |
|                                      |  | 8.0                                       | 280                                  | 114.12                     | 2.1                                     |                        |
|                                      |  | 9.4                                       | 236                                  | 96.45                      | 2.5                                     |                        |
|                                      | 1400                                     | 10.0                                      | 219                                  | 137.88                     | 2.7                                     | MRA283/71<br>MRF283/71 |
|                                      |  | 12.1                                      | 181                                  | 114.12                     | 3.2                                     |                        |
|                                      | 1400                                     | 3.9                                       | 536                                  | 358.26                     | 0.7                                     | MRA275/71<br>MRF275/71 |
|                                      |  | 5.5                                       | 382                                  | 252.15                     | 1.0                                     |                        |
|                                      | 900                                      | 6.6                                       | 339                                  | 138.52                     | 1.2                                     | MRA273/71<br>MRF273/71 |
|                                      |  | 7.5                                       | 295                                  | 121.01                     | 1.4                                     |                        |
|                                      |  | 9.5                                       | 233                                  | 95.36                      | 1.7                                     |                        |
|                                      | 1400                                     | 10.0                                      | 221                                  | 138.52                     | 1.8                                     | MRA273/71<br>MRF273/71 |
|                                      |  | 12.2                                      | 194                                  | 113.50                     | 2.1                                     |                        |
|                                      |  | 14.5                                      | 160                                  | 95.36                      | 2.5                                     |                        |
|                                      |  | 16.7                                      | 137                                  | 82.82                      | 2.9                                     |                        |
|                                      | 900                                      | 13.5                                      | 162                                  | 67.21                      | 1.7                                     | MRA203/71<br>MRF203/71 |
|                                      |  | 15.5                                      | 143                                  | 58.72                      | 1.9                                     |                        |
|                                      | 1400                                     | 20.5                                      | 110                                  | 67.21                      | 2.4                                     | MRA203/71<br>MRF203/71 |
|                                      |  | 25.1                                      | 89                                   | 55.07                      | 3.0                                     |                        |
|                                      |  | 29.5                                      | 77                                   | 46.82                      | 3.5                                     |                        |
|                                      | 900                                      | 10.5                                      | 206                                  | 86.55                      | 0.9                                     | MRA173/71<br>MRF173/71 |
|                                      |  |   |                                      |                            |   |                        |
|                                      | 900                                      | 15.9                                      | 139                                  | 86.55                      | 1.3                                     | MRA173/71<br>MRF173/71 |
|                                      |  | 20.2                                      | 109                                  | 68.33                      | 1.7                                     |                        |
|                                      |  | 30.4                                      | 74                                   | 45.35                      | 2.4                                     |                        |
|                                      |  | 38.5                                      | 59                                   | 35.81                      | 3.1                                     |                        |
|                                      | 900                                      | 18.2                                      | 123                                  | 49.90                      | 1.0                                     | MRA103/71<br>MRF103/71 |
|                                      |  | 22.1                                      | 102                                  | 41.16                      | 1.2                                     |                        |
|                                      | 1400                                     | 31.3                                      | 70                                   | 44.06                      | 1.7                                     | MRA103/71<br>MRF103/71 |
|                                      |  | 39.7                                      | 56                                   | 34.79                      | 2.1                                     |                        |
|                                      |  | 47.5                                      | 47                                   | 29.05                      | 2.5                                     |                        |
| 56.2                                 |  | 40  | 24.56                                | 3.0                        |   |                        |
| 900                                  | 20.4                                     | 109                                       | 44.64                                | 0.7                        | MRA003/71<br>MRF003/71                  |                        |
|                                      | 23.0                                     | 95  | 39.56                                | 0.8                        |   |                        |
|                                      | 28.8                                     | 77  | 31.64                                | 1.0                        |   |                        |
| 1400                                 | 30.9                                     | 72  | 44.64                                | 1.0                        | MRA003/71<br>MRF003/71                  |                        |
|                                      | 43.6                                     | 51  | 31.64                                | 1.5                        |   |                        |
|                                      | 49.2                                     | 45  | 28.04                                | 1.7                        |   |                        |
|                                      | 57.9                                     | 38  | 23.84                                | 2.0                        |   |                        |
|                                      | 65.7                                     | 34  | 21.00                                | 2.2                        |   |                        |
|                                      | 72.9                                     | 31  | 18.94                                | 2.4                        |   |                        |



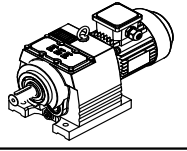
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type  |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|------------------------|
| 0,25kW<br>0,34 HP                    | 1400                                     | 82.7                                      | 27                                   | 16.69                      | 2.8                                     | MRA003/71<br>MRF003/71 |
|                                      |  | 95.2                                      | 23                                   | 14.49                      | 3.3                                     |                        |
|                                      |  | 102.6                                     | 22                                   | 13.45                      | 3.4                                     |                        |
|                                      | 1400                                     | 125.4                                     | 18                                   | 11.01                      | 3.6                                     | MRA002/71<br>MRF002/71 |
|                                      |  | 141.5                                     | 16                                   | 9.75                       | 4.0                                     |                        |
|                                      |  | 160.5                                     | 14                                   | 8.60                       | 4.6                                     |                        |
|                                      |  | 178.2                                     | 13                                   | 7.75                       | 5.0                                     |                        |
|                                      |  | 202.1                                     | 11                                   | 6.83                       | 5.9                                     |                        |
|                                      |  | 232.8                                     | 10                                   | 5.93                       | 6.5                                     |                        |
|                                      |  | 250.8                                     | 9                                    | 5.50                       | 7.2                                     |                        |
|                                      |  | 306.3                                     | 7                                    | 4.51                       | 9.3                                     |                        |
|                                      |  | 358.1                                     | 6                                    | 3.85                       | 10.8                                    |                        |
|                                      |  | 385.8                                     | 6                                    | 3.58                       | 10.8                                    |                        |
|                                      |  | 0,37kW<br>0,50 HP                         | 1400                                 | 0.2                        | 12178                                   |                        |
| 0.3                                  | 10800                                    |   |                                      | 4953.96                    | 1.1                                     |                        |
| 0.4                                  | 8587                                     |   |                                      | 3891.52                    | 1.4                                     |                        |
| 0.4                                  | 7655                                     |   |                                      | 3440.33                    | 1.6                                     |                        |
| 0.6                                  | 5463                                     |   |                                      | 2460.16                    | 2.2                                     |                        |
| 0.7                                  | 4652                                     |   |                                      | 2107.91                    | 2.6                                     |                        |
| 1400                                 | 0.7                                      |   | 4373                                 | 1923.94                    | 2.7                                     | MRA875/71<br>MRF875/71 |
|                                      | 0.9                                      |   | 3452                                 | 1521.25                    | 3.5                                     |                        |
| 1400                                 | 0.4                                      |   | 8659                                 | 3813.63                    | 0.8                                     | MRA775/71<br>MRF775/71 |
|                                      | 0.4                                      |   | 6992                                 | 3103.23                    | 1.0                                     |                        |
|                                      | 0.6                                      |   | 5224                                 | 2323.64                    | 1.3                                     |                        |
|                                      | 0.8                                      |   | 4043                                 | 1791.55                    | 1.7                                     |                        |
|                                      | 1.0                                      |   | 3215                                 | 1417.13                    | 2.2                                     |                        |
|                                      | 1.4                                      |   | 2200                                 | 983.98                     | 3.2                                     |                        |
| 900                                  | 1.5                                      |   | 2076                                 | 594.80                     | 3.4                                     | MRA774/80<br>MRF774/80 |
| 1400                                 | 0.7                                      |   | 4255                                 | 1888.15                    | 0.9                                     | MRA675/71<br>MRF675/71 |
|                                      | 1.0                                      |   | 3249                                 | 1432.45                    | 1.2                                     |                        |
|                                      | 1.6                                      |   | 1985                                 | 874.39                     | 2.0                                     |                        |
| 900                                  | 2.1                                      |   | 1532                                 | 442.11                     | 2.6                                     | MRA674/80<br>MRF674/80 |
|                                      | 2.8                                      |   | 1150                                 | 323.76                     | 3.5                                     |                        |
|                                      | 3.3                                      |   | 991                                  | 280.96                     | 4.0                                     |                        |
| 1400                                 | 1.1                                      |   | 2813                                 | 1259.36                    | 1.0                                     | MRA575/71<br>MRF575/71 |
|                                      | 1.4                                      |   | 2255                                 | 963.86                     | 1.2                                     |                        |
| 900                                  | 1.6                                      |   | 2063                                 | 574.79                     | 1.4                                     | MRA574/80<br>MRF574/80 |
|                                      | 2.3                                      |   | 1393                                 | 402.04                     | 2.0                                     |                        |



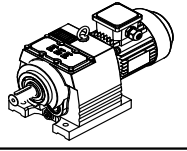
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type  |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|------------------------|
| <b>0,37kW<br/>0,50 HP</b>            | 1400                                     | 2.9                                       | 1138                                 | 485.79                     | 2.5                                     | MRA574/71<br>MRF574/71 |
|                                      |  | 4.0                                       | 808                                  | 343.84                     | 3.5                                     |                        |
|                                      |  | 4.8                                       | 679                                  | 291.19                     | 4.1                                     |                        |
|                                      | 900                                      | 2.6                                       | 1234                                 | 529.82                     | 1.2                                     | MRA474/80<br>MRF474/80 |
|                                      |  | 3.1                                       | 1014                                 | 442.52                     | 1.4                                     |                        |
|                                      | 1400                                     | 2.1                                       | 1586                                 | 674.33                     | 0.9                                     | MRA474/71<br>MRF474/71 |
|                                      |  | 2.6                                       | 1213                                 | 529.82                     | 1.2                                     |                        |
|                                      |  | 3.1                                       | 1043                                 | 442.52                     | 1.4                                     |                        |
|                                      |  | 4.0                                       | 800                                  | 346.00                     | 1.8                                     |                        |
|                                      | 900                                      | 4.2                                       | 783                                  | 218.96                     | 1.9                                     | MRA473/80<br>MRF473/80 |
|                                      |  | 5.8                                       | 566                                  | 157.87                     | 2.6                                     |                        |
|                                      |  | 7.4                                       | 447                                  | 124.83                     | 3.2                                     |                        |
|                                      | 1400                                     | 3.3                                       | 972                                  | 421.77                     | 0.8                                     | MRA374/71<br>MRA374/71 |
|                                      |  | 4.3                                       | 764                                  | 326.97                     | 1.0                                     |                        |
|                                      |  | 5.1                                       | 641                                  | 275.02                     | 1.2                                     |                        |
|                                      | 900                                      | 5.8                                       | 564                                  | 157.73                     | 1.4                                     | MRA373/80<br>MRF373/80 |
|                                      |  | 8.2                                       | 402                                  | 111.65                     | 2.0                                     |                        |
|                                      | 1400                                     | 10.0                                      | 326                                  | 138.69                     | 2.5                                     | MRA373/71<br>MRF373/71 |
|                                      |  | 14.4                                      | 225                                  | 96.74                      | 3.6                                     |                        |
|                                      | 1400                                     | 4.9                                       | 665                                  | 285.83                     | 0.9                                     | MRA284/71<br>MRF284/71 |
|                                      |  |   |                                      |                            |   |                        |
|                                      | 900                                      | 6.7                                       | 491                                  | 137.88                     | 1.2                                     | MRA283/80<br>MRF283/80 |
|                                      |  | 9.5                                       | 345                                  | 96.45                      | 1.7                                     |                        |
|                                      | 1400                                     | 10.1                                      | 322                                  | 137.88                     | 1.8                                     | MRA283/71<br>MRF283/71 |
|                                      |  | 14.4                                      | 224                                  | 96.45                      | 2.6                                     |                        |
|                                      |  | 16.4                                      | 197                                  | 84.57                      | 2.9                                     |                        |
|                                      | 900                                      | 6.6                                       | 496                                  | 138.52                     | 0.8                                     | MRA273/80<br>MRF273/80 |
|                                      |  | 9.6                                       | 341                                  | 95.36                      | 1.2                                     |                        |
|                                      | 1400                                     | 10.0                                      | 326                                  | 138.52                     | 1.2                                     | MRA273/71<br>MRF273/71 |
|                                      |  | 14.6                                      | 235                                  | 95.36                      | 1.7                                     |                        |
| 19.2                                 |  | 172                                       | 72.47                                | 2.3                        |   |                        |
| 23.2                                 |  | 143                                       | 59.93                                | 2.8                        |   |                        |
| 900                                  | 15.7                                     | 209                                       | 58.72                                | 1.3                        | MRA203/80<br>MRF203/80                  |                        |
|                                      |  |   |                                      |                            |   |                        |
| 1400                                 | 20.7                                     | 163                                       | 67.21                                | 1.7                        | MRA203/71<br>MRF203/71                  |                        |
|                                      | 25.2                                     | 131                                       | 55.07                                | 2.1                        |   |                        |
|                                      | 29.7                                     | 113                                       | 46.82                                | 2.4                        |   |                        |
|                                      | 34.2                                     | 97  | 40.67                                | 2.8                        |   |                        |
|                                      | 39.1                                     | 86  | 35.59                                | 3.1                        |   |                        |



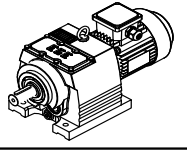
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type  |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|------------------------|
| <b>0,37kW<br/>0,50 HP</b>            | 1400                                     | 14.2                                      | 231                                  | 98.02                      | 0.8                                     | MRA173/71<br>MRF173/71 |
|                                      |  | 20.3                                      | 160                                  | 68.33                      | 1.1                                     |                        |
|                                      |  | 24.4                                      | 135                                  | 57.07                      | 1.3                                     |                        |
|                                      |  | 28.2                                      | 117                                  | 49.21                      | 1.5                                     |                        |
|                                      |  | 30.7                                      | 110                                  | 45.35                      | 1.6                                     |                        |
|                                      |  | 38.8                                      | 86                                   | 35.81                      | 2.1                                     |                        |
|                                      |  | 46.5                                      | 71                                   | 29.90                      | 2.5                                     |                        |
|                                      |  | 53.9                                      | 62                                   | 25.79                      | 2.9                                     |                        |
|                                      | 900                                      | 20.9                                      | 157                                  | 44.06                      | 0.8                                     | MRA103/80<br>MRF103/80 |
|                                      | 1400                                     | 27.9                                      | 121                                  | 49.90                      | 1.0                                     | MRA103/71<br>MRF103/71 |
|                                      |  | 31.5                                      | 104                                  | 44.06                      | 1.2                                     |                        |
|                                      |  | 40.0                                      | 84                                   | 34.79                      | 1.4                                     |                        |
|                                      |  | 47.9                                      | 70                                   | 29.05                      | 1.7                                     |                        |
|                                      |  | 64.1                                      | 52                                   | 21.70                      | 2.3                                     |                        |
|                                      |  | 81.2                                      | 41                                   | 17.12                      | 2.9                                     |                        |
|                                      | 1400                                     | 88.2                                      | 38                                   | 15.76                      | 3.0                                     | MRA102/71<br>MRF102/71 |
|                                      |  | 99.9                                      | 34                                   | 13.91                      | 3.3                                     |                        |
|                                      |  | 107.0                                     | 31                                   | 12.99                      | 3.8                                     |                        |
|                                      | 1400                                     | 31.1                                      | 106                                  | 44.64                      | 0.7                                     | MRA003/71<br>MRF003/71 |
|                                      |  | 43.9                                      | 76                                   | 31.64                      | 1.0                                     |                        |
|                                      |  | 49.6                                      | 66                                   | 28.04                      | 1.1                                     |                        |
|                                      |  | 58.3                                      | 57                                   | 23.84                      | 1.3                                     |                        |
|                                      |  | 68.1                                      | 49                                   | 20.41                      | 1.5                                     |                        |
|                                      |  | 77.3                                      | 43                                   | 17.98                      | 1.8                                     |                        |
|                                      |  | 95.9                                      | 35                                   | 14.49                      | 2.2                                     |                        |
|                                      |  | 103.4                                     | 32                                   | 13.45                      | 2.4                                     |                        |
|                                      | 1400                                     | 126.3                                     | 27                                   | 11.01                      | 2.8                                     | MRA002/71<br>MRF002/71 |
|                                      |  | 142.5                                     | 24                                   | 9.75                       | 3.1                                     |                        |
|                                      |  | 161.7                                     | 21                                   | 8.60                       | 3.6                                     |                        |
|                                      |  | 179.4                                     | 19                                   | 7.75                       | 4.0                                     |                        |
|                                      |  | 188.8                                     | 18                                   | 7.36                       | 4.2                                     |                        |
|                                      |  | 203.6                                     | 17                                   | 6.83                       | 4.4                                     |                        |
| 234.5                                |  | 15  | 5.93                                 | 5.0                        |   |                        |
| 252.6                                |  | 13  | 5.50                                 | 5.8                        |   |                        |
| 308.5                                |  | 11  | 4.51                                 | 6.9                        |   |                        |
| 360.7                                |  | 9   | 3.85                                 | 8.4                        |   |                        |
| 388.6                                |  | 9   | 3.58                                 | 8.4                        |   |                        |
|                                      |  |   |                                      |                            |   |                        |



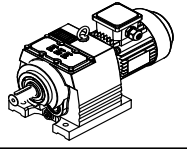
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type  |                        |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|------------------------|------------------------|
| <b>0,55kW<br/>0,70HP</b>             | 1400                                     | 0.3                                       | 17865                                | 5356.36                    | 1.0                                     | MRA976/80<br>MRF976/80 |                        |
|                                      |  | 0.3                                       | 14892                                | 4473.78                    | 1.1                                     |                        |                        |
|                                      |  | 0.4                                       | 12116                                | 3594.09                    | 1.4                                     |                        |                        |
|                                      |  | 0.5                                       | 9510                                 | 2836.07                    | 1.8                                     |                        |                        |
|                                      | 1400                                     | 0.7                                       | 6981                                 | 2027.56                    | 2.4                                     | MRA975/80<br>MRF975/80 |                        |
|                                      |  | 0.9                                       | 5334                                 | 1551.79                    | 3.2                                     |                        |                        |
|                                      | 1400                                     | 1400                                      | 0.4                                  | 12999                      | 3891.52                                 | 0.9                    | MRA876/80<br>MRF876/80 |
|                                      |  |   | 0.5                                  | 9617                       | 2893.70                                 | 1.2                    |                        |
|                                      |  |   | 0.6                                  | 8270                       | 2460.16                                 | 1.5                    |                        |
|                                      |  |   | 0.6                                  | 7042                       | 2107.91                                 | 1.7                    |                        |
|                                      | 1400                                     | 1400                                      | 0.7                                  | 6620                       | 1923.94                                 | 1.8                    | MRA875/80<br>MRF875/80 |
|                                      |  |   | 1.0                                  | 4387                       | 1335.88                                 | 2.7                    |                        |
|                                      |  |   | 1.3                                  | 3514                       | 1048.97                                 | 3.4                    |                        |
|                                      | 1400                                     | 1400                                      | 0.7                                  | 6961                       | 2032.25                                 | 1.0                    | MRA775/80<br>MRF775/80 |
|                                      |  |   | 0.9                                  | 5438                       | 1589.36                                 | 1.3                    |                        |
|                                      |  |   | 1.1                                  | 4230                       | 1252.35                                 | 1.7                    |                        |
|                                      |  |   | 1.4                                  | 3330                       | 983.98                                  | 2.1                    |                        |
|                                      | 900                                      | 900                                       | 1.5                                  | 3155                       | 594.80                                  | 2.2                    | MRA774/80<br>MRF774/80 |
|                                      |  |   | 2.2                                  | 2293                       | 418.09                                  | 3.1                    |                        |
|                                      | 1400                                     | 1400                                      | 2.6                                  | 1856                       | 532.18                                  | 3.8                    | MRA774/80<br>MRF774/80 |
|                                      |  |   |                                      |                            |   |                        |                        |
|                                      | 1400                                     | 1400                                      | 1.1                                  | 4268                       | 1259.29                                 | 0.9                    | MRA675/80<br>MRF675/80 |
|                                      |  |   | 1.6                                  | 3005                       | 874.39                                  | 1.3                    |                        |
|                                      | 900                                      | 900                                       | 2.0                                  | 2327                       | 442.11                                  | 1.7                    | MRA674/80<br>MRF674/80 |
|                                      |  |   |                                      |                            |   |                        |                        |
|                                      | 1400                                     | 1400                                      | 3.1                                  | 1579                       | 442.11                                  | 2.5                    | MRA674/80<br>MRF674/80 |
|                                      |  |   | 3.6                                  | 1323                       | 376.61                                  | 3.0                    |                        |
|                                      |  |   | 4.9                                  | 997                        | 280.96                                  | 4.0                    |                        |
|                                      | 900                                      | 900                                       | 1.6                                  | 3135                       | 574.79                                  | 0.9                    | MRA574/80<br>MRF574/80 |
|                                      |  |   | 2.2                                  | 2117                       | 402.04                                  | 1.3                    |                        |
| 1400                                 | 1400                                     | 2.4                                       | 1993                                 | 574.79                     | 1.4                                     | MRA574/80<br>MRF574/80 |                        |
|                                      |  | 3.4                                       | 1428                                 | 402.04                     | 2.0                                     |                        |                        |
|                                      |  | 4.5                                       | 1058                                 | 301.53                     | 2.6                                     |                        |                        |
|                                      |  | 5.3                                       | 914                                  | 258.82                     | 3.1                                     |                        |                        |
|                                      |  | 6.2                                       | 782                                  | 221.36                     | 3.6                                     |                        |                        |
|                                      |  | 7.0                                       | 688                                  | 194.11                     | 4.1                                     |                        |                        |
|                                      |  |   |                                      |                            |   |                        |                        |
|                                      |  |   |                                      |                            |   |                        |                        |



| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type  |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|------------------------|
| <b>0,55kW<br/>0,70HP</b>             | 1400                                     | 2.6                                       | 1837                                 | 529.82                     | 0.8                                     | MRA474/80<br>MRF474/80 |
|                                      |  | 3.1                                       | 1579                                 | 442.52                     | 0.9                                     |                        |
|                                      |  | 3.9                                       | 1210                                 | 346.00                     | 1.2                                     |                        |
|                                      | 900                                      | 4.1                                       | 1192                                 | 218.96                     | 1.2                                     | MRA473/80<br>MRF473/80 |
|                                      |  | 4.6                                       | 1049                                 | 194.01                     | 1.4                                     |                        |
|                                      |  | 5.7                                       | 863                                  | 157.87                     | 1.7                                     |                        |
|                                      | 1400                                     | 6.2                                       | 789                                  | 218.96                     | 1.8                                     | MRA473/80<br>MRF473/80 |
|                                      |  | 7.0                                       | 697                                  | 194.01                     | 2.1                                     |                        |
|                                      |  | 8.6                                       | 572                                  | 157.87                     | 2.5                                     |                        |
|                                      |  | 10.9                                      | 443                                  | 124.83                     | 3.3                                     |                        |
|                                      | 1400                                     | 5.0                                       | 971                                  | 275.02                     | 0.8                                     | MRA374/80<br>MRF374/80 |
|                                      | 900                                      | 6.5                                       | 757                                  | 138.69                     | 1.1                                     | MRA373/80<br>MRF373/80 |
|                                      |  | 8.1                                       | 612                                  | 111.65                     | 1.3                                     |                        |
|                                      | 1400                                     | 8.7                                       | 569                                  | 157.73                     | 1.4                                     | MRA373/80<br>MRF373/80 |
|                                      |  | 9.8                                       | 495                                  | 138.69                     | 1.6                                     |                        |
|                                      |  | 12.2                                      | 417                                  | 111.65                     | 1.9                                     |                        |
|                                      |  | 16.0                                      | 306                                  | 85.53                      | 2.6                                     |                        |
|                                      |  | 19.0                                      | 257                                  | 71.94                      | 3.1                                     |                        |
|                                      |  | 22.3                                      | 225                                  | 61.17                      | 3.6                                     |                        |
|                                      | 900                                      | 6.5                                       | 748                                  | 137.88                     | 0.8                                     | MRA283/80<br>MRF283/80 |
|                                      |  | 9.3                                       | 525                                  | 96.45                      | 1.1                                     |                        |
|                                      | 1400                                     | 9.9                                       | 489                                  | 137.88                     | 1.2                                     | MRA283/80<br>MRF283/80 |
|                                      |  | 16.1                                      | 298                                  | 84.57                      | 1.9                                     |                        |
|                                      |  | 21.7                                      | 228                                  | 62.89                      | 2.5                                     |                        |
|                                      |  | 25.5                                      | 195                                  | 53.47                      | 3.0                                     |                        |
|                                      | 900                                      | 9.4                                       | 519                                  | 95.36                      | 0.8                                     | MRA273/80<br>MRF273/80 |
|                                      |  |   |                                      |                            |   |                        |
|                                      | 1400                                     | 11.3                                      | 452                                  | 121.01                     | 0.9                                     | MRA273/80<br>MRF273/80 |
|                                      |  | 16.5                                      | 304                                  | 82.82                      | 1.3                                     |                        |
|                                      |  | 22.8                                      | 216                                  | 59.93                      | 1.9                                     |                        |
| 32.6                                 |  | 152                                       | 41.90                                | 2.6                        |   |                        |
| 37.8                                 |  | 130                                       | 36.11                                | 3.1                        |   |                        |
| 900                                  | 15.3                                     | 318                                       | 58.72                                | 0.8                        | MRA203/80<br>MRF203/80                  |                        |
|                                      |  |   |                                      |                            |   |                        |
| 1400                                 | 20.3                                     | 247                                       | 67.21                                | 1.1                        | MRA203/80<br>MRF203/80                  |                        |
|                                      | 29.2                                     | 172                                       | 46.82                                | 1.6                        |   |                        |
|                                      | 38.4                                     | 129                                       | 35.59                                | 2.1                        |   |                        |
|                                      | 48.7                                     | 101                                       | 28.01                                | 2.7                        |   |                        |
|                                      | 59.5                                     | 83  | 22.95                                | 3.3                        |   |                        |

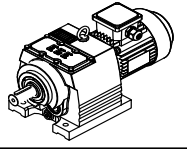


| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type  |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|------------------------|
| <b>0,55kW<br/>0,70HP</b>             | 1400                                     | 23.9                                      | 204                                  | 57.07                      | 0.9                                     | MRA173/80<br>MRF173/80 |
|                                      |  | 30.1                                      | 167                                  | 45.35                      | 1.1                                     |                        |
|                                      |  | 38.1                                      | 131                                  | 35.81                      | 1.4                                     |                        |
|                                      |  | 45.7                                      | 108                                  | 29.90                      | 1.7                                     |                        |
|                                      |  | 52.9                                      | 94                                   | 25.79                      | 1.9                                     |                        |
|                                      | 1400                                     | 66.0                                      | 76                                   | 20.67                      | 2.4                                     | MRA172/80<br>MRF172/80 |
|                                      |  | 75.6                                      | 67                                   | 18.06                      | 2.7                                     |                        |
|                                      | 1400                                     | 31.0                                      | 157                                  | 44.06                      | 0.8                                     | MRA103/80<br>MRF103/80 |
|                                      |  | 39.2                                      | 126                                  | 34.79                      | 0.9                                     |                        |
|                                      |  | 47.0                                      | 106                                  | 29.05                      | 1.1                                     |                        |
|                                      |  | 55.6                                      | 89                                   | 24.56                      | 1.4                                     |                        |
|                                      |  | 67.4                                      | 73                                   | 20.26                      | 1.7                                     |                        |
|                                      |  | 79.7                                      | 62                                   | 17.12                      | 1.9                                     |                        |
|                                      | 1400                                     | 86.6                                      | 58                                   | 15.76                      | 2.1                                     | MRA102/80<br>MRF102/80 |
|                                      |  | 98.1                                      | 51                                   | 13.91                      | 2.3                                     |                        |
|                                      |  | 105.1                                     | 47                                   | 12.99                      | 2.5                                     |                        |
|                                      |  | 124.2                                     | 41                                   | 10.99                      | 3.0                                     |                        |
|                                      |  | 135.7                                     | 37                                   | 10.06                      | 3.2                                     |                        |
|                                      |  | 148.7                                     | 34                                   | 9.18                       | 3.6                                     |                        |
|                                      |  | 172.5                                     | 29                                   | 7.91                       | 4.1                                     |                        |
|                                      |  | 199.4                                     | 25                                   | 6.85                       | 4.7                                     |                        |
|                                      | 1400                                     | 43.1                                      | 114                                  | 31.64                      | 0.7                                     | MRA003/80<br>MRF003/80 |
|                                      |  | 57.3                                      | 86                                   | 23.84                      | 0.9                                     |                        |
|                                      |  | 66.9                                      | 74                                   | 20.41                      | 1.0                                     |                        |
|                                      |  | 75.9                                      | 65                                   | 17.98                      | 1.2                                     |                        |
|                                      |  | 81.8                                      | 61                                   | 16.69                      | 1.2                                     |                        |
|                                      |  | 94.2                                      | 52                                   | 14.49                      | 1.4                                     |                        |
|                                      |  | 101.5                                     | 49                                   | 13.45                      | 1.5                                     |                        |
|                                      | 1400                                     | 124.0                                     | 41                                   | 11.01                      | 1.8                                     | MRA002/80<br>MRF002/80 |
|                                      |  | 140.0                                     | 36                                   | 9.75                       | 2.1                                     |                        |
| 158.8                                |  | 31  | 8.60                                 | 2.4                        |   |                        |
| 176.2                                |  | 28  | 7.75                                 | 2.6                        |   |                        |
| 185.4                                |  | 27  | 7.36                                 | 2.7                        |   |                        |
| 1400                                 | 199.9                                    | 25  | 6.83                                 | 3.0                        | MRA002/80<br>MRF002/80                  |                        |
|                                      | 230.3                                    | 22  | 5.93                                 | 3.4                        |   |                        |
|                                      | 248.0                                    | 20  | 5.50                                 | 3.7                        |   |                        |
|                                      | 303.0                                    | 16  | 4.51                                 | 4.6                        |   |                        |
|                                      | 354.3                                    | 14  | 3.85                                 | 5.3                        |   |                        |
|                                      | 381.7                                    | 13  | 3.58                                 | 5.7                        |   |                        |

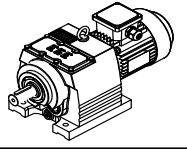


| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type    |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|--------------------------|
| <b>0,75kW<br/>1,0HP</b>              | 1400                                     | 0.3                                       | 20233                                | 4473.78                    | 0.8                                     | MRA976/80<br>MRF976/80   |
|                                      |  | 0.4                                       | 16461                                | 3594.09                    | 1.0                                     |                          |
|                                      |  | 0.5                                       | 12920                                | 2836.07                    | 1.3                                     |                          |
|                                      | 1400                                     | 0.7                                       | 9485                                 | 2027.56                    | 1.8                                     | MRA975/80<br>MRF975/80   |
|                                      |  | 1.0                                       | 6263                                 | 1368.00                    | 2.7                                     |                          |
|                                      | 1400                                     | 0.6                                       | 11236                                | 2460.16                    | 1.1                                     | MRA876/80<br>MRF876/80   |
|                                      |  | 0.6                                       | 9568                                 | 2107.91                    | 1.3                                     |                          |
|                                      | 1400                                     | 0.7                                       | 8995                                 | 1923.94                    | 1.3                                     | MRA875/80<br>MRF875/80   |
|                                      |  | 0.9                                       | 7100                                 | 1521.25                    | 1.7                                     |                          |
|                                      |  | 1.0                                       | 5961                                 | 1335.88                    | 2.0                                     |                          |
|                                      |  | 1.5                                       | 4202                                 | 915.67                     | 2.9                                     |                          |
|                                      | 1400                                     | 1.1                                       | 5747                                 | 1252.35                    | 1.2                                     | MRA775/80<br>MRF775/80   |
|                                      |  | 1.4                                       | 4525                                 | 983.98                     | 1.5                                     |                          |
|                                      | 900                                      | 1.5                                       | 4256                                 | 594.80                     | 1.6                                     | MRA774/90S<br>MRF774/90S |
|                                      |  | 1.9                                       | 3334                                 | 467.34                     | 2.1                                     |                          |
|                                      | 1400                                     | 2.6                                       | 2522                                 | 532.18                     | 2.8                                     | MRA774/80<br>MRF774/80   |
|                                      |  | 3.3                                       | 1981                                 | 418.09                     | 3.5                                     |                          |
|                                      | 1400                                     | 1.6                                       | 4083                                 | 874.39                     | 1.0                                     | MRA675/80<br>MRF675/80   |
|                                      |  |   |                                      |                            |   |                          |
|                                      | 900                                      | 2.4                                       | 2730                                 | 376.61                     | 1.5                                     | MRA674/90S<br>MRF674/90S |
|                                      |  | 2.1                                       | 3229                                 | 442.11                     | 1.2                                     |                          |
|                                      |  | 2.4                                       | 2706                                 | 376.61                     | 1.5                                     |                          |
|                                      |  | 3.2                                       | 2041                                 | 280.96                     | 2.0                                     |                          |
|                                      |  | 4.2                                       | 1570                                 | 215.93                     | 2.5                                     |                          |
|                                      | 900                                      | 2.3                                       | 2855                                 | 402.04                     | 1.0                                     | MRA574/90S<br>MRF574/90S |
|                                      |  |   |                                      |                            |   |                          |
|                                      | 1400                                     | 2.4                                       | 2708                                 | 574.79                     | 1.0                                     | MRA574/80<br>MRF574/80   |
|                                      |  | 2.8                                       | 2340                                 | 485.79                     | 1.2                                     |                          |
|                                      |  | 4.0                                       | 1663                                 | 343.84                     | 1.7                                     |                          |
|                                      |  | 4.5                                       | 1438                                 | 301.53                     | 1.9                                     |                          |
| 5.3                                  |  | 1243                                      | 258.82                               | 2.3                        |   |                          |
| 6.2                                  |  | 1062                                      | 221.36                               | 2.6                        |   |                          |
| 7.1                                  |  | 934                                       | 194.11                               | 3.0                        |   |                          |
| 8.0                                  |  | 833                                       | 171.61                               | 3.4                        |   |                          |
| 1400                                 | 3.3                                      | 1976                                      | 418.08                               | 0.7                        | MRA474/80<br>MRF474/80                  |                          |
|                                      | 4.0                                      | 1644                                      | 346.00                               | 0.9                        |   |                          |
| 900                                  | 4.2                                      | 1606                                      | 218.96                               | 0.9                        | MRA473/90S<br>MRF473/90S                |                          |
|                                      | 5.8                                      | 1163                                      | 157.87                               | 1.2                        |   |                          |
|                                      |  |   |                                      |                            |   |                          |

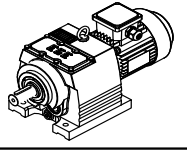




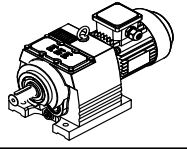
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type    |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|--------------------------|
| <b>0,75kW<br/>1,0HP</b>              | 1400                                     | 7.1                                       | 948                                  | 194.01                     | 1.5                                     | MRA473/80<br>MRF473/80   |
|                                      |  | 8.7                                       | 778                                  | 157.87                     | 1.9                                     |                          |
|                                      |  | 11.0                                      | 601                                  | 124.83                     | 2.4                                     |                          |
|                                      |  | 15.1                                      | 438                                  | 90.48                      | 3.3                                     |                          |
|                                      | 900                                      | 6.6                                       | 1020                                 | 138.69                     | 0.8                                     | MRA373/90S<br>MRF373/90S |
|                                      |  | 8.2                                       | 825                                  | 111.65                     | 1.0                                     |                          |
|                                      | 1400                                     | 8.7                                       | 774                                  | 157.73                     | 1.0                                     | MRA373/80<br>MRF373/80   |
|                                      |  | 9.9                                       | 673                                  | 138.69                     | 1.2                                     |                          |
|                                      |  | 16.0                                      | 416                                  | 85.53                      | 1.9                                     |                          |
|                                      |  | 22.4                                      | 306                                  | 61.17                      | 2.6                                     |                          |
|                                      |  | 28.9                                      | 233                                  | 47.42                      | 3.4                                     |                          |
|                                      | 900                                      | 9.4                                       | 708                                  | 96.45                      | 0.8                                     | MRA283/90S<br>MRF283/90S |
|                                      |  |   |                                      |                            |   |                          |
|                                      | 1400                                     | 12.0                                      | 548                                  | 114.12                     | 1.1                                     | MRA283/80<br>MRF283/80   |
|                                      |  | 21.8                                      | 310                                  | 62.89                      | 1.9                                     |                          |
|                                      |  | 25.6                                      | 265                                  | 53.47                      | 2.2                                     |                          |
|                                      |  | 33.0                                      | 203                                  | 41.46                      | 2.9                                     |                          |
|                                      | 1400                                     | 12.1                                      | 587                                  | 113.50                     | 0.7                                     | MRA273/80<br>MRF273/80   |
|                                      |  | 18.9                                      | 355                                  | 72.47                      | 1.1                                     |                          |
|                                      |  | 27.4                                      | 249                                  | 49.98                      | 1.6                                     |                          |
|                                      |  | 37.9                                      | 177                                  | 36.11                      | 2.3                                     |                          |
|                                      |  | 45.5                                      | 150                                  | 30.11                      | 2.7                                     |                          |
|                                      | 1400                                     | 20.4                                      | 337                                  | 67.21                      | 0.8                                     | MRA203/80<br>MRF203/80   |
|                                      |  | 24.9                                      | 269                                  | 55.07                      | 1.0                                     |                          |
|                                      |  | 31.6                                      | 215                                  | 43.41                      | 1.3                                     |                          |
|                                      |  | 38.5                                      | 176                                  | 35.59                      | 1.5                                     |                          |
|                                      |  | 48.9                                      | 136                                  | 28.01                      | 2.0                                     |                          |
|                                      |  | 56.0                                      | 121                                  | 24.47                      | 2.2                                     |                          |
|                                      |  | 59.7                                      | 113                                  | 22.95                      | 2.4                                     |                          |
|                                      | 1400                                     | 60.3                                      | 113                                  | 22.73                      | 2.4                                     | MRA202/80<br>MRF202/80   |
|                                      |  | 69.0                                      | 99                                   | 19.86                      | 2.6                                     |                          |
|                                      |  | 73.6                                      | 93                                   | 18.62                      | 2.7                                     |                          |
| 86.5                                 |  | 78  | 15.84                                | 3.1                        |   |                          |
| 1400                                 | 30.2                                     | 227                                       | 45.35                                | 0.8                        | MRA203/80<br>MRF203/80                  |                          |
|                                      | 38.3                                     | 177                                       | 35.81                                | 1.0                        |   |                          |
|                                      | 45.8                                     | 147                                       | 29.90                                | 1.2                        |   |                          |
|                                      | 53.1                                     | 128                                       | 25.79                                | 1.4                        |   |                          |
| 1400                                 | 66.3                                     | 103                                       | 20.67                                | 1.7                        | MRA172/80<br>MRF172/80                  |                          |
|                                      | 75.9                                     | 91  | 18.06                                | 2.0                        |   |                          |
|                                      | 80.9                                     | 85  | 16.93                                | 2.1                        |   |                          |



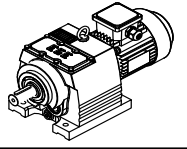
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type    |                        |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|--------------------------|------------------------|
| <b>0,75kW<br/>1,0HP</b>              | 1400                                     | 95.2                                      | 72                                   | 14.40                      | 2.5                                     | MRA172/80<br>MRF172/80   |                        |
|                                      |  | 109.5                                     | 63                                   | 12.51                      | 2.9                                     |                          |                        |
|                                      |  | 125.1                                     | 54                                   | 10.95                      | 3.3                                     |                          |                        |
|                                      | 1400                                     | 1400                                      | 39.4                                 | 173                        | 34.79                                   | 0.7                      | MRA103/80<br>MRF103/80 |
|                                      |  |   | 47.2                                 | 145                        | 29.05                                   | 0.8                      |                        |
|                                      |  |   | 55.8                                 | 120                        | 24.56                                   | 1.0                      |                        |
|                                      |  |   | 63.1                                 | 107                        | 21.70                                   | 1.1                      |                        |
|                                      |  |   | 67.6                                 | 100                        | 20.26                                   | 1.2                      |                        |
|                                      |  |   | 80.0                                 | 85                         | 17.12                                   | 1.3                      |                        |
|                                      | 1400                                     | 1400                                      | 86.9                                 | 79                         | 15.76                                   | 1.5                      | MRA102/80<br>MRF102/80 |
|                                      |  |   | 98.5                                 | 69                         | 13.91                                   | 1.6                      |                        |
|                                      |  |   | 105.4                                | 64                         | 12.99                                   | 1.7                      |                        |
|                                      |  |   | 124.7                                | 56                         | 10.99                                   | 1.8                      |                        |
|                                      |  |   | 136.2                                | 50                         | 10.06                                   | 2.0                      |                        |
|                                      |  |   | 149.3                                | 47                         | 9.18                                    | 2.1                      |                        |
|                                      |  |   | 173.1                                | 39                         | 7.91                                    | 2.3                      |                        |
|                                      |  |   | 200.1                                | 34                         | 6.85                                    | 2.5                      |                        |
|                                      |  |   | 214.0                                | 32                         | 6.40                                    | 2.5                      |                        |
|                                      |  |   | 253.5                                | 27                         | 5.40                                    | 2.9                      |                        |
|                                      |  |   | 276.8                                | 25                         | 4.95                                    | 3.2                      |                        |
|                                      |  |   | 303.4                                | 22                         | 4.52                                    | 3.3                      |                        |
|                                      | 1400                                     | 1400                                      | 57.5                                 | 117                        | 23.84                                   | 0.6                      | MRA003/80<br>MRF003/80 |
|                                      |  |   | 65.2                                 | 103                        | 21.00                                   | 0.7                      |                        |
|                                      |  |   | 72.3                                 | 93                         | 18.94                                   | 0.8                      |                        |
|                                      |  |   | 82.1                                 | 82                         | 16.69                                   | 0.9                      |                        |
|                                      |  |   | 94.5                                 | 71                         | 14.49                                   | 1.1                      |                        |
|                                      |  |   | 101.9                                | 67                         | 13.45                                   | 1.1                      |                        |
|                                      | 1400                                     | 1400                                      | 124.5                                | 55                         | 11.01                                   | 1.2                      | MRA002/80<br>MRF002/80 |
|                                      |  |   | 140.5                                | 49                         | 9.75                                    | 1.6                      |                        |
|                                      |  |   | 159.4                                | 43                         | 8.60                                    | 1.7                      |                        |
|                                      |  |   | 176.9                                | 38                         | 7.75                                    | 1.9                      |                        |
|                                      |  |   | 186.1                                | 36                         | 7.36                                    | 2.0                      |                        |
|                                      |  |   | 200.7                                | 34                         | 6.83                                    | 2.1                      |                        |
|                                      |  |   | 231.1                                | 29                         | 5.93                                    | 2.2                      |                        |
|                                      |  |   | 248.9                                | 27                         | 5.50                                    | 2.4                      |                        |
|                                      |  |   | 304.1                                | 22                         | 4.51                                    | 2.7                      |                        |
| 355.5                                |  |   | 19                                   | 3.85                       | 2.9                                     |                          |                        |
| 383.0                                | 18                                       | 3.58                                      | 3.0                                  |                            |   |                          |                        |
| <b>1,1kW<br/>1,5HP</b>               | 1400                                     | 0.5                                       | 18678                                | 2836.07                    | 0.9                                     | MRA976/90S<br>MRF976/90S |                        |
|                                      |  |   |                                      |                            |   |                          |                        |



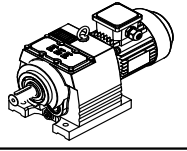
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type    |                          |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|--------------------------|--------------------------|
| 1,1kW<br>1,5HP                       | 1400                                     | 0.7                                       | 13710                                | 2027.56                    | 1.2                                     | MRA975/90S<br>MRF975/90S |                          |
|                                      |  | 1.0                                       | 9053                                 | 1368.00                    | 1.9                                     |                          |                          |
|                                      |  | 1.5                                       | 6092                                 | 914.56                     | 2.8                                     |                          |                          |
|                                      |  | 0.8                                       | 11424                                | 1700.22                    | 1.1                                     |                          |                          |
|                                      | 1400                                     | 1400                                      | 1.0                                  | 8617                       | 1335.88                                 | 1.4                      | MRA875/90S<br>MRF875/90S |
|                                      |  |   | 1.5                                  | 6073                       | 915.67                                  | 2.0                      |                          |
|                                      |  |   | 2.2                                  | 4414                       | 643.71                                  | 2.7                      |                          |
|                                      |  |   | 2.6                                  | 3648                       | 537.64                                  | 3.3                      |                          |
|                                      | 1400                                     | 1400                                      | 1.1                                  | 8307                       | 1252.35                                 | 0.8                      | MRA775/90S<br>MRF775/90S |
|                                      |  |   | 1.4                                  | 6542                       | 983.98                                  | 1.1                      |                          |
|                                      | 900                                      | 900                                       | 1.5                                  | 6207                       | 594.80                                  | 1.1                      | MRA774/90L<br>MRF774/90L |
|                                      |  |   | 2.2                                  | 4511                       | 418.09                                  | 1.6                      |                          |
|                                      | 1400                                     | 1400                                      | 2.6                                  | 3646                       | 532.18                                  | 1.9                      | MRA774/90S<br>MRF774/90S |
|                                      |  |   | 3.3                                  | 2864                       | 418.09                                  | 2.4                      |                          |
|                                      |  |   | 3.8                                  | 2528                       | 361.55                                  | 2.8                      |                          |
|                                      |  |   | 4.4                                  | 2190                       | 313.05                                  | 3.2                      |                          |
|                                      |  |   | 5.1                                  | 1902                       | 273.80                                  | 3.7                      |                          |
|                                      | 900                                      | 900                                       | 2.1                                  | 4579                       | 442.11                                  | 0.9                      | MRA674/90L<br>MRF674/90L |
|                                      |  |   | 2.4                                  | 3982                       | 376.61                                  | 1.0                      |                          |
|                                      | 1400                                     | 1400                                      | 2.8                                  | 3468                       | 500.29                                  | 1.2                      | MRA674/90S<br>MRF674/90S |
|                                      |  |   | 3.7                                  | 2597                       | 376.61                                  | 1.5                      |                          |
|                                      |  |   | 4.9                                  | 1960                       | 280.96                                  | 2.0                      |                          |
|                                      |  |   | 5.7                                  | 1709                       | 245.62                                  | 2.3                      |                          |
|                                      |  |   | 6.4                                  | 1508                       | 215.93                                  | 2.7                      |                          |
|                                      | 1400                                     | 1400                                      | 3.5                                  | 2803                       | 402.04                                  | 1.0                      | MRA574/90S<br>MRF574/90S |
|                                      |  |   | 4.0                                  | 2404                       | 343.84                                  | 1.2                      |                          |
|                                      |  |   | 4.6                                  | 2078                       | 301.53                                  | 1.3                      |                          |
|                                      |  |   | 5.4                                  | 1797                       | 258.82                                  | 1.6                      |                          |
|                                      |  |   | 6.3                                  | 1534                       | 221.36                                  | 1.8                      |                          |
|                                      |  |   | 7.2                                  | 1351                       | 194.11                                  | 2.1                      |                          |
|                                      |  |   | 8.1                                  | 1205                       | 171.61                                  | 2.3                      |                          |
|                                      |  |   | 9.6                                  | 1010                       | 144.34                                  | 2.8                      |                          |
|                                      | 900                                      | 900                                       | 5.8                                  | 1698                       | 157.87                                  | 0.9                      | MRA473/90L<br>MRF473/90L |
|                                      |  |   |                                      |                            |   |                          |                          |
|                                      | 1400                                     | 1400                                      | 7.2                                  | 1372                       | 194.01                                  | 1.1                      | MRA473/90S<br>MRF473/90S |
|                                      |  |   | 8.8                                  | 1125                       | 157.87                                  | 1.3                      |                          |
|                                      |  |   | 10.0                                 | 989                        | 139.51                                  | 1.5                      |                          |
|                                      |  |   | 11.1                                 | 870                        | 124.83                                  | 1.7                      |                          |
|                                      | 1400                                     | 1400                                      | 15.4                                 | 633                        | 90.48                                   | 2.3                      | MRA473/90S<br>MRF473/90S |
|                                      |  |   |                                      |                            |   |                          |                          |



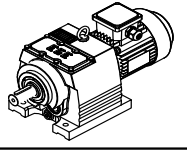
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type    |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|--------------------------|
| <b>1,1kW<br/>1,5HP</b>               | 1400                                     | 10.0                                      | 974                                  | 138.69                     | 0.8                                     | MRA373/90S<br>MRF373/90S |
|                                      |  | 16.3                                      | 602                                  | 85.53                      | 1.3                                     |                          |
|                                      |  | 22.7                                      | 443                                  | 61.17                      | 1.8                                     |                          |
|                                      |  | 29.3                                      | 336                                  | 47.42                      | 2.4                                     |                          |
|                                      | 900                                      | 39.7                                      | 255                                  | 23.05                      | 3.1                                     | MRA372/90L<br>MRF372/90L |
|                                      |  | 44.9                                      | 225                                  | 20.37                      | 3.6                                     |                          |
|                                      | 1400                                     | 16.4                                      | 588                                  | 84.57                      | 1.0                                     | MRA283/90S<br>MRF283/90S |
|                                      |  | 22.1                                      | 448                                  | 62.89                      | 1.3                                     |                          |
|                                      |  | 30.3                                      | 325                                  | 45.81                      | 1.7                                     |                          |
|                                      |  | 33.5                                      | 293                                  | 41.46                      | 1.8                                     |                          |
|                                      | 900                                      | 36.7                                      | 276                                  | 24.93                      | 2.1                                     | MRA282/90L<br>MRF282/90L |
|                                      |  | 42.8                                      | 237                                  | 21.40                      | 2.4                                     |                          |
|                                      | 1400                                     | 46.3                                      | 216                                  | 30.01                      | 2.6                                     | MRA282/90S<br>MRF282/90S |
|                                      |  | 55.8                                      | 179                                  | 24.93                      | 2.9                                     |                          |
|                                      |  | 65.0                                      | 156                                  | 21.40                      | 3.2                                     |                          |
|                                      | 1400                                     | 19.2                                      | 513                                  | 72.47                      | 0.8                                     | MRA273/90S<br>MRF273/90S |
|                                      |  | 27.8                                      | 360                                  | 49.98                      | 1.1                                     |                          |
|                                      |  | 38.5                                      | 256                                  | 36.11                      | 1.6                                     |                          |
|                                      |  | 46.2                                      | 215                                  | 30.11                      | 1.9                                     |                          |
|                                      | 1400                                     | 54.3                                      | 185                                  | 25.58                      | 2.2                                     | MRA272/90S<br>MRF272/90S |
|                                      |  | 65.7                                      | 152                                  | 21.17                      | 2.6                                     |                          |
|                                      |  | 76.8                                      | 131                                  | 18.11                      | 3.1                                     |                          |
|                                      | 1400                                     | 29.7                                      | 339                                  | 46.82                      | 0.8                                     | MRA173/90S<br>MRF173/90S |
|                                      |  | 39.1                                      | 255                                  | 35.59                      | 1.1                                     |                          |
|                                      |  | 49.6                                      | 197                                  | 28.01                      | 1.4                                     |                          |
|                                      |  | 56.8                                      | 176                                  | 24.47                      | 1.5                                     |                          |
|                                      |  | 60.6                                      | 162                                  | 22.95                      | 1.6                                     |                          |
|                                      | 1400                                     | 61.1                                      | 165                                  | 22.73                      | 1.7                                     | MRA172/90S<br>MRF172/90S |
|                                      |  | 70.0                                      | 144                                  | 19.86                      | 1.8                                     |                          |
|                                      |  | 74.6                                      | 134                                  | 18.62                      | 1.9                                     |                          |
|                                      |  | 87.8                                      | 114                                  | 15.84                      | 2.1                                     |                          |
|                                      |  | 94.7                                      | 106                                  | 14.68                      | 2.3                                     |                          |
|                                      |  | 101.1                                     | 100                                  | 13.75                      | 2.4                                     |                          |
|                                      |  | 115.5                                     | 88                                   | 12.03                      | 2.6                                     |                          |
|                                      |  | 130.1                                     | 78                                   | 10.68                      | 2.8                                     |                          |
|                                      |  | 139.7                                     | 73                                   | 9.95                       | 2.9                                     |                          |
| 167.5                                |  | 61  | 8.30                                 | 3.3                        |   |                          |
| 1400                                 | 38.8                                     | 257                                       | 35.81                                | 0.8                        | MRA173/90S<br>MRF173/90S                |                          |
|                                      | 46.5                                     | 212                                       | 29.90                                | 0.9                        |   |                          |
|                                      | 53.9                                     | 185                                       | 25.79                                | 1.1                        |   |                          |



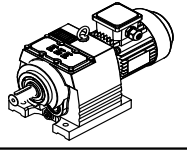
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type    |                          |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|--------------------------|--------------------------|
| <b>1,1kW<br/>1,5HP</b>               | 1400                                     | 67.3                                      | 149                                  | 20.67                      | 1.3                                     | MRA172/90S<br>MRF172/90S |                          |
|                                      |  | 82.1                                      | 123                                  | 16.93                      | 1.6                                     |                          |                          |
|                                      |  | 96.6                                      | 104                                  | 14.40                      | 1.9                                     |                          |                          |
|                                      |  | 111.1                                     | 91                                   | 12.51                      | 2.1                                     |                          |                          |
|                                      |  | 127.0                                     | 79                                   | 10.95                      | 2.3                                     |                          |                          |
|                                      |  | 147.6                                     | 69                                   | 9.42                       | 2.5                                     |                          |                          |
|                                      |  | 157.4                                     | 65                                   | 8.83                       | 2.6                                     |                          |                          |
|                                      |  | 185.1                                     | 55                                   | 7.51                       | 2.9                                     |                          |                          |
|                                      |  | 213.2                                     | 48                                   | 6.52                       | 3.0                                     |                          |                          |
|                                      |  | 243.4                                     | 42                                   | 5.71                       | 3.2                                     |                          |                          |
|                                      | 1400                                     | 1400                                      | 56.6                                 | 174                        | 24.56                                   | 0.8                      | MRA103/90S<br>MRF103/90S |
|                                      |  |   | 68.6                                 | 144                        | 20.26                                   | 1.0                      |                          |
|                                      |  |   | 81.2                                 | 123                        | 17.12                                   | 1.1                      |                          |
|                                      | 1400                                     | 1400                                      | 88.2                                 | 115                        | 15.76                                   | 1.0                      | MRA102/90S<br>MRF102/90S |
|                                      |  |   | 99.9                                 | 100                        | 13.91                                   | 1.1                      |                          |
|                                      |  |   | 126.5                                | 80                         | 10.99                                   | 1.2                      |                          |
|                                      |  |   | 138.2                                | 72                         | 10.06                                   | 1.3                      |                          |
|                                      |  |   | 151.4                                | 67                         | 9.18                                    | 1.4                      |                          |
|                                      |  |   | 175.6                                | 58                         | 7.91                                    | 1.6                      |                          |
|                                      |  |   | 203.0                                | 50                         | 6.85                                    | 1.7                      |                          |
|                                      |  |   | 257.2                                | 39                         | 5.40                                    | 2.0                      |                          |
|                                      |  |   | 280.8                                | 36                         | 4.95                                    | 2.2                      |                          |
|                                      |  |   | 307.9                                | 33                         | 4.52                                    | 2.3                      |                          |
|                                      | 1400                                     | 1400                                      | 95.9                                 | 103                        | 14.49                                   | 0.8                      | MRA003/90S<br>MRF003/90S |
|                                      |  |   | 103.4                                | 96                         | 13.45                                   | 0.8                      |                          |
|                                      | 1400                                     | 1400                                      | 126.3                                | 80                         | 11.01                                   | 0.8                      | MRA002/90S<br>MRF002/90S |
|                                      |  |   | 142.5                                | 71                         | 9.75                                    | 1.1                      |                          |
|                                      |  |   | 166.5                                | 61                         | 8.35                                    | 1.2                      |                          |
|                                      |  |   | 179.4                                | 56                         | 7.75                                    | 1.3                      |                          |
|                                      |  |   | 188.8                                | 54                         | 7.36                                    | 1.4                      |                          |
|                                      |  |   | 203.6                                | 50                         | 6.83                                    | 1.5                      |                          |
|                                      |  |   | 234.5                                | 43                         | 5.93                                    | 1.6                      |                          |
|                                      |  |   | 252.6                                | 40                         | 5.50                                    | 1.7                      |                          |
| 308.5                                |  |   | 33                                   | 4.51                       | 1.8                                     |                          |                          |
| 360.7                                |  |   | 28                                   | 3.85                       | 2.0                                     |                          |                          |
| 1400                                 | 1400                                     | 388.6                                     | 26                                   | 3.58                       | 2.1                                     |                          |                          |
|                                      |  |   |                                      |                            |   |                          |                          |
|                                      |  |   |                                      |                            |   |                          |                          |
| <b>1,5kW<br/>2,0HP</b>               | 1400                                     | 0.8                                       | 16830                                | 1820.42                    | 1.0                                     | MRA975/90L<br>MRF975/90L |                          |
|                                      |  | 0.9                                       | 14285                                | 1551.79                    | 1.2                                     |                          |                          |
|                                      |  | 1.0                                       | 12345                                | 1368.00                    | 1.4                                     |                          |                          |



| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |     |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|-----|
| <b>1,5kW<br/>2,0HP</b>               | 1400                                     | 1.5                                       | 8308                                 | 914.56                     | 2.0                                     | MRA975/90L<br>MRF975/90L   |     |
|                                      |  | 2.1                                       | 6122                                 | 662.41                     | 2.8                                     |                            |     |
|                                      | 1400                                     | 1.0                                       | 11750                                | 1335.88                    | 1.0                                     | MRA875/90L<br>MRF875/90L   |     |
|                                      |  | 1.5                                       | 8282                                 | 915.67                     | 1.4                                     |                            |     |
|                                      | 900                                      | 2.1                                       | 6293                                 | 446.33                     | 1.9                                     | MRA874/100L<br>MRF874/100L |     |
|                                      |  |   | 2.7                                  | 4922                       | 345.60                                  | 2.4                        |     |
|                                      |  | 3.9                                       | 3467                                 | 239.56                     | 3.5                                     |                            |     |
|                                      | 900                                      | 1.6                                       | 8373                                 | 594.80                     | 0.8                                     | MRA774/100L<br>MRF774/100L |     |
|                                      |  | 2.0                                       | 6560                                 | 467.34                     | 1.1                                     |                            |     |
|                                      | 1400                                     | 2.6                                       | 4972                                 | 532.18                     | 1.4                                     | MRA774/100L<br>MRF774/100L |     |
|                                      |  |   | 3.3                                  | 3906                       | 418.09                                  |                            | 1.8 |
|                                      |  |   | 4.4                                  | 2987                       | 313.05                                  |                            | 2.3 |
|                                      |  |   | 5.8                                  | 2294                       | 241.37                                  |                            | 3.1 |
|                                      |  |   | 6.5                                  | 2026                       | 214.13                                  |                            | 3.5 |
|                                      | 1400                                     | 3.1                                       | 4228                                 | 442.11                     | 0.9                                     | MRA674/90L<br>MRF674/90L   |     |
|                                      |  |   | 3.7                                  | 3543                       | 376.61                                  |                            | 1.1 |
|                                      |  |   | 4.3                                  | 3047                       | 323.76                                  |                            | 1.3 |
|                                      |  |   | 4.9                                  | 2672                       | 280.96                                  |                            | 1.5 |
|                                      |  |   | 5.7                                  | 2331                       | 245.62                                  |                            | 1.7 |
|                                      | 1400                                     | 6.4                                       | 2056                                 | 215.93                     | 1.9                                     | MRA574/90L<br>MRF574/90L   |     |
|                                      |  |   | 4.0                                  | 3278                       | 343.84                                  |                            | 0.9 |
|                                      |  |   | 4.6                                  | 2833                       | 301.53                                  |                            | 1.0 |
|                                      |  |   | 5.5                                  | 2435                       | 167.29                                  |                            | 1.2 |
|                                      |  |   | 6.0                                  | 2241                       | 153.58                                  |                            | 1.2 |
|                                      | 900                                      | 7.8                                       | 1735                                 | 118.93                     | 1.6                                     | MRA573/100L<br>MRF573/100L |     |
|                                      |  |   | 9.2                                  | 1470                       | 100.51                                  |                            | 1.9 |
|                                      |  |   | 12.9                                 | 1017                       | 71.94                                   |                            | 2.8 |
|                                      |  |   | 17.1                                 | 769                        | 54.08                                   |                            | 3.6 |
|                                      |  |   | 19.2                                 | 687                        | 48.16                                   |                            | 4.1 |
|                                      |  |   | 7.2                                  | 1873                       | 194.01                                  |                            | 0.8 |
|                                      | 10.0                                     | 1349                                      | 139.51                               | 1.1                        |   |                            |     |
|                                      | 12.7                                     | 1085                                      | 109.62                               | 1.3                        |   |                            |     |
| 15.4                                 | 864                                      | 90.48                                     | 1.7                                  |                            |   |                            |     |
| 1400                                 | 14.4                                     | 918                                       | 96.74                                | 0.9                        | MRA373/90L<br>MRF373/90L                |                            |     |
|                                      |  | 19.3                                      | 690                                  | 71.94                      |   | 1.2                        |     |
|                                      |  | 26.5                                      | 503                                  | 52.40                      |   | 1.6                        |     |
|                                      |  | 29.3                                      | 459                                  | 47.42                      |   | 1.7                        |     |
| 900                                  | 40.1                                     | 345                                       | 23.05                                | 2.3                        | MRA372/100L<br>MRF372/100L              |                            |     |
|                                      |  | 45.4                                      | 304                                  | 20.37                      |   | 2.6                        |     |
|                                      |  | 50.7                                      | 271                                  | 18.23                      |   | 2.9                        |     |

