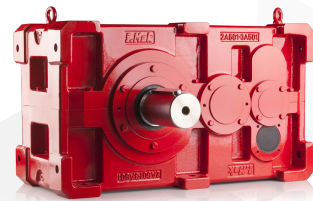




Ağır Hizmet Tipi Redüktörler

Horizontal Helical Gear Unit
Motoréducteurs hélicoïdaux à usage industriel

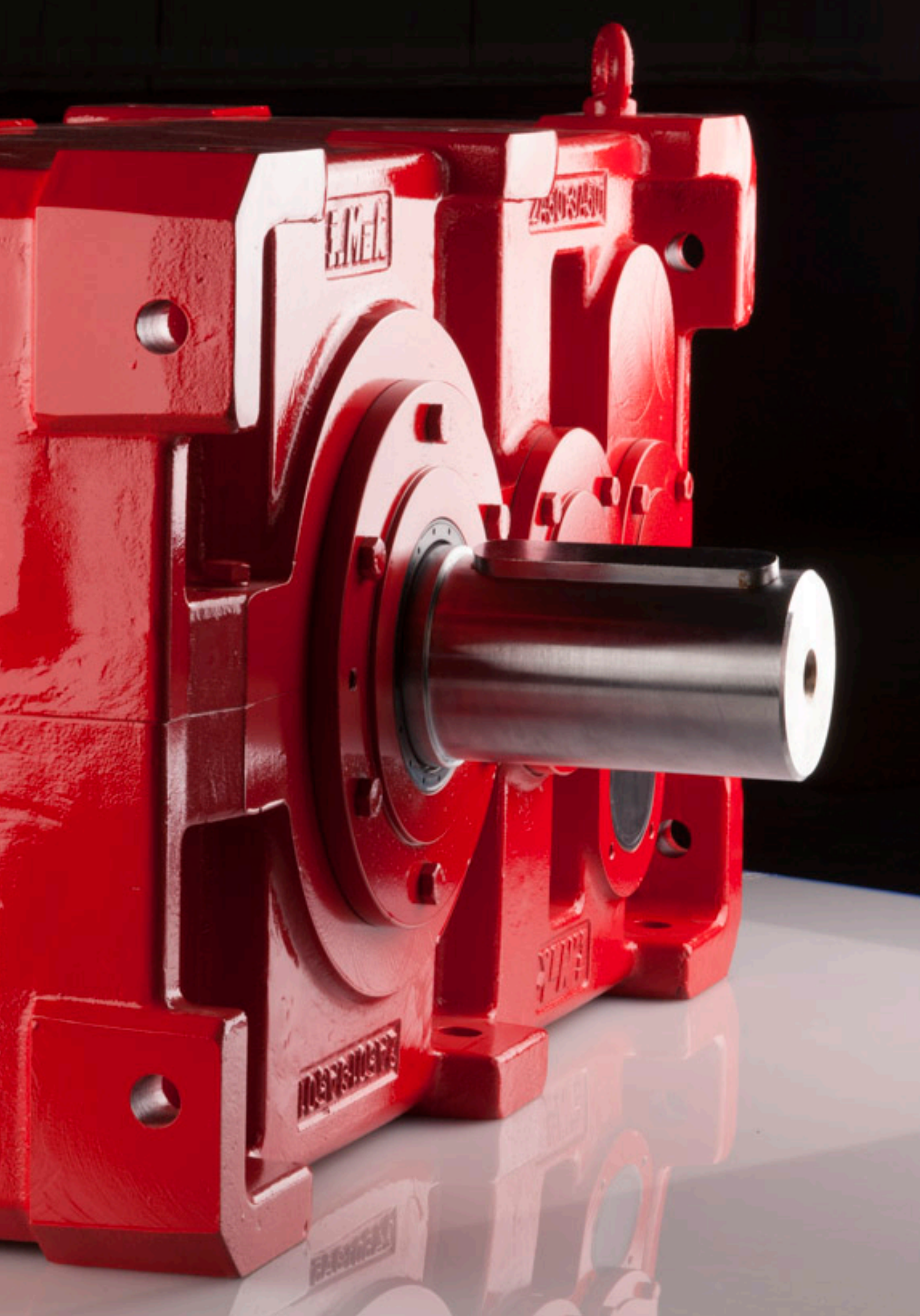
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SERIES
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Gearboxes and Drives / Moto Réducteurs



| | |
|--|-----------|
| A Serisi Redüktörlerin Genel Özellikleri Descriptions and Specifications of the A Serie <i>Descriptions et spécifications de la serie A</i> | 1 |
| Redüktör Bağlantı Varyasyonları Mounting Options and Variations of Gearbox / <i>Options de montage et d'accouplement</i> | 3 |
| Redüktör Komponent Varyasyonları Gearboxes Components Variations / <i>Options et variations (réducteur)</i> | 4 |
| Servis Faktörü Service Factor / <i>Service facteur</i> | 5 |
| Redüktör Yükleme Karakteristikleri Load Characteristics of Gearboxes / <i>Types de machines et applications</i> | 6 |
| Radyal Yükler Overhung Loads / <i>Charges radiales</i> | 10 |
| Motor İşletme Değerleri Motor Performance / <i>Performance moteurs</i> | 13 |
| Frenler Brakes / <i>Freins</i> | 15 |
| Fren Seçim Tablosu Brake Selection Table / <i>Table de sélection des freins</i> | 17 |
| Yağ Tablosu Lubricant Table / <i>Huiles et lubrifiants</i> | 18 |
| Montaj Pozisyonları ve Yağ Miktarları Mounting Positions and Oil Quantities / <i>Positions de montage et quantités d'huiles</i> | 19 |
| Redüktör Sipariş Gearbox Ordering / <i>Commandez votre réducteur</i> | 21 |
| Kontrol ve Bakım Control and Maintenance Gearboxes / <i>Contrôle et maintenance des réducteurs</i> | 22 |
| Sertifikalarımız Certifications / <i>Certificats</i> | 23 |
| MA Serisi Redüktörler Güç ve Devir Tabloları Power Ratings and Output Speed Table for MA Series / <i>MA Series puissances et vitesses de sorties</i> | 24 |
| MA Serisi Redüktörler Ölçü Sayfaları Dimensions Pages / <i>Dimensions</i> | 57 |

Monoblok Helisel Dişlililer Redüktörler Yedek Parça Şeması
General Parts List / *Liste des pièces détachées*

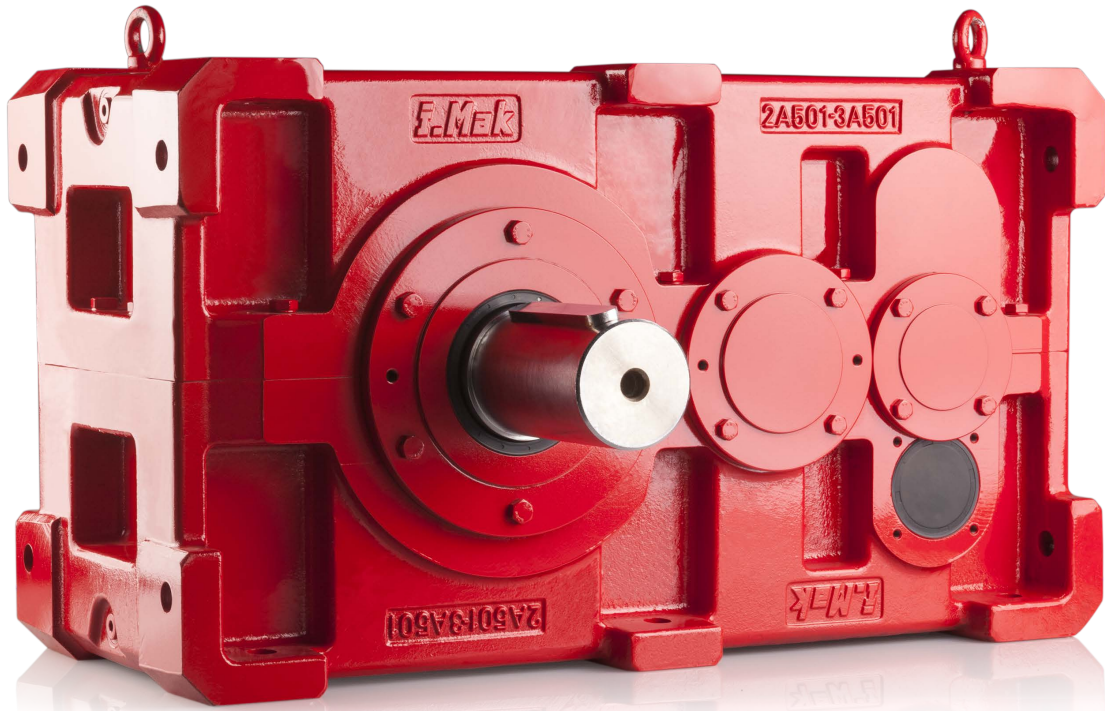
78

Genel Bilgiler

General Information
Informations g n rales

A

SERİSİ / SERIES / SÉRIES



- 8 Farklı gövde büyüklüğü
- 880 – 33000 Nm moment aralığı
- 4 – 487 Tahvil aralığı

- 8 Size of housing
- Torque range from 880 to 33000 Nm
- Ratio range from 4 to 487

- 8 tailles de carter
- Couple allant de 880 à 33000 Nm
- Rapport de réduction compris entre 4 et 487

| Redüktör Opsiyonları | | Gearboxes options | Options des motoréducteurs |
|----------------------|----------------------|------------------------|--------------------------------|
| Kod / Code | Opsiyon | Options | Options |
| EL | Ekstruder | Extruder | Extruder |
| OTS | Yağ sıcaklık sensörü | Oil temperature sensor | Capteur de température d'huile |

| | Çıkış Mili | Output shaft | Arbre de sortie |
|------------|-----------------------|--------------------------|--------------------------------|
| Kod / Code | Varyasyon | Options | Options |
| 111 | Özel mil ölçüsü | Special shaft dimensions | Dimensions de l'arbre spéciale |
| 112 | Özel mil malzemesi | Special shaft materials | Matériel de l'arbre spéciale |
| 113 | Sertleştirilmiş mil | Hardened shaft | Axe durci |
| 114 | Diş çekilmiş mil | Screw | Axe à vis |
| 115 | Çoklu kama uygulaması | Shaft with multiple key | Arbre à multi clavette |

| | Giriş Mili | Input shaft | Bride pam |
|------------|-----------------------|---------------------------|--------------------------------|
| Kod / Code | Varyasyon | Options | Options |
| 131 | Özel mil ölçüsü | Dimensions of the shaft | Dimensions de l'arbre spéciale |
| 132 | Özel mil malzemesi | Material of special shaft | Matériaux de l'arbre spéciale |
| 133 | Sertleştirilmiş mil | Hardened steel shaft | Arbre en acier trempé |
| 134 | Çoklu kama uygulaması | Hollow shaft with screw | Arbre creux a vis |
| 135 | Özel alın mili | Special input shaft | Arbre d'entrée spéciale |
| 136 | Diş çekilmiş mil | Shaft with screw | Arbre de sortie avec vis |
| 137 | Kaplin bağlantısı | Connection coupling | Couplage de connexion |

| | Yağ | Oil | Huiles |
|------------|------------------------------------|---|---|
| Kod / Code | Varyasyon | Options | Options |
| 211 | Sentetik yağ VG 220 (SHC 630) | Synthetic oil VG 220 (SHC 630) | Huile synthétique VG 220 (SHC 630) |
| 212 | Gıda uyumlu yağ VG 220 (CIBUS 220) | Food compatible oil VG 220 (CIBUS 220) | Huile pour industrie agroalimentaire VG 220 (CIBUS 220) |
| 213 | -40C° Uyumlu yağ VG 220 (SHC 630) | Cold resistant oil -40C° VG 220 (SHC 630) | Huile base température -40C° VG220 (SHC 630) |

| | Keçe - Tapa | Seal - Cover | Joint - Bouchon |
|------------|--------------------------|-------------------------------|---------------------------------|
| Kod / Code | Varyasyon | Options | Options |
| 221 | Özel ölçü keçe | Dimensions of special seal | Dimensions du joint spéciale |
| 222 | Özel ölçü tapa | Dimensions of special cover | Dimensions du bouchon spéciale |
| 223 | Özel marka keçe | Special brand of seal | Marque du joint spéciale |
| 224 | Özel marka tapa | Special brand of cover | Marque du bouchon spéciale |
| 225 | Viton keçe | Viton seal | Joint en viton |
| 226 | Özel tip keçe uygulaması | Special configuration of seal | Configuration spéciale du joint |

| | Redüktör Rulmanı | Gearboxes Bearing | Roulement des motoréducteurs |
|------------|------------------------------|-------------------------------|----------------------------------|
| Kod / Code | Varyasyon | Options | Options |
| 231 | Güçlendirilmiş çıkış rulmanı | Reinforced output bearing | Roulement renforcé (Sortie) |
| 232 | Güçlendirilmiş giriş rulmanı | Reinforced input bearing | Roulement renforcée (Entrée) |
| 233 | Özel marka rulman | Special brand of bearing | Marque du roulement spéciale |
| 234 | Özel ölçü rulman | Special dimensions of bearing | Dimensions du roulement spéciale |
| 235 | Mekanik kilit CW* | Backstop bearing (CW) | Roulement anti-retour (CW) |
| 236 | Mekanik kilit CCW* | Backstop bearing (CCW) | Roulement anti-retour (CCW) |

| | Gövde | Housing | Carter |
|------------|---------------------|---------------------------|--------------------------------|
| Kod / Code | Varyasyon | Options | Options |
| 241 | Özel işlenmiş gövde | Special housing | Carter spéciale |
| 242 | Özel malzeme | Special housing materials | Carter avec matériaux spéciaux |

| | Boya | Paint | Peinture |
|------------|--------------------------|----------------------|--|
| Kod / Code | Varyasyon | Options | Options |
| 251 | Özel renk boya | Special paint color | Couleur spéciale |
| 252 | Özel tip boya | Special paint type | Type de peinture spéciale |
| 253 | Epoksi boya | Epoxy paint | Peinture epoxy |
| 254 | Akrilik boya (dış ortam) | Acrylic paint | Peinture acrylique (Environnement extérieur) |
| 255 | Su bazlı boya | Water based paint | Peinture à base d'eau |
| 256 | Antikorozyon boya | Anti-corrosion paint | Peinture anti-corrosion |

| | Dişli | Gears | Pignons |
|------------|---------------------|------------------------|--|
| Kod / Code | Varyasyon | Options | Options |
| 261* | Özel imalat dişli | Special gear | Pignons spéciaux |
| 262 | Katalog dışı tahvil | Gear ratio (Catalogue) | Rapport de réduction des pignons (Catalogue) |

* 261 kodu, 262 kodunu kapsamaktadır. / 261 and 262 codes are equivalent. / Les codes 261 et 262 sont équivalents.

Servis Faktörü (S_f)

Servis Faktörü = İşletme Katsayısı = (S_f)

Redüktörlerdeki bu değer, tahrik edeceği makinenin bütün teknik ve karakteristik özelliklerine dayanma süresine bağlıdır. Genel olarak makineler yüklenme bakımından üç tip karakteristik gösterirler.

1. HAFİF YÜK (U)
2. ORTA YÜK (M)
3. AĞIR YÜK (H)

Üç değişik yükleme biçiminde çalışan, üç ayrı makinede üretilen momentler birbirine eşitte olsalar, ağır çalışan makinede daha büyük işletme katsayılı Redüktör kullanılmaktadır.

Günlük çalışma saati ise, çalışan dişli ve transmisyon elemanlarının malzeme yorulmasına maruz kalması bakımından, çalışma saatinin fazla olması halinde zararlı yönde etki eder.

Star-Stop durumuna gelince, her makinenin ilk kalkış esnasında en yüksek yüke maruz kaldığı düşünülürse tehlikeli görülür. Müteakip çalışmalarda bu daha aşağıya düşer.

Kataloğumuzda işletme katsayılarının nasıl kullanıldığının anlaşılması için bir misal ile belirtelim.

Önce tablo-1'den makinenin çalışma sahasına göre karakteristiğini belirleyelim. Makinemiz elektrik motor tahrikli ZİNCİR KOVALI EKSKAVATÖR ise yükleme durumu AĞIR' dır. (H) Tablo 2'den makine 24 saat çalışacağına göre minimum işletme katsayısı $S_f = 2$ bulunur.

Service Factor (S_f)

Value of the service factor of a gearbox depends on all technical and characteristic specifications of a driven machine. Generally machines have three types of loading characteristics:

1. UNIFORM LOAD (U)
2. MODERATE LOAD (M)
3. HEAVY LOAD (H)

Even if the torques required by three different machines operating at three different load specifications are equal.

Gearbox of the machine operating under heavy load conditions should have greater service factor.

Daily working period has effect on gearbox elements due to the materials fatigue of working parts.

It must be taken into account that all machines are subject to the greatest load at the first start, so that the number of starts has also effect on service factor.

This is an example how to use the service factor given in the catalogue.

Load specification of machine should be determined first, from table 1 in our example, the machine is CHAIN BUCKET EXCAVATOR driven by electric motor has HEAVY load specification and daily operation time is 24 hours. So that minimum service factor $S_f = 2$ is taken from Table 2.

Service facteur (S_f)

La valeur du service facteur d'un motoréducteur dépend des caractéristique de l'application. Ont distingue trois type de charges différentes

1. Charges uniformes (U)
2. Charges modérées (M)
3. Charges élevées (H)

Les spécifications des charges restent les même lorsque trois machines différentes sont soumises à des charges distinctes.

Les réducteurs utilisés dans des applications soumises à de fortes charges doivent obligatoirement avoir des services facteurs élevés.

Le nombre d'heures d'utilisations journalières a une influence directe sur l'usure des pièces et composants du réducteur.

Le réducteur est soumis à une charge maximale lors du démarrage de l'application. Le nombre d'arrêt/rédémarrage est donc à prendre en compte lors de l'analyse du service facteur.

L'exemple çı-dessous explique le processus d'analyse et de calcul du service facteur.

L'application étudiée est un excavateur a godets (Tableau 1) , le réducteur est actionné par un moteur électrique. La charge est "élevée" et la durée de fonctionnement journalière est de 24h. En se basant sur le tableau 2, le service facteur minimum requis est $S_f = 2$

| Ekskavatörler | | Excavators | | Excavateur | |
|-----------------------------|---|--------------------------------|---|-----------------------|---|
| Zincir kovalı ekskavatörler | H | Chain-Bucket excavators | H | Excavateurs à gaudets | H |
| Paletli yürüyüşler | H | Travelling gears (Caterpillar) | H | Convoyeur à étage | H |
| Ray üzerinde yürüyüşler | M | Travelling gears (Rails) | M | Convoyeur à rails | M |
| Manevra mekanizmaları | U | Manoevring winches | U | Grues à manœuvre | U |
| Emiş pompaları | M | Pumps | M | Pompes | M |
| Kovalı çarklar | H | Bucket wheels | H | Roue à gaudets | H |
| Dönüş mekanizmalar | M | Slewing gears | M | Pignons rotatif | M |

| İnşaat Makinaları | | Building Machines | | Machine de Construction | |
|-----------------------|---|----------------------------|---|---------------------------------|---|
| İnşaat asansörleri | U | Hoists | U | Grues de construction | U |
| Betoniyerler | M | Concrete mixers | M | Malaxeur à béton | M |
| Yol inşaat makinaları | M | Road construction machines | M | Machine de construction(routes) | M |

| Kaldırma ve İletme Tesisleri | | Conveyor | | Convoyeurs | |
|--|---|--------------------------------|---|-------------------------------|---|
| Zincirli konveyör | M | Through chain conveyors | M | Convoyeurs à chaines | M |
| Mafsal bantlı konveyörler | M | Link conveyors | M | Convoyeur à bande souple | M |
| Lastik bantlı konveyörler (Dökme Yükler) | U | Belt conveyors (Bulk Goods) | U | Convoyeur à bande rigide | U |
| Lastik bantlı elevatörler | M | Ballast elevators | M | Elevateurs à bande | M |
| Lastik cepli elevatörler | M | Ballast pocket elevators | M | Elevateur à poche | M |
| Lastik bantlı konveyörler (Parça Yükler) | M | Belt conveyors (Piece Goods) | M | Convoyeur à bande | M |
| Askılı konveyörler | U | Chain conveyors | U | Convoyeur à chaines | U |
| Yük asansörleri | M | Goods lifts | M | Elévateur à chaines | M |
| Kovalı elevatörler (Toz Malzeme) | U | Bucket elevators (Flour Goods) | U | Elévateur à godets (graviers) | U |
| Helezon konveyör | M | Screw conveyors | M | Vis d'Archimède | M |
| Kovalı elevatörler (Parçalı Malzeme) | M | Bucket elevators (Piece Goods) | M | Elévateurs à godets (Roches) | M |
| Eğik asansörler | H | Inclined hoists | H | Grues inclinées | H |
| Çelik bantlı konveyörler | M | Steel belt conveyors | M | Convoyeur à bande (Acier) | M |
| Paletli konveyörler | M | Apron conveyors | M | Convoyeurs à palettes | M |

| Tahrik Makinası Torque Machine Machines couplées | Günlük Çalışma Müddeti (Saat) Daily Working Period (Hour) Utilisation journalière (Heure) | Makinanın Yükleme Karakteristiği Load Characteristics of Machines Caractéristique des charges | | |
|---|--|---|---|---|
| | | Hafif Yük U Uniform Load U Charge uniforme U | Orta Yük M Moderate Load M Charge modérée M | Ağır Yük H Heavy Load H Charge élevée H |
| Elekt. Motorlu / Elect. Motor / <i>Moteurs élect.</i> Türbin / Turbin / <i>Turbine</i> Hidrolik / Hydraulic / <i>Hydraulique</i> | 0.....3 | 0.8 | 1 | 1.5 |
| | 3....10 | 1 | 1.25 | 1.75 |
| | 10...24 | 1.25 | 1.5 | 2 |
| Pistonlu Makinalar (4....6 Silindir Piston Machines (4....6 Cylinder) <i>Machine à pistons (4.....6 Cylindres)</i> | 0.....3 | 1 | 1.25 | 2 |
| | 3....10 | 1.25 | 1.5 | 2 |
| | 10...24 | 1.5 | 1.75 | 2 |
| Pistonlu Makinalar (1....2 Silindir Piston Machines (1....2 Cylinder) <i>Machine à pistons (1.....2 Cylindres)</i> | 0.....3 | 1.25 | 1.5 | 2 |
| | 3....10 | 1.5 | 1.75 | 2.25 |
| | 10...24 | 1.75 | 2 | 2.5 |

| Kimya Endüstrisi | | Chemical Industry | | Industrie Chimique | |
|-----------------------------------|---|----------------------------|---|-----------------------------|---|
| Soğutma tamburları | M | Cooling drums | M | Tambours de refroidissement | M |
| Karıştırıcılar | M | Mixers | M | Mixeurs | M |
| Çalkalayıcılar (Hafif Akışkanlar) | U | Agitators (Liquids) | U | Agitateurs (Liquides) | U |
| Çalkalayıcılar (Ağır Akışkanlar) | M | Agitators (Semi Liquids) | M | Agitateurs (Semi liquide) | M |
| Tambur kurutucuları | M | Drying drums | M | Tambours de séchage | M |
| Sanrifüjler | U | Centrifuges (Lights) | U | Centrifugeuse (Légère) | U |
| Sanrifüjler | H | Centrifuges (Heavy) | H | Centrifugeuse (Lourde) | H |

| Petrol Endüstrisi | | Oil Industry | | Pétrole et Hydrocarbures | |
|-------------------------|---|---------------------------|---|--------------------------|---|
| Boru hattı pompaları | M | Pipeline pumps | M | Pompes à oléoducs | M |
| Kuyu açma mekanizmaları | H | Rotary drilling equipment | H | Foreuse à cylindres | H |

| Ventilatör Ve Aspiratörler | | Fans | | Ventilations | |
|----------------------------------|---|------------------------------|---|------------------------------|---|
| Pistonlu ventilatörler | M | Rotary piston blowers | M | Souffleurs rotatifs | M |
| Ventilatör (Aksiyal ve Radyal) | U | Blowers (Axial and Radial) | U | Souffleurs (Axe et radial) | U |
| Santrifüj (türbinli) körük | H | Centrifugal | H | Centrifugeuse | H |

| Kauçuk Makinaları | | Rubber Machines | | Industrie du Caoutchouc | |
|------------------------|---|-------------------------|---|-------------------------|---|
| Ekstruder ve kanderler | H | Extruders and calenders | H | Extrudeuse | H |
| Yoğurma makinaları | H | Pug mills | H | Malaxeur | H |
| Karıştırıcılar | M | Mixers | M | Mixeurs | M |
| Silindirme makinaları | H | Rolling mills | H | Presse | H |

| Ağaç İşleme Makinaları | | Wood Working Machine | | Industries Forestières | |
|------------------------|---|-----------------------|---|------------------------|---|
| Yontma tamburları | H | Backers | H | Presse à bois | H |
| Planya makinaları | M | Planing machines | M | Aplanisseuses | M |
| Ağaç işleme tezgahları | U | Wood working machines | U | Découpe de bois | U |
| Şerit testereleler | H | Band saws | H | Scie | H |

| Yıkama Makinaları | | Washing Machines | | Laveuses | |
|----------------------|---|------------------|---|-------------------|---|
| Yıkama makinaları | U | Washing machines | U | Machine de lavage | U |
| Tamburlu kurutucular | M | Tumblers | M | Tambours | M |

| Tahrik Makinası Torque Machine Machines couplées | Günlük Çalışma Müddeti (Saat) Daily Working Period (Hour) Utilisation journalière (Heure) | Makinanın Yükleme Karakteristiği Load Characteristics of Machines Caractéristique des charges | | |
|---|--|---|---|---|
| | | Hafif Yük U Uniform Load U Charge uniforme U | Orta Yük M Moderate Load M Charge modérée M | Ağır Yük H Heavy Load H Charge élevée H |
| Elekt. Motorlu / Elect. Motor / <i>Moteurs élect.</i> Türbin / Turbin / <i>Turbine</i> Hidrolik / Hydraulic / <i>Hydraulique</i> | 0....3 | 0.8 | 1 | 1.5 |
| | 3....10 | 1 | 1.25 | 1.75 |
| | 10...24 | 1.25 | 1.5 | 2 |
| Pistonlu Makinalar (4....6 Silindir Piston Machines (4....6 Cylinder) <i>Machine à pistons (4.....6 Cylindres)</i> | 0....3 | 1 | 1.25 | 2 |
| | 3....10 | 1.25 | 1.5 | 2 |
| | 10...24 | 1.5 | 1.75 | 2 |
| Pistonlu Makinalar (1....2 Silindir Piston Machines (1....2 Cylinder) <i>Machine à pistons (1.....2 Cylindres)</i> | 0....3 | 1.25 | 1.5 | 2 |
| | 3....10 | 1.5 | 1.75 | 2.25 |
| | 10...24 | 1.75 | 2 | 2.5 |

| Vinç Tesisleri | | Cranes | | Grues | |
|--------------------|---|--------------------------|---|------------------|---|
| Bom kaldırma | H | Derricking jib bomm gear | H | Bras ouvrant | H |
| Vinç yürüyüşerleri | U | Travelling gears | U | Grues(Charriot) | U |
| Yük kaldırma | H | Hoist gears | H | Grues | H |
| Dönüş tertibatları | U | Slewing gears | U | Pignons rotatifs | U |

| Metal İşleme Makinaları | | Metal Working Machines | | Métallurgie et Acieries | |
|--------------------------------------|---|---------------------------------------|---|----------------------------------|---|
| Planya makineleri | S | Planing machine | S | Aplaniseuses | S |
| Çekiç tokmak | S | Hammer | S | Marteau | S |
| Oyma makinesi | S | Engraving machine | S | Graveuses | S |
| Presler | H | Presses | H | Presses | H |
| Makaslar (Giyotin) | M | Shears | M | Découpeuses | M |
| Sıcak basma presleri | H | Forging presses | H | Presse à forge | H |
| Takım tezgahları (Ana Tahrir) | M | Machines tools (Main Drives) | M | Machine outil (Axe principal) | M |
| Takım tezgahları (Yardımcı Tahrir) | U | Machines tools (Auxiliarily Drives) | U | Machine outil (axe secondaire) | U |

| Gıda Endüstri Makinaları | | Food Industry Machines | | Industrie Agroalimentaire | |
|---|---|--|---|---------------------------|---|
| Doldurma makinaları (Şişe, Kavanoz vs.) | U | Filling machines (Bottles, Contaniers.) | U | Embouteilleuse | U |
| Yoğurma makinaları | M | Kneading machines | M | Malaxeurs | M |
| Ambalaj makinaları | U | Packaging machines | U | Machine d'emballage | U |
| Şeker kamışı kırıcıları | M | Cane crushers | M | Presse à canne | M |
| Şeker kamışı kesicileri | M | Cane cutters | M | Découpeuse de canne | M |
| Şeker kamışı öğütücüleri | H | Cane millis | H | Broyeurs de cannes | H |
| Şeker pancarı kesicileri | M | Sugar beet cutters | M | Découpeuse de betteraves | M |
| Şeker pancarı yıkayıcıları | M | Suger beet washers | M | Laveuse à betteraves | M |

| Pompalar | | Pumps | | Pompes | |
|---------------------------------------|---|------------------------------------|---|---------------------------------------|---|
| Pistonlu pompalar (Q1 / 100) | H | Piston pumps (Q1 / 100) | H | Pompes à piston (Q1 / 100) | H |
| Pistonlu pompalar (Q1 / 100 : 1 / 20) | M | Piston pumps (Q1 / 100 : 1 / 20) | M | Pompes à piston (Q1 / 100 : 1 / 20) | M |
| Türbin (Hafif Akışkan) | U | Turbin (Light - Liquids) | U | Turbine (Liquides légers) | U |
| Türbin (Ağır Akışkan) | M | Turbin (Semi - Liquids) | M | Turbine (Semi-liquide) | M |

| Tahrir Makinası Torque Machine Machines couplées | Günlük Çalışma Müddeti (Saat) Daily Working Period (Hour) Utilisation journalière (Heure) | Makinanın Yükleme Karakteristiği Load Characteristics of Machines Caractéristique des charges | | |
|---|--|---|---|---|
| | | Hafif Yük U Uniform Load U Charge uniforme U | Orta Yük M Moderate Load M Charge modérée M | Ağır Yük H Heavy Load H Charge élevée H |
| Elekt. Motorlu / Elect. Motor / Moteurs élect. Türbin / Turbin / Turbine Hidrolik / Hydraulic / Hydraulique | 0....3 | 0.8 | 1 | 1.5 |
| | 3....10 | 1 | 1.25 | 1.75 |
| | 10...24 | 1.25 | 1.5 | 2 |
| Pistonlu Makinalar (4....6 Silindir Piston Machines (4....6 Cylinder) Machine à pistons (4....6 Cylindres) | 0....3 | 1 | 1.25 | 2 |
| | 3....10 | 1.25 | 1.5 | 2 |
| | 10...24 | 1.5 | 1.75 | 2 |
| Pistonlu Makinalar (1....2 Silindir Piston Machines (1....2 Cylinder) Machine à pistons (1....2 Cylindres) | 0....3 | 1.25 | 1.5 | 2 |
| | 3....10 | 1.5 | 1.75 | 2.25 |
| | 10...24 | 1.75 | 2 | 2.5 |

| Kağıt Endüstri Makinaları | | Paper Industry Machines | | Indusrtie Papetière | |
|---------------------------|---|-------------------------|---|------------------------|---|
| Düzleme silindirleri | H | Glazing Cylinders | H | Cylindres appliniseurs | H |
| Holender | M | Hollenders | M | Holenders | M |
| Kağıt hamur makineleri | H | Pulpers | H | Pulpeuses | H |
| Kalender | H | Calender | H | Calendrier | H |
| Taş presler | H | Stone Presses | H | Presse | H |
| Vakum presler | H | Vacum Presses | H | Presse à aspiration | H |
| Kuru silindirler | H | Drying Cylinders | H | Cylindres de séchage | H |

| Taş ve Kil Makinaları | | Stone and Clay Working Machines | | Roches et Argiles | |
|-----------------------|---|---------------------------------|---|-----------------------|---|
| Kırıcılar | H | Breakers | H | Broyeurs | H |
| Döner fırınlar | M | Rotary ovens | M | Four rotatifs | M |
| Çekiçli değirmenler | H | Hammer mills | H | Broyeux à marteaux | H |
| Bilyalı değirmenler | H | Ball mills | H | Broyeurs à billes | H |
| Çarpmalı öğütücüler | H | Beater mills | H | Broyeux à percussions | H |
| Tuğla presleri | H | Brick presses | H | Presse à pavès | H |

| Tekstil Makinaları | | Textile Machines | | Industrie du Textile | |
|-------------------------------|---|------------------------------|---|-----------------------|---|
| Sargı makinaları (Q1 / 100) | M | Batchers (Q1 / 100) | M | Machines d'emballages | M |
| Basma ve boyama mak. | M | Printing and dyeing machines | M | Presse et imprimante | M |
| Dokuma tezgahları | M | Looms | M | Tisseuse | M |

| Kompresörler | | Compressors | | Compresseurs | |
|-----------------|---|-------------------|---|-------------------|---|
| Turbo kompresör | M | Turbo compressors | M | Turbocompresseurs | M |

| Silindirme ve Çekme Tesisleri | | Metal Rolling Mills | | Acieries | |
|-------------------------------|---|------------------------------|---|---------------------------|---|
| Sac kesme makineleri | H | Sheet metal cutting machines | H | Découpeuses | H |
| Hız ayarlı silindirler | M | Roller adjustment drivers | M | Ajusteuse à presses | M |
| Çubuk kesme makinaları | H | Billet shears | H | Scies | H |
| Kabuk sıyırma makinaları | H | Descaling machines | H | Eplucheuse | H |
| Tel çekme tesisleri | M | Wire drawing machines | M | Enrouleuses | M |
| Soğuk çekme tesisleri | H | Cooling beds | H | Bande de refroidissements | H |
| Rulolu nakil (Hafif) | M | Roller tables (Lights) | M | Enrouleuses (légères) | M |
| Rulolu nakil (Ağır) | H | Roller tables (Heavy) | H | Enrouleuses (lourdes) | H |
| Silindir haddeleme | H | Manipulators | H | Cylindres | H |

| Tahrik Makinası Torque Machine Machines couplées | Günlük Çalışma Müddeti (Saat) Daily Working Period (Hour) Utilisation journalière (Heure) | Makinanın Yükleme Karakteristiği Load Characteristics of Machines Caractéristique des charges | | |
|---|--|---|---|---|
| | | Hafif Yük U Uniform Load U Charge uniforme U | Orta Yük M Moderate Load M Charge modérée M | Ağır Yük H Heavy Load H Charge élevée H |
| Elekt. Motorlu / Elect. Motor / <i>Moteurs élect.</i> Türbin / Turbin / <i>Turbine</i> Hidrolik / Hydraulic / <i>Hydraulique</i> | 0.....3 | 0.8 | 1 | 1.5 |
| | 3....10 | 1 | 1.25 | 1.75 |
| | 10...24 | 1.25 | 1.5 | 2 |
| Pistonlu Makinalar (4....6 Silindir) Piston Machines (4....6 Cylinder) <i>Machine à pistons (4.....6 Cylindres)</i> | 0.....3 | 1 | 1.25 | 2 |
| | 3....10 | 1.25 | 1.5 | 2 |
| | 10...24 | 1.5 | 1.75 | 2 |
| Pistonlu Makinalar (1....2 Silindir) Piston Machines (1....2 Cylinder) <i>Machine à pistons (1.....2 Cylindres)</i> | 0.....3 | 1.25 | 1.5 | 2 |
| | 3....10 | 1.5 | 1.75 | 2.25 |
| | 10...24 | 1.75 | 2 | 2.5 |

Radyal Yüklerin Belirlenmesi

Meydana gelen radyal yükün hesaplanabilmesi için redüktörün çıkış veya giriş miline bağlanan iletme elemanının tipi dikkate alınmalıdır. Aşağıdaki tabloda bazı iletme elemanları faktörleri (f_i) verilmiştir.

| İletme Elemanı | İletme Elemanı Faktörü (f_i) | Açıklama |
|-------------------------|----------------------------------|--------------------|
| Dişli | 1,15 | < 17 diş |
| Zincir Dişli | 1,40 | < 13 diş |
| Zincir Dişli | 1,25 | < 20 diş |
| V- Kayış Kasnakları | 1,75 | Ön Gerilme Kuvveti |
| Düz Kayış Kasnakları | 2,50 | Ön Gerilme Kuvveti |
| Triger Kayış Kasnakları | 1,50 | Ön Gerilme Kuvveti |

Mil üzerindeki radyal yük aşağıdaki formülle hesaplanır:

$$F_R = \frac{Md \cdot 2000}{d_0} \cdot f_i$$

$F_R[N]$ = Radyal Yük

$M_d[Nm]$ = Döndürme Momenti

$d_0[mm]$ = İletme elemanının Ortalama Çapı

f_i = İletme Elemanı Faktörü

Bu değerler gözönüne alınarak hesaplanan sonuçlar doğrultusunda, kataloğumuzda yer alan redüktörlere ait radyal yükleri görerek seçim yapabilirsiniz. Bu tablolarda verilen radyal yükler rulman ömrüne göre belirlenmiş olup $S_f = 1$ şartına ve yükün milin ortasını yüklediği durumlar için verilmiştir.

Determining of Overhung Loads

Type of transmission component mounting output or input shaft has to be consideration to find occurred overhung loads. Some transmission component factor (f_i) is given at the table below.

| Transmission Component | Transmission Component Factor (f_i) | Explanation |
|------------------------|---|-------------|
| Gear | 1,15 | < 17 teeth |
| Sprockets | 1,40 | < 13 teeth |
| Sprockets | 1,25 | < 20 teeth |
| V- Belt Pulleys | 1,75 | Pre-tension |
| Flat Belt Pulleys | 2,50 | Pre-tension |
| Trigger Belt Pulleys | 1,50 | Pre-tension |

Overhung Loads on shaft is find by at the formula below:

$$F_R = \frac{Md \cdot 2000}{d_0} \cdot f_i$$

$F_R[N]$ = Overhung Load

$M_d[Nm]$ = Torque

$d_0[mm]$ = Mean Diameter of Transmission Component

f_i = Transmission Component Factor

You can Choose, by seeing overhung loads belong to gearboxes in our catalog according to determined results by considering these values. The given overhung loads on the tables are determined according to working life, on $S_f = 1$ and force which are applied to the midpoint of the shaft

Calcul des charges radiales

Afin de déterminer les charges radiales en bouts d'arbres il conviens de prendre en compte les paramètre et coefficients suivants. Le coefficient correcteur (f_i) est a appliquer en fonction du type de transmission

| Élément de transmission | Coefficient correcteur (f_i) | Remarques |
|-------------------------|----------------------------------|---------------------------------|
| Pignons | 1,15 | < 17 dents |
| Roue a chaîne | 1,40 | < 13 dents |
| Roue a chaîne | 1,25 | < 20 dents |
| Poulies a gorges | 1,75 | En fonction de la précontrainte |
| Poulies plates | 2,50 | En fonction de la précontrainte |
| Poulies dentées | 1,50 | En fonction de la précontrainte |

La charge radiale en bout d'arbre se calcule en utilisant la formule suivante:

$$F_R = \frac{Md \cdot 2000}{d_0} \cdot f_i$$

$F_R[N]$ = Charge appliquée en bout d'arbre(N)

$M_d[Nm]$ = Couple en Nm

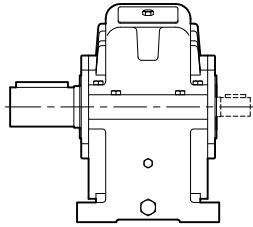
$d_0[mm]$ = Diamètre de l'élément de transmission(mm)

f_i = Coefficient correcteur pour charge radiale

Les résultats sont définis en fonction de la durée de vie et d'utilisation des réducteurs. Les résultats se basent sur les charges radiales appliquées au centre de l'arbre.

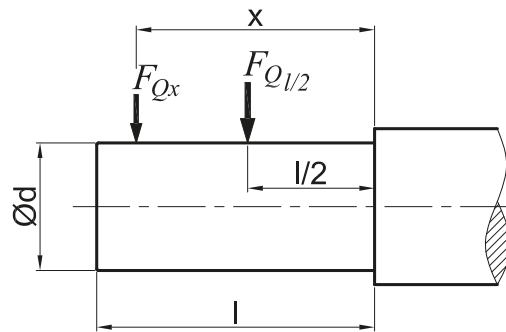
Radyal Yükle Hesabı, Çıkış Miline etkiyen Durum için
Calculation of Overhung Load for State Acting on Output Shaft
Calcul des charges radiales appliquées sur l'arbre de sortie

Radyal Yükle Hesabı için Sabit Değerler Tablosu
Tables of Fixed Values for Calculation of Overhung Load
Tableau des valeurs préétablies pour le calcul des charges radiales



A Serisi / A Series / A Serie

| A Serisi / A Series / A Serie | | | | |
|-------------------------------|--------|--------|-----|-----|
| Tip/Type/Typ | k | c | d | l |
| A 200 | 293.5 | 228.5 | 80 | 130 |
| 2A 200 | 293.5 | 228.5 | 80 | 130 |
| 2A 180 | 227.75 | 187.75 | 45 | 80 |
| 2A 225 | 242 | 197 | 55 | 90 |
| 2A 275 | 270.75 | 218.25 | 65 | 105 |
| 2A 350 | 330.5 | 265.5 | 80 | 130 |
| 2A 430 | 421 | 331 | 105 | 180 |
| 2A 501 | 489.75 | 384.75 | 120 | 210 |
| 3A 430 | 421 | 331 | 105 | 180 |
| 3A 501 | 489.75 | 384.75 | 120 | 210 |
| 3A 750 | 650 | 525 | 140 | 250 |
| 4A 750 | 650 | 525 | 140 | 250 |



Radyal yük, milin orta noktasında değil ise $F_{Qx} = F_{Ql/2} \cdot \frac{k}{c+x}$ formülü ile hesaplanır.

If overhung load is not applied at the midpoint of output shaft; it is calculated by $F_{Qx} = F_{Ql/2} \cdot \frac{k}{c+x}$

Dans le cas où les charges radiales ne sont pas appliquées au centre de l'arbre d'entrée, la formule à appliquer est $F_{Qx} = F_{Ql/2} \cdot \frac{k}{c+x}$

Radyal Yük Hesabı, Giriş Miline etkiyen Durum için

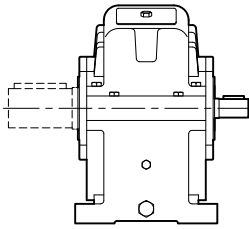
Calculation of Overhung Load for State Acting on Input Shaft

Calcul des charges appliquées sur l'arbre d'entrée

Radyal Yük Hesabı için Sabit Değerler Tablosu

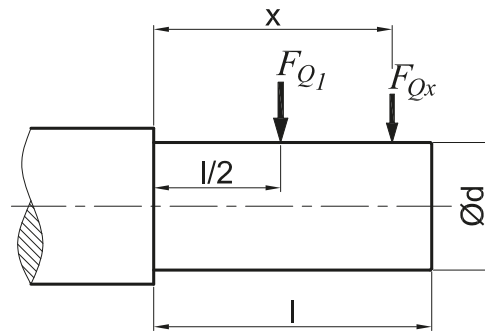
Tables of Fixed Values for Calculation of Overhung Load

Tableau des valeurs préétablies pour le calcul des charges radiales



A Serisi
A Series / A Serie

| A Serisi / A Series / A Serie | | | | |
|-------------------------------|--------|--------|-------|-------|
| Tip/Type/Typ | k | c | d | l |
| A 200 | 269.75 | 162.5 | 48-55 | 80-90 |
| 2A 200 | 264.75 | 154.5 | 38 | 60 |
| 2A 180 | 204.25 | 279 | 24 | 50 |
| 2A 225 | 219.25 | 147.5 | 28 | 60 |
| 2A 275 | 252.75 | 149.5 | 32 | 60 |
| 2A 350 | 297.75 | 180.5 | 42 | 80 |
| 2A 430 | 374.25 | 189.5 | 45 | 80 |
| 2A 501 | 420.25 | 211.5 | 45 | 80 |
| 3A 430 | 372.25 | 193.5 | 42 | 80 |
| 3A 501 | 420.25 | 212.5 | 42 | 80 |
| 3A 750 | 350.5 | 298 | 60 | 105 |
| 4A 750 | 321.25 | 281.25 | 45 | 80 |



Radyal yük, milin orta noktasında değil ise $F_{Qx} = F_{Ql} \cdot \frac{k}{c+x}$ formülü ile hesaplanır.

