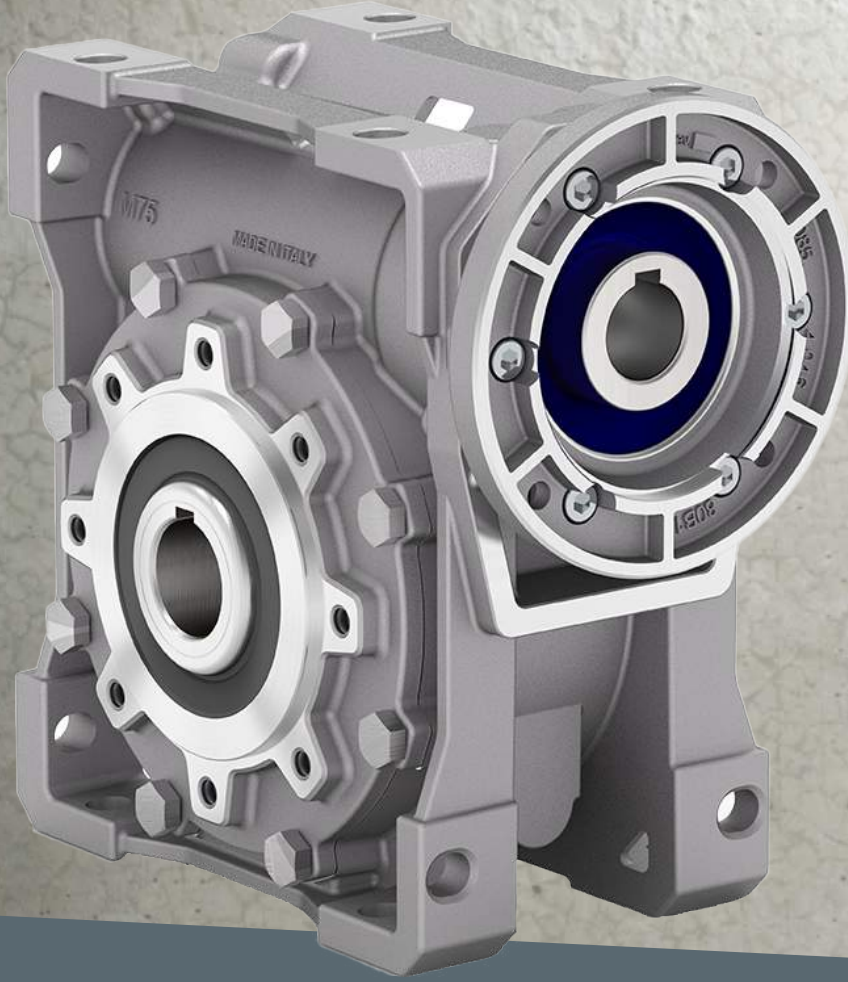


**ZET**  
R e d ü k t ö r



**M Serisi**  
**Kare Gövde Sonsuz Vidalı Redüktörler**  
*M Square Worm Gearboxes*



**02**  
**2024**

## Modüler ve Kompakt Ürün / A modular and compact product

### Tek Parça Alüminyum Alaşımli Gövde

MIL-STD 276 standardına göre üretilmiş gövde için herhangi bir ikincil yüzey işlemi ne gerek yoktur. Yüzeyler boyanabilir. Hafif gövde yapısı ve yüksek mukavemet birlikte sunulmaktadır. Yüksek hassasiyette işlenmiştir.

### Single-piece aluminum alloy housing

Is vacuum impregnated (MIL-STD 276) for protection and sealing.

No secondary finish required but readily accepts paint. Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing.

### Tek parça alaşımli çelik giriş mili ve sonsuz vida çark dişlisi

Yüksek helis açılı sonsuz vida, ısı işlem görmüş (58-60 HRC), silindirik ve profil taşlanmıştır.

Düşük ses seviyesi ve yüksek verim için çeşitli profil düzeltmeler yapılmıştır.

### Single piece alloy steel input shaft and worm shaft.

High helix angle worm is case-hardened (Rc 58-60), ground, teeth are profiled and radiused, for noise reduction and enhanced efficiency.

### Giriş Mili

Sonsuz vida milinde şok yüklerine, dur kalk çalışmaya ve ters yönlü çalışmaya uygun ön gerilmeli rulmanlar, yüksek sıcaklığa dayanıklı NBR keçeler ile birlikte kullanılmıştır.

### Oversized bearings

Support positively-retained, high speed shaft for higher shock load capacity - ideal for frequent starting and reversing application. Premium, Nitrile® high temperature seals each end.

### Keçe

Yüksek sıcaklığa dayanıklı NBR keçeler kullanılmaktadır.

### Premium, high temperature

Nitrile® output seals

### Çıkış Mili

Tork kollu kullanıma uygun kovan çıkış mili, tek ve çift çıkış mili opsiyonları sunulmaktadır.

### Standard hollow output shaft mounting

Reduces total drive envelope size, weight and cost.

Single and double solid output shaft is available.

### Yağlama

Redüktörler montaj sonrası -15, +130 derece sıcaklığa dayanıklı sentetik yağlar ile yağlanmaktadır. Havalandırma Tapası kullanımına gerek yoktur.

### Vent Free Design.

No breather or vents to leak! Factory lubricated for life with synthetic, semifluid gear lubricant with an operating range of -15°C to 130°C.

Yağsız  
/oil free



Havalandırmaz  
/ vent free

### Flanş

Tüm giriş flanşları IEC standardına uygundur.

### Flange

Fully modular to IEC and compact integrated motor. NEMA C flange.

### Sonsuz Vida Çark Dişlisi

Santrüfuj döküm tekniği ile üretilmiş bronz alaşımli sonsuz vida çarkı maksimum mukavemet için çelik göbek ile birleştirilmiştir.

### Bronze alloy worm gears.

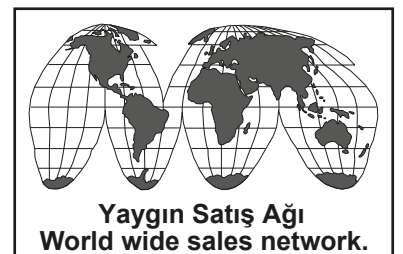
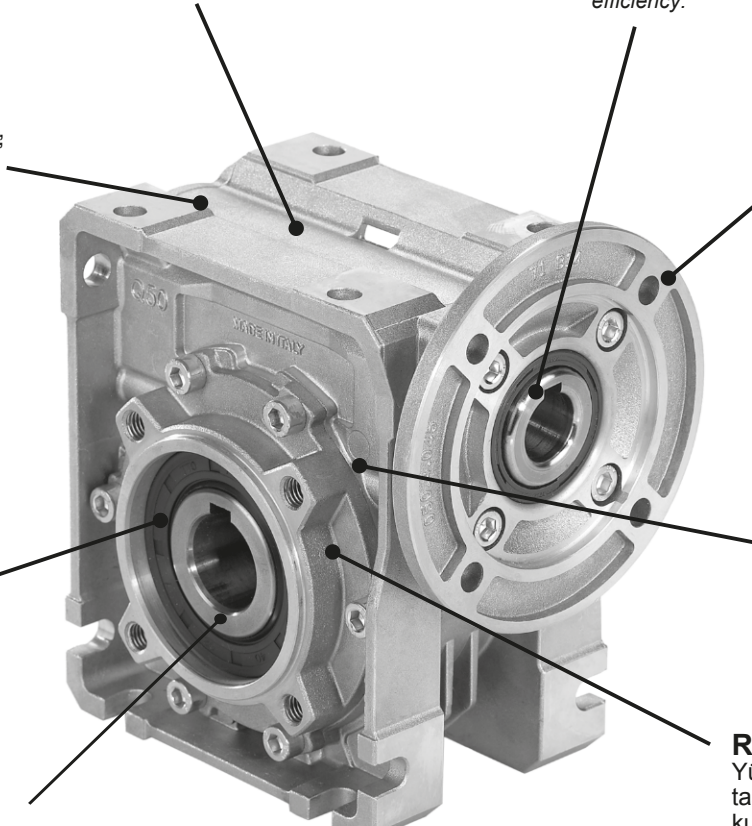
Is centrifugally cast onto an iron hub for maximum strength and superior life.

### Rulmanlar

Yüksek radyal ve eksenel yük taşıma kapasitesine sahip rulmanlar kullanılmıştır.

### Oversize bearing

For radial load capability and maximum hollow output shaft diameter.



# M Serisi Kare Gövde Sonsuz Vidalı Redüktörler / M Square Worm Gearboxes



Tipi / Types →

Sayfa / On page

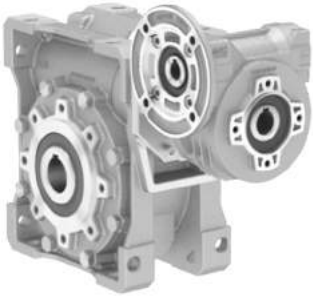
2-5	2-7	2-9	2-11	2-13	2-15	2-17	2-19	2-21
<b>M30</b> 21Nm	<b>M45</b> 47Nm	<b>M50</b> 88Nm	<b>M63</b> 160Nm	<b>M75</b> 270Nm	<b>M85</b> 364Nm	<b>M11</b> 725Nm	<b>M13</b> 1050Nm	<b>M15</b> 1550Nm



Tipi / Types →

Sayfa / On page

2-23	2-25	2-27	2-29	2-31	2-33
<b>P4M</b> 55Nm	<b>P5M</b> 88Nm	<b>P6M</b> 187Nm	<b>P7M</b> 310Nm	<b>P8M</b> 440Nm	<b>P1M</b> 803Nm



Tipi / Types →

Sayfa / On page

2-35	2-37	2-39	2-41	2-43	2-45	2-47	2-49
<b>33M</b> 38Nm	<b>43M</b> 72Nm	<b>53M</b> 138Nm	<b>63M</b> 270Nm	<b>64M</b> 290Nm	<b>74M</b> 420Nm	<b>84M</b> 596Nm	<b>15M</b> 1174Nm



Tipi / Types →

Sayfa / On page

M-1									
<b>56A</b> <b>56B</b>	<b>63A</b> <b>63B</b>	<b>71A</b> <b>71B</b>	<b>80A</b> <b>80B</b>	<b>90S</b> <b>90L</b>	<b>100LA</b> <b>100LB</b>	<b>112M</b>	<b>132S</b> <b>132M</b>	<b>160M</b> <b>160L</b>	<b>180M</b> <b>180L</b>

## NASIL SİPARİŞ EDİLİR / HOW TO ORDER

2

Tip / Type

Gövde Büyüklüğü  
/ Size

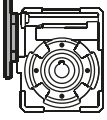
Montaj Şekli - Mounting

**P**

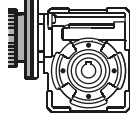
**M45**

**FC**

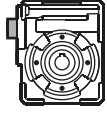
Sonsuz Vidalı Redüktörler  
Worm gearboxes



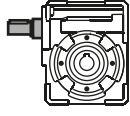
**P**



**M**

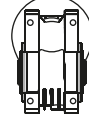


**B**

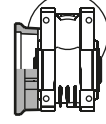


**R**

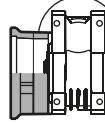
M30  
M45  
M50  
M63  
M75  
M85  
M11  
M13  
M15



**FB**

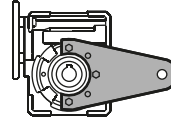


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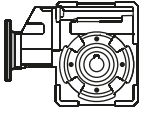
**FL**

F1  
F2  
F3  
F4

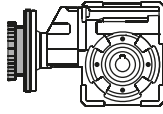


**BR**

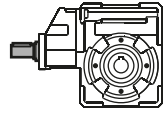
Yavru Dişli Sonsuz Vidalı Redüktörler  
Worm gearboxes with primary reduction



**P**



**M**

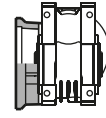


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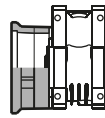
P4M  
P5M  
P6M  
P7M  
P8M  
P1M



**FB**

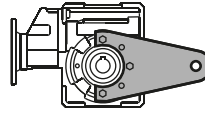


**FC**



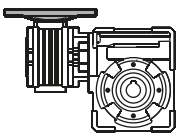
**FL**

F1  
F2  
F3  
F4

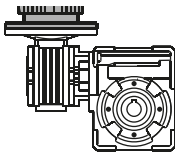


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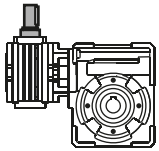
Çift Sonsuz Vidalı Redüktörler  
Combined worm gearboxes



**P**

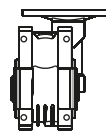


**M**

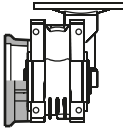


**R**

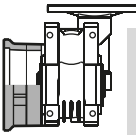
33M  
43M  
53M  
63M  
64M  
74M  
84M  
15M



**FB**

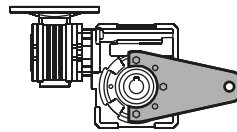


**FC**



**FL**

F1  
F2  
F3  
F4



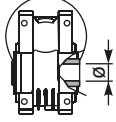
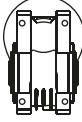
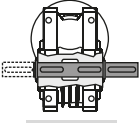
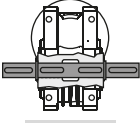
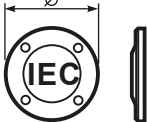
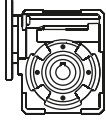
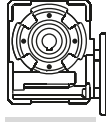
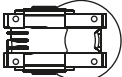

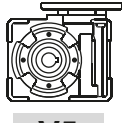
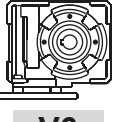
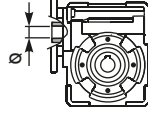


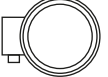
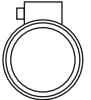


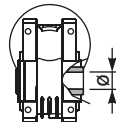
**BR**



Ürünlerimiz isteğe bağlı olarak Atex standartlarında tedarik edilebilir.  
On request we can deliver our products according to the ATEX



## NASIL SİPARİŞ EDİLİR / HOW TO ORDER

Tahvil Oranı Ratio	Çıkış Mili Hub	Çıkış Mili Konfigürasyonu Output shaft	Motor Büyüklüğü Motor size	Montaj Pozisyonu Mounting Position	Düşük Çaplı Giriş Mili Konfigürasyonu Reduced Input bore	Montaj Pozisyonu Mountin position	Terminal Kutusu Pozisyonu Terminal box position
<b>10</b>	<b>C</b>	<b>Ø</b>	<b>-Q</b>	<b>B3</b>	<b>ST</b>	<b>---</b>	
<p>Ölçü tablolarına bakınız See technical data table</p>	 <p><b>STANDART</b> <b>C</b></p> <p>M30 ⇨ ø14 M45 ⇨ ø18 M50 ⇨ ø25 M63 ⇨ ø25 M75 ⇨ ø28 M85 ⇨ ø35 M11 ⇨ ø42 M13 ⇨ ø45 M15 ⇨ ø50</p> <p><b>I</b> Paslanmaz Çelik Çıkış Mili Stainless steel hub</p>	 <p><b>Ø</b></p>  <p><b>S</b></p>  <p><b>D</b></p>	 <p><b>-M</b> Flanşsız without flange</p> <p><b>B5</b></p> <p><b>-A=56 (ø120)</b> <b>-B=63 (ø140)</b> <b>-C=71 (ø160)</b> <b>-D=80 (ø200)</b> <b>-E=90 (ø200)</b> <b>-F=100 (ø250)</b> <b>-G=132 (ø300)</b> <b>-H=160 (ø350)</b></p> <p><b>B14</b></p> <p><b>-O=56 (ø80)</b> <b>-P=63 (ø90)</b> <b>-Q=71 (ø105)</b> <b>-R=80 (ø120)</b> <b>-T=90 (ø140)</b> <b>-U=100 (ø160)</b> <b>-V=132 (ø200)</b></p> <p><b>Fırçasız Brushless</b></p> <p><b>BA=40/63-M5</b> <b>BB=50/70-M5</b> <b>BC=60/75-M5</b> <b>BD=70/90-M6</b> <b>BE=80/100-M6</b> <b>BF=95/115-M8</b> <b>BG=110/145-M8</b> <b>BH=130/165-M8</b></p> <p><b>-0=Tip R</b> <b>-S=Tip R</b> S serisi</p>	 <p><b>B3</b></p>  <p><b>B8</b></p>  <p><b>B6</b></p>  <p><b>B7</b></p>  <p><b>V5</b></p>  <p><b>V6</b></p>	 <p><b>ST</b> Standart Giriş Mili Standard bore * Kit R standard</p> <p><b>Redüksiyon Burçsuz Giriş Mili Input bore without Reduction Bushing</b></p> <p><b>-O = 9mm</b> <b>-P = 11mm</b> <b>-Q = 14mm</b> <b>-R = 19mm</b> <b>-T = 24mm</b> <b>-U = 28mm</b> <b>-V = 38mm</b></p> <p><b>KAPLIN /COUPLING</b></p> <p><b>STANDART (IEC)</b></p> <p><b>-A = 9mm</b> <b>-B = 11mm</b> <b>-C = 14mm</b> <b>-D = 19mm</b> <b>-E = 24mm</b> <b>-F = 28mm</b></p> <p><b>FIRÇASIZ / BRUSHLESS *</b></p> <p><b>-1 = 9mm</b> <b>-2 = 11mm</b> <b>-3 = 14mm</b> <b>-4 = 19mm</b> <b>-5 = 22mm</b> <b>-6 = 24mm</b></p> <p>Giriş Bağlantısı için Kaplin Ready for input coupling</p>  <p><b>-0</b> <b>Type B</b> Tipo B</p>  <p><b>-0</b> <b>Type R</b> Tipo R</p> <p>* Uygun olan yerlerde Redüksiyon Burcu ile With reduction bushing where applicable</p>	<p>Yalnızca çift sonsuz vidalı redüktörler için. Ölçü sayfalarına bakınız.</p> <p>Only for combined units See technical data table</p>	<p>With Type M specify terminal box position Con tipo M specificare posizione morsetteria</p>  <p><b>A</b></p>  <p><b>B</b> <b>STANDART</b></p>  <p><b>C</b></p>  <p><b>D</b></p>
		<p><b>Özel seçenekler Special Series</b></p> <p><b>S</b></p> <p>M45 ⇨ ø19 M50 ⇨ ø24</p> <p><b>X</b> Paslanmaz Çelik Çıkış Mili Stainless steel hub</p>					
	 <p><b>INCH</b> <b>U</b></p> <p>M45 ⇨ ø0.750" M50 ⇨ ø1.000" M63 ⇨ ø1.125" M85 ⇨ ø1.500"</p> <p><b>Z</b> Paslanmaz Çelik Çıkış Mili Stainless steel hub</p>						

## GEREKLİ FORMÜLLER / USEFUL FORMULAS

### GEREKLİ GÜÇ / REQUIRED POWER

Kaldırma / Lifting

$$P [KW] = \frac{M [Kg] \cdot g [9.81] \cdot v [m / s]}{1000}$$

Döndürme / Rotation

$$P [KW] = \frac{M [Nm] \cdot n [rpm]}{9550}$$

Doğrusal hareket / Linear movement

$$P [KW] = \frac{F [N] \cdot v [m / s]}{1000}$$

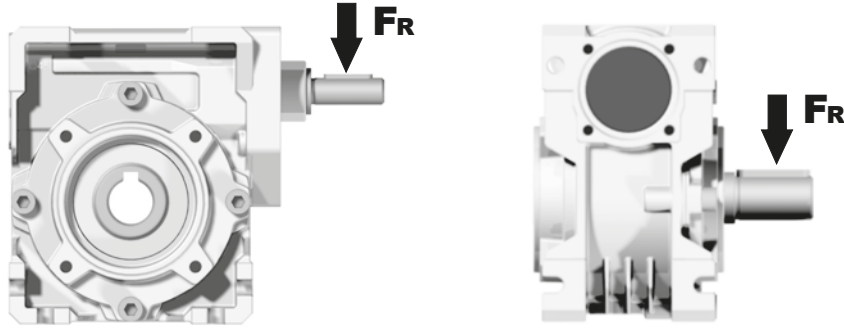
### MOMENT / TORQUE

$$M [Nm] = \frac{9550 \cdot P[KW]}{n [rpm]}$$

$$M [lb in] = \frac{63030 \cdot P[HP]}{n [rpm]}$$

## RADYAL YÜKLER / RADIAL LOADS

- Radyal yükler giriş ve çıkış milinde harici güç aktarım elemanları tarafından oluşturulur.
- Radial load generated by external transmissions keyed onto input and/or output shafts.

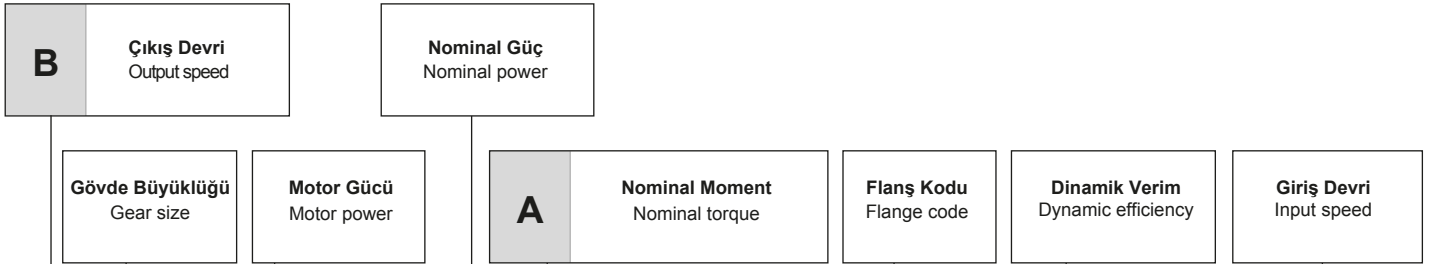


$F_R [N] = \frac{M [Nm] \cdot 2000}{d [mm]} \cdot f_k$		$F_R [N] = \frac{M [lb in] \cdot 8.9}{d [in]} \cdot f_k$	
<b>M</b>	Çıkış momenti / Output torque		
<b>d</b>	Güç aktarım elemanı çapı / Diameter of driving element		
<b>f<sub>k</sub></b>	Düzeltilme katsayısı / Factor <b>1.15</b> Dişli / Gearwheels <b>1.25</b> Zincir Dişli / Chain sprochets <b>1.75</b> V Kayış / Narrow v-belt pulley <b>2.50</b> Düz kayış / Flat-belt pulley		

- Daha yüksek radyal yükler için teknik ofisimiz ile iletişime geçiniz. Yüksek yükler mümkün olabilir.
- If your application requires higher radial loads, contact our technical office. Higher load may be possible.

