



Helisel Sonsuz Dişlili Redüktör

Helical Worm Gear Units

## PSH SERIES





Kataloğumuzda yer alan bilgileri, önceden haber vermemeksizin kısmen veya tamamen değiştirme veya iptal etme hakkını saklı tutmaktayız.

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**KALİTE POLİTİKAMIZ**

POLAT GROUP REDÜKTÖR A.Ş. ürünlerinin kalitesinde en iyi yakalamak için; sektöründeki teknolojik gelişmeleri takip etmeyi, pazar payındaki istikrarı sürdürmek için müşterilerinin istek ve bekleyenlerine eksiksiz ve zamanında cevap vererek, sürekli artan müşteri memnuniyetini sağlamak, eğitimli çalışanlarının performansını huzurlu bir çalışma ortamı sağlayarak artırmayı ve bu şekilde kalite yönetim sistemini sürekli iyileştirmeyi kalite politikası olarak benimsemiştir.

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Müşteri ve çalışan memnuniyetini en üst düzeyde tutan, gelişmeleri izleyen değil yaratıcı bir dünya şirketi olmaktır.

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Müşterilerimizin ihtiyaçlarını karşılayacak çözümleri bilgi teknolojilerini kullanarak en verimli ve kaliteli şekilde sunmaktadır.

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**OUR QUALITY POLICY**

To achieve the best quality of its products, POLAT GROUP REDÜKTÖR A.Ş. adopts with its own quality politics by following the technological developments of its sector, in order to keep up the stabilization on its own market share ensuring the customers' gladness increasing permanently by answering the customers' wishes and expectations completely at the right time to have the well-educated staffs increase their performance by providing a peaceful working place and making better the quality management system all the time.

**OUR VISION**

Our vision is to become a world company which meets and surpasses the customer satisfaction and which not only follows the development but also creates the development itself.

**OUR MISSION**

Our mission is to provide the solutions to our customers in the most efficient and qualified way by making use of the information technologies.

Our reducer group carries out its work using simultaneous engineering methods in order to meet the demands of our customers by presenting several different product ranges. Design and planning activities, product development programmes and computer supporting work how a continuously growing chart. Our competitive and strong quality policy is to develop our customer spectrum.

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## TEKNİK AÇIKLAMALAR

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## EXPLANATORY NOTES

### Dişli Ünitesini Seçme

Bir dişli ünitesini seçerken PGR üç fazlı asenkron AC motorlarını veya tek fazlı AC motorları kullanılır ve teknik olarak kıyaslanabilen motorlar için de geçerlidir. Başka motorlar kullanırken, lütfen PGR'e danışınız. Bir dişli ünitesini seçme ile ilgili aşağıdaki önemli ana esaslarla bağlı kalınmazsa, aşırı bir yük durumunun olması muhtemeldir. Bu durumda, tüm garantiler geçersizdir. Şüpheli durumda, lütfen dişli ünitesi tasarımını kontrol etmek için birlikte çalışabileceğiniz teknik bilgilerden sorumlu PGR satış ofisi ile irtibata geçiniz. Karşılıklı çıkarlarımız açısından, dişli ünitelerinde aşırı yüklemenin neden olduğu tüm problemler her durumda, önlenmelidir.

### Kriter

Seçme kriteri aşağıdakilere göre oluşur:

#### 1. Termal olarak transfer edilebilen güç (termal sınır)

Dişli ünitesinin aşırı ısınmaması için, bu güç transferi (3 saat) daha uzun bir çalışma zamanını aşmamalıdır. Aşağıdaki maddelerden iki veya daha fazlasının geçerli olması durumunda çalışma durumunu kontrol ediniz.

- Ortam sıcaklığı > 40°C
- Dönme hızı  $n_1 > 1500 \text{ min}^{-1}$
- Motor gücü  $P_1 > 100 \text{ kW}$
- W kovanlı ve IEC adaptörlü redüktörler
- Dik olarak montajı yapılan redüktörler (sayfa 30-33)
- Tahvil oranı  $i_{top} < 20$

#### 2. Mekanik olarak transfer edilebilen güç "P"

Bu güç, katalogdaki ilgili tablodaki servis faktörü  $f_B$  tarafından göz önüne alınır. Bir sonraki bölüm, gerekli servis faktörünün saptanmasını tanımlar.

Genel olarak, dişli ünitesi ekleme, ısı radyasyonu, dar yer vs gibi özel montaj koşulları olduğunda bize danışınız. Özel ölçüler (veya su soğutucusu) termal aşırı yükne karşı var olduğunda; lütfen PGR'e danışınız.

### Giriş gücü ve servis faktörü

Her bir uygulama için gerekli giriş gücü, hesaplama ile saptanır. Motor anma gücü ( $P_1$ ), bu giriş gücünden sonra seçilir. Normal olarak, belirli uygulama özel çalışma koşullarına ait güvenlik faktörleri gözleneceği ve anma motor çıkış seviyeleri genellikle standart çıkış seviyesi aralığında olduğu için motorun anma gücü istenilen güclen biraz daha yüksektir.

Montajı yapılacak 3 fazlı bir AC motorun anma gücünü seçerken kısa dönem ve seyrek tork tesirini göz önüne almak gerekmekz. Bir frekans invertörü üzerindeki 3 fazlı bir AC motor çalıştırırken ilave faktörler anma çıkış gücünün seçimini etkiler. Motorun aksine, kısa dönem ve seyrek tork tesiri önemli derecede dişli ünitesinin seçimini etkiler. Dişli ünitesi servis faktörü  $f_B$  bu kısa dönem ve seyrek tork tesirini ve ayrıca yeterli doğrulukla dişli ünitesi üzerinde etkileri göz önüne alır.

4.sayfadaki diyagram 1 çalışma saatine veya güne bağlı olarak yük sınıflandırması, devir ve minimum servis faktörü arasındaki ilişkisi sunmaktadır.

### Selecting Gear Unit

Gear unit selection includes PGR's three-phase AC motor or single phase AC motor and technically equal different motor could be applied. If you intend to use a motor other than PGR please contact PGR. There are some condition for selecting gear unit and these condition must be considered overloading could be happened badly if restrictions are not considered. In these situation, all guarantees could be invalidated. Under suspicious situation please refer to PGR sales office department which is responsible for giving technical information to you.

### Conditions

The conditions of selecting gear unit are as the following:

#### 1. Thermal Limit

Thermal transfer power should not be exceeded over running time (3 hours) to prevent overheated gear unit. In case of any suspicion please contact PGR.

- Ambient temperature > 40°C
- Rotational speed  $n_1 > 1500 \text{ min}^{-1}$
- Input power  $P_1 > 100 \text{ kW}$
- With W-cylinder and IEC adapter gear units
- Vertical mounting position (see page 30-33)
- Reduction ratio  $i_{top} < 20$

#### 2. Power transfer with service factor "P"

Service factor ( $f_B$ ) is important for power transfer, determination of minimum service factor will be provided at the following section

In special operating conditions; eg. heat radiation in bounded field (little space) which is required special devices (oil cooler or water cooler) please contact PGR

### Input power and service factor

For every application, the requiring input power could be calculated. After determining input power, the rated motor power ( $P_1$ ) is selected. Normally motor power is greater than the required input power because the safety factor is used according to operating conditions.

Selecting a motor type is important for right calculation for instance; three phase AC motor which is mounted to gear unit, affecting infrequent torque could not be considered but if you mount three-phase AC motor on frequency inverter latest available factor effects the output power. Besides of motor type short and infrequent torque impression effects selecting gear unit for that service factor is considered.

Diagram 1 which is shown on page 4, presents relation between types of load, revolution per hour and minimum service factor depend on operation hours or day.

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**SERVİS FAKTORÜ**

Diyagram 1, günlük çalışma zamanına bağlı gereklili minimum servis faktörü  $f_B$  min, 'Z' saatteki çevrimleri, ve uygulama yükü sınıflandırması 'U', 'M', 'H' gösterir. Çalışma düzgünliğine ve kütle hız faktörüne bağlı olarak, üç yük sınıflandırması belirlenmiştir. Hareket ettiren makineden gelen etkiler çalışma düzgünliği sınıflandırmasında tanımlanırken, kütle hız faktörü en fazla olan yük üzerinde etkili olur.

**Not :** Elde edilen servis faktörü  $f_B$  kullanılan sürücü (tahrik) tipine göre "k" katsayısı ile çarpılır.

$k = 1$  ; elektrik motoru veya hidromotor,  
 $k = 1.25$  ; çok silindirli içten yanmalı motor,  
 $k = 1.50$  ; tek silindirli içten yanmalı motor

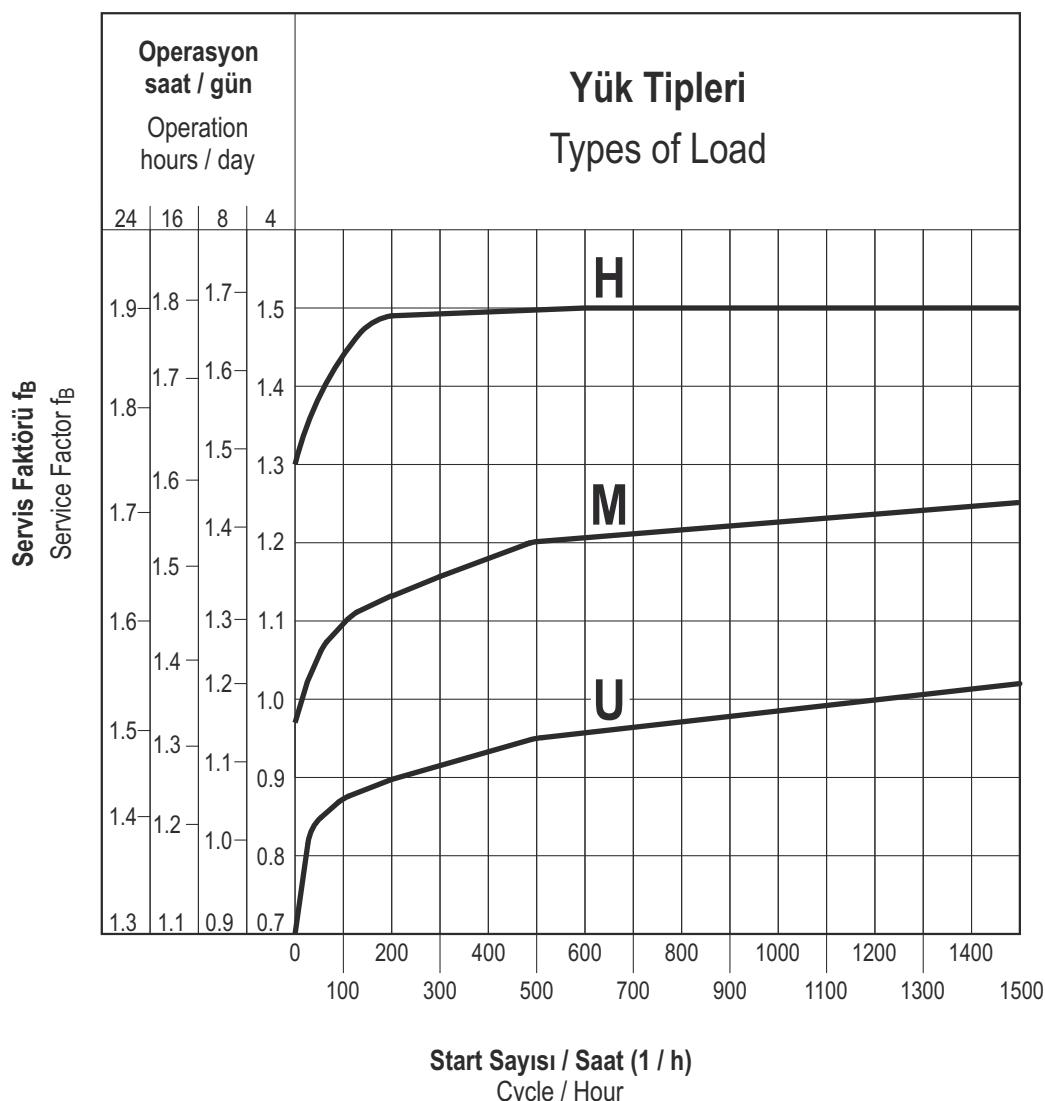
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**SERVICE FACTOR**

Diagram 1 shows requiring minimum service factor depend on revolution per hours 'Z' and types of load 'U', 'M' or 'H'. In the following section the information regarding mass acceleration factor, how it effects and the relation between load classification will be explained. Forces or loads which are applied from driven machine to gear unit while determine load classification, mass acceleration factor is played important role on the high load classification which is designated with 'H' sign.

**Note :** Service factor  $f_B$  which is acquired from diagram should be modified with factor "k" that depends on driver type.

$k = 1$  ; hydraulic motor and electrical motor  
 $k = 1.25$  ; multi-cylinder engine  
 $k = 1.50$  ; single-cylinder engine

**Diyagram - 1**

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## TEKNİK BİLGİLER

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## EXPLANATORY NOTES

### Dişli Ünitesini Seçme

Bir çalışmanın sınıflandırılması :

#### a) Düzgün çalışma (U)

Küçük karıştırıcılar, asansörler, konveyörler, montaj bantları, doldurma makinaları, bantlı konveyörler, temizleme makinaları, fanlar, test makinaları.

#### b) Yumuşak şoklar, düzgün olmayan çalışma (M)

Ağır konveyör bantları, dejirmenler, ahir gübre makinaları, vinç hareketli mekanizmalar, bükme makinaları, çimento karıştırıcılar, dişli makinaları, ahşap işleme makinaları için sürücüler, vinçler, kayar kapılar, dengeleme makinaları.

#### c) Ağır şoklar, aşırı düzgün olmayan çalışma (H)

Taş kırıcılar, eksantrik presler, doğrayıcılar, presler, taşlama milleri, çekiçli kırıcılar, kağıt öğütücüleri, ağır karıştırıcılar, delme makinaları, katlama makinaları, dönen tezgahlar, yataş karıştırıcılar, kesiciler, vibratörler, santrifüj makinaları, döner tablalar.

Yük sınıflandırması, çalışma düzgünlüğünden ve aşağıdaki tabloya göre kütle hız faktörü 'maf' den belirlenir. Burada, çalışma veya kütle hız faktöründen gelen daha yüksek sınıf yük sınıflandırmasında geçerlidir. (Örnek: aşırı düzgün olmayan çalışma ve  $maf = 2,8$  gibi durumda yük sınıfı 'M' olarak belirlenir).

Yük Sınıfı	Çalışma	Kütle hız faktörü
U	Düzgün çalışma	$maf \leq 0.25$
M	Düzgün olmayan çalışma	$0.25 < maf \leq 3$
H	Aşırı düzgün olmayan çalışma	$3 < maf \leq 10$

### Selecting a Gear Unit

Operation classification;

#### a) Uniform application (U)

Small agitators, elevators, conveyors, assembly belts, filling machines, conveyor belts, cleaning machines, fans, testing machines.

#### b) Moderate shocks, non-uniform application (M)

Heavy conveyors belts, mills, stall dunging machines, crane traveling mechanisms, bending machines, cement mixers, gear pumps, decoilers, tapping units, packaging machines, feed drives for wood processing machines, hoists, winches sliding doors, balancing machines.

#### c) Heavy shocks, extreme non-uniform application (H)

Stone crusher, eccentric presses, choppers, presses, spindle grinding mills, hammer mills, shredders, heavy mixers, punching machines, folding machines, rolling stands, tumbling barrels, shears, vibrators, centrifuges, roller tables.

Load classification is obtained from operation class and mass acceleration factor ( $maf$ ). For this reason in any situation you must use the greater factor for calculation. (Eg: heavy - shock and  $maf = 2,8$  load classification must be 'M')

Load Classification	Operation	Mass Acceleration Factor
U	Uniform application	$maf \leq 0.25$
M	Non-uniform application	$0.25 < maf \leq 3$
H	Extreme non-uniform application	$3 < maf \leq 10$

$$maf = \frac{J_{ex,red}}{J_{mot}} = \frac{J_{ex}}{J_{mot}} \times \left( \frac{1}{I_{ges}} \right)^2$$

$I_{ges}$  = Toplam dişli ünitesi oranı

$J_{ex,red}$  = Hareket motoru üzerindeki azaltılmış tüm dış kütle atalet momenti

$J_{ex}$  = Tüm dış kütle atalet momenti

$J_{mot}$  = Motorun kütle atalet momenti

$I_{ges}$  = Total gear unit ratio

$J_{ex,red}$  = All external mass moment of inertia on the drive motor, reduced

$J_{ex}$  = All external mass moment of inertia

$J_{mot}$  = Mass moment of inertia of the motors

Kütle hız faktörü  $maf$ , çıkış tarafındaki dış kütleler ile giriş tarafındaki yüksek hız kütlelerin arasındaki ilişkiyi gösterir. Kütle hız faktörü, başlatma ve frenleme işlemlerine ve titreşime göre dişli ünitesindeki tork tesir seviyesini önemli derecede etkiler.

Örneğin; bantlı konveyör sistemlerinde dış kütle atalet momenti taşıyan ürün kadar yük uygular.  $maf > 10$  ise, transfer elemanlarında büyük bir oynama, yük sınıflamasında belirsizlik varsa veya şüphedesiniz, PGR'e danışınız.

Servis faktörü  $f_B$ , maksimum dişli ünitesi çıkış momenti  $M_{max}$  ile montajlanmış motor gücü  $P_1$ , çıkış hızı  $n_2$  ve dişli ünitesi verimi ( $\eta$ ) sonucu ortaya çıkan momenti  $M_2$  arasındaki ilişkidir.

Technically mass acceleration factor  $maf$  mass different between external output-side and high speed input-side.  $maf$  plays more important role at the level of torque propulsive than in the gear unit.

It is mostly effected at start-up, braking operation and vibration. Please contact PGR where  $maf$  is greater than 10 and if there be large fluctuations in transfer elements and vibration in the system.

Calculation of service factor is illuminated below. It depends on maximum output moment of gear unit and the output moment which is calculated from motor power, rotation speed and efficiency.

## Dişli Ünitesini Seçme

### Helisel - Sonsuz Dişli Üniteleri İçin Seçim Bilgileri

Helisel-sonsuz dişlili tasarımları için, çok sayıdaki kalkışlarda (oto-blokaj olasılığının azalması) çıkış torkunun geriye dönük etki etmesi ya da yüksek atalet momentinin oluşabileceği göz önünde bulundurulmalıdır. Sonsuz dişli sayıları Z2 / Z1 IEC seçim tablolardında listelenmiştir.

- $m_{af} \leq 0,25$  tüm sonsuz dişli sayısı mümkündür.
- $m_{af} \leq 3$  sonsuz dişli sayısı  $Z_1 \geq 3$  önerilir.
- $m_{af} \leq 10$  sonsuz dişli sayısı  $Z_1 \geq 6$  önerilir.

Sonsuz dişli ünitelerinde diyagram 1'den bulunan  $f_{B\min}$  servis faktörüne ek olarak  $T_u$  dış ortam sıcaklığı için  $f_{B1}$  servis faktörü ve devamlılık süresi faktörüne göre ED için  $f_{B2}$  servis gözönünde bulundurulmalıdır.

$f_{B1}$  ve  $f_{B2}$  servis faktörleri diyagram 2 ve 3'ten bulunabilir.

Doğru bir dişli ünitesi seçimi içinde, tablolardan alınan servis faktörü aynı  $f_{B\min}$ ,  $f_{B1}$  ve  $f_{B2}$  servis faktörlerinden büyük olmalıdır.

$$f_B \geq f_{B\min} \cdot f_{B1} \cdot f_{B2}$$

W kovanlı helisel-sonsuz dişli üniteleri için güç aşağıdaki formüle göre hesaplanır.

$P_1 = \frac{M_{a\max} \cdot n_2}{9550 \cdot f_{B\min} \cdot f_{B1} \cdot f_{B2} \cdot \eta}, [kW]$	M <sub>a<max></max></sub> [Nm] n <sub>2</sub> [min <sup>-1</sup> ]
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Burada maksimum sürücü gücü  $P_{1\max}$  değerini geçmemelidir.

$$P_1 \leq P_{1\max}$$

W ve IEC'li performans tablolardında her bir çıkış devri ( $n_2$ ) için maksimum çıkış torku (M<sub>a</sub>), maksimum motor gücü ( $P_{1\max}$ ) ve dişli ünitesi verimi listelenmiştir. Dişli ünitesi verimi ( $\eta$ ) yukarıdaki formüle göre çıkan faktörü içermelidir.

Örneğin ; 0,9 = %90

Helisel-sonsuz dişli ünitelerinde servis faktörü ( $f_{B1}$ ) hesabına etki eden dış ortam sıcaklığına göre ve çalışma çevriminden dolayı gelecek servis faktörleri ( $f_{B2}$ ) gözönünde bulundurulmalıdır.

## Selecting a Gear Unit

### Selection Information For Helical-Worm Gear Unit

For more start-stop applications (reducing possibility of auto-irreversibility) you must consider the effecting of the output torque to anti rotation or occurring high moment of inertia in design of helical-worm gear units. Number of Teeth number of worm gear  $Z_1$ , of gear units with IEC adapters are listed in performance tables.

$m_{af} \leq 0,25$  all number is possible

$m_{af} \leq 3$  number of worm teeth  $Z_1 \geq 3$  önerilir.

$m_{af} \leq 10$  number of worm teeth  $Z_1 \geq 6$  önerilir.

In selection of helical-worm gear units additional  $f_{B1}$  service factor which is depend on ambient temperature and  $f_{B2}$  service factor which is depend on cycle and calculated according to ED are considered.

$f_{B1}$  and  $f_{B2}$  service factors can be found from diagram 2 and 3.

For the right selection, service factor which is taken from performance table must be gearther than  $f_{B\min}$ ,  $f_{B1}$  and  $f_{B2}$  service factors which are taken from diagram 1,2,3.

Power for helical-worm gear with W cylinder is calculated as follows.

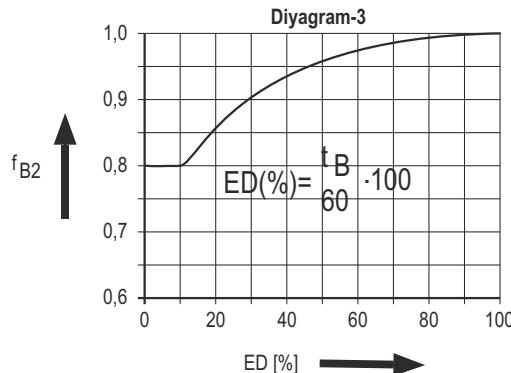
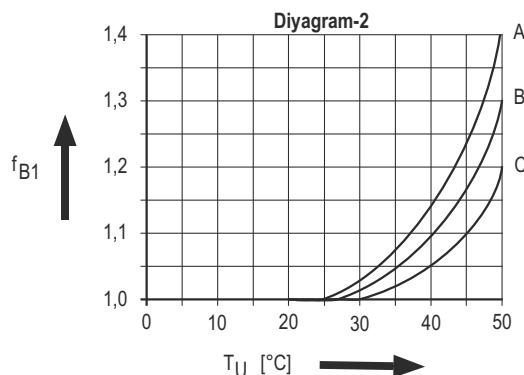
In this section  $P_1$  value must be less than  $P_{1\max}$  value.

$$P_1 \leq P_{1\max}$$

For all output speed, maximum output torque [ $M_{a\max}$ ] maximum motor power ( $P_{1\max}$ ) and efficiency of gear units are listed on performance tables of gear unit with W and IEC adapter. Efficiency of gear units must be included factor which is obtained from equation on above.

Example ; 0,9 = %90

$f_{B1}$  service factor according to ambient temperature and  $f_{B2}$  service factor according to running cycle which are effected to the calculation of service factor must be considered in helical-worm gear units.



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## TEKNİK BİLGİLER

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## EXPLANATORY NOTES

### Verim ( $\eta$ ) :

PSH helisel - sonsuz dişli üniteleri verimde maksimum %92'ye ulaşabilir.

Sonsuz dişilerin maksimum verimliliğe ulaşılabilmesi için dişilerin birbirine alışıması gerekmektedir. Bundan dolayı dişli ünitesi verimi, sonsuz reduktör yeni olduğunda düşük olacaktır.

Helisel - sonsuz dişli ünitesinin az saylıklı kalkışlarında bu etki maksimumdur ama doğrusal açı ile azalır. Tecrübelere göre tam çalışma tamamlanmadan önce aşağıda verilen verim düşüşleri göz önünde bulundurulmalıdır.

Helisel - Sonsuz Çalışması	Verimdeki Düşüş
1. Çalışma	% 12
2. Çalışma	% 6
3. Çalışma	% 3
6. Çalışma	% 2

Sonsuz dişlideki diş sayıları, IEC seçim tablolarda listelenmiştir. Alıştırma prosedürü maksimum yükte yaklaşık 25 saat çalıştırıldıkten sonra tamamlanmış olur.

Tablolarda verilen verim değerlerine ulaşabilmek için aşağıdaki bilgiler göz önünde bulundurulmalıdır.

- Dişli ünitesi devamlı çalıştırılmalı,
- Dişli ünitesi sabit sıcaklığı ulaşmış olmalı,
- Gerekli yağlayıcı ile doldurulmuş olmalı,

### Radyal ve Eksenel Kuvvetler

Cıkış momenti ve hız genel açıklamalarındaki tablolarda, çıkış mili üzerine izin verilen radyal kuvvetler  $F_R$  ve eksenel kuvvetler  $F_A$  listelenmiştir. Tercihen güçlendirilmiş çıkış mili yatakları bir çok dişli ünitesi tipi için geçerlidir. Güçlendirilmiş yataklardaki radyal ve eksenel kuvvetler tablolarda  $F_{R GR}$  ve  $F_{A GR}$  olarak belirtilmiştir. Listelenen radyal ve eksenel kuvvetler, mil çıkışlı, ayak ve flanş bağlantılı dişli üniteleri için uygulanır. Radyal ve eksenel kuvvetler, bu kuvvetlerden biri 0 (sıfır)'a eşit iken hesaplanmıştır.

Ayrıca, radyal ve eksenel kuvvetlere ait bir servis faktörü  $f_B = 1$  çıkış gücü ve devir açıklamalı genel tablolarda verilen kuvvetlerin temeline dayanır. Darbeli tipli kuvvetlerin olduğu ve aşırı çalışmala ( $> 8$  saat/gün) uygulamalarda uygun servis faktörü  $f_B > 1$  radyal ve eksenel kuvvetler için de göz önünde bulundurulmalıdır. İzin verilen kuvvetler  $F_A$  ve  $F_R$  belirli oranda azaltılır.

Listelenen radyal kuvvetler, milin ucunun orta kısmında etki eden bir kuvvette karşılık gelir. İzin verilen kuvvetleri saptarken, uygulanan kuvvetin hiç istenmeyen yönü ve dönmeye yönü varsayıldı. Tam bir hesaplama için, daha yüksek radyal ve eksenel kuvvetler muhtemeldir. Bu yüzden lütfen bize istenen servis süresinin yanısına gerçek güç ve dönmeye yönünün detaylarını da belirtiniz.

Transfer elemanları, çıkış miline eklenirse, ilgili faktör  $f_z$  radyal kuvveti saptamada göz önüne alınmalıdır.

### Efficiency ( $\eta$ ) :

Helical-worm gear units (PSH) can be reached maximum 92% per cent efficiency.

For reaching maximum efficiency of worm gears, gears must be run together. For that reason efficiency of gear units will be low in first running. At low start-stop applications this affect will be maximum but it could be decrease with linearly. According to experience, before full running incompletely decreasing in efficiency which is specified on below must be considered.

Running of Helical-Worm Gear	Decreasing in Efficiency
1 <sup>st</sup> Running	% 12
2 <sup>nd</sup> Running	% 6
3 <sup>rd</sup> Running	% 3
6 <sup>th</sup> Running	% 2

Teeth number of worm gear, reduction ratio and output speed are listed on the performance tables. Procedure of running together is accomplished after 25 hours running with maximum load.

For each efficiency value on the performance tables, you must consider as follows instruction;

- Gear units must be run full,
- Gear units must be reach constant temperature,
- It must be filled suitable lubrication,

### Axial and Radial Forces

Permissible forces on the output shaft are given at the selection of gear motor.  $F_R$  represents radial load and  $F_A$  represents axial load.  $F_{R GR}$  and  $F_{A GR}$  represents permissible load with reinforced bearings. These values are calculated when one of them is equal to zero.

In selection of gear motor tables service factor is given with permissible axial and radial load but it must be considered when operating times is greater than 8 hours and service factor must be greater than 1 for that reason permissible radial and axial loads are reduced.

Axial and radial forces are calculated where force acting on the middle of the shaft end see page 39. Direction of rotation is played important role in calculation. For that reason this forces are calculated and result's value is found from forces to the shaft worse. Hence, please explain details in your orders.

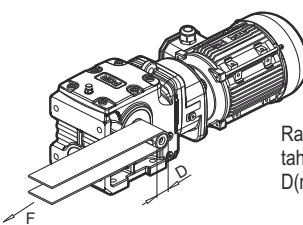
For belt-pulleys operations or any other motion transfer applications  $f_z$  factor must be considered while calculating radial and axial load.

TR

## RADYAL YÜK HESABI

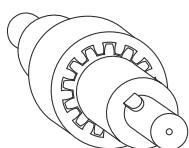
EN

## CALCULATION OF OVERHUNG LOADS



Radyal yük  $F_R$  (N)' nun hesaplanması sırasında gerekli tarihik momenti  $M_2$  (Nm), kasnak veya dişli çapı  $D$ (mm) olmak üzere aşağıdaki formüller kullanılır.

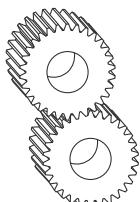
Radial load  $F_R$  (N) is calculated with the following formulas where required moment  $M_2$  (Nm) and hoop or gear diameter  $D$  (mm) is used.

**1 - Elastik Kaplin**

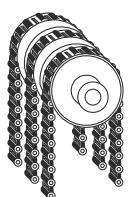
Çalışma sırasında oluşan sapmalar kaplinin güvenlik sınırları içerisinde ise kuvvetler ihmal edilebilir.

**1 - Elastik Coupling**

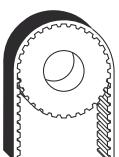
If elastic coupling is working in its reliable working area, the overhung loads can be neglected.

**2 - Düz Dişli ( 20° kavrama açılı )****2 - For Spur Gear ( Pressure angle 20° )**

$$F_R = \frac{2100 \times M_2}{D}$$

**3 - Küçük Hızlarda Zincir Dişli ( Z < 17 )****3 - For Chain Drive With Low Speed ( Z < 17 )**

$$F_R = \frac{2100 \times M_2}{D}$$

**4 - Triger Kayış****4 - For Trigger Belt**

$$F_R = \frac{2500 \times M_2}{D}$$

**5 - V Kayış****5 - For V Belt**

$$F_R = \frac{5000 \times M_2}{D}$$

**6 - Gerdirme Makaralı Kayış****6 - Flat Belt With Spanning Pulley**

$$F_R = \frac{5000 \times M_2}{D}$$

TR

## RADYAL YÜK HESABI

fz için Tablo

Transfer Elemanları	Faktör fz	Açıklama
Dişiler	1.1	$z \leq 17$ diş
Zincir Dişiler	1.4	$z \leq 13$ diş
Zincir Dişiler	1.2	$z \leq 20$ diş
Dar V-Kayış Makaralar Düz kayış Makaralar	1.7 2.5	ön gerilim kuvveti

Mil üzerinde ortaya çıkan radyal kuvvet, aşağıdaki formül kullanılarak hesaplanmıştır.

EN

## CALCULATION OF OVERHUNG LOADS

fz values are shown at table.

Transfer Elements	Factor fz	Notice
Gears	1.1	$z \leq 17$ teeth
Chain Sprockets	1.4	$z \leq 13$ teeth
Chain Sprockets	1.2	$z \leq 20$ teeth
Narrow V-belt pulleys Flat belt pulleys	1.7 2.5	by Pre-Tensioning

Radial load is determined with the following formula;

$$F_{Rvorth} = \frac{2 \cdot M_2}{d_0} f_z \leq F_R$$

$M_2$  : Dişli ünitesi çıkış momenti [Nm]

$f_z$  : Tablodan alınan katsayı

$d_0$  : Etkili daire çapı [mm]

$F_R$  : Devir ve çıkış gücü tablolardan alınan müsaade edilebilir radyal kuvvet [kN]

$F_{Rvorth}$ : Mil üzerindeki radyal kuvvet [kN]

$M_2$  : Output torque of gear unit [Nm]

$f_z$  : Factor which is taken from table

$d_0$  : Effective circular diameter [mm]

$F_R$  : Permitted radial force which is taken from the speed and output moment tables. [kN]

$F_{Rvorth}$ : Radial force on the gear unit shaft [kN]

Kuvvet mil ortasına uygulanmazsa, herhangi bir 'X' noktasında izin verilen radyal kuvvet **formül I** ve **II** kullanılarak hesaplanır.

The formula which is determined above is used for when force is not acting on the middle of shaft at other situations the following formula is applied.

### Formül / Formula - I

$$F_{RXL} = F_R \cdot \frac{Z}{y + x}$$

### Formül / Formula - II

$$F_{RXW} = \frac{C}{(f + x) \cdot 1000}$$

X : Mil bileziğinden kuvvet uygulama noktasına olan uzaklık [mm]  
X Noktası - mil kararlılığı

X : Distance from the shaft collar to the point of force application [mm]  
point X - shaft stability

$F_{RXW}$  : İzin verilen radyal yük [ kN ]

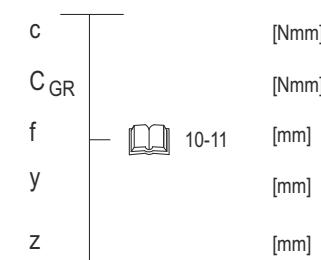
$F_{RXW}$  : Permitted overhung force [ kN ]

$F_R$  : Hız ve çıkış tabloları ve milin ortasına uygulanan kuvvetten alınan radyal kuvvet [ kN ] X Noktası - yatak servis ömrü

$F_R$  : Overhung force from the speed and output tables, force applied at shaft middle [kN] point X - bearing service life

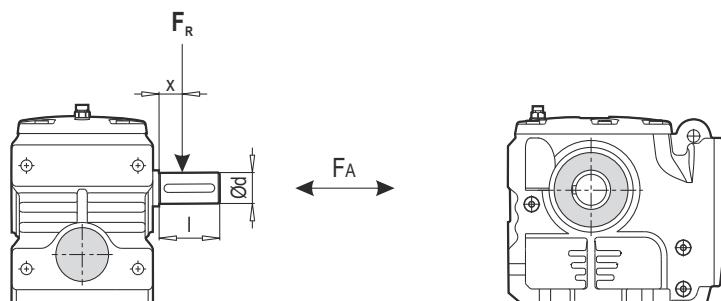
$F_{RXL}$  : İzin verilen radyal yük [ kN ]

$F_{RXL}$  : Permitted overhung load [ kN ]



Belirtilmedir ki, hesaplamlarda **formül I** yatak servis ömrünü, **formül II** ise mil kararlılığını hesaplamada kullanılır. Hesaplamlar sonucunda küçük değer dikkate alınmalıdır.

Notify that, **formula I** and **formula II** are applied for calculating radial load where **formula I** is used for service life and **formula II** is used for shaft stability. But small result must be considered.



## ÇIKIŞ ŞAFTINDAKİ RADYAL VE EKSENEL YÜK HESAPLAMALARI İÇİN DEĞERLER

VALUE TABLE FOR RADIAL AND AXIAL LOADS AT OUTPUT SHAFT

Redüktör Tipi Gearbox Type	y (mm)	z (mm)	c Normal Normal (Nmm)	CGR Güçlendirilmiş Reinforced (Nmm)	f (mm)	Ød (mm)	I (mm)
<b>PSH 2040</b>	99.5	115.5	$0.07 \times 10^6$	—	0	20	40
<b>PSH 2050, PSH 3050</b>	104.0	129.0	$0.12 \times 10^6$	$0.19 \times 10^6$	0	25	50
<b>PSH 2063, PSH 3063</b>	118.5	148.5	$0.19 \times 10^6$	$0.30 \times 10^6$	0	30	60
<b>PSH 2080, PSH 3080</b>	150.0	185.0	$0.21 \times 10^6$	$0.41 \times 10^6$	0	35	70
<b>PSH 2100, PSH 3100</b>	179.0	224.0	$0.51 \times 10^6$	$0.94 \times 10^6$	0	45	90
<b>PSH 2125, PSH 3125</b>	233.5	293.5	$1.33 \times 10^6$	$2.19 \times 10^6$	0	60	120

y-z-c-CGR 9

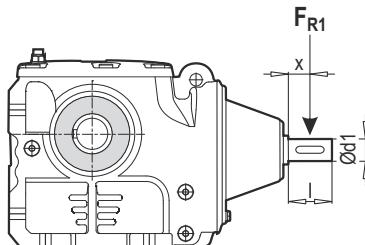
TR

RADYAL YÜK HESABI

EN

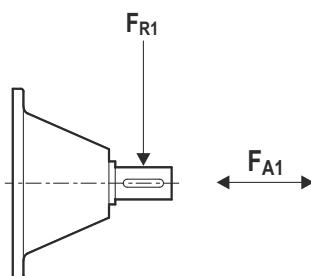
CALCULATION OF OVERHUNG LOADS

W



GİRİŞ ŞAFTINDAKİ RADYAL VE EKSENEL YÜK HESAPLAMALARI İÇİN DEĞERLER VALUE TABLE FOR RADIAL AND AXIAL LOADS AT INPUT SHAFT $f=0$					
Redüktör Tipi Gearbox Type	y (mm)	z (mm)	c (Nmm)	$\varnothing d_1$ (mm)	l (mm)
PSH 2040	58.5	78.5	$0.037 \times 10^6$	16	40
PSH 2050 PSH 2063 PSH 2080 PSH 3050 PSH 3063 PSH 3080 PSH 3100					
	70.0	90.0	$3.64 \times 10^4$	16	40
PSH 2100 PSH 3125	96.5	121.5	$1.07 \times 10^5$	24	50
PSH 2125	110.5	150.5	$4.70 \times 10^5$	38	80

W



Tip Type	PSH 2040		PSH 2050 PSH 2063 PSH 2080 PSH 3050 PSH 3063 PSH 3080 PSH 3100		PSH 2100 PSH 3125		PSH 2125	
	[ kN ]	[ kN ]	[ kN ]	[ kN ]	[ kN ]	[ kN ]	[ kN ]	[ kN ]
P1 (kW)	F <sub>A1</sub>	F <sub>R1</sub>	F <sub>A1</sub>	F <sub>R1</sub>	F <sub>A1</sub>	F <sub>R1</sub>	F <sub>A1</sub>	F <sub>R1</sub>
0.12	1.2	0.85	1.2	0.85	2.9	2.1	-	-
0.18	1.1	0.82	1.1	0.82	2.9	2.1	-	-
0.25	1.0	0.78	1.0	0.78	2.8	2.1	-	-
0.37	0.89	0.75	0.89	0.75	2.6	2.1	4.1	2.1
0.55	0.77	0.72	0.77	0.72	2.5	2.0	3.9	2.8
0.75	0.58	0.70	0.58	0.70	2.3	1.9	3.8	2.4
1.10	0.35	0.61	0.35	0.61	2.1	1.8	3.5	2.7
1.50	0.29	0.43	0.29	0.43	2.0	1.8	3.3	2.6
2.20	0.20	0.42	0.20	0.42	1.7	1.7	2.7	2.4
3.00	0.15	0.23	0.15	0.23	1.5	1.6	2.5	2.3
4.00	-	-	-	-	0.98	1.1	2.3	2.1
5.50	-	-	-	-	0.65	1.0	1.6	1.8
7.50	-	-	-	-	0.27	1.0	1.4	1.3
9.20	-	-	-	-	-	-	1.0	0.98
11.0	-	-	-	-	-	-	0.59	0.47

$$\begin{aligned} F_{A1} &\Leftrightarrow F_{R1} = 0 \\ F_{R1} &\Leftrightarrow F_{A1} = 0 \end{aligned}$$



TR

KISALTMALAR

EN

ABBREVIATIONS

<b>f<sub>B</sub></b>	= Servis Faktörü (Mamax / Ma)	<b>f<sub>B</sub></b>	= Service factor (Mamax / Ma)
<b>F<sub>A</sub></b>	= Çıkış tarafındaki müsaade edilebilir eksenel yük [ kN ]	<b>F<sub>A</sub></b>	= Permissible axial load at the output side [ kN ]
<b>F<sub>R</sub></b>	= Çıkış tarafındaki, milin orta noktasına etkiyen müsaade edilebilir radyal yük [ kN ]	<b>F<sub>R</sub></b>	= Permissible overhung load at the output side, force acting at the shaft's midpoint [ kN ]
<b>i<sub>toplam</sub></b>	= Dişli ünitesindeki toplam tahvil oranı	<b>i<sub>total</sub></b>	= Gear units total ratio
<b>i<sub>ges</sub></b>	= Tahvil oranı	<b>i<sub>ges</sub></b>	= Reduction ratio
<b>M<sub>2</sub></b>	= Çıkış momenti [Nm]	<b>M<sub>2</sub></b>	= Output torque [Nm]
<b>M<sub>amax</sub></b>	= Müsaade edilebilir maksimum çıkış momenti [Nm]	<b>M<sub>amax</sub></b>	= Max. permissible output torque [Nm]
<b>n<sub>2</sub></b>	= Çıkış devri [ d/dk ]	<b>n<sub>2</sub></b>	= Output speed [min <sup>-1</sup> ]
<b>P<sub>e</sub></b>	= Mamax referans alınarak hesaplanan güç [kW]	<b>P<sub>e</sub></b>	= Calculated power [kW] with reference to Mamax
<b>P<sub>n</sub></b>	= Motor güç oranı [kW]	<b>P<sub>n</sub></b>	= Motor power [kW]
<b>η</b>	= Verim [ % ]	<b>η</b>	= Efficiency [ % ]
<b>kg</b>	= Redüktörün ağırlığı	<b>kg</b>	= Weight of the geared motor

TR

## PSH TANITIMI

**POLAT HELİSEL - SONSUZ DİŞLİ ÜNİTESİ (PSH)**

Helisel - sonsuz dişli üniteleri motor mili ile çıkış şaftı arasında  $90^\circ$  açı olan dişli üniteleridir. Bu yüzden uygulamalarda (sistem) faydalı özellik sağlar. Bu katalogta belirtilen tüm helisel - sonsuz dişli üniteleri çok kademedir.

Helisel - sonsuz dişli ünitelerinin helisel dişileri yüksek alaşımı çelikten yapılmış olup, dişiler sertleştirilmiştir. Dişli geometrileri ve düzeltmeleri optimize edilerek tek gövde prensibine göre hassas şaft hizalaması, yüksek yük kapasitesi, uzun servis ömrü ve düşük ses sağlanmış olur.

Sonsuz kademedeki çark sertleştirilmiş olduğu gibi özel bronzdan yapılmış ve şaft üzerinde sıkıca sabitlenmiştir. Bu kombinasyon uzun servis ömrünü garanti etmektedir. Modern CNC tezgahlarında üretilen helisel-sonsuz dişli üniteleri düzenli proses kontrolü yapılarak en yüksek ürün kalitesi, siz değerli müşterilerimize sunulur.

Helisel - sonsuz dişli üniteleri ömrleri için fabrikada yüksek kalitede poliglikol tabanlı sentetik uzun ömrü yağ ile doldurulur. Bu sentetik yağ sürünmeyi düşürerek uzun servis ömrü ve yüksek verim sağlamış olur.

Helisel-sonsuz dişli ünitelerinden PSH 2040'dan PSH 2125'e kadar iki kademe olarak mevcuttur. Bu ünitelere yüksek tahlil oranları için indirgeyici gövde montajlanarak 3 kademeli sunulmaktadır. Bunlar ise PSH 3050'den PSH 3125'e kadar toplam 5 gövde büyüklüğünde sağlanmaktadır.

**Helisel - Sonsuz Dişli Üniteleri**

Çıkış gücü 0,12 kW'dan 15 kW'a kadar  
maksimum çıkış momenti 3570 Nm, 6 gövde büyütüğü

P<sub>1</sub> : 0,12 kW ..... 15 kW  
M<sub>2</sub> : 3 ..... 3570 Nm

EN

## DESCRIPTION OF PSH

**POLAT HELICAL - WORM GEAR UNIT (PSH)**

There is a  $90^\circ$  between motor shaft and output shaft in helical-worm gear units. For that reason this features provide more benefits in applications (in system). All helical-worm gear units in this catalogue have multi-stage reduction.

Helical gears of helical-worm gear units are machined from high alloy steels and case hardened. According to monoblock principle and optimizing the teeth geometries, precise shaft alignment, high load capacity, long service life and low noise are provided.

In worm reduction, worm wheel is special bronze material and heat treated at the same time it is fixed to the output shaft. This combination is guaranteed long service life. Helical-worm gear units which are machined in latest version of CNC tools and always checked regularly in process control, are offered to you with high quality level.

For long service life of helical-worm gear units, gearboxes are filled with high quality synthetic oil which have polyglycol base. This synthetic oil is decreased friction effect and provided long service life, high efficiency.

In helical-worm gear units, from PSH 2040 to PSH 2125 is two stage reduction. For high reduction ratio three-stage reduction is offered when reduction case is mounted to the two stage reduction gear units. These are PSH 3050 to PSH 3125 and offered totally in 5 case width.

**Helical-Worm Gear Units**

Approx. 3570 Nm output moment  
altering power from 0.12 kW to 15 kW

P<sub>1</sub> : 0,12 kW ..... 15 kW  
M<sub>2</sub> : 3 ..... 3570 Nm

**MAX. MÜSAADE EDİLEBİLİR ÇIKIŞ MOMENTİ M<sub>max</sub>.**

MAX. PERMISSIBLE OUTPUT TORQUES M<sub>max</sub>.



117-135

**İki ve Üç kademeli helisel-sonsuz redüktör**

Helical-worm gear units, double and triple stage reduction

Tip/Type	M <sub>max</sub> (Nm)	Tip/Type	M <sub>max</sub> (Nm)
<b>PSH 2040</b>	100		
<b>PSH 2050</b>	185	<b>PSH 3050</b>	195
<b>PSH 2063</b>	360	<b>PSH 3063</b>	380
<b>PSH 2080</b>	710	<b>PSH 3080</b>	770
<b>PSH 2100</b>	1420	<b>PSH 3100</b>	1590
<b>PSH 2125</b>	2850	<b>PSH 3125</b>	3090

TR

**W ve IEC ADAPTÖR KULLANIMI****W ve IEC Adaptör**

W kovanlı redüktörlerin max. tahrik gücü geçerli olan çıkış devri ve tahliv oranına göre tablolarda verilmiştir. (Bknz 115-135) IEC adaptörlü dişli ünitelerinde, her görevde büyütüğünün standart gücü DIN EN 50347'ye göre verilir. P1 değeri W ve IEC seçim sayfalarında listelenmiştir. Bu listedeki değerlerden fazla bir güç istenirse özel hesaplamalar gerekmektedir. Lütfen danışınız.

Kaldırma, asansör ve bu gibi insan yaralannalarına neden olabilecek çalışmalar için özel hesaplamalar gerekmektedir. Lütfen PGR' ye danışınız. Direk motor montajlı redüktörle karşılaşmak gerekirse IEC ilave mil kaplinine ve extra rulman yataklamasına sahiptir. Direk motor montajına göre IEC bağıltılı redüktörlerde güç kayıpları daha fazladır. PGR olarak biz direk motor montajını öneriz. Bu size sadece teknik avantaj değil finansal olarak da avantaj sağlar.

EN

**USING OF W AND IEC ADAPTER****W and IEC Adapter for Gear Units**

The way of selecting W cylinder (with free input shaft) and IEC adapter are listed on page 115-135. Maximum power are given according to gear reduction ratio and output speed. Gear units with IEC adapter standard power are specified according to DIN EN 50347. For other power values which are not shown on table, special calculations are required for operating safety limits. For these cases, please contact PGR.

On the other hand for operations where accident could be caused personnel damage special calculation must be required, please consult us. Direct motor mounting has a lot of advantage according to mounting of IEC adapter. At gear units with IEC adapter has additional solid shaft coupling and bearing seats for that reason power losses are greater than direct motor mounting. Last but not least direct motor mounting could be provided more technical and financial advantage.

**UYGULAMALAR****KARIŞTIRICILAR**

- \* Saf Sıvılar
- \* Sıvılar ve Katılar
- \* Değişken Yoğunluklu Sıvılar

**HAVALANDIRMA TERTİBATLARI**

- \* Santrifüj
- \* Lob
- \* Pervane

**MAYALAMA VE DAMITMA**

- \* Şişeleme Mekanizması
- \* Mayalama Kazanları - Kesintisiz İş
- \* Fırınlar, Ocaklar - Kesintisiz İş
- \* Ezme, Karışım Kazanları - Kesintisiz İş
- \* Ölçü Haznesi - Sık Sık Başlama

**TOPRAK İŞLEME MAKİNELERİ**

- \* Tuğla Presi
- \* Briket Makinesi
- \* Çamur Karma Makinesi

**KOMPRESÖRLER**

- \* Santrifüj
- \* Lob
- \* Çok Pistonlu
- \* Tek Pistonlu

**KONVEYÖRLER - GENEL MAKSATLI**

- \* Üniform Yüklü
- \* Üniform Yüklü Olmayan
- \* Pistonlu veya Karıştırıcılı

**VİNÇLER**

- \* Kuru Havuz
- Ana Kaldırmavinci
- Yardımcı Vinç
- Direkli Vinç
- Döndürme İşi
- Çekme İşi
- \* Endüstriyel İşi
- Ana Kaldırma Vinci

**ASANSÖRLER**

- \* Kova
- \* Santrifüj Boşaltma
- \* Yürüyen Merdiven
- \* Taşıma, Nakliye
- \* Yerçekimi Boşaltım

**KIRMA MAKİNELERİ**

- \* Taş ya da Maden

**APPLICATIONS****AGITATORS (MIXERS)**

- \* Pure Liquids
- \* Liquids and Solids
- \* Liquids - Variable Density

**BLOWERS**

- \* Centrifugal
- \* Lobe
- \* Vane

**BREWING AND DISTILLING**

- \* Bottling Machinery
- \* Brew Kettles - Continuous Duty
- \* Cookers - Continuous Duty
- \* Mash Tubs - Continuous Duty
- \* Scale Hopper - Frequent Starts

**CLAY WORKING MACHINERY**

- \* Brick Press
- \* Briquette Machine
- \* Pug Mill

**COMPRESSORS**

- \* Centrifugal
- \* Lobe
- \* Reciprocating, Multi-Cylinder
- \* Reciprocating, Single-Cylinder

**CONVEYORS - GENERAL PURPOSE**

- \* Uniformly Loaded or Fed
- \* Not Uniformly fed
- \* Reciprocating Or Shaker

**CRANES**

- \* Dry Dock
- Main Hoist
- Auxiliary Hoist
- Boom Hoist
- Slewing Drive
- Traction Drive
- \* Industrial Duty
- Main Hoist

**ELEVATORS**

- \* Bucket
- \* Centrifugal Discharge
- \* Escalators
- \* Freight
- \* Gravity Discharge

**CRUSHER**

- \* Stone or Ore

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KULLANIM ALANLARI

EN

APPLICATION AREAS

## UYGULAMALAR

### TARAMA MAKİNELERİ

- \* Kablo Bobinleri
- \* Konveyörler
- \* Pompalar
- \* İstifleme Makineleri
- \* Vinçler

### EKSTRUİDERLER

- \* Genel
- \* Plastikler
  - Değişken Hızlı Tahrik
  - Sabit Hızlı Tahrik
- \* Kauçuk, Lastik
  - Kesintisiz Vida İşlemleri
  - Kesintili Vida İşlemleri

### FANLAR

- \* Santrifüj
- \* Yüksek Emişli
- \* İndükleneşmiş Çekış
- \* Endüstriyel ve Maden Ocağı

### BESLEME ÜNİTELERİ

- \* Palet
- \* Bant
- \* Disk
- \* Pistonlu
- \* Vida

### GIDA ENDÜSTRİSİ

- \* Hububat Fırını
- \* Hamur Karıştırıcı
- \* Kıyma Makinesi
- \* Dilimleyici

### METAL İŞLEMELERİ

- \* Çekme Makinesi Taşıma ve Ana Tahrik
- \* Hammadde İticileri
- \* Makaslar
- \* Tel Çekme
- \* Tel Sargı Makinesi
- \* Salgı Tezgahı
  - Geri Dönmesiz
  - Tek Tahrik
  - Grup Tahriki

### DÖNER İŞLEMELER

- \* Küresel ve Çubuk
- Düz Halka Dişli
- Helisel Halka Dişli
- Doğrudan Bağlı
- \* Çimento Fırını
- \* Kurutucular ve Soğutucular

## APPLICATIONS

### DREDGES

- \* Cable Reels
- \* Conveyors
- \* Pumps
- \* Stackers
- \* Winches

### EXTRUDERS

- \* General
- \* Plastics
  - Variable Speed Drive
  - Fixed Speed Drive
- \*Rubber
  - Continuous Screw Operation
  - Intermittent Screw Operation

### FANS

- \* Centrifugal
- \* Forced Draft
- \* Induced Draft
- \* Industrial and Mine

### FEEDERS

- \* Apron
- \* Belt
- \* Disc
- \* Reciprocating
- \* Screw

### FOOD INDUSTRY

- \* Cereal Cooker
- \* Dough Mixer
- \* Meat Grinder
- \* Slicer

### METAL MILLS

- \* Draw Bench Carriage and Main Drive
- \* Slab Pushers
- \* Shears
- \* Wire Drawing
- \* Wire Winding Machine
- \* Runout Table
  - Non-Reversing
  - Individual Drives
  - Group Drives

### MILLS (ROTARY TYPE)

- \* Ball and Rod
- Spur Ring Gear
- Helical Ring Gear
- Direct Connected
- \* Cement Kilns
- \* Dryers and Coolers

**UYGULAMALAR****KERESTE ENDÜSTRİSİ**

- \* Kabuk Soyular
- Besleme Tamburu
- Ana Tahrik
- \* Konveyörler
- Brülör
- Ana Yük veya Ağır Yük
- Ana Kütük
- Hızar ve Taşıma Bandı
- Kalın Dilim
- Taşıma
- \* Kesme Testereleri
- Zincir
- Sürükleme
- \* İndirme Boşaltma Tamburları
- \* Uzun Deste
- \* Tomruk Çekme-Eğme
- \* Kütük Döndürme Aygıtları
- \* Sıralama Tablosu
- \* Taşıma
- Zincir
- Kreynyolu
- \* Tabla Tahriki

**KAĞIT İŞLEMELERİ**

- \* Karıştırıcı
- \* Saf çözeltiler İçin Karıştırıcı
- \* Kabuk Soyma Tromelleri
- \* Mekanik Kabuk Soyucu
- \* Dövücü - Öğütücü
- \* Düzleştirme Makinesi
- \* Kalenderleme
- \* Yüzey Pürüzlendirci
- \* Çentik Besleyici
- \* Kaplama Merdanesi
- \* Konveyörler
  - Çentik, Kabuk, Kimyasal
  - Kalın Dilimler İçeren Kütükler
- \* Kesici
- \* Silindir Kalıpları
- \* Kurutucu
  - Kağıt Makinesi
  - Konveyör Tip
- \* Kabartmalı Basıcı
- \* Ekstrüder
- \* Kağıt Merdaneleri
- \* Presler
- \* Küspe Makinesi
- \* Pompalar

**FİLTRELER**

- \* Havalı Yıkama
- \* Döner - Taş veya Çakıl
- \* Hareketli Su Girişи

**APPLICATIONS****LUMBER INDUSTRY**

- \* Barkers
- Spindle Feed
- Main Drive
- \* Conveyors
- Burner
- Main or Heavy Duty
- Main Log
- Re-saw, Merry-Go-Round
- Slab
- Transfer
- \* Cut-Off Saws
- Chain
- Drag
- \* Debarking Drums
- \* Long Deck
- \* Log Hauls - Incline
- \* Log Turning Devices
- \* Sorting Table
- \* Transfers
- Chain
- Causeway
- \* Tray Drives

**PAPER MILLS**

- \* Agitator (Mixer)
- \* Agitator for Pure Liquors
- \* Barking Drums
- \* Mechanical Barkers
- \* Beater
- \* Breaker Stack
- \* Calender
- \* Chipper
- \* Chip Feeder
- \* Coating Rolls
- \* Conveyors
  - Chip, Bark, Chemical
  - Log (including Slab)
- \* Cutter
- \* Cylinder Molds
- \* Dryer
  - Paper Machine
  - Conveyor Type
- \* Embosser
- \* Extruder
- \* Paper Rolls
- \* Presses
- \* Pulper
- \* Pumps

**SCREENS**

- \* Air Washing
- \* Rotary - Stone or Gravel
- \* Traveling Water Intake

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KULLANIM ALANLARI

EN

APPLICATION AREAS

## UYGULAMALAR

### PLASTİK ENDÜSTRİSİ İLK İŞLEMLER

- \* Yoğun İç Karıştırıcılar
- Harmanlayıcı
- Kesintisiz Karıştırıcı

### PLASTİK ENDÜSTRİSİ İKİNCİL İŞLEMLER

- \* Hacim Kalıpçıları
- \* Kaplama
- \* Tabaka
- \* Boru
- \* Ön Plastikleştirme
- \* Rot
- \* Saç, Plaka
- \* Borular

### POMPALAR

- \* Santrifüj
- \* Oranlama
- \* Pistonlu
  - Tek Tesirli - 3 veya daha fazla Silindir
  - Çift Tesirli - 2 veya daha fazla Silindir
- \* Döner
  - Şanzuman Tipi
  - Lob
  - Pervane

### KAUÇUK - LASTİK ENDÜSTRİSİ

- \* Yoğun İç Karıştırıcılar
  - Harmanlayıcılar
  - Kesintisiz Karıştırıcılar
- \* Karıştırma İşlemi
  - 2 Yumuşak Merdane
  - 1 veya 2 Oluklu Merdane
- \* Toplu İşleme - 2 Yumuşak Silindir
- \* Kırıcı ve Isıtıcı - 2 Merdane, 1 Oluklu Merdane
- \* Kırıcı - 2 Oluklu Merdane
- \* Tutma, Besleme, Karıştırma İşlemi - 2 Merdane
- \* Arıtıcı - 2 Merdane
- \* Kalenderler

### ATIK SU BOŞALTIM EKİPMANLARI

- \* Çubuklu Elek
- \* Kimyasal Besleme Üniteleri
- \* Su Boşaltma Eleği
- \* Köpük Kesici
- \* Yavaş veya Hızlı Karıştırıcılar
- \* Tortu Toplayıcı
- \* Koyulaştırıcı
- \* Vakumlu Filtre

### KOMPAKTÖRLER

### ÇEKİTİRMELER - YAVAŞ VE KUVVETLİ

## APPLICATIONS

### PLASTIC INDUSTRY PRIMARY PROCESSING

- \* Intensive Internal Mixers
- Batch Mixers
- Continuous Mixers

### PLASTIC INDUSTRY SECONDARY PROCESSING

- \* Blow Molders
- \* Coating
- \* Film
- \* Pipe
- \* Pre-Plasticizers
- \* Rods
- \* Sheet
- \* Tubing

### PUMPS

- \* Centrifugal
- \* Proportioning
- \* Reciprocating
  - Single Acting - 3 or more cylinders
  - Double Acting - 2 or more cylinders
- \* Rotary
  - Gear Type
  - Lobe
  - Vane

### RUBBER INDUSTRY

- \* Intensive Internal Mixers
- Batch Mixers
- Continuous Mixers
- \* Mixing Mill
  - 2 Smooth Rolls
  - 1 or 2 corrugated Rolls
- \* Batch Drop Mill - 2 Smooth Rolls
- \* Cracker Warmer-2 Rolls, 1 Corr. Roll
- \* Cracker - 2 Corrugated Rolls
- \* Holding, Feed and Blend Mill - 2 Rolls
- \* Refiner - 2 Rolls
- \* Calenders

### SEWAGE DISPOSAL EQUIPMENT

- \* Bar Screens
- \* Chemical Feeders
- \* Dewatering Screen
- \* Scum Breaker
- \* Slow or Rapid Mixers
- \* Sludge Collector
- \* Thickener
- \* Vacuum Filter

### COMPACTORS

### PULLERS - BARGE HAUL

**UYGULAMALAR**ŞEKER ENDÜSTRİSİ

- \* Pancar Dilimleme Aleti
- \* Kambur Bıçakları
- \* Kırma Makineleri

TEKSTİL ENDÜSTRİSİ

- \* Harman Ölçer
- \* Kalenderler
- \* Şablonlar
- \* Kuru Konserveler
- \* Boyama Makinesi
- \* Dokuma Tezgahları
- \* Çamaşır Sıkma Makinesi - Merdane
- \* Kaplama
- \* Doldurma Makinesi
- \* Haşıl Makinesi
- \* Halat Yıkama Makinesi
- \* Eğirme Makinesi
- \* Germe Kurutma Makineleri
- \* Yıkama Makineleri
- \* Masura Sarıcısı

DAMPERLİ ARAÇLARÇEKİCİ ARAÇLARARITİCİLARKONSERVE DOLUM MAKİNELERİ**APPLICATIONS**SUGAR INDUSTRY

- \* Beet Slicer
- \* Cane Knives
- \* Crushers

TEXTILE INDUSTRY

- \* Batcher
- \* Calenders
- \* Cards
- \* Dry Cans
- \* Dyeing Machinery
- \* Looms
- \* Mangle
- \* Napper
- \* Pads
- \* Slashers
- \* Soapers
- \* Spinners
- \* Tenter Frames
- \* Washers
- \* Winders

CAR DUMPERSCAR PULLERSCLARIFIERSCAN FILLING MACHINES

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KULLANILAN TERİMLER

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NOMENCLATURE

REDÜKTÖR TİPİ GEAR TYPE		REDÜKTÖR DİZAYNI GEAR DESIGN	
	<b>Ayak Montajlı</b> Foot Mounted	TMA	= Ayak montajlı, Tek mil çıkışlı Foot mounted, Solid shaft
PSH 2040...PSH 2125 =	İki kademeli, Helisel Sonsuz Dişlili redüktör Double reduction, helical-worm gearboxes	ÇMA	= Ayak montajlı, Çift mil çıkışlı, Foot mounted, Solid shaft on both sides
PSH 3050...PSH 3125 =	Üç kademeli, Helisel Sonsuz Dişlili redüktör Triple reduction, helical-worm gearboxes	DG/B14	= Gövdeden montajlı, Delik milli, B14 flanşlı Case mounted, Hollow shaft, Flange B14
	<b>Gövdeden Montajlı</b> Flange Mounted	DG/B5	= Gövdeden montajlı, Delik milli, B5 flanşlı Case mounted, Hollow shaft, Flange B5
PSH 2040...PSH 2125 =	İki kademeli, Helisel Sonsuz Dişlili redüktör Double reduction, helical-worm gearboxes	DG/KS-B14	= Gövdeden montajlı, Delik milli, Konik sıkırmalı, B14 flanşlı Case mounted, Hollow shaft, Shrink disk connector, Flange B14
PSH 3050...PSH 3125 =	Üç kademeli, Helisel Sonsuz Dişlili redüktör Triple reduction, helical-worm gearboxes	DG/TK	= Gövdeden montajlı, Delik milli, Tork kolu Case mounted, Hollow shaft, Torque arm
	<b>Gövdeden Montajlı / B5 Flanşlı</b> Case Mounted / Flange B5	DG/Ç	= Gövdeden montajlı, Delik milli, Çektirmeli Case mounted, Hollow shaft, Fixing element
PSH 2040...PSH 2125 =	İki kademeli, Helisel Sonsuz Dişlili redüktör Double reduction, helical-worm gearboxes	DG/Ç/KK	= Gövdeden montajlı, Delik milli, Çektirmeli, Koruma Kapaklı Case mounted, Hollow shaft, Fixing element with cover
PSH 3050...PSH 3125 =	Üç kademeli, Helisel Sonsuz Dişlili redüktör Triple reduction, helical-worm gearboxes	DG/KS/KK	= Gövdeden montajlı, Delik milli, Konik sıkırmalı, Koruma Kapaklı Case mounted, Hollow shaft, Shrink disk connector with cover
		TMG/B5	= Gövdeden montajlı, Tek mil çıkışlı, B5 flanşlı Case mounted, Solid shaft, Flange B5

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## KULLANILAN TERİMLER

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## NOMENCLATURE

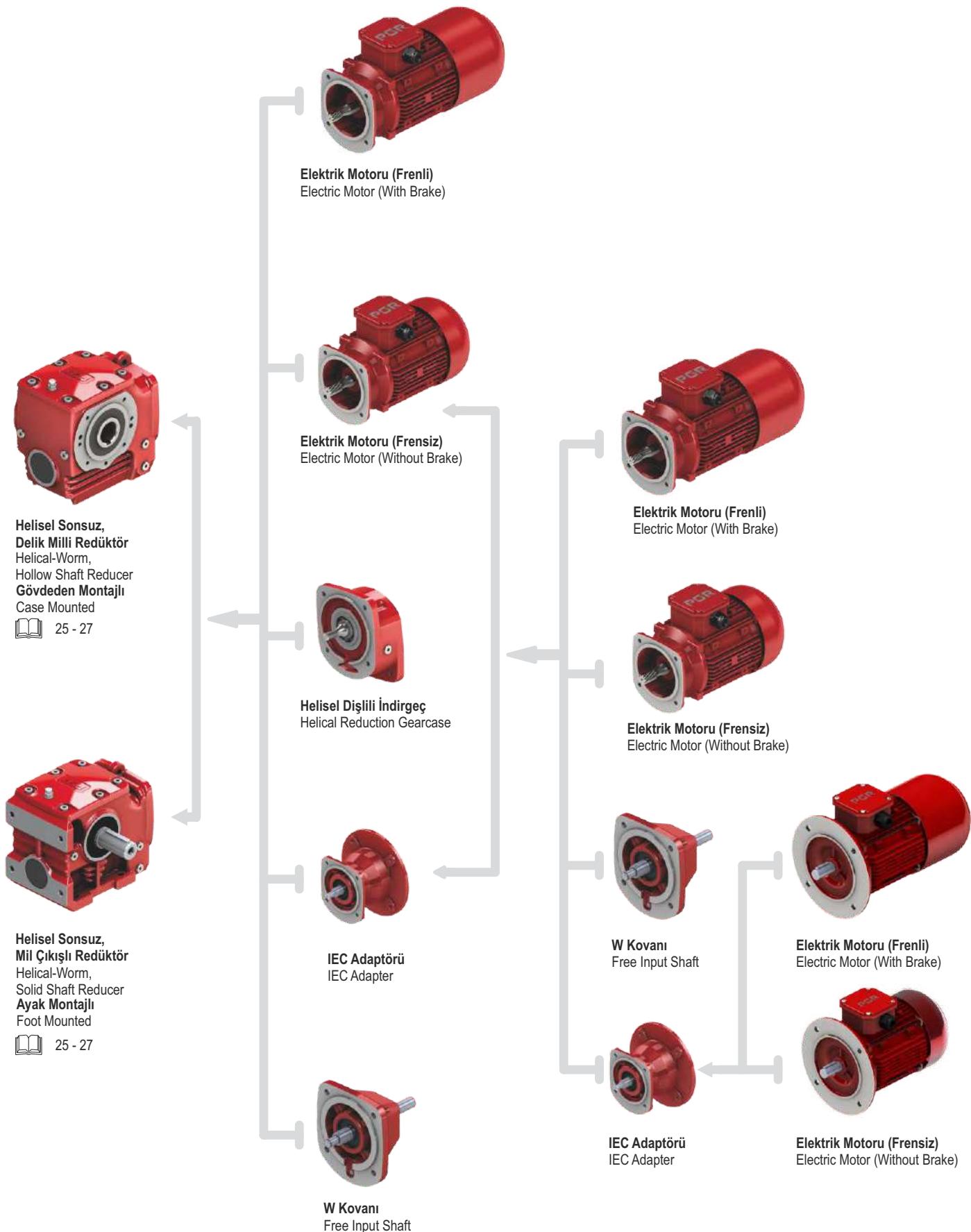
Giriş Aksamları Input Options	Motor Motor	Kutup Numarası Number of Poles	Motor Seçenekleri Motor Options
<b>IEC</b> = DIN 42677' ye göre standart motorlar için aksamlar  = For assembly with IEC standard motors acc. to DIN 42677	<b>Üç fazlı motor</b> Motor boyutu 63 - 315  Three phase motor Motor size 63 - 315	<b>2</b> = 2 Kutuplu = 2 - Poles  <b>4</b> = 4 Kutuplu = 4 - Poles  <b>6</b> = 6 Kutuplu = 6 - Poles  <b>4 - 2</b> = 1:2 oranında hız değiştirici dahlander bağlantısı = Pole changing 1:2 Dahlander connection  <b>8 - 2</b> = 1:4 oranında hız değiştirici ayrılmış sarmal dizilişi = Pole changing 1:4 Separate windings  Diğer kutup kombinasyonları talep sırasında karşılanacaktır Other pole combinations on request	<b>BRE</b> = Frenli = With brake  <b>EF</b> = Tek fazlı, fanlı = Separate fan, single phase  <b>ZF</b> = Çift fazlı, fanlı = Separate fan, double phase  <b>DF</b> = Üç fazlı, fanlı = Separate fan, three phase  <b>IG</b> = Enkoderli = With encoder  <b>KK/FK</b> = Debriyajlı = With clutches  <b>SR</b> = Toza karşı korumalı fren = Brake dust - proof  <b>TF</b> = Termistörlü = Thermistor  <b>RG</b> = Korozyon korumalı frenli = Brake corrosion - protected  <b>WU</b> = Yumuşak kalkışlı rotor = Soft start rotor  <b>B</b> = Geri dönmeye karşı kilitli = Backstop  <b>TW</b> = Isıya duyarlı = Thermal trip  <b>HL</b> = Manuel frenli motor = Brake motor with hand release
<b>W</b> = Motorsuz girişli redüktörler için aksam  = With free input shaft	<b>EExell</b> = Patlamaya karşı güvenliği artırılmış üç fazlı motor  = Explosion proof three phase motor increased safety		
<b>T</b> = Turbo kaplin  = Turbo coupling			

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PSH MODÜLER SİSTEMİ

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MODULAR SYSTEM OF PSH



Kısaltmalar Abbrev	Anlamı Meaning	Helisel Sonsuz Dişili Redüktör Helical Worm Gear Units
DG/B5	Gövdeden montajlı, Delik milli, B5 flanşlı Case mounted, Hollow shaft, Flange B5	✓
DG/B14	Gövdeden montajlı, Delik milli, B14 flanşlı Case mounted, Hollow shaft, Flange B14	✓
DG/TK	Gövdeden montajlı, Delik milli, Tork kollu Case mounted, Hollow shaft, Torque arm	✓
Ç	Çekirme elementli Fixing elements for hollow shaft	✓
KK	Koruma kapaklı Cover as a touch guard	✓
IEC	IEC adaptörü Adapter for mounting B5 IEC standard motors	✓
ÇMA	Ayak montajlı, Çift mil çıkışlı Foot mounted, Solid shaft on both sides	✓
B	Kilit Integrated backstop	✓
WB	W kilidi Backstop in W adapter	✓
KS	Konik sıkıştırma Hollow shaft with shrink disc	✓
TMG/B5	Gövdeden montajlı, Tek mil çıkışlı, B5 flanşlı Case mounted, Solid shaft, Flange B5	✓
GR	Güçlendirilmiş rulman Reinforced bearing	✓
TMA	Ayak montajlı, Tek mil çıkışlı Foot mounted, Solid shaft	✓
W	W kovası Free input shaft	✓

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## ÜRÜNLERİMİZ

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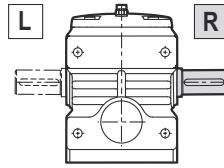
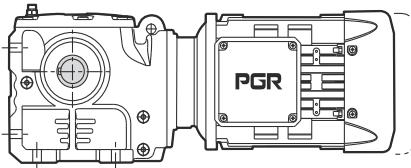
## PRODUCTS

### PSH 2080...TMA- 80S/4A

R

Tek mil çıkışlı, Ayak montajlı,  
Helisel sonsuz dişili, Motorlu reduktör

Helical worm geared motor,  
Solid shaft, Foot mounted, With motor

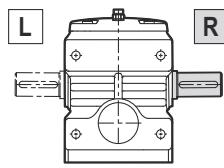
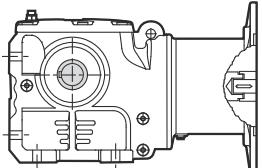


### PSH 2080...TMA - IEC 80

R

Tek mil çıkışlı, Ayak montajlı,  
Helisel sonsuz dişili, IEC Adaptörlü reduktör

Helical worm geared motor,  
Solid shaft, Foot mounted, With IEC adapter

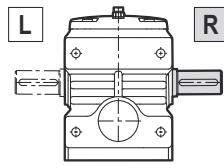
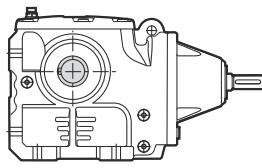


### PSH 2080...TMA - W

R

Tek mil çıkışlı, Ayak montajlı,  
Helisel sonsuz dişili, W kovanlı reduktör

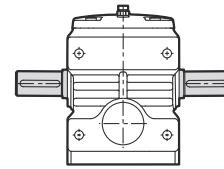
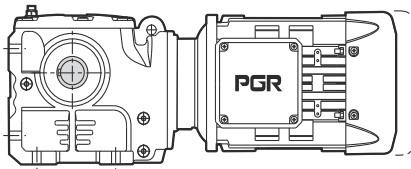
Helical worm geared motor,  
Solid shaft, Foot mounted, With free input shaft



### PSH 2080...ÇMA - 80S/4A

Çift mil çıkışlı, Ayak montajlı,  
Helisel sonsuz dişili, Motorlu reduktör

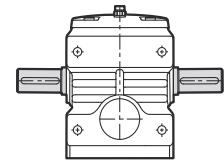
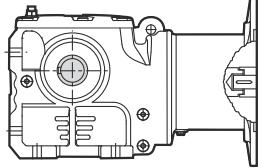
Helical worm geared motor,  
Solid shaft on both sides, Foot mounted, With motor



### PSH 2080...ÇMA - IEC 80

Çift mil çıkışlı, Ayak montajlı,  
Helisel sonsuz dişili, IEC adaptörlü reduktör

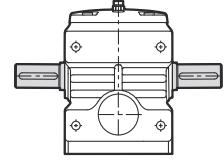
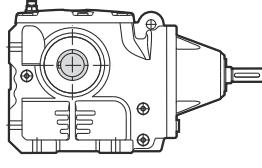
Helical worm geared motor,  
Solid shaft on both sides, Foot mounted, With IEC adapter



### PSH 2080...ÇMA - W

Çift mil çıkışlı, Ayak montajlı,  
Helisel sonsuz dişili, W kovanlı reduktör

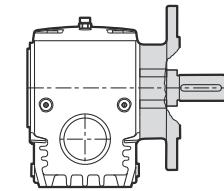
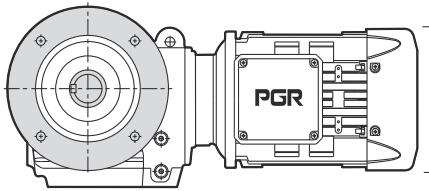
Helical worm geared motor,  
Solid shaft on both sides, Foot mounted, With free input shaft



### PSH 2080...TMG/B5 - 80S/4A

Tek mil çıkışlı, Gövdeden montajlı, B5 Flanşlı  
Helisel sonsuz dişili, Motorlu reduktör

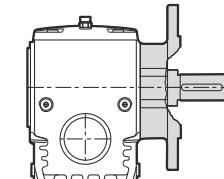
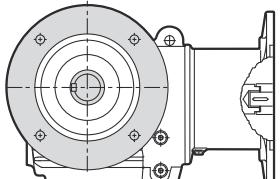
Helical worm geared motor,  
Solid shaft, case mounted, Flange B5, With motor



### PSH 2080...TMG/B5 - IEC 80

Tek mil çıkışlı, Gövdeden montajlı, B5 Flanşlı  
Helisel sonsuz dişili, IEC Adaptörlü Redüktör

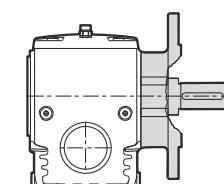
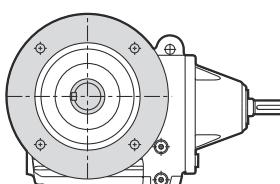
Helical worm geared motor,  
Solid shaft, case mounted, Flange B5, With IEC Adapter



### PSH 2080...TMG/B5 - W

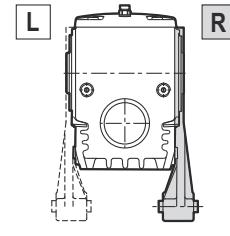
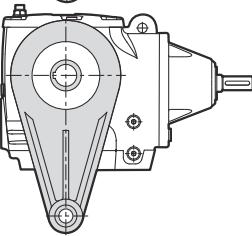
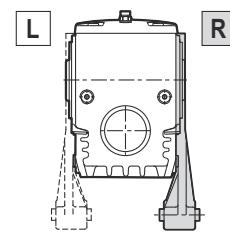
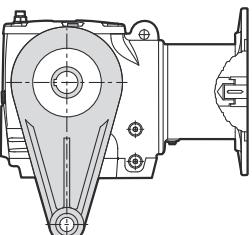
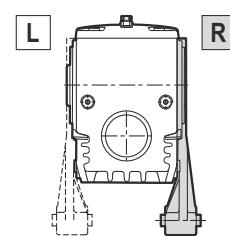
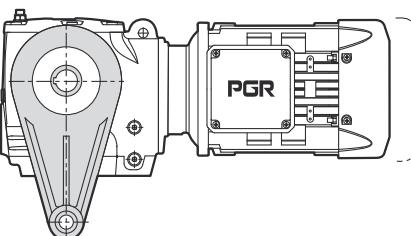
Tek mil çıkışlı, Gövdeden montajlı, B5 Flanşlı  
Helisel sonsuz dişili, W kovanlı reduktör

Helical worm geared motor,  
Solid shaft, case mounted, Flange B5, With free input shaft



**PSH 2080...DG/TK - 80S/4A** R

Delik milli, Gövdeden montajlı, Tork kolu  
Helisel sonsuz dişlili, Motorlu redüktör  
Helical worm geared motor,  
Hollow shaft, Case mounted, Torque arm, With motor

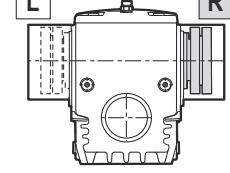
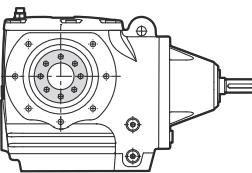
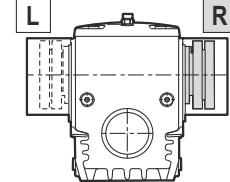
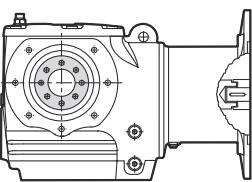
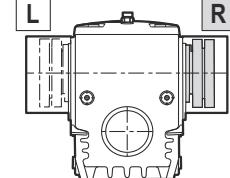
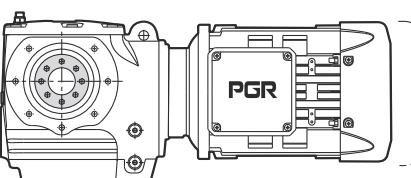


**PSH 2080...DG/TK - W** R

Delik milli, Gövdeden montajlı, Tork kolu  
Helisel sonsuz dişlili, W kovanlı redüktör  
Helical worm geared motor,  
Hollow shaft, Case mounted, Torque arm, With free input shaft

**PSH 2080...DG/KS - 80S/4A** R

Delik milli, Gövdeden montajlı, Konik sıkıtmalı  
Helisel sonsuz dişlili, Motorlu redüktör  
Helical worm geared motor,  
Hollow shaft, Case mounted, Shrink disc, With motor