If overhung load is not applied at the midpoint of input shaft; it is calculated by $F_{Qx} = F_{Ql/2} \cdot \frac{k}{c+x}$

Dans le cas où les charges radiales ne sont appliquées au centre de l'arbre d'entrée, la formule à appliquer est

$$F_{Qx} = F_{Ql/2} \cdot \frac{k}{c+x}$$

1500 d/d Motorlar / 1500 r.p.m. Motors / Moteurs 1500 r.p.m.

| Kod Code Code | Güç (kW) Power (kW) Puissance (kW) | Hız (d/d) Speed (r.p.m.) Vitesse (r.p.m.) | Anma Akımı Rated Current Ampère | Moment (Nm) Torque (Nm) Couple (Nm) | Verim | | IE Sınıfı IE Class Classe IE | Çalışma Sınıfı Duny Type Classe d'utilisation |
|---------------------|--|---|---------------------------------------|---|------------|------|------------------------------------|---|
| | | | | | 100% | 75% | | |
| | | | | | Efficiency | | | |
| | | | | | 100% | 75% | | |
| Efficiency | | | | | | | | |
| 100% | 75% | | | | | | | |
| 63M4a | 0,12 | 1315 | 0,42 | 0,88 | 50,0 | 49,8 | IE1 | S1 |
| 63M4b | 0,18 | 1320 | 0,58 | 1,30 | 57,0 | 56,5 | | |
| 71M4a | 0,25 | 1375 | 0,71 | 1,80 | 68,5 | 66,1 | IE2 | |
| 71M4b | 0,37 | 1375 | 1,12 | 2,50 | 66,0 | 64,9 | | |
| 80M4a | 0,55 | 1410 | 1,55 | 3,70 | 77,1 | 74,5 | IE3 | |
| 80M4b | 0,75 | 1435 | 1,90 | 5,00 | 82,5 | 81,0 | | |
| 90S4a | 1,1 | 1435 | 2,55 | 7,35 | 84,1 | 82,9 | | |
| 90L4a | 1,5 | 1450 | 3,40 | 9,9 | 85,3 | 84,8 | | |
| 100L4a | 2,2 | 1450 | 4,90 | 14,5 | 86,7 | 86,7 | | |
| 100L4b | 3 | 1450 | 6,40 | 19,8 | 87,7 | 87,3 | | |
| 112M4a | 4 | 1450 | 8,20 | 26,3 | 88,6 | 87,8 | | |
| 132S4a | 5,5 | 1460 | 11,5 | 35,8 | 89,6 | 89,3 | | |
| 132M4a | 7,5 | 1460 | 15,9 | 49,1 | 90,4 | 89,1 | | |
| 160M4a | 11 | 1470 | 22,9 | 71,6 | 91,4 | 91,4 | | |
| 160L4a | 15 | 1470 | 30,5 | 97,5 | 92,1 | 90,3 | | |
| 180M4a | 18,5 | 1475 | 36,3 | 120 | 92,6 | 92,5 | | |
| 180L4a | 22 | 1480 | 44,5 | 143 | 93,0 | 92,6 | | |
| 200L4a | 30 | 1470 | 52,5 | 195 | 93,6 | 92,4 | | |
| 225S4a | 37 | 1470 | 64,8 | 240 | 93,9 | 93,6 | | |
| 225M4a | 45 | 1480 | 81,0 | 290 | 94,2 | 93,4 | | |
| 250M4a | 55 | 1480 | 96,0 | 355 | 94,6 | 94,6 | | |
| 280S4a | 75 | 1490 | 128,6 | 481 | 96,0 | 95,2 | IE4 | |
| 280M4a | 90 | 1490 | 153,0 | 577 | 96,1 | 94,5 | | |
| 315S4a | 110 | 1489 | 193,5 | 705 | 96,3 | 95,4 | | |
| 315M4a | 132 | 1488 | 230,0 | 847 | 96,4 | 95,2 | | |
| 315M4b | 160 | 1485 | 271,7 | 1029 | 96,6 | 96,1 | | |
| 315L4a | 185 | 1482 | 317,7 | 1195 | 96,6 | 96,3 | | |
| 315L4b | 200 | 1486 | 347,1 | 1285 | 96,7 | 96,6 | | |
| 355M4a | 250 | 1485 | 460,0 | 1608 | 96,7 | 96,5 | | |
| 355M4b | 315 | 1484 | 535,3 | 2027 | 96,7 | 96,6 | | |
| 355L4c | 355 | 1485 | 588,7 | 2286 | 96,7 | 96,5 | | |
| 355L4d | 400 | 1482 | 686,2 | 2577 | 96,7 | 96,3 | | |
| 400L4a | 450 | 1483 | 754,7 | 2898 | 96,7 | 96,4 | | |

* Motor teknik değerleri I.Mak-A marka motorlar içindir, kullanılan diğer markalar için değişiklik gösterebilir.

1000 d/d Motorlar / 1000 r.p.m. Motors / Moteurs 1000 r.p.m.

| Kod Code Code | Güç (kW) Power (kW) Puissance (kW) | Hız (d/d) Speed (r.p.m.) Vitesse (r.p.m.) | Anma Akımı Rated Current Ampère | Moment (Nm) Torque (Nm) Couple (Nm) | Verim | | IE Sınıfı IE Class Classe IE | Çalışma Sınıfı Duny Type Classe d'utilisation |
|---------------------|--|---|---------------------------------------|---|------------|------|------------------------------------|---|
| | | | | | 100% | 75% | | |
| | | | | | Efficiency | | | |
| | | | | | 100% | 75% | | |
| | | Efficiency | | | | | | |
| | | 100% | 75% | | | | | |
| 71M6a | 0,18 | 835 | 0,75 | 2,00 | 45,5 | 43,6 | IE1 | S1 |
| 71M6b | 0,25 | 860 | 0,80 | 2,70 | 52,1 | 46,3 | | |
| 80M6a | 0,37 | 950 | 1,15 | 3,73 | 73,5 | 72,5 | IE3 | |
| 80M6b | 0,55 | 950 | 1,60 | 5,64 | 74,4 | 73,6 | | |
| 90S6a | 0,75 | 940 | 2,05 | 7,62 | 78,9 | 77,5 | | |
| 90L6a | 1,1 | 935 | 3,05 | 11,30 | 81,0 | 78,5 | | |
| 10L6a | 1,5 | 940 | 3,60 | 15,3 | 82,5 | 81,5 | | |
| 112M6a | 2,2 | 970 | 5,10 | 21,2 | 84,3 | 83,5 | | |
| 132S6a | 3 | 970 | 6,90 | 29,7 | 85,6 | 87,4 | | |
| 132M6a | 4 | 965 | 8,75 | 39,6 | 86,8 | 87,6 | | |
| 132M6b | 5,5 | 960 | 12,5 | 54,6 | 88,0 | 87,7 | | |
| 160M6a | 7,5 | 975 | 16,2 | 73,5 | 89,1 | 89,8 | | |
| 160L6a | 11 | 975 | 25,0 | 107,7 | 90,3 | 89,9 | | |
| 180L6a | 15 | 975 | 30,0 | 147,0 | 91,2 | 91,0 | | |
| 200L6a | 18,5 | 980 | 35,0 | 181 | 91,7 | 91,1 | | |
| 200L6b | 22 | 975 | 43,0 | 215 | 92,2 | 91,6 | | |
| 225M6a | 30 | 985 | 58,0 | 290 | 92,9 | 92,0 | | |
| 250M6a | 37 | 985 | 69,5 | 360 | 93,3 | 92,2 | | |
| 280S6a | 45 | 985 | 90,2 | 436 | 93,7 | 93,5 | | |
| 280M6a | 55 | 985 | 109,8 | 530 | 94,1 | 93,3 | | |
| 315S6a | 75 | 995 | 145,6 | 719 | 95,4 | 95,4 | IE4 | |
| 315M6a | 90 | 995 | 168,3 | 869 | 95,6 | 95,5 | | |
| 315M6b | 110 | 992 | 209,3 | 1059 | 95,8 | 95,6 | | |
| 315L6a | 132 | 991 | 236,2 | 1272 | 96,0 | 95,8 | | |
| 355M6a | 160 | 990 | 289,2 | 1543 | 96,2 | 96,2 | | |
| 355M6b | 200 | 992 | 365,6 | 1930 | 96,3 | 96,2 | | |
| 355M6c | 250 | 992 | 437,8 | 2407 | 96,5 | 96,2 | | |
| 355L6a | 315 | 991 | 547,2 | 3035 | 96,6 | 96,5 | | |
| 355L6b | 355 | 990 | 602,8 | 3424 | 96,6 | 96,5 | | |

* Motor teknik değerleri İ.Mak-A marka motorlar içindir, kullanılan diğer markalar için değişiklik gösterebilir.

Frenler

1) Pervanesiz frenler

Elektrik motorunun arkasındaki soğutma kapağı takılmayarak bunların yerine monte edilen frenlerdir. Kısa süreli çalışan motorlarda bu tip frenler kullanılır.

2) Pervaneli frenler

Elektrik motorunun motor mili ve fan kapağı uzatılarak monte edilen frenlerdir. Devamlı çalışan motorlarda bu tip frenler kullanılır.

3) Mikro anahtarlı frenler

Elektrik motorlarının demeraj akımının yüksek olması ve freni açmada gecikmesi dolayısıyla istenmeyen durumlar meydana gelir. Bunları önlemek için, frenin üzerine konulan bir mikro anahtar vasıtasıyla freni açtıktan hemen sonra motorun çalışması sağlanır. Bu tip frenler özellikle büyük güçteki redüktörlerin elektrik motorları için uygundur.

Redüktörlerin ani veya gecikmeli frenlenmesi

Gecikmeli veya ani frenlenen redüktörler birçok sanayi makinelerinde kullanılmaktadır. Bu sebepten frenler hem ani hem de gecikmeli fren yapacak şekilde dizayn edilmişlerdir. Frenlerin elektrik bağlantısında yapılacak bir değişiklikle ani veya gecikmeli frenleme sağlanır. Her frenli redüktör ile birlikte elektrik bağlantı şeması verilmektedir.

Frenli redüktörleri teslim aldığınızda fren bağlantısının gecikmeli olarak yapıldığını unutmayınız.

Brakes

1) Brakes without cooling fan

Brake which is mounted on fan side of electric motor by cancelling cooling fan and fan cover of motor. This type of brake is used for a short period running motors.

2) Brakes with cooling fan

Brake which is mounted on fan side of electric motor by extending motor shaft and fan cover to use fan. This type of brake is necessary for continuously running motors

3) Brakes with micro switch

Because of high starting current of motors delayed disengagement of magnetic brakes undesirable conditions occur. To prevent this situation, starting of motor is provided after disengagement of brake by means of brake by means of a micro switch installed on the brake. This type of brake is especially suitable for high power geared motors.

Non-delayed or delayed braking of geared motors

Delayed or non-delayed geared motors are used in many industrial machines. Therefore, brakes are designed to operate in both delayed and non-delayed conditions. This is supplied with each brake mounted geared motor.

Please do not forget that the brakes are connected for delayed operations standard.

Freins

1) Freins sans hélices de refroidissements

Freins montés directement à l'emplacement de l'hélice de refroidissement. Dans cette configuration l'hélice et le couvercle extérieur sont retirés. Ce type de configuration est conseillé pour les applications et moteurs avec une durée de fonctionnement réduite.

2) Freins avec hélice de refroidissement

Le frein est monté directement à l'arrière de l'emplacement de l'hélice de refroidissement. Ce type de configuration nécessite une prolongation de l'arbre d'entraînement du moteur. Ce type de configuration est conseillé pour les applications nécessitant un usage continu du frein.

3) Frein à ouverture manuelle

La forte charge appliquée par le moteur sur certains freins entraîne une prolongation de la période de blocage. Afin d'éviter un arrêt prolongé certains freins sont équipés d'un clé d'ouverture manuelle, cette option permet un redémarrage immédiat du moteur. Ce type de freins est particulièrement adapté aux moteurs à forte puissance.

Freins avec ou sans retardement d'arrêt.

Les motoréducteurs équipés de freins à retardement d'arrêt sont utilisés dans notre nombreuses applications et secteurs. Les freins sont conçus pour opérés avec ou sans l'option de retardement. Cette option est disponible pour l'ensemble de notre gamme de motoréducteurs. A noter que le freins doit être correctement connecté pour permettre un fonctionnement optimale de cette option.

Fren alıştırma voltajları

Frenler 24V-DC veya 220V-AC ile çalışacak şekilde imal edilir. 220 voltluk frenlerin bağlantıları motor klemens kutusunda yapılmaktadır. 24V ile çalışan frenlerin bağlantısı için ayrıca 220/30V trafo ile doğrultucu gerekmektedir. İstenildiğinde bunlar firmamızca temin edilmektedir.

Frenli redüktörlerin elektrik motorlarına toprak hattı bağlantısı muhakkak yapılmalıdır.

Fren siparişlerinde belirtilmesi gereken hususlar

- 1) Fren momenti
- 2) Fren tipi
- 3) Fren voltajı

24V ile çalışan fren siparişlerinde trafolu doğrultucu istenip istenmediğini lütfen belirtiniz.

Fren bağlantı şemaları

Operating voltage of brakes

Brakes are manufactured to operate at 24V-DC or 220V-AC. 220V brakes are connected to the motor terminal box directly, but 220/30V transformer with rectifier unit needed for 24V operating brakes. This unit will be supplied if required.

Geared brake motors must be earthed.

Required ordering data for brakes

- 1) Brake torque
- 2) Brake type
- 3) Brake operating voltage.

Please inform as if you need 220/30V transformer with rectifier unit for 24V operating brakes

Brake connection types

Voltage et caractéristique des freins

Les freins sont adaptés à un voltage de 24V-DC ou 220V-AC. Les freins fonctionnant sous 220V sont directement connectés à la boîte de Klemens, Les freins fonctionnant sous 24V doivent impérativement être couplés à un transformateur, cette unité est disponible en option.

Données Nécessaire à la Commande d'un Frein.

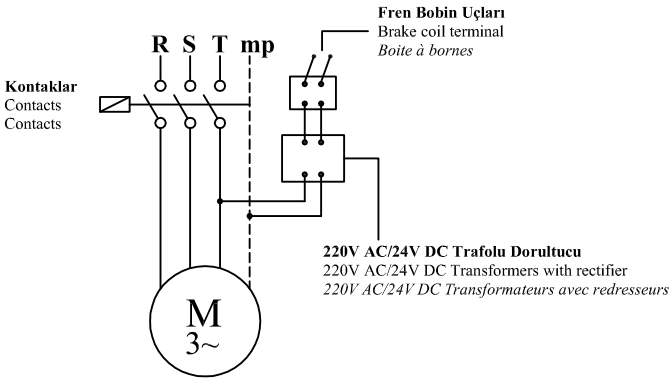
- 1) Couple des freins
- 2) Type de freins
- 3) Type de voltage

Veillez à nous informer si une unité de transformation 220/30V est nécessaire au branchement de votre frein (24 V)

Type de connexion des freins

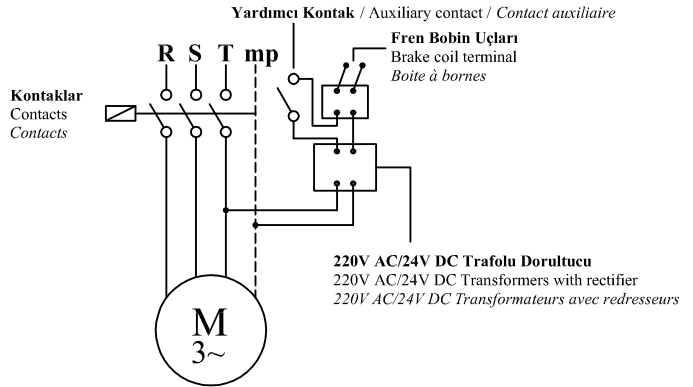
Gecikmeli Frenleme (24V)

Delayed Running Brake (24V)
Frein à retardement (24 V)



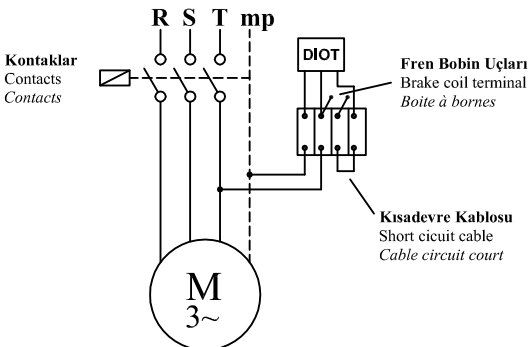
Ani Frenleme (24V)

Sudden Running Brake (24V)
Frein à arrêt immédiat (24 V)



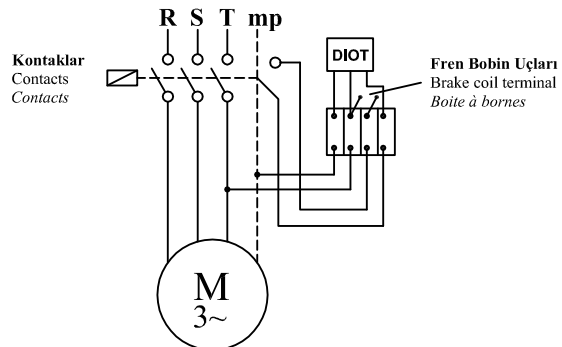
Gecikmeli Frenleme (220V)

Delayed Running Brake (220V)
Frein à retardement (220 V)



Ani Frenleme (220V)

Sudden Running Brake (220V)
Frein à arrêt immédiat (220 V)



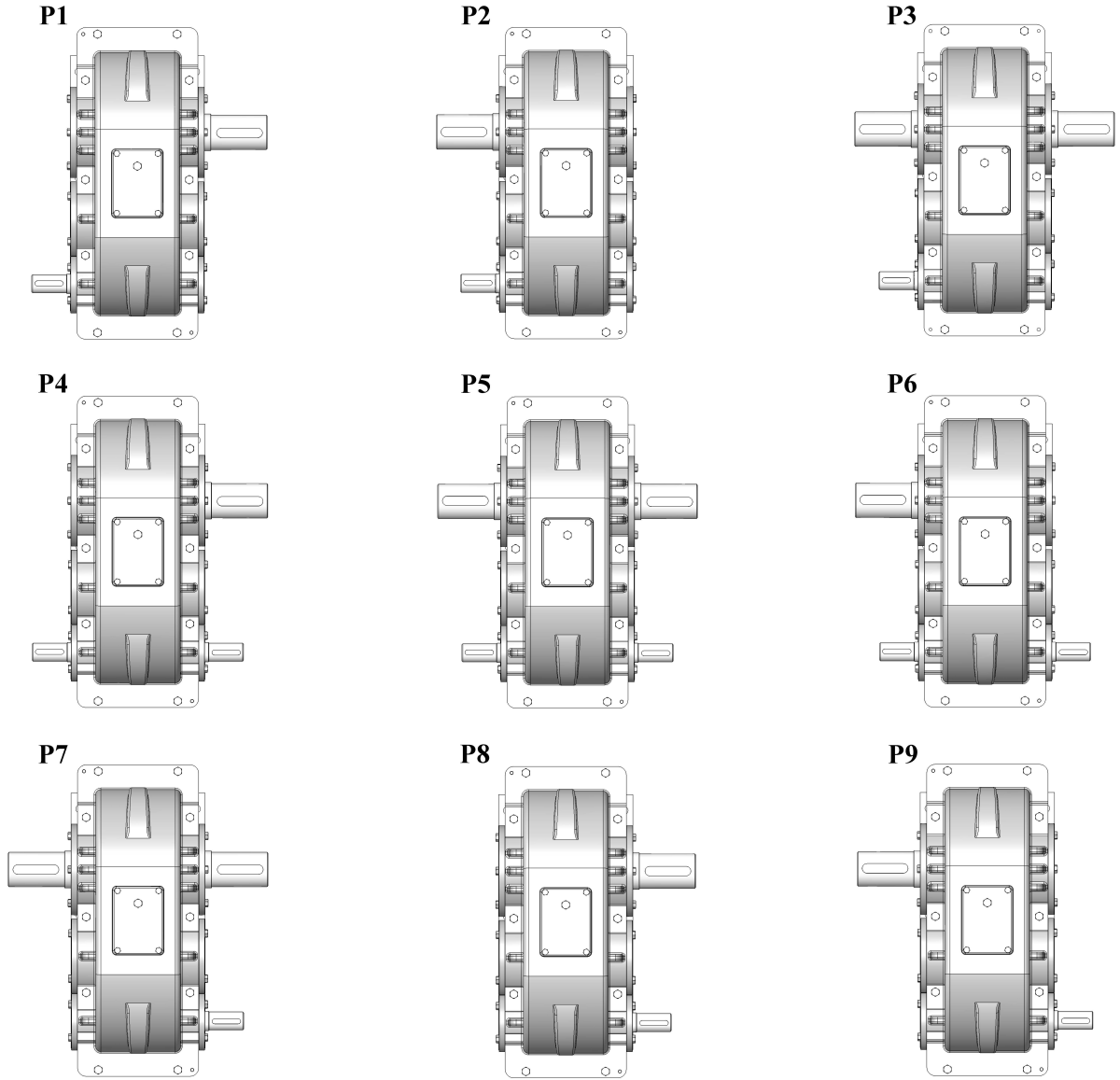
Tablo 1 / Table 1 / Tableau 1

| Motor büyüklüğü Motor size Dimensions du moteur | n1 d/d / r.p.m / r.p.m | | | |
|---|---------------------------------|-------------|-------------|-------------|
| | 750 | 1000 | 1500 | 3000 |
| | Güç / Power / Puissance [kW] | | | |
| 63 | | | 0,12 - 0,18 | 0,18 - 0,25 |
| 71 | 0,09 - 0,12 | 0,18 - 0,28 | 0,25 - 0,37 | 0,37 - 0,55 |
| 80 | 0,18 - 0,25 | 0,37 - 0,55 | 0,55 - 0,75 | 0,75 - 1,1 |
| 90 S | 0,37 | 0,75 | 1,1 | 1,5 |
| 90 L | 0,55 | 1,1 | 1,5 | 2,2 |
| 100 | 0,75 - 1,1 | 1,5 | 2,2 - 3 | 3 |
| 112 | 1,5 | 2,2 | 4 | 4 |
| 132 S | 2,2 | 3 | 5,5 | 5,5 - 7,5 |
| 132 M | 3 | 4 - 5,5 | 7,5 | 11 |
| 160 M | 4-5,5 | 7,5 | 11 | 15 |
| 160 L | 7,5 | 11 | 15 | 18,5 |
| 180 M | | | 18,5 | 22 |
| 180 L | 11 | 15 | 22 | |
| 200 | 15 | 18,5 - 22 | 30 | 30 - 37 |
| 225 S | 18,5 | | 37 | |
| 225 M | 22 | 30 | 45 | 45 |
| 250 | 30 | 37 | 55 | 55 |
| 280 S | 37 | 45 | 75 | 75 |
| 280 M | 45 | 55 | 90 | 90 |

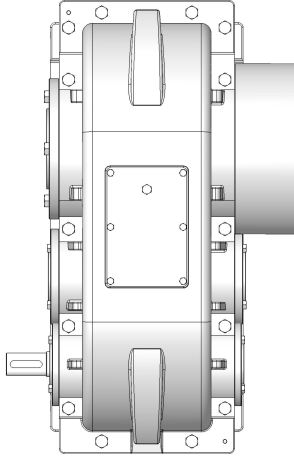
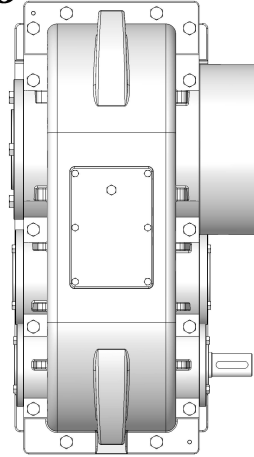
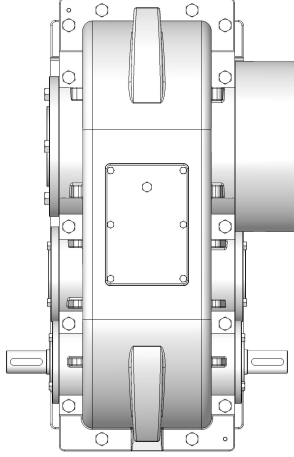
Tablo 2 / Table 2 / Tableau 2

| Motor büyüklüğü Motor size Dimensions du moteur | Fren momenti [kgm] Braking torque [kgm] Puissance de freinage [kgm] | | | | | | | | | | | | | | | | | | | |
|---|---|---|-----|---|---|----|----|----|----|----|--|---|-----|---|---|----|----|----|----|----|
| | Hafif frenleme Light braking Freins légers | | | | | | | | | | Kuvvetli frenleme Strong braking Freins lourds | | | | | | | | | |
| | 0,5 | 1 | 2,5 | 4 | 5 | 10 | 20 | 30 | 50 | 80 | 0,5 | 1 | 2,5 | 4 | 5 | 10 | 20 | 30 | 50 | 80 |
| 63 | | | | | | | | | | | | | | | | | | | | |
| 71 | | | | | | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | | |
| 90 S | | | | | | | | | | | | | | | | | | | | |
| 90 L | | | | | | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | | | | | | |
| 112 | | | | | | | | | | | | | | | | | | | | |
| 132 S | | | | | | | | | | | | | | | | | | | | |
| 132 M | | | | | | | | | | | | | | | | | | | | |
| 160 M | | | | | | | | | | | | | | | | | | | | |
| 160 L | | | | | | | | | | | | | | | | | | | | |
| 180 M | | | | | | | | | | | | | | | | | | | | |
| 180 L | | | | | | | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | | | | | | | |
| 225 S | | | | | | | | | | | | | | | | | | | | |
| 225 M | | | | | | | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | | | | | | | |
| 280 S | | | | | | | | | | | | | | | | | | | | |
| 280 M | | | | | | | | | | | | | | | | | | | | |

| Yağ Cinsi Lubricant Art des Lubrifiant | ISO Viskozite sinifi Viscosity class Catégorie de viscosité | DIN 51517-3 | Kullanım sicaklığı Usage temperature Gebrauchs temperatur d'usage C° | Firma Firm Marque | | | | | | |
|--|---|----------------|---|-------------------------|-----------------|----------------------|---------------------|------------------------------------|---------------------------|-----------------------|
| | | | | Mobil | ARAL | bp | Shell | Castrol | KLÜBER LUBRICATION | BELGIÏ |
| Mineral Yağ Mineral Oil Huile Minéral | ISO VG 320 | CLP | -10.....+90 | Mobilgear 600XP320 | Degol BG 320 | Energol GR-XP 320 | OmalaS2 GX 320 | Alpha SP 320 | Klüberoil GEM 1 N 320 | Recompound FL 320 |
| | ISO VG 220 | CLP | -10.....+90 | Mobilgear 600 XP 220 | Degol BG 220 | Energol GR-XP 220 | OmalaS2 GX 220 | Alpha SP 220 | Klüberoil GEM 1 N 220 | Recompound FL 220 |
| | ISO VG 150 | CLP | -10.....+90 | Mobilgear 600 XP 150 | Degol BG 150 | Energol GR-XP 150 | OmalaS2 GX 150 | Alpha SP 150 | Klüberoil GEM 1 N 150 | Recompound FL 150 |
| | ISO VG 100 | CLP | -15.....+90 | Mobilgear 600 XP 100 | - | - | OmalaS2 GX 100 | Alpha SP 100 | Klüberoil GEM 1 N 100 | Recompound FL 100 |
| Sentetik Yağ Synthetic Oil Huile Synthétique | ISO VG 320 | CLP HC | -30.....+110 | Mobil SHC Gear 320 | Degol GS 320 | Enersyn SG-XP320 | OmalaS4 GX V 320 | Optigear Synthetic PD 320 ES | Klübersynth GEM4 N 320 | Recompound Syn 320 |
| | ISO VG 220 | CLP HC | -35.....+110 | Mobil SHC Gear 220 | Degol GS 220 | Enersyn SG-XP220 | OmalaS4 GX V 220 | Optigear Synthetic PD 220 ES | Klübersynth GEM4 N 220 | Recompound Syn 220 |
| | ISO VG 150 | CLP HC | -40.....+110 | Mobil SHC Gear 150 | Degol GS 150 | Enersyn SG-XP150 | OmalaS4 GX V 150 | Optigear Synthetic PD 150 ES | Klübersynth GEM4 N 150 | Recompound Syn 150 |
| | ISO VG 100 | CLP HC | -45.....+110 | Mobil SHC 627 | - | - | - | Optigear Synthetic PD 100 ES | Klübersynth GEM4 N 100 | Recompound Syn 100 |



| TİP Type Typ | Bağlantı Pozisyonları için Yağ Miktarları (litre) Oil Quantities for Mounting Positions (liter) Ölmengen Tabellen für Bauformen (liter) | | | | | | | | |
|--------------------|---|----|----|----|----|----|----|----|----|
| | P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 | P9 |
| A 200 | | | | | 10 | | | | |
| 2A 200 | | | | | 10 | | | | |
| 2A 180 | | | | | 4 | | | | |
| 2A 225 | | | | | 7 | | | | |
| 2A 275 | | | | | 10 | | | | |
| 2A 350 | | | | | 18 | | | | |
| 2A 430 | | | | | 25 | | | | |
| 2A 501 | | | | | 32 | | | | |
| 3A 430 | | | | | 25 | | | | |
| 3A 501 | | | | | 32 | | | | |
| 3A 750 | | | | | 65 | | | | |
| 4A 750 | | | | | 65 | | | | |

P1**P8****P4**

| TİP Type Typ | Bağlantı Pozisyonları için Yağ Miktarları (litre) Oil Quantities for Mounting Positions (liter) Ölmengen Tabellen für Bauformen (liter) | | |
|--------------------|---|----|----|
| | P1 | P4 | P8 |
| 2AE 225 | | 7 | |
| 2AE 275 | | 10 | |
| 2AE 350 | | 18 | |
| 2AE 430 | | 25 | |
| 2AE 501 | | 32 | |
| 3AE 430 | | 25 | |
| 3AE 501 | | 32 | |
| 3AE 750 | | 65 | |

3A 431 / -OTS - 111→ **Opsiyonlar / Options / Options**→ **Redüktör gövde büyüklüğü / Housing size / Taille du carter du réducteur**
(180-200-225-275-351-430-501-750)→ **Redüktör tipi / Gearbox type / Type de réducteur**
(2A - 3A - 4A)

Redüktörlerin Kontrol ve Bakımları

- Redüktörlerin yağ seviyesi ve miktarını kontrol ediniz. Yağın cinsini İ.MAK kataloğunda yer alan yağ çizelgelerini kullanarak seçiniz.
- Havalandırma tapasının faal olup olmadığına bakınız. Hava tahliye deliği çalışmaz ise redüktör gövdesinin içinde biriken hava, basınç oluşturarak keçelerden yağ sızmasına sebep olur. Böylece yağ azalarak çevre kirliliğine yol açar ve redüktörün verimli çalışmasını engellemiş olur.
- Redüktör bağlantı civatalarının gevşeyip gevşemediğini kontrol ediniz, gevşeyen civatalar var ise sıkılmak suretiyle tedbir alınız. Redüktör montajında meydana gelen eksen kaçıklığında zararlı sarsıntılara dikkat ediniz.
- Redüktörün ilk çalıştırmadan 500 saat sonra, sonraki her 6000 saatte periyodik olarak yağınızı değiştiriniz.
- Özel hususlar ve çalışma şartları hakkında mutlaka firmamıza danışınız.

Control and maintenance gearboxes

- Check the oil levels and quantity of your gearboxes. Choose the type and quantity of oil from the İ.MAK catalogue.
- Check if the ventilation stopper is active or not. If the air evacuation hole does not work properly, the accumulated air in the gearbox trunk might causes pressure and gas leakage from the mats.
- Before starting your geared motors, proceed to the checking of connection bolts and screw. Check if they have loosened or not during transport or installation. Take measures by firming loosened bolts. A wrong connexion might create vibration to the axis and conduct to damage of the geared motor.
- Change the oil after 500 hours of initial operation and periodically every 6000 hours of operating the geared motor.
- If you are facing any technical issue, please consult the user guide delivered with the geared motor. In case of special issue or emergency please directly contact your reseller or the closest I-MAK technical center.

Contrôle et maintenance des réducteurs



- Vérifiez le niveau et la quantité d'huile de façons régulière. Consultez le catalogue I-MAK pour obtenir les niveaux d'huiles requis en fonction du modèle et de la position du réducteur.
- Vérifiez le fonctionnement de la valve d'aération. L'absence d'évacuation de l'air peut provoquer une augmentation de la pression dans le réducteur pouvant conduire à des fuites d'huiles.
- Contrôler les vis et boulons reliant le moteur au réducteur, en cas de mauvaise fermeture le moteur peut créer des vibrations de l'arbre entraînant l'endommagement du motoréducteur.
- La première vidange doit être effectuée après 500 heures d'utilisations du motoréducteur, les vidanges suivantes doivent être effectuées au bout de 6000 heures d'utilisations.
- En cas de problèmes techniques, consultez le manuel d'utilisation fournis à la livraison du motoréducteur. En cas de problèmes particulier ou d'urgence, veillez à contacter votre revendeur ou le centre technique I-MAK le plus proche.

| | | |
|---|---|--|
|  |  | YERLİ MALİ BELGESİ Domestic goods certificate <i>Certificat de produit national</i> |
| |  | TÜRK STANDARTLARI ENSTİTÜSÜ KRİTERE UYGUNLUK BELGESİ Certificate of conformity to Turkish standards <i>Certificats de conformité aux standards Turcs</i> |
| |  | MARKA YENİLEME BELGESİ Certificate of trademark registration <i>Certificat d'enregistrement de marque</i> |
|  |  | ISO 9001:2008 YÖNETİM SİSTEMİ ISO 9000:2008 Quality management system <i>ISO 9000:2008 : Systèmes de management de la qualité</i> |
| |  | ISO10002:2004 MÜŞTERİ MEMNUNİYETİ YÖNETİM SİSTEMİ ISO 10002:2004 Customer satisfaction management system <i>ISO 10002:2004 Management de la qualité - Satisfaction clients</i> |
| |  | OHSAS 18001:2007 İŞ SAĞLIĞI VE GÜVENLİĞİ YÖNETİM SİSTEMİ OHSAS 18001:2007 : Occupational health and safety management <i>OHSAS 18001:2007 : Management de la santé et de la sécurité au travail</i> |
| |  | AT UYGUNLUK BEYANI CE Declaration of conformity <i>Déclaration de conformité aux standards CE</i> |
| |  | EC TYPE EXAMINATION CERTIFICATE ATEX Certificate <i>Certificat ATEX</i> |



A Serisi Redüktörler Güç ve Devir Tabloları

A Series Power Ratings and Output Speed
A Series puissances et vitesses de sorties