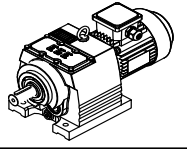


| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type    |                            |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|--------------------------|----------------------------|
| <b>1,5kW<br/>2,0HP</b>               | 1400                                     | 60.3                                      | 228                                  | 23.05                      | 3.5                                     | MRA372/90L<br>MRF372/90L |                            |
|                                      |  | 68.2                                      | 202                                  | 20.37                      | 4.0                                     |                          |                            |
|                                      |  | 76.3                                      | 180                                  | 18.23                      | 4.4                                     |                          |                            |
|                                      | 1400                                     | 1400                                      | 18.6                                 | 706                        | 74.77                                   | 0.8                      | MRA283/90L<br>MRF283/90L   |
|                                      |  |   | 26.0                                 | 523                        | 53.47                                   | 1.1                      |                            |
|                                      |  |   | 30.3                                 | 444                        | 45.81                                   | 1.3                      |                            |
|                                      | 900                                      | 900                                       | 37.1                                 | 373                        | 24.93                                   | 1.6                      | MRA282/100L<br>MRF282/100L |
|                                      |  |   | 43.2                                 | 320                        | 21.40                                   | 1.8                      |                            |
|                                      | 1400                                     | 1400                                      | 46.3                                 | 295                        | 30.01                                   | 1.9                      | MRA282/90L<br>MRF282/90L   |
|                                      |  |   | 55.8                                 | 244                        | 24.93                                   | 2.1                      |                            |
|                                      |  |   | 65.0                                 | 212                        | 21.40                                   | 2.5                      |                            |
|                                      |  |   | 73.8                                 | 185                        | 18.83                                   | 2.8                      |                            |
|                                      |  |   | 83.2                                 | 166                        | 16.71                                   | 2.9                      |                            |
|                                      | 1400                                     | 1400                                      | 98.3                                 | 141                        | 14.14                                   | 3.2                      | MRA282/90L<br>MRF282/90L   |
|                                      | 1400                                     | 1400                                      | 23.2                                 | 580                        | 59.93                                   | 0.7                      | MRA273/90L<br>MRF273/90L   |
|                                      |  |   | 33.2                                 | 408                        | 41.90                                   | 1.0                      |                            |
|                                      |  |   | 46.2                                 | 294                        | 30.11                                   | 1.4                      |                            |
|                                      | 1400                                     | 1400                                      | 54.3                                 | 252                        | 25.58                                   | 1.8                      | MRA272/90L<br>MRF272/90L   |
|                                      |  |   | 65.7                                 | 209                        | 21.17                                   | 2.1                      |                            |
|                                      |  |   | 76.8                                 | 178                        | 18.11                                   | 2.5                      |                            |
|                                      |  |   | 87.5                                 | 157                        | 15.88                                   | 2.7                      |                            |
|                                      |  |   | 99.0                                 | 140                        | 14.04                                   | 2.9                      |                            |
|                                      |  |   | 117.7                                | 117                        | 11.81                                   | 3.4                      |                            |
|                                      | 1400                                     | 1400                                      | 39.1                                 | 347                        | 35.59                                   | 0.8                      | MRA203/90L<br>MRF203/90L   |
|                                      |  |   | 49.6                                 | 270                        | 28.01                                   | 1.0                      |                            |
|                                      |  |   | 56.8                                 | 240                        | 24.47                                   | 1.2                      |                            |
|                                      |  |   | 60.6                                 | 222                        | 22.95                                   | 1.3                      |                            |
|                                      | 1400                                     | 1400                                      | 61.1                                 | 224                        | 22.73                                   | 1.2                      | MRA202/90L<br>MRF202/90L   |
|                                      |  |   | 70.0                                 | 197                        | 19.86                                   | 1.3                      |                            |
|                                      |  |   | 87.8                                 | 156                        | 15.84                                   | 1.6                      |                            |
| 101.1                                |  |   | 137                                  | 13.75                      | 1.7                                     |                          |                            |
| 115.5                                |  |   | 119                                  | 12.03                      | 1.9                                     |                          |                            |
| 130.1                                |  |   | 106                                  | 10.68                      | 2.0                                     |                          |                            |
| 167.5                                |  |   | 83                                   | 8.30                       | 2.4                                     |                          |                            |
| 199.8                                |  |   | 69                                   | 6.96                       | 2.8                                     |                          |                            |
| 242.6                                | 57                                       | 5.73                                      | 3.2                                  |                            |   |                          |                            |
| 1400                                 | 1400                                     | 67.3                                      | 204                                  | 20.67                      | 1.0                                     | MRA172/90L<br>MRF172/90L |                            |
|                                      |  | 77.0                                      | 179                                  | 18.06                      | 1.1                                     |                          |                            |
|                                      |  | 96.6                                      | 142                                  | 14.40                      | 1.4                                     |                          |                            |

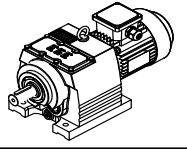


| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type    |                            |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|--------------------------|----------------------------|
| <b>1,5kW<br/>2,0HP</b>               | 1400                                     | 111.1                                     | 125                                  | 12.51                      | 1.6                                     | MRA172/90L<br>MRF172/90L |                            |
|                                      |  | 127.0                                     | 108                                  | 10.95                      | 1.8                                     |                          |                            |
|                                      |  | 147.6                                     | 94                                   | 9.42                       | 1.9                                     |                          |                            |
|                                      |  | 157.4                                     | 88                                   | 8.83                       | 2.0                                     |                          |                            |
|                                      |  | 185.1                                     | 75                                   | 7.51                       | 2.2                                     |                          |                            |
|                                      |  | 213.2                                     | 65                                   | 6.52                       | 2.3                                     |                          |                            |
|                                      |  | 243.4                                     | 57                                   | 5.71                       | 2.5                                     |                          |                            |
|                                      |  | 294.3                                     | 47                                   | 4.72                       | 2.9                                     |                          |                            |
|                                      |  | 344.0                                     | 40                                   | 4.04                       | 3.0                                     |                          |                            |
|                                      |  | 416.2                                     | 33                                   | 3.34                       | 3.4                                     |                          |                            |
|                                      | 1400                                     | 1400                                      | 99.9                                 | 137                        | 13.91                                   | 1.0                      | MRA102/90L<br>MRF102/90L   |
|                                      |  |   | 126.5                                | 109                        | 10.99                                   | 1.3                      |                            |
|                                      |  |   | 138.2                                | 99                         | 10.06                                   | 1.4                      |                            |
|                                      | 1400                                     | 1400                                      | 151.4                                | 91                         | 9.18                                    | 1.0                      | MRA102/90L<br>MRF102/90L   |
|                                      |  |   | 175.6                                | 79                         | 7.91                                    | 1.1                      |                            |
|                                      |  |   | 203.0                                | 68                         | 6.85                                    | 1.3                      |                            |
|                                      |  |   | 257.2                                | 54                         | 5.40                                    | 1.6                      |                            |
|                                      |  |   | 280.8                                | 49                         | 4.95                                    | 1.7                      |                            |
|                                      |  |   | 357.1                                | 39                         | 3.89                                    | 1.9                      |                            |
|                                      | 1400                                     | 1400                                      | 142.5                                | 97                         | 9.75                                    | 0.8                      | MRA002/90L<br>MRF002/90L   |
|                                      |  |   | 161.7                                | 85                         | 8.60                                    | 0.9                      |                            |
|                                      |  |   | 179.4                                | 77                         | 7.75                                    | 0.9                      |                            |
|                                      |  |   | 203.6                                | 68                         | 6.83                                    | 1.0                      |                            |
|                                      |  |   | 234.5                                | 59                         | 5.93                                    | 1.1                      |                            |
|                                      |  |   | 252.6                                | 55                         | 5.50                                    | 1.2                      |                            |
|                                      |  |   | 308.5                                | 45                         | 4.51                                    | 1.3                      |                            |
|                                      |  |   | 360.7                                | 38                         | 3.85                                    | 1.4                      |                            |
|                                      |  |   | 388.6                                | 36                         | 3.58                                    | 1.5                      |                            |
|                                      | <b>2,2kW<br/>3,0HP</b>                   | 1400                                      | 1.2                                  | 16990                      | 1213.61                                 | 1.0                      | MRA975/100L<br>MRF975/100L |
|                                      |  |   | 1.5                                  | 12099                      | 914.56                                  | 1.4                      |                            |
|                                      |  |   | 2.1                                  | 8914                       | 662.41                                  | 1.9                      |                            |
|                                      |  |   | 2.6                                  | 7522                       | 546.83                                  | 2.3                      |                            |
| 1400                                 |  | 1400                                      | 2.7                                  | 6943                       | 510.01                                  | 2.4                      | MRA974/100L<br>MRF974/100L |
|                                      |  |   | 3.1                                  | 6432                       | 457.90                                  | 2.6                      |                            |
|                                      |  |   | 3.6                                  | 5427                       | 390.33                                  | 3.1                      |                            |
| 1400                                 |  | 1400                                      | 1.2                                  | 16866                      | 1210.27                                 | 0.7                      | MRA875/100L<br>MRF875/100L |
|                                      |  |   | 1.5                                  | 12059                      | 915.67                                  | 1.0                      |                            |
|                                      |  |   | 1.9                                  | 9425                       | 718.60                                  | 1.3                      |                            |
| 900                                  |  | 900                                       | 2.4                                  | 8016                       | 390.66                                  | 1.5                      | MRA874/112M<br>MRF874/112M |
|                                      |  |   | 2.7                                  | 7103                       | 345.60                                  | 1.7                      |                            |

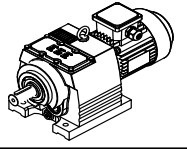




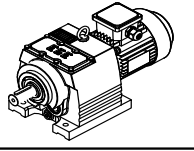
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>2,2kW<br/>3,0HP</b>               | 1400                                     | 3.1                                       | 6076                                 | 446.33                     | 2.0                                     | MRA874/100L<br>MRF874/100L |
|                                      |  | 4.1                                       | 4835                                 | 345.60                     | 2.5                                     |                            |
|                                      |  | 5.8                                       | 3297                                 | 239.56                     | 3.6                                     |                            |
|                                      | 1400                                     | 2.4                                       | 8346                                 | 594.80                     | 0.8                                     | MRA774/100L<br>MRF774/100L |
|                                      |  | 3.0                                       | 6453                                 | 467.34                     | 1.1                                     |                            |
|                                      |  | 3.9                                       | 5020                                 | 361.55                     | 1.4                                     |                            |
|                                      |  | 4.5                                       | 4349                                 | 313.05                     | 1.6                                     |                            |
|                                      |  | 5.8                                       | 3341                                 | 241.37                     | 2.1                                     |                            |
|                                      |  | 7.3                                       | 2637                                 | 190.92                     | 2.7                                     |                            |
|                                      |  | 900                                       | 4.8                                  | 4136                       | 196.57                                  |                            |
|                                      | 900                                      | 6.3                                       | 3111                                 | 149.08                     | 1.3                                     |                            |
|                                      |  | 7.6                                       | 2621                                 | 124.05                     | 1.5                                     |                            |
|                                      | 900                                      | 8.5                                       | 2312                                 | 110.53                     | 1.7                                     | MRA573/112M<br>MRF573/112M |
|                                      |  | 7.0                                       | 2822                                 | 134.42                     | 1.0                                     |                            |
|                                      | 900                                      | 7.9                                       | 2508                                 | 118.93                     | 1.1                                     | MRA573/112M<br>MRF573/112M |
|                                      |  | 1400                                      | 8.4                                  | 2370                       | 167.29                                  |                            |
|                                      | 1400                                     | 10.4                                      | 1823                                 | 134.42                     | 1.5                                     |                            |
|                                      |  | 13.9                                      | 1431                                 | 100.51                     | 2.0                                     |                            |
|                                      |  | 17.2                                      | 1156                                 | 81.46                      | 2.4                                     |                            |
|                                      |  | 21.9                                      | 923                                  | 63.94                      | 3.0                                     |                            |
|                                      |  | 25.9                                      | 782                                  | 54.08                      | 3.6                                     |                            |
|                                      |  | 29.1                                      | 693                                  | 48.16                      | 4.0                                     |                            |
|                                      | 1400                                     | 10.0                                      | 1966                                 | 139.51                     | 0.7                                     | MRA473/100L<br>MRF473/100L |
|                                      |  | 15.5                                      | 1258                                 | 90.48                      | 1.2                                     |                            |
|                                      |  | 19.4                                      | 1016                                 | 72.21                      | 1.4                                     |                            |
|                                      |  | 25.4                                      | 782                                  | 55.15                      | 1.9                                     |                            |
|                                      |  | 28.9                                      | 701                                  | 48.46                      | 2.1                                     |                            |
|                                      |  | 37.8                                      | 522                                  | 37.00                      | 2.8                                     |                            |
|                                      |  | 45.8                                      | 434                                  | 30.56                      | 3.3                                     |                            |
|                                      | 1400                                     | 22.9                                      | 881                                  | 61.17                      | 0.9                                     | MRA373/100L<br>MRF373/100L |
| 29.5                                 |  | 669                                       | 47.42                                | 1.2                        |   |                            |
| 40.2                                 |  | 499                                       | 34.83                                | 1.6                        |   |                            |
| 56.1                                 |  | 353                                       | 24.97                                | 2.3                        |   |                            |
| 1400                                 | 60.7                                     | 332                                       | 23.05                                | 2.4                        | MRA372/100L<br>MRF372/100L              |                            |
|                                      | 68.7                                     | 295                                       | 20.37                                | 2.6                        |   |                            |
|                                      | 76.8                                     | 263                                       | 18.23                                | 2.8                        |   |                            |
|                                      | 87.5                                     | 230                                       | 16.01                                | 3.0                        |   |                            |
|                                      | 104.7                                    | 193                                       | 13.37                                | 3.4                        |   |                            |
|                                      | 113.5                                    | 178                                       | 12.33                                | 3.7                        |   |                            |
|                                      |  |   |                                      |                            |   |                            |



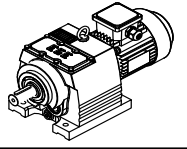
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |                            |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|----------------------------|
| <b>2,2kW<br/>3,0HP</b>               | 1400                                     | 26.2                                      | 762                                  | 53.47                      | 0.8                                     | MRA283/100L<br>MRF283/100L |                            |
|                                      |  | 33.8                                      | 582                                  | 41.46                      | 1.0                                     |                            |                            |
|                                      |  | 46.0                                      | 429                                  | 30.45                      | 1.4                                     |                            |                            |
|                                      | 1400                                     | 1400                                      | 56.2                                 | 355                        | 24.93                                   | 1.5                        | MRA282/100L<br>MRF282/100L |
|                                      |  |   | 65.4                                 | 310                        | 21.40                                   | 1.6                        |                            |
|                                      |  |   | 74.3                                 | 270                        | 18.83                                   | 1.7                        |                            |
|                                      |  |   | 83.8                                 | 242                        | 16.71                                   | 1.9                        |                            |
|                                      |  |   | 99.0                                 | 205                        | 14.14                                   | 2.1                        |                            |
|                                      |  |   | 115.8                                | 174                        | 12.09                                   | 2.4                        |                            |
|                                      |  |   | 134.1                                | 151                        | 10.44                                   | 2.7                        |                            |
|                                      |  |   | 147.5                                | 138                        | 9.49                                    | 2.9                        |                            |
|                                      |  |   | 170.1                                | 120                        | 8.23                                    | 3.2                        |                            |
|                                      | 1400                                     | 1400                                      | 38.8                                 | 509                        | 36.11                                   | 0.8                        | MRA273/100L<br>MRF273/100L |
|                                      |  |   | 46.5                                 | 429                        | 30.11                                   | 0.9                        |                            |
|                                      |  |   | 55.5                                 | 361                        | 25.24                                   | 1.1                        |                            |
|                                      | 1400                                     | 1400                                      | 66.1                                 | 304                        | 21.17                                   | 1.5                        | MRA272/100L<br>MRF272/100L |
|                                      |  |   | 77.3                                 | 260                        | 18.11                                   | 1.7                        |                            |
|                                      |  |   | 88.2                                 | 229                        | 15.88                                   | 1.8                        |                            |
|                                      |  |   | 99.7                                 | 204                        | 14.04                                   | 2.0                        |                            |
|                                      |  |   | 118.6                                | 171                        | 11.81                                   | 2.3                        |                            |
|                                      |  |   | 139.5                                | 145                        | 10.04                                   | 2.6                        |                            |
|                                      |  |   | 162.7                                | 125                        | 8.61                                    | 2.9                        |                            |
|                                      |  |   | 228.2                                | 89                         | 6.14                                    | 3.7                        |                            |
|                                      | 268.4                                    | 76  | 5.22                                 | 3.9                        |   |                            |                            |
|                                      | 1400                                     | 1400                                      | 61.0                                 | 324                        | 22.95                                   | 0.8                        | MRA203/100L<br>MRF203/100L |
|                                      |  |   |                                      |                            |   |                            |                            |
|                                      | 1400                                     | 1400                                      | 70.5                                 | 287                        | 19.86                                   | 1.0                        | MRA202/100L<br>MRF202/100L |
|                                      |  |   | 88.4                                 | 227                        | 15.84                                   | 1.1                        |                            |
|                                      |  |   | 101.8                                | 199                        | 13.75                                   | 1.3                        |                            |
|                                      |  |   | 116.3                                | 174                        | 12.03                                   | 1.4                        |                            |
|                                      |  |   | 131.1                                | 155                        | 10.68                                   | 1.4                        |                            |
|                                      |  |   | 140.7                                | 144                        | 9.95                                    | 1.5                        |                            |
|                                      |  |   | 168.7                                | 121                        | 8.30                                    | 1.6                        |                            |
|                                      |  |   | 201.3                                | 101                        | 6.96                                    | 1.8                        |                            |
|                                      |  |   | 244.3                                | 83                         | 5.73                                    | 2.1                        |                            |
|                                      |  |   | 278.9                                | 72                         | 5.02                                    | 2.2                        |                            |
| 314.9                                |  |   | 64                                   | 4.45                       | 2.3                                     |                            |                            |
| 337.4                                |  |   | 60                                   | 4.15                       | 2.4                                     |                            |                            |
| 404.9                                |  |   | 50                                   | 3.46                       | 2.6                                     |                            |                            |



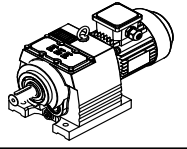
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>2,2kW<br/>3,0HP</b>               | 1400                                     | 97.3                                      | 207                                  | 14.40                      | 1.0                                     | MRA172/100L<br>MRF172/100L |
|                                      |  | 111.9                                     | 181                                  | 12.51                      | 1.1                                     |                            |
|                                      |  | 127.9                                     | 158                                  | 10.95                      | 1.2                                     |                            |
|                                      |  | 148.7                                     | 136                                  | 9.42                       | 1.3                                     |                            |
|                                      |  | 158.5                                     | 128                                  | 8.83                       | 1.4                                     |                            |
|                                      |  | 186.4                                     | 109                                  | 7.51                       | 1.5                                     |                            |
|                                      |  | 214.7                                     | 95                                   | 6.52                       | 1.6                                     |                            |
|                                      |  | 245.2                                     | 83                                   | 5.71                       | 1.8                                     |                            |
|                                      |  | 296.4                                     | 68                                   | 4.72                       | 1.9                                     |                            |
|                                      |  | 346.5                                     | 58                                   | 4.04                       | 2.1                                     |                            |
|                                      |  | 419.2                                     | 48                                   | 3.34                       | 2.3                                     |                            |
| <b>3kW<br/>4,0HP</b>                 | 1400                                     | 1.5                                       | 16439                                | 914.56                     | 1.0                                     | MRA975/100L<br>MRF975/100L |
|                                      |  | 2.1                                       | 12113                                | 662.41                     | 1.4                                     |                            |
|                                      |  | 2.6                                       | 10220                                | 546.83                     | 1.7                                     |                            |
|                                      | 1400                                     | 3.1                                       | 8740                                 | 457.90                     | 1.9                                     | MRA974/100L<br>MRF974/100L |
|                                      |  | 4.1                                       | 6535                                 | 344.10                     | 2.6                                     |                            |
|                                      | 900                                      | 2.7                                       | 9635                                 | 345.60                     | 1.2                                     | MRA874/132S<br>MRF874/132S |
|                                      |  |   |                                      |                            |   |                            |
|                                      | 1400                                     | 3.6                                       | 7359                                 | 390.66                     | 1.6                                     | MRA874/100L<br>MRF874/100L |
|                                      |  | 4.8                                       | 5506                                 | 292.09                     | 2.2                                     |                            |
|                                      |  | 5.9                                       | 4480                                 | 239.56                     | 2.7                                     |                            |
|                                      |  | 6.6                                       | 3982                                 | 211.56                     | 3.0                                     |                            |
|                                      |  | 7.5                                       | 3533                                 | 188.04                     | 3.4                                     |                            |
|                                      |  | 8.0                                       | 3289                                 | 174.65                     | 3.6                                     |                            |
|                                      |  | 9.5                                       | 2795                                 | 147.58                     | 4.3                                     |                            |
|                                      | 1400                                     | 13.1                                      | 2041                                 | 107.58                     | 5.9                                     | MRA774/100L<br>MRF774/100L |
|                                      |  | 3.9                                       | 6821                                 | 361.55                     | 1.0                                     |                            |
|                                      | 900                                      | 4.5                                       | 5916                                 | 208.78                     | 1.2                                     | MRA773/132S<br>MRF773/132S |
|                                      |  | 7.1                                       | 3808                                 | 133.02                     | 1.8                                     |                            |
|                                      |  | 11.0                                      | 2378                                 | 86.08                      | 2.9                                     |                            |
|                                      |  | 14.0                                      | 1894                                 | 67.33                      | 3.7                                     |                            |
|                                      | 900                                      | 6.3                                       | 4216                                 | 149.08                     | 0.9                                     | MRA673/132S<br>MRF673/132S |
| 10.2                                 |  | 2660                                      | 93.04                                | 1.5                        |   |                            |
| 15.6                                 |  | 1775                                      | 60.68                                | 2.3                        |   |                            |
| 21.1                                 |  | 1289                                      | 44.75                                | 3.1                        |   |                            |
| 27.8                                 |  | 968                                       | 33.95                                | 4.1                        |   |                            |
| 1400                                 | 10.5                                     | 2479                                      | 134.42                               | 1.1                        | MRA573/100L<br>MRF573/100L              |                            |
|                                      | 17.2                                     | 1572                                      | 81.46                                | 1.8                        |   |                            |
|                                      | 22.0                                     | 1256                                      | 63.94                                | 2.2                        |   |                            |



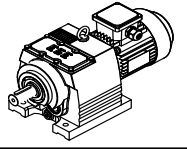
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>3kW<br/>4,0HP</b>                 | 1400                                     | 26.0                                      | 1064                                 | 54.08                      | 2.6                                     | MRA573/100L<br>MRF573/100L |
|                                      |  | 29.2                                      | 942                                  | 48.16                      | 3.0                                     |                            |
|                                      |  | 35.6                                      | 766                                  | 39.50                      | 3.7                                     |                            |
|                                      |  | 40.3                                      | 683                                  | 34.89                      | 4.1                                     |                            |
|                                      |  | 45.3                                      | 608                                  | 31.00                      | 4.6                                     |                            |
|                                      | 1400                                     | 15.5                                      | 1711                                 | 90.48                      | 0.8                                     | MRA473/100L<br>MRF473/100L |
|                                      |  | 19.5                                      | 1382                                 | 72.21                      | 1.0                                     |                            |
|                                      |  | 25.5                                      | 1063                                 | 55.15                      | 1.4                                     |                            |
|                                      |  | 33.3                                      | 824                                  | 42.24                      | 1.8                                     |                            |
|                                      |  | 38.0                                      | 710                                  | 37.00                      | 2.0                                     |                            |
|                                      | 900                                      | 43.2                                      | 642                                  | 21.88                      | 2.3                                     | MRA472/132S<br>MRF472/132S |
|                                      |  | 51.1                                      | 537                                  | 18.50                      | 2.7                                     |                            |
|                                      |  | 62.3                                      | 444                                  | 15.17                      | 3.3                                     |                            |
|                                      | 1400                                     | 29.6                                      | 909                                  | 47.42                      | 0.9                                     | MRA373/100L<br>MRF373/100L |
|                                      |  | 40.3                                      | 677                                  | 34.83                      | 1.2                                     |                            |
|                                      |  | 48.3                                      | 558                                  | 29.12                      | 1.4                                     |                            |
|                                      |  | 56.3                                      | 480                                  | 24.97                      | 1.7                                     |                            |
|                                      | 1400                                     | 61.0                                      | 452                                  | 23.05                      | 1.8                                     | MRA372/100L<br>MRF372/100L |
|                                      |  | 69.0                                      | 400                                  | 20.37                      | 1.9                                     |                            |
|                                      |  | 77.1                                      | 358                                  | 18.23                      | 2.0                                     |                            |
|                                      |  | 87.8                                      | 313                                  | 16.01                      | 2.2                                     |                            |
|                                      |  | 105.1                                     | 262                                  | 13.37                      | 2.5                                     |                            |
|                                      |  | 113.9                                     | 242                                  | 12.33                      | 2.6                                     |                            |
|                                      |  | 131.7                                     | 210                                  | 10.67                      | 2.9                                     |                            |
|                                      |  | 151.1                                     | 183                                  | 9.30                       | 3.2                                     |                            |
|                                      | 1400                                     | 46.1                                      | 583                                  | 30.45                      | 1.0                                     | MRA283/100L<br>MRF283/100L |
|                                      |  |   |                                      |                            |   |                            |
|                                      | 1400                                     | 56.4                                      | 484                                  | 24.93                      | 1.2                                     | MRA282/100L<br>MRF282/100L |
|                                      |  | 65.7                                      | 421                                  | 21.40                      | 1.3                                     |                            |
|                                      |  | 74.6                                      | 367                                  | 18.83                      | 1.4                                     |                            |
|                                      |  | 84.1                                      | 329                                  | 16.71                      | 1.5                                     |                            |
|                                      |  | 99.4                                      | 278                                  | 14.14                      | 1.7                                     |                            |
| 116.2                                |  | 237                                       | 12.09                                | 1.9                        |   |                            |
| 134.5                                |  | 205                                       | 10.44                                | 2.1                        |   |                            |
| 148.0                                |  | 187                                       | 9.49                                 | 2.2                        |   |                            |
| 170.7                                |  | 162                                       | 8.23                                 | 2.5                        |   |                            |
| 197.2                                |  | 141                                       | 7.12                                 | 2.7                        |   |                            |
| 227.5                                |  | 121                                       | 6.18                                 | 3.0                        |   |                            |
| 265.8                                | 104                                      | 5.29                                      | 3.1                                  |                            |   |                            |



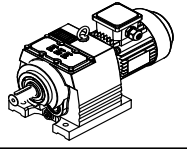
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |                            |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|----------------------------|
| <b>3kW<br/>4,0HP</b>                 | 1400                                     | 307.8                                     | 90                                   | 4.56                       | 3.1                                     | MRA282/100L<br>MRF282/100L |                            |
|                                      |  | 338.6                                     | 82                                   | 4.15                       | 3.2                                     |                            |                            |
|                                      |  | 390.7                                     | 71                                   | 3.60                       | 3.2                                     |                            |                            |
|                                      | 1400                                     | 55.7                                      | 491                                  | 25.24                      | 0.8                                     | MRA273/100L<br>MRF273/100L |                            |
|                                      |  |   |                                      |                            |   |                            |                            |
|                                      | 1400                                     | 66.4                                      | 413                                  | 21.17                      | 1.1                                     | MRA272/100L<br>MRF272/100L |                            |
|                                      |  | 77.6                                      | 354                                  | 18.11                      | 1.2                                     |                            |                            |
|                                      |  | 88.5                                      | 312                                  | 15.88                      | 1.3                                     |                            |                            |
|                                      |  | 100.1                                     | 277                                  | 14.04                      | 1.5                                     |                            |                            |
|                                      |  | 119.0                                     | 232                                  | 11.81                      | 1.7                                     |                            |                            |
|                                      |  | 140.0                                     | 198                                  | 10.04                      | 1.9                                     |                            |                            |
|                                      |  | 163.3                                     | 170                                  | 8.61                       | 2.1                                     |                            |                            |
|                                      |  | 229.0                                     | 121                                  | 6.14                       | 2.5                                     |                            |                            |
|                                      |  | 269.3                                     | 103                                  | 5.22                       | 2.6                                     |                            |                            |
|                                      |  | 313.9                                     | 89                                   | 4.48                       | 2.7                                     |                            |                            |
|                                      | 1400                                     | 88.7                                      | 309                                  | 15.84                      | 0.9                                     | MRA202/100L<br>MRF202/100L |                            |
|                                      |  | 102.2                                     | 271                                  | 13.75                      | 1.0                                     |                            |                            |
|                                      |  | 116.8                                     | 236                                  | 12.03                      | 1.2                                     |                            |                            |
|                                      |  | 131.6                                     | 210                                  | 10.68                      | 1.3                                     |                            |                            |
|                                      |  | 141.2                                     | 196                                  | 9.95                       | 1.4                                     |                            |                            |
|                                      |  | 169.3                                     | 164                                  | 8.30                       | 1.7                                     |                            |                            |
|                                      |  | 202.0                                     | 137                                  | 6.96                       | 2.0                                     |                            |                            |
|                                      |  | 245.2                                     | 112                                  | 5.73                       | 2.5                                     |                            |                            |
|                                      |  | 279.9                                     | 99                                   | 5.02                       | 2.8                                     |                            |                            |
|                                      |  | 316.0                                     | 88                                   | 4.45                       | 3.2                                     |                            |                            |
|                                      |  | 338.6                                     | 82                                   | 4.15                       | 3.4                                     |                            |                            |
|                                      |  | 406.3                                     | 68                                   | 3.46                       | 4.1                                     |                            |                            |
|                                      | 1400                                     | 112.3                                     | 246                                  | 12.51                      | 0.8                                     | MRA172/100L<br>MRF172/100L |                            |
|                                      |  | 128.3                                     | 214                                  | 10.95                      | 0.9                                     |                            |                            |
|                                      |  | 149.2                                     | 185                                  | 9.42                       | 1.1                                     |                            |                            |
|                                      |  | 159.1                                     | 174                                  | 8.83                       | 1.1                                     |                            |                            |
|                                      |  | 187.1                                     | 148                                  | 7.51                       | 1.2                                     |                            |                            |
|                                      |  | 215.5                                     | 128                                  | 6.52                       | 1.3                                     |                            |                            |
|                                      |  | 246.0                                     | 112                                  | 5.71                       | 1.5                                     |                            |                            |
|                                      | 1400                                     | 297.5                                     | 94                                   | 4.72                       | 1.5                                     | MRA172/100L<br>MRF172/100L |                            |
|                                      |  | 347.7                                     | 80                                   | 4.04                       | 1.8                                     |                            |                            |
|                                      |  | 420.7                                     | 66                                   | 3.34                       | 2.1                                     |                            |                            |
|                                      | <b>4kW<br/>5,5HP</b>                     | 1400                                      | 2.2                                  | 15922                      | 662.41                                  | 1.1                        | MRA975/112M<br>MRF975/112M |
|                                      |  |   | 2.6                                  | 13436                      | 546.83                                  | 1.3                        |                            |
|                                      |  |   |                                      |                            |   |                            |                            |



| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>4kW<br/>5,5HP</b>                 | 1400                                     | 2.8                                       | 12403                                | 510.01                     | 1.4                                     | MRA974/112M<br>MRF974/112M |
|                                      |  | 3.7                                       | 9695                                 | 390.33                     | 1.8                                     |                            |
|                                      |  | 4.7                                       | 7595                                 | 305.27                     | 2.2                                     |                            |
|                                      |  | 6.6                                       | 5388                                 | 215.99                     | 3.2                                     |                            |
|                                      | 900                                      | 2.7                                       | 12915                                | 345.60                     | 0.9                                     | MRA874/132M<br>MRF874/132M |
|                                      |  | 3.2                                       | 11024                                | 292.09                     | 1.1                                     |                            |
|                                      | 1400                                     | 3.6                                       | 9674                                 | 390.66                     | 1.2                                     | MRA874/112M<br>MRF874/112M |
|                                      |  | 4.9                                       | 7238                                 | 292.09                     | 1.7                                     |                            |
|                                      |  | 5.9                                       | 5889                                 | 239.56                     | 2.0                                     |                            |
|                                      |  | 7.6                                       | 4644                                 | 188.04                     | 2.6                                     |                            |
|                                      |  | 8.2                                       | 4324                                 | 174.65                     | 2.8                                     |                            |
|                                      | 900                                      | 8.5                                       | 4223                                 | 110.15                     | 2.8                                     | MRA873/132M<br>MRF873/132M |
|                                      |  | 9.5                                       | 3760                                 | 98.61                      | 3.2                                     |                            |
|                                      | 900                                      | 4.5                                       | 7936                                 | 208.78                     | 0.9                                     | MRA773/132M<br>MRF773/132M |
|                                      |  | 5.3                                       | 6773                                 | 178.74                     | 1.0                                     |                            |
|                                      |  | 6.3                                       | 5720                                 | 148.70                     | 1.2                                     |                            |
|                                      |  | 7.1                                       | 5109                                 | 133.02                     | 1.4                                     |                            |
|                                      |  | 8.2                                       | 4379                                 | 115.04                     | 1.6                                     |                            |
|                                      |  | 9.5                                       | 3748                                 | 98.43                      | 1.9                                     |                            |
|                                      |  | 10.9                                      | 3190                                 | 86.08                      | 2.2                                     |                            |
|                                      |  | 12.4                                      | 2978                                 | 75.89                      | 2.4                                     |                            |
|                                      | 1400                                     | 8.1                                       | 4411                                 | 174.86                     | 0.9                                     | MRA673/112M<br>MRF673/112M |
|                                      |  | 9.6                                       | 3773                                 | 149.08                     | 1.1                                     |                            |
|                                      |  | 11.5                                      | 3058                                 | 124.05                     | 1.3                                     |                            |
|                                      |  | 12.9                                      | 2873                                 | 110.53                     | 1.4                                     |                            |
|                                      | 900                                      | 15.5                                      | 2381                                 | 60.68                      | 1.7                                     | MRA673/132M<br>MRF673/132M |
|                                      |  | 17.6                                      | 2088                                 | 53.34                      | 1.9                                     |                            |
|                                      |  | 18.1                                      | 1986                                 | 52.05                      | 2.0                                     |                            |
|                                      |  | 21.0                                      | 1730                                 | 44.75                      | 2.3                                     |                            |
|                                      |  | 24.2                                      | 1500                                 | 38.83                      | 2.7                                     |                            |
|                                      |  | 27.7                                      | 1298                                 | 33.95                      | 3.1                                     |                            |
|                                      |  | 31.5                                      | 1159                                 | 29.84                      | 3.5                                     |                            |
| 1400                                 | 14.2                                     | 2560                                      | 100.51                               | 1.1                        | MRA573/112M<br>MRF573/112M              |                            |
|                                      | 19.8                                     | 1803                                      | 71.94                                | 1.6                        |   |                            |
|                                      | 26.3                                     | 1398                                      | 54.08                                | 2.0                        |   |                            |
|                                      | 29.6                                     | 1240                                      | 48.16                                | 2.3                        |   |                            |
|                                      | 36.1                                     | 1006                                      | 39.50                                | 2.8                        |   |                            |
|                                      | 40.8                                     | 898                                       | 34.89                                | 3.1                        |   |                            |
|                                      | 46.0                                     | 799                                       | 31.00                                | 3.5                        |   |                            |

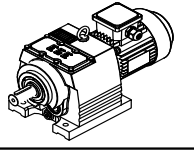


| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>4kW<br/>5,5HP</b>                 | 1400                                     | 53.4                                      | 691                                  | 26.68                      | 4.1                                     | MRA572/112M<br>MRF572/112M |
|                                      |  | 62.7                                      | 590                                  | 22.74                      | 4.7                                     |                            |
|                                      | 1400                                     | 19.7                                      | 1817                                 | 72.21                      | 0.8                                     | MRA473/112M<br>MRF473/112M |
|                                      |  | 25.8                                      | 1397                                 | 55.15                      | 1.0                                     |                            |
|                                      |  | 29.4                                      | 1253                                 | 48.46                      | 1.2                                     |                            |
|                                      |  | 38.5                                      | 934                                  | 37.00                      | 1.6                                     |                            |
|                                      |  | 46.6                                      | 777                                  | 30.56                      | 1.9                                     |                            |
|                                      |  | 56.2                                      | 655                                  | 25.36                      | 2.2                                     |                            |
|                                      |  | 65.1                                      | 564                                  | 21.88                      | 2.6                                     |                            |
|                                      | 1400                                     | 77.0                                      | 480                                  | 18.50                      | 3.0                                     | MRA472/112M<br>MRF472/112M |
|                                      |  | 83.6                                      | 440                                  | 17.04                      | 3.3                                     |                            |
|                                      |  | 94.0                                      | 391                                  | 15.17                      | 3.7                                     |                            |
|                                      |  | 40.9                                      | 891                                  | 34.83                      | 0.9                                     |                            |
|                                      | 48.9                                     | 735                                       | 29.12                                | 1.1                        |   |                            |
|                                      | 57.1                                     | 631                                       | 24.97                                | 1.3                        |   |                            |
|                                      | 66.6                                     | 548                                       | 21.39                                | 1.5                        |   |                            |
|                                      | 1400                                     | 69.9                                      | 527                                  | 20.37                      | 1.5                                     | MRA372/112M<br>MRF372/112M |
|                                      |  | 78.2                                      | 472                                  | 18.23                      | 1.7                                     |                            |
|                                      |  | 89.0                                      | 411                                  | 16.01                      | 1.9                                     |                            |
|                                      |  | 106.6                                     | 344                                  | 13.37                      | 2.3                                     |                            |
|                                      |  | 115.6                                     | 318                                  | 12.33                      | 2.5                                     |                            |
|                                      |  | 133.5                                     | 277                                  | 10.67                      | 2.9                                     |                            |
|                                      |  | 153.3                                     | 241                                  | 9.30                       | 3.3                                     |                            |
|                                      |  | 174.8                                     | 212                                  | 8.15                       | 3.8                                     |                            |
|                                      | 210.9                                    | 176                                       | 6.76                                 | 4.5                        | MRA282/112M<br>MRF282/112M              |                            |
|                                      | 1400                                     | 75.7                                      | 482                                  | 18.83                      |   | 1.0                        |
|                                      |  | 85.3                                      | 432                                  | 16.71                      |   | 1.1                        |
|                                      |  | 100.8                                     | 366                                  | 14.14                      |   | 1.2                        |
|                                      |  | 117.8                                     | 312                                  | 12.09                      |   | 1.3                        |
|                                      |  | 136.5                                     | 270                                  | 10.44                      |   | 1.6                        |
|                                      |  | 150.1                                     | 247                                  | 9.49                       |   | 1.6                        |
|                                      |  | 173.1                                     | 213                                  | 8.23                       |   | 1.9                        |
|                                      |  | 200.0                                     | 184                                  | 7.12                       |   | 2.1                        |
|                                      |  | 230.8                                     | 160                                  | 6.18                       |   | 2.2                        |
|                                      |  | 269.6                                     | 137                                  | 5.29                       |   | 2.3                        |
|                                      |  | 312.2                                     | 118                                  | 4.56                       |   | 2.5                        |
|                                      | 343.4                                    | 108                                       | 4.15                                 | 2.6                        |   |                            |
|                                      | 396.2                                    | 93  | 3.60                                 | 2.8                        | MRA282/112M<br>MRF282/112M              |                            |
|                                      | 457.9                                    | 80  | 3.11                                 | 7.2                        |   |                            |

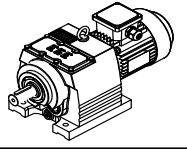


| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |                            |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|----------------------------|
| 4kW<br>5,5HP                         | 1400                                     | 75.9                                      | 480                                  | 18.77                      | 0.8                                     | MRA273/112M<br>MRF273/112M |                            |
|                                      |  |   |                                      |                            |   |                            |                            |
|                                      | 1400                                     | 89.8                                      | 410                                  | 15.88                      | 1.0                                     | MRA272/112M<br>MRF272/112M |                            |
|                                      |  | 101.5                                     | 365                                  | 14.04                      | 1.1                                     |                            |                            |
|                                      |  | 120.7                                     | 305                                  | 11.81                      | 1.2                                     |                            |                            |
|                                      |  | 142.0                                     | 261                                  | 10.04                      | 1.5                                     |                            |                            |
|                                      |  | 165.6                                     | 224                                  | 8.61                       | 1.6                                     |                            |                            |
|                                      |  | 232.3                                     | 159                                  | 6.14                       | 2.0                                     |                            |                            |
|                                      |  | 273.2                                     | 136                                  | 5.22                       | 1.9                                     |                            |                            |
|                                      |  | 318.4                                     | 116                                  | 4.48                       | 1.9                                     |                            |                            |
|                                      | 1400                                     | 133.4                                     | 277                                  | 10.68                      | 0.8                                     | MRA202/112M<br>MRF202/112M |                            |
|                                      |  | 143.2                                     | 257                                  | 9.95                       | 0.8                                     |                            |                            |
|                                      |  | 171.7                                     | 215                                  | 8.30                       | 0.9                                     |                            |                            |
|                                      |  | 204.9                                     | 181                                  | 6.96                       | 1.0                                     |                            |                            |
|                                      |  | 248.7                                     | 148                                  | 5.73                       | 1.1                                     |                            |                            |
|                                      |  | 283.9                                     | 130                                  | 5.02                       | 1.2                                     |                            |                            |
|                                      |  | 320.5                                     | 115                                  | 4.45                       | 1.3                                     |                            |                            |
|                                      |  | 343.4                                     | 108                                  | 4.15                       | 1.3                                     |                            |                            |
|                                      | 1400                                     | 412.1                                     | 89                                   | 3.46                       | 1.5                                     | MRA172/112M<br>MRF172/112M |                            |
|                                      |  | 218.5                                     | 169                                  | 6.52                       | 0.9                                     |                            |                            |
|                                      |  | 249.5                                     | 148                                  | 5.71                       | 1.0                                     |                            |                            |
|                                      |  | 301.7                                     | 122                                  | 4.72                       | 1.1                                     |                            |                            |
|                                      |  | 352.6                                     | 105                                  | 4.04                       | 1.2                                     |                            |                            |
|                                      | 5,5kW<br>7,0HP                           | 1400                                      | 2.2                                  | 21817                      | 662.41                                  | 0.8                        | MRA975/132S<br>MRF975/132S |
|                                      |  |   | 2.6                                  | 18410                      | 546.83                                  | 0.9                        |                            |
|                                      |  | 1400                                      | 2.8                                  | 16995                      | 510.01                                  | 1.0                        | MRA974/132S<br>MRF974/132S |
|                                      |  |   | 3.7                                  | 13284                      | 390.33                                  | 1.3                        |                            |
|                                      |  |   | 4.7                                  | 10406                      | 305.27                                  | 1.6                        |                            |
| 5.3                                  |  |   | 9181                                 | 272.19                     | 1.9                                     |                            |                            |
| 6.6                                  |  |   | 7382                                 | 215.99                     | 2.3                                     |                            |                            |
| 7.4                                  |  |   | 6548                                 | 193.09                     | 2.6                                     |                            |                            |
| 8.3                                  |  |   | 5859                                 | 172.05                     | 2.9                                     |                            |                            |
| 1400                                 |  | 4.1                                       | 11834                                | 345.60                     | 1.0                                     | MRA874/132S<br>MRF874/132S |                            |
|                                      |  | 4.9                                       | 9918                                 | 292.09                     | 1.2                                     |                            |                            |
|                                      |  | 6.0                                       | 8070                                 | 239.56                     | 1.5                                     |                            |                            |
|                                      |  | 6.8                                       | 7173                                 | 211.56                     | 1.7                                     |                            |                            |
|                                      |  | 7.6                                       | 6364                                 | 188.04                     | 1.9                                     |                            |                            |
|                                      |  | 9.7                                       | 5035                                 | 147.58                     | 2.4                                     |                            |                            |
|                                      | 11.4                                     | 4237                                      | 125.67                               | 2.8                        |   |                            |                            |

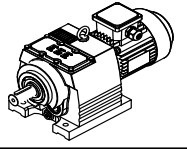




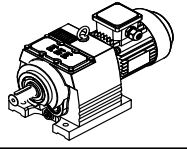
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>5,5kW<br/>7,0HP</b>               | 900                                      | 6.4                                       | 7830                                 | 148.70                     | 0.9                                     | MRA773/132M<br>MRF773/132M |
|                                      |  |   |                                      |                            |   |                            |
|                                      | 1400                                     | 8.0                                       | 6165                                 | 178.74                     | 1.1                                     | MRA773/132S<br>MRF773/132S |
|                                      |  | 9.6                                       | 5144                                 | 148.70                     | 1.4                                     |                            |
|                                      |  | 10.7                                      | 4823                                 | 133.02                     | 1.5                                     |                            |
|                                      |  | 14.5                                      | 3404                                 | 98.43                      | 2.1                                     |                            |
|                                      |  | 18.8                                      | 2608                                 | 75.89                      | 2.7                                     |                            |
|                                      |  | 21.2                                      | 2398                                 | 67.33                      | 2.9                                     |                            |
|                                      | 1400                                     | 11.5                                      | 4191                                 | 124.05                     | 1.0                                     | MRA673/132S<br>MRF673/132S |
|                                      |  | 15.4                                      | 3255                                 | 93.04                      | 1.2                                     |                            |
|                                      |  | 20.6                                      | 2422                                 | 69.42                      | 1.7                                     |                            |
|                                      |  | 23.6                                      | 2132                                 | 60.68                      | 1.9                                     |                            |
|                                      |  | 26.8                                      | 1864                                 | 53.34                      | 2.1                                     |                            |
|                                      |  | 32.0                                      | 1566                                 | 44.75                      | 2.6                                     |                            |
|                                      |  | 36.8                                      | 1371                                 | 38.83                      | 2.9                                     |                            |
|                                      |  | 42.1                                      | 1195                                 | 33.95                      | 3.3                                     |                            |
|                                      | 1400                                     | 47.9                                      | 1038                                 | 29.84                      | 3.9                                     | MRA573/132S<br>MRF573/132S |
|                                      |  | 17.6                                      | 2833                                 | 81.46                      | 1.0                                     |                            |
|                                      |  | 22.4                                      | 2264                                 | 63.94                      | 1.2                                     |                            |
|                                      |  | 29.7                                      | 1698                                 | 48.16                      | 1.6                                     |                            |
|                                      |  | 36.2                                      | 1379                                 | 39.50                      | 2.0                                     |                            |
|                                      |  | 41.0                                      | 1231                                 | 34.89                      | 2.3                                     |                            |
|                                      | 1400                                     | 46.1                                      | 1095                                 | 31.00                      | 2.6                                     | MRA572/132S<br>MRF572/132S |
|                                      |  | 53.6                                      | 947                                  | 26.68                      | 3.0                                     |                            |
|                                      |  | 62.9                                      | 809                                  | 22.74                      | 3.5                                     |                            |
|                                      |  | 75.6                                      | 670                                  | 18.92                      | 4.2                                     |                            |
|                                      | 1400                                     | 84.8                                      | 599                                  | 16.87                      | 4.7                                     | MRA473/132S<br>MRF473/132S |
|                                      |  | 25.9                                      | 1915                                 | 55.15                      | 0.8                                     |                            |
|                                      |  | 29.5                                      | 1717                                 | 48.46                      | 0.8                                     |                            |
|                                      |  | 33.9                                      | 1485                                 | 42.24                      | 1.0                                     |                            |
| 38.6                                 |  | 1280                                      | 37.00                                | 1.1                        |   |                            |
| 46.8                                 |  | 1064                                      | 30.56                                | 1.4                        |   |                            |
| 1400                                 | 56.4                                     | 897                                       | 25.36                                | 1.6                        | MRA472/132S<br>MRF472/132S              |                            |
|                                      | 65.3                                     | 772                                       | 21.88                                | 1.9                        |   |                            |
|                                      | 77.3                                     | 658                                       | 18.50                                | 2.2                        |   |                            |
|                                      | 83.9                                     | 602                                       | 17.04                                | 2.4                        |   |                            |
|                                      | 106.7                                    | 475                                       | 13.40                                | 3.1                        |   |                            |
|                                      | 120.1                                    | 422                                       | 11.91                                | 3.4                        |   |                            |
|                                      | 134.1                                    | 379                                       | 10.66                                | 3.8                        |   |                            |
| 151.9                                | 335                                      | 9.42                                      | 4.3                                  |                            |   |                            |



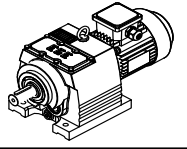
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |                            |                            |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|----------------------------|----------------------------|
| 5,5kW<br>7,0HP                       | 1400                                     | 57.3                                      | 865                                  | 24.97                      | 0.9                                     | MRA373/132S<br>MRF373/132S |                            |                            |
|                                      |  | 66.9                                      | 752                                  | 21.39                      | 1.1                                     |                            |                            |                            |
|                                      |  | 70.1                                      | 715                                  | 20.39                      | 1.1                                     |                            |                            |                            |
|                                      |  | 77.5                                      | 647                                  | 18.46                      | 1.2                                     |                            |                            |                            |
|                                      | 1400                                     | 1400                                      | 89.3                                 | 564                        | 16.01                                   | 1.4                        | MRA372/132S<br>MRF372/132S |                            |
|                                      |  |   | 107.0                                | 472                        | 13.37                                   | 1.7                        |                            |                            |
|                                      |  |   | 116.0                                | 437                        | 12.33                                   | 1.8                        |                            |                            |
|                                      |  |   | 134.0                                | 379                        | 10.67                                   | 2.1                        |                            |                            |
|                                      |  |   | 153.8                                | 330                        | 9.30                                    | 2.4                        |                            |                            |
|                                      |  |   | 175.4                                | 290                        | 8.15                                    | 2.8                        |                            |                            |
|                                      |  |   | 211.6                                | 240                        | 6.76                                    | 3.3                        |                            |                            |
|                                      |  |   | 242.4                                | 210                        | 5.90                                    | 3.8                        |                            |                            |
|                                      |  |   | 276.7                                | 184                        | 5.17                                    | 4.3                        |                            |                            |
|                                      |  |   | 291.8                                | 174                        | 4.90                                    | 4.6                        |                            |                            |
|                                      |  |   | 337.4                                | 151                        | 4.24                                    | 5.3                        |                            |                            |
|                                      |  |   | 387.0                                | 131                        | 3.70                                    | 6.1                        |                            |                            |
|                                      | 1400                                     | 1400                                      | 101.1                                | 501                        | 14.14                                   | 1.2                        | MRA282/132S<br>MRF282/132S |                            |
|                                      |  |   | 118.2                                | 427                        | 12.09                                   | 1.4                        |                            |                            |
|                                      |  |   | 136.9                                | 369                        | 10.44                                   | 1.6                        |                            |                            |
|                                      |  |   | 150.6                                | 338                        | 9.49                                    | 1.7                        |                            |                            |
|                                      |  |   | 173.8                                | 292                        | 8.23                                    | 2.0                        |                            |                            |
|                                      |  |   | 200.7                                | 253                        | 7.12                                    | 2.3                        |                            |                            |
|                                      |  |   | 231.6                                | 220                        | 6.18                                    | 2.6                        |                            |                            |
|                                      |  |   | 270.5                                | 188                        | 5.29                                    | 3.1                        |                            |                            |
|                                      |  |   | 313.3                                | 162                        | 4.56                                    | 3.6                        |                            |                            |
|                                      |  |   | 344.6                                | 148                        | 4.15                                    | 3.9                        |                            |                            |
|                                      |  |   | 397.6                                | 128                        | 3.60                                    | 4.5                        |                            |                            |
|                                      |  |   | 459.5                                | 111                        | 3.11                                    | 5.2                        |                            |                            |
|                                      | 7,5kW<br>10HP                            | 1400                                      | 3.7                                  | 18178                      | 390.33                                  | 0.9                        | MRA974/132M<br>MRF974/132M |                            |
|                                      |  |   | 4.7                                  | 14239                      | 305.27                                  | 1.2                        |                            |                            |
|                                      |  | 900                                       | 900                                  | 5.1                        | 13234                                   | 186.91                     | 1.3                        | MRA973/160M<br>MRF973/160M |
|                                      |  |   |                                      | 6.3                        | 10676                                   | 149.99                     | 1.6                        |                            |
|                                      |  |   |                                      | 7.2                        | 9476                                    | 132.80                     | 1.8                        |                            |
| 8.2                                  |  |   |                                      | 8220                       | 116.15                                  | 2.1                        |                            |                            |
| 10.5                                 |  |   |                                      | 6438                       | 90.46                                   | 2.6                        |                            |                            |
| 11.7                                 |  |   |                                      | 5830                       | 81.21                                   | 2.9                        |                            |                            |
| 1400                                 |  | 1400                                      | 4.9                                  | 13572                      | 292.09                                  | 0.9                        | MRA874/132M<br>MRF874/132M |                            |
|                                      |  |   | 5.9                                  | 11043                      | 239.56                                  | 1.1                        |                            |                            |
|                                      |  |   | 6.7                                  | 9816                       | 211.56                                  | 1.2                        |                            |                            |
|                                      |  |   | 7.6                                  | 8708                       | 188.04                                  | 1.4                        |                            |                            |