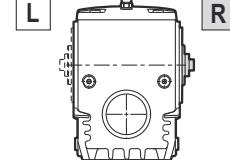
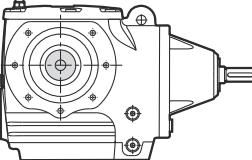
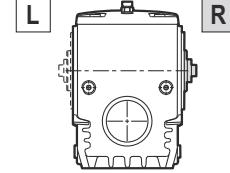
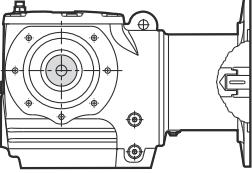
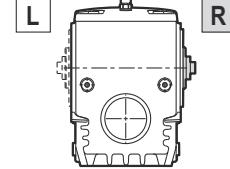
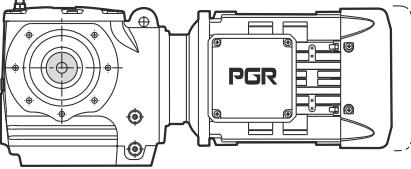


**PSH 2080...DG/KS - W** R

Delik milli, Gövdeden montajlı, Konik sıkıtmalı  
Helisel sonsuz dişlili, W kovanlı redüktör  
Helical worm geared motor,  
Hollow shaft, Case mounted, Shrink disc, With free input shaft

**PSH 2080...DG/Ç - 80S/4A** R

Delik milli, Gövdeden montajlı, Çekirme elementli  
Helisel sonsuz dişlili, Motorlu redüktör  
Helical worm geared motor,  
Hollow shaft, Case mounted, Fixing element, With motor



**PSH 2080...DG/Ç - IEC 80** R

Delik milli, Gövdeden montajlı, Çekirme elementli  
Helisel sonsuz dişlili, IEC adaptörlü redüktör  
Helical worm geared motor,  
Hollow shaft, Case mounted, Fixing element, With IEC adapter

**PSH 2080...DG/Ç - W** R

Delik milli, Gövdeden montajlı, Çekirme elementli  
Helisel sonsuz dişlili, W kovanlı redüktör  
Helical worm geared motor,  
Hollow shaft, Case mounted, Fixing element, With free input shaft

TR

## ÜRÜNLERİMİZ

### PSH 2080...DG/Ç-KK - 80S/4A R

Delik milli, Gövdeden montajlı, Çekirme elementli,  
Koruma kapaklı, Helisel sonsuz dişili, Motorlu redüktör

Helical worm geared motor, Hollow shaft,  
Case mounted, Fixing element and cover, With motor

### PSH 2080...DG/Ç-KK - IEC 80 R

Delik milli, Gövdeden montajlı, Çekirme elementli,  
Koruma kapaklı, Helisel sonsuz dişili, IEC adaptörlü redüktör

Helical worm geared motor, Hollow shaft,  
Case mounted, Fixing element and cover, With IEC adapter

### PSH 2080...DG/Ç-KK - W R

Delik milli, Gövdeden montajlı, Çekirme elementli,  
Koruma kapaklı, Helisel sonsuz dişili, W kovanlı redüktör

Helical worm geared motor, Hollow shaft,  
Case mounted, Fixing element and cover, With free input shaft

### PSH 2080...DG/B14 - 80S/4A

Delik milli, Gövdeden montajlı, B14 Flanşlı  
Helisel sonsuz dişili, Motorlu redüktör

Helical worm geared motor, Hollow shaft,  
Case mounted, Flange B14, With motor

### PSH 2080...DG/B14 - IEC 80

Delik milli, Gövdeden montajlı, B14 Flanşlı  
Helisel sonsuz dişili, IEC adaptörlü redüktör

Helical worm geared motor, Hollow shaft,  
Case mounted, Flange B14, With IEC adapter

### PSH 2080...DG/B14 - W

Delik milli, Gövdeden montajlı, B14 Flanşlı  
Helisel sonsuz dişili, W kovanlı redüktör

Helical worm geared motor, Hollow shaft,  
Case mounted, Flange B14, With free input shaft

### PSH 2080...DG/B5 - 80S/4A R

Delik milli, Gövdeden montajlı, B5 Flanşlı  
Helisel sonsuz dişili, Motorlu redüktör

Helical worm geared motor, Hollow shaft,  
Case mounted, Flange B5, With motor

### PSH 2080...DG/B5 - IEC 80 R

Delik milli, Gövdeden montajlı, B5 Flanşlı  
Helisel sonsuz dişili, IEC adaptörlü redüktör

Helical worm geared motor, Hollow shaft,  
Case mounted, Flange B5, With IEC adapter

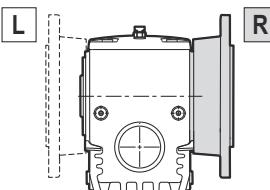
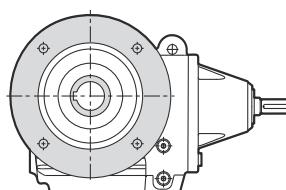
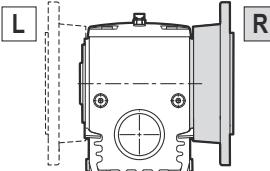
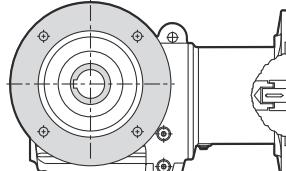
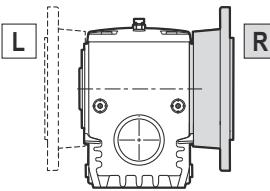
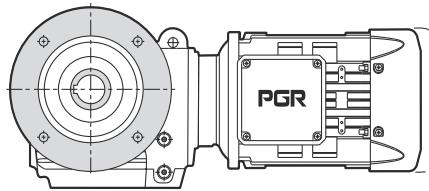
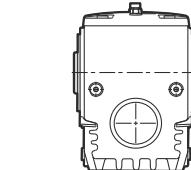
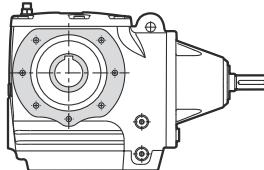
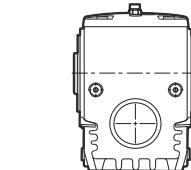
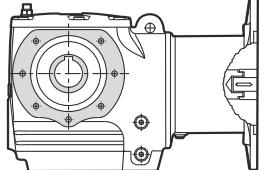
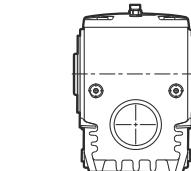
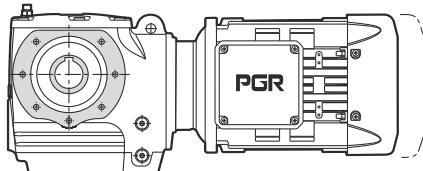
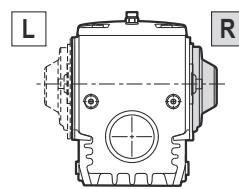
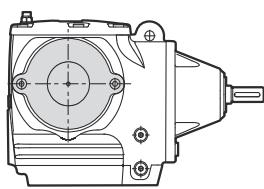
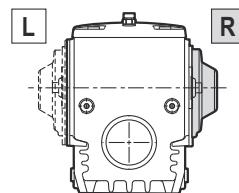
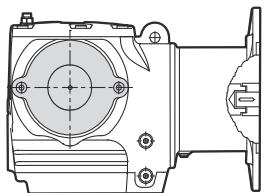
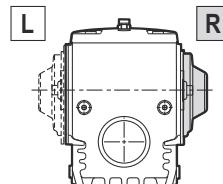
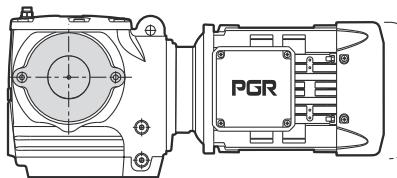
### PSH 2080...DG/B5 - W R

Delik milli, Gövdeden montajlı, B5 Flanşlı  
Helisel sonsuz dişili, W kovanlı redüktör

Helical worm geared motor, Hollow shaft,  
Case mounted, Flange B5, With free input shaft

EN

## PRODUCTS

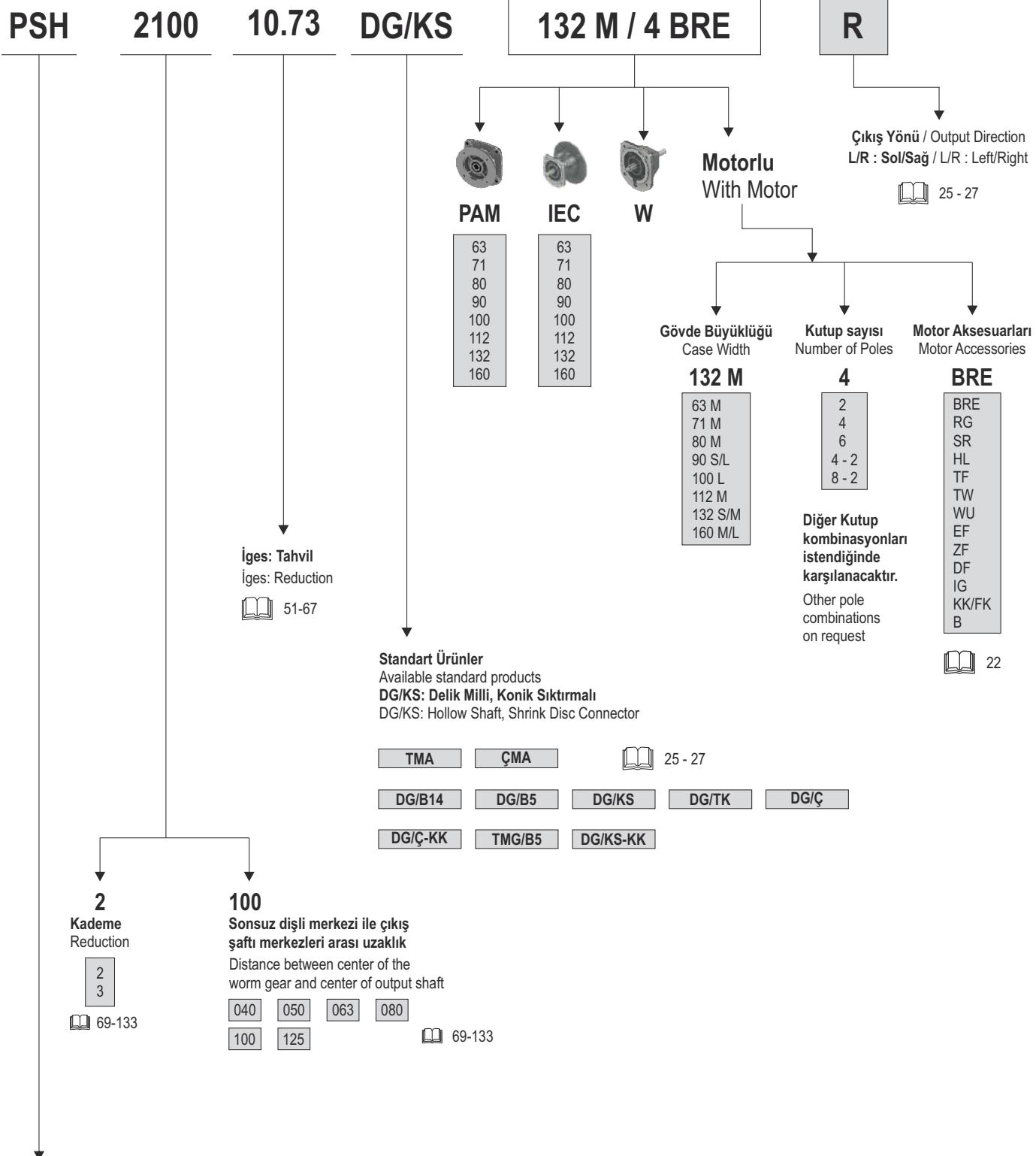


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## SİPARİŞ ÖRNEĞİ

EN

## EXAMPLE FOR ORDERING



TR

## YAĞLAMA

Çalıştırmadan veya uzun süreli olarak depoya kaldırıldan önce kör tapa sökülüp, havalandırma tapası takılarak aşırı basınç ve yağ sızıntısı önlenmeli dir.

Redüktörler fabrikadan çalışmaya hazır ve sentetik yağı doldurulmuş olarak gönderilirler. Bütün dişli üniteler aşağıdaki tablonun ortam sıcaklığı sütununda listesi verilen yağlayıcı (normal) ile dolu olarak sevk edilirler. Diğer ortam sıcaklıklar için listede verilen yağlayıcılar ek ücret karşılığında temin edilebilir.

Yağlayıcı her 10000 çalışma saatinde veya 2 yıl sonra değiştirilmelidir. Sentetik yağlar için yağı değişikliği her 20000 çalışma saatinde veya 4 yıl sonra yapılmalıdır. Zorlu çalışma koşullarında örneğin yüksek rutubet ve büyük sıcaklık değişimleri ve kötü çevre şartları gibi durumlarda daha kısa aralıklarla yağı değişimi yapılması tavsiye edilir. Yağ değişiminin üniteyi komple temizleme işlemi ile gerçekleştirilmeli önerilir. Rulman içerisindeki gres her 10000 çalışma saatinde değiştirilmeli ve yeni gres ile doldurulmalıdır. Bu işlem yapılırken rulmanın 1/3'unun gresle dolu olması sağlanmalıdır.

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## LUBRICATION

Lubricating oil properties and selection of oil must be correct for the reducers to have long life and to run with good performance. In order to prevent oil leakage during long period storage due to inner pressure, top plug should be removed according to assembly type and venting plug should be mounted.

Reducers are delivered as being filled with synthetic oil. Properties of oils depending on ambient temperature are presented at the following table. Gear units which are W or IEC adapter type and gear motors are charged with lubricant. Ambient temperature plays an important role for choosing lubricant. Relation between ambient temperature and properties of oils are shown in table.

Lubricants must be changed every 10000 hours or after two years, but this time changes when synthetic oil is used. Lubricants must be changed every 20000 hours or after four years if synthetic oil is used. However, operating conditions should be considered for changing oil time eg. in aggressive environment severe temperature changing, oil must be changed frequently. For bearings grease should be changed every 10000 running time and it should be done with fresh grease and least 1/3 of bearing must be covered.

**Not: Sentetik ve mineral yağlayıcılar birbirine karıştırılmamalıdır.**  
Note: Consider that different kind of oil (synthetic and mineral oil) should not be mixed.

Redüktör Tipi Type of gearbox	Yağ Tipi Type of Lubricant	Ortam Sıcaklığı Ambient Temp. °C	ISO vızkozite sınıfı ISO viscosity class	SHELL	MOBİL	BP	ESSO	DEA	ARAL	CASTROL	TRIBOL	KLÜBER
Helisel Dişili Redüktör  Helical Gearboxes	Mineral yağı	- 5...40 Normal	ISO VG 220	Shell Omala Oel 220	Mobilgear 600 XP 220	Energol GR-XP 220	Spartan EP 220	Deagear DX SAE 85W-90 Falcon CLP 220	Degol BG 220	Alpha SP 220 Alpha MW 220 Alpha MAX 220 Alpha SP 100 Alpha MW 100 Alpha MAX 220 Hyspin AWS 15 Hyspin SP 15 Hyspin ZZ 15	Tribol 1100/220	Klüberoil GEM 1-220
	Mineral oil	-15...25	ISO VG 100	Shell omala Oel 100	Mobilgear 600 XP 150	Energol GR-XP 100	Spartan EP 100	Deagear DX SAE 80W Falcon CLP 150	Degol BG 100	Tribol 1100/100	Klüberoil GEM 1-100	
	Sentetik yağı Synthetic oil	- 25...80	ISO VG 220	Shell Tivela Oel WB	Mobil Glygoyle 30	Enersyn SG-XP 220	ESSO Glycolube 220	Polydea PGLP 220	Degol GS 220	Alphasyn PG 220	Tribol 800/220	Klübersynth GH 6 - 220
	Biyolojik Sentetik yağı Biodegradable oil	- 25...80	ISO VG 220					Plantogear 220 S	Bio-Degol S 220	Carelube GES 220	Tribol Bio Top1418/220	Klüber - Bio GM 2 - 220
	Gıda yağları Food - grade oil	- 25...80	ISO VG 220	Cassida 220	Mobil SHC Cibus 220		GEAR OIL FM 220	Renolin 220	Degol FG 220	OPTIMOL optileb GE 220	Tribol Food Proof 1810/220	Klüberoil 4UH1 - 220
Rulmanlar  Anti Friction Bearings	Akıskan sentetik gres Synthetic fluid grease	- 35...60		Shell Tivela compound A	Mobil SHC Polyrex 005	Enersyn GSF	Fliessfett S 420	Glissando 6833 EP 00	Aralub SKA 00	Alpha Gel 00	Tribol 800/1000	Klübersynth GE 46 -1200
	Mineral yağlı gres	- 30...60 Normal		Alvania Fett R 3 oder Alvania Fett RL 3	Mobilux 3 Mobilux 2	Energrease LS 3	Beacon 3	Glissando 30 Glissando 20	Aralub HL 3 Aralub HL 2	Spheerol AP 3 Spheerol AP 2 LZV - EP Spheerol EPL 2	Tribol 3030/100-2 Tribol 4020/220-2 Tribol 3785	Centoplex 3 Centoplex 2
	Mineral oil grease	# - 50...110		Aero Shell Grease 16 oder 7	Mobiltemp SHC 32	Energrease LS 2	Beacon 2	Glissando FT 3	Aralub BAB EP 2	Product 783/46	Tribol 3499	Isoflex Topas NB52
	Sentetik gres Synthetic grease	# - 50...110					Beacon 325	Discor 8 - EP 2	Aralub SKL 2			

# -30°C altında ve 60°C üzerindeki ortam sıcaklıklarında şaffaktaki sızdırmazlık elemanı için özel kalitedeki malzeme kullanılmalıdır.

# Different materials should be used for sealing rings at operation temperature where temperature is below -30 °C and above 60 °C.

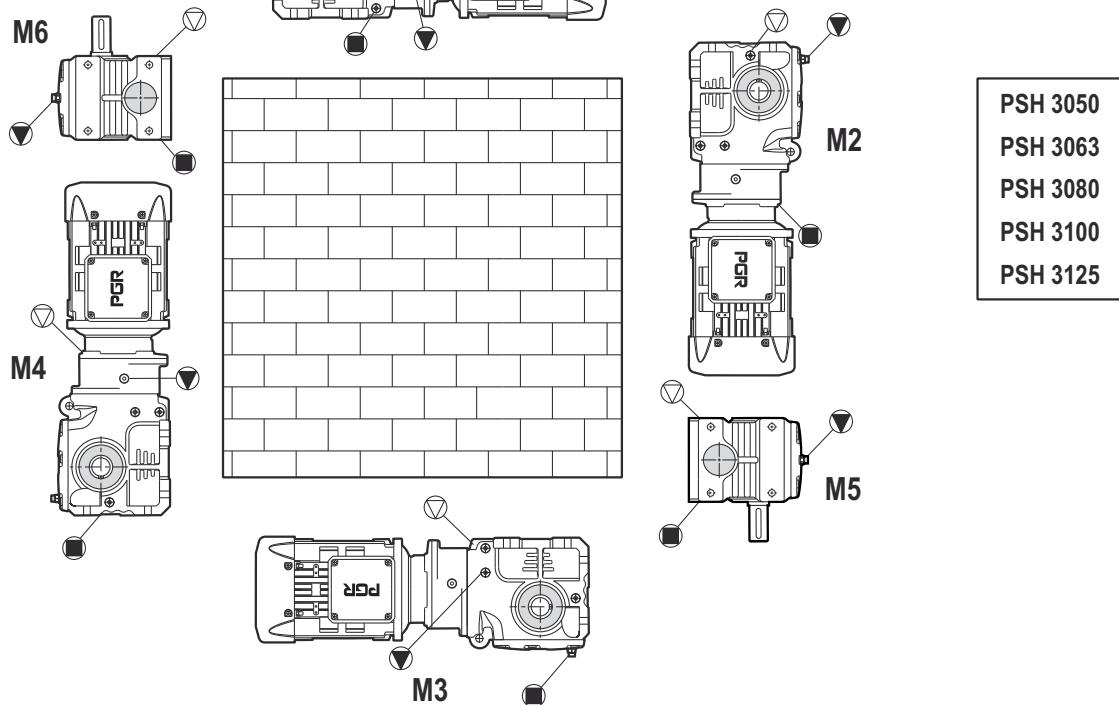
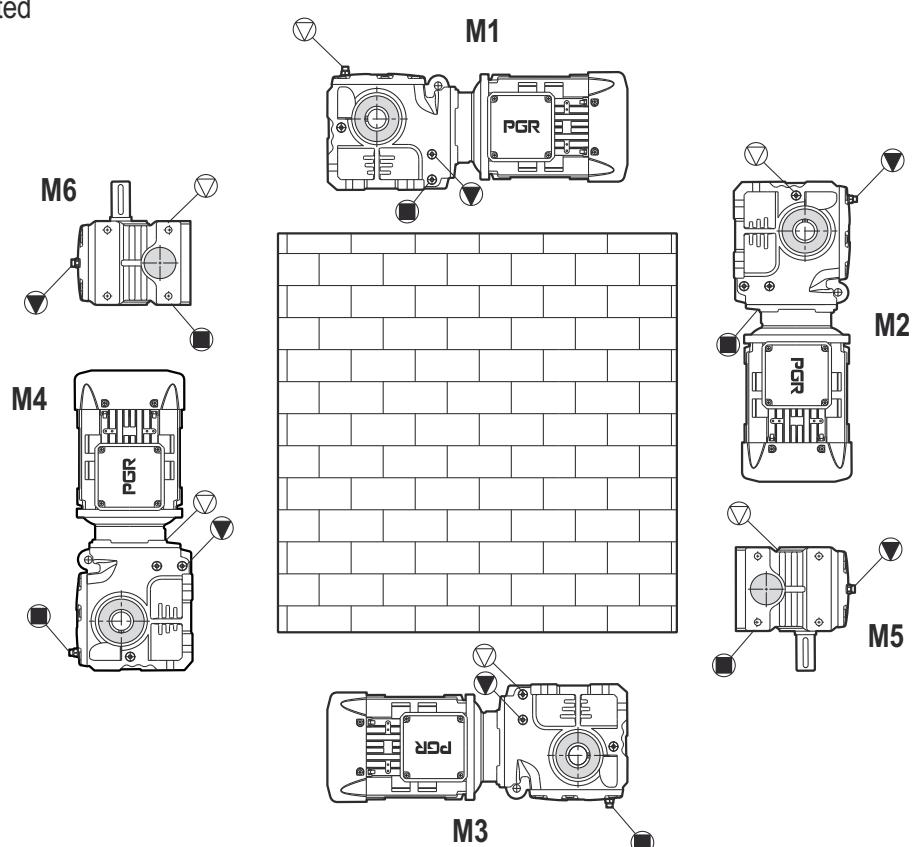
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## MONTAJ POZİSYONLARI

EN

## MOUNTING POSITIONS

## PSH Ayaklı / Foot Mounted

 PSH 2040  
 PSH 2050  
 PSH 2063  
 PSH 2080  
 PSH 2100  
 PSH 2125


Havalandırma tapası / Vent plug

Boşaltma tapası / Drain plug

Yağ Seviye tapası / Oil level

TR

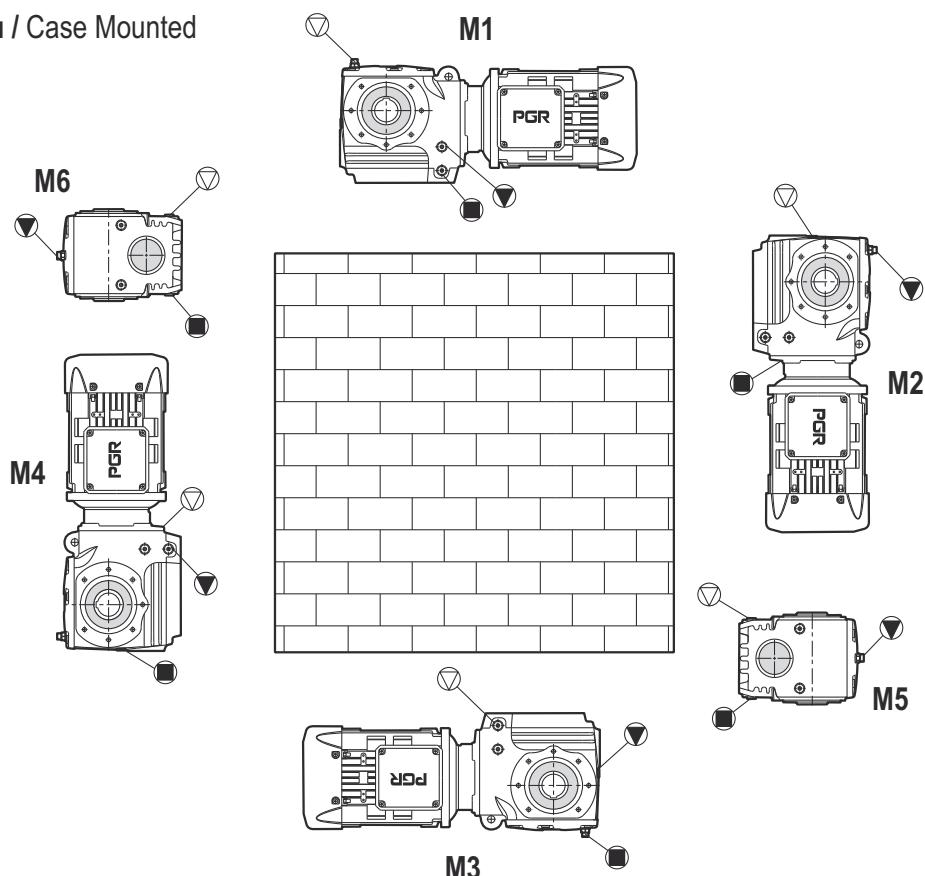
MONTAJ POZİSYONLARI

EN

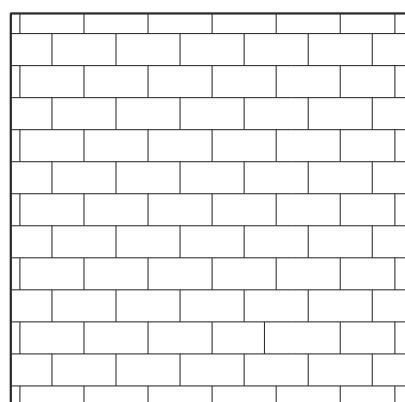
MOUNTING POSITIONS

PSH Gövdeden Montajlı / Case Mounted

PSH 2040  
PSH 2050  
PSH 2063  
PSH 2080  
PSH 2100  
PSH 2125

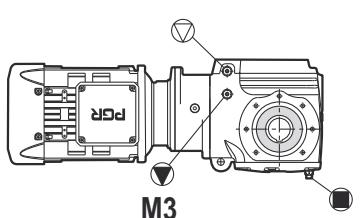


M6  
M4



PSH 3050  
PSH 3063  
PSH 3080  
PSH 3100  
PSH 3125

M4



VENT PLUG

DRAIN PLUG

OIL LEVEL

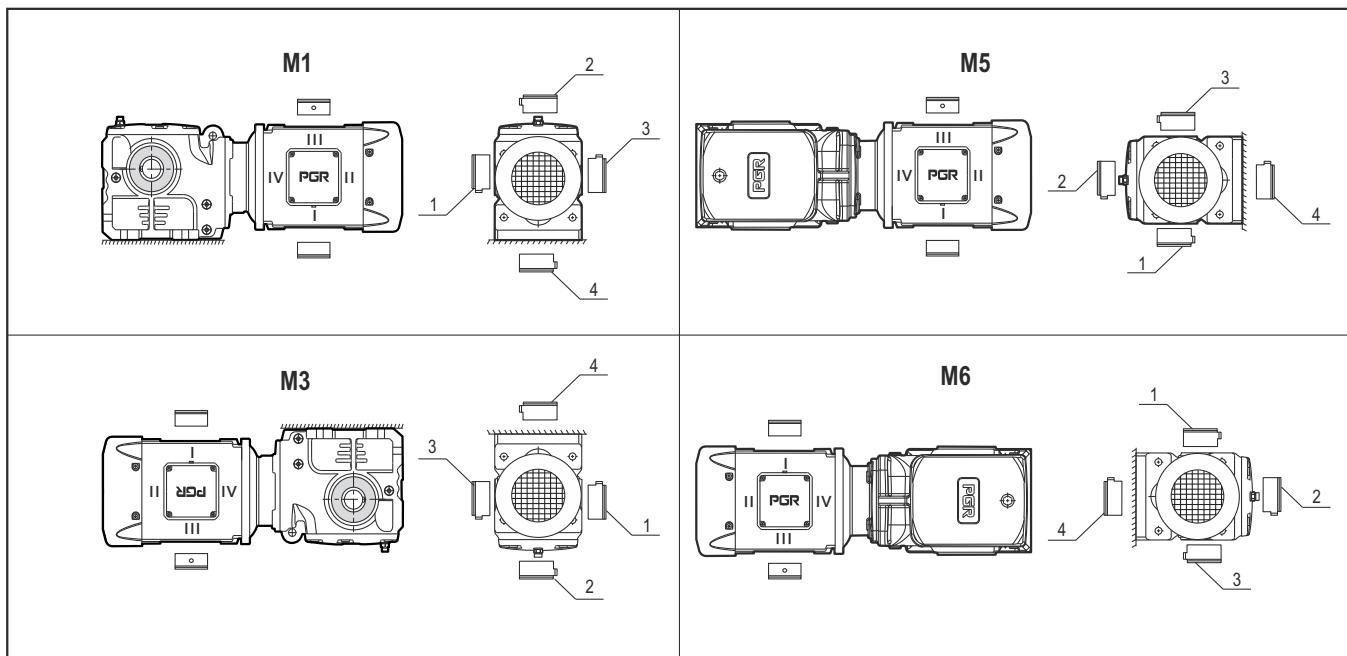
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## MONTAJ POZİSYONLARI

EN

## MOUNTING POSITIONS

## TERMINAL KUTUSU VE KABLO GİRİŞ YÖNLERİ / POSITION OF TERMINAL BOX AND CABLE ENTRY



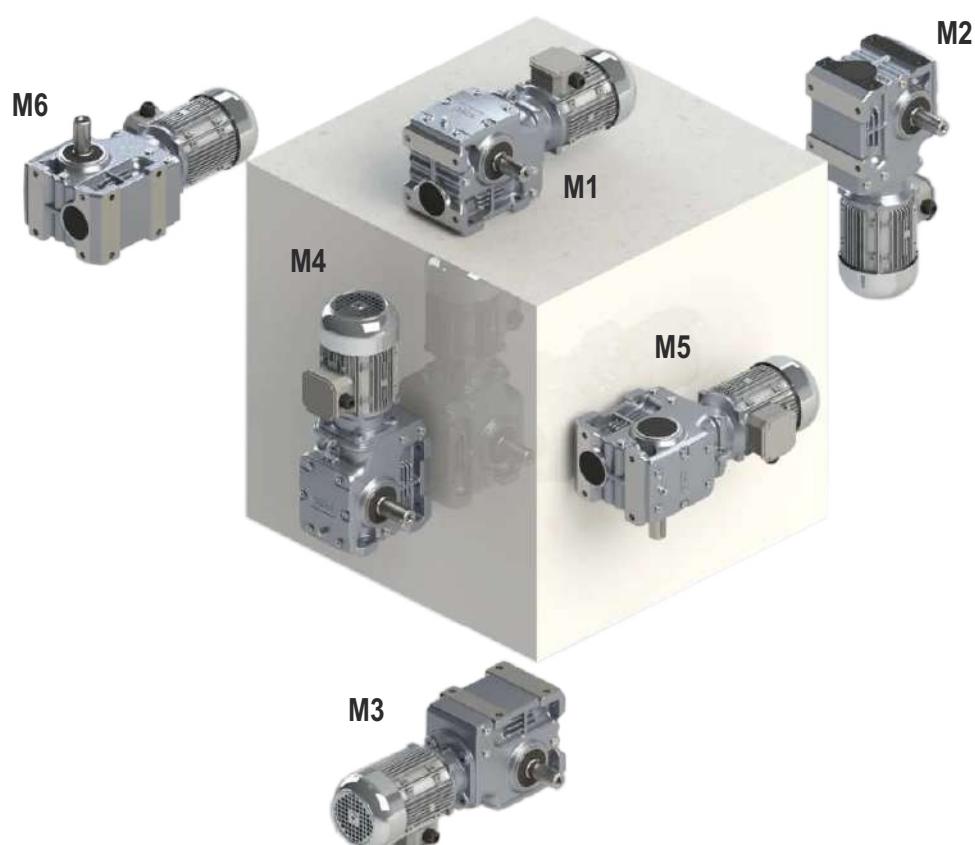
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MONTAJ POZİSYONLARI

EN

MOUNTING POSITIONS

Ayak Montajlı  
Foot Mounted



M6

M3

M4

M1

M5

M2

Gövdeden Montajlı  
Case Mounted

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## YAĞ MİKTAR TABLOSU

EN

## LUBRICATION LEVELS

(Litre) (L)	Ayak Montajlı / Foot Mounted						Gövdeden Montajlı / Case Mounted					
30-33	<b>M1</b>	<b>M2</b>	<b>M3</b>	<b>M4</b>	<b>M5</b>	<b>M6</b>	<b>M1</b>	<b>M2</b>	<b>M3</b>	<b>M4</b>	<b>M5</b>	<b>M6</b>
<b>PSH 2040</b>	0.50	0.65	0.65	0.65	0.55	0.55	0.55	0.85	0.80	0.65	0.55	0.55
<b>PSH 2050</b>	0.60	1.25	0.80	1.20	0.75	0.75	0.40	1.35	0.85	1.20	0.95	0.95
<b>PSH 2063</b>	0.45	1.80	1.35	1.65	1.05	1.05	0.45	1.60	1.25	1.60	1.35	1.35
<b>PSH 2080</b>	0.90	2.75	1.90	3.00	1.85	1.85	0.70	3.00	2.25	3.30	2.30	2.30
<b>PSH 2100</b>	1.60	6.00	3.80	5.95	3.50	3.50	1.35	5.70	4.40	5.00	4.00	4.00
<b>PSH 2125</b>	3.10	12.10	6.90	11.30	6.40	6.40	3.00	11.2	11.1	10.40	6.80	6.80

(Litre) (L)	Ayak Montajlı / Foot Mounted						Gövdeden Montajlı / Case Mounted					
30-33	<b>M1</b>	<b>M2</b>	<b>M3</b>	<b>M4</b>	<b>M5</b>	<b>M6</b>	<b>M1</b>	<b>M2</b>	<b>M3</b>	<b>M4</b>	<b>M5</b>	<b>M6</b>
<b>PSH 3050</b>	0.95	1.60	1.20	1.50	1.00	1.00	0.85	1.75	1.10	1.70	1.20	1.20
<b>PSH 3063</b>	0.90	2.40	1.75	2.10	1.30	1.30	0.90	2.10	1.50	1.95	1.60	1.60
<b>PSH 3080</b>	1.80	3.35	2.30	3.70	2.10	2.10	1.15	3.90	2.50	3.80	2.55	2.55
<b>PSH 3100</b>	2.20	8.10	4.40	7.35	4.00	4.00	2.15	6.90	5.00	7.10	4.45	4.45
<b>PSH 3125</b>	5.10	15.10	7.90	14.50	7.30	7.30	4.00	12.90	7.70	12.1	7.70	7.70

TR

## KİLİT

Opsiyonel olarak kilitlerimiz mevcuttur. Bu kilitler tek yöne dönmeye izin verirken, diğer yöne dönmeyi engeller. 63 gövde ve üzeri üç fazlı motorlar, W kovanları ve IEC adaptörleri yağlanması yapılmış kilit ile donatılabilir. Bu kilitler çıkartılabilir, merkezkaç kuvveti tarafından kontrol edilir ve yaklaşık olarak 900 d/dk üzerine çıktıktan sonra aşınmaya maruz kalır.

Kilit mekanizmali redüktörler için çıkış şaftının veya milinin dönde yönünün verilmesi gereklidir. Dönde yönü çıkış şaftına veya çıkış miline göre düzenlenir.

Kararlaştırılan dönde yönü için, tarif edilen dönde yönü her zaman çıkış şaftına veya miline göre düzenlenir. Delik milli redüktörler ise konik sıkıştırma tarafından belirlenir.

**DİKKAT:** Motoru ve sistemi çalıştırmadan önce redüktörün dönde yönünü kontrol ediniz. Redüktör üzerindeki oklar dönde yönünü gösterir.

Bloke edilen yön **CCW** ise      Dönde Yönü **CW**

Bloke edilen yön **CW** ise      Dönde Yönü **CCW**

**CW** : Saat yönü

**CCW** : Saat yönü tersi

EN

## BACKSTOP

Backstop system is available for all types of helical gear unit. Lubricated backstop system could be used optionally for motor size 63 and greater, W cylinder and IEC adapters. Backstop system permits just one direction rotation it resists another direction rotation. Rotation speed is important for abrasion. Nearly 900 min<sup>-1</sup> and greater rotation speed influece abration.

Please, determine direction of rotation when you offer. Direction of rotation should be determined according to output shaft.

Arrows which is designated by 'CW' or 'CCW' shows locking direction from viewing at face of output shaft end. For hollow shafts gearboxes this direction determined by shrinkdisc side.

**Precaution:** When you receive gear units, please check direction of rotation before running or installation to avoid damage.

If Locking direction is **CCW**,      Rotational direction is **CW**

If Locking direction is **CW**,      Rotational direction is **CCW**

**CW** : Clockwise rotation

**CCW** : Counterclockwise rotation

Tip Type	Çıkış Shaftı Dönüş Yönü: CW Output shaft rotational direction: CW	Çıkış Shaftı Dönüş Yönü: CCW Output shaft rotational direction: CCW
<b>2 kademe helisel - sonsuz redüktör</b> <b>PSH 2040... PSH 2125</b> Çıkış şaftı L veya konik sıkıştırma R'de 2-stage helical worm gear motor: PSH 2040... PSH 2125 Output shaft position L or shrink disc at R	<b>Motor Dönüş Yönü CW</b> Motor rotational direction CW	<b>Motor Dönüş Yönü CCW</b> Motor rotational direction CCW
<b>2 kademe helisel - sonsuz redüktör</b> <b>PSH 2040... PSH 2125</b> Çıkış şaftı R veya konik sıkıştırma L'de 2-stage helical worm gear motor: PSH 2040... PSH 2125 Output shaft position R or shrink disc at L	<b>Motor Dönüş Yönü CCW</b> Motor rotational direction CCW	<b>Motor Dönüş Yönü CW</b> Motor rotational direction CW
<b>3 kademe helisel - sonsuz redüktör</b> <b>PSH 3050... PSH 3125</b> Çıkış şaftı L veya konik sıkıştırma R'de 3-stage helical worm gear motor: PSH 3050... PSH 3125 Output shaft position L or shrink disc at R	<b>Motor Dönüş Yönü CCW</b> Motor rotational direction CCW	<b>Motor Dönüş Yönü CW</b> Motor rotational direction CW
<b>3 kademe helisel - sonsuz redüktör</b> <b>PSH 3050... PSH 3125</b> Çıkış şaftı R veya konik sıkıştırma L'de 3-stage helical worm gear motor: PSH 3050... PSH 3125 Output shaft position R or shrink disc at L	<b>Motor Dönüş Yönü CW</b> Motor rotational direction CW	<b>Motor Dönüş Yönü CCW</b> Motor rotational direction CCW

A



B



**CCW**

**CCW**

**CW**

**CW**

TR

## TOLERANSLAR

EN

## TOLERANCES

## MOTOR VE REDÜKTÖRLERDE BOYUT - ÇİZİM BİLGİLERİ

Motor ölçüler istenen opsiyona göre ölçülerini değiştirebilir.

## DELİK MİLLİLER

Delik mil çapı toleransı için ( DIN 748 ) ISO H7.  
Müşteri mili çap toleransı ISO h6. "H" yükleme tipi bulunuyorsa ISO k6

## IEC - ADAPTÖR

Flanş merkezi çap toleransı için ISO H7

## GİRİŞ VE ÇIKIŞ ŞAFTLARI

Mil çapı toleransı ( DIN 748 ) :

$\varnothing$  14 ile  $\varnothing$  50 mm arası için ISO k6,  
 $\varnothing$  50 mm üzeri için ISO m6

Şaftta dış çekilmiş delikler için DIN 332/2 ye göre;

= $\varnothing$ 13 - $\varnothing$ 16	M5	
> $\varnothing$ 16 - $\varnothing$ 21	M6	
> $\varnothing$ 21 - $\varnothing$ 24	M8	
> $\varnothing$ 24 - $\varnothing$ 30	M10	
> $\varnothing$ 30 - $\varnothing$ 38	M12	69-113
> $\varnothing$ 38 - $\varnothing$ 50	M16	
> $\varnothing$ 50 - $\varnothing$ 85	M20	
> $\varnothing$ 85 - $\varnothing$ 130	M24	

Kama yatakları DIN 6885

Şaft boyu "h" DIN 747

## FLAŞLAR

Flanş merkezi çap toleransı ( DIN 42948 );

$\leq$   $\varnothing$  230 mm' ye kadar ISO j6,  
 $>$   $\varnothing$  230 mm üzeri için ISO h6

## DIMENSIONS OF GEARED MOTORS AND GEARBOXES- DRAWING INFORMATION

Motor dimension could be changed according to customer purchase.

## HOLLOW SHAFTS

Tolerance of hollow shaft (DIN 748) ISO H7.  
Tolerance of customer's solid shaft which is used for hollow shaft ISO h6, with type of load classification 'H' which is heavy-shock operation ISO k6.

## IEC - ADAPTER

Diameter tolerance of flange centering is machined according to ISO H7.

## INPUT AND OUTPUT SHAFT

Tolerances of solid shaft ( DIN 748 ) :

between  $\varnothing$  14 -  $\varnothing$  50 mm to ISO k6,  
greater than  $\varnothing$  50 mm to ISO m6.

Tapped center hole is machined according to DIN 332, sheet 2;

= $\varnothing$ 13 - $\varnothing$ 16	M5	
> $\varnothing$ 16 - $\varnothing$ 21	M6	
> $\varnothing$ 21 - $\varnothing$ 24	M8	
> $\varnothing$ 24 - $\varnothing$ 30	M10	
> $\varnothing$ 30 - $\varnothing$ 38	M12	69-113
> $\varnothing$ 38 - $\varnothing$ 50	M16	
> $\varnothing$ 50 - $\varnothing$ 85	M20	
> $\varnothing$ 85 - $\varnothing$ 130	M24	

Keyways are machined according to DIN 6885, sheet 1

Shaft heights are machined according to "h" to DIN 747

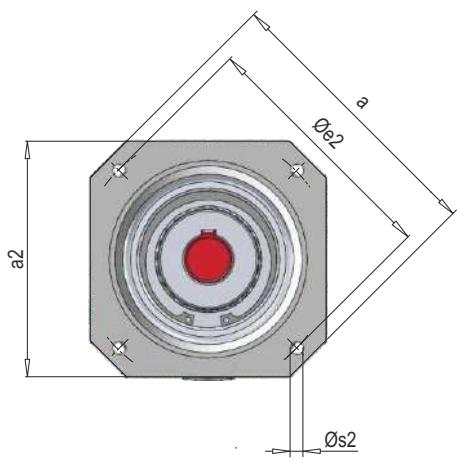
## FLANGES

Diameter tolerance of flange centering is machined according to (DIN 42948);

$\leq$   $\varnothing$  230 mm to ISO j6,  
 $>$   $\varnothing$  230 mm to ISO h6

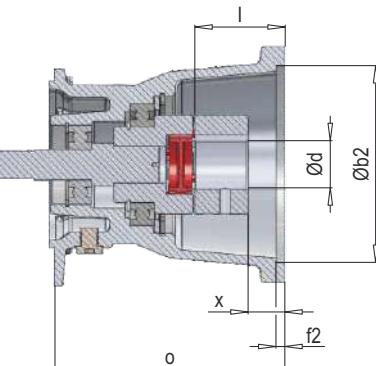
TR

SERVOMOTOR ADAPTÖRÜ



EN

SERVOMOTOR ADAPTERS



Redüktör Tipi Gear Unit Type	Motor Büyüklüğü / Motor Size							Şaft Ebatı Shaft Size		Silindir Cylinder o	$M_{knom}$ [Nm]	Adaptör Tipi Adapter Type
	a	a2	b2	e2	f2	s2	x	d	l			
<b>PSH 2050</b>	120	96	80	100	4	M6	15	19	40	124	10	Servo 100/160 S
<b>PSH 2063</b>												
<b>PSH 2080</b>												
<b>PSH 2050</b>	165	126	110	130	4	M8	20	24	50	136	35	Servo 130/160 S
<b>PSH 2063</b>												
<b>PSH 2080</b>												
<b>PSH 2100</b>	155	126	110	130	4	M8	20	24	50	150	35	Servo 130/250 S
<b>PSH 2050</b>	186	155	130	165	5	M10	23	32	58	151	95	Servo 165/160 S
<b>PSH 2063</b>												
<b>PSH 2080</b>												
<b>PSH 2100</b>	186	155	130	165	5	M10	23	32	58	166	95	Servo 165/250 S
<b>PSH 2100</b>	240	192	180	215	5	M12	45	38	80	187	95	Servo 215/250 S
<b>PSH 2125</b>	240	192	180	215	5	M12	24	38	80	229	310	Servo 215/300 S
<b>PSH 2125</b>	350	260	250	300	5	M16	26	48	82	231	310	Servo 300/300 S

SEP tipi servo motor bağlantı adaptörünün bağlantısı kamalı olarak yapılmaktadır. SEK tiplerinde ise servo motor adaptörünün bağlantısı setuskur civata sıkıltırması ile yapılmaktadır.

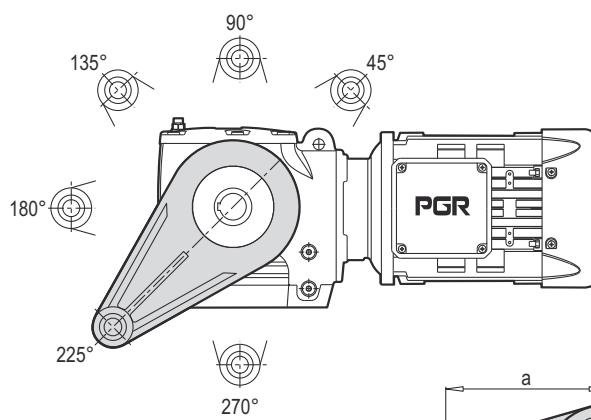
Servo motor bağlantı adaptörünün bağlantılı flanşının farklı olması durumunda yüksek adeteki siparişler üretime alınır.

For connecting SEP adapter which is shown above on this page, servo motor's output shaft is designed with locking key. For connecting SEK type adapter, connecting is supplied with a clamp coupling sleeve.

An intermediate flange is required when other servo motor types are used with IEC adapter. Offers are manufactured gladly by PGR.

TR

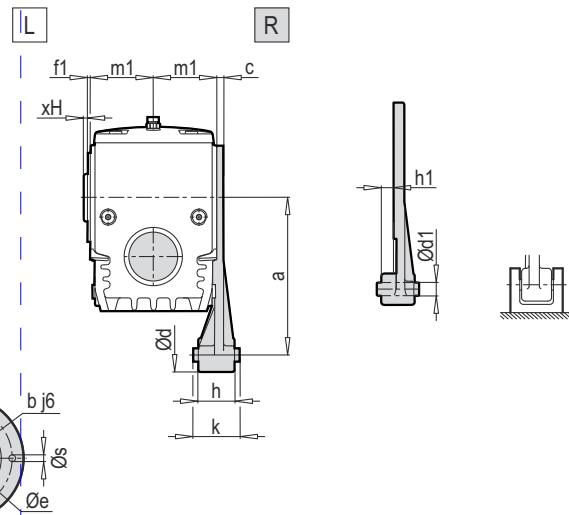
## TORK KOLU



EN

## TORQUE ARM

TK



Tork kolunun pozisyonlanması  
Positions of torque arm

PSH 2050 DG/TK ... 2125 DG/TK için 45°...270° / PSH 2050 DG/TK ... 2125 DG/TK for 45°...270°

PSH 3050 DG/TK ... 3125 DG/TK için 45°...270° / PSH 3050 DG/TK ... 3125 DG/TK for 45°...270°

PSH 2040 için sadece 90° - 180° - 270° / Only 90° - 180° - 270° for PSH 2040

Tip Type	Montaj Ölçüleri Mounting Dimensions												Ana Ölçüler Outline Dimensions	
	a	b j6	c	d	d1	f1	h	h1	k	s	e	m1	xH	
PSH 2040 DG/TK	110	60	10	35	10.5	-	32	8	36	6.6	75	57	3	
PSH 2050 DG/TK PSH 3050 DG/TK	130	95	14	40	10.5	3	32	10	36	9	115	60	3	
PSH 2063 DG/TK PSH 3063 DG/TK	160	95	14	40	10.5	3	32	11.5	36	9	115	67	4	
PSH 2080 DG/TK PSH 3080 DG/TK	200	130	13.5	40	10.5	4	32	9	36	11	165	75	5	
PSH 2100 DG/TK PSH 3100 DG/TK	250	180	16	60	16.5	4	56	20.5	60	14	215	92	5	
PSH 2125 DG/TK PSH 3125 DG/TK	310	230	18	60	16.5	4	56	29.5	60	14	265	115	6	

Sipariş verirken tork kolunun pozisyonunu belirtiniz. (Örn. 180°)  
Tork kolu L yada R tarafına bağlanabilir.

Determine position of torque arm when commission.( e.g. 180°)

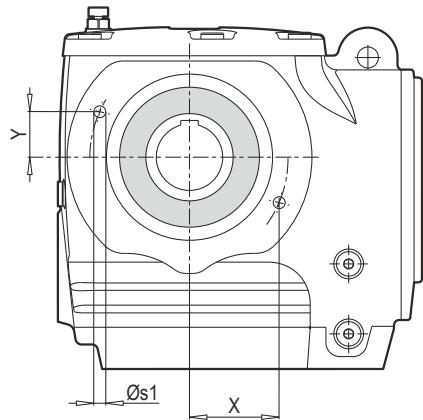
Determine mounted and connecting position for instance side L or side R of gear unit when you commission.

TR

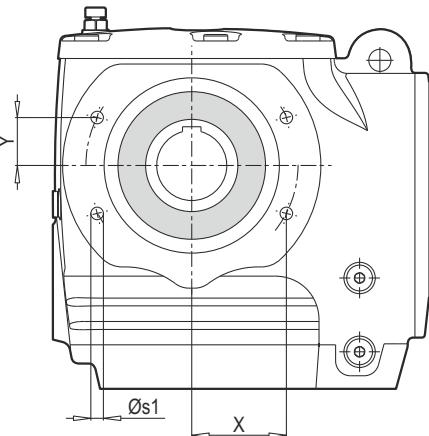
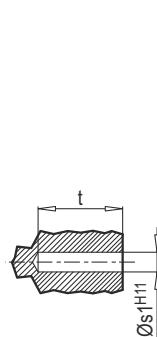
MERKEZLEME PİMİ

EN

GUIDE PINS



PSH 2050 DG ... PSH 3100 DG



PSH 2125 DG ... PSH 3125 DG

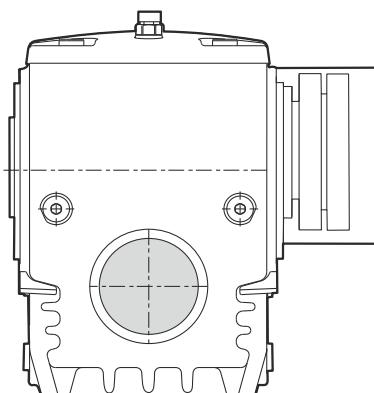
Tip / Type	s1 <sup>H11</sup> x t	X	Y
<b>PSH 2050 DG PSH 3050 DG</b>	2 X Ø8 X 12	56.14	12.45
<b>PSH 2063 DG PSH 3063 DG</b>	2 X Ø8 X 12	56.14	12.45
<b>PSH 2080 DG PSH 3080 DG</b>	2 X Ø10 X 15	80.54	17.86
<b>PSH 2100 DG PSH 3100 DG</b>	2 X Ø12 X 20	104.95	23.27
<b>PSH 2125 DG PSH 3125 DG</b>	4 X Ø12 X 20	111.75	71.19

TR

## KONİK SIKTIRMA

EN

## SHRINK DISC



Konik sıkıştırma, genellikle kullanıcı milinin karşı tarafına montaj edilmeli dir. Şaft çapı ISO h6 veya f6'ya göre imal edilmelidir.

(f6= Kolay montaj)

**S** = h6 veya f6 ile konik sıkıtmamanın güvenirliliği.

**S** = Assurance of shrink disc (with h6 and f6 tolerance)

**MA** = Civatayı sıkmak için gerekli olan tork

**MA** = Screw torque for tightening

**Zs** = Vida miktarı

**Zs** = Amount of screw

**M<sub>amax</sub>** = max. izin verilebilir çıkış momenti

**M<sub>amax</sub>** = maximum allowable output moment

When customer shaft is installed to the gear unit, shrink disc should be mounted on opposite side of it. Customer diameter shaft should be machined according to ISO h6 or f6 tolerances.

(f6= For easy assembling)

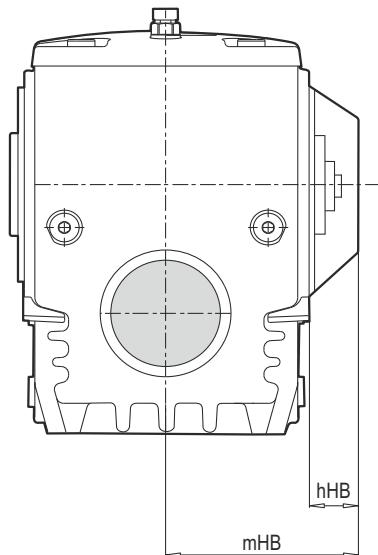
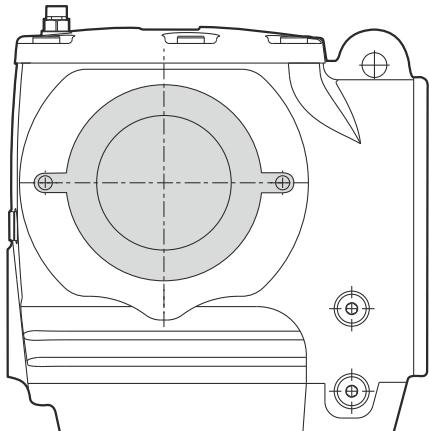
Redüktör Tipi Gearbox Type	Konik Sıkıştırma Shrink Disc				Hexagonal Screw Altıköşe Başlı Civata DIN 931 / DIN 933* 10.9Vz		
	Tip Type	M <sub>amax</sub> [Nm]	s <sub>h6</sub>	s <sub>f6</sub>	d x l	Zs	M <sub>A</sub> [Nm]
PSH 2050 KS-KK	KS 25 / 35	182	2.8	2.3	M5 X 25	8	7
PSH 2050 KS-KK	KS 30 / 40	182	5.4	4.7	M6 X 35*	8	12
PSH 2063 KS-KK	KS 30 / 40	383	2.6	2.2	M6 X 35*	8	12
PSH 2063 KS-KK	KS 35 / 46	383	3.0	3.2	M6 X 35*	10	12
PSH 2080 KS-KK	KS 40 / 55	779	3.0	2.6	M8 X 40	8	30
PSH 2080 KS-KK	KS 45 / 55	779	4.1	3.8	M8 X 40	8	30
PSH 2100 KS-KK	KS 50 / 62	1604	2.7	2.6	M8 X 40	10	30
PSH 2100 KS-KK	KS 60 / 76	1604	5.1	4.7	M10 X 50	10	59
PSH 2125 KS-KK	KS 60 / 76	3120	2.6	2.4	M10 X 50	10	59
PSH 2125 KS-KK	KS 70 / 90	3120	4.4	4.1	M12 X 70*	10	100

TR

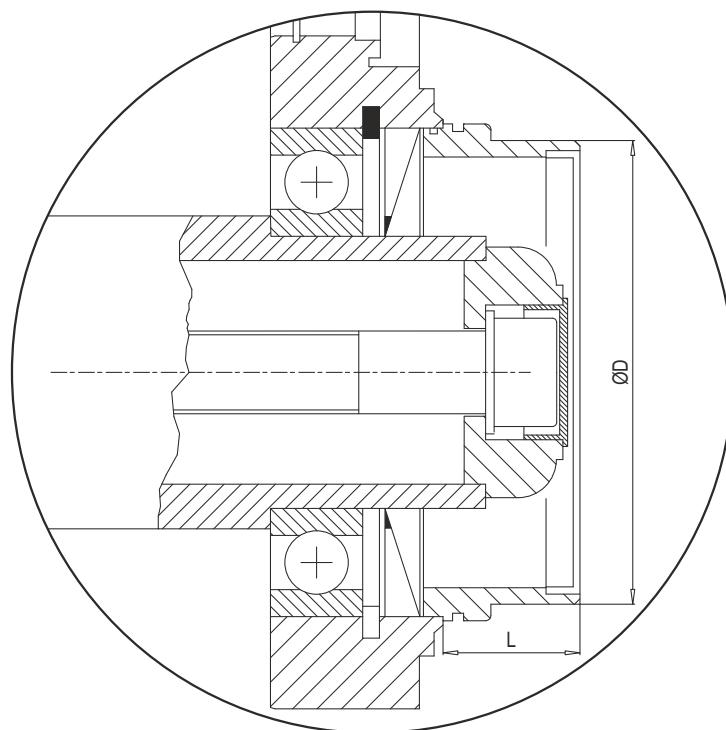
KORUMA KAPAĞI

EN

COVER



Tip / Type	hHB	mHB
<b>PSH 2050 DG/KK PSH 3050 DG/KK</b>	38	98
<b>PSH 2063 DG/KK PSH 3063 DG/KK</b>	38	105
<b>PSH 2080 DG/KK PSH 3080 DG/KK</b>	42	117
<b>PSH 2100 DG/KK PSH 3100 DG/KK</b>	50	142
<b>PSH 2125 DG/KK PSH 3125 DG/KK</b>	54	169



Tip / Type	ØD	L
<b>PSH 2050 PSH 3050</b>	81	25
<b>PSH 2063 PSH 3063</b>	86	28
<b>PSH 2080 PSH 3080</b>	105	35
<b>PSH 2100 PSH 3100</b>	136	40
<b>PSH 2125 PSH 3125</b>	151	40

TR

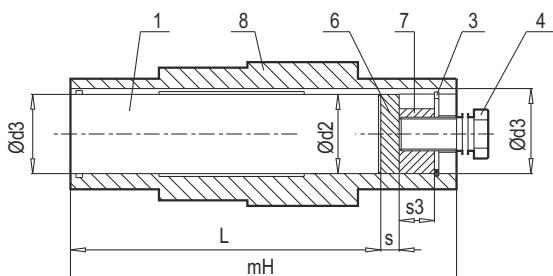
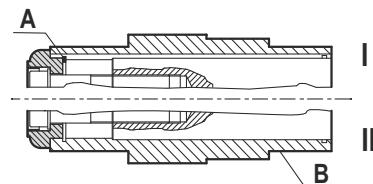
## ÇEKİRME KİTİ

### Çekirme Kiti

Çekirme kiti, şaft montajlı dişli ünitelerinde opsiyonel olarak bulunur.

#### Kullanım Şartları:

- Kullanılacak müşteri miliinin merkezinde DIN 332/2 standartlarında bir delik açılmışmalıdır.
- Müşterinin mili, faturalı yada faturasız olsa da, çekirme kiti ile sabitlenebilir.
- I 'deki montaj kullanıldığında, müşteri mili, redüktör şaftı içinde bulunan segman ile tutturulur.( Parça A )
- II 'deki montaj kullanıldığında, müşteri miliinin üzerinde bulunan fatura kullanılarak doğrudan redüktör şaftı üzerine tutturulur.( Parça B )



DEMONTAJ / DISASSEMBLY

L= max. kullanıcı şaft boyu

L= maximum length of the solid shaft

- 1) Müşteri mili
- 2) Rondela DIN 127
- 3) \* İç Segman DIN 472
- 4) \* Çekirme civatası
- 5) Alyan başlı civata DIN 912
- 6) \* Yaylı rondela
- 7) \* Somun
- 8) Redüktör şaftı
- 9) Çekirme rondelası

\*Dikkat, yıldızlı ürünler PGR tarafından temin edilmez.

#### DEMONTAJ:

- 1) Alyanbaşlı civata sökülmeliidir. (poz.5)
- 2) Çekirme rondelası çıkartılmalıdır. (poz.9)
- 3) Yaylı rondela takılmalıdır. (poz.6)
- 4) Somun yerleştirilmelidir. (poz.7)
- 5) Segman takılmalıdır. (poz.3)
- 6) Çekirme civatasını gevşeterek müşteri mili şafttan ayrılmalıdır. (poz.4)

#### KOŞULLAR:

Kullanıcı mili DIN 332/2' e göre merkezine diş açılmış delik gerekmektedir. Müşteri mili "L" uzunluğunu geçmemelidir aksi halde çekirme işlemi uygulanamaz. (pos. 5,6,7)

#### MONTAJ:

- 1) Müşteri mili, redüktör şaftının içérisine yerleştirilmelidir. (poz.8)
- 2) Çekirme rondelası redüktör şaftının içéine yerleştirilmelidir.
- 3) Çekirme rondelası alyan başlı civata ve rondela sabitlenmelidir. (poz.2-5)

EN

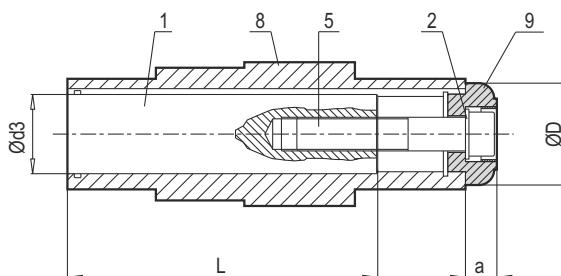
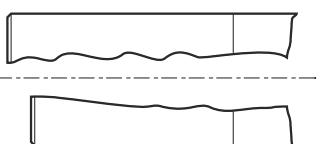
## PULLER KİT

### Puller Kit

The puller kit is optionally available on shaft mounted gear units.

#### Using conditions:

- The centre hole must be DIN 332/2 for customer solid shaft.
- The customer shaft can be fixed with the puller kit (with shoulder or without shoulder)
- When the assembly in Fig. I is used, the customer shaft is fasten by the circlip in the gear unit shaft.(Track A)
- When the assembly in Fig. II is used,It is fasten directly to the gearbox shaft using the invoice on the customer shaft.



MONTAJ / ASSEMBLY

- 1) Customer's shaft
- 2) Washer DIN 127
- 3) \* Circlip DIN 472
- 4) \* Puller screw
- 5) Socket head screw DIN 912
- 6) \* Thrust washer
- 7) \* Nut
- 8) Hollow shaft
- 9) Puller washer

\*Star signs are shown this item are not provided by PGR

#### DISASSEMBLING:

- 1) Loosen the socket head screw (5)
- 2) Remove puller washer (9)
- 3) Install spring washer (6)
- 4) Install nut(7)
- 5) Install circlip (3)
- 6) Remove solid shaft from hollow shaft with using puller screw (4)

#### CONDITIONS

The user shaft must be threaded to the center according to DIN 332/2. The customer shaft must not exceed the "L" length, otherwise the puller cannot be applied. (pos. 5,6,7)

#### ASSEMBLING:

- 1) The customer shaft must be mounted inside the gear units shaft. (8)
- 2) The puller washer must be mounted inside the gear units shaft. (9)
- 3) The bolt and washer must be fixed with the puller washer. (2-5)

TR

ÇEKİRME ÖLÇÜ TABLOSU

EN

DIMENSION TABLE OF FIXING ELEMENT

## PSH 2040 DG/Ç ... PSH 2125 DG/Ç

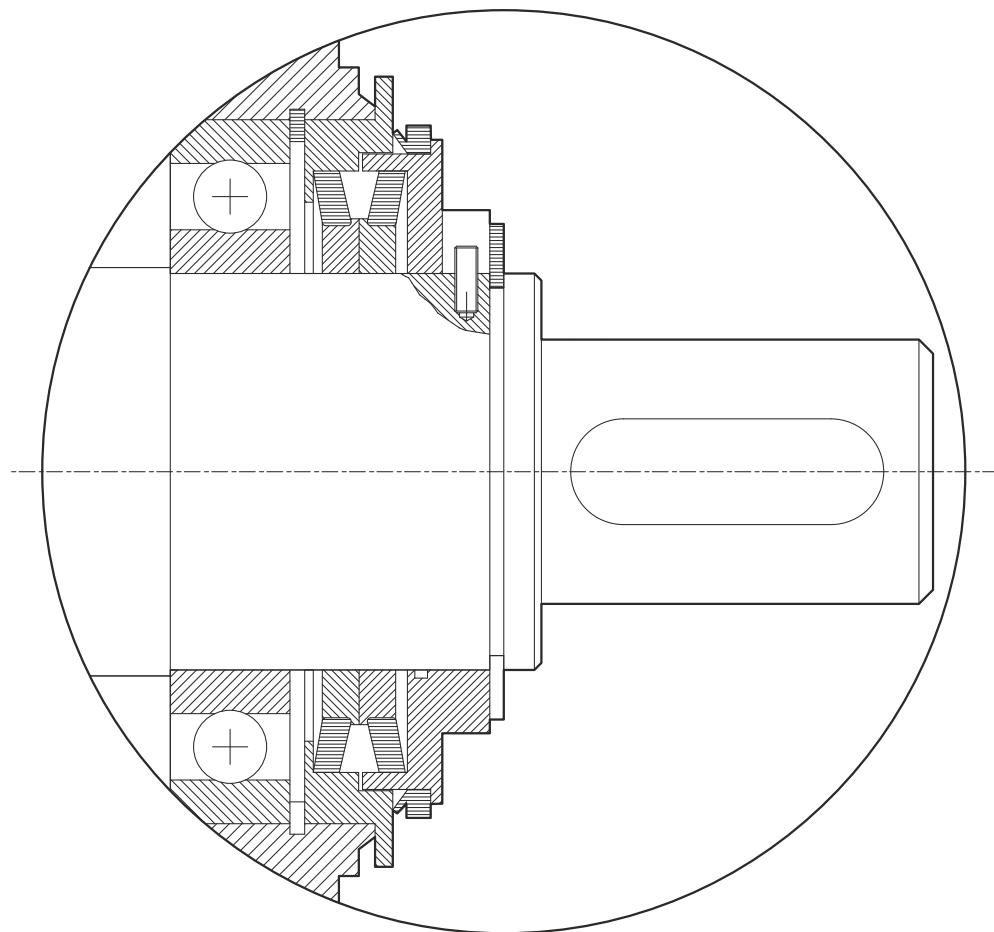
Tip / Type	1 L	2	3	4	5	6			7		8 d x mH	9	
						d2	s	d3	s3			a	D
PSH 2040 DG/Ç	100	A6	120 x 1.5	M10	M6 X 30	19.9	3	19.9	10	M10	20 X 120	15	30
PSH 2050 DG/Ç	110	A10	125 x 1.2	M12	M10 X 45	24.9	3	24.9	12	M12	25 X 132	20	38
	110	A10	130 x 1.2	M12	M10 X 45	29.9	3	29.9	12	M12	30 X 132	20	40
PSH 2063 DG/Ç	125	A10	135 x 1.5	M12	M10 X 45	29.9	3	12	12	M12	30 X 148	20	40
	120	A12	140 x 1.75	M16	M12 X 55	34.9	3	16	16	M16	35 X 148	24.5	45
PSH 2080 DG/Ç	135	A16	140 x 1.75	M16	M16 X 70	39.9	4	39.9	16	M16	40 X 168	25	55
	135	A16	145 x 2.0	M16	M16 X 70	44.9	4	44.9	16	M16	45 X 168	26	60
PSH 2100 DG/Ç	165	A16	150 x 2.0	M20	M16 X 70	49.9	4	49.9	20	M20	50 X 202	26	65
	155	A20	160 x 2.0	M24	M20 X 70	59.9	5	59.9	24	M24	60 X 202	30	75
PSH 2125 DG/Ç	205	A20	160 x 2.0	M24	M20 X 90	59.9	5	59.9	24	M24	60 X 250	30	75
	205	A20	170 x 2.5	M24	M20 X 90	69.9	5	69.9	24	M24	70 X 250	30	95

TR

## MEKANİK KEÇE

EN

## MECHANICAL SEAL

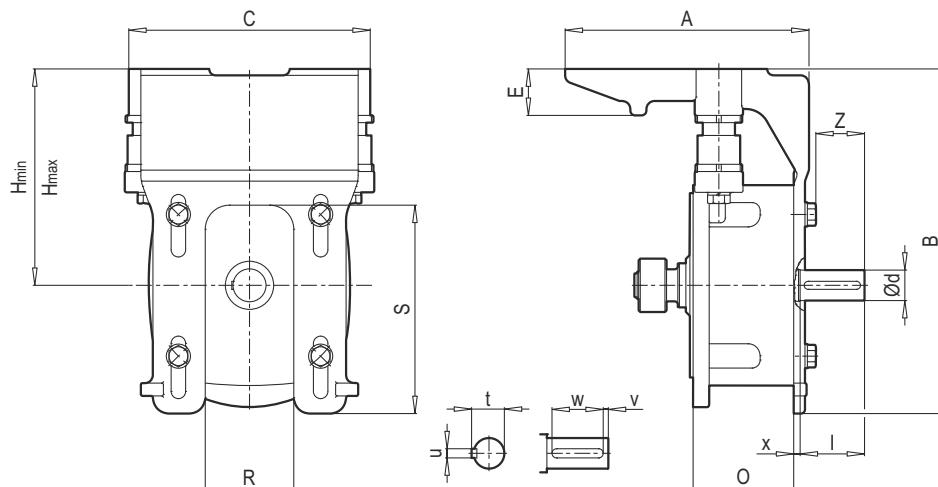


Özellikle aşırı çalışmalarla ve çok kötü çalışma koşullarında uygundur. Daldırmalı veya sulu çalışma ortamlarından etkilenmemektedir. Bu keçe tipi dış çevre koşullarından kesin koruma sağlar.

Seals are important for preventing oil leakage from gear unit and protection from environment. In hazardous environments and extreme operation conditions sealing must be considered. For that reason mechanical seals are applicable for using at hazardous environment, submerged operation.

## Motor Platformu Ölçüleri

### Motor Platform Dimensions



Tip Type	Bağlantı Boyutları ve Platform Ölçüleri Connection and Platform dimensions										Mil Ölçüleri Shaft size				Flans Flange
	A	B	C	E	R	S	H min	H max	Z	O	d l	t u	v w	x	
MK I 63 M - 100 L	224	253	206	45	60	140	153	173	41	121.5	24 50	27 8	5 40	8	160 S
MK II 80 M - 112 M	238	320	252	50	66	145	199	224	48	115.5	28 60	31 8	5 50	9	250 S
MK III-A 90 S - 132 M	305	430	302	58	110	260	254	286	61	127	38 80	41 10	5 70	8	300 S
MK III-B 90 S - 132 M	305	430	302	58	110	260	254	286	91	172	42 110	45 12	10 90	8	Ø250
MK IV 112 M - 200L	478	530	402	75	130	315	315	355	116	254	65 140	69 18	15 110	8	Ø350
MK V 200 L - 250 M	664	690	572	105	382	369	465	515	119	247	65 140	69 18	15 110	12	Ø450

### Motor Platform Montajı

Motor platform tasarımı PGR monoblok dişli ünitesi serilerinin tüm montaj pozisyonlarında kullanılabilir. 5 motor platformu boyutu tüm motor-redüktör kombinasyonlarını kapsar. Çok kademeli redüktörleri de karşılayan ayrı ayrı redüktörler için seçim tablolarından motor platformları bakılabilir.

- \* Her montaj pozisyonu için kullanılabilir.
- \* Optimum kayış gerilimi için kolayca yönlendirilebilir yükseklik ayarlaması yapılabilir.
- \* Sabitleme elemanlarında dahil olmak üzere korozyona karşı dirençlidir.
- \* Hafif, vibrasyonu absorbe eden alüminyum yapı mevcuttur.
- \* Birçok motor boyutu için kullanım kolaylığı sağlar.
- \* Tabloya göre "i" oranının 1'e eşit olduğu durumlar için önerilir.
- \* Her yöne 90° ye kadar eksen etrafında dönenbilme özelliğine sahiptir.

### Assembling of Motor Platform

Motor platform design could be used at all PGR monoblock gear unit series for all mounting positions. There are 5 motor platform designs. This platforms are provide using possibility with all motorgear unit series. Motor platform type, dimension and suitable belt type could be followed from table which is shown on page 45 - 46, on the other hand this table is valid for multi stage gear units.

- \* It could be used for all mounting positions.
- \* It could be adjusted for optimum belt-tension and height easily.
- \* It has high corrosion resistance however fixing elements have this property.
- \* Aluminum structure provide vibration absorbing and light weight.
- \* It could be used with all motor type.
- \* We recommend, it is suitable for while 'i' ratio is equal to one, table is prepared according to this situation
- \* It could be adjusted to all direction up to 90°

TR

MOTOR PLATFORMU

EN

MOTOR PLATFORM INSTALLATION

Tip Type	PSH 2050 PSH 2063 PSH 2080	PSH 2100	PSH 2125				
Motor	W III	W II	W III				
63 M	MK I						
71 M	MK I						
80 M	MK I	MK II					
90 S 90 L	MK I	MK II	MK III - A				
100 L	MK I	MK II	MK III - A				
112 M		MK II	MK III - A				
132 S 132 M			MK III - A				

#### Seçim Örneği:

Çıkış gücü ve hızına göre gerekli olan dişli ünitesinin temel tipini ve gerekli çıkış gücü veya çıkış dönüş hızına dayanan çıkış gücü ve dişli oranını saptayınız.

#### Örnek :

0.75 kW , 17.3 d/dk i = 78.83  
PSH 2080 - 80 M

Bu esas dişli ünitesi tipi için, motor platformu MK I tayin edildiğini tablodan (yukarıda bakınız) saptayınız.

Bu nedenle, tam tip tanımı **PSH 2080 - MK I - 80**'dır.

MK I için, tablodan (sayfa 48) kayış - kasnak ve kayış tipi ile ilgili daha fazla bilgi alabilirsiniz.

Esas boyutlar, tabloda gösterilmiştir.

#### Selection Example:

Motor platform assignment could be explained in one example hence, according to selecting gear unit reduction ratio, output speed and motor power is determined.

#### For instance ;

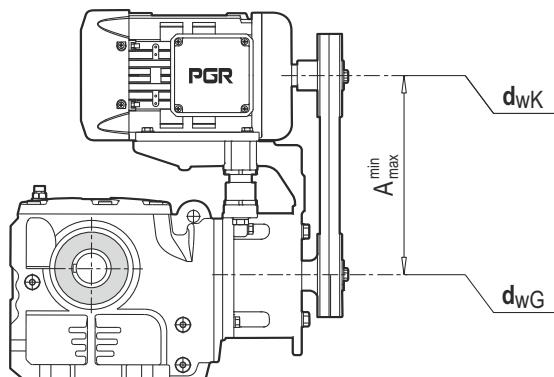
0.75 kW , 17.3 min-1, i = 78.83  
PSH 2080 - 80 M

From table (see above of this page) type of gear unit (column) and motor type (row) are intersected. Hence, from this motor bracket MK I dimension should be used.

Full designation is **PSH 2080 - MK I - 80**.

Following page shows more detail about belt pulley and type of belt (see page 48).

You can see dimension of belt length with motor platform assignment.