## REDÜKTÖR SEÇİMİ NASIL YAPILIR / HOW TO SELECT A GEARBOX

2



# M45

**M Serisi Kare Gövde  
Sonsuz Vidalı Redüktörler**  
M Square - Gear  
**47Nm**

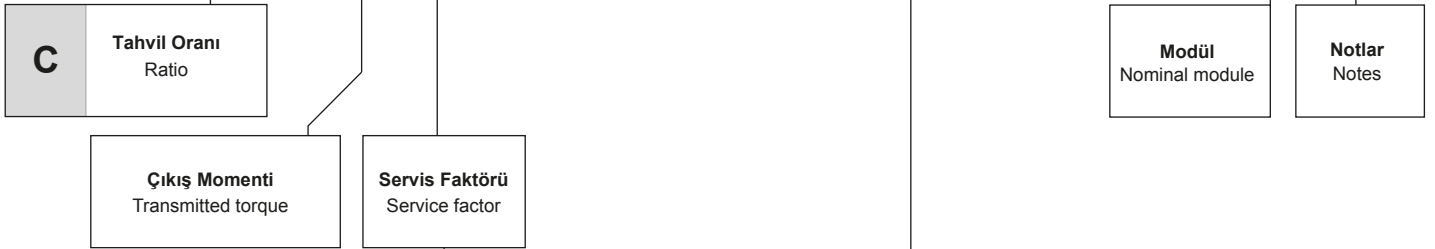
PERFORMANS TABLOLARI-ALÜMİNYUM  
RATING-ALUMINUM WORM GEARBOXES



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Oranı Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges		Uygun / Available B14 motor flanşları B14 motor flanges			Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code
							-B	-C	-O	-P	-Q			
200	7	0.37	14	2.9	1.07	41	B		B-C	B-C		80	2.2	01
140	10	0.37	20	2.2	0.82	44	B		B-C	B-C		79	2.2	02
100	14	0.37	27	1.6	0.60	44	B		B-C	B-C		77	2.4	03



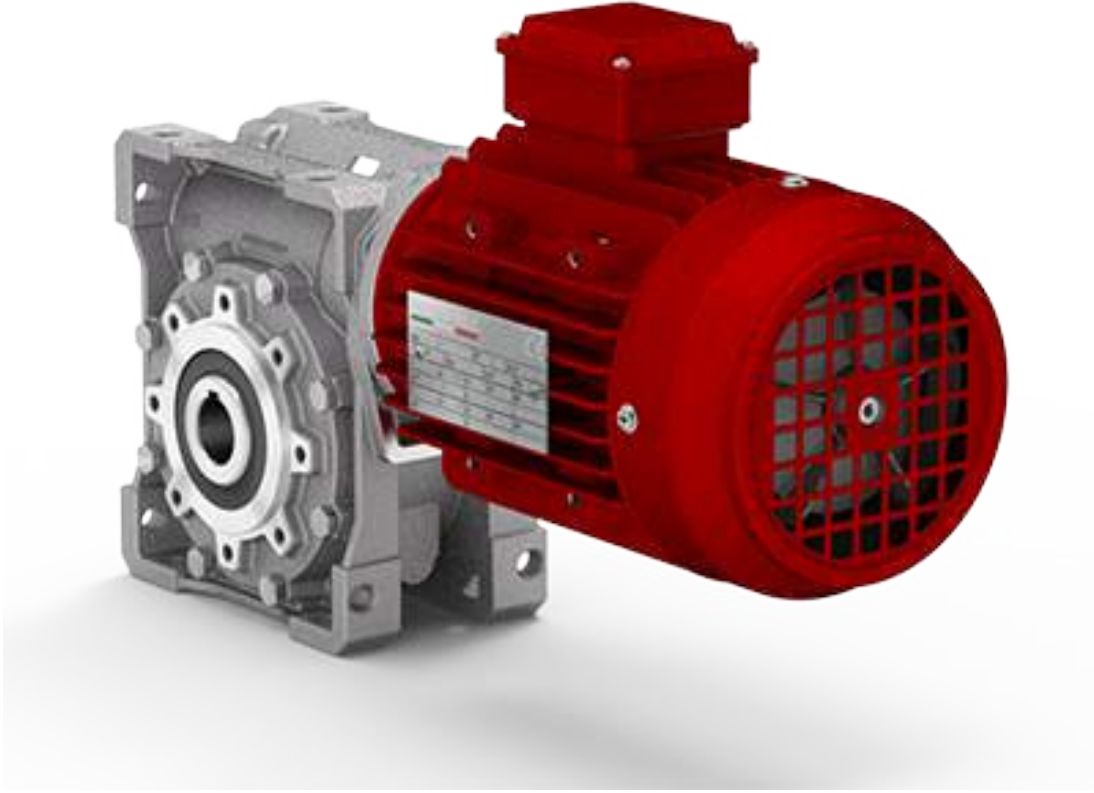
Yük Sınıfı ve Saatteki Dur-Kalk Sayısı Type of load and starts per hour		Günlük Çalışma Süresi Oper. hours per day			
		<2 sa	2 - 8 sa	8 - 16 sa	
Sürekli yada Aralıklı Çalışmada Dur-Kalk Sayısı / Saat Application with start / stop	≤ 10	Düzensiz Yükleme / Uniform	0.9	1	1.25
		Orta Darbeli Yükleme / Moderate	1	1.25	1.5
		Ağır Yükleme / Heavy	1.25	1.5	1.75
Aralıklı Çalışmada Dur-Kalk Sayısı / Saat Intermittent application with start / hour	> 10	Düzensiz Yükleme / Uniform	1.25	1.5	1.75
		Orta Darbeli Yükleme / Moderate	1.5	1.75	2
		Ağır Yükleme / Heavy	1.75	2	2.25

<b>D</b>	<b>Standart motor flanşı</b> Motor flange available
<b>B)</b>	<b>Burç ile montajı yapılabilir</b> Mounting with reduction ring
<b>C)</b>	<b>Terminal kutusu flanş pozisyonu</b> Motor flangeholes position/terminal box position
<b>B)</b>	<b>Burç kullanılmadan montajı yapılabilir</b> Available without reduction bushes

<b>A</b>	Servis faktörüne bağlı gerekli moment belirlenir	Select required torque (according to service factor)
<b>B</b>	Gerekli çıkış devri belirlenir	Select output speed
<b>C</b>	Aynı satırda belirlenen redüktörün tahvil oranı görülebilir	On the same line of selected geared motor, you can find the gear ratio
<b>D</b>	Uygun motor flanşı belirlenir (Gerekli olduğu durumlarda)	Select motor flange available (if requested)

**MOTORLU GÜÇ DEVİR SAYFALARI**  
*GRARED MOTORS PERFORMANCE TABLES*

## **GÜÇ VE DEVİR TABLOLARI**



**PERFORMANCE TABLES**





**MOTORLU GÜÇ DEVİR SAYFALARI**  
GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed n <sub>2</sub> [r.p.m]	Çıkış Momenti Output Torque m <sub>2</sub> [Nm]	Nominal Moment Nominal Torque m <sub>2R</sub>	Tahvil Ratio i	Servis Faktörü Service factor f <sub>s</sub>	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
0,06 kW	14,0	22	55	100	2,5			50	
	17,5	19	65	80	3,4			54	
	20,6	17	66	68	3,9			57	
	23,3	15	71	60	4,6	M50	56-A4	58	2-9
	28,0	14	76	50	5,6			62	
	32,6	12	82	43	6,6			66	
	38,9	11	82	36	7,5			69	
	13,7	22	29	102	1,3			49	
	20,0	17	30	70	1,8			54	
	23,3	15	41	60	2,8			56	
	30,4	12	41	46	3,4	M45	56-A4	59	2-7
	37,8	10	41	37	4			63	
	50,0	8	47	28	5,9			65	
	66,7	6	42	21	6,8			67	
	17,5	17	16	80	0,9			48	
	23,0	13	20	61	1,5			50	
	35,0	10	20	40	2			57	
	46,7	8	21	30	2,6	M30	56-A4	62	2-5
	70,0	6	19	20	3,1			70	
	93,3	5	19	15	3,9			73	
	140	3	19	10	5,5			78	
200	2	19	7	7,7			80		
0,09 kW	14,0	34	55	100	1,6			50	
	17,5	29	65	80	2,2			54	
	20,6	26	66	68	2,5			57	
	23,3	23	71	60	3	M50	56-B4	58	2-9
	28,0	21	76	50	3,7			62	
	32,6	19	82	43	4,3			66	
	38,9	17	82	36	4,9			69	
	13,7	33	29	102	0,9			49	
	20,0	25	30	70	1,2			54	
	23,3	23	41	60	1,8			56	
	30,4	18	41	46	2,3	M45	56-B4	59	2-7
	37,8	16	41	37	2,6			63	
	50,0	12	47	28	3,9			65	
	66,7	9	42	21	4,5			67	
	100	7	44	14	6,1			77	
	23,0	20	20	61	1			50	
	35,0	15	20	40	1,3			57	
	46,7	12	21	30	1,7			62	
	70,0	9	19	20	2	M30	56-B4	70	2-5
	93,3	7	19	15	2,6			73	
	140	5	19	10	3,6			78	
200	4	19	7	5,1			80		
280	3	19	5	6,9			82		


**MOTORLU GÜÇ DEVİR SAYFALARI**  
 GRARED MOTORS PERFORMANCE TABLES

Güç power	Çıkış Devri Output Speed	Çıkış Momenti Output Torque	Nominal Moment Nominal Torque	Tahvil Ratio	Servis Faktörü Service factor	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency	Ölçü Sayfası Dim Page
0,12 kW	14,9	41	119	94	2,9	M63	63-A4	52	2-11
	17,5	38	122	80	3,2			57	
	20,9	34	124	67	3,7			60	
	23,3	31	135	60	4,3			62	
	31,1	25	135	45	5,4			66	
	14,0	42	55	100	1,3	M50	63-A4	50	2-9
	17,5	36	65	80	1,8			54	
	20,6	33	66	68	2			57	
	23,3	29	71	60	2,4			58	
	28,0	26	76	50	2,9			62	
	32,6	24	82	43	3,4			66	
	38,9	21	82	36	3,9			69	
	46,7	18	88	30	5			70	
	53,9	15	71	26	4,7			69	
	77,8	11	75	18	6,6	75			
	20,0	32	30	70	0,9	M45	63-A4	54	2-7
	23,3	28	41	60	1,5			56	
	30,4	23	41	46	1,8			59	
	37,8	20	41	37	2,1			63	
	50,0	15	47	28	3,1			65	
	66,7	12	42	21	3,6			67	
	100	9	44	14	4,9			77	
	140	7	44	10	6,6			79	
	23,0	26	20	61	0,8	M30	63-A4	50	2-5
	35,0	19	20	40	1			57	
	46,7	16	21	30	1,3			62	
	70,0	12	19	20	1,6			70	
	93,3	9	19	15	2,1			73	
140	7	19	10	2,9	78				
200	5	19	7	4	80				
280	3	19	5	5,5	82				
0,18 kW	14,9	64	119	94	1,9	M63	63-B4	52	2-11
	17,5	59	122	80	2,1			57	
	20,9	52	124	67	2,4			60	
	23,3	48	135	60	2,8			62	
	31,1	39	135	45	3,5			66	
	14,0	65	55	100	0,8	M50	63-B4	50	2-9
	17,5	56	65	80	1,2			54	
	20,6	50	66	68	1,3			57	
	23,3	45	71	60	1,6			58	
	28,0	40	76	50	1,9			62	
	32,6	37	82	43	2,2			66	
	38,9	32	82	36	2,5			69	
	46,7	27	88	30	3,2			70	
	53,9	23	71	26	3			69	
	77,8	18	75	18	4,3	75			
	100	14	79	14	5,5	79			
	140	10	78	10	7,5	80			
	23,3	44	41	60	0,9	M45	63-B4	56	2-7
	30,4	35	41	46	1,2			59	
	37,8	30	41	37	1,4			63	
	50,0	24	47	28	2			65	
	66,7	18	42	21	2,3			67	
	100	14	44	14	3,1			77	
	140	10	44	10	4,3			79	
	200	7	41	7	5,6			80	
	46,7	24	21	30	0,9	M30	63-B4	62	2-5
	70,0	18	19	20	1			70	
	93,3	14	19	15	1,3			73	
140	10	19	10	1,9	78				
200	7	19	7	2,6	80				
280	5	19	5	3,6	82				



**MOTORLU GÜÇ DEVİR SAYFALARI**  
GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed n <sub>2</sub> [r.p.m]	Çıkış Momenti Output Torque m <sub>2</sub> [Nm]	Nominal Moment Nominal Torque m <sub>2R</sub>	Tahvil Ratio i	Servis Faktörü Service factor f <sub>s</sub>	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page																																																																																																																																																																																																																																																																																		
0,25 kW	14,1	101	483	99	4,8	M11	71-A4	60	2-17																																																																																																																																																																																																																																																																																		
	16,7	93	515	84	5,5			65			14,6	86	254	96	2,9	M85	71-A4	53	2-15	20,9	74	303	67	4,1	65	18,9	73	281	74	3,9	58	26,9	58	303	52	5,2	66	30,4	53	342	46	6,4	68	36,8	46	353	38	7,7	71		14,0	94	175	100	1,9	M75	71-A4	55	2-13	17,5	80	195	80	2,4	59	23,3	66	213	60	3,2	65	28,0	58	223	50	3,9	68	35,0	49	255	40	5,2	72	45,2	41	270	31	6,7	77	56,0	34	250	25	7,4	80		14,9	83	119	94	1,4	M63	71-A4	52	2-11	17,5	78	122	80	1,6	57	20,9	68	124	67	1,8	60	23,3	63	135	60	2,1	62	31,1	50	135	45	2,7	66	35,0	45	148	40	3,3	66	38,9	42	147	36	3,5	68	46,7	38	160	30	4,2	74	58,3	31	142	24	4,6	75	73,7	25	145	19	5,8	78	93,3	20	148	15	7,3	79		17,5	73	65	80	0,9	M50	71-A4	54	2-9	20,6	66	66	68	1	57	23,3	59	71	60	1,2	58	28,0	53	76	50	1,4	62	32,6	48	82	43	1,7	66	38,9	42	82	36	1,9	69	46,7	36	88	30	2,5	70	53,9	30	71	26	2,3	69	77,8	23	75	18	3,3	75	100	19	79	14	4,2	79	140	14	78	10	5,7	80	200	10	75	7	7,7	82		30,4	46	41	46	0,9	M45	71-A4	59	2-7	37,8	40	41	37	1	63	50,0	31	47	28	1,5	65	66,7	24	42	21	1,8	67	100	18	44	14	2,4	77	140	13	44	10	3,3	79	200	10
	14,6	86	254	96	2,9	M85	71-A4	53	2-15																																																																																																																																																																																																																																																																																		
	20,9	74	303	67	4,1			65																																																																																																																																																																																																																																																																																			
	18,9	73	281	74	3,9			58																																																																																																																																																																																																																																																																																			
	26,9	58	303	52	5,2			66																																																																																																																																																																																																																																																																																			
	30,4	53	342	46	6,4			68																																																																																																																																																																																																																																																																																			
	36,8	46	353	38	7,7			71																																																																																																																																																																																																																																																																																			
	14,0	94	175	100	1,9	M75	71-A4	55	2-13																																																																																																																																																																																																																																																																																		
	17,5	80	195	80	2,4			59																																																																																																																																																																																																																																																																																			
	23,3	66	213	60	3,2			65																																																																																																																																																																																																																																																																																			
	28,0	58	223	50	3,9			68																																																																																																																																																																																																																																																																																			
	35,0	49	255	40	5,2			72																																																																																																																																																																																																																																																																																			
	45,2	41	270	31	6,7			77																																																																																																																																																																																																																																																																																			
	56,0	34	250	25	7,4			80																																																																																																																																																																																																																																																																																			
		14,9	83	119	94			1,4		M63	71-A4	52	2-11																																																																																																																																																																																																																																																																														
17,5		78	122	80	1,6	57																																																																																																																																																																																																																																																																																					
20,9		68	124	67	1,8	60																																																																																																																																																																																																																																																																																					
23,3		63	135	60	2,1	62																																																																																																																																																																																																																																																																																					
31,1		50	135	45	2,7	66																																																																																																																																																																																																																																																																																					
35,0		45	148	40	3,3	66																																																																																																																																																																																																																																																																																					
38,9		42	147	36	3,5	68																																																																																																																																																																																																																																																																																					
46,7		38	160	30	4,2	74																																																																																																																																																																																																																																																																																					
58,3		31	142	24	4,6	75																																																																																																																																																																																																																																																																																					
73,7		25	145	19	5,8	78																																																																																																																																																																																																																																																																																					
93,3	20	148	15	7,3	79																																																																																																																																																																																																																																																																																						
	17,5	73	65	80	0,9	M50	71-A4	54	2-9																																																																																																																																																																																																																																																																																		
	20,6	66	66	68	1			57																																																																																																																																																																																																																																																																																			
	23,3	59	71	60	1,2			58																																																																																																																																																																																																																																																																																			
	28,0	53	76	50	1,4			62																																																																																																																																																																																																																																																																																			
	32,6	48	82	43	1,7			66																																																																																																																																																																																																																																																																																			
	38,9	42	82	36	1,9			69																																																																																																																																																																																																																																																																																			
	46,7	36	88	30	2,5			70																																																																																																																																																																																																																																																																																			
	53,9	30	71	26	2,3			69																																																																																																																																																																																																																																																																																			
	77,8	23	75	18	3,3			75																																																																																																																																																																																																																																																																																			
	100	19	79	14	4,2			79																																																																																																																																																																																																																																																																																			
140	14	78	10	5,7	80																																																																																																																																																																																																																																																																																						
200	10	75	7	7,7	82																																																																																																																																																																																																																																																																																						
	30,4	46	41	46	0,9	M45	71-A4	59	2-7																																																																																																																																																																																																																																																																																		
	37,8	40	41	37	1			63																																																																																																																																																																																																																																																																																			
	50,0	31	47	28	1,5			65																																																																																																																																																																																																																																																																																			
	66,7	24	42	21	1,8			67																																																																																																																																																																																																																																																																																			
	100	18	44	14	2,4			77																																																																																																																																																																																																																																																																																			
	140	13	44	10	3,3			79																																																																																																																																																																																																																																																																																			
	200	10	41	7	4,3			80																																																																																																																																																																																																																																																																																			


**MOTORLU GÜÇ DEVİR SAYFALARI**  
 GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed $n_2$ [r.p.m]	Çıkış Momenti Output Torque $m_2$ [Nm]	Nominal Moment Nominal Torque $m_{2R}$	Tahvil Ratio $i$	Servis Faktörü Service factor $f_s$	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page				
0,37 kW	14,1	150	483	99	3,2	M11	71-B4	60	2-17				
	16,7	138	515	84	3,7								
	21,9	111	612	64	5,5								
		14,6	128	254	96	2	M85	71-B4	53	2-15			
		20,9	110	303	67	2,8							
		18,9	108	281	74	2,6							
		26,9	86	303	52	3,5							
		30,4	79	342	46	4,3							
		36,8	68	353	38	5,2							
		14,0	139	175	100	1,3	M75	71-B4	55	2-13			
17,5		119	195	80	1,6								
23,3		98	213	60	2,2								
28,0		86	223	50	2,6								
35,0		73	255	40	3,5								
45,2		60	270	31	4,5								
56,0		50	250	25	5								
		14,9	123	119	94	1			M63		71-B4	52	2-11
	17,5	115	122	80	1,1								
	20,9	101	124	67	1,2								
	23,3	94	135	60	1,4								
	31,1	75	135	45	1,8								
	35,0	67	148	40	2,2								
	38,9	62	147	36	2,4								
	46,7	56	160	30	2,9								
	58,3	45	142	24	3,1								
	73,7	37	145	19	3,9								
	93,3	30	148	15	5								
	140	20	134	10	6,6								
		23,3	88	71	60	0,8	M50	71-B4		58		2-9	
		28,0	78	76	50	1							
32,6		72	82	43	1,1								
38,9		63	82	36	1,3								
46,7		53	88	30	1,7								
53,9		45	71	26	1,6								
77,8		34	75	18	2,2								
100		28	79	14	2,8								
140		20	78	10	3,9								
200		14	75	7	5,2								
	50,0	46	47	28	1	M45	71-B4	65	2-7				
	66,7	35	42	21	1,2								
	100	27	44	14	1,6								
	140	20	44	10	2,2								
	200	14	41	7	2,9								