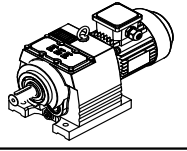
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>7,5kW<br/>10HP</b>                | 900                                      | 8.6                                       | 7835                                 | 110.15                     | 1.5                                     | MRA873/160M<br>MRF873/160M |
|                                      |  | 9.6                                       | 6975                                 | 98.61                      | 1.7                                     |                            |
|                                      |  | 17.0                                      | 3980                                 | 55.86                      | 3.0                                     |                            |
|                                      | 1400                                     | 10.7                                      | 6602                                 | 133.02                     | 1.1                                     | MRA773/132M<br>MRF773/132M |
|                                      |  | 16.6                                      | 4078                                 | 86.08                      | 1.7                                     |                            |
|                                      |  | 21.2                                      | 3281                                 | 67.33                      | 2.1                                     |                            |
|                                      | 1400                                     | 15.3                                      | 4455                                 | 93.04                      | 0.9                                     | MRA673/132M<br>MRF673/132M |
|                                      |  | 20.5                                      | 3315                                 | 69.42                      | 1.2                                     |                            |
|                                      |  | 26.7                                      | 2552                                 | 53.34                      | 1.6                                     |                            |
|                                      |  | 31.8                                      | 2143                                 | 44.75                      | 1.9                                     |                            |
|                                      |  | 36.7                                      | 1877                                 | 38.83                      | 2.1                                     |                            |
|                                      |  | 42.0                                      | 1637                                 | 33.95                      | 2.4                                     |                            |
|                                      |  | 47.8                                      | 1421                                 | 29.84                      | 2.8                                     |                            |
|                                      | 1400                                     | 62.2                                      | 1103                                 | 22.90                      | 3.3                                     | MRA672/132M<br>MRF672/132M |
|                                      |  | 69.5                                      | 1002                                 | 20.49                      | 3.5                                     |                            |
|                                      | 1400                                     | 22.3                                      | 3098                                 | 63.94                      | 0.9                                     | MRA573/132M<br>MRF573/132M |
|                                      |  | 26.3                                      | 2624                                 | 54.08                      | 1.1                                     |                            |
|                                      |  | 29.6                                      | 2325                                 | 48.16                      | 1.2                                     |                            |
|                                      |  | 36.1                                      | 1888                                 | 39.50                      | 1.5                                     |                            |
|                                      |  | 40.8                                      | 1685                                 | 34.89                      | 1.7                                     |                            |
|                                      |  | 46.0                                      | 1499                                 | 31.00                      | 1.9                                     |                            |
|                                      | 1400                                     | 53.4                                      | 1297                                 | 26.68                      | 2.2                                     | MRA572/132M<br>MRF572/132M |
|                                      |  | 62.7                                      | 1107                                 | 22.74                      | 2.5                                     |                            |
|                                      |  | 75.3                                      | 917                                  | 18.92                      | 2.8                                     |                            |
|                                      |  | 84.5                                      | 819                                  | 16.87                      | 3.1                                     |                            |
|                                      |  | 99.2                                      | 695                                  | 14.37                      | 3.5                                     |                            |
|                                      |  | 115.4                                     | 601                                  | 12.35                      | 3.8                                     |                            |
|                                      | 1400                                     | 38.5                                      | 1752                                 | 37.00                      | 0.8                                     | MRA473/132M<br>MRF473/132M |
|                                      |  | 46.6                                      | 1456                                 | 30.56                      | 1.0                                     |                            |
|                                      |  | 56.2                                      | 1228                                 | 25.36                      | 1.2                                     |                            |
| 1400                                 | 65.1                                     | 1057                                      | 21.88                                | 1.4                        | MRA472/132M<br>MRF472/132M              |                            |
|                                      | 77.0                                     | 900                                       | 18.50                                | 1.6                        |   |                            |
|                                      | 83.6                                     | 825                                       | 17.04                                | 1.6                        |   |                            |
|                                      | 94.0                                     | 735                                       | 15.17                                | 1.7                        |   |                            |
|                                      | 106.4                                    | 650                                       | 13.40                                | 1.9                        |   |                            |
|                                      | 119.7                                    | 579                                       | 11.91                                | 2.1                        |   |                            |
|                                      | 133.7                                    | 519                                       | 10.66                                | 2.2                        |   |                            |
|                                      | 151.3                                    | 458                                       | 9.42                                 | 2.4                        |   |                            |
|                                      | 170.3                                    | 407                                       | 8.37                                 | 2.6                        |   |                            |
|                                      | 183.3                                    | 378                                       | 7.78                                 | 2.7                        |   |                            |



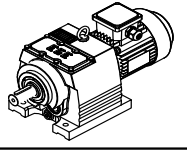
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |                            |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|----------------------------|
| <b>7,5kW<br/>10HP</b>                | 1400                                     | 216.9                                     | 320                                  | 6.57                       | 3.1                                     | MRA472/132M<br>MRF472/132M |                            |
|                                      |  |   |                                      |                            |   |                            |                            |
|                                      | 1400                                     | 89.0                                      | 772                                  | 16.01                      | 1.0                                     | MRA372/132M<br>MRF372/132M |                            |
|                                      |  | 106.6                                     | 645                                  | 13.37                      | 1.1                                     |                            |                            |
|                                      |  | 115.6                                     | 597                                  | 12.33                      | 1.2                                     |                            |                            |
|                                      |  | 133.5                                     | 520                                  | 10.67                      | 1.3                                     |                            |                            |
|                                      |  | 153.3                                     | 453                                  | 9.30                       | 1.5                                     |                            |                            |
|                                      |  | 174.8                                     | 398                                  | 8.15                       | 1.6                                     |                            |                            |
|                                      |  | 210.9                                     | 330                                  | 6.76                       | 1.8                                     |                            |                            |
|                                      |  | 241.6                                     | 288                                  | 5.90                       | 2.1                                     |                            |                            |
|                                      |  | 275.8                                     | 252                                  | 5.17                       | 2.2                                     |                            |                            |
|                                      | 1400                                     | 136.5                                     | 506                                  | 10.44                      | 1.0                                     | MRA282/132M<br>MRF282/132M |                            |
|                                      |  | 150.1                                     | 463                                  | 9.49                       | 1.1                                     |                            |                            |
|                                      |  | 173.1                                     | 400                                  | 8.23                       | 1.3                                     |                            |                            |
|                                      |  | 200.0                                     | 346                                  | 7.12                       | 1.4                                     |                            |                            |
|                                      |  | 230.8                                     | 300                                  | 6.18                       | 1.5                                     |                            |                            |
|                                      |  | 269.6                                     | 258                                  | 5.29                       | 1.6                                     |                            |                            |
|                                      |  | 312.2                                     | 222                                  | 4.56                       | 1.6                                     |                            |                            |
|                                      |  | 343.4                                     | 202                                  | 4.15                       | 1.5                                     |                            |                            |
|                                      |  | 396.2                                     | 175                                  | 3.60                       | 1.4                                     |                            |                            |
|                                      | 457.9                                    | 151                                       | 3.11                                 | 1.7                        |   |                            |                            |
|                                      | <b>11kW<br/>15HP</b>                     | 900                                       | 5.1                                  | 19421                      | 186.91                                  | 0.9                        | MRA973/160L<br>MRF973/160L |
|                                      |  |   | 7.2                                  | 13907                      | 132.80                                  | 1.2                        |                            |
|                                      |  | 1400                                      | 8.7                                  | 11439                      | 166.70                                  | 1.5                        | MRA973/160M<br>MRF973/160M |
|                                      |  |   | 10.9                                 | 9510                       | 132.80                                  | 1.8                        |                            |
|                                      |  |   | 16.0                                 | 6114                       | 90.46                                   | 2.8                        |                            |
|                                      |  | 900                                       | 9.6                                  | 10231                      | 98.61                                   | 1.2                        | MRA873/160L<br>MRF873/160L |
|                                      |  |   | 14.8                                 | 6702                       | 63.99                                   | 1.8                        |                            |
| 1400                                 |  | 14.7                                      | 6703                                 | 98.61                      | 1.8                                     | MRA873/160M<br>MRF873/160M |                            |
|                                      |  | 19.4                                      | 5207                                 | 74.60                      | 2.3                                     |                            |                            |
|                                      |  | 26.0                                      | 3841                                 | 55.86                      | 3.1                                     |                            |                            |
| 1400                                 |  | 10.9                                      | 9517                                 | 133.02                     | 0.7                                     | MRA773/160M<br>MRF773/160M |                            |
|                                      |  | 16.8                                      | 5880                                 | 86.08                      | 1.2                                     |                            |                            |
|                                      |  | 21.5                                      | 4731                                 | 67.33                      | 1.5                                     |                            |                            |
|                                      |  | 25.0                                      | 3998                                 | 57.89                      | 1.8                                     |                            |                            |
|                                      |  | 33.2                                      | 3038                                 | 43.64                      | 2.3                                     |                            |                            |
|                                      |  | 37.3                                      | 2717                                 | 38.86                      | 2.6                                     |                            |                            |
| 1400                                 |  | 47.2                                      | 2130                                 | 30.74                      | 3.3                                     | MRA673/160M<br>MRF673/160M |                            |
|                                      |  | 23.9                                      | 4206                                 | 60.68                      | 1.0                                     |                            |                            |
|                                      |  | 27.2                                      | 3680                                 | 53.34                      | 1.1                                     |                            |                            |



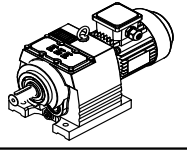
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>11kW<br/>15HP</b>                 | 1400                                     | 32.4                                      | 3091                                 | 44.75                      | 1.3                                     | MRA673/160M<br>MRF673/160M |
|                                      |  | 37.3                                      | 2707                                 | 38.83                      | 1.4                                     |                            |
|                                      |  | 42.7                                      | 2359                                 | 33.95                      | 1.6                                     |                            |
|                                      |  | 48.6                                      | 2048                                 | 29.84                      | 1.9                                     |                            |
|                                      |  | 55.0                                      | 1842                                 | 26.34                      | 2.1                                     |                            |
|                                      | 1400                                     | 63.3                                      | 1591                                 | 22.90                      | 2.1                                     | MRA672/160M<br>MRF672/160M |
|                                      |  | 70.8                                      | 1445                                 | 20.49                      | 2.4                                     |                            |
|                                      |  | 81.9                                      | 1238                                 | 17.71                      | 2.7                                     |                            |
|                                      |  | 94.5                                      | 1072                                 | 15.34                      | 3.1                                     |                            |
|                                      |  | 108.1                                     | 940                                  | 13.42                      | 3.4                                     |                            |
|                                      |  | 122.6                                     | 830                                  | 11.83                      | 3.7                                     |                            |
|                                      | 1400                                     | 36.7                                      | 2721                                 | 39.50                      | 1.0                                     | MRA573/160M<br>MRF573/160M |
|                                      |  | 41.6                                      | 2429                                 | 34.89                      | 1.2                                     |                            |
|                                      |  | 46.8                                      | 2161                                 | 31.00                      | 1.3                                     |                            |
|                                      |  | 55.3                                      | 1824                                 | 26.22                      | 1.5                                     |                            |
|                                      | 1400                                     | 63.8                                      | 1596                                 | 22.74                      | 1.5                                     | MRA572/160M<br>MRF572/160M |
|                                      |  | 76.6                                      | 1323                                 | 18.92                      | 1.8                                     |                            |
|                                      |  | 86.0                                      | 1182                                 | 16.87                      | 2.0                                     |                            |
|                                      |  | 100.9                                     | 1002                                 | 14.37                      | 2.4                                     |                            |
|                                      |  | 117.4                                     | 866                                  | 12.35                      | 2.5                                     |                            |
|                                      |  | 135.3                                     | 752                                  | 10.72                      | 2.9                                     |                            |
|                                      |  | 154.8                                     | 660                                  | 9.37                       | 3.3                                     |                            |
|                                      |  | 176.0                                     | 579                                  | 8.24                       | 3.8                                     |                            |
|                                      | 1400                                     | 67.5                                      | 1476                                 | 21.48                      | 1.0                                     | MRA473/160M<br>MRF473/160M |
|                                      |  | 81.4                                      | 1241                                 | 17.82                      | 1.2                                     |                            |
|                                      | 1400                                     | 85.1                                      | 1189                                 | 17.04                      | 1.1                                     | MRA472/160M<br>MRF472/160M |
|                                      |  | 95.6                                      | 1060                                 | 15.17                      | 1.2                                     |                            |
|                                      |  | 108.2                                     | 936                                  | 13.40                      | 1.3                                     |                            |
|                                      |  | 121.8                                     | 834                                  | 11.91                      | 1.5                                     |                            |
|                                      |  | 136.0                                     | 748                                  | 10.66                      | 1.6                                     |                            |
|                                      |  | 154.0                                     | 661                                  | 9.42                       | 1.7                                     |                            |
|                                      |  | 173.3                                     | 587                                  | 8.37                       | 1.9                                     |                            |
| 186.5                                |  | 545                                       | 7.78                                 | 2.0                        |   |                            |
| 220.7                                |  | 462                                       | 6.57                                 | 2.2                        |   |                            |
| 259.3                                |  | 392                                       | 5.59                                 | 2.3                        |   |                            |
| 300.1                                |  | 340                                       | 4.83                                 | 2.5                        |   |                            |
| 323.3                                |  | 315                                       | 4.49                                 | 2.5                        |   |                            |
| 383.2                                |  | 267                                       | 3.78                                 | 2.6                        |   |                            |
| 448.8                                | 227                                      | 3.23                                      | 2.6                                  |                            |   |                            |



| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>15kW<br/>20HP</b>                 | 900                                      | 7.3                                       | 18672                                | 132.80                     | 0.9                                     | MRA973/180L<br>MRF973/180L |
|                                      |  |   |                                      |                            |   |                            |
|                                      | 1400                                     | 8.6                                       | 15764                                | 166.70                     | 1.1                                     | MRA973/160L<br>MRF973/160L |
|                                      |  | 10.8                                      | 13106                                | 132.80                     | 1.3                                     |                            |
|                                      |  | 15.9                                      | 8426                                 | 90.46                      | 2.0                                     |                            |
|                                      |  | 20.7                                      | 6590                                 | 69.23                      | 2.6                                     |                            |
|                                      |  | 26.5                                      | 5253                                 | 54.14                      | 3.2                                     |                            |
|                                      | 900                                      | 8.8                                       | 15428                                | 110.15                     | 0.8                                     | MRA873/180L<br>MRF873/180L |
|                                      |  | 12.9                                      | 10481                                | 74.60                      | 1.1                                     |                            |
|                                      | 1400                                     | 13.0                                      | 10573                                | 110.15                     | 1.1                                     | MRA873/160L<br>MRF873/160L |
|                                      |  | 19.2                                      | 7174                                 | 74.60                      | 1.7                                     |                            |
|                                      |  | 25.7                                      | 5292                                 | 55.86                      | 2.3                                     |                            |
|                                      |  | 35.8                                      | 3811                                 | 40.06                      | 3.1                                     |                            |
|                                      | 1400                                     | 14.6                                      | 9257                                 | 98.43                      | 0.8                                     | MRA773/160L<br>MRF773/160L |
|                                      |  | 21.3                                      | 6521                                 | 67.33                      | 1.1                                     |                            |
|                                      |  | 24.8                                      | 5510                                 | 57.89                      | 1.3                                     |                            |
|                                      |  | 32.9                                      | 4187                                 | 43.64                      | 1.7                                     |                            |
|                                      |  | 41.6                                      | 3278                                 | 34.47                      | 2.1                                     |                            |
|                                      |  | 48.4                                      | 2848                                 | 29.64                      | 2.5                                     |                            |
|                                      |  | 55.9                                      | 2459                                 | 25.68                      | 2.8                                     |                            |
|                                      | 64.2                                     | 2142                                      | 22.35                                | 3.3                        |   |                            |
|                                      | 1400                                     | 67.9                                      | 2026                                 | 21.14                      | 3.5                                     | MRA772/160L<br>MRF772/160L |
|                                      |  |   |                                      |                            |   |                            |
|                                      | 1400                                     | 32.1                                      | 4259                                 | 44.75                      | 0.9                                     | MRA673/160L<br>MRF673/160L |
|                                      |  | 42.3                                      | 3252                                 | 33.95                      | 1.2                                     |                            |
|                                      |  | 54.5                                      | 2538                                 | 26.34                      | 1.6                                     |                            |
|                                      | 1400                                     | 62.7                                      | 2193                                 | 22.90                      | 1.8                                     | MRA672/160L<br>MRF672/160L |
|                                      |  | 70.0                                      | 1992                                 | 20.49                      | 2.0                                     |                            |
|                                      |  | 81.0                                      | 1706                                 | 17.71                      | 2.3                                     |                            |
|                                      |  | 93.5                                      | 1478                                 | 15.34                      | 2.7                                     |                            |
|                                      |  | 107.0                                     | 1295                                 | 13.42                      | 3.1                                     |                            |
|                                      |  | 121.3                                     | 1145                                 | 11.83                      | 3.5                                     |                            |
| 136.8                                |  | 1017                                      | 10.49                                | 3.9                        |   |                            |
| 153.4                                |  | 908                                       | 9.36                                 | 4.4                        |   |                            |
| 159.1                                |  | 871                                       | 9.02                                 | 4.6                        |   |                            |
| 183.6                                | 758                                      | 7.82                                      | 5.3                                  |                            |   |                            |
| 1400                                 | 46.3                                     | 2979                                      | 31.00                                | 0.9                        | MRA573/160L<br>MRF573/160L              |                            |
|                                      | 54.7                                     | 2514                                      | 26.22                                | 1.1                        |   |                            |
| 1400                                 | 63.1                                     | 2199                                      | 22.74                                | 1.3                        | MRA572/160L<br>MRF572/160L              |                            |
|                                      | 75.8                                     | 1823                                      | 18.92                                | 1.5                        |   |                            |

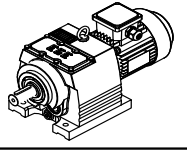


| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |                            |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|----------------------------|
| <b>15kW<br/>20HP</b>                 | 1400                                     | 85.1                                      | 1628                                 | 16.87                      | 1.7                                     | MRA572/160L<br>MRF572/160L |                            |
|                                      |  | 99.9                                      | 1382                                 | 14.37                      | 2.0                                     |                            |                            |
|                                      |  | 116.2                                     | 1193                                 | 12.35                      | 2.3                                     |                            |                            |
|                                      |  | 133.9                                     | 1037                                 | 10.72                      | 2.7                                     |                            |                            |
|                                      |  | 153.2                                     | 909                                  | 9.37                       | 3.1                                     |                            |                            |
|                                      |  | 174.2                                     | 799                                  | 8.24                       | 3.5                                     |                            |                            |
|                                      |  | 196.0                                     | 710                                  | 7.32                       | 3.9                                     |                            |                            |
|                                      |  | 225.9                                     | 618                                  | 6.35                       | 4.5                                     |                            |                            |
|                                      |  | 258.0                                     | 541                                  | 5.56                       | 5.2                                     |                            |                            |
|                                      |  | 293.4                                     | 475                                  | 4.89                       | 5.9                                     |                            |                            |
|                                      | 332.4                                    | 420                                       | 4.32                                 | 6.7                        |   |                            |                            |
|                                      | 1400                                     | 80.5                                      | 1710                                 | 17.82                      | 0.8                                     | MRA473/160L<br>MRF473/160L |                            |
|                                      | 1400                                     | 84.2                                      | 1639                                 | 17.04                      | 0.9                                     | MRA472/160L<br>MRF472/160L |                            |
|                                      |  | 94.6                                      | 1461                                 | 15.17                      | 1.0                                     |                            |                            |
|                                      |  | 107.1                                     | 1291                                 | 13.40                      | 1.1                                     |                            |                            |
|                                      |  | 120.5                                     | 1150                                 | 11.91                      | 1.3                                     |                            |                            |
|                                      |  | 134.6                                     | 1031                                 | 10.66                      | 1.4                                     |                            |                            |
|                                      |  | 152.4                                     | 911                                  | 9.42                       | 1.6                                     |                            |                            |
|                                      |  | 171.5                                     | 808                                  | 8.37                       | 1.8                                     |                            |                            |
|                                      |  | 184.6                                     | 751                                  | 7.78                       | 1.9                                     |                            |                            |
|                                      |  | 218.4                                     | 637                                  | 6.57                       | 2.3                                     |                            |                            |
|                                      |  | 256.6                                     | 541                                  | 5.59                       | 2.7                                     |                            |                            |
|                                      |  | 297.0                                     | 470                                  | 4.83                       | 3.1                                     |                            |                            |
|                                      |  | 319.9                                     | 436                                  | 4.49                       | 3.3                                     |                            |                            |
|                                      |  | 379.2                                     | 368                                  | 3.78                       | 3.9                                     |                            |                            |
|                                      |  | 444.2                                     | 314                                  | 3.23                       | 4.6                                     |                            |                            |
|                                      | <b>18,5kW<br/>25HP</b>                   | 1400                                      | 8.7                                  | 19175                      | 166.70                                  | 0.9                        | MRA973/180M<br>MRF973/180M |
|                                      |  |   | 11.0                                 | 15943                      | 132.80                                  | 1.1                        |                            |
| 16.1                                 |  |   | 10250                                | 90.46                      | 1.7                                     |                            |                            |
| 21.0                                 |  |   | 8016                                 | 69.23                      | 2.1                                     |                            |                            |
| 26.9                                 |  |   | 6390                                 | 54.14                      | 2.7                                     |                            |                            |
| 30.1                                 |  |   | 5673                                 | 48.27                      | 3.0                                     |                            |                            |
| 34.8                                 |  |   | 4843                                 | 41.79                      | 3.5                                     |                            |                            |
| 900                                  |  | 12.9                                      | 12994                                | 74.60                      | 0.9                                     | MRA873/200L<br>MRF873/200L |                            |
|                                      |  | 15.0                                      | 11154                                | 63.99                      | 1.1                                     |                            |                            |
| 1400                                 |  | 17.0                                      | 9645                                 | 85.47                      | 1.2                                     | MRA873/180M<br>MRF873/180M |                            |
|                                      |  | 22.7                                      | 7435                                 | 63.99                      | 1.6                                     |                            |                            |
|                                      |  | 26.0                                      | 6438                                 | 55.86                      | 1.9                                     |                            |                            |

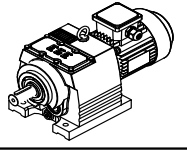


| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>18,5kW<br/>25HP</b>               | 1400                                     | 31.9                                      | 5140                                 | 45.57                      | 2.3                                     | MRA873/180M<br>MRF873/180M |
|                                      |  | 36.3                                      | 4636                                 | 40.06                      | 2.6                                     |                            |
|                                      | 1400                                     | 19.2                                      | 8628                                 | 75.89                      | 0.8                                     | MRA773/180M<br>MRF773/180M |
|                                      |  | 25.1                                      | 6703                                 | 57.89                      | 1.0                                     |                            |
|                                      |  | 29.0                                      | 5875                                 | 50.14                      | 1.2                                     |                            |
|                                      |  | 37.4                                      | 4554                                 | 38.86                      | 1.5                                     |                            |
|                                      |  | 47.3                                      | 3571                                 | 30.74                      | 2.0                                     |                            |
|                                      |  | 56.7                                      | 2991                                 | 25.68                      | 2.3                                     |                            |
|                                      |  | 65.1                                      | 2606                                 | 22.35                      | 2.7                                     |                            |
|                                      | 1400                                     | 68.8                                      | 2464                                 | 21.14                      | 2.8                                     | MRA772/180M<br>MRF772/180M |
|                                      |  | 79.0                                      | 2158                                 | 18.41                      | 3.2                                     |                            |
|                                      | 1400                                     | 37.5                                      | 4538                                 | 38.83                      | 0.9                                     | MRA673/180M<br>MRF673/180M |
|                                      |  | 48.8                                      | 3434                                 | 29.84                      | 1.2                                     |                            |
|                                      |  | 55.2                                      | 3088                                 | 26.34                      | 1.3                                     |                            |
|                                      | 1400                                     | 63.5                                      | 2668                                 | 22.90                      | 1.5                                     | MRA672/180M<br>MRF672/180M |
|                                      |  | 71.0                                      | 2423                                 | 20.49                      | 1.7                                     |                            |
|                                      |  | 82.1                                      | 2075                                 | 17.71                      | 1.9                                     |                            |
|                                      |  | 94.8                                      | 1799                                 | 15.34                      | 2.2                                     |                            |
|                                      |  | 108.4                                     | 1577                                 | 13.42                      | 2.5                                     |                            |
|                                      |  | 123.0                                     | 1393                                 | 11.83                      | 2.9                                     |                            |
|                                      |  | 138.7                                     | 1238                                 | 10.49                      | 3.2                                     |                            |
|                                      |  | 155.5                                     | 1105                                 | 9.36                       | 3.6                                     |                            |
|                                      |  | 161.3                                     | 1060                                 | 9.02                       | 3.8                                     |                            |
|                                      |  | 186.2                                     | 922                                  | 7.82                       | 4.3                                     |                            |
|                                      |  | 214.1                                     | 801                                  | 6.80                       | 5.0                                     |                            |
|                                      | 1400                                     | 257.0                                     | 668                                  | 5.66                       | 6.0                                     | MRA572/180M<br>MRF572/180M |
|                                      |  | 76.9                                      | 2217                                 | 18.92                      | 1.3                                     |                            |
|                                      |  | 86.3                                      | 1981                                 | 16.87                      | 1.4                                     |                            |
|                                      |  | 101.3                                     | 1680                                 | 14.37                      | 1.7                                     |                            |
|                                      |  | 117.8                                     | 1452                                 | 12.35                      | 1.9                                     |                            |
|                                      |  | 135.7                                     | 1261                                 | 10.72                      | 2.2                                     |                            |
|                                      |  | 155.3                                     | 1106                                 | 9.37                       | 2.5                                     |                            |
|                                      |  | 176.6                                     | 972                                  | 8.24                       | 2.9                                     |                            |
|                                      |  | 198.7                                     | 863                                  | 7.32                       | 3.2                                     |                            |
|                                      |  | 229.0                                     | 751                                  | 6.35                       | 3.7                                     |                            |
|                                      |  | 261.6                                     | 658                                  | 5.56                       | 4.3                                     |                            |
|                                      | 1400                                     | 297.5                                     | 578                                  | 4.89                       | 4.8                                     | MRA472/180M<br>MRF472/180M |
|                                      |  | 337.0                                     | 512                                  | 4.32                       | 5.5                                     |                            |
|                                      |  | 108.6                                     | 1571                                 | 13.40                      | 0.8                                     |                            |
|                                      | 1400                                     | 122.2                                     | 1399                                 | 11.91                      | 0.9                                     |                            |

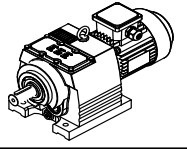




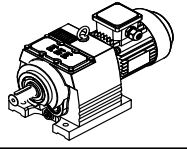
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>18,5kW<br/>25HP</b>               | 1400                                     | 154.5                                     | 1108                                 | 9.42                       | 1.0                                     | MRA472/180M<br>MRF472/180M |
|                                      |  | 173.9                                     | 983                                  | 8.37                       | 1.1                                     |                            |
|                                      |  | 187.1                                     | 914                                  | 7.78                       | 1.1                                     |                            |
|                                      |  | 221.5                                     | 775                                  | 6.57                       | 1.2                                     |                            |
|                                      |  | 260.2                                     | 658                                  | 5.59                       | 1.3                                     |                            |
|                                      |  | 301.2                                     | 572                                  | 4.83                       | 1.4                                     |                            |
|                                      |  | 324.4                                     | 530                                  | 4.49                       | 1.3                                     |                            |
|                                      |  | 384.5                                     | 447                                  | 3.78                       | 1.3                                     |                            |
|                                      |  | 450.4                                     | 382                                  | 3.23                       | 1.6                                     |                            |
| <b>22kW<br/>30HP</b>                 | 1400                                     | 10.9                                      | 19025                                | 132.80                     | 0.9                                     | MRA973/180L<br>MRF973/180L |
|                                      |  | 16.0                                      | 12232                                | 90.46                      | 1.4                                     |                            |
|                                      |  | 20.9                                      | 9566                                 | 69.23                      | 1.8                                     |                            |
|                                      |  | 26.8                                      | 7626                                 | 54.14                      | 2.2                                     |                            |
|                                      |  | 30.0                                      | 6770                                 | 48.27                      | 2.5                                     |                            |
|                                      |  | 34.7                                      | 5779                                 | 41.79                      | 2.9                                     |                            |
|                                      |  | 39.4                                      | 5179                                 | 36.84                      | 3.3                                     |                            |
|                                      | 900                                      | 12.9                                      | 15372                                | 74.60                      | 0.8                                     | MRA873/200L<br>MRF873/200L |
|                                      |  | 15.1                                      | 13196                                | 63.99                      | 0.9                                     |                            |
|                                      | 1400                                     | 17.0                                      | 11509                                | 85.47                      | 1.0                                     | MRA873/180L<br>MRF873/180L |
|                                      |  | 19.4                                      | 10413                                | 74.60                      | 1.2                                     |                            |
|                                      |  | 26.0                                      | 7682                                 | 55.86                      | 1.6                                     |                            |
|                                      |  | 31.8                                      | 6133                                 | 45.57                      | 2.0                                     |                            |
|                                      |  | 36.2                                      | 5532                                 | 40.06                      | 2.2                                     |                            |
|                                      | 1400                                     | 25.0                                      | 7998                                 | 57.89                      | 0.9                                     | MRA773/180L<br>MRF773/180L |
|                                      |  | 33.2                                      | 6077                                 | 43.64                      | 1.2                                     |                            |
|                                      |  | 37.3                                      | 5434                                 | 38.86                      | 1.3                                     |                            |
|                                      |  | 42.1                                      | 4758                                 | 34.47                      | 1.5                                     |                            |
|                                      |  | 47.2                                      | 4261                                 | 30.74                      | 1.6                                     |                            |
|                                      |  | 48.9                                      | 4135                                 | 29.64                      | 1.7                                     |                            |
|                                      |  | 56.5                                      | 3571                                 | 25.68                      | 2.0                                     |                            |
|                                      | 1400                                     | 64.9                                      | 3110                                 | 22.35                      | 2.3                                     | MRA772/180L<br>MRF772/180L |
|                                      |  | 68.6                                      | 2941                                 | 21.14                      | 2.4                                     |                            |
|                                      |  | 78.8                                      | 2575                                 | 18.41                      | 2.7                                     |                            |
|                                      |  | 89.5                                      | 2261                                 | 16.19                      | 3.1                                     |                            |
|                                      | 1400                                     | 100.9                                     | 2012                                 | 14.37                      | 3.5                                     | MRA673/180L<br>MRF673/180L |
|                                      |  | 48.6                                      | 4098                                 | 29.84                      | 1.0                                     |                            |
|                                      | 1400                                     | 55.0                                      | 3685                                 | 26.34                      | 1.1                                     | MRA672/180L<br>MRF672/180L |
|                                      |  | 63.3                                      | 3183                                 | 22.90                      | 1.1                                     |                            |
|                                      |  | 70.8                                      | 2891                                 | 20.49                      | 1.2                                     |                            |
| 1400                                 | 81.9                                     | 2477                                      | 17.71                                | 1.4                        | MRA672/180L<br>MRF672/180L              |                            |
|                                      |  |   |                                      |                            |   |                            |



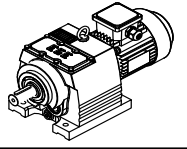
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>22kW<br/>30HP</b>                 | 1400                                     | 94.5                                      | 2147                                 | 15.34                      | 1.6                                     | MRA672/180L<br>MRF672/180L |
|                                      |  | 108.1                                     | 1881                                 | 13.42                      | 1.8                                     |                            |
|                                      |  | 122.6                                     | 1662                                 | 11.83                      | 1.9                                     |                            |
|                                      |  | 138.2                                     | 1478                                 | 10.49                      | 2.1                                     |                            |
|                                      |  | 155.0                                     | 1318                                 | 9.36                       | 2.3                                     |                            |
|                                      |  | 160.7                                     | 1266                                 | 9.02                       | 2.3                                     |                            |
|                                      |  | 185.5                                     | 1100                                 | 7.82                       | 2.5                                     |                            |
|                                      |  | 213.3                                     | 956                                  | 6.80                       | 2.8                                     |                            |
|                                      |  | 256.1                                     | 797                                  | 5.66                       | 3.3                                     |                            |
|                                      |  | 288.9                                     | 707                                  | 5.02                       | 3.7                                     |                            |
|                                      |  | 324.0                                     | 632                                  | 4.48                       | 4.0                                     |                            |
|                                      |  | 335.8                                     | 609                                  | 4.32                       | 4.1                                     |                            |
|                                      | 387.2                                    | 529                                       | 3.74                                 | 4.6                        |   |                            |
|                                      | 1400                                     | 76.6                                      | 2646                                 | 18.92                      | 1.0                                     | MRA572/180L<br>MRF572/180L |
|                                      |  | 86.0                                      | 2363                                 | 16.87                      | 1.1                                     |                            |
|                                      |  | 100.9                                     | 2006                                 | 14.37                      | 1.2                                     |                            |
|                                      |  | 117.4                                     | 1732                                 | 12.35                      | 1.4                                     |                            |
|                                      |  | 135.3                                     | 1505                                 | 10.72                      | 1.6                                     |                            |
|                                      |  | 154.8                                     | 1320                                 | 9.37                       | 1.7                                     |                            |
|                                      |  | 176.0                                     | 1160                                 | 8.24                       | 1.9                                     |                            |
|                                      |  | 198.1                                     | 1031                                 | 7.32                       | 2.1                                     |                            |
|                                      |  | 228.2                                     | 897                                  | 6.35                       | 2.4                                     |                            |
|                                      |  | 260.7                                     | 785                                  | 5.56                       | 2.7                                     |                            |
|                                      |  | 296.5                                     | 690                                  | 4.89                       | 2.9                                     |                            |
|                                      |  | 335.8                                     | 611                                  | 4.32                       | 3.2                                     |                            |
|                                      | 1400                                     | 154.0                                     | 1322                                 | 9.42                       | 0.9                                     | MRA472/180L<br>MRF472/180L |
|                                      |  | 173.3                                     | 1174                                 | 8.37                       | 1.0                                     |                            |
|                                      |  | 186.5                                     | 1091                                 | 7.78                       | 1.1                                     |                            |
|                                      |  | 220.7                                     | 925                                  | 6.57                       | 1.2                                     |                            |
|                                      |  | 259.3                                     | 786                                  | 5.59                       | 1.3                                     |                            |
|                                      |  | 300.1                                     | 683                                  | 4.83                       | 1.5                                     |                            |
|                                      |  | 323.3                                     | 633                                  | 4.49                       | 1.5                                     |                            |
|                                      |  | 383.2                                     | 533                                  | 3.78                       | 1.7                                     |                            |
| 448.8                                | 456                                      | 3.23                                      | 1.9                                  |                            |   |                            |
| <b>30kW<br/>40HP</b>                 | 1400                                     | 16.3                                      | 16454                                | 90.46                      | 1.0                                     | MRA973/200L<br>MRF973/200L |
|                                      |  | 21.2                                      | 12868                                | 69.23                      | 1.3                                     |                            |
|                                      |  | 27.2                                      | 10258                                | 54.14                      | 1.7                                     |                            |
|                                      |  | 30.5                                      | 9107                                 | 48.27                      | 1.9                                     |                            |
|                                      |  | 35.2                                      | 7775                                 | 41.79                      | 2.2                                     |                            |
|                                      |  | 39.9                                      | 6968                                 | 36.84                      | 2.4                                     |                            |



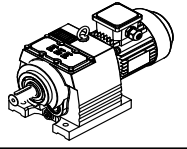
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>30kW<br/>40HP</b>                 | 1400                                     | 45.0                                      | 6068                                 | 32.68                      | 2.8                                     | MRA973/200L<br>MRF973/200L |
|                                      |  | 50.5                                      | 5404                                 | 29.14                      | 3.1                                     |                            |
|                                      | 1400                                     | 23.0                                      | 11933                                | 63.99                      | 1.0                                     | MRA873/200L<br>MRF873/200L |
|                                      |  | 26.3                                      | 10333                                | 55.86                      | 1.2                                     |                            |
|                                      |  | 32.3                                      | 8249                                 | 45.57                      | 1.5                                     |                            |
|                                      |  | 43.1                                      | 6320                                 | 34.12                      | 1.9                                     |                            |
|                                      |  | 49.0                                      | 5482                                 | 30.00                      | 2.2                                     |                            |
|                                      |  | 54.3                                      | 4948                                 | 27.06                      | 2.4                                     |                            |
|                                      |  | 62.3                                      | 4347                                 | 23.58                      | 2.8                                     |                            |
|                                      |  | 73.4                                      | 3668                                 | 20.04                      | 3.3                                     |                            |
|                                      |  | 83.4                                      | 3246                                 | 17.62                      | 3.7                                     |                            |
|                                      |  | 92.5                                      | 2911                                 | 15.90                      | 4.1                                     |                            |
|                                      |  | 106.1                                     | 2540                                 | 13.85                      | 4.7                                     |                            |
|                                      | 1400                                     | 42.6                                      | 6401                                 | 34.47                      | 1.1                                     | MRA773/200L<br>MRF773/200L |
|                                      |  | 49.6                                      | 5562                                 | 29.64                      | 1.3                                     |                            |
|                                      |  | 57.2                                      | 4803                                 | 25.68                      | 1.5                                     |                            |
|                                      |  | 65.8                                      | 4182                                 | 22.35                      | 1.7                                     |                            |
|                                      | 1400                                     | 69.5                                      | 3957                                 | 21.14                      | 1.8                                     | MRA772/200L<br>MRF772/200L |
|                                      |  | 79.9                                      | 3464                                 | 18.41                      | 2.0                                     |                            |
|                                      |  | 90.8                                      | 3042                                 | 16.19                      | 2.3                                     |                            |
|                                      |  | 102.3                                     | 2707                                 | 14.37                      | 2.6                                     |                            |
|                                      |  | 114.6                                     | 2430                                 | 12.82                      | 2.9                                     |                            |
|                                      |  | 127.7                                     | 2177                                 | 11.51                      | 3.2                                     |                            |
|                                      |  | 135.3                                     | 2053                                 | 10.87                      | 3.4                                     |                            |
|                                      | 1400                                     | 154.7                                     | 1806                                 | 9.50                       | 3.9                                     | MRA672/200L<br>MRF672/200L |
|                                      |  | 83.0                                      | 3332                                 | 17.71                      | 1.1                                     |                            |
|                                      |  | 95.8                                      | 2888                                 | 15.34                      | 1.2                                     |                            |
|                                      |  | 109.6                                     | 2531                                 | 13.42                      | 1.3                                     |                            |
|                                      |  | 124.3                                     | 2236                                 | 11.83                      | 1.5                                     |                            |
|                                      |  | 140.1                                     | 1988                                 | 10.49                      | 1.6                                     |                            |
|                                      |  | 157.1                                     | 1774                                 | 9.36                       | 1.7                                     |                            |
|                                      |  | 163.0                                     | 1703                                 | 9.02                       | 1.8                                     |                            |
| 188.1                                |  | 1480                                      | 7.82                                 | 2.0                        |   |                            |
| 216.3                                |  | 1286                                      | 6.80                                 | 2.3                        |   |                            |
| 259.7                                |  | 1073                                      | 5.66                                 | 2.7                        |   |                            |
| 292.9                                |  | 952                                       | 5.02                                 | 3.0                        |   |                            |
| 328.4                                |  | 851                                       | 4.48                                 | 3.3                        |   |                            |
| 340.5                                |  | 820                                       | 4.32                                 | 3.3                        |   |                            |
| 392.6                                | 713                                      | 3.74                                      | 3.7                                  |                            |   |                            |
| 452.2                                | 618                                      | 3.25                                      | 4.0                                  |                            |   |                            |



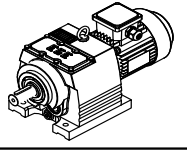
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>30kW<br/>40HP</b>                 | 1400                                     | 102.3                                     | 2698                                 | 14.37                      | 1.0                                     | MRA572/200L<br>MRF572/200L |
|                                      |  | 119.0                                     | 2330                                 | 12.35                      | 1.2                                     |                            |
|                                      |  | 137.1                                     | 2024                                 | 10.72                      | 1.4                                     |                            |
|                                      |  | 156.9                                     | 1776                                 | 9.37                       | 1.6                                     |                            |
|                                      |  | 178.4                                     | 1560                                 | 8.24                       | 1.8                                     |                            |
|                                      |  | 200.8                                     | 1387                                 | 7.32                       | 2.0                                     |                            |
|                                      |  | 231.4                                     | 1206                                 | 6.35                       | 2.3                                     |                            |
|                                      |  | 264.3                                     | 1055                                 | 5.56                       | 2.7                                     |                            |
|                                      |  | 300.6                                     | 928                                  | 4.89                       | 3.0                                     |                            |
|                                      |  | 340.5                                     | 821                                  | 4.32                       | 3.4                                     |                            |
| <b>37kW<br/>50HP</b>                 | 1400                                     | 21.3                                      | 15818                                | 69.23                      | 1.1                                     | MRA973/225S<br>MRF973/225S |
|                                      |  | 27.2                                      | 12610                                | 54.14                      | 1.3                                     |                            |
|                                      |  | 30.6                                      | 11194                                | 48.27                      | 1.5                                     |                            |
|                                      |  | 35.3                                      | 9557                                 | 41.79                      | 1.8                                     |                            |
|                                      |  | 40.0                                      | 8564                                 | 36.84                      | 2.0                                     |                            |
|                                      |  | 45.1                                      | 7459                                 | 32.68                      | 2.3                                     |                            |
|                                      |  | 50.6                                      | 6643                                 | 29.14                      | 2.6                                     |                            |
|                                      |  | 57.4                                      | 5942                                 | 25.72                      | 2.9                                     |                            |
|                                      |  | 65.1                                      | 5224                                 | 22.67                      | 3.3                                     |                            |
|                                      |  | 1400                                      | 32.4                                 | 10140                      | 45.57                                   |                            |
|                                      | 43.2                                     |   | 7768                                 | 34.12                      | 1.5                                     |                            |
|                                      | 49.2                                     |   | 6738                                 | 30.00                      | 1.8                                     |                            |
|                                      | 54.5                                     |   | 6081                                 | 27.06                      | 2.0                                     |                            |
|                                      | 62.5                                     |   | 5343                                 | 23.58                      | 2.2                                     |                            |
|                                      | 73.6                                     |   | 4508                                 | 20.04                      | 2.7                                     |                            |
|                                      | 83.7                                     |   | 3990                                 | 17.62                      | 3.0                                     |                            |
|                                      | 92.8                                     |   | 3578                                 | 15.90                      | 3.4                                     |                            |
|                                      | 106.5                                    |   | 3123                                 | 13.85                      | 3.8                                     |                            |
|                                      | 112.2                                    |   | 2951                                 | 13.14                      | 4.1                                     |                            |
|                                      | 1400                                     | 48.0                                      | 7045                                 | 30.74                      | 1.0                                     | MRA773/225S<br>MRF773/225S |
|                                      |  | 57.4                                      | 5904                                 | 25.68                      | 1.2                                     |                            |
|                                      |  | 66.0                                      | 5141                                 | 22.35                      | 1.4                                     |                            |
|                                      |  | 76.5                                      | 4446                                 | 19.29                      | 1.6                                     |                            |
|                                      |  | 85.8                                      | 3931                                 | 17.19                      | 1.8                                     |                            |
|                                      | 1400                                     | 102.7                                     | 3327                                 | 14.37                      | 2.1                                     | MRA772/225S<br>MRF772/225S |
|                                      |  | 115.0                                     | 2987                                 | 12.82                      | 2.3                                     |                            |
|                                      |  | 128.1                                     | 2676                                 | 11.51                      | 2.6                                     |                            |
|                                      |  | 135.7                                     | 2523                                 | 10.87                      | 2.8                                     |                            |
|                                      |  | 155.2                                     | 2220                                 | 9.50                       | 3.2                                     |                            |
|                                      |  | 176.5                                     | 1954                                 | 8.36                       | 3.6                                     |                            |



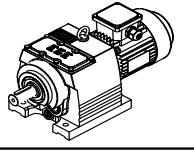
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>37kW<br/>50HP</b>                 | 1400                                     | 205.6                                     | 1675                                 | 7.17                       | 4.2                                     | MRA772/225S<br>MRF772/225S |
|                                      |  | 229.0                                     | 1506                                 | 6.44                       | 4.6                                     |                            |
|                                      | 1400                                     | 124.7                                     | 2749                                 | 11.83                      | 1.5                                     | MRA672/225S<br>MRF672/225S |
|                                      |  | 140.6                                     | 2443                                 | 10.49                      | 1.6                                     |                            |
|                                      |  | 157.6                                     | 2180                                 | 9.36                       | 1.8                                     |                            |
|                                      |  | 163.5                                     | 2093                                 | 9.02                       | 1.9                                     |                            |
|                                      |  | 188.7                                     | 1819                                 | 7.82                       | 2.2                                     |                            |
|                                      |  | 217.0                                     | 1581                                 | 6.80                       | 2.5                                     |                            |
|                                      |  | 260.5                                     | 1319                                 | 5.66                       | 3.0                                     |                            |
|                                      |  | 293.9                                     | 1171                                 | 5.02                       | 3.4                                     |                            |
|                                      |  | 329.6                                     | 1046                                 | 4.48                       | 3.8                                     |                            |
|                                      |  | 341.6                                     | 1007                                 | 4.32                       | 2.5                                     |                            |
|                                      |  | 393.9                                     | 875                                  | 3.74                       | 2.6                                     |                            |
|                                      |  | 446.1                                     | 774                                  | 3.25                       | 2.7                                     |                            |
| <b>45kW<br/>60HP</b>                 | 1400                                     | 23.8                                      | 17514                                | 61.03                      | 1.0                                     | MRA973/225M<br>MRF973/225M |
|                                      |  | 26.8                                      | 15601                                | 54.14                      | 1.1                                     |                            |
|                                      |  | 30.0                                      | 13850                                | 48.27                      | 1.2                                     |                            |
|                                      |  | 34.7                                      | 11825                                | 41.79                      | 1.4                                     |                            |
|                                      |  | 39.4                                      | 10597                                | 36.84                      | 1.6                                     |                            |
|                                      |  | 44.4                                      | 9229                                 | 32.68                      | 1.8                                     |                            |
|                                      |  | 49.8                                      | 8219                                 | 29.14                      | 2.1                                     |                            |
|                                      |  | 56.4                                      | 7352                                 | 25.72                      | 2.3                                     |                            |
|                                      |  | 63.9                                      | 6464                                 | 22.67                      | 2.6                                     |                            |
|                                      |  | 72.1                                      | 5763                                 | 20.12                      | 3.0                                     |                            |
|                                      |  | 80.9                                      | 5117                                 | 17.93                      | 3.3                                     |                            |
|                                      |  | 1400                                      | 31.8                                 | 12545                      | 45.57                                   |                            |
|                                      | 36.2                                     |   | 11314                                | 40.06                      | 1.1                                     |                            |
|                                      | 42.5                                     |   | 9612                                 | 34.12                      | 1.2                                     |                            |
|                                      | 48.3                                     |   | 8336                                 | 30.00                      | 1.4                                     |                            |
|                                      | 53.6                                     |   | 7524                                 | 27.06                      | 1.6                                     |                            |
|                                      | 61.5                                     |   | 6610                                 | 23.58                      | 1.8                                     |                            |
|                                      | 72.4                                     |   | 5578                                 | 20.04                      | 2.2                                     |                            |
|                                      | 82.3                                     |   | 4937                                 | 17.62                      | 2.4                                     |                            |
|                                      | 91.2                                     |   | 4427                                 | 15.90                      | 2.7                                     |                            |
|                                      | 104.7                                    |   | 3864                                 | 13.85                      | 3.1                                     |                            |
|                                      | 110.3                                    |   | 3651                                 | 13.14                      | 3.3                                     |                            |
|                                      | 126.6                                    |   | 3195                                 | 11.45                      | 3.8                                     |                            |
|                                      | 1400                                     | 145.5                                     | 2841                                 | 9.97                       | 4.2                                     | MRA872/225M<br>MRF872/225M |
| 165.5                                |  | 2496                                      | 8.76                                 | 4.8                        |   |                            |
| 194.4                                |  | 2119                                      | 7.46                                 | 5.7                        |   |                            |



| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |                            |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|----------------------------|
| <b>45kW<br/>60HP</b>                 | 1400                                     | 221.0                                     | 1868                                 | 6.56                       | 6.4                                     | MRA872/225M<br>MRF872/225M |                            |
|                                      |  | 245.0                                     | 1687                                 | 5.92                       | 7.1                                     |                            |                            |
|                                      |  | 281.2                                     | 1467                                 | 5.16                       | 8.2                                     |                            |                            |
|                                      |  | 296.5                                     | 1394                                 | 4.89                       | 8.6                                     |                            |                            |
|                                      |  | 339.7                                     | 1213                                 | 4.27                       | 9.9                                     |                            |                            |
|                                      | 1400                                     | 56.5                                      | 7305                                 | 25.68                      | 1.0                                     | MRA773/225M<br>MRF773/225M |                            |
|                                      |  | 64.9                                      | 6361                                 | 22.35                      | 1.1                                     |                            |                            |
|                                      |  | 75.2                                      | 5501                                 | 19.29                      | 1.3                                     |                            |                            |
|                                      |  | 84.3                                      | 4864                                 | 17.19                      | 1.4                                     |                            |                            |
|                                      | 1400                                     | 100.9                                     | 4116                                 | 14.37                      | 1.7                                     | MRA772/225M<br>MRF772/225M |                            |
|                                      |  | 113.1                                     | 3696                                 | 12.82                      | 1.8                                     |                            |                            |
|                                      |  | 126.0                                     | 3312                                 | 11.51                      | 2.0                                     |                            |                            |
|                                      |  | 133.4                                     | 3122                                 | 10.87                      | 2.1                                     |                            |                            |
|                                      |  | 152.6                                     | 2747                                 | 9.50                       | 2.4                                     |                            |                            |
|                                      |  | 173.5                                     | 2417                                 | 8.36                       | 2.6                                     |                            |                            |
|                                      |  | 202.2                                     | 2074                                 | 7.17                       | 3.0                                     |                            |                            |
|                                      |  | 225.1                                     | 1864                                 | 6.44                       | 3.3                                     |                            |                            |
|                                      | 1400                                     | 238.6                                     | 1751                                 | 6.08                       | 3.5                                     | MRA672/225M<br>MRF672/225M |                            |
|                                      |  | 122.6                                     | 3401                                 | 11.83                      | 1.1                                     |                            |                            |
|                                      |  | 138.2                                     | 3023                                 | 10.49                      | 1.2                                     |                            |                            |
|                                      |  | 155.0                                     | 2697                                 | 9.36                       | 1.3                                     |                            |                            |
|                                      |  | 160.7                                     | 2590                                 | 9.02                       | 1.3                                     |                            |                            |
|                                      |  | 185.5                                     | 2251                                 | 7.82                       | 1.5                                     |                            |                            |
|                                      |  | 213.3                                     | 1957                                 | 6.80                       | 1.6                                     |                            |                            |
|                                      |  | 256.1                                     | 1632                                 | 5.66                       | 2.3                                     |                            |                            |
|                                      |  | 288.9                                     | 1448                                 | 5.02                       | 2.6                                     |                            |                            |
|                                      |  | 324.0                                     | 1294                                 | 4.48                       | 2.7                                     |                            |                            |
|                                      |  | 335.8                                     | 1246                                 | 4.32                       | 2.7                                     |                            |                            |
|                                      | <b>55kW<br/>70HP</b>                     | 1400                                      | 387.2                                | 1084                       | 3.74                                    | 3.0                        | MRA973/250M<br>MRF973/250M |
|                                      |  |   | 446.1                                | 941                        | 3.25                                    | 3.4                        |                            |
|                                      |  |   | 26.8                                 | 19069                      | 54.14                                   | 0.9                        |                            |
|                                      |  |   | 30.0                                 | 16929                      | 48.27                                   | 1.0                        |                            |
| 34.7                                 |  |   | 14452                                | 41.79                      | 1.2                                     |                            |                            |
| 39.4                                 |  |   | 12952                                | 36.84                      | 1.3                                     |                            |                            |
| 44.4                                 |  |   | 11281                                | 32.68                      | 1.5                                     |                            |                            |
| 49.8                                 |  |   | 10046                                | 29.14                      | 1.7                                     |                            |                            |
| 56.4                                 |  |   | 8986                                 | 25.72                      | 1.9                                     |                            |                            |
| 63.9                                 |  |   | 7901                                 | 22.67                      | 2.2                                     |                            |                            |
| 72.1                                 | 7043                                     | 20.12                                     | 2.4                                  |                            |   |                            |                            |
| 80.9                                 | 6255                                     | 17.93                                     | 2.7                                  |                            |   |                            |                            |

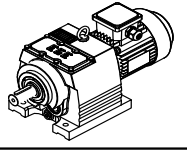


| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>55kW<br/>70HP</b>                 | 1400                                     | 90.4                                      | 5632                                 | 16.04                      | 3.0                                     | MRA972/250M<br>MRF972/250M |
|                                      |  | 101.9                                     | 5006                                 | 14.23                      | 3.4                                     |                            |
|                                      | 1400                                     | 42.5                                      | 11747                                | 34.12                      | 1.0                                     | MRA873/250M<br>MRF873/250M |
|                                      |  | 48.3                                      | 10189                                | 30.00                      | 1.2                                     |                            |
|                                      |  | 53.6                                      | 9195                                 | 27.06                      | 1.3                                     |                            |
|                                      |  | 61.5                                      | 8079                                 | 23.58                      | 1.5                                     |                            |
|                                      |  | 72.4                                      | 6817                                 | 20.04                      | 1.8                                     |                            |
|                                      |  | 82.3                                      | 6034                                 | 17.62                      | 2.0                                     |                            |
|                                      |  | 91.2                                      | 5411                                 | 15.90                      | 2.2                                     |                            |
|                                      |  | 104.7                                     | 4723                                 | 13.85                      | 2.5                                     |                            |
|                                      |  | 110.3                                     | 4463                                 | 13.14                      | 2.7                                     |                            |
|                                      |  | 126.6                                     | 3905                                 | 11.45                      | 3.1                                     |                            |
|                                      | 1400                                     | 145.5                                     | 3472                                 | 9.97                       | 3.5                                     | MRA872/250M<br>MRF872/250M |
|                                      |  | 165.5                                     | 3051                                 | 8.76                       | 3.9                                     |                            |
|                                      |  | 194.4                                     | 2590                                 | 7.46                       | 4.6                                     |                            |
|                                      |  | 221.0                                     | 2283                                 | 6.56                       | 5.3                                     |                            |
|                                      |  | 245.0                                     | 2061                                 | 5.92                       | 5.8                                     |                            |
|                                      |  | 281.2                                     | 1793                                 | 5.16                       | 6.7                                     |                            |
|                                      |  | 296.5                                     | 1703                                 | 4.89                       | 7.0                                     |                            |
|                                      | 1400                                     | 64.9                                      | 7776                                 | 22.35                      | 0.9                                     | MRA773/250M<br>MRF773/250M |
|                                      |  | 75.2                                      | 6724                                 | 19.29                      | 1.0                                     |                            |
|                                      |  | 84.3                                      | 5945                                 | 17.19                      | 1.2                                     |                            |
|                                      | 1400                                     | 100.9                                     | 5031                                 | 14.37                      | 1.4                                     | MRA772/250M<br>MRF772/250M |
|                                      |  | 113.1                                     | 4517                                 | 12.82                      | 1.5                                     |                            |
|                                      |  | 126.0                                     | 4047                                 | 11.51                      | 1.7                                     |                            |
|                                      |  | 133.4                                     | 3816                                 | 10.87                      | 1.8                                     |                            |
|                                      |  | 152.6                                     | 3357                                 | 9.50                       | 2.1                                     |                            |
|                                      |  | 173.5                                     | 2954                                 | 8.36                       | 2.4                                     |                            |
|                                      |  | 202.2                                     | 2534                                 | 7.17                       | 2.8                                     |                            |
|                                      |  | 225.1                                     | 2278                                 | 6.44                       | 3.1                                     |                            |
| 238.6                                | 2140                                     | 6.08                                      | 3.3                                  |                            |   |                            |
| <b>75kW<br/>97HP</b>                 | 1400                                     | 39.4                                      | 17662                                | 36.84                      | 1.0                                     | MRA973/280S<br>MRF973/280S |
|                                      |  | 44.4                                      | 15384                                | 32.68                      | 1.1                                     |                            |
|                                      |  | 49.8                                      | 13700                                | 29.14                      | 1.2                                     |                            |
|                                      |  | 56.4                                      | 12254                                | 25.72                      | 1.4                                     |                            |
|                                      |  | 63.9                                      | 10774                                | 22.67                      | 1.6                                     |                            |
|                                      |  | 72.1                                      | 9605                                 | 20.12                      | 1.8                                     |                            |
|                                      |  | 80.9                                      | 8530                                 | 17.93                      | 2.0                                     |                            |
|                                      |  |   |                                      |                            |   |                            |