	Motor	Çıkış Output (kW)	Ayar aralığı Adjustment range		Kayış uzunluğu Belt length	Mil merkezi uzaklığı Shaft centre distance A	Kayış sayısı Number of belts
<b>MK I</b> Kayış Tipi SPZ Belt type SPZ	63 M/4A	0.12	216	236	697	223	1
	63 M/4B	0.18	216	236	697	223	1
	71 M/4A	0.25	224	244	710	229	1
	71 M/4B	0.37	224	244	710	229	1
	80 M/4A	0.55	233	253	737	243	1
	80 M/4B	0.75	233	253	737	243	1
	90 S/4A	1.10	243	263	750	249	1
	90 L/4A	1.50	243	263	750	249	2
	100 L/4A	2.20	253	273	772	260	2
	100 L/4B	3.00	253	273	772	260	3
<b>MK II</b> Kayış Tipi XPZ Belt type XPZ	80 M/4A	0.55	279	304	(dwg = 80) (i = 1) Lw	930	289
	80 M/4B	0.75	279	304		930	289
	90 S/4A	1.10	289	314		950	299
	90 L/4A	1.50	289	314		950	299
	100 L/4A	2.20	299	324		980	314
	100 L/4B	3.00	299	324		980	314
	112 M/4B	4.00	311	336		1000	324
<b>MK III</b> Kayış Tipi SPZ Belt type SPZ	90 S/4A	1.10	344	376	(dwg = 112) (i = 1) Lw	1222	360
	90 L/4B	1.50	344	376		1222	360
	100 L/4A	2.20	354	386		1250	374
	100 L/4B	3.00	354	386		1250	374
	112 M/4B	4.00	366	398		1262	380
	132 S/4C	5.50	386	418		1312	405
	132 M/4B	7.50	386	418		1312	405
	132 M/4	9.20	386	418		1312	405
	112 M/4B	4.00	427	467	(dwg = 160) (i = 1) Lw	1500	436
<b>MK IV</b> Kayış Tipi XPA Belt type XPA	132 S/4C	5.50	447	487		1550	461
	132 M/4B	7.50	447	487		1550	461
	132 M/4	9.20	447	487		1550	461
	160 M/4B	11.0	475	515		1600	486
	160 L/4A	15.0	475	515		1600	486





## Motorlu Seçim Tabloları

Selection Tables of  
Gearedmotors

PSH 2040 DG



PSH 2040 TMA



PSH 2050 DG ... 2125 DG  
PSH 3050 DG ... 3125 DG



PSH 2050 TMA ... 2125 TMA  
PSH 3050 TMA ... 3125 TMA

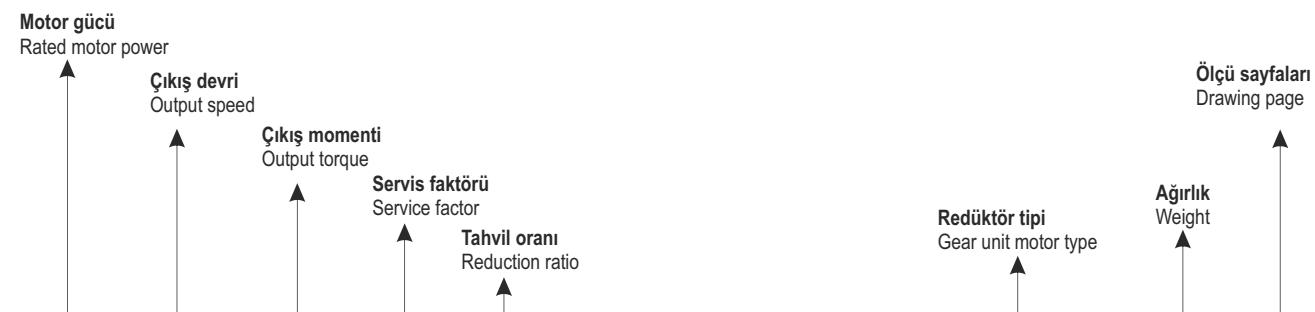


**PSH**

**Motorlu redüktör performans tablolarının yapısı.**  
Notify about performance tables for Geared motor.

**0.55 kW**

Redüktör motor gücü  
Gear unit motor power



P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Ağırlık Kg	Sayfa Page mm
<b>0.55</b>	1.2 1.5 1.8	2293 1811 1578	1.3 1.7 2.0	1198.50 928.25 793.81	25.0 27.0 27.0	21.0 21.0 21.0	27.0 27.0 27.0	28.0 28.0 28.0	PSH 3125 - 80M/4A	117	110-111

Müsaade edilebilir radyal yükler Normal rulmanlarda F<sub>R</sub> için listelenmiş değerlerde F<sub>A</sub> = 0 (N) olarak hesaplanmıştır

Permissible radial force or load on output shaft while normal bearings are used. For this load F<sub>A</sub> is assumed equal zero.  
F<sub>A</sub> = 0 (N)

Müsaade edilebilir eksenel yükler  
Normal rulmanlarda  
F<sub>A</sub> için listelenmiş değerlerde  
F<sub>R</sub> = 0 (N) olarak hesaplanmıştır

Permissible axial force or load on output shaft while normal bearings are used. For this load Fr is assumed equal zero.  
Fr = 0 (N)

► Müsaade edilebilir eksenel yükler  
Güçlendirilmiş rulmanlarda  
F<sub>A</sub> için listelenmiş değerlerde  
F<sub>R</sub> = 0 (N) olarak hesaplanmıştır

Permissible axial force on output shaft while reinforced bearings are used. For this load F<sub>R</sub> is assumed equal to zero. F<sub>R</sub> = 0 (N)

► Müsaade edilebilir radyal yükler  
Güçlendirilmiş rulmanlarda  
F<sub>R</sub> için listelenmiş değerlerde  
F<sub>A</sub> = 0 (N) olarak hesaplanmıştır

Permissible radial force or load on output shaft while reinforced bearings are used. For this load F<sub>A</sub> is assumed equal to zero. F<sub>A</sub> = 0 (N)

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm			
<b>0.12</b>	0.9	732	2.2	1506.84	16.0	12.0	16.0	16.0	PSH 3100 - 63M/4A	65	102-103			
	1.1	490	3.2	1173.93	16.0	12.0	16.0	16.0						
	1.1	490	1.6	1199.07	9.0	9.0	13.0	12.0	PSH 3080 - 63M/4A	37	94-95			
	1.4	391	2.0	955.78	9.0	9.0	13.0	12.0						
	1.6	336	2.3	805.70	10.0	9.0	13.0	12.0						
	1.9	301	2.6	705.97	10.0	9.0	13.0	12.0						
	1.3	424	1.8	656.63*	9.0	9.0	13.0	12.0	PSH 2080 - 63M/6	32	90-91			
	2.0	280	2.5	656.63*	10.0	9.0	13.0	12.0	PSH 2080 - 63M/4A	32	90-91			
	4.8	164	4.3	276.81*	10.0	9.0	13.0	12.0						
	1.0	484#	0.8	1343.24*	5.0	8.0	9.0	10.0	PSH 3063 - 63M/4A	27	86-87			
	1.2	452#	0.8	1140.10*	5.0	8.0	9.0	10.0						
	1.4	390	0.9	626.57*	6.0	8.0	10.0	10.0	PSH 2063 - 63M/6	22	82-83			
	1.6	329	1.1	529.13*	7.0	8.0	10.0	10.0						
	1.9	295	1.2	464.67*	7.0	8.0	10.0	10.0						
	2.1	262	1.4	626.57*	7.0	8.0	10.0	10.0	PSH 2063 - 63M/4A	22	82-83			
	2.5	226	1.6	529.13*	7.0	8.0	11.0	10.0						
	2.8	198	1.8	464.67*	8.0	8.0	11.0	10.0						
	5.0	154	2.2	264.14*	8.0	8.0	11.0	10.0						
	5.9	130	2.8	223.06*	8.0	8.0	11.0	10.0						
	6.7	116	3.1	195.89*	8.0	8.0	11.0	10.0						
	7.2	86	4.2	183.60	8.0	8.0	11.0	10.0						
	8.1	78	4.0	162.27	8.0	8.0	11.0	10.0						
	1.0	247#	0.8	1330.71	4.0	8.0	6.0	8.0	PSH 3050 - 63M/4A	23	78-79			
	1.3	239#	0.8	991.88	4.0	8.0	6.0	8.0						
	1.5	242#	0.8	868.89	4.0	8.0	6.0	8.0						
	1.7	238#	0.8	755.93	4.0	8.0	6.0	8.0						
	2.0	234#	0.8	663.52	4.0	8.0	6.0	8.0						
	2.2	239#	0.8	586.50	4.0	8.0	6.0	8.0						
	1.6	224#	0.8	524.57	4.0	8.0	6.0	8.0	PSH 2050 - 63M/6	18	74-75			
	2.0	235#	0.8	439.88	4.0	8.0	6.0	8.0						
	2.2	227#	0.8	385.33	4.0	8.0	6.0	8.0						
	2.5	230#	0.8	524.57	4.0	8.0	6.0	8.0	PSH 2050 - 63M/4A	18	74-75			
	3.0	188	1.0	439.88	5.0	8.0	6.0	8.0						
	3.4	168	1.1	385.33	5.0	8.0	6.0	8.0						
	5.7	135	1.4	231.43	5.0	8.0	6.0	8.0						
	6.8	115	1.6	194.06	5.0	8.0	6.0	8.0						
	7.7	101	1.8	170.00	6.0	8.0	6.0	8.0						
	8.9	69	2.5	147.90	6.0	8.0	6.0	8.0						
	10.1	62	2.7	129.82	6.0	8.0	6.0	8.0						
	11.5	56	3.0	114.75	6.0	8.0	6.0	8.0						
	14.2	46	3.7	92.73	6.0	8.0	6.0	8.0						
# Max. çıkış momenti f <sub>B</sub> = 0.8 # Max. Output Torque With f <sub>B</sub> = 0.8														
★ İşareti belirtilen tahlil oranlarının B14 veya B5 flanşlı gövde bağlantılıları için geçerli olduğunu gösterir. ★ Sign shows that this reduction ratio is valid for geared motor with B14 and B5 flange														

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm
<b>0.12</b>	4.3	122 #	0.8	304.20	3.0	4.0	-	-	PSH 2040 - 63M/4A	10	70-71
	5.5	103	1.0	237.90	3.0	4.0	-	-			
	10.2	76	1.4	128.70	4.0	4.0	-	-			
	11.4	53	1.8	115.23	4.0	4.0	-	-			
	13.2	47	2.0	99.45	4.0	4.0	-	-			
	15.2	41	2.1	86.86	4.0	4.0	-	-			
	17.2	37	2.3	76.38	4.0	4.0	-	-			
	19.5	33	2.5	67.50	4.0	4.0	-	-			
	22.0	41	2.5	59.80	4.0	4.0	-	-			
	25.3	26	3.1	52.00	4.0	4.0	-	-			
	28.2	31	3.1	46.77	4.0	4.0	-	-			
	29.4	22	3.6	44.78	4.0	4.0	-	-			
	31.3	25	3.2	42.08	4.0	4.0	-	-			
	35.8	23	3.5	36.75	4.0	4.0	-	-			
	40.8	20	3.9	32.31	4.0	4.0	-	-			
	46.1	18	4.1	28.56	4.0	4.0	-	-			
	59.9	14	5.2	22.00	4.0	4.0	-	-			
	67.4	13	5.8	19.55	4.0	4.0	-	-			
	77.1	12	6.5	17.08	4.0	4.0	-	-			
	87.8	10	7.0	15.01	4.0	4.0	-	-			
	99.3	9	7.7	13.27	4.0	4.0	-	-			
	128.9	7	9.2	10.22	4.0	4.0	-	-			
	149.7	6	10.2	8.80	4.0	4.0	-	-			
	175.4	5	10	7.51	4.0	4.0	-	-			
	198.7	5	11	6.63	4.0	4.0	-	-			
	257.8	4	12	5.11	4.0	4.0	-	-			
	299.4	3	14	4.40	4.0	4.0	-	-			
<b>0.18</b>	1.1	720	2.2	1173.93	16.0	12.0	16.0	16.0	PSH 3100 - 63M/4B	65	102-103
	2.0	430	3.7	660.00	16.0	12.0	16.0	16.0			
	2.6	345	4.6	519.44	16.0	12.0	16.0	16.0			
	2.9	317	5.0	468.59	16.0	12.0	16.0	16.0			
	3.7	257	5.9	365.06	16.0	12.0	16.0	16.0			
	4.5	214	7.1	298.69	16.0	12.0	16.0	16.0			
	1.4	604	2.4	645.00	16.0	12.0	16.0	16.0	PSH 2100 - 71M/6A	58	98-99
	1.1	720	1.1	1199.07	7.0	9.0	12.0	12.0	PSH 3080 - 63M/4B	37	94-95
	1.4	574	1.3	955.78	8.0	9.0	13.0	12.0			
	1.7	494	1.6	805.70	9.0	9.0	13.0	12.0			
	1.9	442	1.7	705.97	9.0	9.0	13.0	12.0			
	1.4	589	1.3	656.63*	8.0	9.0	13.0	12.0	PSH 2080 - 71M/6A	33	90-91
	2.0	411	1.7	656.63*	9.0	9.0	13.0	12.0	PSH 2080 - 63M/4B	32	90-91
	4.9	240	3.0	276.81*	10.0	9.0	13.0	12.0			
	5.7	165	4.3	234.60	10.0	9.0	13.0	12.0			
	7.2	136	4.9	187.00	10.0	9.0	13.0	12.0	PSH 2063 - 71M/6A	23	82-83
	1.7	475	0.8	529.13*	5.0	8.0	9.0	10.0	PSH 2063 - 63M/4B	22	82-83
	1.9	426	0.8	464.67*	6.0	8.0	10.0	10.0			
	2.1	384	0.9	626.57*	6.0	8.0	10.0	10.0			
	2.5	331	1.1	529.13*	7.0	8.0	10.0	10.0			
	2.9	291	1.2	464.67*	7.0	8.0	10.0	10.0			
	5.1	226	1.5	264.14*	7.0	8.0	11.0	10.0			
	6.0	191	1.9	223.06*	8.0	8.0	11.0	10.0			
	6.9	170	2.1	195.89*	8.0	8.0	11.0	10.0			
	7.3	127	2.8	183.60	8.0	8.0	11.0	10.0			
	8.3	114	2.7	162.27	8.0	8.0	11.0	10.0			
	9.3	103	2.9	144.50	8.0	8.0	11.0	10.0			
	11.4	88	3.4	118.23	8.0	8.0	11.0	10.0			
	12.9	78	3.8	104.13	8.0	8.0	11.0	10.0			
# Max. çıkış momenti f <sub>B</sub> = 0.8 # Max. Output Torque With f <sub>B</sub> = 0.8											

★ İşareti belirtilen tahvil oranlarının B14 veya B5 flanşlı gövde bağlantıları için geçerli olduğunu gösterir.

★ Sign shows that this reduction ratio is valid for geared motor with B14 and B5 flange

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm
<b>0.18</b>	5.8	198	0.9	231.43	5.0	8.0	6.0	8.0	PSH 2050 - 63M/4B	18	74-75
	6.9	169	1.1	194.06	5.0	8.0	6.0	8.0			
	7.9	148	1.3	170.00	5.0	8.0	6.0	8.0			
	9.1	102	1.7	147.90	6.0	8.0	6.0	8.0			
	10.4	91	1.8	129.82	6.0	8.0	6.0	8.0			
	11.7	82	2.0	114.75	6.0	8.0	6.0	8.0			
	14.5	68	2.5	92.73	6.0	8.0	6.0	8.0			
	16.7	60	2.8	80.75	6.0	8.0	6.0	8.0			
	20.6	60	2.8	65.25	6.0	8.0	6.0	8.0			
	23.5	53	3.2	57.27	6.0	8.0	6.0	8.0			
	26.6	47	3.3	50.63	6.0	8.0	6.0	8.0			
	11.7	78	1.2	115.23	4.0	4.0	-	-			
	13.5	69	1.3	99.45	4.0	4.0	-	-			
	15.5	60	1.5	86.86	4.0	4.0	-	-			
	17.6	54	1.6	76.38	4.0	4.0	-	-			
	19.9	48	1.7	67.50	4.0	4.0	-	-			
	22.5	60	1.7	59.80	4.0	4.0	-	-			
	25.9	38	2.1	52.00	4.0	4.0	-	-			
	28.8	47	2.1	46.77	4.0	4.0	-	-			
	30.0	34	2.4	44.78	4.0	4.0	-	-			
	32.0	38	2.3	42.08	4.0	4.0	-	-			
	36.6	33	2.4	36.75	4.0	4.0	-	-			
	41.6	29	2.7	32.31	4.0	4.0	-	-			
	47.1	26	2.8	28.56	4.0	4.0	-	-			
	61.2	20	3.5	22.00	4.0	4.0	-	-			
	68.8	19	3.9	19.55	4.0	4.0	-	-			
	78.8	17	4.4	17.08	4.0	4.0	-	-			
	89.6	15	4.8	15.01	4.0	4.0	-	-			
	101.4	14	5.3	13.27	4.0	4.0	-	-			
	131.7	10	6.3	10.22	4.0	4.0	-	-			
	152.9	9	7.0	8.80	4.0	4.0	-	-			
	179.2	8	6.8	7.51	4.0	4.0	-	-			
	202.9	7	7.3	6.63	4.0	4.0	-	-			
	263.3	6	8.4	5.11	4.0	4.0	-	-			
	305.8	5	9.3	4.40	4.0	3.0	-	-			
<b>0.25</b>	0.9	1363	2.3	1475.08	27.0	21.0	27.0	28.0	PSH 3125 - 71M/4A	114	110-111
	1.2	1050	2.9	1198.50	27.0	21.0	27.0	28.0			
	0.9	1351	1.2	1506.84	14.0	12.0	16.0	16.0	PSH 3100 - 71M/4A	66	102-103
	1.2	968	1.6	1173.93	16.0	12.0	16.0	16.0			
	2.1	578	2.8	660.00	16.0	12.0	16.0	16.0			
	1.4	829	1.8	645.00	16.0	12.0	16.0	16.0	PSH 2100 - 71M/6B	59	98-99
	2.2	565	2.5	645.00	16.0	12.0	16.0	16.0	PSH 2100 - 71M/4A	58	98-99
	1.2	968	0.8	1199.07	1.0	9.0	10.0	12.0	PSH 3080 - 71M/4A	38	94-95
	1.5	772	1.0	955.78	5.0	9.0	11.0	12.0			
	1.7	664	1.2	805.70	7.0	9.0	12.0	12.0			
	2.0	594	1.3	705.97	8.0	9.0	13.0	12.0			
	1.4	810	0.9	656.63*	5.0	9.0	11.0	12.0	PSH 2080 - 71M/6B	34	90-91
	1.7	655	1.1	520.20*	8.0	9.0	13.0	12.0			
	2.1	553	1.3	656.63*	8.0	9.0	13.0	12.0			
	5.0	323	2.2	276.81*	10.0	9.0	13.0	12.0			
	5.9	222	3.2	234.60	10.0	9.0	13.0	12.0			
	7.4	183	3.7	187.00	10.0	9.0	13.0	12.0	PSH 2080 - 71M/4A	33	90-91
	8.8	157	4.3	157.64	10.0	9.0	13.0	12.0			

\* İşareti belirtilen tahlil oranlarının B14 veya B5 flanşlı gövde bağlantıları için geçerli olduğunu gösterir.

\* Sign shows that this reduction ratio is valid for geared motor with B14 and B5 flange

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm
<b>0.25</b>	2.6	445	0.8	529.13*	5.0	8.0	9.0	10.0	PSH 2063 - 71M/4A	23	82-83
	3.0	391	0.9	464.67*	6.0	8.0	10.0	10.0			
	5.3	304	1.2	264.14*	7.0	8.0	10.0	10.0			
	6.2	257	1.4	223.06*	7.0	8.0	11.0	10.0			
	7.1	229	1.6	195.89	7.0	8.0	11.0	10.0			
	7.6	170	2.1	183.60	8.0	8.0	11.0	10.0			
	8.6	153	2.0	162.27	8.0	8.0	11.0	10.0			
	9.6	139	2.2	144.50	8.0	8.0	11.0	10.0			
	11.8	118	2.5	118.23	8.0	8.0	11.0	10.0			
	13.3	106	2.8	104.13	8.0	8.0	11.0	10.0			
	15.1	95	3.1	92.19	8.0	8.0	11.0	10.0			
	18.0	96	3.2	77.40	8.0	8.0	11.0	10.0			
	20.3	86	3.4	68.41	8.0	8.0	11.0	10.0			
	22.8	76	3.7	60.92	8.0	8.0	11.0	10.0			
	7.6	213	0.9	182.08	5.0	8.0	6.0	8.0	PSH 3050 - 71M/4A	24	78-79
	8.2	199	0.9	170.00	5.0	8.0	6.0	8.0	PSH 2050 - 71M/4A	19	74-75
	9.4	137	1.3	147.90	5.0	8.0	6.0	8.0			
	10.7	123	1.4	129.82	5.0	8.0	6.0	8.0			
	12.1	110	1.5	114.75	6.0	8.0	6.0	8.0			
	15.0	91	1.9	92.73	6.0	8.0	6.0	8.0			
	17.2	80	2.1	80.75	6.0	8.0	6.0	8.0			
	21.3	81	2.1	65.25	6.0	8.0	6.0	8.0			
	24.3	71	2.4	57.27	6.0	8.0	6.0	8.0			
	27.5	63	2.4	50.63	6.0	8.0	6.0	8.0			
	34.0	52	3.0	40.91	6.0	8.0	6.0	8.0			
	39.0	46	3.4	35.63	6.0	8.0	6.0	8.0			
	44.9	43	3.6	30.93	6.0	8.0	6.0	8.0			
	51.2	38	4.0	27.15	5.0	8.0	6.0	8.0			
	57.9	33	4.6	24.00	5.0	8.0	6.0	8.0			
	14.0	92	1.0	99.45	3.0	4.0	-	-	PSH 2040- 71M/4A	12	70-71
	16.0	81	1.1	86.86	4.0	4.0	-	-			
	18.2	72	1.2	76.38	4.0	4.0	-	-			
	20.6	65	1.3	67.50	4.0	4.0	-	-			
	23.2	80	1.2	59.80	4.0	4.0	-	-			
	26.7	52	1.6	52.00	4.0	4.0	-	-			
	29.7	63	1.6	46.77	4.0	4.0	-	-			
	31.0	45	1.8	44.78	4.0	4.0	-	-			
	33.0	51	1.7	42.08	4.0	4.0	-	-			
	37.8	45	1.8	36.75	4.0	4.0	-	-			
	43.0	40	2.0	32.31	4.0	4.0	-	-			
	48.7	35	2.1	28.56	4.0	4.0	-	-			
	63.2	28	2.6	22.00	4.0	4.0	-	-			
	71.1	27	2.9	19.55	4.0	4.0	-	-			
	81.4	23	3.3	17.08	4.0	4.0	-	-			
	92.6	21	3.5	15.01	4.0	4.0	-	-			
	104.7	18	4.0	13.27	4.0	4.0	-	-			
	136.0	14	4.6	10.22	4.0	4.0	-	-			
	158.0	12	5.2	8.80	4.0	4.0	-	-			
	185.1	11	5.0	7.51	4.0	4.0	-	-			
	209.7	9	5.4	6.63	4.0	4.0	-	-			
	272.0	8	6.2	5.11	4.0	3.0	-	-			
	315.9	6	6.9	4.40	4.0	3.0	-	-			
<p>* İşareti belirtilen tahlil oranlarının B14 veya B5 flanşlı gövde bağlantıları için geçerli olduğunu gösterir.</p> <p>* Sign shows that this reduction ratio is valid for geared motor with B14 and B5 flange</p>											

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm
0.37	1.1	1577	2.0	1198.50	27.0	21.0	27.0	28.0	PSH 3125 - 71M/4B	115	110-111
	1.2	1454	1.1	1173.93	13.0	12.0	16.0	16.0	PSH 3100 - 71M/4B	67	102-103
	2.1	869	1.8	660.00	16.0	12.0	16.0	16.0			
	1.4	1214	1.2	645.00	14.0	12.0	16.0	16.0	PSH 2100 - 80M/6A	61	98-99
	1.8	979	1.5	510.00	16.0	12.0	16.0	16.0	PSH 2100 - 71M/4B	59	98-99
	2.1	849	1.7	645.00	16.0	12.0	16.0	16.0	PSH 2100 - 71M/4B	59	98-99
	5.7	362	3.9	241.67	16.0	12.0	16.0	16.0			
	1.8	959	0.7	520.20*	2.0	9.0	10.0	12.0	PSH 2080 - 80M/6A	36	90-91
	2.1	830	0.9	656.63*	5.0	9.0	11.0	12.0			
	2.6	671	1.1	520.20*	7.0	9.0	12.0	12.0			
	4.9	486	1.5	276.81*	9.0	9.0	13.0	12.0			
	5.8	333	2.1	234.60	10.0	9.0	13.0	12.0			
	7.3	275	2.4	187.00	10.0	9.0	13.0	12.0			
	8.7	236	2.8	157.64	10.0	9.0	13.0	12.0			
	9.9	214	3.0	138.13	10.0	9.0	13.0	12.0	PSH 2080 - 71M/4B	34	90-91
	11.1	195	3.2	123.58	10.0	9.0	13.0	12.0			
	12.9	170	3.5	106.25	10.0	9.0	13.0	12.0			
	14.5	153	3.7	94.15	10.0	9.0	13.0	12.0			
	17.4	153	4.3	78.83	10.0	9.0	13.0	12.0			
	20.6	130	4.8	66.45	10.0	9.0	13.0	12.0			
	6.1	386	0.9	223.06*	6.0	8.0	10.0	10.0			
	7.0	344	1.0	195.89*	7.0	8.0	10.0	10.0			
	7.5	256	1.4	183.60	7.0	8.0	11.0	10.0			
	8.4	230	1.3	162.27	7.0	8.0	11.0	10.0			
	9.5	209	1.4	144.50	8.0	8.0	11.0	10.0			
	11.6	177	1.7	118.23	8.0	8.0	11.0	10.0			
	13.1	159	1.9	104.13	8.0	8.0	11.0	10.0			
	14.9	143	2.1	92.19	8.0	8.0	11.0	10.0	PSH 2063 - 71M/4B	24	82-83
	17.7	144	2.1	77.40	8.0	8.0	11.0	10.0			
	20.0	129	2.3	68.41	8.0	8.0	11.0	10.0			
	22.5	115	2.4	60.92	8.0	8.0	11.0	10.0			
	27.5	96	2.7	49.84	8.0	8.0	11.0	10.0			
	31.2	85	2.9	43.90	8.0	8.0	11.0	10.0			
	35.2	76	3.2	38.87	8.0	8.0	11.0	10.0			
	39.2	73	3.6	34.94	8.0	8.0	11.0	10.0			
	11.9	166	1.0	114.75	5.0	8.0	6.0	8.0			
	14.8	136	1.2	92.73	5.0	8.0	6.0	8.0			
	17.0	121	1.4	80.75	5.0	8.0	6.0	8.0			
	21.0	121	1.4	65.25	5.0	8.0	6.0	8.0			
	23.9	106	1.6	57.27	6.0	8.0	6.0	8.0	PSH 2050 - 71M/4B	20	74-75
	27.0	95	1.6	50.63	6.0	8.0	6.0	8.0			
	33.5	78	2.0	40.91	6.0	8.0	6.0	8.0			
	38.4	69	2.2	35.63	6.0	8.0	6.0	8.0			
	44.3	65	2.4	30.93	5.0	8.0	6.0	8.0			
	50.4	57	2.7	27.15	5.0	8.0	6.0	8.0			
	57.0	51	3.1	24.00	5.0	7.0	6.0	8.0			

\* İşareti belirtilen tahvil oranlarının B14 veya B5 flanşlı gövde bağlantıları için geçerli olduğunu gösterir.

\* Sign shows that this reduction ratio is valid for geared motor with B14 and B5 flange

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm
<b>0.37</b>	22.9	120	0.8	59.80	3.0	4.0	-	-	PSH 2040 - 71M/4B	13	70-71
	26.3	78	1.0	52.00	4.0	4.0	-	-			
	29.3	95	1.0	46.77	3.0	4.0	-	-			
	30.6	68	1.2	44.78	4.0	4.0	-	-			
	32.5	77	1.1	42.08	4.0	4.0	-	-			
	37.3	68	1.2	36.75	4.0	4.0	-	-			
	42.4	61	1.3	32.31	4.0	4.0	-	-			
	47.9	55	1.4	28.56	4.0	4.0	-	-			
	62.2	42	1.7	22.00	4.0	4.0	-	-			
	70.0	41	2.0	19.55	4.0	4.0	-	-			
	80.2	36	2.2	17.08	4.0	4.0	-	-			
	91.2	32	2.4	15.01	4.0	4.0	-	-			
	103.2	28	2.6	13.27	4.0	4.0	-	-			
	134.0	22	3.1	10.22	4.0	4.0	-	-			
	155.6	19	3.4	8.80	4.0	4.0	-	-			
	182.3	16	3.5	7.51	4.0	4.0	-	-			
	206.5	15	3.7	6.63	4.0	4.0	-	-			
	267.9	11	4.1	5.11	4.0	3.0	-	-			
	311.2	10	4.6	4.40	4.0	3.0	-	-			
<b>0.55</b>	1.2	2293	1.3	1198.50	25.0	21.0	27.0	28.0	PSH 3125 - 80M/4A	117	110-111
	1.5	1811	1.7	928.25	27.0	21.0	27.0	28.0			
	1.8	1578	2.0	793.81	27.0	21.0	27.0	28.0			
	2.0	1762	1.6	690.49	27.0	21.0	27.0	28.0			
	2.3	1549	1.7	607.31	27.0	21.0	27.0	28.0			
	2.6	1416	2.2	546.92	27.0	21.0	27.0	28.0			
	3.2	1150	2.6	444.38	27.0	21.0	27.0	28.0			
	3.7	998	2.6	380.02	27.0	21.0	27.0	28.0			
	4.3	860	2.8	323.00	27.0	21.0	27.0	28.0			
	5.2	730	3.9	270.16	27.0	21.0	27.0	28.0			
2.1	1263	1.3	660.00	14.0	12.0	16.0	16.0	PSH 3100 - 80M/4A	69	102-103	
1.4	1804	0.8	645.00	7.0	12.0	16.0	16.0	PSH 2100 - 80M/6B	62	98-99	
2.2	1234	1.2	645.00	14.0	12.0	16.0	16.0	PSH 2100 - 80M/4A	61	98-99	
2.7	995	1.4	510.00	16.0	12.0	16.0	16.0				
5.8	526	2.7	241.67	16.0	12.0	16.0	16.0				
7.6	420	3.3	183.33	16.0	12.0	16.0	16.0				
8.5	385	3.5	165.38	16.0	12.0	16.0	16.0				
10.9	314	3.9	128.85	16.0	12.0	16.0	16.0	PSH 2080 - 80M/6B	37	90-91	
3.9	696	1.0	234.60	7.0	9.0	12.0	12.0				
3.5	771	0.9	402.90*	6.0	9.0	11.0	12.0				
6.0	484	1.5	234.60	9.0	9.0	13.0	12.0				
7.5	400	1.7	187.00	9.0	9.0	13.0	12.0				
8.9	343	2.0	157.64	10.0	9.0	13.0	12.0				
10.1	311	2.1	138.13	10.0	9.0	13.0	12.0				
11.3	283	2.2	123.58	10.0	9.0	13.0	12.0				
13.2	247	2.4	106.25	10.0	9.0	13.0	12.0				
14.9	223	2.5	94.15	10.0	9.0	13.0	12.0				
17.8	222	3.0	78.83	10.0	9.0	13.0	12.0				
21.1	189	3.3	66.45	10.0	9.0	13.0	12.0				
24.0	168	3.6	58.23	10.0	9.0	13.0	12.0				
26.9	151	3.8	52.10	10.0	9.0	13.0	12.0				
31.3	131	4.2	44.79	10.0	9.0	13.0	12.0				
★ İşareti belirtilen tahvil oranlarının B14 veya B5 flanşlı gövde bağlantıları için geçerli olduğunu gösterir. ★ Sign shows that this reduction ratio is valid for geared motor with B14 and B5 flange											

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm
<b>0.55</b>	7.6	372	1.0	183.60	6.0	8.0	10.0	10.0	PSH 2063 - 80M/4A	26	82-83
	8.6	335	0.9	162.27	7.0	8.0	10.0	10.0			
	9.7	304	1.0	144.50	7.0	8.0	10.0	10.0			
	11.8	257	1.1	118.23	7.0	8.0	11.0	10.0			
	13.4	230	1.3	104.13	7.0	8.0	11.0	10.0			
	15.2	208	1.4	92.19	8.0	8.0	11.0	10.0			
	18.1	209	1.5	77.40	8.0	8.0	11.0	10.0			
	20.5	187	1.6	68.41	8.0	8.0	11.0	10.0			
	23.0	167	1.7	60.92	8.0	8.0	11.0	10.0			
	28.1	140	1.9	49.84	8.0	8.0	11.0	10.0			
	31.9	124	2.0	43.90	8.0	8.0	11.0	10.0			
	36.0	111	2.2	38.87	8.0	8.0	11.0	10.0			
	40.1	106	2.5	34.94	7.0	8.0	11.0	10.0			
	49.0	88	2.8	28.59	7.0	8.0	11.0	10.0			
	55.6	78	3.1	25.18	7.0	8.0	11.0	10.0			
	62.8	69	3.5	22.29	6.0	8.0	11.0	10.0			
	73.6	59	3.6	19.01	6.0	8.0	11.0	10.0			
	21.5	176	1.0	65.25	5.0	8.0	6.0	8.0	PSH 2050- 80M/4A	22	74-75
	24.4	155	1.1	57.27	5.0	8.0	6.0	8.0			
	27.7	139	1.1	50.63	5.0	8.0	6.0	8.0			
	34.2	114	1.4	40.91	6.0	8.0	6.0	8.0			
	39.3	100	1.5	35.63	5.0	8.0	6.0	8.0			
	45.3	94	1.6	30.93	5.0	7.0	6.0	8.0			
	51.6	84	1.9	27.15	5.0	7.0	6.0	8.0			
	58.3	74	2.1	24.00	5.0	7.0	6.0	8.0			
	72.2	60	2.4	19.39	5.0	6.0	6.0	8.0			
	82.9	52	2.3	16.89	4.0	6.0	6.0	8.0			
	94.8	46	2.5	14.77	4.0	6.0	6.0	8.0			
	106.5	43	2.8	13.15	4.0	5.0	6.0	8.0			
	120.4	38	3.0	11.63	4.0	5.0	6.0	8.0			
	149.1	31	3.5	9.39	4.0	4.0	6.0	8.0			
	171.1	27	3.8	8.18	3.0	4.0	6.0	8.0			
	195.8	24	4.0	7.15	3.0	4.0	6.0	8.0			
	43.3	87	0.9	32.31	3.0	4.0	-	-	PSH 2040 - 80M/4A	15	70-71
	49.0	78	1.0	28.56	4.0	4.0	-	-			
	63.6	61	1.2	22.00	4.0	4.0	-	-			
	71.6	59	1.3	19.55	4.0	4.0	-	-			
	82.0	52	1.5	17.08	4.0	4.0	-	-			
	93.3	46	1.6	15.01	4.0	4.0	-	-			
	105.5	40	1.8	13.27	4.0	4.0	-	-			
	137.0	31	2.1	10.22	4.0	4.0	-	-			
	159.1	27	2.3	8.80	4.0	4.0	-	-			
	186.4	24	2.4	7.51	4.0	3.0	-	-			
	211.2	21	2.4	6.63	4.0	3.0	-	-			
	274.0	16	2.8	5.11	4.0	3.0	-	-			
	318.2	14	3.2	4.40	3.0	3.0	-	-			

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm	
<b>0.75</b>	1.2	3127	1.0	1198.50	20.0	21.0	27.0	28.0	PSH 3125 - 80M/4B	118	110-111	
	1.5	2469	1.3	928.25	25.0	21.0	27.0	28.0				
	1.8	2152	1.4	793.81	26.0	21.0	27.0	28.0				
	2.0	2402	1.2	690.49	25.0	21.0	27.0	28.0				
	2.3	2113	1.3	607.31	27.0	21.0	27.0	28.0				
	2.6	1931	1.6	546.92	27.0	21.0	27.0	28.0				
	3.2	1569	1.9	444.38	27.0	21.0	27.0	28.0				
	3.7	1361	1.9	380.02	27.0	21.0	27.0	28.0				
	4.3	1173	2.0	323.00	27.0	21.0	27.0	28.0				
	5.2	995	2.8	270.16	27.0	21.0	27.0	28.0				
	5.9	884	3.1	236.72	27.0	21.0	27.0	28.0				
	7.5	710	3.1	187.50	27.0	21.0	27.0	28.0				
	1.3	2747	1.0	695.60	25.0	21.0	27.0	28.0		PSH 2125 - 90S/6A	104	106-107
	1.9	2034	1.4	495.64	27.0	21.0	27.0	28.0				
	2.1	1722	0.9	660.00	9.0	12.0	16.0	16.0	PSH 3100 - 80M/4B	70	102-103	
	2.2	1683	0.8	645.00	9.0	12.0	16.0	16.0	PSH 2100 - 80M/4B	62	98-99	
	2.7	1357	1.0	510.00	13.0	12.0	16.0	16.0				
	5.8	717	2.0	241.67	16.0	12.0	16.0	16.0				
	7.6	572	2.4	183.33	16.0	12.0	16.0	16.0				
	8.5	525	2.5	165.38	16.0	12.0	16.0	16.0				
	10.9	428	2.9	128.85	16.0	12.0	16.0	16.0				
	14.9	366	2.8	94.25	14.0	12.0	16.0	16.0				
	19.6	285	3.1	71.50	13.0	12.0	16.0	16.0				
	6.0	660	1.1	234.60	7.0	9.0	12.0	12.0	PSH 2080 - 80M/4B	37	90-91	
	7.5	545	1.2	187.00	8.0	9.0	13.0	12.0				
	8.9	468	1.4	157.64	9.0	9.0	13.0	12.0				
	10.1	424	1.5	138.13	9.0	9.0	13.0	12.0				
	11.3	386	1.6	123.58	10.0	9.0	13.0	12.0				
	13.2	337	1.8	106.25	10.0	9.0	13.0	12.0				
	14.9	303	1.8	94.15	10.0	9.0	13.0	12.0				
	17.8	302	2.2	78.83	10.0	9.0	13.0	12.0				
	21.1	258	2.4	66.45	10.0	9.0	13.0	12.0				
	24.0	229	2.6	58.23	10.0	9.0	13.0	12.0				
	26.9	205	2.8	52.10	10.0	9.0	13.0	12.0	PSH 2063 - 80M/4B	27	82-83	
	31.3	179	3.1	44.79	10.0	9.0	13.0	12.0				
	36.9	161	2.8	37.89	9.0	9.0	13.0	12.0				
	43.8	137	3.0	31.94	9.0	9.0	13.0	12.0				
	50.0	122	3.1	27.99	8.0	9.0	13.0	12.0				
	55.9	109	3.3	25.04	8.0	9.0	13.0	12.0				
	11.8	351	0.8	118.23	7.0	8.0	10.0	10.0				
	13.4	314	0.9	104.13	7.0	8.0	10.0	10.0				
	15.2	283	1.0	92.19	7.0	8.0	10.0	10.0				
	18.1	285	1.1	77.40	7.0	8.0	10.0	10.0				
	20.5	255	1.2	68.41	7.0	8.0	11.0	10.0				
	23.0	228	1.2	60.92	7.0	8.0	11.0	10.0				
	28.1	191	1.4	49.84	8.0	8.0	11.0	10.0				
	31.9	168	1.5	43.90	8.0	8.0	11.0	10.0				
	36.0	151	1.6	38.87	7.0	8.0	11.0	10.0				
	40.1	145	1.8	34.94	7.0	8.0	11.0	10.0				
	49.0	120	2.0	28.59	7.0	8.0	11.0	10.0				
	55.6	107	2.3	25.18	6.0	8.0	11.0	10.0				
	62.8	95	2.6	22.29	6.0	8.0	11.0	10.0				
	73.6	82	2.6	19.01	6.0	8.0	11.0	10.0				
	89.9	69	2.7	15.58	6.0	8.0	11.0	10.0				
	109.8	57	2.9	12.75	5.0	8.0	11.0	10.0				
	124.7	50	3.1	11.23	5.0	8.0	11.0	10.0				
	140.8	45	3.3	9.94	5.0	8.0	11.0	10.0				
	165.1	39	3.4	8.48	5.0	7.0	10.0	10.0				

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm
<b>0.75</b>	34.2	155	1.0	40.91	5.0	8.0	6.0	8.0	PSH 2050 - 80M/4B	23	74-75
	39.3	137	1.1	35.63	5.0	8.0	6.0	8.0			
	45.3	128	1.2	30.93	5.0	6.0	6.0	8.0			
	51.6	114	1.4	27.15	5.0	6.0	6.0	8.0			
	58.3	101	1.5	24.00	5.0	6.0	6.0	8.0			
	72.2	82	1.8	19.39	4.0	6.0	6.0	8.0			
	82.9	72	1.7	16.89	4.0	6.0	6.0	8.0			
	94.8	63	1.8	14.77	4.0	5.0	6.0	8.0			
	106.5	59	2.1	13.15	4.0	4.0	6.0	8.0			
	120.4	52	2.2	11.63	4.0	4.0	6.0	8.0			
	149.1	42	2.6	9.39	3.0	4.0	6.0	8.0			
	171.1	37	2.8	8.18	3.0	4.0	6.0	8.0			
	195.8	33	2.8	7.15	3.0	4.0	6.0	8.0			
	63.6	83	0.9	22.00	3.0	4.0	-	-			
	71.6	81	1.0	19.55	4.0	4.0	-	-			
	82.0	71	1.1	17.08	4.0	4.0	-	-			
<b>1.10</b>	93.3	63	1.2	15.01	4.0	4.0	-	-	PSH 2040- 80M/4B	16	70-71
	105.5	56	1.3	13.27	4.0	4.0	-	-			
	137.0	43	1.5	10.22	4.0	4.0	-	-			
	159.1	37	1.8	8.80	4.0	4.0	-	-			
	186.4	33	1.7	7.51	4.0	3.0	-	-			
	211.2	29	1.9	6.63	4.0	3.0	-	-			
	274.0	22	2.1	5.11	3.0	3.0	-	-			
	318.2	19	2.4	4.40	3.0	3.0	-	-			
	1.5	3596	0.9	928.25	18.0	21.0	27.0	28.0	PSH 3125 - 90S/4A	121	110-111
	1.9	2951	1.0	495.64	23.0	21.0	27.0	28.0	PSH 2125 - 90L/6B	106	106-107
	2.0	2799	1.0	695.60	23.0	21.0	27.0	28.0	PSH 2125 - 90S/4A	104	106-107
	2.8	2068	1.4	495.64	27.0	21.0	27.0	28.0			
	7.0	977	2.7	201.71	27.0	21.0	27.0	28.0			
	7.7	898	2.9	182.58	27.0	21.0	27.0	28.0			
	8.8	802	3.1	160.58	27.0	21.0	27.0	28.0			
	9.7	733	3.3	144.62	27.0	21.0	27.0	28.0			
	12.0	622	3.6	117.50	26.0	21.0	27.0	28.0			
	14.0	539	4.0	100.48	25.0	21.0	27.0	28.0			
	3.4	1650	0.8	410.00	10.0	12.0	16.0	16.0	PSH 2100 - 90S/4A	65	98-99
	4.6	1313	1.1	303.85	14.0	12.0	16.0	16.0			
	5.8	1044	1.4	241.67	16.0	12.0	16.0	16.0			
	7.7	833	1.6	183.33	16.0	12.0	16.0	16.0			
	8.5	764	1.7	165.38	16.0	12.0	16.0	16.0			
	10.9	624	2.0	128.85	15.0	12.0	16.0	16.0			
	13.6	518	2.3	103.85	14.0	12.0	16.0	16.0			
	15.0	534	2.5	94.25	14.0	12.0	16.0	16.0			
	19.7	416	2.9	71.50	13.0	12.0	16.0	16.0			
	21.9	380	3.1	64.50	12.0	12.0	16.0	16.0			
	28.1	300	3.7	50.25	12.0	12.0	16.0	16.0			
	33.0	271	3.4	42.78	11.0	12.0	16.0	16.0			
	36.5	244	3.5	38.59	11.0	12.0	16.0	16.0			
	41.1	212	4.1	34.29	10.0	12.0	16.0	16.0			

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm
<b>1.10</b>	8.9	681	1.0	157.64	7.0	9.0	12.0	12.0	PSH 2080 - 90S/4A	40	90-91
	10.2	617	1.0	138.13	8.0	9.0	13.0	12.0			
	11.4	562	1.1	123.58	8.0	9.0	13.0	12.0			
	13.3	491	1.2	106.25	9.0	9.0	13.0	12.0			
	15.0	442	1.3	94.15	9.0	9.0	13.0	12.0			
	17.9	440	1.5	78.83	9.0	9.0	13.0	12.0			
	21.2	376	1.7	66.45	10.0	9.0	13.0	12.0			
	24.2	334	1.8	58.23	10.0	9.0	13.0	12.0			
	27.1	299	1.9	52.10	9.0	9.0	13.0	12.0			
	31.5	260	2.1	44.79	9.0	9.0	13.0	12.0			
	37.2	234	2.3	37.89	9.0	9.0	13.0	12.0			
	44.1	200	2.6	31.94	8.0	9.0	13.0	12.0			
	50.4	177	2.9	27.99	8.0	9.0	13.0	12.0			
	56.3	159	3.1	25.04	8.0	9.0	13.0	12.0			
	65.5	138	3.4	21.53	7.0	9.0	13.0	12.0			
	73.9	122	3.6	19.08	7.0	9.0	13.0	12.0			
	88.3	106	3.1	15.97	7.0	9.0	13.0	12.0			
	100.8	93	3.2	13.99	6.0	9.0	13.0	12.0			
	112.6	84	3.4	12.52	6.0	9.0	13.0	12.0			
	131.0	72	3.5	10.76	6.0	9.0	13.0	12.0			
<b>28.3</b>	278	0.9	49.84	7.0	8.0	10.0	10.0	PSH 2063 - 90S/4A	30	82-83	
	32.1	245	1.0	43.90	7.0	8.0	11.0	10.0			
	36.3	220	1.1	38.87	7.0	8.0	11.0	10.0			
	40.4	211	1.2	34.94	7.0	8.0	11.0	10.0			
	49.3	175	1.4	28.59	6.0	8.0	11.0	10.0			
	56.0	156	1.6	25.18	6.0	8.0	11.0	10.0			
	63.3	138	1.8	22.29	6.0	8.0	11.0	10.0			
	74.2	119	1.8	19.01	6.0	8.0	11.0	10.0			
	90.5	101	1.9	15.58	5.0	8.0	11.0	10.0			
	110.6	84	2.2	12.75	5.0	7.0	11.0	10.0			
	125.6	74	2.4	11.23	5.0	7.0	11.0	10.0			
	141.9	66	2.6	9.94	5.0	7.0	10.0	10.0			
	166.3	56	3.0	8.48	5.0	7.0	10.0	10.0			
	190.5	49	3.2	7.40	4.0	6.0	10.0	10.0			
<b>58.8</b>	147	1.1	24.00	4.0	5.0	6.0	8.0	PSH 2050 - 90S/4A	26	74-75	
	72.7	120	1.2	19.39	4.0	5.0	6.0	8.0			
	83.5	104	1.1	16.89	4.0	5.0	6.0	8.0			
	95.5	92	1.2	14.77	4.0	5.0	6.0	8.0			
	107.2	85	1.4	13.15	3.0	3.0	6.0	8.0			
	121.2	75	1.5	11.63	3.0	3.0	6.0	8.0			
	150.2	61	1.8	9.39	3.0	3.0	6.0	8.0			
	172.4	54	2.1	8.18	3.0	3.0	6.0	8.0			
	197.2	47	2.2	7.15	3.0	3.0	6.0	8.0			
<b>93.9</b>	92	0.8	15.01	3.0	3.0	-	-	PSH 2040 - 90S/4A	19	70-71	
	106.3	81	0.9	13.27	4.0	3.0	-				
	138.0	63	1.1	10.22	4.0	3.0	-				
	160.2	54	1.2	8.80	4.0	3.0	-				
	187.7	48	1.2	7.51	3.0	2.0	-				
	212.7	43	1.3	6.63	3.0	2.0	-				
	275.9	34	1.4	5.11	3.0	2.0	-				
	320.5	29	1.6	4.40	3.0	2.0	-				

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm
1.50	2.9	2800	1.0	495.64	23.0	21.0	27.0	28.0	PSH 2125 - 90L/4A	106	106-107
	7.0	1323	2.0	201.71	27.0	21.0	27.0	28.0			
	7.8	1216	2.1	182.58	27.0	21.0	27.0	28.0			
	8.8	1085	2.3	160.58	27.0	21.0	27.0	28.0			
	9.8	992	2.4	144.62	27.0	21.0	27.0	28.0			
	12.1	842	2.7	117.50	25.0	21.0	27.0	28.0			
	14.1	730	2.9	100.48	24.0	21.0	27.0	28.0			
	16.2	705	2.7	87.40	23.0	21.0	27.0	28.0			
	18.5	628	2.9	76.88	23.0	21.0	27.0	28.0			
	20.5	566	2.9	69.23	22.0	21.0	27.0	28.0			
	25.2	471	3.0	56.25	21.0	21.0	27.0	28.0			
5.1	1592	0.9	183.33	11.0	12.0	16.0	16.0	PSH 2100 - 100L/6A	71	98-99	
	5.9	1414	1.0	241.67	13.0	12.0	16.0	16.0	PSH 2100- 90L/4A	67	98-99
	7.7	1128	1.2	183.33	15.0	12.0	16.0	16.0			
	8.6	1034	1.3	165.38	15.0	12.0	16.0	16.0			
	11.0	845	1.5	128.85	14.0	12.0	16.0	16.0			
	13.7	702	1.7	103.85	13.0	12.0	16.0	16.0			
	15.1	723	1.8	94.25	13.0	12.0	16.0	16.0			
	19.9	563	2.2	71.50	12.0	12.0	16.0	16.0			
	22.0	514	2.3	64.50	12.0	12.0	16.0	16.0			
	28.3	406	2.7	50.25	11.0	12.0	16.0	16.0			
	33.2	367	2.5	42.78	11.0	12.0	16.0	16.0			
	36.8	331	2.6	38.59	10.0	12.0	16.0	16.0			
	41.4	287	3.0	34.29	10.0	12.0	16.0	16.0			
	47.2	261	2.8	30.06	10.0	12.0	16.0	16.0			
	58.6	213	3.0	24.23	9.0	12.0	16.0	16.0			
15.1	598	0.9	94.15	8.0	9.0	13.0	12.0	PSH 2080 - 90L/4A	42	90-91	
	18.0	596	1.1	78.83	8.0	9.0	13.0	12.0			
	21.4	509	1.2	66.45	9.0	9.0	13.0	12.0			
	24.4	452	1.3	58.23	9.0	9.0	13.0	12.0			
	27.3	405	1.4	52.10	9.0	9.0	13.0	12.0			
	31.7	352	1.6	44.79	9.0	9.0	13.0	12.0			
	37.5	317	1.7	37.89	8.0	9.0	13.0	12.0			
	44.5	271	1.9	31.94	8.0	9.0	13.0	12.0			
	50.7	240	2.1	27.99	8.0	9.0	13.0	12.0			
	56.7	215	2.3	25.04	7.0	9.0	13.0	12.0			
	66.0	187	2.5	21.53	7.0	9.0	13.0	12.0			
	74.4	166	2.7	19.08	7.0	9.0	13.0	12.0			
	88.9	143	2.2	15.97	6.0	9.0	13.0	12.0			
	101.5	126	2.4	13.99	6.0	9.0	13.0	12.0			
	113.4	114	2.5	12.52	6.0	8.0	13.0	12.0			
	132.0	98	2.6	10.76	6.0	8.0	13.0	12.0			
	148.8	87	2.8	9.54	6.0	8.0	13.0	12.0			
	188.1	69	2.8	7.55	5.0	7.0	12.0	12.0			
49.7	237	1.0	28.59	6.0	8.0	11.0	10.0	PSH 2063 - 90L/4A	32	82-83	
	56.4	211	1.2	25.18	6.0	8.0	11.0	10.0			
	63.7	187	1.3	22.29	6.0	8.0	11.0	10.0			
	74.7	161	1.3	19.01	5.0	8.0	11.0	10.0			
	91.1	137	1.4	15.58	5.0	7.0	11.0	10.0			
	111.4	113	1.6	12.75	5.0	7.0	11.0	10.0			
	126.4	100	1.8	11.23	5.0	6.0	11.0	10.0			
	142.9	89	1.9	9.94	4.0	6.0	10.0	10.0			
	167.5	76	2.2	8.48	4.0	6.0	10.0	10.0			
	191.9	67	2.3	7.40	4.0	6.0	10.0	10.0			
84.1	141	0.8	16.89	4.0	4.0	6.0	8.0	PSH 2050 - 90L/4A	28	74-75	
	96.1	125	0.9	14.77	4.0	4.0	6.0	8.0			
	108.0	115	1.0	13.15	2.0	2.0	6.0	7.0			
	122.1	102	1.1	11.63	3.0	2.0	6.0	7.0			
	151.2	83	1.3	9.39	3.0	3.0	6.0	7.0			
	173.6	73	1.5	8.18	3.0	3.0	6.0	7.0			
	198.6	63	1.7	7.15	3.0	3.0	6.0	7.0			

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm
<b>2.20</b>	4.2	2968	1.0	337.55	23.0	21.0	27.0	28.0	PSH 2125 - 100L/4A	110	106-107
	7.0	1954	1.3	201.71	27.0	21.0	27.0	28.0			
	7.7	1796	1.4	182.58	27.0	21.0	27.0	28.0			
	8.8	1564	1.6	160.58	26.0	21.0	27.0	28.0			
	9.7	1465	1.6	144.62	25.0	21.0	27.0	28.0			
	12.0	1243	1.8	117.50	24.0	21.0	27.0	28.0			
	14.0	1078	2.0	100.48	23.0	21.0	27.0	28.0			
	16.1	1042	2.3	87.40	22.0	21.0	27.0	28.0			
	18.3	928	2.5	76.88	21.0	21.0	27.0	28.0			
	20.4	836	2.3	69.23	21.0	21.0	27.0	28.0			
	25.1	696	3.0	56.25	20.0	21.0	27.0	28.0			
	29.3	602	3.3	48.10	19.0	21.0	27.0	28.0			
	34.4	519	3.5	40.98	18.0	21.0	27.0	28.0			
	39.9	463	2.7	35.31	17.0	21.0	27.0	28.0			
	44.4	417	2.9	31.79	17.0	21.0	27.0	28.0			
	10.9	1248	1.0	128.85	12.0	12.0	16.0	16.0	PSH 2100 - 100L/4A	71	98-99
	13.6	1037	1.1	103.85	12.0	12.0	16.0	16.0			
	15.0	1067	1.2	94.25	11.0	12.0	16.0	16.0			
	19.7	831	1.5	71.50	11.0	12.0	16.0	16.0			
	21.9	759	1.6	64.50	11.0	12.0	16.0	16.0			
	28.1	599	1.9	50.25	10.0	12.0	16.0	16.0			
	33.0	542	2.0	42.78	10.0	12.0	16.0	16.0			
	36.5	489	2.3	38.59	10.0	12.0	16.0	16.0			
	41.1	424	2.6	34.29	9.0	12.0	16.0	16.0			
	46.9	385	2.5	30.06	9.0	12.0	16.0	16.0			
	58.2	314	2.9	24.23	9.0	12.0	16.0	16.0			
	68.7	269	3.0	20.52	8.0	12.0	16.0	16.0			
	74.4	254	2.2	18.94	8.0	10.0	16.0	16.0			
	82.5	229	2.3	17.09	8.0	9.0	16.0	16.0			
	86.8	216	3.1	16.25	8.0	11.0	16.0	16.0			
	105.9	180	2.6	13.31	7.0	9.0	16.0	16.0			
	131.4	145	2.8	10.73	7.0	9.0	16.0	16.0			
	155.1	125	3.0	9.09	7.0	8.0	15.0	16.0			
	27.1	598	1.0	52.10	8.0	9.0	13.0	12.0	PSH 2080 - 100L/4A	46	90-91
	31.5	521	1.1	44.79	8.0	9.0	13.0	12.0			
	37.2	469	1.2	37.89	7.0	9.0	13.0	12.0			
	44.1	400	1.3	31.94	7.0	9.0	13.0	12.0			
	50.4	355	1.4	27.99	7.0	9.0	13.0	12.0			
	56.3	317	1.5	25.04	7.0	9.0	13.0	12.0			
	65.5	276	1.7	21.53	7.0	9.0	13.0	12.0			
	73.9	245	1.9	19.08	7.0	9.0	13.0	12.0			
	88.3	212	1.6	15.97	6.0	7.0	13.0	12.0			
	100.8	186	2.0	13.99	6.0	7.0	13.0	12.0			
	112.6	168	2.1	12.52	6.0	7.0	13.0	12.0			
	131.0	144	2.4	10.76	5.0	7.0	13.0	12.0			
	147.8	128	2.5	9.54	5.0	7.0	12.0	12.0			
	186.8	102	2.7	7.55	5.0	6.0	12.0	11.0			
	74.2	238	0.9	19.01	5.0	7.0	11.0	10.0	PSH 2063 - 100L/4A	36	82-83
	90.5	202	0.9	15.58	4.0	5.0	11.0	10.0			
	110.6	167	1.1	12.75	4.0	5.0	10.0	10.0			
	125.6	147	1.2	11.23	4.0	5.0	10.0	10.0			
	141.9	132	1.3	9.94	4.0	5.0	10.0	10.0			
	166.3	112	1.5	8.48	4.0	5.0	9.0	9.0			
	190.5	99	1.6	7.40	4.0	5.0	9.0	9.0			

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm
<b>3.00</b>	7.0	2664	1.0	201.71	24.0	21.0	27.0	28.0	PSH 2125 - 100L/4B	113	106-107
	7.7	2449	1.0	182.58	24.0	21.0	27.0	28.0			
	8.8	2186	1.1	160.58	24.0	21.0	27.0	28.0			
	9.7	1998	1.2	144.62	24.0	21.0	27.0	28.0			
	12.0	1695	1.3	117.50	23.0	21.0	27.0	28.0			
	14.0	1470	1.4	100.48	22.0	21.0	27.0	28.0			
	16.1	1421	1.7	87.40	21.0	21.0	27.0	28.0			
	18.3	1265	1.8	76.88	20.0	21.0	27.0	28.0			
	20.4	1139	1.7	69.23	20.0	21.0	27.0	28.0			
	25.1	949	2.2	56.25	19.0	21.0	27.0	28.0			
	29.3	830	2.4	48.10	18.0	21.0	27.0	28.0			
	34.4	708	2.6	40.98	17.0	21.0	27.0	28.0			
	39.9	631	2.0	35.31	17.0	21.0	27.0	28.0			
	44.4	568	2.1	31.79	16.0	21.0	27.0	28.0			
	54.6	467	2.3	25.83	15.0	21.0	27.0	28.0			
	63.8	404	2.5	22.09	15.0	21.0	27.0	28.0			
	74.9	344	2.6	18.82	14.0	20.0	27.0	28.0			
	88.7	297	2.1	15.90	13.0	17.0	27.0	28.0			
	109.1	242	2.3	12.92	13.0	16.0	27.0	27.0			
	127.6	209	2.5	11.05	12.0	15.0	26.0	26.0			
<b>19.7</b>	1133	1.1	71.50	9.0	12.0	16.0	16.0	PSH 2100 - 100L/4B	74	98-99	
	1035	1.1	64.50	9.0	12.0	16.0	16.0				
	817	1.3	50.25	9.0	12.0	16.0	16.0				
	739	1.5	42.78	9.0	12.0	16.0	16.0				
	666	1.7	38.59	9.0	12.0	16.0	16.0				
	578	1.9	34.29	9.0	12.0	16.0	16.0				
	525	1.9	30.06	9.0	12.0	16.0	16.0				
	428	2.1	24.23	8.0	11.0	16.0	16.0				
	367	2.3	20.52	8.0	11.0	16.0	16.0				
	346	1.6	18.94	7.0	8.0	16.0	16.0				
	313	1.7	17.09	7.0	8.0	16.0	16.0				
	294	2.3	16.25	8.0	10.0	16.0	16.0				
	246	1.9	13.31	7.0	8.0	16.0	16.0				
	198	2.1	10.73	7.0	8.0	16.0	16.0				
	170	2.2	9.09	6.0	7.0	15.0	16.0				
<b>44.1</b>	545	1.0	31.94	6.0	8.0	13.0	12.0	PSH 2080 - 100L/4B	48	90-91	
	483	1.1	27.99	6.0	8.0	13.0	12.0				
	432	1.1	25.04	6.0	9.0	13.0	12.0				
	376	1.2	21.53	6.0	8.0	13.0	12.0				
	333	1.4	19.08	6.0	8.0	13.0	12.0				
	289	1.2	15.97	5.0	6.0	13.0	11.0				
	253	1.4	13.99	5.0	6.0	13.0	11.0				
	229	1.5	12.52	5.0	6.0	13.0	11.0				
	197	1.7	10.76	5.0	6.0	13.0	11.0				
	174	1.8	9.54	5.0	6.0	12.0	11.0				

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm
<b>4.00</b>	9.9	2627	0.9	144.62	21.0	21.0	27.0	28.0	PSH 2125 - 112M/4B	122	106-107
	12.2	2229	1.0	117.50	21.0	21.0	27.0	28.0			
	14.2	1933	1.1	100.48	20.0	21.0	27.0	28.0			
	16.4	1868	1.3	87.40	19.0	21.0	27.0	28.0			
	18.6	1664	1.4	76.88	19.0	21.0	27.0	28.0			
	20.7	1498	1.3	69.23	18.0	21.0	27.0	28.0			
	25.4	1247	1.7	56.25	18.0	21.0	27.0	28.0			
	29.7	1079	1.8	48.10	17.0	21.0	27.0	28.0			
	34.9	931	2.0	40.98	17.0	21.0	27.0	28.0			
	40.5	830	1.9	35.31	16.0	21.0	27.0	28.0			
	45.0	747	2.4	31.79	16.0	21.0	27.0	28.0			
	55.4	614	2.6	25.83	15.0	21.0	27.0	28.0			
	64.7	531	2.8	22.09	14.0	20.0	27.0	28.0			
	76.0	452	2.9	18.82	14.0	19.0	27.0	28.0			
	89.9	391	2.4	15.90	13.0	16.0	27.0	27.0			
	110.7	318	2.6	12.92	12.0	15.0	26.0	26.0			
	129.4	275	2.8	11.05	12.0	14.0	25.0	25.0			
<b>5.50</b>	28.5	1074	1.0	50.25	8.0	12.0	16.0	16.0	PSH 2100 - 112M/4B	83	98-99
	33.4	971	1.1	42.78	8.0	9.0	16.0	16.0			
	37.1	876	1.3	38.59	8.0	10.0	16.0	16.0			
	41.7	760	1.4	34.29	8.0	12.0	16.0	16.0			
	47.6	691	1.5	30.06	8.0	10.0	16.0	16.0			
	59.0	563	1.8	24.23	8.0	10.0	16.0	16.0			
	69.7	482	1.7	20.52	7.0	10.0	16.0	16.0			
	75.5	455	1.8	18.94	6.0	6.0	16.0	16.0			
	83.7	411	1.7	17.09	6.0	6.0	16.0	16.0			
	88.0	386	1.9	16.25	7.0	9.0	16.0	16.0			
	107.4	324	2.1	13.31	6.0	6.0	16.0	16.0			
	133.3	261	2.4	10.73	6.0	7.0	15.0	16.0			
	157.3	223	2.5	9.09	6.0	6.0	15.0	16.0			
	198.6	177	2.6	7.20	6.0	6.0	14.0	15.0			
<b>5.50</b>	66.4	495	1.0	21.53	5.0	7.0	13.0	12.0	PSH 2080 - 112M/4B	57	90-91
	74.9	438	1.0	19.08	5.0	7.0	13.0	12.0			
	89.5	380	0.9	15.97	4.0	3.0	13.0	9.0			
	102.2	333	1.1	13.99	4.0	4.0	13.0	10.0			
	114.2	301	1.1	12.52	4.0	4.0	12.0	10.0			
	132.9	259	1.3	10.76	5.0	4.0	12.0	10.0			
	149.9	229	1.5	9.54	5.0	5.0	12.0	10.0			
	189.4	184	1.6	7.55	4.0	5.0	11.0	10.0			
	18.8	2264	1.0	76.88	16.0	21.0	27.0	28.0			
	20.9	2038	1.0	69.23	16.0	21.0	27.0	28.0			
	25.7	1697	1.2	56.25	16.0	21.0	27.0	28.0			
	30.0	1469	1.3	48.10	16.0	21.0	27.0	28.0			
	35.3	1266	1.5	40.98	15.0	21.0	27.0	28.0			
	40.9	1129	1.1	35.31	15.0	20.0	27.0	28.0			
	45.5	1017	1.8	31.79	15.0	19.0	27.0	28.0			
	55.9	836	2.0	25.83	14.0	19.0	27.0	28.0			
	65.4	723	2.2	22.09	14.0	18.0	27.0	28.0			
	76.8	616	2.5	18.82	13.0	17.0	27.0	28.0			
	90.9	532	2.3	15.90	12.0	14.0	27.0	25.0			
	99.4	481	2.8	14.54	12.0	16.0	27.0	27.0			
	111.8	432	2.8	12.92	12.0	13.0	26.0	24.0			
	130.8	374	2.9	11.05	11.0	13.0	25.0	24.0			
	153.6	318	3.1	9.41	11.0	12.0	24.0	23.0			
	171.2	285	3.3	8.44	10.0	12.0	23.0	23.0			
	186.5	262	3.3	7.75	10.0	12.0	23.0	22.0			
	198.8	246	3.4	7.27	10.0	12.0	22.0	22.0			

P <sub>1</sub> [kW]	n <sub>2</sub> [Min <sup>-1</sup> ]	M <sub>2</sub> [Nm]	f <sub>B</sub>	i <sub>ges</sub>	F <sub>R</sub> [kN]	F <sub>A</sub> [kN]	F <sub>R GR</sub> [kN]	F <sub>A GR</sub> [kN]	Tip / Type	Kg	Sayfa Page mm
<b>5.50</b>	48.1	940	1.1	30.06	6.0	7.0	16.0	16.0	PSH 2100 - 132S/4C	97	98-99
	59.6	766	1.3	24.23	6.0	8.0	16.0	16.0			
	70.4	656	1.3	20.52	6.0	8.0	16.0	16.0			
	76.3	620	0.9	18.94	3.0	3.0	16.0	13.0			
	84.6	559	1.3	17.09	4.0	3.0	16.0	14.0			
	88.9	526	1.4	16.25	6.0	8.0	16.0	16.0			
	108.6	440	1.6	13.31	5.0	4.0	15.0	14.0			
	134.7	355	2.0	10.73	6.0	5.0	15.0	14.0			
	159.0	304	2.4	9.09	5.0	5.0	14.0	14.0			
	200.7	241	2.8	7.20	5.0	5.0	14.0	14.0			
<b>7.50</b>	30.1	1996	1.0	48.10	14.0	21.0	27.0	28.0	PSH 2125 - 132M/4B	147	106-107
	35.4	1721	1.1	40.98	14.0	20.0	27.0	28.0			
	41.1	1535	0.8	35.31	13.0	16.0	27.0	28.0			
	45.6	1382	1.3	31.79	13.0	16.0	27.0	28.0			
	56.1	1136	1.5	25.83	13.0	16.0	27.0	28.0			
	65.6	982	1.6	22.09	13.0	16.0	27.0	27.0			
	77.0	837	1.8	18.82	12.0	15.0	27.0	27.0			
	91.2	723	1.7	15.90	11.0	11.0	26.0	23.0			
	99.7	654	2.1	14.54	12.0	15.0	26.0	26.0			
	112.2	587	2.0	12.92	11.0	11.0	25.0	22.0			
	131.2	508	2.2	11.05	10.0	11.0	24.0	22.0			
	154.1	432	2.3	9.41	10.0	11.0	23.0	22.0			
	171.8	388	2.4	8.44	10.0	11.0	23.0	21.0			
	187.1	356	2.4	7.75	10.0	11.0	22.0	21.0			
	199.4	334	2.5	7.27	10.0	11.0	22.0	21.0			
<b>9.20</b>	89.2	714	1.0	16.25	5.0	6.0	16.0	16.0	PSH 2100 - 132M/4B	107	98-99
	108.9	598	1.2	13.31	2.0	2.0	14.0	11.0			
	135.1	482	1.5	10.73	3.0	3.0	14.0	12.0			
	159.5	413	1.8	9.09	4.0	3.0	14.0	12.0			
	201.4	327	2.1	7.20	5.0	4.0	13.0	12.0			
	45.6	1695	1.1	31.79	12.0	13.0	27.0	26.0			
	56.1	1393	1.2	25.83	12.0	14.0	27.0	26.0			
	65.6	1205	1.3	22.09	12.0	14.0	27.0	26.0			
	77.0	1026	1.5	18.82	12.0	14.0	27.0	25.0			
	91.2	886	1.4	15.90	10.0	9.0	25.0	20.0			
	99.7	802	1.7	14.54	11.0	13.0	26.0	25.0			
	112.2	720	1.7	12.92	10.0	9.0	24.0	21.0			
	131.2	623	2.0	11.05	10.0	10.0	24.0	21.0			
	154.1	530	2.1	9.41	10.0	10.0	23.0	20.0			
	171.8	476	2.4	8.44	10.0	10.0	22.0	20.0			
	187.1	437	2.3	7.75	9.0	10.0	22.0	20.0			
	199.4	410	2.3	7.27	9.0	10.0	21.0	20.0			
<b>11.00</b>	56.1	1665	1.0	25.83	11.0	11.0	27.0	24.0	PSH 2125 - 160M/4B	174	106-107
	65.6	1440	1.1	22.09	11.0	12.0	27.0	24.0			
	77.0	1227	1.2	18.82	11.0	12.0	27.0	24.0			
	91.2	1060	1.2	15.90	8.0	6.0	24.0	18.0			
	99.7	959	1.4	14.54	10.0	12.0	25.0	24.0			
	112.2	861	1.4	12.92	9.0	7.0	24.0	19.0			
	131.2	745	1.7	11.05	9.0	8.0	23.0	19.0			
	154.1	634	1.8	9.41	9.0	8.0	22.0	19.0			
	171.8	569	2.0	8.44	9.0	8.0	22.0	19.0			
	187.1	522	1.9	7.75	9.0	8.0	21.0	19.0			
	199.4	490	1.9	7.27	9.0	9.0	21.0	19.0			
<b>15.00</b>	99.7	1307	1.0	14.54	9.0	9.0	24.0	21.0	PSH 2125 - 160L/4A	199	106-107
	112.2	1174	1.1	12.92	4.0	3.0	22.0	15.0			
	131.2	1015	1.2	11.05	5.0	4.0	22.0	16.0			
	154.1	865	1.3	9.41	6.0	5.0	21.0	16.0			
	171.8	775	1.5	8.44	7.0	6.0	21.0	16.0			
	187.1	712	1.4	7.75	7.0	6.0	20.0	17.0			
	199.4	668	1.4	7.27	8.0	6.0	20.0	17.0			



## İki - Üç Kademeli Ölçü Tabloları

Double - Triple Stages  
Dimension Tables

PSH 2040 DG



PSH 2040 TMA



PSH 2050 DG ... 2125 DG



PSH 3050 DG ... 3125 DG



PSH 2050 TMA ... 2125 TMA

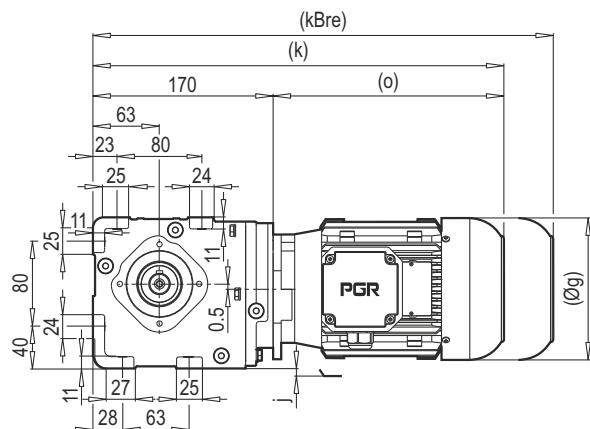


PSH 3050 TMA ... 3125 TMA

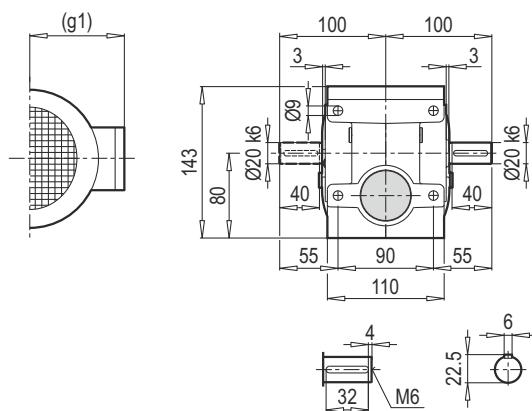


# PSH

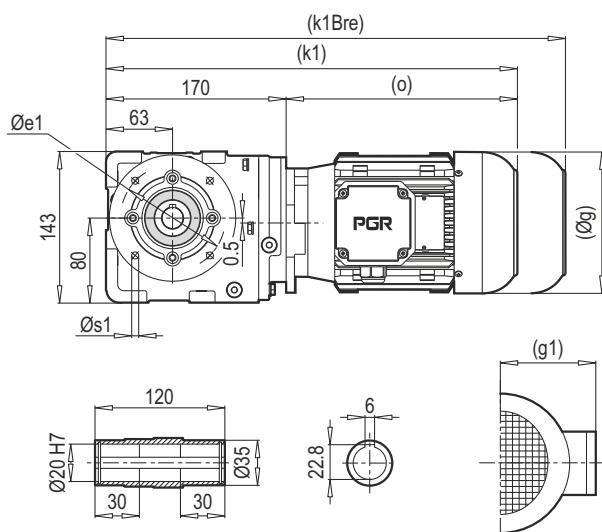
PSH 2040 TMA



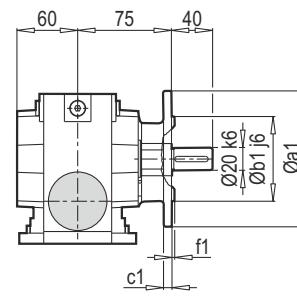
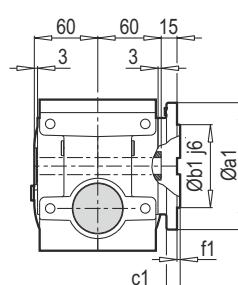
PSH 2040 ÇMA



PSH 2040 DG/B5



PSH 2040 TMG/B5

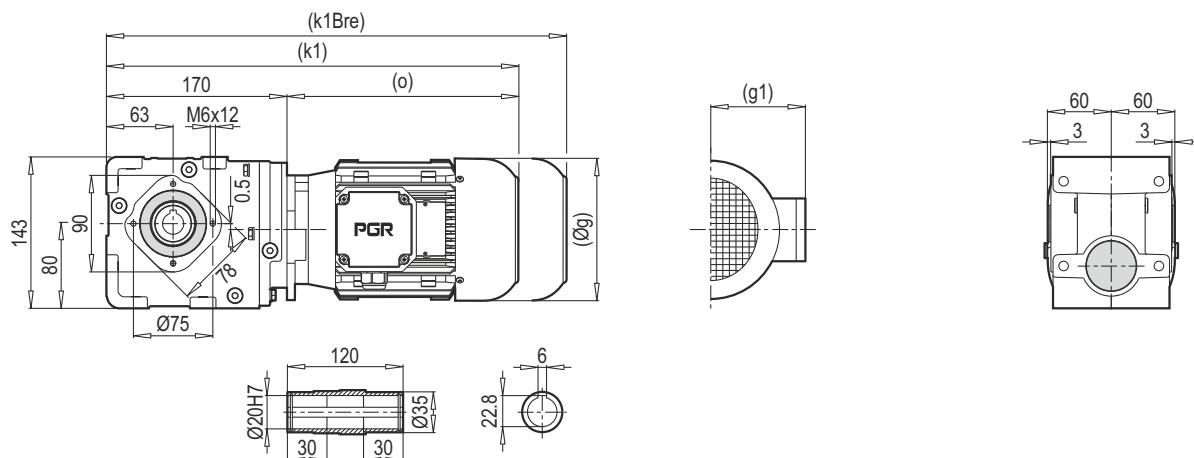


a1	b1	c1	e1	f1	s1
120	80	10	100	3	6.6
160	110	10	130	3.5	9

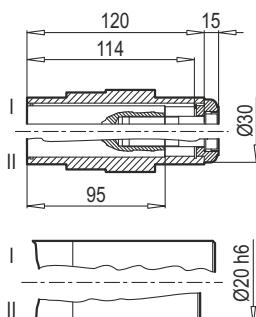
	63 M	71 M	80 M	90 S			
g	124	140	159	193			
g1	111	119	127	151			
k/k1	364/364	388/388	412/412	434/434			
kBre/k1Bre	416/416	448/448	474/474	507/507			
o	194	218	242	264			
j	—	—	3	12			

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

PSH 2040 DG/B14



PSH 2040 DG/Ç

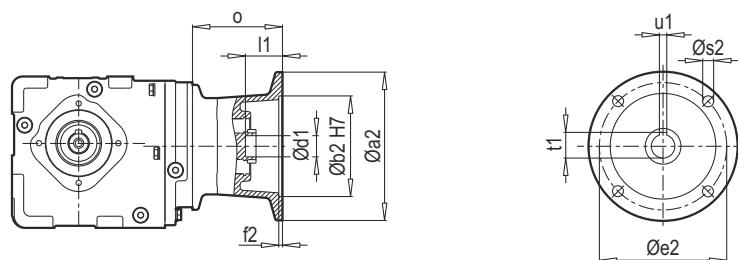


43 - 44

	63 M	71 M	80 M	90 S			
<b>g</b>	124	140	159	193			
<b>g1</b>	111	119	127	151			
<b>k1</b>	364	388	412	434			
<b>k1Bre</b>	416	448	474	507			
<b>o</b>	194	218	242	264			

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

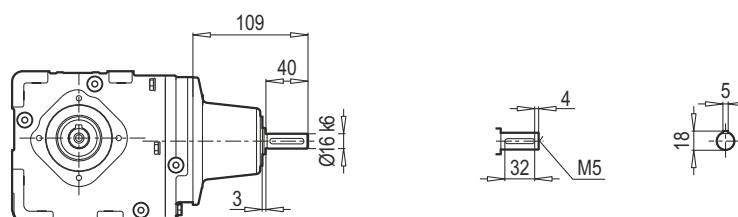
## PSH 2040 IEC



Tip / Type	IEC	$\varnothing a2$	$\varnothing b2$	$\varnothing e2$	f2	$\varnothing s2$	$\varnothing d1$	l1	t1	u1	o
PSH 2040	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	85
	80	200	130	165	4.0	M10	19	40	21.8	6	103
	90	200	130	165	4.0	M10	24	50	27.3	8	103

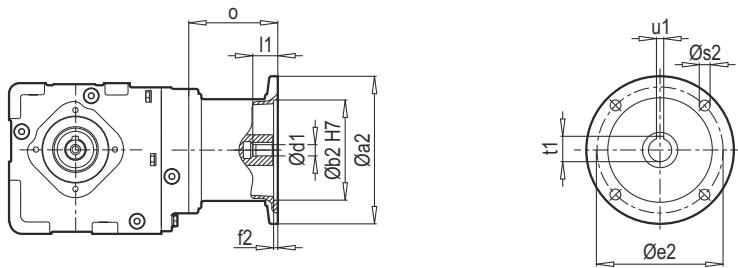
$\sim \text{Kg}$	
IEC	PSH 2040
63	10
71	11
80	13
90	13

## PSH 2040 W



W ~ Kg	
PSH 2040	9

PSH 2040 PAM B5/B14



Tip / Type	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 2040	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	85
	80	200	130	165	4.0	M10	19	40	21.8	6	103
	90	200	130	165	4.0	M10	24	50	27.3	8	103

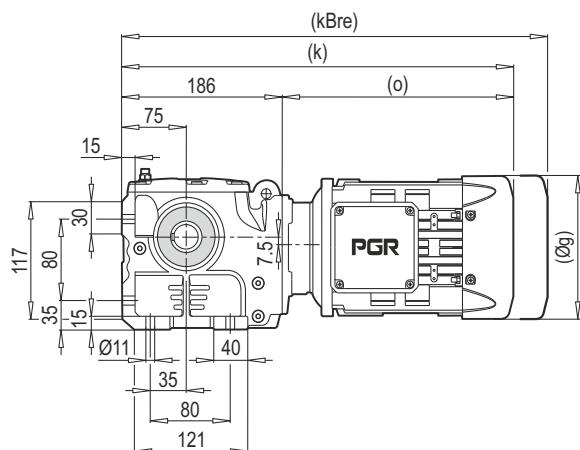
~ <b>Kg</b>	
PAM B5	PSH 2040
63	9
71	10
80	12
90	12

Tip / Type	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 2040	63	90	60	75	4.0	6	11	23	12.8	4	85
	71	105	70	85	4.0	7	14	30	16.3	5	85
	80	120	80	100	4.0	7	19	40	21.8	6	103
	90	140	95	115	4.0	9	24	50	27.3	8	103

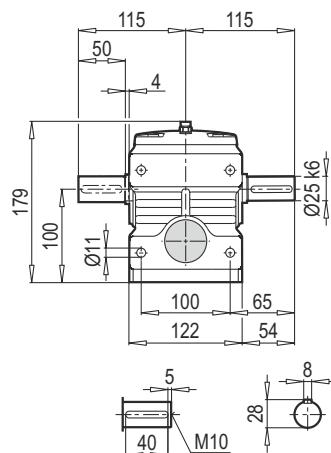
~ <b>Kg</b>	
PAM B14	PSH 2040
63	8
71	9
80	11
90	11

## PSH 2050

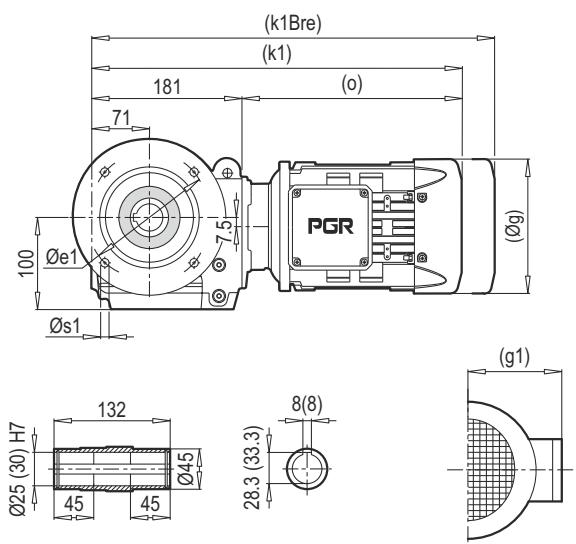
PSH 2050 TMA



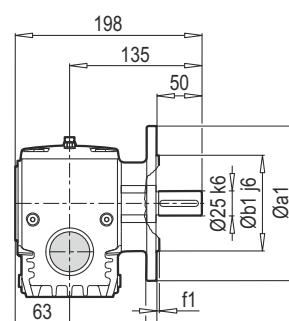
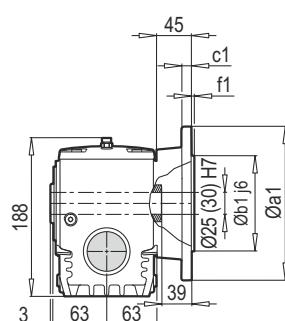
PSH 2050 ÇMA