**MOTORLU GÜÇ DEVİR SAYFALARI**  
GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed $n_2$ [r.p.m]	Çıkış Momenti Output Torque $m_2$ [Nm]	Nominal Moment Nominal Torque $m_{2R}$	Tahvil Ratio $i$	Servis Faktörü Service factor $f_s$	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
0,55 kW	14,1	224	483	99	2,2			60	
	16,7	206	515	84	2,5			65	
	21,9	166	612	64	3,7			69	
	26,4	140	660	53	4,7	M11	80-A4	70	2-17
	31,1	124	650	45	5,2			73	
	36,8	107	698	38	6,5			75	
	14,6	192	254	96	1,3			53	
	20,9	164	303	67	1,8			65	
	18,9	162	281	74	1,7			58	
	26,9	129	303	52	2,3			66	
	30,4	118	342	46	2,9			68	
	36,8	102	353	38	3,5	M85	80-A4	71	2-15
	50,0	79	364	28	4,6			75	
	63,6	65	309	22	4,8			78	
	70,0	60	309	20	5,2			79	
	100	41	320	14	7,8			78	
	14,0	207	175	100	0,8			55	
	17,5	178	195	80	1,1			59	
	23,3	147	213	60	1,4			65	
	28,0	128	223	50	1,7			68	
	35,0	109	255	40	2,3			72	
	45,2	90	270	31	3	M75	80-A4	77	2-13
	56,0	75	250	25	3,3			80	
	70,0	63	250	20	4			83	
	93,3	48	250	15	5,2			85	
	140	33	230	10	6,9			88	
	200	24	190	7	8			90	
	20,9	152	124	67	0,8			60	
	23,3	140	135	60	1			62	
	31,1	112	135	45	1,2			66	
	35,0	100	148	40	1,5			66	
	38,9	92	147	36	1,6			68	
	46,7	84	160	30	1,9	M63	80-A4	74	2-11
	58,3	68	142	24	2,1			75	
	73,7	56	145	19	2,6			78	
	93,3	45	148	15	3,3			79	
140	31	134	10	4,4			81		
200	22	128	7	5,8			83		
46,7	79	88	30	1,1			70		
53,9	68	71	26	1			69		
77,8	51	75	18	1,5			75		
100	42	79	14	1,9	M50	80-A4	79	2-9	
140	30	78	10	2,6			80		
200	22	75	7	3,5			82		


**MOTORLU GÜÇ DEVİR SAYFALARI**  
 GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed $n_2$ [r.p.m]	Çıkış Momenti Output Torque $m_2$ [Nm]	Nominal Moment Nominal Torque $m_{2R}$	Tahvil Ratio $i$	Servis Faktörü Service factor $f_s$	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
0,75 kW	14,1	304	483	99	1,6			60	
	16,7	279	515	84	1,8			65	
	21,9	226	612	64	2,7			69	
	26,4	190	660	53	3,5			70	
	31,1	168	650	45	3,9	M11	80-B4	73	2-17
	36,8	146	698	38	4,8			75	
	46,7	117	725	30	6,2			76	
	60,9	94	670	23	7,1			80	
	70,0	84	640	20	7,6			82	
	14,6	260	254	96	1			53	
	20,9	223	303	67	1,4			65	
	18,9	219	281	74	1,3			58	
	26,9	175	303	52	1,7			66	
	30,4	160	342	46	2,1			68	
	36,8	138	353	38	2,6	M85	80-B4	71	2-15
	50,0	107	364	28	3,4			75	
	63,6	88	309	22	3,5			78	
	70,0	81	309	20	3,8			79	
	100	56	320	14	5,7			78	
	140	41	298	10	7,3			80	
	17,5	241	195	80	0,8			59	
	23,3	199	213	60	1,1			65	
	28,0	174	223	50	1,3			68	
	35,0	147	255	40	1,7			72	
	45,2	122	270	31	2,2			77	
	56,0	102	250	25	2,4	M75	80-B4	80	2-13
	70,0	85	250	20	2,9			83	
	93,3	65	250	15	3,8			85	
140	45	230	10	5,1			88		
200	32	190	7	5,9			90		
31,1	152	135	45	0,9			66		
35,0	135	148	40	1,1			66		
38,9	125	147	36	1,2			68		
46,7	113	160	30	1,4			74		
58,3	92	142	24	1,5	M63	80-B4	75	2-11	
73,7	76	145	19	1,9			78		
93,3	61	148	15	2,4			79		
140	41	134	10	3,2			81		
200	30	128	7	4,3			83		
46,7	107	88	30	0,8			70		
53,9	92	71	26	0,8			69		
77,8	69	75	18	1,1			75		
100	57	79	14	1,4	M50	80-B4	79	2-9	
140	41	78	10	1,9			80		
200	29	75	7	2,6			82		

**MOTORLU GÜÇ DEVİR SAYFALARI**  
GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed n <sub>2</sub> [r.p.m]	Çıkış Momenti Output Torque m <sub>2</sub> [Nm]	Nominal Moment Nominal Torque m <sub>2R</sub>	Tahvil Ratio i	Servis Faktörü Service factor f <sub>s</sub>	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
1,1 kW	14,0	477	742	100	1,6	M13	90-S4	64	2-19
	17,5	405	853	80	2,1			68	
	23,3	326	928	60	2,8			73	
	28,0	279	972	50	3,5			75	
	14,1	443	483	99	1,1	M11	90-S4	60	2-17
	16,7	407	515	84	1,3			65	
	21,9	329	612	64	1,9			69	
	26,4	276	660	53	2,4			70	
	31,1	245	650	45	2,7			73	
	36,8	212	698	38	3,3			75	
	46,7	170	725	30	4,3			76	
	60,9	137	670	23	4,9			80	
	70,0	122	640	20	5,2	82			
	87,5	98	650	16	6,7	82			
	20,9	324	303	67	0,9	M85	90-S4	65	2-15
	18,9	320	281	74	0,9			58	
	26,9	256	303	52	1,2			66	
	30,4	233	342	46	1,5			68	
	36,8	201	353	38	1,8			71	
	50,0	156	364	28	2,3			75	
	63,6	128	309	22	2,4			78	
	70,0	118	309	20	2,6			79	
	100	81	320	14	3,9			78	
	140	60	298	10	5			80	
200	46	270	7	5,9	88				
35,0	215	255	40	1,2	M75	90-S4	72	2-13	
45,2	178	270	31	1,5			77		
56,0	149	250	25	1,7			80		
70,0	124	250	20	2			83		
93,3	95	250	15	2,6			85		
140	66	230	10	3,5			88		
200	47	190	7	4	90				
35,0	197	148	40	0,8	M63	90-S4	66	2-11	
38,9	182	147	36	0,8			68		
46,7	165	160	30	1			74		
58,3	134	142	24	1,1			75		
73,7	110	145	19	1,3			78		
93,3	88	148	15	1,7			79		
140	60	134	10	2,2			81		
200	43	128	7	3			83		


**MOTORLU GÜÇ DEVİR SAYFALARI**  
 GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed $n_2$ [r.p.m]	Çıkış Momenti Output Torque $m_2$ [Nm]	Nominal Moment Nominal Torque $m_{2R}$	Tahvil Ratio $i$	Servis Faktörü Service factor $f_s$	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
1,5 kW	14,0	653	742	100	1,1	M13	90-LA4	64	2-19
	17,5	555	853	80	1,5			68	
	23,3	447	928	60	2,1			73	
	28,0	383	972	50	2,5			75	
	14,1	606	483	99	0,8	M11	90-LA4	60	2-17
	16,7	557	515	84	0,9			65	
	21,9	450	612	64	1,4			69	
	26,4	378	660	53	1,7			70	
	31,1	335	650	45	1,9			73	
	36,8	291	698	38	2,4			75	
	46,7	233	725	30	3,1			76	
	60,9	188	670	23	3,6			80	
	70,0	167	640	20	3,8			82	
	87,5	134	650	16	4,9			82	
	140	88	595	10	6,8	86			
	26,9	350	303	52	0,9	M85	90-LA4	66	2-15
	30,4	319	342	46	1,1			68	
	36,8	275	353	38	1,3			71	
	50,0	214	364	28	1,7			75	
	63,6	175	309	22	1,8			78	
	70,0	161	309	20	1,9			79	
	100	111	320	14	2,9			78	
	140	82	298	10	3,7			80	
	200	63	270	7	4,3	88			
	35,0	294	255	40	0,9	M75	90-LA4	72	2-13
	45,2	243	270	31	1,1			77	
	56,0	204	250	25	1,2			80	
	70,0	169	250	20	1,5			83	
93,3	130	250	15	1,9	85				
140	90	230	10	2,6	88				
200	64	190	7	3	90				
58,3	184	142	24	0,8	M63	90-LA4	75	2-11	
73,7	151	145	19	1			78		
93,3	121	148	15	1,2			79		
140	83	134	10	1,6			81		
200	59	128	7	2,2			83		



**MOTORLU GÜÇ DEVİR SAYFALARI**  
GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed $n_2$ [r.p.m]	Çıkış Momenti Output Torque $m_2$ [Nm]	Nominal Moment Nominal Torque $m_{2R}$	Tahvil Ratio $i$	Servis Faktörü Service factor $f_s$	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
2,2 kW	14,0	947	1000	100	1,1			64	
	17,5	805	1150	80	1,4			68	
	23,3	648	1260	60	1,9			73	
	28,0	562	1400	50	2,5	M15	100-LA4	76	2-21
	35,0	462	1550	40	3,4			78	
	46,7	369	1200	30	3,3			83	
	14,0	947	742	100	0,8			64	
	17,5	805	853	80	1,1			68	
	23,3	648	928	60	1,4			73	
	28,0	555	972	50	1,8			75	
	35,0	462	1043	40	2,3			78	
	46,7	355	1047	30	2,9	M13	100-LA4	80	2-19
	56,0	311	931	25	3			84	
	70,0	252	905	20	3,6			85	
	93,3	193	917	15	4,7			87	
	140	132	820	10	6,2			89	
	187	100	741	7,5	7,4			90	
	26,4	549	660	53	1,2			70	
	31,1	486	650	45	1,3			73	
	36,8	422	698	38	1,7			75	
	46,7	337	725	30	2,1			76	
60,9	272	670	23	2,5	M11	100-LA4	80	2-17	
70,0	243	640	20	2,6			82		
87,5	194	650	16	3,3			82		
140	127	595	10	4,7			86		
200	91	546	7	6			88		
50,0	311	364	28	1,2			75		
63,6	254	309	22	1,2			78		
70,0	234	309	20	1,3			79		
100	162	320	14	2	M85	100-LA4	78	2-15	
140	118	298	10	2,5			80		
200	91	270	7	3			88		
70,0	246	250	20	1			83		
93,3	189	250	15	1,3			85		
140	130	230	10	1,8	M75	100-LA4	88	2-13	
200	93	190	7	2			90		


**MOTORLU GÜÇ DEVİR SAYFALARI**  
 GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed $n_2$ [r.p.m]	Çıkış Momenti Output Torque $m_2$ [Nm]	Nominal Moment Nominal Torque $m_{2R}$	Tahvil Ratio i	Servis Faktörü Service factor $f_s$	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
3 kW	14,0	1286	1000	100	0,8			64	
	17,5	1093	1150	80	1,1			68	
	23,3	880	1260	60	1,4	M15	100-LB4	73	2-21
	28,0	764	1400	50	1,8			76	
	35,0	627	1550	40	2,5			78	
	46,7	500	1200	30	2,4			83	
	17,5	1093	853	80	0,8			68	
	23,3	880	928	60	1,1			73	
	28,0	754	972	50	1,3			75	
	35,0	627	1043	40	1,7			78	
	46,7	482	1047	30	2,2	M13	100-LB4	80	2-19
	56,0	422	931	25	2,2			84	
	70,0	342	905	20	2,6			85	
	93,3	262	917	15	3,5			87	
	140	179	820	10	4,6			89	
	187	136	741	7,5	5,5			90	
	26,4	746	660	53	0,9			70	
	31,1	660	650	45	1			73	
	36,8	573	698	38	1,2			75	
	46,7	458	725	30	1,6			76	
	60,9	370	670	23	1,8	M11	100-LB4	80	2-17
	70,0	330	640	20	1,9			82	
	87,5	264	650	16	2,5			82	
	140	173	595	10	3,4			86	
	200	124	546	7	4,4			88	
	50,0	422	364	28	0,9			75	
	63,6	345	309	22	0,9			78	
	70,0	318	309	20	1			79	
100	219	320	14	1,5	M85	100-LB4	78	2-15	
140	161	298	10	1,9			80		
200	124	270	7	2,2			88		
93,3	256	250	15	1			85		
140	177	230	10	1,3	M75	100-LB4	88	2-13	
200	127	190	7	1,5			90		

**MOTORLU GÜÇ DEVİR SAYFALARI**  
GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed $n_2$ [r.p.m]	Çıkış Momenti Output Torque $m_2$ [Nm]	Nominal Moment Nominal Torque $m_{2R}$	Tahvil Ratio $i$	Servis Faktörü Service factor $f_s$	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
4 kW	17,5	1452	1150	80	0,8			68	
	23,3	1169	1260	60	1,1			73	
	28,0	1015	1400	50	1,4	M15	112-M4	76	2-21
	35,0	833	1550	40	1,9			78	
	46,7	665	1200	30	1,8			83	
	23,3	1169	928	60	0,8			73	
	28,0	1001	972	50	1			75	
	35,0	833	1043	40	1,3			78	
	46,7	641	1047	30	1,6			80	
	56,0	561	931	25	1,7	M13	112-M4	84	2-19
	70,0	454	905	20	2			85	
	93,3	348	917	15	2,6			87	
	140	238	820	10	3,5			89	
	187	180	741	7,5	4,1			90	
	36,8	761	698	38	0,9			75	
	46,7	609	725	30	1,2			76	
	60,9	491	670	23	1,4			80	
	70,0	438	640	20	1,5	M11	112-M4	82	2-17
	87,5	350	650	16	1,9			82	
	140	230	595	10	2,6			86	
	200	164	546	7	3,3			88	
	100	292	320	14	1,1			78	
	140	214	298	10	1,4	M85	112-M4	80	2-15
	200	164	270	7	1,6			88	
140	235	230	10	1	M75	112-M4	88	2-13	
200	168	190	7	1,1			90		
5,5 kW	23,3	1599	1260	60	0,8			73	
	28,0	1387	1400	50	1			76	
	35,0	1139	1550	40	1,4			78	
	46,7	909	1200	30	1,3			83	
	56,0	767	1200	25	1,6	M15	132-S4	84	2-21
	70,0	628	1300	20	2,1			86	
	93,3	482	1250	15	2,6			88	
	140	329	1240	10	3,8			90	
	187	249	1200	7,5	4,8			91	
	35,0	1139	1043	40	0,9			78	
	46,7	876	1047	30	1,2			80	
	56,0	767	931	25	1,2			84	
	70,0	621	905	20	1,5	M13	132-S4	85	2-19
	93,3	476	917	15	1,9			87	
	140	325	820	10	2,5			89	
	187	246	741	7,5	3			90	
	87,5	479	650	16	1,4			82	
	140	314	595	10	1,9	M11	132-S4	86	2-17
200	225	546	7	2,4			88		


**MOTORLU GÜÇ DEVİR SAYFALARI**  
 GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed n <sub>2</sub> [r.p.m]	Çıkış Momenti Output Torque m <sub>2</sub> [Nm]	Nominal Moment Nominal Torque m <sub>2R</sub>	Tahvil Ratio i	Servis Faktörü Service factor f <sub>s</sub>	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page	
7,5 kW	35,0	1541	1550	40	1			78		
	46,7	1230	1200	30	1			83		
	56,0	1037	1200	25	1,2			84		
	70,0	850	1300	20	1,5	M15	132-MA4	86	2-21	
	93,3	652	1250	15	1,9			88		
	140	445	1240	10	2,8			90		
	187	337	1200	7,5	3,6			91		
	46,7	1186	1047	30	0,9			80		
	56,0	1037	931	25	0,9			84		
	70,0	840	905	20	1,1	M13	132-MA4	85	2-19	
	93,3	645	917	15	1,4			87		
	140	440	820	10	1,9			89		
	187	333	741	7,5	2,2			90		
	87,5	648	650	16	1			82		
	140	425	595	10	1,4	M11	132-MA4	86	2-17	
	200	304	546	7	1,8			88		
	9 kW	35,0	1916	1550	40	0,8			78	
		46,7	1529	1200	30	0,8			83	
56,0		1289	1200	25	0,9			84		
70,0		1056	1300	20	1,2	M15	132-MB4	86	2-21	
93,3		810	1250	15	1,5			88		
140		553	1240	10	2,2			90		
187		419	1200	7,5	2,9			91		
70,0		1044	905	20	0,9			85		
93,3		801	917	15	1,1	M13	132-MB4	87	2-19	
140		546	820	10	1,5			89		
187		414	741	7,5	1,8			90		
87,5		806	650	16	0,8			82		
140	528	595	10	1,1	M11	132-MB4	86	2-17		
200	378	546	7	1,4			88			
11 kW	56,0	1512	1200	25	0,8			84		
	70,0	1238	1300	20	1			86		
	93,3	950	1250	15	1,3	M15	160-M4	88	2-21	
	140	648	1240	10	1,9			90		
	187	491	1200	7,5	2,4			91		
15 kW	70,0	1686	1300	20	0,8			86		
	93,3	1294	1250	15	1			88		
	140	882	1240	10	1,4	M15	160-L4	90	2-21	
	187	669	1200	7,5	1,8			91		



M SERİSİ YAVRU DİŞLİ SONSUZ VİDALI REDÜKTÖRLER  
/ M SERIES WORM GEARBOXES WITH PRIMARY REDUCTION

**ZET**  
Redüktör

**MOTORLU GÜÇ DEVİR SAYFALARI**  
GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed n <sub>2</sub> [r.p.m]	Çıkış Momenti Output Torque m <sub>2</sub> [Nm]	Nominal Moment Nominal Torque m <sub>2R</sub>	Tahvil Ratio i	Servis Faktörü Service factor f <sub>s</sub>	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
0,06 kW	7,57	37	0,12	184,9	2,1	P5M	56-A4	49	2-25
	9,04	35	0,15	154,8	2,5			56	
	12,5	28	0,19	111,8	3,2			61	
	18,1	19	0,27	77,4	4,6			61	
	23,3	17	0,27	60,2	4,5			69	
	32,6	13	0,35	43	5,8			75	
	8,8	32	0,1	159,1	1,7	P4M	56-A4	49	
	11,6	26	0,13	120,4	2,1			53	
	15,5	21	0,16	90,3	2,6			57	
	23,3	15	0,22	60,2	3,7			60	
	32,6	13	0,26	43	4,3			72	
	46,5	9	0,36	30,1	6			74	
	7,57	56	0,12	184,9	1,4			P5M	
	9,04	53	0,15	154,8	1,7	56			
12,5	42	0,19	111,8	2,1	61				
18,1	29	0,27	77,4	3	61				
23,3	26	0,27	60,2	3	69				
32,6	20	0,35	43	3,9	75				
46,5	14	0,49	30,1	5,5	76				
8,8	48	0,1	159,1	1,1	P4M	56-B4	49		
11,6	39	0,13	120,4	1,4			53		
15,5	32	0,16	90,3	1,7			57		
23,3	22	0,22	60,2	2,5			60		
32,6	19	0,26	43	2,9			72		
46,5	14	0,36	30,1	4			74		
0,12 kW	2,24	301	0,21	624			1,8	P1M	63-A4
	2,65	277	0,24	529	2	64			
	3,47	224	0,32	403	2,6	68			
	4,19	189	0,42	334	3,5	69			
	4,73	165	0,43	296	3,6	68			
	5,71	138	0,57	245	4,8	69			
	6,73	123	0,65	208	5,4	72			
	7,95	107	0,9	176	7,5	74			
	2,31	198	0,2	604,8	1,7	P8M	63-A4	40	
	3,32	180	0,26	422,1	2,1			52	
	3,00	172	0,23	466,2	1,9			45	
	4,27	142	0,35	327,6	2,9			53	
	6,59	104	0,47	212,5	3,9			60	
	5,83	104	0,48	240,2	4			53	
	7,98	91	0,58	175,5	4,9			63	
	3,70	133	0,27	378	2,2	P7M	63-A4	43	
	5,05	107	0,33	277,2	2,8			47	
	6,06	93	0,38	231	3,2			49	
	7,58	83	0,43	184,8	3,6			55	
	8,92	75	0,41	157	3,4			58	