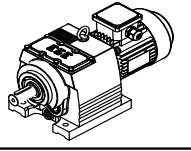


| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|
| <b>75kW<br/>97HP</b>                 | 1400                                     | 90.4                                      | 7681                                 | 16.04                      | 2.2                                     | MRA972/280S<br>MRF972/280S |
|                                      |  | 101.9                                     | 6827                                 | 14.23                      | 2.5                                     |                            |
|                                      |  | 114.1                                     | 6126                                 | 12.71                      | 2.8                                     |                            |
|                                      |  | 127.0                                     | 5496                                 | 11.42                      | 3.1                                     |                            |
|                                      |  | 146.9                                     | 4752                                 | 9.87                       | 3.6                                     |                            |
|                                      |  | 165.6                                     | 4226                                 | 8.75                       | 4.0                                     |                            |
|                                      |  | 185.3                                     | 3783                                 | 7.82                       | 4.5                                     |                            |
|                                      |  | 206.4                                     | 3399                                 | 7.02                       | 5.0                                     |                            |
|                                      | 1400                                     | 53.6                                      | 12539                                | 27.06                      | 1.0                                     | MRA873/280S<br>MRF873/280S |
|                                      |  | 61.5                                      | 11017                                | 23.58                      | 1.1                                     |                            |
|                                      |  | 72.4                                      | 9297                                 | 20.04                      | 1.3                                     |                            |
|                                      |  | 82.3                                      | 8228                                 | 17.62                      | 1.5                                     |                            |
|                                      |  | 91.2                                      | 7379                                 | 15.90                      | 1.6                                     |                            |
|                                      |  | 104.7                                     | 6440                                 | 13.85                      | 1.9                                     |                            |
|                                      |  | 110.3                                     | 6085                                 | 13.14                      | 2.0                                     |                            |
|                                      |  | 126.6                                     | 5325                                 | 11.45                      | 2.3                                     |                            |
|                                      | 1400                                     | 145.5                                     | 4735                                 | 9.97                       | 2.5                                     | MRA872/280S<br>MRF872/280S |
|                                      |  | 165.5                                     | 4160                                 | 8.76                       | 2.9                                     |                            |
|                                      |  | 194.4                                     | 3531                                 | 7.46                       | 3.4                                     |                            |
|                                      |  | 221.0                                     | 3114                                 | 6.56                       | 3.9                                     |                            |
|                                      |  | 245.0                                     | 2811                                 | 5.92                       | 4.3                                     |                            |
|                                      |  | 281.2                                     | 2445                                 | 5.16                       | 4.9                                     |                            |
|                                      |  | 296.5                                     | 2322                                 | 4.89                       | 5.2                                     |                            |
|                                      |  | 339.7                                     | 2022                                 | 4.27                       | 5.9                                     |                            |
| <b>90 kW<br/>117HP</b>               | 1400                                     | 49.8                                      | 16440                                | 29.14                      | 1.0                                     | MRA973/280M<br>MRF973/280M |
|                                      |  | 56.4                                      | 14704                                | 25.72                      | 1.2                                     |                            |
|                                      |  | 63.9                                      | 12930                                | 22.67                      | 1.3                                     |                            |
|                                      |  | 72.1                                      | 11527                                | 20.12                      | 1.5                                     |                            |
|                                      |  | 80.9                                      | 10237                                | 17.93                      | 1.7                                     |                            |
|                                      | 1400                                     | 90.4                                      | 9217                                 | 16.04                      | 1.7                                     | MRA972/280M<br>MRF972/280M |
|                                      |  | 101.9                                     | 8194                                 | 14.23                      | 2.0                                     |                            |
|                                      |  | 114.1                                     | 7352                                 | 12.71                      | 2.1                                     |                            |
|                                      |  | 127.0                                     | 6596                                 | 11.42                      | 2.3                                     |                            |
|                                      |  | 146.9                                     | 5704                                 | 9.87                       | 2.5                                     |                            |
|                                      |  | 165.6                                     | 5071                                 | 8.75                       | 2.5                                     |                            |
|                                      |  | 185.3                                     | 4541                                 | 7.82                       | 2.5                                     |                            |
|                                      |  | 206.4                                     | 4079                                 | 7.02                       | 2.5                                     |                            |
|                                      | 1400                                     | 72.4                                      | 11157                                | 20.04                      | 1.1                                     | MRA873/280M<br>MRF873/280M |
|                                      |  | 82.3                                      | 9874                                 | 17.62                      | 1.2                                     |                            |
|                                      |  | 91.2                                      | 8854                                 | 15.90                      | 1.4                                     |                            |

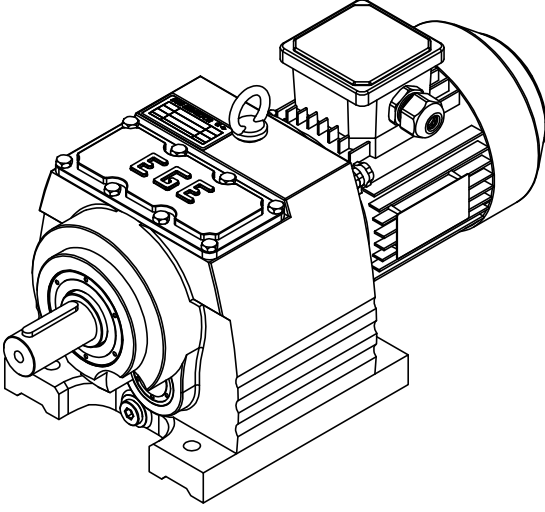




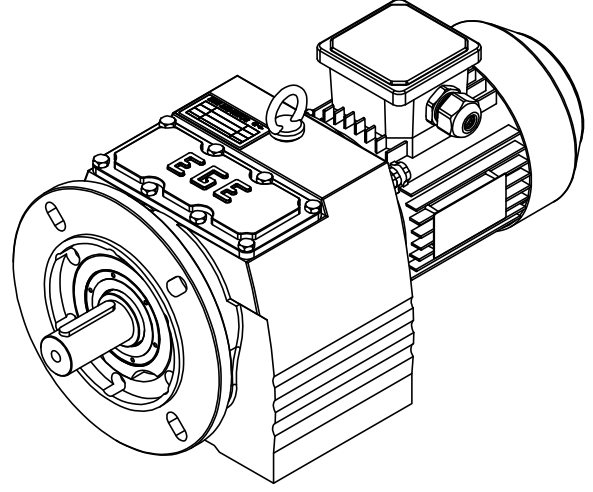
| Motor Gücü<br>Motor Power<br>kW / HP | Motor Devri<br>Motor Speeds<br>d/d (rpm) | Çıkış Devri<br>Output Speeds<br>d/d (rpm) | Çıkış Momenti<br>Output Torque<br>Nm | Çevrim Oranı<br>Ratio<br>i | Servis Faktörü<br>Service Factors<br>fs | Redüktör Tipi<br>Type      |                            |
|--------------------------------------|--|---|--------------------------------------|----------------------------|---|----------------------------|----------------------------|
| <b>90 kW<br/>117HP</b>               | 1400                                     | 104.7                                     | 7727                                 | 13.85                      | 1.6                                     | MRA873/280M<br>MRF873/280M |                            |
|                                      |  | 110.3                                     | 7302                                 | 13.14                      | 1.6                                     |                            |                            |
|                                      |  | 126.6                                     | 6391                                 | 11.45                      | 1.9                                     |                            |                            |
|                                      | 1400                                     | 1400                                      | 145.5                                | 5682                       | 9.97                                    | 2.1                        | MRA872/280M<br>MRF872/280M |
|                                      |  |   | 165.5                                | 4991                       | 8.76                                    | 2.4                        |                            |
|                                      |  |   | 194.4                                | 4237                       | 7.46                                    | 2.8                        |                            |
|                                      |  |   | 221.0                                | 3736                       | 6.56                                    | 3.2                        |                            |
|                                      |  |   | 245.0                                | 3373                       | 5.92                                    | 3.6                        |                            |
|                                      |  |   | 281.2                                | 2934                       | 5.16                                    | 4.1                        |                            |
|                                      |  |   | 296.5                                | 2787                       | 4.89                                    | 4.3                        |                            |
| 339.7                                | 2427                                     | 4.27                                      | 4.9                                  |                            |   |                            |                            |
| <b>110kW<br/>150HP</b>               | 1400                                     | 63.9                                      | 15804                                | 22.67                      | 1.1                                     | MRA973/315S<br>MRF973/315S |                            |
|                                      |  | 72.1                                      | 14088                                | 20.12                      | 1.2                                     |                            |                            |
|                                      |  | 80.9                                      | 12512                                | 17.93                      | 1.4                                     |                            |                            |
|                                      | 1400                                     | 1400                                      | 90.4                                 | 11265                      | 16.04                                   | 1.5                        | MRA972/315S<br>MRF972/315S |
|                                      |  |   | 101.9                                | 10014                      | 14.23                                   | 1.7                        |                            |
|                                      |  |   | 114.1                                | 8987                       | 12.71                                   | 1.8                        |                            |
|                                      |  |   | 127.0                                | 8062                       | 11.42                                   | 1.9                        |                            |
|                                      |  |   | 146.9                                | 6972                       | 9.87                                    | 2.2                        |                            |
|                                      |  |   | 165.6                                | 6198                       | 8.75                                    | 2.3                        |                            |
|                                      |  |   | 185.3                                | 5550                       | 7.82                                    | 2.3                        |                            |
| 206.4                                | 4986                                     | 7.02                                      | 2.4                                  |                            |   |                            |                            |
| <b>132kW<br/>180HP</b>               | 1400                                     | 72.1                                      | 16907                                | 20.12                      | 1.0                                     | MRA973/315M<br>MRF973/315M |                            |
|                                      |  | 80.9                                      | 15015                                | 17.93                      | 1.1                                     |                            |                            |
|                                      | 1400                                     | 1400                                      | 90.4                                 | 13519                      | 16.04                                   | 1.3                        | MRA972/315M<br>MRF972/315M |
|                                      |  |   | 101.9                                | 12018                      | 14.23                                   | 1.4                        |                            |
|                                      |  |   | 114.1                                | 10784                      | 12.71                                   | 1.6                        |                            |
|                                      |  |   | 127.0                                | 9675                       | 11.42                                   | 1.8                        |                            |
|                                      |  |   | 146.9                                | 8366                       | 9.87                                    | 1.6                        |                            |
|                                      |  |   | 165.6                                | 7438                       | 8.75                                    | 1.6                        |                            |
|                                      |  |   | 185.3                                | 6661                       | 7.82                                    | 1.7                        |                            |
|                                      |  |   | 206.4                                | 5983                       | 7.02                                    | 1.7                        |                            |
| <b>"160kW<br/>218HP"</b>             | 1400                                     | 101.9                                     | 14567                                | 14.23                      | 1.2                                     | MRA972/315M<br>MRF972/315M |                            |
|                                      |  | 114.1                                     | 13072                                | 12.71                      | 1.3                                     |                            |                            |
|                                      |  | 127.0                                     | 11728                                | 11.42                      | 1.4                                     |                            |                            |
|                                      |  | 146.9                                     | 10142                                | 9.87                       | 1.2                                     |                            |                            |
|                                      |  | 165.6                                     | 9017                                 | 8.75                       | 1.1                                     |                            |                            |
|                                      |  | 185.3                                     | 8073                                 | 7.82                       | 1.2                                     |                            |                            |
|                                      |  | 206.4                                     | 7252                                 | 7.02                       | 1.4                                     |                            |                            |



MRA...



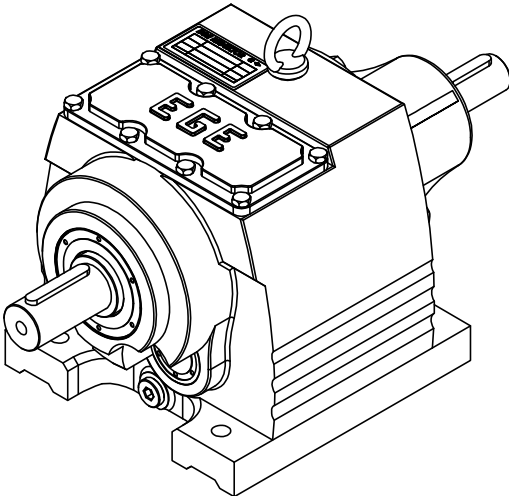
MRF...



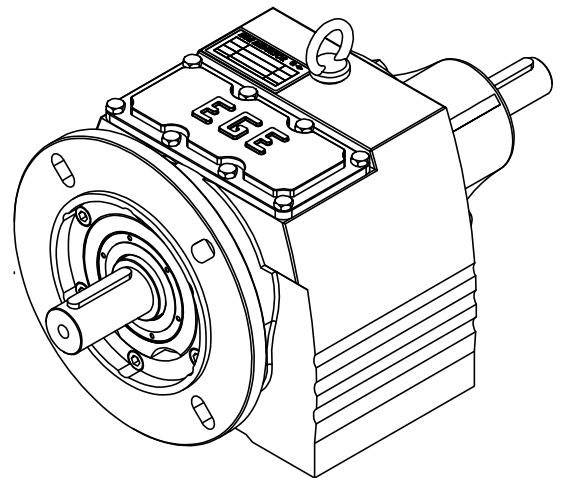
# Ölçü Sayfaları

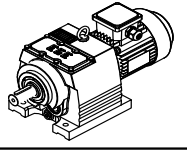
## Dimension Pages

MTA...

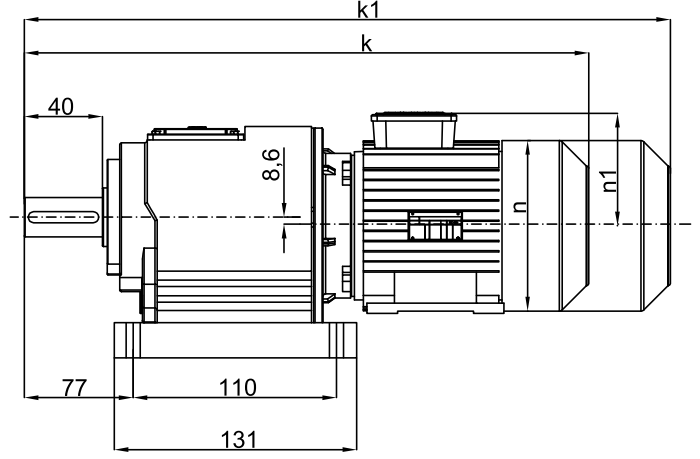
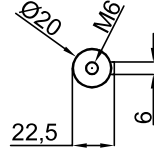
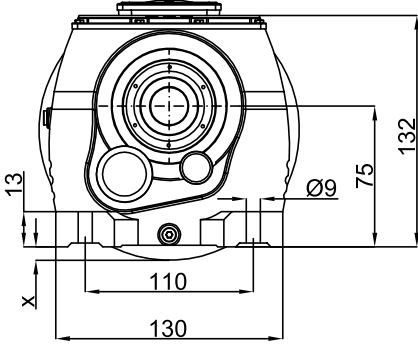


MTF...

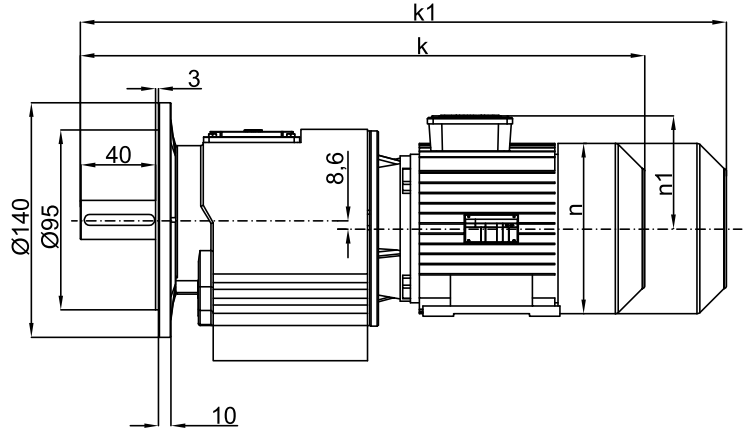
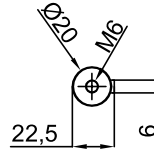
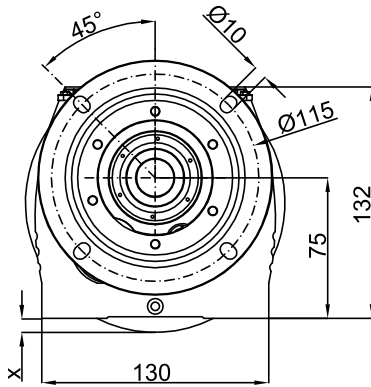




MRA 002  
MRA 003



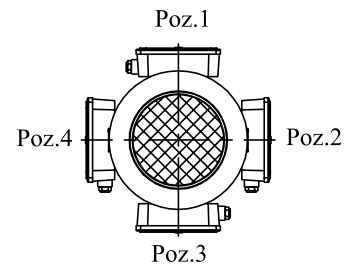
MRF 002  
MRF 003



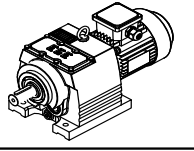
| Motor Büyüklüğü / Motor Size |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|
|                              | 63  | 71  | 80  | 90S | 90L |
| k                            | 368 | 387 | 415 | 443 | 483 |
| k1                           | 421 | 507 | 535 | 568 | 608 |
| n                            | 121 | 138 | 156 | 176 | 176 |
| n1                           | 97  | 111 | 118 | 126 | 126 |
| x                            | -   | 5   | 14  | 24  | 24  |

### Klemens Pozisyonları Terminal Box

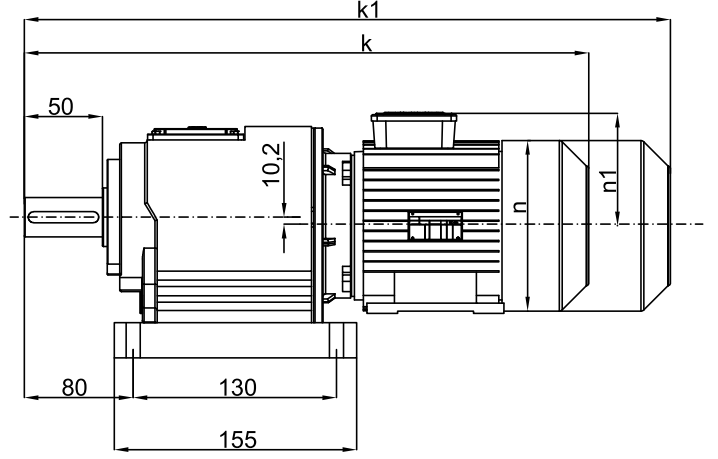
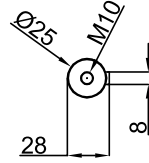
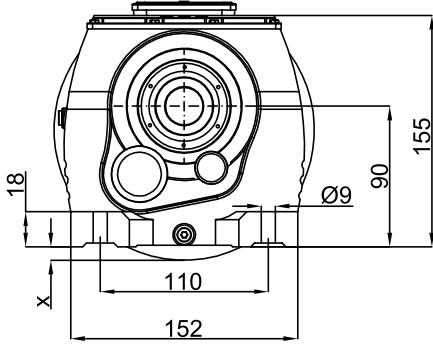
63-71-80-90 Tip



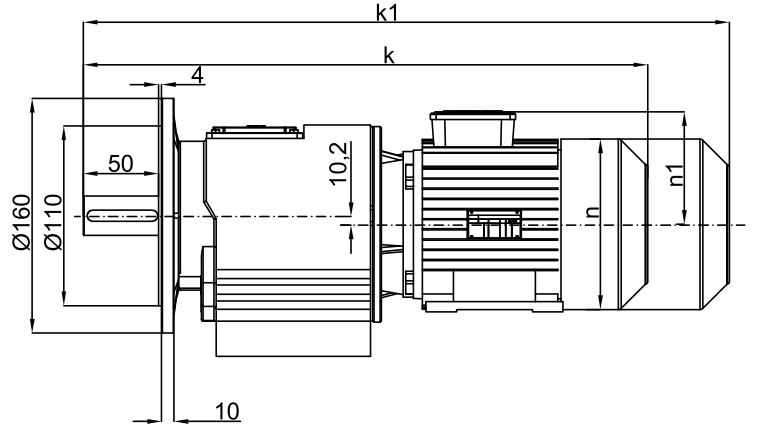
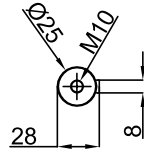
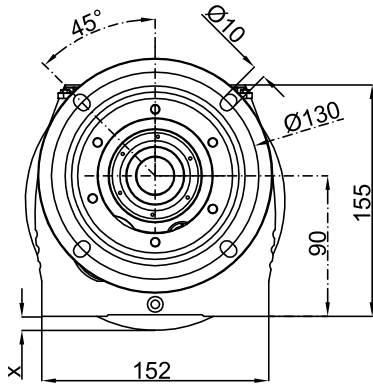
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA 102  
MRA 103



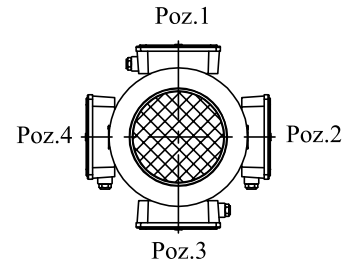
MRF 102  
MRF 103



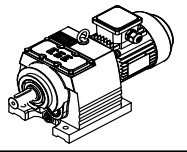
| Motor Büyüklüğü / Motor Size |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|
|                              | 63  | 71  | 80  | 90S | 90L |
| k                            | 394 | 413 | 442 | 471 | 596 |
| k1                           | 447 | 533 | 562 | 596 | 633 |
| n                            | 121 | 138 | 156 | 176 | 176 |
| n1                           | 97  | 111 | 118 | 126 | 126 |
| x                            | -   | -   | -   | 9   | 9   |

Klemens Pozisyonları  
Terminal Box

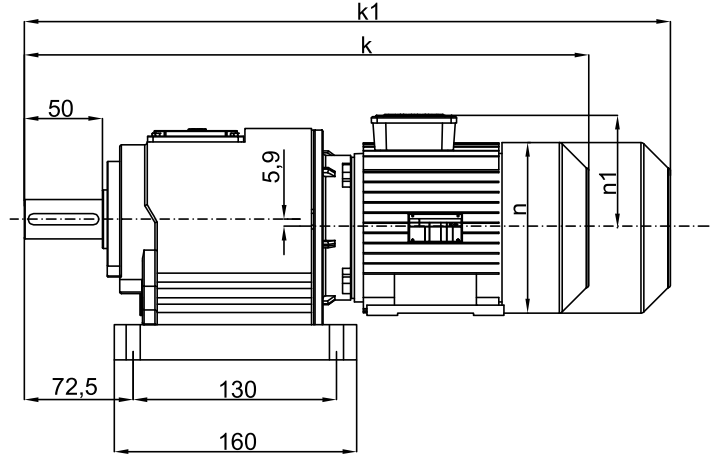
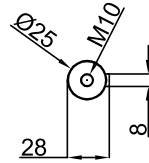
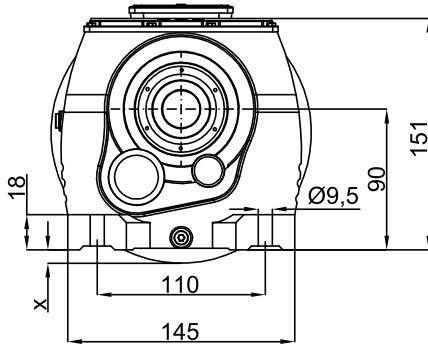
63-71-80-90 Tip



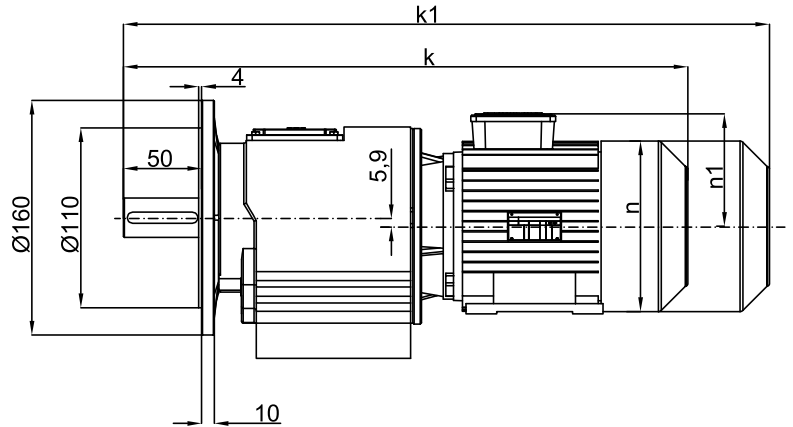
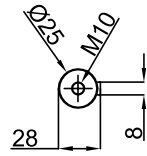
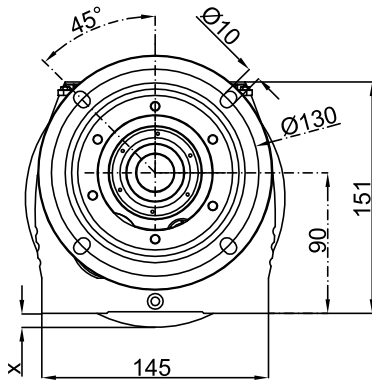
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA 172  
MRA 173



MRF 172  
MRF 173

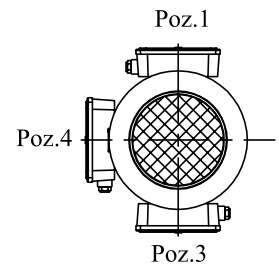


Motor Büyüklüğü / Motor Size

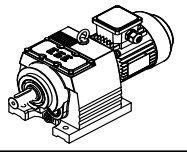
|    | 63  | 71  | 80  | 90S | 90L | 100L | 112M |
|----|-----|-----|-----|-----|-----|------|------|
| k  | 395 | 414 | 442 | 470 | 510 | 536  | 694  |
| k1 | 448 | 534 | 562 | 595 | 635 | 671  | 694  |
| n  | 121 | 138 | 156 | 176 | 176 | 194  | 218  |
| n1 | 97  | 111 | 118 | 126 | 126 | 135  | 146  |
| x  | -   | -   | -   | 6   | 6   | 16   | 28   |

Klemens Pozisyonları  
Terminal Box

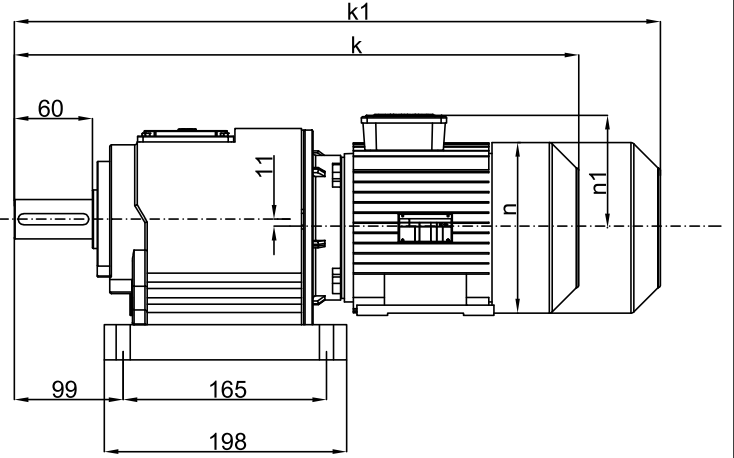
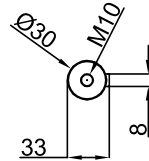
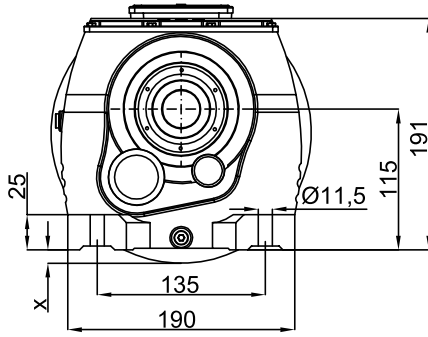
63-71-80-90-100-112 Tip



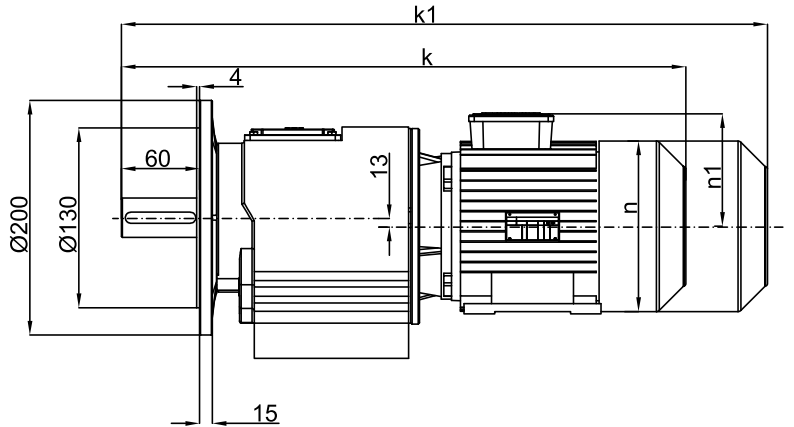
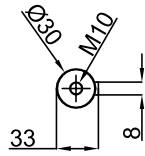
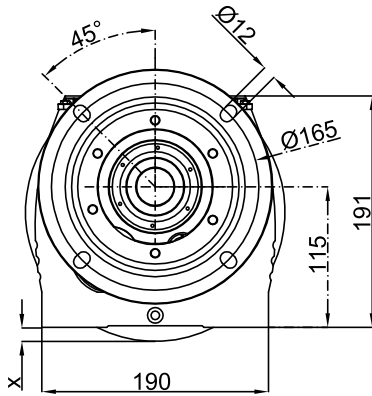
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA202  
MRA203



MRF202  
MRF203



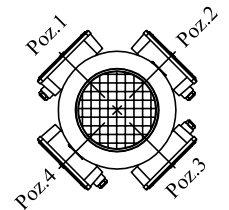
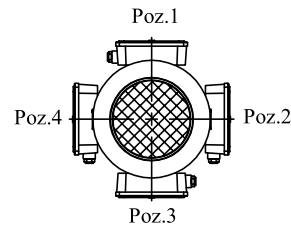
Motor Büyüklüğü / Motor Size

|    | 63  | 71  | 80  | 90S | 90L | 100L | 112M |
|----|-----|-----|-----|-----|-----|------|------|
| k  | 442 | 461 | 489 | 517 | 542 | 583  | 606  |
| k1 | 495 | 581 | 609 | 642 | 667 | 718  | 741  |
| n  | 121 | 138 | 156 | 176 | 176 | 194  | 218  |
| n1 | 97  | 111 | 118 | 126 | 126 | 135  | 146  |
| x  | -   | -   | -   | -   | -   | -    | 10   |

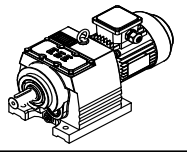
Klemens Pozisyonları  
Terminal Box

63-80-90-100-112 Tip

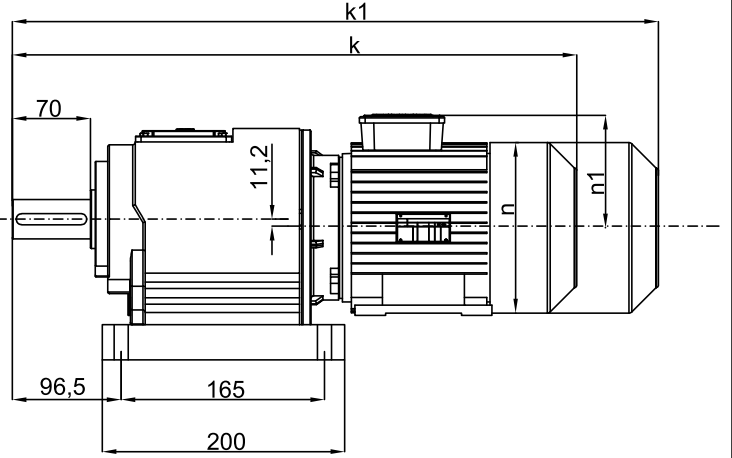
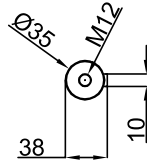
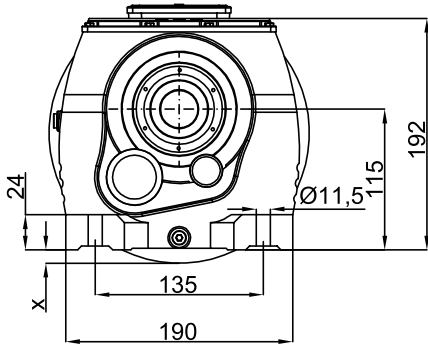
71 Tip



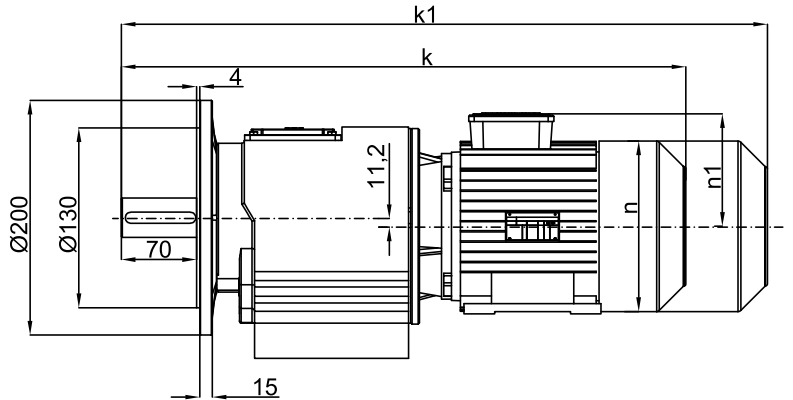
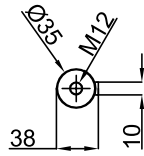
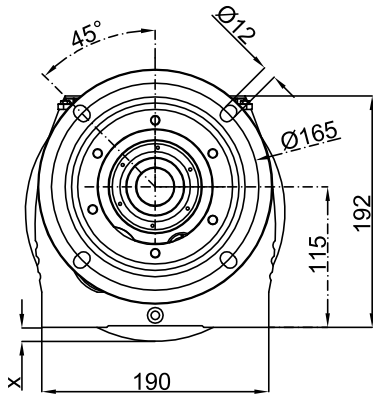
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA272  
MRA273



MRF272  
MRF273

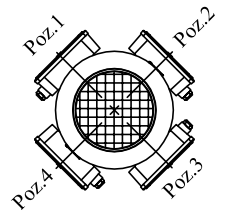
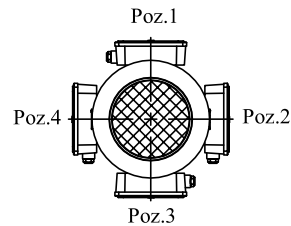


| Motor Büyüklüğü / Motor Size |     |     |     |     |     |      |      |
|------------------------------|-----|-----|-----|-----|-----|------|------|
|                              | 63  | 71  | 80  | 90S | 90L | 100L | 112M |
| k                            | 443 | 462 | 490 | 518 | 543 | 584  | 607  |
| k1                           | 496 | 582 | 610 | 643 | 668 | 719  | 742  |
| n                            | 121 | 138 | 156 | 176 | 176 | 194  | 218  |
| n1                           | 97  | 111 | 118 | 126 | 126 | 135  | 146  |
| x                            | -   | -   | -   | -   | -   | -    | 10   |

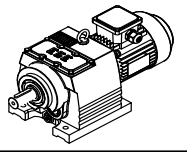
Klemens Pozisyonları  
Terminal Box

63-80-90-100-112 Tip

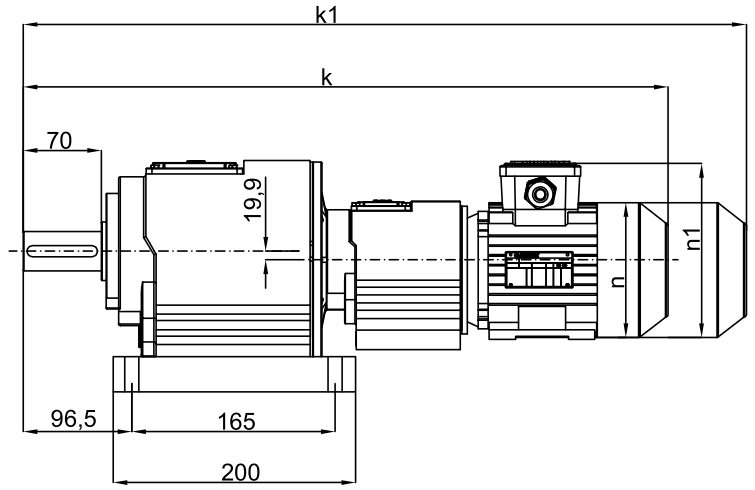
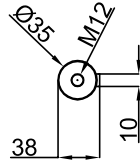
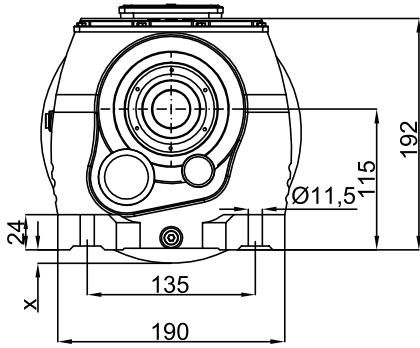
71 Tip



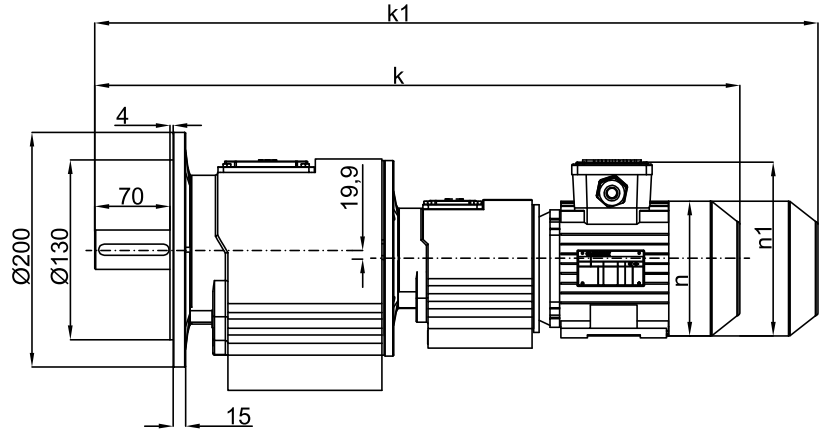
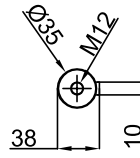
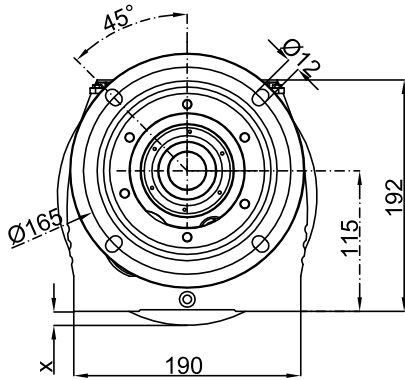
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA275  
MRA276



MRF275  
MRF276

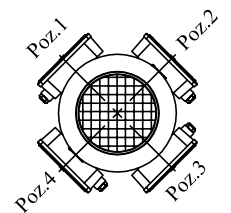
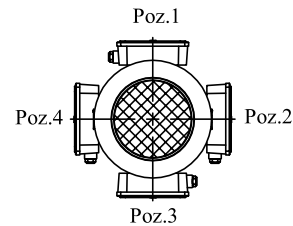


| Motor Büyüklüğü / Motor Size |     |     |
|------------------------------|-----|-----|
|                              | 63  | 71  |
| k                            | 593 | 614 |
| k1                           | 646 | 734 |
| n                            | 121 | 138 |
| n1                           | 97  | 111 |
| x                            | -   | -   |

Klemens Pozisyonları  
Terminal Box

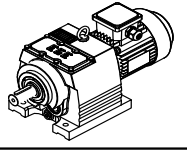
63 Tip

71 Tip

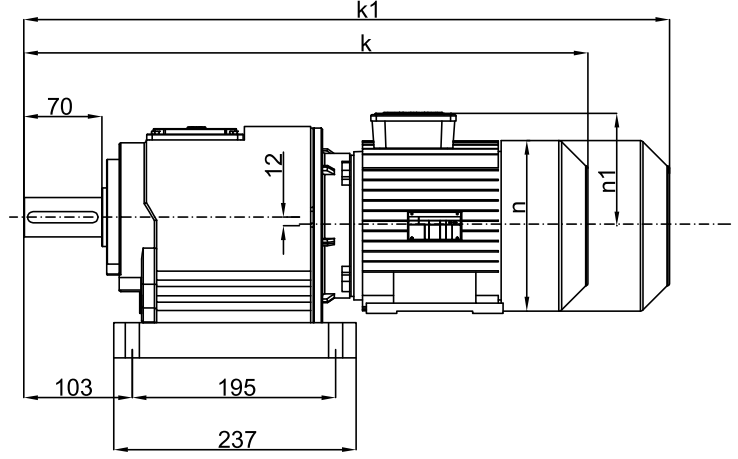
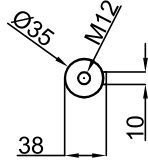
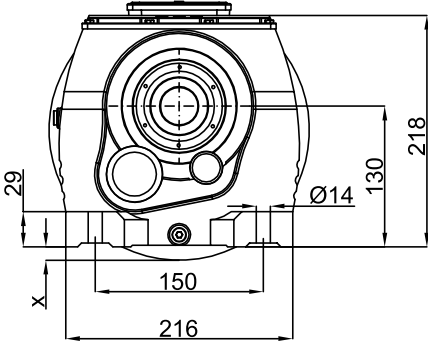


\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.

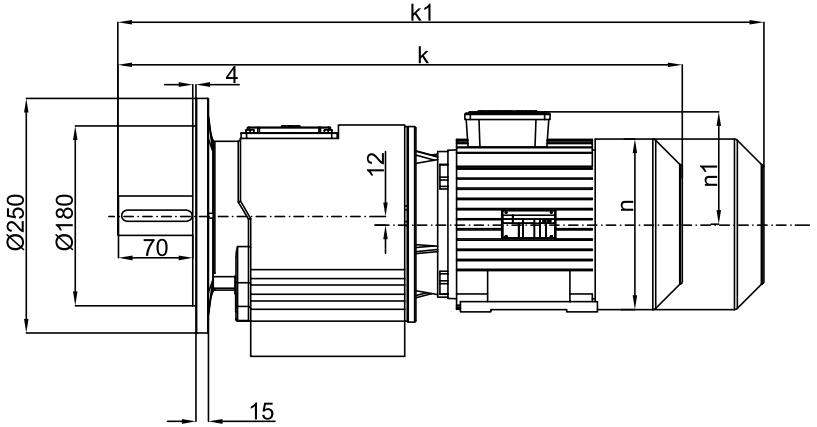
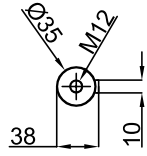
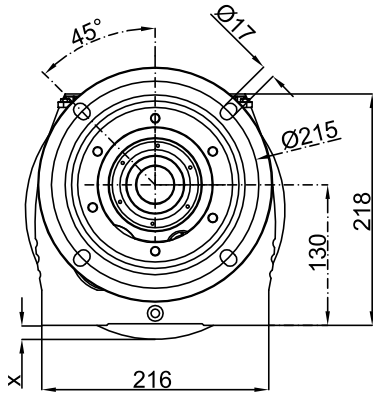




MRA282  
MRA283



MRF282  
MRF283

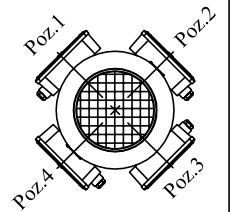
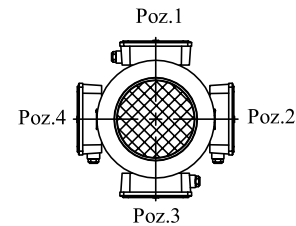


| Motor Büyüklüğü / Motor Size |     |     |     |     |      |      |      |      |
|------------------------------|-----|-----|-----|-----|------|------|------|------|
|                              | 71  | 80  | 90S | 90L | 100L | 112M | 132S | 132M |
| k                            | 479 | 507 | 537 | 562 | 602  | 625  | 679  | 717  |
| k1                           | 599 | 627 | 662 | 687 | 737  | 760  | 824  | 862  |
| n                            | 138 | 156 | 176 | 176 | 194  | 218  | 257  | 257  |
| n1                           | 111 | 118 | 126 | 126 | 135  | 146  | 168  | 168  |
| x                            | -   | -   | -   | -   | -    | -    | -    | 14   |

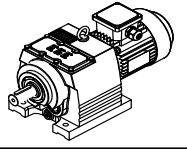
Klemens Pozisyonları  
Terminal Box

80-90-100-112-132S-132M Tip

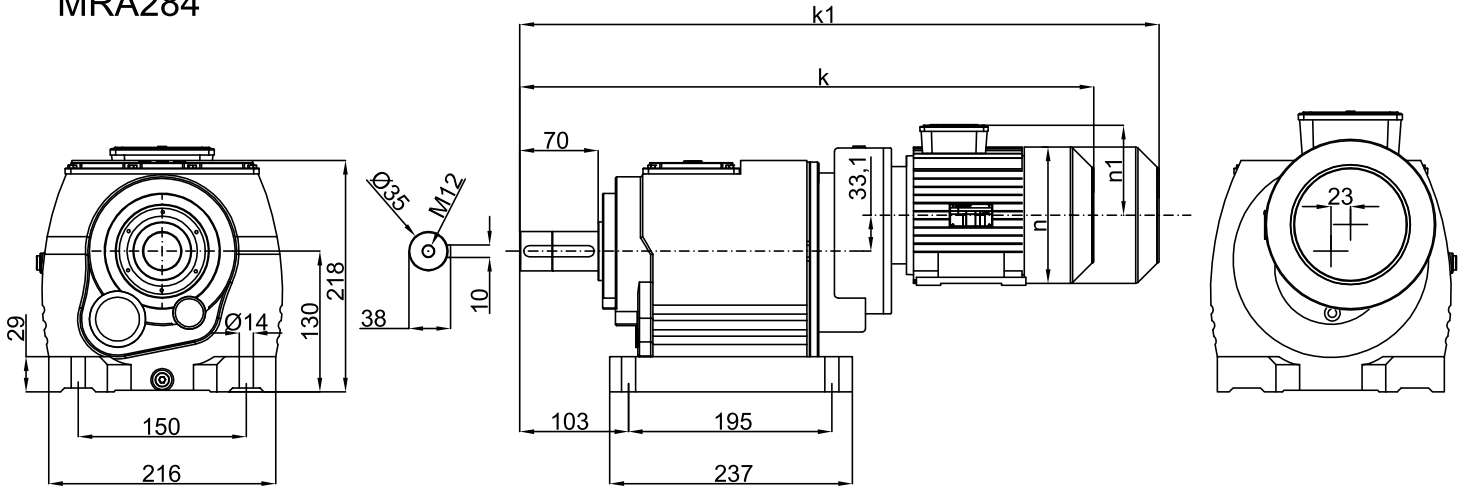
71 Tip



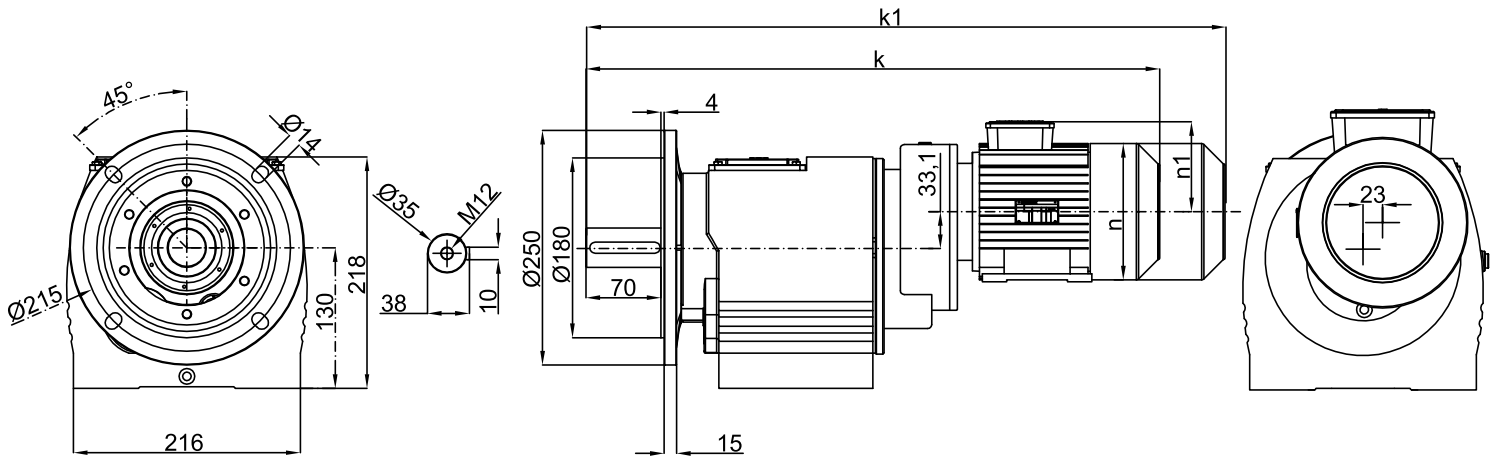
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



### MRA284



### MRF284



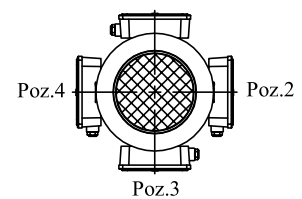
#### Motor Büyüklüğü / Motor Size

|    | 63  | 71  |
|----|-----|-----|
| k  | 540 | 558 |
| k1 | 593 | 678 |
| n  | 121 | 138 |
| n1 | 97  | 111 |
| x  | -   | -   |

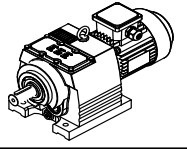
#### Klemens Pozisyonları Terminal Box

63 - 71 Tip

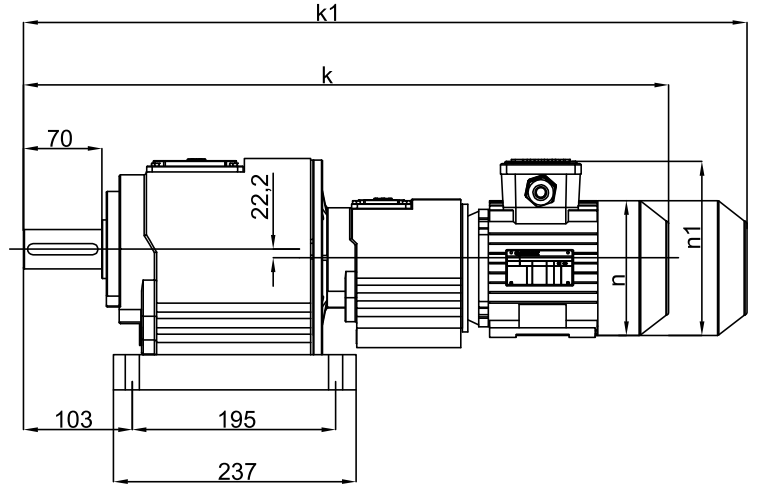
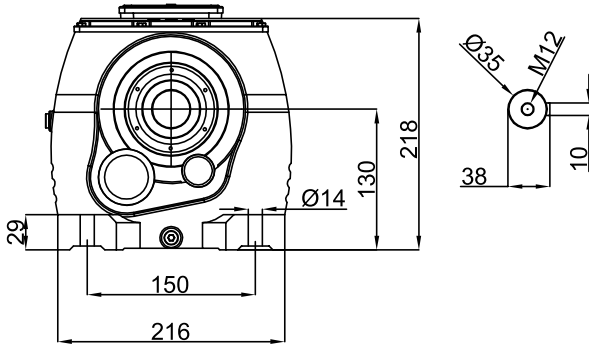
Poz.1



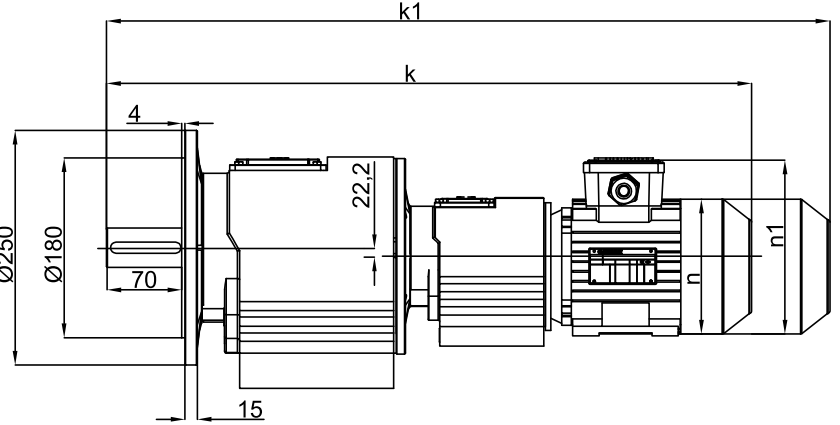
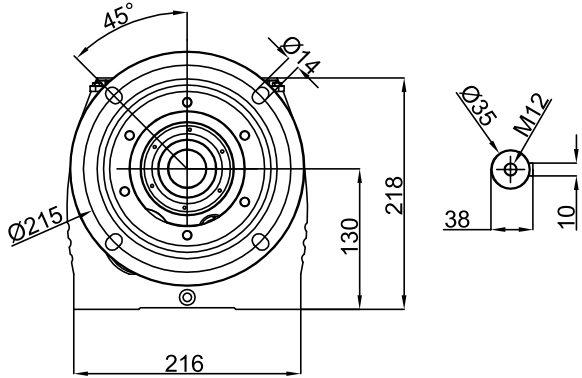
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA285  
MRA286



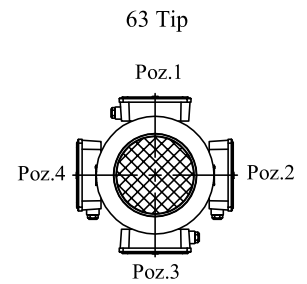
MRF285  
MRF286



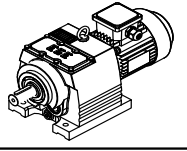
Motor Büyüklüğü / Motor Size

|    | Motor Büyüklüğü / Motor Size |
|----|------------------------------|
|    | 63                           |
| k  | 641                          |
| k1 | 694                          |
| n  | 121                          |
| n1 | 97                           |
| x  | -                            |

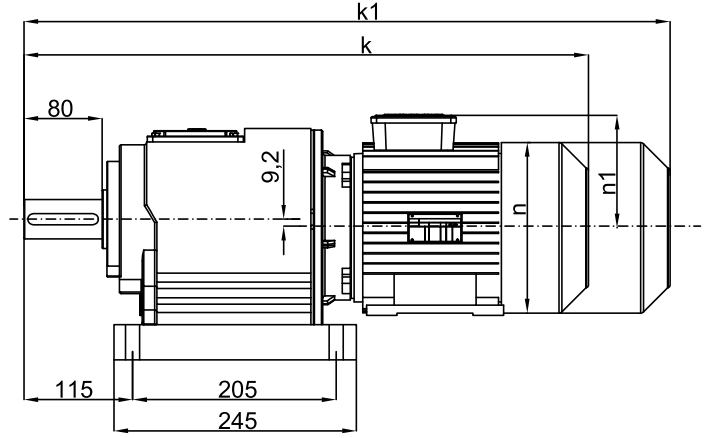
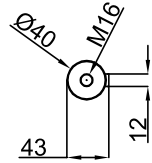
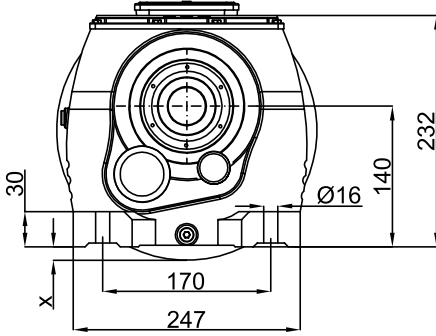
Klemens Pozisyonları  
Terminal Box



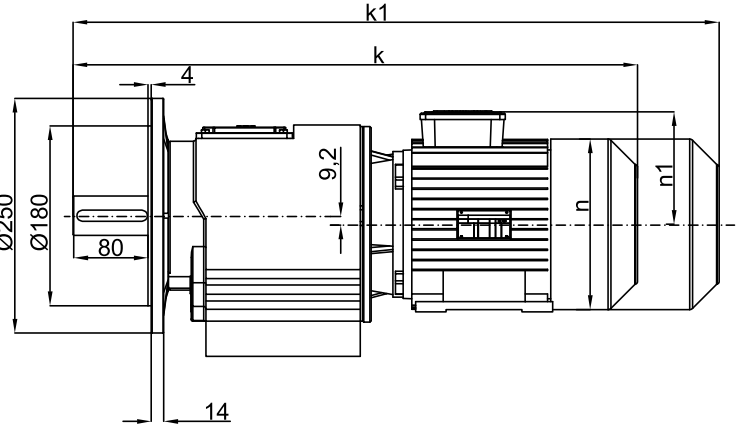
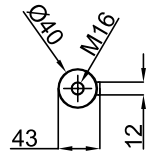
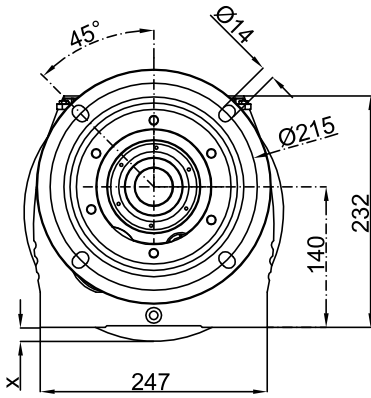
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA372  
MRA373