PSH 2050 DG/B5



PSH 2050 TMG/B5



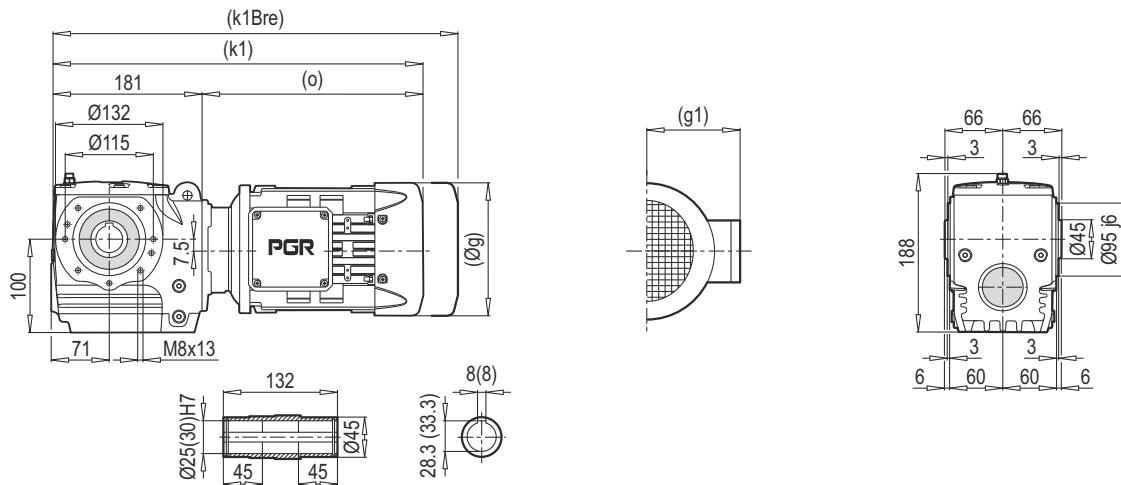
a1	b1	c1	e1	f1	s1
200	130	12	165	3.5	4 x 11

a1	b1	c1	e1	f1	s1
160	110	10	130	3.5	4 x 9

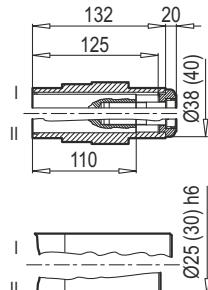
	63 M	71 M	80 M	90 S	90 L		
g	124	140	159	193	193		
g1	111	119	127	151	151		
k/k1	384 / 379	426 / 421	453 / 448	476 / 471	496 / 491		
kBre/k1Bre	436 / 431	486 / 481	515 / 510	549 / 544	569 / 564		
o	198	240	267	290	310		

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

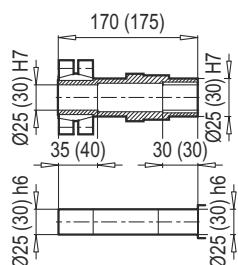
PSH 2050 DG/B14



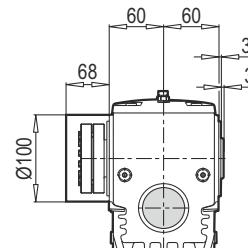
PSH 2050 DG/Ç



PSH 2050 DG/KS



PSH 2050 DG/KS/KK



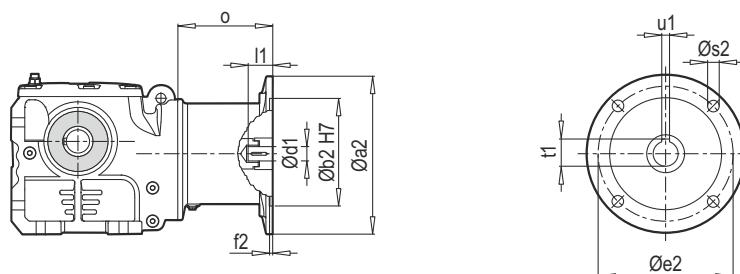
43 - 44

Konik sıkıştırma / Shrink disc				Altıköşe başlı civata / Hexagonal screw		
Tip/Type	M <sub>max</sub> (Nm)	s <sup>h6</sup>	s <sup>f6</sup>	d <sub>x</sub> l	Z <sub>s</sub>	M <sub>A</sub> (Nm)
KS 25/35	182	2.8	2.3	M5x25	8	7
KS 30/40	182	5.4	4.7	M6x35*	8	12

	63 M	71 M	80 M	90 S	90 L		
g	124	140	159	193	193		
g1	111	119	127	151	151		
k1	379	421	448	471	491		
k1Bre	431	481	510	544	564		
o	198	240	267	290	310		

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

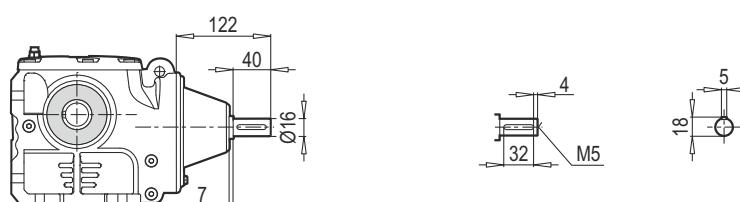
## PSH 2050 IEC



Tip / Type	IEC	$\varnothing a_2$	$\varnothing b_2$	$\varnothing e_2$	$f_2$	$\varnothing s_2$	$\varnothing d_1$	$I_1$	$t_1$	$u_1$	$\varnothing$
PSH 2050	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	89
	80	200	130	165	4.0	M10	19	40	21.8	6	105
	90	200	130	165	4.0	M10	24	50	27.3	8	105

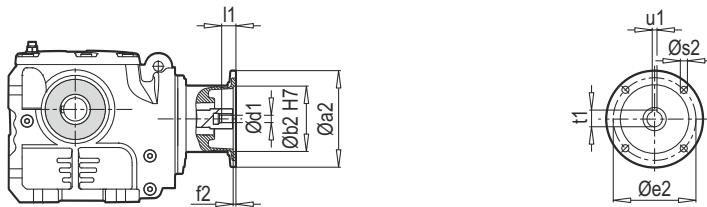
$\sim \frac{\text{kg}}{\text{W}}$	
IEC	PSH 2050
63	19
71	20
80	23
90	23

## PSH 2050 W



$\text{W} \sim \frac{\text{kg}}{\text{W}}$	
PSH 2050	18

PSH 2050 PAM B5/B14



Tip / Type	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	I1	t1	u1	o
PSH 2050	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	55
	80	200	130	165	4.0	M10	19	40	21.8	6	74
	90	200	130	165	4.0	M10	24	50	27.3	8	74

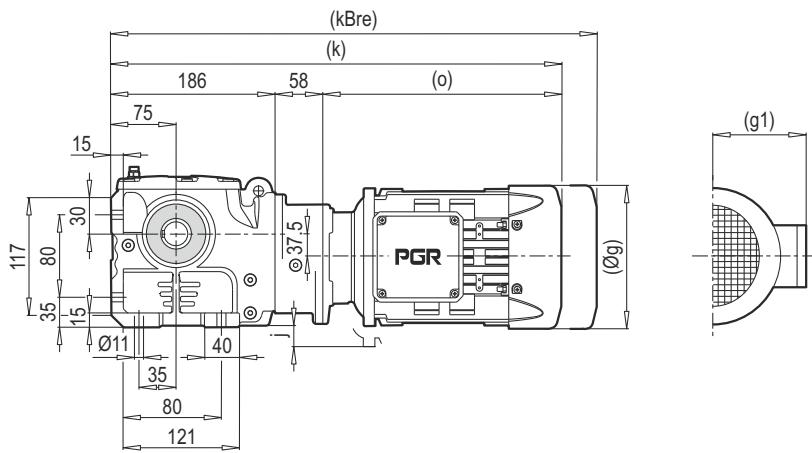
~ <b>Kg</b>	
PAM B5	PSH 2050
63	16
71	16
80	17
90	17

Tip / Type	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	I1	t1	u1	o
PSH 2050	63	90	60	75	4.0	6	11	23	12.8	4	60
	71	105	70	85	4.0	7	14	30	16.3	5	55
	80	120	80	100	4.0	7	19	40	21.8	6	74
	90	140	95	115	4.0	9	24	50	27.3	8	75

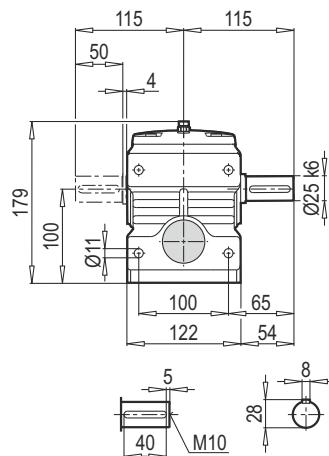
~ <b>Kg</b>	
PAM B14	PSH 2050
63	15
71	15
80	16
90	16

**PSH 3050**

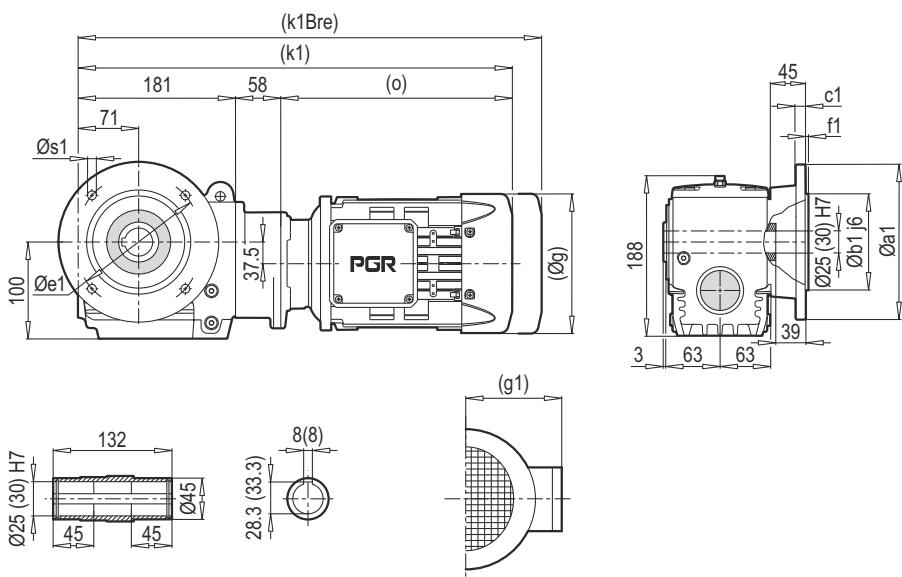
**PSH 3050 TMA**



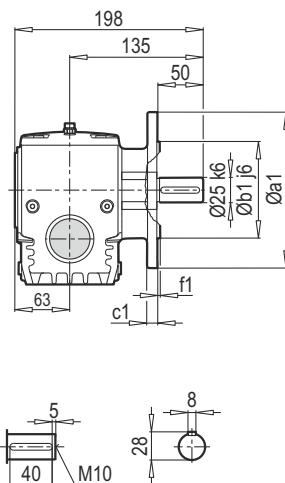
**PSH 3050 ÇMA**



**PSH 3050 DG/B5**



**PSH 3050 TMG/B5**



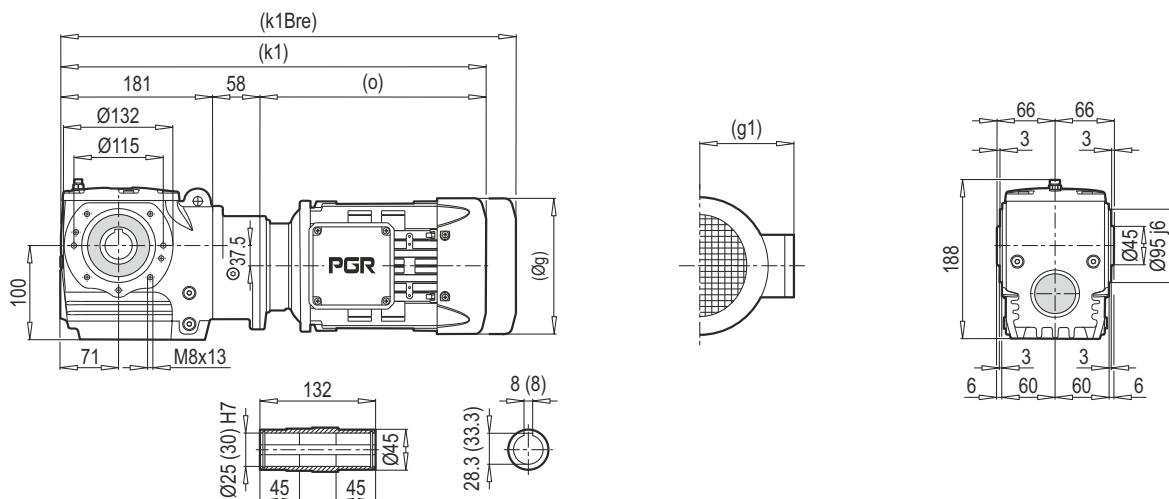
a1	b1	c1	e1	f1	s1
200	130	12	165	3.5	4 x 11

a1	b1	c1	e1	f1	s1
160	110	10	130	3.5	4 x 9

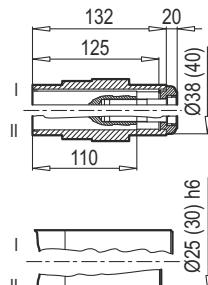
	63 M	71 M				
g	124	140				
g1	111	119				
k/k1	442 / 437	484 / 479				
kBre/k1Bre	494 / 489	544 / 539				
o	198	240				
j	2.5	10				

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

PSH 3050 DG/B14

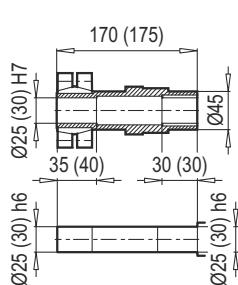


PSH 3050 DG/Ç

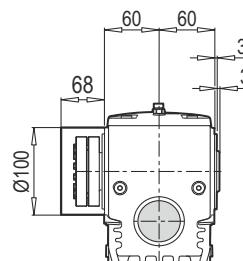


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PSH 3050 DG/KS



PSH 3050 DG/KS/KK

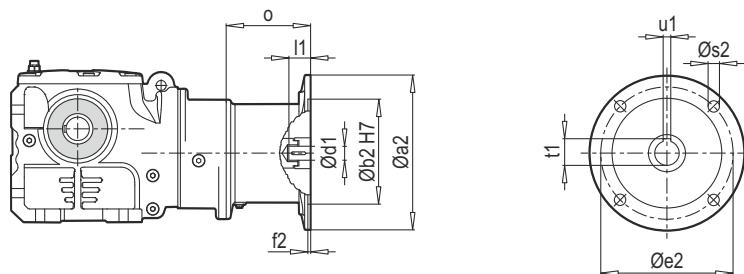


Konik sıkıştırma / Shrink disc  41				Altıköşe başlı civata / Hexagonal screw DIN 931 / DIN 933* 10.9Vz		
Tip/Type	M <sub>max</sub> (Nm)	s <sub>h6</sub>	s <sub>f6</sub>	d <sub>x</sub> l	Z <sub>s</sub>	M <sub>A</sub> (Nm)
KS 25/35	182	2.8	2.3	M5x25	8	7
KS 30/40	182	5.4	4.7	M6x35*	8	12

	63 M	71 M					
g	124	140					
g1	111	119					
k1	437	479					
k1Bre	489	539					
o	198	240					

Note: (...) İşaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

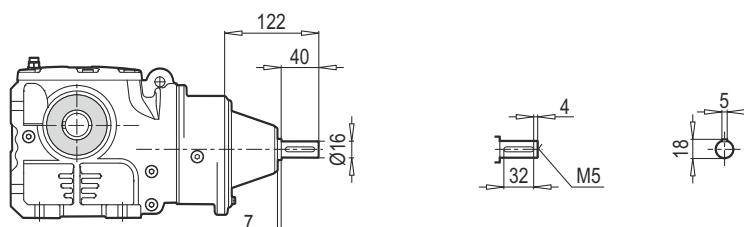
## PSH 3050 IEC



Tip / Type	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 3050	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	89

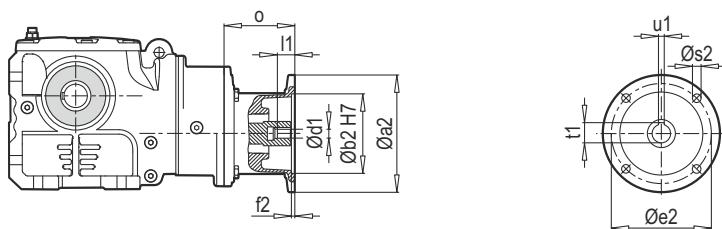
~ Kg	
IEC	PSH 3050
63	24
71	25

## PSH 3050 W



W ~ Kg	
PSH 3050	23

PSH 3050 PAM B5/B14



Tip / Type	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 3050	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	55

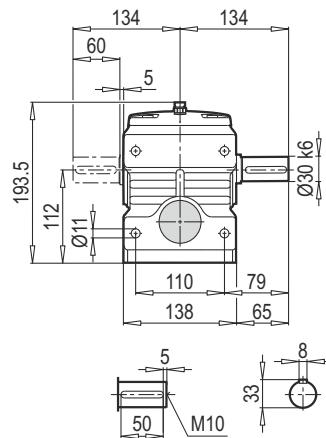
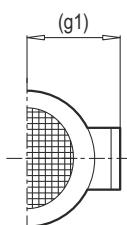
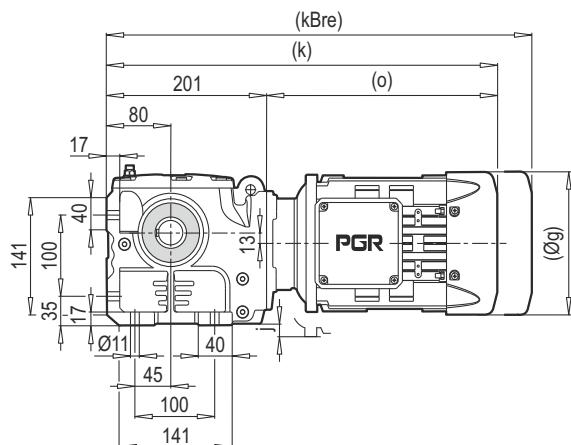
~ Kg	
PAM B5	PSH 3050
63	21
71	21

Tip / Type	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 3050	63	90	60	75	4.0	6	11	23	12.8	4	60
	71	105	70	85	4.0	7	14	30	16.3	5	55

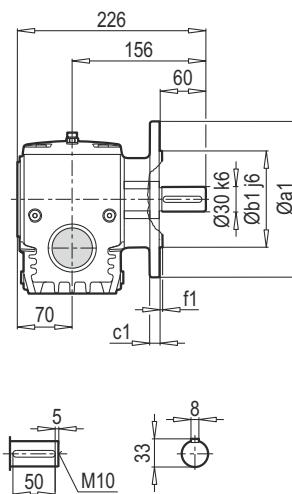
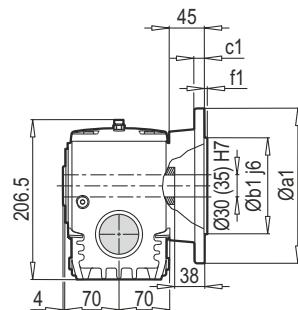
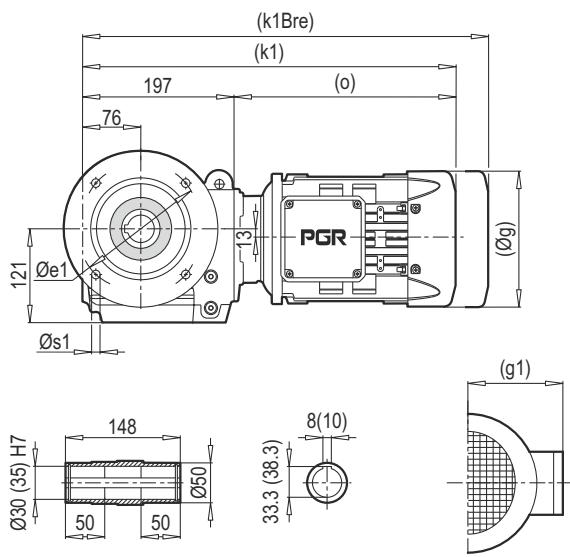
~ Kg	
PAM B14	PSH 3050
63	20
71	20

**PSH 2063**

**PSH 2063 TMA**



**PSH 2063 DG/B5**



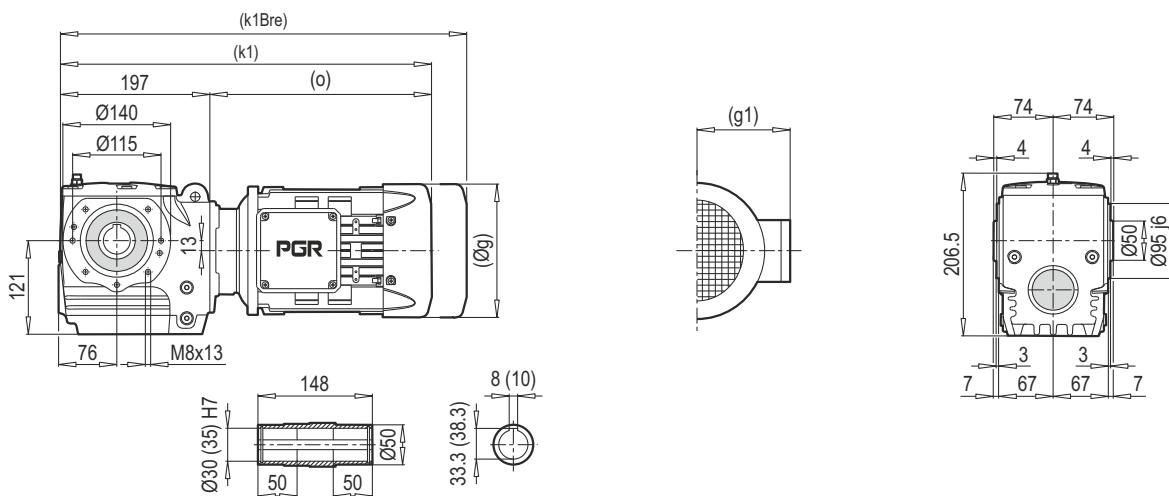
a1	b1	c1	e1	f1	s1
200	130	12	165	3.5	4 x 11

a1	b1	c1	e1	f1	s1
200	130	12	165	3.5	4 x 11

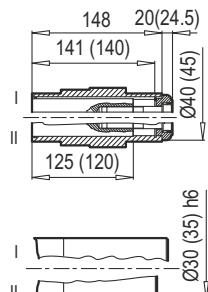
	63 M	71 M	80 M	90 S	90 L	100 L	
g	124	140	159	193	193	217	
g1	111	119	127	151	151	160	
k/k1	399 / 395	441 / 437	468 / 464	491 / 487	511 / 507	539 / 535	
kBre/k1Bre	451 / 447	501 / 497	530 / 526	564 / 560	584 / 580	620 / 616	
o	198	240	267	290	310	338	
j	-	-	-	-	-	2.5	

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

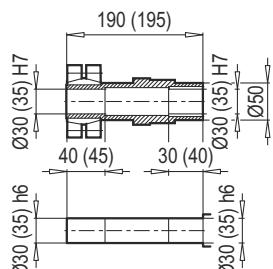
PSH 2063 DG/B14



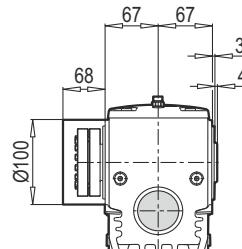
PSH 2063 DG/Ç



PSH 2063 DG/KS



PSH 2063 DG/KS/KK



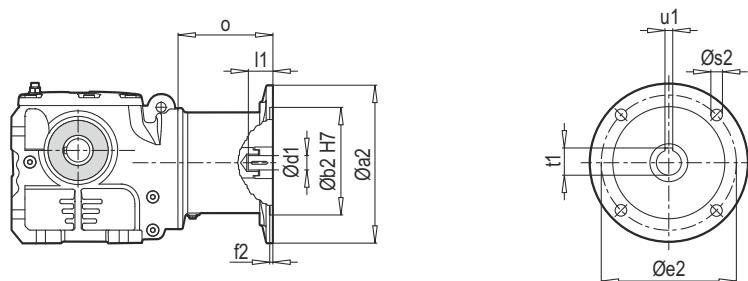
43 - 44

Konik sıkıştırma / Shrink disc				41	Altıköşe başlı civata / Hexagonal screw		
Tip/Type	Mamax (Nm)	s h6	s f6		d x l	Zs	MA (Nm)
KS 30/40	383	2.6	2.2		M6x35*	8	12
KS 35/46	383	3.0	3.2		M6x35*	10	12

	63 M	71 M	80 M	90 S	90 L	100 L	
g	124	140	159	193	193	217	
g1	111	119	127	151	151	160	
k1	395	437	464	487	507	535	
k1Bre	447	497	526	560	580	616	
o	198	240	267	290	310	338	

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

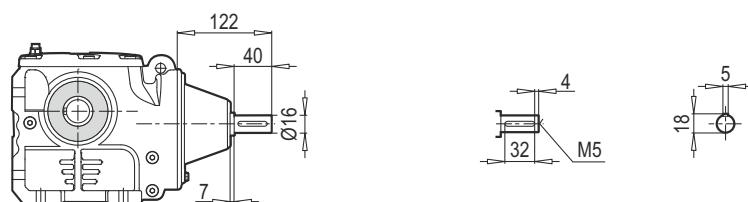
## PSH 2063 IEC



Tip / Type	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 2063	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	89
	80	200	130	165	4.0	M10	19	40	21.8	6	105
	90	200	130	165	4.0	M10	24	50	27.3	8	105
	100	250	180	215	5.0	M12	28	60	31.3	8	130

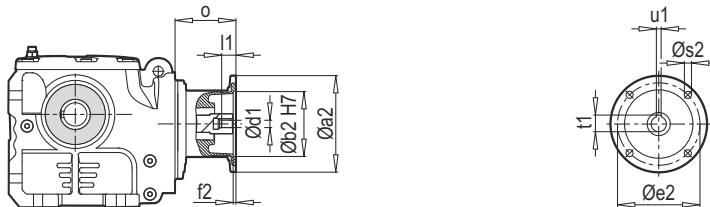
W ~ Kg	
IEC	PSH 2063
63	23
71	24
80	27
90	27
100	34

## PSH 2063 W



W ~ Kg	
PSH 2063	22

PSH 2063 PAM B5/B14



Tip / Type	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 2063	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	55
	80	200	130	165	4.0	M10	19	40	21.8	6	74
	90	200	130	165	4.0	M10	24	50	27.3	8	74
	100	250	180	215	5.0	M12	28	60	31.3	8	131.5

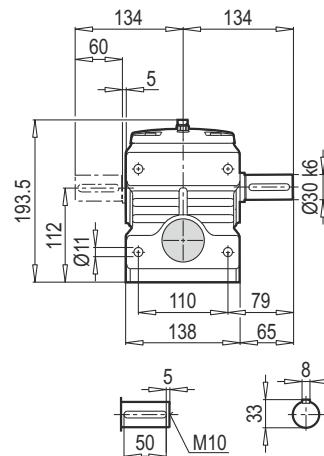
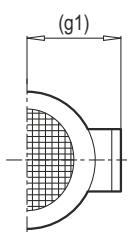
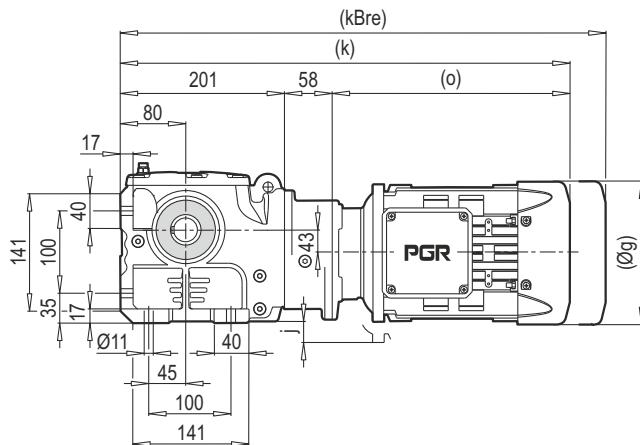
~ Kg	
PAM B5	PSH 2063
63	20
71	20
80	21
90	21
100	28

Tip / Type	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 2063	63	90	60	75	4.0	6	11	23	12.8	4	60
	71	105	70	85	4.0	7	14	30	16.3	5	55
	80	120	80	100	4.0	7	19	40	21.8	6	74
	90	140	95	115	4.0	9	24	50	27.3	8	74
	100	160	110	130	5.0	9	28	60	31.3	8	75

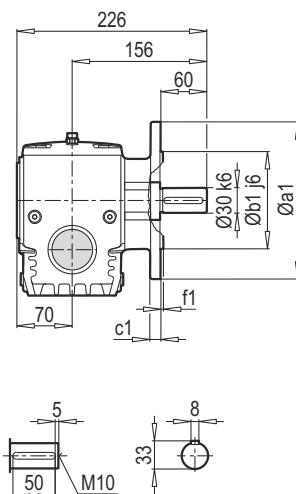
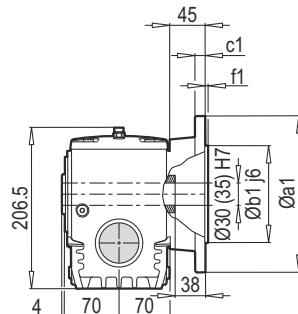
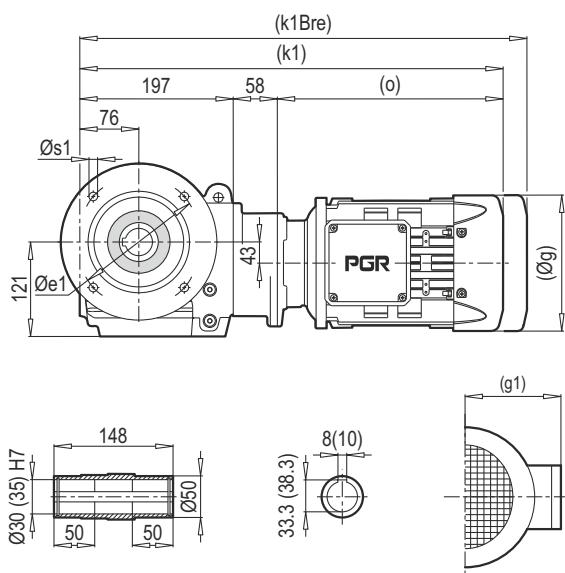
~ Kg	
PAM B14	PSH 2063
63	19
71	19
80	20
90	20
100	21

**PSH 3063**

**PSH 3063 TMA**



**PSH 3063 DG/B5**



**PSH 3063 TMG/B5**

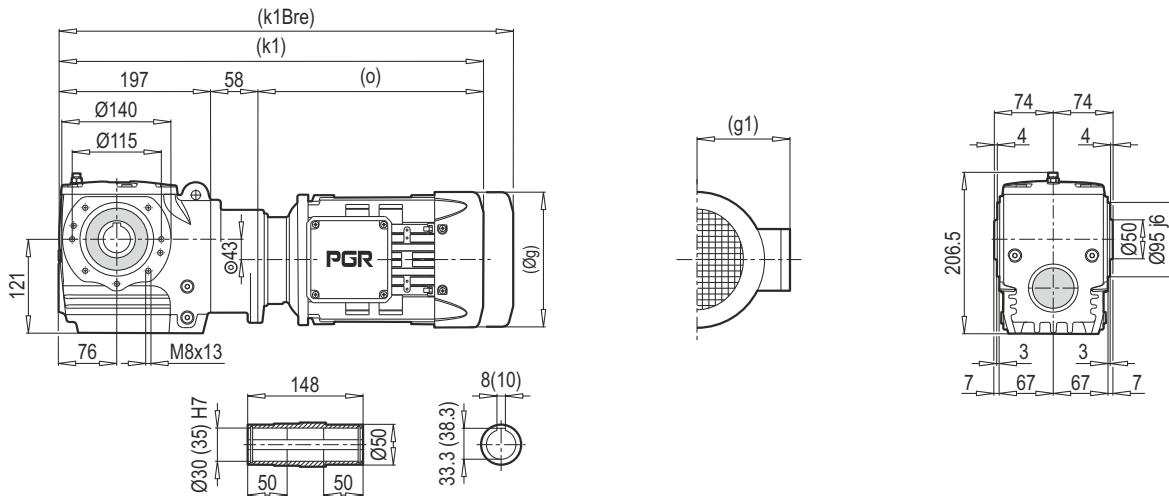
a1	b1	c1	e1	f1	s1
200	130	12	165	3.5	4 x 11

a1	b1	c1	e1	f1	s1
200	130	12	165	3.5	4 x 11

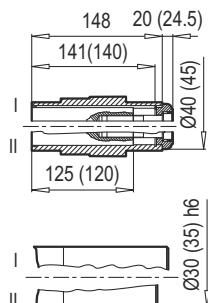
	63 M	71 M			
g	124	140			
g1	111	119			
k/k1	457 / 453	499 / 495			
kBre/k1Bre	509 / 505	559 / 555			
o	198	240			
j	-	3.5			

Note: (...) İşaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

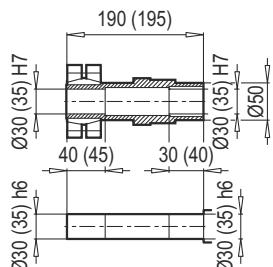
PSH 3063 DG/B14



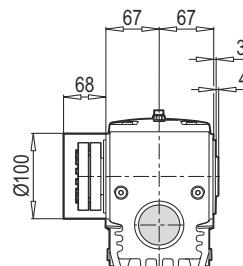
PSH 3063 DG/Ç



PSH 3063 DG/KS



PSH 3063 DG/KS/KK



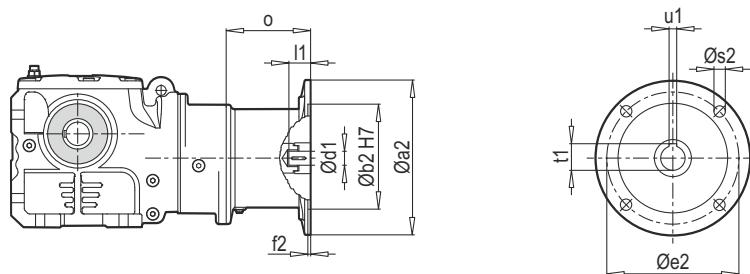
43 - 44

Konik sıkıştırma / Shrink disc  41				Altıköşe başlı civata / Hexagonal screw DIN 931 / DIN 933* 10.9Vz		
Tip/Type	Mamax (Nm)	s <h>6</h>	s f6	d <sub>x</sub> l	Z <sub>s</sub>	MA (Nm)
KS 30/40	383	2.6	2.2	M6x35*	8	12
KS 35/46	383	3.0	3.2	M6x35*	10	12

	63 M	71 M					
g	124	140					
g1	111	119					
k1	453	495					
k1Bre	505	555					
o	198	240					

Note: (...) İşaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

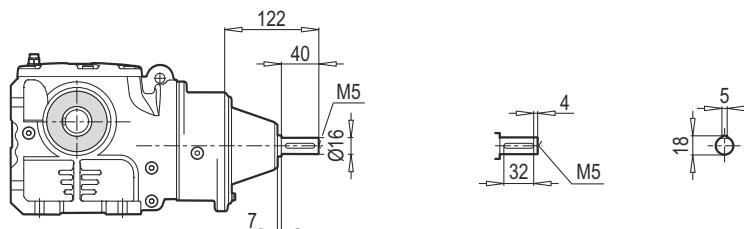
## PSH 3063 IEC



Tip / Type	IEC	$\varnothing a2$	$\varnothing b2$	$\varnothing e2$	$f2$	$\varnothing s2$	$\varnothing d1$	$l1$	$t1$	$u1$	$o$
PSH 3063	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	89

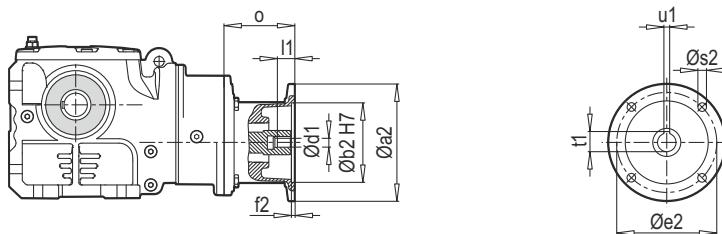
$\sim \text{Kg}$	
IEC	PSH 3063
63	28
71	29

## PSH 3063 W



$W \sim \text{Kg}$	
PSH 3063	27

PSH 3063 PAM B5/B14



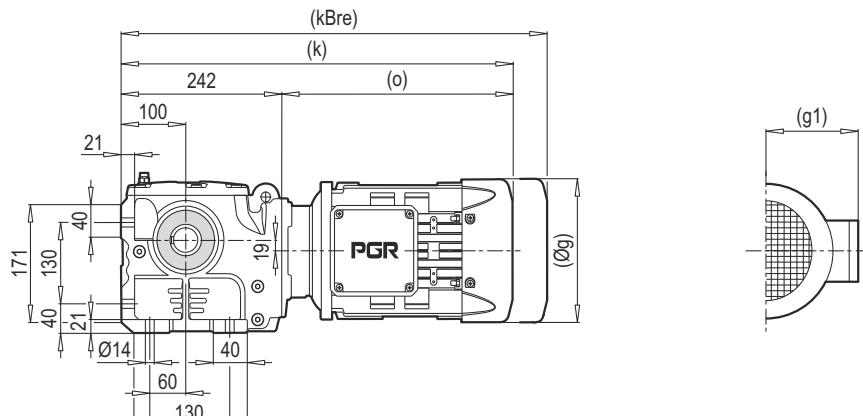
Tip / Type	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 3063	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	55

~ Kg	
PAM B5	PSH 3063
63	25
71	25

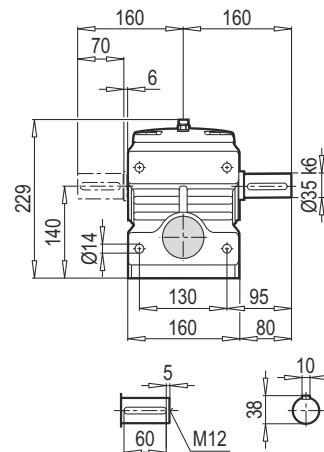
Tip / Type	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 3063	63	90	60	75	4.0	6	11	23	12.8	4	85
	71	105	70	85	4.0	7	14	30	16.3	5	55

~ Kg	
PAM B14	PSH 3063
63	24
71	24

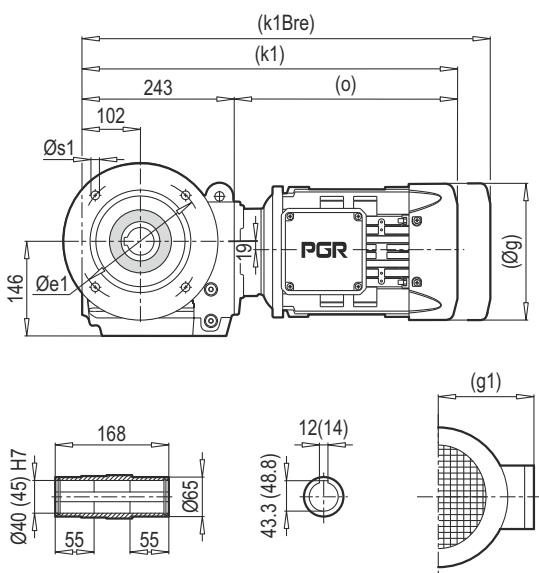
PSH 2080 TMA



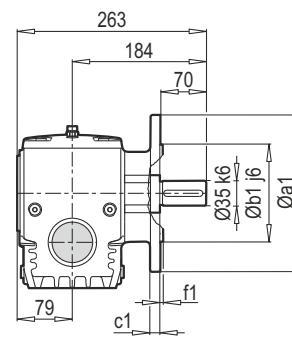
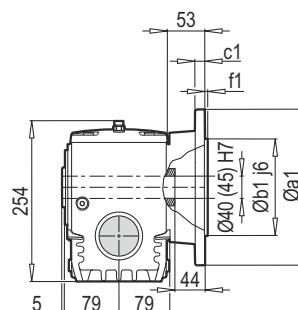
PSH 2080 ÇMA



PSH 2080 DG/B5



PSH 2080 TMG/B5



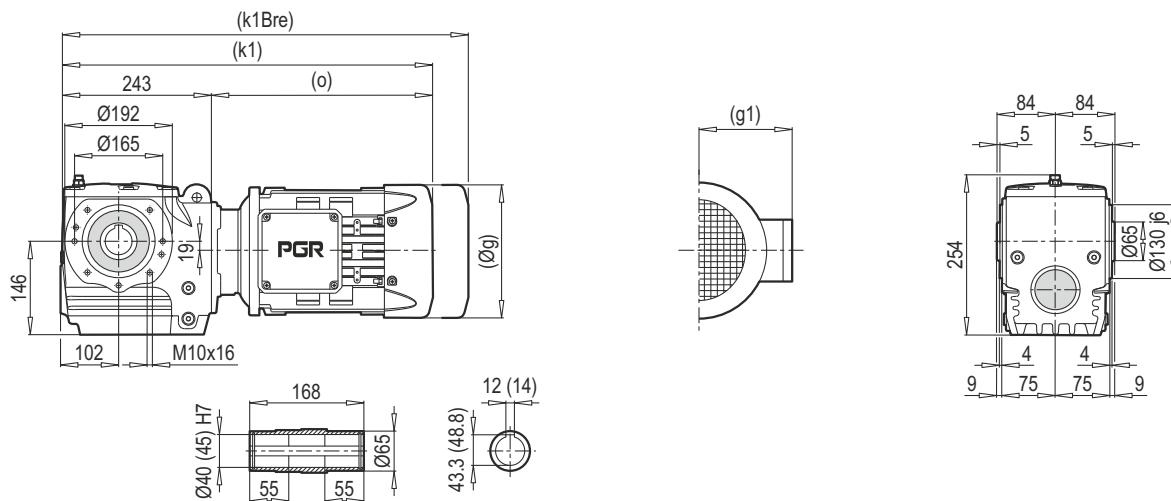
a1	b1	c1	e1	f1	s1
250	180	15	215	4	$4 \times 14$
300	230	20	265	4	$4 \times 14$

a1	b1	c1	e1	f1	s1
200	130	12	165	3.5	$4 \times 11$

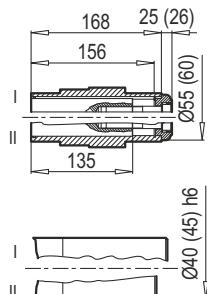
	<b>63 M</b>	<b>71 M</b>	<b>80 M</b>	<b>90 S</b>	<b>90 L</b>	<b>100 L</b>	<b>112 M</b>
<b>g</b>	124	140	159	193	193	217	232
<b>g1</b>	111	119	127	151	151	160	168
<b>k/k1</b>	440 / 441	482 / 483	509 / 510	532 / 533	552 / 553	580 / 581	625 / 626
<b>kBre/k1Bre</b>	492 / 493	542 / 543	571 / 572	605 / 606	625 / 626	661 / 662	705 / 706
<b>o</b>	198	240	267	290	310	338	383

**Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.**

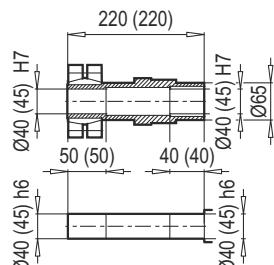
PSH 2080 DG/B14



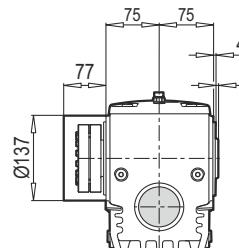
PSH 2080 DG/Ç



PSH 2080 DG/KS



PSH 2080 DG/KS/KK



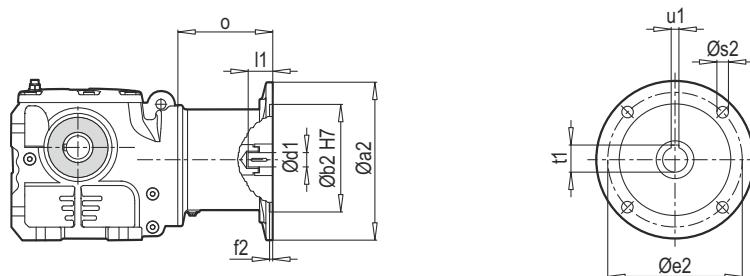
43 - 44

Tip/Type	Konik sıkıştırma / Shrink disc			41	Altıköşe başlı civata / Hexagonal screw		
	Mamax (Nm)	s <h>6</h>	s f6		d x l	Zs	MA (Nm)
KS 40/55	779	3.0	2.6		M8x40	8	30
KS 45/55	779	4.1	3.8		M8x40	8	30

	63 M	71 M	80 M	90 S	90 L	100 L	112 M
g	124	140	159	193	193	217	232
g1	111	119	127	151	151	160	168
k1	441	483	510	533	553	581	626
k1Bre	493	543	572	606	626	662	706
o	198	240	267	290	310	338	383

Note: (...) İşaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

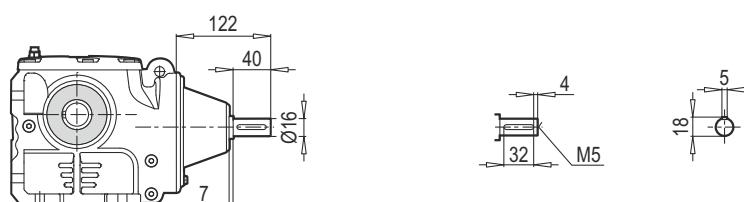
## PSH 2080 IEC



Tip / Type	IEC	$\varnothing a_2$	$\varnothing b_2$	$\varnothing e_2$	f2	$\varnothing s_2$	$\varnothing d_1$	l1	t1	u1	o
PSH 2080	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	89
	80	200	130	165	4.0	M10	19	40	21.8	6	105
	90	200	130	165	4.0	M10	24	50	27.3	8	105
	100	250	180	215	5.0	M12	28	60	31.3	8	130
	112	250	180	215	5.0	M12	28	60	31.3	8	130

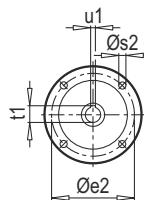
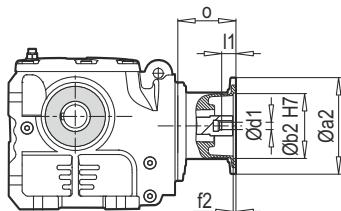
$\sim \frac{\text{Nm}}{\text{Kg}}$	
IEC	PSH 2080
63	33
71	34
80	37
90	37
100	44
112	44

## PSH 2080 W



$\text{W} \sim \frac{\text{Nm}}{\text{Kg}}$	
PSH 2080	32

PSH 2080 PAM B5/B14



Tip / Type	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 2080	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	55
	80	200	130	165	4.0	M10	19	40	21.8	6	74
	90	200	130	165	4.0	M10	24	50	27.3	8	74
	100	250	180	215	5.0	M12	28	60	31.3	8	131.5
	112	250	180	215	5.0	M12	28	60	31.3	8	131.5

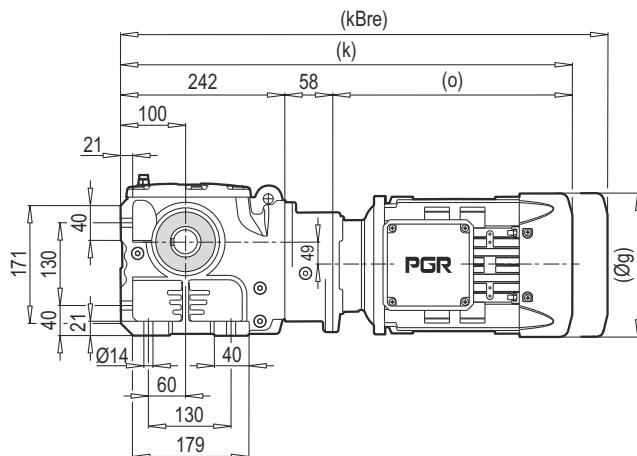
~	
PAM B5	PSH 2080
63	30
71	30
80	31
90	31
100	38
112	38

Tip / Type	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 2080	63	90	60	75	4.0	6	11	23	12.8	4	60
	71	105	70	85	4.0	7	14	30	16.3	5	55
	80	120	80	100	4.0	7	19	40	21.8	6	74
	90	140	95	115	4.0	9	24	50	27.3	8	74
	100	160	110	130	5.0	9	28	60	31.3	8	75
	112	160	110	130	5.0	9	28	60	31.3	8	75

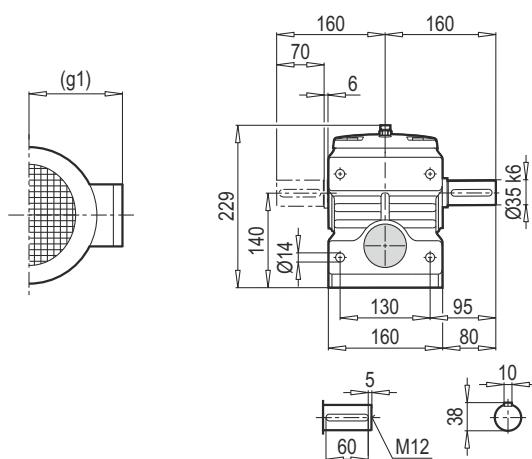
~	
PAM B14	PSH 2080
63	29
71	29
80	30
90	30
100	31
112	31

## PSH 3080

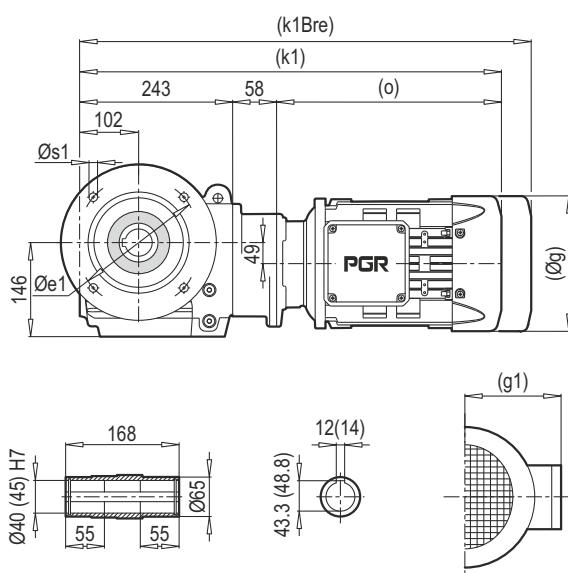
PSH 3080 TMA



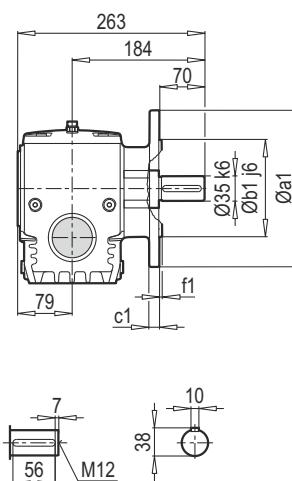
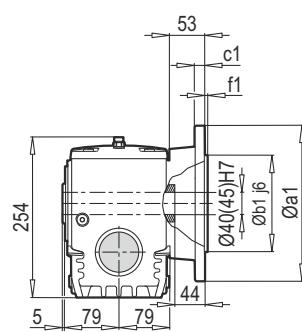
PSH 3080 ÇMA



PSH 3080 DG/B5



PSH 3080 TMG/B5



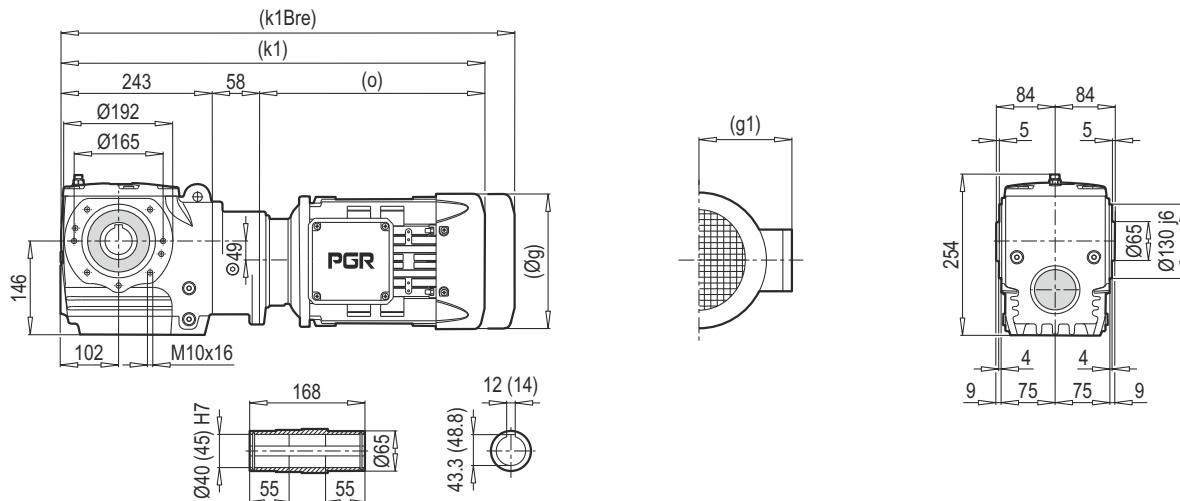
a1	b1	c1	e1	f1	s1
250	180	15	215	4	4 x 14
300	230	20	265	4	4 x 14

a1	b1	c1	e1	f1	s1
200	130	12	165	3.5	4 x 11

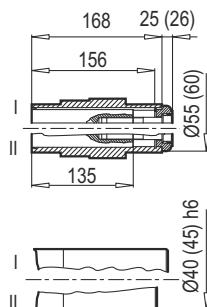
	63 M	71 M				
g	124	140				
g1	111	119				
k/k1	498 / 499	540 / 541				
kBre/k1Bre	550 / 551	600 / 601				
o	198	240				

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

PSH 3080 DG/B14

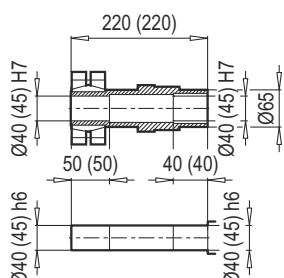


PSH 3080 DG/Ç

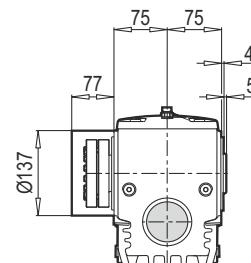


43 - 44

PSH 3080 DG/KS



PSH 3080 DG/KS/KK



Konik sıkıştırma / Shrink disc

41

Altıköşe başlı civata / Hexagonal screw

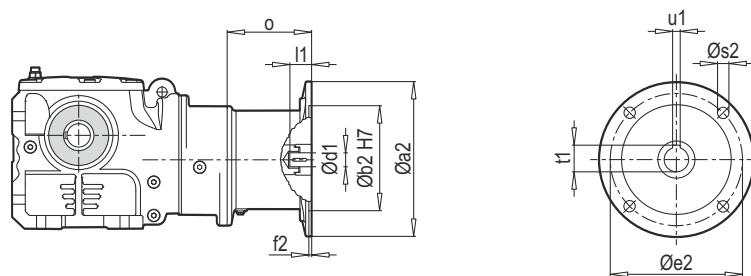
DIN 931 / DIN 933\* 10.9Vz

Tip/Type	M <sub>max</sub> (Nm)	s <sub>h6</sub>	s <sub>f6</sub>	d <sub>x</sub> l	Z <sub>s</sub>	M <sub>A</sub> (Nm)
KS 40/55	779	3.0	2.6	M8x40	8	30
KS 45/55	779	4.1	3.8	M8x40	8	30

	63 M	71 M					
g	124	140					
g1	111	119					
k1	499	541					
k1Bre	551	601					
o	198	240					

Note: (...) İşaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

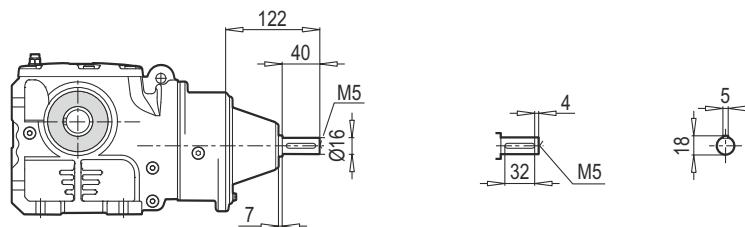
## PSH 3080 IEC



Tip / Type	IEC	$\varnothing a_2$	$\varnothing b_2$	$\varnothing e_2$	$f_2$	$\varnothing s_2$	$\varnothing d_1$	$l_1$	$t_1$	$u_1$	$o$
PSH 3080	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	89

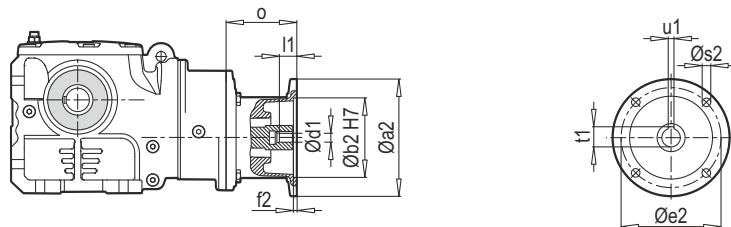
$\sim \frac{T}{Kg}$	
IEC	PSH 3080
63	38
71	39

## PSH 3080 W



$W \sim \frac{Kw}{Kg}$	
PSH 3080	37

PSH 3080 PAM B5/B14



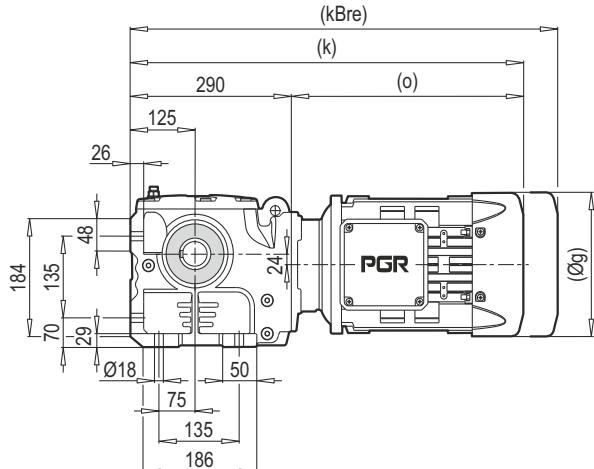
Tip / Type	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 3080	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	55

~ Kg	
PAM B5	PSH 3080
63	35
71	35

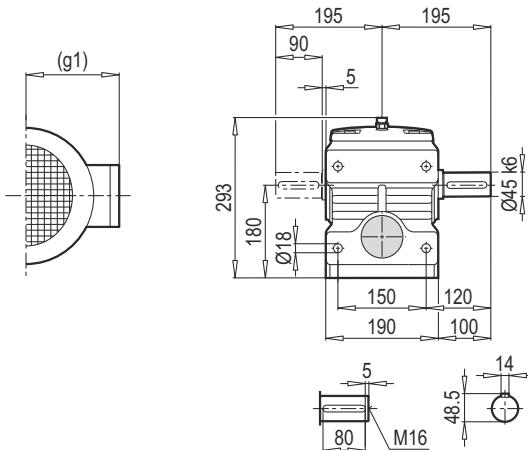
Tip / Type	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 3080	63	90	60	75	4.0	6	11	23	12.8	4	60
	71	105	70	85	4.0	7	14	30	16.3	5	55

~ Kg	
PAM B14	PSH 3080
63	34
71	34

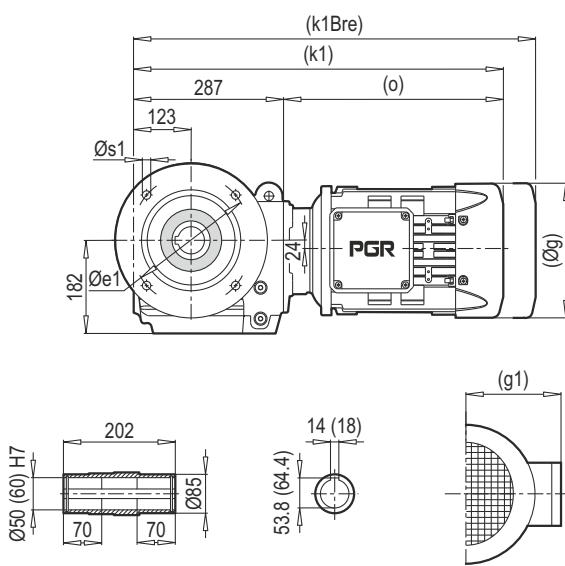
PSH 2100 TMA



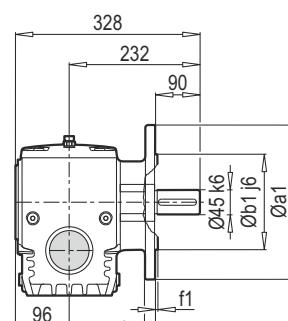
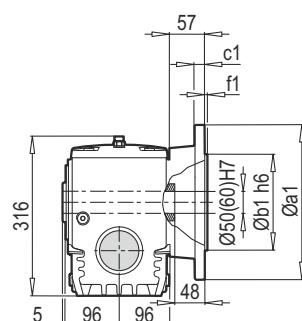
PSH 2100 ÇMA



PSH 2100 DG/B5



PSH 2100 TMG/B5



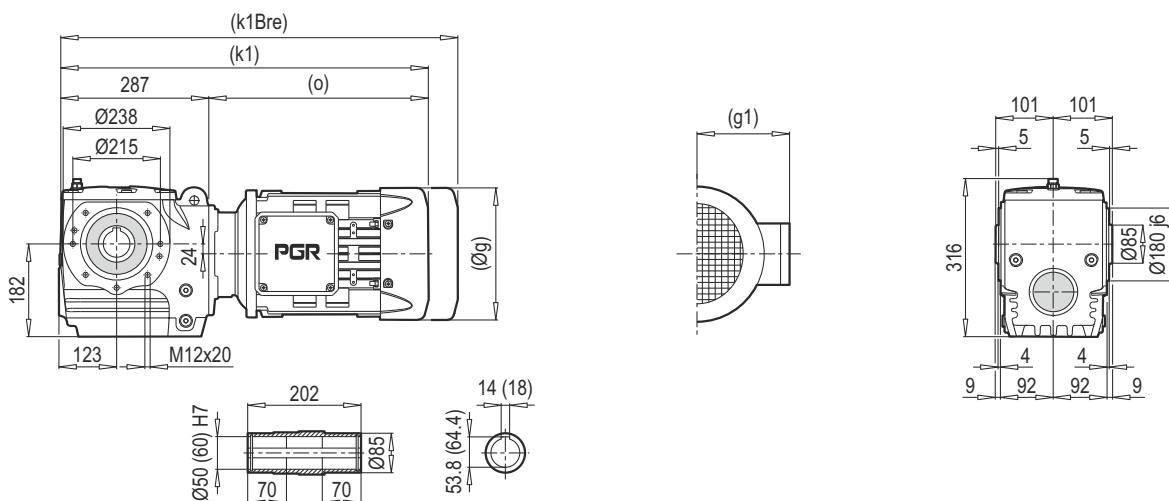
a1	b1	c1	e1	f1	s1
350	250	20	300	5	$4 \times 18$

a1	b1	c1	e1	f1	s1
250	180	16	215	4	$4 \times 14$

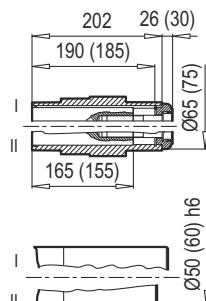
	<b>71 M</b>	<b>80 M</b>	<b>90 S</b>	<b>90 L</b>	<b>100 L</b>	<b>112 M</b>	<b>132 S</b>	<b>132 M</b>
<b>g</b>	140	159	193	193	217	232	279	279
<b>g1</b>	119	127	151	151	160	168	182	182
<b>k/k1</b>	526 / 523	552 / 549	575 / 572	595 / 592	623 / 620	668 / 665	675 / 672	710 / 707
<b>kBre/k1Bre</b>	586 / 583	614 / 611	648 / 645	668 / 665	704 / 701	748 / 745	783 / 780	851 / 848
<b>o</b>	236	262	285	305	333	378	385	420

**Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.**

PSH 2100 DG/B14

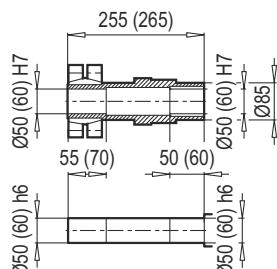


PSH 2100 DG/Ç

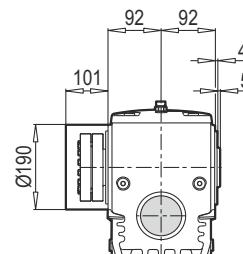


43 - 44

PSH 2100 DG/KS



PSH 2100 DG/KS/KK



Konik sıkıştırma / Shrink disc

41

Altıköşe başlı civata / Hexagonal screw

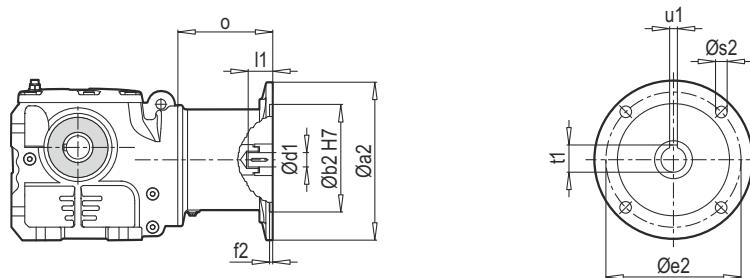
DIN 931 / DIN 933\* 10.9Vz

Tip/Type	Mamax (Nm)	s <h>6</h>	s f6	dxi	Zs	MA (Nm)
KS 50/62	1604	2.7	2.6	M8x40	10	30
KS 60/76	1604	5.1	4.7	M10x50	10	59

	71 M	80 M	90 S	90 L	100 L	112 M	132 S	132 M
g	140	159	193	193	217	232	279	279
g1	119	127	151	151	160	168	182	182
k1	523	549	572	592	620	665	672	707
k1Bre	583	611	645	665	701	745	780	848
o	236	262	285	305	333	378	385	420

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

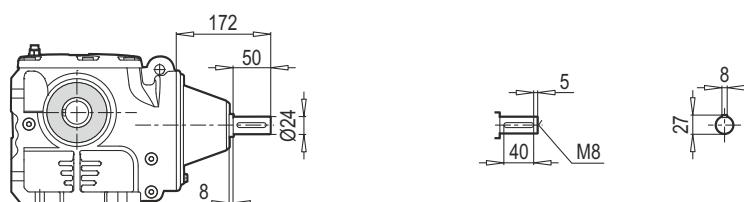
## PSH 2100 IEC



Tip / Type	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 2100	71	160	110	130	4.0	M8	14	30	16.3	5	88
	80	200	130	165	4.0	M10	19	40	21.8	6	107
	90	200	130	165	4.0	M10	24	50	27.3	8	107
	100	250	180	215	5.0	M12	28	60	31.3	8	124
	112	250	180	215	5.0	M12	28	60	31.3	8	124
	132	300	230	265	5.0	M12	38	80	41.3	10	156

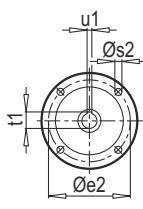
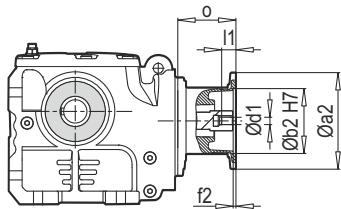
IEC	PSH 2100	~
71	61	
80	65	
90	65	
100	69	
112	69	
132	78	

## PSH 2100 W



PSH 2100	W ~
	63

PSH 2100 PAM B5/B14



Tip / Type	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 2100	71	160	110	130	4.0	M8	14	30	16.3	5	88
	80	200	130	165	4.0	M10	19	40	21.8	6	72
	90	200	130	165	4.0	M10	24	50	27.3	8	72
	100	250	180	215	5.0	M12	28	60	31.3	8	75
	112	250	180	215	5.0	M12	28	60	31.3	8	75
	132	300	230	265	5.0	M12	38	80	41.3	10	94

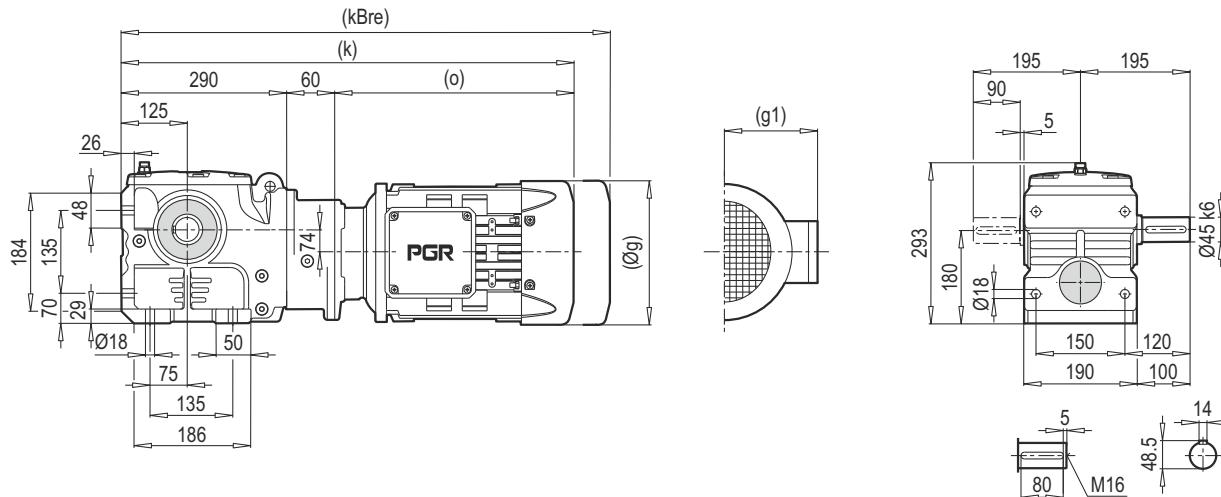
~	
PAM B5	PSH 2100
71	55.5
80	56.5
90	56.5
100	57.5
112	57.5
132	67.5

Tip / Type	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 2100	71	105	70	85	4.0	7	14	30	16.3	5	88
	80	120	80	100	4.0	7	19	40	21.8	6	72
	90	140	95	115	4.0	9	24	50	27.3	8	72
	100	160	110	130	5.0	9	28	60	31.3	8	75
	112	160	110	130	5.0	9	28	60	31.3	8	75
	132	200	130	165	5.0	11	38	80	41.3	10	94

~	
PAM B14	PSH 2100
71	53.5
80	54.5
90	54.5
100	56.5
112	56.5
132	60.5

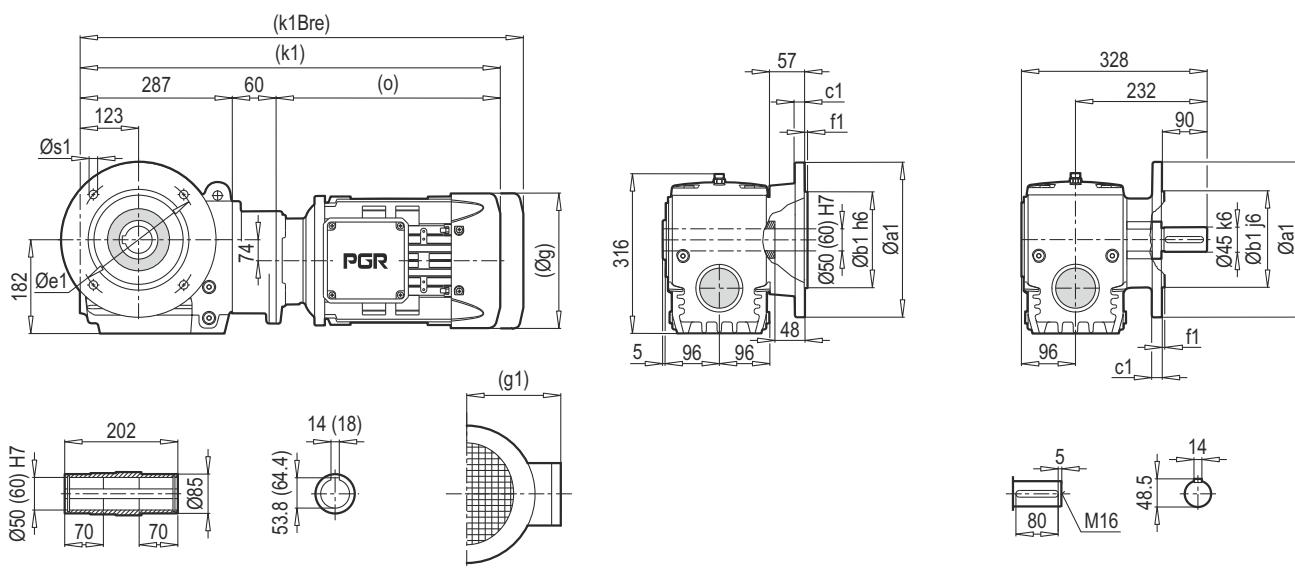
PSH 3100 TMA

PSH 3100 ÇMA



PSH 3100 DG/B5

PSH 3100 TMG/B5



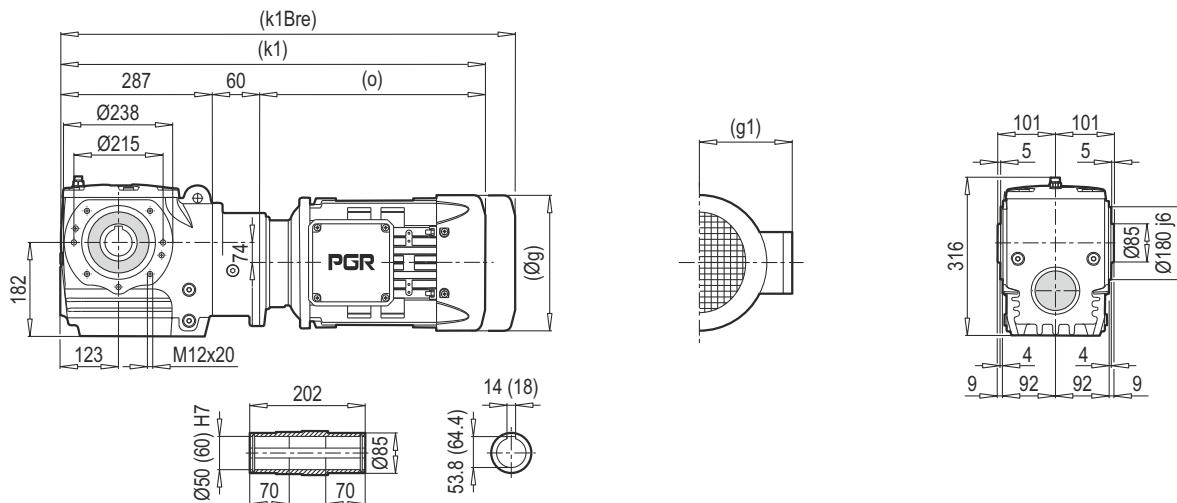
a1	b1	c1	e1	f1	s1
350	250	20	300	5	4 x 18

a1	b1	c1	e1	f1	s1
250	180	16	215	4	$4 \times 14$

	<b>63 M</b>	<b>71 M</b>	<b>80 M</b>	<b>90 S</b>	<b>90 L</b>		
<b>g</b>	124	140	159	193	193		
<b>g1</b>	111	119	127	151	151		
<b>k/k1</b>	548 / 545	590 / 587	617 / 614	640 / 637	660 / 657		
<b>kBre/k1Bre</b>	600 / 597	650 / 647	679 / 676	713 / 710	733 / 730		
<b>o</b>	198	240	267	290	310		

**Not: (...) İşaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.**

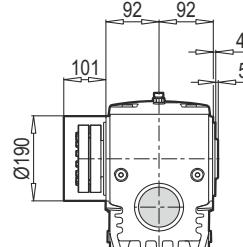
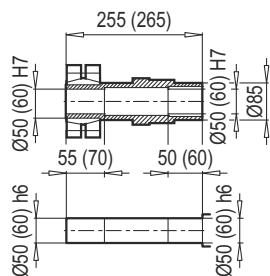
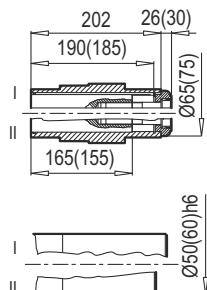
PSH 3100 DG/B14



PSH 3100 DG/Ç

PSH 3100 DG/KS

PSH 3100 DG/KS/KK



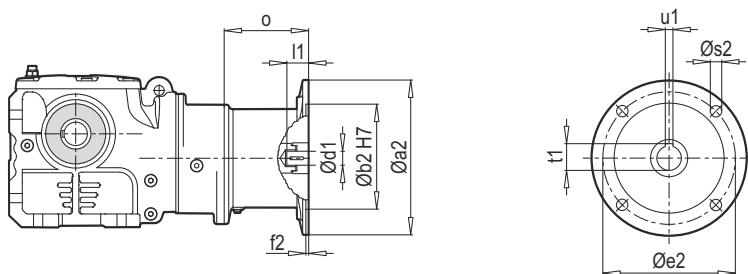
43 - 44

Tip/Type	Konik sıkıştırma / Shrink disc		41	Altıköşe başlı civata / Hexagonal screw		
	Mamax (Nm)	s <sup>h6</sup>		d <sub>x</sub> l	Z <sub>s</sub>	MA (Nm)
KS 50/62	1604	2.7	2.6	M8x40	10	30
KS 60/76	1604	5.1	4.7	M10x50	10	59

	63 M	71 M	80 M	90 S	90 L		
g	124	140	159	193	193		
g1	111	119	127	151	151		
k1	545	587	614	637	657		
k1Bre	597	647	676	710	730		
o	198	240	267	290	310		

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

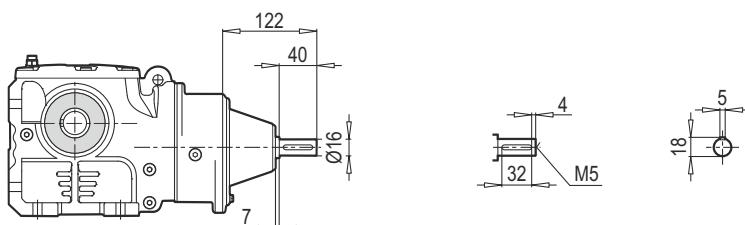
## PSH 3100 IEC



Tip / Type	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 3100	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	89
	80	200	130	165	4.0	M10	19	40	21.8	6	105
	90	200	130	165	4.0	M10	24	50	27.3	8	105

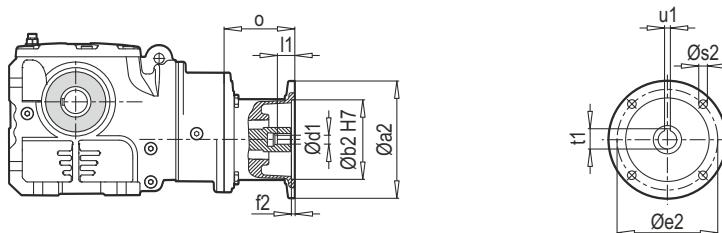
<b>~ Kg</b>	
IEC	PSH 3100
63	66
71	67
80	70
90	70

## PSH 3100 W



<b>W ~ Kg</b>	
PSH 3100	65

PSH 3100 PAM B5/B14



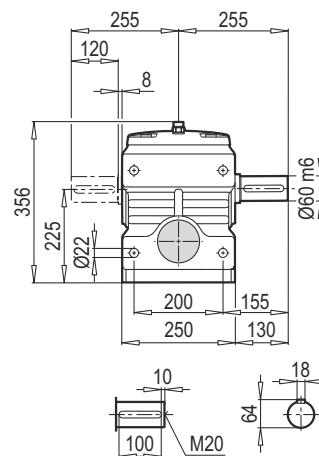
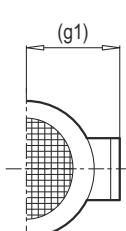
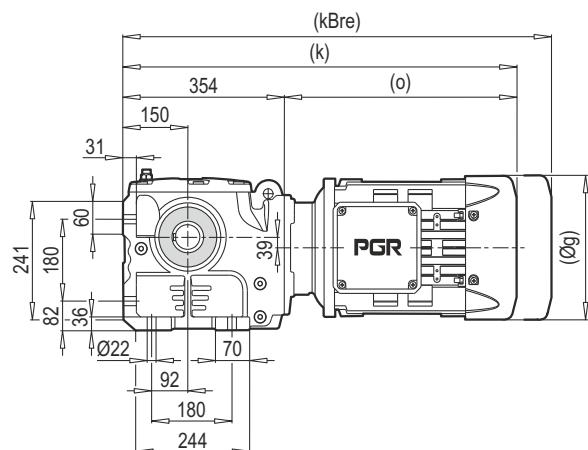
Tip / Type	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 3100	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	55
	80	200	130	165	4.0	M10	19	40	21.8	6	74
	90	200	130	165	4.0	M10	24	50	27.3	8	74