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | |
| 1.71 | 1400 | 820 | 132 | 3,57 | 1514 | 3700 | 24000 | A 200 | 658 | 190 | |
| | | | 110 | 4,29 | 1262 | 3700 | 24000 | | | | |
| | | | 90 | 5,25 | 1032 | 3700 | 24000 | | | | |
| | 900 | 525 | 110 | 2,86 | 1971 | 3700 | 24800 | | | | |
| | | | 90 | 3,50 | 1613 | 3700 | 24800 | | | | |
| | | | 75 | 4,20 | 1344 | 3700 | 24800 | | | | |
| | 700 | 410 | 90 | 2,83 | 2065 | 3700 | 25750 | | | | |
| | | | 75 | 3,40 | 1344 | 3700 | 25750 | | | | |
| | | | 55 | 4,63 | 1262 | 3700 | 25750 | | | | |
| | 500 | 290 | 75 | 2,45 | 2433 | 3700 | 26500 | | | | |
| | | | 55 | 3,34 | 985 | 3700 | 26500 | | | | |
| | | | 45 | 4,08 | 1460 | 3700 | 26500 | | | | |
| 1.87 | 1400 | 745 | 132 | 3,40 | 1667 | 3700 | 24000 | | | | |
| | | | 110 | 4,09 | 1389 | 3700 | 24000 | | | | |
| | | | 90 | 5,00 | 1136 | 3700 | 24000 | | | | |
| | 900 | 480 | 110 | 2,27 | 2156 | 3700 | 24800 | | | | |
| | | | 90 | 3,33 | 1764 | 3700 | 24800 | | | | |
| | | | 75 | 4,00 | 1470 | 3700 | 24800 | | | | |
| | 700 | 370 | 90 | 2,66 | 2288 | 3700 | 25750 | | | | |
| | | | 75 | 3,20 | 1907 | 3700 | 25750 | | | | |
| | | | 55 | 4,36 | 1398 | 3700 | 25750 | | | | |
| | 500 | 270 | 75 | 2,30 | 2613 | 3700 | 26500 | | | | |
| | | | 55 | 3,13 | 1916 | 3700 | 26500 | | | | |
| | | | 45 | 3,83 | 1568 | 3700 | 26500 | | | | |
| 2.06 | 1400 | 680 | 132 | 3,23 | 1826 | 3700 | 24000 | | | | |
| | | | 110 | 3,88 | 1522 | 3700 | 24000 | | | | |
| | | | 90 | 4,75 | 1245 | 3700 | 24000 | | | | |
| | 900 | 440 | 110 | 2,42 | 2352 | 3700 | 24800 | | | | |
| | | | 90 | 2,95 | 1324 | 3700 | 24800 | | | | |
| | | | 75 | 3,55 | 1603 | 3700 | 24800 | | | | |
| | 700 | 340 | 90 | 2,50 | 2490 | 3700 | 25750 | | | | |
| | | | 75 | 3,00 | 2075 | 3700 | 25750 | | | | |
| | | | 55 | 4,09 | 1522 | 3700 | 25750 | | | | |
| | 500 | 240 | 75 | 2,15 | 2940 | 3700 | 26500 | | | | |
| | | | 55 | 2,93 | 2156 | 3700 | 26500 | | | | |
| | | | 45 | 3,58 | 1764 | 3700 | 26500 | | | | |
| 2.27 | 1400 | 615 | 132 | 3,23 | 2019 | 3700 | 24000 | | | | |
| | | | 110 | 3,88 | 1683 | 3700 | 24000 | | | | |
| | | | 90 | 4,75 | 1377 | 3700 | 24000 | | | | |
| | 900 | 395 | 110 | 3,04 | 2620 | 3700 | 25750 | | | | |
| | | | 90 | 3,65 | 2143 | 3700 | 25750 | | | | |
| | | | 75 | 4,46 | 1786 | 3700 | 25750 | | | | |
| | 700 | 310 | 90 | 2,42 | 2731 | 3700 | 25750 | | | | |
| | | | 75 | 2,96 | 2276 | 3700 | 25750 | | | | |
| | | | 55 | 3,55 | 1669 | 3700 | 25750 | | | | |
| | 500 | 220 | 75 | 2,01 | 3207 | 3700 | 26500 | | | | |
| | | | 55 | 2,75 | 2352 | 3700 | 26500 | | | | |
| | | | 45 | 3,36 | 1924 | 3700 | 26500 | | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | | |
| 2.51 | 1400 | 555 | 110 | 3,4 | 1864 | 3700 | 24000 | A 200 | 658 | 190 | |
| | | | 90 | 4,15 | 1525 | 3700 | 24000 | | | | |
| | | | 75 | 4,98 | 1271 | 3700 | 24000 | | | | |
| | 900 | 360 | 90 | 2,78 | 2352 | 3700 | 25750 | | | | |
| | | | 75 | 3,33 | 1960 | 3700 | 25750 | | | | |
| | | | 55 | 4,55 | 1437 | 3700 | 25750 | | | | |
| | 700 | 280 | 75 | 2,60 | 2520 | 3700 | 26500 | | | | |
| | | | 55 | 3,55 | 1840 | 3700 | 26500 | | | | |
| | | | 45 | 4,33 | 1512 | 3700 | 26500 | | | | |
| | 500 | 200 | 55 | 2,60 | 2587 | 3700 | 26500 | | | | |
| | | | 45 | 3,17 | 2117 | 3700 | 26500 | | | | |
| | | | 37 | 3,86 | 1740 | 3700 | 26500 | | | | |
| 2.80 | 1400 | 500 | 110 | 3,20 | 2069 | 3700 | 24800 | | | | |
| | | | 90 | 3,91 | 1693 | 3700 | 24800 | | | | |
| | | | 75 | 4,69 | 1411 | 3700 | 24800 | | | | |
| | 900 | 320 | 90 | 2,62 | 1693 | 3700 | 25750 | | | | |
| | | | 75 | 3,15 | 1411 | 3700 | 25750 | | | | |
| | | | 55 | 4,20 | 1035 | 3700 | 25750 | | | | |
| | 700 | 250 | 75 | 2,42 | 2822 | 3700 | 26500 | | | | |
| | | | 55 | 3,30 | 2069 | 3700 | 26500 | | | | |
| | | | 45 | 4,03 | 1693 | 3700 | 26500 | | | | |
| | 500 | 180 | 55 | 2,40 | 2874 | 3700 | 26500 | | | | |
| | | | 45 | 2,93 | 2352 | 3700 | 26500 | | | | |
| | | | 37 | 3,56 | 1934 | 3700 | 26500 | | | | |
| 3.13 | 1400 | 450 | 110 | 2,92 | 2299 | 3700 | 24800 | | | | |
| | | | 90 | 3,57 | 1881 | 3700 | 24800 | | | | |
| | | | 75 | 4,29 | 1568 | 3700 | 24800 | | | | |
| | 900 | 290 | 90 | 2,35 | 2919 | 3700 | 25750 | | | | |
| | | | 75 | 2,82 | 2433 | 3700 | 25750 | | | | |
| | | | 55 | 3,85 | 1784 | 3700 | 25750 | | | | |
| | 700 | 225 | 75 | 2,23 | 3136 | 3700 | 26500 | | | | |
| | | | 55 | 3,05 | 2299 | 3700 | 26500 | | | | |
| | | | 45 | 3,73 | 1881 | 3700 | 26500 | | | | |
| | 500 | 160 | 55 | 2,20 | 3234 | 3700 | 26500 | | | | |
| | | | 45 | 2,68 | 2646 | 3700 | 26500 | | | | |
| | | | 37 | 3,27 | 2175 | 3700 | 26500 | | | | |
| 3.52 | 1400 | 400 | 90 | 3,26 | 2117 | 3700 | 25750 | | | | |
| | | | 75 | 3,92 | 1764 | 3700 | 25750 | | | | |
| | | | 55 | 5,34 | 1293 | 3700 | 25750 | | | | |
| | 900 | 255 | 75 | 2,60 | 2767 | 3700 | 26500 | | | | |
| | | | 55 | 3,54 | 2029 | 3700 | 26500 | | | | |
| | | | 45 | 4,33 | 1660 | 3700 | 26500 | | | | |
| | 700 | 200 | 55 | 2,78 | 2587 | 3700 | 26500 | | | | |
| | | | 45 | 3,40 | 2117 | 3700 | 26500 | | | | |
| | | | 37 | 4,13 | 1740 | 3700 | 26500 | | | | |
| | 500 | 140 | 45 | 2,43 | 3024 | 3700 | 26500 | | | | |
| | | | 37 | 2,96 | 2486 | 3700 | 26500 | | | | |
| | | | 30 | 3,65 | 2016 | 3700 | 26500 | | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|-----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | |
| 4.00 | 1400 | 350 | 90 | 3,00 | 2419 | 3700 | 25750 | A | 200 | 658 | 190 |
| | | | 75 | 3,60 | 2016 | 3700 | 25750 | | | | |
| | | | 55 | 4,90 | 1478 | 3700 | 25750 | | | | |
| | 900 | 225 | 75 | 2,32 | 3136 | 3700 | 26500 | | | | |
| | | | 55 | 3,16 | 2299 | 3700 | 26500 | | | | |
| | | | 45 | 3,86 | 1881 | 3700 | 26500 | | | | |
| | 700 | 175 | 55 | 2,51 | 2956 | 3700 | 26500 | | | | |
| | | | 45 | 3,06 | 2419 | 3700 | 26500 | | | | |
| | | | 37 | 3,73 | 1989 | 3700 | 26500 | | | | |
| | 500 | 125 | 45 | 2,20 | 3386 | 3700 | 27250 | | | | |
| | | | 37 | 2,67 | 2784 | 3700 | 27250 | | | | |
| | | | 30 | 3,30 | 2258 | 3700 | 27250 | | | | |
| 4.58 | 1400 | 305 | 90 | 2,66 | 2776 | 3700 | 25750 | | | | |
| | | | 75 | 3,20 | 2313 | 3700 | 25750 | | | | |
| | | | 55 | 4,36 | 1696 | 3700 | 25750 | | | | |
| | 900 | 195 | 75 | 2,08 | 3618 | 3700 | 26500 | | | | |
| | | | 55 | 2,83 | 2653 | 3700 | 26500 | | | | |
| | | | 45 | 3,46 | 2171 | 3700 | 26500 | | | | |
| | 700 | 150 | 55 | 2,21 | 3449 | 3700 | 26500 | | | | |
| | | | 45 | 2,70 | 2822 | 3700 | 26500 | | | | |
| | | | 37 | 3,28 | 2320 | 3700 | 26500 | | | | |
| | 500 | 110 | 45 | 1,93 | 3848 | 3700 | 27250 | | | | |
| | | | 37 | 2,35 | 3164 | 3700 | 27250 | | | | |
| | | | 30 | 2,90 | 2565 | 3700 | 27250 | | | | |
| 4.93 | 1400 | 285 | 75 | 3,00 | 2475 | 3700 | 26500 | | | | |
| | | | 55 | 4,09 | 1815 | 3700 | 26500 | | | | |
| | | | 45 | 5,00 | 1485 | 3700 | 26500 | | | | |
| | 900 | 180 | 55 | 2,65 | 2874 | 3700 | 26500 | | | | |
| | | | 45 | 3,23 | 2352 | 3700 | 26500 | | | | |
| | | | 37 | 3,93 | 1934 | 3700 | 26500 | | | | |
| | 700 | 140 | 45 | 2,53 | 3024 | 3700 | 26500 | | | | |
| | | | 37 | 3,08 | 2486 | 3700 | 26500 | | | | |
| | | | 30 | 3,80 | 2016 | 3700 | 26500 | | | | |
| | 500 | 100 | 37 | 2,23 | 3480 | 3700 | 27250 | | | | |
| | | | 30 | 2,75 | 2822 | 3700 | 27250 | | | | |
| | | | 22 | 3,75 | 2069 | 3700 | 27250 | | | | |
| 5.33 | 1400 | 260 | 75 | 2,80 | 2713 | 3700 | 26500 | | | | |
| | | | 55 | 3,82 | 1990 | 3700 | 26500 | | | | |
| | | | 45 | 4,66 | 1628 | 3700 | 26500 | | | | |
| | 900 | 170 | 55 | 2,45 | 3043 | 3700 | 26500 | | | | |
| | | | 45 | 3,00 | 2490 | 3700 | 26500 | | | | |
| | | | 37 | 3,65 | 2047 | 3700 | 26500 | | | | |
| | 700 | 130 | 45 | 2,33 | 3256 | 3700 | 27250 | | | | |
| | | | 37 | 2,84 | 2677 | 3700 | 27250 | | | | |
| | | | 30 | 3,50 | 2171 | 3700 | 27250 | | | | |
| | 500 | 95 | 37 | 2,06 | 3664 | 3700 | 27250 | | | | |
| | | | 30 | 2,55 | 2971 | 3700 | 27250 | | | | |
| | | | 22 | 3,48 | 2178 | 3700 | 27250 | | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | | |
| 5.78 | 1400 | 240 | 75 | 2,60 | 2940 | 3700 | 26500 | A 200 | 658 | 190 | |
| | | | 55 | 3,55 | 2156 | 3700 | 26500 | | | | |
| | | | 45 | 4,33 | 1764 | 3700 | 26500 | | | | |
| | 900 | 155 | 55 | 2,29 | 3338 | 3700 | 26500 | | | | |
| | | | 45 | 2,80 | 2731 | 3700 | 26500 | | | | |
| | | | 37 | 3,41 | 2245 | 3700 | 26500 | | | | |
| | 700 | 120 | 45 | 2,20 | 3528 | 3700 | 27250 | | | | |
| | | | 37 | 2,67 | 2900 | 3700 | 27250 | | | | |
| | | | 30 | 3,30 | 2352 | 3700 | 27250 | | | | |
| | 500 | 85 | 37 | 1,90 | 4095 | 3700 | 27250 | | | | |
| | | | 30 | 2,35 | 3320 | 3700 | 27250 | | | | |
| | | | 22 | 3,20 | 2435 | 3700 | 27250 | | | | |
| 6.30 | 1400 | 220 | 75 | 2,40 | 3207 | 3700 | 26500 | | | | |
| | | | 55 | 3,27 | 2352 | 3700 | 26500 | | | | |
| | | | 45 | 4,00 | 1924 | 3700 | 26500 | | | | |
| | 900 | 140 | 55 | 2,10 | 3696 | 3700 | 26500 | | | | |
| | | | 45 | 2,56 | 3024 | 3700 | 26500 | | | | |
| | | | 37 | 3,11 | 2486 | 3700 | 26500 | | | | |
| | 700 | 110 | 45 | 2,00 | 3848 | 3700 | 27250 | | | | |
| | | | 37 | 2,43 | 3164 | 3700 | 27250 | | | | |
| | | | 30 | 3,00 | 2565 | 3700 | 27250 | | | | |
| | 500 | 80 | 37 | 1,74 | 4351 | 3700 | 27250 | | | | |
| | | | 30 | 2,15 | 3528 | 3700 | 27250 | | | | |
| | | | 22 | 2,93 | 2587 | 3700 | 27250 | | | | |
| 6.91 | 1400 | 200 | 75 | 2,73 | 3528 | 3700 | 26500 | | | | |
| | | | 55 | 3,32 | 2587 | 3700 | 26500 | | | | |
| | | | 45 | 4,10 | 2117 | 3700 | 26500 | | | | |
| | 900 | 130 | 55 | 2,20 | 3980 | 3700 | 27250 | | | | |
| | | | 45 | 3,00 | 3256 | 3700 | 27250 | | | | |
| | | | 37 | 3,66 | 2677 | 3700 | 27250 | | | | |
| | 700 | 100 | 45 | 1,93 | 4233 | 3700 | 27250 | | | | |
| | | | 37 | 2,36 | 3480 | 3700 | 27250 | | | | |
| | | | 30 | 2,87 | 2822 | 3700 | 27250 | | | | |
| | 500 | 72 | 37 | 1,93 | 4834 | 3700 | 27250 | | | | |
| | | | 30 | 2,23 | 3919 | 3700 | 27250 | | | | |
| | | | 22 | 2,75 | 2874 | 3700 | 27250 | | | | |
| 7.17 | 1400 | 195 | 45 | 2,73 | 2138 | 3700 | 26500 | 2A 200 | 659 | 215 | |
| | | | 37 | 3,32 | 1758 | 3700 | 26500 | | | | |
| | | | 30 | 3,48 | 1425 | 3700 | 26500 | | | | |
| | 900 | 125 | 37 | 2,07 | 2742 | 3700 | 27250 | | | | |
| | | | 30 | 2,55 | 2223 | 3700 | 27250 | | | | |
| | | | 22 | 3,48 | 1630 | 3700 | 27250 | | | | |
| | 700 | 100 | 30 | 2,15 | 2779 | 3700 | 27250 | | | | |
| | | | 22 | 2,94 | 2038 | 3700 | 27250 | | | | |
| | | | 18,5 | 3,50 | 1714 | 3700 | 27250 | | | | |
| | 500 | 70 | 22 | 2,11 | 2911 | 3700 | 27250 | | | | |
| | | | 18,5 | 2,50 | 2448 | 3700 | 27250 | | | | |
| | | | 15 | 3,09 | 1985 | 3700 | 27250 | | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | | |
| 7.91 | 1400 | 180 | 37 | 3,12 | 1904 | 3700 | 26500 | 2A 200 | 659 | 215 | |
| | | | 30 | 3,85 | 1544 | 3700 | 26500 | | | | |
| | | | 22 | 5,25 | 1132 | 3700 | 26500 | | | | |
| | 900 | 115 | 30 | 2,55 | 2417 | 3700 | 27250 | | | | |
| | | | 22 | 3,49 | 1772 | 3700 | 27250 | | | | |
| | | | 18,5 | 4,15 | 1490 | 3700 | 27250 | | | | |
| | 700 | 90 | 22 | 2,76 | 2264 | 3700 | 27250 | | | | |
| | | | 18,5 | 3,29 | 1904 | 3700 | 27250 | | | | |
| | | | 15 | 4,05 | 1544 | 3700 | 27250 | | | | |
| | 500 | 60 | 18,5 | 2,35 | 2856 | 3700 | 27800 | | | | |
| | | | 15 | 2,89 | 2316 | 3700 | 27800 | | | | |
| | | | 11 | 3,95 | 1698 | 3700 | 27800 | | | | |
| 8.75 | 1400 | 160 | 37 | 2,91 | 2142 | 3700 | 26500 | | | | |
| | | | 30 | 2,58 | 1737 | 3700 | 26500 | | | | |
| | | | 22 | 4,90 | 1274 | 3700 | 26500 | | | | |
| | 900 | 100 | 30 | 2,40 | 2779 | 3700 | 27250 | | | | |
| | | | 22 | 3,27 | 2038 | 3700 | 27250 | | | | |
| | | | 18,5 | 3,89 | 1714 | 3700 | 27250 | | | | |
| | 700 | 80 | 22 | 2,55 | 2547 | 3700 | 27250 | | | | |
| | | | 18,5 | 3,03 | 2142 | 3700 | 27250 | | | | |
| | | | 15 | 3,74 | 1737 | 3700 | 27250 | | | | |
| | 500 | 60 | 18,5 | 2,22 | 2142 | 3700 | 27800 | | | | |
| | | | 15 | 2,73 | 1737 | 3700 | 27800 | | | | |
| | | | 11 | 3,73 | 1274 | 3700 | 27800 | | | | |
| 9.73 | 1400 | 145 | 37 | 2,77 | 2364 | 3700 | 26500 | | | | |
| | | | 30 | 3,42 | 1917 | 3700 | 26500 | | | | |
| | | | 22 | 4,67 | 1405 | 3700 | 26500 | | | | |
| | 900 | 90 | 30 | 2,21 | 3088 | 3700 | 27250 | | | | |
| | | | 22 | 3,02 | 2264 | 3700 | 27250 | | | | |
| | | | 18,5 | 3,60 | 1904 | 3700 | 27250 | | | | |
| | 700 | 70 | 22 | 2,37 | 2911 | 3700 | 27250 | | | | |
| | | | 18,5 | 2,82 | 2448 | 3700 | 27250 | | | | |
| | | | 15 | 3,48 | 1985 | 3700 | 27250 | | | | |
| | 500 | 50 | 18,5 | 2,04 | 3427 | 3700 | 27800 | | | | |
| | | | 15 | 2,52 | 2779 | 3700 | 27800 | | | | |
| | | | 11 | 3,44 | 2038 | 3700 | 27800 | | | | |
| 10.88 | 1400 | 130 | 30 | 3,08 | 2138 | 3700 | 27250 | | | | |
| | | | 22 | 4,21 | 1568 | 3700 | 27250 | | | | |
| | | | 18,5 | 5,00 | 1318 | 3700 | 27250 | | | | |
| | 900 | 80 | 22 | 2,76 | 2547 | 3700 | 27250 | | | | |
| | | | 18,5 | 3,28 | 2142 | 3700 | 27250 | | | | |
| | | | 15 | 4,05 | 1737 | 3700 | 27250 | | | | |
| | 700 | 65 | 18,5 | 2,60 | 2637 | 3700 | 27800 | | | | |
| | | | 15 | 3,21 | 2138 | 3700 | 27800 | | | | |
| | | | 11 | 4,38 | 1568 | 3700 | 27800 | | | | |
| | 500 | 45 | 15 | 2,31 | 3088 | 3700 | 28350 | | | | |
| | | | 11 | 3,15 | 2264 | 3700 | 28350 | | | | |
| | | | 7,5 | 4,63 | 1544 | 3700 | 28350 | | | | |



| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | | |
| 12.24 | 1400 | 115 | 30 | 2,82 | 2417 | 3700 | 27250 | 2A 200 | 659 | 215 | |
| | | | 22 | 3,84 | 1772 | 3700 | 27250 | | | | |
| | | | 18,5 | 4,57 | 1490 | 3700 | 27250 | | | | |
| | 900 | 75 | 22 | 2,55 | 2717 | 3700 | 27250 | | | | |
| | | | 18,5 | 3,03 | 2285 | 3700 | 27250 | | | | |
| | | | 15 | 3,75 | 1853 | 3700 | 27250 | | | | |
| | 700 | 60 | 18,5 | 2,37 | 2856 | 3700 | 27800 | | | | |
| | | | 15 | 2,93 | 2316 | 3700 | 27800 | | | | |
| | | | 11 | 4,00 | 1698 | 3700 | 27800 | | | | |
| | 500 | 40 | 15 | 2,09 | 3474 | 3700 | 28350 | | | | |
| | | | 11 | 2,86 | 2547 | 3700 | 28350 | | | | |
| | | | 7,5 | 4,19 | 1737 | 3700 | 28350 | | | | |
| 13.90 | 1400 | 100 | 30 | 2,58 | 2779 | 3700 | 27250 | | | | |
| | | | 22 | 3,52 | 2038 | 3700 | 27250 | | | | |
| | | | 18,5 | 4,19 | 1714 | 3700 | 27250 | | | | |
| | 900 | 65 | 22 | 2,27 | 3135 | 3700 | 27800 | | | | |
| | | | 18,5 | 2,70 | 2637 | 3700 | 27800 | | | | |
| | | | 15 | 3,33 | 3138 | 3700 | 27800 | | | | |
| | 700 | 50 | 18,5 | 2,14 | 3427 | 3700 | 27800 | | | | |
| | | | 15 | 2,64 | 2779 | 3700 | 27800 | | | | |
| | | | 11 | 3,61 | 2038 | 3700 | 27800 | | | | |
| | 500 | 35 | 15 | 1,89 | 3970 | 3700 | 28350 | | | | |
| | | | 11 | 2,58 | 2911 | 3700 | 28350 | | | | |
| | | | 7,5 | 3,79 | 1985 | 3700 | 28350 | | | | |
| 15.94 | 1400 | 90 | 30 | 2,31 | 3088 | 3700 | 27250 | | | | |
| | | | 22 | 3,15 | 2264 | 3700 | 27250 | | | | |
| | | | 18,5 | 3,74 | 1904 | 3700 | 27250 | | | | |
| | 900 | 55 | 22 | 2,04 | 3705 | 3700 | 27800 | | | | |
| | | | 18,5 | 2,42 | 3116 | 3700 | 27800 | | | | |
| | | | 15 | 3,00 | 2526 | 3700 | 27800 | | | | |
| | 700 | 45 | 18,5 | 1,88 | 3808 | 3700 | 28350 | | | | |
| | | | 15 | 2,32 | 3088 | 3700 | 28350 | | | | |
| | | | 11 | 3,17 | 2264 | 3700 | 28350 | | | | |
| | 500 | 30 | 15 | 1,66 | 4632 | 3700 | 28350 | | | | |
| | | | 11 | 2,27 | 3397 | 3700 | 28350 | | | | |
| | | | 7,5 | 3,33 | 2316 | 3700 | 28350 | | | | |
| 17.16 | 1400 | 80 | 30 | 2,15 | 3474 | 3700 | 27250 | | | | |
| | | | 22 | 2,93 | 2547 | 3700 | 27250 | | | | |
| | | | 18,5 | 3,49 | 2142 | 3700 | 27250 | | | | |
| | 900 | 50 | 22 | 1,90 | 4076 | 3700 | 27800 | | | | |
| | | | 18,5 | 2,26 | 3427 | 3700 | 27800 | | | | |
| | | | 15 | 2,79 | 2779 | 3700 | 27800 | | | | |
| | 700 | 40 | 18,5 | 1,77 | 4284 | 3700 | 28350 | | | | |
| | | | 15 | 2,18 | 3474 | 3700 | 28350 | | | | |
| | | | 11 | 2,97 | 2547 | 3700 | 28350 | | | | |
| | 500 | 30 | 15 | 1,58 | 4632 | 3700 | 28350 | | | | |
| | | | 11 | 2,16 | 3397 | 3700 | 28350 | | | | |
| | | | 7,5 | 3,33 | 2316 | 3700 | 28350 | | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | | |
| 18.53 | 1400 | 75 | 30 | 2,02 | 3705 | 3700 | 27250 | 2A 200 | 659 | 215 | |
| | | | 22 | 2,75 | 2717 | 3700 | 27250 | | | | |
| | | | 18,5 | 3,28 | 2285 | 3700 | 27250 | | | | |
| | 900 | 50 | 22 | 1,76 | 4076 | 3700 | 27800 | | | | |
| | | | 18,5 | 2,09 | 3427 | 3700 | 27800 | | | | |
| | | | 15 | 2,58 | 2779 | 3700 | 27800 | | | | |
| | 700 | 40 | 18,5 | 1,63 | 4284 | 3700 | 28350 | | | | |
| | | | 15 | 2,01 | 3474 | 3700 | 28350 | | | | |
| | | | 11 | 2,75 | 2547 | 3700 | 28350 | | | | |
| | 500 | 25 | 15 | 1,47 | 5558 | 3700 | 29000 | | | | |
| | | | 11 | 1,99 | 4076 | 3700 | 29000 | | | | |
| | | | 7,5 | 2,92 | 2779 | 3700 | 29000 | | | | |
| 20.11 | 1400 | 70 | 30 | 1,88 | 3970 | 3700 | 27250 | | | | |
| | | | 22 | 2,56 | 2911 | 3700 | 27250 | | | | |
| | | | 18,5 | 3,04 | 2448 | 3700 | 27250 | | | | |
| | 900 | 45 | 22 | 1,64 | 4529 | 3700 | 28350 | | | | |
| | | | 18,5 | 1,95 | 3808 | 3700 | 28350 | | | | |
| | | | 15 | 2,41 | 3088 | 3700 | 28350 | | | | |
| | 700 | 35 | 18,5 | 1,53 | 4896 | 3700 | 28350 | | | | |
| | | | 15 | 1,90 | 3970 | 3700 | 28350 | | | | |
| | | | 11 | 2,59 | 2911 | 3700 | 28350 | | | | |
| | 500 | 25 | 15 | 1,35 | 5558 | 3700 | 29000 | | | | |
| | | | 11 | 1,85 | 4076 | 3700 | 29000 | | | | |
| | | | 7,5 | 2,71 | 2779 | 3700 | 29000 | | | | |
| 21.52 | 1400 | 65 | 30 | 1,73 | 4275 | 3700 | 27800 | | | | |
| | | | 22 | 2,35 | 3135 | 3700 | 27800 | | | | |
| | | | 18,5 | 2,80 | 2637 | 3700 | 27800 | | | | |
| | 900 | 40 | 22 | 1,55 | 5095 | 3700 | 28350 | | | | |
| | | | 18,5 | 1,83 | 4284 | 3700 | 28350 | | | | |
| | | | 15 | 2,27 | 3474 | 3700 | 28350 | | | | |
| | 700 | 30 | 18,5 | 1,42 | 5712 | 3700 | 28350 | | | | |
| | | | 15 | 1,75 | 4632 | 3700 | 28350 | | | | |
| | | | 11 | 2,39 | 3397 | 3700 | 28350 | | | | |
| | 500 | 20 | 15 | 1,26 | 6948 | 3700 | 29000 | | | | |
| | | | 11 | 1,72 | 5095 | 3700 | 29000 | | | | |
| | | | 7,5 | 2,52 | 3474 | 3700 | 29000 | | | | |
| 24.04 | 1400 | 60 | 30 | 1,58 | 4632 | 3700 | 27800 | | | | |
| | | | 22 | 2,15 | 3397 | 3700 | 27800 | | | | |
| | | | 18,5 | 2,56 | 2856 | 3700 | 27800 | | | | |
| | 900 | 40 | 22 | 1,38 | 5095 | 3700 | 28350 | | | | |
| | | | 18,5 | 1,63 | 4284 | 3700 | 28350 | | | | |
| | | | 15 | 2,02 | 3474 | 3700 | 28350 | | | | |
| | 700 | 30 | 18,5 | 1,28 | 5712 | 3700 | 28350 | | | | |
| | | | 15 | 1,57 | 4632 | 3700 | 28350 | | | | |
| | | | 11 | 2,15 | 3397 | 3700 | 28350 | | | | |
| | 500 | 20 | 15 | 1,15 | 6948 | 3700 | 29000 | | | | |
| | | | 11 | 1,57 | 5095 | 3700 | 29000 | | | | |
| | | | 7,5 | 2,31 | 3474 | 3700 | 29000 | | | | |



| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ | | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|-----|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | |
| 6.98 | 1400 | 200 | 11 | 1,45 | 509 | 2850 | 7600 | 2A 180 | 660 | 58 |
| | | | 7,5 | 2,15 | 347 | 2850 | 7600 | | | |
| | | | 5,5 | 2,95 | 255 | 2850 | 7600 | | | |
| | 900 | 130 | 7,5 | 1,35 | 534 | 2850 | 7600 | | | |
| | | | 5,5 | 1,87 | 392 | 2850 | 7600 | | | |
| | | | 4 | 2,60 | 285 | 2850 | 7600 | | | |
| | 700 | 100 | 5,5 | 1,45 | 509 | 2850 | 7850 | | | |
| | | | 4 | 2,00 | 371 | 2850 | 7850 | | | |
| | | | 3 | 2,70 | 278 | 2850 | 7850 | | | |
| | 500 | 72 | 4 | 1,42 | 515 | 2850 | 8000 | | | |
| | | | 3 | 1,91 | 386 | 2850 | 8000 | | | |
| | | | 2,2 | 2,63 | 283 | 2850 | 8000 | | | |
| 9.51 | 1400 | 150 | 11 | 1,52 | 679 | 2850 | 7600 | | | |
| | | | 7,5 | 2,95 | 463 | 2850 | 7600 | | | |
| | | | 5,5 | 3,09 | 340 | 2850 | 7600 | | | |
| | 900 | 95 | 7,5 | 1,43 | 731 | 2850 | 8000 | | | |
| | | | 5,5 | 1,98 | 536 | 2850 | 8000 | | | |
| | | | 4 | 2,72 | 390 | 2850 | 8000 | | | |
| | 700 | 75 | 5,5 | 1,51 | 679 | 2850 | 8000 | | | |
| | | | 4 | 2,10 | 494 | 2850 | 8000 | | | |
| | | | 3 | 2,84 | 371 | 2850 | 8000 | | | |
| | 500 | 50 | 4 | 1,49 | 741 | 2850 | 8350 | | | |
| | | | 3 | 2,00 | 556 | 2850 | 8350 | | | |
| | | | 2,2 | 2,50 | 408 | 2850 | 8350 | | | |
| 11.75 | 1400 | 120 | 7,5 | 1,85 | 579 | 2850 | 7850 | | | |
| | | | 5,5 | 1,55 | 425 | 2850 | 7850 | | | |
| | | | 4 | 3,51 | 309 | 2850 | 7850 | | | |
| | 900 | 75 | 5,5 | 1,61 | 679 | 2850 | 8000 | | | |
| | | | 4 | 2,24 | 494 | 2850 | 8000 | | | |
| | | | 3 | 3,00 | 371 | 2850 | 8000 | | | |
| | 700 | 60 | 4 | 1,73 | 618 | 2850 | 8350 | | | |
| | | | 3 | 2,32 | 463 | 2850 | 8350 | | | |
| | | | 2,2 | 3,18 | 340 | 2850 | 8350 | | | |
| | 500 | 40 | 3 | 1,64 | 695 | 2850 | 8600 | | | |
| | | | 2,2 | 2,25 | 509 | 2850 | 8600 | | | |
| | | | 1,5 | 3,34 | 347 | 2850 | 8600 | | | |
| 14.88 | 1400 | 95 | 7,5 | 1,55 | 731 | 2850 | 8000 | | | |
| | | | 5,5 | 2,14 | 536 | 2850 | 8000 | | | |
| | | | 4 | 2,97 | 390 | 2850 | 8000 | | | |
| | 900 | 60 | 5,5 | 1,35 | 849 | 2850 | 8350 | | | |
| | | | 4 | 1,89 | 618 | 2850 | 8350 | | | |
| | | | 3 | 2,53 | 463 | 2850 | 8350 | | | |
| | 700 | 50 | 4 | 1,45 | 741 | 2850 | 8350 | | | |
| | | | 3 | 1,96 | 556 | 2850 | 8350 | | | |
| | | | 2,2 | 2,69 | 408 | 2850 | 8350 | | | |
| | 500 | 35 | 3 | 1,38 | 794 | 2850 | 8600 | | | |
| | | | 2,2 | 1,90 | 582 | 2850 | 8600 | | | |
| | | | 1,5 | 2,82 | 397 | 2850 | 8600 | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | | |
| 16.62 | 1400 | 85 | 5,5 | 1,82 | 599 | 2850 | 8000 | | | | |
| | | | 4 | 2,52 | 436 | 2850 | 8000 | | | | |
| | | | 3 | 3,37 | 327 | 2850 | 8000 | | | | |
| | 900 | 55 | 4 | 1,60 | 674 | 2850 | 8350 | | | | |
| | | | 3 | 2,15 | 505 | 2850 | 8350 | | | | |
| | | | 2,2 | 2,95 | 371 | 2850 | 8350 | | | | |
| | 700 | 40 | 3 | 1,66 | 695 | 2850 | 8600 | | | | |
| | | | 2,2 | 2,29 | 509 | 2850 | 8600 | | | | |
| | | | 1,5 | 3,37 | 347 | 2850 | 8600 | | | | |
| | 500 | 30 | 2,2 | 1,62 | 679 | 2850 | 8600 | | | | |
| | | | 1,5 | 2,40 | 463 | 2850 | 8600 | | | | |
| | | | 1,1 | 3,29 | 340 | 2850 | 8600 | | | | |
| 18.15 | 1400 | 80 | 5,5 | 1,65 | 637 | 2850 | 8000 | | | | |
| | | | 4 | 2,28 | 463 | 2850 | 8000 | | | | |
| | | | 3 | 3,05 | 347 | 2850 | 8000 | | | | |
| | 900 | 50 | 4 | 1,45 | 741 | 2850 | 8350 | | | | |
| | | | 3 | 1,95 | 556 | 2850 | 8350 | | | | |
| | | | 2,2 | 2,68 | 408 | 2850 | 8350 | | | | |
| | 700 | 40 | 3 | 1,51 | 695 | 2850 | 8600 | | | | |
| | | | 2,2 | 2,08 | 509 | 2850 | 8600 | | | | |
| | | | 1,5 | 3,08 | 347 | 2850 | 8600 | | | | |
| | 500 | 30 | 2,2 | 1,46 | 679 | 2850 | 8600 | | | | |
| | | | 1,5 | 2,18 | 463 | 2850 | 8600 | | | | |
| | | | 1,1 | 2,98 | 340 | 2850 | 8600 | | | | |
| 20.01 | 1400 | 70 | 4 | 2,08 | 529 | 2850 | 8350 | | | | |
| | | | 3 | 2,79 | 397 | 2850 | 8350 | | | | |
| | | | 2,2 | 3,82 | 291 | 2850 | 8350 | | | | |
| | 900 | 45 | 3 | 1,77 | 618 | 2850 | 8600 | | | | |
| | | | 2,2 | 2,43 | 453 | 2850 | 8600 | | | | |
| | | | 1,5 | 3,59 | 309 | 2850 | 8600 | | | | |
| | 700 | 35 | 2,2 | 1,88 | 582 | 2850 | 8600 | | | | |
| | | | 1,5 | 2,78 | 397 | 2850 | 8600 | | | | |
| | | | 1,1 | 3,81 | 291 | 2850 | 8600 | | | | |
| | 500 | 25 | 1,5 | 1,97 | 556 | 2850 | 8900 | | | | |
| | | | 1,1 | 2,70 | 408 | 2850 | 8900 | | | | |
| | | | 0,75 | 3,99 | 278 | 2850 | 8900 | | | | |
| 23.75 | 1400 | 60 | 4 | 1,75 | 618 | 2850 | 8350 | | | | |
| | | | 3 | 2,35 | 463 | 2850 | 8350 | | | | |
| | | | 2,2 | 3,22 | 340 | 2850 | 8350 | | | | |
| | 900 | 40 | 3 | 1,49 | 695 | 2850 | 8600 | | | | |
| | | | 2,2 | 2,05 | 509 | 2850 | 8600 | | | | |
| | | | 1,5 | 3,00 | 347 | 2850 | 8600 | | | | |
| | 700 | 30 | 2,2 | 1,58 | 679 | 2850 | 8600 | | | | |
| | | | 1,5 | 2,35 | 463 | 2850 | 8600 | | | | |
| | | | 1,1 | 3,82 | 340 | 2850 | 8600 | | | | |
| | 500 | 20 | 1,5 | 1,66 | 695 | 2850 | 8900 | | | | |
| | | | 1,1 | 2,29 | 509 | 2850 | 8900 | | | | |
| | | | 0,75 | 3,38 | 347 | 2850 | 8900 | | | | |

2A 180 660 58



| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ | | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|-----|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | |
| 30.80 | 1400 | 45 | 3 | 1,75 | 618 | 2850 | 8600 | 2A 180 | 660 | 58 |
| | | | 2,2 | 2,40 | 453 | 2850 | 8600 | | | |
| | | | 1,5 | 3,55 | 309 | 2850 | 8600 | | | |
| | 900 | 30 | 2,2 | 1,52 | 679 | 2850 | 8600 | | | |
| | | | 1,5 | 2,25 | 463 | 2850 | 8600 | | | |
| | | | 1,1 | 3,10 | 340 | 2850 | 8600 | | | |
| | 700 | 23 | 1,5 | 1,74 | 604 | 2850 | 8900 | | | |
| | | | 1,1 | 2,40 | 443 | 2850 | 8900 | | | |
| | | | 0,75 | 3,54 | 302 | 2850 | 8900 | | | |
| | 500 | 16 | 1,1 | 1,70 | 637 | 2850 | 8900 | | | |
| | | | 0,75 | 2,51 | 434 | 2850 | 8900 | | | |
| | | | 0,55 | 3,45 | 318 | 2850 | 8900 | | | |
| 35.78 | 1400 | 40 | 2,2 | 2,06 | 509 | 2850 | 8600 | | | |
| | | | 1,5 | 3,04 | 347 | 2850 | 8600 | | | |
| | | | 1,1 | 4,17 | 255 | 2850 | 8600 | | | |
| | 900 | 25 | 1,5 | 1,94 | 556 | 2850 | 8900 | | | |
| | | | 1,1 | 2,67 | 408 | 2850 | 8900 | | | |
| | | | 0,75 | 3,93 | 278 | 2850 | 8900 | | | |
| | 700 | 20 | 1,1 | 2,05 | 509 | 2850 | 8900 | | | |
| | | | 0,75 | 3,03 | 347 | 2850 | 8900 | | | |
| | | | 0,55 | 4,16 | 255 | 2850 | 8900 | | | |
| | 500 | 14 | 0,75 | 2,15 | 496 | 2850 | 8900 | | | |
| | | | 0,55 | 2,95 | 364 | 2850 | 8900 | | | |
| | | | 0,37 | 2,40 | 245 | 2850 | 8900 | | | |
| 38.80 | 1400 | 35 | 2,2 | 1,92 | 582 | 2850 | 8600 | | | |
| | | | 1,5 | 2,83 | 397 | 2850 | 8600 | | | |
| | | | 1,1 | 3,89 | 291 | 2850 | 8600 | | | |
| | 900 | 23 | 1,5 | 1,80 | 604 | 2850 | 8900 | | | |
| | | | 1,1 | 2,48 | 443 | 2850 | 8900 | | | |
| | | | 0,75 | 3,66 | 302 | 2850 | 8900 | | | |
| | 700 | 18 | 1,1 | 1,91 | 566 | 2850 | 8900 | | | |
| | | | 0,75 | 2,83 | 386 | 2850 | 8900 | | | |
| | | | 0,55 | 2,88 | 283 | 2850 | 8900 | | | |
| | 500 | 13 | 0,75 | 2,01 | 534 | 2850 | 8900 | | | |
| | | | 0,55 | 2,76 | 392 | 2850 | 8900 | | | |
| | | | 0,37 | 4,13 | 264 | 2850 | 8900 | | | |
| 46.02 | 1400 | 30 | 2,2 | 1,30 | 679 | 2850 | 8600 | | | |
| | | | 1,5 | 1,93 | 463 | 2850 | 8600 | | | |
| | | | 1,1 | 2,65 | 340 | 2850 | 8600 | | | |
| | 900 | 20 | 1,5 | 1,22 | 695 | 2850 | 8900 | | | |
| | | | 1,1 | 1,69 | 509 | 2850 | 8900 | | | |
| | | | 0,75 | 2,50 | 347 | 2850 | 8900 | | | |
| | 700 | 15 | 1,1 | 1,30 | 679 | 2850 | 8900 | | | |
| | | | 0,75 | 1,93 | 463 | 2850 | 8900 | | | |
| | | | 0,55 | 2,65 | 340 | 2850 | 8900 | | | |
| | 500 | 11 | 0,75 | 1,35 | 632 | 2850 | 8900 | | | |
| | | | 0,55 | 1,86 | 463 | 2850 | 8900 | | | |
| | | | 0,37 | 2,80 | 312 | 2850 | 8900 | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|-----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | | |
| 7.32 | 1400 | 190 | 22 | 1,95 | 1073 | 3550 | 8250 | 2A 2AE 225 | 661 | 94 | 134 |
| | | | 18,5 | 2,32 | 902 | 3550 | 8250 | | | | |
| | | | 15 | 2,88 | 731 | 3550 | 8250 | | | | |
| | 900 | 120 | 18,5 | 1,45 | 1428 | 3550 | 8250 | | | | |
| | | | 15 | 1,83 | 1158 | 3550 | 8250 | | | | |
| | | | 11 | 2,52 | 849 | 3550 | 8250 | | | | |
| | 700 | 95 | 15 | 1,41 | 1463 | 3550 | 8500 | | | | |
| | | | 11 | 1,95 | 1073 | 3550 | 8500 | | | | |
| | | | 7,5 | 2,88 | 731 | 3550 | 8500 | | | | |
| | 500 | 70 | 11 | 1,38 | 1456 | 3550 | 8900 | | | | |
| | | | 7,5 | 2,03 | 993 | 3550 | 8900 | | | | |
| | | | 5,5 | 2,80 | 728 | 3550 | 8900 | | | | |
| 10.52 | 1400 | 133 | 22 | 1,85 | 1532 | 3550 | 8250 | | | | |
| | | | 18,5 | 2,21 | 1289 | 3550 | 8250 | | | | |
| | | | 15 | 2,73 | 1045 | 3550 | 8250 | | | | |
| | 900 | 85 | 18,5 | 1,40 | 2016 | 3550 | 8800 | | | | |
| | | | 15 | 1,73 | 1635 | 3550 | 8800 | | | | |
| | | | 11 | 2,38 | 1199 | 3550 | 8800 | | | | |
| | 700 | 65 | 15 | 1,34 | 2138 | 3550 | 9000 | | | | |
| | | | 11 | 1,84 | 1568 | 3550 | 9000 | | | | |
| | | | 7,5 | 2,73 | 1069 | 3550 | 9000 | | | | |
| | 500 | 45 | 11 | 1,31 | 2264 | 3550 | 9280 | | | | |
| | | | 7,5 | 1,94 | 1544 | 3550 | 9280 | | | | |
| | | | 5,5 | 2,67 | 1132 | 3550 | 9280 | | | | |
| 11.04 | 1400 | 125 | 18,5 | 1,35 | 1371 | 3550 | 8250 | | | | |
| | | | 15 | 1,68 | 1112 | 3550 | 8250 | | | | |
| | | | 11 | 2,30 | 815 | 3550 | 8250 | | | | |
| | 900 | 80 | 15 | 1,05 | 1737 | 3550 | 8800 | | | | |
| | | | 11 | 1,46 | 1274 | 3550 | 8800 | | | | |
| | | | 7,5 | 2,17 | 868 | 3550 | 8800 | | | | |
| | 700 | 63 | 11 | 1,13 | 1617 | 3550 | 9000 | | | | |
| | | | 7,5 | 1,68 | 1103 | 3550 | 9000 | | | | |
| | | | 5,5 | 2,30 | 809 | 3550 | 9000 | | | | |
| | 500 | 45 | 7,5 | 1,18 | 1544 | 3550 | 9280 | | | | |
| | | | 5,5 | 1,63 | 1132 | 3550 | 9280 | | | | |
| | | | 4 | 2,25 | 823 | 3550 | 9280 | | | | |
| 14.12 | 1400 | 100 | 15 | 1,55 | 1390 | 3550 | 8500 | | | | |
| | | | 11 | 2,13 | 1019 | 3550 | 8500 | | | | |
| | | | 7,5 | 3,15 | 695 | 3550 | 8500 | | | | |
| | 900 | 65 | 11 | 1,35 | 1568 | 3550 | 9000 | | | | |
| | | | 7,5 | 2,00 | 1069 | 3550 | 9000 | | | | |
| | | | 5,5 | 2,50 | 784 | 3550 | 9000 | | | | |
| | 700 | 50 | 7,5 | 1,54 | 1390 | 3550 | 9000 | | | | |
| | | | 5,5 | 2,13 | 1019 | 3550 | 9000 | | | | |
| | | | 4 | 2,92 | 741 | 3550 | 9000 | | | | |
| | 500 | 35 | 5,5 | 1,50 | 1456 | 3550 | 9280 | | | | |
| | | | 4 | 2,19 | 1059 | 3550 | 9280 | | | | |
| | | | 3 | 2,80 | 794 | 3550 | 9280 | | | | |



| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ | | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|--|---------|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | |
| 15.60 | 1400 | 90 | 11 | 2,15 | 1132 | 3550 | 8800 | 2A 2AE 225 | | 661 94 |
| | | | 7,5 | 3,17 | 772 | 3550 | 8800 | | | |
| | | | 5,5 | 4,35 | 566 | 3550 | 8800 | | | |
| | 900 | 60 | 7,5 | 2,00 | 1158 | 3550 | 9000 | | | |
| | | | 5,5 | 2,78 | 849 | 3550 | 9000 | | | |
| | | | 4 | 3,78 | 618 | 3550 | 9000 | | | |
| | 700 | 45 | 5,5 | 2,14 | 1132 | 3550 | 9280 | | | |
| | | | 4 | 2,95 | 823 | 3550 | 9280 | | | |
| | | | 3 | 3,92 | 618 | 3550 | 9280 | | | |
| | 500 | 32 | 4 | 2,11 | 1158 | 3550 | 9280 | | | |
| | | | 3 | 2,83 | 868 | 3550 | 9280 | | | |
| | | | 2,2 | 2,89 | 637 | 3550 | 9280 | | | |
| 17.30 | 1400 | 80 | 11 | 1,80 | 1274 | 3550 | 8800 | 2A 2AE 225 | | 661 94 |
| | | | 7,5 | 2,66 | 868 | 3550 | 8800 | | | |
| | | | 5,5 | 3,65 | 637 | 3550 | 8800 | | | |
| | 900 | 50 | 7,5 | 1,68 | 1390 | 3550 | 9000 | | | |
| | | | 5,5 | 2,33 | 1019 | 3550 | 9000 | | | |
| | | | 4 | 3,22 | 741 | 3550 | 9000 | | | |
| | 700 | 40 | 5,5 | 1,80 | 1274 | 3550 | 9280 | | | |
| | | | 4 | 2,49 | 926 | 3550 | 9280 | | | |
| | | | 3 | 3,33 | 695 | 3550 | 9280 | | | |
| | 500 | 30 | 4 | 1,76 | 1235 | 3550 | 9280 | | | |
| | | | 3 | 2,37 | 926 | 3550 | 9280 | | | |
| | | | 2,2 | 3,25 | 679 | 3550 | 9280 | | | |
| 21.25 | 1400 | 65 | 7,5 | 2,70 | 1069 | 3550 | 9000 | 2A 2AE 225 | | 671 134 |
| | | | 5,5 | 3,70 | 784 | 3550 | 9000 | | | |
| | | | 4 | 5,10 | 570 | 3550 | 9000 | | | |
| | 900 | 42 | 5,5 | 2,35 | 1213 | 3550 | 9280 | | | |
| | | | 4 | 3,26 | 882 | 3550 | 9280 | | | |
| | | | 3 | 4,36 | 662 | 3550 | 9280 | | | |
| | 700 | 33 | 4 | 2,52 | 1123 | 3550 | 9280 | | | |
| | | | 3 | 3,38 | 842 | 3550 | 9280 | | | |
| | | | 2,2 | 4,63 | 618 | 3550 | 9280 | | | |
| | 500 | 24 | 3 | 2,40 | 1158 | 3550 | 9600 | | | |
| | | | 2,2 | 3,39 | 849 | 3550 | 9600 | | | |
| | | | 1,5 | 4,84 | 579 | 3550 | 9600 | | | |
| 24.14 | 1400 | 60 | 7,5 | 2,15 | 1158 | 3550 | 9000 | 2A 2AE 225 | | 661 94 |
| | | | 5,5 | 2,95 | 849 | 3550 | 9000 | | | |
| | | | 4 | 4,17 | 618 | 3550 | 9000 | | | |
| | 900 | 37 | 5,5 | 1,88 | 1377 | 3550 | 9280 | | | |
| | | | 4 | 2,60 | 1001 | 3550 | 9280 | | | |
| | | | 3 | 3,49 | 751 | 3550 | 9280 | | | |
| | 700 | 29 | 4 | 2,00 | 1278 | 3550 | 9600 | | | |
| | | | 3 | 2,69 | 958 | 3550 | 9600 | | | |
| | | | 2,2 | 3,69 | 703 | 3550 | 9600 | | | |
| | 500 | 21 | 3 | 1,91 | 1323 | 3550 | 9600 | | | |
| | | | 2,2 | 2,63 | 970 | 3550 | 9600 | | | |
| | | | 1,5 | 3,88 | 662 | 3550 | 9600 | | | |







| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | | |
| 32.12 | 1400 | 45 | 7,5 | 1,75 | 1544 | 3550 | 9280 | | | | |
| | | | 5,5 | 2,40 | 1132 | 3550 | 9280 | | | | |
| | | | 4 | 3,32 | 823 | 3550 | 9280 | | | | |
| | 900 | 28 | 5,5 | 1,45 | 1820 | 3550 | 9600 | | | | |
| | | | 4 | 2,02 | 1323 | 3550 | 9600 | | | | |
| | | | 3 | 2,71 | 993 | 3550 | 9600 | | | | |
| | 700 | 22 | 4 | 1,55 | 1684 | 3550 | 9600 | | | | |
| | | | 3 | 2,10 | 1263 | 3550 | 9600 | | | | |
| | | | 2,2 | 2,88 | 926 | 3550 | 9600 | | | | |
| | 500 | 16 | 3 | 1,48 | 1737 | 3550 | 9600 | | | | |
| | | | 2,2 | 2,05 | 1274 | 3550 | 9600 | | | | |
| | | | 1,5 | 3,02 | 868 | 3550 | 9600 | | | | |
| 35.79 | 1400 | 40 | 7,5 | 1,29 | 1737 | 3550 | 9280 | | | | |
| | | | 5,5 | 1,77 | 1274 | 3550 | 9280 | | | | |
| | | | 4 | 2,46 | 926 | 3550 | 9280 | | | | |
| | 900 | 25 | 5,5 | 1,12 | 2038 | 3550 | 9600 | | | | |
| | | | 4 | 1,56 | 1482 | 3550 | 9600 | | | | |
| | | | 3 | 2,10 | 1112 | 3550 | 9600 | | | | |
| | 700 | 20 | 4 | 1,21 | 1853 | 3550 | 9600 | | | | |
| | | | 3 | 1,63 | 1390 | 3550 | 9600 | | | | |
| | | | 2,2 | 2,23 | 1019 | 3550 | 9600 | | | | |
| | 500 | 14 | 3 | 1,14 | 1985 | 3550 | 9600 | | | | |
| | | | 2,2 | 1,57 | 1456 | 3550 | 9600 | | | | |
| | | | 1,5 | 2,38 | 993 | 3550 | 9600 | | | | |
| 38.92 | 1400 | 36 | 5,5 | 1,55 | 1415 | 3550 | 9280 | 2A 2AE 225 | | | |
| | | | 4 | 2,15 | 1029 | 3550 | 9280 | | | | |
| | | | 3 | 2,88 | 772 | 3550 | 9280 | | | | |
| | 900 | 23 | 4 | 1,36 | 1611 | 3550 | 9600 | | | | |
| | | | 3 | 1,83 | 1208 | 3550 | 9600 | | | | |
| | | | 2,2 | 2,52 | 886 | 3550 | 9600 | | | | |
| | 700 | 18 | 3 | 1,41 | 1544 | 3550 | 9600 | | | | |
| | | | 2,2 | 1,94 | 1132 | 3550 | 9600 | | | | |
| | | | 1,5 | 2,87 | 772 | 3550 | 9600 | | | | |
| | 500 | 13 | 2,2 | 1,37 | 1568 | 3550 | 9600 | | | | |
| | | | 1,5 | 2,04 | 1069 | 3550 | 9600 | | | | |
| | | | 1,1 | 2,80 | 784 | 3550 | 9600 | | | | |
| 46.69 | 1400 | 30 | 4 | 1,65 | 1235 | 3550 | 9280 | | | | |
| | | | 3 | 2,21 | 926 | 3550 | 9280 | | | | |
| | | | 2,2 | 3,04 | 679 | 3550 | 9280 | | | | |
| | 900 | 19 | 3 | 1,41 | 1463 | 3550 | 9600 | | | | |
| | | | 2,2 | 1,94 | 1073 | 3550 | 9600 | | | | |
| | | | 1,5 | 2,87 | 731 | 3550 | 9600 | | | | |
| | 700 | 15 | 2,2 | 1,49 | 1073 | 3550 | 9600 | | | | |
| | | | 1,5 | 2,20 | 731 | 3550 | 9600 | | | | |
| | | | 1,1 | 3,03 | 536 | 3550 | 9600 | | | | |
| | 500 | 11 | 1,5 | 1,57 | 1263 | 3550 | 9600 | | | | |
| | | | 1,1 | 2,16 | 926 | 3550 | 9600 | | | | |
| | | | 0,75 | 3,19 | 632 | 3550 | 9600 | | | | |



| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ | | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|--|---------|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | |
| 6.26 | 1400 | 220 | 45 | 2,66 | 1895 | 4800 | 17500 | 2A 2AE 275 | | 662 153 |
| | | | 37 | 3,24 | 1558 | 4800 | 17500 | | | |
| | | | 30 | 4,00 | 1263 | 4800 | 17500 | | | |
| | 900 | 144 | 37 | 2,13 | 2380 | 4800 | 17500 | | | |
| | | | 30 | 2,63 | 1930 | 4800 | 17500 | | | |
| | | | 22 | 3,58 | 1415 | 4800 | 17500 | | | |
| | 700 | 112 | 30 | 2,03 | 2481 | 4800 | 18250 | | | |
| | | | 22 | 2,78 | 1820 | 4800 | 18250 | | | |
| | | | 18,5 | 3,30 | 1530 | 4800 | 18250 | | | |
| | 500 | 80 | 22 | 1,98 | 2547 | 4800 | 19000 | | | |
| | | | 18,5 | 2,36 | 2142 | 4800 | 19000 | | | |
| | | | 15 | 2,91 | 1737 | 4800 | 19000 | | | |
| 7.83 | 1400 | 180 | 45 | 2,18 | 2316 | 4800 | 17500 | 2A 2AE 275 | | 662 153 |
| | | | 37 | 2,65 | 1904 | 4800 | 17500 | | | |
| | | | 30 | 3,27 | 1544 | 4800 | 17500 | | | |
| | 900 | 115 | 37 | 1,70 | 2980 | 4800 | 18250 | | | |
| | | | 30 | 2,10 | 2417 | 4800 | 18250 | | | |
| | | | 22 | 2,86 | 1772 | 4800 | 18250 | | | |
| | 700 | 90 | 30 | 1,63 | 3088 | 4800 | 19000 | | | |
| | | | 22 | 2,23 | 2264 | 4800 | 19000 | | | |
| | | | 18,5 | 2,65 | 1904 | 4800 | 19000 | | | |
| | 500 | 64 | 22 | 1,59 | 3184 | 4800 | 19650 | | | |
| | | | 18,5 | 1,89 | 2678 | 4800 | 19650 | | | |
| | | | 15 | 2,33 | 2171 | 4800 | 19650 | | | |
| 9.69 | 1400 | 145 | 45 | 1,68 | 2875 | 4800 | 17500 | 2A 2AE 275 | | 672 205 |
| | | | 37 | 2,05 | 2364 | 4800 | 17500 | | | |
| | | | 30 | 2,52 | 1917 | 4800 | 17500 | | | |
| | 900 | 93 | 37 | 1,31 | 3685 | 4800 | 19000 | | | |
| | | | 30 | 1,62 | 2988 | 4800 | 19000 | | | |
| | | | 22 | 2,21 | 2191 | 4800 | 19000 | | | |
| | 700 | 72 | 30 | 1,26 | 3860 | 4800 | 19000 | | | |
| | | | 22 | 1,71 | 2831 | 4800 | 19000 | | | |
| | | | 18,5 | 2,04 | 2380 | 4800 | 19000 | | | |
| | 500 | 52 | 22 | 1,22 | 3919 | 4800 | 19650 | | | |
| | | | 18,5 | 1,46 | 3296 | 4800 | 19650 | | | |
| | | | 15 | 1,80 | 2672 | 4800 | 19650 | | | |
| 11.79 | 1400 | 120 | 37 | 1,82 | 2856 | 4800 | 18250 | 2A 2AE 275 | | 662 153 |
| | | | 30 | 2,24 | 2316 | 4800 | 18250 | | | |
| | | | 22 | 3,06 | 1698 | 4800 | 18250 | | | |
| | 900 | 76 | 30 | 1,44 | 3657 | 4800 | 19000 | | | |
| | | | 22 | 1,96 | 2682 | 4800 | 19000 | | | |
| | | | 18,5 | 2,34 | 2255 | 4800 | 19000 | | | |
| | 700 | 60 | 22 | 1,53 | 3397 | 4800 | 19650 | | | |
| | | | 18,5 | 1,81 | 2856 | 4800 | 19650 | | | |
| | | | 15 | 2,24 | 2316 | 4800 | 19650 | | | |
| | 500 | 42 | 18,5 | 1,30 | 4080 | 4800 | 20400 | | | |
| | | | 15 | 1,60 | 3308 | 4800 | 20400 | | | |
| | | | 11 | 2,18 | 2426 | 4800 | 20400 | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | | |
| 14.29 | 1400 | 98 | 37 | 1,46 | 3497 | 4800 | 19000 | 2A 2AE 275 |  |  | |
| | | | 30 | 1,80 | 2836 | 4800 | 19000 | | | | |
| | | | 22 | 2,45 | 2080 | 4800 | 19000 | | | | |
| | 900 | 63 | 30 | 1,15 | 4411 | 4800 | 19650 | | | | |
| | | | 22 | 1,57 | 3235 | 4800 | 19650 | | | | |
| | | | 18,5 | 1,87 | 2720 | 4800 | 19650 | | | | |
| | 700 | 50 | 22 | 1,22 | 4076 | 4800 | 19650 | | | | |
| | | | 18,5 | 1,45 | 3427 | 4800 | 19650 | | | | |
| | | | 15 | 1,80 | 2779 | 4800 | 19650 | | | | |
| | 500 | 35 | 18,5 | 1,04 | 4896 | 4800 | 20400 | | | | |
| | | | 15 | 1,28 | 3970 | 4800 | 20400 | | | | |
| | | | 11 | 1,75 | 2911 | 4800 | 20400 | | | | |
| 17.96 | 1400 | 78 | 30 | 1,46 | 3569 | 4800 | 19000 | | | | |
| | | | 22 | 1,99 | 2613 | 4800 | 19000 | | | | |
| | | | 18,5 | 2,36 | 2197 | 4800 | 19000 | | | | |
| | 900 | 50 | 22 | 1,28 | 4076 | 4800 | 19650 | | | | |
| | | | 18,5 | 1,52 | 3427 | 4800 | 19650 | | | | |
| | | | 15 | 1,87 | 2779 | 4800 | 19650 | | | | |
| | 700 | 40 | 18,5 | 1,18 | 4284 | 4800 | 20400 | | | | |
| | | | 15 | 1,45 | 3474 | 4800 | 20400 | | | | |
| | | | 11 | 1,98 | 2547 | 4800 | 20400 | | | | |
| | 500 | 28 | 15 | 1,04 | 4963 | 4800 | 21000 | | | | |
| | | | 11 | 1,42 | 3639 | 4800 | 21000 | | | | |
| | | | 7,5 | 2,08 | 2481 | 4800 | 21000 | | | | |
| 20.00 | 1400 | 70 | 30 | 1,58 | 3970 | 4800 | 19000 | | | | |
| | | | 22 | 2,15 | 2911 | 4800 | 19000 | | | | |
| | | | 18,5 | 2,56 | 2448 | 4800 | 19000 | | | | |
| | 900 | 45 | 22 | 1,38 | 4529 | 4800 | 20400 | | | | |
| | | | 18,5 | 1,64 | 3808 | 4800 | 20400 | | | | |
| | | | 15 | 2,03 | 3088 | 4800 | 20400 | | | | |
| | 700 | 34 | 18,5 | 1,28 | 5040 | 4800 | 20400 | | | | |
| | | | 15 | 1,58 | 4087 | 4800 | 20400 | | | | |
| | | | 11 | 2,15 | 2997 | 4800 | 20400 | | | | |
| | 500 | 25 | 15 | 1,12 | 5558 | 4800 | 21000 | | | | |
| | | | 11 | 1,53 | 4076 | 4800 | 21000 | | | | |
| | | | 7,5 | 2,25 | 2779 | 4800 | 21000 | | | | |
| 23.77 | 1400 | 58 | 22 | 1,55 | 3514 | 4800 | 19650 | | | | |
| | | | 18,5 | 1,84 | 2955 | 4800 | 19650 | | | | |
| | | | 15 | 2,27 | 2396 | 4800 | 19650 | | | | |
| | 900 | 37 | 18,5 | 1,18 | 4632 | 4800 | 20400 | | | | |
| | | | 15 | 1,46 | 3755 | 4800 | 20400 | | | | |
| | | | 11 | 1,99 | 2754 | 4800 | 20400 | | | | |
| | 700 | 29 | 15 | 1,13 | 4791 | 4800 | 21000 | | | | |
| | | | 11 | 1,54 | 3514 | 4800 | 21000 | | | | |
| | | | 7,5 | 2,27 | 2396 | 4800 | 21000 | | | | |
| | 500 | 21 | 11 | 1,11 | 4852 | 4800 | 21000 | | | | |
| | | | 7,5 | 1,62 | 3308 | 4800 | 21000 | | | | |
| | | | 5,5 | 2,21 | 2426 | 4800 | 21000 | | | | |



| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ | | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|--|---------|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | |
| 29.25 | 1400 | 48 | 15 | 1,62 | 2895 | 4800 | 20400 | 2A 2AE 275 | | 662 153 |
| | | | 11 | 2,21 | 2123 | 4800 | 20400 | | | |
| | | | 7,5 | 3,25 | 1447 | 4800 | 20400 | | | |
| | 900 | 30 | 11 | 1,42 | 3397 | 4800 | 20400 | | | |
| | | | 7,5 | 2,08 | 2316 | 4800 | 20400 | | | |
| | | | 5,5 | 2,83 | 1698 | 4800 | 20400 | | | |
| | 700 | 24 | 7,5 | 1,62 | 2895 | 4800 | 21000 | | | |
| | | | 5,5 | 2,21 | 2123 | 4800 | 21000 | | | |
| | | | 4 | 3,03 | 1544 | 4800 | 21000 | | | |
| | 500 | 17 | 5,5 | 1,58 | 2997 | 4800 | 21000 | | | |
| | | | 4 | 2,17 | 2180 | 4800 | 21000 | | | |
| | | | 3 | 2,89 | 1635 | 4800 | 21000 | | | |
| 37.91 | 1400 | 37 | 15 | 1,12 | 3755 | 4800 | 20400 | 2A 2AE 275 | | 662 153 |
| | | | 11 | 1,52 | 2754 | 4800 | 20400 | | | |
| | | | 7,5 | 2,23 | 1878 | 4800 | 20400 | | | |
| | 900 | 24 | 11 | 0,98 | 4246 | 4800 | 21000 | | | |
| | | | 7,5 | 1,43 | 2895 | 4800 | 21000 | | | |
| | | | 5,5 | 1,96 | 2123 | 4800 | 21000 | | | |
| | 700 | 19 | 7,5 | 1,12 | 3657 | 4800 | 21000 | | | |
| | | | 5,5 | 1,53 | 2682 | 4800 | 21000 | | | |
| | | | 4 | 2,10 | 1950 | 4800 | 21000 | | | |
| | 500 | 13 | 5,5 | 1,09 | 3919 | 4800 | 21000 | | | |
| | | | 4 | 1,50 | 2850 | 4800 | 21000 | | | |
| | | | 3 | 2,00 | 2138 | 4800 | 21000 | | | |
| 47.50 | 1400 | 30 | 11 | 1,21 | 3397 | 4800 | 20400 | 2A 2AE 350 | | 663 287 |
| | | | 7,5 | 1,77 | 2316 | 4800 | 20400 | | | |
| | | | 5,5 | 2,42 | 1698 | 4800 | 20400 | | | |
| | 900 | 19 | 7,5 | 1,14 | 3657 | 4800 | 21000 | | | |
| | | | 5,5 | 1,55 | 2682 | 4800 | 21000 | | | |
| | | | 4 | 2,13 | 1950 | 4800 | 21000 | | | |
| | 700 | 15 | 5,5 | 1,20 | 3397 | 4800 | 21000 | | | |
| | | | 4 | 1,65 | 2470 | 4800 | 21000 | | | |
| | | | 3 | 2,21 | 1853 | 4800 | 21000 | | | |
| | 500 | 10 | 4 | 1,18 | 3705 | 4800 | 21000 | | | |
| | | | 3 | 1,58 | 2779 | 4800 | 21000 | | | |
| | | | 2,2 | 2,15 | 2038 | 4800 | 21000 | | | |
| 6.50 | 1400 | 215 | 75 | 2,28 | 3231 | 8300 | 22300 | 2A 2AE 350 | | 663 287 |
| | | | 55 | 3,12 | 2370 | 8300 | 22300 | | | |
| | | | 45 | 3,81 | 1939 | 8300 | 22300 | | | |
| | 900 | 140 | 55 | 1,99 | 3639 | 8300 | 22300 | | | |
| | | | 45 | 2,44 | 2978 | 8300 | 22300 | | | |
| | | | 37 | 2,97 | 2448 | 8300 | 22300 | | | |
| | 700 | 108 | 45 | 1,89 | 3860 | 8300 | 25500 | | | |
| | | | 37 | 2,30 | 3174 | 8300 | 25500 | | | |
| | | | 30 | 2,84 | 2573 | 8300 | 25500 | | | |
| | 500 | 77 | 37 | 1,65 | 4451 | 8300 | 25750 | | | |
| | | | 30 | 2,03 | 3609 | 8300 | 25750 | | | |
| | | | 22 | 2,77 | 2647 | 8300 | 25750 | | | |







| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | |
| 10.47 | 1400 | 134 | 75 | 2,18 | 4963 | 8300 | 22300 | | | | |
| | | | 55 | 2,98 | 3639 | 8300 | 22300 | | | | |
| | | | 45 | 3,64 | 2978 | 8300 | 22300 | | | | |
| | 900 | 86 | 55 | 1,91 | 5661 | 8300 | 25750 | | | | |
| | | | 45 | 2,33 | 4632 | 8300 | 25750 | | | | |
| | | | 37 | 2,84 | 3808 | 8300 | 25750 | | | | |
| | 700 | 67 | 45 | 1,81 | 5955 | 8300 | 25750 | | | | |
| | | | 37 | 2,21 | 4896 | 8300 | 25750 | | | | |
| | | | 30 | 2,72 | 3970 | 8300 | 25750 | | | | |
| | 500 | 48 | 37 | 1,57 | 6855 | 8300 | 26250 | | | | |
| | | | 30 | 1,94 | 5558 | 8300 | 26250 | | | | |
| | | | 22 | 2,65 | 4076 | 8300 | 26250 | | | | |
| 14.38 | 1400 | 97 | 55 | 2,04 | 5253 | 8300 | 25750 | | | | |
| | | | 45 | 2,49 | 4298 | 8300 | 25750 | | | | |
| | | | 37 | 3,03 | 3534 | 8300 | 25750 | | | | |
| | 900 | 63 | 45 | 1,60 | 6617 | 8300 | 26250 | | | | |
| | | | 37 | 1,95 | 5440 | 8300 | 26250 | | | | |
| | | | 30 | 2,40 | 4411 | 8300 | 26250 | | | | |
| | 700 | 50 | 37 | 1,51 | 6855 | 8300 | 26250 | | | | |
| | | | 30 | 1,86 | 5558 | 8300 | 26250 | | | | |
| | | | 22 | 2,55 | 4076 | 8300 | 26250 | | | | |
| | 500 | 35 | 30 | 1,33 | 7940 | 8300 | 27000 | | | | |
| | | | 22 | 1,81 | 5823 | 8300 | 27000 | | | | |
| | | | 18,5 | 2,16 | 4896 | 8300 | 27000 | | | | |
| 16.04 | 1400 | 90 | 55 | 1,91 | 5661 | 8300 | 25750 | 2A | 350 | | |
| | | | 45 | 2,33 | 4632 | 8300 | 25750 | | | | |
| | | | 37 | 2,84 | 3808 | 8300 | 25750 | | | | |
| | 900 | 56 | 45 | 1,50 | 7444 | 8300 | 26250 | | | | |
| | | | 37 | 1,82 | 6121 | 8300 | 26250 | | | | |
| | | | 30 | 2,25 | 4963 | 8300 | 26250 | | | | |
| | 700 | 44 | 37 | 1,41 | 7790 | 8300 | 27000 | | | | |
| | | | 30 | 1,75 | 6316 | 8300 | 27000 | | | | |
| | | | 22 | 2,38 | 4632 | 8300 | 27000 | | | | |
| | 500 | 31 | 30 | 1,25 | 8965 | 8300 | 27000 | | | | |
| | | | 22 | 1,70 | 6574 | 8300 | 27000 | | | | |
| | | | 18,5 | 2,03 | 5528 | 8300 | 27000 | | | | |
| 20.08 | 1400 | 70 | 45 | 1,83 | 5955 | 8300 | 25750 | | | | |
| | | | 37 | 2,23 | 4896 | 8300 | 25750 | | | | |
| | | | 30 | 2,75 | 3970 | 8300 | 25750 | | | | |
| | 900 | 45 | 37 | 1,43 | 7617 | 8300 | 27000 | | | | |
| | | | 30 | 1,76 | 6176 | 8300 | 27000 | | | | |
| | | | 22 | 2,41 | 4529 | 8300 | 27000 | | | | |
| | 700 | 35 | 30 | 1,37 | 7940 | 8300 | 27000 | | | | |
| | | | 22 | 1,86 | 5823 | 8300 | 27000 | | | | |
| | | | 18,5 | 2,22 | 4896 | 8300 | 27000 | | | | |
| | 500 | 25 | 22 | 1,33 | 8152 | 8300 | 27500 | | | | |
| | | | 18,5 | 1,59 | 6855 | 8300 | 27500 | | | | |
| | | | 15 | 1,96 | 5558 | 8300 | 27500 | | | | |



| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ | | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|-----|-----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | |
| 23.41 | 1400 | 60 | 37 | 1,45 | 5712 | 8300 | 26250 | 2A 2AE 350 | 663 | 287 |
| | | | 30 | 1,78 | 4632 | 8300 | 26250 | | | |
| | | | 22 | 2,44 | 3397 | 8300 | 26250 | | | |
| | 900 | 38 | 30 | 1,15 | 7313 | 8300 | 27000 | | | |
| | | | 22 | 1,56 | 5363 | 8300 | 27000 | | | |
| | | | 18,5 | 1,86 | 4510 | 8300 | 27000 | | | |
| | 700 | 30 | 22 | 1,22 | 6793 | 8300 | 27000 | | | |
| | | | 18,5 | 1,45 | 5712 | 8300 | 27000 | | | |
| | | | 15 | 1,78 | 4632 | 8300 | 27000 | | | |
| | 500 | 21 | 18,5 | 1,04 | 8161 | 8300 | 27500 | | | |
| | | | 15 | 1,28 | 6617 | 8300 | 27500 | | | |
| | | | 11 | 1,74 | 4862 | 8300 | 27500 | | | |
| 31.50 | 1400 | 44 | 30 | 1,69 | 6316 | 8300 | 27000 | | | |
| | | | 22 | 2,30 | 4632 | 8300 | 27000 | | | |
| | | | 18,5 | 2,74 | 3895 | 8300 | 27000 | | | |
| | 900 | 28 | 22 | 1,48 | 7278 | 8300 | 27500 | | | |
| | | | 18,5 | 1,76 | 6121 | 8300 | 27500 | | | |
| | | | 15 | 2,17 | 4963 | 8300 | 27500 | | | |
| | 700 | 22 | 18,5 | 1,37 | 7790 | 8300 | 27500 | | | |
| | | | 15 | 1,69 | 6316 | 8300 | 27500 | | | |
| | | | 11 | 2,30 | 4632 | 8300 | 27500 | | | |
| | 500 | 16 | 15 | 1,21 | 8685 | 8300 | 27500 | | | |
| | | | 11 | 1,65 | 6369 | 8300 | 27500 | | | |
| | | | 7,5 | 2,42 | 4342 | 8300 | 27500 | | | |
| 35.00 | 1400 | 40 | 22 | 1,93 | 5095 | 8300 | 27000 | | | |
| | | | 18,5 | 2,29 | 4284 | 8300 | 27000 | | | |
| | | | 15 | 2,83 | 3474 | 8300 | 27000 | | | |
| | 900 | 26 | 18,5 | 1,47 | 6591 | 8300 | 27500 | | | |
| | | | 15 | 1,82 | 5344 | 8300 | 27500 | | | |
| | | | 11 | 2,48 | 3919 | 8300 | 27500 | | | |
| | 700 | 20 | 15 | 1,41 | 6948 | 8300 | 27500 | | | |
| | | | 11 | 1,93 | 5095 | 8300 | 27500 | | | |
| | | | 7,5 | 2,83 | 3474 | 8300 | 27500 | | | |
| | 500 | 14 | 11 | 1,38 | 7278 | 8300 | 27500 | | | |
| | | | 7,5 | 2,02 | 4963 | 8300 | 27500 | | | |
| | | | 5,5 | 2,76 | 3639 | 8300 | 27500 | | | |
| 48.97 | 1400 | 29 | 18,5 | 1,35 | 5909 | 8300 | 27500 | | | |
| | | | 15 | 1,67 | 4791 | 8300 | 27500 | | | |
| | | | 11 | 2,21 | 3514 | 8300 | 27500 | | | |
| | 900 | 18 | 15 | 1,07 | 7720 | 8300 | 27500 | | | |
| | | | 11 | 1,46 | 5661 | 8300 | 27500 | | | |
| | | | 7,5 | 2,14 | 3860 | 8300 | 27500 | | | |
| | 700 | 14 | 11 | 1,13 | 7278 | 8300 | 27500 | | | |
| | | | 7,5 | 1,66 | 4963 | 8300 | 27500 | | | |
| | | | 5,5 | 2,27 | 3639 | 8300 | 27500 | | | |
| | 500 | 10 | 7,5 | 1,18 | 6948 | 8300 | 27500 | | | |
| | | | 5,5 | 1,62 | 5095 | 8300 | 27500 | | | |
| | | | 4 | 2,22 | 3705 | 8300 | 27500 | | | |













| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | |
| 6.18 | 1400 | 227 | 160 | 3,30 | 6529 | 8550 | 60000 | 2A 2AE 430 |  |  | |
| | | | 132 | 4,00 | 5387 | 8550 | 60000 | | | | |
| | | | 110 | 4,80 | 4489 | 8550 | 60000 | | | | |
| | 900 | 145 | 132 | 2,57 | 8433 | 8550 | 60000 | | | | |
| | | | 110 | 3,08 | 7027 | 8550 | 60000 | | | | |
| | | | 90 | 3,77 | 5750 | 8550 | 60000 | | | | |
| | 700 | 113 | 110 | 2,40 | 9018 | 8550 | 61500 | | | | |
| | | | 90 | 2,93 | 7378 | 8550 | 61500 | | | | |
| | | | 75 | 3,52 | 6148 | 8550 | 61500 | | | | |
| | 500 | 81 | 90 | 2,09 | 10293 | 8550 | 63000 | | | | |
| | | | 75 | 2,51 | 8577 | 8550 | 63000 | | | | |
| | | | 55 | 3,43 | 6290 | 8550 | 63000 | | | | |
| 7.04 | 1400 | 200 | 160 | 2,88 | 7411 | 8550 | 60000 | | | | |
| | | | 132 | 3,49 | 6114 | 8550 | 60000 | | | | |
| | | | 110 | 4,19 | 5095 | 8550 | 60000 | | | | |
| | 900 | 130 | 132 | 2,24 | 9406 | 8550 | 61500 | | | | |
| | | | 110 | 2,69 | 7838 | 8550 | 61500 | | | | |
| | | | 90 | 3,29 | 6413 | 8550 | 61500 | | | | |
| | 700 | 100 | 110 | 2,09 | 10190 | 8550 | 63000 | | | | |
| | | | 90 | 2,56 | 8337 | 8550 | 63000 | | | | |
| | | | 75 | 3,07 | 6948 | 8550 | 63000 | | | | |
| | 500 | 71 | 90 | 1,82 | 11742 | 8550 | 63000 | | | | |
| | | | 75 | 2,19 | 9785 | 8550 | 63000 | | | | |
| | | | 55 | 2,99 | 7176 | 8550 | 63000 | | | | |
| 8.07 | 1400 | 174 | 160 | 2,51 | 8518 | 8550 | 60000 | | | | |
| | | | 132 | 3,04 | 7027 | 8550 | 60000 | | | | |
| | | | 110 | 3,65 | 5856 | 8550 | 60000 | | | | |
| | 900 | 112 | 132 | 1,95 | 10918 | 8550 | 63000 | | | | |
| | | | 110 | 2,35 | 9098 | 8550 | 63000 | | | | |
| | | | 90 | 2,87 | 7444 | 8550 | 63000 | | | | |
| | 700 | 87 | 110 | 1,82 | 11712 | 8550 | 63000 | | | | |
| | | | 90 | 2,23 | 9583 | 8550 | 63000 | | | | |
| | | | 75 | 2,67 | 7986 | 8550 | 63000 | | | | |
| | 500 | 62 | 90 | 1,59 | 13447 | 8550 | 64500 | | | | |
| | | | 75 | 1,91 | 11206 | 8550 | 64500 | | | | |
| | | | 55 | 2,60 | 8218 | 8550 | 64500 | | | | |
| 9.32 | 1400 | 150 | 160 | 2,17 | 9881 | 8550 | 60000 | | | | |
| | | | 132 | 2,63 | 8152 | 8550 | 60000 | | | | |
| | | | 110 | 3,16 | 6793 | 8550 | 60000 | | | | |
| | 900 | 97 | 132 | 1,69 | 12606 | 8550 | 63000 | | | | |
| | | | 110 | 2,03 | 10505 | 8550 | 63000 | | | | |
| | | | 90 | 2,48 | 8595 | 8550 | 63000 | | | | |
| | 700 | 75 | 110 | 1,57 | 13586 | 8550 | 63000 | | | | |
| | | | 90 | 1,92 | 11116 | 8550 | 63000 | | | | |
| | | | 75 | 2,31 | 9264 | 8550 | 63000 | | | | |
| | 500 | 54 | 90 | 1,37 | 15439 | 8550 | 64500 | | | | |
| | | | 75 | 1,65 | 12866 | 8550 | 64500 | | | | |
| | | | 55 | 2,25 | 9435 | 8550 | 64500 | | | | |



| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ | | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|--|---------|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | |
| 10.86 | 1400 | 130 | 132 | 2,27 | 9406 | 8550 | 61500 | 2A 2AE 430 | | 664 535 |
| | | | 110 | 2,73 | 7838 | 8550 | 61500 | | | |
| | | | 90 | 3,33 | 6413 | 8550 | 61500 | | | |
| | 900 | 83 | 110 | 1,75 | 12277 | 8550 | 63000 | | | |
| | | | 90 | 2,14 | 10045 | 8550 | 63000 | | | |
| | | | 75 | 2,57 | 8371 | 8550 | 63000 | | | |
| | 700 | 64 | 90 | 1,66 | 13027 | 8550 | 64500 | | | |
| | | | 75 | 1,99 | 10856 | 8550 | 64500 | | | |
| | | | 55 | 2,72 | 7961 | 8550 | 64500 | | | |
| | 500 | 46 | 75 | 1,42 | 15104 | 8550 | 68000 | | | |
| | | | 55 | 1,94 | 11076 | 8550 | 68000 | | | |
| | | | 45 | 2,37 | 9062 | 8550 | 68000 | | | |
| 12.81 | 1400 | 109 | 132 | 1,96 | 11218 | 8550 | 63000 | | | |
| | | | 110 | 2,35 | 9348 | 8550 | 63000 | | | |
| | | | 90 | 2,87 | 7649 | 8550 | 63000 | | | |
| | 900 | 70 | 110 | 1,51 | 14557 | 8550 | 63000 | | | |
| | | | 90 | 1,85 | 11910 | 8550 | 63000 | | | |
| | | | 75 | 2,22 | 9925 | 8550 | 63000 | | | |
| | 700 | 55 | 90 | 1,43 | 15158 | 8550 | 64500 | | | |
| | | | 75 | 1,72 | 12632 | 8550 | 64500 | | | |
| | | | 55 | 2,35 | 9264 | 8550 | 64500 | | | |
| | 500 | 39 | 75 | 1,23 | 17814 | 8550 | 68000 | | | |
| | | | 55 | 1,67 | 13064 | 8550 | 68000 | | | |
| | | | 45 | 2,05 | 10689 | 8550 | 68000 | | | |
| 15.36 | 1400 | 91 | 110 | 1,92 | 11198 | 8550 | 63000 | | | |
| | | | 90 | 2,34 | 9162 | 8550 | 63000 | | | |
| | | | 75 | 2,81 | 7635 | 8550 | 63000 | | | |
| | 900 | 59 | 90 | 1,51 | 14131 | 8550 | 64500 | | | |
| | | | 75 | 1,81 | 11776 | 8550 | 64500 | | | |
| | | | 55 | 2,47 | 8635 | 8550 | 64500 | | | |
| | 700 | 46 | 75 | 1,41 | 15104 | 8550 | 68000 | | | |
| | | | 55 | 1,92 | 11076 | 8550 | 68000 | | | |
| | | | 45 | 2,35 | 9062 | 8550 | 68000 | | | |
| | 500 | 33 | 55 | 1,37 | 15439 | 8550 | 68000 | | | |
| | | | 45 | 1,67 | 13632 | 8550 | 68000 | | | |
| | | | 37 | 2,03 | 10386 | 8550 | 68000 | | | |
| 16.96 | 1400 | 83 | 90 | 2,18 | 10045 | 8550 | 63000 | | | |
| | | | 75 | 2,62 | 8371 | 8550 | 63000 | | | |
| | | | 55 | 3,57 | 6138 | 8550 | 63000 | | | |
| | 900 | 53 | 75 | 1,68 | 13109 | 8550 | 64500 | | | |
| | | | 55 | 2,29 | 9613 | 8550 | 64500 | | | |
| | | | 45 | 2,80 | 7865 | 8550 | 64500 | | | |
| | 700 | 41 | 55 | 1,78 | 12427 | 8550 | 68000 | | | |
| | | | 45 | 2,18 | 10167 | 8550 | 68000 | | | |
| | | | 37 | 2,65 | 8360 | 8550 | 68000 | | | |
| | 500 | 30 | 45 | 1,55 | 13895 | 8550 | 68000 | | | |
| | | | 37 | 1,89 | 11425 | 8550 | 68000 | | | |
| | | | 30 | 2,38 | 9264 | 8550 | 68000 | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | | |
| 18.84 | 1400 | 74 | 90 | 1,98 | 11266 | 8550 | 63000 | 2A 430 |  |  | |
| | | | 75 | 2,38 | 9389 | 8550 | 63000 | | | | |
| | | | 55 | 3,24 | 6885 | 8550 | 63000 | | | | |
| | 900 | 48 | 75 | 1,52 | 14474 | 8550 | 68000 | | | | |
| | | | 55 | 2,08 | 10614 | 8550 | 68000 | | | | |
| | | | 45 | 2,54 | 8685 | 8550 | 68000 | | | | |
| | 700 | 37 | 55 | 1,61 | 13770 | 8550 | 68000 | | | | |
| | | | 45 | 1,98 | 11266 | 8550 | 68000 | | | | |
| | | | 37 | 2,40 | 9264 | 8550 | 68000 | | | | |
| | 500 | 27 | 45 | 1,41 | 15439 | 8550 | 70000 | | | | |
| | | | 37 | 1,72 | 12694 | 8550 | 70000 | | | | |
| | | | 30 | 2,11 | 10293 | 8550 | 70000 | | | | |
| 23.18 | 1400 | 60 | 75 | 1,85 | 11579 | 8550 | 64500 | 2AE 430 |  |  | |
| | | | 55 | 2,53 | 8492 | 8550 | 64500 | | | | |
| | | | 45 | 3,09 | 6948 | 8550 | 64500 | | | | |
| | 900 | 39 | 55 | 1,62 | 13064 | 8550 | 68000 | | | | |
| | | | 45 | 1,98 | 10689 | 8550 | 68000 | | | | |
| | | | 37 | 2,41 | 8788 | 8550 | 68000 | | | | |
| | 700 | 30 | 45 | 1,54 | 13895 | 8550 | 68000 | | | | |
| | | | 37 | 1,87 | 11425 | 8550 | 68000 | | | | |
| | | | 30 | 2,31 | 9264 | 8550 | 68000 | | | | |
| | 500 | 22 | 37 | 1,34 | 15580 | 8550 | 70000 | | | | |
| | | | 30 | 1,65 | 12632 | 8550 | 70000 | | | | |
| | | | 22 | 2,25 | 9264 | 8550 | 70000 | | | | |
| 7.28 | 1400 | 192 | 160 | 2,11 | 7720 | 8900 | 76000 | 2A 501 |  |  | |
| | | | 132 | 2,56 | 6369 | 8900 | 76000 | | | | |
| | | | 110 | 3,07 | 5307 | 8900 | 76000 | | | | |
| | 900 | 124 | 132 | 1,64 | 9861 | 8900 | 76000 | | | | |
| | | | 110 | 1,97 | 8218 | 8900 | 76000 | | | | |
| | | | 90 | 2,41 | 6724 | 8900 | 76000 | | | | |
| | 700 | 96 | 110 | 1,54 | 10614 | 8900 | 78000 | | | | |
| | | | 90 | 1,87 | 8685 | 8900 | 78000 | | | | |
| | | | 75 | 2,25 | 7237 | 8900 | 78000 | | | | |
| | 500 | 69 | 90 | 1,34 | 12083 | 8900 | 81000 | | | | |
| | | | 75 | 1,61 | 10069 | 8900 | 81000 | | | | |
| | | | 55 | 2,19 | 7384 | 8900 | 81000 | | | | |
| 10.48 | 1400 | 134 | 160 | 2,02 | 11061 | 8900 | 76000 | 2AE 501 |  |  | |
| | | | 132 | 2,45 | 9125 | 8900 | 76000 | | | | |
| | | | 110 | 2,95 | 7604 | 8900 | 76000 | | | | |
| | 900 | 86 | 132 | 1,57 | 14218 | 8900 | 80000 | | | | |
| | | | 110 | 1,88 | 11849 | 8900 | 80000 | | | | |
| | | | 90 | 2,30 | 9694 | 8900 | 80000 | | | | |
| | 700 | 67 | 110 | 1,47 | 15209 | 8900 | 81000 | | | | |
| | | | 90 | 1,80 | 12444 | 8900 | 81000 | | | | |
| | | | 75 | 2,15 | 10370 | 8900 | 81000 | | | | |
| | 500 | 48 | 90 | 1,28 | 17369 | 8900 | 82500 | | | | |
| | | | 75 | 1,53 | 14474 | 8900 | 82500 | | | | |
| | | | 55 | 2,09 | 10614 | 8900 | 82500 | | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ | | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|--|---------|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | |
| 12.89 | 1400 | 109 | 160 | 1,74 | 13598 | 8900 | 78000 | 2A 2AE 501 | | 665 800 |
| | | | 132 | 2,10 | 11218 | 8900 | 78000 | | | |
| | | | 110 | 2,52 | 9348 | 8900 | 78000 | | | |
| | 900 | 70 | 132 | 1,35 | 17468 | 8900 | 80000 | | | |
| | | | 110 | 1,63 | 14557 | 8900 | 80000 | | | |
| | | | 90 | 1,99 | 11910 | 8900 | 80000 | | | |
| | 700 | 55 | 110 | 1,26 | 18527 | 8900 | 81000 | | | |
| | | | 90 | 1,55 | 15158 | 8900 | 81000 | | | |
| | | | 75 | 1,85 | 12632 | 8900 | 81000 | | | |
| | 500 | 40 | 90 | 1,11 | 20843 | 8900 | 82500 | | | |
| | | | 75 | 1,32 | 17369 | 8900 | 82500 | | | |
| | | | 55 | 1,80 | 12737 | 8900 | 82500 | | | |
| 15.09 | 1400 | 95 | 132 | 2,27 | 12871 | 8900 | 80000 | | | |
| | | | 110 | 2,73 | 10726 | 8900 | 80000 | | | |
| | | | 90 | 3,33 | 8776 | 8900 | 80000 | | | |
| | 900 | 60 | 110 | 1,75 | 16983 | 8900 | 81000 | | | |
| | | | 90 | 2,14 | 13895 | 8900 | 81000 | | | |
| | | | 75 | 2,56 | 11579 | 8900 | 81000 | | | |
| | 700 | 50 | 90 | 1,66 | 16674 | 8900 | 81000 | | | |
| | | | 75 | 1,99 | 13895 | 8900 | 81000 | | | |
| | | | 55 | 2,72 | 10190 | 8900 | 81000 | | | |
| | 500 | 35 | 75 | 1,42 | 19850 | 8900 | 82500 | | | |
| | | | 55 | 1,94 | 14557 | 8900 | 82500 | | | |
| | | | 45 | 2,37 | 11910 | 8900 | 82500 | | | |
| 16.98 | 1400 | 82 | 132 | 1,83 | 15285 | 8900 | 80000 | | | |
| | | | 110 | 2,20 | 12737 | 8900 | 80000 | | | |
| | | | 90 | 2,69 | 10421 | 8900 | 80000 | | | |
| | 900 | 53 | 110 | 1,41 | 19226 | 8900 | 81000 | | | |
| | | | 90 | 1,73 | 15730 | 8900 | 81000 | | | |
| | | | 75 | 2,07 | 13109 | 8900 | 81000 | | | |
| | 700 | 41 | 90 | 1,34 | 20335 | 8900 | 82500 | | | |
| | | | 75 | 1,61 | 16945 | 8900 | 82500 | | | |
| | | | 55 | 2,20 | 12427 | 8900 | 82500 | | | |
| | 500 | 30 | 75 | 1,15 | 23159 | 8900 | 82500 | | | |
| | | | 55 | 1,56 | 16983 | 8900 | 82500 | | | |
| | | | 45 | 1,92 | 13895 | 8900 | 82500 | | | |
| 18.51 | 1400 | 76 | 110 | 2,22 | 13408 | 8900 | 80000 | | | |
| | | | 90 | 2,71 | 10970 | 8900 | 80000 | | | |
| | | | 75 | 3,25 | 9142 | 8900 | 80000 | | | |
| | 900 | 49 | 90 | 1,74 | 17015 | 8900 | 82500 | | | |
| | | | 75 | 2,09 | 14149 | 8900 | 82500 | | | |
| | | | 55 | 2,85 | 10398 | 8900 | 82500 | | | |
| | 700 | 38 | 75 | 1,63 | 18283 | 8900 | 82500 | | | |
| | | | 55 | 2,22 | 13408 | 8900 | 82500 | | | |
| | | | 45 | 2,71 | 10970 | 8900 | 82500 | | | |
| | 500 | 27 | 55 | 1,58 | 18870 | 8900 | 85000 | | | |
| | | | 45 | 1,94 | 15439 | 8900 | 85000 | | | |
| | | | 37 | 2,35 | 12694 | 8900 | 85000 | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | |
| 21.50 | 1400 | 65 | 110 | 1,93 | 15677 | 8900 | 81000 | | | | |
| | | | 90 | 2,36 | 12826 | 8900 | 81000 | | | | |
| | | | 75 | 2,83 | 10689 | 8900 | 81000 | | | | |
| | 900 | 42 | 90 | 1,51 | 19850 | 8900 | 82500 | | | | |
| | | | 75 | 1,81 | 16542 | 8900 | 82500 | | | | |
| | | | 55 | 2,48 | 12131 | 8900 | 82500 | | | | |
| | 700 | 33 | 75 | 1,41 | 21053 | 8900 | 82500 | | | | |
| | | | 55 | 1,93 | 15439 | 8900 | 82500 | | | | |
| | | | 45 | 2,35 | 12632 | 8900 | 82500 | | | | |
| | 500 | 23 | 55 | 1,37 | 22152 | 8900 | 85000 | | | | |
| | | | 45 | 1,68 | 18124 | 8900 | 85000 | | | | |
| | | | 37 | 2,04 | 14902 | 8900 | 85000 | | | | |
| 25.41 | 1400 | 55 | 90 | 1,98 | 15158 | 8900 | 81000 | | | | |
| | | | 75 | 2,38 | 12632 | 8900 | 81000 | | | | |
| | | | 55 | 3,24 | 9264 | 8900 | 81000 | | | | |
| | 900 | 35 | 75 | 1,52 | 19850 | 8900 | 82500 | | | | |
| | | | 55 | 2,08 | 14557 | 8900 | 82500 | | | | |
| | | | 45 | 2,54 | 11910 | 8900 | 82500 | | | | |
| | 700 | 28 | 55 | 1,62 | 18196 | 8900 | 85000 | | | | |
| | | | 45 | 1,97 | 14888 | 8900 | 85000 | | | | |
| | | | 37 | 2,40 | 12241 | 8900 | 85000 | | | | |
| | 500 | 20 | 45 | 1,41 | 20843 | 8900 | 85000 | | | | |
| | | | 37 | 1,71 | 17137 | 8900 | 85000 | | | | |
| | | | 30 | 2,11 | 13895 | 8900 | 85000 | | | | |
| 30.31 | 1400 | 45 | 75 | 2,25 | 15200 | 8900 | 82500 | 2A | 501 | | |
| | | | 55 | 3,06 | 11147 | 8900 | 82500 | | | | |
| | | | 45 | 3,71 | 9120 | 8900 | 82500 | | | | |
| | 900 | 29 | 55 | 1,95 | 17297 | 8900 | 85000 | | | | |
| | | | 45 | 2,41 | 14152 | 8900 | 85000 | | | | |
| | | | 37 | 2,93 | 11636 | 8900 | 85000 | | | | |
| | 700 | 22 | 45 | 1,87 | 18655 | 8900 | 85000 | | | | |
| | | | 37 | 2,28 | 15339 | 8900 | 85000 | | | | |
| | | | 30 | 2,81 | 12437 | 8900 | 85000 | | | | |
| | 500 | 16 | 37 | 1,62 | 21091 | 8900 | 90000 | | | | |
| | | | 30 | 2,00 | 17100 | 8900 | 90000 | | | | |
| | | | 22 | 2,73 | 12540 | 8900 | 90000 | | | | |
| 36.59 | 1400 | 38 | 75 | 2,25 | 18287 | 8900 | 82500 | | | | |
| | | | 55 | 3,06 | 13411 | 8900 | 82500 | | | | |
| | | | 45 | 3,71 | 10972 | 8900 | 82500 | | | | |
| | 900 | 25 | 55 | 1,95 | 20384 | 8900 | 85000 | | | | |
| | | | 45 | 2,41 | 16678 | 8900 | 85000 | | | | |
| | | | 37 | 2,93 | 13713 | 8900 | 85000 | | | | |
| | 700 | 19 | 45 | 1,87 | 21945 | 8900 | 85000 | | | | |
| | | | 37 | 2,28 | 18044 | 8900 | 85000 | | | | |
| | | | 30 | 2,81 | 14630 | 8900 | 85000 | | | | |
| | 500 | 14 | 37 | 1,62 | 24488 | 8900 | 90000 | | | | |
| | | | 30 | 2,00 | 19855 | 8900 | 90000 | | | | |
| | | | 22 | 2,73 | 14560 | 8900 | 90000 | | | | |









| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | | |
| 25.24 | 1400 | 56 | 75 | 1,67 | 12215 | 7600 | 64500 | 3A 3AE 430 | 666 | 546 | |
| | | | 55 | 2,28 | 8957 | 7600 | 64500 | | | | |
| | | | 45 | 2,80 | 7329 | 7600 | 64500 | | | | |
| | 900 | 36 | 55 | 1,46 | 13934 | 7600 | 68000 | | | | |
| | | | 45 | 1,78 | 11400 | 7600 | 68000 | | | | |
| | | | 37 | 2,17 | 9374 | 7600 | 68000 | | | | |
| | 700 | 28 | 45 | 1,39 | 14658 | 7600 | 70000 | | | | |
| | | | 37 | 1,68 | 12052 | 7600 | 70000 | | | | |
| | | | 30 | 2,08 | 9772 | 7600 | 70000 | | | | |
| | 500 | 20 | 37 | 1,21 | 16872 | 7600 | 70000 | | | | |
| | | | 30 | 1,49 | 13680 | 7600 | 70000 | | | | |
| | | | 22 | 2,03 | 10032 | 7600 | 70000 | | | | |
| 29.77 | 1400 | 47 | 55 | 2,02 | 10673 | 7600 | 68000 | | | | |
| | | | 45 | 2,47 | 8732 | 7600 | 68000 | | | | |
| | | | 37 | 3,00 | 7180 | 7600 | 68000 | | | | |
| | 900 | 30 | 45 | 1,58 | 13680 | 7600 | 68000 | | | | |
| | | | 37 | 1,93 | 11248 | 7600 | 68000 | | | | |
| | | | 30 | 2,38 | 9120 | 7600 | 68000 | | | | |
| | 700 | 24 | 37 | 1,50 | 14060 | 7600 | 70000 | | | | |
| | | | 30 | 1,85 | 11400 | 7600 | 70000 | | | | |
| | | | 22 | 2,52 | 8360 | 7600 | 70000 | | | | |
| | 500 | 17 | 30 | 1,32 | 16095 | 7600 | 70000 | | | | |
| | | | 22 | 1,80 | 11803 | 7600 | 70000 | | | | |
| | | | 18,5 | 2,15 | 9925 | 7600 | 70000 | | | | |
| 33.41 | 1400 | 42 | 55 | 2,00 | 11943 | 7600 | 68000 | | | | |
| | | | 45 | 2,44 | 9772 | 7600 | 68000 | | | | |
| | | | 37 | 2,97 | 8035 | 7600 | 68000 | | | | |
| | 900 | 27 | 45 | 1,57 | 15200 | 7600 | 70000 | | | | |
| | | | 37 | 1,90 | 12498 | 7600 | 70000 | | | | |
| | | | 30 | 2,35 | 10134 | 7600 | 70000 | | | | |
| | 700 | 21 | 37 | 1,48 | 16069 | 7600 | 70000 | | | | |
| | | | 30 | 1,82 | 13029 | 7600 | 70000 | | | | |
| | | | 22 | 2,48 | 9555 | 7600 | 70000 | | | | |
| | 500 | 15 | 30 | 1,30 | 18241 | 7600 | 70000 | | | | |
| | | | 22 | 1,77 | 13376 | 7600 | 70000 | | | | |
| | | | 18,5 | 2,11 | 11248 | 7600 | 70000 | | | | |
| 40.07 | 1400 | 35 | 55 | 1,54 | 14332 | 7600 | 68000 | | | | |
| | | | 45 | 1,88 | 11726 | 7600 | 68000 | | | | |
| | | | 37 | 2,29 | 9641 | 7600 | 68000 | | | | |
| | 900 | 23 | 45 | 1,21 | 17844 | 7600 | 70000 | | | | |
| | | | 37 | 1,47 | 14672 | 7600 | 70000 | | | | |
| | | | 30 | 1,82 | 11896 | 7600 | 70000 | | | | |
| | 700 | 18 | 37 | 1,15 | 18747 | 7600 | 70000 | | | | |
| | | | 30 | 1,41 | 15200 | 7600 | 70000 | | | | |
| | | | 22 | 1,93 | 11147 | 7600 | 70000 | | | | |
| | 500 | 13 | 30 | 1,01 | 21047 | 7600 | 72500 | | | | |
| | | | 22 | 1,38 | 15434 | 7600 | 72500 | | | | |
| | | | 18,5 | 1,64 | 12979 | 7600 | 72500 | | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|-----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | |
| 49.89 | 1400 | 28 | 45 | 1,46 | 14658 | 7600 | 70000 | 3A | 430 | 666 | 546 |
| | | | 37 | 1,77 | 12052 | 7600 | 70000 | | | | |
| | | | 30 | 2,19 | 9772 | 7600 | 70000 | | | | |
| | 900 | 18 | 37 | 1,14 | 18747 | 7600 | 70000 | | | | |
| | | | 30 | 1,40 | 15200 | 7600 | 70000 | | | | |
| | | | 22 | 1,91 | 11147 | 7600 | 70000 | | | | |
| | 700 | 14 | 30 | 1,09 | 19543 | 7600 | 72500 | | | | |
| | | | 22 | 1,48 | 14332 | 7600 | 72500 | | | | |
| | | | 18,5 | 1,77 | 12052 | 7600 | 72500 | | | | |
| | 500 | 10 | 22 | 1,06 | 20065 | 7600 | 72500 | | | | |
| | | | 18,5 | 1,26 | 16872 | 7600 | 72500 | | | | |
| | | | 15 | 1,55 | 13680 | 7600 | 72500 | | | | |
| 56.62 | 1400 | 25 | 37 | 1,60 | 13498 | 7600 | 70000 | | | | |
| | | | 30 | 1,97 | 10944 | 7600 | 70000 | | | | |
| | | | 22 | 2,69 | 8026 | 7600 | 70000 | | | | |
| | 900 | 16 | 30 | 1,27 | 17100 | 7600 | 70000 | | | | |
| | | | 22 | 1,73 | 12540 | 7600 | 70000 | | | | |
| | | | 18,5 | 2,06 | 10545 | 7600 | 70000 | | | | |
| | 700 | 12 | 22 | 1,35 | 16720 | 7600 | 72500 | | | | |
| | | | 18,5 | 1,60 | 14060 | 7600 | 72500 | | | | |
| | | | 15 | 1,98 | 11400 | 7600 | 72500 | | | | |
| | 500 | 9 | 18,5 | 1,14 | 18747 | 7600 | 74000 | | | | |
| | | | 15 | 1,40 | 15200 | 7600 | 74000 | | | | |
| | | | 11 | 1,92 | 11147 | 7600 | 74000 | | | | |
| 71.98 | 1400 | 20 | 30 | 1,55 | 13680 | 7600 | 70000 | | | | |
| | | | 22 | 2,11 | 10032 | 7600 | 70000 | | | | |
| | | | 18,5 | 2,51 | 8436 | 7600 | 70000 | | | | |
| | 900 | 13 | 22 | 1,36 | 15434 | 7600 | 72500 | | | | |
| | | | 18,5 | 1,62 | 12979 | 7600 | 72500 | | | | |
| | | | 15 | 1,99 | 10523 | 7600 | 72500 | | | | |
| | 700 | 10 | 18,5 | 1,25 | 16872 | 7600 | 72500 | | | | |
| | | | 15 | 1,55 | 13680 | 7600 | 72500 | | | | |
| | | | 11 | 2,11 | 10032 | 7600 | 72500 | | | | |
| | 500 | 7 | 15 | 1,10 | 19543 | 7600 | 74000 | | | | |
| | | | 11 | 1,50 | 14332 | 7600 | 74000 | | | | |
| | | | 7,5 | 2,20 | 9772 | 7600 | 74000 | | | | |
| 83.18 | 1400 | 17 | 22 | 1,99 | 11803 | 7600 | 70000 | | | | |
| | | | 18,5 | 2,37 | 9925 | 7600 | 70000 | | | | |
| | | | 15 | 2,92 | 8047 | 7600 | 70000 | | | | |
| | 900 | 11 | 18,5 | 1,52 | 15339 | 7600 | 72500 | | | | |
| | | | 15 | 1,87 | 12437 | 7600 | 72500 | | | | |
| | | | 11 | 2,55 | 9120 | 7600 | 72500 | | | | |
| | 700 | 8,5 | 15 | 1,45 | 16095 | 7600 | 74000 | | | | |
| | | | 11 | 1,99 | 11803 | 7600 | 74000 | | | | |
| | | | 7,5 | 2,92 | 8047 | 7600 | 74000 | | | | |
| | 500 | 6 | 11 | 1,42 | 16720 | 7600 | 74000 | | | | |
| | | | 7,5 | 2,08 | 11400 | 7600 | 74000 | | | | |
| | | | 5,5 | 2,84 | 8360 | 7600 | 74000 | | | | |



| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | | |
| 99.05 | 1400 | 14 | 18,5 | 1,41 | 12052 | 7600 | 72500 | 3A 3AE 430 |  |  | |
| | | | 15 | 1,74 | 9772 | 7600 | 72500 | | | | |
| | | | 11 | 2,37 | 7166 | 7600 | 72500 | | | | |
| | 900 | 9 | 15 | 1,12 | 15200 | 7600 | 74000 | | | | |
| | | | 11 | 1,53 | 11147 | 7600 | 74000 | | | | |
| | | | 7,5 | 2,24 | 7600 | 7600 | 74000 | | | | |
| | 700 | 7 | 11 | 1,18 | 14332 | 7600 | 74000 | | | | |
| | | | 7,5 | 1,72 | 9772 | 7600 | 74000 | | | | |
| | | | 5,5 | 2,35 | 7166 | 7600 | 74000 | | | | |
| | 500 | 5 | 7,5 | 1,23 | 13680 | 7600 | 74000 | | | | |
| | | | 5,5 | 1,68 | 10032 | 7600 | 74000 | | | | |
| | | | 4 | 2,31 | 7296 | 7600 | 74000 | | | | |
| 121.40 | 1400 | 11,5 | 11 | 1,58 | 8724 | 7600 | 72500 | | | | |
| | | | 7,5 | 2,32 | 5948 | 7600 | 72500 | | | | |
| | | | 5,5 | 3,16 | 4362 | 7600 | 72500 | | | | |
| | 900 | 7,5 | 7,5 | 1,49 | 9120 | 7600 | 74000 | | | | |
| | | | 5,5 | 2,03 | 6688 | 7600 | 74000 | | | | |
| | | | 4 | 2,79 | 4864 | 7600 | 74000 | | | | |
| | 700 | 6 | 5,5 | 1,59 | 8360 | 7600 | 74000 | | | | |
| | | | 4 | 2,19 | 6080 | 7600 | 74000 | | | | |
| | | | 3 | 2,92 | 4560 | 7600 | 74000 | | | | |
| | 500 | 4 | 4 | 1,55 | 9120 | 7600 | 74000 | | | | |
| | | | 3 | 2,06 | 6840 | 7600 | 74000 | | | | |
| | | | 2,2 | 2,81 | 5016 | 7600 | 74000 | | | | |
| 144.85 | 1400 | 9,5 | 7,5 | 1,96 | 7200 | 7600 | 74000 | | | | |
| | | | 5,5 | 2,68 | 5280 | 7600 | 74000 | | | | |
| | | | 4 | 3,69 | 3840 | 7600 | 74000 | | | | |
| | 900 | 6,2 | 5,5 | 1,72 | 8091 | 7600 | 74000 | | | | |
| | | | 4 | 2,37 | 5884 | 7600 | 74000 | | | | |
| | | | 3 | 3,16 | 4413 | 7600 | 74000 | | | | |
| | 700 | 5 | 4 | 1,84 | 7296 | 7600 | 74000 | | | | |
| | | | 3 | 2,45 | 5472 | 7600 | 74000 | | | | |
| | | | 2,2 | 3,34 | 4013 | 7600 | 74000 | | | | |
| | 500 | 3,5 | 3 | 1,78 | 7817 | 7600 | 74000 | | | | |
| | | | 2,2 | 2,43 | 5733 | 7600 | 74000 | | | | |
| | | | 1,5 | 3,57 | 3909 | 7600 | 74000 | | | | |
| 38.34 | 1400 | 37 | 55 | 1,96 | 13557 | 7500 | 82500 | 3A 3AE 501 |  |  | |
| | | | 45 | 2,39 | 11092 | 7500 | 82500 | | | | |
| | | | 37 | 2,91 | 9120 | 7500 | 82500 | | | | |
| | 900 | 23 | 45 | 1,54 | 17844 | 7500 | 85000 | | | | |
| | | | 37 | 1,87 | 14672 | 7500 | 85000 | | | | |
| | | | 30 | 2,31 | 11896 | 7500 | 85000 | | | | |
| | 700 | 18 | 37 | 1,45 | 18747 | 7500 | 90000 | | | | |
| | | | 30 | 1,79 | 15200 | 7500 | 90000 | | | | |
| | | | 22 | 2,44 | 11147 | 7500 | 90000 | | | | |
| | 500 | 13 | 30 | 1,27 | 21047 | 7500 | 95000 | | | | |
| | | | 22 | 1,74 | 15434 | 7500 | 95000 | | | | |
| | | | 18,5 | 2,07 | 12979 | 7500 | 95000 | | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | | |
| 49.86 | 1400 | 28 | 45 | 1,87 | 14658 | 7500 | 85000 | | | | |
| | | | 37 | 2,27 | 12052 | 7500 | 85000 | | | | |
| | | | 30 | 2,81 | 9772 | 7500 | 85000 | | | | |
| | 900 | 18 | 37 | 1,45 | 18747 | 7500 | 90000 | | | | |
| | | | 30 | 1,80 | 15200 | 7500 | 90000 | | | | |
| | | | 22 | 2,45 | 11147 | 7500 | 90000 | | | | |
| | 700 | 14 | 30 | 1,40 | 19543 | 7500 | 95000 | | | | |
| | | | 22 | 1,90 | 14332 | 7500 | 95000 | | | | |
| | | | 18,5 | 2,26 | 12052 | 7500 | 95000 | | | | |
| | 500 | 10 | 22 | 1,36 | 20065 | 7500 | 95000 | | | | |
| | | | 18,5 | 1,62 | 16872 | 7500 | 95000 | | | | |
| | | | 15 | 1,99 | 13680 | 7500 | 95000 | | | | |
| 76.13 | 1400 | 18 | 37 | 1,59 | 18747 | 7500 | 90000 | | | | |
| | | | 30 | 1,95 | 15200 | 7500 | 90000 | | | | |
| | | | 22 | 2,67 | 11147 | 7500 | 90000 | | | | |
| | 900 | 12 | 30 | 1,26 | 22801 | 7500 | 95000 | | | | |
| | | | 22 | 1,71 | 16720 | 7500 | 95000 | | | | |
| | | | 18,5 | 2,04 | 14060 | 7500 | 95000 | | | | |
| | 700 | 9 | 22 | 1,34 | 22294 | 7500 | 100000 | | | | |
| | | | 18,5 | 1,59 | 18747 | 7500 | 100000 | | | | |
| | | | 15 | 1,96 | 15200 | 7500 | 100000 | | | | |
| | 500 | 6,5 | 18,5 | 1,12 | 25958 | 7500 | 100000 | | | | |
| | | | 15 | 1,38 | 21047 | 7500 | 100000 | | | | |
| | | | 11 | 1,89 | 15434 | 7500 | 100000 | | | | |
| 101.38 | 1400 | 14 | 22 | 1,63 | 14332 | 7500 | 95000 | 3A | 501 | | |
| | | | 18,5 | 1,94 | 12052 | 7500 | 95000 | | | | |
| | | | 15 | 2,39 | 9772 | 7500 | 95000 | | | | |
| | 900 | 9 | 18,5 | 1,23 | 18747 | 7500 | 100000 | | | | |
| | | | 15 | 1,52 | 15200 | 7500 | 100000 | | | | |
| | | | 11 | 2,08 | 11147 | 7500 | 100000 | | | | |
| | 700 | 7 | 15 | 1,19 | 19543 | 7500 | 100000 | | | | |
| | | | 11 | 1,63 | 14332 | 7500 | 100000 | | | | |
| | | | 7,5 | 2,39 | 9772 | 7500 | 100000 | | | | |
| | 500 | 5 | 11 | 1,15 | 20065 | 7500 | 100000 | | | | |
| | | | 7,5 | 1,70 | 13680 | 7500 | 100000 | | | | |
| | | | 5,5 | 2,31 | 10032 | 7500 | 100000 | | | | |
| 148.69 | 1400 | 9,5 | 18,5 | 1,60 | 17760 | 7500 | 100000 | | | | |
| | | | 15 | 1,97 | 14400 | 7500 | 100000 | | | | |
| | | | 11 | 2,68 | 10560 | 7500 | 100000 | | | | |
| | 900 | 6 | 15 | 1,97 | 22801 | 7500 | 100000 | | | | |
| | | | 11 | 2,69 | 16720 | 7500 | 100000 | | | | |
| | | | 7,5 | 3,95 | 11400 | 7500 | 100000 | | | | |
| | 700 | 5 | 11 | 1,35 | 20065 | 7500 | 100000 | | | | |
| | | | 7,5 | 1,97 | 13680 | 7500 | 100000 | | | | |
| | | | 5,5 | 2,69 | 10032 | 7500 | 100000 | | | | |
| | 500 | 3,5 | 7,5 | 1,42 | 19543 | 7500 | 100000 | | | | |
| | | | 5,5 | 1,95 | 14332 | 7500 | 100000 | | | | |
| | | | 4 | 2,67 | 10423 | 7500 | 100000 | | | | |



| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ | | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|-----------------------|--|----------|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | |
| 213.93 | 1400 | 6,5 | 15 | 1,39 | 21047 | 7500 | 100000 | 3A 3AE 501 | | 667 838 |
| | | | 11 | 1,90 | 15434 | 7500 | 100000 | | | |
| | | | 7,5 | 2,78 | 10523 | 7500 | 100000 | | | |
| | 900 | 4 | 11 | 1,22 | 25081 | 7500 | 100000 | | | |
| | | | 7,5 | 1,80 | 17100 | 7500 | 100000 | | | |
| | | | 5,5 | 2,45 | 12540 | 7500 | 100000 | | | |
| | 700 | 3,3 | 7,5 | 1,41 | 20728 | 7500 | 100000 | | | |
| | | | 5,5 | 1,92 | 15200 | 7500 | 100000 | | | |
| | | | 4 | 2,65 | 11055 | 7500 | 100000 | | | |
| | 500 | 2,3 | 5,5 | 1,34 | 21809 | 7500 | 100000 | | | |
| | | | 4 | 1,84 | 15861 | 7500 | 100000 | | | |
| | | | 3 | 2,46 | 11896 | 7500 | 100000 | | | |
| 310.01 | 1400 | 4,5 | 11 | 1,21 | 22294 | 7500 | 100000 | | | |
| | | | 7,5 | 1,77 | 15200 | 7500 | 100000 | | | |
| | | | 5,5 | 2,42 | 11147 | 7500 | 100000 | | | |
| | 900 | 3 | 7,5 | 1,14 | 22801 | 7500 | 100000 | | | |
| | | | 5,5 | 1,55 | 16720 | 7500 | 100000 | | | |
| | | | 4 | 2,14 | 12160 | 7500 | 100000 | | | |
| | 700 | 2,2 | 5,5 | 1,18 | 22801 | 7500 | 100000 | | | |
| | | | 4 | 1,63 | 16582 | 7500 | 100000 | | | |
| | | | 3 | 2,17 | 12437 | 7500 | 100000 | | | |
| | 500 | 1,6 | 4 | 1,18 | 22801 | 7500 | 100000 | | | |
| | | | 3 | 1,58 | 17100 | 7500 | 100000 | | | |
| | | | 2,2 | 2,15 | 12540 | 7500 | 100000 | | | |
| 15.01 | 1400 | 93 | 185 | 2,60 | 18142 | 7750 | 135000 | 3A 3AE 750 | | 668 1380 |
| | | | 160 | 3,01 | 15691 | 7750 | 135000 | | | |
| | | | 132 | 3,65 | 12945 | 7750 | 135000 | | | |
| | 900 | 60 | 160 | 1,93 | 24321 | 7750 | 135000 | | | |
| | | | 132 | 2,34 | 20065 | 7750 | 135000 | | | |
| | | | 110 | 2,81 | 16720 | 7750 | 135000 | | | |
| | 700 | 47 | 132 | 1,82 | 25614 | 7750 | 137500 | | | |
| | | | 110 | 2,18 | 21345 | 7750 | 137500 | | | |
| | | | 90 | 2,67 | 17464 | 7750 | 137500 | | | |
| | 500 | 33 | 110 | 1,56 | 30401 | 7750 | 139000 | | | |
| | | | 90 | 1,90 | 24873 | 7750 | 139000 | | | |
| | | | 75 | 2,28 | 20728 | 7750 | 139000 | | | |
| 16.49 | 1400 | 85 | 160 | 2,87 | 17168 | 7750 | 135000 | 3A 3AE 750 | | 678 1470 |
| | | | 132 | 3,48 | 14163 | 7750 | 135000 | | | |
| | | | 110 | 4,17 | 11803 | 7750 | 135000 | | | |
| | 900 | 55 | 132 | 2,23 | 21889 | 7750 | 137500 | | | |
| | | | 110 | 2,68 | 18241 | 7750 | 137500 | | | |
| | | | 90 | 3,28 | 14924 | 7750 | 137500 | | | |
| | 700 | 42 | 110 | 2,08 | 23886 | 7750 | 139000 | | | |
| | | | 90 | 2,54 | 19543 | 7750 | 139000 | | | |
| | | | 75 | 3,05 | 16286 | 7750 | 139000 | | | |
| | 500 | 30 | 90 | 1,82 | 27361 | 7750 | 139000 | | | |
| | | | 75 | 2,18 | 22801 | 7750 | 139000 | | | |
| | | | 55 | 2,98 | 16720 | 7750 | 139000 | | | |





| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|------|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | |
| 18.17 | 1400 | 77 | 132 | 3,13 | 15635 | 7750 | 135000 | 3A | 750 | 668 | 1380 |
| | | | 110 | 3,76 | 13029 | 7750 | 135000 | | | | |
| | | | 90 | 4,59 | 10660 | 7750 | 135000 | | | | |
| | 900 | 50 | 110 | 2,41 | 20065 | 7750 | 137500 | | | | |
| | | | 90 | 2,95 | 16416 | 7750 | 137500 | | | | |
| | | | 75 | 3,54 | 13680 | 7750 | 137500 | | | | |
| | 700 | 39 | 90 | 2,29 | 21047 | 7750 | 139000 | | | | |
| | | | 75 | 2,75 | 17539 | 7750 | 139000 | | | | |
| | | | 55 | 3,75 | 12862 | 7750 | 139000 | | | | |
| | 500 | 28 | 75 | 1,96 | 24429 | 7750 | 140500 | | | | |
| | | | 55 | 2,67 | 17915 | 7750 | 140500 | | | | |
| | | | 45 | 3,27 | 14658 | 7750 | 140500 | | | | |
| 20.58 | 1400 | 68 | 132 | 2,02 | 17704 | 7750 | 135000 | | | | |
| | | | 110 | 2,43 | 14753 | 7750 | 135000 | | | | |
| | | | 90 | 2,97 | 12071 | 7750 | 135000 | | | | |
| | 900 | 44 | 110 | 1,56 | 22801 | 7750 | 139000 | | | | |
| | | | 90 | 1,91 | 18655 | 7750 | 139000 | | | | |
| | | | 75 | 2,29 | 15546 | 7750 | 139000 | | | | |
| | 700 | 34 | 90 | 1,48 | 24142 | 7750 | 139000 | | | | |
| | | | 75 | 1,77 | 20118 | 7750 | 139000 | | | | |
| | | | 55 | 2,42 | 14753 | 7750 | 139000 | | | | |
| | 500 | 24 | 75 | 1,27 | 28501 | 7750 | 140500 | | | | |
| | | | 55 | 1,73 | 20901 | 7750 | 140500 | | | | |
| | | | 45 | 2,11 | 17100 | 7750 | 140500 | | | | |
| 25.29 | 1400 | 55 | 110 | 1,96 | 18241 | 7750 | 137500 | | | | |
| | | | 90 | 2,39 | 14924 | 7750 | 137500 | | | | |
| | | | 75 | 2,87 | 12437 | 7750 | 137500 | | | | |
| | 900 | 36 | 90 | 1,54 | 22801 | 7750 | 139000 | | | | |
| | | | 75 | 1,85 | 19001 | 7750 | 139000 | | | | |
| | | | 55 | 2,52 | 13934 | 7750 | 139000 | | | | |
| | 700 | 28 | 75 | 1,43 | 24429 | 7750 | 140500 | | | | |
| | | | 55 | 1,96 | 17915 | 7750 | 140500 | | | | |
| | | | 45 | 2,40 | 14658 | 7750 | 140500 | | | | |
| | 500 | 20 | 55 | 1,40 | 25081 | 7750 | 140500 | | | | |
| | | | 45 | 1,71 | 20521 | 7750 | 140500 | | | | |
| | | | 37 | 2,08 | 16872 | 7750 | 140500 | | | | |
| 34.96 | 1400 | 43 | 75 | 2,01 | 15907 | 7750 | 139000 | | | | |
| | | | 55 | 2,75 | 11665 | 7750 | 139000 | | | | |
| | | | 45 | 3,35 | 9544 | 7750 | 139000 | | | | |
| | 900 | 27 | 55 | 1,76 | 18578 | 7750 | 140500 | | | | |
| | | | 45 | 2,15 | 15200 | 7750 | 140500 | | | | |
| | | | 37 | 2,62 | 12498 | 7750 | 140500 | | | | |
| | 700 | 21 | 45 | 1,67 | 19543 | 7750 | 140500 | | | | |
| | | | 37 | 2,03 | 16069 | 7750 | 140500 | | | | |
| | | | 30 | 2,50 | 13029 | 7750 | 140500 | | | | |
| | 500 | 15 | 37 | 1,45 | 22497 | 7750 | 142700 | | | | |
| | | | 30 | 1,80 | 18241 | 7750 | 142700 | | | | |
| | | | 22 | 2,45 | 13376 | 7750 | 142700 | | | | |



| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ | | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|--|----------|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | |
| 44.31 | 1400 | 32 | 55 | 2,09 | 15675 | 7750 | 139000 | 3A 3AE 750 | | 668 1380 |
| | | | 45 | 2,56 | 12825 | 7750 | 139000 | | | |
| | | | 37 | 3,11 | 10545 | 7750 | 139000 | | | |
| | 900 | 20 | 45 | 1,64 | 20521 | 7750 | 140500 | | | |
| | | | 37 | 1,99 | 16872 | 7750 | 140500 | | | |
| | | | 30 | 2,46 | 13680 | 7750 | 140500 | | | |
| | 700 | 16 | 37 | 1,55 | 21091 | 7750 | 142700 | | | |
| | | | 30 | 1,91 | 17100 | 7750 | 142700 | | | |
| | | | 22 | 2,61 | 12540 | 7750 | 142700 | | | |
| | 500 | 11 | 30 | 1,37 | 24873 | 7750 | 142700 | | | |
| | | | 22 | 1,86 | 18241 | 7750 | 142700 | | | |
| | | | 18,5 | 2,22 | 15339 | 7750 | 142700 | | | |
| 63.88 | 1400 | 22 | 37 | 2,13 | 15339 | 7750 | 140500 | 3A 3AE 750 | | 668 1380 |
| | | | 30 | 2,63 | 12437 | 7750 | 140500 | | | |
| | | | 22 | 3,58 | 9120 | 7750 | 140500 | | | |
| | 900 | 14 | 30 | 1,69 | 19543 | 7750 | 142700 | | | |
| | | | 22 | 2,31 | 14332 | 7750 | 142700 | | | |
| | | | 18,5 | 2,75 | 12052 | 7750 | 142700 | | | |
| | 700 | 11 | 22 | 1,78 | 18241 | 7750 | 142700 | | | |
| | | | 18,5 | 2,12 | 15339 | 7750 | 142700 | | | |
| | | | 15 | 2,61 | 12437 | 7750 | 142700 | | | |
| | 500 | 8 | 18,5 | 1,52 | 21091 | 7750 | 145500 | | | |
| | | | 15 | 1,87 | 17100 | 7750 | 145500 | | | |
| | | | 11 | 2,55 | 12540 | 7750 | 145500 | | | |
| 81.75 | 1400 | 17 | 22 | 2,58 | 11803 | 7750 | 142700 | 3A 3AE 750 | | 678 1470 |
| | | | 18,5 | 3,06 | 9925 | 7750 | 142700 | | | |
| | | | 15 | 3,78 | 8047 | 7750 | 142700 | | | |
| | 900 | 11 | 18,5 | 1,97 | 15339 | 7750 | 142700 | | | |
| | | | 15 | 2,43 | 12437 | 7750 | 142700 | | | |
| | | | 11 | 3,32 | 9120 | 7750 | 142700 | | | |
| | 700 | 8,5 | 15 | 1,90 | 16095 | 7750 | 145500 | | | |
| | | | 11 | 2,59 | 11803 | 7750 | 145500 | | | |
| | | | 7,5 | 3,81 | 8047 | 7750 | 145500 | | | |
| | 500 | 6 | 11 | 1,84 | 16720 | 7750 | 145500 | | | |
| | | | 7,5 | 2,70 | 11400 | 7750 | 145500 | | | |
| | | | 5,5 | 3,68 | 8360 | 7750 | 145500 | | | |
| 118.50 | 1400 | 12 | 18,5 | 2,17 | 14060 | 7750 | 142700 | 3A 3AE 750 | | 678 1470 |
| | | | 15 | 2,67 | 11400 | 7750 | 142700 | | | |
| | | | 11 | 3,64 | 8360 | 7750 | 142700 | | | |
| | 900 | 7,5 | 15 | 1,72 | 18241 | 7750 | 145500 | | | |
| | | | 11 | 2,35 | 13376 | 7750 | 145500 | | | |
| | | | 7,5 | 3,44 | 9120 | 7750 | 145500 | | | |
| | 700 | 6 | 11 | 1,82 | 16720 | 7750 | 145500 | | | |
| | | | 7,5 | 2,67 | 11400 | 7750 | 145500 | | | |
| | | | 5,5 | 3,65 | 8360 | 7750 | 145500 | | | |
| | 500 | 4 | 7,5 | 1,90 | 17100 | 7750 | 145500 | | | |
| | | | 5,5 | 2,60 | 12540 | 7750 | 145500 | | | |
| | | | 4 | 3,57 | 9120 | 7750 | 145500 | | | |



| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ |  |  | kg |
|--|-----------------------------|-----------------------------|----------------|----------------|------------------------------|-----------------|-------------------|--------------------|---|---|----|
| | Giriş Devri | Çıkış Devri | GÜÇ | Servis Faktörü | Çıkış Momenti | Rad. Yük | Rad. Yük | | | | |
| | Input Speeds | Output Speeds | Power | Service Factor | Output Torque | Over Loads | Over Loads | | | | |
| | Antriebswelle Drehzahlen | Abtriebswelle Drehzahlen | Leistung | Betriebsfaktor | Abtriebswelle Drehmomente | Querkräfte | Querkräfte | | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | | |
| 140.30 | 1400 | 10 | 15 | 2,69 | 13680 | 7750 | 142700 | 4A 750 | 669 | 1410 | |
| | | | 11 | 3,67 | 10032 | 7750 | 142700 | | | | |
| | | | 7,5 | 5,38 | 6840 | 7750 | 142700 | | | | |
| | 900 | 6,5 | 11 | 2,35 | 15434 | 7750 | 145500 | | | | |
| | | | 7,5 | 3,44 | 10523 | 7750 | 145500 | | | | |
| | | | 5,5 | 4,69 | 7717 | 7750 | 145500 | | | | |
| | 700 | 5 | 7,5 | 2,69 | 13680 | 7750 | 145500 | | | | |
| | | | 5,5 | 3,66 | 10032 | 7750 | 145500 | | | | |
| | | | 4 | 5,04 | 7296 | 7750 | 145500 | | | | |
| | 500 | 3,5 | 5,5 | 2,64 | 14332 | 7750 | 145500 | | | | |
| | | | 4 | 3,63 | 10423 | 7750 | 145500 | | | | |
| | | | 3 | 4,84 | 7817 | 7750 | 145500 | | | | |
| 154.20 | 1400 | 9 | 15 | 2,20 | 14978 | 7150 | 147000 | | | | |
| | | | 11 | 3,01 | 10984 | 7150 | 147000 | | | | |
| | | | 7,5 | 4,41 | 7489 | 7150 | 147000 | | | | |
| | 900 | 6 | 11 | 1,92 | 16475 | 7150 | 147000 | | | | |
| | | | 7,5 | 2,81 | 11233 | 7150 | 147000 | | | | |
| | | | 5,5 | 3,83 | 8238 | 7150 | 147000 | | | | |
| | 700 | 4,5 | 7,5 | 2,17 | 14978 | 7150 | 147000 | | | | |
| | | | 5,5 | 2,96 | 10984 | 7150 | 147000 | | | | |
| | | | 4 | 4,08 | 7988 | 7150 | 147000 | | | | |
| | 500 | 3,2 | 5,5 | 2,11 | 15446 | 7150 | 147000 | | | | |
| | | | 4 | 2,90 | 11233 | 7150 | 147000 | | | | |
| | | | 3 | 3,86 | 8425 | 7150 | 147000 | | | | |
| 187.10 | 1400 | 7,5 | 15 | 1,82 | 17973 | 7150 | 147000 | | | | |
| | | | 11 | 2,48 | 13180 | 7150 | 147000 | | | | |
| | | | 7,5 | 3,64 | 8987 | 7150 | 147000 | | | | |
| | 900 | 5 | 11 | 1,60 | 19770 | 7150 | 147000 | | | | |
| | | | 7,5 | 2,35 | 13480 | 7150 | 147000 | | | | |
| | | | 5,5 | 3,20 | 9885 | 7150 | 147000 | | | | |
| | 700 | 3,8 | 7,5 | 1,82 | 17737 | 7150 | 147000 | | | | |
| | | | 5,5 | 2,48 | 13007 | 7150 | 147000 | | | | |
| | | | 4 | 3,41 | 9460 | 7150 | 147000 | | | | |
| | 500 | 2,7 | 5,5 | 1,76 | 18306 | 7150 | 147000 | | | | |
| | | | 4 | 2,42 | 13313 | 7150 | 147000 | | | | |
| | | | 3 | 3,23 | 9985 | 7150 | 147000 | | | | |
| 222.23 | 1400 | 6 | 11 | 2,10 | 16475 | 7150 | 147000 | | | | |
| | | | 7,5 | 3,08 | 11233 | 7150 | 147000 | | | | |
| | | | 5,5 | 4,20 | 8238 | 7150 | 147000 | | | | |
| | 900 | 4 | 7,5 | 1,95 | 16850 | 7150 | 147000 | | | | |
| | | | 5,5 | 2,65 | 12357 | 7150 | 147000 | | | | |
| | | | 4 | 3,65 | 8987 | 7150 | 147000 | | | | |
| | 700 | 3 | 5,5 | 2,06 | 16475 | 7150 | 147000 | | | | |
| | | | 4 | 2,84 | 11982 | 7150 | 147000 | | | | |
| | | | 3 | 3,78 | 8987 | 7150 | 147000 | | | | |
| | 500 | 2 | 4 | 2,01 | 17973 | 7150 | 147000 | | | | |
| | | | 3 | 2,68 | 13480 | 7150 | 147000 | | | | |
| | | | 2,2 | 3,66 | 9885 | 7150 | 147000 | | | | |



| İ Tahvil Oranı Ratio Übersetzung | n ₁ | n ₂ | P ₁ | S _f | M ₂ | F _{q1} | F _{q1/2} | Tip Type Typ | | kg |
|--|--|---|--------------------------|--|--|--------------------------------------|--------------------------------------|--------------------|-----|------|
| | Giriş Devri Input Speeds Antriebswelle Drehzahlen | Çıkış Devri Output Speeds Abtriebswelle Drehzahlen | GÜÇ Power Leistung | Servis Faktörü Service Factor Betriebsfaktor | Çıkış Momenti Output Torque Abtriebswelle Drehmomente | Rad. Yük Over Loads Querkräfte | Rad. Yük Over Loads Querkräfte | | | |
| | [r.p.m] | [r.p.m] | [kW] | | [Nm] | [N] | [N] | | | |
| | | | | | | | | | | |
| 282.32 | 1400 | 5 | 7,5 | 2,25 | 13480 | 7150 | 147000 | 4A 750 | 669 | 1410 |
| | | | 5,5 | 3,60 | 9885 | 7150 | 147000 | | | |
| | | | 4 | 4,21 | 7189 | 7150 | 147000 | | | |
| | 900 | 3,2 | 5,5 | 2,00 | 15446 | 7150 | 147000 | | | |
| | | | 4 | 2,75 | 11233 | 7150 | 147000 | | | |
| | | | 3 | 3,67 | 8425 | 7150 | 147000 | | | |
| | 700 | 2,5 | 4 | 2,15 | 14378 | 7150 | 147000 | | | |
| | | | 3 | 2,86 | 10784 | 7150 | 147000 | | | |
| | | | 2,2 | 3,91 | 7908 | 7150 | 147000 | | | |
| | 500 | 1,7 | 3 | 1,95 | 15859 | 7150 | 147000 | | | |
| | | | 2,2 | 2,66 | 11630 | 7150 | 147000 | | | |
| | | | 1,5 | 3,90 | 7929 | 7150 | 147000 | | | |
| 327.87 | 1400 | 4,2 | 7,5 | 1,98 | 14340 | 7150 | 147000 | | | |
| | | | 5,5 | 2,70 | 10516 | 7150 | 147000 | | | |
| | | | 4 | 3,71 | 7648 | 7150 | 147000 | | | |
| | 900 | 2,7 | 5,5 | 1,74 | 18306 | 7150 | 147000 | | | |
| | | | 4 | 2,38 | 13313 | 7150 | 147000 | | | |
| | | | 3 | 3,18 | 9985 | 7150 | 147000 | | | |
| | 700 | 2 | 4 | 1,85 | 17973 | 7150 | 147000 | | | |
| | | | 3 | 2,47 | 13480 | 7150 | 147000 | | | |
| | | | 2,2 | 3,37 | 9885 | 7150 | 147000 | | | |
| | 500 | 1,5 | 3 | 1,77 | 17973 | 7150 | 147000 | | | |
| | | | 2,2 | 2,41 | 13180 | 7150 | 147000 | | | |
| | | | 1,5 | 3,53 | 8987 | 7150 | 147000 | | | |
| 412.40 | 1400 | 3,5 | 5,5 | 2,15 | 14122 | 7150 | 147000 | | | |
| | | | 4 | 2,95 | 10270 | 7150 | 147000 | | | |
| | | | 3 | 3,94 | 7703 | 7150 | 147000 | | | |
| | 900 | 2,2 | 4 | 1,91 | 16339 | 7150 | 147000 | | | |
| | | | 3 | 2,55 | 12254 | 7150 | 147000 | | | |
| | | | 2,2 | 3,48 | 8987 | 7150 | 147000 | | | |
| | 700 | 1,7 | 3 | 1,97 | 15859 | 7150 | 147000 | | | |
| | | | 2,2 | 2,68 | 11630 | 7150 | 147000 | | | |
| | | | 1,5 | 3,94 | 7929 | 7150 | 147000 | | | |
| | 500 | 1,2 | 2,2 | 1,89 | 16475 | 7150 | 147000 | | | |
| | | | 1,5 | 2,78 | 11233 | 7150 | 147000 | | | |
| | | | 1,1 | 3,79 | 8238 | 7150 | 147000 | | | |
| 487.32 | 1400 | 3 | 5,5 | 1,84 | 16475 | 7150 | 147000 | | | |
| | | | 4 | 2,53 | 11982 | 7150 | 147000 | | | |
| | | | 3 | 3,37 | 8987 | 7150 | 147000 | | | |
| | 900 | 1,8 | 4 | 1,57 | 19970 | 7150 | 147000 | | | |
| | | | 3 | 2,09 | 14978 | 7150 | 147000 | | | |
| | | | 2,2 | 2,85 | 10984 | 7150 | 147000 | | | |
| | 700 | 1,4 | 3 | 1,63 | 19257 | 7150 | 147000 | | | |
| | | | 2,2 | 2,22 | 14122 | 7150 | 147000 | | | |
| | | | 1,5 | 3,25 | 9628 | 7150 | 147000 | | | |
| | 500 | 1 | 2,2 | 1,58 | 19770 | 7150 | 147000 | | | |
| | | | 1,5 | 2,32 | 13480 | 7150 | 147000 | | | |
| | | | 1,1 | 3,17 | 9885 | 7150 | 147000 | | | |

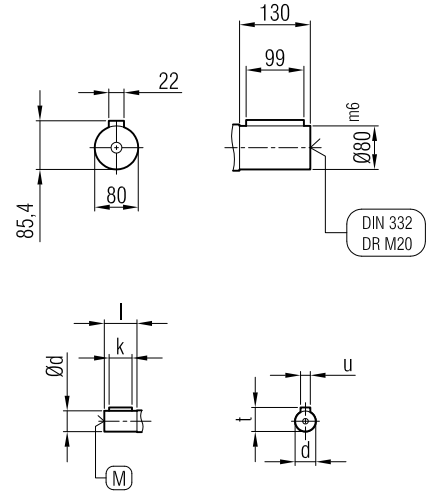
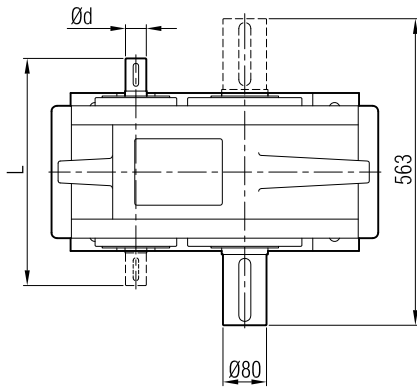
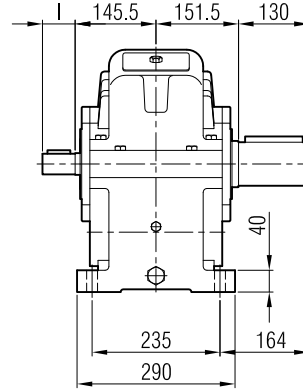
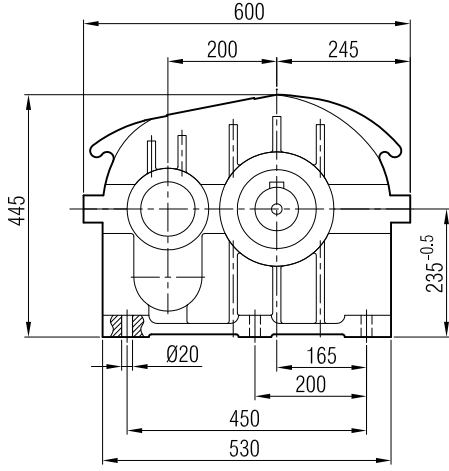
A Serisi Redüktörler Ölçü Sayfaları

Dimensions Pages

Dimensions

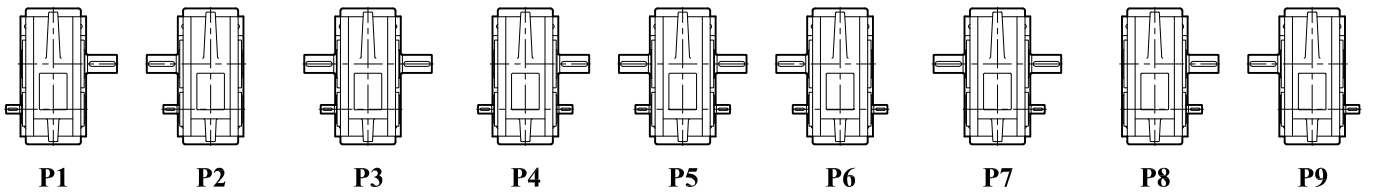


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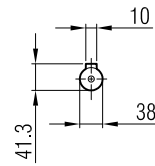
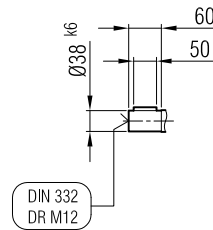
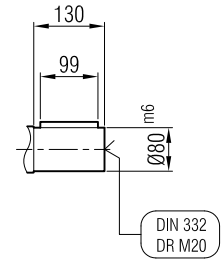
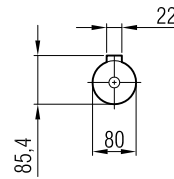
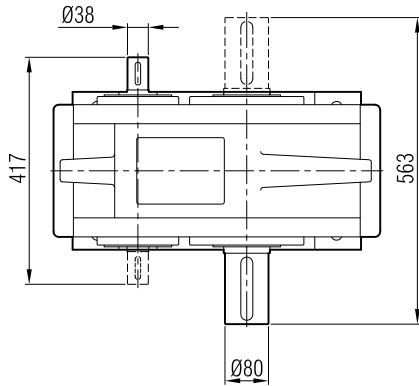
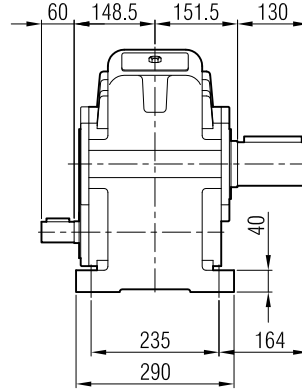
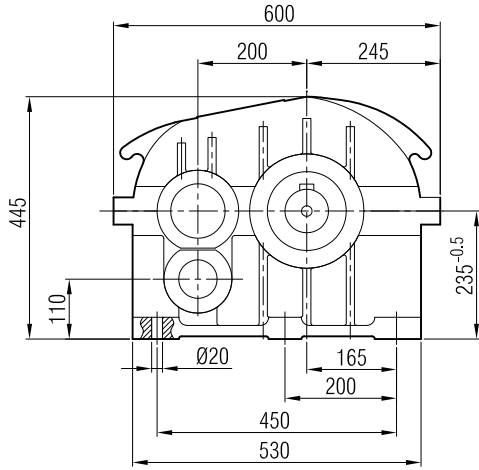
| M | d | u | t | k | l | L | Tahvil |
|-----|----|----|------|----|----|-----|-------------------|
| M20 | 55 | 16 | 59,3 | 75 | 90 | 471 | $i \leq 2,84$ |
| M16 | 48 | 14 | 51,8 | 65 | 80 | 451 | $3 < i \leq 6,91$ |