MRF372  
MRF373

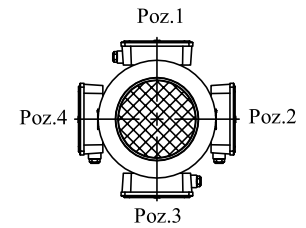


Motor Büyüklüğü / Motor Size

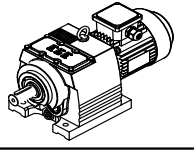
|    | 71  | 80  | 90S | 90L | 100L | 112M | 132S | 132M |
|----|-----|-----|-----|-----|------|------|------|------|
| k  | 500 | 528 | 558 | 583 | 623  | 646  | 700  | 738  |
| k1 | 620 | 648 | 683 | 708 | 758  | 781  | 845  | 883  |
| n  | 138 | 156 | 176 | 176 | 194  | 218  | 257  | 257  |
| n1 | 111 | 118 | 126 | 126 | 135  | 146  | 168  | 168  |
| x  | -   | -   | -   | -   | -    | -    | 2    | 30   |

Klemens Pozisyonları  
Terminal Box

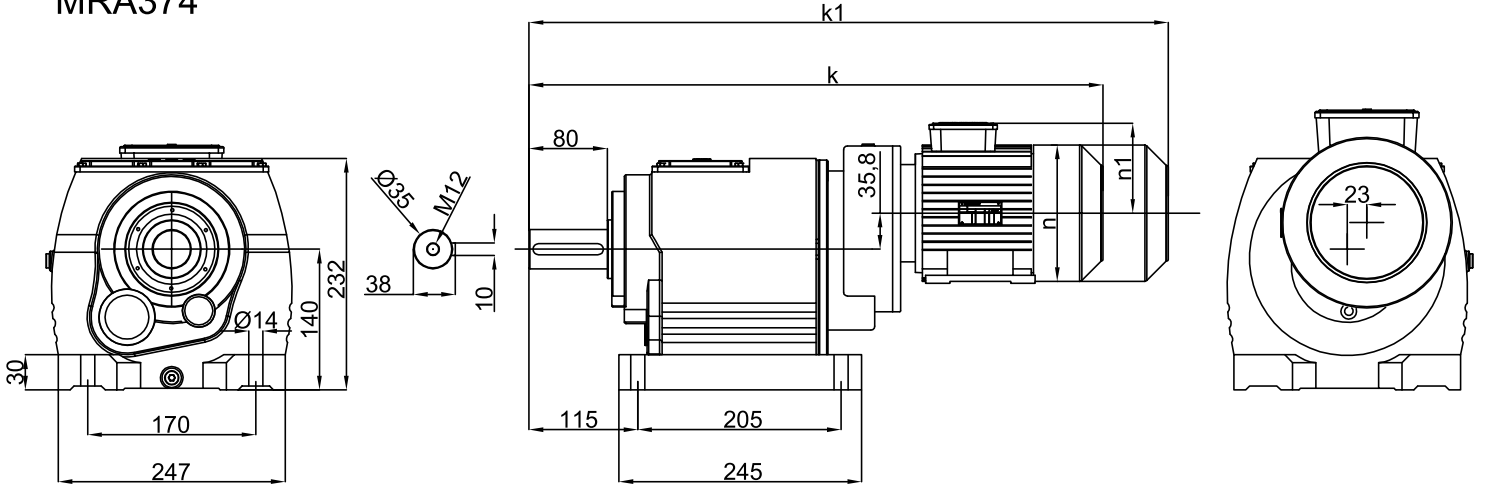
71-80-90-100-112-132S-132M Tip



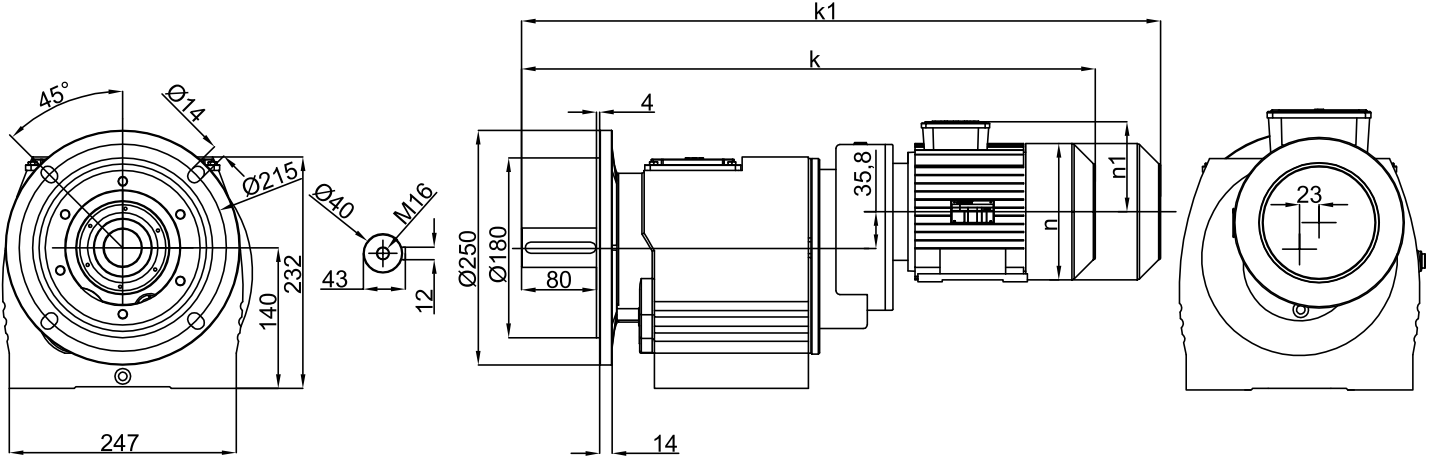
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



### MRA374



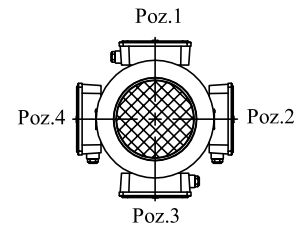
### MRF374



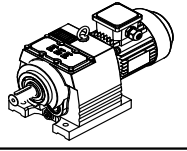
| Motor Büyüklüğü / Motor Size | 63  | 71  | 80  |
|------------------------------|-----|-----|-----|
| k                            | 561 | 579 | 608 |
| k1                           | 614 | 699 | 728 |
| n                            | 121 | 138 | 156 |
| n1                           | 97  | 111 | 118 |
| x                            | -   | -   | -   |

### Klemens Pozisyonları Terminal Box

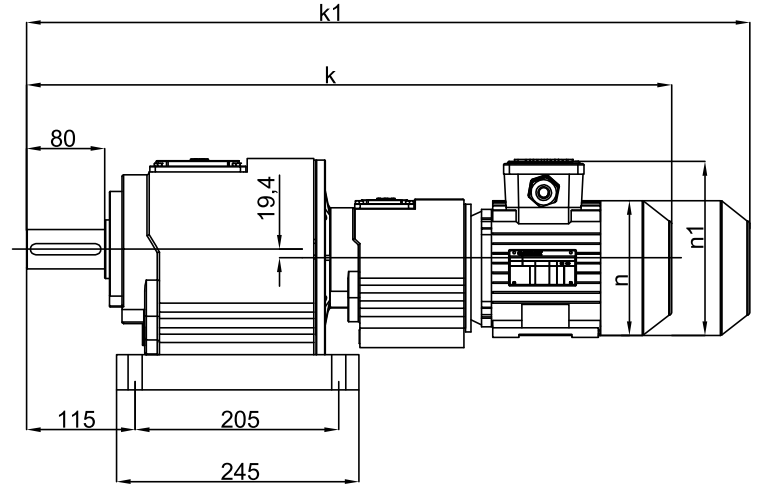
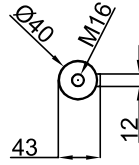
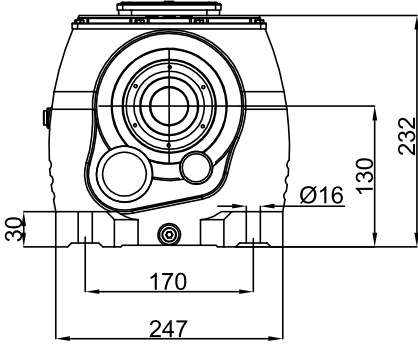
63 - 71 - 80 Tip



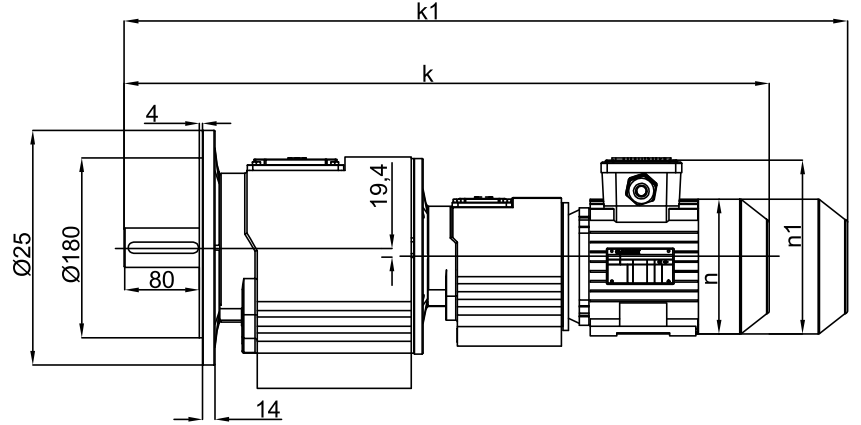
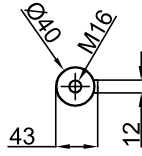
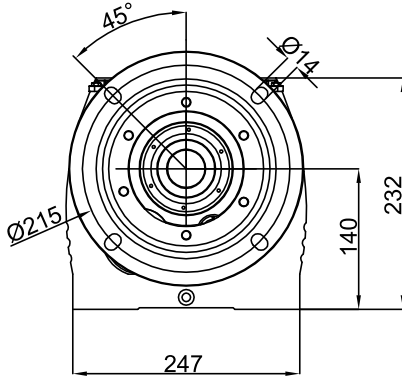
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA375  
MRA376



MRF375  
MRF376



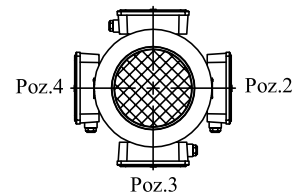
Motor Büyüklüğü / Motor Size

|    | Motor Büyüklüğü / Motor Size |
|----|------------------------------|
|    | 63                           |
| k  | 662                          |
| k1 | 715                          |
| n  | 121                          |
| n1 | 97                           |
| x  | -                            |

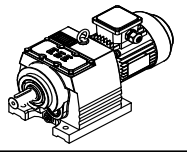
Klemens Pozisyonları  
Terminal Box

63 Tip

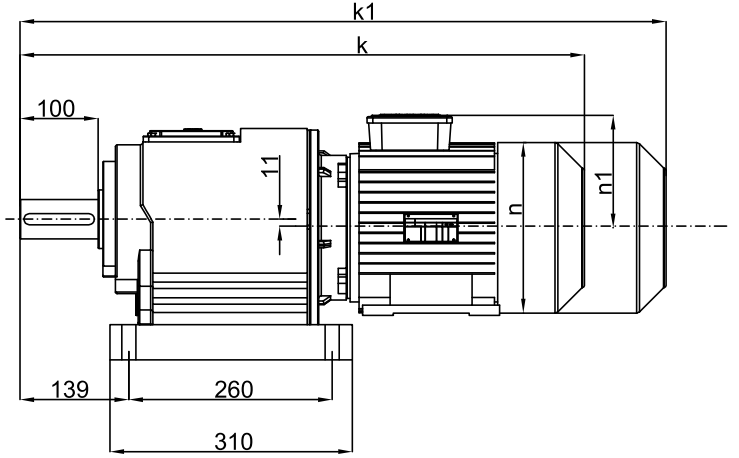
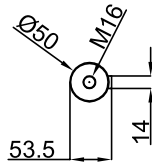
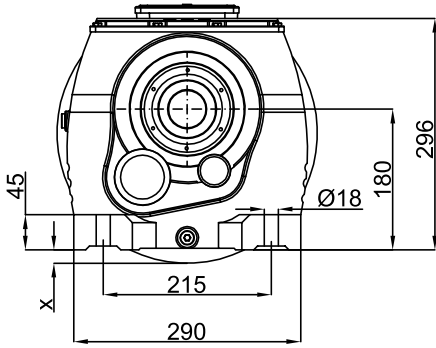
Poz.1



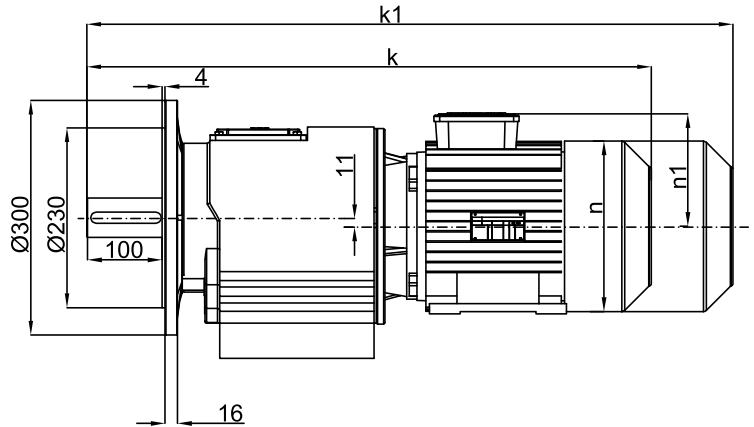
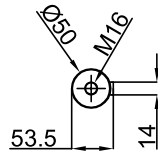
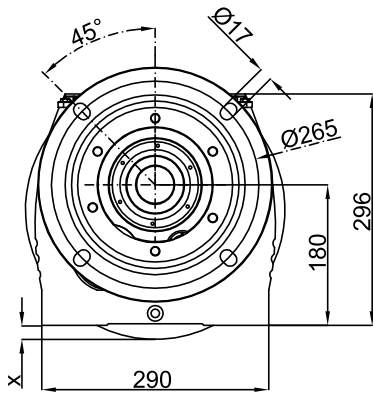
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA472  
MRA473



MRF472  
MRF473



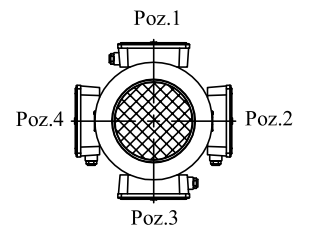
Motor Büyüklüğü / Motor Size

|    | 80  | 90S | 90L | 100L | 112M | 132S | 132M | 160M | 160L | 180M | 180L |
|----|-----|-----|-----|------|------|------|------|------|------|------|------|
| k  | 602 | 630 | 645 | 685  | 715  | 795  | 801  | 856  | 892  | 959  | 965  |
| k1 | 701 | 736 | 751 | 796  | 819  | 899  | 905  | 952  | 998  | 1123 | 1113 |
| n  | 156 | 176 | 176 | 194  | 218  | 257  | 257  | 310  | 310  | 348  | 348  |
| n1 | 118 | 126 | 126 | 135  | 146  | 168  | 168  | 225  | 225  | 241  | 241  |
| x  | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5    | 5    |

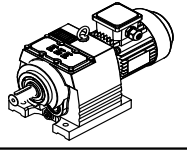
Klemens Pozisyonları

Terminal Box

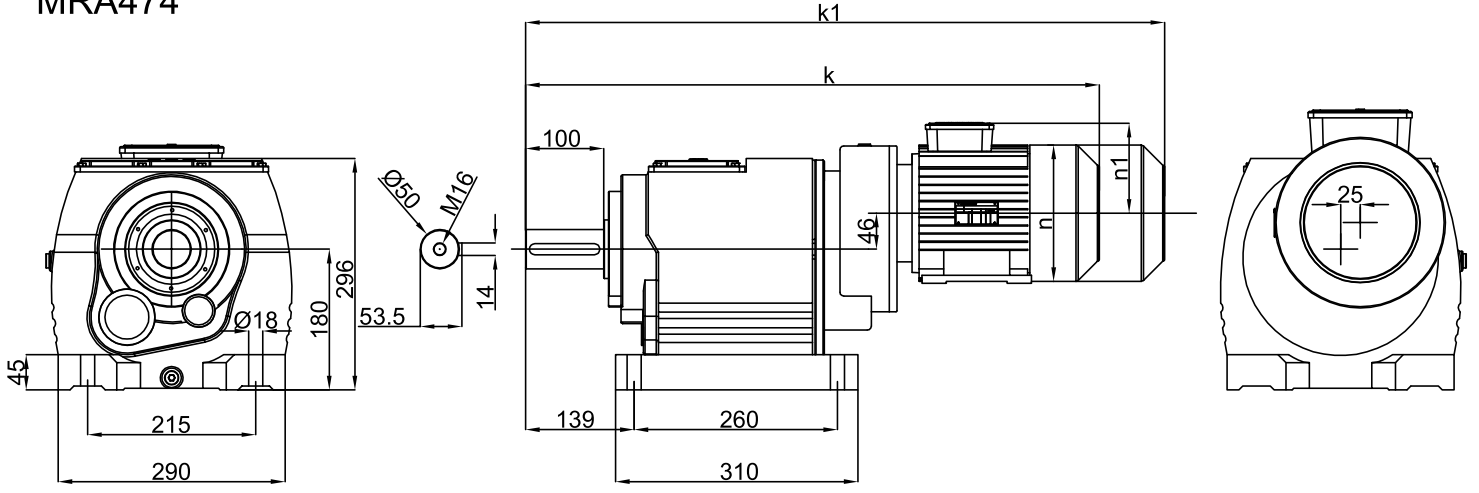
80-90-100-112-132S  
132M-160M-160L-180M-180L  
Tip



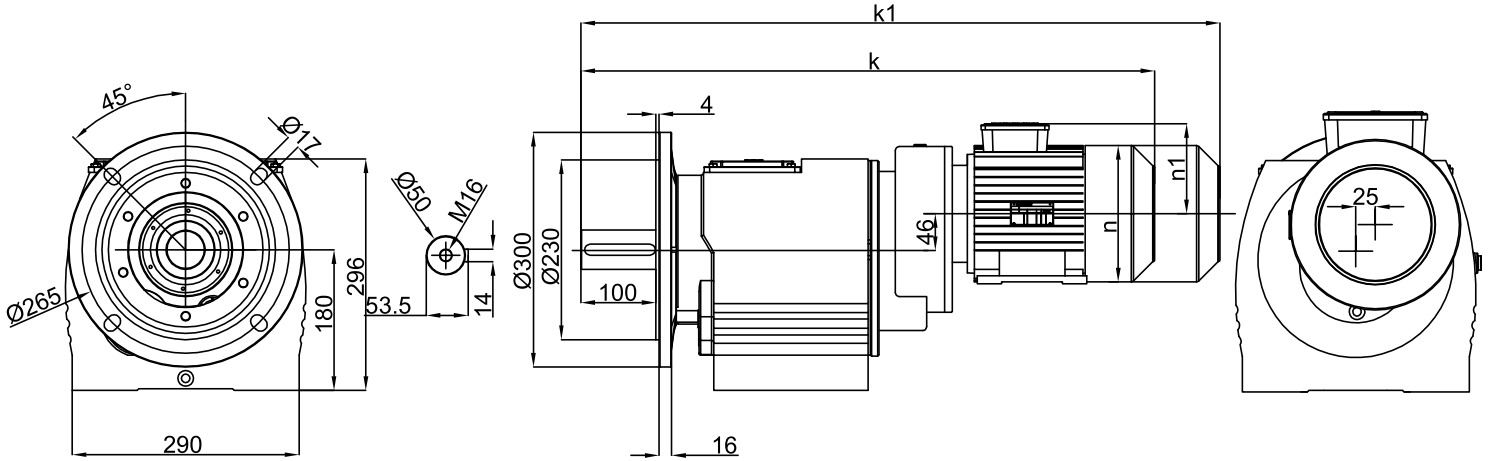
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



### MRA474



### MRF474

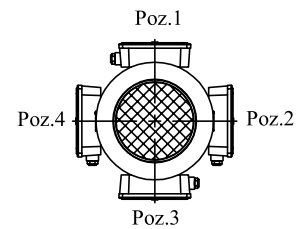


#### Motor Büyüklüğü / Motor Size

|    | 71  | 80  |
|----|-----|-----|
| k  | 662 | 689 |
| k1 | 781 | 809 |
| n  | 138 | 156 |
| n1 | 111 | 118 |
| x  | -   | -   |

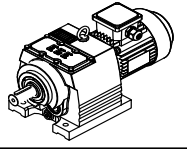
#### Klemens Pozisyonları Terminal Box

71-80  
Tip

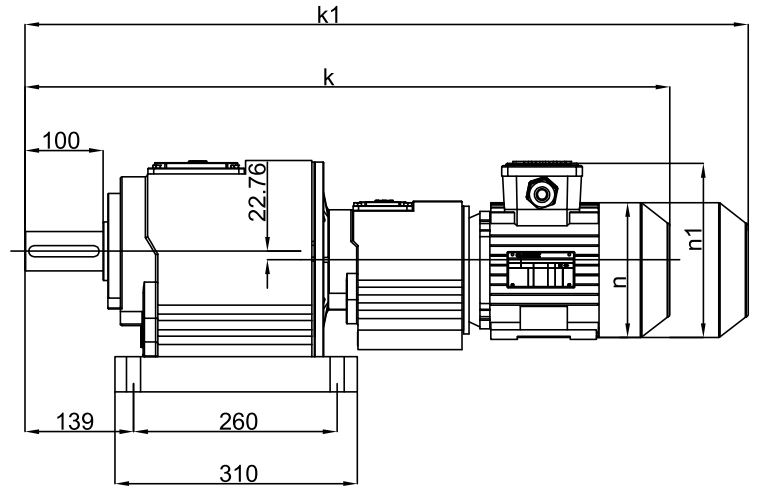
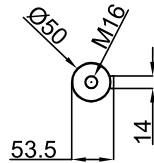
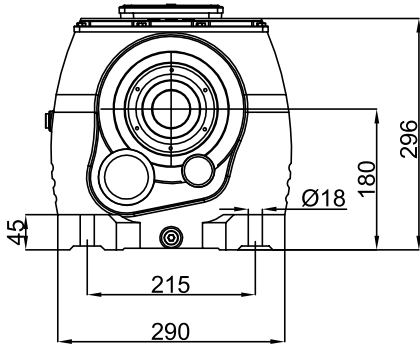


\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.

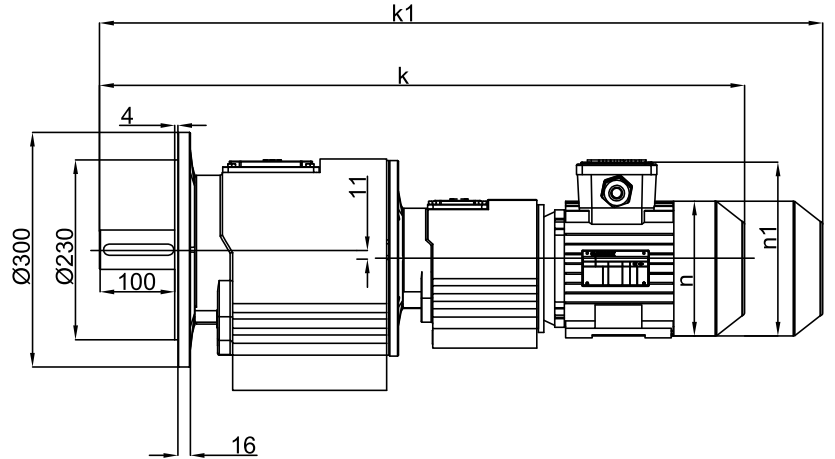
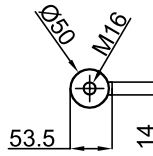
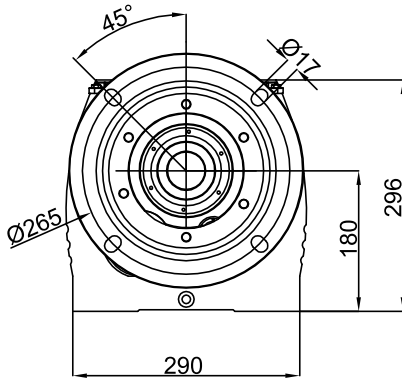




MRA475  
MRA476



MRF475  
MRF476

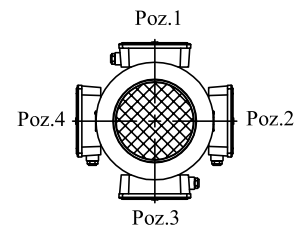


Motor Büyüklüğü / Motor Size

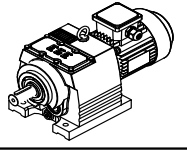
|    | 63  | 71  |
|----|-----|-----|
| k  | 772 | 791 |
| k1 | 825 | 911 |
| n  | 121 | 138 |
| n1 | 97  | 111 |
| x  | -   | -   |

Klemens Pozisyonları  
Terminal Box

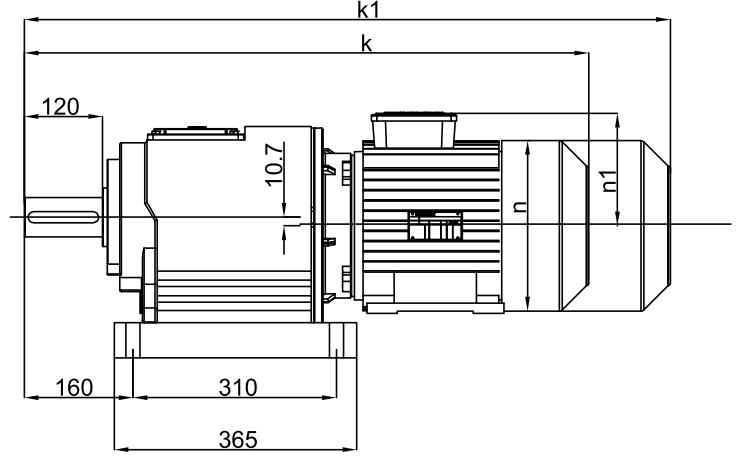
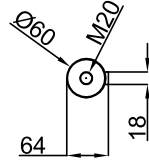
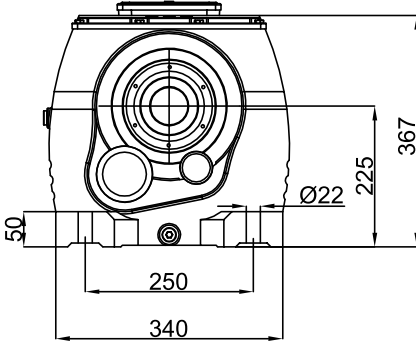
63-71  
Tip



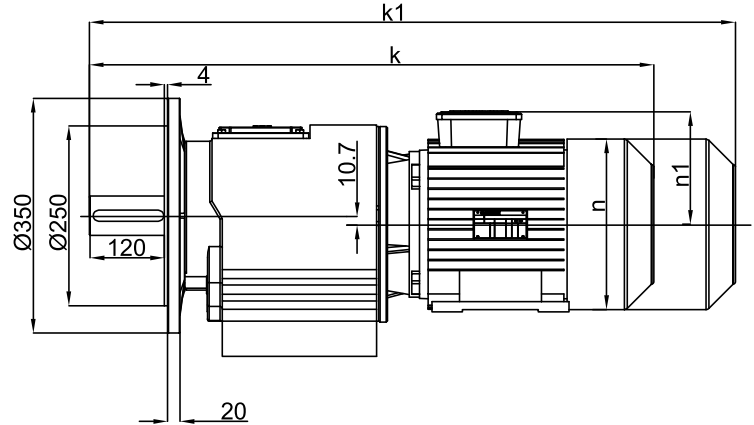
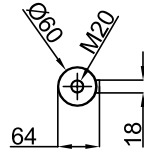
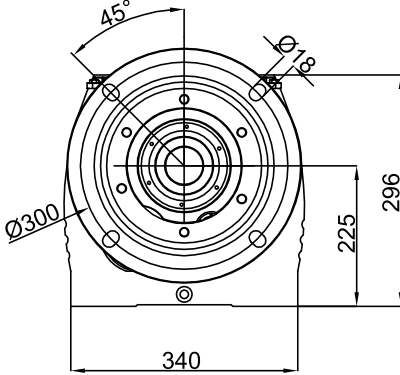
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA572  
MRA573



MRF572  
MRF573

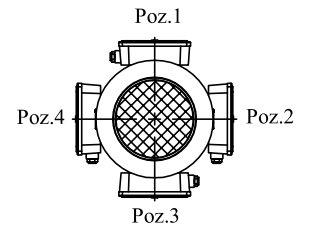


Motor Büyüklüğü / Motor Size

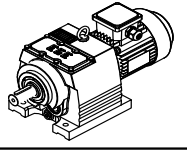
|    | 100L | 112M | 132S | 132M | 160M | 160L | 180M | 180L | 200  |
|----|------|------|------|------|------|------|------|------|------|
| k  | 745  | 768  | 822  | 860  | 935  | 979  | 995  | 1033 | 1072 |
| k1 | 880  | 903  | 967  | 1005 | 1105 | 1149 | 1165 | 1203 | 1272 |
| n  | 194  | 218  | 257  | 257  | 310  | 310  | 348  | 348  | 390  |
| n1 | 135  | 146  | 168  | 168  | 225  | 225  | 241  | 241  | 275  |
| x  | -    | -    | -    | -    | -    | -    | -    | -    | -    |

Klemens Pozisyonları  
Terminal Box

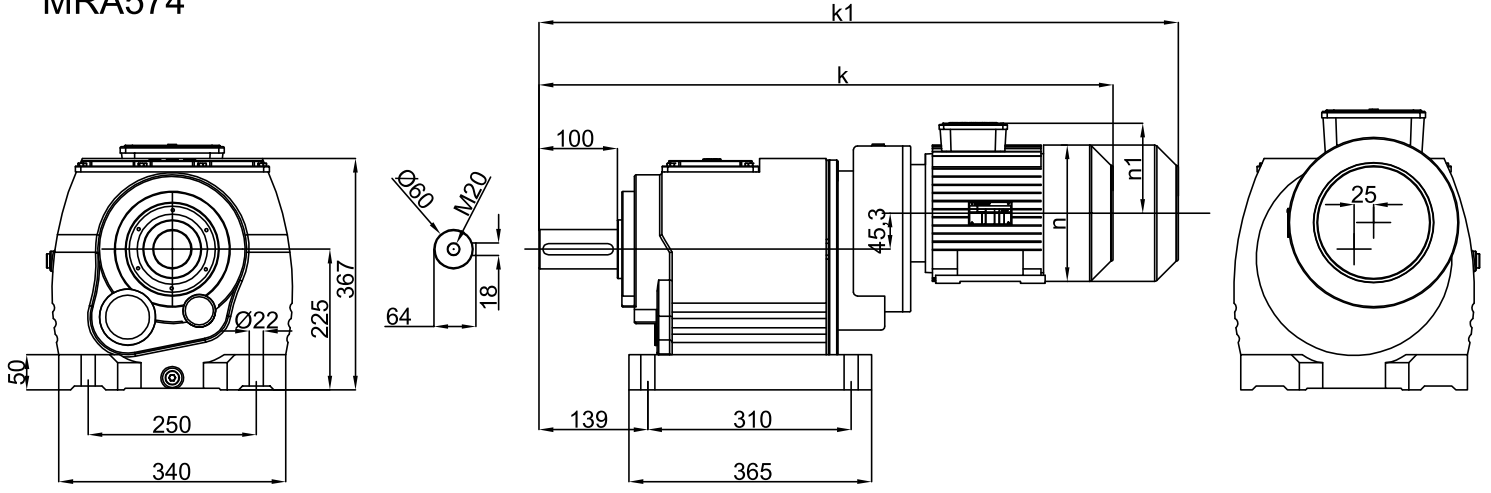
100-112-132S-132M-160M-160L  
180M-180L-200L  
Tip



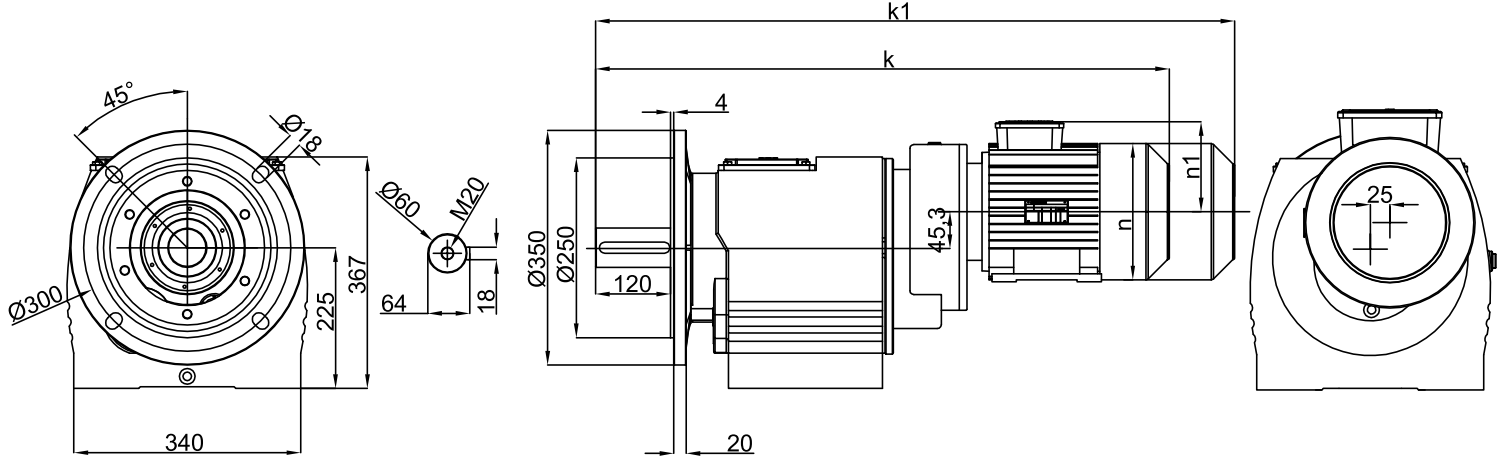
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



### MRA574



### MRF574



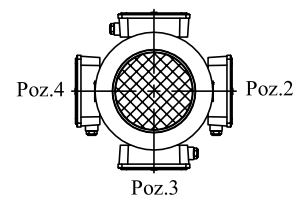
| Motor Büyüklüğü / Motor Size |     |     |     |     |
|------------------------------|-----|-----|-----|-----|
|                              | 71  | 80  | 90S | 90L |
| k                            | 723 | 751 | 558 | 583 |
| k1                           | 843 | 871 | 905 | 930 |
| n                            | 138 | 156 | 176 | 176 |
| n1                           | 111 | 118 | 126 | 126 |
| x                            | -   | -   | -   | -   |

### Klemens Pozisyonları Terminal Box

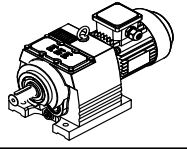
71-80-90

Tip

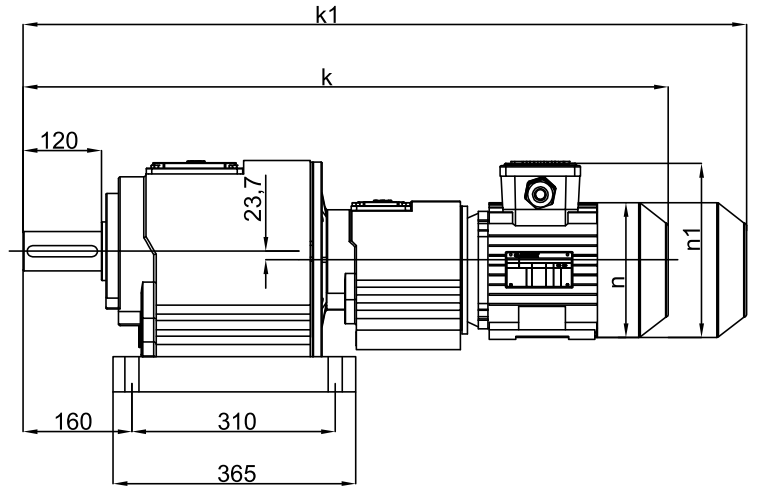
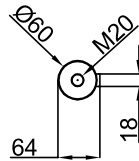
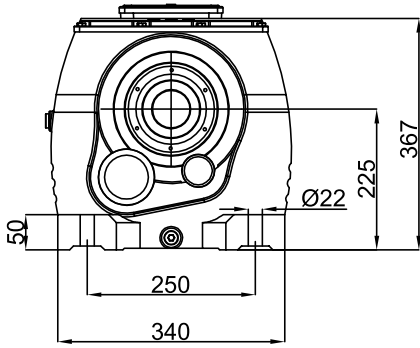
Poz.1



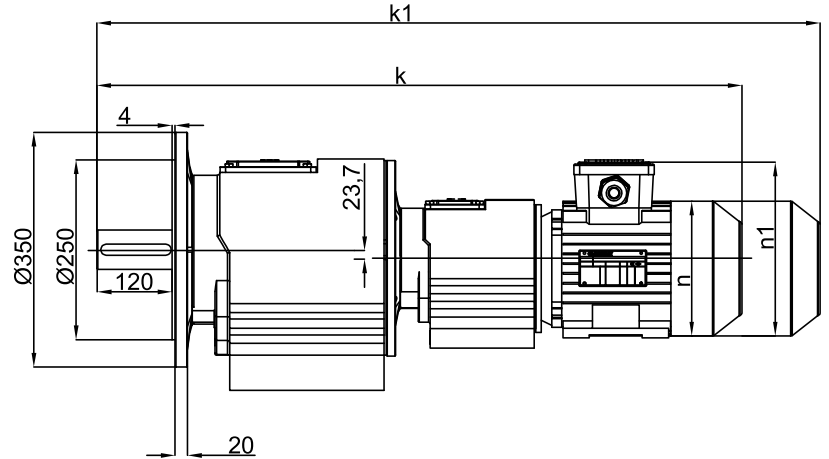
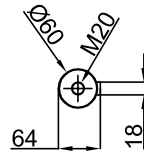
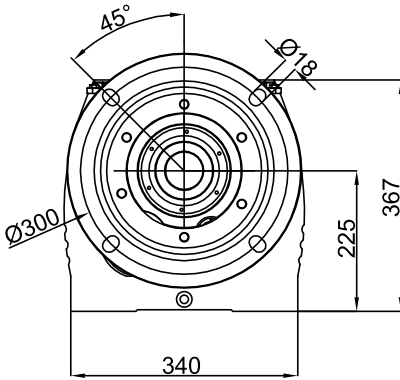
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA575  
MRA576



MRF575  
MRF576

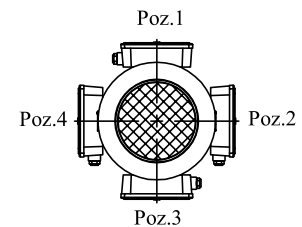


Motor Büyüklüğü / Motor Size

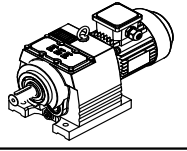
|    | 63  | 71  |
|----|-----|-----|
| k  | 836 | 855 |
| k1 | 889 | 975 |
| n  | 121 | 138 |
| n1 | 97  | 111 |
| x  | -   | -   |

Klemens Pozisyonları  
Terminal Box

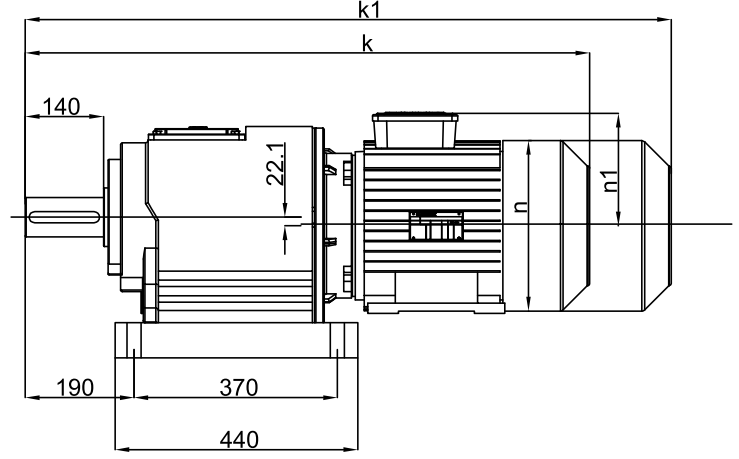
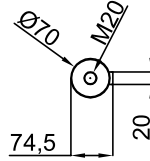
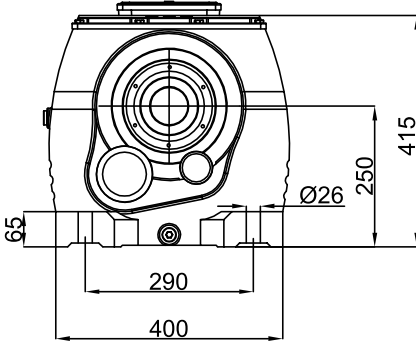
63-71  
Tip



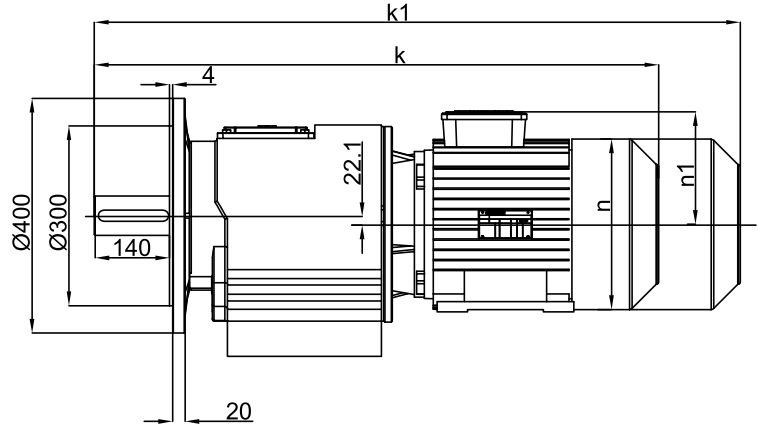
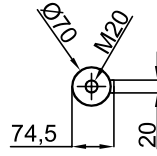
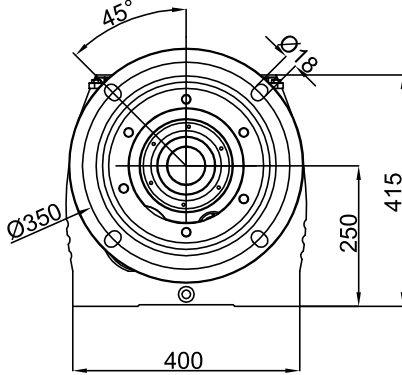
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA672  
MRA673



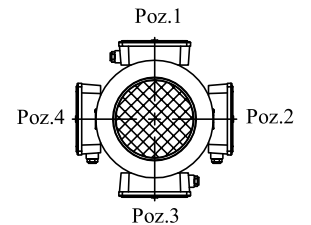
MRF672  
MRF673



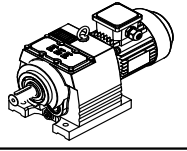
| Motor Büyüklüğü / Motor Size |      |      |      |      |      |      |      |      |      |      |
|------------------------------|------|------|------|------|------|------|------|------|------|------|
|                              | 112M | 132S | 132M | 160M | 160L | 180M | 180L | 200L | 225S | 225M |
| k                            | 825  | 879  | 917  | 991  | 1035 | 1049 | 1087 | 1129 | 1155 | 1180 |
| k1                           | 960  | 1024 | 1062 | 1161 | 1205 | 1219 | 1257 | 1329 | 1345 | 1370 |
| n                            | 218  | 257  | 257  | 310  | 310  | 348  | 348  | 390  | 434  | 434  |
| n1                           | 146  | 168  | 168  | 225  | 225  | 241  | 241  | 275  | 285  | 285  |
| x                            | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |

Klemens Pozisyonları  
Terminal Box

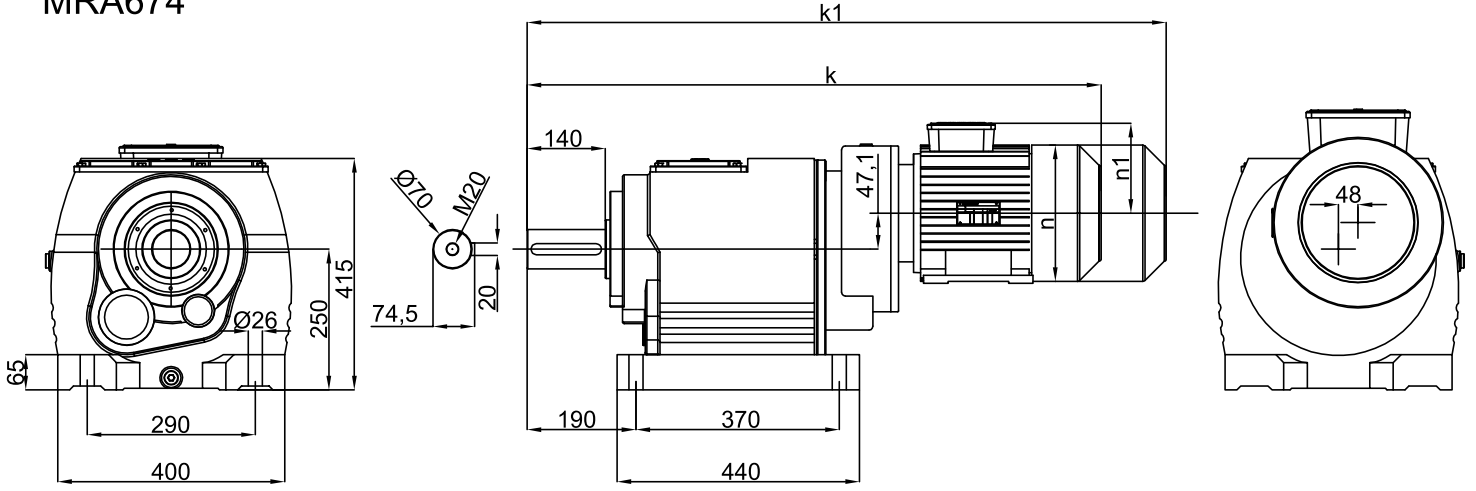
112-132S-132M-160M-160L  
180M-180L-200L-225S-225M  
Tip



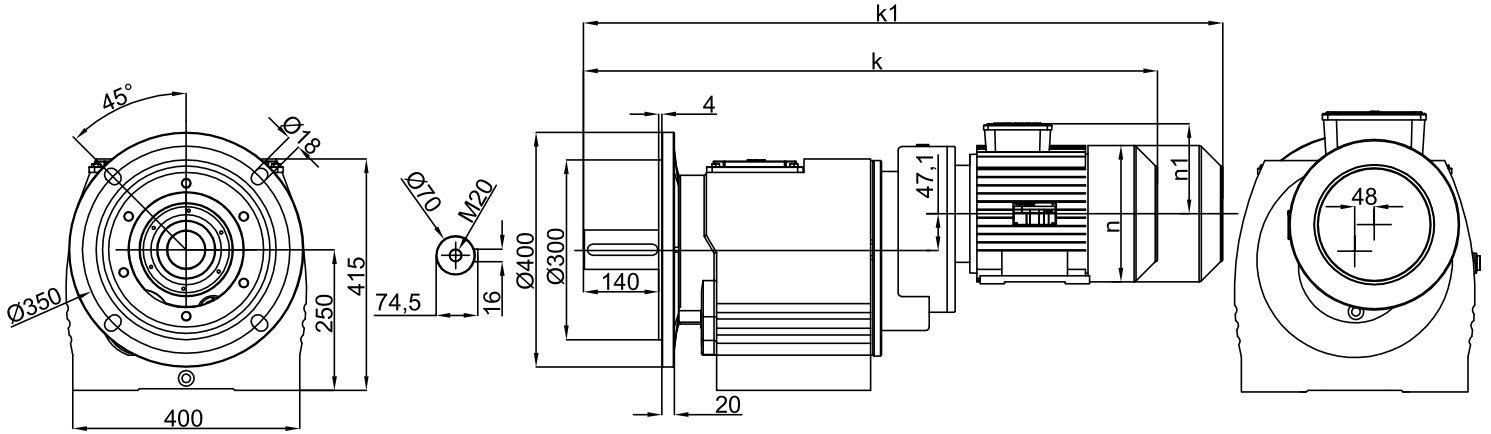
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



### MRA674

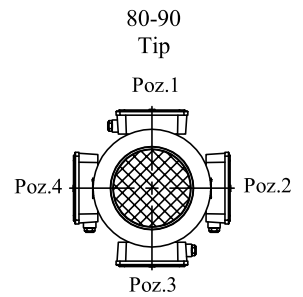


### MRF674

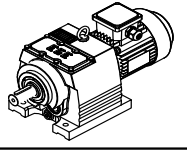


| Motor Büyüklüğü / Motor Size |     |     |      |
|------------------------------|-----|-----|------|
|                              | 80  | 90S | 90L  |
| k                            | 827 | 855 | 880  |
| k1                           | 947 | 980 | 1005 |
| n                            | 156 | 176 | 176  |
| n1                           | 118 | 126 | 126  |
| x                            | -   | -   | -    |

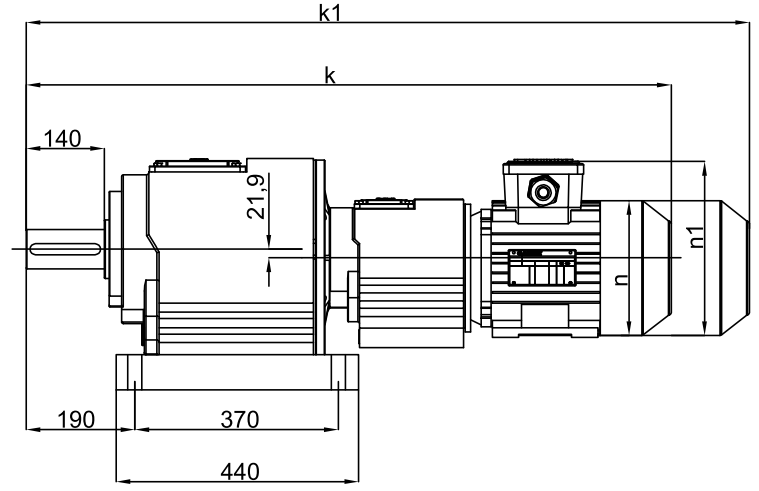
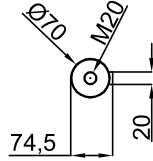
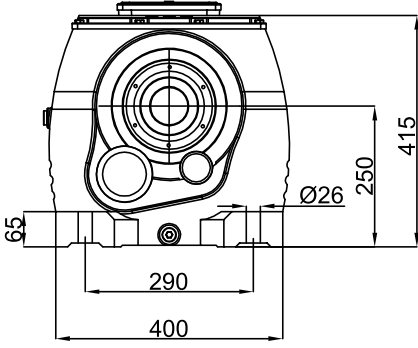
### Klemens Pozisyonları Terminal Box



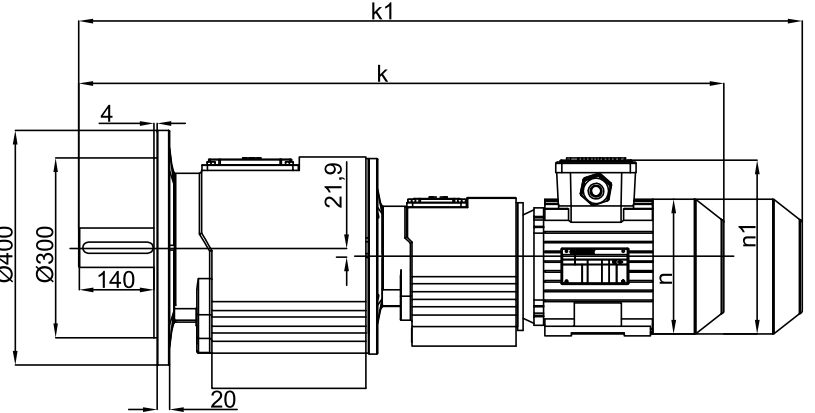
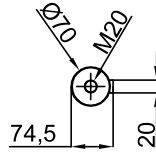
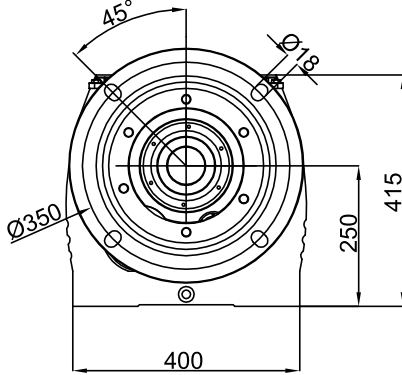
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA675  
MRA676



MRF675  
MRF676



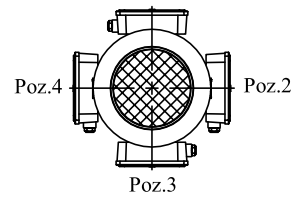
| Motor Büyüklüğü / Motor Size |      |      |
|------------------------------|------|------|
|                              | 71   | 80   |
| k                            | 944  | 972  |
| k1                           | 1064 | 1092 |
| n                            | 138  | 156  |
| n1                           | 111  | 118  |
| x                            | -    | -    |

Klemens Pozisyonları  
Terminal Box

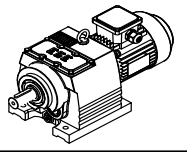
71-80

Tip

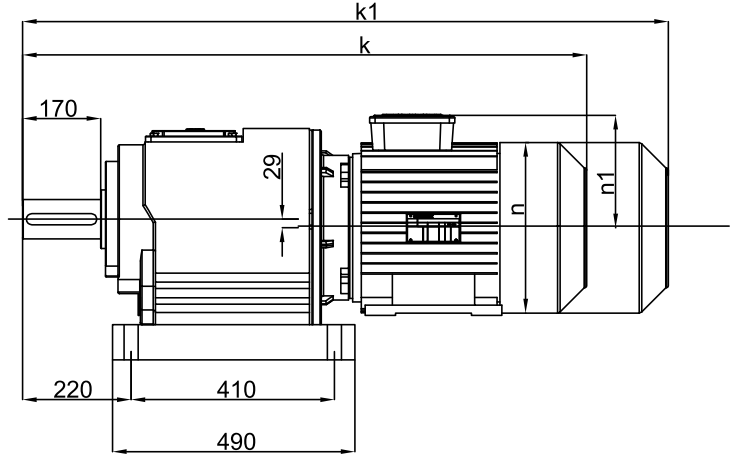
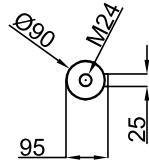
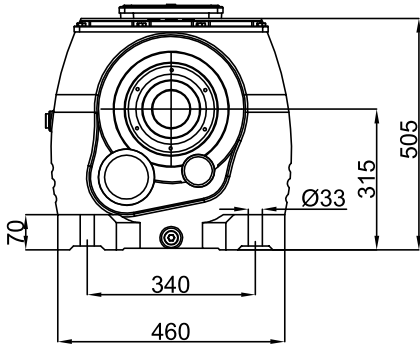
Poz.1



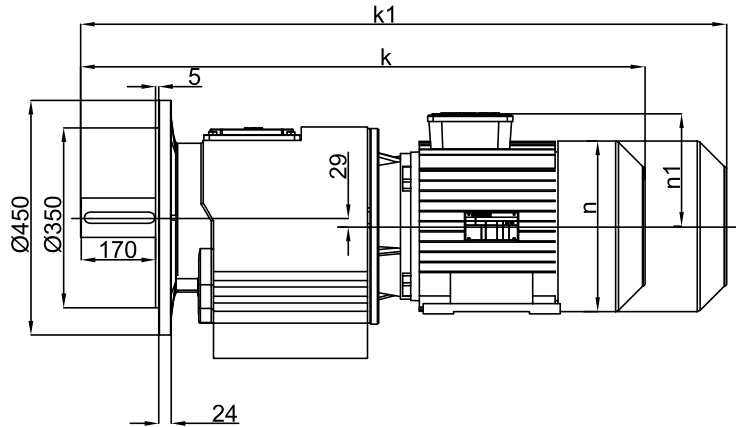
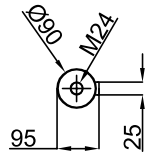
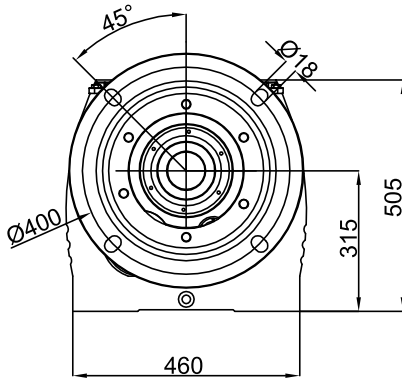
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA772  
MRA773



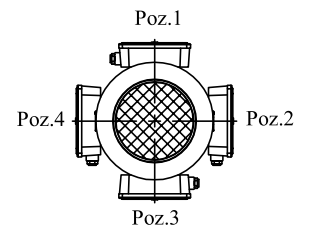
MRF772  
MRF773



| Motor Büyüklüğü / Motor Size |      |      |      |      |      |      |      |      |      |      |
|------------------------------|------|------|------|------|------|------|------|------|------|------|
|                              | 132S | 132M | 160M | 160L | 180M | 180L | 200L | 225S | 225M | 250M |
| k                            | 958  | 996  | 1072 | 1116 | 1133 | 1171 | 1210 | 1237 | 1262 | 1366 |
| k1                           | 1103 | 1141 | 1242 | 1286 | 1303 | 1341 | 1410 | 1427 | 1452 | -    |
| n                            | 257  | 257  | 310  | 310  | 348  | 348  | 390  | 434  | 434  | 480  |
| n1                           | 168  | 168  | 225  | 225  | 241  | 241  | 275  | 285  | 285  | 322  |
| x                            | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |

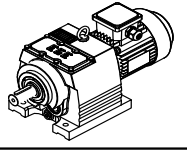
Klemens Pozisyonları  
Terminal Box

132S-132M-160M-160L  
180M-180L-200L-225S-225M-250M  
Tip

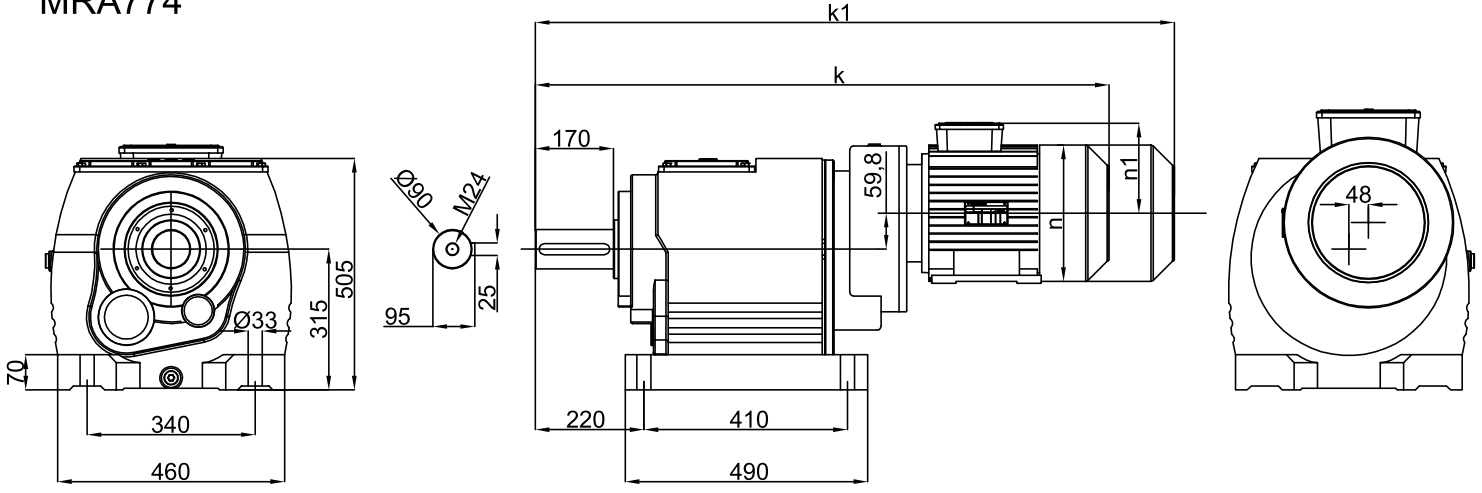


\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.