$\sim \frac{\text{kg}}{\text{m}}$	
PAM B5	PSH 3100
63	60.5
71	60.5
80	61.5
90	61.5

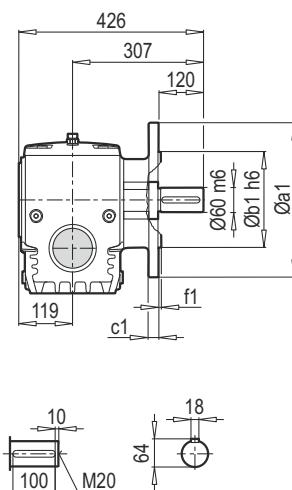
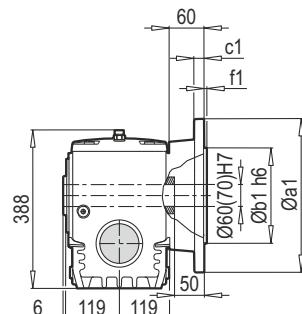
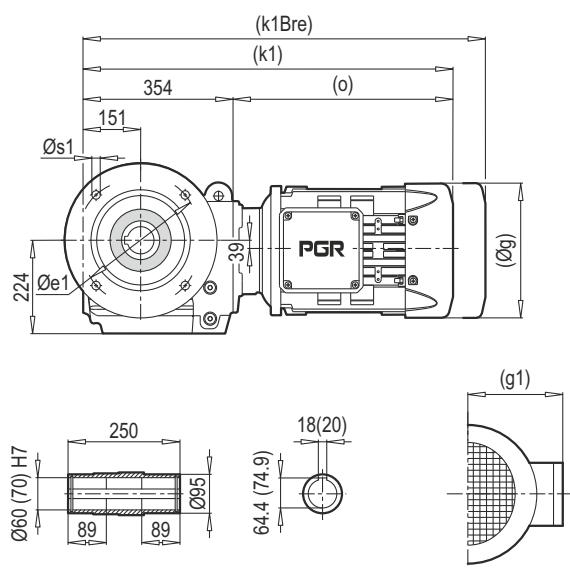
Tip / Type	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 3100	63	90	60	75	4.0	6	11	23	12.8	4	60
	71	105	70	85	4.0	7	14	30	16.3	5	55
	80	120	80	100	4.0	7	19	40	21.8	6	74
	90	140	95	115	4.0	9	24	50	27.3	8	74

$\sim \frac{\text{kg}}{\text{m}}$	
PAM B14	PSH 3100
63	59.5
71	59.5
80	60.5
90	60.5

**PSH 2125 TMA**



**PSH 2125 DG/B5**



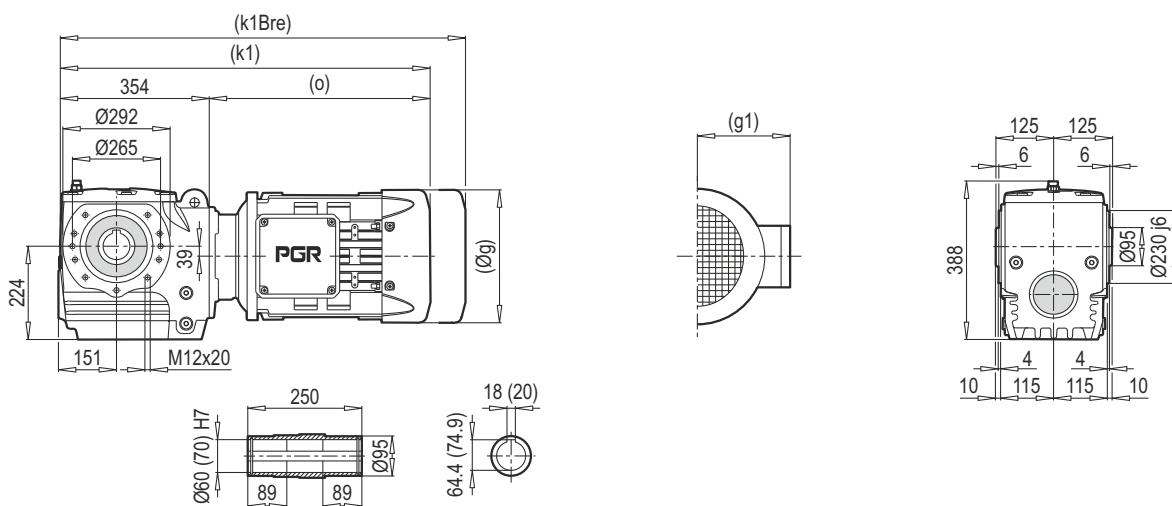
a1	b1	c1	e1	f1	s1
400	300	20	350	5	4 x 18
450	350	22	400	5	8 x 18

a1	b1	c1	e1	f1	s1
350	250	20	300	5	4 x 18

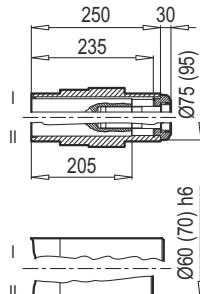
	90 S	90 L	100 L	112 M	132 S	132 M	160 M/L
g	193	193	217	232	279	279	323
g1	151	151	160	168	182	182	200
k/k1	619 / 619	639 / 639	667 / 667	712 / 712	719 / 719	754 / 754	859 / 859
kBre/k1Bre	692 / 692	712 / 712	748 / 748	792 / 792	827 / 827	895 / 895	1011 / 1011
o	265	285	313	358	365	400	505

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

PSH 2125 DG/B14

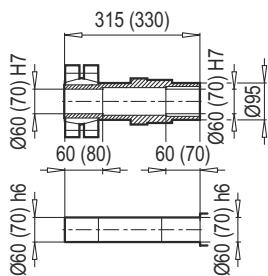


PSH 2125 DG/Ç

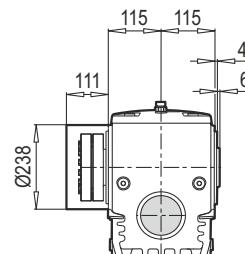


43 - 44

PSH 2125 DG/KS



PSH 2125 DG/KS/KK

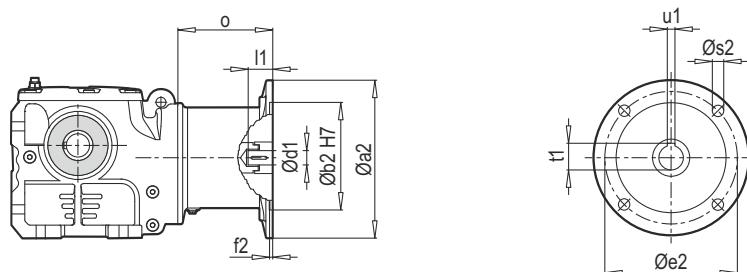


Tip/Type	M <sub>max</sub> (Nm)	Konik sıkıştırma / Shrink disc		41	Altıköşe başlı civata / Hexagonal screw		
		s <h>6</h>	s f6		d <sub>x</sub> l	Z <sub>s</sub>	M <sub>A</sub> (Nm)
KS 60/76	3120	2.6	2.4		M10x50	10	59
KS 70/90	3120	4.4	4.1		M12x70*	10	100

	90 S	90 L	100 L	112 M	132 S	132 M	160 M/L
g	193	193	217	232	279	279	323
g1	151	151	160	168	182	182	200
k1	619	639	667	712	719	754	859
k1Bre	692	712	748	792	827	895	1011
o	265	285	313	358	365	400	505

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

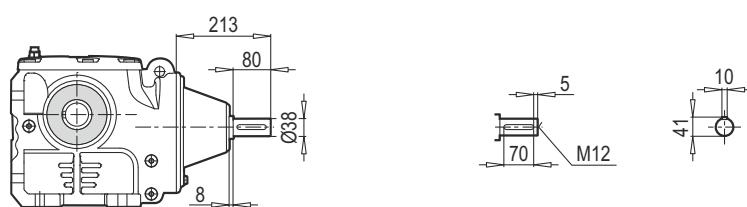
## PSH 2125 IEC



Tip / Type	IEC	$\varnothing a2$	$\varnothing b2$	$\varnothing e2$	$f2$	$\varnothing s2$	$\varnothing d1$	$I1$	$t1$	$u1$	$\varnothing$
PSH 2125	90	200	130	165	4.0	M10	24	50	27.3	8	109
	100	250	180	215	5.0	M12	28	60	31.3	8	133
	112	250	180	215	5.0	M12	28	60	31.3	8	133
	132	300	230	265	5.0	M12	38	80	41.3	10	190
	160	350	250	300	6.0	M16	42	110	45.3	12	194

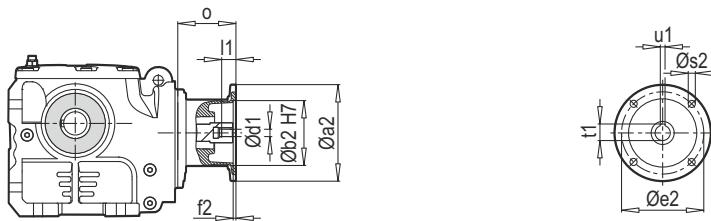
$\sim \frac{T}{Kg}$	
IEC	PSH 2125
90	107
100	114
112	114
132	128
160	138

## PSH 2125 W



$W \sim \frac{Kg}{Kw}$	
PSH 2125	112

PSH 2125 PAM B5/B14



Tip / Type	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 2125	90	200	130	165	4.0	M10	24	50	27.3	8	72
	100	250	180	215	5.0	M12	28	60	31.3	8	75
	112	250	180	215	5.0	M12	28	60	31.3	8	75
	132	300	230	265	5.0	M12	38	80	41.3	10	94
	160	350	250	300	6.0	M16	42	110	45.3	12	120

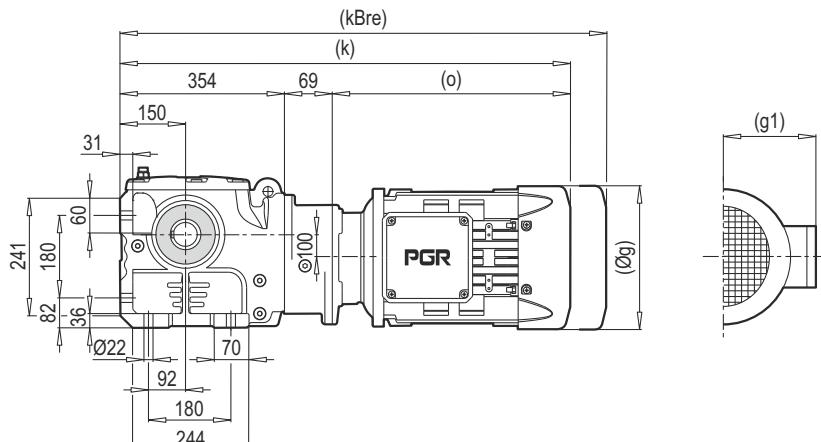
~ Kg	
PAM B5	PSH 2125
90	96
100	97
112	97
132	106
160	114

Tip / Type	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 2125	90	140	110	115	4.0	9	24	50	27.3	8	72
	100	160	110	130	5.0	9	28	60	31.3	8	75
	112	160	130	130	5.0	9	28	60	31.3	8	75
	132	200		165	5.0	11	38	80	41.3	10	94

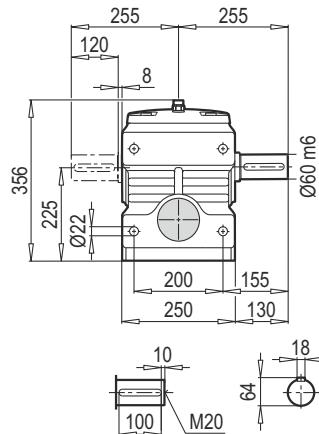
~ Kg	
PAM B14	PSH 2125
90	95
100	96
112	96
132	101

PSH 3125

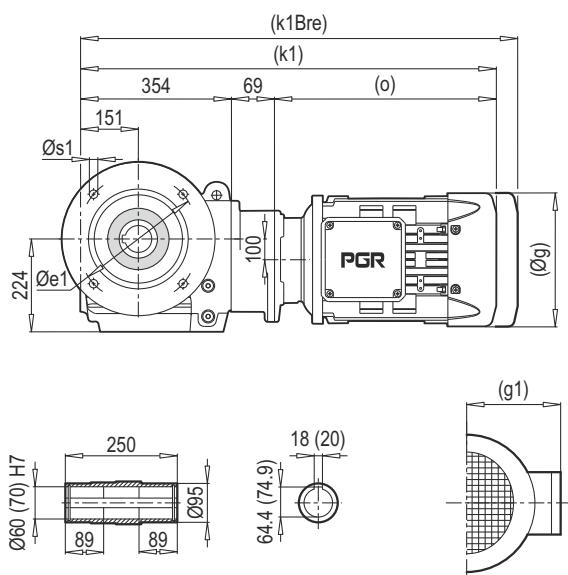
PSH 3125 TMA



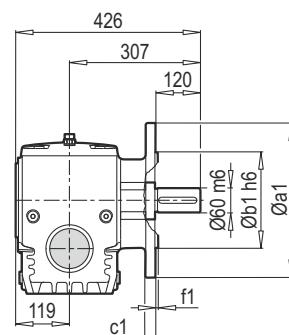
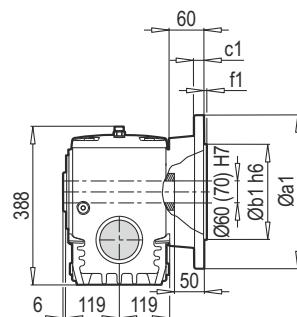
PSH 3125 ÇMA



PSH 3125 DG/B5



PSH 3125 TMG/B5



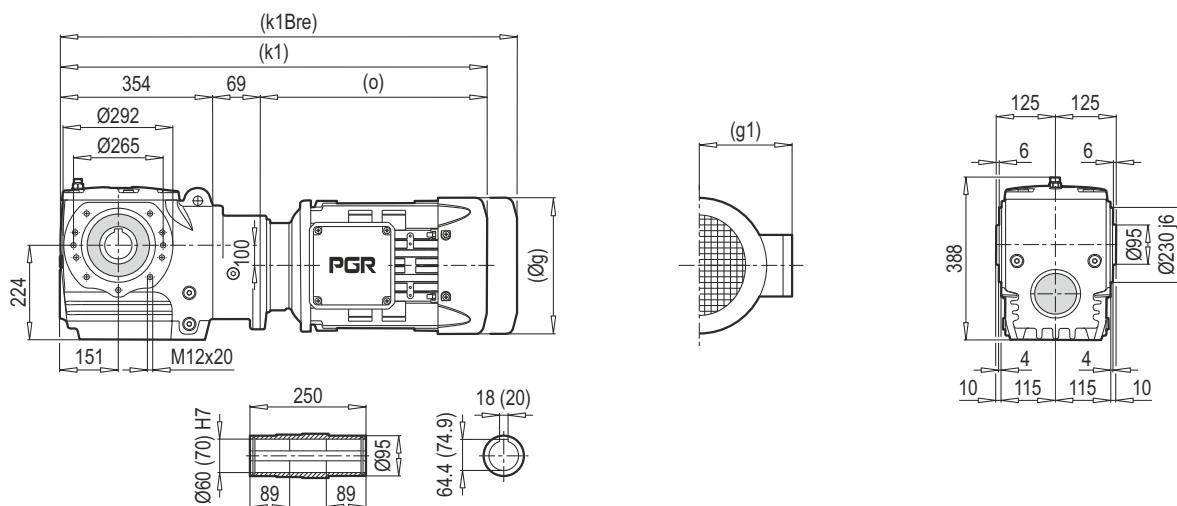
a1	b1	c1	e1	f1	s1
400	300	20	350	5	4 x 18
450	350	22	400	5	8 x 18

a1	b1	c1	e1	f1	s1
350	250	20	300	5	$4 \times 18$

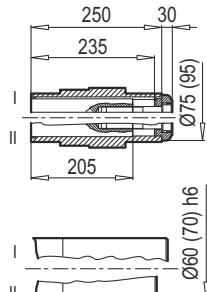
	<b>71 M</b>	<b>80 M</b>	<b>90 S</b>	<b>90 L</b>	<b>100 L</b>		
<b>g</b>	140	159	193	193	217		
<b>g1</b>	119	127	151	151	160		
<b>k/k1</b>	659 / 659	685 / 685	708 / 708	728 / 728	756 / 756		
<b>kBre/k1Bre</b>	719 / 719	747 / 747	781 / 781	801 / 801	837 / 837		
<b>o</b>	236	262	285	305	333		

**Not: (...) İşaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.**

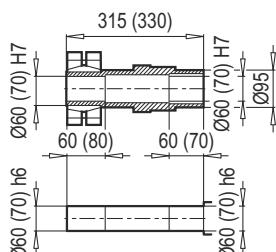
PSH 3125 DG/B14



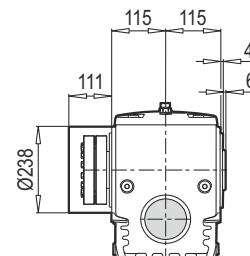
PSH 3125 DG/Ç



PSH 3125 DG/KS



PSH 3125 DG/KS/KK



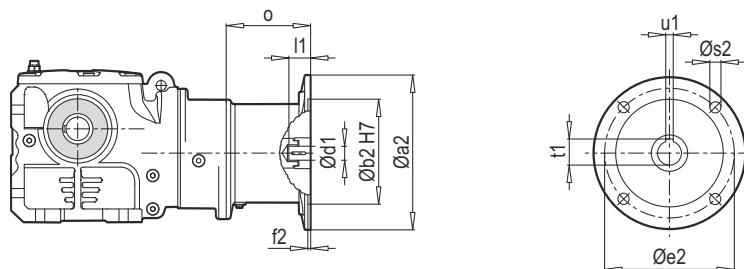
43 - 44

Konik sıkıştırma / Shrink disc				41	Altıköşe başlı civata / Hexagonal screw		
Tip/Type	Mamax (Nm)	s <h>6</h>	s f6	d x l	Zs	MA (Nm)	
KS 60/76	3120	2.6	2.4	M10x50	10	59	
KS 70/90	3120	4.4	4.1	M12x70*	10	100	

	71 M	80 M	90 S	90 L	100 L		
g	140	159	193	193	217		
g1	119	127	151	151	160		
k1	659	685	708	728	756		
k1Bre	719	747	781	801	837		
o	236	262	285	305	333		

Note: (...) İşaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor brand.

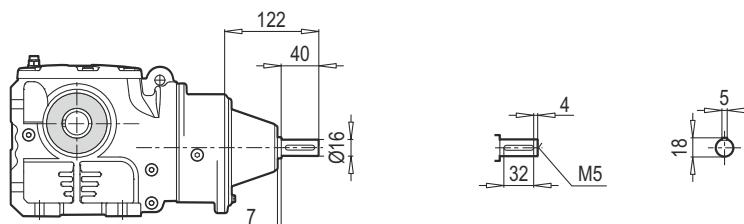
## PSH 3125 IEC



Tip / Type	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	Ø
PSH 3125	71	160	110	130	4.0	M8	14	30	16.3	5	88
	80	200	130	165	4.0	M10	19	40	21.8	6	107
	90	200	130	165	4.0	M10	24	50	27.3	8	107
	100	250	180	215	5.0	M12	28	60	31.3	8	124
	112	250	180	215	5.0	M12	28	60	31.3	8	124

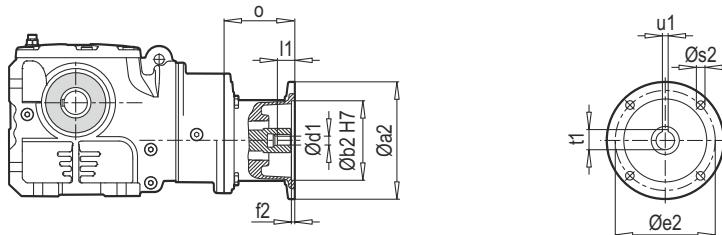
W ~ Kg	
IEC	PSH 3125
71	117
80	121
90	121
100	125
112	125

## PSH 3125 W



W ~ Kg	
PSH 3125	119

PSH 3125 PAM B5/B14



Tip / Type	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 3125	71	160	110	130	4.0	M8	14	30	16.3	5	88
	80	200	130	165	4.0	M10	19	40	21.8	6	72
	90	200	130	165	4.0	M10	24	50	27.3	8	72
	100	250	180	215	5.0	M12	28	60	31.3	8	75
	112	250	180	215	5.0	M12	28	60	31.3	8	75

$\sim \frac{\text{kg}}{\text{m}}$	
PAM B5	PSH 3125
71	107
80	108
90	108
100	109
112	109

Tip / Type	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PSH 3125	71	105	70	85	4.0	7	14	30	16.3	5	88
	80	120	80	100	4.0	7	19	40	21.8	6	72
	90	140	95	115	4.0	9	24	50	27.3	8	72
	100	160	110	130	5.0	9	28	60	31.3	8	75
	112	160	110	130	5.0	9	28	60	31.3	8	75

$\sim \frac{\text{kg}}{\text{m}}$	
PAM B14	PSH 3125
71	105
80	106
90	106
100	108
112	108



## W ve IEC Adaptörü Seçim Tabloları

Selection of W and IEC  
Adapters

**PSH**

**PSH**  
**İKİ KADEME**



**PSH**  
**ÜÇ KADEME**





W ve IEC adaptörü için performans tablolarının yapısı

Notify about performance tables for W and IEC adapter type

**PSH 2063** → Redüktör Tipi / Gear unit type

**Motor gövde büyülüğu ile IEC gövde büyüğü aynı olan IEC montajlı reduktörler için Servis faktörü  $f_B$  motor seçim sayfalarından alınabilir.**

IEC motor büyüklükleri ve IEC standart çıkışları DIN 50347' e göredir.

According to DIN EN 50347 IEC motor sizes.

165.1	166	2.20	89
189.2	156	2.20	90

$P_{1\max}$  hesaplanırken *italik* o  
değerlerde  $f_B > 1$  alınmıştır.  
 $P_{1\max}$  value which is *italic*, is  
calculated when service  
factor  $f_B$  is greater than one.

**Tip W** azami tahrik gücü hesaplanırken *italik* olmayan değerler alınmıştır.  $P_{1\max}$  ile  $f_B = 1$   $P_{1\max}$  value which is *non-italic* is calculated when service factor  $f_B$  is equal to one.

**Max. çıkış momenti**  
Max.output torque  
while service factor  $f_B = 1$

## Çıkış Devri Output speed

## Redüktör Tahvili Reduction ratio

**Yıldız işaret : Dikkat**  
**Tip W sütunundaki  $P_{1\max}$**   
**değerlerini aşmamalıdır.**  
Star sign is shown precautions  
which is value of  $P_{1\max}$  must be  
greater than drive power.

Rakamlı alanlar IEC adaptörünün, IEC motor büyüğü ve tahvil oranına uygun olduğunu belirtir. This area which is colorless is shown IEC adapter is applicable for this IEC motor size and reduction ratio.

Tip Type	Tahvil Reduction $i_{ges}$	Helisel Helical $i_1$	Sonsuz Worm $Z_2/Z_1$	<b>W</b> $n_1 = 1400 \text{ min}^{-1}$					<b>W</b> $n_1 = 930 \text{ min}^{-1}$					IEC-PAM			
				$n_2$		$M_{amax}$	$P_{1max}$	$\eta$	$n_2$		$M_{amax}$	$P_{1max}$	$\eta$				
				$f_B=1$	$f_B \geq 1$	[min $^{-1}$ ]	[Nm]	[%]	$f_B=1$	$f_B \geq 1$	[min $^{-1}$ ]	[Nm]	[kW]	[%]	$f_B \Rightarrow$	53 - 67	
<b>PSH 2040</b>	304.20	7.80	39/1	4.6	100	0.10	49	3.1	104	0.07	48	63*	71*	80*			
	237.90	6.10	39/1	5.9	100	0.12	50	3.9	106	0.09	49	63*	71*	80*			
	128.70	7.80	33/2	10.9	100	0.17	68	7.2	104	0.12	67	63*	71*	80*			
<b>W - IEC</b>	<b>115.23</b>	2.95	39/1	12.1	94	0.22	53	8.1	101	0.17	51	63	71*	80*	90*		
	100.65	6.10	33/2	13.9	100	0.21	68	9.2	106	0.15	67	63	71*	80*			
	<b>99.45</b>	2.55	39/1	14.1	92	0.25	54	9.4	99	0.19	52	63	71*	80*	90*		
	<b>86.86</b>	2.23	39/1	16.1	87	0.27	54	10.7	95	0.20	52	63	71*	80*	90*		
+	<b>76.38</b>	1.96	39/1	18.3	85	0.30	55	12.2	93	0.22	53	63	71*	80*	90*		
<b>PAM</b>	<b>67.50</b>	1.73	39/1	20.7	82	0.32	56	13.8	91	0.24	54	63	71*	80*	90*		
	59.80	7.80	23/3	23.4	100	0.31	78	15.6	104	0.22	78	63	71*	80*			
	<b>52.00</b>	1.33	39/1	26.9	81	0.39	58	17.9	91	0.31	55	63	71	80*	90*		
	46.77	6.10	23/3	29.9	100	0.40	79	19.9	106	0.28	78	63	71	80*			
	<b>44.78</b>	1.15	39/1	31.3	81	0.45	59	20.8	92	0.36	56	63	71	80*	90*		
	<b>42.08</b>	2.55	33/2	33.3	85	0.42	71	22.1	92	0.30	70	63	71	80*	90*		
	<b>36.75</b>	2.23	33/2	38.1	81	0.45	72	25.3	88	0.33	70	63	71	80*	90*		
	<b>32.31</b>	1.96	33/2	43.3	78	0.49	72	28.8	85	0.36	71	63	71	80*	90*		
	<b>28.56</b>	1.73	33/2	49.0	75	0.53	73	32.6	83	0.40	71	63	71	80*	90*		
	<b>22.00</b>	1.33	33/2	63.6	73	0.66	74	42.3	82	0.50	72	63	71	80*	90*		
	<b>19.55</b>	2.55	23/3	71.6	80	0.74	81	47.6	86	0.54	80	63	71	80*	90*		
	<b>17.08</b>	2.23	23/3	82.0	78	0.83	81	54.4	85	0.61	80	63	71	80	90*		
	<b>15.01</b>	1.96	23/3	93.3	75	0.89	82	62.0	82	0.66	81	63	71	80	90*		
	<b>13.27</b>	1.73	23/3	105.5	73	0.98	82	70.1	81	0.73	81	63	71	80	90*		
	<b>10.22</b>	1.33	23/3	137.0	68	1.10	83	91.0	77	0.73	82	63	71	80	90*		
	<b>8.80</b>	1.15	23/3	159.1	65	1.10	83	105.7	74	0.73	82	63	71	80	90*		
	<b>7.51</b>	1.96	23/6	186.4	57	1.10	87	123.8	62	0.73	86	63	71	80	90*		
	<b>6.63</b>	1.73	23/6	211.2	54	1.10	87	140.3	60	0.73	86	63	71	80	90*		
	<b>5.11</b>	1.33	23/6	274.0	48	1.10	88	182.0	54	0.73	87	63	71	80	90*		
	<b>4.40</b>	1.15	23/6	318.2	46	1.10	88	211.4	52	0.73	87	63	71	80	90*		



IEC bağlantısı yoktur - No IEC assembling on empty fields



IEC bağlantısı yapılır - IEC assembling available on numbered fields

IEC bağlantısı yapılacaksa  $P_{1max}$  değerleri aşılmamalıdır - Do not exceed the  $P_{1max}$  values indicated on fields with asterisk

Tip Type	Tahvil Reduction i <sub>ges</sub>	Helisel Helical i <sub>1</sub>	Sonsuz Worm Z <sub>2</sub> /Z <sub>1</sub>	W n <sub>1</sub> = 700 min <sup>-1</sup>					W n <sub>1</sub> = 465 min <sup>-1</sup>					W n <sub>1</sub> = 250 min <sup>-1</sup>					IEC						
				n <sub>2</sub>	M <sub>a</sub> max	P <sub>1</sub> max	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	f <sub>B</sub> =1	f <sub>B</sub> ≥1	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	f <sub>B</sub> =1	f <sub>B</sub> ≥1	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]
<b>PSH 2040</b>	304.20	7.80	39/1	2.3	107	0.05	48	1.5	112	0.04	47	0.82	119	0.02	47	63*	71*	80*							
	237.90	6.10	39/1	2.9	109	0.07	48	2.0	113	0.05	47	1.1	120	0.03	47	63*	71*	80*							
	128.70	7.80	33/2	5.4	107	0.09	66	3.6	112	0.06	66	1.9	119	0.04	65	63*	71*	80*							
<b>W - IEC</b>	<b>115.23</b>	2.95	39/1	6.1	104	0.13	50	4.0	111	0.09	49	2.2	117	0.06	48	63	71*	80*	90*						
	100.65	6.10	33/2	7.0	109	0.12	67	4.6	113	0.08	66	2.5	120	0.05	66	63	71*	80*							
72	<b>99.45</b>	2.55	39/1	7.0	103	0.15	50	4.7	110	0.11	49	2.5	116	0.06	48	63	71*	80*	90*						
+	<b>86.86</b>	2.23	39/1	8.1	99	0.16	51	5.4	105	0.12	49	2.9	112	0.07	48	63	71*	80*	90*						
<b>PAM</b>	<b>76.38</b>	1.96	39/1	9.2	98	0.18	52	6.1	104	0.13	50	3.3	112	0.08	48	63	71*	80*	90*						
	<b>67.50</b>	1.73	39/1	10.4	96	0.20	52	6.9	102	0.15	50	3.7	110	0.09	49	63	71*	80*	90*						
73	59.80	7.80	23/3	11.7	107	0.17	77	7.8	112	0.12	77	4.2	119	0.07	77	63	71*	80*							
	<b>52.00</b>	1.33	39/1	13.5	97	0.26	53	8.9	105	0.19	51	4.8	114	0.12	49	63	71	80*	90*						
	46.77	6.10	23/3	15.0	109	0.22	78	9.9	113	0.15	77	5.3	120	0.09	77	63	71	80*							
	<b>44.78</b>	1.15	39/1	15.6	99	0.30	54	10.4	108	0.23	52	5.6	118	0.14	50	63	71	80*	90*						
	<b>42.08</b>	2.55	33/2	16.6	95	0.24	69	11.1	101	0.17	68	5.9	107	0.10	66	63	71	80*	90*						
	<b>36.75</b>	2.23	33/2	19.0	92	0.27	69	12.7	98	0.19	68	6.8	104	0.11	67	63	71	80*	90*						
	<b>32.31</b>	1.96	33/2	21.7	90	0.29	70	14.4	95	0.21	68	7.7	102	0.12	67	63	71	80*	90*						
	<b>28.56</b>	1.73	33/2	24.5	87	0.32	70	16.3	93	0.23	69	8.8	101	0.14	67	63	71	80*	90*						
	<b>22.00</b>	1.33	33/2	31.8	88	0.41	71	21.1	95	0.30	69	11.4	103	0.18	68	63	71	80*	90*						
	<b>19.55</b>	2.55	23/3	35.8	90	0.43	79	23.8	95	0.30	78	12.8	101	0.17	78	63	71	80*	90*						
	<b>17.08</b>	2.23	23/3	41.0	88	0.47	80	27.2	94	0.34	79	14.6	100	0.20	78	63	71	80	90*						
	<b>15.01</b>	1.96	23/3	46.6	86	0.52	80	31.0	92	0.38	79	16.7	99	0.22	78	63	71	80	90*						
	<b>13.27</b>	1.73	23/3	52.8	85	0.59	80	35.0	90	0.42	79	18.8	98	0.25	78	63	71	80	90*						
	<b>10.22</b>	1.33	23/3	68.5	82	0.55	81	45.5	88	0.36	80	24.5	96	0.20	78	63	71	80	90*						
	<b>8.80</b>	1.15	23/3	79.5	80	0.55	81	52.8	87	0.36	80	28.4	94	0.20	79	63	71	80	90*						
	<b>7.51</b>	1.96	23/6	93.2	66	0.55	85	61.9	70	0.36	84	33.3	75	0.20	84	63	71	80	90*						
	<b>6.63</b>	1.73	23/6	105.6	63	0.55	86	70.1	67	0.36	85	37.7	72	0.20	84	63	71	80	90*						
	<b>5.11</b>	1.33	23/6	137.0	58	0.55	86	91.0	62	0.36	85	48.9	68	0.20	84	63	71	80	90*						
	<b>4.40</b>	1.15	23/6	159.1	56	0.55	86	105.7	61	0.36	85	56.8	67	0.20	84	63	71	80	90*						

IEC bağlantısı yoktur - No IEC assembling on empty fields

63 IEC bağlantısı yapılır - IEC assembling available on numbered fields

80\* IEC bağlantısı yapılacaksa P<sub>1max</sub> değerleri aşılmamalıdır - Do not exceed the P<sub>1max</sub> values indicated on fields with asterisk

Tip Type	Tahvil Reduction $i_{ges}$	Helisel Helical $i_1$	Sonsuz Worm $Z_2/Z_1$	<b>W</b> $n_1 = 1400 \text{ min}^{-1}$				<b>W</b> $n_1 = 930 \text{ min}^{-1}$				IEC			
				$n_2$	$M_{amax}$	$P_{1max}$	$\eta$	$f_B=1$	$f_B \geq 1$	$n_2$	$M_{amax}$	$P_{1max}$	$\eta$	$f_B=1$	$f_B \geq 1$
				[min $^{-1}$ ]	[Nm]	[kW]	[%]	[min $^{-1}$ ]	[Nm]	[kW]	[%]				
<b>PSH</b> <b>3050</b>	3016.29	59.14	51/1	0.46	195	0.02	47	0.31	199	0.01	46	63*	71*		
	2248.25	44.08	51/1	0.62	195	0.03	47	0.41	201	0.02	46	63*	71*		
	1969.48	38.62	51/1	0.71	195	0.03	47	0.47	202	0.02	47	63*	71*		
<b>W - IEC</b>	1746.47	34.24	51/1	0.80	195	0.03	47	0.53	203	0.02	47	63*	71*		
$\leftarrow\rightleftharpoons$	1330.71	59.14	45/2	1.1	195	0.03	65	0.70	199	0.02	65	63*	71*		
$\square$ 80	991.88	44.08	45/2	1.4	195	0.04	66	0.94	201	0.03	65	63*	71*		
	868.89	38.62	45/2	1.6	195	0.05	66	1.1	202	0.04	65	63*	71*		
+	755.93	14.82	51/1	1.9	195	0.08	48	1.2	203	0.05	47	63*	71*		
<b>PAM</b>	663.52	13.01	51/1	2.1	195	0.09	48	1.4	203	0.06	47	63*	71*		
$\leftarrow\rightleftharpoons$	586.50	11.50	51/1	2.4	195	0.10	48	1.6	203	0.07	48	63*	71*		
$\square$ 81	473.94	9.29	51/1	3.0	195	0.13	49	2.0	202	0.09	48	63*	71*		
	412.72	8.09	51/1	3.4	195	0.14	49	2.3	203	0.10	48	63*	71*		
	333.50	14.82	45/2	4.2	195	0.13	67	2.8	203	0.09	66	63*	71*		
	292.73	13.01	45/2	4.8	195	0.15	67	3.2	203	0.10	66	63*	71*		
	209.09	9.29	45/2	6.7	195	0.20	68	4.4	202	0.14	67	63	71*		
	182.08	8.09	45/2	7.7	195	0.23	68	5.1	203	0.16	67	63	71*		
	158.10	14.82	32/3	8.9	195	0.23	78	5.9	203	0.16	77	63	71*		
	138.77	13.01	32/3	10.1	195	0.26	78	6.7	203	0.18	77	63	71*		
	122.67	11.50	32/3	11.4	195	0.30	78	7.6	203	0.21	77	63	71*		
	99.12	9.29	32/3	14.1	190	0.36	78	9.4	197	0.25	78	63	71*		
	86.32	8.09	32/3	16.2	180	0.37	79	10.8	187	0.24	78	63	71		
	76.58	14.82	31/6	18.3	140	0.32	83	12.1	141	0.22	83	63	71*		
	67.22	13.01	31/6	20.8	130	0.34	84	13.8	136	0.24	83	63	71*		
	59.42	11.50	31/6	23.6	130	0.37	84	15.7	135	0.24	83	63	71		
	48.01	9.29	31/6	29.2	110	0.37	84	19.4	114	0.24	83	63	71		
	41.81	8.09	31/6	33.5	110	0.37	84	22.2	110	0.24	84	63	71		



IEC bağlantısı yoktur - No IEC assembling on empty fields



IEC bağlantısı yapılır - IEC assembling available on numbered fields

80\* IEC bağlantısı yapılacaksa  $P_{1max}$  değerleri aşılmamalıdır - Do not exceed the  $P_{1max}$  values indicated on fields with asterisk

Tip Type	Tahvil Reduction i <sub>ges</sub>	Helisel Helical i <sub>1</sub>	Sonsuz Worm Z <sub>2</sub> /Z <sub>1</sub>	W n <sub>1</sub> = 700 min <sup>-1</sup>				W n <sub>1</sub> = 465 min <sup>-1</sup>				W n <sub>1</sub> = 250 min <sup>-1</sup>				IEC			
				n <sub>2</sub>	M <sub>a</sub> max	P <sub>1</sub> max	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	f <sub>B</sub> =1	f <sub>B</sub> ≥1	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]
<b>PSH 3050</b>	3016.29	59.14	51/1	0.23	202	0.01	46	0.15	215	0.01	46	0.08	232	-	46	63*	71*		
	2248.25	44.08	51/1	0.31	204	0.01	46	0.21	207	0.01	46	0.11	230	0.01	46	63*	71*		
	1969.48	38.62	51/1	0.36	205	0.02	46	0.24	209	0.01	46	0.13	229	0.01	46	63*	71*		
<b>W - IEC</b>	1746.47	34.24	51/1	0.40	207	0.02	46	0.27	211	0.01	46	0.14	227	0.01	46	63*	71*		
	1330.71	59.14	45/2	0.53	202	0.02	65	0.35	215	0.01	65	0.19	232	0.01	65	63*	71*		
	991.88	44.08	45/2	0.71	204	0.02	65	0.47	207	0.02	65	0.25	230	0.01	65	63*	71*		
+	868.89	38.62	45/2	0.81	205	0.03	65	0.54	209	0.02	65	0.29	229	0.01	65	63*	71*		
<b>PAM</b>	755.93	14.82	51/1	0.93	208	0.04	47	0.62	219	0.03	47	0.33	227	0.02	46	63*	71*		
	663.52	13.01	51/1	1.1	208	0.05	47	0.70	219	0.03	47	0.38	229	0.02	46	63*	71*		
	586.50	11.50	51/1	1.2	208	0.06	47	0.79	218	0.04	47	0.43	229	0.02	46	63*	71*		
	473.94	9.29	51/1	1.5	209	0.07	48	1.0	216	0.05	47	0.53	231	0.03	47	63*	71*		
	412.72	8.09	51/1	1.7	209	0.08	48	1.1	217	0.05	47	0.61	232	0.03	47	63	71*		
	333.50	14.82	45/2	2.1	208	0.07	66	1.4	219	0.05	65	0.75	227	0.03	65	63*	71*		
	292.73	13.01	45/2	2.4	208	0.08	66	1.6	219	0.06	66	0.85	229	0.03	65	63*	71*		
	209.09	9.29	45/2	3.3	209	0.11	66	2.2	216	0.08	66	1.2	231	0.04	65	63*	71*		
	182.08	8.09	45/2	3.8	209	0.13	66	2.6	217	0.09	66	1.4	232	0.05	66	63	71*		
	158.10	14.82	32/3	4.4	208	0.12	77	2.9	219	0.09	77	1.6	227	0.05	77	63	71*		
	138.77	13.01	32/3	5.0	208	0.14	77	3.4	219	0.10	77	1.8	229	0.06	77	63	71*		
	122.67	11.50	32/3	5.7	208	0.16	77	3.8	218	0.11	77	2.0	229	0.06	77	63	71*		
	99.12	9.29	32/3	7.1	203	0.20	77	4.7	211	0.13	77	2.5	225	0.08	77	63	71*		
	86.32	8.09	32/3	8.1	193	0.21	78	5.4	199	0.12	77	2.9	199	0.07	77	63	71*		
	76.58	14.82	31/6	9.1	141	0.16	83	6.1	141	0.12	83	3.3	139	0.06	82	63	71*		
	67.22	13.01	31/6	10.4	139	0.18	83	6.9	139	0.12	83	3.7	138	0.07	82	63	71*		
	59.42	11.50	31/6	11.8	138	0.19	83	7.8	138	0.12	83	4.2	137	0.07	82	63	71*		
	48.01	9.29	31/6	14.6	118	0.19	83	9.7	120	0.12	83	5.2	120	0.07	83	63	71*		
	41.81	8.09	31/6	16.7	109	0.19	83	11.1	109	0.12	83	6.0	109	0.07	83	63	71*		



IEC bağlantısı yoktur - No IEC assembling on empty fields



IEC bağlantısı yapılır - IEC assembling available on numbered fields



IEC bağlantısı yapılacaksa P<sub>1</sub>max değerleri aşılmamalıdır - Do not exceed the P<sub>1</sub>max values indicated on fields with asterisk

Tip Type	Tahvil Reduction $i_{ges}$	Helisel Helical $i_1$	Sonsuz Worm $Z_2/Z_1$	<b>W</b> $n_1 = 1400 \text{ min}^{-1}$					<b>W</b> $n_1 = 930 \text{ min}^{-1}$					IEC				
				$n_2$	$M_{amax}$	$P_{1max}$	$\eta$	$f_B=1$	$f_B \geq 1$	$n_2$	$M_{amax}$	$P_{1max}$	$\eta$	$f_B=1$	$f_B \geq 1$	$f_B \Leftrightarrow$	53 - 67	
				[min $^{-1}$ ]	[Nm]	[kW]	[%]	[min $^{-1}$ ]	[Nm]	[kW]	[%]							
<b>PSH</b>	524.57	10.29	51/1	2.7	185	0.11	49	1.8	192	0.08	48	63*	71*					
<b>2050</b>	439.88	8.62	51/1	3.2	185	0.13	49	2.1	192	0.09	48	63*	71*					
	385.33	7.56	51/1	3.6	185	0.14	50	2.4	193	0.10	48	63*	71*					
<b>W - IEC</b>	341.70	6.70	51/1	4.1	185	0.16	50	2.7	195	0.11	49		71*	80*				
	231.43	10.29	45/2	6.0	185	0.17	67	4.0	192	0.12	67	63*	71*					
76	194.06	8.62	45/2	7.2	185	0.21	68	4.8	192	0.14	67	63	71*					
	170.00	7.56	45/2	8.2	185	0.23	68	5.5	193	0.17	67	63	71*					
+	<b>147.90</b>	2.90	51/1	9.5	175	0.32	54	6.3	188	0.24	52	63	71*	80*	90*			
<b>PAM</b>	<b>129.82</b>	2.55	51/1	10.8	168	0.35	55	7.2	181	0.26	52	63	71*	80*	90*			
	<b>114.75</b>	2.25	51/1	12.2	168	0.38	56	8.1	182	0.29	53	63	71	80*	90*			
77	<b>92.73</b>	1.82	51/1	15.1	168	0.47	57	10.0	185	0.36	54	63	71	80*	90*			
	<b>80.75</b>	1.58	51/1	17.3	168	0.52	58	11.5	187	0.41	55	63	71	80*	90*			
	<b>65.25</b>	2.90	45/2	21.5	168	0.53	72	14.3	180	0.39	70	63	71	80*	90*			
	<b>57.27</b>	2.55	45/2	24.4	168	0.60	72	16.2	181	0.44	70	63	71	80*	90*			
	<b>50.63</b>	2.25	45/2	27.7	155	0.62	73	18.4	168	0.46	71	63	71	80*	90*			
	<b>40.91</b>	1.82	45/2	34.2	155	0.75	74	22.7	171	0.56	72	63	71	80	90*			
	<b>35.63</b>	1.58	45/2	39.3	155	0.85	75	26.1	172	0.65	72	63	71	80	90*			
	<b>30.93</b>	2.90	32/3	45.3	155	0.91	81	30.1	166	0.65	80	63	71	80	90*			
	<b>27.15</b>	2.55	32/3	51.6	155	1.02	82	34.3	167	0.75	80	63	71	80	90*			
	<b>24.00</b>	2.25	32/3	58.3	155	1.15	82	38.8	168	0.84	81	63	71	80	90*			
	<b>19.39</b>	1.82	32/3	72.2	145	1.32	83	48.0	160	0.98	82	63	71	80	90*			
	<b>16.89</b>	1.58	32/3	82.9	120	1.26	83	55.1	133	0.94	82	63	71	80	90*			
	<b>14.77</b>	1.38	32/3	94.8	113	1.34	84	63.0	127	1.02	82	63	71	80	90*			
	<b>13.15</b>	2.55	31/6	106.5	120	1.50	87	70.7	129	0.99	86	63	71	80	90			
	<b>11.63</b>	2.25	31/6	120.4	113	1.50	87	80.0	123	0.99	86	63	71	80	90			
	<b>9.39</b>	1.82	31/6	149.1	110	1.50	88	99.0	121	0.99	87	63	71	80	90			
	<b>8.18</b>	1.58	31/6	171.1	110	1.50	88	113.7	122	0.99	87	63	71	80	90			
	<b>7.15</b>	1.38	31/6	195.8	105	1.50	88	130.1	118	0.99	87	63	71	80	90			



IEC bağlantısı yoktur - No IEC assembling on empty fields



IEC bağlantısı yapılır - IEC assembling available on numbered fields

IEC bağlantısı yapılacaksa  $P_{1max}$  değerleri aşılmamalıdır - Do not exceed the  $P_{1max}$  values indicated on fields with asterisk

Tip Type	Tahvil Reduction i <sub>ges</sub>	Helisel Helical i <sub>1</sub>	Sonsuz Worm Z <sub>2</sub> /Z <sub>1</sub>	W n <sub>1</sub> = 700 min <sup>-1</sup>					W n <sub>1</sub> = 465 min <sup>-1</sup>					W n <sub>1</sub> = 250 min <sup>-1</sup>					IEC								
				n <sub>2</sub>	M <sub>a</sub> max	P <sub>1</sub> max	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	f <sub>B</sub> =1	f <sub>B</sub> ≥1	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	f <sub>B</sub> =1	f <sub>B</sub> ≥1	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	f <sub>B</sub> ⇒  53 - 67	
<b>PSH 2050</b>	524.57	10.29	51/1	1.3	198	0.06	47	0.89	206	0.04	47	0.48	218	0.02	47	63*	71*										
	439.88	8.62	51/1	1.6	198	0.07	48	1.1	205	0.05	47	0.57	219	0.03	47	63*	71*										
	385.33	7.56	51/1	1.8	198	0.08	48	1.2	207	0.06	47	0.65	220	0.03	47	63*	71*										
<b>W - IEC</b>	341.70	6.70	51/1	2.0	199	0.09	48	1.4	208	0.06	47	0.73	221	0.04	47		71*	80*									
	231.43	10.29	45/2	3.0	198	0.09	66	2.0	206	0.07	66	1.1	211	0.04	65	63*	71*										
 76	194.06	8.62	45/2	3.6	198	0.11	66	2.4	205	0.08	66	1.3	219	0.05	65	63	71*										
+	170.00	7.56	45/2	4.1	198	0.13	67	2.7	207	0.09	66	1.5	220	0.05	66	63	71*										
<b>147.90</b>	2.90	51/1	4.7	194	0.19	51	3.1	207	0.14	49	1.7	219	0.08	48	63	71*	80*	90*									
<b>PAM</b>	<b>129.82</b>	2.55	51/1	5.4	188	0.21	51	3.6	201	0.15	49	1.9	212	0.09	48	63	71*	80*	90*								
	<b>114.75</b>	2.25	51/1	6.1	190	0.23	52	4.1	203	0.17	50	2.2	216	0.10	48	63	71*	80*	90*								
 77	92.73	1.82	51/1	7.5	195	0.29	53	5.0	207	0.21	51	2.7	224	0.13	49	63	71	80*	90*								
	80.75	1.58	51/1	8.7	198	0.34	53	5.8	211	0.25	51	3.1	229	0.15	49	63	71	80*	90*								
	65.25	2.90	45/2	10.7	186	0.30	69	7.1	199	0.22	68	3.8	210	0.13	66	63	71	80*	90*								
	57.27	2.55	45/2	12.2	188	0.35	69	8.1	201	0.25	68	4.4	212	0.15	67	63	71	80*	90*								
	50.63	2.25	45/2	13.8	176	0.36	70	9.2	187	0.26	68	4.9	199	0.15	67	63	71	80*	90*								
	40.91	1.82	45/2	17.1	180	0.45	71	11.4	191	0.33	69	6.1	206	0.20	67	63	71	80*	90*								
	35.63	1.58	45/2	19.6	183	0.53	71	13.1	195	0.39	69	7.0	211	0.23	68	63	71	80*	90*								
	30.93	2.90	32/3	22.6	172	0.52	79	15.0	183	0.37	78	8.1	194	0.21	78	63	71	80*	90*								
	27.15	2.55	32/3	25.8	174	0.59	80	17.1	185	0.42	79	9.2	196	0.24	78	63	71	80	90*								
	24.00	2.25	32/3	29.2	176	0.67	80	19.4	187	0.48	79	10.4	199	0.28	78	63	71	80	90*								
	19.39	1.82	32/3	36.1	168	0.78	81	24.0	178	0.57	79	12.9	193	0.33	78	63	71	80	90*								
	16.89	1.58	32/3	41.4	141	0.75	81	27.5	151	0.54	80	14.8	164	0.33	78	63	71	80	90*								
	14.77	1.38	32/3	47.4	135	0.83	81	31.5	146	0.60	80	16.9	158	0.35	79	63	71	80	90*								
	13.15	2.55	31/6	53.2	134	0.75	85	35.4	141	0.50	84	19.0	139	0.27	83	63	71	80	90*								
	11.63	2.25	31/6	60.2	128	0.75	85	40.0	136	0.50	85	21.5	140	0.27	84	63	71	80	90*								
	9.39	1.82	31/6	74.5	128	0.75	86	49.5	135	0.50	85	26.6	137	0.27	84	63	71	80	90*								
	8.18	1.58	31/6	85.6	130	0.75	86	56.8	137	0.50	85	30.6	135	0.27	84	63	71	80	90								
	7.15	1.38	31/6	97.9	126	0.75	87	65.0	136	0.50	86	35.0	133	0.27	84	63	71	80	90								

 IEC bağlantısı yoktur - No IEC assembling on empty fields

 63 IEC bağlantısı yapılır - IEC assembling available on numbered fields

 80\* IEC bağlantısı yapılacaksa P<sub>1max</sub> değerleri aşılmamalıdır - Do not exceed the P<sub>1max</sub> values indicated on fields with asterisk

Tip Type	Tahvil Reduction $i_{ges}$	Helisel Helical $i_1$	Sonsuz Worm $Z_2/Z_1$	<b>W</b> $n_1 = 1400 \text{ min}^{-1}$				<b>W</b> $n_1 = 930 \text{ min}^{-1}$				IEC			
				$n_2$	$M_{amax}$	$P_{1max}$	$\eta$	$n_2$	$M_{amax}$	$P_{1max}$	$\eta$	$f_B=1$	$f_B \geq 1$	$f_B=1$	$f_B \geq 1$
				[min $^{-1}$ ]	[Nm]	[kW]	[%]	[min $^{-1}$ ]	[Nm]	[kW]	[%]				
<b>PSH</b>	3628.29*	71.14	51/1	0.39	380	0.03	45	0.26	387	0.02	45	63*	71*		
<b>3063</b>	2704.42*	53.03	51/1	0.52	380	0.04	46	0.34	390	0.03	45	63*	71*		
	2374.96*	46.57	51/1	0.59	380	0.05	46	0.39	391	0.04	45	63*	71*		
<b>W - IEC</b>	2111.40*	41.40	51/1	0.66	380	0.06	46	0.44	393	0.04	45	63*	71*		
	1343.24*	62.48	43/2	1.0	380	0.06	64	0.69	388	0.04	64	63*	71*		
88	1140.10*	53.03	43/2	1.2	380	0.07	64	0.82	390	0.05	64	63*	71*		
	938.40	18.40	51/1	1.5	380	0.13	47	1.0	392	0.09	46	63*	71*		
+	738.56	14.48	51/1	1.9	380	0.16	48	1.3	396	0.11	47	63*	71*		
<b>PAM</b>	604.27	11.85	51/1	2.3	380	0.19	48	1.5	396	0.13	47	63	71*		
	532.19	10.44	51/1	2.6	380	0.21	49	1.7	395	0.15	47	63	71*		
89	471.21	9.24	51/1	3.0	380	0.24	49	2.0	394	0.17	48	63	71*		
	395.60	18.40	43/2	3.5	380	0.21	66	2.4	392	0.15	65	63	71*		
	349.65	16.26	43/2	4.0	380	0.24	66	2.7	394	0.17	65	63	71*		
	311.35	14.48	43/2	4.5	380	0.27	66	3.0	396	0.19	66	63	71*		
	254.74	11.85	43/2	5.5	370	0.32	67	3.7	385	0.23	66	63	71*		
	224.36	10.44	43/2	6.2	370	0.36	67	4.1	384	0.25	66	63	71*		
	198.65	9.24	43/2	7.0	360	0.37	68	4.7	373	0.24	66	63	71		
	178.60	14.48	37/3	7.8	340	0.37	76	5.2	354	0.24	75	63	71		
	146.13	11.85	37/3	9.6	330	0.37	77	6.4	333	0.24	76	63	71		
	128.70	10.44	37/3	10.9	300	0.37	77	7.2	296	0.24	76	63	71		
	113.95	9.24	37/3	12.3	260	0.37	77	8.2	260	0.24	76	63	71		
	97.18	7.88	37/3	14.4	230	0.37	78	9.6	227	0.24	77	63	71		
	79.65	14.48	33/6	17.6	200	0.37	84	11.7	198	0.24	83	63	71		
	65.17	11.85	33/6	21.5	170	0.37	84	14.3	168	0.24	83	63	71		

\* İşareti belirtilen tahvil oranlarının B14 veya B5 flanşlı gövde bağlantıları için geçerli olduğunu gösterir.

\* Sign shows that this reduction ratio is valid for geared motor with B14 and B5 flange

IEC bağlantısı yoktur - No IEC assembling on empty fields

63 IEC bağlantısı yapılır - IEC assembling available on numbered fields

80\* IEC bağlantısı yapılacaksa P1max değerleri aşılmamalıdır - Do not exceed the P1max values indicated on fields with asterisk

Tip Type	Tahvil Reduction i <sub>ges</sub>	Helisel Helical i <sub>1</sub>	Sonsuz Worm Z <sub>2</sub> /Z <sub>1</sub>	W n <sub>1</sub> = 700 min <sup>-1</sup>					W n <sub>1</sub> = 465 min <sup>-1</sup>					W n <sub>1</sub> = 250 min <sup>-1</sup>					IEC					
				n <sub>2</sub> M <sub>a</sub> max P <sub>1</sub> max η					n <sub>2</sub> M <sub>a</sub> max P <sub>1</sub> max η					n <sub>2</sub> M <sub>a</sub> max P <sub>1</sub> max η										
				f <sub>B</sub> =1	f <sub>B</sub> ≥1	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	f <sub>B</sub> =1	f <sub>B</sub> ≥1	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	f <sub>B</sub> =1	f <sub>B</sub> ≥1	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]			
<b>PSH 3063</b>	3628.29*	71.14	51/1	0.19	392	0.02	45	0.13	426	0.01	45	0.07	454	0.01	45	63*	71*							
	2704.42*	53.03	51/1	0.26	394	0.02	45	0.17	413	0.02	45	0.09	451	0.01	45	63*	71*							
	2374.96*	46.57	51/1	0.29	397	0.03	45	0.20	406	0.02	45	0.11	449	0.01	45	63*	71*							
<b>W - IEC</b>	2111.40*	41.40	51/1	0.33	399	0.03	45	0.22	406	0.02	45	0.12	447	0.01	45	63*	71*							
	1343.24*	62.48	43/2	0.52	392	0.03	64	0.35	421	0.02	64	0.19	452	0.01	64	63*	71*							
	1140.10*	53.03	43/2	0.61	394	0.04	64	0.41	413	0.03	64	0.22	428	0.02	64	63*	71*							
+	938.40	18.40	51/1	0.75	407	0.07	46	0.50	424	0.05	45	0.27	437	0.03	45	63*	71*							
	738.56	14.48	51/1	0.95	405	0.09	46	0.63	427	0.06	46	0.34	444	0.04	45	63*	71*							
<b>PAM</b>	604.27	11.85	51/1	1.2	405	0.11	47	0.77	425	0.07	46	0.41	447	0.04	45	63	71*							
	532.19	10.44	51/1	1.3	406	0.12	47	0.87	423	0.08	46	0.47	448	0.05	45	63	71*							
	471.21	9.24	51/1	1.5	406	0.14	47	1.0	421	0.10	46	0.53	449	0.05	46	63	71*							
	395.60	18.40	43/2	1.8	407	0.12	65	1.2	424	0.08	64	0.63	437	0.05	64	63	71*							
	349.65	16.26	43/2	2.0	406	0.13	65	1.3	425	0.09	65	0.72	440	0.05	64	63	71*							
	311.35	14.48	43/2	2.2	405	0.14	65	1.5	427	0.10	65	0.80	444	0.06	64	63	71*							
	254.74	11.85	43/2	2.7	395	0.17	65	1.8	414	0.12	65	1.0	435	0.07	64	63	71*							
	224.36	10.44	43/2	3.1	395	0.19	66	2.1	412	0.14	65	1.1	430	0.08	64	63	71*							
	198.65	9.24	43/2	3.5	385	0.19	66	2.3	388	0.12	65	1.3	382	0.07	64	63	71*							
	178.60	14.48	37/3	3.9	363	0.19	75	2.6	382	0.12	75	1.4	396	0.07	74	63	71*							
	146.13	11.85	37/3	4.8	329	0.19	75	3.2	329	0.12	75	1.7	325	0.07	74	63	71*							
	128.70	10.44	37/3	5.4	292	0.19	75	3.6	292	0.12	75	1.9	288	0.07	74	63	71							
	113.95	9.24	37/3	6.1	260	0.19	76	4.1	257	0.12	75	2.2	257	0.07	75	63	71							
	97.18	7.88	37/3	7.2	224	0.19	76	4.8	221	0.12	75	2.6	221	0.07	75	63	71							
	79.65	14.48	33/6	8.8	198	0.19	83	5.8	196	0.12	82	3.1	196	0.07	82	63	71							
	65.17	11.85	33/6	10.7	168	0.19	83	7.1	168	0.12	83	3.8	166	0.07	82	63	71							

\* İşareti belirtilen tahvil oranlarının B14 veya B5 flanşlı gövde bağlantıları için geçerli olduğunu gösterir.

\* Sign shows that this reduction ratio is valid for geared motor with B14 and B5 flange

IEC bağlantısı yoktur - No IEC assembling on empty fields

63 IEC bağlantısı yapılır - IEC assembling available on numbered fields

80\* IEC bağlantısı yapılacaksa P<sub>1</sub>max değerleri aşılmamalıdır - Do not exceed the P<sub>1</sub>max values indicated on fields with asterisk

Tip Type	Tahvil Reduction $i_{ges}$	Helisel Helical $i_1$	Sonsuz Worm $Z_2/Z_1$	<b>W</b> $n_1 = 1400 \text{ min}^{-1}$					<b>W</b> $n_1 = 930 \text{ min}^{-1}$					IEC				
				$n_2$	$M_{amax}$	$P_{1max}$	$\eta$	$f_B=1$	$f_B \geq 1$	$n_2$	$M_{amax}$	$P_{1max}$	$\eta$	$f_B=1$	$f_B \geq 1$	$f_B \Rightarrow$	53 - 67	
				[min $^{-1}$ ]	[Nm]	[kW]	[%]	[min $^{-1}$ ]	[Nm]	[kW]	[%]							
<b>PSH</b> <b>2063</b>	626.57*	12.29	51/1	2.2	360	0.17	48	1.5	375	0.13	47	63*	71*					
	529.13*	10.38	51/1	2.6	360	0.20	49	1.8	374	0.15	47	63	71*					
	464.67*	9.11	51/1	3.0	360	0.23	49	2.0	373	0.16	48	63	71*					
<b>W - IEC</b>	413.10*	8.10	51/1	3.4	360	0.26	50	2.3	375	0.19	48		71*	80*				
	264.14*	12.29	43/2	5.3	350	0.29	67	3.5	349	0.19	66	63	71*					
84	223.06*	10.38	43/2	6.3	360	0.35	67	4.2	374	0.25	66	63	71*					
+	195.89*	9.11	43/2	7.1	360	0.39	68	4.7	373	0.27	67	63	71					
<b>PAM</b>	<b>183.60</b>	3.60	51/1	7.6	325	0.48	54	5.1	343	0.35	52	63	71	80*	90*			
<b>162.27</b>	3.18	51/1	8.6	310	0.51	55	5.7	330	0.38	52	63	71	80*	90*				
	<b>144.50</b>	2.83	51/1	9.7	300	0.54	56	6.4	322	0.41	53	63	71	80*	90*	100*		
85	<b>118.23</b>	2.32	51/1	11.8	295	0.63	58	7.9	320	0.49	54	63	71	80*	90*	100*		
	<b>104.13</b>	2.04	51/1	13.4	295	0.70	59	8.9	322	0.55	55	63	71	80*	90*	100*		
	<b>92.19</b>	1.81	51/1	15.2	295	0.78	60	10.1	325	0.61	56	63	71	80	90*	100*		
	<b>77.40</b>	3.60	43/2	18.1	305	0.80	72	12.0	322	0.58	70	63	71	80	90*			
	<b>68.41</b>	3.18	43/2	20.5	295	0.87	73	13.6	314	0.64	70	63	71	80	90*			
	<b>60.92</b>	2.83	43/2	23.0	280	0.92	73	15.3	301	0.68	71	63	71	80	90*	100*		
	<b>49.84</b>	2.32	43/2	28.1	262	1.03	75	18.7	284	0.77	72	63	71	80	90*	100*		
	<b>43.90</b>	2.04	43/2	31.9	250	1.11	75	21.2	273	0.83	73	63	71	80	90*	100*		
	<b>38.87</b>	1.81	43/2	36.0	245	1.22	76	23.9	270	0.91	74	63	71	80	90*	100*		
	<b>34.94</b>	2.83	37/3	40.1	262	1.36	81	26.6	281	0.98	80	63	71	80	90*	100*		
	<b>28.59</b>	2.32	37/3	49.0	245	1.53	82	32.5	266	1.12	81	63	71	80	90	100*		
	<b>25.18</b>	2.04	37/3	55.6	245	1.72	83	36.9	268	1.28	81	63	71	80	90	100*		
	<b>22.29</b>	1.81	37/3	62.8	245	1.94	83	41.7	270	1.44	82	63	71	80	90	100*		
	<b>19.01</b>	1.54	37/3	73.6	215	1.97	84	48.9	240	1.50	82	63	71	80	90	100*		
	<b>15.58</b>	2.83	33/6	89.9	190	2.06	87	59.7	204	1.48	86	63	71	80	90	100*		
	<b>12.75</b>	2.32	33/6	109.8	180	2.20	88	72.9	195	1.45	87	63	71	80	90	100*		
	<b>11.23</b>	2.04	33/6	124.7	175	2.20	88	82.8	191	1.45	87	63	71	80	90	100*		
	<b>9.94</b>	1.81	33/6	140.8	170	2.20	89	93.6	187	1.45	88	63	71	80	90	100*		
	<b>8.48</b>	1.54	33/6	165.1	166	2.20	89	109.7	185	1.45	88	63	71	80	90	100*		
	<b>7.40</b>	1.35	33/6	189.2	156	2.20	90	125.7	176	1.45	88	63	71	80	90	100*		

\* İşareti belirtilen tahvil oranlarının B14 veya B5 flanşlı gövde bağlantıları için geçerli olduğunu gösterir.

\* Sign shows that this reduction ratio is valid for geared motor with B14 and B5 flange

IEC bağlantısı yoktur - No IEC assembling on empty fields

63 IEC bağlantısı yapılır - IEC assembling available on numbered fields

80\* IEC bağlantısı yapılacaksa P<sub>1max</sub> değerleri aşılmamalıdır - Do not exceed the P<sub>1max</sub> values indicated on fields with asterisk

Tip Type	Tahvil Reduction i <sub>ges</sub>	Helisel Helical i <sub>1</sub>	Sonsuz Worm Z <sub>2</sub> /Z <sub>1</sub>	W n <sub>1</sub> = 700 min <sup>-1</sup>				W n <sub>1</sub> = 465 min <sup>-1</sup>				W n <sub>1</sub> = 250 min <sup>-1</sup>				IEC							
				n <sub>2</sub>	M <sub>a</sub> max	P <sub>1</sub> max	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	n <sub>2</sub>	M <sub>a</sub> max	P <sub>1</sub> max	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	n <sub>2</sub>	M <sub>a</sub> max	P <sub>1</sub> max	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	53 - 67	
<b>PSH 2063</b>	626.57*	12.29	51/1	1.1	384	0.10	46	0.74	403	0.07	46	0.40	423	0.04	45	63*	71*						
	529.13*	10.38	51/1	1.3	385	0.11	47	0.88	401	0.08	46	0.47	424	0.05	45	63	71*						
	464.67*	9.11	51/1	1.5	385	0.13	47	1.0	399	0.09	46	0.54	426	0.05	46	63	71*						
<b>W - IEC</b>	413.10*	8.10	51/1	1.7	385	0.15	47	1.1	401	0.10	46	0.61	428	0.06	46		71*	80*					
	264.14*	12.29	43/2	2.7	344	0.15	65	1.8	344	0.10	65	0.95	338	0.05	64	63	71*						
	223.06*	10.38	43/2	3.1	385	0.19	66	2.1	401	0.14	65	1.1	424	0.08	64	63	71*						
+	195.89*	9.11	43/2	3.6	385	0.22	66	2.4	399	0.15	65	1.3	426	0.09	64	63	71*						
<b>PAM</b>	<b>183.60</b>	3.60	51/1	3.8	359	0.29	50	2.5	377	0.21	48	1.4	399	0.12	47	63	71	80*	90*				
	<b>162.27</b>	3.18	51/1	4.3	343	0.30	51	2.9	363	0.22	49	1.5	384	0.13	47	63	71	80*	90*				
	<b>144.50</b>	2.83	51/1	4.8	333	0.33	51	3.2	355	0.24	49	1.7	376	0.14	47	63	71	80*	90*	100*			
	<b>118.23</b>	2.32	51/1	5.9	333	0.39	53	3.9	355	0.29	50	2.1	377	0.17	48	63	71	80*	90*	100*			
	<b>104.13</b>	2.04	51/1	6.7	338	0.45	53	4.5	359	0.33	51	2.4	385	0.20	48	63	71	80*	90*	100*			
	<b>92.19</b>	1.81	51/1	7.6	343	0.51	54	5.0	363	0.37	51	2.7	393	0.23	49	63	71	80*	90*	100*			
	<b>77.40</b>	3.60	43/2	9.0	336	0.46	69	6.0	353	0.33	67	3.2	374	0.19	66	63	71	80*	90*				
	<b>68.41</b>	3.18	43/2	10.2	327	0.51	69	6.8	345	0.37	67	3.7	366	0.21	66	63	71	80*	90*				
	<b>60.92</b>	2.83	43/2	11.5	311	0.54	70	7.6	332	0.39	68	4.1	351	0.23	66	63	71	80	90*	100*			
	<b>49.84</b>	2.32	43/2	14.0	296	0.61	71	9.3	315	0.44	69	5.0	335	0.26	67	63	71	80	90*	100*			
	<b>43.90</b>	2.04	43/2	15.9	286	0.67	71	10.6	304	0.49	69	5.7	326	0.29	67	63	71	80	90*	100*			
	<b>38.87</b>	1.81	43/2	18.0	285	0.75	72	12.0	301	0.54	70	6.4	327	0.33	67	63	71	80	90*	100*			
	<b>34.94</b>	2.83	37/3	20.0	291	0.77	79	13.3	310	0.56	77	7.2	328	0.33	76	63	71	80	90*	100*			
	<b>28.59</b>	2.32	37/3	24.5	277	0.90	79	16.3	295	0.65	78	8.7	313	0.38	76	63	71	80	90*	100*			
	<b>25.18</b>	2.04	37/3	27.8	281	1.02	80	18.5	298	0.74	78	9.9	320	0.43	77	63	71	80	90*	100*			
	<b>22.29</b>	1.81	37/3	31.4	285	1.17	80	20.9	301	0.83	79	11.2	327	0.50	77	63	71	80	90*	100*			
	<b>19.01</b>	1.54	37/3	36.8	254	1.21	81	24.5	272	0.88	79	13.2	295	0.53	77	63	71	80	90	100*			
	<b>15.58</b>	2.83	33/6	44.9	211	1.15	86	29.8	225	0.84	84	16.0	238	0.48	83	63	71	80	90	100*			
	<b>12.75</b>	2.32	33/6	54.9	203	1.10	86	36.5	216	0.73	85	19.6	230	0.40	84	63	71	80	90	100*			
	<b>11.23</b>	2.04	33/6	62.3	200	1.10	86	41.4	213	0.73	85	22.3	228	0.40	84	63	71	80	90	100*			
	<b>9.94</b>	1.81	33/6	70.4	197	1.10	87	46.8	209	0.73	86	25.2	227	0.40	84	63	71	80	90	100*			
	<b>8.48</b>	1.54	33/6	82.5	196	1.10	87	54.8	210	0.73	86	29.5	228	0.40	85	63	71	80	90	100*			
	<b>7.40</b>	1.35	33/6	94.6	187	1.10	88	62.8	202	0.73	86	33.8	220	0.40	85	63	71	80	90	100*			

\* İşareti belirtilen tahlil oranlarının B14 veya B5 flanşlı gövde bağlantıları için geçerli olduğunu gösterir.

\* Sign shows that this reduction ratio is valid for geared motor with B14 and B5 flange

IEC bağlantısı yoktur - No IEC assembling on empty fields

IEC bağlantısı yapılır - IEC assembling available on numbered fields

IEC bağlantısı yapılacağsa P<sub>1max</sub> değerleri aşılmamalıdır - Do not exceed the P<sub>1max</sub> values indicated on fields with asterisk

Tip Type	Tahvil Reduction i <sub>ges</sub>	Helisel Helical i <sub>1</sub>	Sonsuz Worm Z <sub>2</sub> /Z <sub>1</sub>	W n <sub>1</sub> = 1400 min <sup>-1</sup>					W n <sub>1</sub> = 930 min <sup>-1</sup>					IEC					
				n <sub>2</sub>	M <sub>amax</sub>	P <sub>1max</sub>	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	f <sub>B</sub> =1	f <sub>B</sub> ≥1	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]
<b>PSH</b> <b>3080</b>	3356.08*	65.81	51/1	0.42	770	0.08	45	0.28	786	0.05	45	63*	71*						
	2658.80*	52.13	51/1	0.53	770	0.09	45	0.35	790	0.06	45	63*	71*						
	2059.27*	40.38	51/1	0.68	770	0.12	46	0.45	796	0.08	45	63*	71*						
<b>W - IEC</b>	1199.07	23.51	51/1	1.2	770	0.21	47	0.78	804	0.14	46	63	71*						
	955.78	18.74	51/1	1.5	770	0.26	47	1.0	795	0.18	46	63	71*						
96	805.70	15.80	51/1	1.7	770	0.29	48	1.2	800	0.21	47	63	71*						
+	705.97	13.84	51/1	2.0	770	0.33	49	1.3	804	0.23	47	63	71*						
	631.62	12.38	51/1	2.2	770	0.36	49	1.5	802	0.27	47	63	71*						
<b>PAM</b>	543.06	10.65	51/1	2.6	770	0.37	50	1.7	781	0.24	48	63	71						
	481.23	9.44	51/1	2.9	770	0.37	50	1.9	739	0.24	48	63	71						
97	402.93	18.74	43/2	3.5	770	0.37	67	2.3	795	0.24	66	63	71						
	339.66	15.80	43/2	4.1	700	0.37	68	2.7	679	0.24	66	63	71						
	297.62	13.84	43/2	4.7	610	0.37	68	3.1	601	0.24	67	63	71						
	266.27	12.38	43/2	5.3	570	0.37	68	3.5	562	0.24	67	63	71						
	228.94	10.65	43/2	6.1	570	0.37	69	4.1	554	0.24	67	63	71						
	193.65	18.74	31/3	7.2	450	0.37	78	4.8	448	0.24	77	63	71						
	163.25	15.80	31/3	8.6	380	0.37	78	5.7	377	0.24	77	63	71						
	143.04	13.84	31/3	9.8	340	0.37	78	6.5	335	0.24	77	63	71						
	127.97	12.38	31/3	10.9	300	0.37	79	7.3	299	0.24	78	63	71						
	110.03	10.65	31/3	12.7	260	0.37	79	8.5	257	0.24	78	63	71						
	97.50	9.44	31/3	14.4	230	0.37	79	9.5	229	0.24	78	63	71						
<b>PSH</b> <b>2080</b>	656.63*	12.88	51/1	2.1	710	0.32	49	1.4	740	0.23	47	63	71*						
	520.20*	10.20	51/1	2.7	710	0.40	50	1.8	737	0.29	48		71	80*					
	402.90*	7.90	51/1	3.5	710	0.51	51	2.3	740	0.36	49		71	80*					
<b>W - IEC</b>	276.81*	12.88	43/2	5.1	710	0.56	68	3.4	740	0.39	67	63	71						
	<b>234.60</b>	4.60	51/1	6.0	710	0.81	55	4.0	752	0.61	52	63	71	80	90*				
92	<b>187.00</b>	3.67	51/1	7.5	670	0.92	57	5.0	706	0.68	54	63	71	80	90*	100*	112*		
+	<b>157.64</b>	3.09	51/1	8.9	670	1.08	58	5.9	714	0.80	55	63	71	80	90*	100*	112*		
	<b>138.13</b>	2.71	51/1	10.1	645	1.14	60	6.7	694	0.87	56	63	71	80	90*	100*	112*		
<b>PAM</b>	<b>123.58</b>	2.42	51/1	11.3	620	1.20	61	7.5	671	0.92	57	63	71	80	90*	100*	112*		
	<b>106.25</b>	2.08	51/1	13.2	590	1.32	62	8.8	643	1.02	58	63	71	80	90*	100*	112*		
93	<b>94.15</b>	1.85	51/1	14.9	560	1.39	63	9.9	615	1.08	59	63	71	80	90*	100*	112*		
	78.83	3.67	43/2	17.8	655	1.63	75	11.8	690	1.18	72	63	71	80	90	100*	112*		
	66.45	3.09	43/2	21.1	630	1.83	76	14.0	672	1.35	73	63	71	80	90	100*	112*		
	58.23	2.71	43/2	24.0	600	1.96	77	16.0	646	1.46	74	63	71	80	90	100*	112*		
	52.10	2.42	43/2	26.9	575	2.10	77	17.9	622	1.55	75	63	71	80	90	100*	112*		
	44.79	2.08	43/2	31.3	550	2.31	78	20.8	600	1.72	76	63	71	80	90	100*	112*		
	37.89	3.67	31/3	36.9	550	2.56	83	24.5	580	1.81	82	63	71	80	90	100*	112*		
	31.94	3.09	31/3	43.8	525	2.87	84	29.1	560	2.08	82	63	71	80	90	100*	112*		
	27.99	2.71	31/3	50.0	510	3.14	85	33.2	549	2.30	83	63	71	80	90	100	112*		
	25.04	2.42	31/3	55.9	490	3.37	85	37.1	530	2.48	83	63	71	80	90	100	112*		
	21.53	2.08	31/3	65.0	470	3.72	86	43.2	513	2.76	84	63	71	80	90	100	112*		
	19.08	1.85	31/3	73.4	455	4.00	86	48.7	500	2.64	85	63	71	80	90	100	112		
	15.97	3.09	31/6	87.7	395	4.00	89	58.2	421	2.64	88	63	71	80	90	100	112		
	13.99	2.71	31/6	100.1	365	4.00	89	66.5	393	2.64	88	63	71	80	90	100	112		
	12.52	2.42	31/6	111.8	345	4.00	90	74.3	373	2.64	88	63	71	80	90	100	112		
	10.76	2.08	31/6	130.1	340	4.00	90	86.4	371	2.64	89	63	71	80	90	100	112		
	9.54	1.85	31/6	146.8	340	4.00	90	97.5	374	2.64	89	63	71	80	90	100	112		
	7.55	1.46	31/6	185.4	295	4.00	91	123.2	330	2.64	90								

\* İşareti belirtilen tahlil oranlarının B14 veya B5 flanşlı gövde bağlantıları için geçerli olduğunu gösterir.