**MOTORLU GÜÇ DEVİR SAYFALARI**  
 GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed $n_2$ [r.p.m]	Çıkış Momenti Output Torque $m_2$ [Nm]	Nominal Moment Nominal Torque $m_{2R}$	Tahvil Ratio $i$	Servis Faktörü Service factor $f_s$	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
0,12 kW	3,22	149	0,11	434,3	0,9	P6M	63-A4	42	2-27
	3,79	145	0,14	369,6	1,1			48	
	4,52	129	0,15	309,5	1,3			51	
	6,73	100	0,2	207,9	1,6			59	
	8,42	83	0,27	166,3	2,3			61	
	10,1	76	0,3	138,6	2,5			67	
	5,43	77	0,09	258	0,8	P5M	63-A4	47	2-25
	7,57	74	0,12	184,9	1			49	
	9,04	71	0,15	154,8	1,2			56	
	4,79	66	0,08	292,4	0,8			44	
	12,5	56	0,19	111,8	1,6			61	
	4,07	44	0,05	344	0,8			40	
	3,26	44	0,04	430	0,8			36	
	18,1	39	0,27	77,4	2,3			61	
	23,3	34	0,27	60,2	2,3			69	
	32,6	26	0,35	43	2,9			75	
	46,5	19	0,49	30,1	4,1	76			
	8,80	64	0,1	159,1	0,9	P4M	63-A4	49	2-23
	7,08	55	0,09	197,8	0,8			47	
	5,43	55	0,07	258	0,8			45	
	11,6	52	0,13	120,4	1,1			53	
	15,5	42	0,16	90,3	1,3			57	
	4,65	39	0,05	301	0,8			40	
	3,19	39	0,04	438,6	0,8			36	
	23,3	30	0,22	60,2	1,9			60	
	32,6	25	0,26	43	2,2			72	
	46,5	18	0,36	30,1	3			74	
0,18 kW	2,24	452	0,21	624	1,2	P1M	63-B4	59	2-33
	2,65	416	0,24	529	1,3			64	
	3,47	336	0,32	403	1,8			68	
	4,19	283	0,42	334	2,3			69	
	4,73	247	0,43	296	2,4			68	
	5,71	208	0,57	245	3,2			69	
	6,73	184	0,65	208	3,6			72	
	7,95	160	0,9	176	5	74			
	2,31	297	0,2	604,8	1,1	P8M	63-B4	40	2-31
	3,32	270	0,26	422,1	1,4			52	
	3,00	258	0,23	466,2	1,3			45	
	4,27	213	0,35	327,6	2			53	
	6,59	157	0,47	212,5	2,6			60	
	5,83	156	0,48	240,2	2,7			53	
	7,98	136	0,58	175,5	3,2	63			
	3,70	200	0,27	378	1,5	P7M	63-B4	43	2-29
	5,05	160	0,33	277,2	1,9			47	
	6,06	139	0,38	231	2,1			49	
	7,58	125	0,43	184,8	2,4			55	
	8,92	112	0,41	157	2,3			58	
	3,79	218	0,14	369,6	0,8	P6M	63-B4	48	2-27
	4,52	194	0,15	309,5	0,9			51	
	6,73	151	0,2	207,9	1,1			59	
	8,42	125	0,27	166,3	1,5			61	
	10,1	114	0,3	138,6	1,6			67	
	9,04	106	0,15	154,8	0,8	P5M	63-B4	56	2-25
	12,5	84	0,19	111,8	1,1			61	
	18,1	58	0,27	77,4	1,5			61	
	23,3	51	0,27	60,2	1,5			69	
	32,6	40	0,35	43	1,9			75	
	46,5	28	0,49	30,1	2,7			76	
	15,5	63	0,16	90,3	0,9	P4M	63-B4	57	2-23
	23,3	44	0,22	60,2	1,2			60	
32,6	38	0,26	43	1,4	72				
46,5	27	0,36	30,1	2	74				



M SERİSİ YAVRU DİŞLİ SONSUZ VİDALI REDÜKTÖRLER  
/ M SERIES WORM GEARBOXES WITH PRIMARY REDUCTION



MOTORLU GÜÇ DEVİR SAYFALARI  
GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed $n_2$ [r.p.m]	Çıkış Momenti Output Torque $m_2$ [Nm]	Nominal Moment Nominal Torque $m_{2R}$	Tahvil Ratio $i$	Servis Faktörü Service factor $f_s$	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
0,25 kW	2,65	577	0,24	529	1			64	
	3,47	467	0,32	403	1,3			68	
	4,19	393	0,42	334	1,7			69	
	4,73	343	0,43	296	1,7			68	
	5,71	288	0,57	245	2,3			69	
	6,73	255	0,65	208	2,6	P1M	71-A4	72	2-33
	7,95	222	0,9	176	3,6			74	
	10,6	144	0,95	132	3,8			64	
	13,9	117	1,3	100,5	5,1			68	
	16,8	98	1,7	83,2	6,7			69	
	2,31	413	0,2	604,8	0,8			40	
	3,32	374	0,26	422,1	1			52	
3	358	0,23	466,2	0,9			45		
4,27	296	0,35	327,6	1,4			53		
6,59	217	0,47	212,5	1,9			60		
5,83	217	0,48	240,2	1,9	P8M	71-A4	53	2-31	
7,98	189	0,58	175,5	2,3			63		
13,3	108	0,89	105,3	3,6			60		
17,1	85	1,2	81,7	4,9			61		
19,4	79	1,3	72,3	5,2			64		
23,5	68	1,5	59,7	6,1			67		
3,70	277	0,27	378	1,1			43		
5,05	222	0,33	277,2	1,3			47		
6,06	193	0,38	231	1,5			49		
7,58	173	0,43	184,8	1,7			55		
8,92	155	0,41	157	1,6	P7M	71-A4	58	2-29	
11,2	135	0,55	125,6	2,2			63		
14,9	111	0,7	94,2	2,8			69		
17,8	98	0,73	78,5	2,9			73		
22,3	83	0,87	62,9	3,5			77		
6,73	209	0,2	207,9	0,8			59		
8,42	173	0,27	166,3	1,1			61		
10,1	158	0,3	138,6	1,2			67		
12,5	134	0,35	110,8	1,4			71		
16,0	109	0,43	87,8	1,7			73		
19,8	75	0,63	70,7	2,5	P6M	71-A4	62	2-27	
24,7	62	0,76	56,6	3			64		
29,7	56	0,83	47,1	3,3			70		
37,1	47	0,88	37,7	3,5			73		
46,8	38	1,1	29,9	4,4			74		
12,5	116	0,19	111,8	0,8			61		
18,1	81	0,27	77,4	1,1			61		
23,3	71	0,27	60,2	1,1	P5M	71-A4	69	2-25	
32,6	55	0,35	43	1,4			75		
46,5	39	0,49	30,1	2			76		
23,3	62	0,22	60,2	0,9			60		
32,6	53	0,26	43	1	P4M	71-A4	72	2-23	
46,5	38	0,36	30,1	1,4			74		
0,37 kW	3,47	692	0,32	403	0,9			68	
	4,19	582	0,42	334	1,1			69	
	4,73	508	0,43	296	1,2			68	
	5,71	427	0,57	245	1,5			69	
	6,73	378	0,65	208	1,7			72	
	7,95	329	0,9	176	2,4	P1M	71-B4	74	2-33
	10,6	213	0,95	132	2,6			64	
	13,9	172	1,3	100,5	3,4			68	
	16,8	145	1,7	83,2	4,6			69	
	4,27	438	0,35	327,6	1			53	
	6,59	322	0,47	212,5	1,3			60	
	5,83	321	0,48	240,2	1,3			53	
	7,98	279	0,58	175,5	1,6			63	
	13,3	159	0,89	105,3	2,4	P8M	71-B4	60	2-31
	17,1	126	1,2	81,7	3,3			61	
	19,4	117	1,3	72,3	3,5			64	
	23,5	101	1,5	59,7	4,1			67	
	5,05	329	0,33	277,2	0,9			47	
	6,06	286	0,38	231	1			49	
	7,58	257	0,43	184,8	1,2			55	
	8,92	230	0,41	157	1,1			58	
	11,2	200	0,55	125,6	1,5	P7M	71-B4	63	2-29
	14,9	164	0,7	94,2	1,9			69	
	17,8	145	0,73	78,5	2			73	
22,3	122	0,87	62,9	2,3			77		
10,1	234	0,3	138,6	0,8			67		
12,5	199	0,35	110,8	0,9			71		
16,0	162	0,43	87,8	1,2			73		
19,8	111	0,63	70,7	1,7			62		
24,7	91	0,76	56,6	2	P6M	71-B4	64	2-27	
29,7	83	0,83	47,1	2,2			70		
37,1	69	0,88	37,7	2,4			73		
46,8	56	1,1	29,9	3			74		
32,6	81	0,35	43	0,9			75		
46,5	58	0,49	30,1	1,3	P5M	71-B4	76	2-25	
46,5	56	0,36	30,1	1	P4M	71-B4	74	2-23	




**MOTORLU GÜÇ DEVİR SAYFALARI**  
**GRARED MOTORS PERFORMANCE TABLES**

Güç power [kW]	Çıkış Devri Output Speed n <sub>2</sub> [r.p.m]	Çıkış Momenti Output Torque m <sub>2</sub> [Nm]	Nominal Moment Nominal Torque m <sub>2R</sub>	Tahvil Ratio i	Servis Faktörü Service factor f <sub>s</sub>	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
0,55 kW	4,19	865	0,42	334	0,8	P1M	80-A4	69	2-33
	4,73	755	0,43	296	0,8			68	
	5,71	634	0,57	245	1			69	
	6,73	562	0,65	208	1,2			72	
	7,95	489	0,9	176	1,6			74	
	10,6	317	0,95	132	1,7			64	
	13,9	256	1,3	100,5	2,3			68	
	16,8	215	1,7	83,2	3,1			69	
	6,59	478	0,47	212,5	0,9	P8M	80-A4	60	2-31
	5,83	478	0,48	240,2	0,9			53	
	7,98	415	0,58	175,5	1,1			63	
	13,3	237	0,89	105,3	1,6			60	
	17,1	187	1,2	81,7	2,2			61	
	19,4	174	1,3	72,3	2,3			64	
	23,5	150	1,5	59,7	2,8	67			
	7,58	381	0,43	184,8	0,8	P7M	80-A4	55	2-29
	11,2	297	0,55	125,6	1			63	
	14,9	244	0,7	94,2	1,3			69	
	17,8	215	0,73	78,5	1,3			73	
	22,3	182	0,87	62,9	1,6			77	
16,0	240	0,43	87,8	0,8	P6M	80-A4	73	2-27	
19,8	164	0,63	70,7	1,1			62		
24,7	136	0,76	56,6	1,4			64		
29,7	124	0,83	47,1	1,5			70		
37,1	103	0,88	37,7	1,6			73		
46,8	83	1,1	29,9	2			74		
5,71	865	0,57	245	0,8			P1M		80-B4
6,73	766	0,65	208	0,9	72				
7,95	666	0,9	176	1,2	74				
10,6	432	0,95	132	1,3	64				
13,9	350	1,3	100,5	1,7	68				
16,8	294	1,7	83,2	2,2	69				
7,98	566	0,58	175,5	0,8	P8M	80-B4	63	2-31	
13,3	323	0,89	105,3	1,2			60		
17,1	255	1,2	81,7	1,6			61		
19,4	237	1,3	72,3	1,7			64		
23,5	205	1,5	59,7	2			67		
14,9	333	0,7	94,2	0,9	P7M	80-B4	69	2-29	
17,8	293	0,73	78,5	1			73		
22,3	248	0,87	62,9	1,2			77		
19,8	224	0,63	70,7	0,8			P6M		80-B4
24,7	185	0,76	56,6	1	64				
29,7	169	0,83	47,1	1,1	70				
37,1	141	0,88	37,7	1,2	73				
46,8	113	1,1	29,9	1,5	74				
1,1 kW	10,6	634	0,95	132	0,9	P1M	90-S4	64	2-33
	13,9	513	1,3	100,5	1,2			68	
	16,8	431	1,7	83,2	1,5			69	
	13,3	474	0,89	105,3	0,8	P8M	90-S4	60	2-31
	17,1	374	1,2	81,7	1,1			61	
	19,4	347	1,3	72,3	1,2			64	
	23,5	300	1,5	59,7	1,4			67	
	22,3	363	0,87	62,9	0,8			P7M	
29,7	247	0,83	47,1	0,8	P6M	90-S4	70	2-27	
37,1	207	0,88	37,7	0,8			73		
46,8	166	1,1	29,9	1			74		
1,5 kW	13,9	699	1,3	100,5	0,8	P1M	90-LA4	68	2-33
	16,8	587	1,7	83,2	1,1			69	
	17,1	510	1,2	81,7	0,8	P8M	90-LA4	61	2-31
	19,4	473	1,3	72,3	0,9			64	
23,5	409	1,5	59,7	1	67				
1,85 kW	16,8	724	1,7	83,2	0,9	P1M	90-LB4	69	2-33
	23,5	505	1,5	59,7	0,8	P8M	90-LB4	67	2-31



M SERİSİ ÇİFT SONSUZ VİDALI REDÜKTÖRLER  
/ M SERIES COMBINED WORM GEARBOX

**ZET**  
Redüktör

**MOTORLU GÜÇ DEVİR SAYFALARI**  
GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed n <sub>2</sub> [r.p.m]	Çıkış Momenti Output Torque m <sub>2</sub> [Nm]	Nominal Moment Nominal Torque m <sub>2R</sub>	Tahvil Ratio i	Servis Faktörü Service factor f <sub>s</sub>	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
0,06 Kw	0,47	343	978	3000	2,8			26	
	0,58	296	1174	2400	4			28	
	0,69	269	1174	2040	4,4			30	
	0,78	238	1174	1800	4,9	15M	56-A4	30	2-49
	1,09	199	1174	1290	5,9			35	
	1,3	176	1174	1080	6,7			37	
	0,49	314	518	2856	1,6			25	
	0,71	241	518	1960	2,1			28	
	1,09	170	580	1288	3,4			30	
	1,35	150	596	1036	4	84M	56-A4	33	2-47
	1,79	117	596	784	5,1			34	
	2,38	96	596	588	6,2			37	
	3,57	76	596	392	7,9			44	
	0,5	320	420	2800	1,3			26	
	0,58	296	420	2400	1,4			28	
	0,34	269	359	4080	1,3			15	
	0,76	267	420	1840	1,6			33	
	0,95	241	420	1480	1,7			37	
	1,25	182	420	1120	2,3	74M	56-A4	37	2-45
	1,67	152	420	840	2,8			41	
	2,50	108	420	560	3,9			44	
	3,50	81	420	400	5,2			46	
	5,00	70	420	280	6			57	
	0,56	277	290	2520	1			25	
	0,65	247	290	2160	1,2			26	
	0,85	204	290	1656	1,4			28	
	1,05	176	290	1332	1,6			30	
	1,39	137	290	1008	2,1	64M	56-A4	31	2-43
	1,85	110	290	756	2,6			33	
	2,78	86	290	504	3,4			39	
	3,89	67	290	360	4,4			42	
	5,56	51	290	252	5,7			46	
	1,94		270	720	2,5			34	
	0,51	278	270	2745	1			23	
	0,97	171	270	1440	1,6			27	
	1,30	143	270	1080	1,9	63M	56-A4	30	2-41
	2,59	88	270	540	3,1			37	
	3,89	65	270	360	4,2			41	
	5,56	51	270	252	5,3			46	
	0,97	165	138	1440	0,8			26	
	1,17	143	138	1200	1			27	
	1,63	121	138	860	1,1			32	
1,94	114	138	720	1,2	53M	56-A4	36	2-39	
2,59	93	138	540	1,5			39		
3,89	67	138	360	2,1			42		
5,56	52	138	252	2,6			47		
2,50	81	72	560	0,9			33		
3,33	67	72	420	1,1			36		
5,00	55	72	280	1,3	43M	56-A4	45	2-37	
7,00	42	72	200	1,7			48		
10,0	31	72	140	2,3			50		
4,67	48	38	300	0,8			36		
6,67	42	38	210	0,9	33M	56-A4	45	2-35	
9,33	32	38	150	1,2			48		


**MOTORLU GÜÇ DEVİR SAYFALARI**  
 GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed n <sub>2</sub> [r.p.m]	Çıkış Momenti Output Torque m <sub>2</sub> [Nm]	Nominal Moment Nominal Torque m <sub>2R</sub>	Tahvil Ratio i	Servis Faktörü Service factor f <sub>s</sub>	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
0,09 kW	0,47	523	978	3000	1,9			26	
	0,58	450	1174	2400	2,6			28	
	0,69	410	1174	2040	2,9			30	
	0,78	362	1174	1800	3,2	15M	56-B4	30	2-49
	1,09	303	1174	1290	3,9			35	
	1,30	268	1174	1080	4,4			37	
	0,49	478	518	2856	1,1			25	
	0,71	368	518	1960	1,4			28	
	1,09	259	580	1288	2,2			30	
	1,35	229	596	1036	2,6			33	
	1,79	179	596	784	3,3	84M	56-B4	34	2-47
	2,38	146	596	588	4,1			37	
	3,57	116	596	392	5,2			44	
	5,00	88	596	280	6,8			47	
	7,14	68	423	196	6,2			52	
	10,0	54	423	140	7,8			58	
	0,50	488	420	2800	0,9			26	
	0,58	450	420	2400	0,9			28	
	0,34	410	359	4080	0,9			15	
0,76	407	420	1840	1			33		
0,95	367	420	1480	1,1			37		
1,25	278	420	1120	1,5	74M	56-B4	37	2-45	
1,67	231	420	840	1,8			41		
2,50	165	420	560	2,5			44		
3,50	123	420	400	3,4			46		
5,00	107	420	280	3,9			57		
0,65	376	290	2160	0,8			26		
0,85	311	290	1656	0,9			28		
1,05	268	290	1332	1,1			30		
1,39	209	290	1008	1,4			31		
1,85	167	290	756	1,7	64M	56-B4	33	2-43	
2,78	132	290	504	2,2			39		
3,89	101	290	360	2,9			42		
5,56	78	290	252	3,7			46		
0,97	260	270	1440	1			27		
1,30	217	270	1080	1,2			30		
1,94	164	270	720	1,6			34		
2,59	134	270	540	2	63M	56-B4	37	2-41	
3,89	99	270	360	2,7			41		
5,56	78	270	252	3,5			46		
1,94	174	138	720	0,8			36		
2,59	141	138	540	1			39		
3,89	101	138	360	1,4	53M	56-B4	42	2-39	
5,56	79	138	252	1,7			47		
5,00	84	72	280	0,9			45		
7,00	64	72	200	1,1	43M	56-B4	48	2-37	
10,0	47	72	140	1,5			50		
9,33	48	38	150	0,8	33M	56-B4	48	2-35	



M SERİSİ ÇİFT SONSUZ VİDALI REDÜKTÖRLER  
/ M SERIES COMBINED WORM GEARBOX

**ZET**  
Redüktör

**MOTORLU GÜÇ DEVİR SAYFALARI**  
GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed n <sub>2</sub> [r.p.m]	Çıkış Momenti Output Torque m <sub>2</sub> [Nm]	Nominal Moment Nominal Torque m <sub>2R</sub>	Tahvil Ratio i	Servis Faktörü Service factor f <sub>s</sub>	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page
0,12 kW	0,47	655	978	3000	1,5			26	
	0,58	564	1174	2400	2,1			28	
	0,69	514	1174	2040	2,3			30	
	0,78	454	1174	1800	2,6			30	
	1,09	379	1174	1290	3,1	15M	63-A4	35	2-49
	1,30	336	1174	1080	3,5			37	
	1,79	249	1174	780	4,7			38	
	2,59	191	1174	540	6,2			42	
	3,33	166	1174	420	7,1			47	
	0,49	600	518	518	2856	0,9			25
0,71	461	518	518	1960	1,1			28	
1,09	325	580	580	1288	1,8			30	
1,35	287	596	596	1036	2,1			33	
1,79	224	596	596	784	2,7	84M	63-A4	34	2-47
2,38	183	596	596	588	3,3			37	
3,57	145	596	596	392	4,1			44	
5,00	111	596	596	280	5,4			47	
7,14	86	423	423	196	4,9			52	
10,0	68	423	423	140	6,2			58	
0,76	510	420	420	1840	0,8			33	
0,95	460	420	420	1480	0,9			37	
1,25	348	420	420	1120	1,2			37	
1,67	289	420	420	840	1,5	74M	63-A4	41	2-45
2,50	207	420	420	560	2			44	
3,50	155	420	420	400	2,7			46	
5,00	134	420	420	280	3,1			57	
1,05	336	290	290	1332	0,9			30	
1,39	262	290	290	1008	1,1			31	
1,85	210	290	290	756	1,4			33	
2,78	165	290	290	504	1,8	64M	63-A4	39	2-43
3,89	127	290	290	360	2,3			42	
5,56	97	290	290	252	3			46	
0,97	327	270	270	1440	0,8			27	
1,30	272	270	270	1080	1			30	
1,94	206	270	270	720	1,3	63M	63-A4	34	2-41
2,59	168	270	270	540	1,6			37	
3,89	124	270	270	360	2,2			41	
5,56	97	270	270	252	2,8			46	
2,59	177	138	138	540	0,8			39	
3,89	127	138	138	360	1,1	53M	63-A4	42	2-39
5,56	99	138	138	252	1,4			47	
7,00	81	72	72	200	0,9			48	
10,0	59	72	72	140	1,2	43M	63-A4	50	2-37


**MOTORLU GÜÇ DEVİR SAYFALARI**  
 GRARED MOTORS PERFORMANCE TABLES

Güç	Çıkış Devri	Çıkış Momenti	Nominal Moment	Tahvil	Servis Faktörü	Redüktör	Motor	Verim	Ölçü Sayfası	
power	Output Speed	Output Torque	Nominal Torque	Ratio	Service factor	Gearbox	Motors	Dynamic efficiency	Dim Page	
[kW]	$n_2$ [r.p.m]	$m_2$ [Nm]	$m_{2R}$	$i$	$f_s$			RD		
0,18 kW	0,47	1014	978	3000	1			26		
	0,58	874	1174	2400	1,3			28		
	0,69	796	1174	2040	1,5			30		
	0,78	702	1174	1800	1,7			30		
	1,09	587	1174	1290	2			35		
	1,30	519	1174	1080	2,3		15M	63-B4	37	2-49
	1,79	385	1174	780	3				38	
	2,59	295	1174	540	4				42	
	3,33	257	1174	420	4,6				47	
	4,67	191	1174	300	6,1				49	
	6,67	150	1036	210	6,9				55	
	1,09	502	580	580	1288	1,2			30	
	1,35	444	596	596	1036	1,3			33	
	1,79	347	596	784	784	1,7			34	
	2,38	283	596	588	588	2,1			37	
	3,57	224	596	392	392	2,7	84M	63-B4	44	2-47
	5,00	171	596	280	280	3,5			47	
	7,14	132	423	196	196	3,2			52	
	10,0	106	423	140	140	4			58	
	1,25	539	420	420	1120	0,8			37	
	1,67	448	420	840	840	0,9			41	
	2,50	320	420	560	560	1,3	74M	63-B4	44	2-45
	3,50	239	420	400	400	1,8			46	
	5,00	207	420	280	280	2			57	
	1,85	324	290	756	756	0,9			33	
	2,78	256	290	504	504	1,1	64M	63-B4	39	2-43
	3,89	197	290	360	360	1,5			42	
	5,56	151	290	252	252	1,9			46	
	1,94	318	270	720	720	0,8			34	
	2,59	260	270	540	540	1	63M	63-B4	37	2-41
3,89	192	270	360	360	1,4			41		
5,56	151	270	252	252	1,8			46		
5,56	154	138	252	252	0,9	53M	63-B4	47	2-39	
10,0	91	72	140	140	0,8	43M	63-B4	50	2-37	