Bağlantı Pozisyonları
Mounting Positions
Bauformen

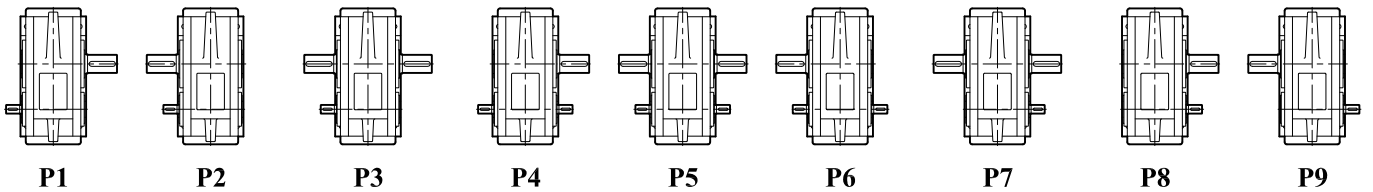




2A 200

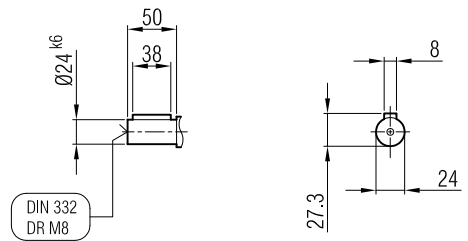
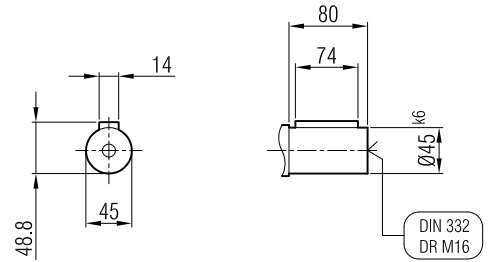
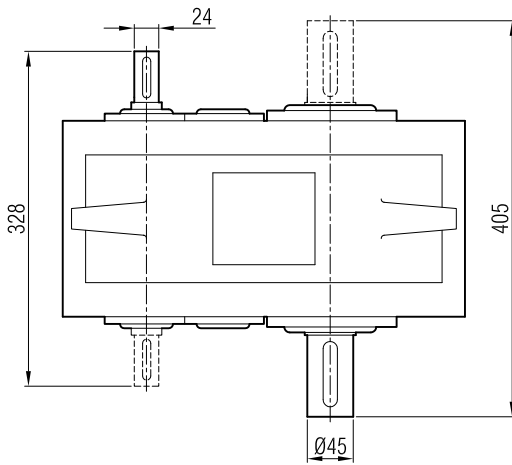
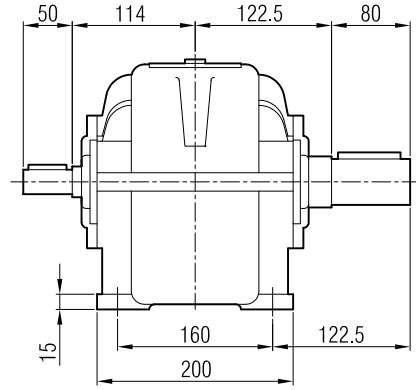
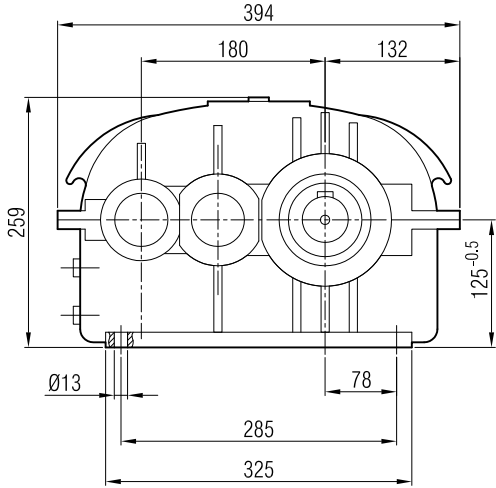


Bağlantı Pozisyonları
Mounting Positions
Bauformen

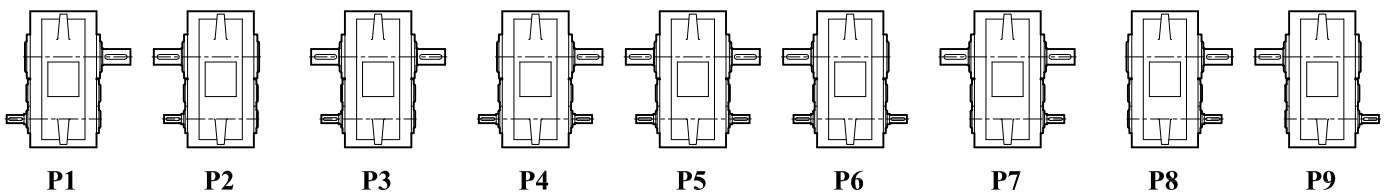




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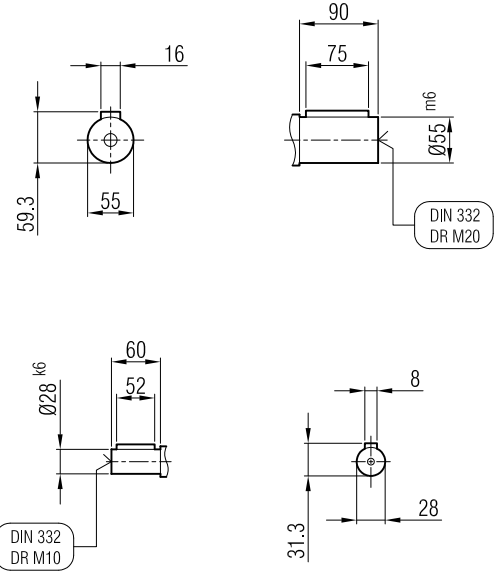
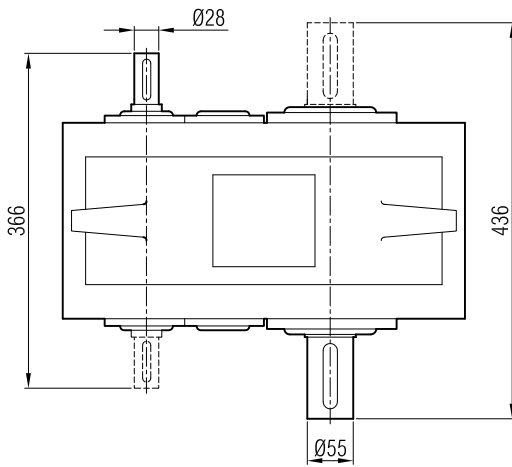
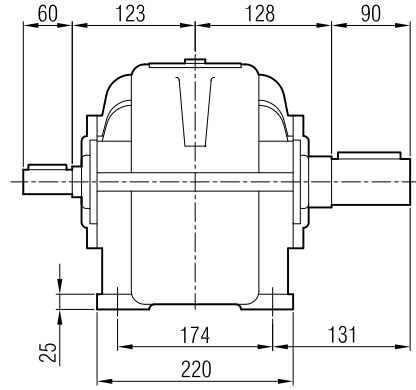
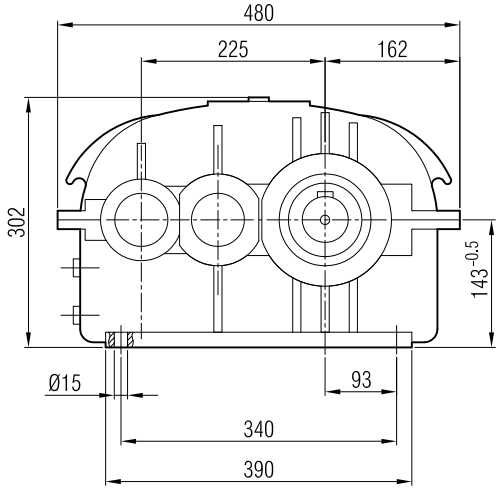


Bağlantı Pozisyonları
Mounting Positions
Bauformen

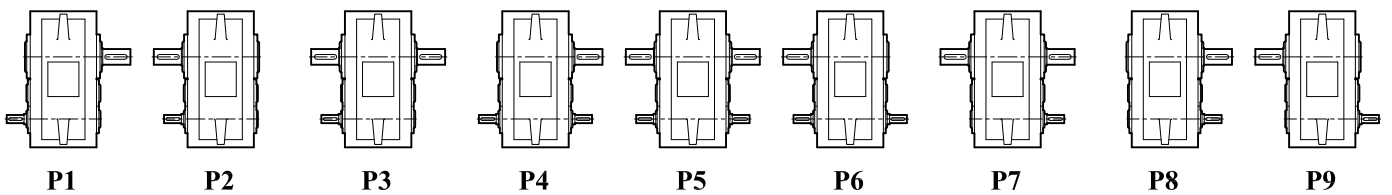




2A 225

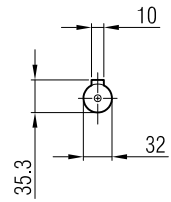
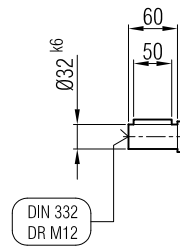
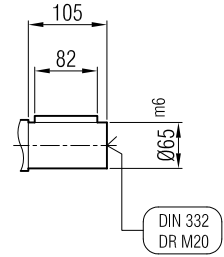
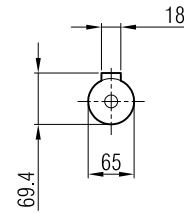
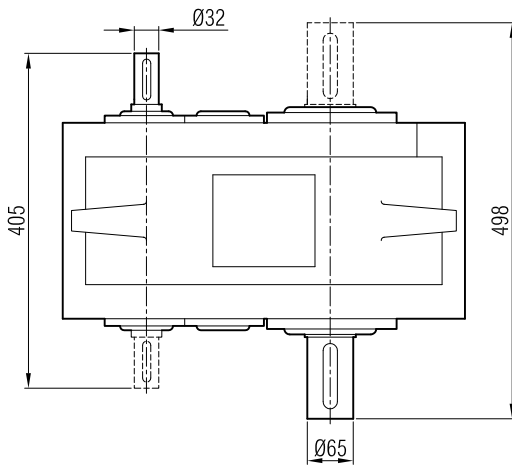
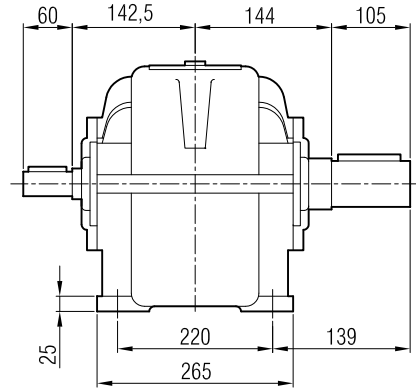
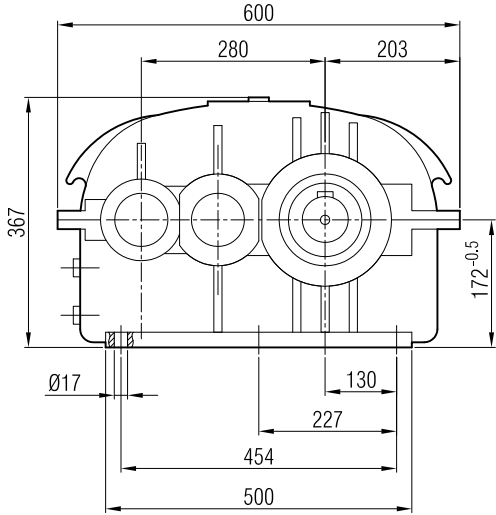


Bağlantı Pozisyonları
Mounting Positions
Bauformen

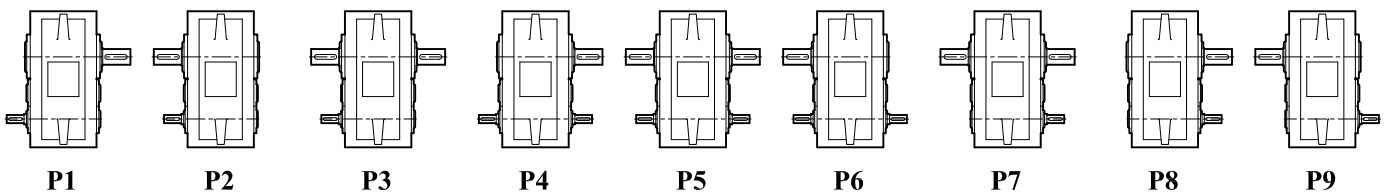




2A 275

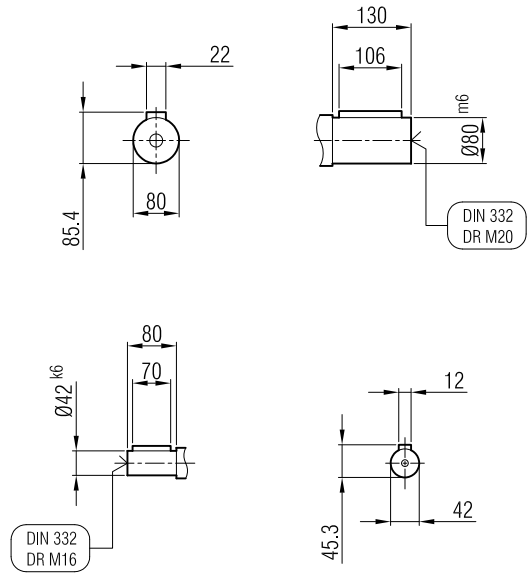
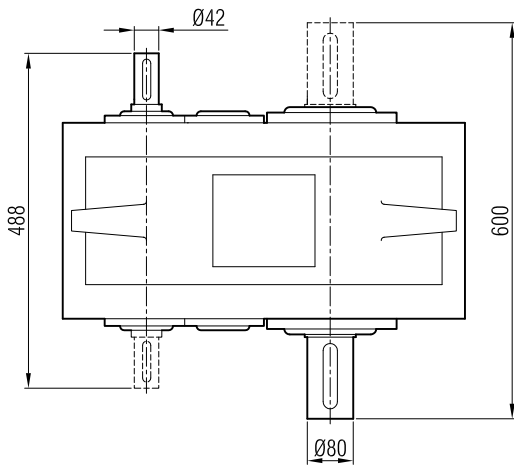
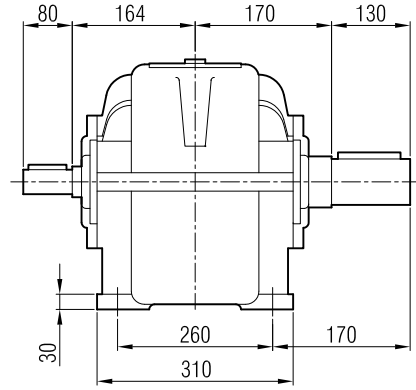
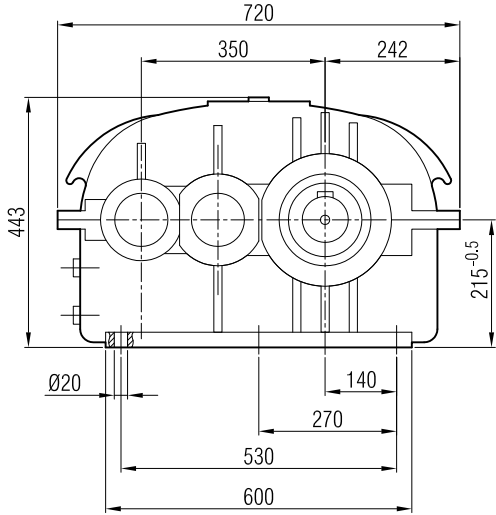


Bağlantı Pozisyonları
Mounting Positions
Bauformen

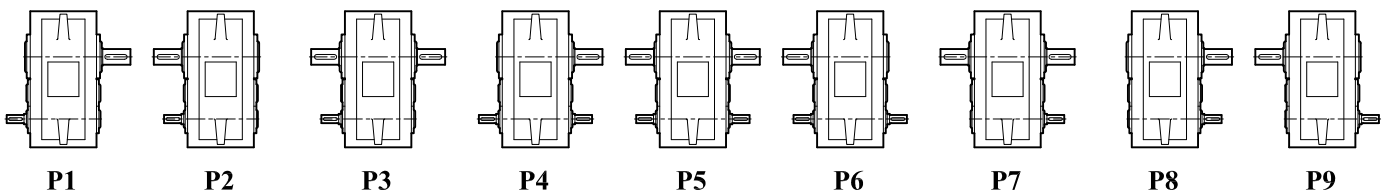




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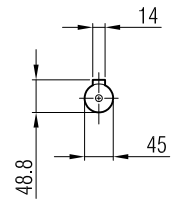
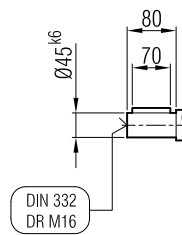
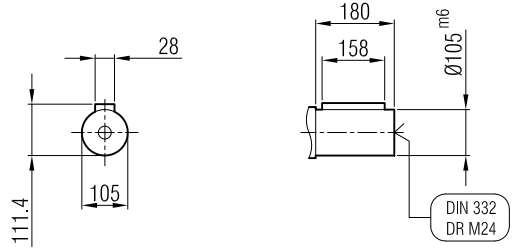
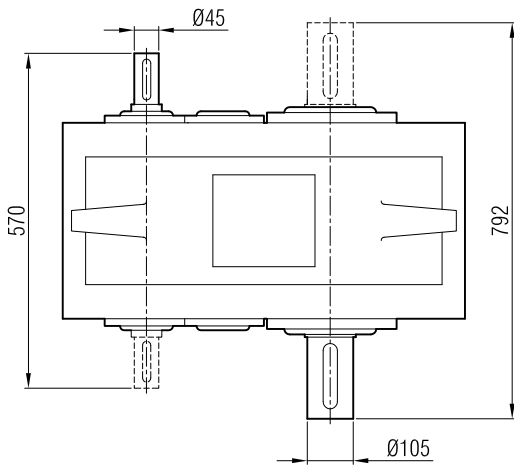
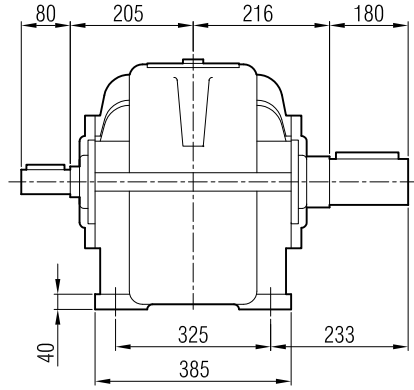
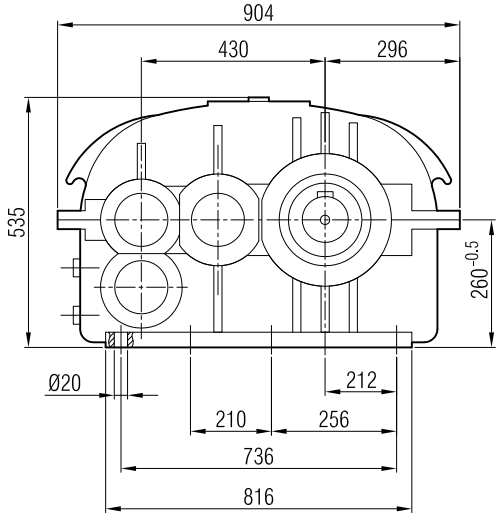


Bağlantı Pozisyonları
Mounting Positions
Bauformen

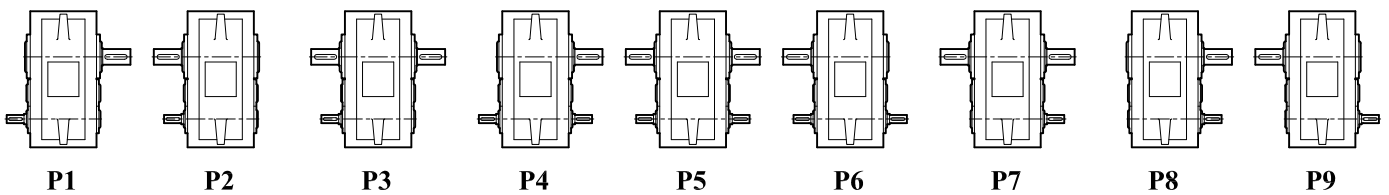




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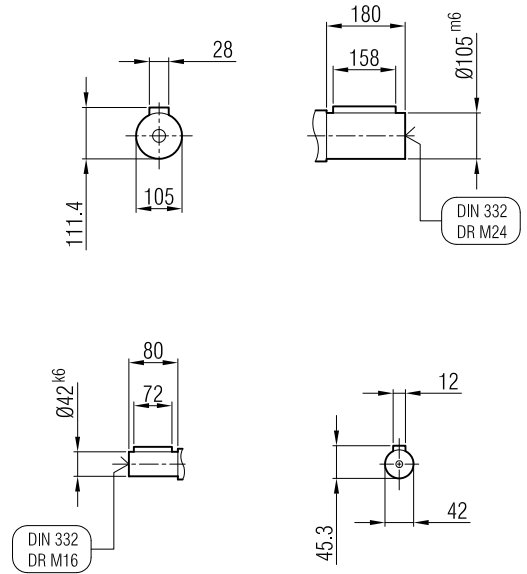
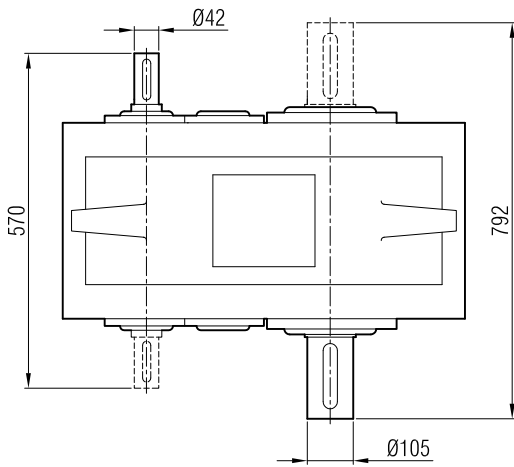
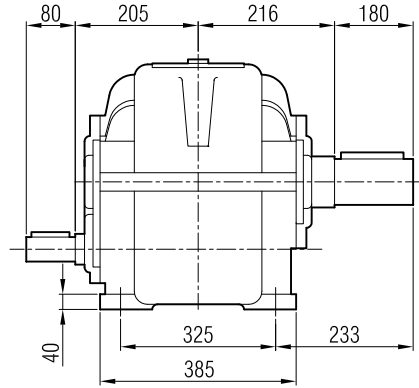
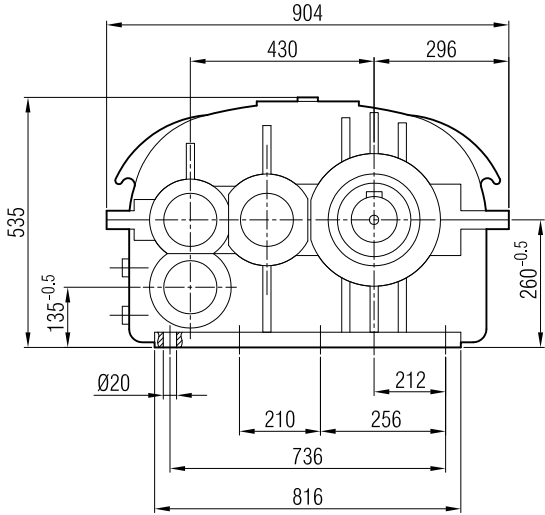


Bağlantı Pozisyonları
Mounting Positions
Bauformen

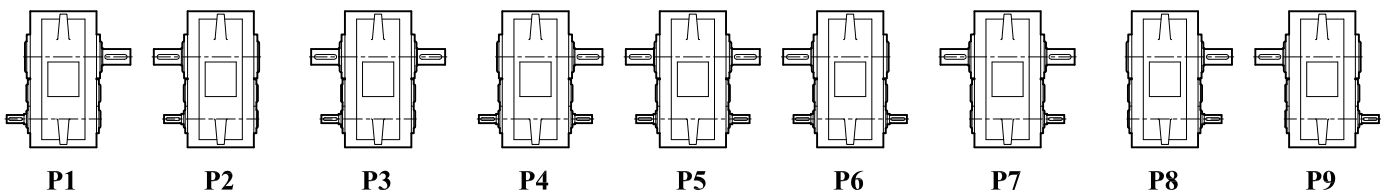




3A 430

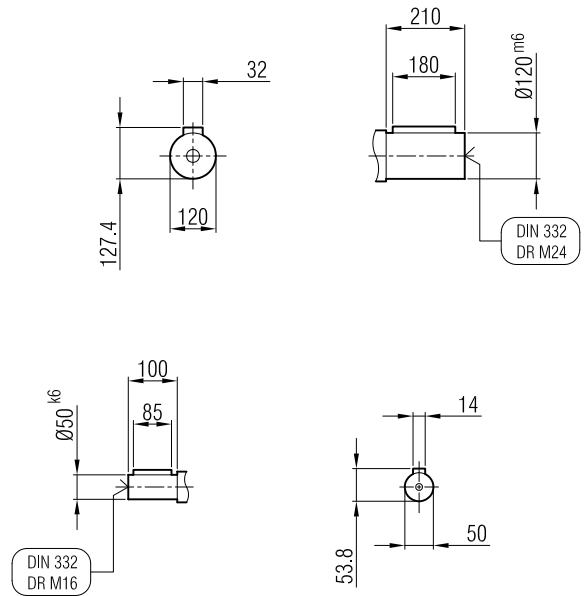
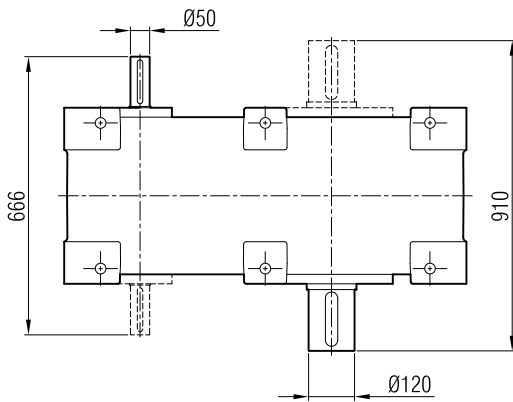
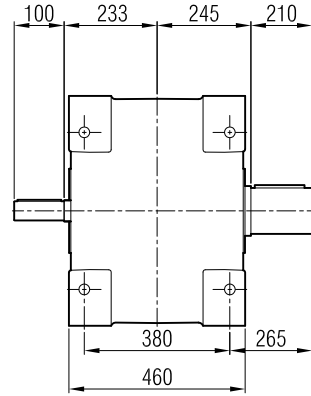
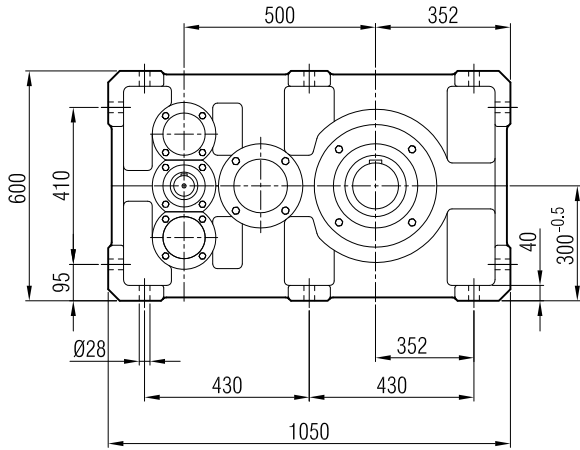


Bağlantı Pozisyonları
Mounting Positions
Bauformen

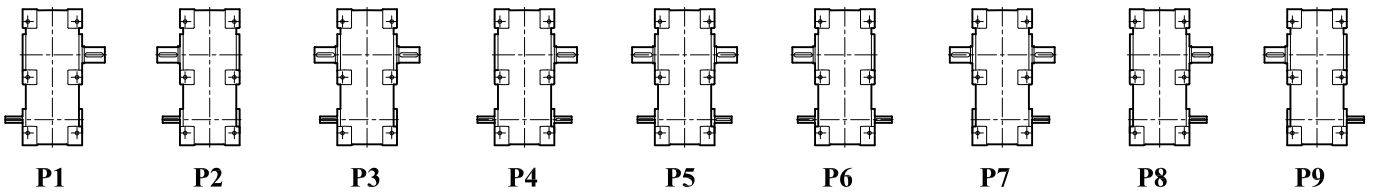




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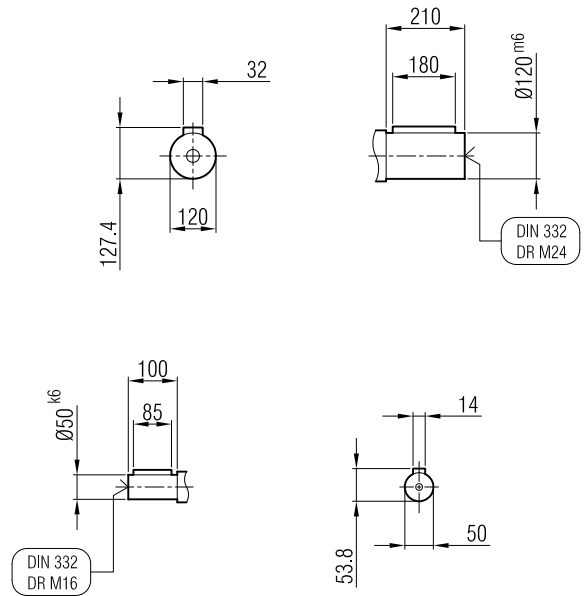
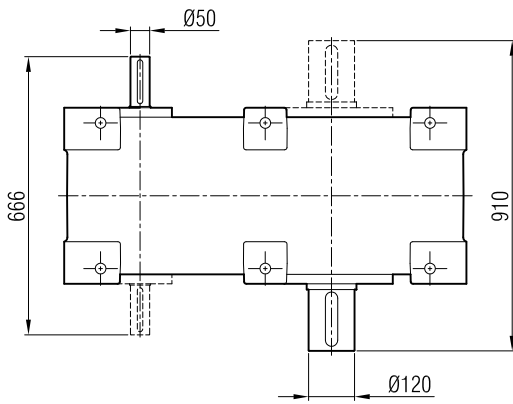
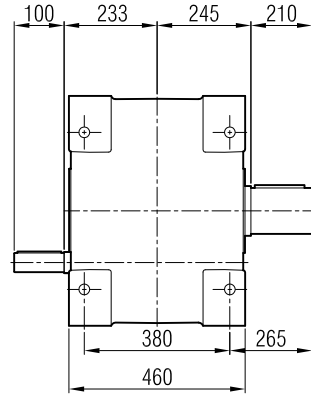
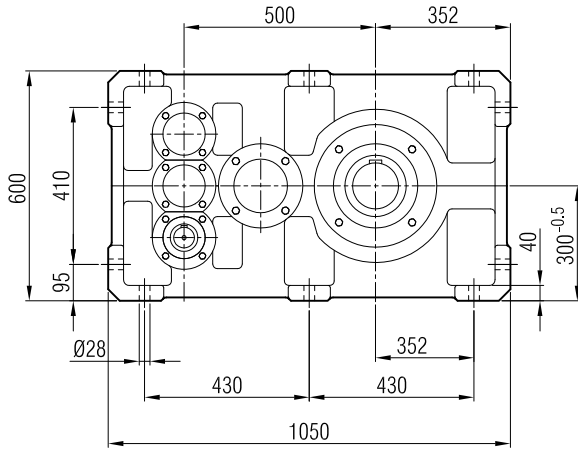


Bağlantı Pozisyonları
Mounting Positions
Bauformen

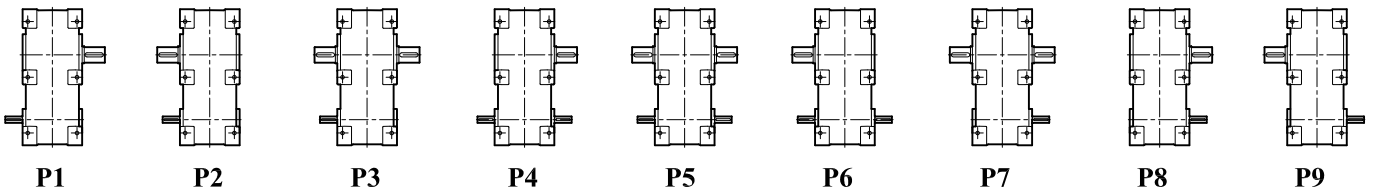




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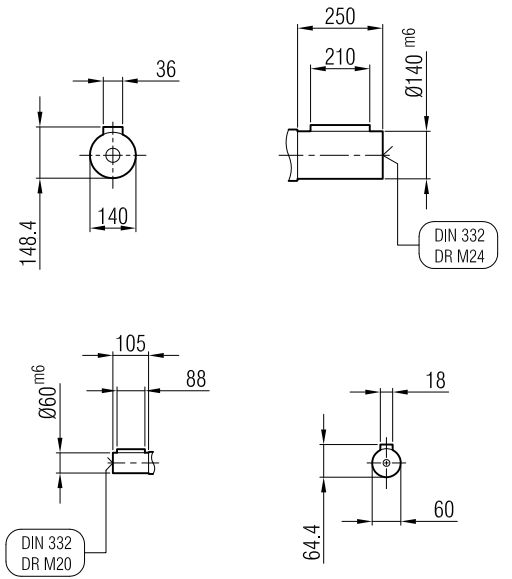
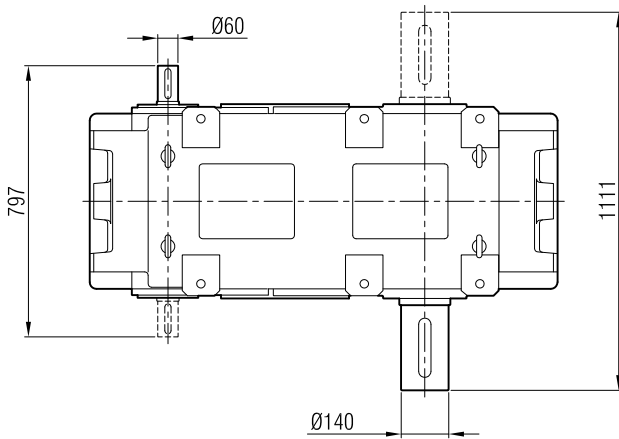
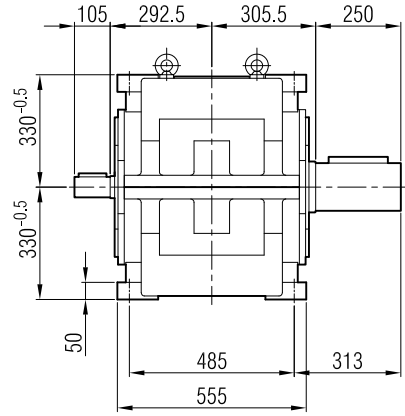
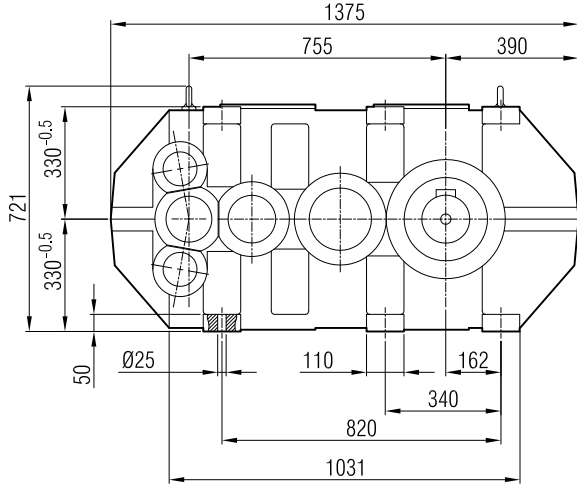


Bağlantı Pozisyonları
Mounting Positions
Bauformen

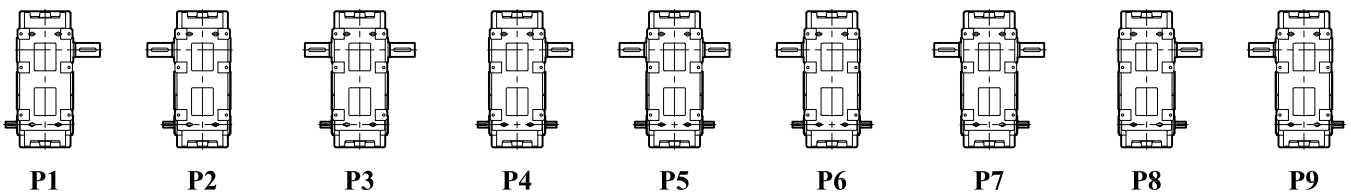




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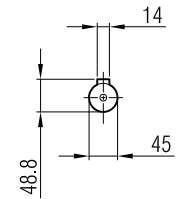
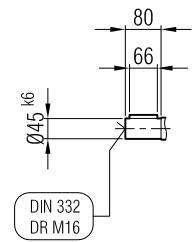
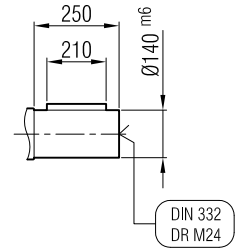
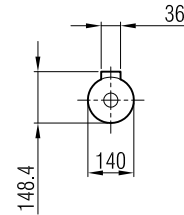
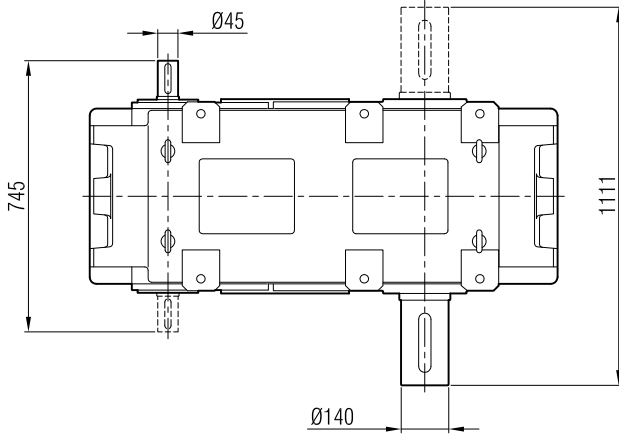
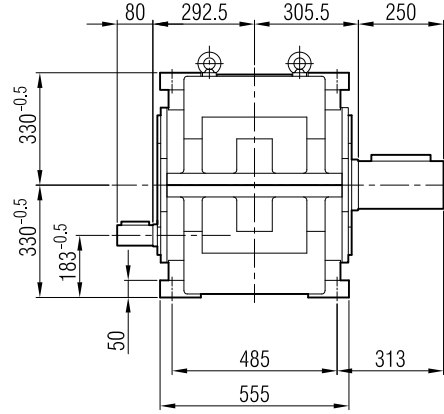
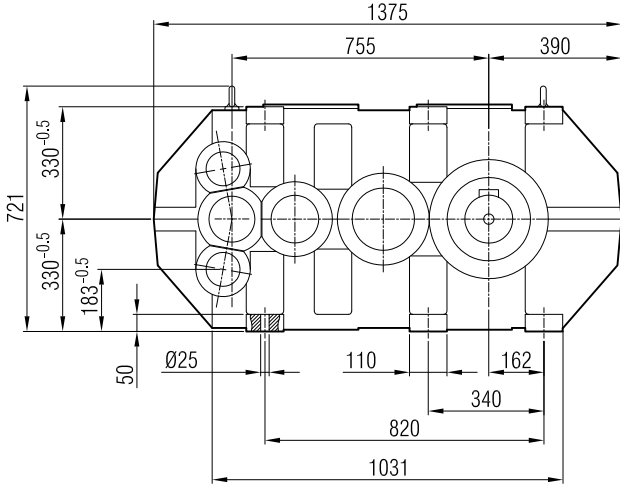


Bağlantı Pozisyonları
Mounting Positions
Bauformen

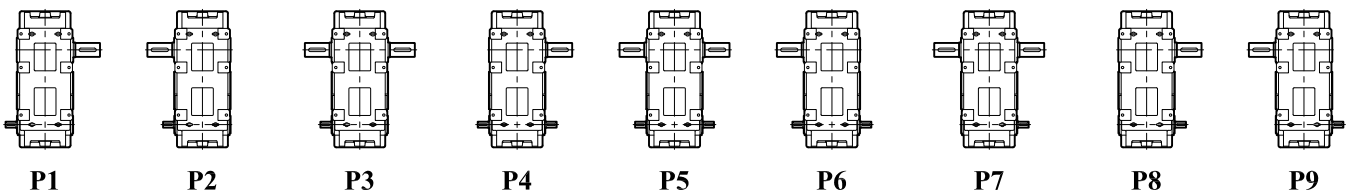




4A 750

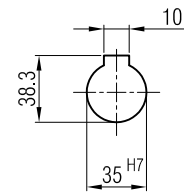
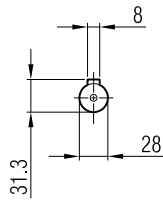
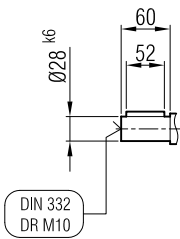
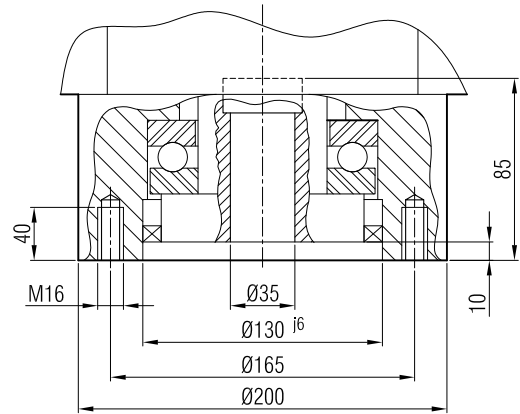
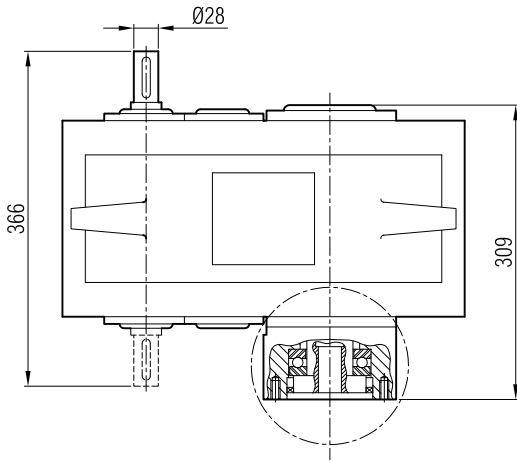
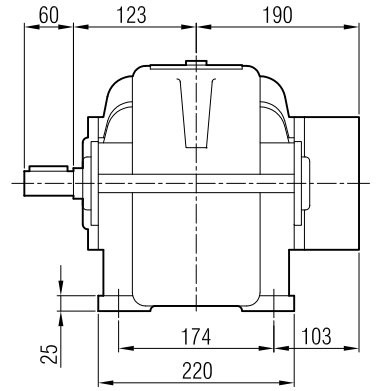
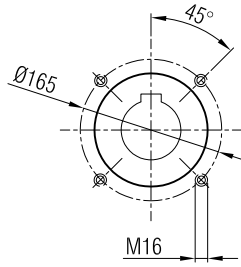
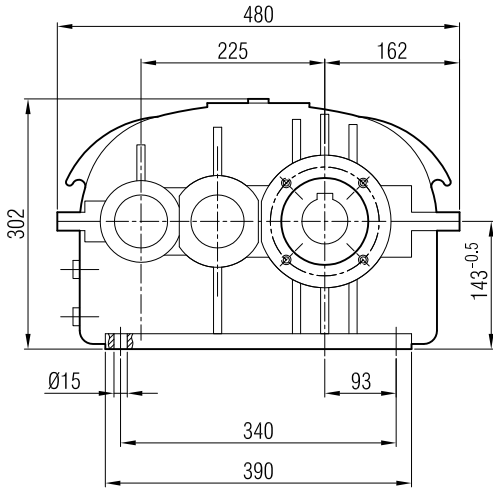