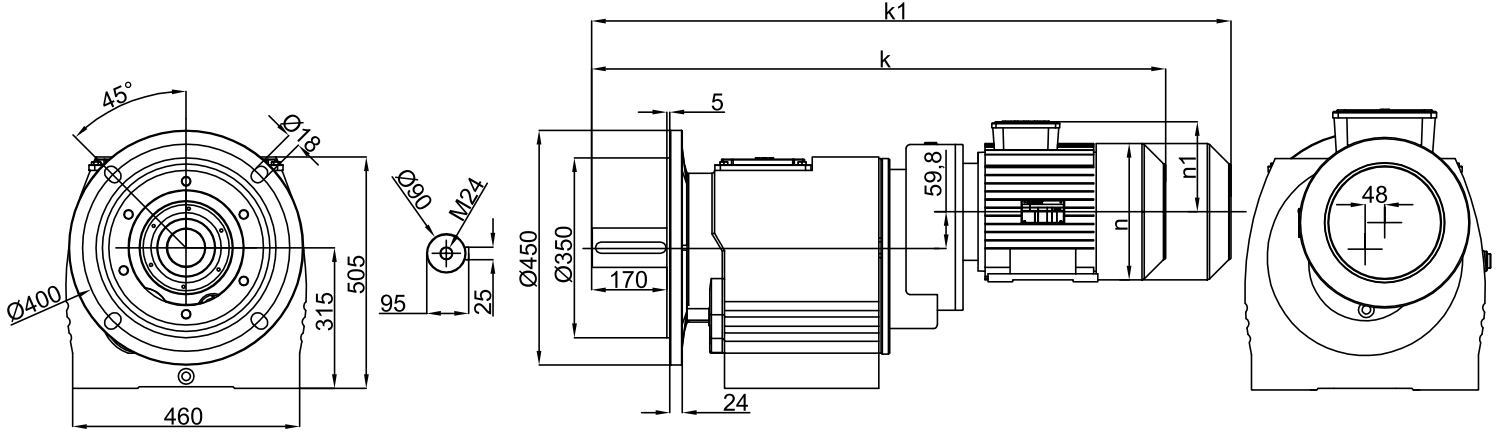




### MRA774



### MRF774



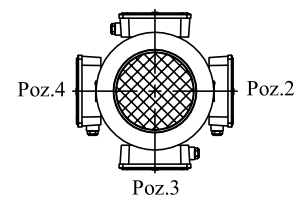
| Motor Büyüklüğü / Motor Size |      |      |      |      |
|------------------------------|------|------|------|------|
|                              | 80   | 90S  | 90L  | 100L |
| k                            | 912  | 940  | 965  | 1003 |
| k1                           | 1032 | 1065 | 1090 | 1138 |
| n                            | 156  | 176  | 176  | 194  |
| n1                           | 118  | 126  | 126  | 135  |
| x                            | -    | -    | -    |      |

### Klemens Pozisyonları Terminal Box

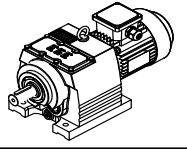
80-90S-90L-100L

Tip

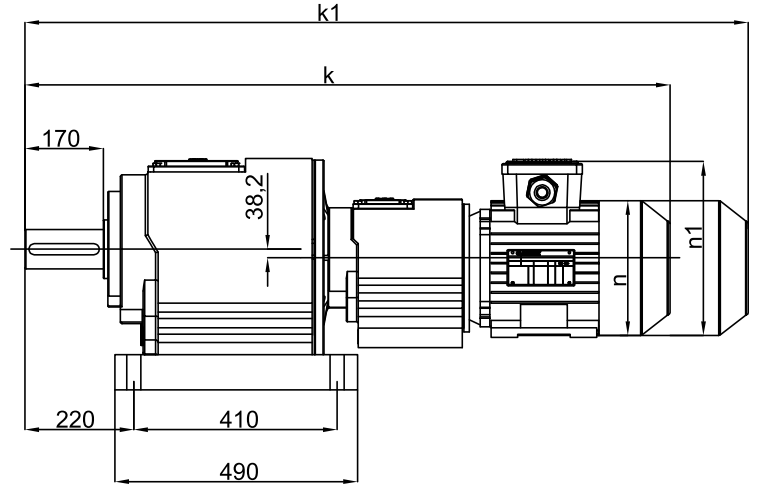
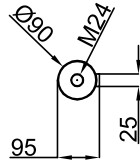
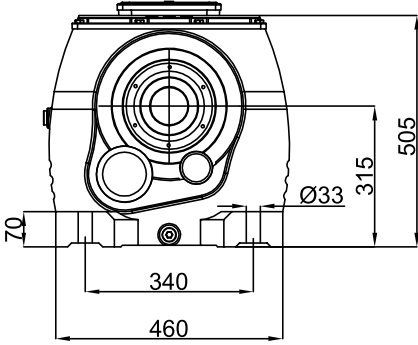
Poz.1



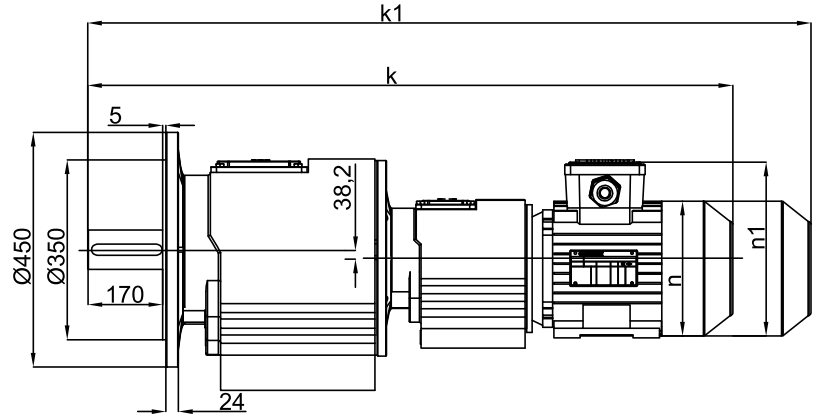
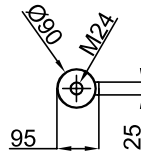
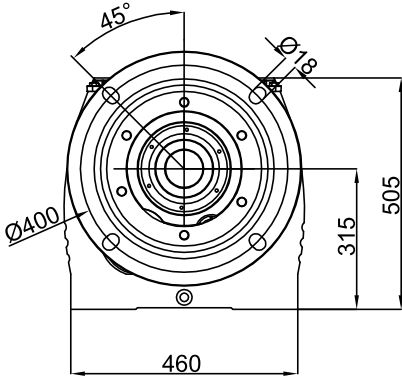
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA775  
MRA776



MRF775  
MRF776



Motor Büyüklüğü / Motor Size

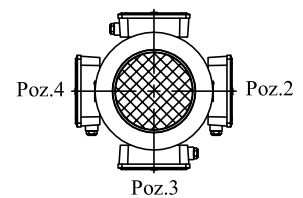
|    | 71   | 80   | 90S  | 90L  |
|----|------|------|------|------|
| k  | 1032 | 1060 | 1090 | 1115 |
| k1 | 1152 | 1180 | 1215 | 1240 |
| n  | 156  | 156  | 176  | 176  |
| n1 | 118  | 118  | 126  | 126  |
| x  | -    | -    | -    | -    |

Klemens Pozisyonları  
Terminal Box

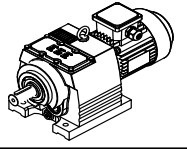
80-90S-90L-100L

Tip

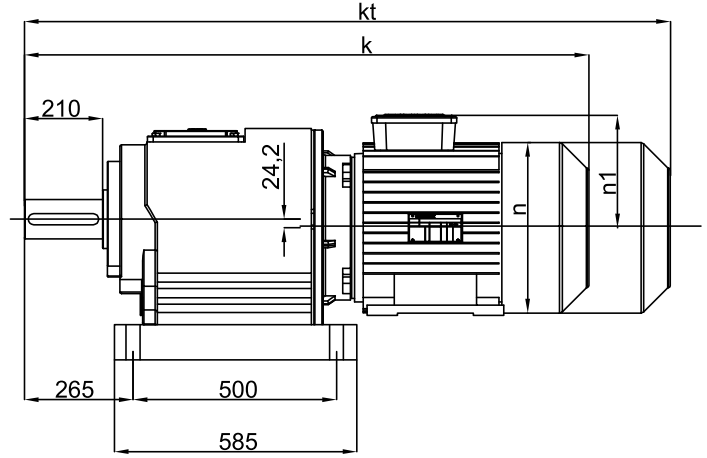
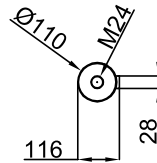
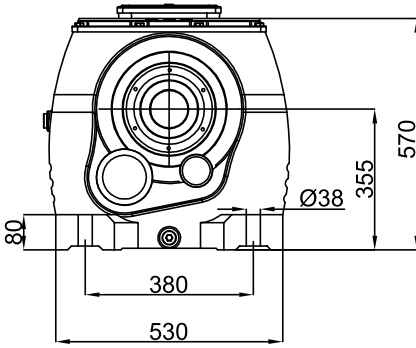
Poz.1



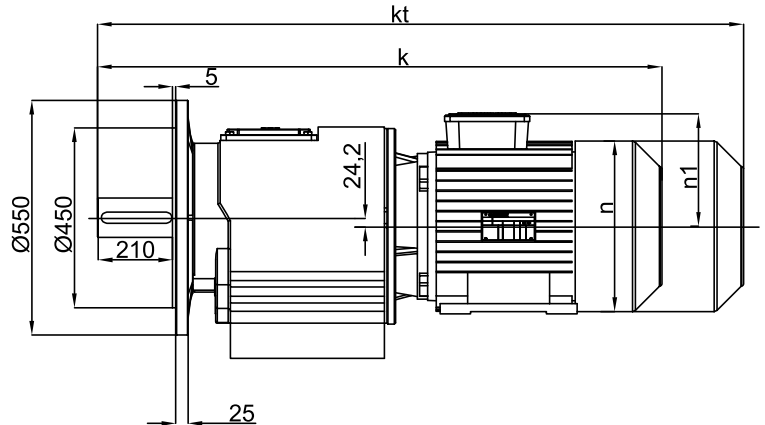
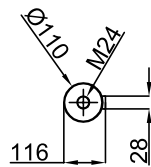
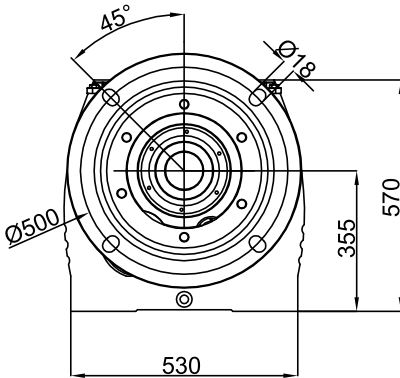
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA872  
MRA873



MRF872  
MRF873

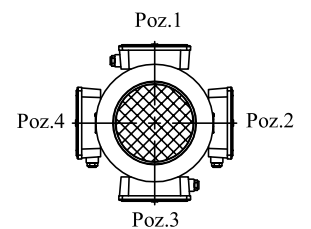


Motor Büyüklüğü / Motor Size

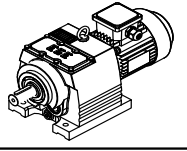
|    | 132M | 160M | 160L | 180M | 180L | 200L | 225S | 225M | 250M | 280S | 280M |
|----|------|------|------|------|------|------|------|------|------|------|------|
| k  | 1106 | 1181 | 1225 | 1242 | 1280 | 1319 | 1348 | 1373 | 1476 | 1537 | 1537 |
| k1 | 1251 | 1351 | 1395 | 1412 | 1450 | 1519 | 1538 | 1563 | -    | -    | -    |
| n  | 257  | 310  | 310  | 348  | 348  | 390  | 434  | 434  | 480  | 544  | 544  |
| n1 | 168  | 225  | 225  | 241  | 241  | 275  | 285  | 285  | 322  | 350  | 350  |
| x  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |

Klemens Pozisyonları  
Terminal Box

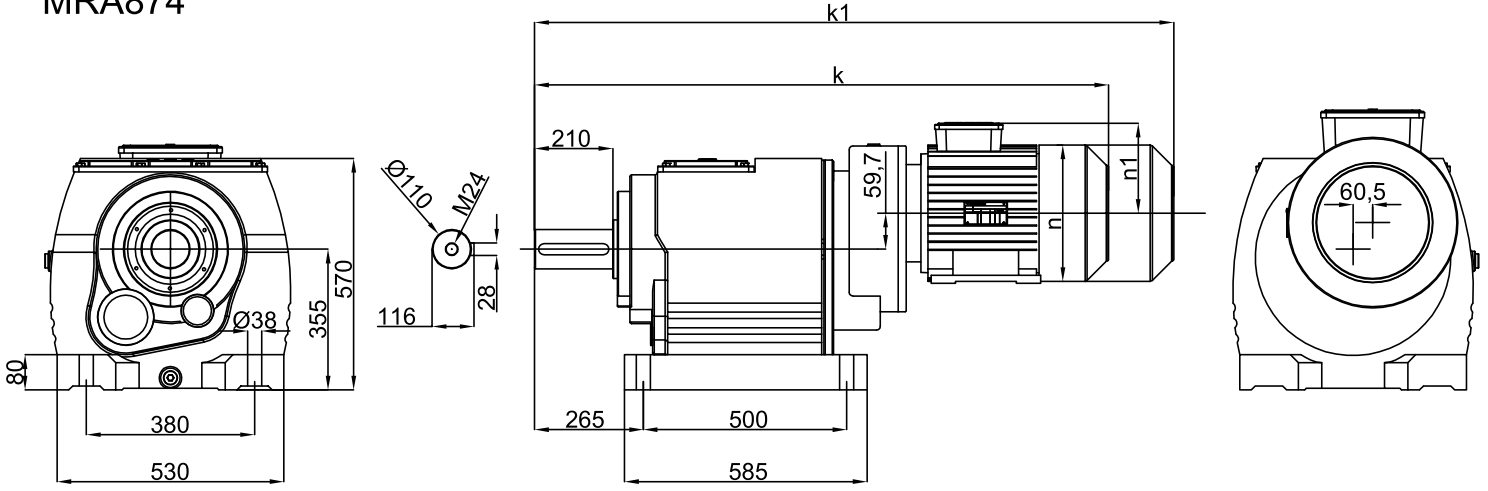
132M-160M-160L-180M-180L  
200L-225S-225M-250M-280S-280M  
Tip



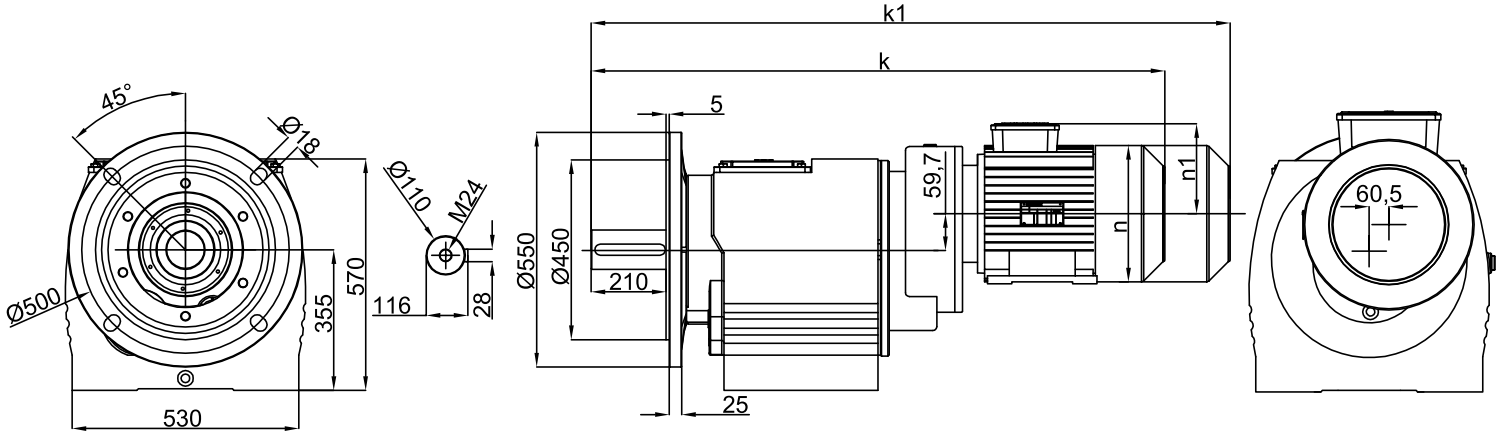
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



### MRA874



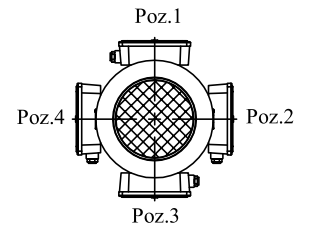
### MRF874



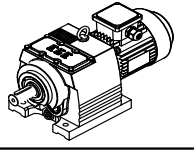
| Motor Büyüklüğü / Motor Size |      |      |      |      |
|------------------------------|------|------|------|------|
|                              | 100L | 112M | 132S | 132M |
| k                            | 1134 | 1157 | 1211 | 1249 |
| k1                           | 1269 | 1292 | 1356 | 1394 |
| n                            | 194  | 218  | 257  | 257  |
| n1                           | 135  | 146  | 168  | 168  |
| x                            | -    | -    | -    | -    |

### Klemens Pozisyonları Terminal Box

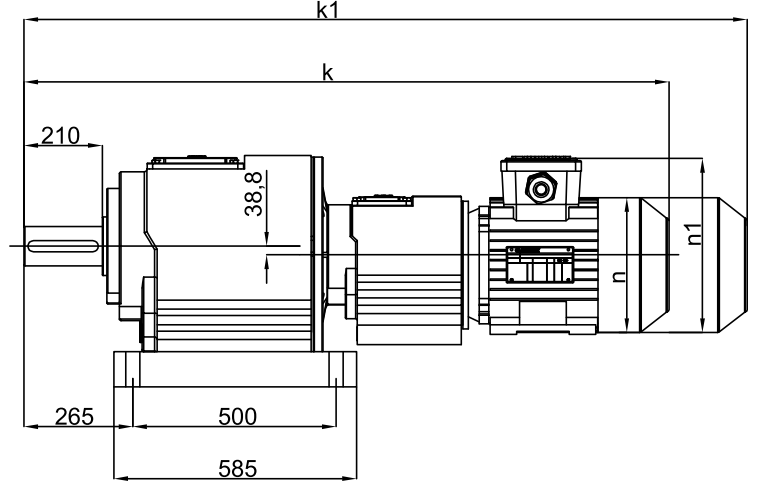
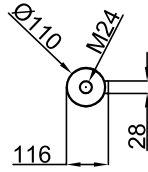
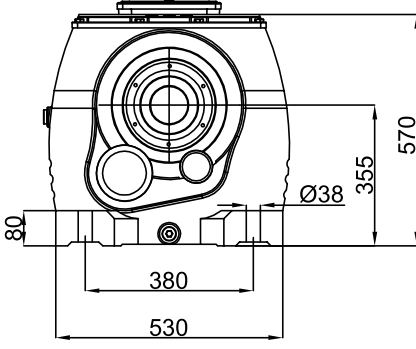
100-112-132S-132M  
Tip



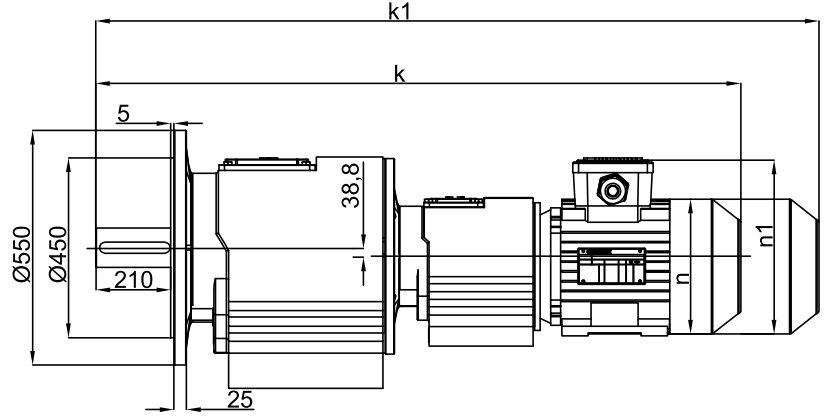
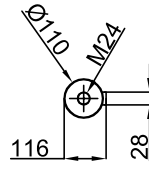
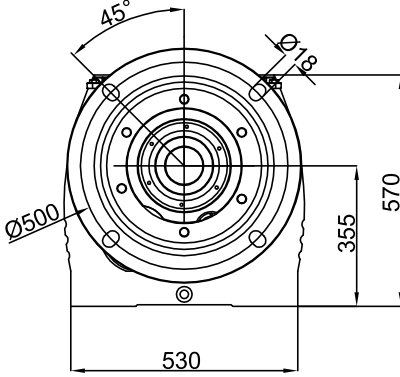
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA875  
MRA876



MRF875  
MRF876



Motor Büyüklüğü / Motor Size

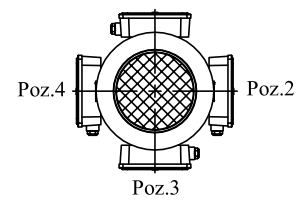
|    | 71   | 80   | 90S  | 90L  | 100L |
|----|------|------|------|------|------|
| k  | 1149 | 1177 | 1207 | 1232 | 1272 |
| k1 | 1269 | 1297 | 1332 | 1357 | 1407 |
| n  | 156  | 156  | 176  | 176  | 194  |
| n1 | 118  | 118  | 126  | 126  | 135  |
| x  | -    | -    | -    | -    | -    |

Klemens Pozisyonları  
Terminal Box

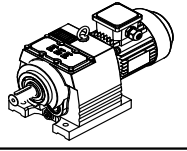
71-80-90S-90L-100L

Tip

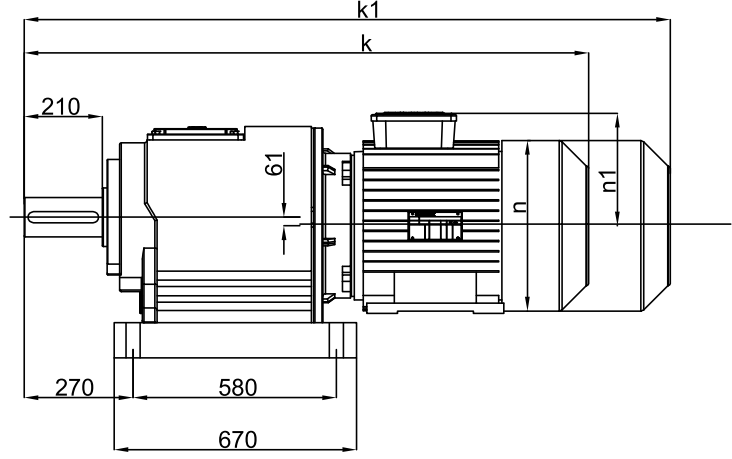
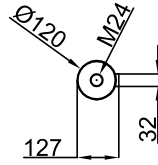
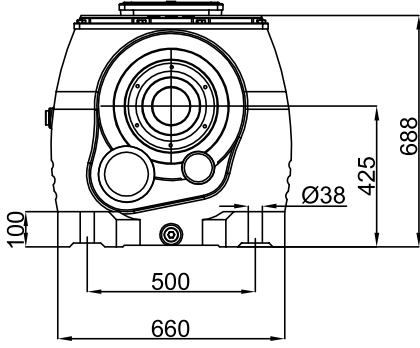
Poz.1



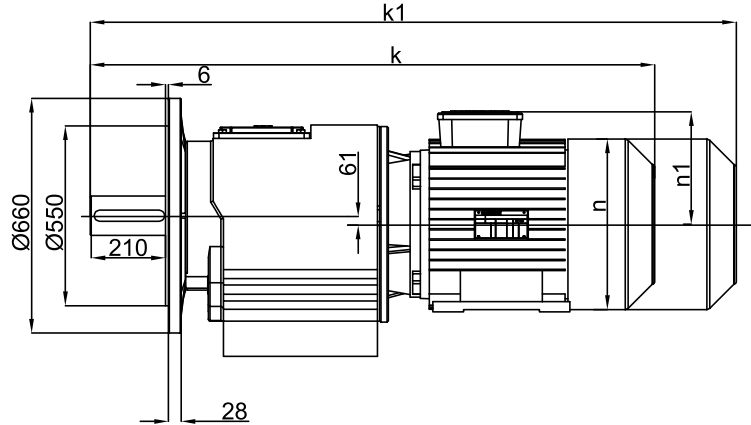
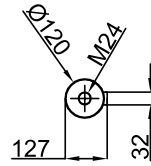
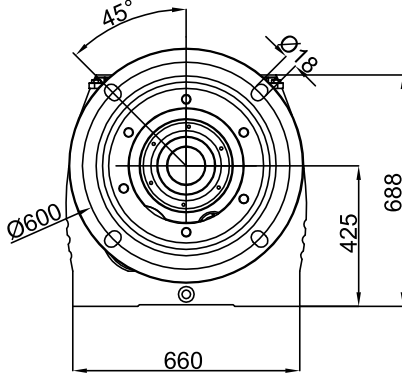
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA972  
MRA973



MRF972  
MRF973

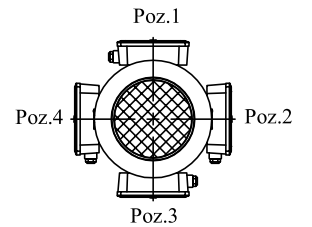


Motor Büyüklüğü / Motor Size

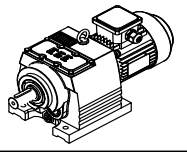
|    | 160M | 160L | 180M | 180L | 200L | 225S | 225M | 250M | 280S | 280M | 315S | 315M |
|----|------|------|------|------|------|------|------|------|------|------|------|------|
| k  | 1248 | 1292 | 1308 | 1346 | 1385 | 1403 | 1426 | 1529 | 1590 | 1590 | 1702 | 1754 |
| k1 | 1418 | 1462 | 1478 | 1516 | 1585 | 1593 | 1616 | -    | -    | -    |      |      |
| n  | 310  | 310  | 348  | 348  | 390  | 434  | 434  | 480  | 544  | 544  | 614  | 614  |
| n1 | 225  | 225  | 241  | 241  | 275  | 285  | 285  | 322  | 350  | 350  | 510  | 510  |
| x  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |

Klemens Pozisyonları  
Terminal Box

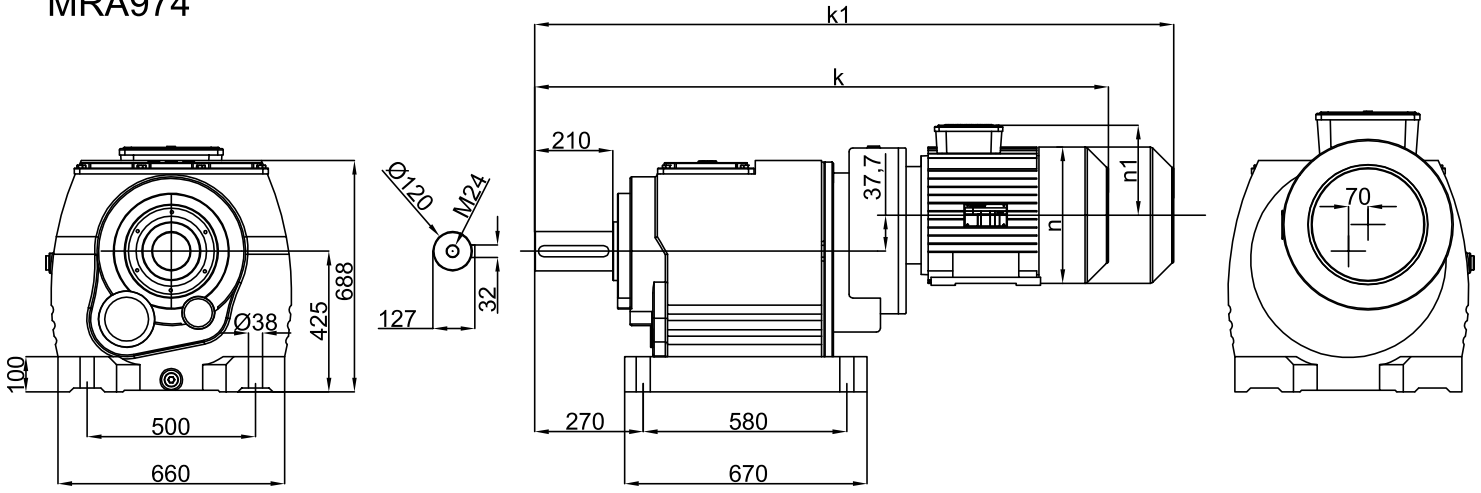
160M-160L-180M-180L  
200L-225S-225M-250M  
280S-280M-315S-315M  
Tip



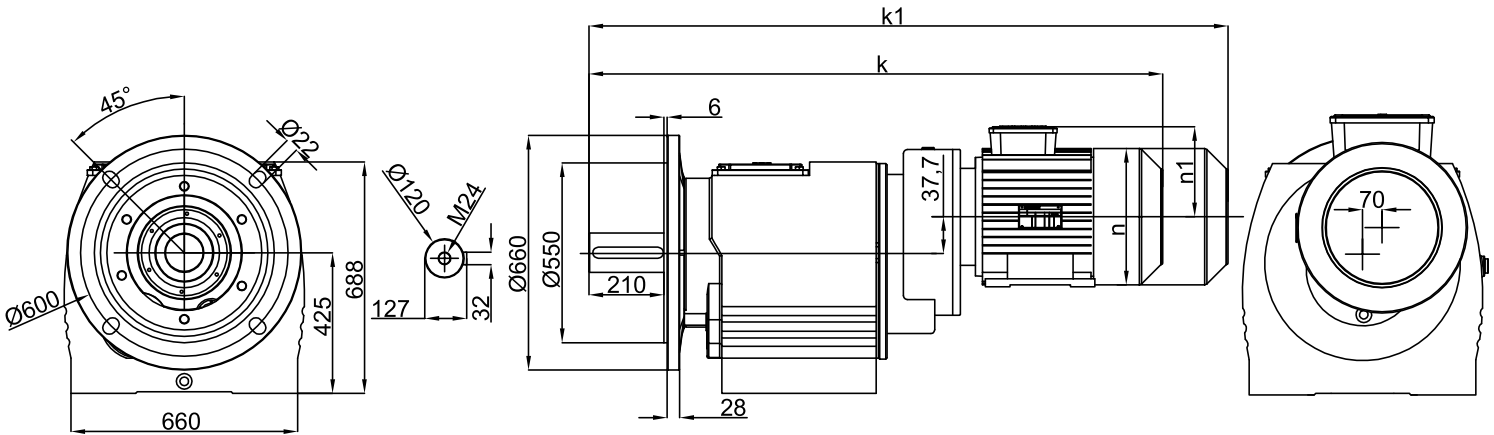
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



### MRA974



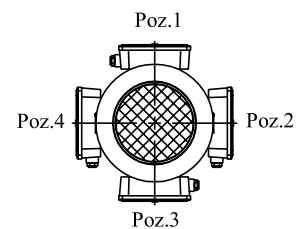
### MRF974



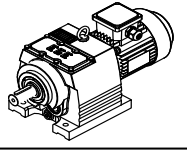
| Motor Büyüklüğü / Motor Size |      |      |      |      |
|------------------------------|------|------|------|------|
|                              | 100L | 112M | 132S | 132M |
| k                            | 1234 | 1257 | 1311 | 1349 |
| k1                           | 1169 | 1392 | 1456 | 1494 |
| n                            | 194  | 218  | 257  | 257  |
| n1                           | 135  | 146  | 168  | 168  |
| x                            | -    | -    | -    | -    |

### Klemens Pozisyonları Terminal Box

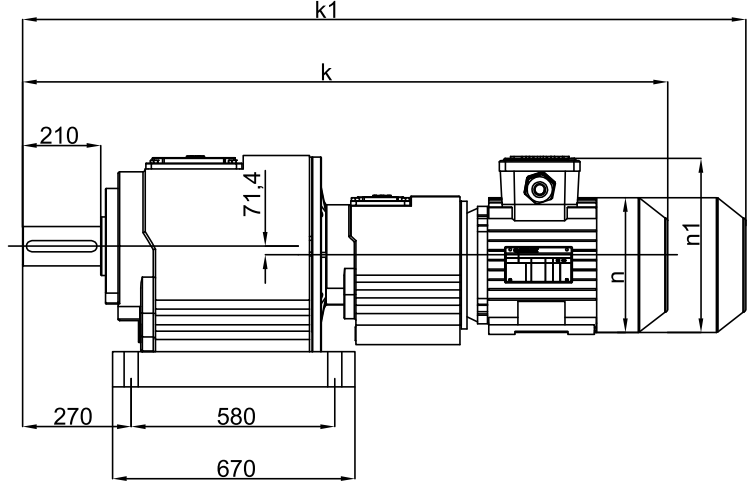
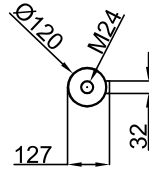
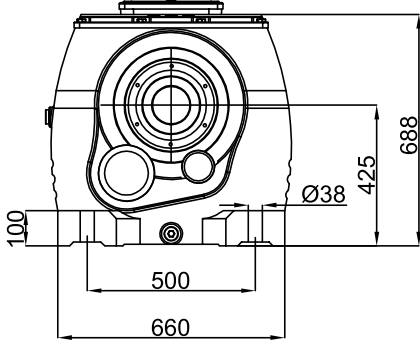
100-112-132S-132M  
Tip



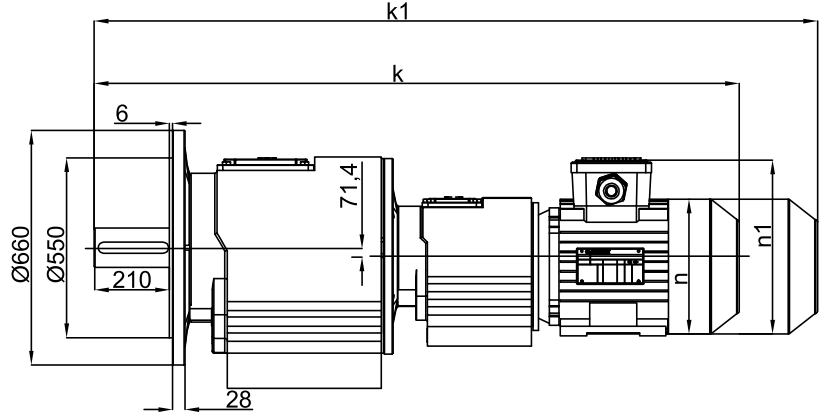
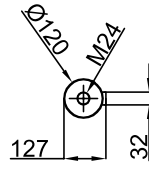
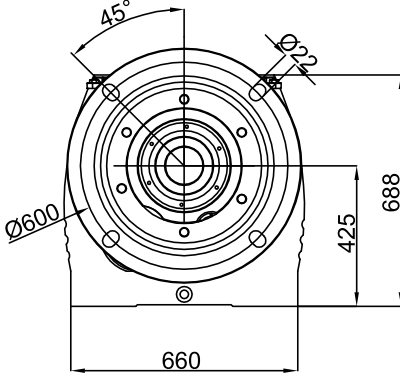
\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.



MRA975  
MRA976



MRF975  
MRF976



Motor Büyüklüğü / Motor Size

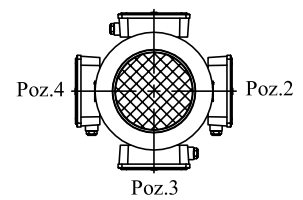
|    | 80   | 90S  | 90L  | 100L | 112M | 132S |
|----|------|------|------|------|------|------|
| k  | 1305 | 1333 | 1358 | 1393 | 1416 | 1470 |
| k1 | 1425 | 1458 | 1483 | 1528 | 1551 | 1615 |
| n  | 156  | 176  | 176  | 194  | 218  | 257  |
| n1 | 118  | 126  | 126  | 135  | 146  | 168  |
| x  | -    | -    | -    | -    | -    | -    |

Klemens Pozisyonları  
Terminal Box

71-80-90S-90L-100L

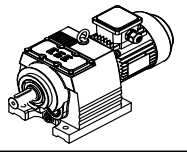
Tip

Poz.1

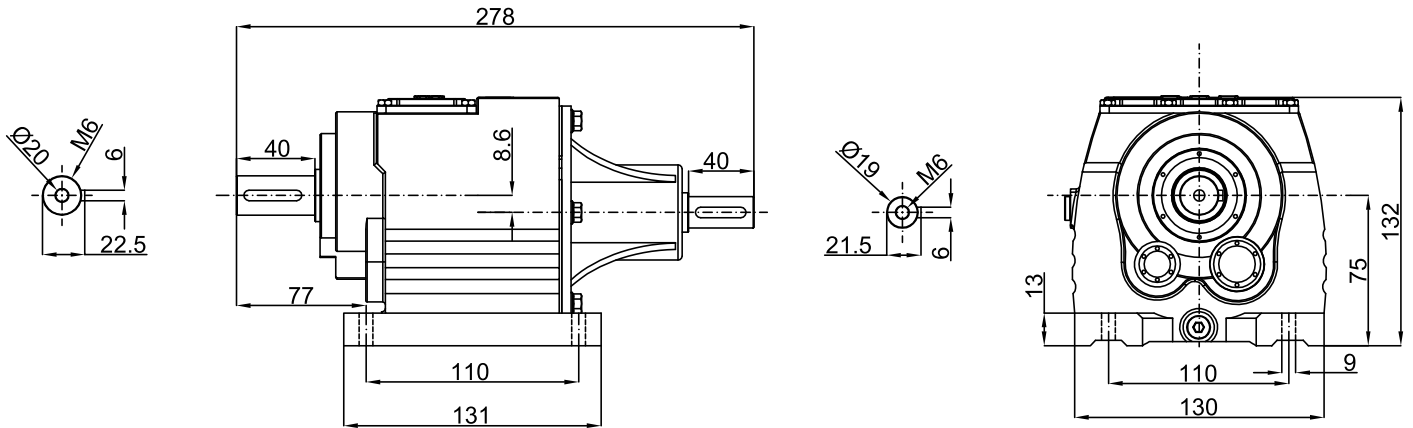


\* k1 Ölçüsü frenli redüktörlere aittir. / Dimension "k1" is for motors with brake.