\* Sign shows that this reduction ratio is valid for geared motor with B14 and B5 flange



IEC bağlantısı yoktur - No IEC assembling on empty fields



63 IEC bağlantısı yapılmır - IEC assembling available on numbered fields



80\* IEC bağlantısı yapılacaksa P<sub>1max</sub> değerleri aşılmamalıdır - Do not exceed the P<sub>1max</sub> values indicated on fields with asterisk

Tip Type	Tahvil Reduction i <sub>ges</sub>	Helisel Helical i <sub>1</sub>	Sonsuz Worm Z <sub>2</sub> /Z <sub>1</sub>	W $n_1 = 700 \text{ min}^{-1}$				W $n_1 = 465 \text{ min}^{-1}$				W $n_1 = 250 \text{ min}^{-1}$				IEC				$f_B \Rightarrow \text{book icon} 53 - 67$							
				n <sub>2</sub>	M <sub>amax</sub>	P <sub>1max</sub>	η	f <sub>B=1</sub>	f <sub>B≥1</sub>	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	f <sub>B=1</sub>	f <sub>B≥1</sub>	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	f <sub>B=1</sub>	f <sub>B≥1</sub>	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]		
<b>PSH</b> <b>3080</b>	3356.08*	65.81	51/1	0.21	793	0.04	45	0.14	857	0.03	45	0.07	918	0.02	44	63*	71*										
	2658.80*	52.13	51/1	0.26	800	0.05	45	0.17	835	0.03	45	0.09	912	0.02	44	63*	71*										
	2059.27*	40.38	51/1	0.34	809	0.06	45	0.23	823	0.04	45	0.12	905	0.03	44	63*	71*										
<b>W - IEC</b> 	1199.07	23.51	51/1	0.58	828	0.11	46	0.39	853	0.08	45	0.21	874	0.04	45	63	71*										
	955.78	18.74	51/1	0.73	825	0.14	46	0.49	858	0.10	45	0.26	884	0.05	45	63	71*										
	805.70	15.80	51/1	0.87	823	0.16	46	0.58	862	0.11	46	0.31	894	0.06	45	63	71*										
	705.97	13.84	51/1	1.0	821	0.19	46	0.66	866	0.13	46	0.35	902	0.07	45	63	71*										
	631.62	12.38	51/1	1.1	821	0.20	47	0.74	863	0.15	46	0.40	851	0.08	45	63	71*										
<b>PAM</b> 	543.06	10.65	51/1	1.3	764	0.19	47	0.86	748	0.12	46	0.46	732	0.07	45	63	71										
	481.23	9.44	51/1	1.5	724	0.19	47	1.0	709	0.12	46	0.52	693	0.07	45	63	71										
	402.93	18.74	43/2	1.7	798	0.19	66	1.2	786	0.12	65	0.62	786	0.07	65	63	71*										
	339.66	15.80	43/2	2.1	679	0.19	66	1.4	669	0.12	65	0.74	669	0.07	65	63	71										
	297.62	13.84	43/2	2.4	592	0.19	66	1.6	583	0.12	65	0.84	583	0.07	65	63	71										
	266.27	12.38	43/2	2.6	554	0.19	66	1.7	554	0.12	66	0.94	545	0.07	65	63	71										
	228.94	10.65	43/2	3.1	554	0.19	67	2.0	545	0.12	66	1.1	537	0.07	65	63	71										
	193.65	18.74	31/3	3.6	442	0.19	76	2.4	442	0.12	76	1.3	442	0.07	76	63	71										
	163.25	15.80	31/3	4.3	377	0.19	77	2.8	372	0.12	76	1.5	372	0.07	76	63	71										
	143.04	13.84	31/3	4.9	335	0.19	77	3.3	331	0.12	76	1.7	331	0.07	76	63	71										
	127.97	12.38	31/3	5.5	295	0.19	77	3.6	291	0.12	76	2.0	291	0.07	76	63	71										
	110.03	10.65	31/3	6.4	254	0.19	77	4.2	254	0.12	77	2.3	250	0.07	76	63	71										
	97.50	9.44	31/3	7.2	229	0.19	78	4.8	226	0.12	77	2.6	223	0.07	76	63	71										
<b>PSH</b> <b>2080</b>	656.63*	12.88	51/1	1.1	757	0.19	47	0.71	797	0.13	46	0.38	833	0.07	45	63	71*										
	520.20*	10.20	51/1	1.3	759	0.22	47	0.89	791	0.16	46	0.48	838	0.09	45		71	80*									
	402.90*	7.90	51/1	1.7	761	0.28	48	1.2	792	0.21	47	0.62	844	0.12	46		71	80*									
<b>W - IEC</b> 	276.81*	12.88	43/2	2.5	731	0.29	66	1.7	731	0.20	66	0.90	720	0.10	65	63	71										
	234.60	4.60	51/1	3.0	779	0.49	50	2.0	810	0.35	48	1.1	857	0.21	47	63	71	80*	90*								
	187.00	3.67	51/1	3.7	739	0.55	52	2.5	775	0.41	49	1.3	820	0.24	47	63	71	80	90*	100*	112*						
	157.64	3.09	51/1	4.4	742	0.65	53	2.9	787	0.48	50	1.6	832	0.29	48	63	71	80	90*	100*	112*						
	138.13	2.71	51/1	5.1	719	0.71	54	3.4	767	0.54	51	1.8	811	0.32	48	63	71	80	90*	100*	112*						
<b>PAM</b> 	123.58	2.42	51/1	5.7	698	0.76	55	3.8	743	0.57	52	2.0	787	0.34	49	63	71	80	90*	100*	112*						
	106.25	2.08	51/1	6.6	674	0.83	56	4.4	716	0.62	53	2.4	767	0.39	49	63	71	80	90*	100*	112*						
	94.15	1.85	51/1	7.4	649	0.88	57	4.9	688	0.67	53	2.7	744	0.42	50	63	71	80	90*	100*	112*						
	78.83	3.67	43/2	8.9	722	0.95	71	5.9	758	0.68	69	3.2	802	0.40	67	63	71	80	90*	100*	112*						
	66.45	3.09	43/2	10.5	698	1.07	72	7.0	740	0.79	69	3.8	783	0.47	67	63	71	80	90*	100*	112*						
	58.23	2.71	43/2	12.0	668	1.17	72	8.0	713	0.85	70	4.3	754	0.50	68	63	71	80	90	100*	112*						
	52.10	2.42	43/2	13.4	647	1.24	73	8.9	689	0.92	70	4.8	730	0.54	68	63	71	80	90	100*	112*						
	44.79	2.08	43/2	15.6	629	1.39	74	10.4	668	1.02	71	5.6	715	0.61	69	63	71	80	90	100*	112*						
	37.89	3.67	31/3	18.5	607	1.47	80	12.3	636	1.04	79	6.6	673	0.60	77	63	71	80	90	100*	112*						
	31.94	3.09	31/3	21.9	582	1.65	81	14.6	616	1.19	79	7.8	652	0.68	78	63	71	80	90	100*	112*						
	27.99	2.71	31/3	25.0	568	1.81	82	16.6	606	1.32	80	8.9	641	0.77	78	63	71	80	90	100*	112*						
	25.04	2.42	31/3	28.0	551	1.97	82	18.6	587	1.43	80	10.0	622	0.84	78	63	71	80	90	100*	112*						
	21.53	2.08	31/3	32.5	537	2.20	83	21.6	571	1.59	81	11.6	611	0.94	79	63	71	80	90	100*	112*						
	19.08	1.85	31/3	36.7	528	2.00	83	24.4	559	1.32	81	13.1	604	0.72	79	63	71	80	90	100	112*						
	15.97	3.09	31/6	43.8	417	2.00	87	29.1	408	1.32	85	15.7	403	0.72	84	63	71	80	90	100	112*						
	13.99	2.71	31/6	50.0	407	2.00	87	33.2	409	1.32	86	17.9	399	0.72	84	63	71	80	90	100	112*						
	12.52	2.42	31/6	55.9	388	2.00	87	37.1	406	1.32	86	20.0	401	0.72	85	63	71	80	90	100	112*						
	10.76	2.08	31/6	65.1	389	2.00	88	43.2	406	1.32	87	23.2	397	0.72	85	63	71	80	90	100	112*						
	9.54	1.85	31/6	73.4	394	2.00	88	48.7	402	1.32	87	26.2	393	0.72	85	63	71	80	90	100	112*						
	7.55	1.46	31/6	92.7	351	2.00	89	61.6	377	1.32	88	33.1	390	0.72	86								90	100	112*		

\* İşareti belirtilen tahlil oranlarının B14 veya B5 flanşlı gövde bağlantılıları için geçerli olduğunu gösterir.

\* Sign shows that this reduction ratio is valid for geared motor with B14 and B5 flange

IEC bağlantısı yoktur - No IEC assembling on empty fields

63 IEC bağlantısı yapılmır - IEC assembling available on numbered fields

80\* IEC bağlantısı yapılacaksa P<sub>1max</sub>

Tip Type	Tahvil Reduction $i_{ges}$	Helisel Helical $i_1$	Sonsuz Worm $Z_2/Z_1$	<b>W</b> $n_1 = 1400 \text{ min}^{-1}$					<b>W</b> $n_1 = 930 \text{ min}^{-1}$					IEC				
				$n_2$	$M_{amax}$	$P_{1max}$	$\eta$	$f_B=1$	$f_B \geq 1$	$n_2$	$M_{amax}$	$P_{1max}$	$\eta$	$f_B=1$	$f_B \geq 1$	$f_B \Rightarrow$		53 - 67
				[min $^{-1}$ ]	[Nm]	[kW]	[%]	[min $^{-1}$ ]	[Nm]	[kW]	[%]							
<b>PSH 3100</b>	5876.67	117.53	50/1	0.24	1590	0.09	45	0.16	1682	0.06	45	63*	71*					
	4646.67	92.93	50/1	0.30	1590	0.11	46	0.20	1612	0.08	45	63*	71*					
	3735.56	74.71	50/1	0.37	1590	0.13	46	0.25	1618	0.09	45	63*	71*					
<b>W - IEC</b>	2201.85	44.04	50/1	0.64	1590	0.23	47	0.42	1640	0.16	46	63	71*					
1670.37	33.41	50/1	0.84	1590	0.30	47	0.56	1657	0.21	46	63	71*						
104 +	1506.84	30.14	50/1	0.93	1590	0.32	48	0.62	1666	0.23	47	63	71*					
	1173.93	23.48	50/1	1.2	1590	0.42	48	0.79	1661	0.29	47	63	71					
	<b>660.00</b>	13.20	50/1	2.1	1590	0.69	51	1.4	1659	0.50	49	63	71	80*	90*			
<b>PAM</b>	<b>519.44</b>	10.39	50/1	2.7	1590	0.86	52	1.8	1651	0.62	50	63	71	80	90*			
468.59	9.37	50/1	3.0	1590	0.94	53	2.0	1647	0.69	50	63	71	80	90*				
105	<b>365.06</b>	7.30	50/1	3.8	1510	1.09	55	2.5	1580	0.80	52	63	71	80	90*			
	298.69	5.97	50/1	4.7	1510	1.33	56	3.1	1599	0.98	53	63	71	80	90*			
	257.40	13.20	39/2	5.4	1510	1.22	70	3.6	1575	0.86	69	63	71	80	90*			
	182.75	9.37	39/2	7.7	1420	1.50	72	5.1	1471	0.99	70	63	71	80				
	142.38	7.30	39/2	9.8	1310	1.50	74	6.5	1371	0.99	71	63	71	80	90			
	121.20	10.39	35/3	11.6	1190	1.50	80	7.7	1236	0.99	78	63	71	80	90			
	109.34	9.37	35/3	12.8	1190	1.50	80	8.5	1232	0.99	79	63	71	80	90			
	85.18	7.30	35/3	16.4	1080	1.50	81	10.9	1130	0.99	80	63	71	80	90			
	69.69	5.97	35/3	20.1	1080	1.50	82	13.3	1143	0.99	80	63	71	80	90			
	<b>53.68</b>	10.39	31/6	26.1	690	1.50	86	17.3	696	0.99	85	63	71	80	90			
<b>PSH 2100</b>	645.00	12.90	50/1	2.2	1420	0.64	51	1.4	1481	0.44	49	71	80*	90*				
	510.00	10.20	50/1	2.7	1420	0.77	52	1.8	1474	0.56	50		80	90*				
	410.00	8.20	50/1	3.4	1355	0.89	54	2.3	1410	0.67	51			90*	100*	112*		
<b>W - IEC</b>	303.85	6.08	50/1	4.6	1420	1.22	56	3.1	1502	0.92	53			90*				
241.67	4.83	50/1	5.8	1420	1.49	58	3.8	1506	1.09	55	71	80	90*	100*	112*			
100 +	<b>183.33</b>	3.67	50/1	7.6	1365	1.78	61	5.1	1439	1.35	57	71	80	90	100*	112*		
	165.38	3.31	50/1	8.5	1330	1.91	62	5.6	1411	1.43	58	71	80	90	100*	112*		
	128.85	2.58	50/1	10.9	1240	2.18	65	7.2	1337	1.68	60	71	80	90	100*	112*	132*	
<b>PAM</b>	<b>103.85</b>	2.08	50/1	13.5	1170	2.47	67	9.0	1276	1.91	63			90	100*	112*	132*	
94.25	4.83	39/2	14.9	1310	2.69	76	9.9	1389	1.95	74	71	80	90	100*	112*			
101	<b>71.50</b>	3.67	39/2	19.6	1220	3.21	78	13.0	1286	2.33	75	71	80	90	100	112*		
	64.50	3.31	39/2	21.7	1190	3.42	79	14.4	1263	2.51	76	71	80	90	100	112*		
	50.25	2.58	39/2	27.9	1110	4.05	80	18.5	1197	2.97	78	71	80	90	100	112	132*	
	42.78	3.67	35/3	32.7	1100	4.43	85	21.7	1159	3.17	83	71	80	90	100	112		
	38.59	3.31	35/3	36.3	1100	4.92	85	24.1	1167	3.55	83	71	80	90	100	112		
	34.29	1.76	39/2	40.8	1090	5.61	83	27.1	1202	4.26	80			90	100	112	132*	
	30.06	2.58	35/3	46.6	1050	5.96	86	30.9	1132	4.36	84	71	80	90	100	112	132*	
	24.23	2.08	35/3	57.8	1020	7.10	87	38.4	1112	5.26	85			90	100	112	132*	
	20.52	1.76	35/3	68.2	840	6.82	88	45.3	926	5.11	86			90	100	112	132*	
	18.94	3.67	31/6	73.9	720	6.19	90	49.1	721	4.21	88	71	80	90	100	112	132*	
	17.09	3.31	31/6	81.9	710	6.77	90	54.4	725	4.64	89	71	80	90	100	112	132*	
	16.25	1.39	35/3	86.2	750	7.50	89	57.2	844	4.95	87			90	100	112	132*	
	13.31	2.58	31/6	105.2	710	7.50	91	69.9	712	4.95	89	71	80	90	100	112	132*	
	10.73	2.08	31/6	130.5	725	7.50	91	86.7	717	4.95	90			90	100	112	132*	
	9.09	1.76	31/6	154.0	725	7.50	92	102.3	717	4.95	91			90	100	112	132*	
	<b>7.20</b>	1.39	31/6	194.4	680	7.50	92	129.2	680	4.95	91			90	100	112	132*	
				IEC bağlantısı yoktur - No IEC assembling on empty fields														
				IEC bağlantısı yapılır - IEC assembling available on numbered fields														
				80* IEC bağlantısı yapılacaksa P1max değerleri aşılmamalıdır - Do not exceed the P1max values indicated on fields with asterisk														

Tip Type	Tahvil Reduction i <sub>ges</sub>	Helisel Helical i <sub>1</sub>	Sonsuz Worm Z <sub>2</sub> /Z <sub>1</sub>	W n <sub>1</sub> = 700 min <sup>-1</sup>				W n <sub>1</sub> = 465 min <sup>-1</sup>				W n <sub>1</sub> = 250 min <sup>-1</sup>				IEC						
				n <sub>2</sub>	M <sub>amax</sub>	P <sub>1max</sub>	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	n <sub>2</sub>	M <sub>amax</sub>	P <sub>1max</sub>	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	n <sub>2</sub>	M <sub>amax</sub>	P <sub>1max</sub>	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	53 - 67
<b>PSH 3100</b>	5876.67	117.53	50/1	0.12	1760	0.05	45	0.08	1845	0.03	45	0.04	1913	0.02	45	63*	71*					
	4646.67	92.93	50/1	0.15	1712	0.06	45	0.10	1820	0.04	45	0.05	1907	0.02	45	63*	71*					
W - IEC	3735.56	74.71	50/1	0.19	1655	0.07	45	0.12	1791	0.05	45	0.07	1900	0.03	45	63*	71*					
↔	2201.85	44.04	50/1	0.32	1664	0.12	46	0.21	1690	0.08	45	0.11	1874	0.05	45	63	71*					
↔	1670.37	33.41	50/1	0.42	1690	0.16	46	0.28	1726	0.11	46	0.15	1853	0.06	45	63	71*					
↔	1506.84	30.14	50/1	0.46	1703	0.18	46	0.31	1743	0.12	46	0.17	1843	0.07	45	63	71*					
+	1173.93	23.48	50/1	0.60	1710	0.23	47	0.40	1762	0.16	46	0.21	1805	0.09	45	63	71					
<b>660.00</b>	13.20	50/1	1.1	1695	0.41	48	0.70	1785	0.28	47	0.38	1865	0.16	46	63	71	80*	90*				
<b>PAM</b>	<b>519.44</b>	10.39	50/1	1.3	1698	0.47	49	0.90	1772	0.36	47	0.48	1875	0.20	46	63	71	80	90*			
↔	<b>468.59</b>	9.37	50/1	1.5	1700	0.54	49	1.0	1764	0.38	48	0.53	1880	0.23	46	63	71	80	90*			
↔	<b>365.06</b>	7.30	50/1	1.9	1619	0.64	50	1.3	1692	0.48	48	0.68	1800	0.27	47	63	71	80	90*			
	<b>298.69</b>	5.97	50/1	2.3	1642	0.78	51	1.6	1715	0.59	49	0.84	1815	0.34	47	63	71	80	90*			
	<b>257.40</b>	13.20	39/2	2.7	1610	0.67	68	1.8	1696	0.48	67	1.0	1771	0.27	66	63	71	80	90*			
	<b>182.75</b>	9.37	39/2	3.8	1518	0.75	69	2.5	1576	0.50	68	1.4	1679	0.27	67	63	71	80	90*			
	<b>142.38</b>	7.30	39/2	4.9	1405	0.75	70	3.3	1468	0.50	68	1.8	1562	0.27	67	63	71	80	90			
	<b>121.20</b>	10.39	35/3	5.8	1271	0.75	78	3.8	1326	0.50	77	2.1	1403	0.27	76	63	71	80	90			
	<b>109.34</b>	9.37	35/3	6.4	1272	0.75	78	4.3	1320	0.50	77	2.3	1397	0.27	76	63	71	80	90			
	<b>85.18</b>	7.30	35/3	8.2	1158	0.75	79	5.5	1210	0.50	77	2.9	1287	0.27	76	63	71	80	90			
	<b>69.69</b>	5.97	35/3	10.0	1174	0.75	79	6.7	1227	0.50	78	3.6	1298	0.27	76	63	71	80	90			
	<b>53.68</b>	10.39	31/6	13.0	688	0.75	84	8.7	688	0.50	84	4.7	680	0.27	83	63	71	80	90			
<b>PSH 2100</b>	645.00	12.90	50/1	1.1	1514	0.36	48	0.72	1593	0.26	47	0.39	1666	0.15	46		80*	90*				
	510.00	10.20	50/1	1.4	1517	0.45	49	0.91	1581	0.32	47	0.49	1675	0.19	46		80	90*				
	410.00	8.20	50/1	1.7	1451	0.52	50	1.1	1508	0.36	48	0.61	1609	0.22	47		90*	100*	112*			
W - IEC	303.85	6.08	50/1	2.3	1542	0.73	51	1.5	1611	0.52	49	0.82	1706	0.31	47		90*	100*	112*			
↔	<b>241.67</b>	4.83	50/1	2.9	1558	0.89	53	1.9	1621	0.65	50	1.0	1709	0.37	48	71	80	90*	100*	112*		
↔	<b>183.33</b>	3.67	50/1	3.8	1505	1.09	55	2.5	1579	0.79	52	1.4	1671	0.50	49	71	80	90	100*	112*		
+	<b>165.38</b>	3.31	50/1	4.2	1470	1.18	55	2.8	1552	0.88	52	1.5	1642	0.53	49	71	80	90	100*	112*		
PAM	<b>128.85</b>	2.58	50/1	5.4	1387	1.35	58	3.6	1479	1.03	54	1.9	1564	0.62	50	71	80	90	100*	112*	132*	
↔	<b>103.85</b>	2.08	50/1	6.7	1337	1.56	60	4.5	1420	1.19	56	2.4	1521	0.75	51		90	100*	112*	132*		
↔	<b>94.25</b>	4.83	39/2	7.4	1437	1.55	72	4.9	1495	1.10	70	2.7	1576	0.65	68	71	80	90	100*	112*		
↔	<b>71.50</b>	3.67	39/2	9.8	1345	1.89	73	6.5	1412	1.35	71	3.5	1494	0.79	69	71	80	90	100*	112*		
	<b>64.50</b>	3.31	39/2	10.9	1316	2.03	74	7.2	1389	1.45	72	3.9	1469	0.87	69	71	80	90	100*	112*		
	<b>50.25</b>	2.58	39/2	13.9	1242	2.38	76	9.3	1324	1.77	73	5.0	1400	1.05	70	71	80	90	100	112*	132*	
	<b>42.78</b>	3.67	35/3	16.4	1213	2.57	81	10.9	1273	1.84	79	5.8	1347	1.05	78	71	80	90	100	112*		
	<b>38.59</b>	3.31	35/3	18.1	1216	2.81	82	12.0	1284	2.02	80	6.5	1358	1.18	78	71	80	90	100	112*		
	<b>34.29</b>	1.76	39/2	20.4	1269	3.48	78	13.6	1346	2.56	75	7.3	1459	1.55	72		90	100	112	132*		
	<b>30.06</b>	2.58	35/3	23.3	1175	3.45	83	15.5	1252	2.51	81	8.3	1324	1.46	79	71	80	90	100	112	132*	
	<b>24.23</b>	2.08	35/3	28.9	1166	4.20	84	19.2	1238	3.04	82	10.3	1326	1.81	79		90	100	112	132*		
	<b>20.52</b>	1.76	35/3	34.1	978	4.11	85	22.7	1037	2.97	83	12.2	1125	1.80	80		90	100	112	132*		
	<b>18.94</b>	3.67	31/6	37.0	712	3.17	87	24.6	704	2.11	86	13.2	688	1.13	84	71	80	90	100	112	132	
	<b>17.09</b>	3.31	31/6	41.0	717	3.50	88	27.2	700	2.32	86	14.6	692	1.24	85	71	80	90	100	112		
	<b>16.25</b>	1.39	35/3	43.1	897	3.75	86	28.6	968	2.48	84	15.4	1051	1.35	81	71	80	90	100	112	132*	
	<b>13.31</b>	2.58	31/6	52.6	712	3.75	89	34.9	696	2.48	87	18.8	680	1.35	85	71	80	90	100	112	132*	
	<b>10.73</b>	2.08	31/6	65.2	709	3.75	89	43.3	701	2.48	88	23.3	685	1.35	86		90	100	112	132*		
	<b>9.09</b>	1.76	31/6	77.0	709	3.75	90	51.2	694	2.48	88	27.5	678	1.35	86		90	100	112	132*		
	<b>7.20</b>	1.39	31/6	97.2	680	3.75	91	64.6	665	2.48	89	34.7	650	1.35	87		90	100	112	132*		

IEC bağlantısı yoktur - No IEC assembling on empty fields

63 IEC bağlantısı yapılır - IEC assembling available on numbered fields

80\* IEC bağlantısı yapılmaksa P<sub>1max</sub> değerleri aşılmamalıdır - Do not exceed the P<sub>1max</sub> values indicated on fields with asterisk

Tip Type	Tahvil Reduction $i_{ges}$	Helisel Helical $i_1$	Sonsuz Worm $Z_2/Z_1$	<b>W</b> $n_1 = 1400 \text{ min}^{-1}$					<b>W</b> $n_1 = 930 \text{ min}^{-1}$					IEC			
				$n_2$	$M_{amax}$	$P_{1max}$	$\eta$	$f_B=1$	$f_B \geq 1$	$n_2$	$M_{amax}$	$P_{1max}$	$\eta$	$f_B=1$	$f_B \geq 1$	$f_B \Rightarrow$	53 - 67
				[min $^{-1}$ ]	[Nm]	[kW]	[%]	[min $^{-1}$ ]	[Nm]	[kW]	[%]						
<b>PSH</b>	7095.12	150.96	47/1	0.20	3000	0.13	47	0.13	3000	0.09	47	71*	80*	90*			
<b>3125</b>	5055.49	107.56	47/1	0.28	3090	0.19	48	0.18	3222	0.13	47	71*	80*	90*			
	3442.96	73.25	47/1	0.41	3090	0.28	48	0.27	3146	0.19	48	71*	80*	90*			
<b>W - IEC</b>	2527.75	53.78	47/1	0.55	3090	0.36	49	0.37	3168	0.26	48	71*	80*	90*			
	2057.43	43.78	47/1	0.68	3090	0.45	49	0.45	3187	0.31	48	71	80*	90*			
112	1862.28	39.62	47/1	0.75	3090	0.50	49	0.50	3198	0.35	48	71	80*	90*			
+	1637.95	34.85	47/1	0.85	3090	0.55	50	0.57	3215	0.39	49	71	80*	90*			
<b>PAM</b>	1475.08	31.38	47/1	0.95	3090	0.61	50	0.63	3230	0.43	49	71	80*	90*			
	1198.50	25.50	47/1	1.2	3090	0.76	51	0.78	3239	0.54	49	71	80	90*			
113	928.25	19.75	47/1	1.5	3090	0.93	52	1.0	3200	0.67	50	80	90*				
	793.81	16.89	47/1	1.8	3090	1.10	53	1.2	3201	0.79	51	80	90*				
	690.49	30.69	45/2	2.0	2830	0.87	68	1.3	2962	0.60	67	80	90*				
	607.31	26.99	45/2	2.3	2670	0.95	68	1.5	2805	0.66	67	80	90*				
	546.92	24.31	45/2	2.6	3090	1.22	69	1.7	3233	0.86	67	80	90*				
	444.38	19.75	45/2	3.2	2990	1.45	69	2.1	3022	0.98	68	80	90*				
	380.02	16.89	45/2	3.7	2610	1.44	70	2.4	2625	0.96	69	80	90*				
	323.00	14.39	45/2	4.3	2400	1.52	71	2.9	2332	1.03	69	80	90				
<b>270.16</b>	12.01	45/2	5.2	2810	2.13	72	3.4	2926	1.49	70	71	80	90	100*	112*		
<b>236.72</b>	10.52	45/2	5.9	2810	2.38	73	3.9	2918	1.70	70	71	80	90	100*	112*		
<b>187.50</b>	8.33	45/2	7.5	2590	2.75	74	5.0	2694	1.96	72	71	80	90	100*	112*		
<b>152.34</b>	6.77	45/2	9.2	2590	3.28	76	6.1	2721	2.38	73	71	80	90	100	112*		
<b>130.28</b>	5.79	45/2	10.7	2480	3.61	77	7.1	2631	2.64	74	71	80	90	100	112*		
<b>110.99</b>	4.93	45/2	12.6	2370	4.00	78	8.4	2514	2.64	75	71	80	90	100	112		
<b>86.11</b>	8.33	31/3	16.3	1760	3.62	83	10.8	1830	2.55	81	71	80	90	100	112*		
<b>69.97</b>	6.77	31/3	20.0	1560	3.89	84	13.3	1639	2.78	82	71	80	90	100	112*		
<b>62.60</b>	6.06	31/3	22.4	1570	4.00	85	14.9	1661	2.64	83	71	80	90	100	112		

IEC bağlantısı yoktur - No IEC assembling on empty fields

63 IEC bağlantısı yapılır - IEC assembling available on numbered fields

80\* IEC bağlantısı yapılacaksa  $P_{1max}$  değerleri aşılmamalıdır - Do not exceed the  $P_{1max}$  values indicated on fields with asterisk

Tip Type	Tahvil Reduction i <sub>ges</sub>	Helisel Helical i <sub>1</sub>	Sonsuz Worm Z <sub>2</sub> /Z <sub>1</sub>	W n <sub>1</sub> = 700 min <sup>-1</sup>				W n <sub>1</sub> = 465 min <sup>-1</sup>				W n <sub>1</sub> = 250 min <sup>-1</sup>				IEC						
				n <sub>2</sub>	M <sub>a</sub> max	P <sub>1</sub> max	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	n <sub>2</sub>	M <sub>a</sub> max	P <sub>1</sub> max	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	n <sub>2</sub>	M <sub>a</sub> max	P <sub>1</sub> max	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	53 - 67
[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	[min <sup>-1</sup> ]	[Nm]	[kW]	[%]	[min <sup>-1</sup> ]	[Nm]	
<b>PSH 3125</b>	7095.12	150.96	47/1	0.10	3000	0.07	47	0.07	3000	0.05	47	0.04	3000	0.03	47	71*	80*	90*				
	5055.49	107.56	47/1	0.14	3388	0.11	47	0.09	3569	0.07	47	0.05	3714	0.04	47	71*	80*	90*				
W - IEC	3442.96	73.25	47/1	0.20	3204	0.14	47	0.14	3475	0.11	47	0.07	3691	0.06	47	71*	80*	90*				
↔ <sup>mm</sup>	2527.75	53.78	47/1	0.28	3206	0.20	48	0.18	3364	0.13	47	0.10	3665	0.08	47	71	80*	90*				
↔ <sup>mm</sup>	2057.43	43.78	47/1	0.34	3235	0.24	48	0.23	3286	0.17	47	0.12	3641	0.10	47	71	80*	90*				
112	1862.28	39.62	47/1	0.38	3252	0.27	48	0.25	3309	0.18	47	0.13	3628	0.11	47	71	80*	90*				
+	1637.95	34.85	47/1	0.43	3276	0.31	48	0.28	3342	0.20	48	0.15	3608	0.12	47	71	80*	90*				
PAM	1475.08	31.38	47/1	0.47	3299	0.34	48	0.32	3374	0.24	48	0.17	3589	0.14	47	71	80*	90*				
↔ <sup>mm</sup>	1198.50	25.50	47/1	0.58	3325	0.41	49	0.39	3420	0.29	48	0.21	3380	0.16	47	71	80*	90*				
↔ <sup>mm</sup>	928.25	19.75	47/1	0.75	3315	0.53	49	0.50	3439	0.38	48	0.27	3538	0.21	48		80	90*				
113	793.81	16.89	47/1	0.88	3306	0.61	50	0.59	3453	0.44	49	0.31	3571	0.24	48		80	90*				
	690.49	30.69	45/2	1.0	3027	0.48	66	0.67	3097	0.33	66	0.36	3282	0.19	65		80	90*				
	607.31	26.99	45/2	1.2	2875	0.54	67	0.77	2952	0.36	66	0.41	3063	0.20	65		80	90*				
	546.92	24.31	45/2	1.3	3324	0.68	67	0.85	3396	0.46	66	0.46	3396	0.25	66		80	90*				
	444.38	19.75	45/2	1.6	2977	0.74	67	1.0	2933	0.47	66	0.56	2933	0.26	66		80	90*				
	380.02	16.89	45/2	1.8	2587	0.72	68	1.2	2549	0.48	67	0.66	2511	0.26	66		80	90*				
	323.00	14.39	45/2	2.2	2298	0.78	68	1.4	2265	0.50	67	0.77	2231	0.27	66		80	90*				
	<b>270.16</b>	12.01	45/2	2.6	2998	1.18	69	1.7	3146	0.84	67	0.93	3302	0.49	66	71	80	90	100*	112*		
	<b>236.72</b>	10.52	45/2	3.0	3001	1.37	69	2.0	3132	0.96	68	1.1	3312	0.58	66	71	80	90	100*	112*		
	<b>187.50</b>	8.33	45/2	3.7	2772	1.53	70	2.5	2880	1.11	68	1.3	3073	0.62	67	71	80	90	100*	112*		
	<b>152.34</b>	6.77	45/2	4.6	2786	1.89	71	3.1	2916	1.37	69	1.6	3096	0.77	67	71	80	90	100*	112*		
	<b>130.28</b>	5.79	45/2	5.4	2705	2.12	72	3.6	2824	1.52	70	1.9	2986	0.87	68	71	80	90	100	112*		
	<b>110.99</b>	4.93	45/2	6.3	2599	2.00	73	4.2	2706	1.32	71	2.3	2849	0.72	68	71	80	90	100	112*		
	<b>86.11</b>	8.33	31/3	8.1	1884	2.00	80	5.4	1866	1.34	79	2.9	1842	0.72	78	71	80	90	100	112*		
	<b>69.97</b>	6.77	31/3	10.0	1678	2.17	81	6.6	1756	1.52	80	3.6	1810	0.87	78	71	80	90	100	112*		
	<b>62.60</b>	6.06	31/3	11.2	1705	2.00	82	7.4	1782	1.32	80	4.0	1810	0.72	78	71	80	90	100	112		

IEC bağlantısı yoktur - No IEC assembling on empty fields

63 IEC bağlantısı yapılır - IEC assembling available on numbered fields

80\* IEC bağlantısı yapılacaksa P<sub>1max</sub> değerleri aşılmamalıdır - Do not exceed the P<sub>1max</sub> values indicated on fields with asterisk

Tip Type	Tahvil Reduction $i_{ges}$	Helisel Helical $i_1$	Sonsuz Worm $Z_2/Z_1$	<b>W</b> $n_1 = 1400 \text{ min}^{-1}$					<b>W</b> $n_1 = 930 \text{ min}^{-1}$					IEC				
				$n_2$		$M_{amax}$	$P_{1max}$	$\eta$	$n_2$		$M_{amax}$	$P_{1max}$	$\eta$	$f_B=1$		$f_B \geq 1$	$f_B \Rightarrow$	
				[min $^{-1}$ ]	[Nm]	[kW]	[%]	[min $^{-1}$ ]	[Nm]	[kW]	[%]							
<b>PSH 2125</b>	695.60	14.80	47/1	2.0	2850	1.11	54	1.3	2968	0.79	51	90*						
	495.64	10.55	47/1	2.8	2850	1.49	56	1.9	2960	1.11	53	90*	100*	112*				
	337.55	7.18	47/1	4.1	2850	2.07	59	2.8	2985	1.56	56		100*	112*	132*			
<b>W - IEC</b>	247.82	5.27	47/1	5.6	2760	2.61	62	3.8	2932	2.01	58				132*			
	<b>201.71</b>	4.29	47/1	6.9	2630	2.92	65	4.6	2781	2.23	60	90	100*	112*				
	<b>182.58</b>	3.88	47/1	7.7	2560	3.13	66	5.1	2700	2.36	61	90	100	112*				
+ 	<b>160.58</b>	3.42	47/1	8.7	2470	3.36	67	5.8	2615	2.52	63	90	100	112*				
	<b>144.62</b>	3.08	47/1	9.7	2390	3.57	68	6.4	2549	2.67	64	90	100	112*	132*	160*		
<b>PAM</b>	<b>117.50</b>	2.50	47/1	11.9	2240	3.93	71	7.9	2419	3.03	66	90	100	112*	132*	160*		
	<b>100.48</b>	2.14	47/1	13.9	2130	4.31	72	9.3	2319	3.32	68	90	100	112	132*	160*		
	<b>87.40</b>	3.88	45/2	16.0	2360	4.94	80	10.6	2489	3.59	77	90	100	112	132*			
	<b>76.88</b>	3.42	45/2	18.2	2290	5.39	81	12.1	2424	3.94	78	90	100	112	132*			
	<b>69.23</b>	3.08	45/2	20.2	2220	5.80	81	13.4	2368	4.26	78	90	100	112	132*	160*		
	<b>56.25</b>	2.50	45/2	24.9	2060	6.47	83	16.5	2225	4.81	80	90	100	112	132*	160*		
	<b>48.10</b>	2.14	45/2	29.1	1960	7.11	84	19.3	2134	5.32	81	90	100	112	132*	160*		
	<b>40.98</b>	1.82	45/2	34.2	1840	7.75	85	22.7	2024	5.87	82	90	100	112	132*	160*		
	<b>35.31</b>	3.42	31/3	39.6	1600	7.54	88	26.3	1694	5.42	86	90	100	112	132*			
	<b>31.79</b>	3.08	31/3	44.0	1840	9.63	88	29.3	1962	7.00	86	90	100	112	132	160*		
	<b>25.83</b>	2.50	31/3	54.2	1710	10.90	89	36.0	1847	8.00	87	90	100	112	132	160*		
	<b>22.09</b>	2.14	31/3	63.4	1610	11.88	90	42.1	1753	8.78	88	90	100	112	132	160*		
	<b>18.82</b>	1.82	31/3	74.4	1510	13.07	90	49.4	1661	9.66	89	90	100	112	132	160*		
	<b>15.90</b>	3.08	31/6	88.1	1240	12.43	92	58.5	1300	8.85	90	90	100	112	132	160*		
	<b>14.54</b>	1.41	31/3	96.3	1340	14.85	91	64.0	1506	11.21	90				132	160*		
	<b>12.92</b>	2.50	31/6	108.4	1240	15.00	92	72.0	1314	9.90	91	90	100	112	132	160		
	<b>11.05</b>	2.14	31/6	126.7	1240	15.00	93	84.2	1297	9.90	92	90	100	112	132	160		
	<b>9.41</b>	1.82	31/6	148.8	1140	15.00	93	98.8	1254	9.90	92	90	100	112	132	160		
	<b>8.44</b>	1.63	31/6	165.9	1140	15.00	93	110.2	1234	9.90	92				132	160		
	<b>7.75</b>	1.50	31/6	180.6	1010	15.00	93	120.0	1129	9.90	93				132	160		
	<b>7.27</b>	1.41	31/6	192.6	940	15.00	93	127.9	1057	9.90	93				132	160		



IEC bağlantısı yoktur - No IEC assembling on empty fields



IEC bağlantısı yapılır - IEC assembling available on numbered fields

IEC bağlantısı yapılacaksa  $P_{1max}$  değerleri aşılmamalıdır - Do not exceed the  $P_{1max}$  values indicated on fields with asterisk

Tip Type	Tahvil Reduction i <sub>ges</sub>	Helisel Helical i <sub>1</sub>	Sonsuz Worm Z <sub>2</sub> /Z <sub>1</sub>	W n <sub>1</sub> = 700 min <sup>-1</sup>					W n <sub>1</sub> = 465 min <sup>-1</sup>					W n <sub>1</sub> = 250 min <sup>-1</sup>					IEC			
				n <sub>2</sub>	M <sub>a</sub> max	P <sub>1</sub> max	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	n <sub>2</sub>	M <sub>a</sub> max	P <sub>1</sub> max	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	n <sub>2</sub>	M <sub>a</sub> max	P <sub>1</sub> max	η	f <sub>B</sub> =1	f <sub>B</sub> ≥1	53 - 67
<b>PSH 2125</b>	695.60	14.80	47/1	1.0	3041	0.64	50	0.67	3068	0.44	49	0.36	3005	0.24	48	90*						
	495.64	10.55	47/1	1.4	3044	0.86	52	0.94	3177	0.63	50	0.50	3359	0.37	48	90*	100*	112*				
	337.55	7.18	47/1	2.1	3056	1.24	54	1.4	3196	0.92	51	0.74	3399	0.54	49		100*	112*	132*			
<b>W - IEC</b>	247.82	5.27	47/1	2.8	3023	1.58	56	1.9	3152	1.18	53	1.0	3322	0.70	50				132*			
	<b>201.71</b>	4.29	47/1	3.5	2891	1.83	58	2.3	3010	1.34	54	1.2	3186	0.78	51	90	100*	112*				
	<b>182.58</b>	3.88	47/1	3.8	2820	1.90	59	2.5	2950	1.40	55	1.4	3122	0.88	52	90	100*	112*				
+	<b>160.58</b>	3.42	47/1	4.4	2729	2.10	60	2.9	2874	1.56	56	1.6	3041	0.98	52	90	100*	112*				
	<b>144.62</b>	3.08	47/1	4.8	2648	2.18	61	3.2	2807	1.65	57	1.7	2970	1.00	53	90	100	112*	132*	160*		
<b>PAM</b>	<b>117.50</b>	2.50	47/1	6.0	2513	2.51	63	4.0	2678	1.90	59	2.1	2831	1.15	54	90	100	112*	132*	160*		
	<b>100.48</b>	2.14	47/1	7.0	2427	2.74	65	4.6	2579	2.07	60	2.5	2756	1.31	55	90	100	112*	132*	160*		
	<b>87.40</b>	3.88	45/2	8.0	2599	2.90	75	5.3	2720	2.10	72	2.9	2878	1.27	69	90	100	112	132*			
	<b>76.88</b>	3.42	45/2	9.1	2530	3.21	75	6.0	2665	2.29	73	3.3	2820	1.39	70	90	100	112	132*			
	<b>69.23</b>	3.08	45/2	10.1	2459	3.42	76	6.7	2608	2.51	73	3.6	2759	1.49	70	90	100	112	132*	160*		
	<b>56.25</b>	2.50	45/2	12.4	2311	3.85	78	8.3	2462	2.85	75	4.4	2604	1.69	71	90	100	112	132*	160*		
	<b>48.10</b>	2.14	45/2	14.6	2233	4.32	79	9.7	2373	3.17	76	5.2	2536	1.92	72	90	100	112	132*	160*		
	<b>40.98</b>	1.82	45/2	17.1	2136	4.78	80	11.3	2263	3.48	77	6.1	2450	2.14	73	90	100	112	132*	160*		
	<b>35.31</b>	3.42	31/3	19.8	1767	4.36	84	13.2	1862	3.14	82	7.1	1904	1.77	80	90	100	112	132*			
	<b>31.79</b>	3.08	31/3	22.0	2008	5.44	85	14.6	1960	3.61	83	7.9	1890	1.95	80	90	100	112	132	160*		
	<b>25.83</b>	2.50	31/3	27.1	1918	6.33	86	18.0	1949	4.37	84	9.7	1880	2.36	81	90	100	112	132	160*		
	<b>22.09</b>	2.14	31/3	31.7	1834	7.00	87	21.1	1917	5.04	84	11.3	1872	2.70	82	90	100	112	132	160*		
	<b>18.82</b>	1.82	31/3	37.2	1753	7.85	87	24.7	1857	5.65	85	13.3	1829	3.11	82	90	100	112	132	160*		
	<b>15.90</b>	3.08	31/6	44.0	1285	6.65	89	29.2	1271	4.42	88	15.7	1242	2.37	86	90	100	112	132	160*		
	<b>14.54</b>	1.41	31/3	48.1	1599	9.05	89	32.0	1725	6.64	87	17.2	1801	3.86	84				132	160*		
	<b>12.92</b>	2.50	31/6	54.2	1300	7.50	90	36.0	1271	4.95	88	19.3	1242	2.70	86	90	100	112	132	160*		
	<b>11.05</b>	2.14	31/6	63.3	1283	7.50	91	42.1	1255	4.95	89	22.6	1226	2.70	87	90	100	112	132	160*		
	<b>9.41</b>	1.82	31/6	74.4	1251	7.50	91	49.4	1238	4.95	90	26.6	1196	2.70	87	90	100	112	132	160*		
	<b>8.44</b>	1.63	31/6	82.9	1220	7.50	91	55.1	1207	4.95	90	29.6	1180	2.70	88				132	160*		
	<b>7.75</b>	1.50	31/6	90.3	1196	7.50	92	60.0	1207	4.95	90	32.3	1180	2.70	88				132	160		
	<b>7.27</b>	1.41	31/6	96.3	1122	7.50	92	64.0	1189	4.95	91	34.4	1150	2.70	88				132	160		

IEC bağlantısı yoktur - No IEC assembling on empty fields

63 IEC bağlantısı yapılır - IEC assembling available on numbered fields

80\* IEC bağlantısı yapılacaksa P<sub>1max</sub> değerleri aşılmamalıdır - Do not exceed the P<sub>1max</sub> values indicated on fields with asterisk



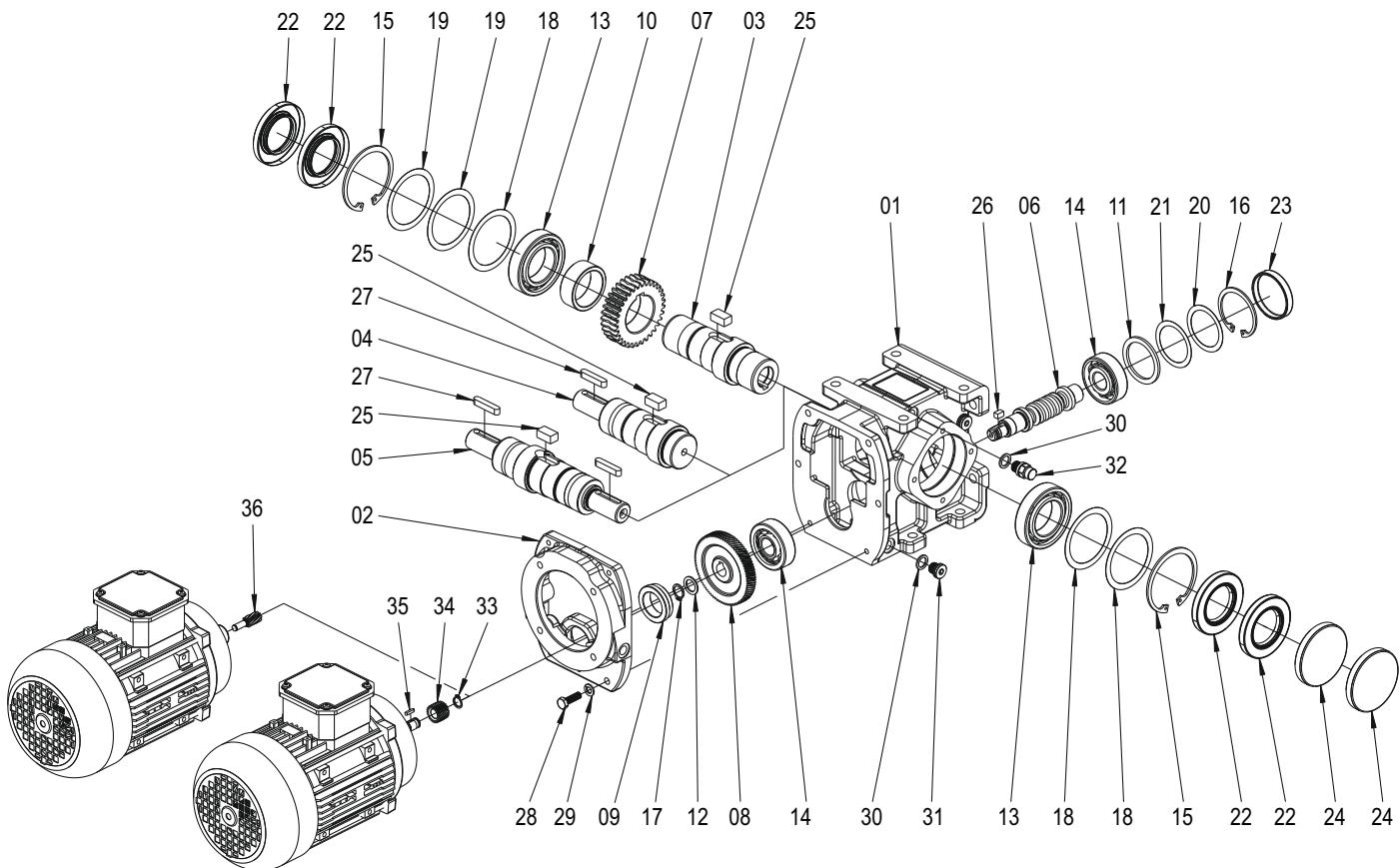
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GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST OF PSH

**PSH 2040 DG-TMG-TMA**



1	PSH Ayaklı-Flanşlı Gövde	1	PSH Foot-Flange Gear Case
2	Ara Bağlantı Flanşı	2	Intermediate Flange
3	Çıkış Şaftı	3	Output Shaft
4	TMA Çıkış Mili	4	TMA Solid Shaft
5	ÇMA Çıkış Mili	5	ÇMA Solid Shaft
6	Vida	6	Worm Gear
7	Çark	7	Wheel
8	Z2 Dişli	8	Driving Gear
9	Burç	9	Spacer
10	Şaft Burcu	10	Spacer
11	Z3 Rondelası	11	Z3 Washer
12	Z2 Rondelası	12	Z2 Washer
13	Rulman	13	Bearing
14	Rulman	14	Bearing
15	Segman (DIN 472)	15	Circlip (DIN 472)
16	Segman (DIN 472)	16	Circlip (DIN 472)
17	Segman (DIN 471)	17	Circlip (DIN 471)
18	Layner	18	Shim
19	Layner	19	Shim
20	Layner	20	Shim
21	Layner	21	Shim
22	Yağ Keçesi (DG VE TMA)	22	Oil Seal
23	Yağ Kapağı	23	Oil Cap
24	Yağ Kapağı (TMA)	24	Oil Cap (TMA)
25	Kama	25	Key
26	Kama	26	Key
27	Kama	27	Key
28	Civata	28	Bolt
29	Yaylı Rondela	29	Spring Washer
30	Tapa Rondelası	30	Washer
31	Yağ Tapası	31	Drain Plug
32	Havalandırma Tapası	32	Vent Plug
33	Segman (DIN 471)	33	Circlip (DIN 471)
34	Çakma Z1	34	Z1 Pinion, plain
35	Kama	35	Key
36	Yekpare Çakma Z1	36	Z1 Pinion, gearcut, plain

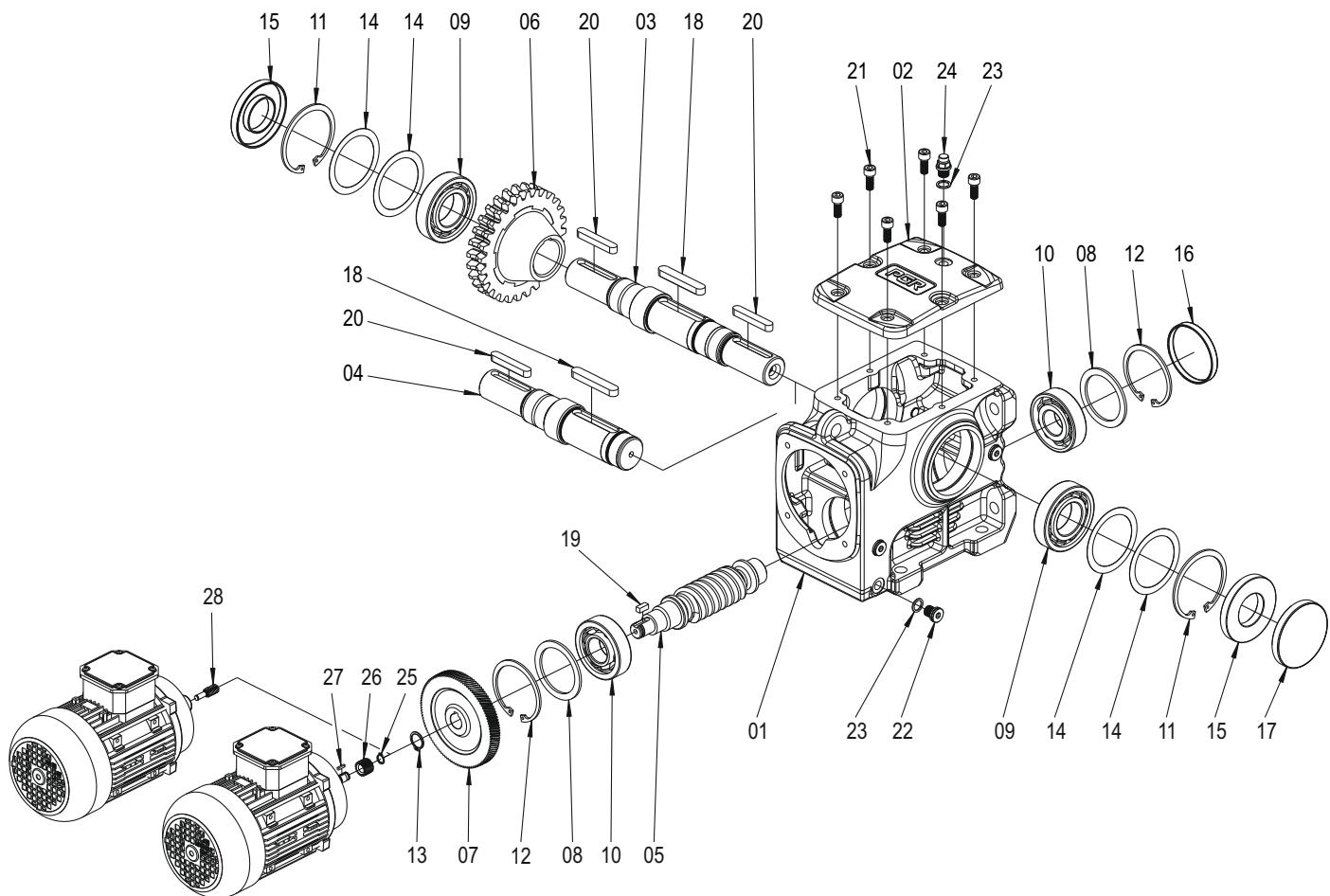
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## GENEL PARÇA LİSTESİ

EN

## GENERAL PART LIST OF PSH

## PSH 2050 - 2125 TMA - ÇMA



1	Ayaklı Gövde	1	Foot Mounted, Gear Case
2	Üst Kapak	2	Gear Case Cover
3	ÇMA Çıkış Mili	3	ÇMA Solid Shaft
4	TMA Çıkış Mili	4	TMA Solid Shaft
5	Vida	5	Worm Gear
6	Çark	6	Wheel
7	Z2 DişliSİ	7	Z2 Pinion
8	Rondela	8	Washer
9	Rulman	9	Bearing
10	Rulman	10	Bearing
11	Segman (DIN 472)	11	Circlip (DIN 472)
12	Segman (DIN 472)	12	Circlip (DIN 472)
13	Segman (DIN 471)	13	Circlip (DIN 471)
14	Layner	14	Shim
15	Yağ Keçesi	15	Oil Seal
16	Yağ Kapağı	16	Oil Cap
17	Yağ Kapığı	17	Oil Cap
18	Kama	18	Key
19	Kama	19	Key
20	Kama	20	Key
21	Civata	21	Bolt
22	Yağ Tapası	22	Drain Plug
23	Tapa Rondelası	23	Washer
24	Havalandırma Tapası	24	Vent Plug
25	Segman (DIN 471)	25	Circlip (DIN 471)
26	Çakma Z1	26	Z1 Pinion, plain
27	Kama	27	Key
28	Yekpare Çakma Z1	28	Z1 Pinion, gearcut, plain

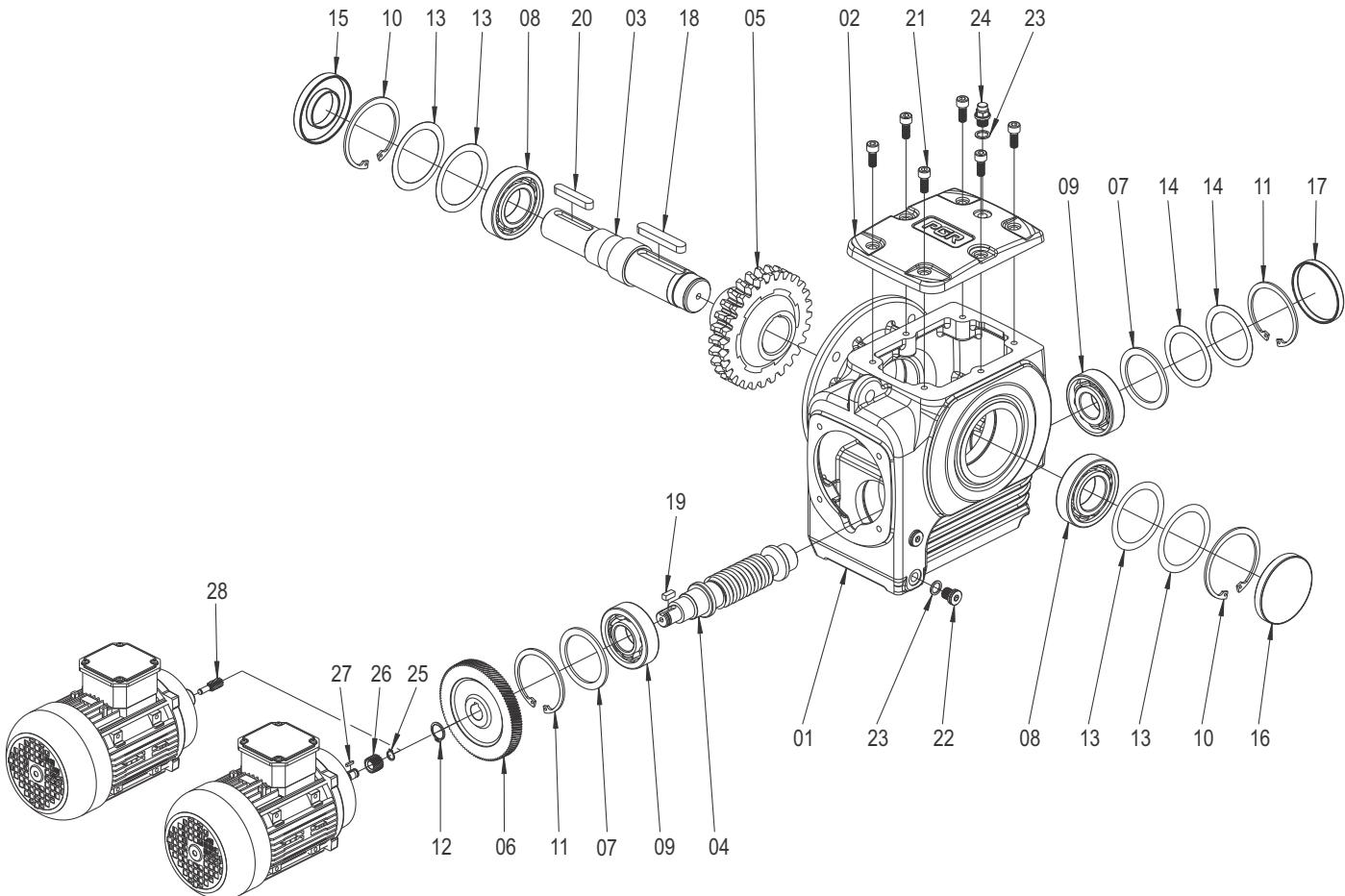
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GENEL PARÇA LİSTESİ

EN

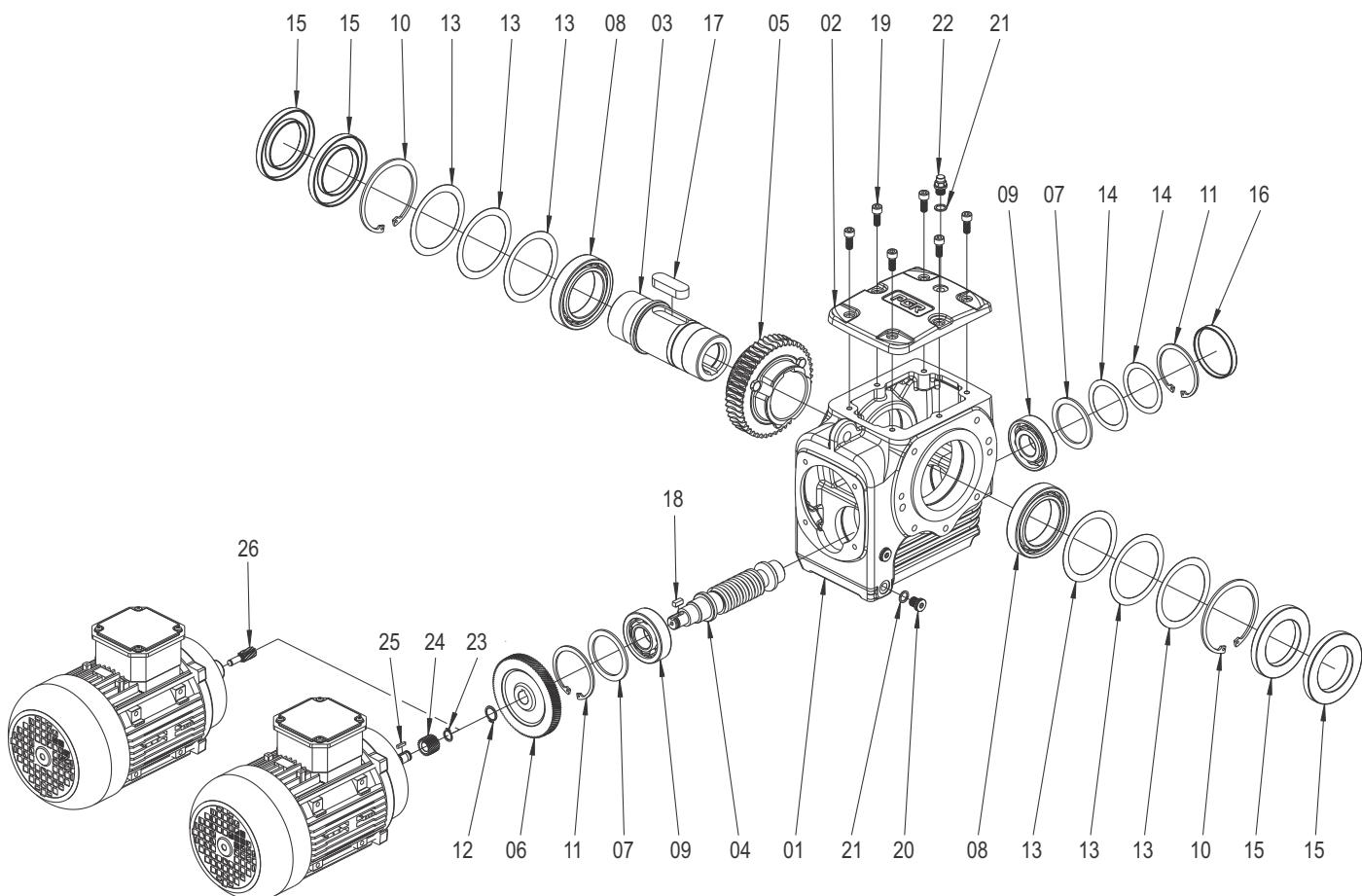
GENERAL PART LIST OF PSH

PSH 2040-2125 TMG-B5



1	TMG B5 Gövde	1	TMG B5 Gear Case
2	Üst Kapak	2	Gear Case Cover
3	B5 Çıkış Mili	3	B5 Solid Shaft
4	Vida	4	Worm Gear
5	Çark	5	Wheel
6	Z2 Dişlisi	6	Z2 Pinion
7	Rondela	7	Washer
8	Rulman	8	Bearing
9	Rulman	9	Bearing
10	Segman (DIN 472)	10	Circlip (DIN 472)
11	Segman (DIN 472)	11	Circlip (DIN 472)
12	Segman (DIN 471)	12	Circlip (DIN 471)
13	Layner	13	Shim
14	Layner	14	Shim
15	Yağ Keçesi	15	Oil Seal
16	Yağ Kapağı	16	Oil Cap
17	Yağ Kapağı	17	Oil Cap
18	Kama	18	Key
19	Kama	19	Key
20	Kama	20	Key
21	Civata	21	Bolt
22	Yağ Tapası	22	Drain Plug
23	Tapa Rondelasi	23	Washer
24	Havalandırma Tapası	24	Vent Plug
25	Segman (DIN 471)	25	Circlip (DIN 471)
26	Z1 Dişlisi (Çakma)	26	Z1 Pinion, plain
27	Z1 Kaması	27	Key
28	Z1 Dişlisi (Yekpare Çakma)	28	Z1 Pinion, gearcut, plain

**PSH 2050-2125 DG**



1	Flanşlı Gövde	1	Flanged Gear Case
2	Üst Kapak	2	Gear Case Cover
3	Çıkış Şaftı	3	Hollow Shaft
4	Vida	4	Worm Gear
5	Çark	5	Wheel
6	Z2 Dışılı	6	Z2 Pinion
7	Rondela	7	Washer
8	Rulman	8	Bearing
9	Rulman	9	Bearing
10	Segman (DIN 472)	10	Circlip (DIN 472)
11	Segman (DIN 472)	11	Circlip (DIN 472)
12	Segman (DIN 471)	12	Circlip (DIN 471)
13	Layner	13	Shim
14	Layner	14	Shim
15	Yağ Keçesi	15	Oil Seal
16	Yağ Kapağı	16	Oil Cap
17	Kama	17	Key
18	Kama	18	Key
19	Civata	19	Bolt
20	Yağ Tapası	20	Drain Plug
21	Tapa Rondelası	21	Washer
22	Havalandırma Tapası	22	Vent Plug
23	Segman (DIN 471)	23	Circlip (DIN 471)
24	Çakma Z1	24	Z1 Pinion, plain
25	Kama	25	Key
26	Yekpare Çakma Z1	26	Z1 Pinion, gearcut, plain

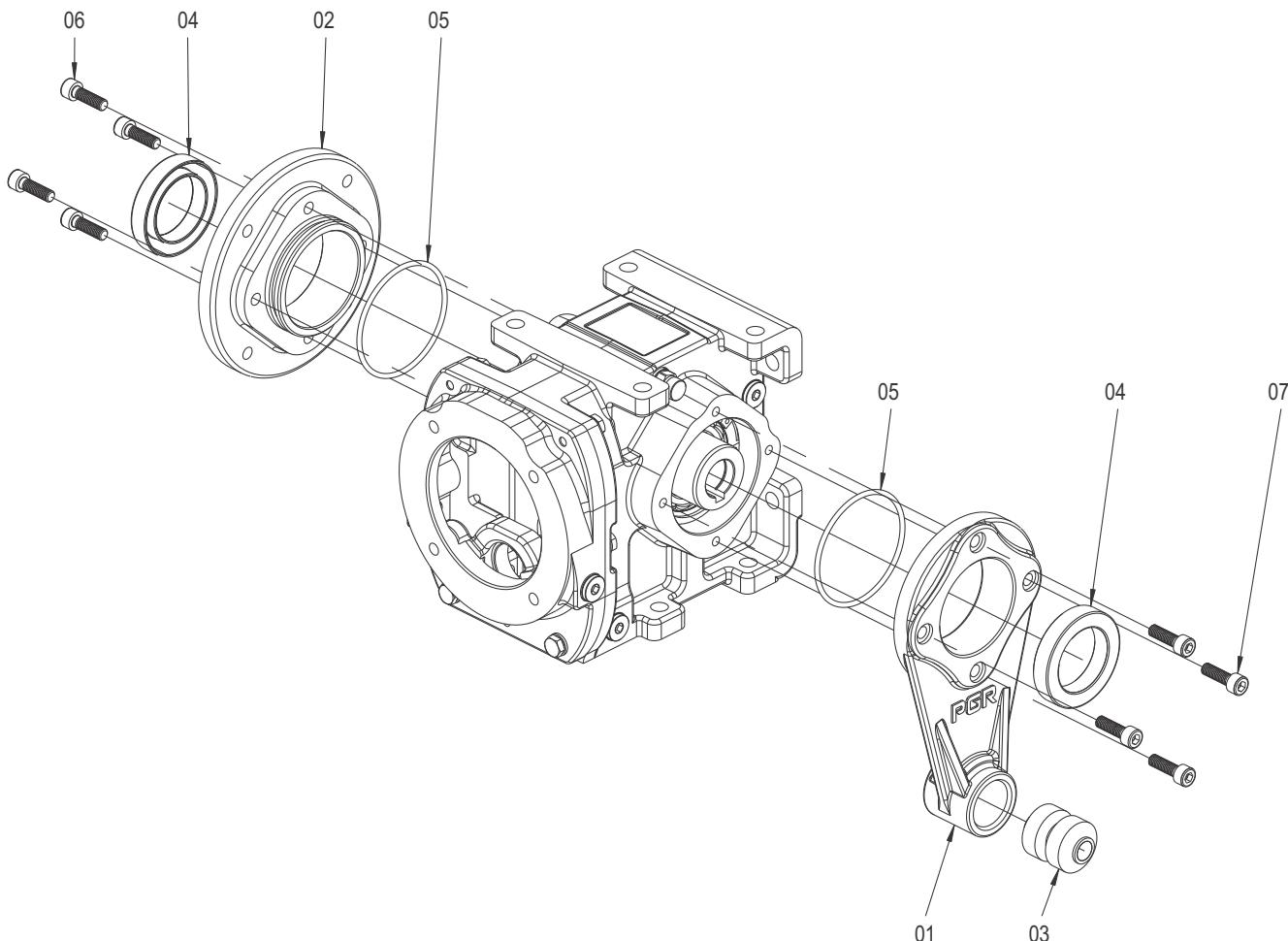
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GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST

**PSH 2040 DG - B5 - TK**



- |                |                 |
|----------------|-----------------|
| 1 Tork Kolu    | 1 Torque Arm    |
| 2 B5 Flanşı    | 2 B5 Flange     |
| 3 Lastik Takoz | 3 Rubber Buffer |
| 4 Yağ Keçesi   | 4 Oil Seal      |
| 5 O-Ring       | 5 O-Ring        |
| 6 Civata       | 6 Bolt          |
| 7 Civata       | 7 Bolt          |

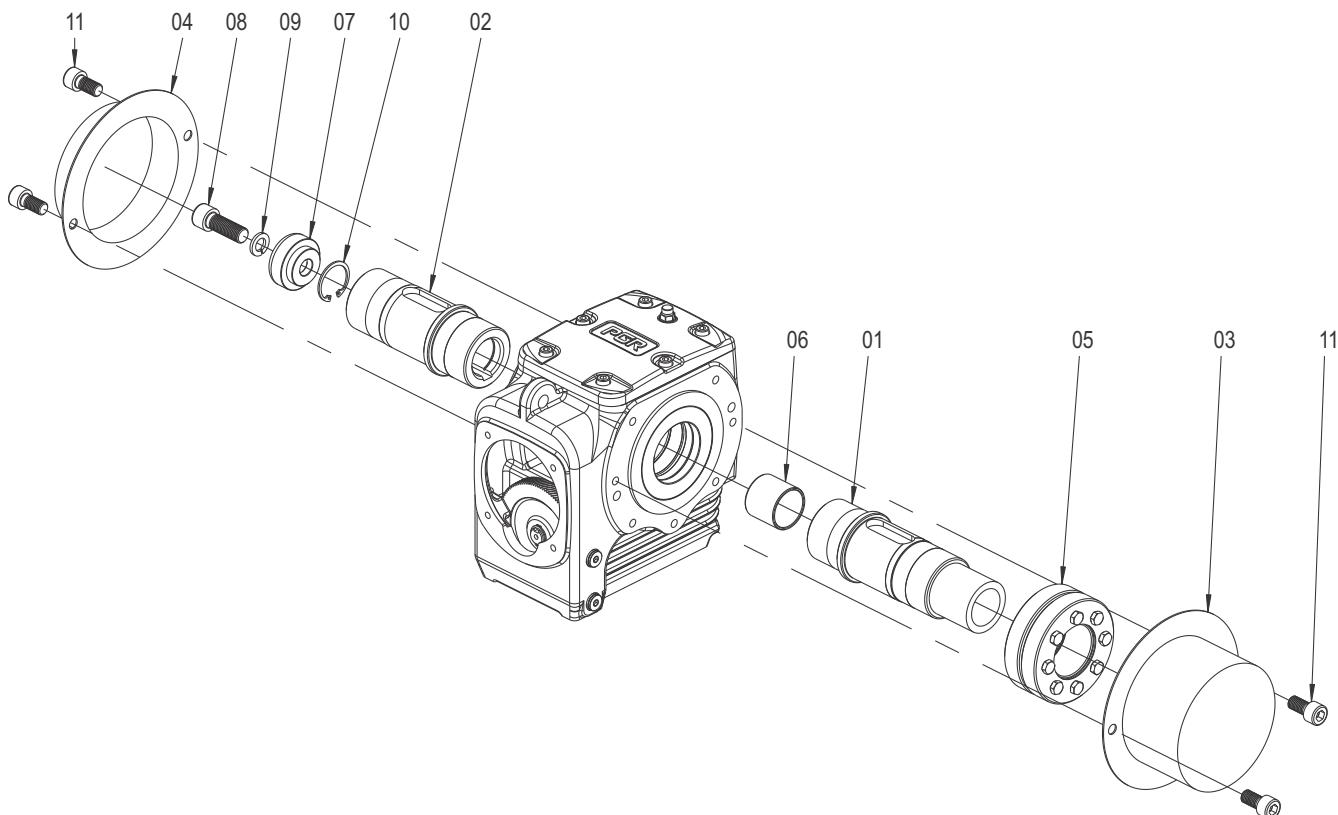
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## GENEL PARÇA LİSTESİ

EN

## GENERAL PART LIST OF PSH

## PSH 2040-2125 DG - KS ÇEKTİRME RONDELASI



- 1 KS Çıkış Şaftı
- 2 Çıkış Şaftı
- 3 Konik Sıkıtma Koruma Kapığı
- 4 Şaft Koruma Kapığı
- 5 Konik Sıkıtma
- 6 KS Burcu
- 7 Çektirme Rondelası
- 8 Çektirme Civatası
- 9 Yaylı Rondela
- 10 Segman
- 11 Civata (İnbus)

- 1 Hollow Shaft for KS
- 2 Hollow Shaft
- 3 Shrink Disc, Protection Cap
- 4 Shaft Protection Cover
- 5 Shrink Disc
- 6 Washer
- 7 Fixing Element
- 8 Bolt
- 9 Spring Washer
- 10 Circlip
- 11 Bolt (Inbus)

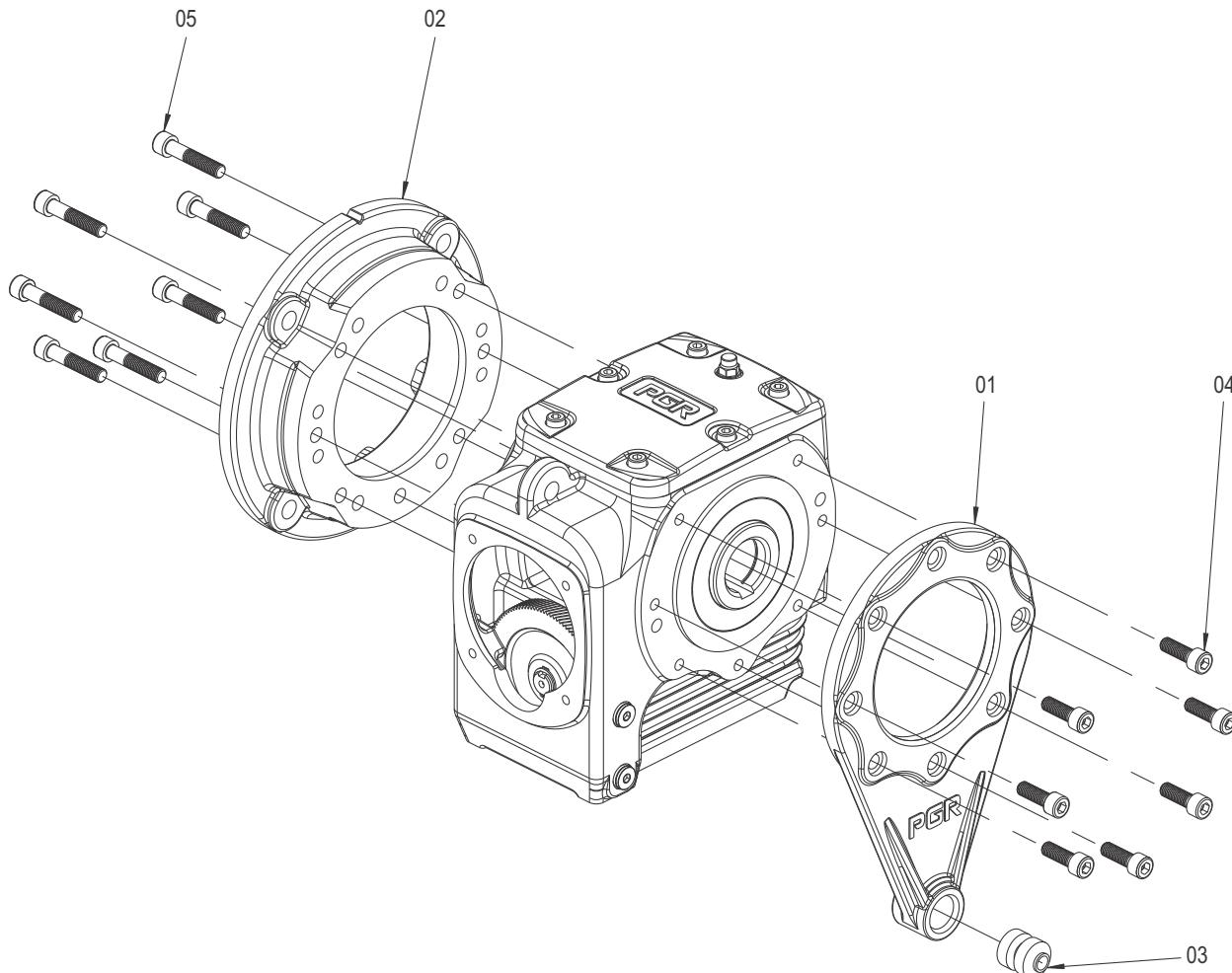
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GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST OF PSH

**PSH 2050-2125 DG - B5 - TK**



- |                |                 |
|----------------|-----------------|
| 1 Tork Kolu    | 1 Torque Arm    |
| 2 B5 Flanşı    | 2 B5 Flange     |
| 3 Lastik Takoz | 3 Rubber Buffer |
| 4 Civata       | 4 Bolt          |
| 5 Civata       | 5 Bolt          |

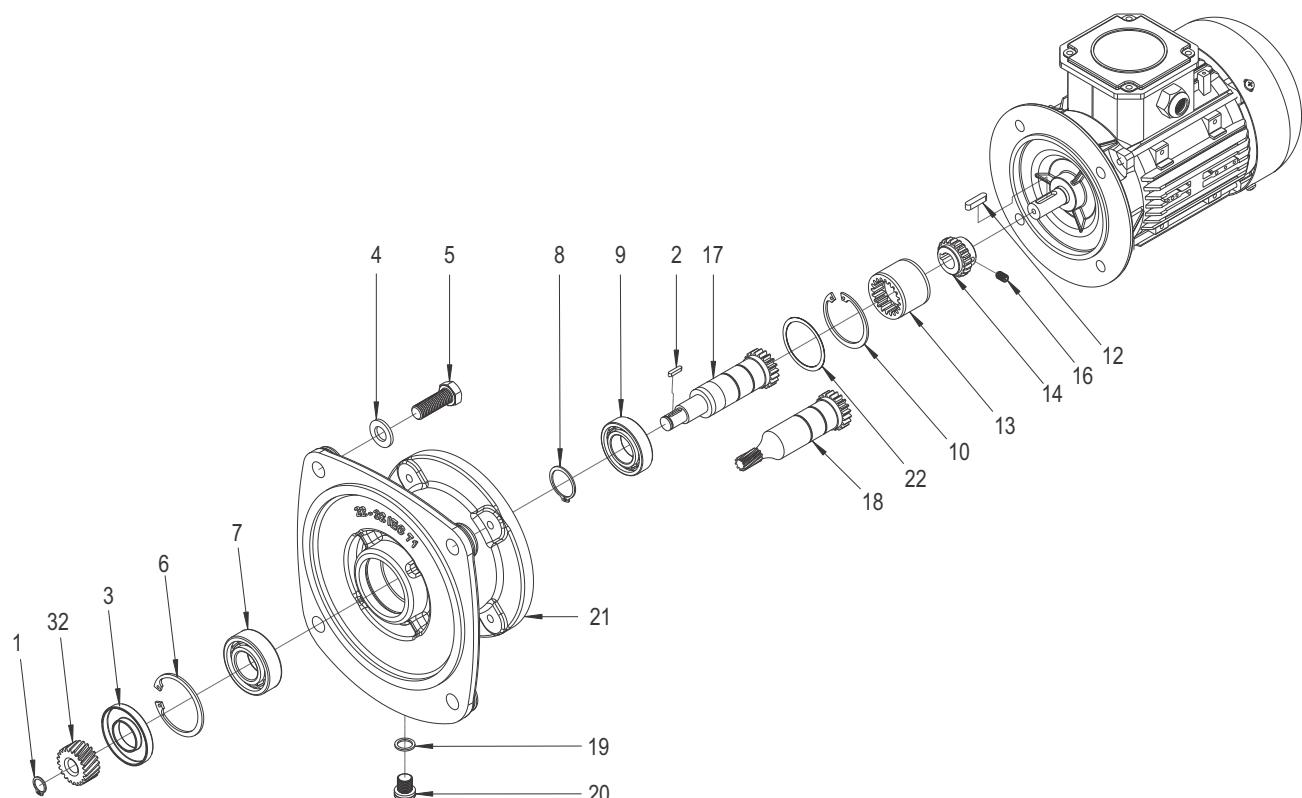
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## GENEL PARÇA LİSTESİ

EN

## GENERAL PART LIST

IEC 63...112



- |                          |                          |
|--------------------------|--------------------------|
| 1. Segman                | 1. Circlip               |
| 2. Kama                  | 2. Key                   |
| 3. Yağ Keçesi            | 3. Oil Seal              |
| 4. Yaylı Rondela         | 4. Spring Washer         |
| 5. Altıköşe Başlı Civata | 5. Bolt                  |
| 6. Segman                | 6. Circlip               |
| 7. Rulman                | 7. Bearing               |
| 8. Segman                | 8. Circlip               |
| 9. Rulman                | 9. Bearing               |
| 10. Segman               | 10. Circlip              |
| 12. Kama                 | 12. Key                  |
| 13. Kaplin               | 13. Coupling             |
| 14. Kaplin               | 14. Coupling             |
| 16. Setuskur Civata      | 16. Set Screw            |
| 17. IEC Mili Çakma       | 17. Input Shaft, Plain   |
| 18. IEC Mili Yekpare     | 18. Input Shaft, Gearcut |
| 19. Rondela              | 19. Washer               |
| 20. Yağ Tapası           | 20. Oil Plug             |
| 21. IEC Göße             | 21. IEC Adapter          |
| 22. Layner               | 22. Shim                 |
| 32. Z1 Dışlısı           | 32. Pinion               |