Bağlantı Pozisyonları
Mounting Positions
Bauformen

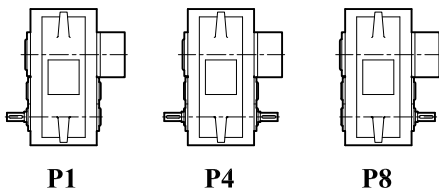




2AE 225

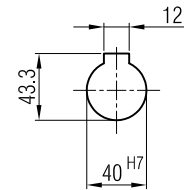
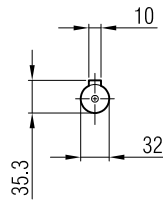
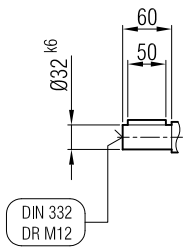
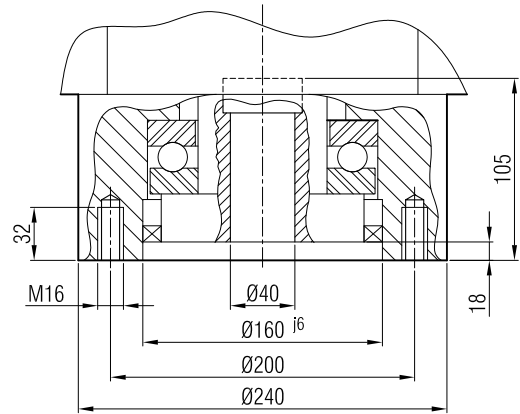
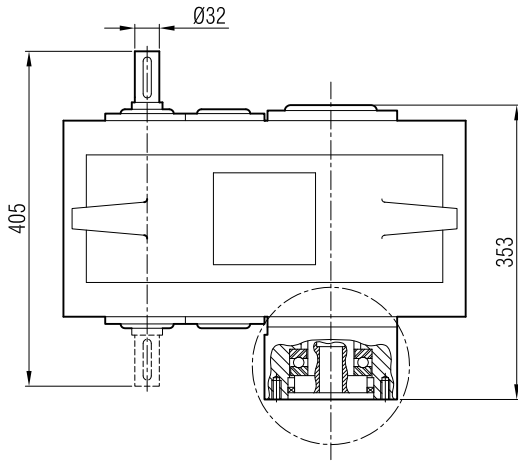
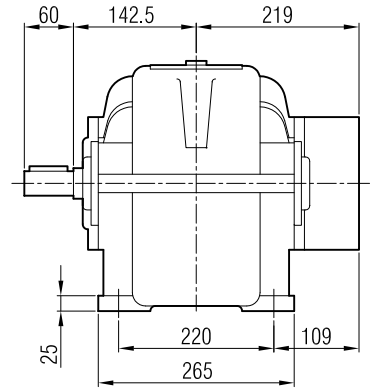
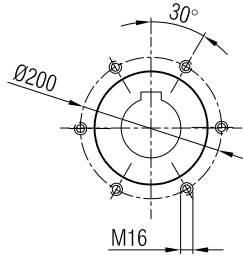
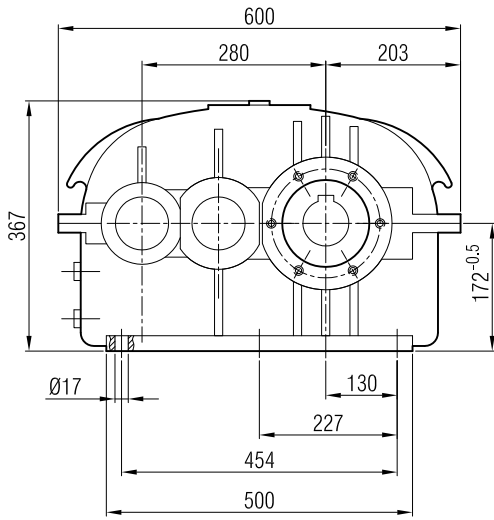


Bağlantı Pozisyonları
Mounting Positions
Bauformen

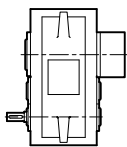




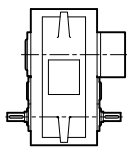
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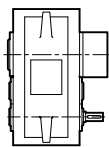
Bağlantı Pozisyonları
Mounting Positions
Bauformen



P1



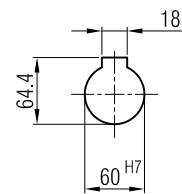
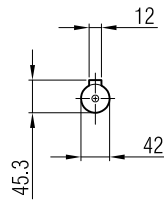
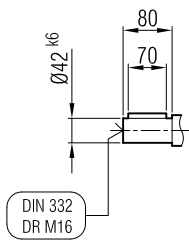
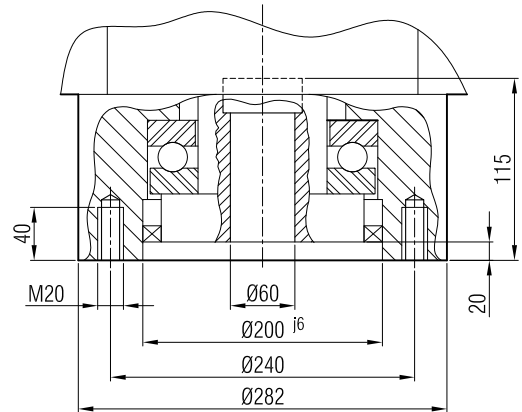
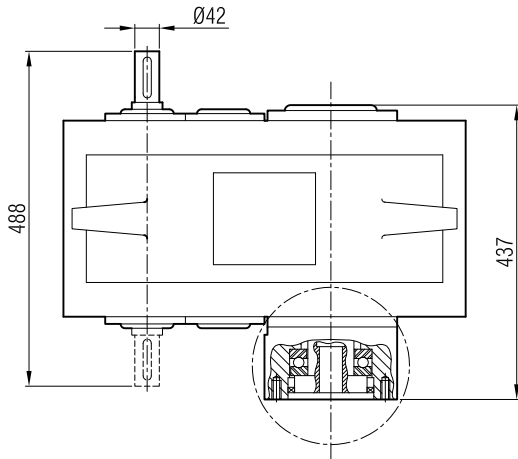
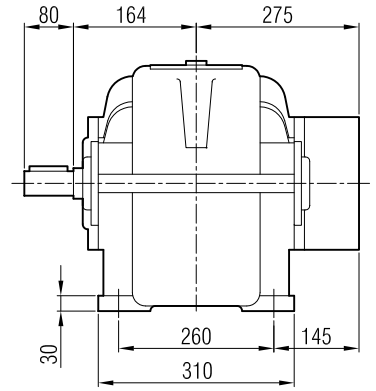
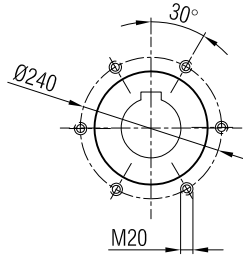
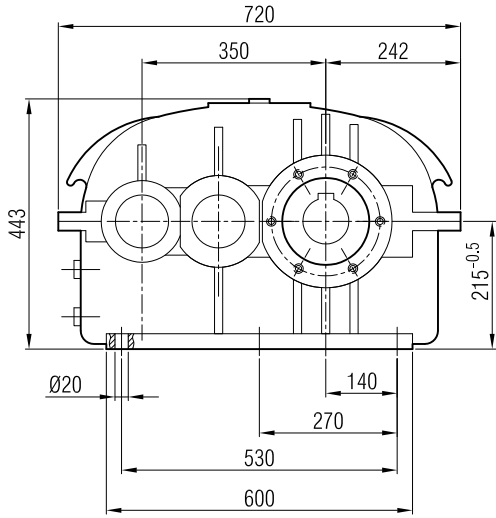
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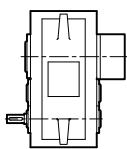
P8



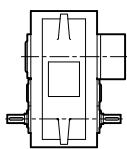
2AE 350



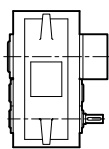
Bağlantı Pozisyonları
Mounting Positions
Bauformen



P1



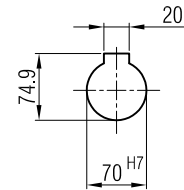
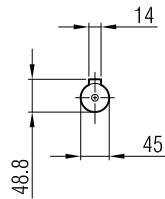
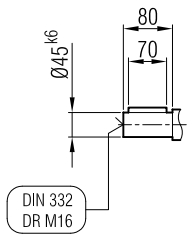
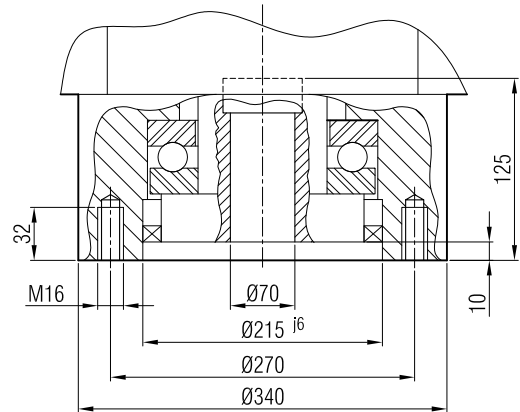
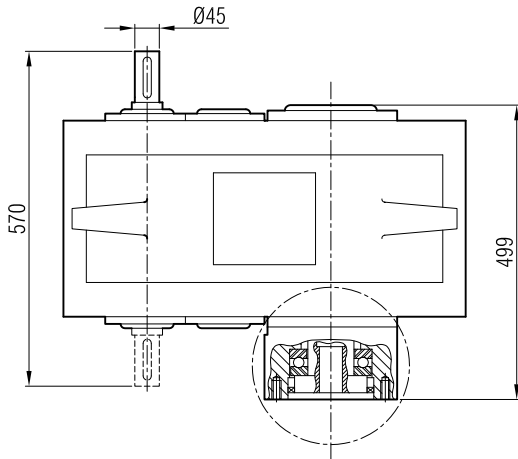
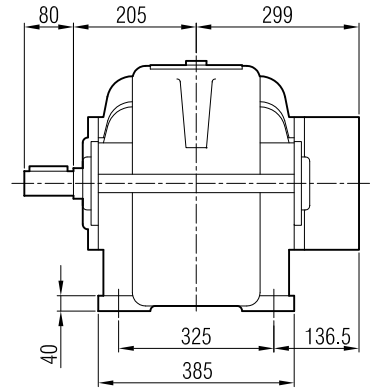
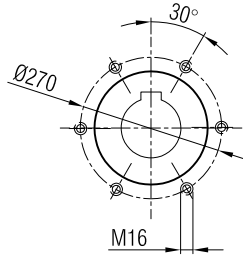
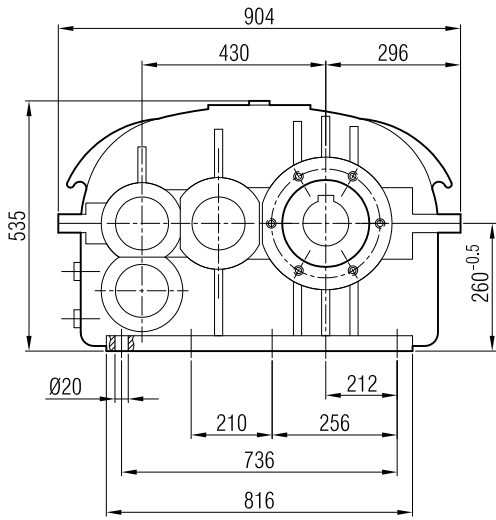
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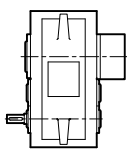
P8



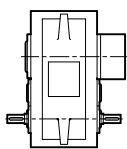
2AE 430



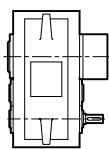
Bağlantı Pozisyonları
Mounting Positions
Bauformen



P1



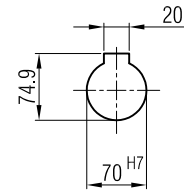
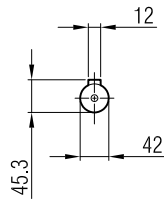
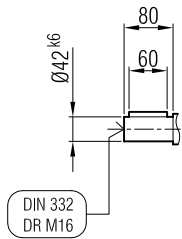
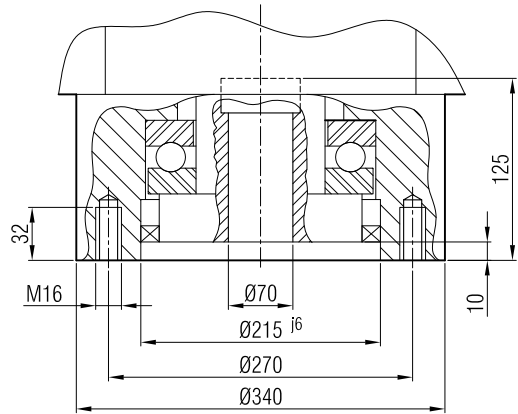
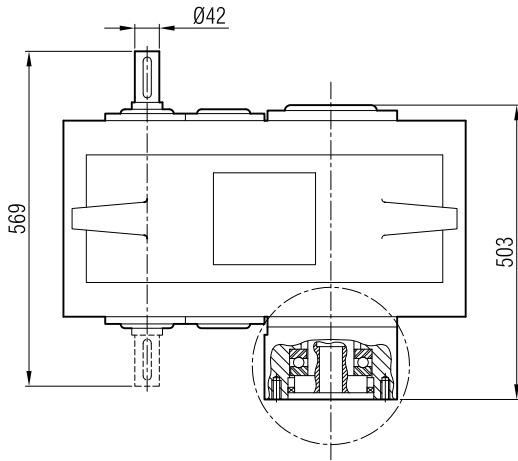
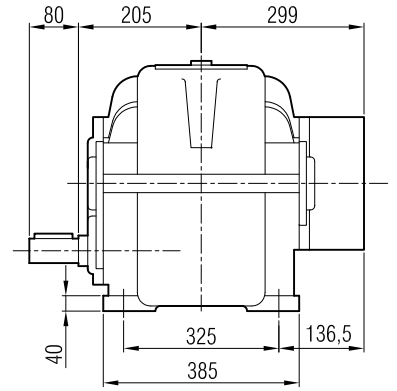
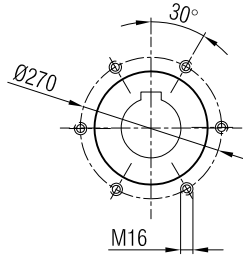
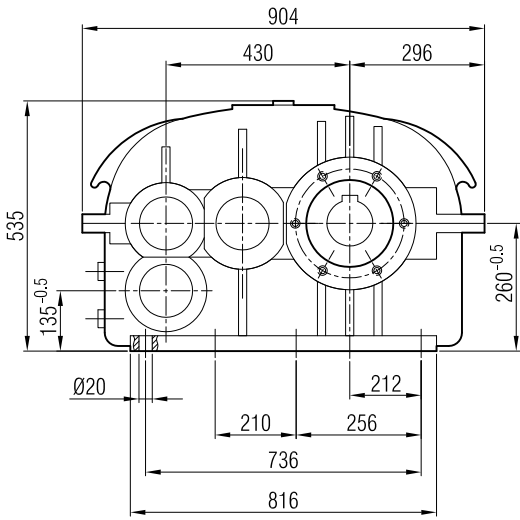
P4



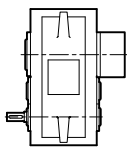
P8



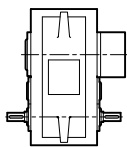
3AE 430



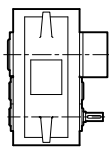
Bağlantı Pozisyonları
Mounting Positions
Bauformen



P1



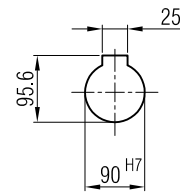
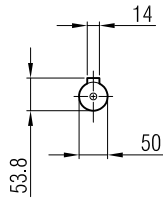
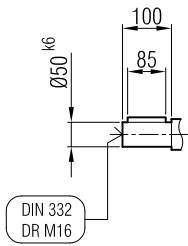
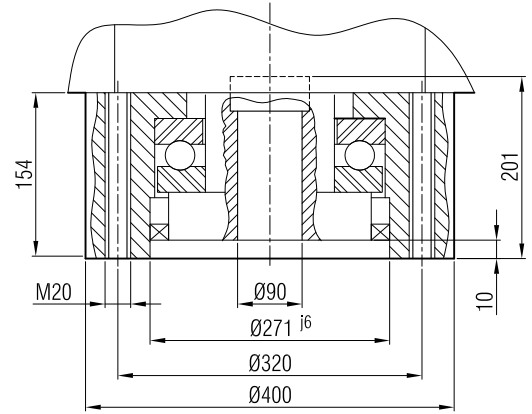
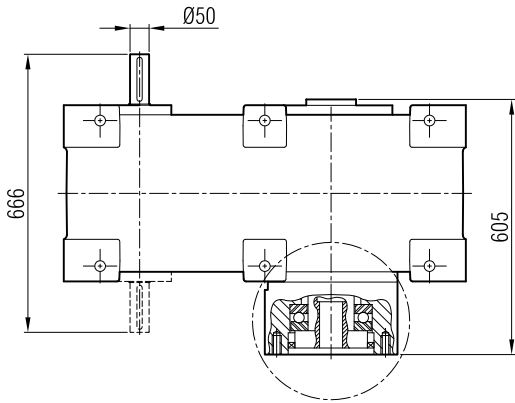
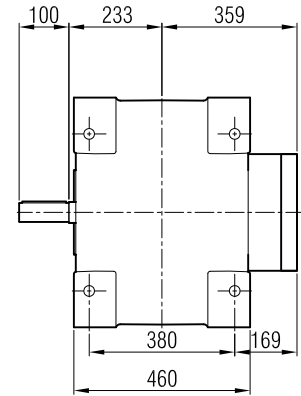
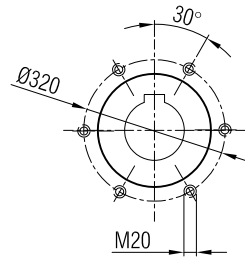
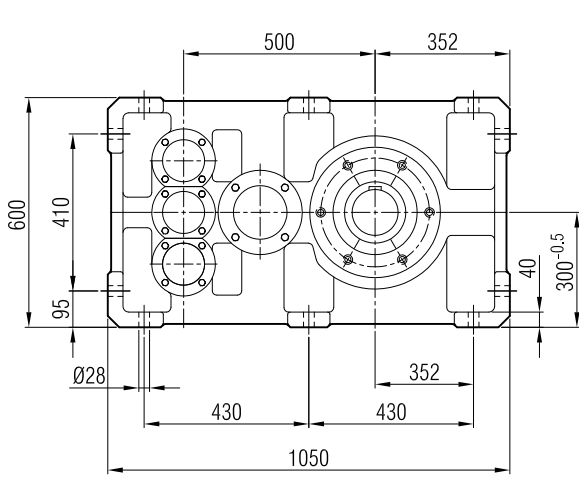
P4



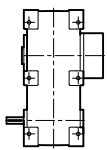
P8



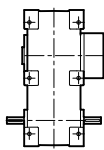
2A 501



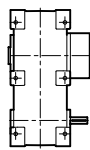
Bağlantı Pozisyonları
 Mounting Positions
 Bauformen



P1



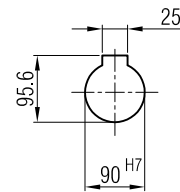
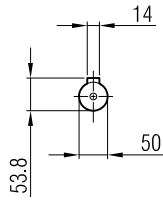
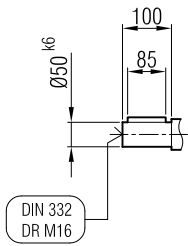
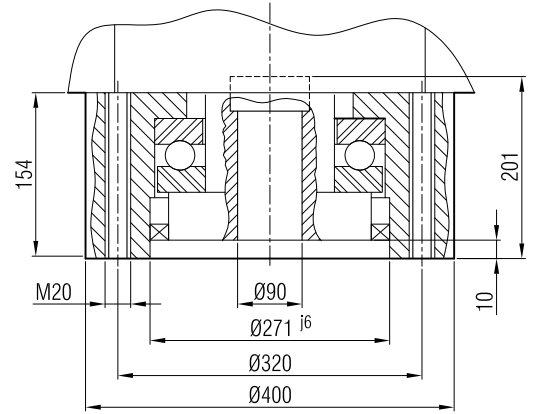
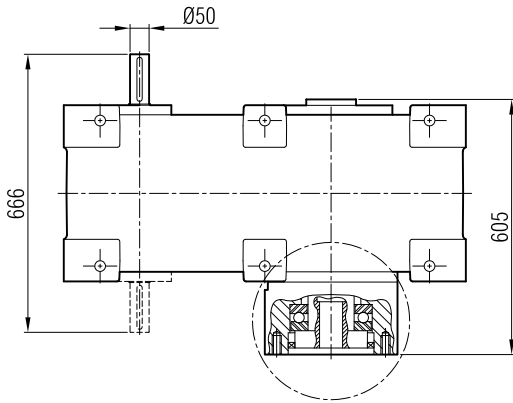
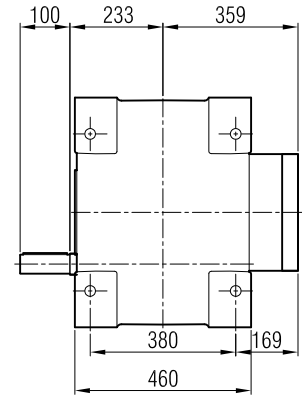
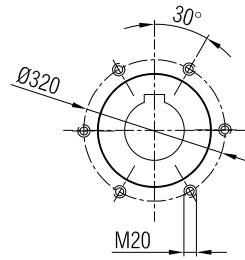
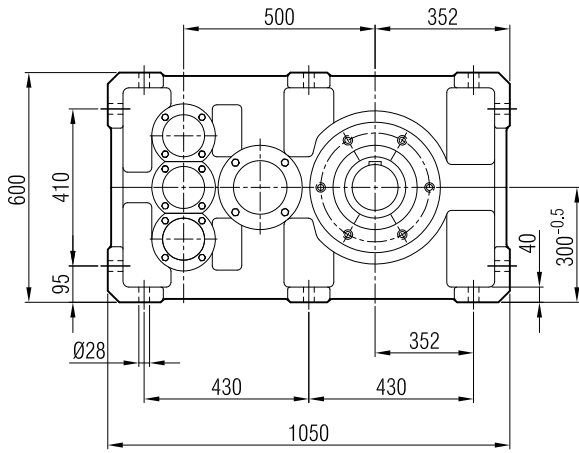
P4



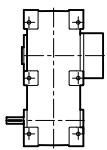
P8



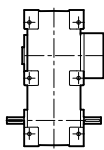
3A 501



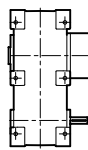
Bağlantı Pozisyonları
Mounting Positions
Bauformen



P1



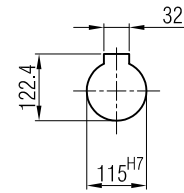
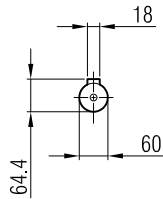
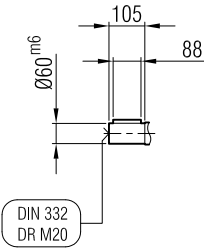
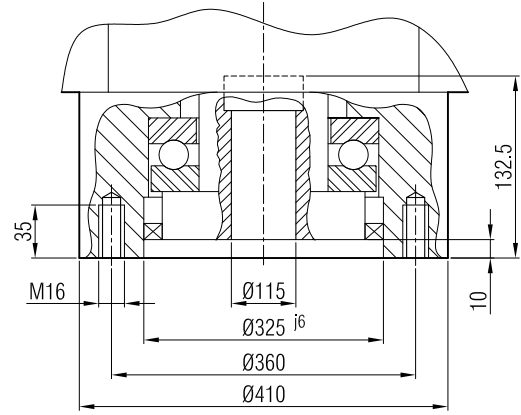
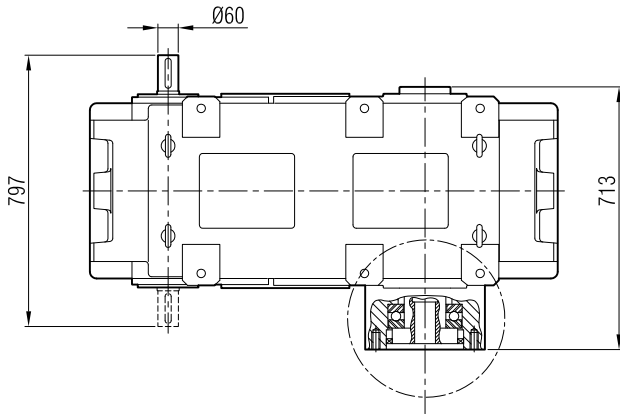
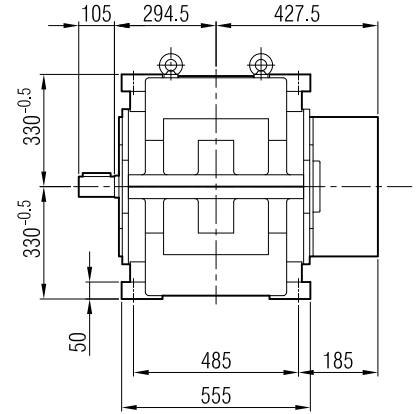
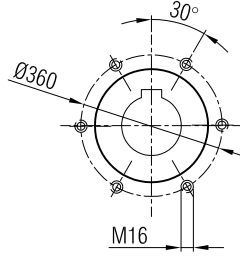
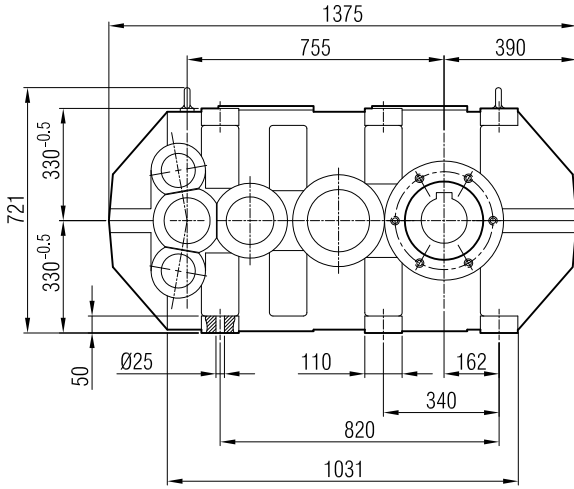
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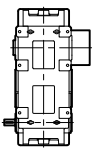
P8



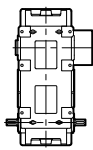
3AE 750



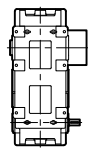
Bağlantı Pozisyonları
Mounting Positions
Bauformen



P1



P4



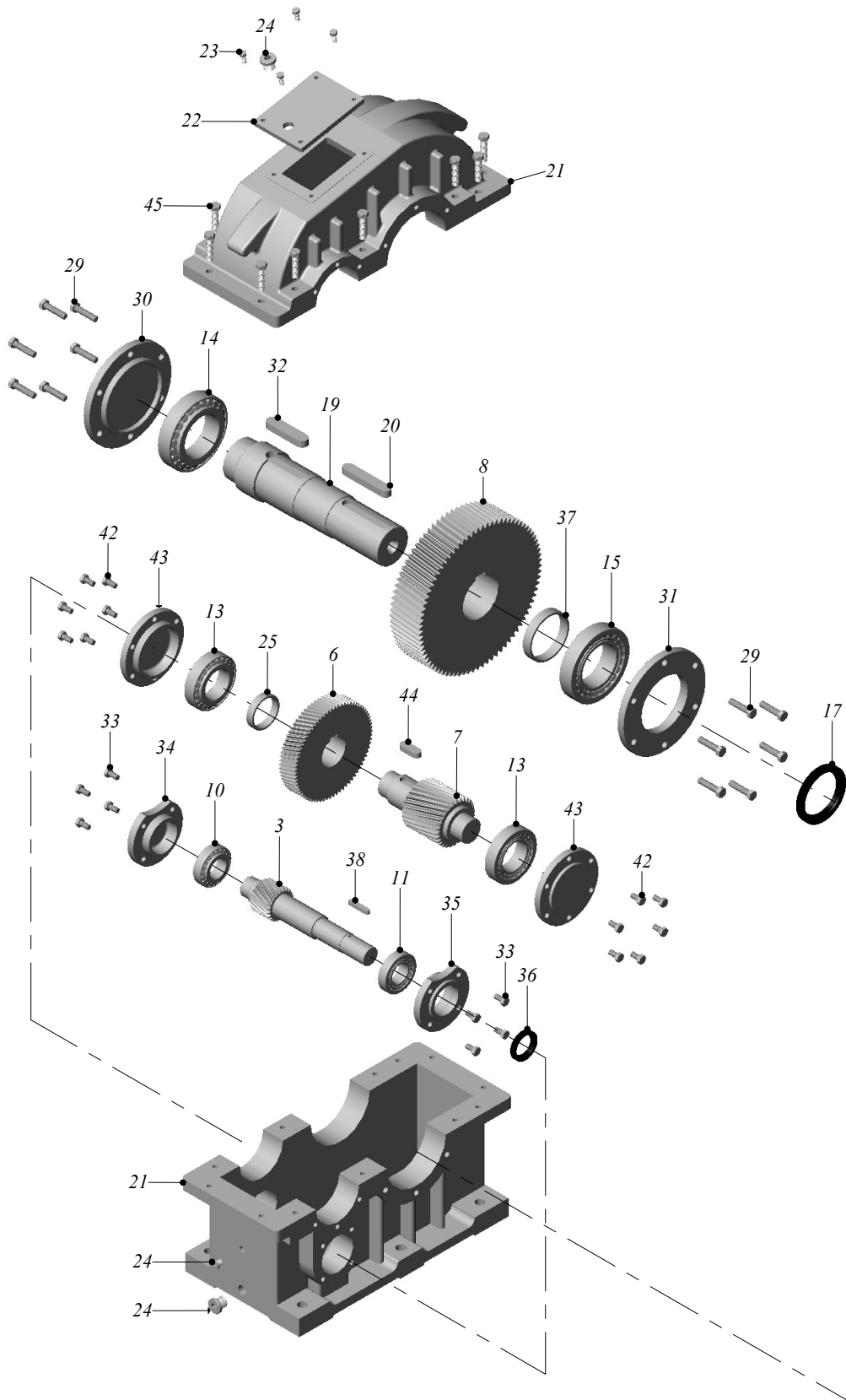
P8

A Serisi Yedek Parça Listeleri

General Parts List
Liste des pièces détachées



TİP / TYPE / TYP
A } 200



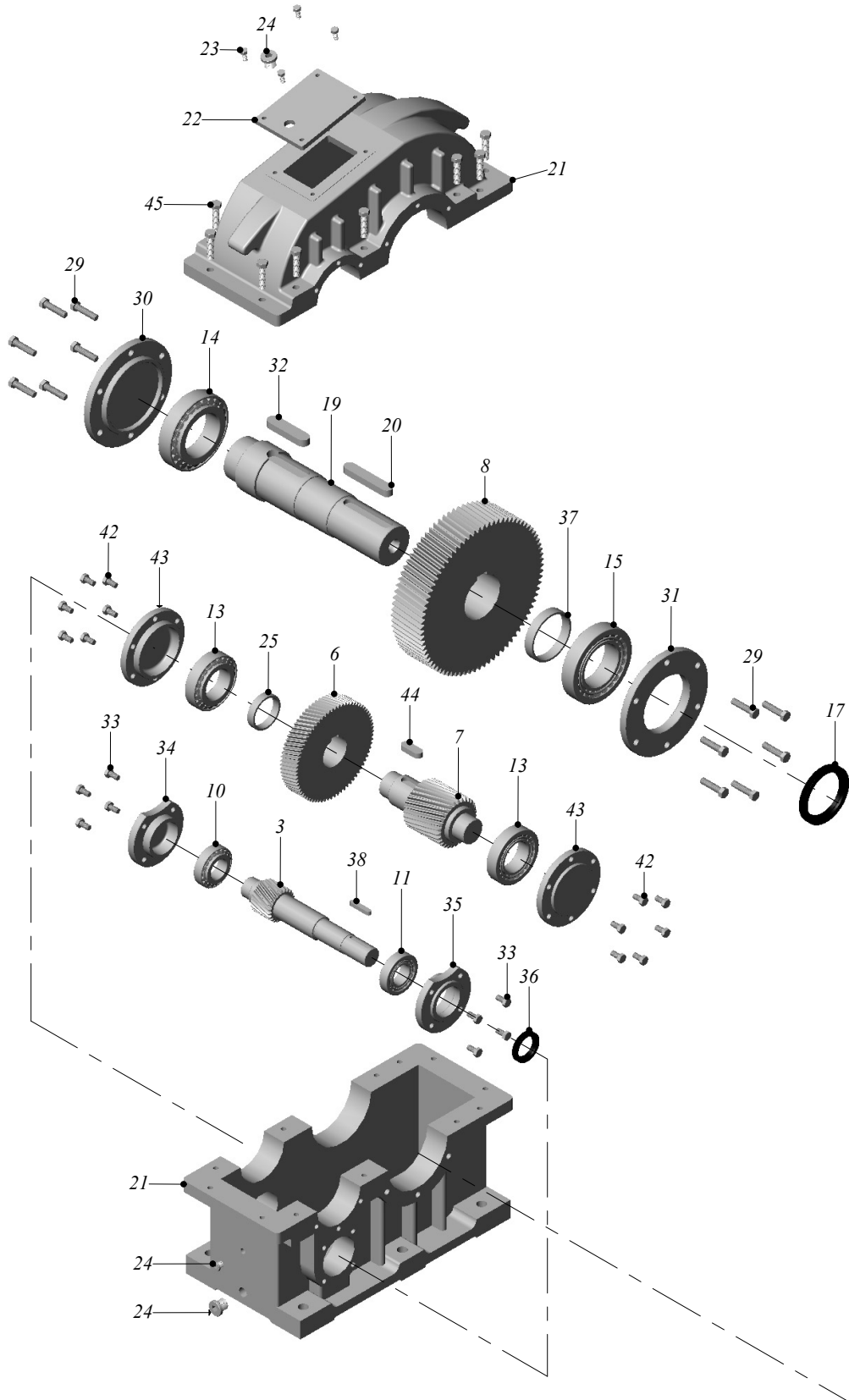
**TİP / TYPE / TYP**

A } 200

| | | |
|--|--------------------|------------------------|
| 3 - Milli Dişli Z1 (Giriş Mili) | 3 - Gear Z1 | 3 - Ritzelwelle Z1 |
| 7 - Milli Dişli Z5 | 7 - Gear Z5 | 7 - Ritzelwelle Z5 |
| 8 - Dişli Z6 | 8 - Gear Z6 | 8 - Rad Z6 |
| 10 - Rulman | 10 - Bearing | 10 - Lager |
| 11 - Rulman | 11 - Bearing | 11 - Lager |
| 13 - Rulman | 13 - Bearing | 13 - Lager |
| 14 - Rulman | 14 - Bearing | 14 - Lager |
| 15 - Rulman | 15 - Bearing | 15 - Lager |
| 17 - Keçe | 17 - Seal | 17 - Wellendichtring |
| 19 - Çıkış Mili | 19 - Output Shaft | 19 - Abtriebswelle |
| 20 - Kama | 20 - Key | 20 - Passfeder |
| 21 - Gövde | 21 - Gear Case | 21 - Getriebegehäuse |
| 22 - Kapak | 22 - Cover | 22 - Deckel |
| 23 - Cıvata | 23 - Bolt | 23 - Sechskantschraube |
| 24 - Yağ Tapası | 24 - Oil Plug | 24 - Ölschraube |
| 25 - Burç | 25 - Spacer | 25 - Stützscheibe |
| 29 - Cıvata | 29 - Bolt | 29 - Sechskantschraube |
| 30 - Rulman Baskı Kapağı | 30 - Bearing Cover | 30 - Lagerdeckel |
| 31 - Keçe Kapağı | 31 - Seal Cover | 31 - Dichtringflansch |
| 32 - Kama | 32 - Key | 32 - Passfeder |
| 33 - Cıvata | 33 - Bolt | 33 - Sechskantschraube |
| 34 - Rulman Baskı Kapağı | 34 - Bearing Cover | 34 - Lagerdeckel |
| 35 - Keçe Kapağı | 35 - Seal Cover | 35 - Dichtringflansch |
| 36 - Keçe | 36 - Seal | 36 - Wellendichtring |
| 37 - Burç | 37 - Spacer | 37 - Stützscheibe |
| 38 - Kama | 38 - Key | 38 - Passfeder |
| 42 - Cıvata | 42 - Bolt | 42 - Sechskantschraube |
| 43 - Rulman Baskı Kapağı | 43 - Bearing Cover | 43 - Lagerdeckel |
| 25 - Burç | 25 - Spacer | 25 - Stützscheibe |
| 45 - Cıvata | 45 - Bolt | 45 - Sechskantschraube |



TİP / TYPE / TYP
2A } 200



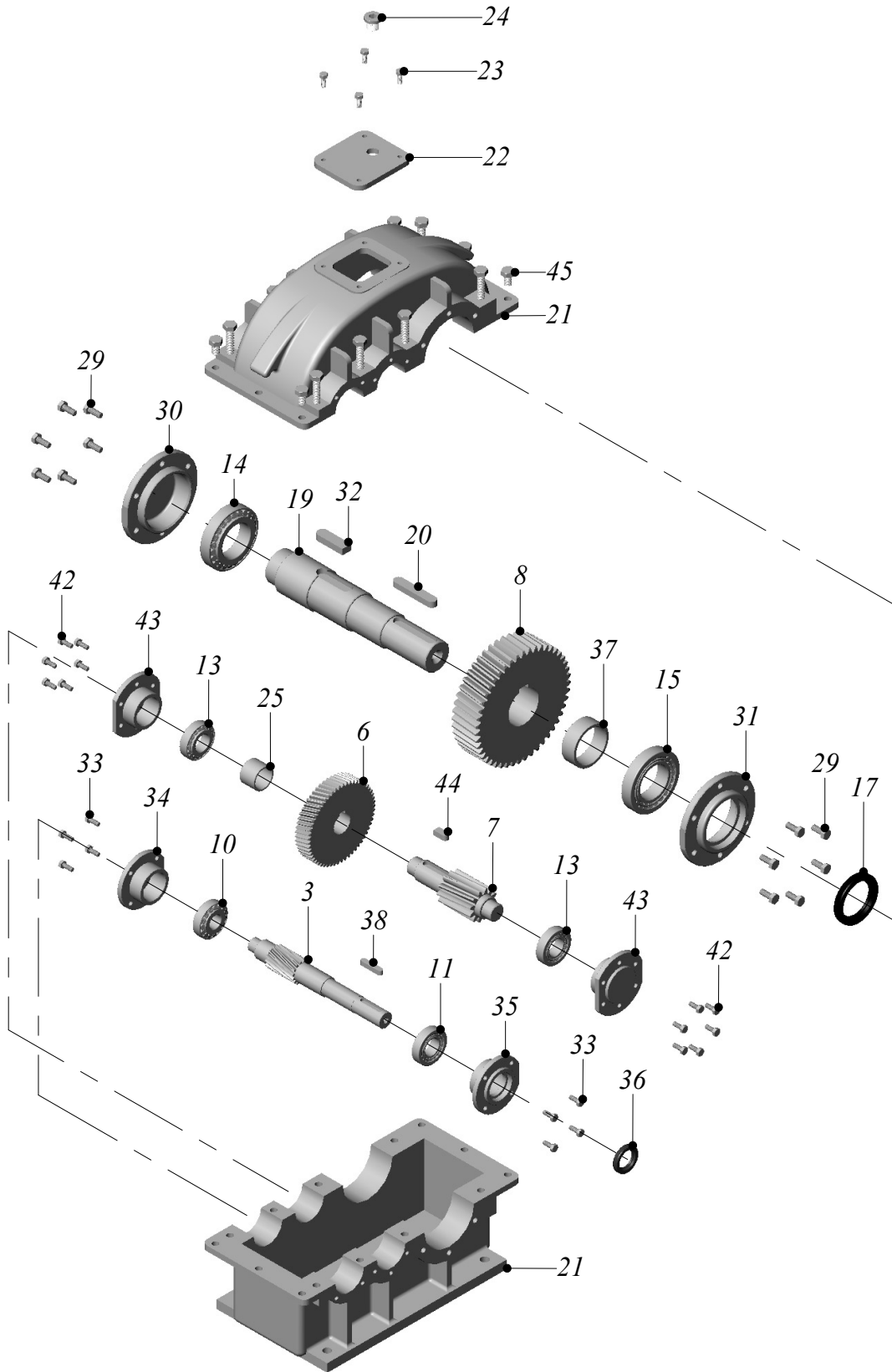
**TİP / TYPE / TYP****2A } 200**

| | | |
|--|--------------------|------------------------|
| 3 - Milli Dişli Z1 (Giriş Mili) | 3 - Gear Z1 | 3 - Ritzelwelle Z1 |
| 6 - Dişli Z4 | 6 - Gear Z4 | 6 - Rad Z4 |
| 7 - Milli Dişli Z5 | 7 - Gear Z5 | 7 - Ritzelwelle Z5 |
| 8 - Dişli Z6 | 8 - Gear Z6 | 8 - Rad Z6 |
| 10 - Rulman | 10 - Bearing | 10 - Lager |
| 11 - Rulman | 11 - Bearing | 11 - Lager |
| 13 - Rulman | 13 - Bearing | 13 - Lager |
| 14 - Rulman | 14 - Bearing | 14 - Lager |
| 15 - Rulman | 15 - Bearing | 15 - Lager |
| 17 - Keçe | 17 - Seal | 17 - Wellendichtring |
| 19 - Çıkış Mili | 19 - Output Shaft | 19 - Abtriebswelle |
| 20 - Kama | 20 - Key | 20 - Passfeder |
| 21 - Gövde | 21 - Gear Case | 21 - Getriebegehäuse |
| 22 - Kapak | 22 - Cover | 22 - Deckel |
| 23 - Cıvata | 23 - Bolt | 23 - Sechskantschraube |
| 24 - Yağ Tapası | 24 - Oil Plug | 24 - Ölschraube |
| 25 - Burç | 25 - Spacer | 25 - Stützscheibe |
| 29 - Cıvata | 29 - Bolt | 29 - Sechskantschraube |
| 30 - Rulman Baskı Kapağı | 30 - Bearing Cover | 30 - Lagerdeckel |
| 31 - Keçe Kapağı | 31 - Seal Cover | 31 - Dichtringflansch |
| 32 - Kama | 32 - Key | 32 - Passfeder |
| 33 - Cıvata | 33 - Bolt | 33 - Sechskantschraube |
| 34 - Rulman Baskı Kapağı | 34 - Bearing Cover | 34 - Lagerdeckel |
| 35 - Keçe Kapağı | 35 - Seal Cover | 35 - Dichtringflansch |
| 36 - Keçe | 36 - Seal | 36 - Wellendichtring |
| 37 - Burç | 37 - Spacer | 37 - Stützscheibe |
| 38 - Kama | 38 - Key | 38 - Passfeder |
| 42 - Cıvata | 42 - Bolt | 42 - Sechskantschraube |
| 43 - Rulman Baskı Kapağı | 43 - Bearing Cover | 43 - Lagerdeckel |
| 25 - Burç | 25 - Spacer | 25 - Stützscheibe |
| 45 - Cıvata | 45 - Bolt | 45 - Sechskantschraube |