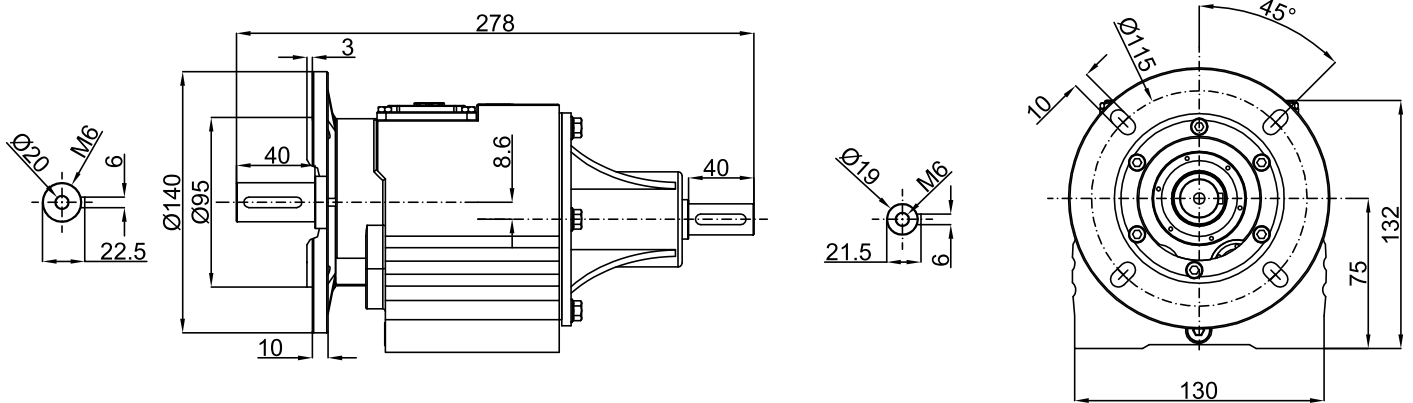


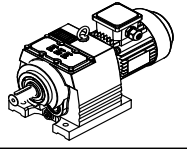


MTA002  
MTA003

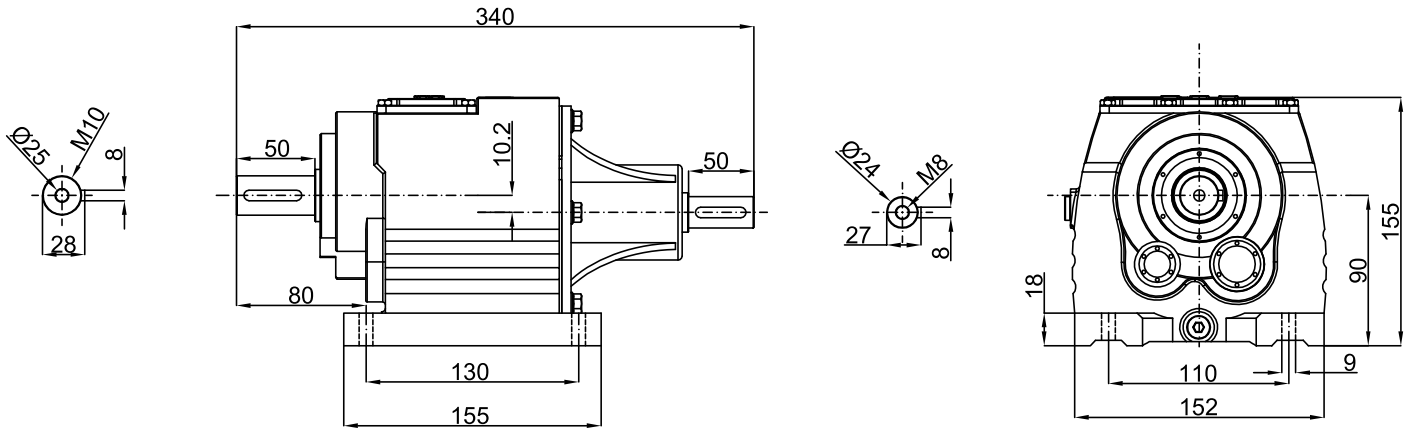


MTF002  
MTF003

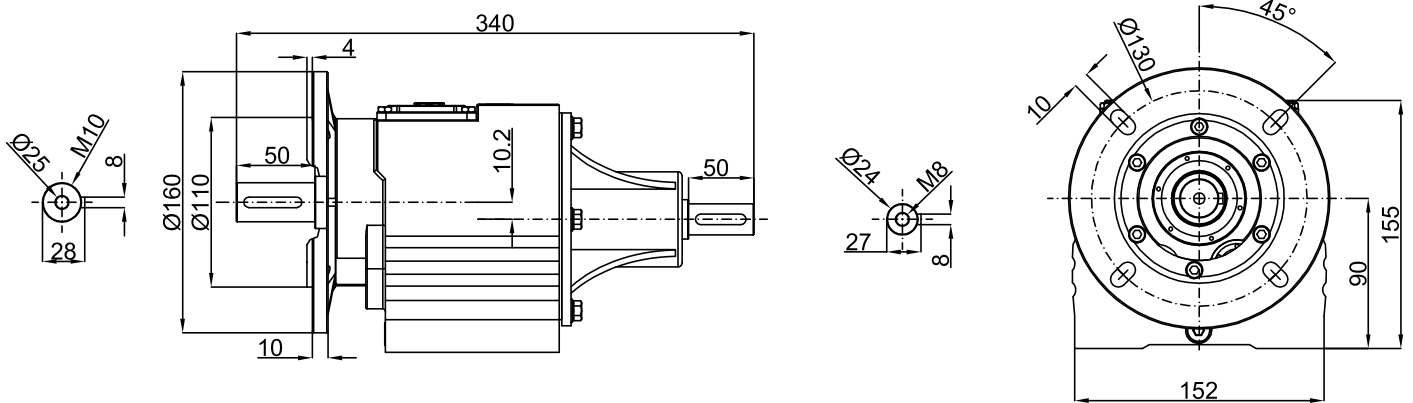


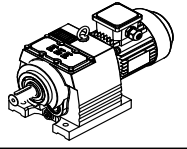


MTA102  
MTA103

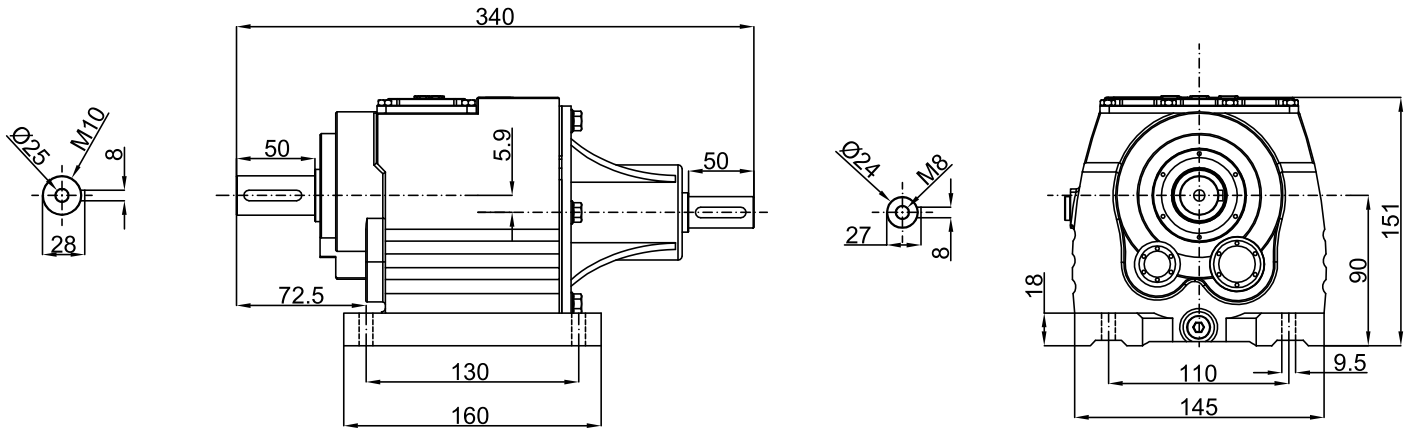


MTF102  
MTF103

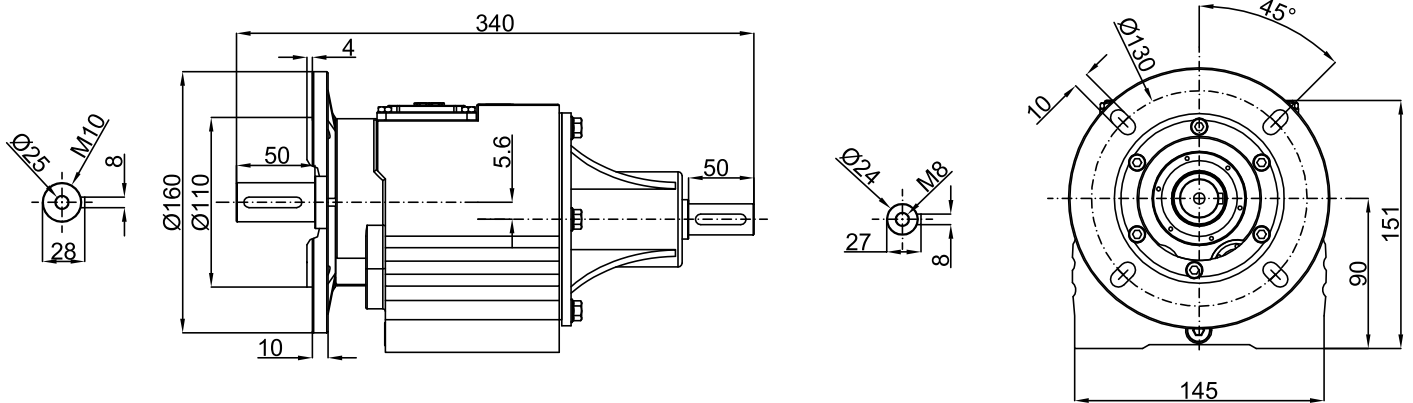


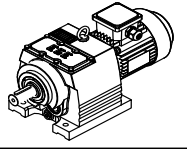


MTA172  
MTA173

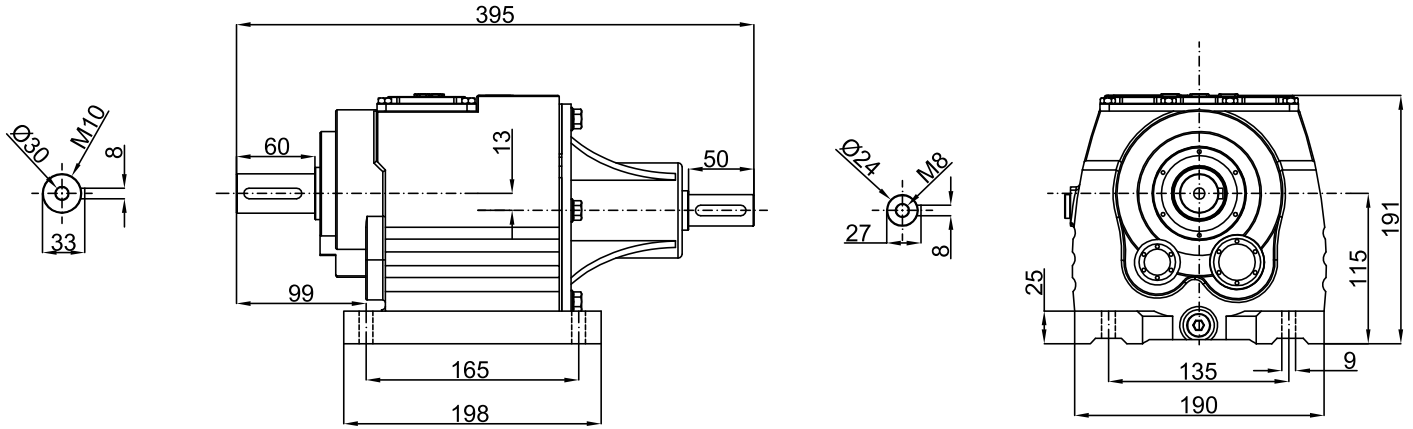


MTF172  
MTF173

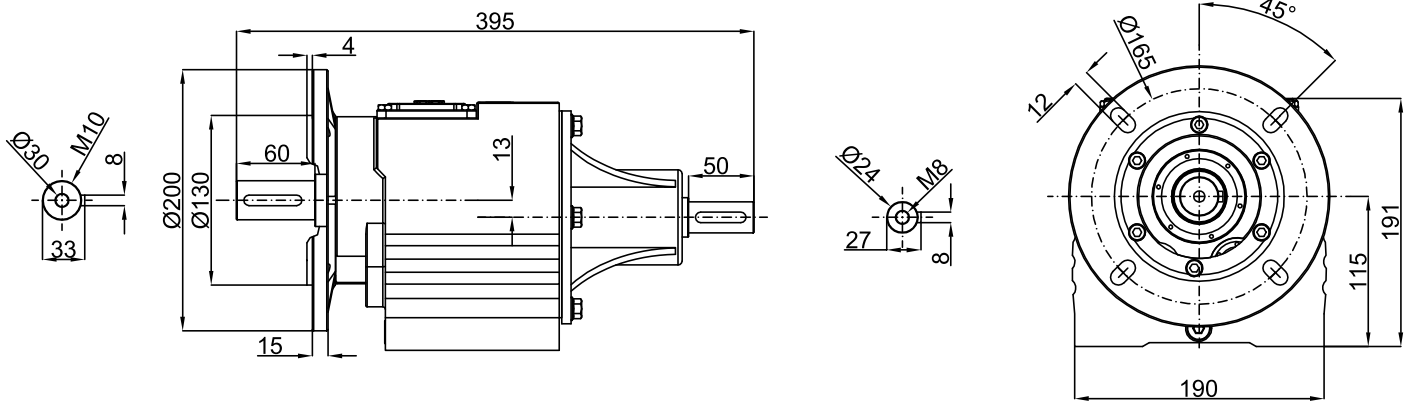


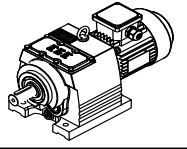


MTA202  
MTA203

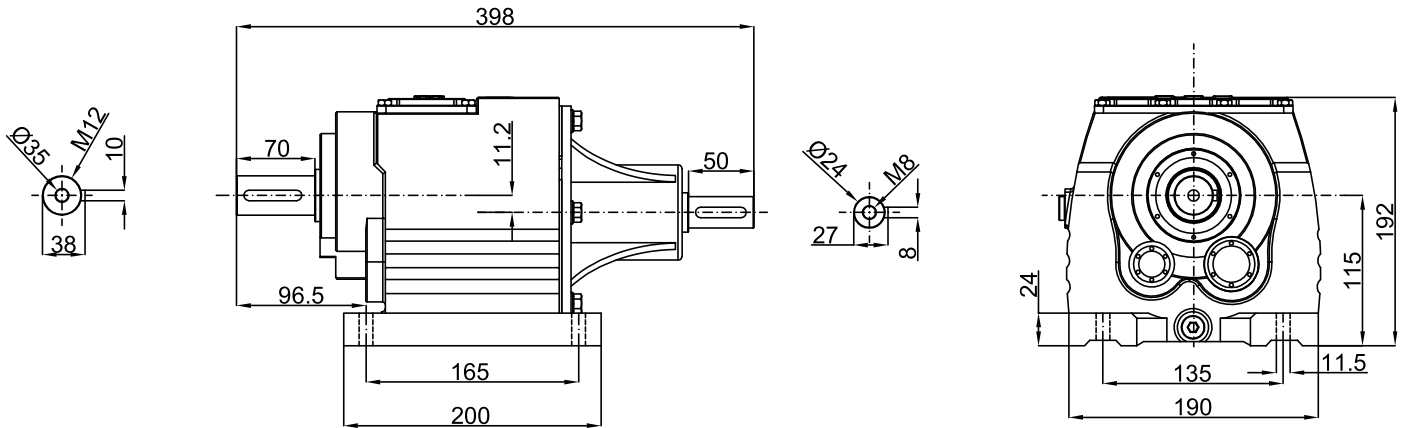


MTF202  
MTF203

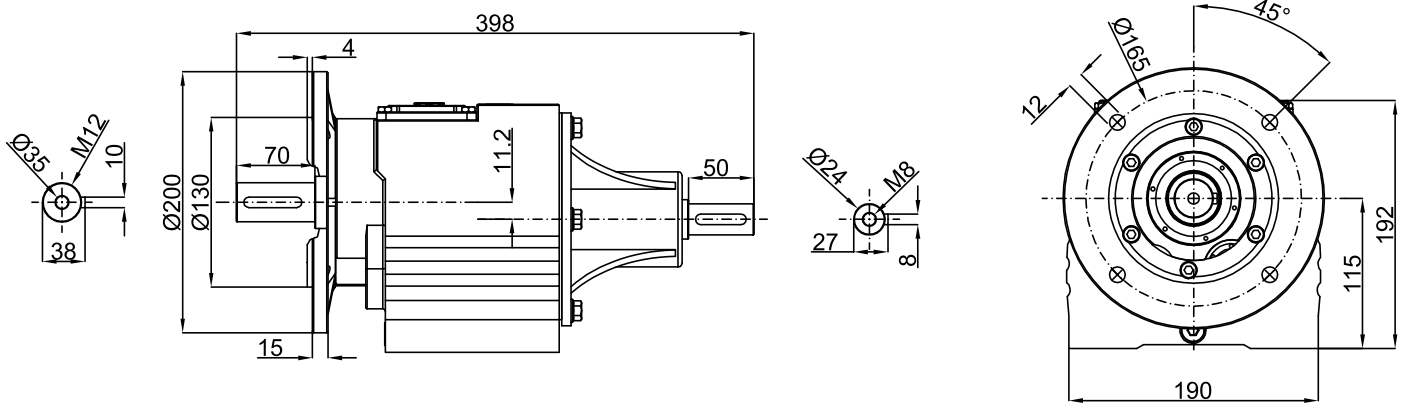


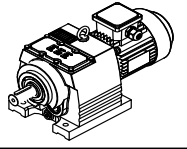


MTA272  
MTA273

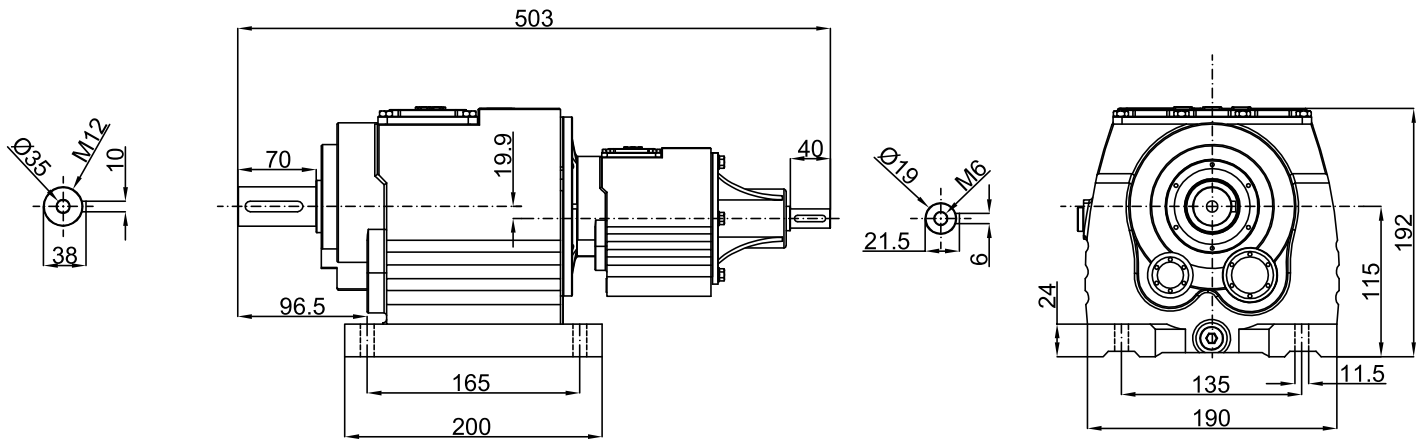


MTF272  
MTF273

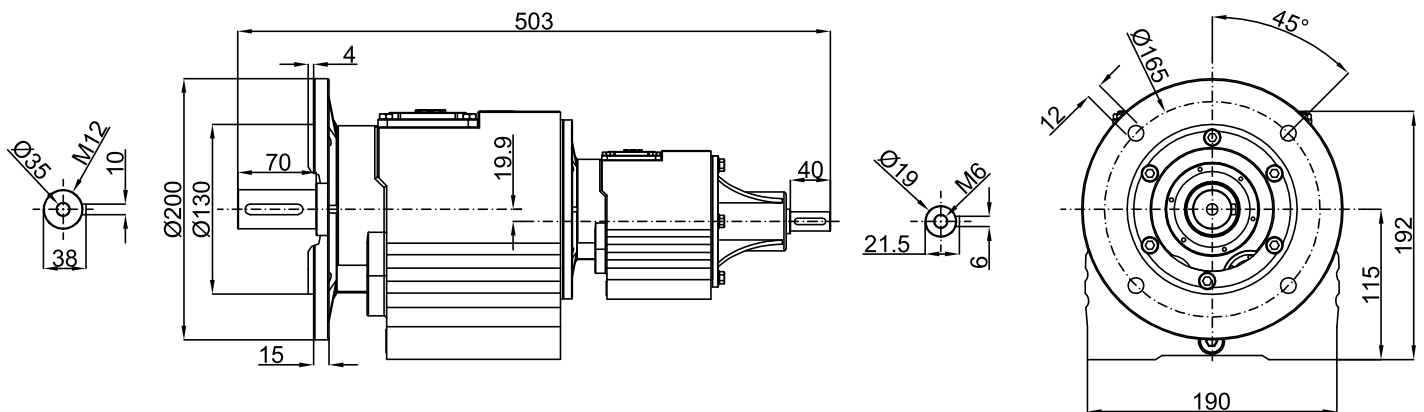


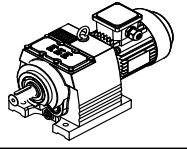


MTA275  
MTA276

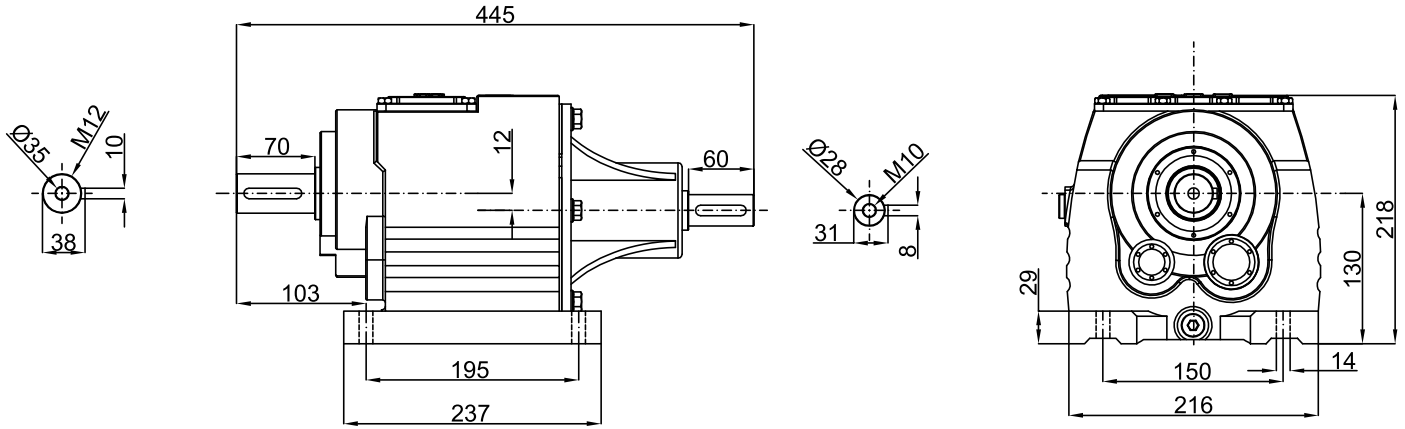


MTF275  
MTF276

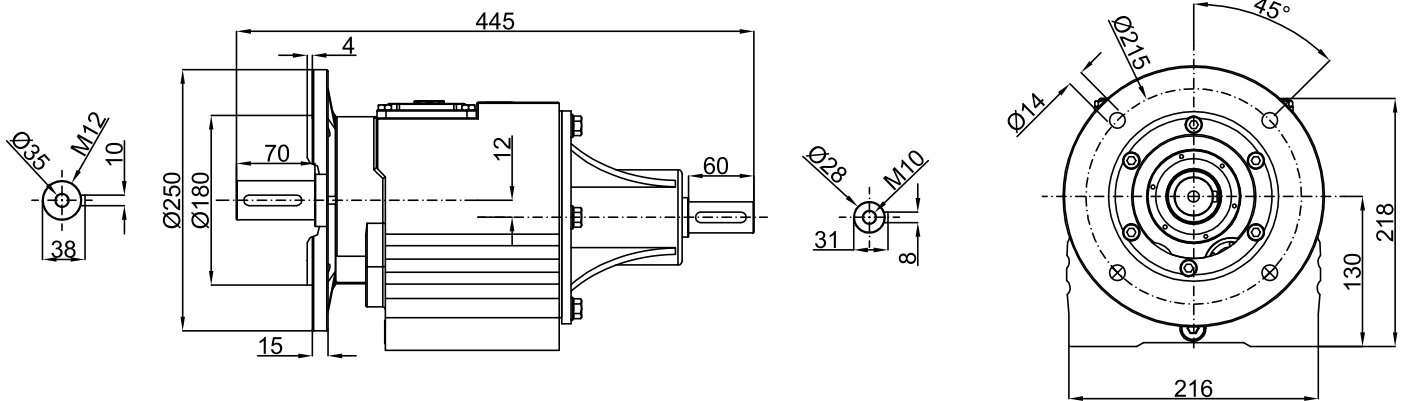


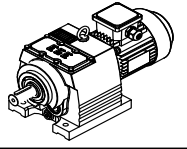


MTA282  
MTA283

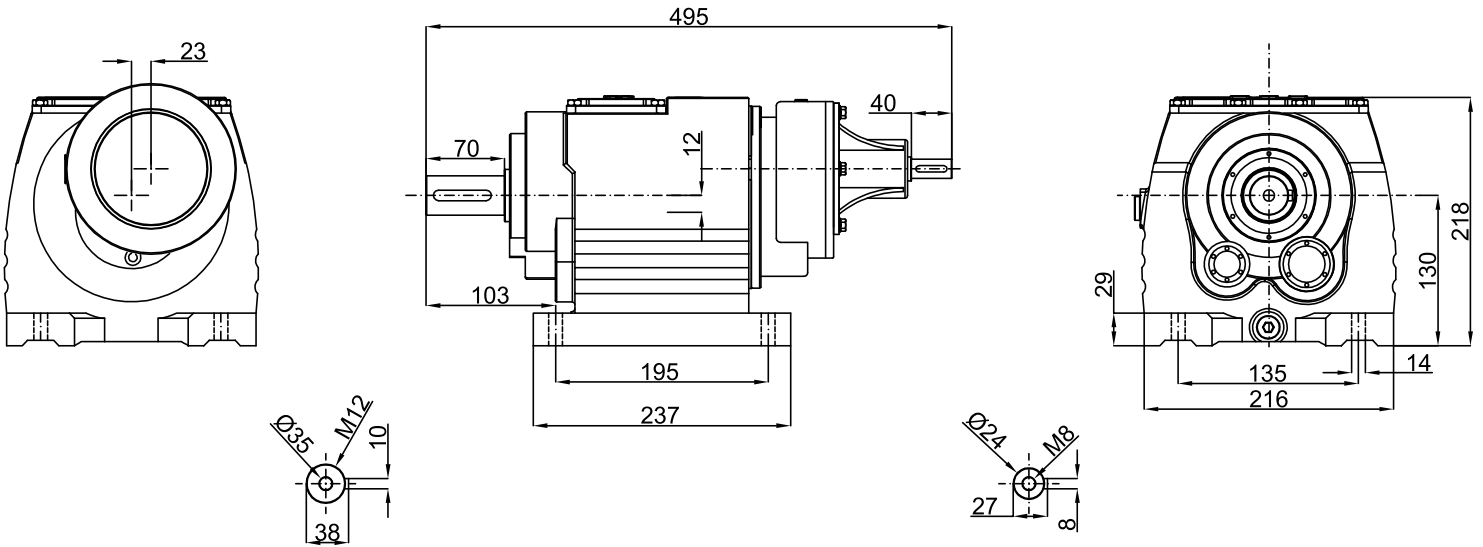


MTF282  
MTF283

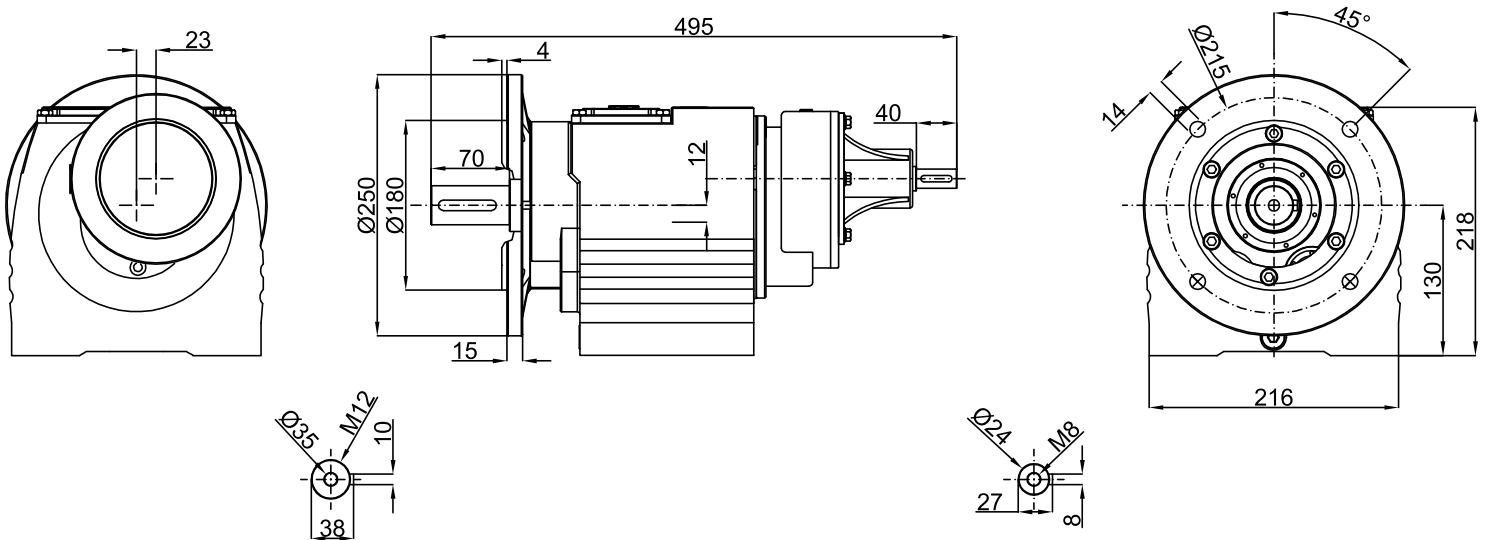




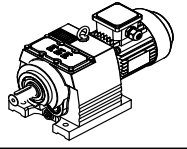
MTA284



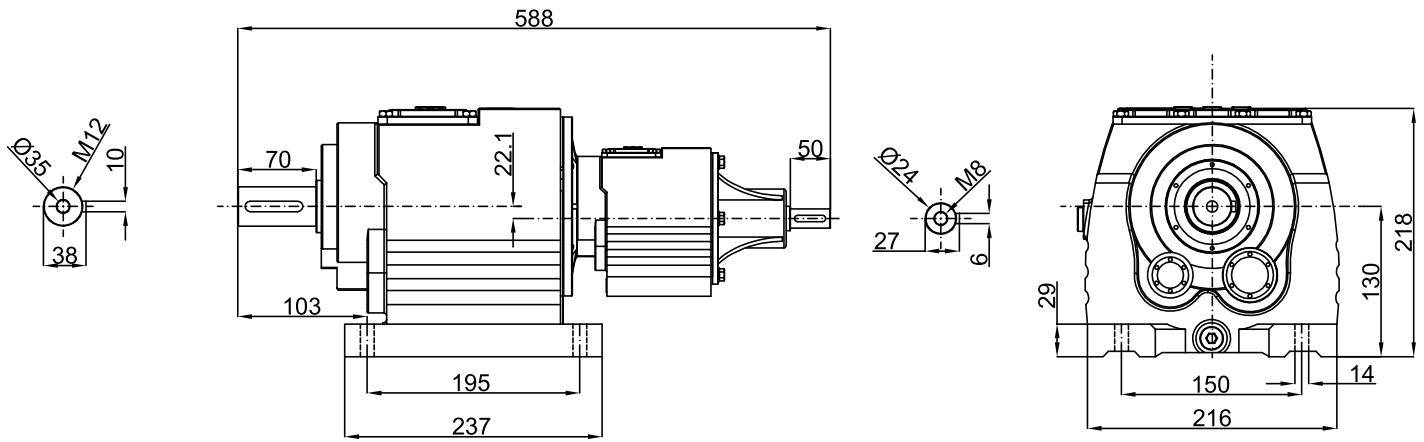
MTF284



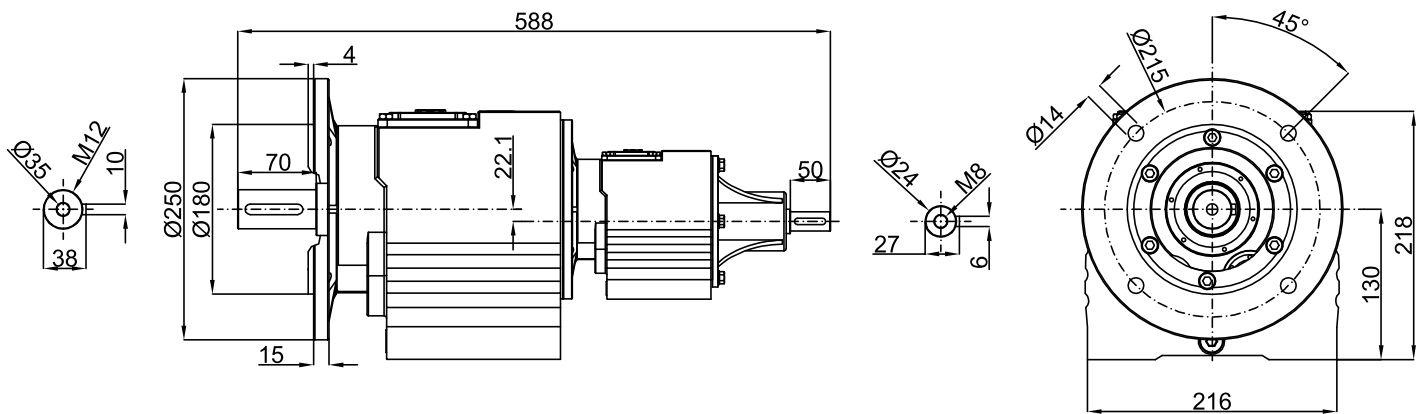


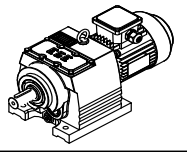


MTA285  
MTA286

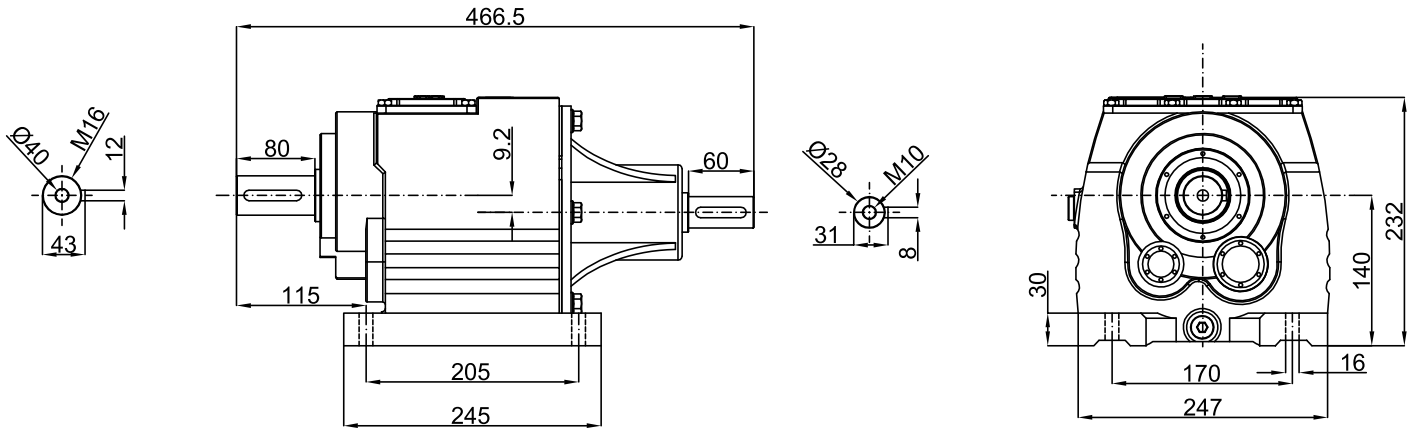


MTF285  
MTF286

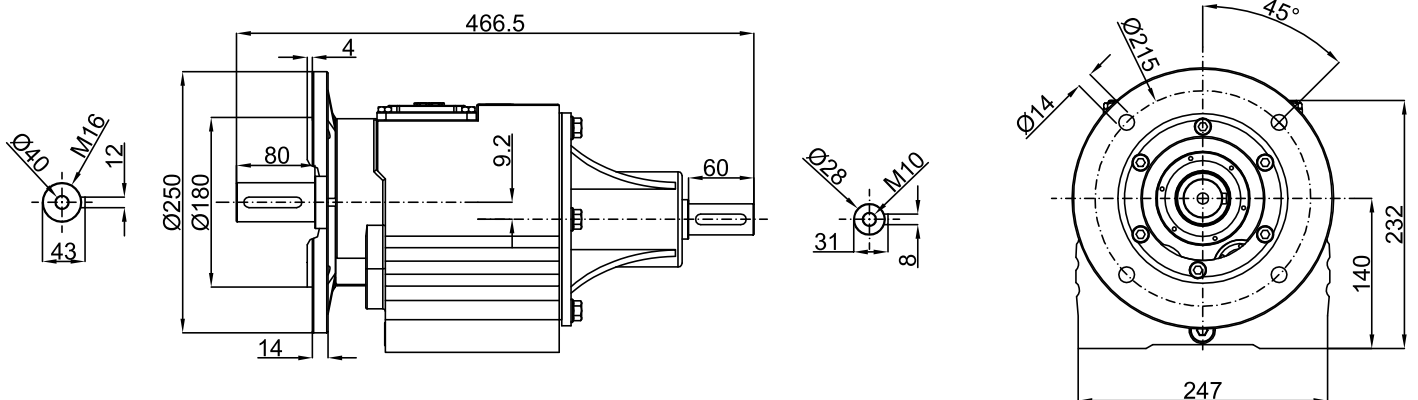


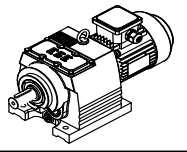


MTA372  
MTA373

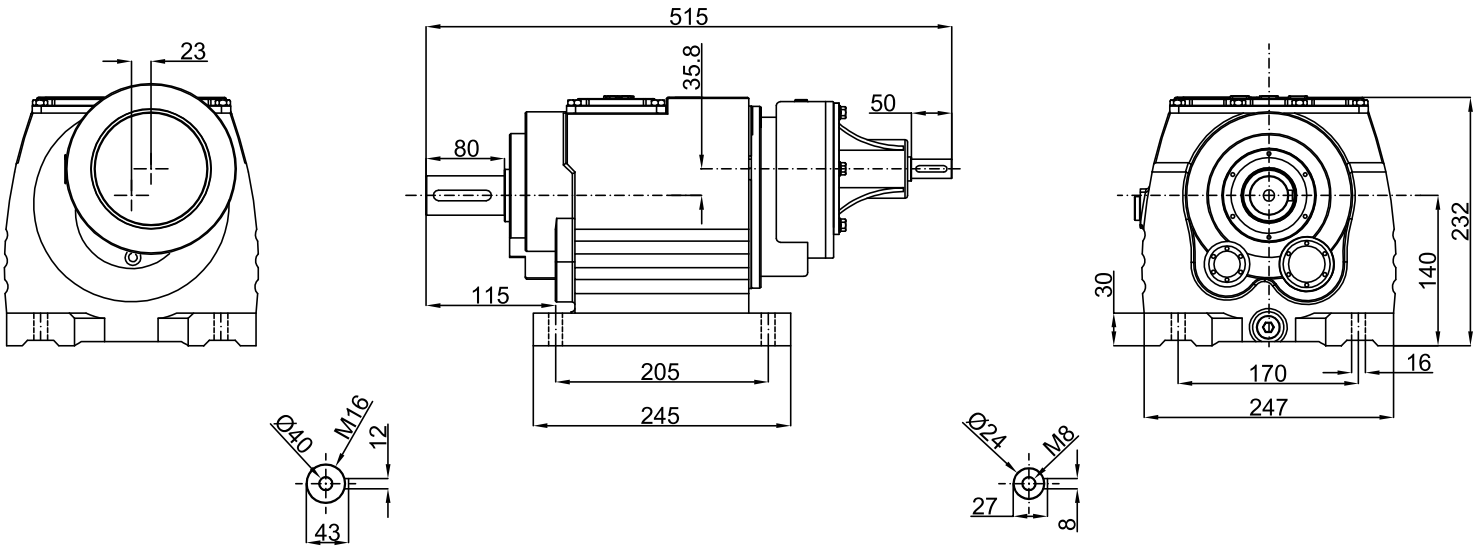


MTF372  
MTF373

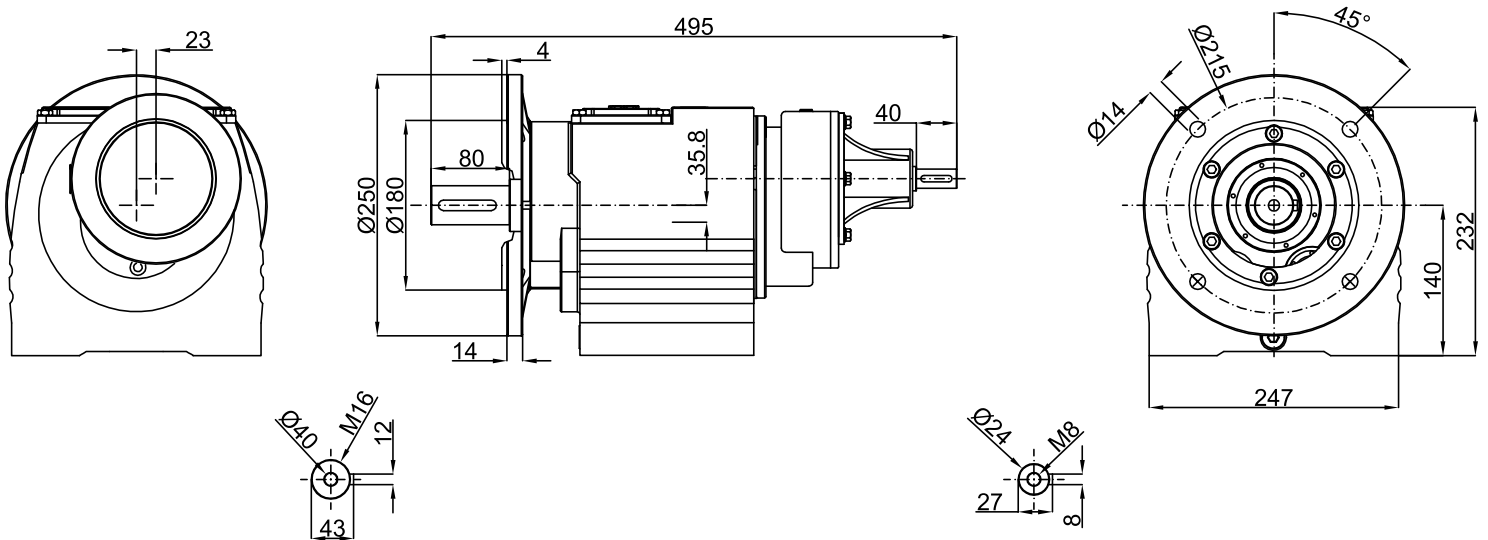


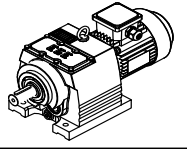


MTA374

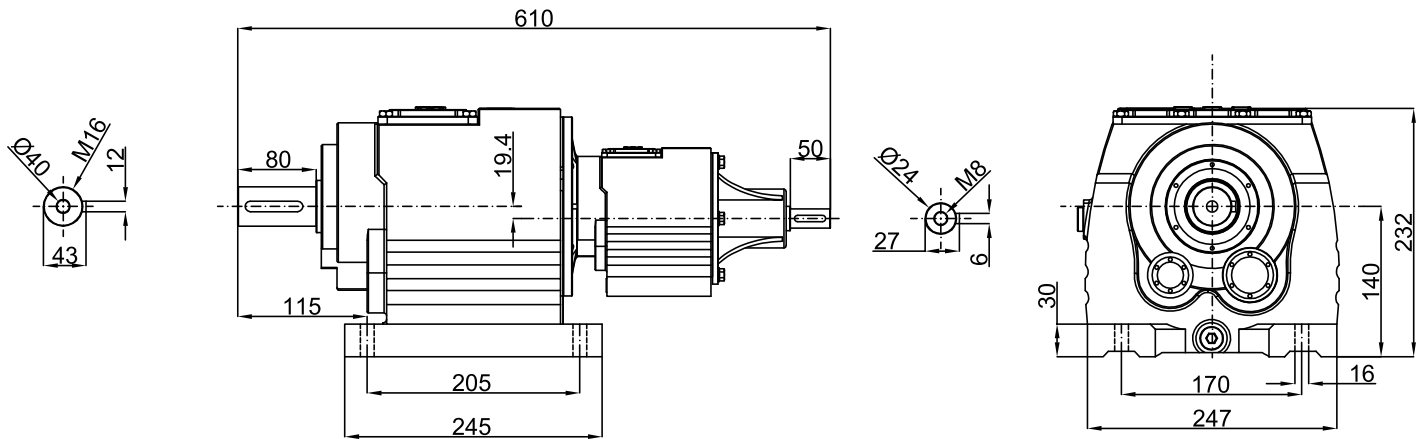


MTF374

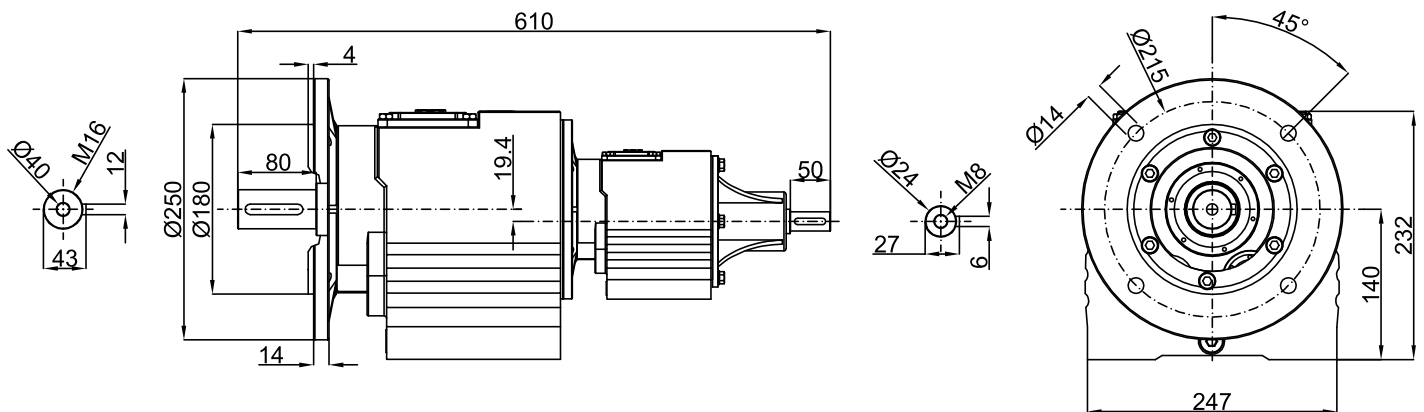


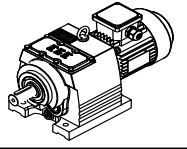


MTA375  
MTA376

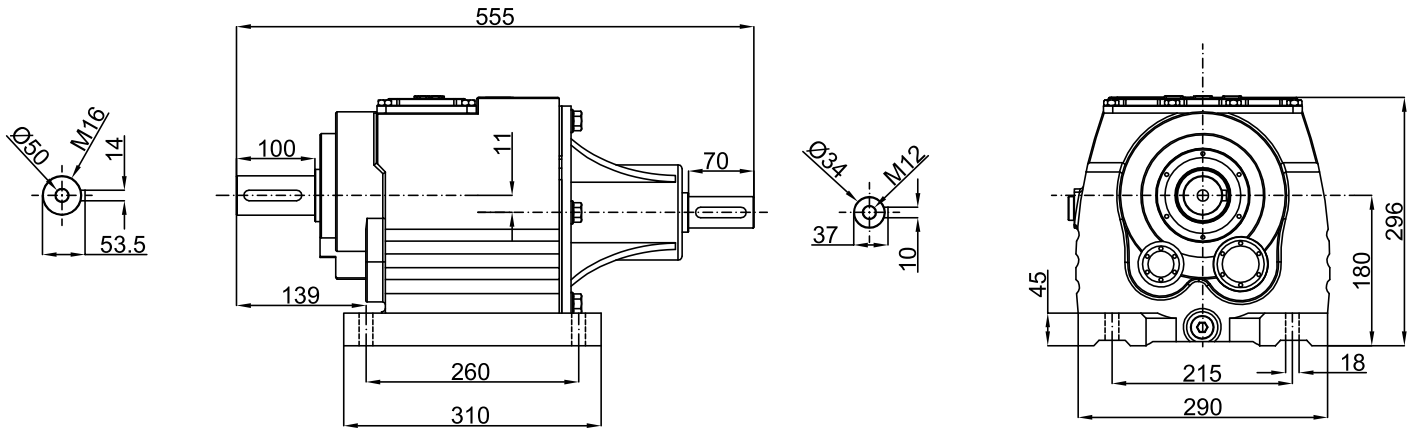


MTF375  
MTF376

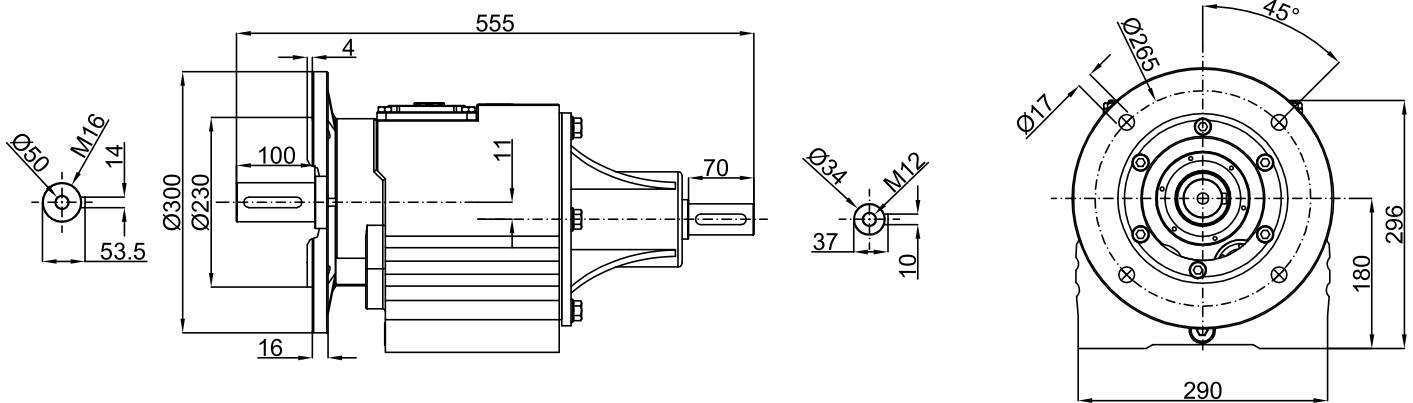


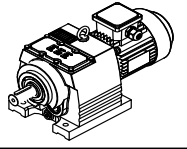


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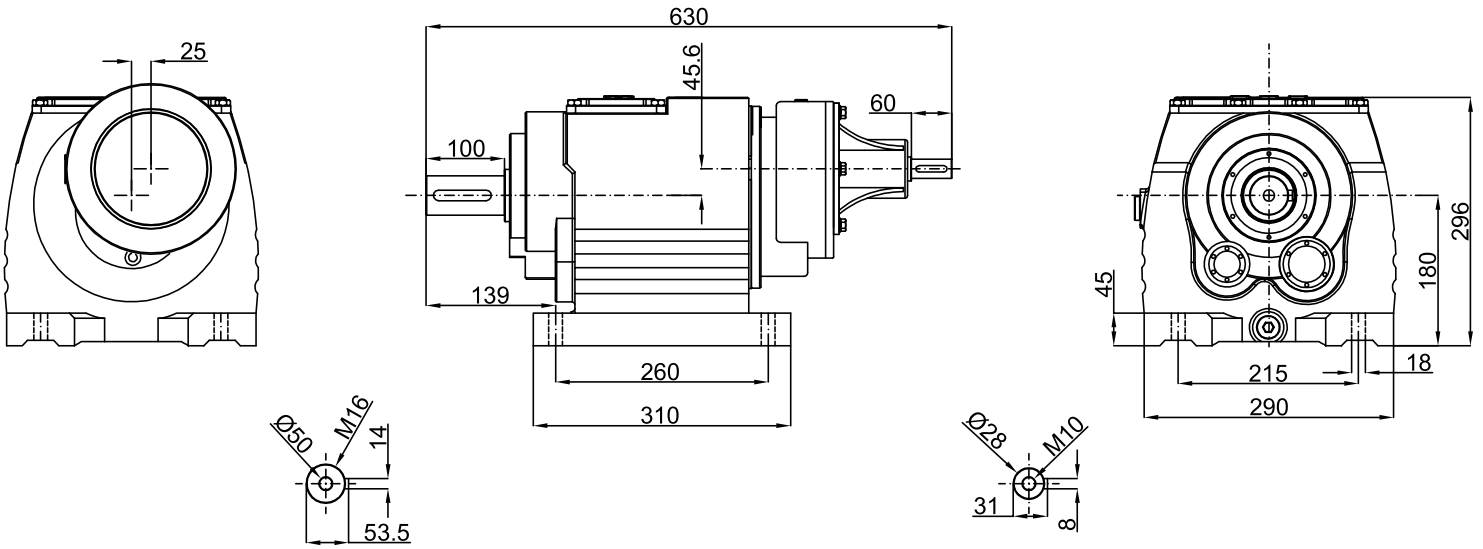


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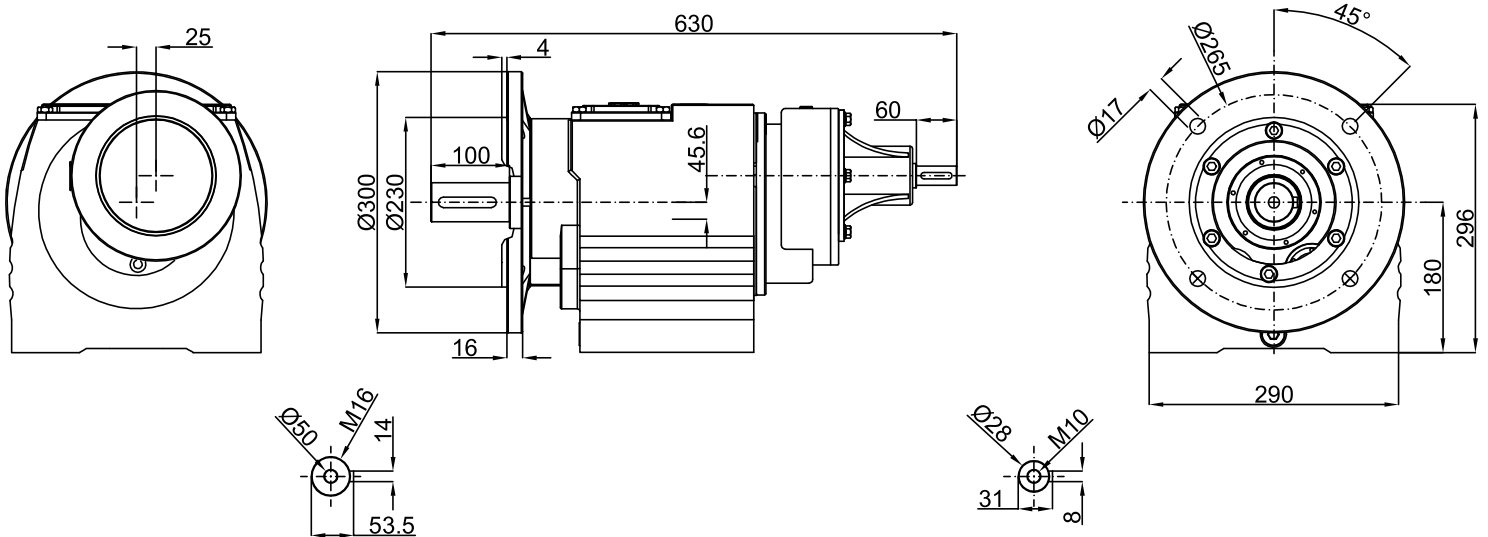


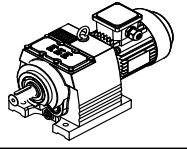


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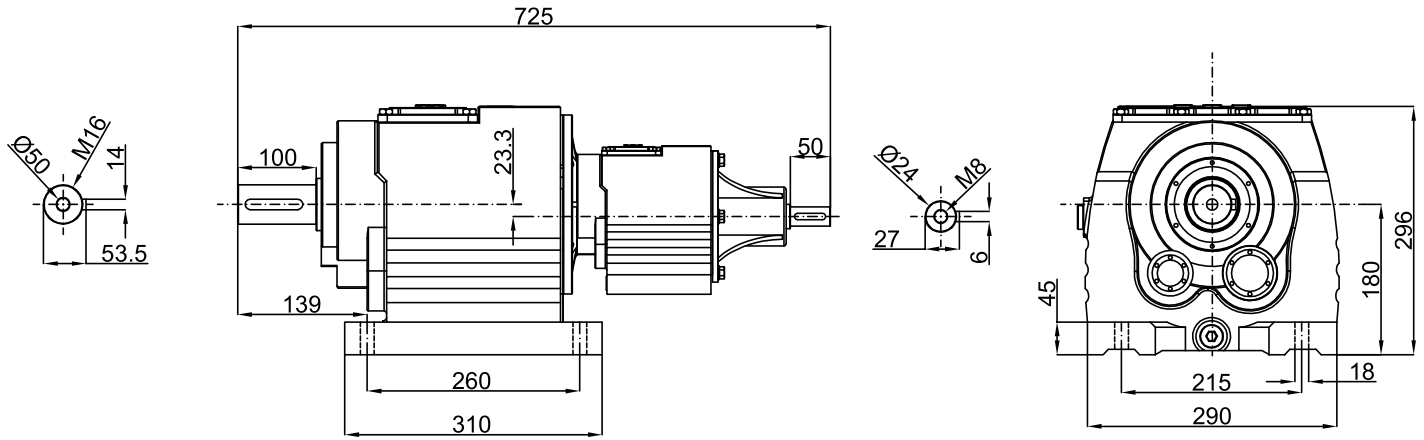


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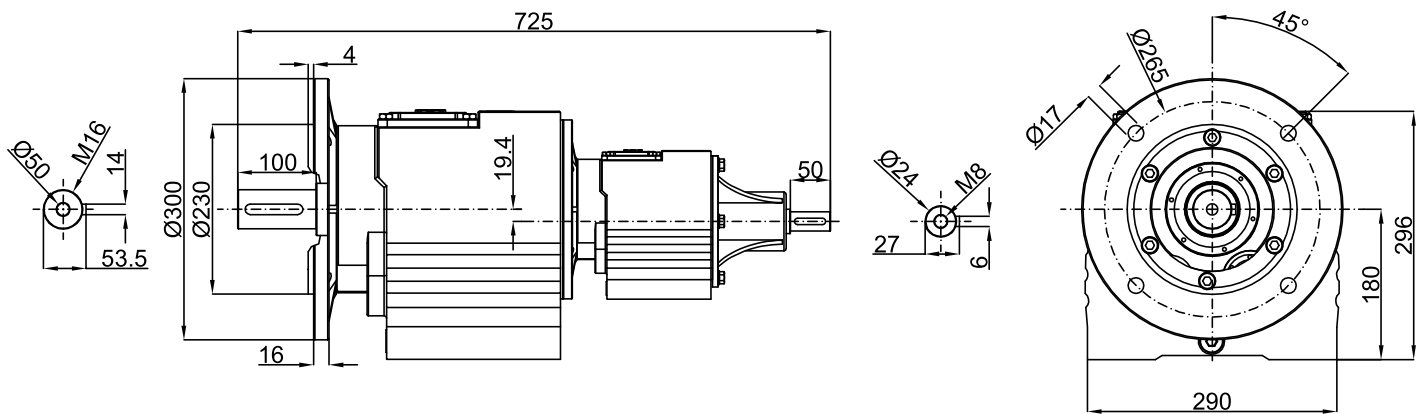


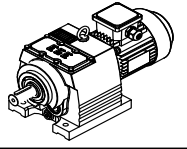


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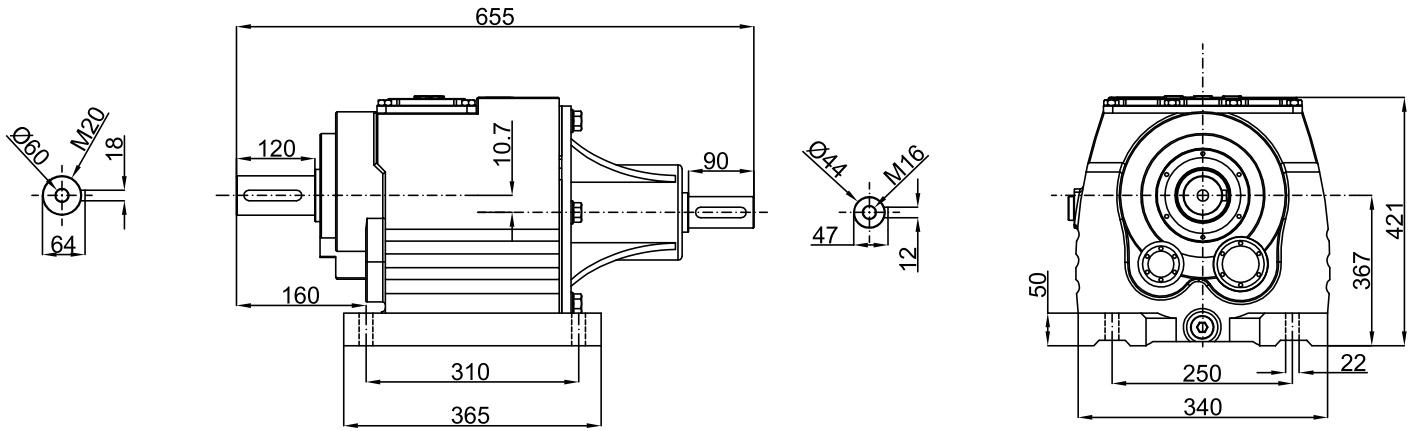


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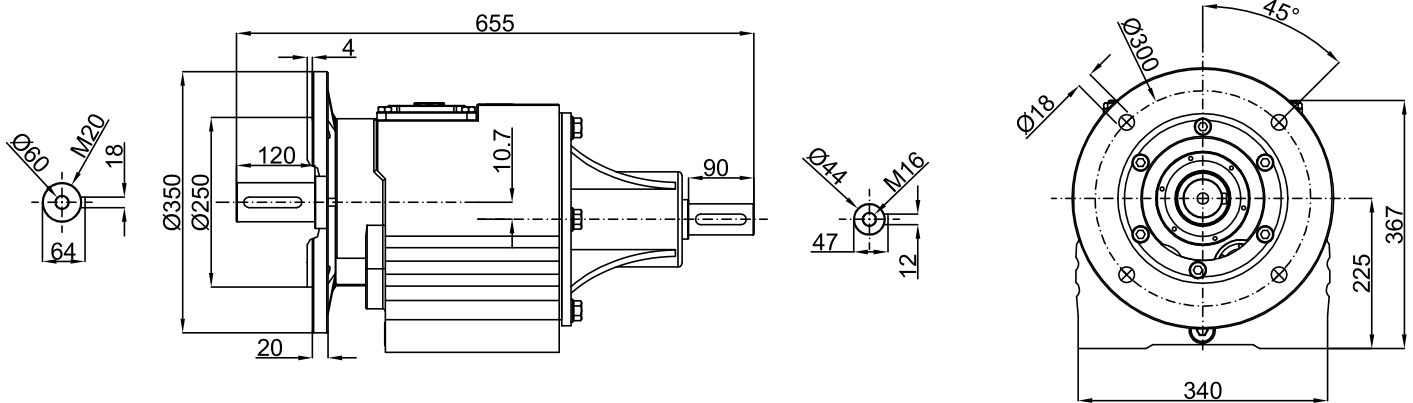




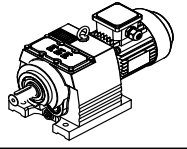
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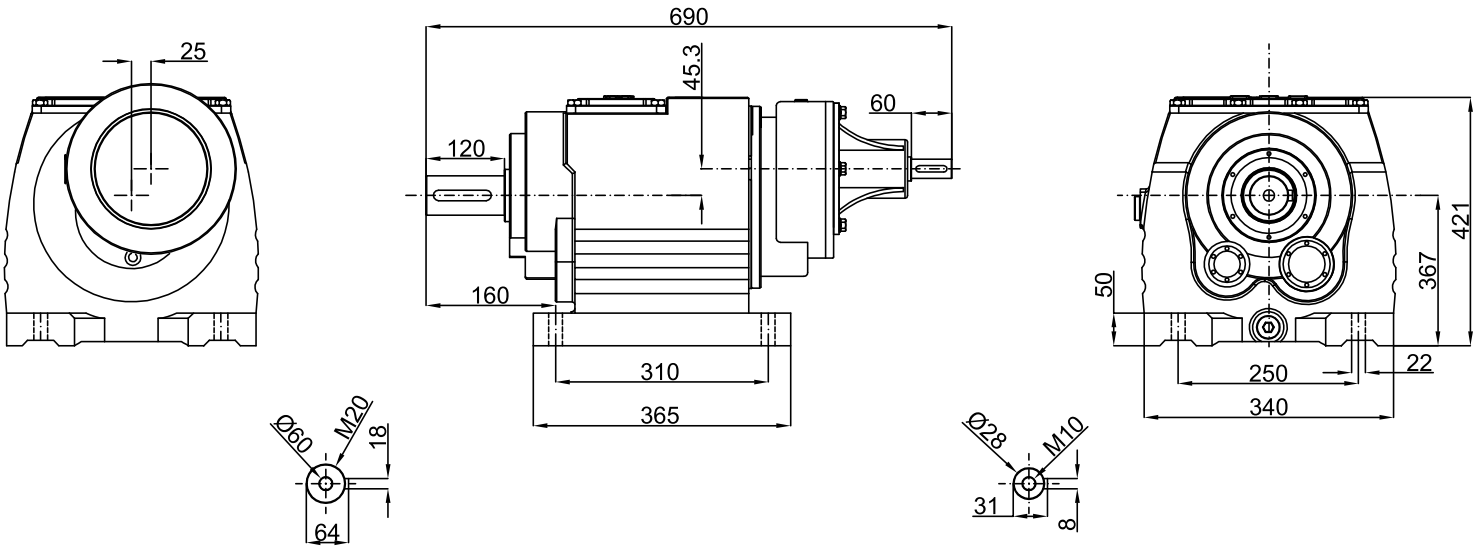
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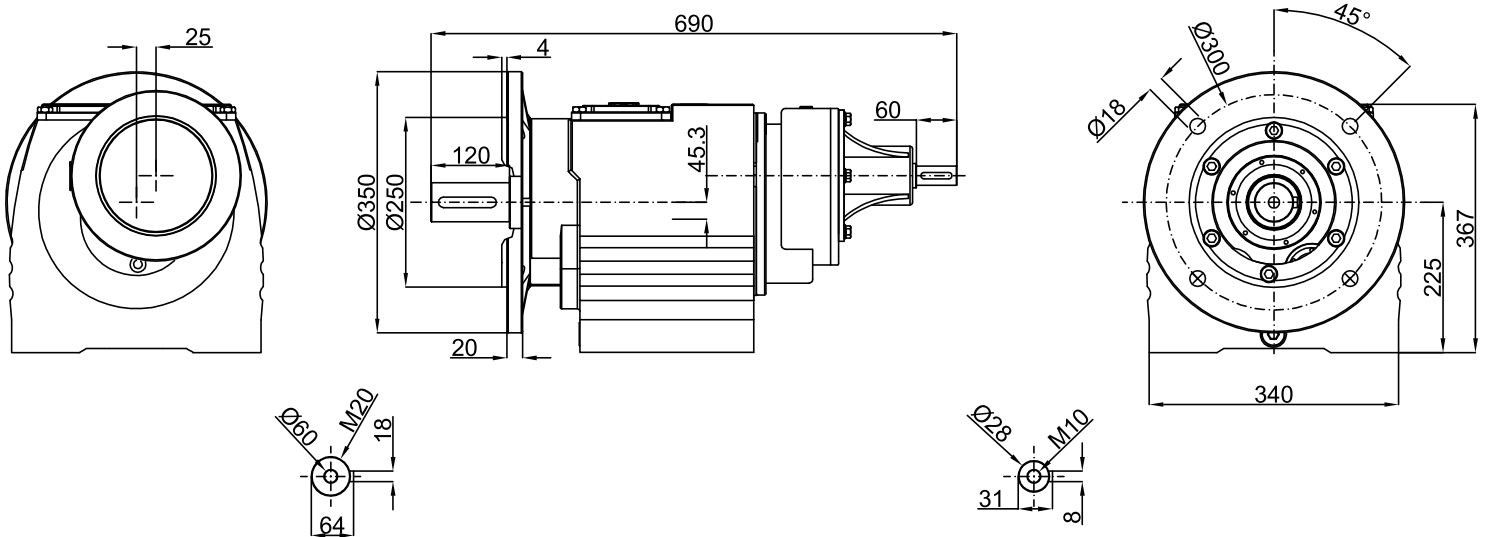


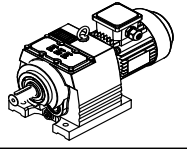


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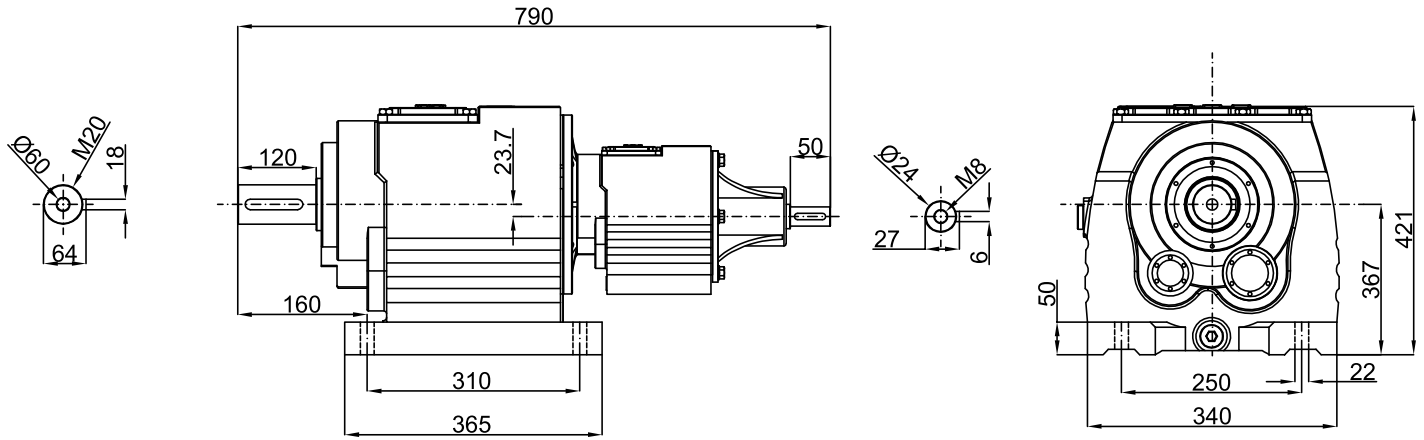