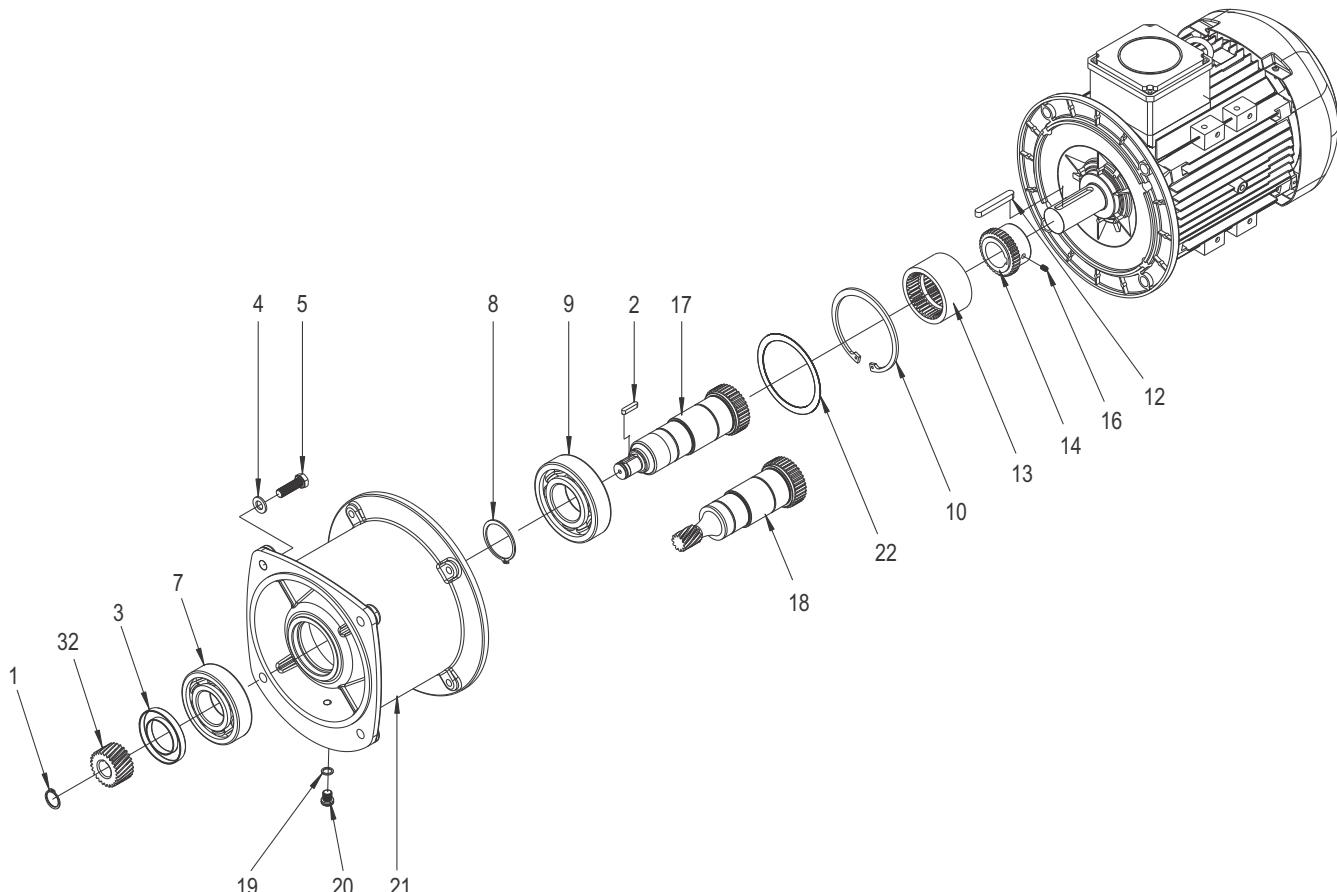
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GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST

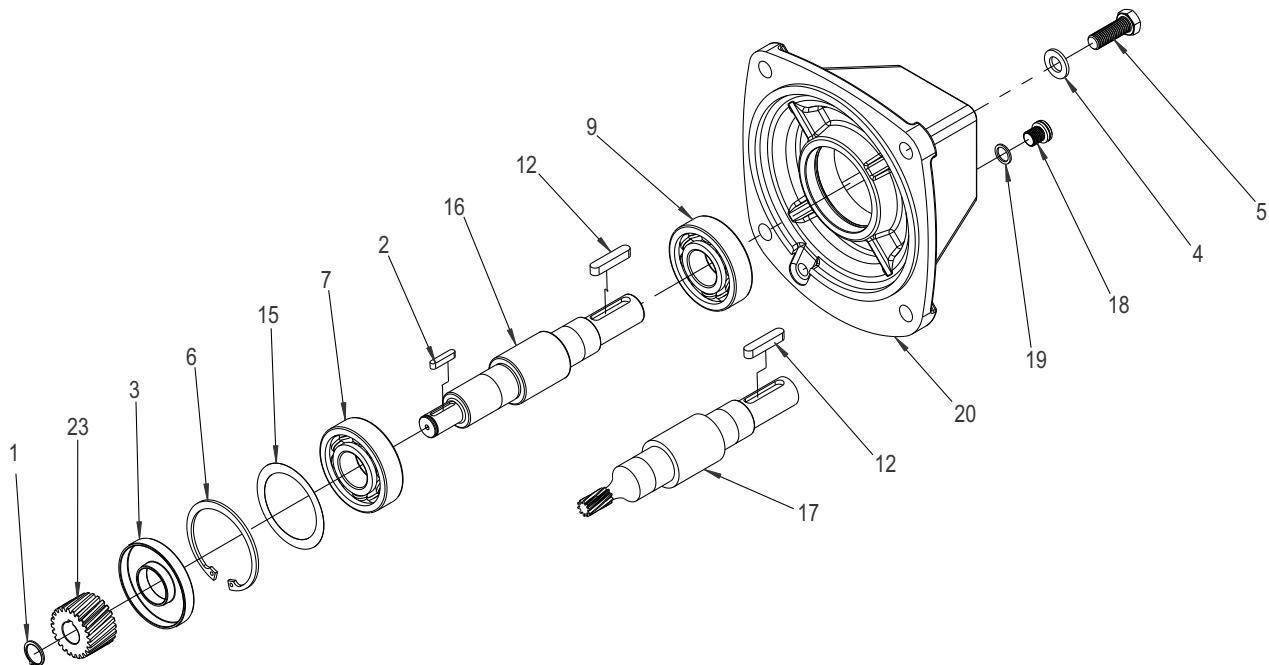
IEC 132...180



- |                          |                          |
|--------------------------|--------------------------|
| 1. Segman                | 1. Circlip               |
| 2. Kama                  | 2. Key                   |
| 3. Şaft Keçesi           | 3. Shaft Seal            |
| 4. Yayılı Rondela        | 4. Spring Washer         |
| 5. Altıköşe Başlı Civata | 5. Bolt                  |
| 7. Rulman                | 7. Bearing               |
| 8. Segman                | 8. Circlip               |
| 9. Rulman                | 9. Bearing               |
| 10. Segman               | 10. Circlip              |
| 12. Kama                 | 12. Key                  |
| 13. Kaplin               | 13. Coupling             |
| 14. Kaplin               | 14. Coupling             |
| 16. Setuskur Civata      | 16. Set Screw            |
| 17. IEC Mili Çakma       | 17. Input Shaft, Plain   |
| 18. IEC Mili Yekpare     | 18. Input Shaft, Gearcut |
| 19. Rondela              | 19. Washer               |
| 20. Yağ Tapası           | 20. Oil Plug             |
| 21. IEC Gövde            | 21. IEC Adapter          |
| 22. Layner               | 22. Shim                 |
| 32. Z1 Dışlısı           | 32. Pinion               |

PSH - 2040  
PSH - 2050...2125  
PSH - 3050...3125

W



- 1. Segman
- 2. Kama
- 3. Yağ Keçesi
- 4. Yaylı Rondela
- 5. Altıköşe Başlı Civata
- 6. Segman
- 7. Rulman
- 9. Rulman
- 12. Kama
- 15. Layner
- 16. W Mili Çakma
- 17. W Mili Yekpare
- 18. Yağ Tapası
- 19. Rondela
- 20. W Gövdesi
- 23. Z1 Dışlısı

- 1. Circlip
- 2. Key
- 3. Oil Seal
- 4. Spring Seal
- 5. Bolt
- 6. Circlip
- 7. Bearing
- 9. Bearing
- 12. Key
- 15. Shim
- 16. Input Shaft, Plain
- 17. Input Shaft, Gearcut
- 18. Oil Plug
- 19. Washer
- 20. W Input Housing
- 23. Pinion

TR

GENEL PARÇA LİSTESİ

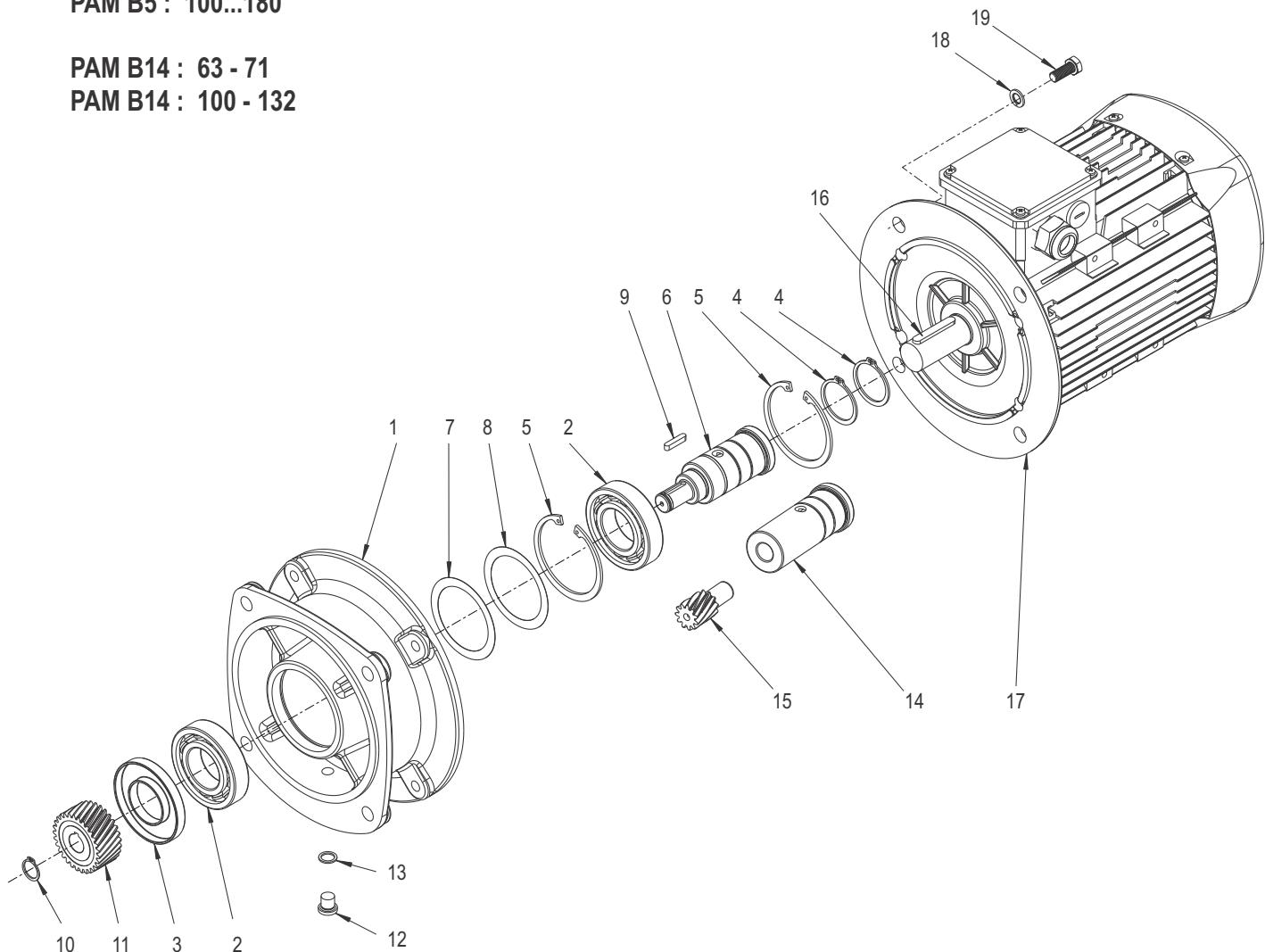
EN

GENERAL PART LIST

**PAM B5 : 63 - 71**  
**PAM B5 : 100...180**

**PAM B14 : 63 - 71**  
**PAM B14 : 100 - 132**

### PAM (B5/B14)

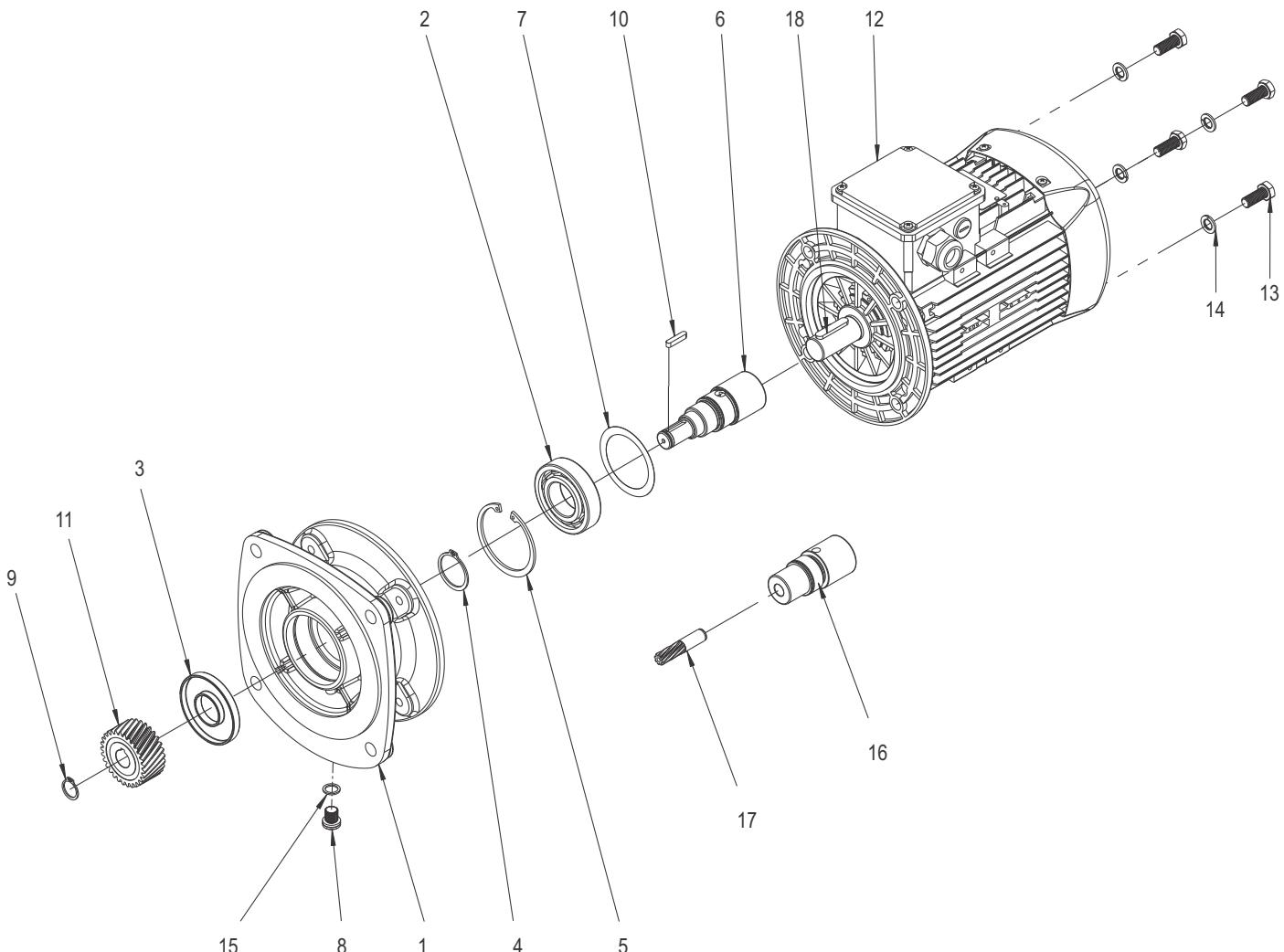


- |                            |                          |
|----------------------------|--------------------------|
| 1. Pam Gövde (B5/B14)      | 1. Pam Adapter (B5/B14)  |
| 2. Rulman                  | 2. Bearing               |
| 3. Yağ Keçesi              | 3. Oil Seal              |
| 4. Segman                  | 4. Circlip               |
| 5. Segman                  | 5. Circlip               |
| 6. Pam mili çakma          | 6. Input Shaft, Plain    |
| 7. Layner                  | 7. Shim                  |
| 8. Layner                  | 8. Shim                  |
| 9. Kama                    | 9. Key                   |
| 10. Segman                 | 10. Circlip              |
| 11. Z1 Dışlısı             | 11. Pinion               |
| 12. Yağ Tapası             | 12. Oil plug             |
| 13. Rondela                | 13. Washer               |
| 14. Pam mili yekpare çakma | 14. Input Shaft, Gearcut |
| 15. Z1 Dışlısı             | 15. Pinion               |
| 16. Motor mili Kaması      | 16. Key                  |
| 17. Motor                  | 17. Motor                |
| 18. Rondela                | 18. Washer               |
| 19. Altı köşe başlı civata | 19. Bolt                 |

PAM B5 : 80 - 90

PAM (B5/B14)

PAM B14 : 80 - 90



- 1. Pam Gövde (B5/B14)
- 2. Rulman
- 3. Yağ Keçesi
- 4. Segman
- 5. Segman
- 6. Pam mili çakma
- 7. Layner
- 8. Yağ Tapası
- 9. Segman
- 10. Kama
- 11. Z1 Dışlısı
- 12. Motor
- 13. Cıvata
- 14. Yaylı Rondela
- 15. Rondela
- 16. Pam mili yekpare çakma
- 17. Z1 Dışlısı
- 18. Motor Kaması

- 1. Pam Adapter (B5/B14)
- 2. Bearing
- 3. Oil Seal
- 4. Circlip
- 5. Circlip
- 6. Input Shaft, Plain
- 7. Shim
- 8. Oil plug
- 9. Circlip
- 10. Key
- 11. Pinion
- 12. Motor
- 13. Bolt
- 14. Spring Washer
- 15. Washer
- 16. Input Shaft, Gearcut
- 17. Pinion
- 18. Key



## ELEKTRİKSEL ÖZELLİKLER - 50 Hz / ELECTRICAL CHARACTERISTICS AT 50 Hz

Motor Tipi Motor Type	Gövde Tipi Housing Type	Nominal / Rated Values				Kalkıştaki Değerler / Starting Values				Devrilmeli Momeni Oranı Breakdown Torque Ratio Mk/Mn	Verim * Efficiency * η%	Cosφ	J kgm²	Ağırlık (B3) kg	Ses Seviyesi (B3) ** Sound Pressure Level dB(A)**				
		Güç / Power kW	Güç / Power HP	Devir Speed d/d	Akim Current A	Moment Torque Nm	Akim Current I <sub>A</sub> / A <sub>N</sub> A	Moment Torque M <sub>A</sub> / M <sub>N</sub> Δ	Akim Current I <sub>A</sub> / A <sub>N</sub> Δ										
2kutup3000d/d																			
220/380V	Q3E80M2C	Alüminyum	0,75	1,0	2880	1,7	2,5	7,4	-	4,0	-	4,8	80,7	79,1	77,4	0,86	0,00109	12,2	58
	Q3E80M2D	Alüminyum	1,1	1,5	2895	2,4	3,7	8,4	-	4,9	-	5,1	82,7	82,1	78,9	0,84	0,00150	13	58
	Q3E90L2C	Alüminyum	1,5	2,0	2910	3,2	4,9	8,9	-	4,2	-	4,9	84,2	84,7	82,3	0,86	0,00182	17,5	62
	Q3E90L2D	Alüminyum	2,2	3,0	2900	4,6	7,2	8,6	-	4,6	-	4,0	85,9	87,0	85,5	0,84	0,00182	18	62
	Q3E100L2D	Alüminyum	3,0	4,0	2920	5,6	9,8	9,8	-	4,1	-	4,4	87,1	86,9	84,5	0,89	0,00335	25	64
380/660V	Q3E112M2C	Alüminyum	4,0	5,5	2915	7,8	13,2	3,2	9,7	1,3	3,8	5,1	88,1	87,9	85,7	0,87	0,00489	31	67
	Q3E132S2C	Alüminyum	5,5	7,5	2900	10,4	18,0	3,6	10,8	1,0	3,0	3,5	89,2	88,9	86,7	0,91	0,01410	48	70
	Q3E132M2A	Alüminyum	7,5	10,0	2930	13,7	24,5	3,2	9,7	1,3	3,8	4,4	90,1	90,3	88,9	0,91	0,01596	51	70
	Q3E160L2A	Alüminyum	11,0	15,0	2940	19,8	35,9	2,9	8,8	1,0	3,0	5,1	91,2	91,4	90,3	0,93	0,03317	77	71
	Q3E160L2C	Alüminyum	15,0	20,0	2945	26,7	48,8	3,6	10,8	1,1	3,2	3,9	91,9	91,0	90,3	0,93	0,04075	91	71
	Q3E160L2D	Alüminyum	18,5	25,0	2940	33,4	60,0	2,9	8,8	1,3	3,8	4,1	92,4	92,0	90,9	0,91	0,04075	101	71
	Q3E180M2A	Alüminyum	22,0	30,0	2955	38,7	71,3	3,5	10,5	1,1	3,2	3,2	92,7	92,9	91,7	0,93	0,06193	139	77
	Q3E200L2C	Alüminyum	30,0	40,0	2950	52,9	97,4	3,0	9,1	0,8	2,4	3,5	93,3	93,8	93,4	0,93	0,11917	167	80
	Q3E200L2D	Alüminyum	37,0	50,0	2950	65,2	119,5	3,2	9,7	0,9	2,7	3,5	93,7	94,1	93,8	0,92	0,15010	179	80
	Q3E225M2C	Alüminyum	45,0	60,0	2965	80,3	145,2	2,7	8,0	0,8	2,4	3,4	94,0	94,0	93,2	0,91	0,23505	249	81
	Q3EP250M2C	Pik	55,0	75,0	2980	95,9	178,5	2,1	6,4	0,7	2,1	3,1	94,3	94,0	92,6	0,91	0,48707	488	82
	Q3EP280M2C	Pik	75,0	100,0	2975	125,4	240,8	2,7	8,0	0,6	1,9	4,0	94,7	94,0	92,7	0,92	0,54033	585	84
	Q3EP280M2D	Pik	90,0	125,0	2975	151,3	289,4	2,7	8,0	0,7	2,1	4,9	95,0	94,2	92,7	0,93	0,64510	587	84
400/660V	Q3EP315S2C	Pik	110,0	127,0	2,983	187	358	2,4	7,2	0,6	1,7	2,6	95,2	95,2	94,0	0,89	2,19900	963	83
	Q3EP315M2B	Pik	132,0	152,0	2,983	224	418	2,5	7,5	0,6	1,8	2,6	95,4	95,4	94,4	0,89	2,37790	1.007	83
	Q3EP315L2A	Pik	160,0	184,0	2,983	271	513	2,5	7,5	0,6	1,8	2,6	95,6	95,6	94,4	0,89	2,62170	1.065	83
	Q3EP315L2C	Pik	200,0	230,0	2,983	339	641	2,5	7,5	0,6	1,9	2,6	95,8	95,8	94,9	0,89	2,90860	1.180	83
	Q3EP355M2C	Pik	250,0	280,0	2,983	419	800	2,4	7,3	0,6	1,7	2,5	95,8	95,8	94,7	0,90	3,81300	1.612	91
	Q3EP355L2B	Pik	315,0	353,0	2,984	527	1.008	2,4	7,3	0,6	1,8	2,5	95,8	95,7	94,4	0,90	4,52000	1.771	91
	Q3EP355L2C	Pik	355,0	398,0	2,981	594	1.137	2,6	7,9	0,7	2,2	2,5	95,8	95,8	95,0	0,90	5,58000	2.002	91
4kutup1500d/d																			
220/380V	Q3E80M4D	Alüminyum	0,75	1,0	1430	1,8	5,0	6,1	-	3,0	-	3,1	82,5	81,2	78,0	0,77	0,00268	12	49
	Q3E90L4C	Alüminyum	1,1	1,5	1440	2,5	7,4	7,5	-	2,9	-	3,3	84,1	84,1	81,3	0,80	0,00365	18	54
	Q3E90L4D	Alüminyum	1,5	2,0	1440	3,5	10,0	7,9	-	3,2	-	3,6	85,3	84,9	82,0	0,76	0,00365	18	55
	Q3E100L4C	Alüminyum	2,2	3,0	1445	5,1	14,6	7,6	-	3,7	-	4,0	86,7	84,4	82,0	0,78	0,00545	26	56
	Q3E100L4D	Alüminyum	3,0	4,0	1435	7,1	19,9	8,2	-	3,8	-	4,1	87,7	87,3	85,5	0,73	0,00581	26	56
380/660V	Q3E112M4D	Alüminyum	4,0	5,5	1445	8,3	26,3	2,8	8,3	1,0	3,0	4,0	88,6	87,6	85,8	0,83	0,01123	31	58
	Q3E132M4B	Alüminyum	5,5	7,5	1465	11,4	36,2	2,3	6,8	1,1	3,2	3,9	89,6	89,0	86,8	0,80	0,02763	54	61
	Q3E132M4C	Alüminyum	7,5	10,0	1450	15,8	49,4	2,5	7,4	1,0	3,0	4,1	90,4	89,3	87,4	0,82	0,02980	57	61
	Q3E160L4A	Alüminyum	11,0	15,0	1470	23,0	71,9	2,4	7,1	1,0	3,0	3,6	91,4	90,7	89,4	0,81	0,06922	90	63
	Q3E160L4B	Alüminyum	15,0	20,0	1465	30,8	98,0	2,7	8,0	0,9	2,6	3,4	92,1	91,7	90,7	0,82	0,07991	107	63
	Q3E180M4B	Alüminyum	18,5	25,0	1470	35,3	120,7	2,8	8,3	0,8	2,4	3,1	92,6	92,5	92,2	0,86	0,11220	148	69
	Q3E180L4B	Alüminyum	22,0	30,0	1475	42,0	142,4	2,7	8,0	0,8	2,4	2,5	93,0	93,0	93,0	0,86	0,12773	157	69
	Q3E200L4D	Alüminyum	30,0	40,0	1480	54,3	193,6	2,4	7,1	0,7	2,2	2,5	93,6	93,6	93,7	0,86	0,26448	183	70
	Q3E225M4D	Alüminyum	37,0	50,0	1485	77,8	239,6	2,8	8,3	0,9	2,7	3,3	93,9	92,6	90,6	0,81	0,36429	280	71
	Q3E225M4DE	Alüminyum	45,0	60,0	1480	84,3	289,9	2,9	8,6	0,9	2,7	3,3	94,2	93,1	91,6	0,85	0,43513	282	71
	Q3EP250M4E	Pik	55,0	75,0	1450	100,0	356,1	2,6	7,7	0,9	2,7	3,2	94,6	94,0	92,8	0,87	0,90782	506	72
400/660V	Q3EP280M4C	Pik	75,0	100,0	1485	141,7	482,0	2,5	7,4	0,9	2,7	2,9	95,0	94,7	93,5	0,84	1,06114	624	73
	Q3EP280M4D	Pik	90,0	125,0	1485	163,5	584,2	2,5	7,4	0,9	2,7	2,9	95,2	94,5	93,7	0,86	1,14768	653	73
	Q3EP315S4C	Pik	110,0	127,0	1,489	194	705	2,5	7,5	0,7	2,0	2,5	95,4	95,4	94,7	0,86	3,46500	867	70
	Q3EP315M4B	Pik	132,0	152,0	1,489	232	846	2,5	7,6	0,7	2,1	2,5	95,6	95,6	95,0	0,86	3,96600	993	70
	Q3EP315L4A	Pik	160,0	184,0	1,489	274	1.026	2,5	7,6	0,7	2,2	2,5	95,8	95,8	95,4	0,88	4,88320	1.165	70
	Q3EP315L4C	Pik	200,0	230,0	1,489	346	1,282	2,7	8,2	0,7	2,2	2,5	96,0	96,0	95,5	0,87	5,23440	1.223	70
	Q3EP355M4C	Pik	250,0	280,0	1,491	422	1,601	2,5	7,5	0,6	1,9	2,4	96,0	96,0	95,5	0,89	9,30600	1.692	82
	Q3EP355L4B	Pik	315,0	353,0	1,491	532	2,017	2,5	7,5	0,6	1,9	2,4	96,0	96,0	95,5	0,89	10,06700	1.879	82
	Q3EP355L4C	Pik	355,0	398,0	1,491	600	2,273	2,5	7,5	0,7	2,0	2,3	96,0	96,0	95,5	0,89	11,90000	1.953	82

ELEKTRİKSEL ÖZELLİKLER - 50 Hz / ELECTRICAL CHARACTERISTICS AT 50 Hz

Motor Tipi Motor Type	Gövde Tipi Housing Type	Nominal / Rated Values				Kalkıştaki Değerler / Starting Values				Devirme Momeni Oranı Breakdown Torque Ratio Mk/Mn	Verim * Efficiency*			Cosφ	J kgm <sup>2</sup>	Ağırlık (B3) kg	Ses Seviyesi (B3)** Sound Pressure Level dB(A)**		
		Güç / Power kW	Güç / Power HP	Devir Speed d/d	Akim Current A	Moment Torque Nm	Akim Current I <sub>A</sub> / A <sub>N</sub> A	Moment Torque M <sub>A</sub> / M <sub>N</sub> A	Devirme Momeni Oranı Breakdown Torque Ratio Mk/Mn	η%	4/4	3/4	2/4						
6kutup1000d/d																			
220/380V	Q3E90L6C	Alüminyum	0,75	1,0	940	2,2	7,6	4,0	-	2,3	-	2,5	78,9	77,7	76,1	0,65	0,00365	18	54
	Q3E90L6D	Alüminyum	1,1	1,5	940	3,1	11,2	4,2	-	2,3	-	2,6	81,0	80,5	79,9	0,66	0,00451	20	55
	Q3E100L6D	Alüminyum	1,5	2,0	940	3,9	15,2	4,5	-	2,3	-	2,7	82,5	81,9	79,0	0,68	0,00570	26	56
	Q3E112M6D	Alüminyum	2,2	3,0	950	5,4	22,0	4,7	-	2,4	-	2,7	84,3	83,7	80,7	0,73	0,01107	32	58
380/660V	Q3E132M6B	Alüminyum	3,0	4,0	960	7,5	29,7	1,7	5,2	0,6	1,7	2,3	85,6	85,2	82,8	0,70	0,02709	58,5	61
	Q3E132M6C	Alüminyum	4,0	5,5	955	9,5	39,8	1,8	5,3	0,6	1,9	2,3	86,8	85,7	82,8	0,74	0,02921	67	61
	Q3E132M6D	Alüminyum	5,5	7,5	950	12,7	55,0	1,7	5,0	0,6	1,8	2,3	88,0	87,6	85,3	0,75	0,03347	76	61
	Q3E160L6C	Alüminyum	7,5	10,0	970	17,7	74,2	1,8	5,5	0,6	1,9	2,7	89,1	89,0	88,0	0,72	0,07663	96	63
	Q3E160L6D	Alüminyum	11,0	15,0	955	25,3	109,4	1,8	5,5	0,6	1,9	2,7	90,3	90,1	89,3	0,75	0,08129	100,5	63
	Q3E180L6B	Alüminyum	15,0	20,0	978	32,2	146,2	2,0	5,9	0,6	1,8	2,6	91,2	90,9	88,7	0,79	0,22951	155	69
	Q3E200L6C	Alüminyum	18,5	25,0	975	37,7	180,3	1,8	5,5	0,5	1,6	2,4	91,7	91,5	90,9	0,82	0,31281	165	70
	Q3E200L6D	Alüminyum	22,0	30,0	975	44,5	214,4	1,8	5,5	0,5	1,6	2,4	92,2	92,0	91,4	0,82	0,33078	170	70
	Q3E225M6C	Alüminyum	30,0	40,0	970	62,1	293,8	1,8	5,4	0,5	1,6	2,3	92,9	92,8	91,8	0,79	0,52901	237,5	71

\* IEC 60034-2-1'e göre belirlenen verim değerleri

\*\* Ses seviyesi ölçümleri motordan 1 metre uzaklıktan alınır.

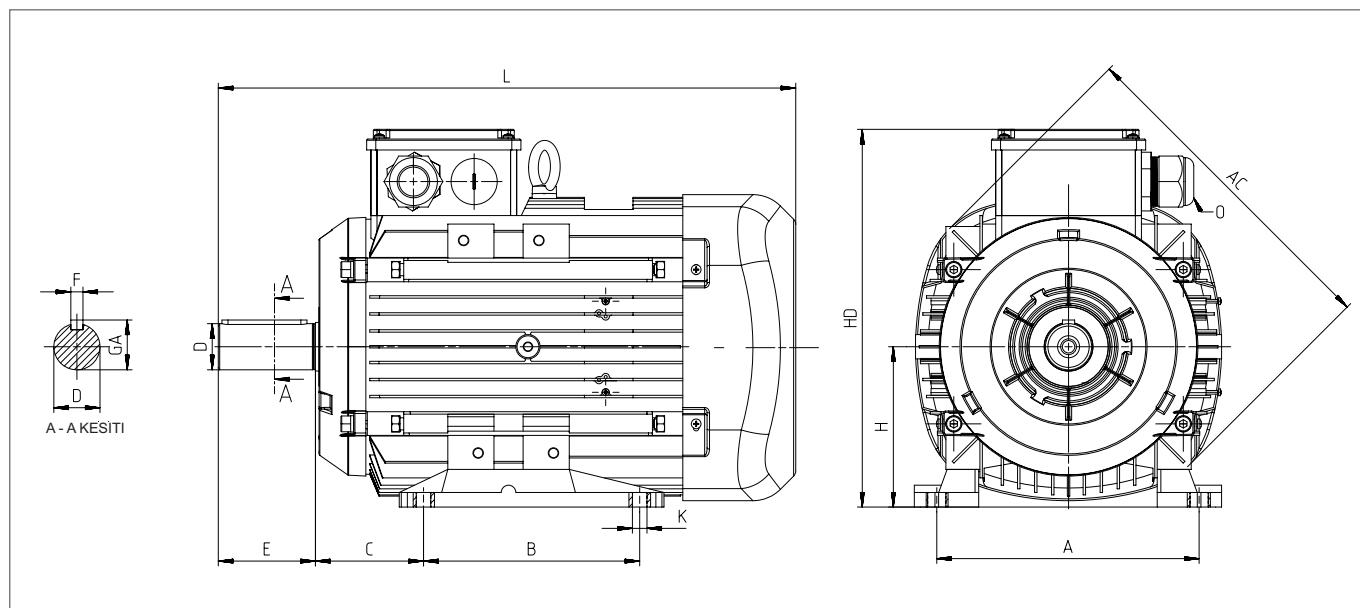
\*\*\* Tolerans + 3 dB(A)

\* According to IEC 60034-2-1

\*\* The sound pressure measurement are taken 1m away from the motor.

\*\*\* Tolerance + 3 dB(A)

## BOYUTLAR / DIMENSIONS - B3



Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar / Foot Mounted Motors						Mil / Shaft				Rulman / Bearing		Keçe / Seal	
				A	C	O	B	A	H	HD	K	C	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side
0,75	2	Q3E80M2C	Alüminyum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
	4	Q3E80M4D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
	6	Q3E90L6C	Alüminyum	193	316,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
1,1	2	Q3E80M2D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
	4	Q3E90L4C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	6	Q3E90L6D	Alüminyum	193	344,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
1,5	2	Q3E90L2C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	4	Q3E90L4D	Alüminyum	193	344,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	6	Q3E100L6D	Alüminyum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*47*7
2,2	2	Q3E90L2D	Alüminyum	193	316,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	4	Q3E100L4C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	6	Q3E112M6D	Alüminyum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
3,0	2	Q3E100L2C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	4	Q3E100L4D	Alüminyum	217	377,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	6	Q3E132M6B	Alüminyum	260	481,0	2*M32	178	216	132	323	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
4,0	2	Q3E112M2C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
	4	Q3E112M4C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
	6	Q3E132M6C	Alüminyum	260	481,0	2*M32	178	216	132	323	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
5,5	2	Q3E132S2C	Alüminyum	279	440,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	4	Q3E132M4B	Alüminyum	279	475,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	6	Q3E132M6D	Alüminyum	260	481,0	2*M32	178	216	132	323	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
7,5	2	Q3E132M2A	Alüminyum	279	475,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	4	Q3E132M4C	Alüminyum	279	475,5	2*M32	178	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	6	Q3E160L6C	Alüminyum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
11,0	2	Q3E160L2A	Alüminyum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	4	Q3E160L4A	Alüminyum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	6	Q3E160L6D	Alüminyum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
15,5	2	Q3E160L2C	Alüminyum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	4	Q3E160L4B	Alüminyum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	6	Q3E180L6B	Alüminyum	347	689,0	2*M40	279	279	180	452	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
18,5	2	Q3E160L2C	Alüminyum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	4	Q3E180M4B	Alüminyum	370	629,0	2*M40	241	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
	6	Q3E200L6C	Alüminyum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10

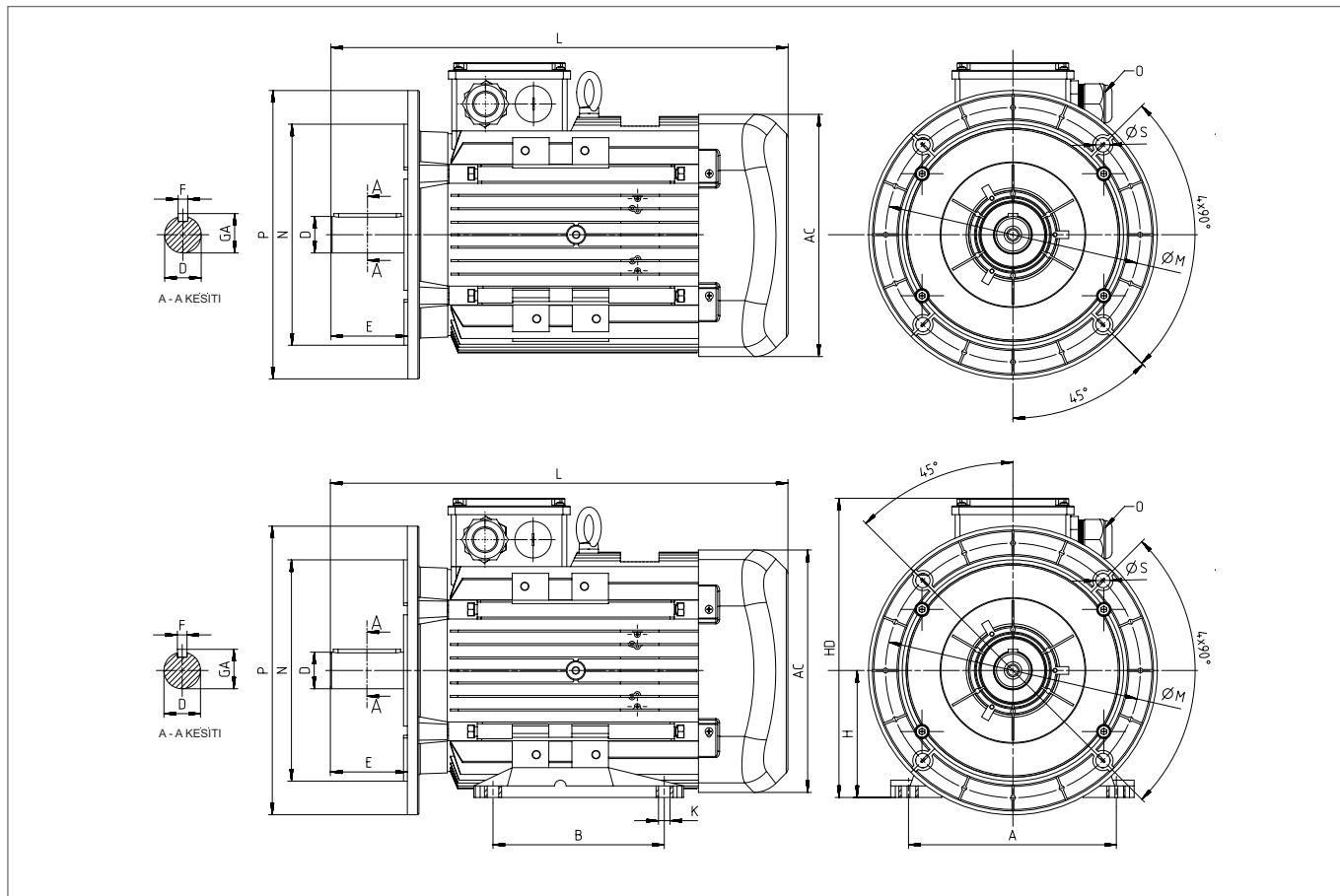
BOYUTLAR / DIMENSIONS - B3

Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar / Foot Mounted Motors						Mil / Shaft			Rulman / Bearing		Keçe / Seal		
				AC	L	O	B	A	H	HD	K	C	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksi Non Drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksi Non Drive Side
22,0	2	Q3E160L2D	Alüminyum	302	576,0	2*M32	210	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	2	Q3E180M2A	Alüminyum	370	629,0	2*M40	241	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
	4	Q3E180L4B	Alüminyum	370	629,0	2*M40	279	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
	6	Q3E200L6D	Alüminyum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10
30,0	2	Q3E200L2B	Alüminyum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6310-2Z	60*90*10	50*80*10
	4	Q3E200L4D	Alüminyum	415	665,0	2*M50	311	318	200	461	19	133	55	110	59	16	6312-2Z	6310-2Z	60*90*10	50*80*10
	6	Q3E225M6C	Alüminyum	456	765,0	2*M40	311	356	225	485	19	149	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13
37,0	2	Q3E200L2C	Alüminyum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6310-2Z	60*90*10	50*80*10
	4	Q3E225M4C	Alüminyum	456	765,0	2*M50	286	356	225	504	19	149	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13
45,0	2	Q3E225M2B	Alüminyum	456	735,0	2*M50	311	356	225	504	19	149	55	110	59	16	6313-2Z	6313-2Z	65*100*13	65*100*13
	4	Q3E225M4D	Alüminyum	456	765,0	2*M50	311	356	225	504	19	149	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13
55,0	2	Q3EP250M2C	Pik	527	886,0	2*M50	349	406	250	615	24	168	60	140	64	18	6316	6316	80*100*10	80*100*10
	4	Q3EP250M4E	Pik	527	886,0	2*M50	349	406	250	615	24	168	65	140	69	18	6316	6316	80*100*10	80*100*10
75,0	2	Q3EP280M2C	Pik	527	10250	2*M50	419	457	280	647	24	190	65	140	69	18	6316	6316	80*100*10	80*100*10
	4	Q3EP280M4C	Pik	527	10250	2*M50	419	457	280	647	24	190	75	140	80	20	6316	6316	80*100*10	80*100*10
90,0	2	Q3EP280M2D	Pik	527	10250	2*M50	419	457	280	647	24	190	65	140	69	18	6316	6316	80*100*10	80*100*10
	4	Q3EP280M4D	Pik	527	10250	2*M50	419	457	280	647	24	190	75	140	80	20	6316	6316	80*100*10	80*100*10
110,0	2	Q3EP315S2C	Pik	652	11760	2*M63	406	508	315	833	28	216	65	140	69	18	6316	6316	80*100*5,5	80*100*5,5
	4	Q3EP315S4C	Pik	652	12060	2*M63	406	508	315	833	28	216	80	170	85	22	6319	6319	95*115*5,5	95*115*5,5
132,0	2	Q3EP315M2B	Pik	652	11760	2*M63	457	508	315	833	28	216	65	140	69	18	6316	6316	80*100*5,5	80*100*5,5
	4	Q3EP315M4B	Pik	652	12060	2*M63	457	508	315	833	28	216	80	170	85	22	6319	6319	95*115*5,5	95*115*5,5
160,0	2	Q3EP315L2A	Pik	652	12870	2*M63	508	508	315	833	28	216	65	140	69	18	6316	6316	80*100*5,5	80*100*5,5
	4	Q3EP315L4A	Pik	652	13170	2*M63	508	508	315	833	28	216	80	170	85	22	6319	6319	95*115*5,5	95*115*5,5
200,0	2	Q3EP315L2C	Pik	652	12870	2*M63	508	508	315	833	28	216	65	140	69	18	6316	6316	80*100*5,5	80*100*5,5
	4	Q3EP315L4C	Pik	652	13170	2*M63	508	508	315	833	28	216	80	170	85	22	6319	6319	95*115*5,5	95*115*5,5
250,0	2	Q3EP355M2C	Pik	762	15120	4*M63	560	610	355	997	28	254	75	140	80	20	6317	6317	85*105*5,5	85*105*5,5
	4	Q3EP355M4C	Pik	762	15420	4*M63	560	610	355	997	28	254	95	170	100	25	6322	6322	110*130*5,5	110*130*5,5
315,0	2	Q3EP355L2B	Pik	762	15120	4*M63	630	610	355	997	28	254	75	140	80	20	6317	6317	85*105*5,5	85*105*5,5
	4	Q3EP355L4B	Pik	762	15420	4*M63	630	610	355	997	28	254	95	170	100	25	6322	6322	110*130*5,5	110*130*5,5
355,0	2	Q3EP355L2C	Pik	762	15120	4*M63	630	610	355	997	28	254	75	140	80	20	6317	6317	85*105*5,5	85*105*5,5
	4	Q3EP355L4C	Pik	762	15420	4*M63	630	610	355	997	28	254	95	170	100	25	6322	6322	110*130*5,5	110*130*5,5

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6"  
(2) DIN 6885'e göre

(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm  
(2) According to DIN 6885

## BOYUTLAR / DIMENSIONS - B5, B35



Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors				Mil / Shaft			Rulman / Bearing		Keçe / Seal		Flanş / Flange (FA) (B5)						
				AC	L	O	B	A	H	HD	K	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side	P	N <sup>(3)</sup>	M	R	S		
0,75	2	Q3E80M2C	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
	4	Q3E80M4D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
	6	Q3E90L6C	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
1,1	2	Q3E80M2D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
	4	Q3E90L4C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	6	Q3E90L6D	Alüminyum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
1,5	2	Q3E90L2C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	4	Q3E90L4D	Alüminyum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	6	Q3E100L6D	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*47*7	250	180	215	0	15
2,2	2	Q3E90L2D	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	4	Q3E100L4C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
	6	Q3E112M6D	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
3,0	2	Q3E100L2C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
	4	Q3E100L4D	Alüminyum	217	377,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
	6	Q3E132M6B	Alüminyum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
4,0	2	Q3E112M2C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
	4	Q3E112M4C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
	6	Q3E132M6C	Alüminyum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
5,5	2	Q3E132S2C	Alüminyum	279	440,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	4	Q3E132M4B	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	6	Q3E132M6D	Alüminyum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
7,5	2	Q3E132M2A	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	4	Q3E132M4C	Alüminyum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	6	Q3E160L6C	Alüminyum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
11,0	2	Q3E160L2A	Alüminyum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	4	Q3E160L4A	Alüminyum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	6	Q3E160L6D	Alüminyum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19

BOYUTLAR / DIMENSIONS - B5, B35

Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil / Shaft				Rulman / Bearing		Keçe / Seal		Flanş / Flange (FA) (B5)				
				AC	L	O	B	A	H	HD	K	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non Drive Side	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non Drive Side	P	N <sup>(3)</sup>	M	R	S
15,0	2	Q3E160L2C	Alüminyum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	4	Q3E160L4B	Alüminyum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	6	Q3E180L6B	Alüminyum	347	689,0	2*M40	279	279	180	452	15	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10	350	250	300	0	19
18,5	2	Q3E160L2C	Alüminyum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	4	Q3E180M4B	Alüminyum	370	629,0	2*M40	241	279	180	428	15	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10	350	250	300	0	19
	6	Q3E200L6C	Alüminyum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10	400	300	350	0	19
22,0	2	Q3E160L2D	Alüminyum	302	576,0	2*M32	210	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	2	Q3E180M2A	Alüminyum	370	629,0	2*M40	241	279	180	428	15	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10	350	250	300	0	19
	4	Q3E180L4B	Alüminyum	370	629,0	2*M40	279	279	180	428	15	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10	350	250	300	0	19
30,0	6	Q3E200L6D	Alüminyum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10	400	300	350	0	19
	2	Q3E200L2B	Alüminyum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6310-2Z	60*90*10	50*80*10	400	300	350	0	19
	4	Q3E200L4D	Alüminyum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6310-2Z	60*90*10	50*80*10	400	300	350	0	19
37,0	2	Q3E225M6C	Alüminyum	456	765,0	2*M40	311	356	225	485	19	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13	450	350	400	0	19
	4	Q3E225M4C	Alüminyum	456	765,0	2*M50	286	356	225	504	19	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13	450	350	400	0	19
	2	Q3E225M2B	Alüminyum	456	735,0	2*M50	311	356	225	504	19	55	110	59	16	6313-2Z	6313-2Z	65*100*13	65*100*13	450	350	400	0	19
45,0	4	Q3E225M4D	Alüminyum	456	765,0	2*M50	311	356	225	504	19	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13	450	350	400	0	19
	2	Q3EP250M2C	Pik	527	886,0	2*M50	349	406	250	615	24	60	140	64	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q3EP250M4E	Pik	527	886,0	2*M50	349	406	250	615	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
55,0	2	Q3EP280M2C	Pik	527	1025,0	2*M50	419	457	280	647	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q3EP280M4C	Pik	527	1025,0	2*M50	419	457	280	647	24	75	140	80	20	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q3EP280M2D	Pik	527	1025,0	2*M50	419	457	280	647	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
90,0	4	Q3EP280M4D	Pik	527	1025,0	2*M50	419	457	280	647	24	75	140	80	20	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	2	Q3EP315S2C	Pik	652	1176,0	2*M63	406	508	315	833	28	65	140	69	18	6316	6316	80*100*5,5	80*100*5,5	660	550	600	0	24
	4	Q3EP315S4C	Pik	652	1206,0	2*M63	406	508	315	833	28	80	170	85	22	6319	6319	95*115*5,5	95*115*5,5	660	550	600	0	24
132,0	2	Q3EP315M2B	Pik	652	1176,0	2*M63	457	508	315	833	28	65	140	69	18	6316	6316	80*100*5,5	80*100*5,5	660	550	600	0	24
	4	Q3EP315M4B	Pik	652	1206,0	2*M63	457	508	315	833	28	80	170	85	22	6319	6319	95*115*5,5	95*115*5,5	660	550	600	0	24
	2	Q3EP315L2A	Pik	652	1287,0	2*M63	508	508	315	833	28	65	140	69	18	6316	6316	80*100*5,5	80*100*5,5	660	550	600	0	24
160,0	4	Q3EP315L4A	Pik	652	1317,0	2*M63	508	508	315	833	28	80	170	85	22	6319	6319	95*115*5,5	95*115*5,5	660	550	600	0	24
	2	Q3EP315L2C	Pik	652	1287,0	2*M63	508	508	315	833	28	65	140	69	18	6316	6316	80*100*5,5	80*100*5,5	660	550	600	0	24
	4	Q3EP315L4C	Pik	652	1317,0	2*M63	508	508	315	833	28	80	170	85	22	6319	6319	95*115*5,5	95*115*5,5	660	550	600	0	24
200,0	2	Q3EP355M2C	Pik	762	1512,0	4*M63	560	610	355	997	28	75	140	80	20	6317	6317	85*105*5,5	85*105*5,5	800	680	740	0	24
	4	Q3EP355M4C	Pik	762	1542,0	4*M63	560	610	355	997	28	95	170	100	25	6322	6322	110*130*5,5	110*130*5,5	800	680	740	0	24
	2	Q3EP355L2B	Pik	762	1512,0	4*M63	630	610	355	997	28	75	140	80	20	6317	6317	85*105*5,5	85*105*5,5	800	680	740	0	24
315,0	4	Q3EP355L4B	Pik	762	1542,0	4*M63	630	610	355	997	28	95	170	100	25	6322	6322	110*130*5,5	110*130*5,5	800	680	740	0	24
	2	Q3EP355L2C	Pik	762	1512,0	4*M63	630	610	355	997	28	75	140	80	20	6317	6317	85*105*5,5	85*105*5,5	800	680	740	0	24
	4	Q3EP355L4C	Pik	762	1542,0	4*M63	630	610	355	997	28	95	170	100	25	6322	6322	110*130*5,5	110*130*5,5	800	680	740	0	24
355,0	2	Q3EP355L2C	Pik	762	1512,0	4*M63	630	610	355	997	28	75	140	80	20	6317	6317	85*105*5,5	85*105*5,5	800	680	740	0	24
	4	Q3EP355L4C	Pik	762	1542,0	4*M63	630	610	355	997	28	95	170	100	25	6322	6322	110*130*5,5	110*130*5,5	800	680	740	0	24

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6"

(2) DIN 6885'e göre

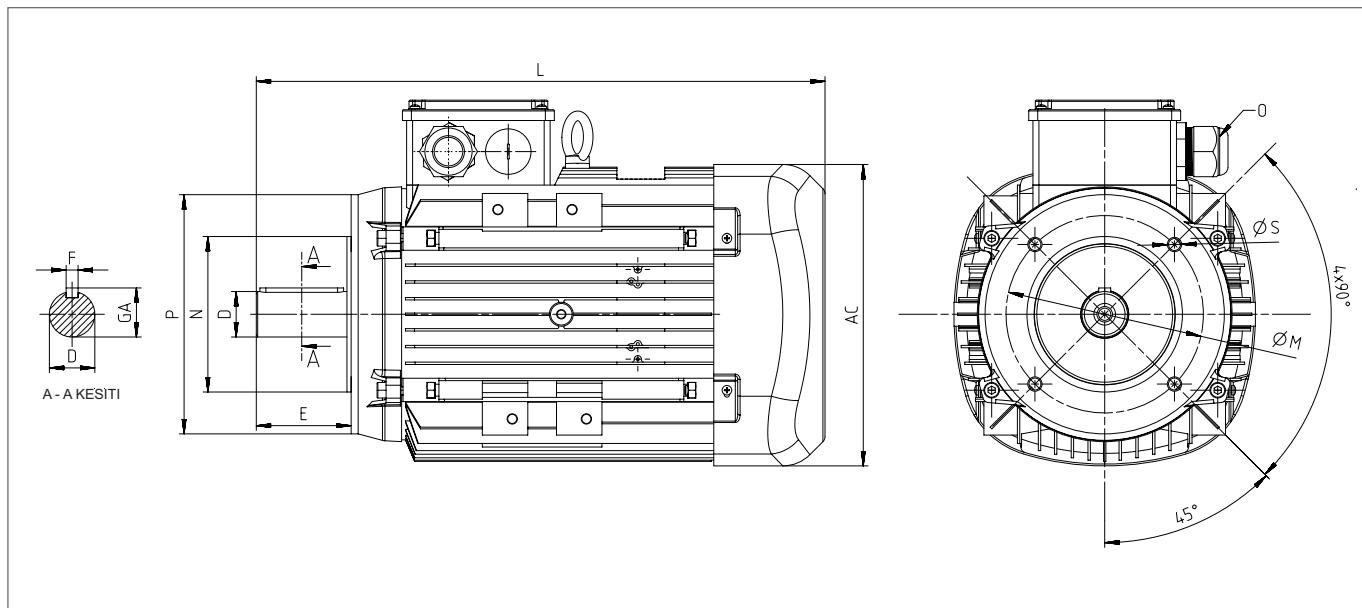
(3) Tolerans DIN EN 50347 "j6"

(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm

(2) According to DIN 6885

(3) Tolerance DIN EN 50347 "j6"

## BOYUTLAR / DIMENSIONS - B14a, B34a



Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil / Shaft			Rulman / Bearing		Keçe / Seal		Flanş / Flange (FC) (B14a)					
				AC	L	O	B	A	H	HD	K	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side	P	N <sup>(3)</sup>	M	R	S
0,75	2	Q3E80M2C	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30 <sup>7</sup>	20*30 <sup>7</sup>	120	80	100	0	M6
	4	Q3E80M4D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30 <sup>7</sup>	20*30 <sup>7</sup>	120	80	100	0	M6
	6	Q3E90L6C	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40 <sup>7</sup>	25*40 <sup>7</sup>	200	130	165	0	12
1,1	2	Q3E80M2D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30 <sup>7</sup>	20*30 <sup>7</sup>	120	80	100	0	M6
	4	Q3E90L4C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40 <sup>7</sup>	25*40 <sup>7</sup>	140	95	115	0	M8
	6	Q3E90L6D	Alüminyum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40 <sup>7</sup>	25*40 <sup>7</sup>	200	130	165	0	12
1,5	2	Q3E90L2C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40 <sup>7</sup>	25*40 <sup>7</sup>	140	95	115	0	M8
	4	Q3E90L4D	Alüminyum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40 <sup>7</sup>	25*40 <sup>7</sup>	140	95	115	0	M8
	6	Q3E100L6D	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47 <sup>7</sup>	25*47 <sup>7</sup>	250	180	215	0	15
2,2	2	Q3E90L2D	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40 <sup>7</sup>	25*40 <sup>7</sup>	140	95	115	0	M8
	4	Q3E100L4C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47 <sup>7</sup>	25*40 <sup>7</sup>	160	110	130	0	M8
	6	Q3E112M6D	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47 <sup>7</sup>	30*47 <sup>7</sup>	250	180	215	0	15
3,0	2	Q3E100L2C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47 <sup>7</sup>	25*40 <sup>7</sup>	160	110	130	0	M8
	4	Q3E100L4D	Alüminyum	217	377,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47 <sup>7</sup>	25*40 <sup>7</sup>	160	110	130	0	M8
	6	Q3E132M6B	Alüminyum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62 <sup>10</sup>	40*62 <sup>10</sup>	300	230	265	0	15
4,0	2	Q3E112M2C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47 <sup>7</sup>	30*47 <sup>7</sup>	160	110	130	0	M8
	4	Q3E112M4C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47 <sup>7</sup>	30*47 <sup>7</sup>	160	110	130	0	M8
	6	Q3E132M6C	Alüminyum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62 <sup>10</sup>	40*62 <sup>10</sup>	300	230	265	0	15
5,5	2	Q3E132S2C	Alüminyum	279	440,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62 <sup>10</sup>	40*62 <sup>10</sup>	200	130	165	0	M10
	4	Q3E132M4B	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62 <sup>10</sup>	40*62 <sup>10</sup>	200	130	165	0	M10
	6	Q3E132M6D	Alüminyum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62 <sup>10</sup>	40*62 <sup>10</sup>	300	230	265	0	15
7,5	2	Q3E132M2A	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62 <sup>10</sup>	40*62 <sup>10</sup>	200	130	165	0	M10
	4	Q3E132M4C	Alüminyum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62 <sup>10</sup>	40*62 <sup>10</sup>	200	130	165	0	M10

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6"

(2) DIN 6885'e göre

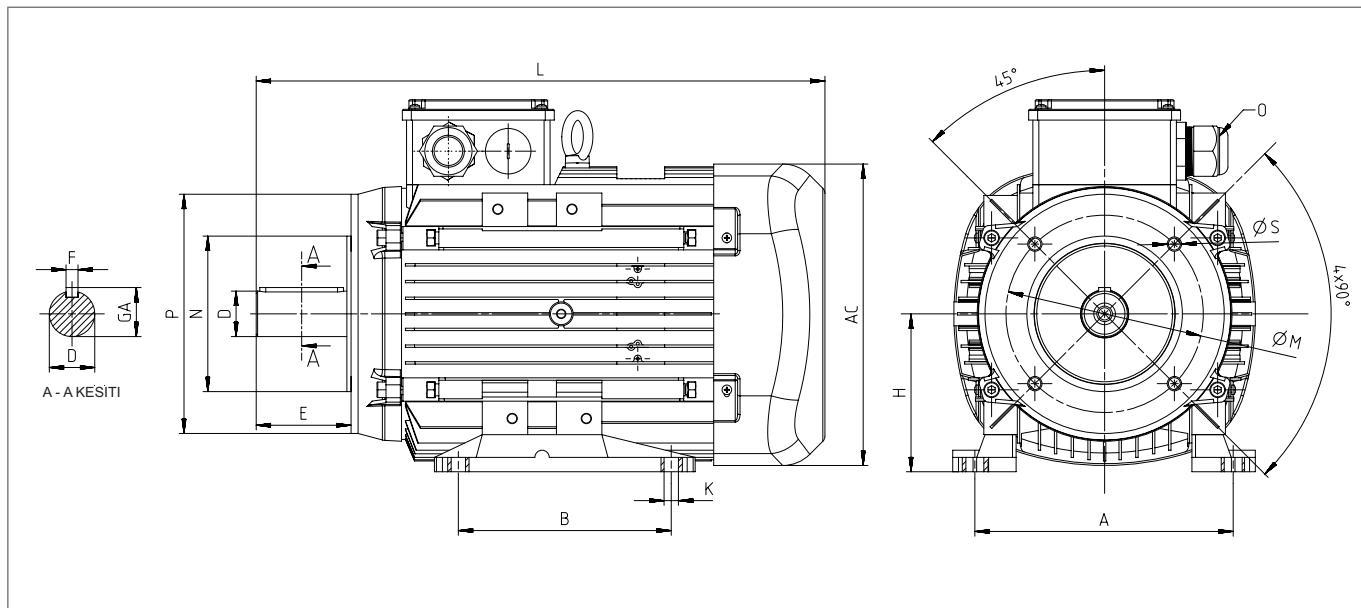
(3) Tolerans DIN EN 50347 "j6"

(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm

(2) According to DIN 6885

(3) Tolerance DIN EN 50347 "j6"

BOYUTLAR / DIMENSIONS - B14b, B34b



Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil / Shaft			Rulman / Bearing		Keçe / Seal		Flanş / Flange (FB) (B14b)					
				AC	L	O	B	A	H	HD	K	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side	P	N <sup>(3)</sup>	M	R	S
0,75	2	Q3E80M2C	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	4	Q3E80M4D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	6	Q3E90L6C	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
1,1	2	Q3E80M2D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	4	Q3E90L4C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	6	Q3E90L6D	Alüminyum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
1,5	2	Q3E90L2C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	4	Q3E90L4D	Alüminyum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	6	Q3E100L6D	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*47*7	250	180	215	0	15
2,2	2	Q3E90L2D	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	4	Q3E100L4C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	6	Q3E112M6D	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
3,0	2	Q3E100L2C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	4	Q3E100L4D	Alüminyum	217	377,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	6	Q3E132M6B	Alüminyum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
4,0	2	Q3E112M2C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
	4	Q3E112M4C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
	6	Q3E132M6C	Alüminyum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
5,5	2	Q3E132S2C	Alüminyum	279	440,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 veya 15
	4	Q3E132M4B	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 veya 15
	6	Q3E132M6D	Alüminyum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
7,5	2	Q3E132M2A	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 veya 15
	4	Q3E132M4C	Alüminyum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 veya 15

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6"

(2) DIN 6885'e göre

(3) Tolerans DIN EN 50347 "j6"

(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm

(2) According to DIN 6885

(3) Tolerance DIN EN 50347 "j6"

## ELEKTRİKSEL ÖZELLİKLER - 50 Hz / ELECTRICAL CHARACTERISTICS AT 50 Hz

Motor Tipi Motor Type	Gövde Tipi Housing Type	Nominal / Rated Values				Kalkıştaki Değerler / Starting Values				DeviTime Momenİ Oranı Breakdown Torque Ratio	Verim * Efficiency*	$\eta\%$	$\cos\phi$	J $\text{kgm}^2$	Ağırlık (B3) kg	Ses Seviyesi dB(A)** Sound Pressure Level dB(A**)			
		Güç / Power kW	Devir Speed HP	Akim Current d/d	Akim Current A	Moment Torque Nm	Akim Current $I_A / I_{A_N}$	Moment Torque $M_A / M_{A_N}$	$\Delta$										
2kutup3000d/d																			
220/380V	Q2E71M2C*	Alüminyum	0,37	1/2	2850	1,0	1,2	7,7	-	3,6	-	3,8	69,5	69,6	67,3	0,80	0,00067	8	54
	Q2E71M2D*	Alüminyum	0,55	3/4	2860	1,2	1,8	7,8	-	3,7	-	3,9	74,1	74,2	72,0	0,82	0,00086	9,7	54
	Q2E80M2B	Alüminyum	0,75	1,0	2860	1,7	2,5	7,7	-	3,7	-	4,0	77,4	77,0	73,6	0,84	0,00109	11	58
	Q2E80M2D	Alüminyum	1,1	1,5	2860	2,4	3,6	7,7	-	3,7	-	4,1	79,6	79,1	77,1	0,84	0,00150	13	58
	Q2E90L2C	Alüminyum	1,5	2,0	2900	3,2	5,0	7,8	-	3,4	-	4,0	81,3	80,8	77,7	0,83	0,00182	17	62
	Q2E90L2D	Alüminyum	2,2	3,0	2900	4,7	7,3	7,9	-	3,5	-	4,1	83,2	82,9	80,5	0,84	0,00182	18	62
	Q2E100L2C	Alüminyum	3,0	4,0	2875	6,0	9,9	9,1	-	3,9	-	4,6	84,6	84,5	83,1	0,90	0,00335	21	64
380/660V	Q2E112M2C	Alüminyum	4,0	5,5	2900	7,7	13,2	2,9	8,6	1,3	3,8	4,5	85,8	85,7	84,3	0,88	0,00489	31	67
	Q2E132S2C	Alüminyum	5,5	7,5	2900	10,4	18,0	3,0	8,9	1,1	3,2	4,2	87,0	86,9	85,2	0,91	0,01410	46	70
	Q2E132M2A	Alüminyum	7,5	10,0	2920	13,6	24,5	2,9	8,6	1,0	3,0	3,7	88,1	87,7	85,9	0,90	0,01596	53	70
	Q2E160M2B	Alüminyum	11,0	15,0	2930	20,3	35,9	3,1	9,4	1,0	3,0	3,8	89,4	89,3	87,5	0,91	0,02644	76	71
	Q2E160L2A	Alüminyum	15,0	20,0	2930	27,0	48,7	2,9	8,6	1,0	3,0	3,3	90,3	90,2	88,4	0,93	0,03317	82	71
	Q2E160L2C	Alüminyum	18,5	25,0	2930	32,8	60,0	3,3	10,0	0,5	1,4	4,3	90,9	90,8	89,0	0,91	0,04075	90	71
	Q2E180M2A	Alüminyum	22,0	30,0	2945	38,7	71,3	2,6	7,9	0,7	2,2	3,4	91,3	90,9	89,5	0,91	0,06193	114	77
	Q2E200L2B	Alüminyum	30,0	40,0	2955	56,6	97,1	2,6	7,9	0,6	1,9	4,1	92,0	91,4	89,6	0,86	0,11917	167	80
	Q2E200L2C	Alüminyum	37,0	50,0	2955	66,8	119,4	2,8	8,3	0,6	1,9	3,1	92,5	91,9	90,1	0,91	0,15010	167	80
	Q2E225M2B	Alüminyum	45,0	60,0	2965	85,7	145,2	2,8	8,3	0,7	2,2	3,4	92,9	92,6	91,1	0,86	0,23505	235	81
	Q2EP250M2B	Pik	55,0	75,0	2970	97,9	178,5	1,7	5,1	0,7	2,1	3,1	93,2	92,1	90,9	0,91	0,48707	486	82
	Q2EP280M2B	Pik	75,0	100,0	2970	135,0	241,1	3,0	9,1	0,7	2,1	2,6	93,8	93,7	92,5	0,90	0,54033	576	84
	Q2EP280M2C	Pik	90,0	125,0	2970	156,5	291,3	3,3	10,0	1,1	3,2	3,6	94,1	93,9	92,9	0,93	0,64510	585	84
400/690V	Q2EP315S2C	Pik	110,0	127,0	2,975	185	353	2,6	7,8	0,7	2,2	2,4	94,3	94,3	93,1	0,91	1,43600	920	87
	Q2EP315M2C	Pik	132,0	152,0	2,975	221	423	2,6	7,8	0,8	2,3	2,4	94,6	94,6	93,4	0,91	1,72300	970	87
	Q2EP315L2C	Pik	160,0	184,0	2,975	268	513	2,5	7,5	0,8	2,3	2,4	94,8	94,8	93,6	0,91	1,95300	1.170	87
	Q2EP315L2D	Pik	200,0	230,0	2,975	334	643	2,7	8,0	0,8	2,4	2,6	95,0	95,0	93,8	0,91	2,52700	1.200	87
	Q2EP355M2C	Pik	250,0	280,0	2,985	422	799	2,3	7,0	0,7	2,0	2,4	95,0	95,0	93,8	0,90	3,92000	1.690	87
	Q2EP355L2C	Pik	315,0	353,0	2,985	532	1.007	2,5	7,4	0,7	2,0	2,3	95,0	95,0	93,8	0,90	4,17000	1.870	87
	Q2EP355L2D	Pik	355,0	398,0	2,985	599	1.135	2,5	7,5	0,6	1,8	2,1	95,0	95,0	93,8	0,90	4,44000	1.953	87
4kutup1500d/d																			
220/380V	Q2E71M4C*	Alüminyum	0,25	1/3	1415	0,7	1,7	4,4	-	2,3	-	3,4	68,5	68,8	68,8	0,74	0,00095	9	45
	Q2E71M4D*	Alüminyum	0,37	1/2	1415	1,1	2,5	4,4	-	2,3	-	3,4	72,7	73,1	72,0	0,75	0,00095	8,5	45
	Q2E80M4B*	Alüminyum	0,55	3/4	1415	1,5	3,7	4,8	-	2,8	-	3,2	77,1	77,6	76,4	0,76	0,00205	10,5	49
	Q2E80M4D	Alüminyum	0,75	1,0	1435	2	5,1	5,2	-	2,9	-	3,2	79,6	78,9	75,3	0,7	0,00268	12	49
	Q2E90L4C	Alüminyum	1,1	1,5	1430	2,5	7,4	6,7	-	2,9	-	3,3	81,4	80,8	78,1	0,81	0,00365	18	54
	Q2E90L4D	Alüminyum	1,5	2,0	1430	3,5	10,0	7,0	-	3,2	-	3,6	82,8	82,0	79,3	0,76	0,00365	18	55
	Q2E100L4C	Alüminyum	2,2	3,0	1430	5,0	14,6	7,1	-	3,9	-	4,2	84,3	83,8	81,2	0,77	0,00545	26	56
	Q2E100L4D	Alüminyum	3,0	4,0	1440	6,4	20,0	7,1	-	3,4	-	3,8	85,5	85,1	83,0	0,75	0,00581	26	56
380/660V	Q2E112M4C	Alüminyum	4,0	5,5	1440	8,7	26,3	2,6	7,9	0,9	2,8	3,9	86,6	86,0	84,5	0,81	0,01123	31	58
	Q2E132M4B	Alüminyum	5,5	7,5	1450	11,7	36,2	2,4	7,1	1,1	3,2	3,9	87,7	87,6	85,2	0,81	0,02763	54	61
	Q2E132M4C	Alüminyum	7,5	10,0	1450	15,8	49,4	2,9	8,7	0,9	2,8	4,1	88,7	88,5	86,6	0,80	0,02980	57	61
	Q2E160M4B	Alüminyum	11,0	15,0	1460	22,5	72,5	2,0	6,0	0,7	2,2	2,7	89,8	89,7	88,2	0,83	0,05547	76	63
	Q2E160L4A	Alüminyum	15,0	20,0	1460	28,8	98,5	2,0	6,0	0,8	2,3	2,7	90,6	90,5	89,5	0,83	0,06922	92	63
	Q2E180M4B	Alüminyum	18,5	25,0	1465	36,5	121,4	2,5	7,4	1,0	3,0	4,1	91,2	91,1	90,2	0,84	0,11220	119	69
	Q2E180L4B	Alüminyum	22,0	30,0	1465	44,5	143,5	2,6	7,7	0,8	2,4	3,4	91,6	91,5	90,6	0,82	0,12773	127	69
	Q2E200L4D	Alüminyum	30,0	40,0	1465	57,3	195,6	2,4	7,3	0,8	2,5	3,2	92,3	92,1	91,1	0,86	0,26448	177	70
	Q2E225M4C	Alüminyum	37,0	50,0	1480	70,7	240,0	2,5	7,5	1,0	2,9	3,5	92,7	92,6	91,5	0,84	0,36429	260	71
	Q2E225M4D	Alüminyum	45,0	60,0	1470	85,9	292,3	2,6	7,7	1,0	2,9	3,5	93,1	93,0	91,9	0,85	0,43513	280	71
	Q2EP250M4D	Pik	55,0	75,0	1480	105,0	359,0	2,4	7,1	0,7	2,1	2,9	93,5	93,2	90,7	0,83	0,90782	506	72
	Q2EP280M4B	Pik	75,0	100,0	1475	147,0	485,7	2,5	7,4	0,7	2,1	3,1	94,0	93,9	93,2	0,85	1,06114	624	73
	Q2EP280M4C	Pik	90,0	125,0	1470	173,8	584,2	2,5	7,4	0,7	2,1	3,0	94,2	94,4	93,6	0,85	1,14768	638	73

ELEKTRİKSEL ÖZELLİKLER - 50 Hz / ELECTRICAL CHARACTERISTICS AT 50 Hz

Motor Tipi Motor Type	Gövde Tipi Housing Type	Nominal / Rated Values				Kalkıştaki Değerler / Starting Values				Devirme Momeni Oranı Breakdown Torque Ratio Mk/Mn	Verim * Efficiency* η%	Cosφ	J kgm <sup>2</sup>	Ağırlık (B3) kg	Ses Seviyesi dB(A)** Sound Pressure Level dB(A)**				
		Güç / Power kW	Devir Speed HP	Akim Current d/d	Moment Torque A	Akim Current I <sub>A</sub> / A <sub>N</sub> A	Moment Torque M <sub>A</sub> / M <sub>N</sub> A												
4kutup1500d/d																			
400/690V	Q2EP315S4C	Pik	110,0	127,0	1.480	191	709	2,4	7,2	0,7	2,2	2,5	94,5	94,5	93,9	0,88	3,03500	925	70
	Q2EP315M4C	Pik	132,0	152,0	1.480	229	851	2,3	7,0	0,7	2,1	2,4	94,7	94,7	94,1	0,88	3,41500	1.010	70
	Q2EP315L4C	Pik	160,0	184,0	1.480	273	1.032	2,5	7,5	0,7	2,2	2,5	94,9	94,9	94,3	0,89	4,11900	1.080	76
	Q2EP315L4D	Pik	200,0	230,0	1.480	341	1.290	2,5	7,5	0,8	2,3	2,5	95,1	95,1	94,5	0,89	5,20300	1.200	76
	Q2EP355M4C	Pik	250,0	280,0	1.485	426	1.607	2,6	7,9	0,8	2,3	2,5	95,1	95,1	94,5	0,89	8,79000	1.720	76
	Q2EP355L4C	Pik	315,0	353,0	1.485	531	2.025	2,5	7,4	0,7	2,0	2,3	95,1	95,1	94,5	0,90	10,13300	1.920	87
	Q2EP355L4D	Pik	355,0	398,0	1.485	605	2.283	2,9	8,8	0,6	1,8	2,0	95,1	95,1	94,5	0,89	10,67800	1.953	87
6kutup1000d/d																			
220/380V	Q2E90L6C	Alüminyum	0,75	1,0	940	2,6	7,7	4,0	-	2,3	-	2,5	75,9	74,7	73,2	0,68	0,00371	18	53
	Q2E90L6D	Alüminyum	1,1	1,5	940	3,2	11,3	4,0	-	2,6	-	2,6	78,1	77,6	74,8	0,65	0,00444	20	53
	Q2E100L6D	Alüminyum	1,5	2,0	940	4	15,3	4,5	-	2,4	-	2,7	79,8	79,3	76,4	0,71	0,00570	26	56
	Q2E112M6C	Alüminyum	2,2	3,0	950	5,4	22,1	5,0	-	2,3	-	2,7	81,8	81,2	78,3	0,71	0,00916	31	58
380/660V	Q2E132M6A	Alüminyum	3,0	4,0	945	7,3	29,8	1,7	5,2	1,0	3,0	3,0	83,3	82,3	79,4	0,64	0,02057	53	62
	Q2E132M6B	Alüminyum	4,0	5,5	965	10,5	39,8	1,8	5,3	0,6	1,9	2,3	84,6	83,5	80,7	0,65	0,02070	54	62
	Q2E132M6C	Alüminyum	5,5	7,5	945	13,1	54,7	1,6	4,9	0,8	2,4	2,6	86,1	85,7	83,9	0,76	0,02709	67	62
	Q2E160L6B	Alüminyum	7,5	10,0	965	18,7	74,6	2,0	6,0	1,1	3,2	3,4	87,2	84,3	81,7	0,66	0,07040	94	63
	Q2E160L6C	Alüminyum	11,0	15,0	960	25,1	109,4	1,6	4,9	0,9	2,7	2,8	88,7	88,5	86,3	0,74	0,07040	95,5	63
	Q2E180L6A	Alüminyum	15,0	20,0	960	31,8	147,7	2,0	5,9	0,6	1,8	2,6	89,7	89,5	87,3	0,80	0,18369	115	64
	Q2E200L6B	Alüminyum	18,5	25,0	970	38,0	182,2	1,8	5,5	0,5	1,6	2,4	90,4	90,2	89,6	0,83	0,27088	155	64
	Q2E200L6C	Alüminyum	22,0	30,0	970	45,6	216,6	1,8	5,5	0,5	1,6	2,4	90,9	90,7	90,1	0,83	0,31281	165	64
	Q2E225M6B	Alüminyum	30,0	40,0	980	60,9	287,6	1,8	5,4	0,5	1,6	2,3	91,7	91,6	90,7	0,82	0,49334	221	65

\* IEC 60034-2-1'e göre belirlenen verim değerleri

\*\* Ses seviyesi ölçümü motordan 1 metre uzaklıktan alınır.

\*\* Tolerans + 3 dBa

\* According to IEC 60034-2-1

\*\* The sound pressure measurement are taken 1 m away from the motor.