TİP / TYPE / TYP

2A } 180-225-275-350-430-501

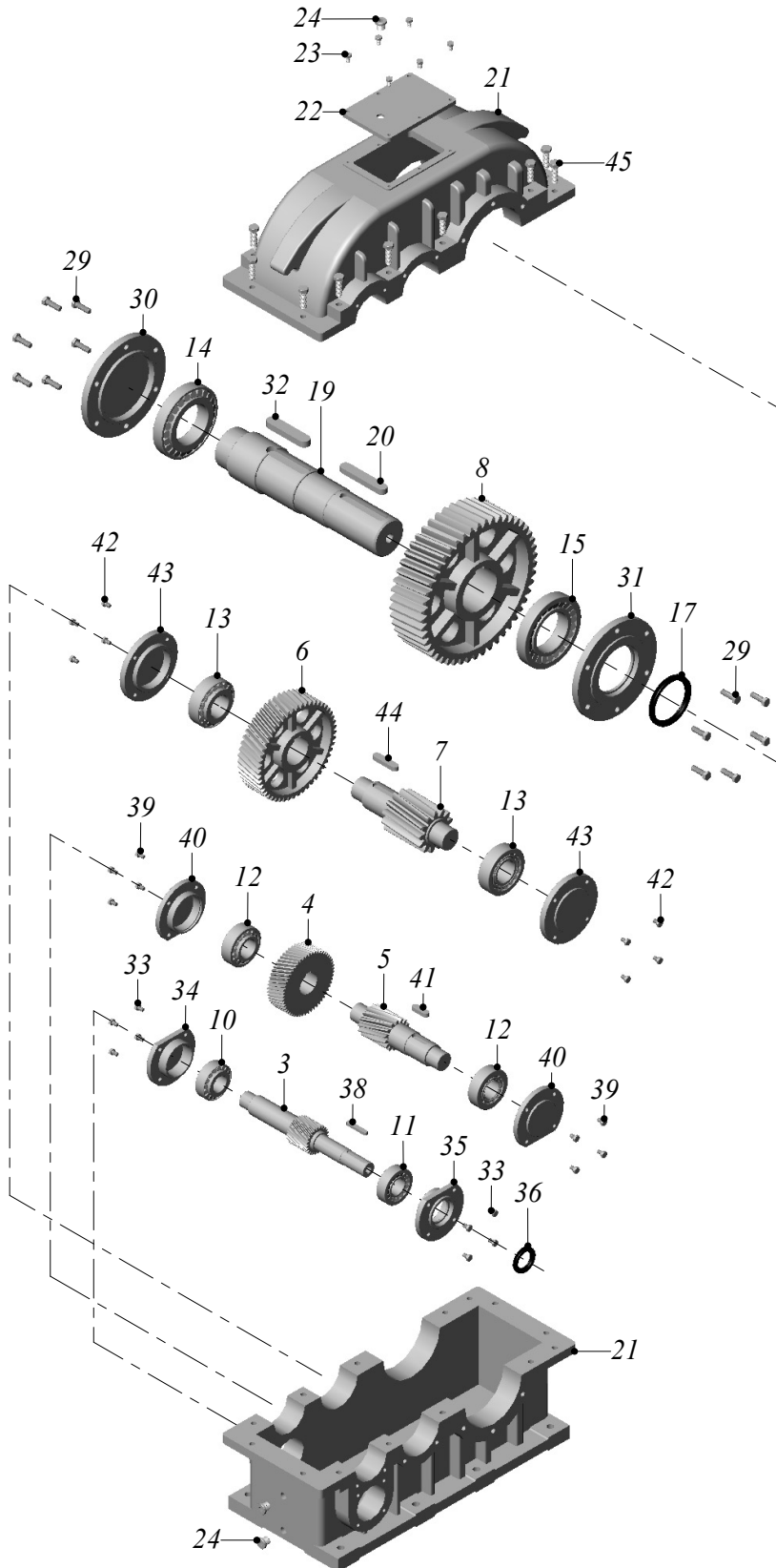


**TİP / TYPE / TYP****2A } 180-225-275-350-430-501**

| | | |
|--|--------------------|------------------------|
| 3 - Milli Dişli Z1 (Giriş Mili) | 3 - Gear Z1 | 3 - Ritzelwelle Z1 |
| 6 - Dişli Z4 | 6 - Gear Z4 | 6 - Rad Z4 |
| 7 - Milli Dişli Z5 | 7 - Gear Z5 | 7 - Ritzelwelle Z5 |
| 8 - Dişli Z6 | 8 - Gear Z6 | 8 - Rad Z6 |
| 10 - Rulman | 10 - Bearing | 10 - Lager |
| 11 - Rulman | 11 - Bearing | 11 - Lager |
| 13 - Rulman | 13 - Bearing | 13 - Lager |
| 14 - Rulman | 14 - Bearing | 14 - Lager |
| 15 - Rulman | 15 - Bearing | 15 - Lager |
| 17 - Keçe | 17 - Seal | 17 - Wellendichtring |
| 19 - Çıkış Mili | 19 - Output Shaft | 19 - Abtriebswelle |
| 20 - Kama | 20 - Key | 20 - Passfeder |
| 21 - Gövde | 21 - Gear Case | 21 - Getriebegehäuse |
| 22 - Kapak | 22 - Cover | 22 - Deckel |
| 23 - Cıvata | 23 - Bolt | 23 - Sechskantschraube |
| 24 - Yağ Tapası | 24 - Oil Plug | 24 - Ölschraube |
| 25 - Burç | 25 - Spacer | 25 - Stützscheibe |
| 29 - Cıvata | 29 - Bolt | 29 - Sechskantschraube |
| 30 - Rulman Baskı Kapağı | 30 - Bearing Cover | 30 - Lagerdeckel |
| 31 - Keçe Kapağı | 31 - Seal Cover | 31 - Dichtringflansch |
| 32 - Kama | 32 - Key | 32 - Passfeder |
| 33 - Cıvata | 33 - Bolt | 33 - Sechskantschraube |
| 34 - Rulman Baskı Kapağı | 34 - Bearing Cover | 34 - Lagerdeckel |
| 35 - Keçe Kapağı | 35 - Seal Cover | 35 - Dichtringflansch |
| 36 - Keçe | 36 - Seal | 36 - Wellendichtring |
| 37 - Burç | 37 - Spacer | 37 - Stützscheibe |
| 38 - Kama | 38 - Key | 38 - Passfeder |
| 42 - Cıvata | 42 - Bolt | 42 - Sechskantschraube |
| 43 - Rulman Baskı Kapağı | 43 - Bearing Cover | 43 - Lagerdeckel |
| 44 - Kama | 44 - Key | 44 - Passfeder |
| 45 - Cıvata | 45 - Bolt | 45 - Sechskantschraube |



TİP / TYPE / TYP
3A } 430 - 501

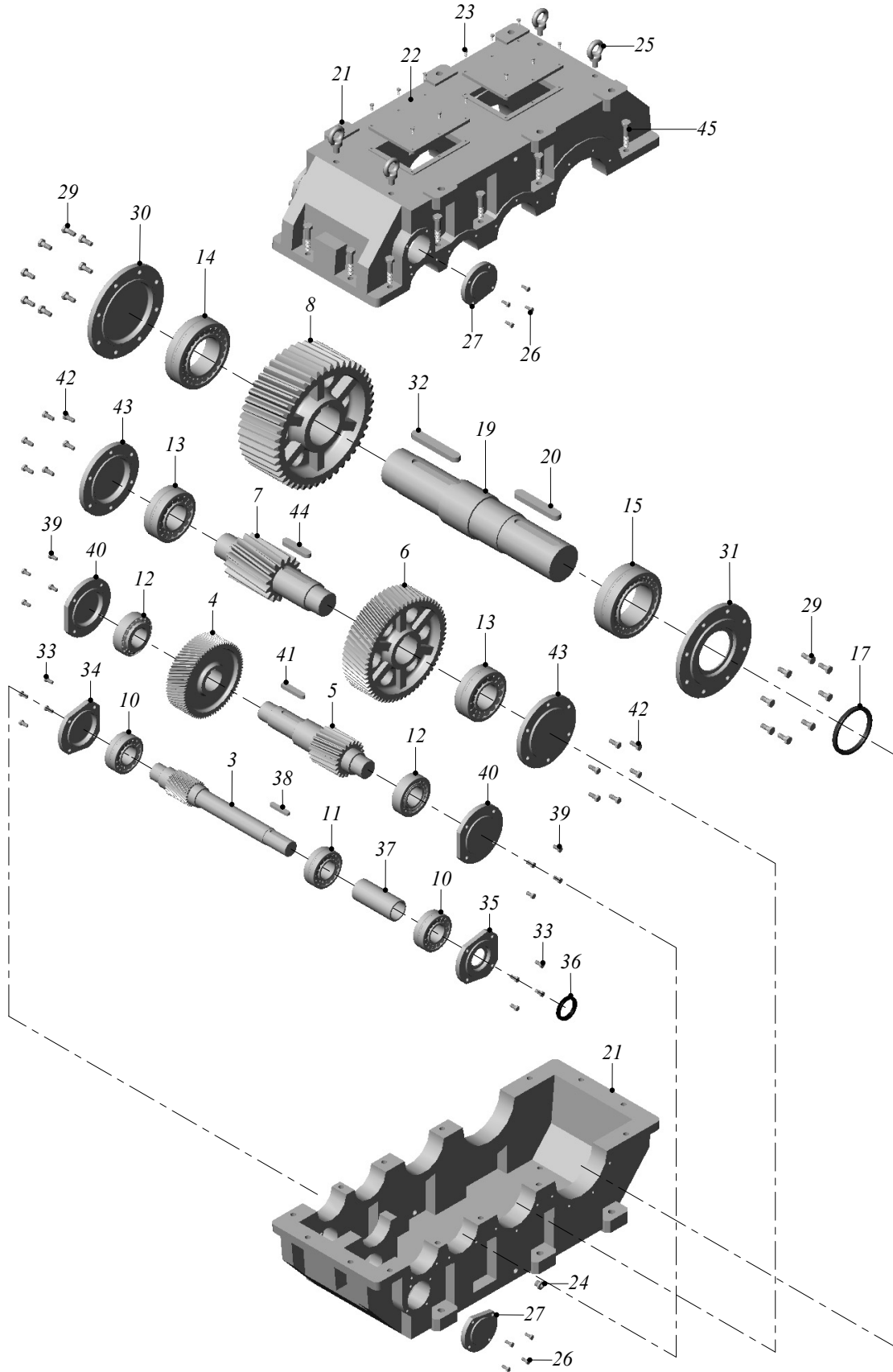


**TİP / TYPE / TYP****3A } 430-501**

| | | |
|--|--------------------|------------------------|
| 3 - Milli Dişli Z1 (Giriş Mili) | 3 - Gear Z1 | 3 - Ritzelwelle Z1 |
| 4 - Dişli Z2 | 4 - Gear Z2 | 4 - Rad Z2 |
| 5 - Milli Dişli Z3 | 5 - Gear Z3 | 5 - Ritzelwelle Z3 |
| 6 - Dişli Z4 | 6 - Gear Z4 | 6 - Rad Z4 |
| 7 - Milli Dişli Z5 | 7 - Gear Z5 | 7 - Ritzelwelle Z5 |
| 8 - Dişli Z6 | 8 - Gear Z6 | 8 - Rad Z6 |
| 10 - Rulman | 10 - Bearing | 10 - Lager |
| 11 - Rulman | 11 - Bearing | 11 - Lager |
| 12 - Rulman | 12 - Bearing | 12 - Lager |
| 13 - Rulman | 13 - Bearing | 13 - Lager |
| 14 - Rulman | 14 - Bearing | 14 - Lager |
| 15 - Rulman | 15 - Bearing | 15 - Lager |
| 17 - Keçe | 17 - Seal | 17 - Wellendichtring |
| 19 - Çıkış Mili | 19 - Output Shaft | 19 - Abtriebswelle |
| 20 - Kama | 20 - Key | 20 - Passfeder |
| 21 - Gövde | 21 - Gear Case | 21 - Getriebegehäuse |
| 22 - Kapak | 22 - Cover | 22 - Deckel |
| 23 - Cıvata | 23 - Bolt | 23 - Sechskantschraube |
| 24 - Yağ Tapası | 24 - Oil Plug | 24 - Ölschraube |
| 29 - Cıvata | 29 - Bolt | 29 - Sechskantschraube |
| 30 - Rulman Baskı Kapağı | 30 - Bearing Cover | 30 - Lagerdeckel |
| 31 - Keçe Kapağı | 31 - Seal Cover | 31 - Dichtringflansch |
| 32 - Kama | 32 - Key | 32 - Passfeder |
| 33 - Cıvata | 33 - Bolt | 33 - Sechskantschraube |
| 34 - Rulman Baskı Kapağı | 34 - Bearing Cover | 34 - Lagerdeckel |
| 35 - Keçe Kapağı | 35 - Seal Cover | 35 - Dichtringflansch |
| 36 - Keçe | 36 - Seal | 36 - Wellendichtring |
| 38 - Kama | 38 - Key | 38 - Passfeder |
| 39 - Cıvata | 39 - Bolt | 39 - Sechskantschraube |
| 40 - Rulman Baskı Kapağı | 40 - Bearing Cover | 40 - Lagerdeckel |
| 41 - Kama | 41 - Key | 41 - Passfeder |
| 42 - Cıvata | 42 - Bolt | 42 - Sechskantschraube |
| 43 - Rulman Baskı Kapağı | 43 - Bearing Cover | 43 - Lagerdeckel |
| 44 - Kama | 44 - Key | 44 - Passfeder |
| 45 - Cıvata | 45 - Bolt | 45 - Sechskantschraube |



TİP / TYPE / TYP
3A } 750

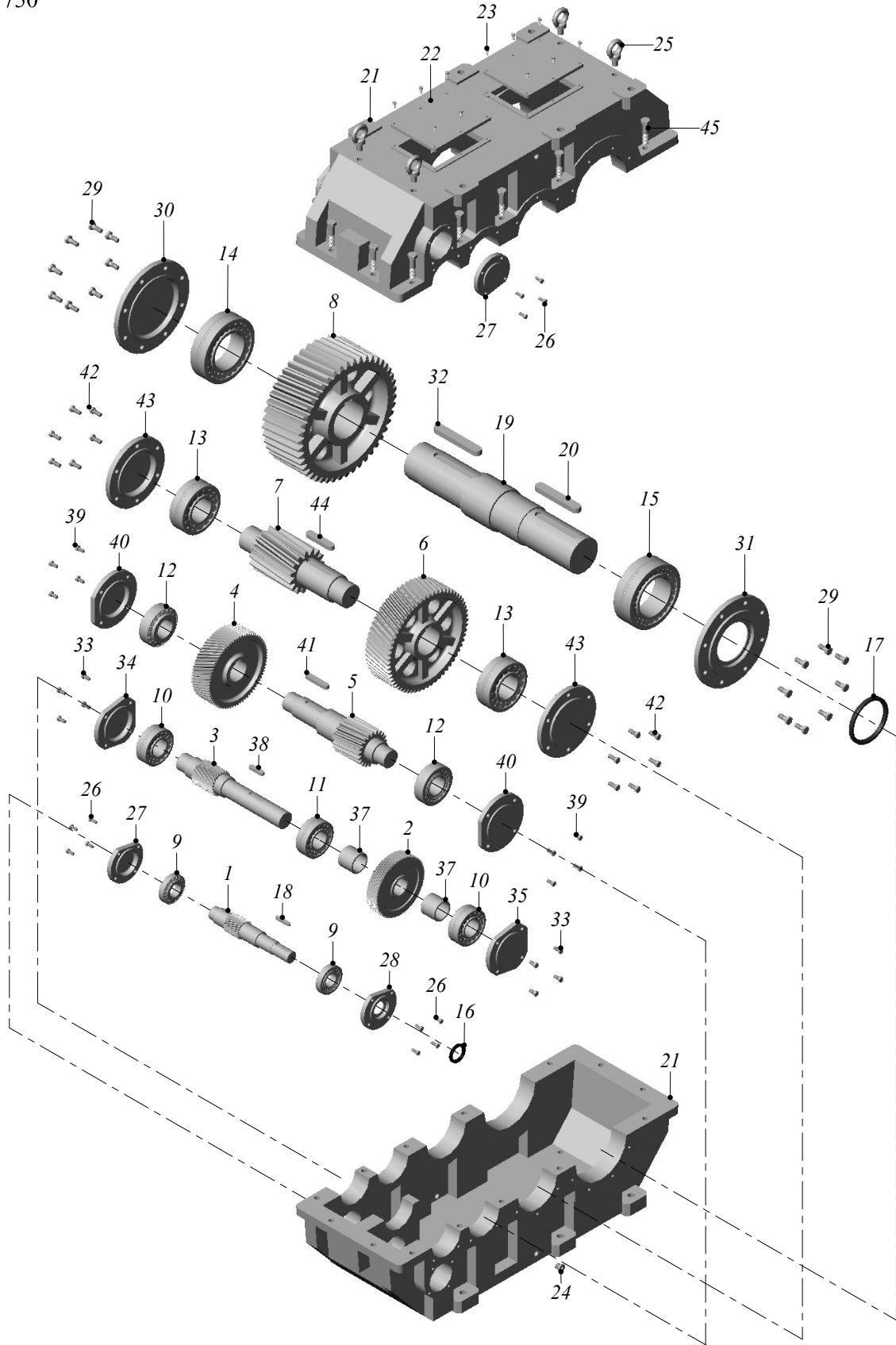


**TİP / TYPE / TYP****3A } 750**

| | | |
|--|------------------------------|-------------------------------|
| 3 - Milli Dişli Z1 (Giriş Mili) | 3 - Gear Z1 | 3 - Ritzelwelle Z1 |
| 4 - Dişli Z2 | 4 - Gear Z2 | 4 - Rad Z2 |
| 5 - Milli Dişli Z3 | 5 - Gear Z3 | 5 - Ritzelwelle Z3 |
| 6 - Dişli Z4 | 6 - Gear Z4 | 6 - Rad Z4 |
| 7 - Milli Dişli Z5 | 7 - Gear Z5 | 7 - Ritzelwelle Z5 |
| 8 - Dişli Z6 | 8 - Gear Z6 | 8 - Rad Z6 |
| 10 - Rulman | 10 - Bearing | 10 - Lager |
| 11 - Rulman | 11 - Bearing | 11 - Lager |
| 12 - Rulman | 12 - Bearing | 12 - Lager |
| 13 - Rulman | 13 - Bearing | 13 - Lager |
| 14 - Rulman | 14 - Bearing | 14 - Lager |
| 15 - Rulman | 15 - Bearing | 15 - Lager |
| 17 - Keçe | 17 - Seal | 17 - Wellendichtring |
| 19 - Çıkış Mili | 19 - Output Shaft | 19 - Abtriebswelle |
| 20 - Kama | 20 - Key | 20 - Passfeder |
| 21 - Gövde | 21 - Gear Case | 21 - Getriebegehäuse |
| 22 - Kapak | 22 - Cover | 22 - Deckel |
| 23 - Cıvata | 23 - Bolt | 23 - Sechskantschraube |
| 24 - Yağ Tapası | 24 - Oil Plug | 24 - Ölschraube |
| 25 - Taşıma Kancası | 25 - Lifting Eye Bolt | 25 - Ringschraube |
| 26 - Cıvata | 26 - Bolt | 26 - Sechskantschraube |
| 27 - Rulman Baskı Kapağı | 27 - Bearing Cover | 27 - Lagerdeckel |
| 29 - Cıvata | 29 - Bolt | 29 - Sechskantschraube |
| 30 - Rulman Baskı Kapağı | 30 - Bearing Cover | 30 - Lagerdeckel |
| 31 - Keçe Kapağı | 31 - Seal Cover | 31 - Dichtringflansch |
| 32 - Kama | 32 - Key | 32 - Passfeder |
| 33 - Cıvata | 33 - Bolt | 33 - Sechskantschraube |
| 34 - Rulman Baskı Kapağı | 34 - Bearing Cover | 34 - Lagerdeckel |
| 35 - Keçe Kapağı | 35 - Seal Cover | 35 - Dichtringflansch |
| 36 - Keçe | 36 - Seal | 36 - Wellendichtring |
| 37 - Burç | 37 - Spacer | 37 - Stützscheibe |
| 38 - Kama | 38 - Key | 38 - Passfeder |
| 39 - Cıvata | 39 - Bolt | 39 - Sechskantschraube |
| 40 - Rulman Baskı Kapağı | 40 - Bearing Cover | 40 - Lagerdeckel |
| 41 - Kama | 41 - Key | 41 - Passfeder |
| 42 - Cıvata | 42 - Bolt | 42 - Sechskantschraube |
| 43 - Rulman Baskı Kapağı | 43 - Bearing Cover | 43 - Lagerdeckel |
| 44 - Kama | 44 - Key | 44 - Passfeder |
| 45 - Cıvata | 45 - Bolt | 45 - Sechskantschraube |



TİP / TYPE / TYP
4A } 750

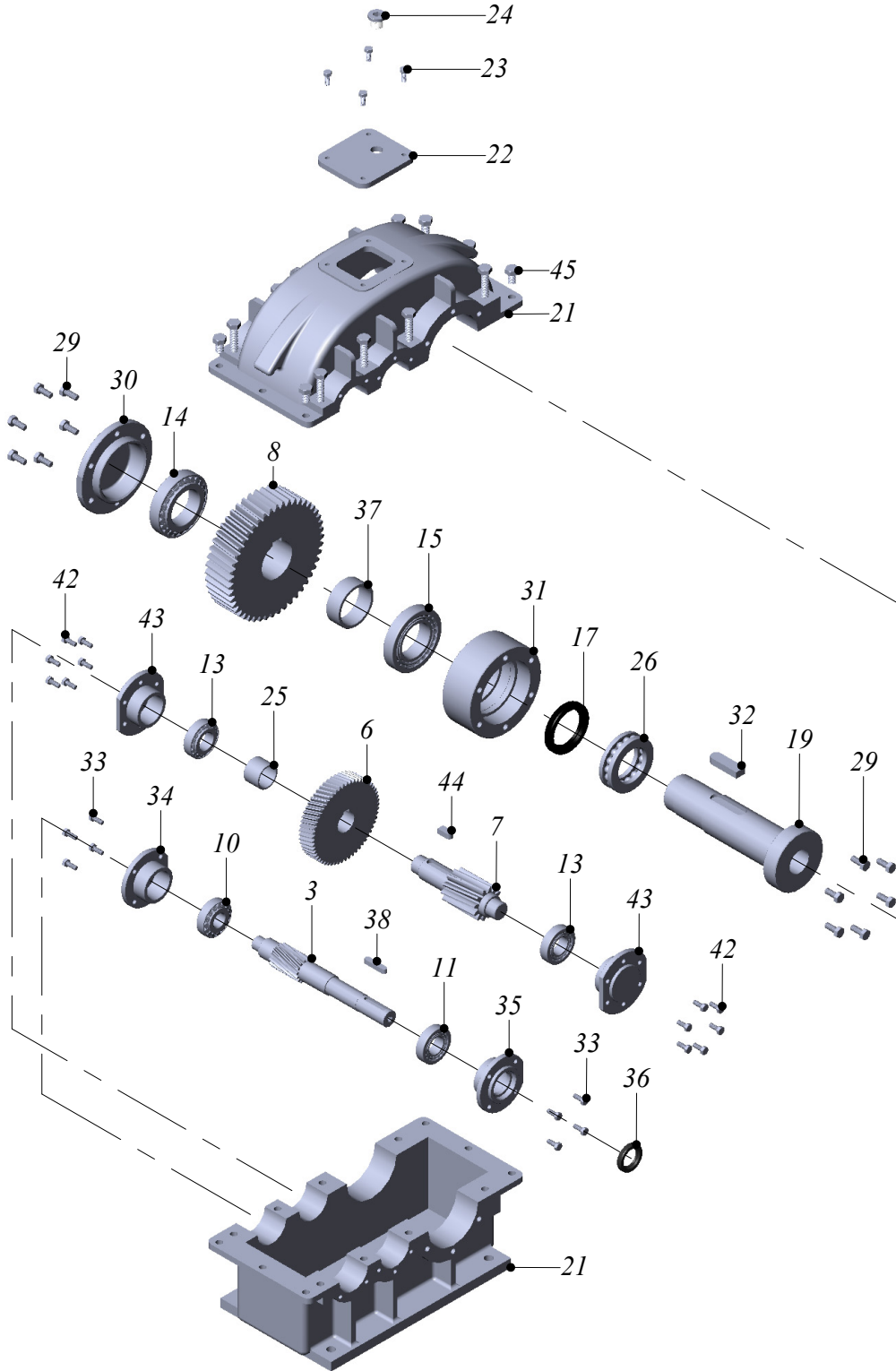


**TİP / TYPE / TYP****4A } 750**

| | | |
|---------------------------|-----------------------|------------------------|
| 1 - Dişli Z1 (Giriş Mili) | 1 - Gear Z1 | 1 - Rad Z1 |
| 2 - Dişli Z2 | 2 - Gear Z2 | 2 - Rad Z2 |
| 3 - Milli Dişli Z3 | 3 - Gear Z3 | 3 - Ritzelwelle Z3 |
| 4 - Dişli Z4 | 4 - Gear Z4 | 4 - Rad Z4 |
| 5 - Milli Dişli Z5 | 5 - Gear Z5 | 5 - Ritzelwelle Z5 |
| 6 - Dişli Z6 | 6 - Gear Z6 | 6 - Rad Z6 |
| 7 - Milli Dişli Z7 | 7 - Gear Z7 | 7 - Ritzelwelle Z7 |
| 8 - Dişli Z8 | 8 - Gear Z8 | 8 - Rad Z8 |
| 9 - Rulman | 9 - Bearing | 9 - Lager |
| 10 - Rulman | 10 - Bearing | 10 - Lager |
| 11 - Rulman | 11 - Bearing | 11 - Lager |
| 12 - Rulman | 12 - Bearing | 12 - Lager |
| 13 - Rulman | 13 - Bearing | 13 - Lager |
| 14 - Rulman | 14 - Bearing | 14 - Lager |
| 15 - Rulman | 15 - Bearing | 15 - Lager |
| 16 - Keçe | 16 - Seal | 16 - Wellendichtring |
| 17 - Keçe | 17 - Seal | 17 - Wellendichtring |
| 18 - Kama | 18 - Key | 18 - Passfeder |
| 19 - Çıkış Mili | 19 - Output Shaft | 19 - Abtriebswelle |
| 20 - Kama | 20 - Key | 20 - Passfeder |
| 21 - Gövde | 21 - Gear Case | 21 - Getriebegehäuse |
| 22 - Kapak | 22 - Cover | 22 - Deckel |
| 23 - Cıvata | 23 - Bolt | 23 - Sechskantschraube |
| 24 - Yağ Tapası | 24 - Oil Plug | 24 - Ölschraube |
| 25 - Taşıma Kancası | 25 - Lifting Eye Bolt | 25 - Ringschraube |
| 26 - Cıvata | 26 - Bolt | 26 - Sechskantschraube |
| 27 - Rulman Baskı Kapağı | 27 - Bearing Cover | 27 - Lagerdeckel |
| 28 - Keçe Kapağı | 28 - Seal Cover | 28 - Dichtringflansch |
| 29 - Cıvata | 29 - Bolt | 29 - Sechskantschraube |
| 30 - Rulman Baskı Kapağı | 30 - Bearing Cover | 30 - Lagerdeckel |
| 31 - Keçe Kapağı | 31 - Seal Cover | 31 - Dichtringflansch |
| 32 - Kama | 32 - Key | 32 - Passfeder |
| 33 - Cıvata | 33 - Bolt | 33 - Sechskantschraube |
| 34 - Rulman Baskı Kapağı | 34 - Bearing Cover | 34 - Lagerdeckel |
| 35 - Rulman Baskı Kapağı | 35 - Bearing Cover | 35 - Lagerdeckel |
| 37 - Burç | 37 - Spacer | 37 - Stützscheibe |
| 38 - Kama | 38 - Key | 38 - Passfeder |
| 39 - Cıvata | 39 - Bolt | 39 - Sechskantschraube |
| 40 - Rulman Baskı Kapağı | 40 - Bearing Cover | 40 - Lagerdeckel |
| 41 - Kama | 41 - Key | 41 - Passfeder |
| 42 - Cıvata | 42 - Bolt | 42 - Sechskantschraube |
| 43 - Rulman Baskı Kapağı | 43 - Bearing Cover | 43 - Lagerdeckel |
| 44 - Kama | 44 - Key | 44 - Passfeder |
| 45 - Cıvata | 45 - Bolt | 45 - Sechskantschraube |



TİP / TYPE / TYP
2AE } 225-275-350-430-501

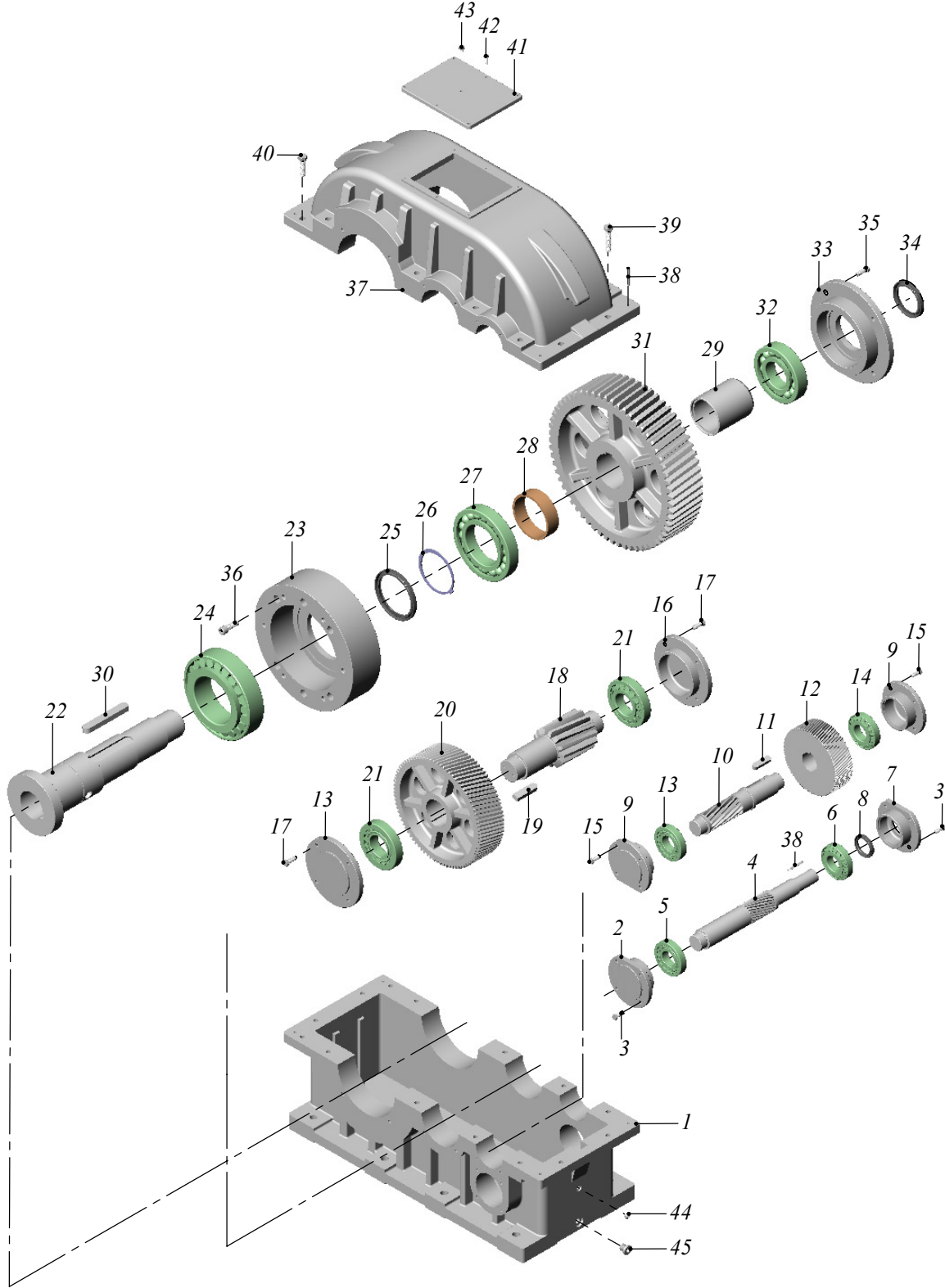


**TİP / TYPE / TYP****2AG } 225-275-350-430-501**

| | | |
|--|----------------------------|----------------------------|
| 3 - Milli Dişli Z1 (Giriş Mili) | 3 - Gear Z1 | 3 - Ritzelwelle Z1 |
| 6 - Dişli Z4 | 6 - Gear Z4 | 6 - Rad Z4 |
| 7 - Milli Dişli Z5 | 7 - Gear Z5 | 7 - Ritzelwelle Z5 |
| 8 - Dişli Z6 | 8 - Gear Z6 | 8 - Rad Z6 |
| 10 - Rulman | 10 - Bearing | 10 - Lager |
| 11 - Rulman | 11 - Bearing | 11 - Lager |
| 13 - Rulman | 13 - Bearing | 13 - Lager |
| 14 - Rulman | 14 - Bearing | 14 - Lager |
| 15 - Rulman | 15 - Bearing | 15 - Lager |
| 17 - Keçe | 17 - Seal | 17 - Wellendichtring |
| 19 - Çıkış Mili | 19 - Output Shaft | 19 - Abtriebswelle |
| 20 - Kama | 20 - Key | 20 - Passfeder |
| 21 - Gövde | 21 - Gear Case | 21 - Getriebegehäuse |
| 22 - Kapak | 22 - Cover | 22 - Deckel |
| 23 - Cıvata | 23 - Bolt | 23 - Sechskantschraube |
| 24 - Yağ Tapası | 24 - Oil Plug | 24 - Ölschraube |
| 25 - Burç | 25 - Spacer | 25 - Stützscheibe |
| 29 - Cıvata | 29 - Bolt | 29 - Sechskantschraube |
| 30 - Rulman Baskı Kapağı | 30 - Bearing Cover | 30 - Lagerdeckel |
| 31 - Extruder Rulman Gövdesi | 31 - Extruder Bearing Case | 31 - Extruder Lagergehäuse |
| 32 - Kama | 32 - Key | 32 - Passfeder |
| 33 - Cıvata | 33 - Bolt | 33 - Sechskantschraube |
| 34 - Rulman Baskı Kapağı | 34 - Bearing Cover | 34 - Lagerdeckel |
| 35 - Keçe Kapağı | 35 - Seal Cover | 35 - Dichtringflansch |
| 36 - Keçe | 36 - Seal | 36 - Wellendichtring |
| 37 - Burç | 37 - Spacer | 37 - Stützscheibe |
| 38 - Kama | 38 - Key | 38 - Passfeder |
| 42 - Cıvata | 42 - Bolt | 42 - Sechskantschraube |
| 43 - Rulman Baskı Kapağı | 43 - Bearing Cover | 43 - Lagerdeckel |
| 44 - Kama | 44 - Key | 44 - Passfeder |
| 45 - Cıvata | 45 - Bolt | 45 - Sechskantschraube |



TİP / TYPE / TYP
3AE 430-501

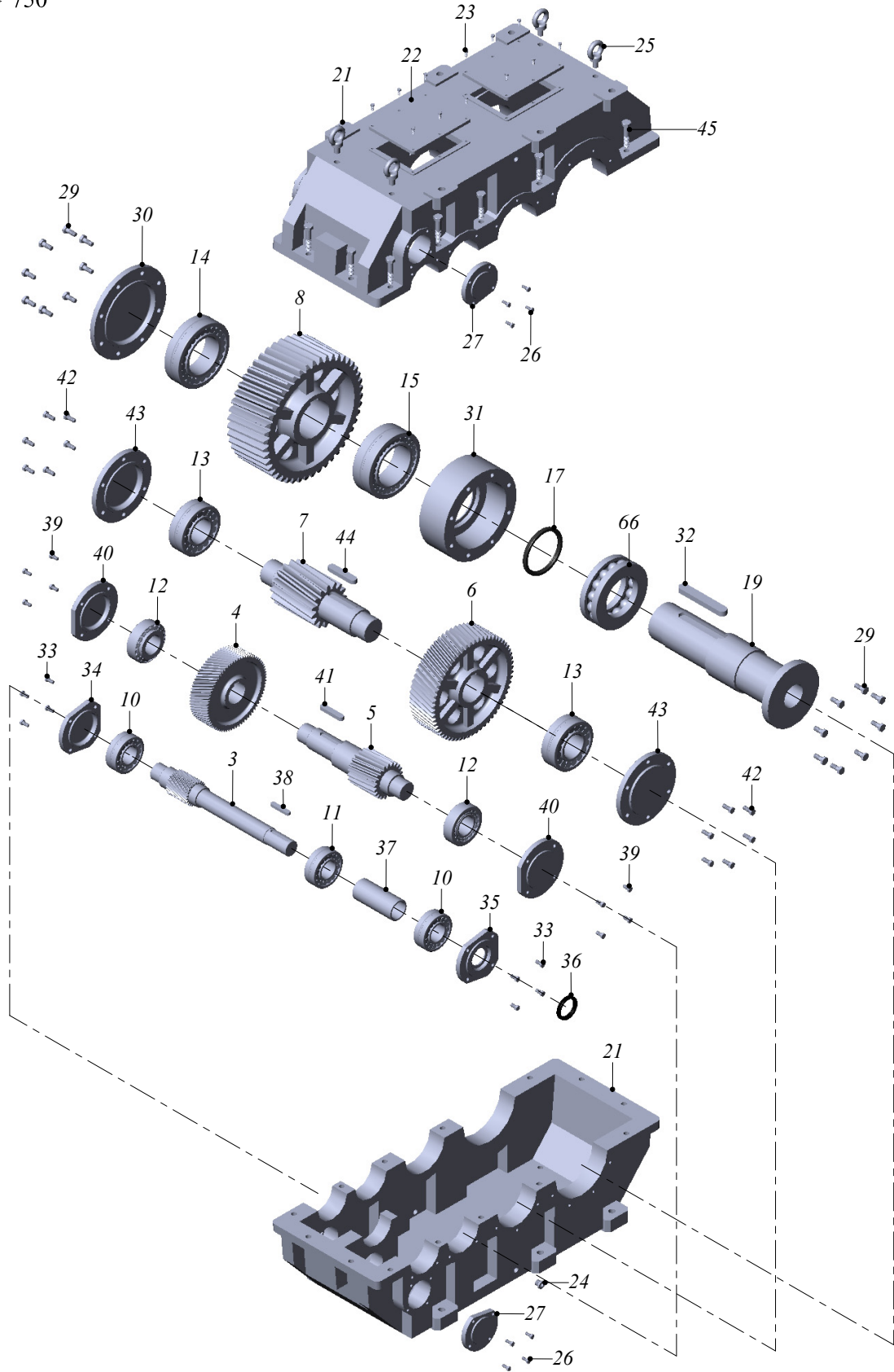


**TİP / TYPE / TYP****3AE } 430-501**

| | | |
|--------------------------------|----------------------------|---------------------------------|
| 1- Gövde | 1- Gear Case | 1- Getriebegehäuse |
| 2- Rulman Baskı Kapağı | 2- Bearing Cover | 2- Lagerdeckel |
| 3- Cıvata | 3- Bolt | 3- Sechskantschraube |
| 4- Milli Dişli Z1 | 4- Gear Z1 | 4- Ritzelwelle Z1 |
| 5- Rulman | 5- Bearing | 5- Lager |
| 6- Rulman | 6- Bearing | 6- Lager |
| 7- Keçe Kapağı | 7- Seal Cover | 7- Dichtringflansch |
| 8- Keçe | 8- Seal | 8- Wellendichtring |
| 9- Rulman Baskı Kapağı | 9- Bearing Cover | 9- Lagerdeckel |
| 10- Milli Dişli Z3 | 10- Gear Z3 | 10- Ritzelwelle Z3 |
| 11- Kama | 11- Key | 11- Passfeder |
| 12- Dişli Z2 | 12- Gear Z2 | 12- Rad Z2 |
| 13- Rulman | 13- Bearing | 13- Lager |
| 14- Rulman | 14- Bearing | 14- Lager |
| 15- Cıvata | 15- Bolt | 15- Sechskantschraube |
| 16- Rulman Baskı Kapağı | 16- Bearing Cover | 16- Lagerdeckel |
| 17- Cıvata | 17- Bolt | 17- Sechskantschraube |
| 18- Milli Dişli Z5 | 18- Gear Z5 | 18- Ritzelwelle Z5 |
| 19- Kama | 19- Key | 19- Passfeder |
| 20- Dişli Z4 | 20- Gear Z4 | 20- Rad Z4 |
| 21- Rulman | 21- Bearing | 21- Lager |
| 22- Extruder Çıkış Mili | 22- Extruder Output Shaft | 22- Extruder Abtriebswelle |
| 23- Extruder Rulman Gövdesi | 23- Extruder Bearing Case | 23- Extruder Lagergehäuse |
| 24- Rulman | 24- Bearing | 24- Lager |
| 25- Keçe | 25- Seal | 25- Wellendichtring |
| 26- Segman | 26- Circlip | 26- Sicherungsring |
| 27- Rulman | 27- Bearing | 27- Lager |
| 28- Bilezik | 28- Spacer | 28- Stützsheibe |
| 29- Burç | 29- Spacer | 29- Stützsheibe |
| 30- Kama | 30- Key | 30- Passfeder |
| 31- Dişli Z6 | 31- Gear Z6 | 31- Rad Z6 |
| 32- Rulman | 32- Bearing | 32- Lager |
| 33- Rulman Baskı Kapağı | 33- Bearing Cover | 33- Lagerdeckel |
| 34- Keçe | 34- Seal | 34- Wellendichtring |
| 35- Cıvata | 35- Bolt | 35- Sechskantschraube |
| 36- Cıvata | 36- Bolt | 36- Sechskantschraube |
| 37- Üst Gövde | 37- Gear Case (Upper Part) | 37- Getriebegehäuse (Über teil) |
| 38- Pim | 38- Pin | 38- Stift |
| 39- Cıvata | 39- Bolt | 39- Sechskantschraube |
| 40- Cıvata | 40- Bolt | 40- Sechskantschraube |
| 41- Üst Kapak | 41- Upper Cover | 41- Getriebedeckel |
| 42- Cıvata | 42- Bolt | 42- Sechskantschraube |
| 43- Havalandırma Cıvatası | 43- Vent Plug | 43- Entlüftungsschraube |
| 44- Yağ Seviye Tespit Cıvatası | 44- Oil Level Plug | 44- Ölstandschraube |
| 45- Yağ Boşaltma Cıvatası | 45- Drain Plug | 45- Verschluss-Schraube |



TİP / TYPE / TYP
3AE } 750



**TİP / TYPE / TYP**

3AE } 750

| | | |
|---------------------------------|----------------------------|----------------------------|
| 3 - Milli Dişli Z1 (Giriş Mili) | 3 - Gear Z1 | 3 - Ritzelwelle Z1 |
| 4 - Dişli Z2 | 4 - Gear Z2 | 4 - Rad Z2 |
| 5 - Milli Dişli Z3 | 5 - Gear Z3 | 5 - Ritzelwelle Z3 |
| 6 - Dişli Z4 | 6 - Gear Z4 | 6 - Rad Z4 |
| 7 - Milli Dişli Z5 | 7 - Gear Z5 | 7 - Ritzelwelle Z5 |
| 8 - Dişli Z6 | 8 - Gear Z6 | 8 - Rad Z6 |
| 10 - Rulman | 10 - Bearing | 10 - Lager |
| 11 - Rulman | 11 - Bearing | 11 - Lager |
| 12 - Rulman | 12 - Bearing | 12 - Lager |
| 13 - Rulman | 13 - Bearing | 13 - Lager |
| 14 - Rulman | 14 - Bearing | 14 - Lager |
| 15 - Rulman | 15 - Bearing | 15 - Lager |
| 17 - Keçe | 17 - Seal | 17 - Wellendichtring |
| 19 - Çıkış Mili | 19 - Output Shaft | 19 - Abtriebswelle |
| 21 - Gövde | 21 - Gear Case | 21 - Getriebegehäuse |
| 22 - Kapak | 22 - Cover | 22 - Deckel |
| 23 - Cıvata | 23 - Bolt | 23 - Sechskantschraube |
| 24 - Yağ Tapası | 24 - Oil Plug | 24 - Ölschraube |
| 25 - Taşıma Kancası | 25 - Lifting Eye Bolt | 25 - Ringschraube |
| 26 - Cıvata | 26 - Bolt | 26 - Sechskantschraube |
| 27 - Rulman Baskı Kapağı | 27 - Bearing Cover | 27 - Lagerdeckel |
| 29 - Cıvata | 29 - Bolt | 29 - Sechskantschraube |
| 30 - Rulman Baskı Kapağı | 30 - Bearing Cover | 30 - Lagerdeckel |
| 31 - Extruder Rulman Gövdesi | 31 - Extruder Bearing Case | 31 - Extruder Lagergehäuse |
| 32 - Kama | 32 - Key | 32 - Passfeder |
| 33 - Cıvata | 33 - Bolt | 33 - Sechskantschraube |
| 34 - Rulman Baskı Kapağı | 34 - Bearing Cover | 34 - Lagerdeckel |
| 35 - Keçe Kapağı | 35 - Seal Cover | 35 - Dichtringflansch |
| 36 - Keçe | 36 - Seal | 36 - Wellendichtring |
| 37 - Burç | 37 - Spacer | 37 - Stützscheibe |
| 38 - Kama | 38 - Key | 38 - Passfeder |
| 39 - Cıvata | 39 - Bolt | 39 - Sechskantschraube |
| 40 - Rulman Baskı Kapağı | 40 - Bearing Cover | 40 - Lagerdeckel |
| 41 - Kama | 41 - Key | 41 - Passfeder |
| 42 - Cıvata | 42 - Bolt | 42 - Sechskantschraube |
| 43 - Rulman Baskı Kapağı | 43 - Bearing Cover | 43 - Lagerdeckel |
| 44 - Kama | 44 - Key | 44 - Passfeder |
| 45 - Cıvata | 45 - Bolt | 45 - Sechskantschraube |
| 46 - Rulman | 46 - Bearing | 46 - Lager |



I-MAK Turkey (Factory-Head Office):
Seyhli Mahallesi, Sanayi Caddesi No:1, 34906 Pendik / İstanbul –
Turkey Tel: +90 216 378 03 26 - Fax: +90 216 378 06 86
Web: www.imakreduktor.com / E-mail: imak@imakreduktor.com

I-MAK USA :
12610 Galveston Road, Webster, 77598 Texas, USA.
Tel: 281 480 8711 ext 200 / Fax: 281 480 8656
E-mail: sales@sipco-mls.com

www.imakreduktor.com