M SERİSİ ÇİFT SONSUZ VİDALI REDÜKTÖRLER  
/ M SERIES COMBINED WORM GEARBOX

**ZET**  
Redüktör

**MOTORLU GÜÇ DEVİR SAYFALARI**  
GRARED MOTORS PERFORMANCE TABLES

Güç power [kW]	Çıkış Devri Output Speed n <sub>2</sub> [r.p.m]	Çıkış Momenti Output Torque m <sub>2</sub> [Nm]	Nominal Moment Nominal Torque m <sub>2R</sub>	Tahvil Ratio i	Servis Faktörü Service factor f <sub>s</sub>	Redüktör Gearbox	Motor Motors	Verim Dynamic efficiency RD	Ölçü Sayfası Dim Page	
0,25 kW	0,58	1142	1174	2400	1			28		
	0,69	1040	1174	2040	1,1			30		
	0,78	918	1174	1800	1,3			30		
	1,09	768	1174	1290	1,5			35		
	1,30	679	1174	1080	1,7			37		
	1,79	504	1174	780	2,3	15M	71-A4	38	2-49	
	2,59	386	1174	540	3			42		
	3,33	336	1174	420	3,5			47		
	4,67	250	1174	300	4,7			49		
	6,67	196	1036	210	5,3			55		
	1,09	657	580	580	1288	0,9			30	
	1,35	581	596	596	1036	1			33	
	1,79	453	596	596	784	1,3			34	
	2,38	370	596	588	588	1,6	84M	71-A4	37	2-47
	3,57	293	596	392	392	2			44	
	5,00	224	596	280	280	2,7			47	
	7,14	173	423	196	196	2,4			52	
	10,0	138	423	140	140	3,1			58	
	2,50	419	420	420	560	1			44	
	3,50	313	420	400	400	1,3			46	
5,00	271	420	280	280	1,5	74M	71-A4	57	2-45	
2,78	334	290	504	504	0,9			39		
3,89	257	290	360	360	1,1			42		
5,56	197	290	252	252	1,5			46		
0,37 kW	0,69	1542	1174	2040	0,8			30		
	0,78	1361	1174	1800	0,9			30		
	1,09	1138	1174	1290	1			35		
	1,30	1007	1174	1080	1,2			37		
	1,79	747	1174	780	1,6	15M	71-B4	38	2-49	
	2,59	572	1174	540	2,1			42		
	3,33	497	1174	420	2,4			47		
	4,67	370	1174	300	3,2			49		
	6,67	291	1036	210	3,6			55		
	1,79	672	596	784	784	0,9			34	
	2,38	548	596	588	588	1,1			37	
	3,57	435	596	392	392	1,4	84M	71-B4	44	2-47
	5,00	332	596	280	280	1,8			47	
	7,14	257	423	196	196	1,6			52	
	10,0	205	423	140	140	2,1			58	
	3,50	464	420	400	400	0,9	74M	71-B4	46	2-45
5,00	402	420	280	280	1			57		
3,89	381	290	360	360	0,8	64M	71-B4	42	2-43	
5,56	292	290	252	252	1			46		
0,55 kW	1,79	1117	1174	780	1,1			38		
	2,59	855	1174	540	1,4			42		
	3,33	744	1174	420	1,6	15M	80-A4	47	2-49	
	4,67	554	1174	300	2,1			49		
	6,67	435	1036	210	2,4			55		
0,75 kW	1,79	1515	1174	780	0,8			38		
	2,59	1159	1174	540	1			42		
	3,33	1009	1174	420	1,2	15M	80-B4	47	2-47	
	4,67	751	1174	300	1,6			49		
	6,67	590	1036	210	1,8			55		



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor $f.s.$	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges		Uygun / Available B14 motor flanşları B14 motor flanges		Dinamik verim Dynamic efficiency  RD	Modül Module  [mm]	Tahvil kodu Ration code
							-A	-B	-O	-P			
							56	63	56	63			
280	5	0.18	5	3.8	0.68	19	B		B-C		82	1.26	01
200	7	0.18	7	2.8	0.50	19	B		B-C		80	1.44	02
140	10	0.18	10	2.0	0.36	19	B		B-C		78	1.44	03
93	15	0.18	13	1.4	0.25	19	B		B-C		73	1.44	04
70	20	0.18	17	1.1	0.20	19	B		B-C		70	1.09	05
47	30	0.12	15	1.4	0.17	21	B		B-C		62	1.44	06
35	40	0.12	19	1.1	0.13	20	B		B-C		57	1.09	07
23	61	0.09	19	1.1	0.10	20	B		B-C		50	0.72	08
17.5	80	0.06	16	1.0	0.06	16	B		B-C		48	0.56	09
14	100	0.06*	16	0.5	0.03	8	B		B-C		40	0.45	10

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanşı Delik Konumları  
Motor Flange Holes Position

\* Tablolarda verilen değerlerin üzerindeki motor güçleri için seçimleri  $M_{2R}$  değerini referans alarak yapınız.  
Power higher than the maximum one which can be supported by the gearbox. Select according to the torque  $M_{2R}$

**TR** M30 Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz. Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve eksenel yükler tanımlanmıştır.

**EN** Unit M30 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

YAĞLAMA M30 YAĞ MİKTARI 0.03Lt.  
LUBRICATION M30 Oil Quantity 0.03Lt.

SHELL Omala S4 WE 320

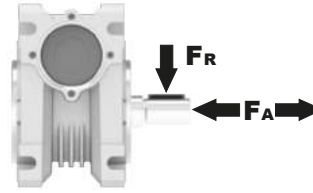
ENI Telium VSF 320

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

Tablo 1

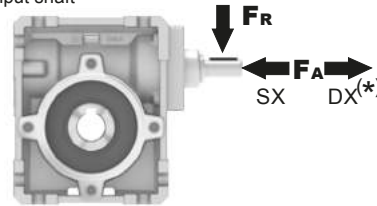
### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

Çıkış Mili  
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
200	120	600
150	140	700
100	160	800
75	180	900
50	200	1000
25	250	1250
15	280	1400

Giriş Mili  
Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	20	100

\*DX yönünde eksenel yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

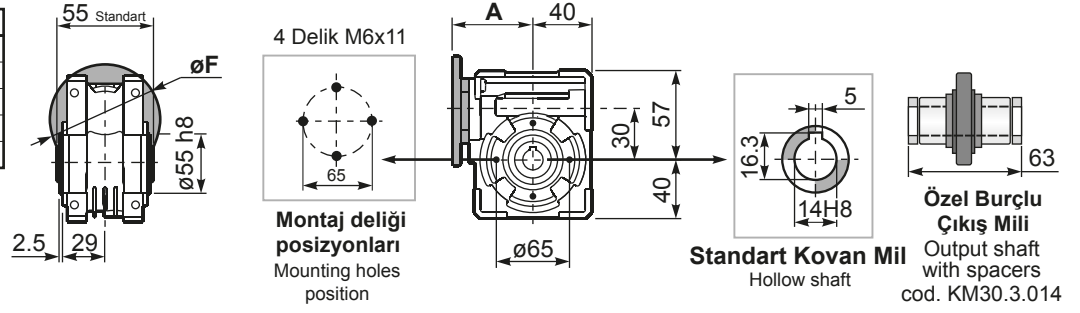
Tablo 2



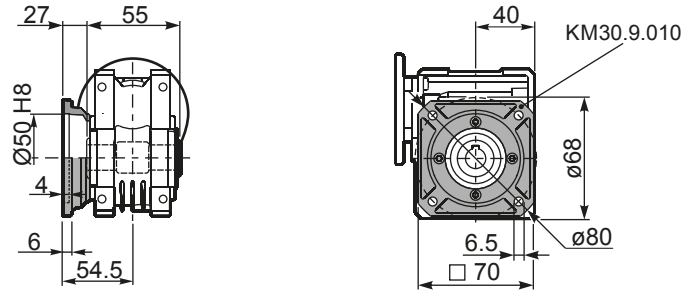
PM30**FB**... Standart Redüktör  
Basic wormbox

Ağırlık  
Gearbox  
weight **1.15 kg**

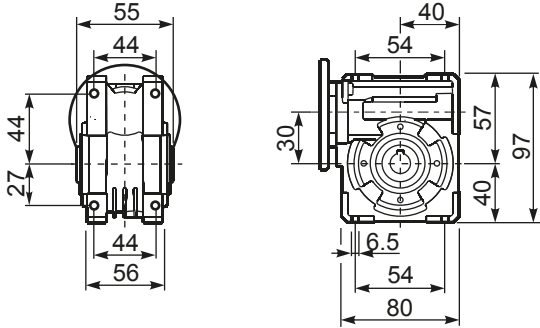
M. Flanşları	Kit kodu	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



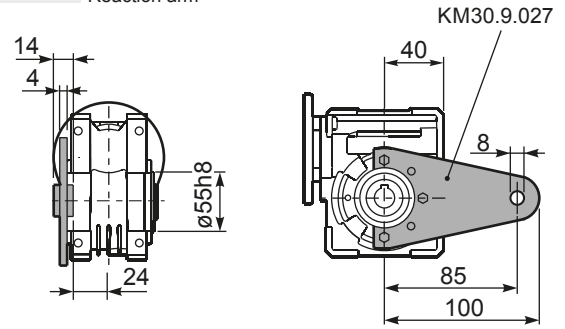
PM30**FC**... Kare Çıkış Flanşı  
Square flange



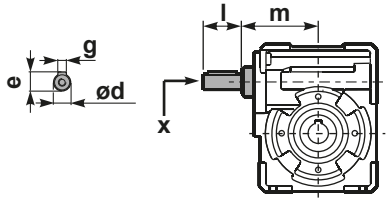
PM30**FB**... Ayak  
Feet



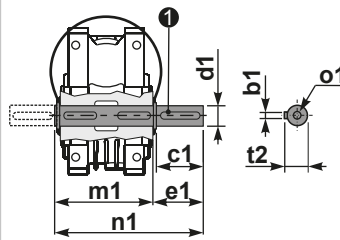
PM30**BR**... Tork Kolu  
Reaction arm



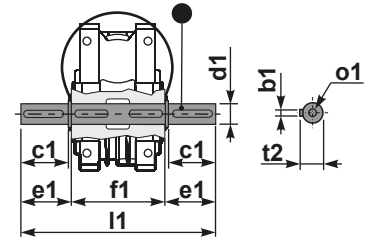
**RM30FB**... Giriş Mili  
Input shaft



PM30.....**S**... Tek Çıkış Mili  
Single Shaft



PM30.....**D**... Çift Çıkış Mili  
Double Shaft



① K030.5.028 Tip B

② K030.5.029 Tip B

	ød	e	g	l	m	x	Kit Kodu
Tip B	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
Tip S	-	-	-	-	-	-	-

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	5	25	14 <sup>-0.005</sup> <sub>-0.020</sub>	35.5	55	126	59	94.5	16	M5x14
Tip S	-	-	-	-	-	-	-	-	-	-



## HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor $f.s.$	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges		Uygun / Available B14 motor flanşları B14 motor flanges			Dinamik verim Dynamic efficiency  RD	Modül Module  [mm]	Tahvil kodu Ration code
							-B	-C	-O	-P	-Q			
							63	71	56	63	71			
200	7	0.37	14	2.9	1.07	41	B		B-C	B-C		80	2.2	01
140	10	0.37	20	2.2	0.82	44	B		B-C	B-C		79	2.2	02
100	14	0.37	27	1.6	0.60	44	B		B-C	B-C		77	2.4	03
67	21	0.37	36	1.2	0.44	42	B		B-C	B-C		67	1.6	04
50	28	0.37	46	1.0	0.38	47	B		B-C	B-C		65	2.5	05
38	37	0.25	40	1.0	0.26	41	B		B-C	B-C		63	1.8	06
30	46	0.25	46	0.9	0.22	41	B		B-C	B-C		59	1.5	07
23	60	0.18	41	1.0	0.18	41	B		B-C	B-C		56	1.2	08
20	70	0.12	31	1.0	0.12	30	B		B-C	B-C		54	1.0	09
13.7	102	0.09	31	0.9	0.09	29	B		B-C	B-C		49	0.72	10

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanşı Delik Konumları  
Motor Flange Holes Position

\* Tablolarda verilen değerlerin üzerindeki motor güçleri için seçimleri  $M_{2R}$  değerini referans alarak yapınız.  
Power higher than the maximum one which can be supported by the gearbox. Select according to the torque  $M_{2R}$

**TR** M45 Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz.  
Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve eksenel yükler tanımlanmıştır.

**EN** Unit M45 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.  
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

YAĞLAMA M45 YAĞ MİKTARI 0.09Lt.  
LUBRICATION M45 Oil Quantity 0.09Lt.

SHELL Omala S4 WE 320

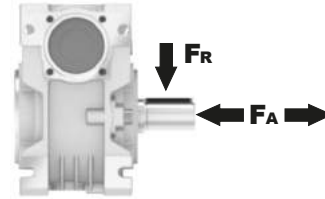
ENI Telium VSF 320

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

Tablo 1

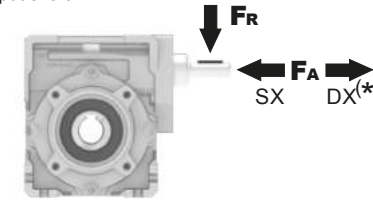
## RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

Çıkış Mili  
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
200	180	900
150	200	1000
100	220	1100
75	240	1200
50	260	1400
25	300	1800
15	400	2000

Giriş Mili  
Input shaft



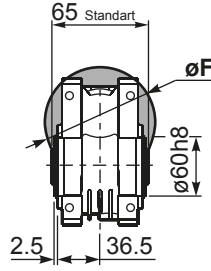
$n_1$ [r.p.m]	FA [N]	FR [N]
1400	42	210

\*DX yönünde eksenel yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

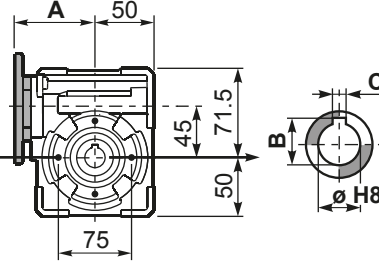
Tablo 2

PM45**FB**... Standart Redüktör  
Basic wormbox

M. Flanşları	Kit kodu	øF	A
63B5	K050.4.041	138	80
71B5	K050.4.042	160	77.5
56B14	KC40.4.049	80	77.5
63B14	K050.4.047	90	80
71B14	K050.4.045	105	77.5

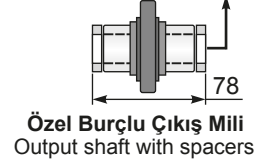


4 Delik M6x12  
Montaj deliği  
pozisyonları  
Mounting holes  
position

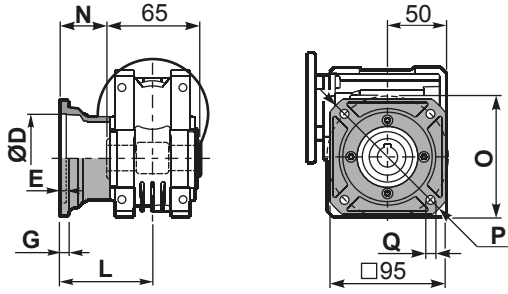


Ağırlık  
Gearbox  
weight **2.30 kg**

ø H8	B	C	*Spacer code
18 Standart	20.8	6	KM45.3.018
19 on request	21.8	6	KM45.3.019
20 on request	22.8	6	KM45.3.020

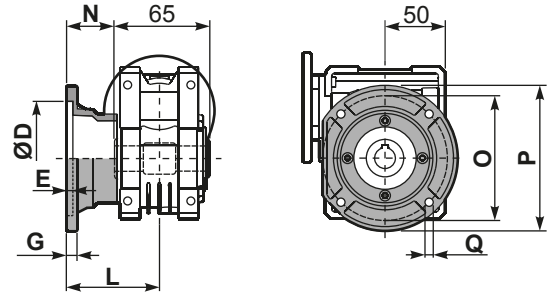


PM45**FC**... Kare Çıkış Flanşı  
Square flange



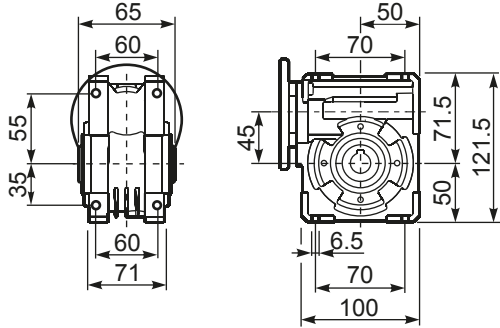
Tip B	øD	E	G	L	N	O	P	Q	Kit Kodu
FC	60 H8	4	7	67	34.5	75	110	9	KM45.9.010
FL	60 H8	4	7	97	64.5	75	110	9	KM45.9.011

PM45**F1**... Yuvarlak Çıkış Flanşı  
Round flange

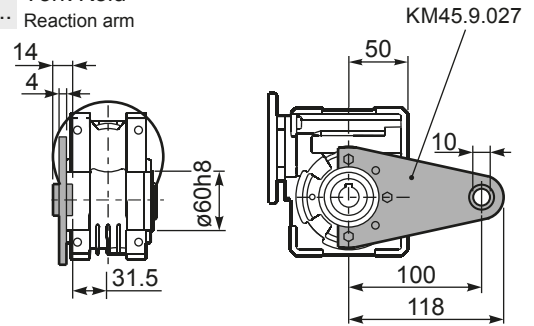


Tip S	øD	E	G	L	N	O	P	Q	Kit Kodu
F1	95H8	5	9	80	47.5	115	140	9.5	KM45.9.012
F2	-	-	-	-	-	-	-	-	-

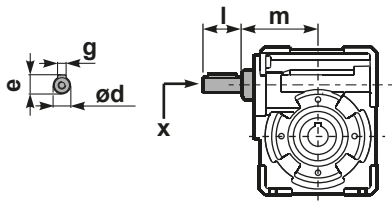
PM45**FB**... Ayak  
Feet



PM45**BR**... Tork Kolu  
Reaction arm

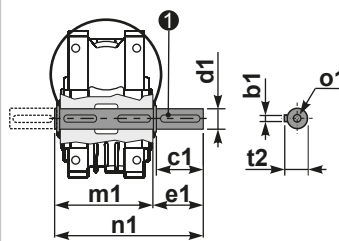


**RM45FB**... Giriş Mili  
Input shaft



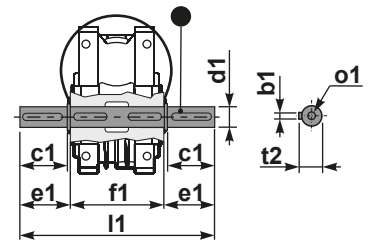
Tip	ød	e	g	l	m	x	Kit Kodu
Tip B	11 h6	12.5	4	30	74	-	① K045.5.006 PAM71 ② -
Tip S	-	-	-	-	-	-	① - ② -

PM45.....**S**... Tek Çıkış Mili  
Single Shaft



① K045.5.028 tip B  
KS045.5.030 tip S

PM45.....**D**... Çift Çıkış Mili  
Double Shaft



② K045.5.029 tip B

Tip	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	6	32	18 <sup>-0.005</sup> <sub>-0.020</sub>	43	65	151	70	113	20.5	M6x18
Tip S	6	40	19 <sup>-0.005</sup> <sub>-0.020</sub>	58.5	-	-	70	128.5	21.5	M8x20



## HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges			Uygun / Available B14 motor flanşları B14 motor flanges				Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code	
							-B	-C	-D	-O	-P	-Q	-R				
							63	71	80	56	63	71	80				
200	7	0.75	29	2.6	1.92	75	B	B			B-C	B			82	2.5	01
140	10	0.75	41	1.9	1.43	78	B	B			B-C	B			80	2.4	02
100	14	0.75	57	1.4	1.05	79	B	B			B-C	B			79	2.6	03
78	18	0.75	69	1.1	0.81	75	B	B			B-C	B			75	2.0	04
54	26	0.55	67	1.1	0.58	71	B	B			B-C	B			69	2.7	05
47	30	0.55	79	1.1	0.61	88	B	B			B-C	B			70	2.5	12
39	36	0.37	63	1.3	0.48	82	B			B-C	B-C			69	2.1	06	
33	43	0.37	72	1.1	0.42	82	B			B-C	B-C			66	1.8	07	
28	50	0.37	78	1.0	0.36	76	B			B-C	B-C			62	1.5	13	
23	60	0.25	59	1.2	0.30	71	B			B-C	B-C			58	1.3	08	
21	68	0.25	66	1.0	0.25	66	B			B-C	B-C			57	1.2	09	
17.5	80	0.18	53	1.2	0.22	65				B-C	B-C			54	1.0	10	
14	100	0.12	41	1.3	0.16	55				B-C	B-C			50	0.8	11	

2

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanşı Delik Konumları  
Motor Flange Holes Position

**TR** M50 Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz. Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve eksenel yükler tanımlanmıştır.