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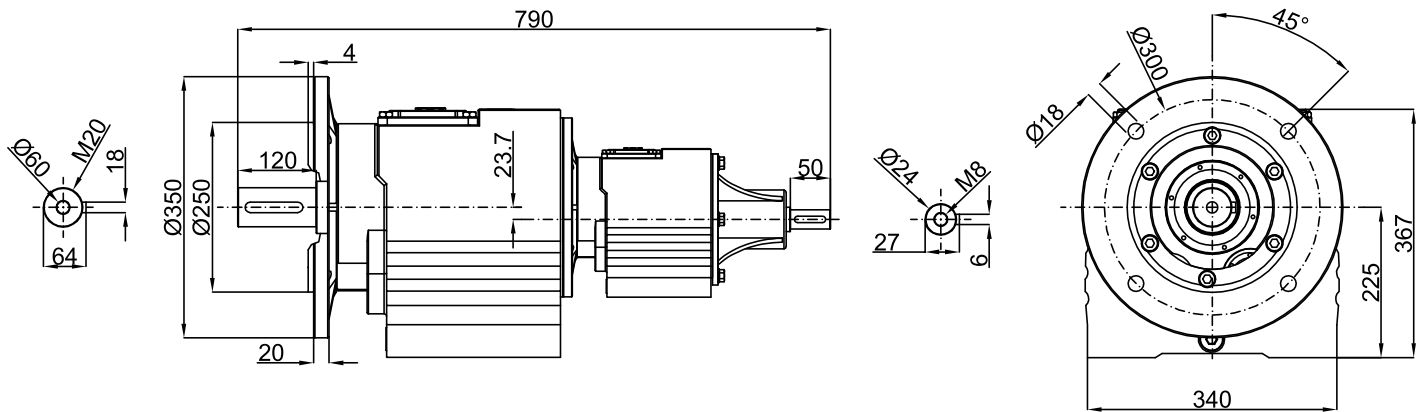


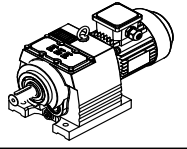


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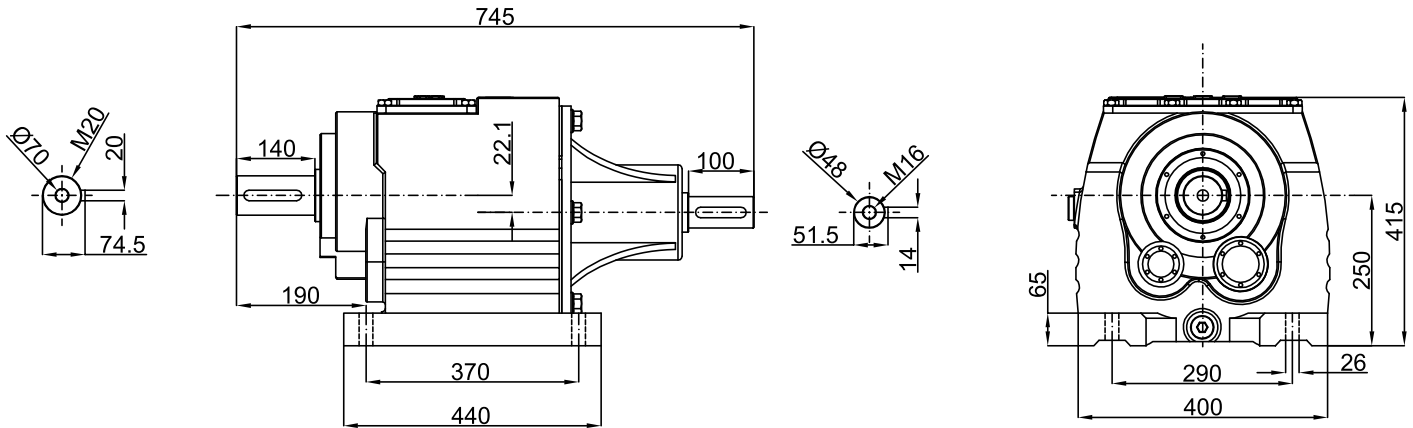


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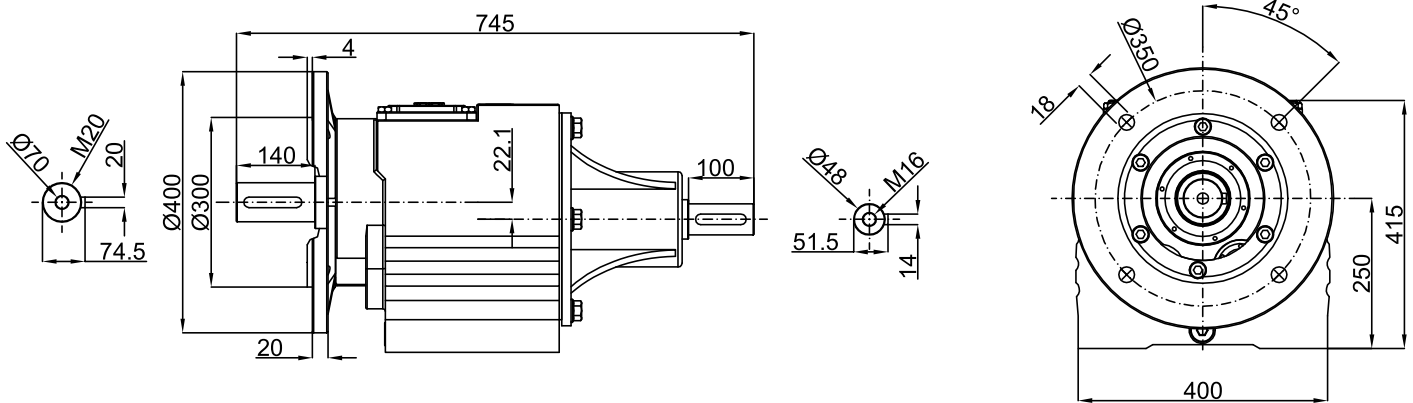


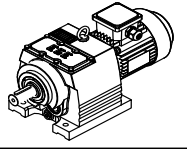


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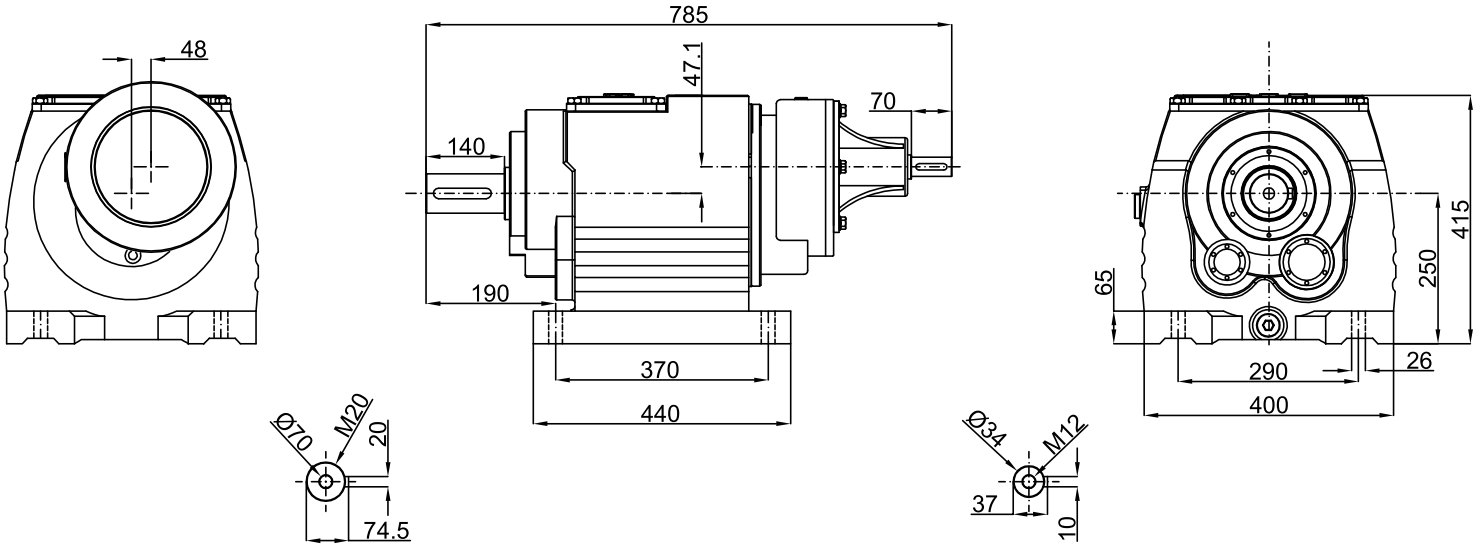


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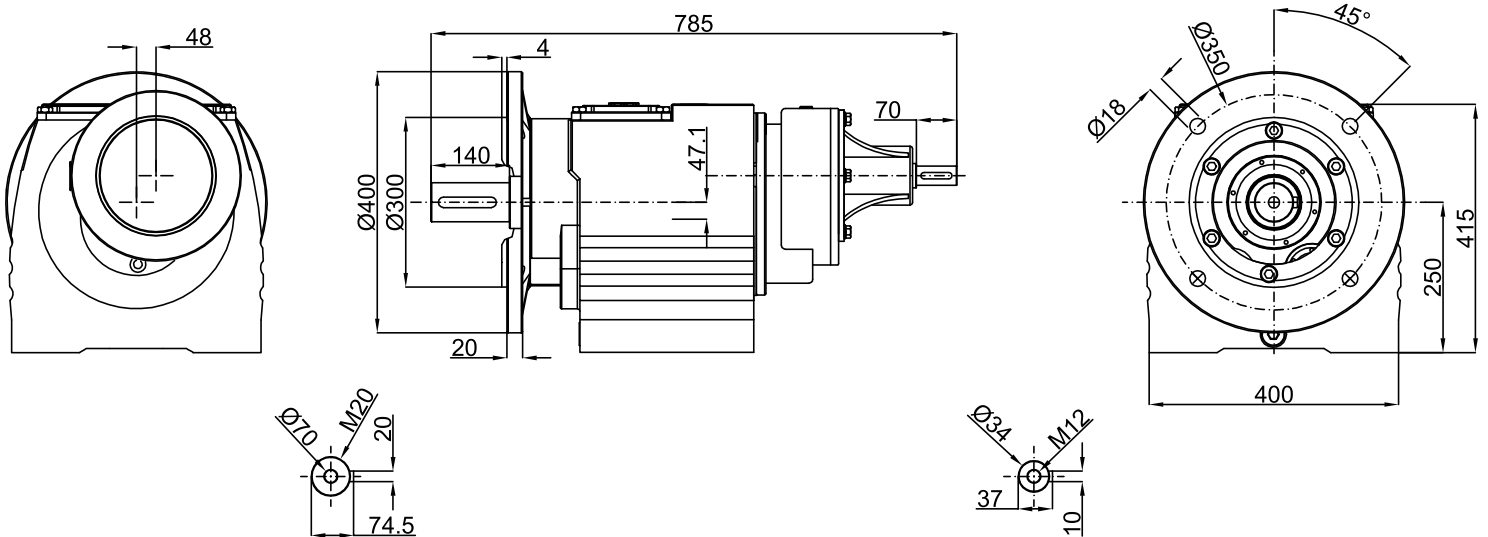


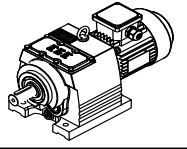


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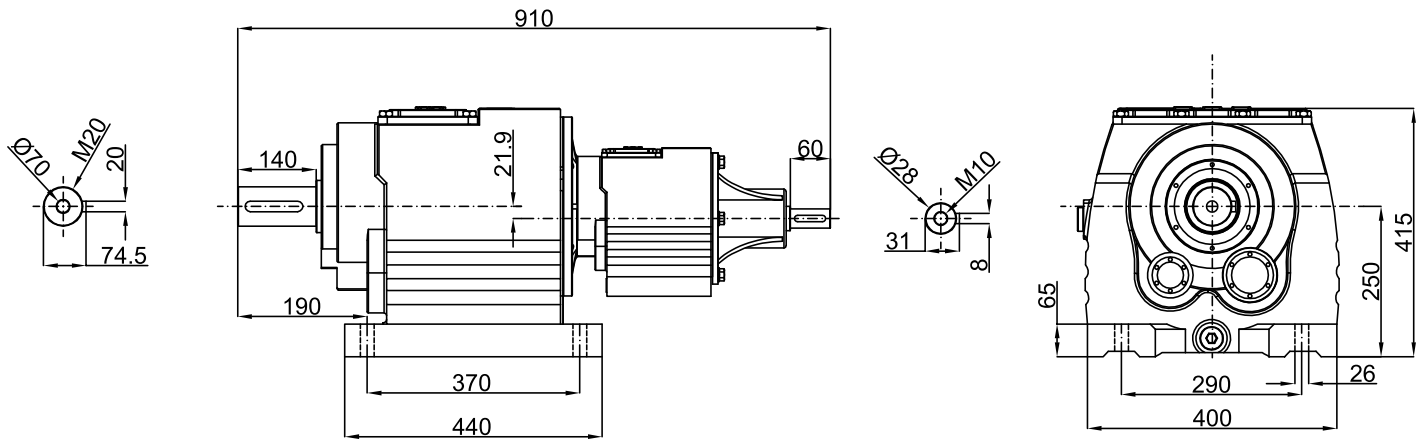


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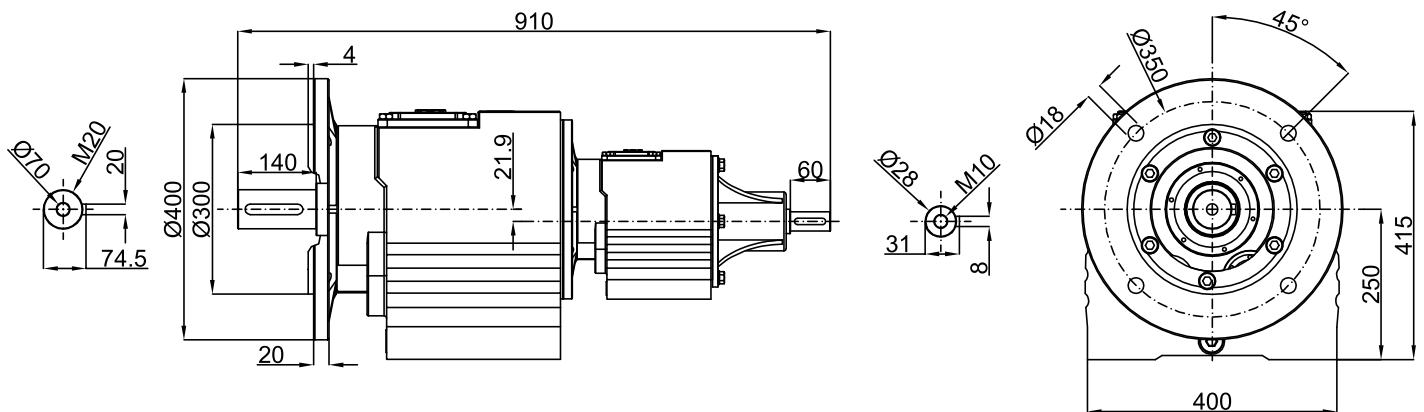


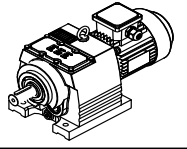


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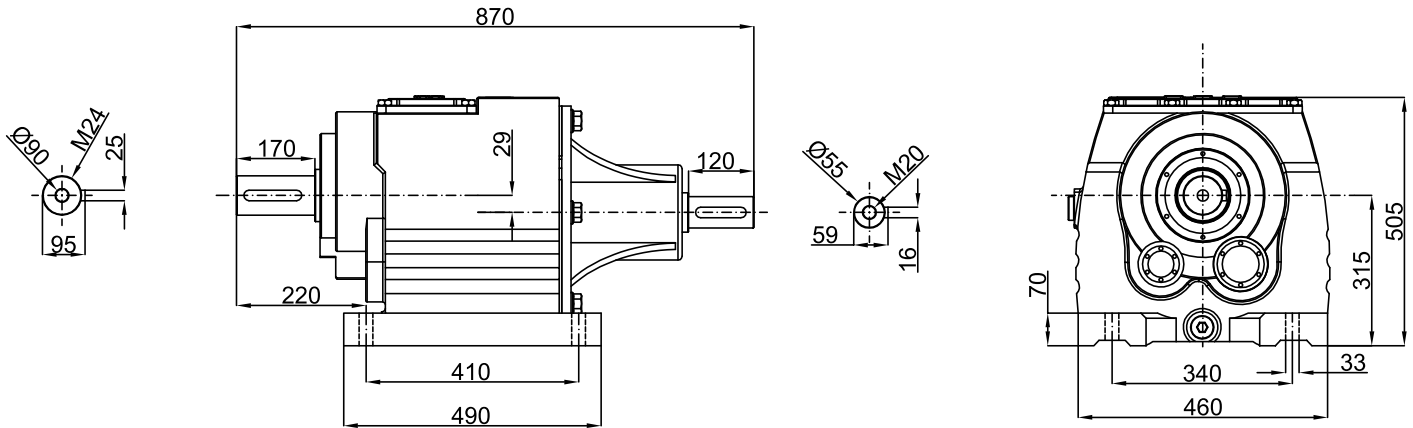


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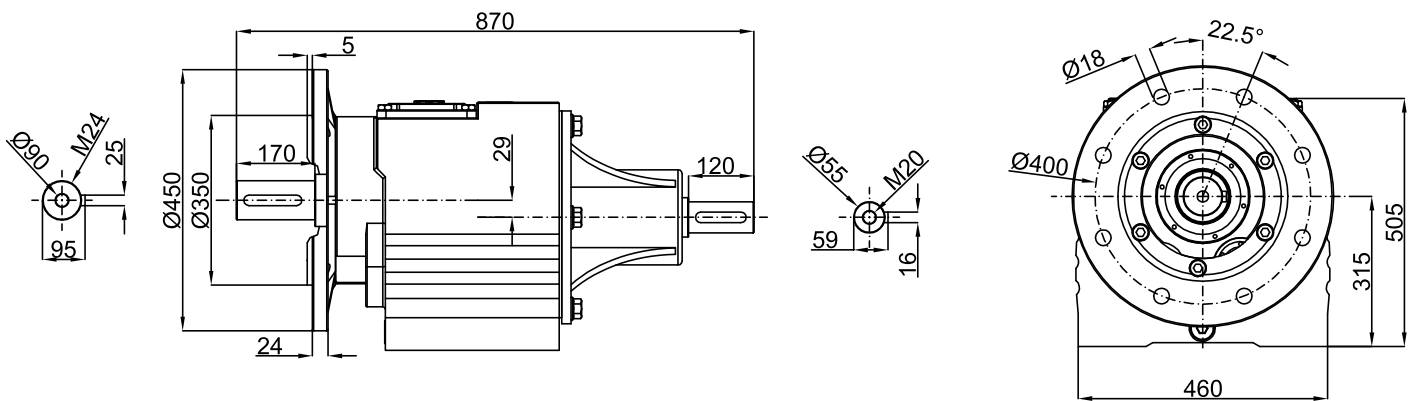


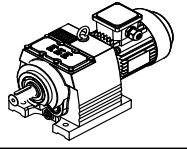


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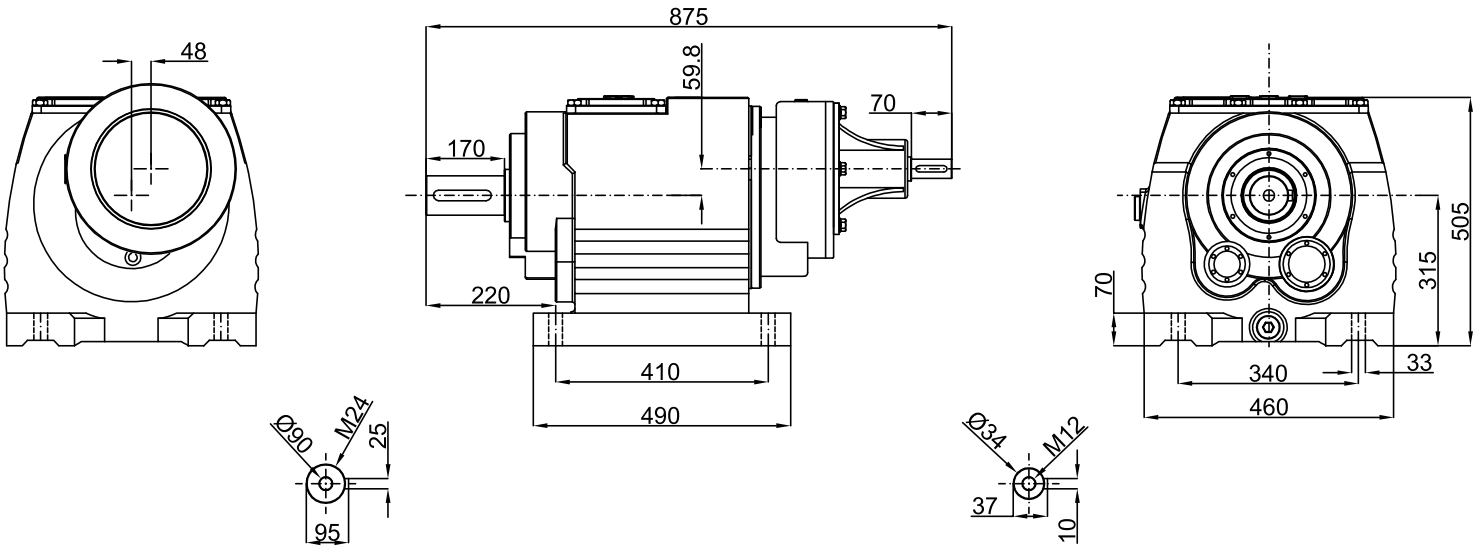


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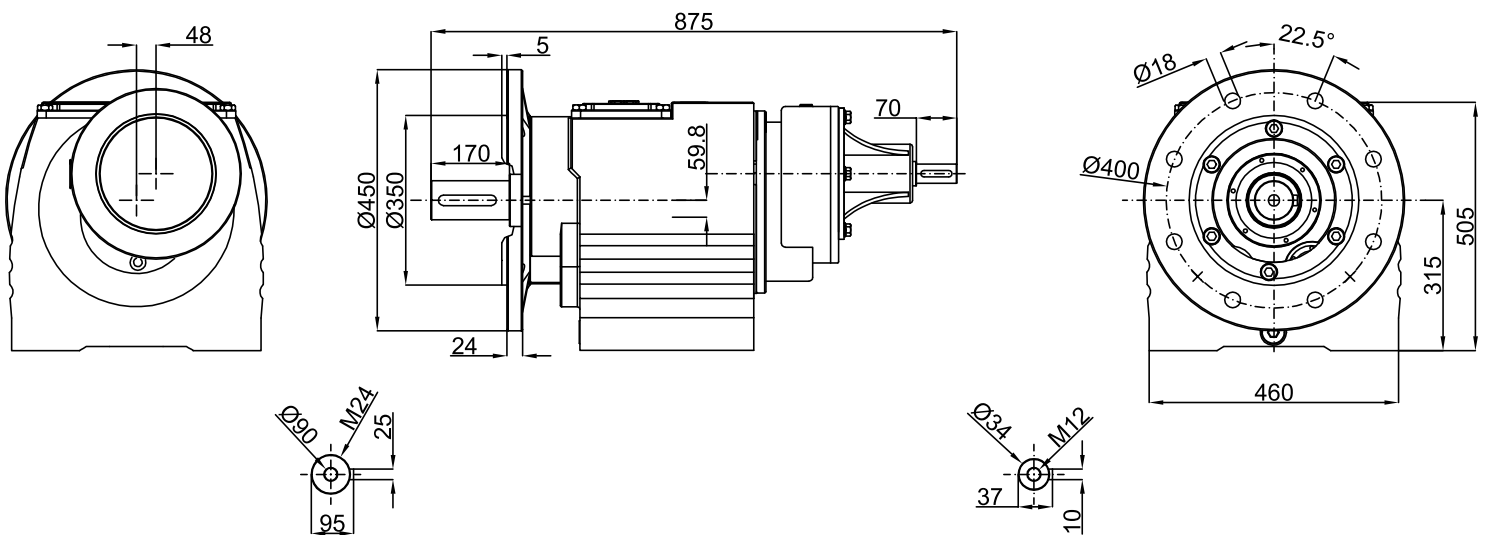


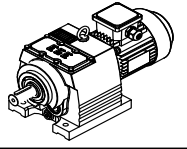


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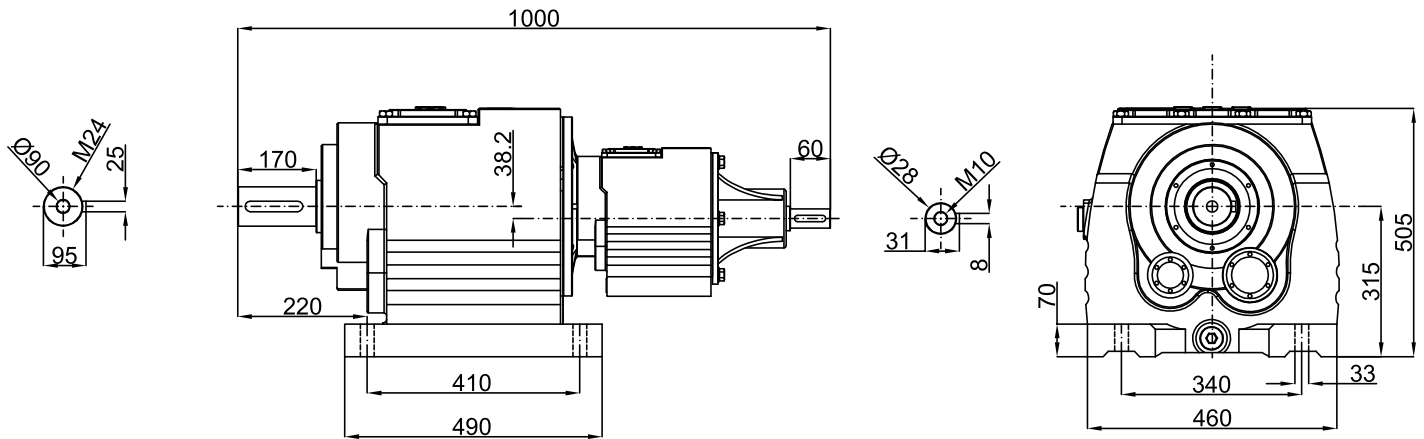


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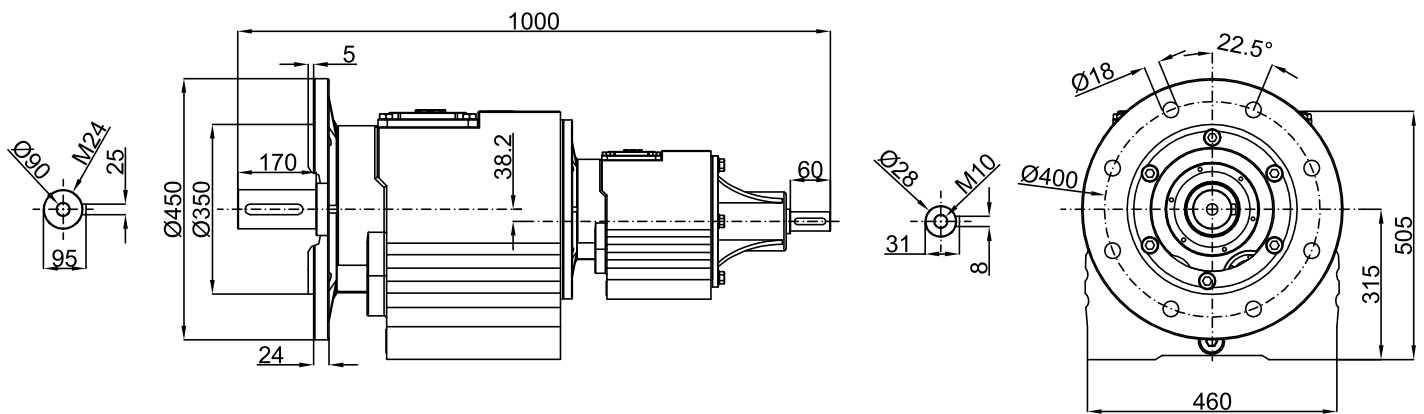




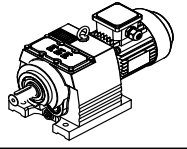
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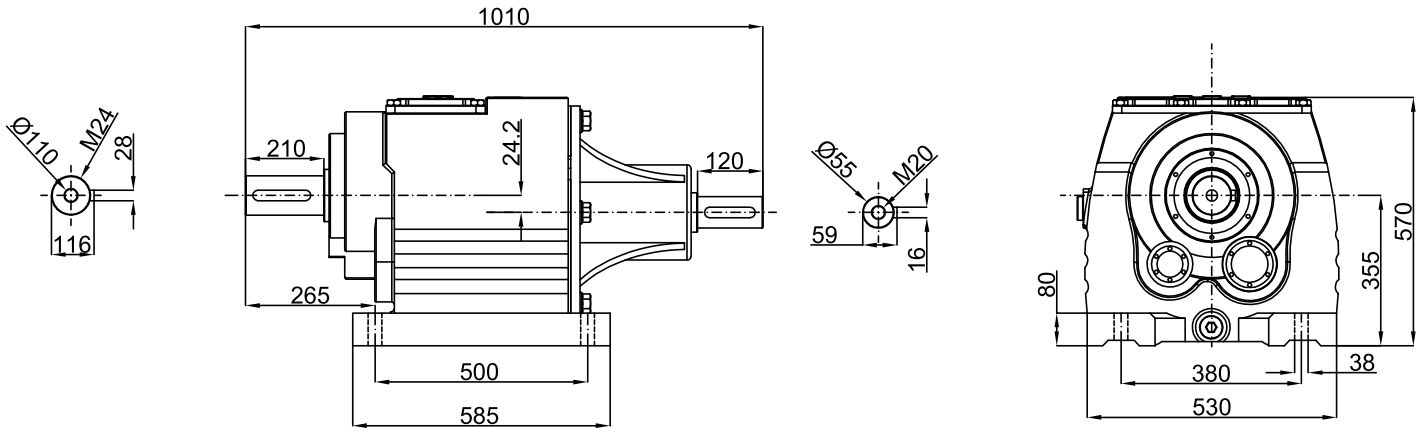
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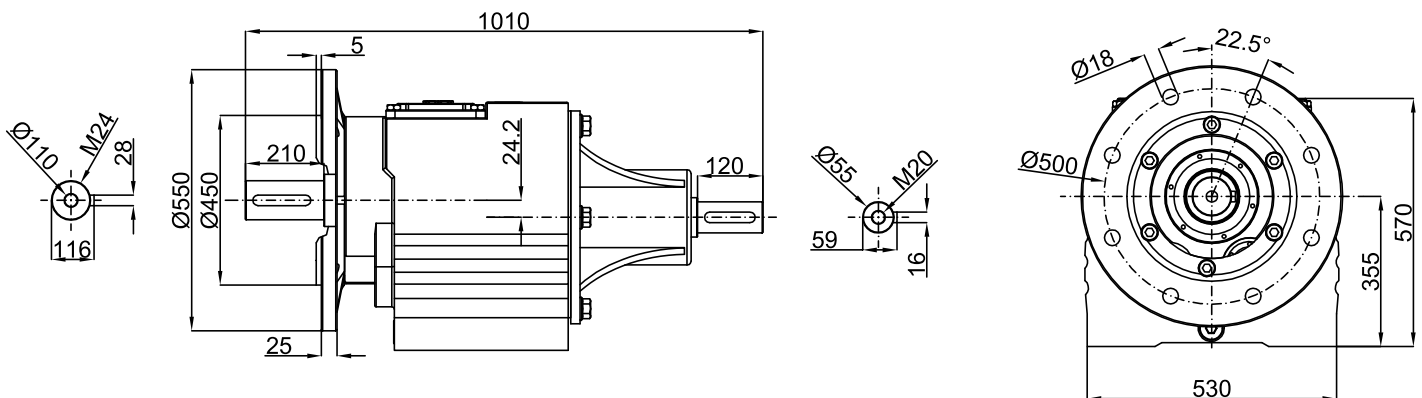


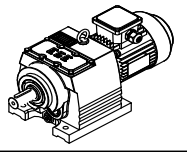


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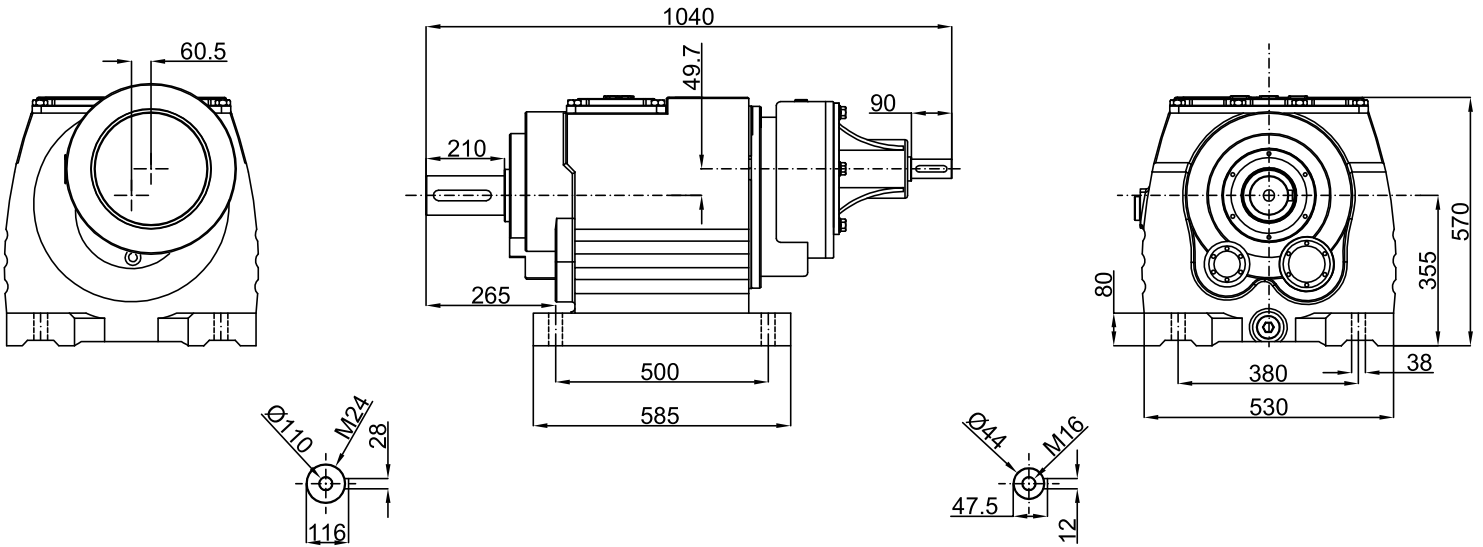


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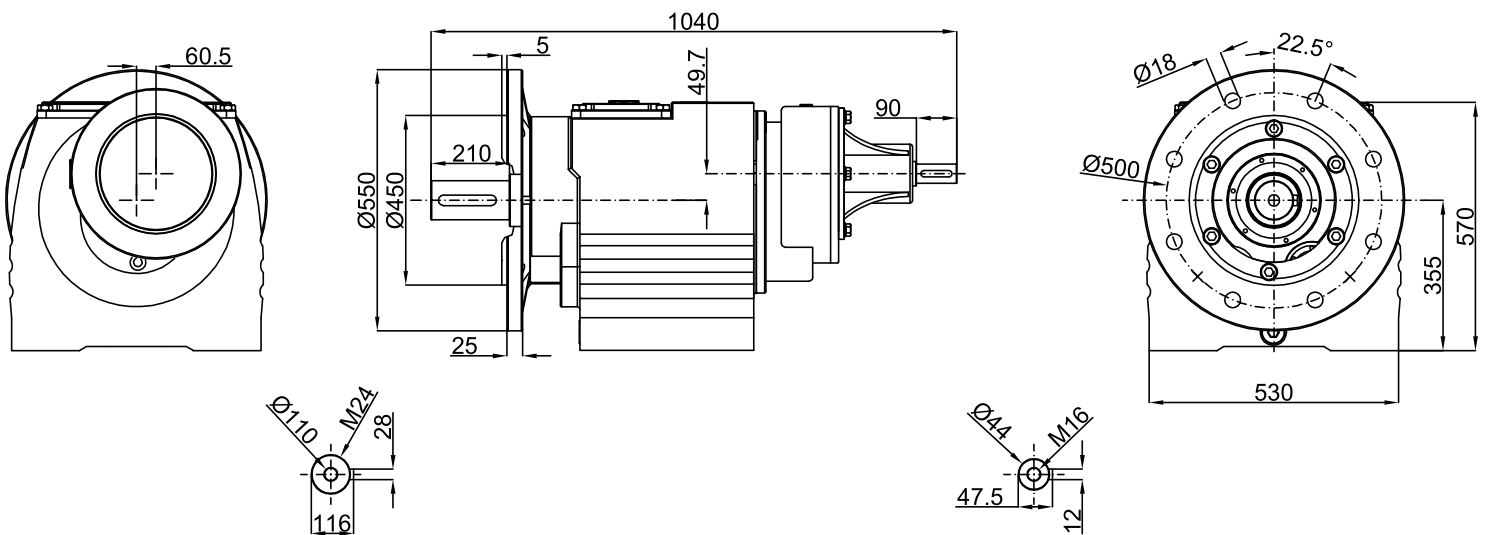


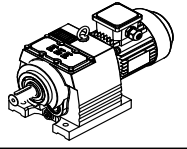


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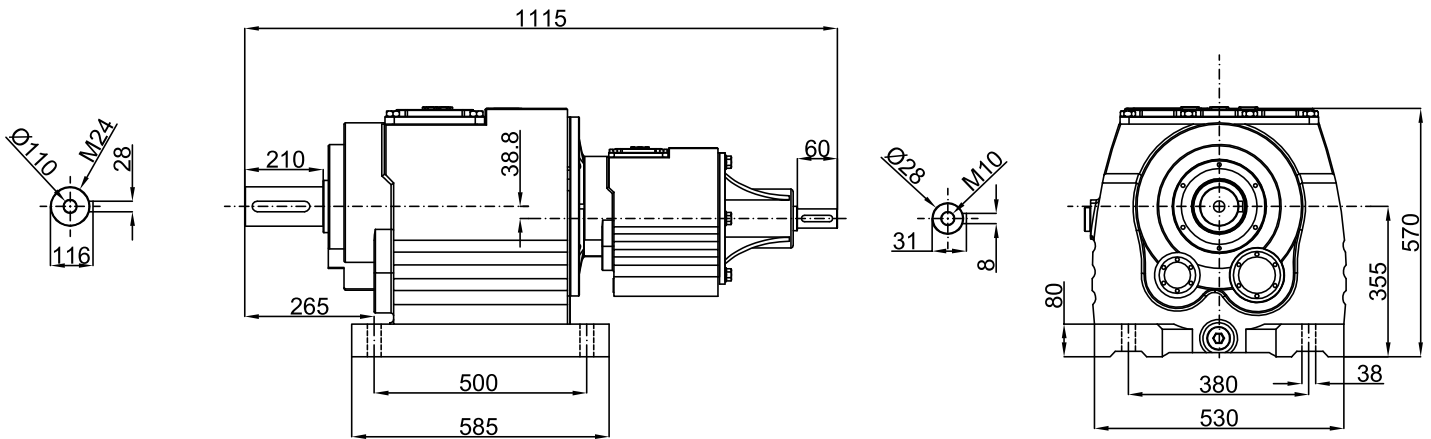


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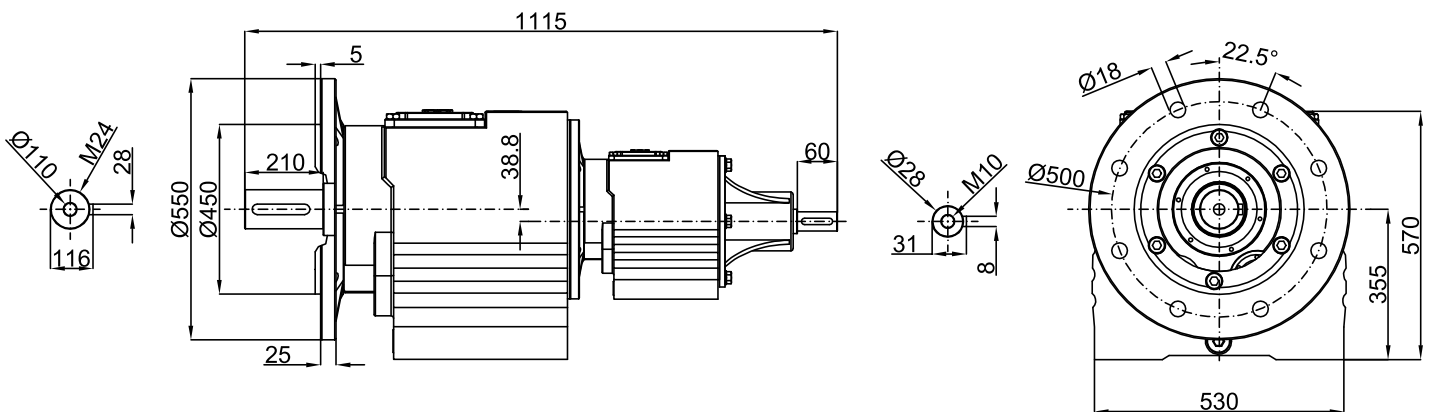


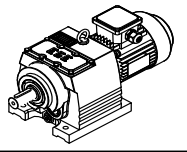


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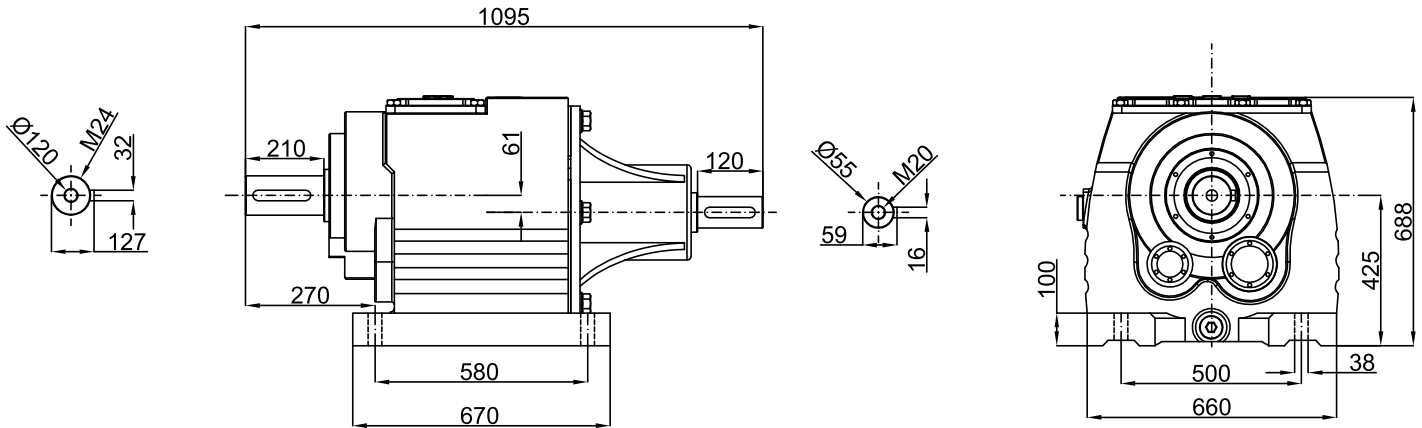


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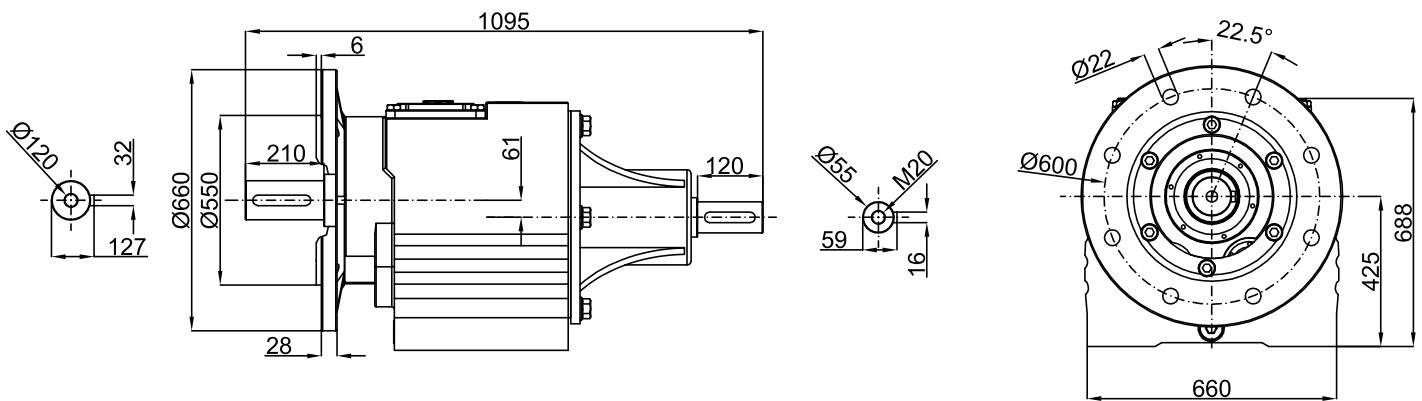


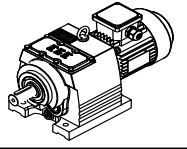


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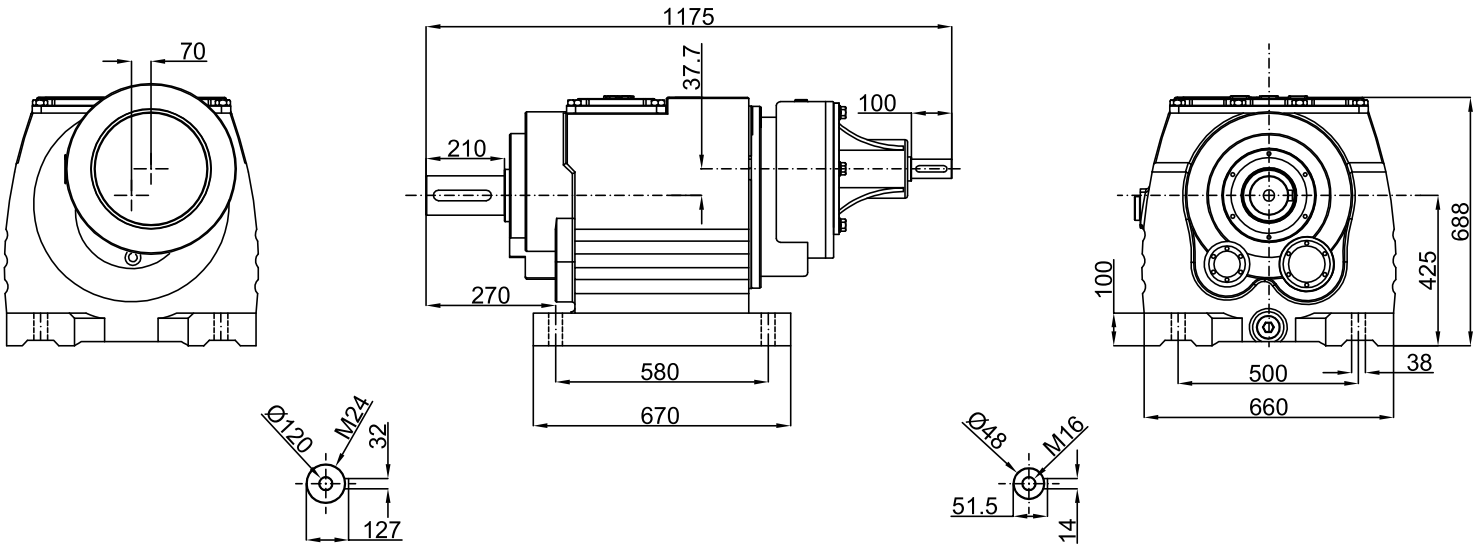


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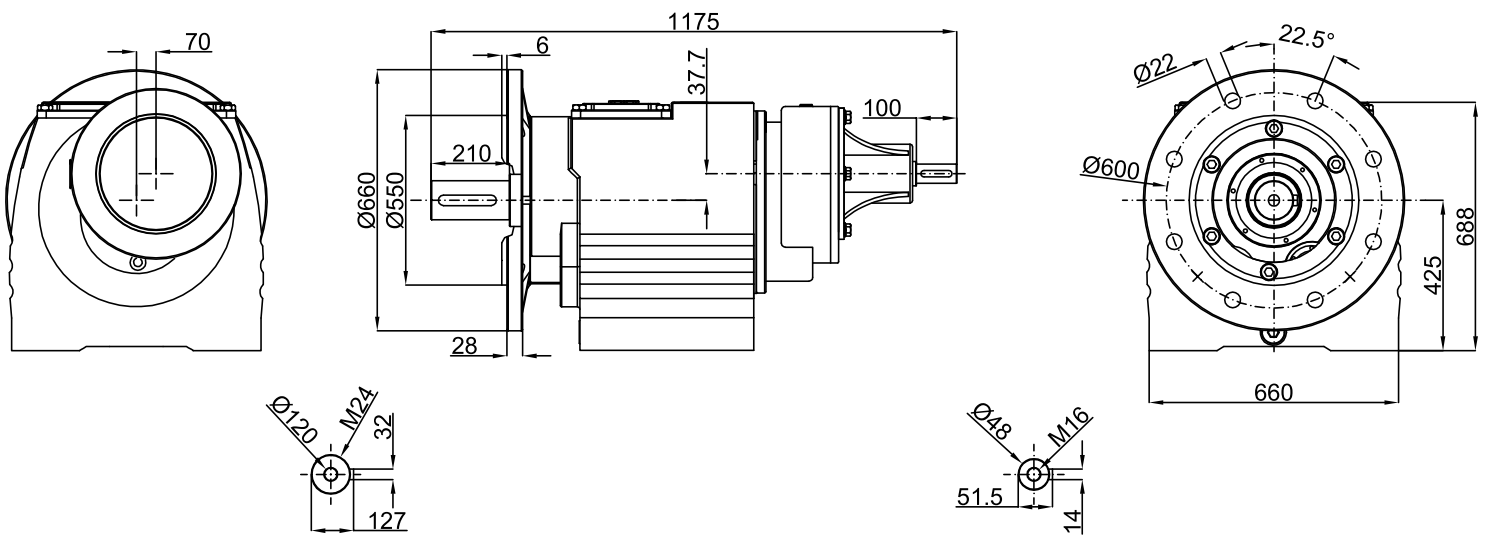


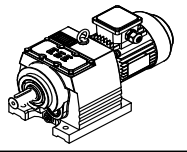


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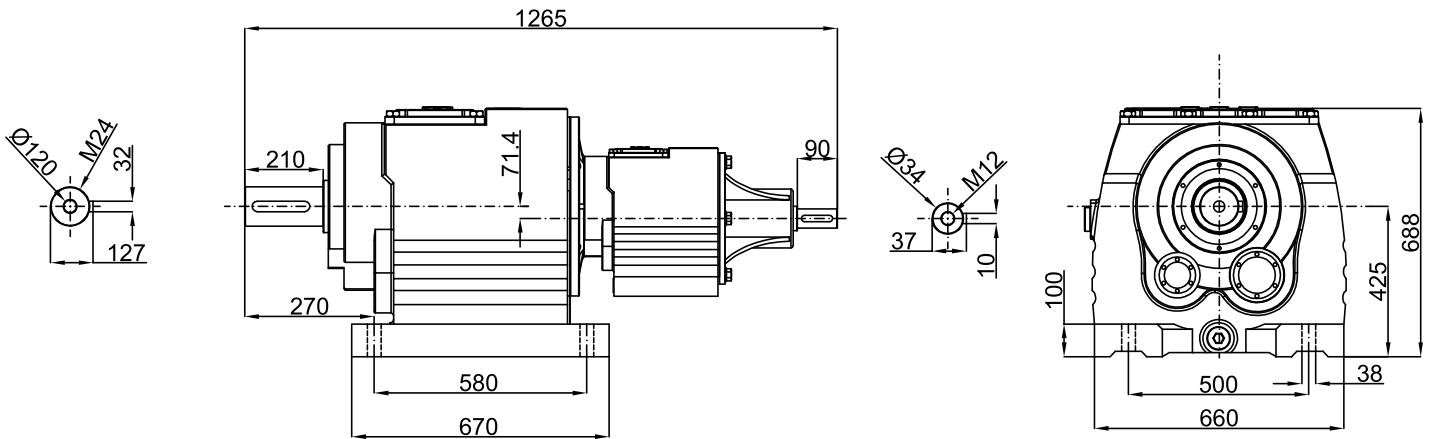


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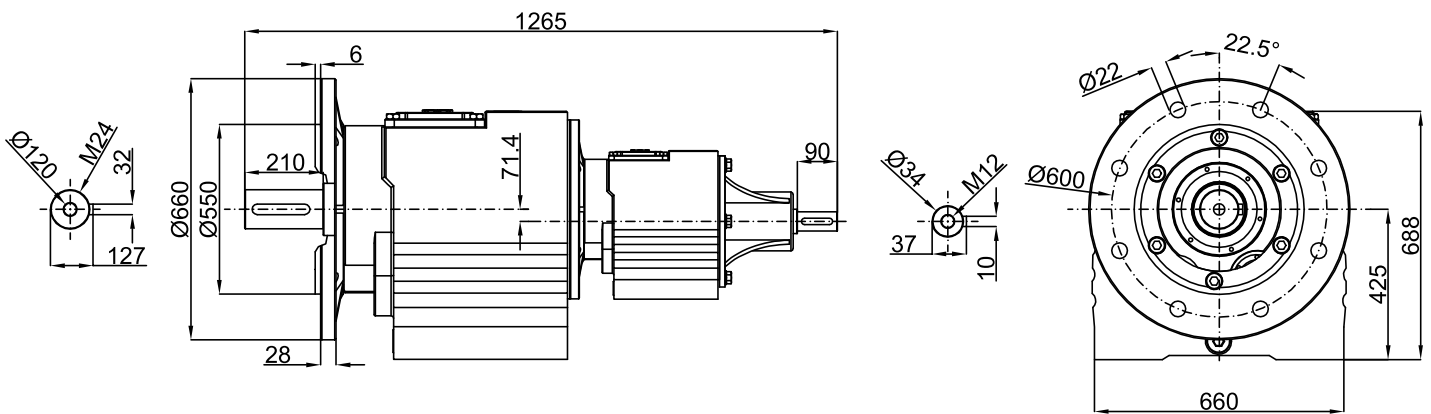




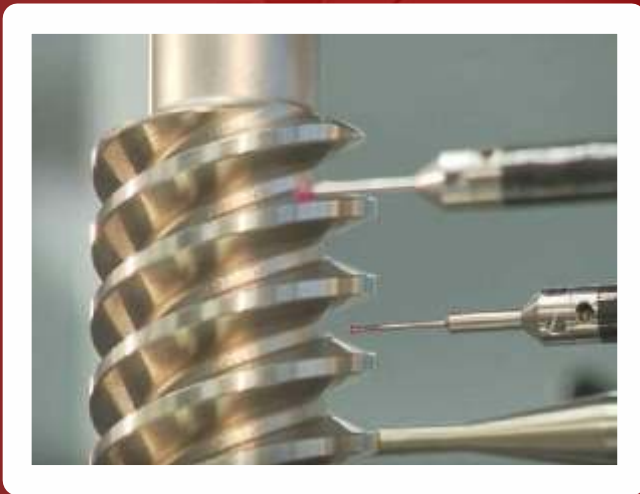
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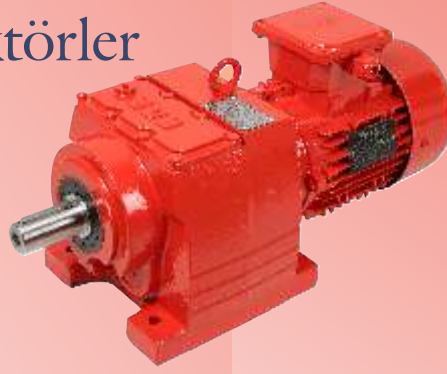


# EGGE REDÜKTÖR



# Monoblok Redüktörler

Monoblock Gearboxes



AR Serisi Delik Şaft Milli Tek Kademeli Redüktörler  
AR Series Gearboxes With Hollow Shaft Axle One Transmission

EP Serisi Delik Şaft Milli 1-2 Kademeli Redüktörler  
EP Series 1-2 Stage Hellical Geared Gearboxes With Hollow Shaft



EK Serisi Yatık Paralel Milli Ekstruder Redüktörler  
EK Series Horizontal Parallel Extruder Type Gearboxes

ED Serisi Delik Şaft Milli Monoblok Gövdeli Redüktörler  
ED Series Hellical Geared Gearboxes With Monobloc Body And Hollow Shaft



K Serisi Yatık Paralel Milli  
2-3-4 Kademeli Redüktörler

K Series Horizontal Parallel Axle 2-3-4 Stages Gearboxes

ERS Serisi Alüminyum Enjeksiyon Gövdeli  
Sonsuz Vidalı Redüktörler

ERS Series Worm Geared Gearboxes With Aluminium Injection Body



ERS Serisi Döküm Gövdeli Sonsuz  
Vidalı Redüktörler

ERS Series Worm Geared Gearboxes With Cast Iron Body

EA Serisi Helisel Dişlili Redüktörler

EA Series Hellical Geared Gearboxes



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