\*\* Tolerance + 3 dBa

## ELEKTRİKSEL ÖZELLİKLER - 50 Hz / ELECTRICAL CHARACTERISTICS AT 50 Hz

Motor Tipi Motor Type	Gövde Tipi Housing Type	Nominal / Rated Values				Kalkıştaki Değerler / Starting Values				Devrilmeye Mоменти Ограничение Brake-down Torque Ratio Mk/Mn	Verim * Efficiency*			Cosφ	J kgm <sup>2</sup>	Ağırlık (B3) kg	Ses Seviyesi (B3)** Sound Pressure Level dB(A)**		
		Güç / Power kW	Devir Speed HP	Akim Current d/d	Moment Torque A	Akim Current Nm	Δ	Moment Torque I <sub>A</sub> / I <sub>N</sub>	Moment Torque M <sub>A</sub> / M <sub>N</sub>		η%	4/4	3/4	2/4					
2kutup3000d/d																			
220/380V	Q2E71M2DE	Alüminyum	0,75	1,0	2870	1,7	2,4	8,8	-	5,0	-	5,2	77,4	77,5	75,9	0,77	0,00110	11	56
	Q2E80M2DE	Alüminyum	1,5	2,0	2875	3,0	5,0	8,1	-	4,0	-	4,3	81,5	82,0	80,9	0,76	0,00150	13	58
	Q2E90L2DE	Alüminyum	3,0	4,0	2880	6,1	9,9	8,3	-	4,0	-	4,5	84,6	84,1	80,8	0,75	0,00182	18	62
380/660V	Q2E100L2DE	Alüminyum	4,0	5,5	2900	7,9	13,3	3,0	9,3	1,4	4,3	5,2	85,9	86,0	84,1	0,77	0,00335	27	64
	Q2E112M2CE	Alüminyum	5,5	7,5	2910	9,1	17,9	3,1	9,5	1,4	4,2	5,0	86,3	86,5	84,7	0,87	0,00489	31	67
	Q2E132M2AE	Alüminyum	11,0	15,0	2923	13,6	24,5	2,9	9,0	1,2	3,6	4,0	88,3	87,9	86,1	0,89	0,01596	53	70
	Q2E160L2DE	Alüminyum	22,0	30,0	2943	31,4	60,0	2,6	8,2	1,1	3,3	3,9	91,4	91,8	91,2	0,92	0,04075	92	71
	Q2EP250M2C	Pik	75,0	100,0	2975	125,4	241,1	2,5	7,5	0,8	2,8	3,3	93,8	93,7	92,5	0,92	0,54033	576	84
	Q2EP280M2D	Pik	110,0	150,0	2980	191,0	352,4	2,6	7,7	0,9	2,9	3,4	94,3	94,3	93,6	0,88	0,74111	640	84
4kutup1500d/d																			
220/380V	Q2E80M4DE	Alüminyum	1,1	1,5	1438	1,9	4,9	5,5	-	3,2	-	3,5	79,9	79,4	76,3	0,72	0,00268	12,5	49
	Q2E90L4DE	Alüminyum	2,2	3,0	1440	4,8	14,5	7,5	-	3,5	-	4,0	84,3	83,5	80,6	0,70	0,00365	18	54
380/660V	Q2E112M4DE	Alüminyum	5,5	7,5	1458	8,5	26,2	2,8	8,6	1,1	3,2	4,3	86,7	86,7	85,1	0,77	0,01123	34	58
	Q2EP250M4E	Pik	75,0	100,0	1485	134,2	485,7	2,6	7,8	0,8	2,9	3,4	94,0	93,9	93,2	0,86	1,06114	624	73
	Q2EP280M4D	Pik	110,0	150,0	1485	200,3	714,0	2,8	7,9	0,8	2,9	3,4	94,5	94,3	93,1	0,84	1,25586	654	73

\* IEC 60034-2-1'e göre belirlenen verim değerleri

\*\* Ses seviyesi ölçümleri motordan 1 metre uzaklıktan alınır.

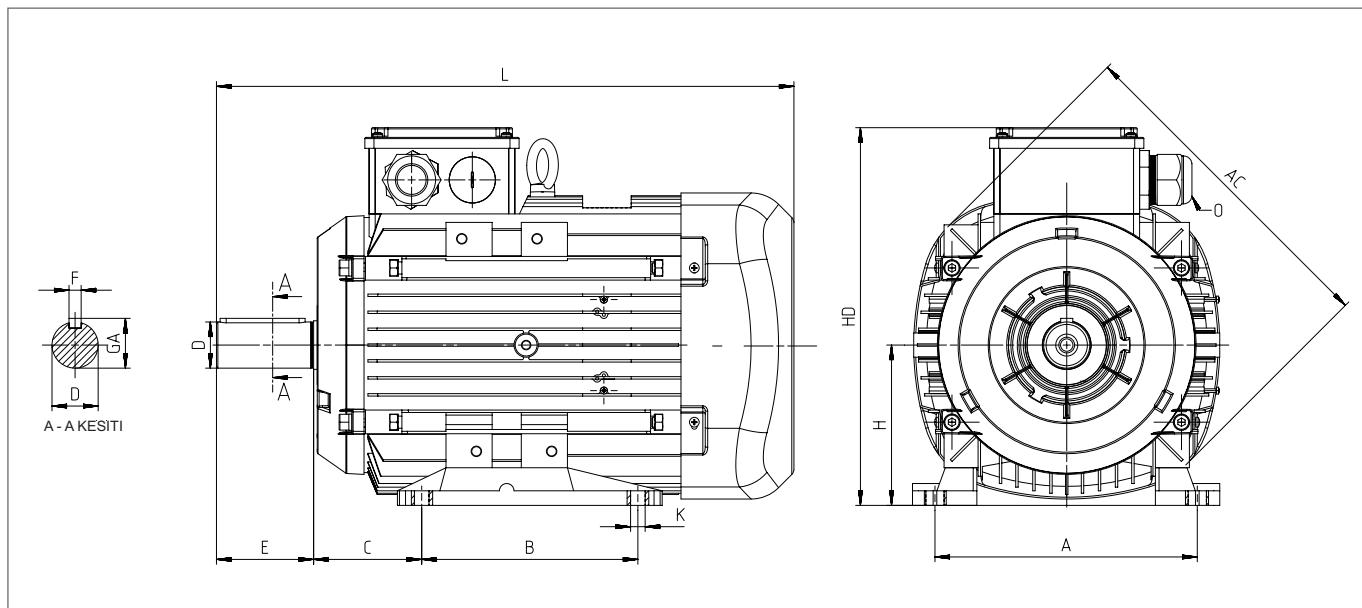
\*\*\* Tolerans + 3 dB(A)

\* According to IEC 60034-2-1

\*\* The sound pressure measurement are taken 1 m away from the motor.

\*\*\* Tolerance + 3 dB(A)

BOYUTLAR / DIMENSIONS - B3



Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar / Foot Mounted Motors						Mil / Shaft			Rulman / Bearing			Keçe / Seal	
				AC	L	O	B	A	H	HD	K	C	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Taraflı Aksı Drive Side	Kasnak Taraflı Aksı Non Drive Side	Kasnak Taraflı Aksı Drive Side	Kasnak Taraflı Aksı Non Drive Side
0,25	4	Q2E71M4B	Alüminyum	138	252,5	1*M20	90	112	71	190	7	45	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5
0,37	2	Q2E71M2C	Alüminyum	138	252,5	1*M20	90	112	71	190	7	45	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5
	4	Q2E71M4B	Alüminyum	138	252,5	1*M20	90	112	71	190	7	45	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5
0,55	2	Q2E71M2D	Alüminyum	138	252,5	1*M20	90	112	71	190	7	45	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5
	4	Q2E80M4B	Alüminyum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
	2	Q2E71M2DE	Alüminyum	138	252,5	1*M20	90	112	71	190	7	45	14	30	16,0	5	6202-2Z	6202-2Z	15*24*5	15*24*5
0,75	2	Q2E80M2B	Alüminyum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
	4	Q2E80M4D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
	6	Q2E90L6C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	2	Q2E80M2D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
1,1	4	Q2E80M4DE	Alüminyum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
	4	Q2E90L4C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	6	Q2E90L6D	Alüminyum	193	344,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	2	Q2E80M2DE	Alüminyum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
1,5	2	Q2E90L2C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	4	Q2E90L4D	Alüminyum	193	316,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	6	Q2E100L6D	Alüminyum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	2	Q2E90L2D	Alüminyum	193	316,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
2,2	4	Q2E90L4DE	Alüminyum	193	344,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	4	Q2E100L4C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	6	Q2E112M6C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
	2	Q2E90L2DE	Alüminyum	193	316,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
3,0	2	Q2E100L2C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	4	Q2E100L4D	Alüminyum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	6	Q2E132M6A	Alüminyum	279	475,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10

## BOYUTLAR / DIMENSIONS - B3

Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar / Foot Mounted Motors						Mil / Shaft			Rulman / Bearing		Keçe / Seal		
				AC	L	O	B	A	H	HD	K	C	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side
4,0	2	Q2E100L2DE	Alüminyum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	2	Q2E112M2C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
	4	Q2E112M4C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
	6	Q2E132M6B	Alüminyum	279	475,5	2*M32	178	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
5,5	2	Q2E112M2CE	Alüminyum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
	4	Q2E112M4D	Alüminyum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
	2	Q2E132S2C	Alüminyum	279	440,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	4	Q2E132M4B	Alüminyum	279	475,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
7,5	6	Q2E132M6C	Alüminyum	279	475,5	2*M32	178	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	2	Q2E132M2A	Alüminyum	279	475,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	4	Q2E132M4C	Alüminyum	279	475,5	2*M32	178	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	6	Q2E160M6B	Alüminyum	302	576,0	2*M32	210	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
11,0	2	Q2E132M2AE	Alüminyum	279	475,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	2	Q2E160M2B	Alüminyum	302	576,0	2*M32	210	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	4	Q2E160M4B	Alüminyum	302	576,0	2*M32	210	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	6	Q2E160L6B	Alüminyum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
15,0	2	Q2E160L2A	Alüminyum	302	576,0	2*M32	210	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	4	Q2E160L4A	Alüminyum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	6	Q2E180L6A	Alüminyum	370	629,0	2*M40	279	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
	2	Q2E160L2C	Alüminyum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
18,5	4	Q2E180M4B	Alüminyum	370	629,0	2*M40	241	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
	6	Q2E200L6B	Alüminyum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10
	2	Q2E160L2D	Alüminyum	302	576,0	2*M32	210	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	2	Q2E180M2A	Alüminyum	370	629,0	2*M40	241	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
22,0	4	Q2E180L4B	Alüminyum	370	629,0	2*M40	279	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
	6	Q2E200L6C	Alüminyum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10
	2	Q2E200L2B	Alüminyum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10
	4	Q2E200L4D	Alüminyum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10
30,0	2	Q2E225M6B	Alüminyum	456	765,0	2*M50	311	356	225	504	19	149	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13
	4	Q2E200L2C	Alüminyum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10
	6	Q2E225M4B	Alüminyum	456	765,0	2*M50	286	356	225	504	19	149	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13
	2	Q2E225M2B	Alüminyum	456	735,0	2*M50	311	356	225	504	19	149	55	110	59	16	6313-2Z	6313-2Z	65*100*13	65*100*13
37,0	4	Q2E225M4C	Alüminyum	456	765,0	2*M50	305	318	200	461	19	133	55	110	59	16	6313-2Z	6313-2Z	65*100*13	65*100*13
	2	Q2E225M2B	Alüminyum	456	735,0	2*M50	311	356	225	504	19	149	55	110	59	16	6313-2Z	6313-2Z	65*100*13	65*100*13
	4	Q2E225M4D	Alüminyum	456	765,0	2*M50	311	356	225	504	19	149	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13
	2	Q2EP250M2B	Pik	527	886,0	2*M50	349	406	250	615	24	168	60	140	64	18	6316	6316	80*100*10	80*100*10
55,0	4	Q2EP250M4D	Pik	527	886,0	2*M50	349	406	250	615	24	168	65	140	69	18	6316	6316	80*100*10	80*100*10
	2	Q2EP250M2C	Pik	527	886,0	2*M50	349	406	250	615	24	168	60	140	64	18	6316	6316	80*100*10	80*100*10
	2	Q2EP280M2B	Pik	527	1025,0	2*M50	419	457	280	647	24	190	65	140	69	18	6316	6316	80*100*10	80*100*10
	4	Q2EP250M4E	Pik	527	886,0	2*M50	349	406	250	615	24	168	65	140	69	18	6316	6316	80*100*10	80*100*10
75,0	2	Q2EP280M4B	Pik	527	1025,0	2*M50	419	457	280	647	24	190	75	140	80	20	6316	6316	80*100*10	80*100*10
	4	Q2EP280M2C	Pik	527	1025,0	2*M50	419	457	280	647	24	190	65	140	69	18	6316	6316	80*100*10	80*100*10
	2	Q2EP280M4C	Pik	527	1025,0	2*M50	419	457	280	647	24	190	75	140	80	20	6316	6316	80*100*10	80*100*10
	4	Q2EP280M2D	Pik	527	1025,0	2*M50	419	457	280	647	24	190	65	140	69	18	6316	6316	80*100*10	80*100*10
90,0	2	Q2EP280M4D	Pik	527	1025,0	2*M50	419	457	280	647	24	190	75	140	80	20	6316	6316	80*100*10	80*100*10
	4	Q2EP280M2B	Pik	527	1025,0	2*M50	419	457	280	647	24	190	65	140	69	18	6316	6316	80*100*10	80*100*10
	2	Q2EP280M2C	Pik	527	1025,0	2*M50	419	457	280	647	24	190	65	140	69	18	6316	6316	80*100*10	80*100*10
	4	Q2EP280M4C	Pik	527	1025,0	2*M50	419	457	280	647	24	190	65	140	69	18	6316	6316	80*100*10	80*100*10
110,0	2	Q2EP280M2D	Pik	527	1025,0	2*M50	419	457	280	647	24	190	75	140	80	20	6316	6316	80*100*10	80*100*10
	4	Q2EP280M4D	Pik	527	1025,0	2*M50	419	457	280	647	24	190	75	140	80	20	6316	6316	80*100*10	80*100*10

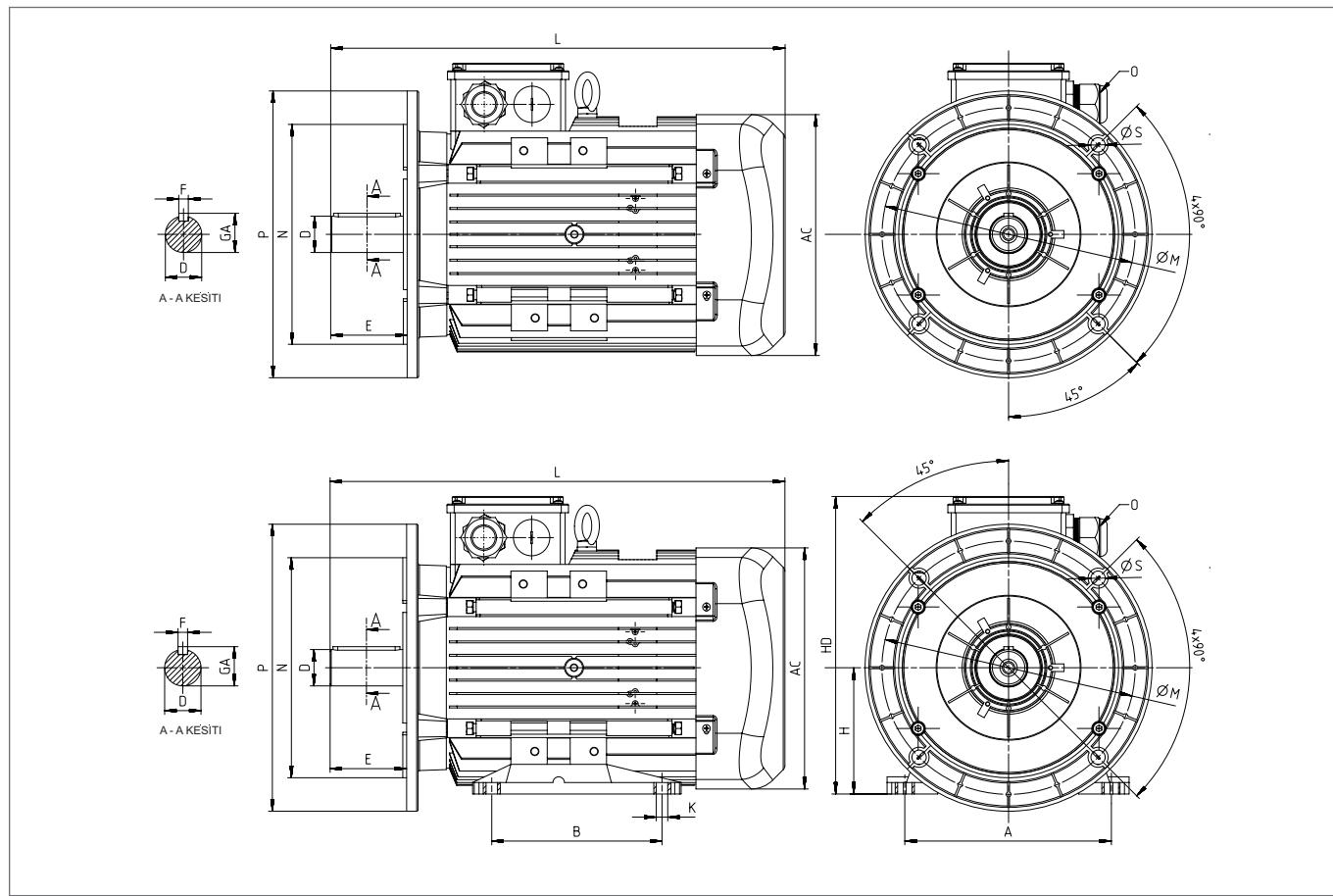
## BOYUTLAR / DIMENSIONS - B3

Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar / Foot Mounted Motors						Mil / Shaft			Rulman / Bearing		Keçe / Seal		
				AC	L	O	B	A	H	HD	K	C	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksi Non Drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksi Non Drive Side
110,0	2	Q2EP315S2C	Pik	630	1180,0	2*M63	406	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP315S4C	Pik	630	1210,0	2*M63	406	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
132,0	2	Q2EP315M2C	Pik	630	1290,0	2*M63	457	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP315M4C	Pik	630	1320,0	2*M63	457	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
160,0	2	Q2EP315L2C	Pik	630	1290,0	2*M63	508	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP315L4C	Pik	630	1320,0	2*M63	508	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
200,0	2	Q2EP315L2D	Pik	630	1290,0	2*M63	508	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP315L4D	Pik	630	1320,0	2*M63	508	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
250,0	2	Q2EP355M2C	Pik	710	1486,0	4*M63	560	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP355M4C	Pik	710	1517,0	4*M63	560	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5
315,0	2	Q2EP355L2C	Pik	710	1486,0	4*M63	630	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP355L4C	Pik	710	1517,0	4*M63	630	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5
355,0	2	Q2EP355L2D	Pik	710	1486,0	4*M63	630	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP355L4D	Pik	710	1517,0	4*M63	630	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6"  
(2) DIN 6885'e göre

(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm  
(2) According to DIN 6885

## BOYUTLAR / DIMENSIONS - B5, B35



Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors				Mil / Shaft			Rulman / Bearing		Keçe / Seal		Flanş / Flange (FA) (B5)						
				AC	L	O	B	A	H	HD	K	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Taraflı Drive Side	Kasnak Taraflı Non Drive Side	Kasnak Taraflı Drive Side	Kasnak Taraflı Non Drive Side	P	N <sup>(3)</sup>	M	R	S
0,25	4	Q2E71M4B	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	160	110	130	0	10
	2	Q2E71M2C	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	160	110	130	0	10
0,37	4	Q2E71M4B	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	160	110	130	0	10
	2	Q2E71M2D	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	160	110	130	0	10
0,55	4	Q2E80M4B	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
	2	Q2E71M2DE	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16,0	5	6202-2Z	6202-2Z	15*24*5	15*24*5	160	110	130	0	10
0,75	2	Q2E80M2B	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
	4	Q2E80M4D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
1,1	6	Q2E90L6C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	2	Q2E80M2D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
1,5	4	Q2E80M4DE	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
	4	Q2E90L4C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
2,2	6	Q2E90L6D	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	2	Q2E80M2DE	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
3,0	4	Q2E90L2C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	2	Q2E100L4D	Alüminyum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
2,2	6	Q2E100L6C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
	2	Q2E90L2D	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
2,2	4	Q2E90L4DE	Alüminyum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	4	Q2E100L4C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
3,0	6	Q2E112M6C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
	2	Q2E90L2DE	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
3,0	2	Q2E100L2C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
	4	Q2E100L4D	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
3,0	6	Q2E132M6A	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15

**BOYUTLAR / DIMENSIONS - B5, B35**

Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil / Shaft			Rulman / Bearing		Keçe / Seal		Flanş / Flange (FA) (B5)					
				AC	L	O	B	A	H	HD	K	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Tarafı Drive Side	Kasnak Tarafı Non Drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Non Drive Side	P	N <sup>(3)</sup>	M	R	S
4,0	2	Q2E100L2DE	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	250	180	215	0	15
	2	Q2E112M2C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	250	180	215	0	15
	4	Q2E112M4C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	250	180	215	0	15
	6	Q2E132M6B	Alüminyum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	0	15
5,5	2	Q2E112M2CE	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	250	180	215	0	15
	4	Q2E112M4D	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	250	180	215	0	15
	2	Q2E132S2C	Alüminyum	279	440,5	2*M32	140	216	132	314	12	38	80	41	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	0	15
	4	Q2E132M4B	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	0	15
7,5	2	Q2E132M6C	Alüminyum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	0	15
	4	Q2E132M4C	Alüminyum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	0	15
	6	Q2E160M6B	Alüminyum	302	576,0	2*M32	210	254	160	360	15	42	110	45	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	0	19
	2	Q2E132M2AE	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	0	15
11,0	2	Q2E160M2B	Alüminyum	302	576,0	2*M32	210	254	160	360	15	42	110	45	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	0	19
	4	Q2E160M4B	Alüminyum	302	576,0	2*M32	210	254	160	360	15	42	110	45	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	0	19
	6	Q2E160L6B	Alüminyum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	0	19
	2	Q2E160L2A	Alüminyum	302	576,0	2*M32	210	254	160	360	15	42	110	45	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	0	19
15,0	4	Q2E160L4A	Alüminyum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	0	19
	6	Q2E180L6A	Alüminyum	370	629,0	2*M40	279	279	180	428	15	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10	350	250	300	0	19
	2	Q2E160L2C	Alüminyum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	0	19
	4	Q2E180M4B	Alüminyum	370	629,0	2*M40	241	279	180	428	15	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10	350	250	300	0	19
18,5	6	Q2E200L6B	Alüminyum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-ZZ	6312-ZZ	60*90*10	60*90*10	400	300	350	0	19
	2	Q2E160L2D	Alüminyum	302	576,0	2*M32	210	254	160	360	15	42	110	45	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	0	19
	2	Q2E180M2A	Alüminyum	370	629,0	2*M40	241	279	180	428	15	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10	350	250	300	0	19
	4	Q2E180L4B	Alüminyum	370	629,0	2*M40	279	279	180	428	15	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10	350	250	300	0	19
22,0	6	Q2E200L6C	Alüminyum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-ZZ	6312-ZZ	60*90*10	60*90*10	400	300	350	0	19
	2	Q2E200L2B	Alüminyum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-ZZ	6312-ZZ	60*90*10	60*90*10	400	300	350	0	19
	4	Q2E200L4D	Alüminyum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-ZZ	6312-ZZ	60*90*10	60*90*10	400	300	350	0	19
	6	Q2E225M6B	Alüminyum	456	765,0	2*M50	311	356	225	504	19	60	140	64	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	0	19
30,0	2	Q2E200L2C	Alüminyum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-ZZ	6312-ZZ	60*90*10	60*90*10	400	300	350	0	19
	4	Q2E200L4D	Alüminyum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-ZZ	6312-ZZ	60*90*10	60*90*10	400	300	350	0	19
	6	Q2E225M6B	Alüminyum	456	765,0	2*M50	311	356	225	504	19	60	140	64	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	0	19
	2	Q2E225M4C	Alüminyum	456	765,0	2*M50	286	356	225	504	19	60	140	64	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	0	19
45,0	2	Q2E225M2B	Alüminyum	456	735,0	2*M50	311	356	225	504	19	65	110	59	16	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	0	19
	4	Q2E225M4D	Alüminyum	456	765,0	2*M50	311	356	225	504	19	60	140	64	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	0	19
	2	Q2EP250M2B	Pik	527	886,0	2*M50	349	406	250	615	24	60	140	64	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q2EP250M4D	Pik	527	886,0	2*M50	349	406	250	615	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
75,0	2	Q2EP250M2C	Pik	527	886,0	2*M50	349	406	250	615	24	60	140	64	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	2	Q2EP280M2B	Pik	527	1025,0	2*M50	419	457	280	647	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q2EP250M4E	Pik	527	886,0	2*M50	349	406	250	615	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q2EP280M4B	Pik	527	1025,0	2*M50	419	457	280	647	24	75	140	80	20	6316	6316	80*100*10	80*100*10	550	450	500	0	19
90,0	2	Q2EP280M2C	Pik	527	1025,0	2*M50	419	457	280	647	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q2EP280M4C	Pik	527	1025,0	2*M50	419	457	280	647	24	75	140	80	20	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	2	Q2EP280M2D	Pik	527	1025,0	2*M50	419	457	280	647	24	75	140	80	20	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q2EP280M4D	Pik	527	1025,0	2*M50	419	457	280	647	24	75	140	80	20	6316	6316	80*100*10	80*100*10	550	450	500	0	19
110,0	2	Q2EP280M2D	Pik	527	1025,0	2*M50	419	457	280	647	24	75	140	80	20	6316	6316	80*100*10	80*100					

## BOYUTLAR / DIMENSIONS - B5, B35

Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar / Foot Mounted Motors						Mil / Shaft				Rulman / Bearing		Keçe / Seal		Flanş / Flange (FA) (B5)				
				AC	L	O	B	A	H	HD	K	C	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side	P	N <sup>(3)</sup>	M	R	S
110,0	2	Q2EP315S2C	Pik	630	1180,0	2*M63	406	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5,5	85*105*5,5	660	550	600	0	24
	4	Q2EP315S4C	Pik	630	1210,0	2*M63	406	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5,5	95*115*5,5	660	550	600	0	24
132,0	2	Q2EP315M2C	Pik	630	1290,0	2*M63	457	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5,5	85*105*5,5	660	550	600	0	24
	4	Q2EP315M4C	Pik	630	1320,0	2*M63	457	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5,5	95*115*5,5	660	550	600	0	24
160,0	2	Q2EP315L2C	Pik	630	1290,0	2*M63	508	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5,5	85*105*5,5	660	550	600	0	24
	4	Q2EP315L4C	Pik	630	1320,0	2*M63	508	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5,5	95*115*5,5	660	550	600	0	24
200,0	2	Q2EP315L2D	Pik	630	1290,0	2*M63	508	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5,5	85*105*5,5	660	550	600	0	24
	4	Q2EP315L4D	Pik	630	1320,0	2*M63	508	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5,5	95*115*5,5	660	550	600	0	24
250,0	2	Q2EP355M2C	Pik	710	1486,0	4*M63	560	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5,5	85*105*5,5	800	680	740	0	24
	4	Q2EP355M4C	Pik	710	1517,0	4*M63	560	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5,5	110*130*5,5	800	680	740	0	24
315,0	2	Q2EP355L2C	Pik	710	1486,0	4*M63	630	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5,5	85*105*5,5	800	680	740	0	24
	4	Q2EP355L4C	Pik	710	1517,0	4*M63	630	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5,5	110*130*5,5	800	680	740	0	24
355,0	2	Q2EP355L2D	Pik	710	1486,0	4*M63	630	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5,5	85*105*5,5	800	680	740	0	24
	4	Q2EP355L4D	Pik	710	1517,0	4*M63	630	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5,5	110*130*5,5	800	680	740	0	24

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6"

(2) DIN 6885'e göre

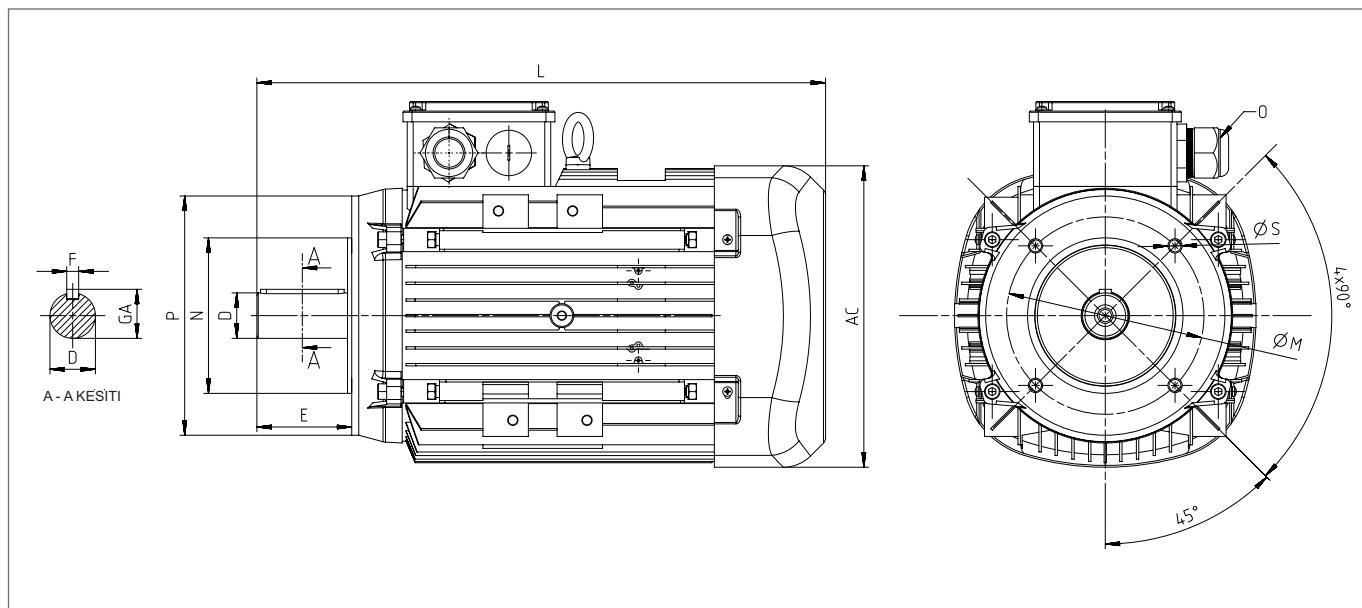
(3) Tolerans DIN EN 50347 "j6"

(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm

(2) According to DIN 6885

(3) Tolerance DIN EN 50347 "j6"

BOYUTLAR / DIMENSIONS - B14a, B34a



Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil / Shaft			Rulman / Bearing		Keçe / Seal		Flanş / Flange (FC) (B14a)					
				AC	L	O	B	A	H	HD	K	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side	P	N <sup>(3)</sup>	M	R	S
0,25	4	Q2E71M4B	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	105	70	85	0	M6
	2	Q2E71M2C	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	105	70	85	0	M6
0,37	4	Q2E71M4B	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	105	70	85	0	M6
	2	Q2E71M2D	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	105	70	85	0	M6
0,55	4	Q2E80M4B	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
	2	Q2E71M2DE	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16,0	5	6202-2Z	6202-2Z	15*24*5	15*24*5	105	70	85	0	M6
0,75	2	Q2E80M2B	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
	4	Q2E80M4D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
1,1	6	Q2E90L6C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
	2	Q2E80M2D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
1,5	4	Q2E80M4DE	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
	4	Q2E90L4C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
2,2	6	Q2E90L6D	Alüminyum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
	2	Q2E80M2DE	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
3,0	2	Q2E90L2C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
	4	Q2E90L4D	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
4,0	4	Q2E100L4C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	160	110	130	0	M8
	6	Q2E112M6C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	160	110	130	0	M8
3,0	2	Q2E90L2DE	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
	2	Q2E100L2C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	160	110	130	0	M8
4,0	4	Q2E100L4D	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	160	110	130	0	M8
	6	Q2E132M6A	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10
4,0	2	Q2E100L2DE	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	160	110	130	0	M8
	2	Q2E112M2C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	160	110	130	0	M8
4,0	4	Q2E112M4C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	160	110	130	0	M8
	6	Q2E132M6B	Alüminyum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10

## BOYUTLAR / DIMENSIONS - B14a, B34a

Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	GövdeTipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil / Shaft			Rulman / Bearing		Keçe / Seal		Flanş / Flange (FC) (B14a)					
				AC	L	O	B	A	H	HD	K	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non Drive Side	Kasnak Taraflı Aksı Non Drive Side	P	N <sup>(3)</sup>	M	R	S	
5,5	2	Q2E112M2CE	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47°	30*47°	160	110	130	0	M8
	4	Q2E112M4D	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47°	30*47°	160	110	130	0	M8
	2	Q2E132S2C	Alüminyum	279	440,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62°10	40*62°10	200	130	165	0	M10
	4	Q2E132M4B	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62°10	40*62°10	200	130	165	0	M10
	6	Q2E132M6C	Alüminyum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62°10	40*62°10	200	130	165	0	M10
	7,5	2	Q2E132M2A	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62°10	40*62°10	200	130	165	0
11,0	4	Q2E132M4C	Alüminyum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62°10	40*62°10	200	130	165	0	M10
	2	Q2E132M2AE	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62°10	40*62°10	200	130	165	0	M10

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6"

(2) DIN 6885'e göre

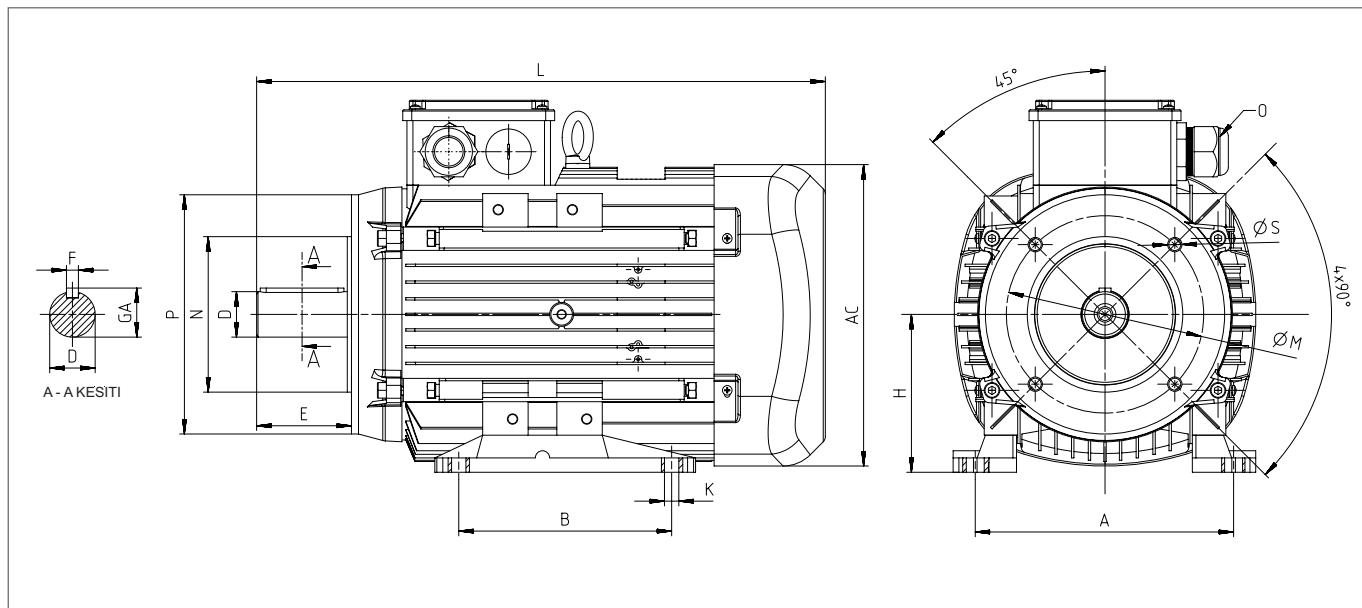
(3) Tolerans DIN EN 50347 "j6"

(1) Tolerance DIN 50347 "j6" up to 28 mm "k6" above 28 mm

(2) According to DIN 6885

(3) Tolerance DIN EN 50347 "j6"

BOYUTLAR / DIMENSIONS - B14b, B34b



Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions				Ayaklı Motorlar Foot Mounted Motors				Mil / Shaft			Rulman / Bearing		Keçe / Seal		Flanş / Flange (FB) (B14b)					
				AC	L	O	B	A	H	HD	K	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non Drive Side	Kasnak Tarafı Aksı Non Drive Side	P	N <sup>(3)</sup>	M	R	S	
0,25	4	Q2E71M4B	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	140	95	115	0	M8
0,37	2	Q2E71M2C	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	140	95	115	0	M8
	4	Q2E71M4B	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	140	95	115	0	M8
0,55	2	Q2E71M2D	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	140	95	115	0	M8
	4	Q2E80M4B	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
0,75	2	Q2E71M2DE	Alüminyum	138	252,5	1*M20	90	112	71	190	7	14	30	16,0	5	6202-2Z	6202-2Z	15*24*5	15*24*5	140	95	115	0	M8
	2	Q2E80M2B	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	4	Q2E80M4D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	6	Q2E90L6C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
1,1	2	Q2E80M2D	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	4	Q2E80M4DE	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	4	Q2E90L4C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	6	Q2E90L6D	Alüminyum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
1,5	2	Q2E80M2DE	Alüminyum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	2	Q2E90L2C	Alüminyum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	4	Q2E90L4D	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	6	Q2E100L6D	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
2,2	2	Q2E90L2D	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	4	Q2E90L4DE	Alüminyum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	4	Q2E100L4C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	6	Q2E112M6D	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
3,0	2	Q2E90L2DE	Alüminyum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	2	Q2E100L2C	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	4	Q2E100L4D	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	6	Q2E132M6A	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 veya 15
4,0	2	Q2E100L2DE	Alüminyum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	2	Q2E112M2C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
	4	Q2E112M4C	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
	6	Q2E132M6B	Alüminyum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 veya 15

## BOYUTLAR / DIMENSIONS - B14b, B34b

Güç Power (kW)	Kutup Sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil / Shaft			Rulman / Bearing		Keçe / Seal		Flanş / Flange (FB) (B14b)					
				AC	L	O	B	A	H	HD	K	D <sup>(1)</sup>	E	GA	F <sup>(2)</sup>	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksi Non Drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksi Non Drive Side	P	N <sup>(3)</sup>	M	R	S
5,5	2	Q2E112M2CE	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
	4	Q2E112M4D	Alüminyum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
	2	Q2E132S2C	Alüminyum	279	440,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 veya 15
	4	Q2E132M4B	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 veya 15
	6	Q2E132M6C	Alüminyum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 veya 15
	7,5	2	Q2E132M2A	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0
11,0	4	Q2E132M4C	Alüminyum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 veya 15
	2	Q2E132M2AE	Alüminyum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 veya 15

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6"

(2) DIN 6885'e göre

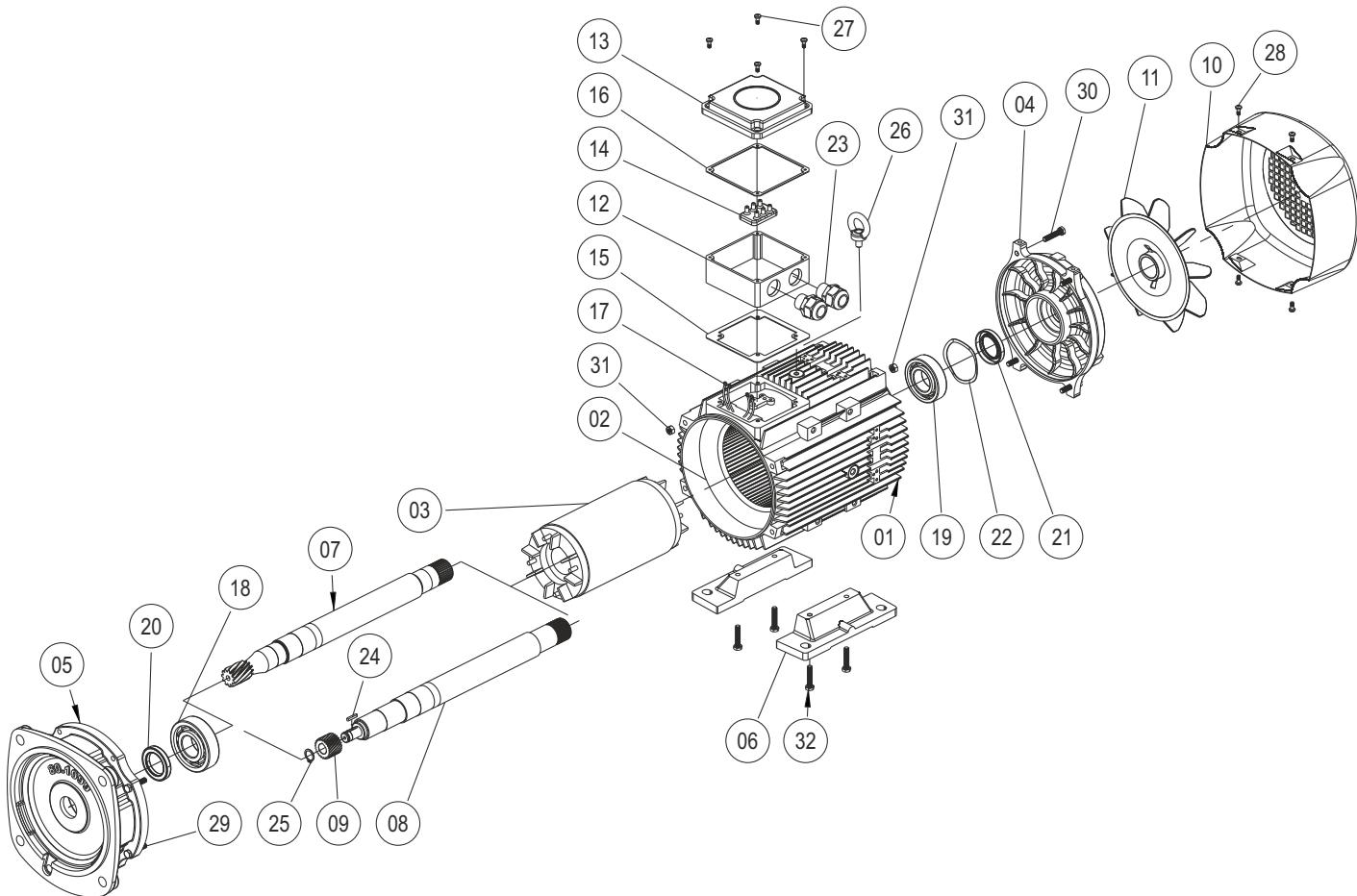
(3) Tolerans DIN EN 50347 "j6"

(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm

(2) According to DIN 6885

(3) Tolerance DIN EN 50347 "j6"

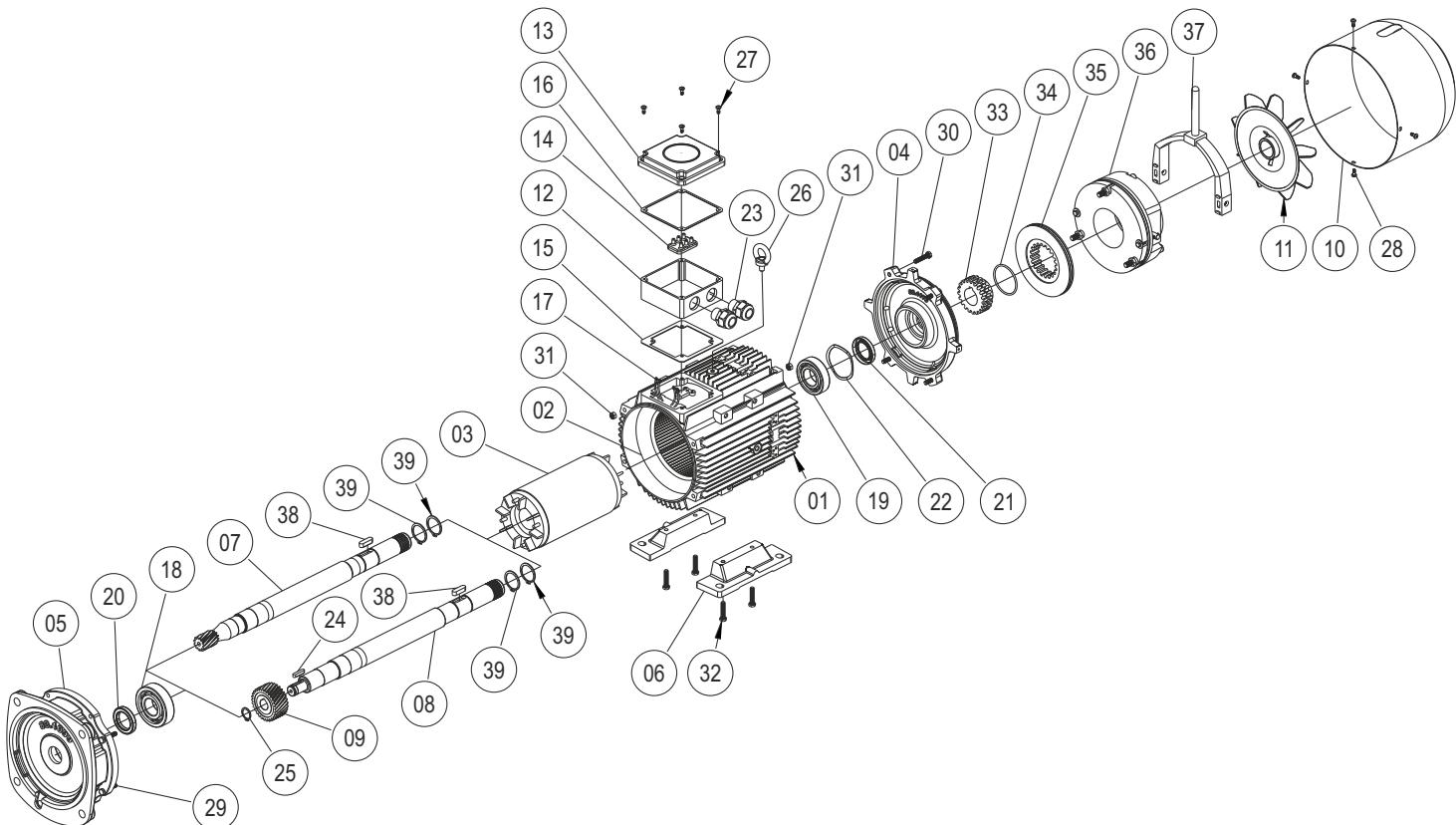


**MOTOR PARÇA LİSTESİ / MOTOR PART LIST**


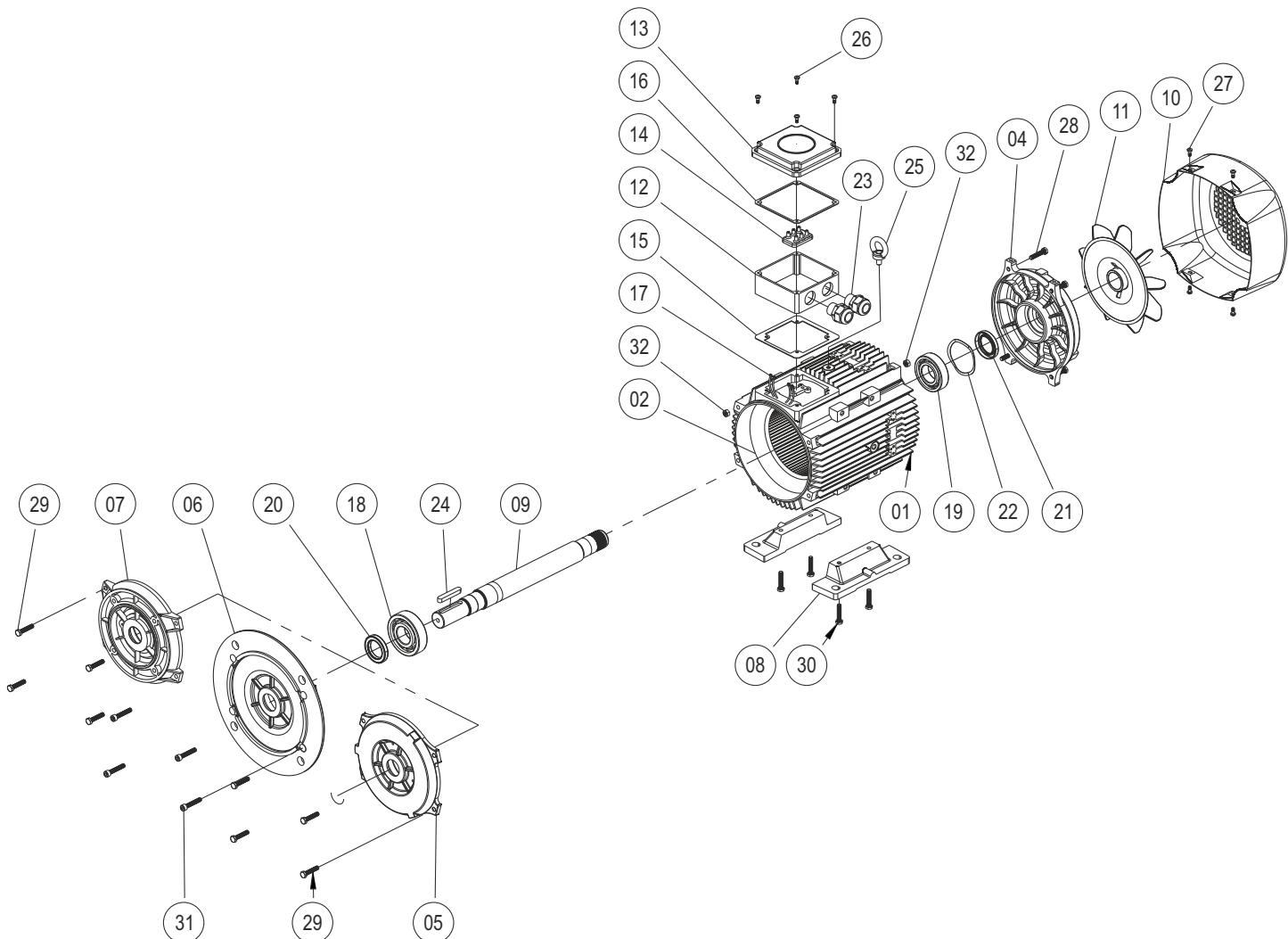
01	Gövde
02	Sarıgilı Stator
03	Rotor
04	Motor Arka Kapığı
05	PGR Motor Bağlantı Flanşı
06	Ayak
07	Motor Mili (Yekpare)
08	Motor Mili (Çakma)
09	Z1 DişliSİ
10	Fan Kapığı
11	Fan
12	Terminal Kutusu
13	Terminal Kutu Kapağı
14	Klemens Plakası
15	Terminal Contası Alt
16	Terminal Contası Üst

01	Housing	17	Kablo Grubu	17	Lead Cables
02	Wound Stator	18	Ön Rulman	18	Bal Bearing (Drive-Side)
03	Rotor	19	Arka Rulman	19	Bal Bearing (Non-Drive-Side)
04	Nondrive - Endshield	20	Keçe (Ön)	20	Seal Ring (Front)
05	Moter Connection Flange	21	Keçe (Arka)	21	Seal Ring (Back)
06	Foot	22	Rulman Gergi Yayı	22	Bearing Shim
07	Drive Shaft (Gearcut)	23	Rakor	23	Conduit
08	Drive Shaft (Plain)	24	Kama	24	Key
09	Z1 Gear	25	Segman	25	Circilip DIN 471
10	Fan Cover	26	Mapa	26	Eye Bolt
11	Fan	27	Yıldız Başlı Civata	27	Pan Head Screws
12	Terminal Box	28	Yıldız Başlı Civata	28	Pan Head Screws
13	Terminal Box Cover	29	Civata DIN 933	29	Bolt
14	Terminal Plate	30	Civata DIN 933	30	Bolt
15	Terminal Gasket Down	31	Somun	31	Nut
16	Terminal Gasket Up	32	Civata DIN 933	32	Bolt

## FRENLİ MOTOR PARÇA LİSTESİ / BRAKE MOTOR PART LIST

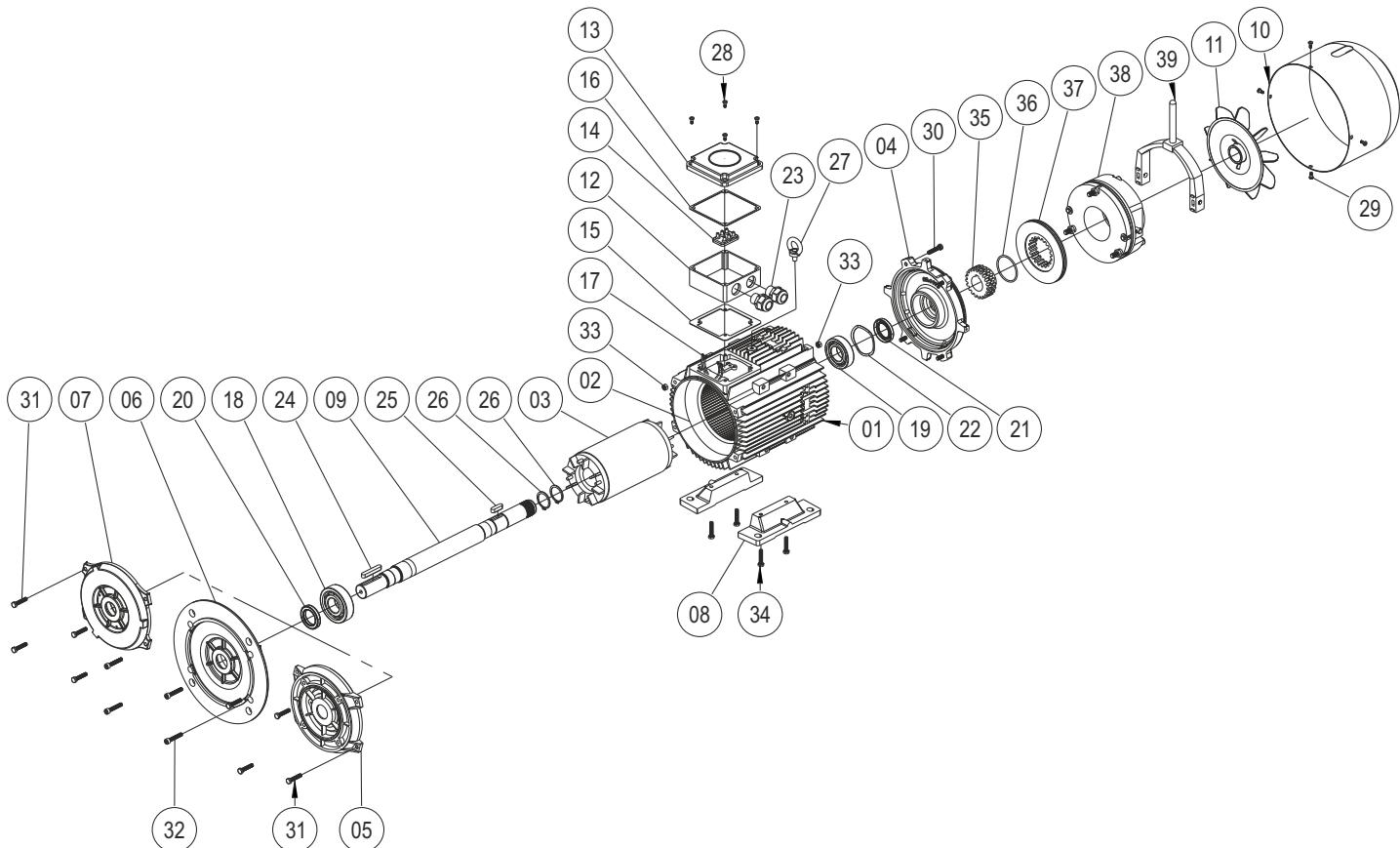


01	Gövde	01	Housing	21	Keçe (Arka)	21	Seal Ring (Back)
02	Sargılı Stator	02	Wound Stator	22	Rulman Gergi Yayı	22	Bearing Shim
03	Rotor	03	Rotor	23	Rakor	23	Conduit
04	Fren Flanşı	04	Brake Connection Flange	24	Kama	24	Key
05	PGR Motor Bağlantı Flanşı	05	Motor Connection Flange	25	Segman	25	Circilip DIN 471
06	Ayak	06	Foot	26	Mapa	26	Eye Bolt
07	Motor Mili (Yekpare)	07	Drive Shaft (Gearcut)	27	Yıldız Başlı Civata	27	Pan Head Screws
08	Motor Mili (Çakma)	08	Drive Shaft (Plain)	28	Yıldız Başlı Civata	28	Pan Head Screws
09	Z1 Dişlisi	09	Z1 Gear	29	Civata DIN 933	29	Bolt
10	Fan Kapağı	10	Fan Cover	30	Civata DIN 933	30	Bolt
11	Fan	11	Fan	31	Somun	31	Nut
12	Terminal Kutusu	12	Terminal Box	32	Civata DIN 933	32	Bolt
13	Terminal Kutu Kapağı	13	Terminal Box Cover	33	Fren Kaplini / Coupling	33	Coupling
14	Klemens Plakası	14	Terminal Plate	34	O-Ring / O-Ring	34	O-Ring
15	Terminal Contası Alt	15	Terminal Gasket Down	35	Fren Balatası / Break Lining	35	Brake Lining
16	Terminal Contası Üst	16	Terminal Gasket Up	36	Fren / Break	36	Brake
17	Kablo Grubu	17	Lead Cables	37	Manuel Kolu / Hand Release	37	Hand Release
18	Ön Rulman	18	Bal Bearing (Drive-Side)	38	Kama / Key	38	Key
19	Arka Rulman	19	Bal Bearing (Non-Drive-Side)	39	Segman / Circilip DIN 471	39	Circilip DIN 471
20	Keçe (Ön)	20	Seal Ring (Front)				

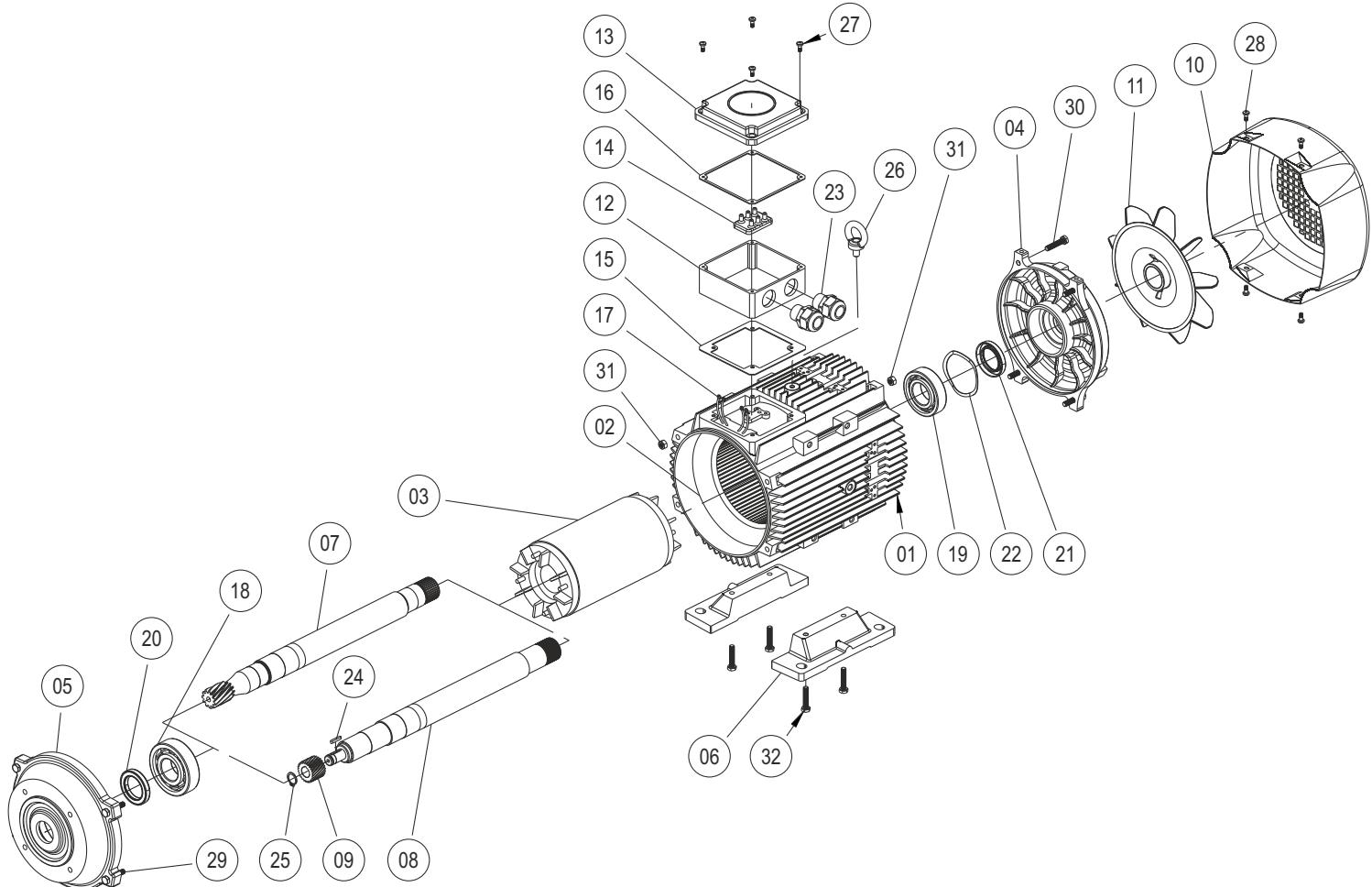
**B3-B5-B14 FLANŞLI MOTOR PARÇA LİSTESİ / B3-B5-B14 FLANGE MOTOR PART LIST**


01	Gövde	01	Housing	17	Kablo Grubu /	17	Lead Cables
02	Sargılı Stator	02	Wound Stator	18	Ön Rulman /	18	Bal Bearing (Drive-Side)
03	Rotor	03	Rotor	19	Arka Rulman /	19	Bal Bearing (Non-Drive-Side)
04	Motor Arka Kapığı	04	Nondrive - Endshield	20	Keçe (Ön) /	20	Seal Ring (Front)
05	B3 Motor Bağlantı Flanşı	05	Flange	21	Keçe (Arka) /	21	Seal Ring (Back)
06	B5 Motor Bağlantı Flanşı	06	Flange	22	Rulman Gergi Yayı /	22	Bearing Shim
07	B14 Motor Bağlantı Flanşı	07	Flange	23	Rakor /	23	Conduit
08	Ayak	08	Foot	24	Kama /	24	Key
09	Motor Mili (Standart)	09	Drive Shaft (Gearcut)	25	Mapa /	25	Eye Bolt
10	Fan Kapağı	10	Fan Cover	26	Yıldız Başlı Civata /	26	Pan Head Secrews
11	Fan	11	Fan	27	Yıldız Başlı Civata /	27	Pan Head Secrews
12	Terminal Kutusu	12	Terminal Box	28	Civata DIN 933 /	28	Bolt
13	Terminal Kutu Kapığı	13	Terminal Box Cover	29	Civata DIN 933 /	29	Bolt
14	Klemens Plakası	14	Terminal Plate	30	Civata DIN 933 /	30	Bolt
15	Terminal Contası Alt	15	Terminal Gasket Down	31	Civata DIN 912 /	31	Bolt
16	Terminal Contası Üst	16	Terminal Gasket Up	32	Somun /	32	Nut

## FRENLİ B3-B5-B14 FLANŞLI MOTOR PARÇA LİSTESİ / BRAKE B3-B5-B14 FLANGE MOTOR PART LIST



01	Gövde	01	Housing	21	Keçe (Arka)	21	Seal Ring (Back)
02	Sargılı Stator	02	Wound Stator	22	Rulman Gergi Yayı	22	Bearing Shim
03	Rotor	03	Rotor	23	Rakor	23	Conduit
04	Fren Flanşı	04	Brake Connection Flange	24	Kama	24	Key
05	B3 Motor Bağlantı Flanşı	05	Flange	25	Kama	25	Key
06	B5 Motor Bağlantı Flanşı	06	Flange	26	Segman	26	Circilip DIN 471
07	B14 Motor Bağlantı Flanşı	07	Flange	27	Mapa	27	Eye Bolt
08	Ayak	08	Foot	28	Yıldız Başlı Civata	28	Pan Head Screws
09	Motor Mili (Standart)	09	Drive Shaft (Gearcut)	29	Yıldız Başlı Civata	29	Pan Head Screws
10	Fan Kapağı	10	Fan Cover	30	Civata DIN 933	30	Bolt
11	Fan	11	Fan	31	Civata DIN 933	31	Bolt
12	Terminal Kutusu	12	Terminal Box	32	Civata DIN 912	32	Bolt
13	Terminal Kutu Kapağı	13	Terminal Box Cover	33	Somun	33	Nut
14	Klemens Plakası	14	Terminal Plate	34	Civata DIN 933	34	Bolt
15	Terminal Contası Alt	15	Terminal Gasket Down	35	Fren Kaplini	35	Brake Coupling
16	Terminal Contası Üst	16	Terminal Gasket Up	36	O-Ring	36	O-Ring
17	Kablo Grubu	17	Lead Cables	37	Fren Balatası	37	Brake Lining
18	Ön Rulman	18	Bal Bearing (Drive-Side)	38	Fren	38	Brake
19	Arka Rulman	19	Bal Bearing (Non-Drive-Side)	39	Manuel Kolu	39	Hand Release
20	Keçe (Ön)	20	Seal Ring (Front)				

**MOTOR PARÇA LİSTESİ / THE MOTOR PART LIST**


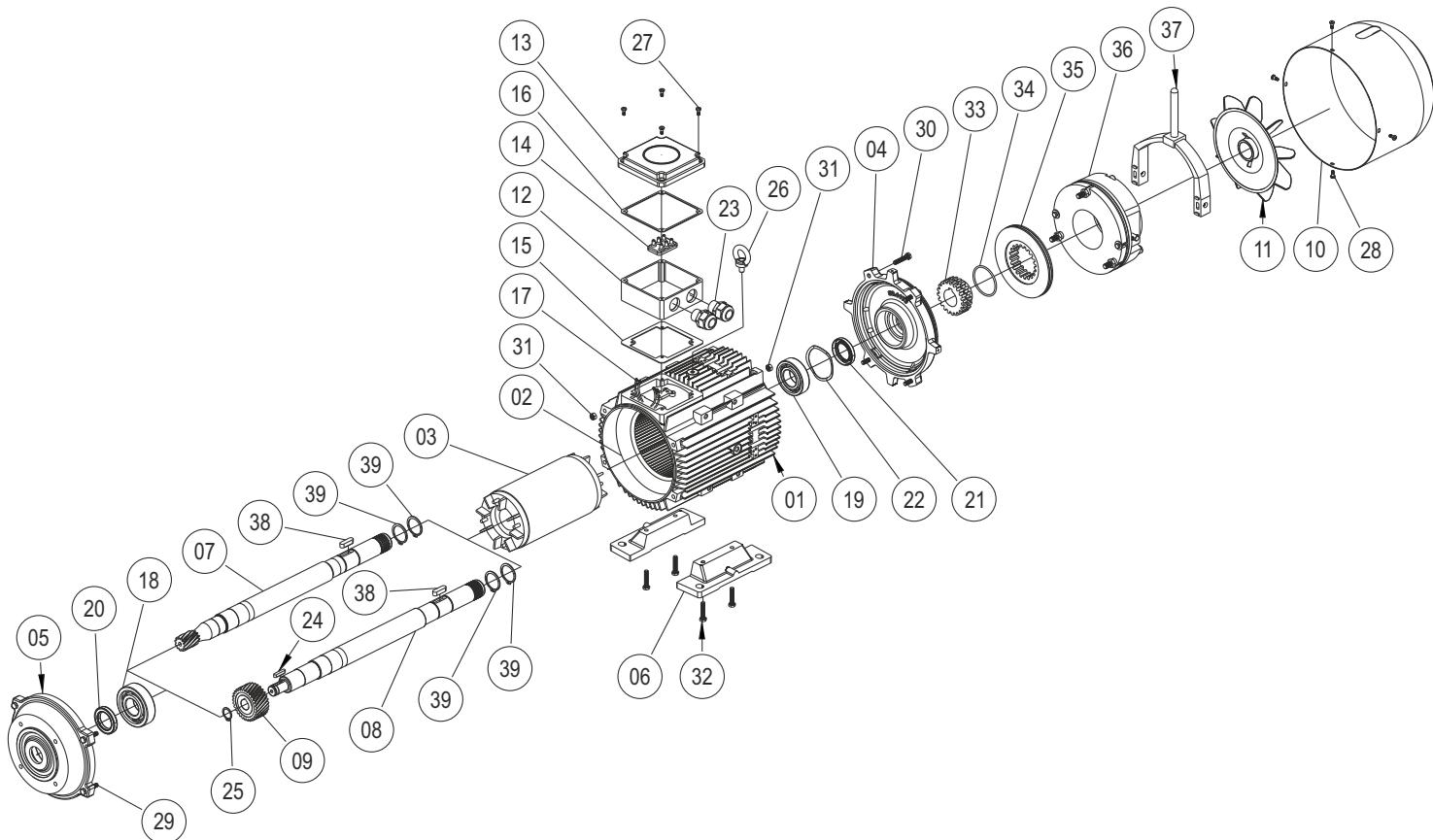
01	Gövde
02	Sargılı Stator
03	Rotor
04	Motor Arka Kapağı
05	PGR Motor Bağlantı Flanşı
06	Ayak
07	Motor Mili (Yekpare)
08	Motor Mili (Çakma)
09	Z1 DişliSİ
10	Fan Kapağı
11	Fan
12	Terminal Kutusu
13	Terminal Kuta Kapağı
14	Klemens Plakası
15	Terminal Contası Alt
16	Terminal Contası Üst

01	Housing
02	Wound Stator
03	Rotor
04	Nondrive - Endshield
05	Moter Connection Flange
06	Foot
07	Drive Shaft (Gearcut)
08	Drive Shaft (Plain)
09	Z1 Gear
10	Fan Cover
11	Fan
12	Terminal Box
13	Terminal Box Cover
14	Terminal Plate
15	Terminal Gasket Down
16	Terminal Gasket Up

17	Kablo Grubu
18	Ön Rulman
19	Arka Rulman
20	Keçe (Ön)
21	Keçe (Arka)
22	Rulman Gergi Yayı
23	Rakor
24	Kama
25	Segman
26	Mapa
27	Yıldız Başlı Civata
28	Yıldız Başlı Civata
29	Civata DIN 933
30	Civata DIN 933
31	Somun
32	Civata DIN 933

17	Lead Cables
18	Bal Bearing (Drive-Side)
19	Bal Bearing (Non-Drive-Side)
20	Seal Ring (Front)
21	Seal Ring (Back)
22	Bearing Shim
23	Conduit
24	Key
25	Circilip DIN 471
26	Eye Bolt
27	Pan Head Secrews
28	Pan Head Secrews
29	Bolt
30	Bolt
31	Nut
32	Bolt

## FRENLİ MOTOR PARÇA LİSTESİ / THE MOTOR PART LIST WITH BRAKE



01	Gövde	01	Housing	21	Keçe (Arka)	21	Seal Ring (Back)
02	Sargılı Stator	02	Wound Stator	22	Rulman Gergi Yayı	22	Bearing Shim
03	Rotor	03	Rotor	23	Rakor	23	Conduit
04	Fren Flanşı	04	Brake Connection Flange	24	Kama	24	Key
05	PGR Motor Bağlantı Flanşı	05	Flange	25	Segman	25	Circilip DIN 471
06	Ayak	06	Foot	26	Mapa	26	Eye Bolt
07	Motor Mili (Yekpare)	07	Drive Shaft (Gearcut)	27	Yıldız Başlı Civata	27	Pan Head Secrews
08	Motor Mili (Çakma)	08	Drive Shaft (Plain)	28	Yıldız Başlı Civata	28	Pan Head Secrews
09	Z1 Dışlısı	09	Z1 Gear	29	Civata DIN 933	29	Bolt
10	Fan Kapağı	10	Fan Cover	30	Civata DIN 933	30	Bolt
11	Fan	11	Fan	31	Somun	31	Nut
12	Terminal Kutusu	12	Terminal Box	32	Civata DIN 933	32	Bolt
13	Terminal Kutu Kapağı	13	Terminal Box Cover	33	Fren Kaplini	33	Coupling
14	Klemens Plakası	14	Terminal Plate	34	O-Ring	34	O-Ring
15	Terminal Contası Alt	15	Terminal Gasket Down	35	Fren Balatası	35	Brake Lining
16	Terminal Contası Üst	16	Terminal Gasket Up	36	Fren	36	Brake
17	Kablo Grubu	17	Lead Cables	37	Manuel Kolu	37	Hand Release
18	Ön Rulman	18	Bal Bearing (Drive-Side)	38	Kama	38	Key
19	Arka Rulman	19	Bal Bearing (Non-Drive-Side)	39	Segman	39	Circilip DIN 471
20	Keçe (Ön)	20	Seal Ring (Front)				

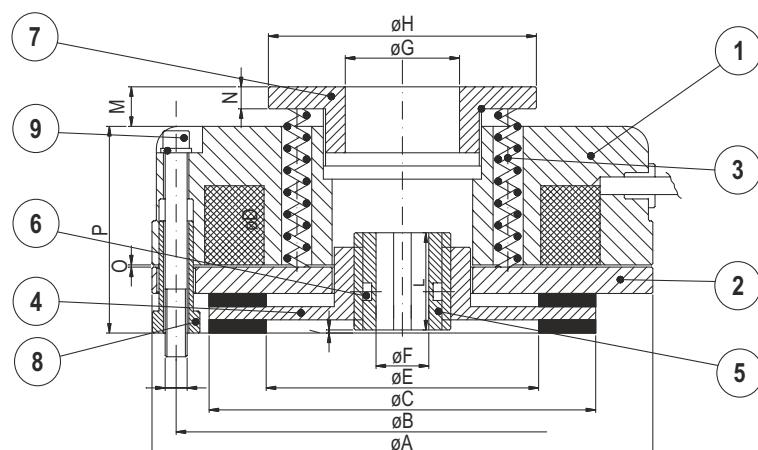
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## FREN PARÇA LİSTESİ VE ÖZELLİKLERİ

EN

## BRAKE PART LIST AND PROPERTIES

- |                       |                  |
|-----------------------|------------------|
| 1 Elektro mıknatıs    | 1 Electromagnet  |
| 2 Endüvi plakası      | 2 Armature plate |
| 3 Tork yayı           | 3 Torque springs |
| 4 Disk                | 4 Disc           |
| 5 Kamalı burç         | 5 Splined hub    |
| 6 O-ring              | 6 O-ring         |
| 7 Ayar halkası        | 7 Adjuster rings |
| 8 Ayar somunu         | 8 Adjuster nuts  |
| 9 Bağlantı civataları | 9 Fixing screws  |

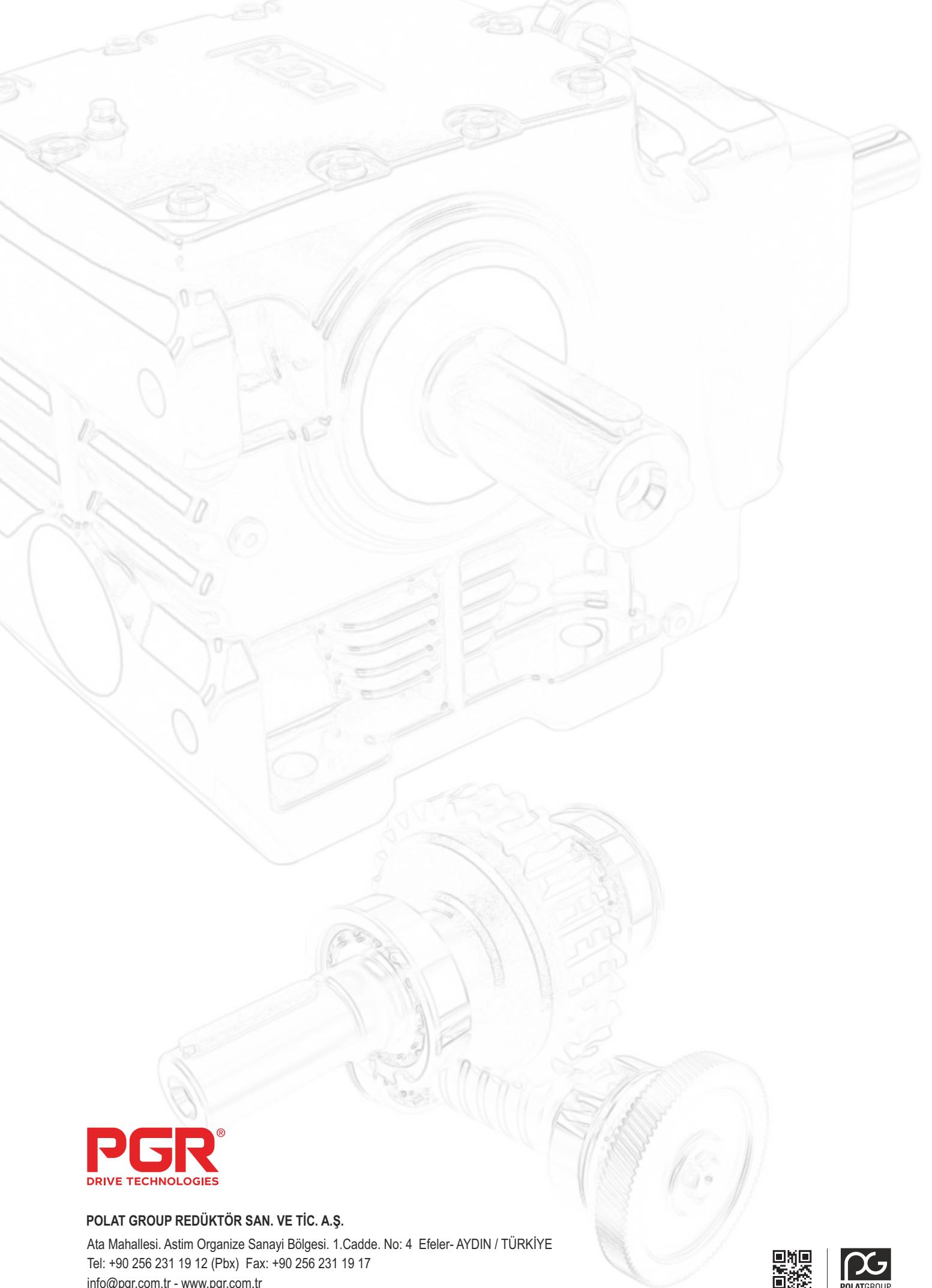


Tip / Type Fren Modeli / Brake Model	K1	K2	K3	K4	K5	K6	K7	K7/D	K8	K8/D	K9	K9/D	K9/T
Statik Fren Momenti Static Braking Torque (Nm)	5	12	16	20	40	60	90	180	200	400	300	600	900
Motorun Max. Hızı Max Speed of the motor (rpm)	3000	3000	3000	3000	3000	3000	3000	3000	1500	1500	1500	1500	1500
Giriş Gücü Input Power (W)	15	20	25	30	45	50	55	55	60	60	65	65	65
Max. Ses Max noisiness (≤dB-A)	68	69	68	69	70	70	70	70	70	69	69	69	70
Ağırlık Weight (Kg.)	1,1	1,85	2,55	2,84	4,8	7	12	15	14,3	18	23	28	34
A	84	104	114	124	148	159	189	189	218	218	248	248	248
B	72	90	103	112	132	145	170	170	196	196	230	230	230
C	61	77	88	98	119	128	151	151	176	176	204	204	204
D	3xM4	3xM5	3xM5	3xM6	3xM6	3xM8	3xM8	3xM8	6xM10	6xM10	6xM10	6xM10	9xM10
Delik toleransı K3'e kadar H7, diğerleri + 0,01/-0,01 Tollerance hole till size K3 H7, others + 0,01/-0,01	E	35	44	62	69	79	80	90	90	103	103	132	132
F	10-11 12	11-14 15	11-15	14-25	24-25 28	25-30 34	25-30 34	25 H40 34 H60	24-34	34 H60 48	44-45 48	44-45 48	44-45 48-50
G	20	26	26	42	60	60	60	60	60	60	60	60	60
H	50	61	61	79	104	104	104	104	104	104	104	104	104
I	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5
L	18	20	20	20	25	30	30	60	40	60	40	60	80
M (max)	9	9	9	9,5	18	16	14	14	18	18	18	18	18
N	4	4	4	5,5	8	8	8	8	8	8	8	8	8
O	0,2	0,2	0,2	0,2	0,3	0,3	0,3	0,3	0,3	0,4	0,4	0,4	0,4+0,5
P	38,5	41,5	47	46,5	64	69,5	79	101,5	78	98	80	105	130

**Not :** Fren çalıştırılmadan önce statik fren momenti tablodan verilen değerlere göre ± % 20 değişiklik gösterebilir.  
**Note :** The brake before running in, the static braking torque value could change by +20% from the reported value.







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**POLAT GROUP REDÜKTÖR SAN. VE TİC. A.Ş.**

Ata Mahallesi. Astim Organize Sanayi Bölgesi. 1.Cadde. No: 4 Efeler- AYDIN / TÜRKİYE  
Tel: +90 256 231 19 12 (Pbx) Fax: +90 256 231 19 17  
[info@pgr.com.tr](mailto:info@pgr.com.tr) - [www.pgr.com.tr](http://www.pgr.com.tr)