**EN** Unit M50 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

YAĞLAMA M50 YAĞ MİKTARI 0.14Lt.  
LUBRICATION M50 Oil Quantity 0.14Lt.

SHELL Omala S4 WE 320

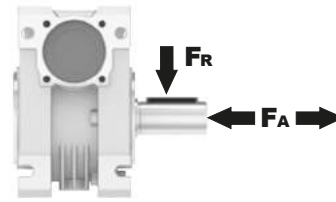
ENI Telium VSF 320

Tablo 1

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

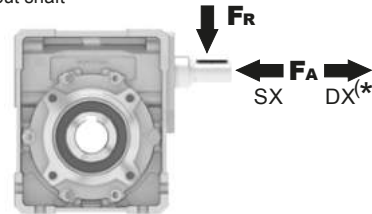
### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

Çıkış Mili  
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
200	240	1200
150	280	1400
100	300	1500
75	340	1700
50	380	1900
25	480	2500
15	560	2800

Giriş Mili  
Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	76	380

\*DX yönünde eksenel yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

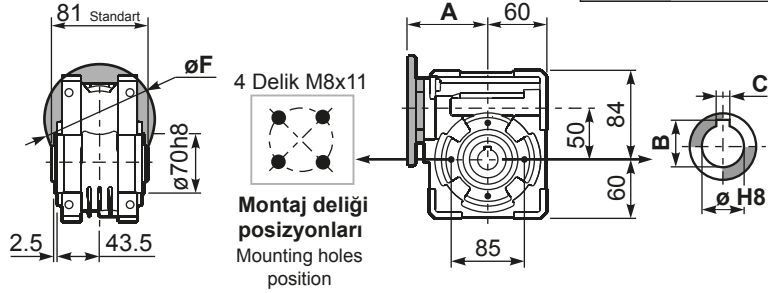
Tablo 2

PM50**FB**... Standart Redüktör  
Basic wormbox

Ağırlık  
Gearbox  
weight **3.25 kg**

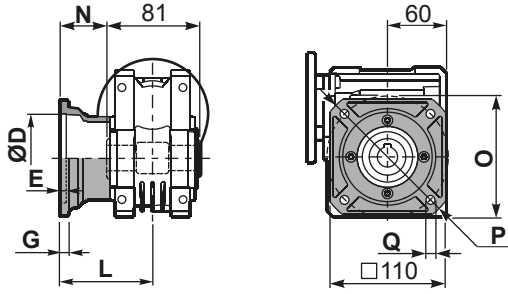
ø H8	B	C	*Space code
25 Standard	28.3	8	KM50.3.025
24 on request	27.3	8	KM50.3.024

M. Flanşları	Kit kodu	øF	A
63B5	K050.4.041	138	83.5
71B5	K050.4.042	160	81
80B5	K050.4.043	200	81.5
56B14	KC40.4.049	80	81
63B14	K050.4.047	90	83.5
71B14	K050.4.045	105	81
80B14	K050.4.046	120	81.5



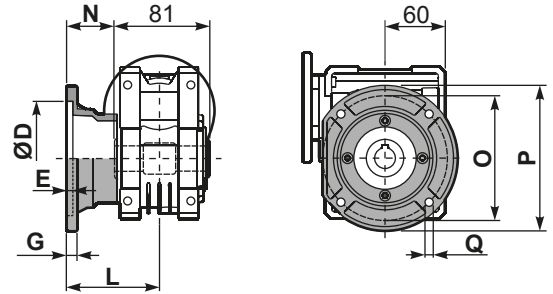
Özel Burçlu Çıkış Mili  
Output shaft with spacers

PM50**FC**... Kare Çıkış Flanşı  
Square flange



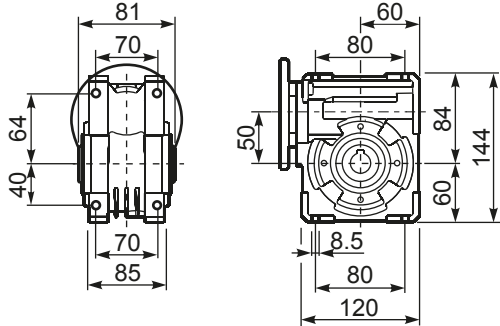
Tip B	øD	E	G	L	N	O	P	Q	Kit Kodu
FC	70 H8	5	9	90	49.5	85	125	11	KM50.9.010
FL	70 H8	5	9	120	79.5	85	125	11	KM50.9.011

PM50**F1**... Yuvarlak Çıkış Flanşı  
Round flange

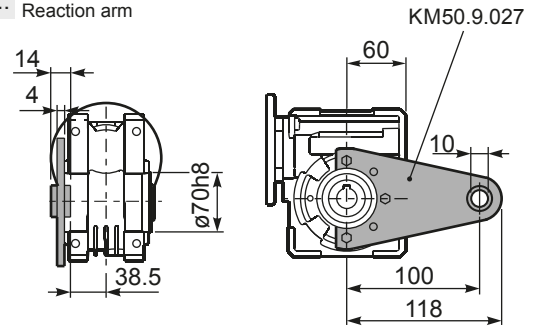


Tip S	øD	E	G	L	N	O	P	Q	Kit Kodu
F1	110 H8	5	10	89	48.5	130	160	9.5	KM50.9.012
F2	95 H8	5	14.5	72	31.5	115	140	11	KM50.9.013

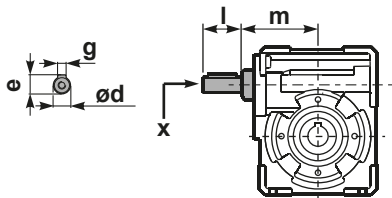
PM50**FB**... Ayak  
Feet



PM50**BR**... Tork Kolu  
Reaction arm

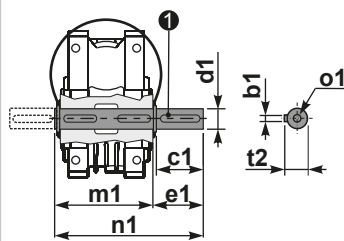


**RM50FB**... Giriş Mili  
Input shaft



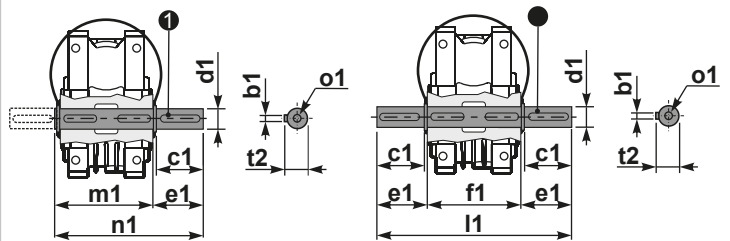
	ød	e	g	l	m	x	Kit Kodu
Tip B	16 h6	18	5	30	79.5	M6x16	① K050.5.006 PAM71 ② K050.5.007 PAM80
Tip S	14 h6	16	5	30	79.5	M5x10	① KS050.5.008 PAM71 ② KS050.5.009 PAM80

PM50.....**S**... Tek Çıkış Mili  
Single Shaft



① K050.5.028 tip B  
KS050.5.030 tip S

PM50.....**D**... Çift Çıkış Mili  
Double Shaft



② K050.5.029 tip B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	8	52	25 <sup>-0.005</sup> <sub>-0.020</sub>	59.5	81	200	86.5	146	28	M8x20
Tip S	8	50	24 <sup>-0.005</sup> <sub>-0.020</sub>	68.8	-	-	86.5	155	27	M8x20



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flansları B5 motor flanges				Uygun / Available B14 motor flansları B14 motor flanges			Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code	
							-B	-C	-D	-E	-Q	-R	-T				
							63	71	80	90	71	80	90				
200	7	1.8	71	1.8	3.2	128		B	B			B-C	B-C		83	3.1	01
140	10	1.8	99	1.3	2.4	134		B	B			B-C	B-C		81	3.1	02
93	15	1.5	121	1.2	1.8	148		B	B			B-C	B-C		79	3.1	03
74	19	1.5	152	1.0	1.4	145		B	B			B-C	B-C		78	2.6	04
58	24	1.1	135	1.1	1.2	142		B	B			B-C	B-C		75	2.0	05
47	30	1.1	167	1.0	1.06	160		B	B			B-C	B-C		74	3.2	06
39	36	0.75	125	1.2	0.88	147		B	B			B-C	B-C		68	2.7	07
35	40	0.75	135	1.1	0.82	148		B	B			B-C	B-C		66	2.5	13
31	45	0.55	111	1.2	0.67	135	B	B				B-C	C		66	2.1	08
23	60	0.55	140	1.0	0.53	135	B	B				B-C	C		62	1.6	12
21	67	0.55	151	0.8	0.45	124	B	B				B-C	C		60	1.5	09
17.5	80	0.37	115	1.1	0.39	122	B	B				B-C	C		57	1.3	10
14.9	94	0.37	123	1.0	0.36	119	B	B				B-C	C		52	1.1	11

2

Uygun Motor Flansları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flansı Delik Konumları  
Motor Flange Holes Position

**TR** M63 Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz.

Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve eksenel yükler tanımlanmıştır.

**EN** Unit M63 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

YAĞLAMA M63 YAĞ MİKTARI 0.30 Lt.  
LUBRICATION M63 Oil Quantity 0.30 Lt.

SHELL Omala S4 WE 320

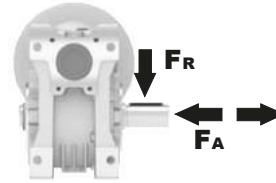
ENI Telium VSF 320

Tablo 1

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

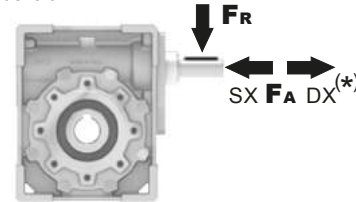
### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

Çıkış Mili  
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
200	360	1800
150	400	2000
100	460	2300
75	500	2500
50	600	3000
25	700	3800
15	800	4000

Giriş Mili  
Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	90	450

\*DX yönünde eksenel yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

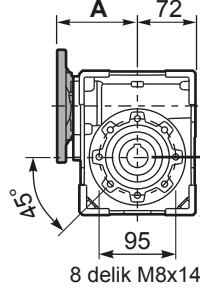
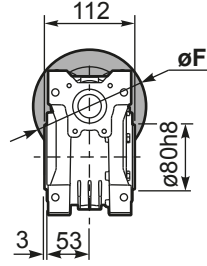
Tablo 2



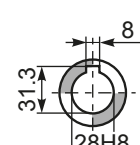
PM63**FB**... Standart Redüktör  
Basic wormbox

Ağırlık  
Gearbox  
weight **6.00 kg**

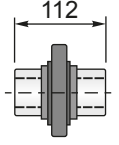
M.Flanşları	Kit Kodu	øF	A
63B5	K063.4.041	140	100.5
71B5	K063.4.042	160	98.5
80/90B5	K063.4.043	200	100.5
71B14	K063.4.047	105	98.5
80B14	K063.4.046	120	100.5
90B14	K063.4.041	140	100.5



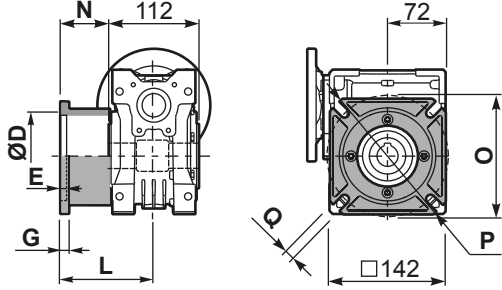
Standart Kovan Mil  
Hollow shaft



Özel  
On request

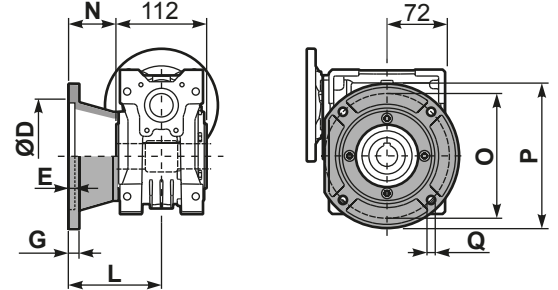


PM63**FC**... Kare Çıkış Flanşı  
Square flange



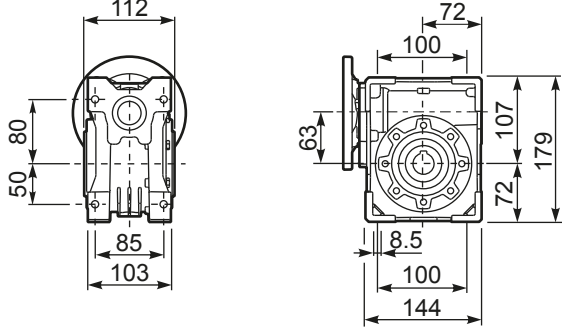
Tip B	øD	E	G	L	N	O	P	Q	Kit Kodu
FC	115 H8	6	10	82	26	150	180	11	KM63.9.010
FL	115 H8	6	10	112	56	150	180	11	KM63.9.011

PM63**F1**... Yuvarlak Çıkış Flanşı  
Round flange

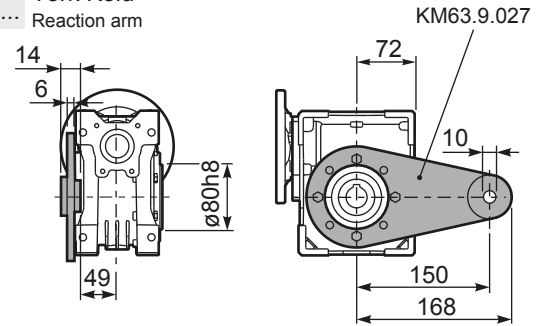


Tip S	øD	E	G	L	N	O	P	Q	Kit Kodu
F1	130 H8	5	10	98	42	165	200	11	KM63.9.012
F2	130 H8	5	10	107	51	165	200	11	KM63.9.013
F3	110 H8	5	16.5	80.5	24.5	130	160	11	KM63.9.014

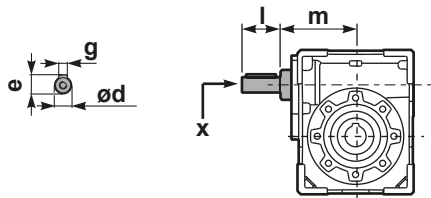
PM63**FB**... Ayak  
Feet



PM63**BR**... Tork Kolu  
Reaction arm

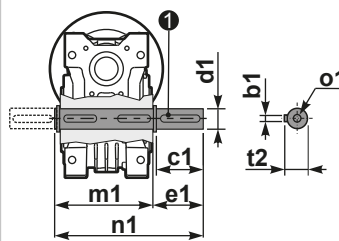


**RM63FB**... Giriş Mili  
Input shaft



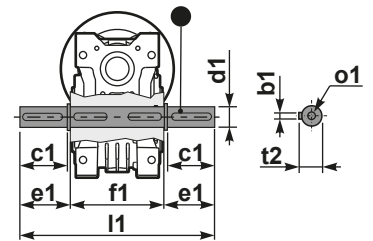
	ød	e	g	l	m	x	Kit Kodu
Tip B	18 h6	20.5	6	45	94	M6x16	① K063.5.006 PAM80 ② K063.5.007 PAM90
Tip S	19 h6	21.5	6	40	94	M8x20	① KS063.5.008 PAM80 ② KS063.5.009 PAM90

PM63.....**S**... Tek Çıkış Mili  
Single Shaft



① KM63.5.028 tip B

PM63.....**D**... Çift Çıkış Mili  
Double Shaft



② KM63.5.029 tip B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	8	50	25 h6	53.5	112	219	119.5	173	28	M10x23
Tip S	-	-	-	-	-	-	-	-	-	-





### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges				Uygun / Available B14 motor flanşları B14 motor flanges			Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code	
							-C	-D	-E	-F	-R	-T	-U				
							71	80	90	100	80	90	100				112
200	7	4	172	1.1	4.4	190		B	B			B	B		90	3.75	01
140	10	4	240	1.0	3.8	230		B	B			B	B		88	3.75	02
93	15	3	261	1.0	2.9	250		B	B			B	B		85	3.75	03
70	20	2.2	249	1.0	2.2	250		B	B	B		B	B		83	3.00	04
56	25	1.5	205	1.2	1.8	250	B	B				B			80	2.41	05
45	31	1.5	244	1.1	1.7	270	B	B				B			77	3.75	06
35	40	1.5	295	0.9	1.3	255	B	B				B			72	3.10	07
28	50	0.75	174	1.3	0.96	223	B								68	2.41	08
23	60	0.75	200	1.1	0.80	213	B								65	2.10	09
17.5	80	0.55	177	1.1	0.61	195	B								59	1.53	10
14.0	100	0.55	206	0.8	0.47	175	B								55	1.23	11

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanş Delik Konumları  
Motor Flange Holes Position

**TR** M75 Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz.

Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve eksenel yükler tanımlanmıştır.

**EN** Unit M75 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

YAĞLAMA M75 YAĞ MİKTARI 0.40 Lt.  
LUBRICATION M75 Oil Quantity 0.40 Lt.

SHELL Omala S4 WE 320

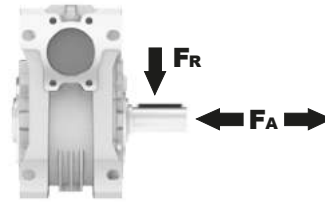
ENI Telium VSF 320

Tablo 1

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

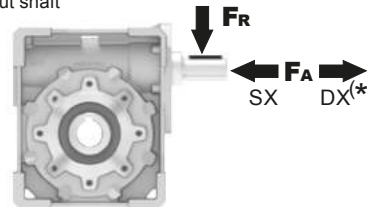
### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

Çıkış Mili  
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
200	460	2300
150	520	2600
100	560	2800
75	620	3100
50	720	3600
25	880	4400
15	1000	5000

Giriş Mili  
Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	125	630

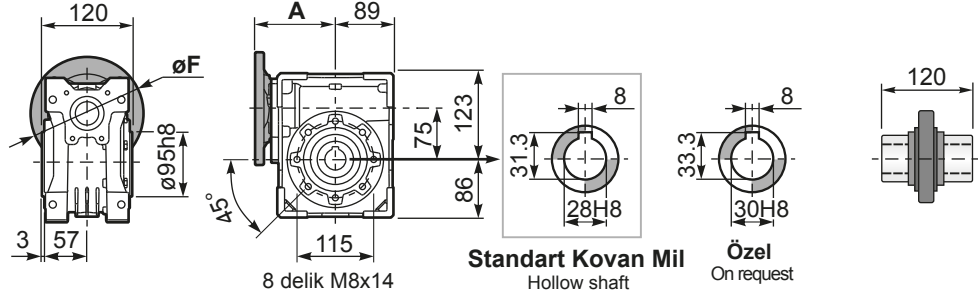
\*DX yönünde eksenel yüke izin verilmez.  
Strong axial loads in the DX direction are not allowed.

Tablo 2

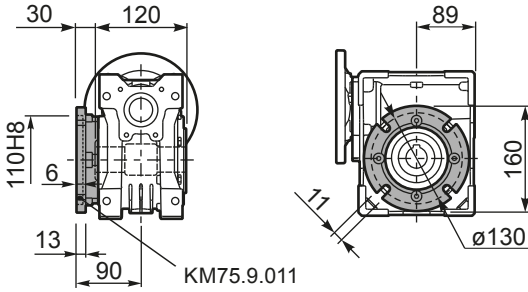
PM75**FB**... Standart Redüktör  
Basic wormbox

Ağırlık  
Gearbox  
weight **8.70 kg**

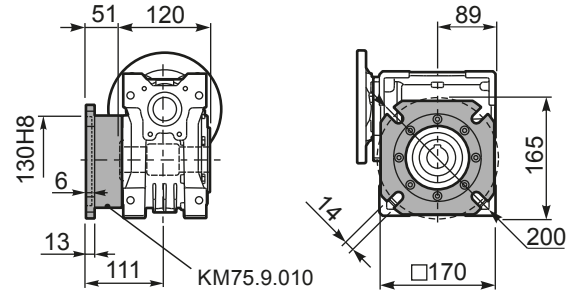
M.Flanşlar	Kit Kodu	øF	A
71B5	K023.4.041	160	114
80/90B5	K023.4.042	200	116
100/112B5	K023.4.043	250	125
80B14	K085.4.046	120	116
90B14	K085.4.045	140	116
100/112B14	K085.4.047	160	125



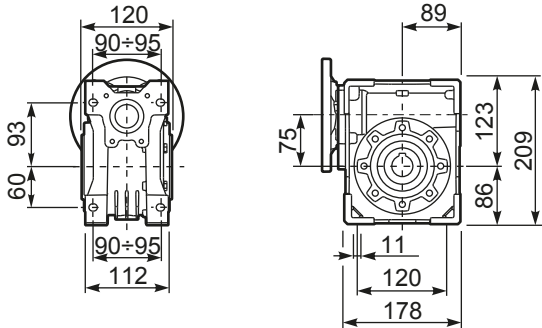
PM75**FC**... Yuvarlak Çıkış Flanşı  
Round flange



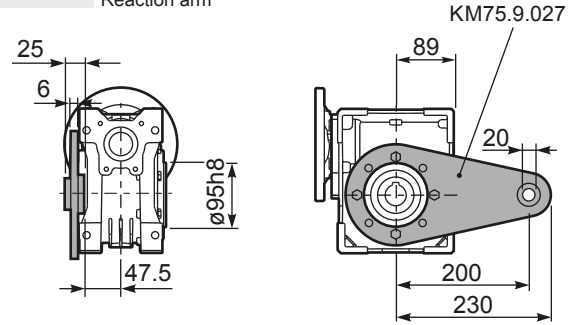
PM75**FL**... Kare Çıkış Flanşı  
Square flange



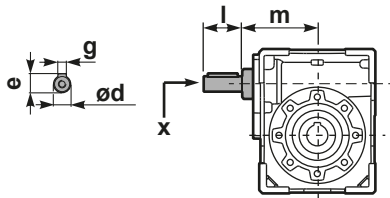
PM75**FB**... Ayak  
Feet



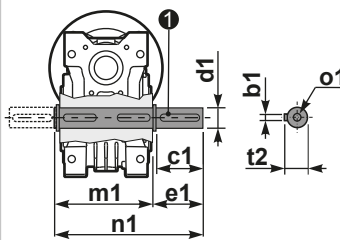
PM75**BR**... Tork Kolu  
Reaction arm



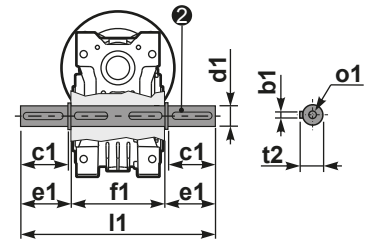
**RM75FB**... Giriş Mili  
Input shaft



PM75.....**S**... Tek Çıkış Mili  
Single Shaft



PM75.....**D**... Çift Çıkış Mili  
Double Shaft



① KM75.5.028 Standart

② KM75.5.029 Standart

	ød	e	g	l	m	x	Kit Kodu
Tip B	25 h6	27.8	8	50	109.5	M8x20	KQ75.5.006 PAM80 K085.5.007 PAM90 K085.5.008 PAM100

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standart	8	60	28 h6	63.5	120	247	128.5	192	31	M10
Özel	-	-	-	-	-	-	-	-	-	-



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flansları B5 motor flanges				Uygun / Available B14 motor flansları B14 motor flanges			Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code	
							-C	-D	-E	-F	-R	-T	-U				
							71	80	90	100	80	90	100				112
200	7	4.0	168	1.6	6.4	270		B	B			B	B		88	4.23	01
140	10	4.0	218	1.4	5.5	298		B	B			B	B		80	4.2	02
100	14	4.0	298	1.1	4.3	320		B	B			B	B		78	4.5	03
70	20	3.0	323	1.0	2.9	309		B	B			B	B		79	3.4	04
64	22	2.2	258	1.2	2.6	309		B	B			B	B		78	3.1	05
50	28	2.2	315	1.2	2.5	364		B	B			B	B		75	4.7	06
37	38	1.5	276	1.3	1.9	353	B	B				B			71	3.5	07
30	46	1.5	320	1.1	1.6	342	B	B				B			68	3.1	08
27	52	1.1	258	1.2	1.3	303	B	B				B			66	2.7	09
21	67	1.1	327	0.9	1.02	303	B	B				B			65	2.1	10
18.9	74	0.75	220	1.3	0.96	281	B	B				B			58	1.9	11
14.6	96	0.55	191	1.3	0.73	254	B	B				B			53	1.5	12

Uygun Motor Flansları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flansı Delik Konumları  
Motor Flange Holes Position

**TR** M85 Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz. Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve eksenel yükler tanımlanmıştır.

**EN** Unit M85 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

YAĞLAMA M85 YAĞ MİKTARI 1.20 Lt.

LUBRICATION M85 Oil Quantity 1.20 Lt.

SHELL Omala S4 WE 320

ENI Telium VSF 320

Daha fazla ayrıntı için internet sitemizi inceleyiniz.

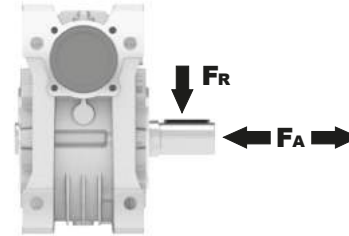
For all details on lubrication and plugs check our website

Tablo 1

### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

#### Çıkış Mili

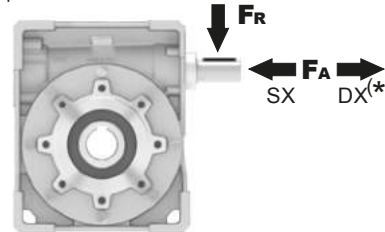
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
200	500	2500
150	580	2900
100	600	3000
75	700	3500
50	800	4000
25	1000	5000
15	1160	5800

#### Giriş Mili

Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	130	650

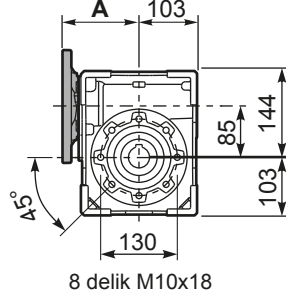
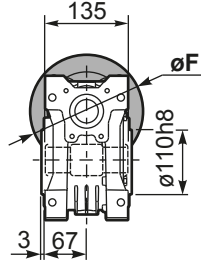
\*DX yönünde eksenel yüke izin verilmez

Strong axial loads in the DX direction are not allowed.

Tablo 2

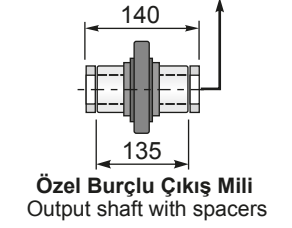
**PM85FB...** Standart Redüktör  
Basic wormbox

M.Flanşlar	Kit Kodu	øF	A
71B5	K023.4.041	160	116.5
80/90B5	K023.4.042	200	118.5
100/112B5	K023.4.043	250	127.5
80B14	K085.4.046	120	118.5
90B14	K085.4.045	140	118.5
100/112B14	K085.4.047	160	127.5

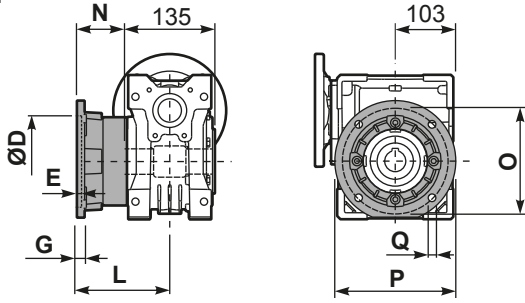


Ağırlık  
Gearbox  
weight **12.1 kg**

ø H8	B	C	*Spacer code
35 Standard	38.3	10	KM85.3.035
38 on request	41.3	10	KM85.3.038

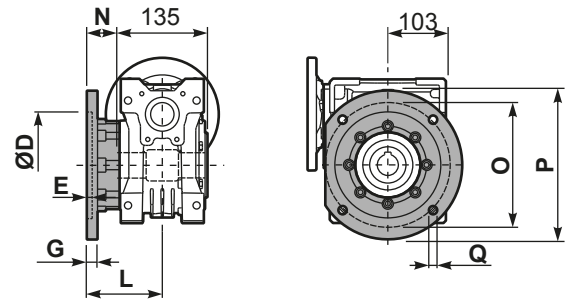


**PM85FC...** Yuvarlak Çıkış Flanşı  
Round flange



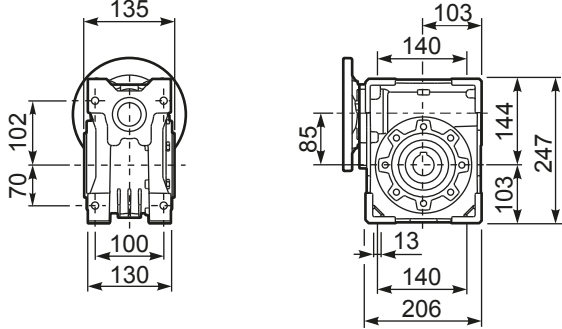
Tip	B	ØD	E	G	L	N	O	P	Q	Kit Kodu
FC	152 H8	5	16	111	43.5	176	205	13	K085.9.010	
FL	180 H8	6	18	122	54.5	215	250	14	KM85.9.011	

**PM85F1** Yuvarlak Çıkış Flanşı  
Round flange

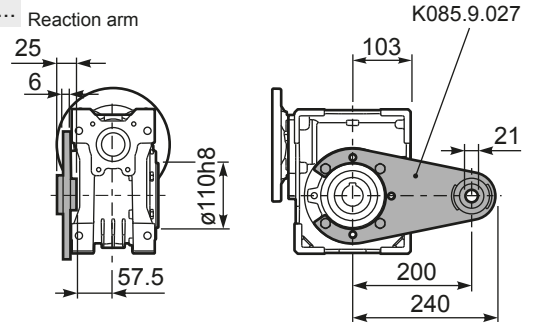


Tip	S	ØD	E	G	L	N	O	P	Q	Kit Kodu
F1	130 H8	5	13	109.5	42	165	200	13	KS085.9.015	
F2	152 H8	5	16	151.5	84	176	205	13	K085.9.010 K085.0.201	

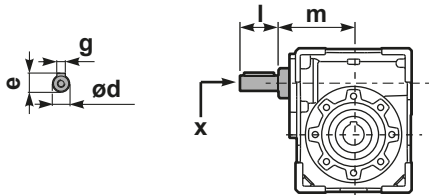
**PM85FB...** Ayak  
Feet



**PM85BR...** Tork Kolu  
Reaction arm

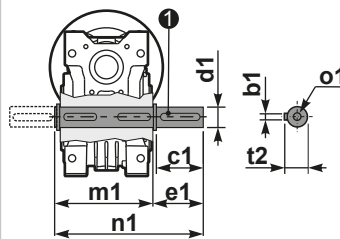


**RM85FB...** Giriş Mili  
Input shaft



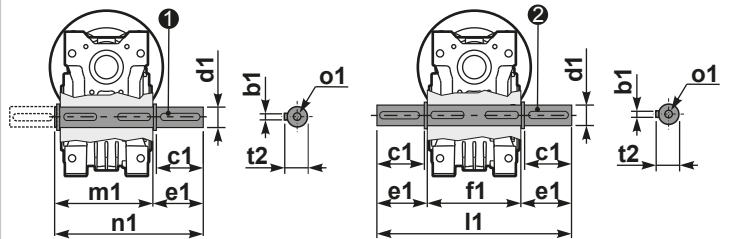
Tip	B	ød	e	g	l	m	x	Kit Kodu
Tip B	25 h6	28	8	50	112	M8x20	① K085.5.007 PAM90 ② K085.5.008 PAM100	
Tip S	24 h6	27	8	50	112	M8x20	① KS085.5.009 PAM90 ② KS085.5.011 PAM100	

**PM85.....S...** Tek Çıkış Mili  
Single Shaft



① K085.5.028 tip B

**PM85.....D...** Çift Çıkış Mili  
Double Shaft



② K085.5.029 tip B

Tip	B	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	10	60	35 <sup>-0.005</sup> <sub>-0.020</sub>	73.5	135	282	141	214.5	38	M10x23	
Tip S	-	-	-	-	-	-	-	-	-	-	



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges					Uygun / Available B14 motor flanşları B14 motor flanges				Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code	
							-C	-D	-E	-F	-G	-R	-T	-U	-V				
							71	80	90	100	112	132	80	90	100				112
200	7	7.5	315	1.7	13.0	546		B	B				B	B			88	5.5	01
140	10	7.5	440	1.4	10.1	595		B	B				B	B			86	5.4	02
88	16	5.5	492	1.3	7.3	650		B	B				B	B			82	5.3	03
70	20	4.0	447	1.4	5.7	640		B	B				B	B			82	4.5	04
61	23	4.0	502	1.3	5.3	670		B	B				B	B			80	3.9	05
47	30	4.0	622	1.2	4.7	725		B	B				B	B			76	5.6	06
37	38	3.0	583	1.2	3.6	698		B	B				B	B			75	4.7	07
31	45	2.2	493	1.3	2.9	650		B	B				B	B			73	4.0	08
26	53	2.2	557	1.2	2.6	660		B	B				B	B			70	3.5	09
22	64	1.5	452	1.4	2.0	612	B	B					B				69	2.9	10
16.7	84	1.1	410	1.3	1.4	515	B	B					B				65	2.2	11
14.1	99	1.1	446	1.1	1.2	483	B	B					B				60	1.9	12

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanşı Delik Konumları  
Motor Flange Holes Position

**TR** M11 Kare Gövde Sonsuz Vidalı Redüktörler yağsız olarak sevk edilir. Redüktör üzerinde havalandırma tapası, yağ göstergesi ve tahliye tapası mevcuttur. Mineral yağlar bu ekipmanlar ile birlikte kullanılır. Sentetik yağ kullanılmak istenirse bu ekipmanların körtapa ile değiştirilmesi önerilir.

Tablo 1'de montaj pozisyonuna göre uygun yağ miktarları tanımlanmıştır.

Tablo 2'de izin verilebilir radyal ve eksenel yük değerleri tanımlanmıştır.

**EN** Unit M11 is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

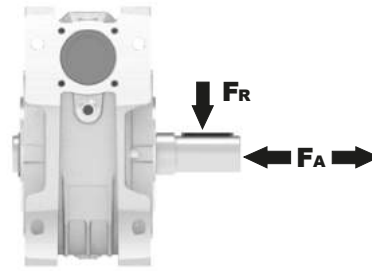
B3	B6	B7	B8	V5	V6
1.90 LT	1.35 LT	1.35 LT	2.00LT	2.00 LT	2.00LT
SHELL Omala S2 GX 460			ENI Blasia 460		

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

Tablo 1

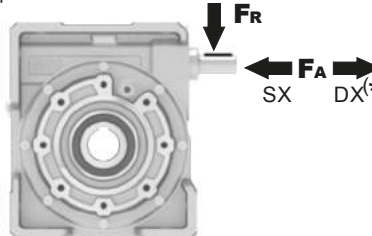
### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

Çıkış Mili  
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
200	600	2900
150	700	3300
100	750	3600
75	800	4000
50	920	4600
25	1200	6000
15	1400	7000

Giriş Mili  
Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	228	1140

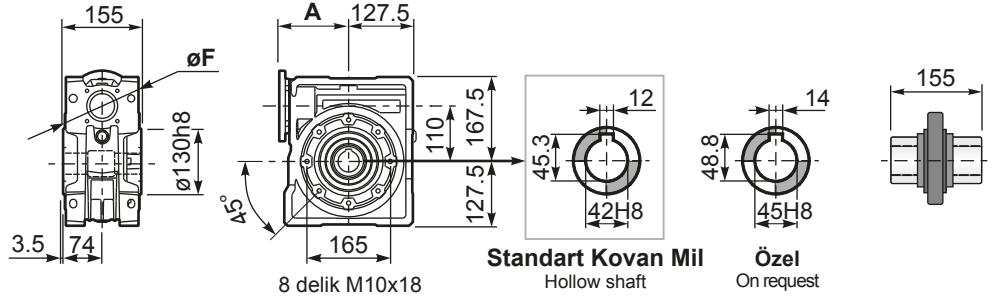
\*DX yönünde eksenel yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

Tablo 2

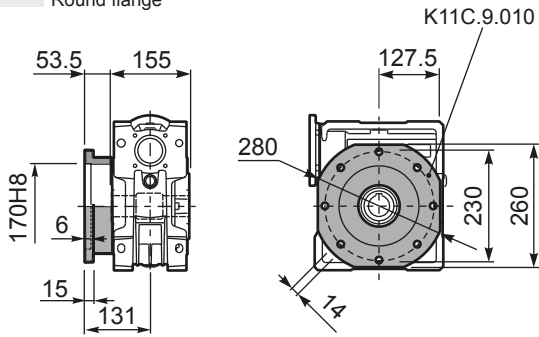
PM11**FB**... Standart Redüktör  
Basic wormbox

Ağırlık  
Gearbox  
weight **35.0 kg**

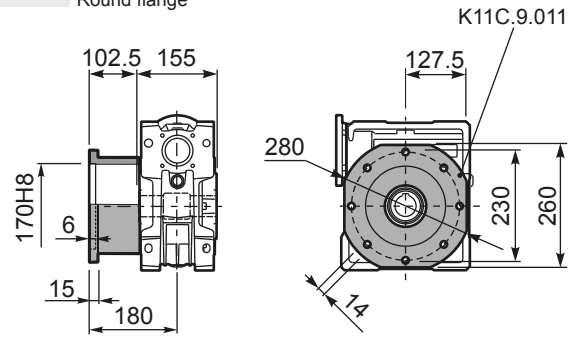
M.Flanşları	Kit Kodu	øF	A
71B5	K023.4.041	160	136
80/90B5	K023.4.042	200	138
100/112B5	K023.4.043	250	147
132B5	-	300	187
80B14	K085.4.046	120	138
90B14	K085.4.045	140	138
100/112B14	K023.4.041	160	136
132B14	-	200	187



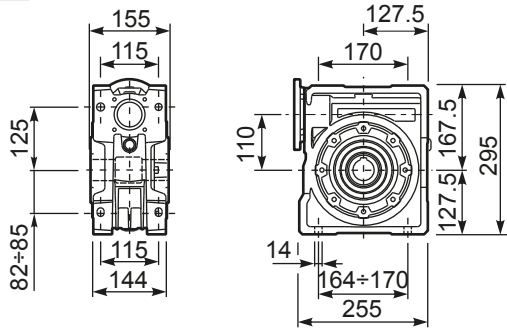
PM11**FC**... Yuvarlak Çıkış Flanşı  
Round flange



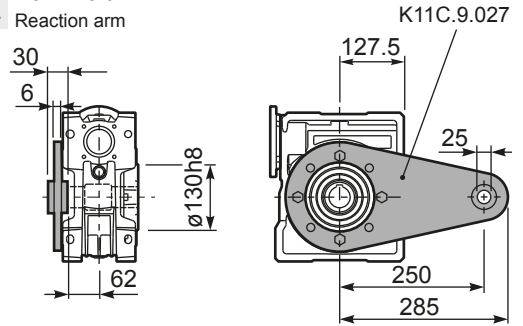
PM11**FL**... Yuvarlak Çıkış Flanşı  
Round flange



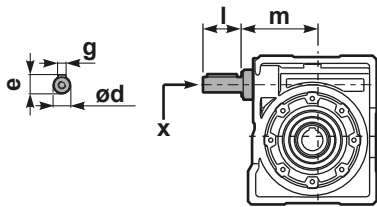
PM11**FB**... Ayak  
Feet



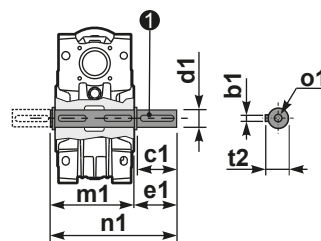
PM11**BR**... Tork Kolu  
Reaction arm



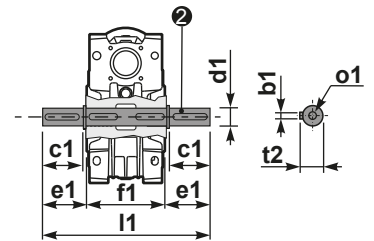
**RM11FB**... Giriş Milini  
Input shaft



PM11.....**S**... Tek Çıkış Milini  
Single Shaft



PM11.....**D**... Çift Çıkış Milini  
Double Shaft



① K11C.5.028 tip B

② K11C.5.029 tip B

	ød	e	g	l	m	x	Kit Kodu
Tip B	25 h6	28	8	50	131.5	M8x20	① K085.5.007 PAM90 ② K085.5.008 PAM100
Tip S	24 h6	27	8	50	131.5	M8x20	① KS085.5.009 PAM90 ② KS085.5.011 PAM100

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	12	80	42h6	84.5	155	324	164.5	249	45	M16x28
Tip S	-	-	-	-	-	-	-	-	-	-





## HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges			Uygun / Available B14 motor flanşları B14 motor flanges				Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code
							-E	-F	-G	-	-	-	-			
							90	100 112	132	-	-	-	-			
187	7.5	7.5	345	2.1	16.1	741		B						90	6.11	01
140	10	7.5	455	1.8	13.5	820		B						89	6.45	02
93	15	7.5	668	1.4	10.3	917		B						87	6.72	03
70	20	7.5	870	1.0	7.8	905		B						85	5.24	04
56	25	5.5	788	1.2	6.5	931		B						84	4.28	05
46.7	30	5.5	900	1.2	6.4	1047		B						80	6.91	06
35	40	4.0	851	1.2	4.9	1043		B						78	5.36	07
28	50	4.0	1023	0.9	3.8	972	B							75	4.35	08
23.3	60	3.0	896	1.0	3.1	928	B							73	3.65	09
17.5	80	2.2	816	1.0	2.3	853	B							68	2.76	10
14	100	1.5	655	1.1	1.7	742	B							64	2.23	11

2

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanşı Delik Konumları  
Motor Flange Holes Position

**TR** M13 Kare Gövde Sonsuz Vidalı Redüktörler yağsız olarak sevk edilir. Redüktör üzerinde havalandırma tapası, yağ göstergesi ve tahliye tapası mevcuttur. Mineral yağlar bu ekipmanlar ile birlikte kullanılır. Sentetik yağ kullanılmak istenirse bu ekipmanların körtapa ile değiştirilmesi önerilir.

Tablo 1'de montaj pozisyonuna göre uygun yağ miktarları tanımlanmıştır.

Tablo 2'de izin verilebilir radyal ve eksenel yük değerleri tanımlanmıştır.

**EN** Unit M13 is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

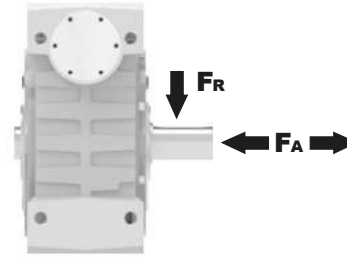
B3	B6	B7	B8	V5	V6
4.50 LT	3.50 LT	3.50 LT	3.30LT	4.50 LT	3.30LT
SHELL Omala S2 GX 460			ENI Blasias 460		

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

Tablo 1

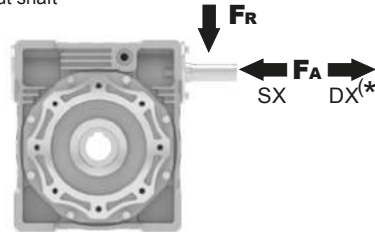
## \*RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

### Çıkış Mili Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
200	960	4800
150	1100	5500
100	1240	6200
75	1380	6900
50	1560	7800
25	2000	10000
15	2400	12000

### Giriş Mili Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	300	1500

\*DX yönünde eksenel yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

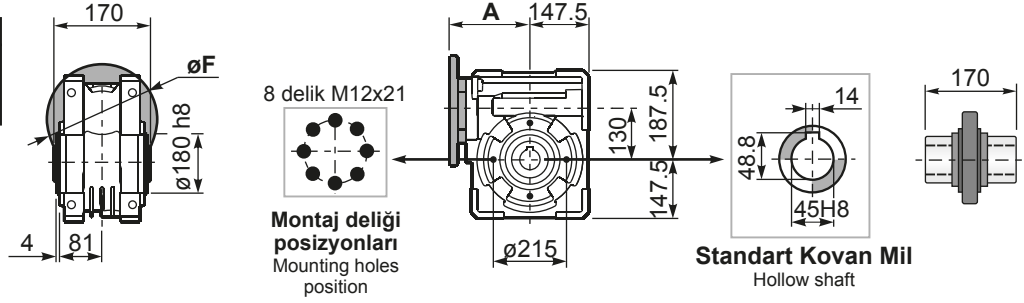
Tablo 2



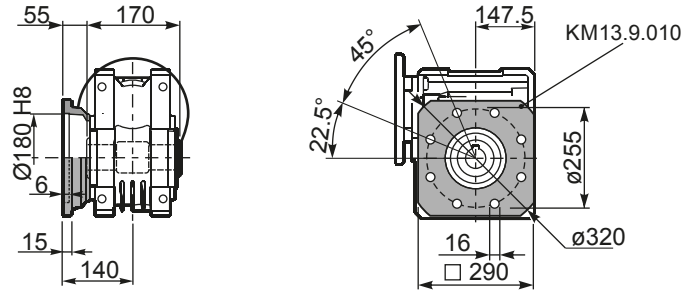
PM13**FB**... Standart Redüktör  
Basic wormbox

Ağırlık  
Gearbox  
weight **48.0 kg**

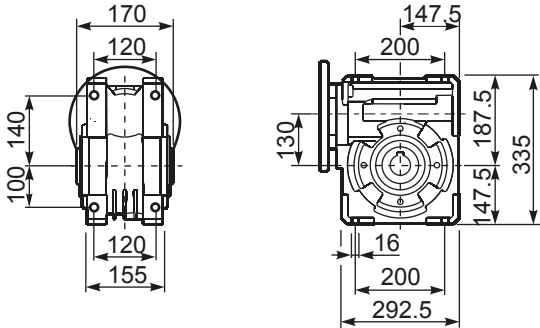
M.Flanşlar	Kit Kodu	øF	A
90B5	KM13.4.041	200	180
100/112B5	KM13.4.042	250	180
132B5	KM13.4.043	300	180



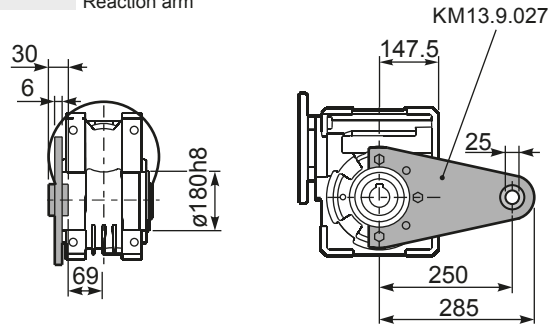
PM13**FC**... Kare Çıkış Flanşı  
Square flange



PM13**FB**... Ayak  
Feet

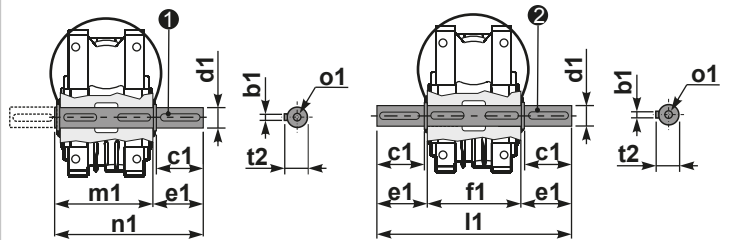


PM13**BR**... Tork Kolu  
Reaction arm



PM13.....**S**... Tek Çıkış Mili  
Single Shaft

PM13.....**D**... Çift Çıkış Mili  
Double Shaft



1 KM13.5.028 tip B

2 KM13.5.029 tip B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip	14	80	45 <sup>-0.005</sup> <sub>-0.020</sub>	85	170	340	180	265	48.5	M16
Tip	-	-	-	-	-	-	-	-	-	-



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges			Uygun / Available B14 motor flanşları B14 motor flanges				Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code
							-F	-G	-H	-	-	-	-			
							100 112	132	160	-	-	-	-			
187	7.5	15	698	1.7	25.8	1200		B					91	5.5	01	
140	10	15	921	1.3	20.2	1240		B					90	6.155	02	
93	15	11	990	1.3	13.9	1250		B					88	5.5	03	
70	20	11	1291	1.0	11.1	1300		B					86	6.155	04	
56	25	9	1289	0.9	8.4	1200		B					84	5	05	
46.7	30	7.5	1274	0.9	7.1	1200	B						83	4.193	06	
35	40	7.5	1596	1.0	7.3	1550	B						78	6.155	07	
28	50	5.5	1426	1.0	5.4	1400	B						76	5	08	
23.3	60	4	1195	1.1	4.2	1260	B						73	4.193	09	
17.5	80	3	1113	1.0	3.1	1150	B						68	3.17	10	
14	100	2.2	960	1.0	2.3	1000							64	2.55	11	

2

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanşı Delik Konumları  
Motor Flange Holes Position

**TR** M15 Kare Gövde Sonsuz Vidalı Redüktörler yağsız olarak sevk edilir. Redüktör üzerinde havalandırma tapası, yağ göstergesi ve tahliye tapası mevcuttur. Mineral yağlar bu ekipmanlar ile birlikte kullanılır. Sentetik yağ kullanılmak istenirse bu ekipmanların körtapa ile değiştirilmesi önerilir.

Tablo 1'de montaj pozisyonuna göre uygun yağ miktarları tanımlanmıştır.

Tablo 2'de izin verilebilir radyal ve eksenel yük değerleri tanımlanmıştır.

**EN** Unit M15 is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

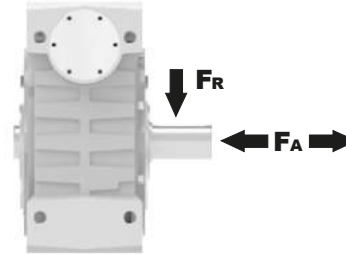
B3	B6	B7	B8	V5	V6
7.00 LT	5.40 LT	5.40 LT	5.10 LT	7.00 LT	5.10 LT
SHELL Omala S2 GX 460			ENI Blasias 460		

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

Tablo 1

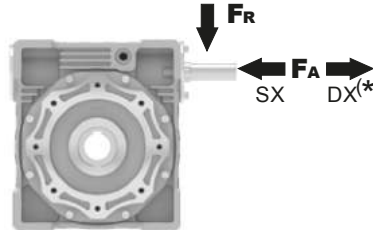
### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

Çıkış Mili  
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
200	1300	6500
150	1440	7200
100	1640	8200
75	1800	9000
50	2120	10600
25	2700	13500
15	3300	16500

Giriş Mili  
Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	400	2000

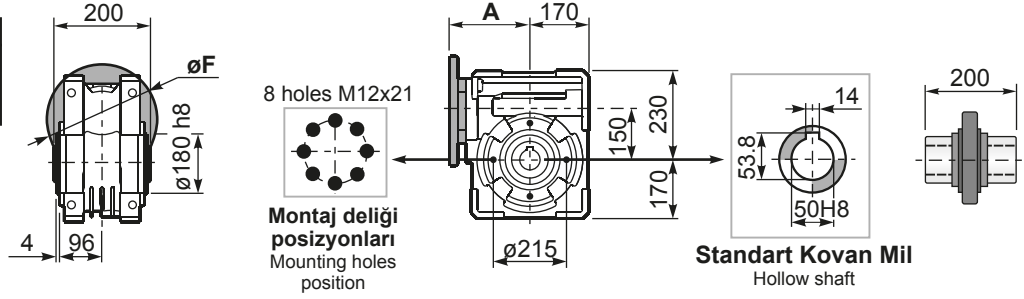
\*DX yönünde eksenel yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

Tablo 2

PM15**FB**... Standart Redüktör  
Basic wormbox

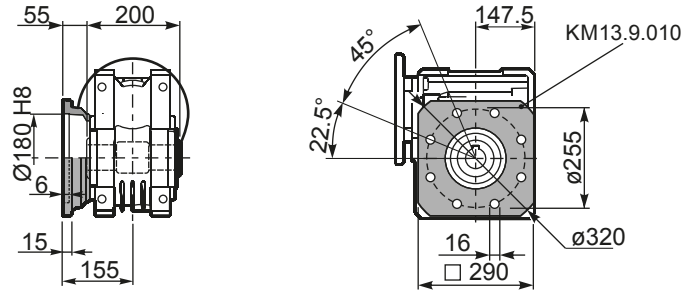
Ağırlık  
Gearbox  
weight **84.0 kg**

M.Flanşlar	Kit Kodu	øF	A
100/112B5	KM15.4.042	250	210
132B5	KM15.4.043	300	210
160B5	KM15.4.044	350	210

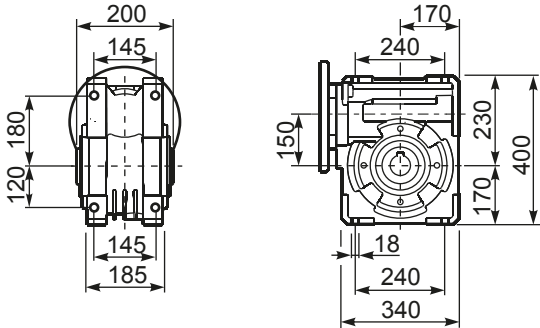


2

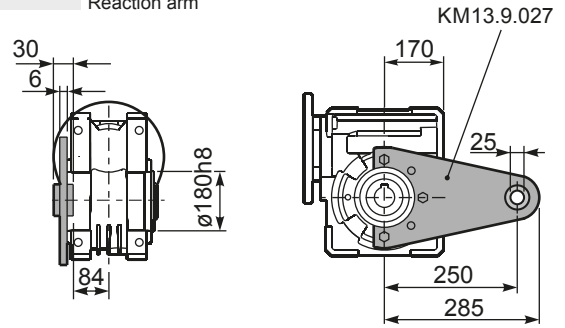
PM15**FC**... Kare Çıkış Flanşı  
Square flange



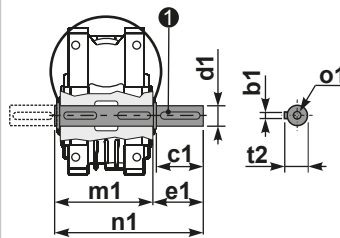
PM15**FB**... Ayak  
Feet



PM15**BR**... Tork Kolu  
Reaction arm

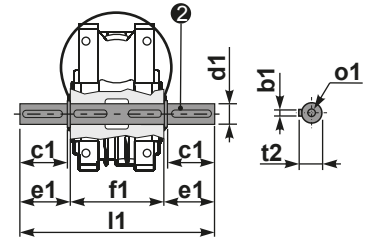


PM15.....**S**... Tek Çıkış Mili  
Single Shaft



① KM15.5.028 tip B

PM15.....**D**... Çift Çıkış Mili  
Double Shaft



② KM15.5.029 tip B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip	14	82	50 <sup>-0.005</sup> <sub>-0.020</sub>	87	200	374	210	297	53.5	M16
Tip	-	-	-	-	-	-	-	-	-	-



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges			Uygun / Available B14 motor flanşları B14 motor flanges		Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code
							-A	-B	-C	-P	-Q			
							56	63	71	63	71			
47	30.1	0.25	38	1.4	0.36	55				C		74	2.2	01
33	43.0	0.25	53	1.0	0.26	55				C		72	2.2	02
23	60.2	0.25	62	0.9	0.22	55				C		60	2.4	03
15.5	90.3	0.12	42	1.3	0.16	55				C		57	1.6	04
11.6	120	0.12	52	1.1	0.13	55				C		53	2.5	05
8.8	159	0.12	64	0.9	0.10	55				C		49	1.8	06
7.1	198	0.12*	55	<0.8	0.09	55				C		47	1.5	07
5.4	258	0.12*	55	<0.8	0.07	55				C		45	1.2	08
4.7	301	0.12*	39	<0.8	0.05	39				C		40	1.0	09
3.2	439	0.12*	39	<0.8	0.04	39				C		36	0.72	10

2

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanşı Delik Konumları  
Motor Flange Holes Position

\* Tablolarda verilen değerlerin üzerindeki motor güçleri için seçimleri  $M_{2R}$  değerini referans alarak yapınız.  
Power higher than the maximum one which can be supported by the gearbox. Select according to the torque  $M_{2R}$

**TR** P4M Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz.  
Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve aksel yükler tanımlanmıştır.

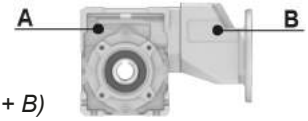
**EN** Unit P4M is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.  
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

#### YAĞLAMA P4M

Ortak Yağlama 0,17 lt (A + B)

#### LUBRICATION P4M

Common Lubrication 0,17 lt (A + B)



SHELL Omala S4 WE 320

ENI Telium VSF 320

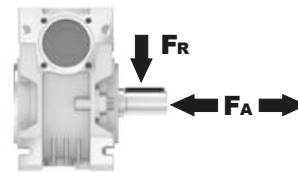
Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

Tablo 1

#### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

##### Çıkış Mili

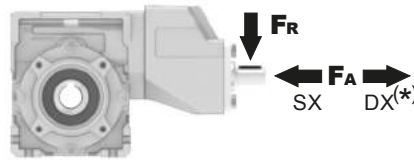
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
75	240	1200
50	260	1400
25	300	1800
15-6	400	2000

##### Giriş Mili

Input shaft



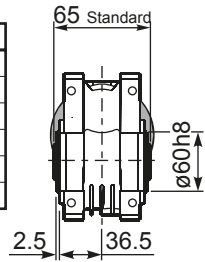
$n_1$ [r.p.m]	FA [N]	FR [N]
1400	44	220

\*DX yönünde aksel yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

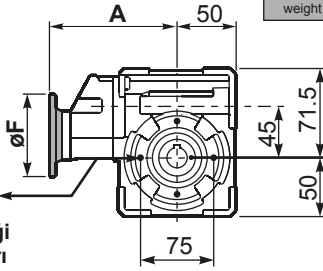
Tablo 2

**PP4MFB...** Standart Redüktör  
Basic wormbox

M.Flanşları	Kit Kodu	øF	A
56B5	K050.4.046	120	143.5
63B5	K050.4.041	138	145.5
71B5	K050.4.042	160	143
63B14	K050.4.047	90	145.5
71B14	K050.4.045	105	143

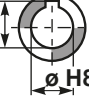


4 holes  
M6x12  
**Montaj deliği pozisyonları**  
Mounting holes position



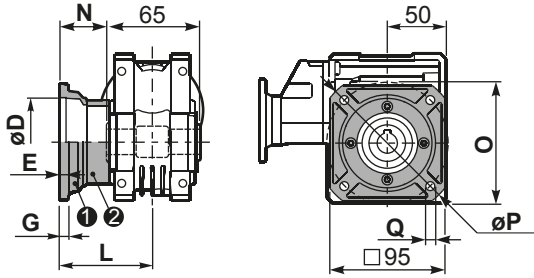
Ağırlık  
Gearbox weight **3.10 kg**

ø H8	B	C	Burç Kodu *Spacer code
18 Standard	20.8	6	KM45.3.018
19 Özel on request	21.8	6	KM45.3.019
20 Özel on request	22.8	6	KM45.3.020



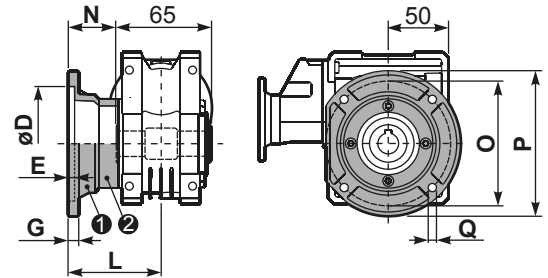
78  
**Özel Burçlu Çıkış Mili**  
Output shaft with spacers

**PP4MFC...** Kare Çıkış Flanşı  
Square flange



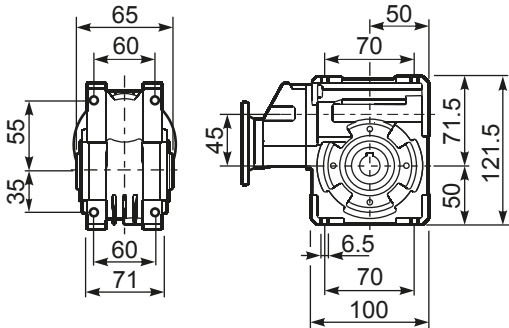
Tip B	øD	E	G	L	N	O	P	Q	Kit Kodu
FC	60 H8	4	7	67	34.5	75	110	9	KM45.9.010
FL	60 H8	4	7	97	64.5	75	110	9	KM45.9.011

**PP4MF1...** Yuvarlak Çıkış Flanşı  
Round flange

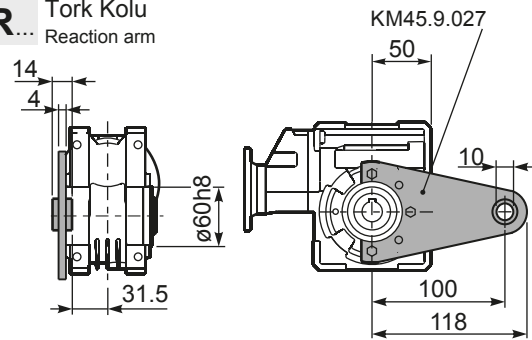


Tip S	øD	E	G	L	N	O	P	Q	Kit Kodu
F1	95H8	5	9	80	47.5	115	140	9.5	KM45.9.012
F2	-	-	-	-	-	-	-	-	-

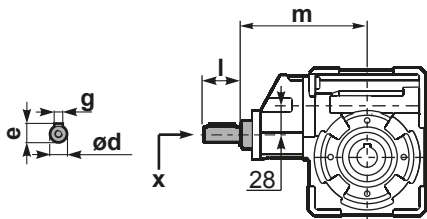
**PP4MFB...** Ayak  
Feet



**PP4MBR...** Tork Kolu  
Reaction arm

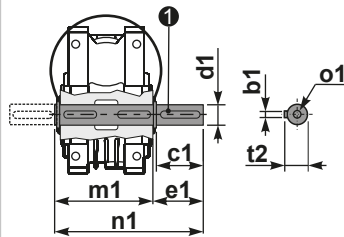


**RP4MFB...** Giriş Mili  
Input shaft



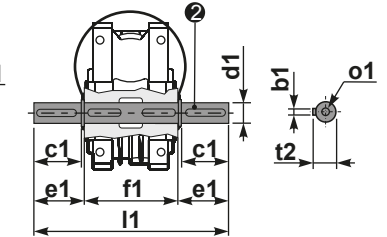
Tip B	ød	e	g	l	m	x	Kit Kodu
Tip B	14 h6	16	5	25	141	M5x13	C35.5.061
Tip S	-	-	-	-	-	-	-

**PP4M....S...** Tek Çıkış Mili  
Single Shaft



1 K045.5.028 tip B  
KS045.5.030 tip S

**PP4M....D...** Çift Çıkış Mili  
Double Shaft



2 K045.5.029 tip B

Tip B	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	6	32	18 <sup>-0.005</sup> <sub>-0.020</sub>	43	65	151	70	113	20.5	M6x18
Tip S	6	40	19 <sup>-0.005</sup> <sub>-0.020</sub>	58.5	-	-	70	128.5	21.5	M8x20



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges			Uygun / Available B14 motor flanşları B14 motor flanges		Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code
							-A	-B	-C	-P	-Q			
							56	63	71	63	71			
47	30.1	0.37	58	1.3	0.49	77				C		76	2.5	01
33	43.0	0.25	55	1.4	0.35	77				C		75	2.4	02
23	60.2	0.25	71	1.1	0.27	77				C		69	2.6	03
18.1	77.4	0.25	81	1.1	0.27	88				C		61	2.0	04
12.5	112	0.18	84	1.1	0.19	88				C		61	2.7	05
9.0	155	0.12	71	1.2	0.15	88				C		56	2.1	06
7.6	185	0.12	74	1.0	0.12	77				C		49	1.8	07
5.4	258	0.12*	77	<0.8	0.09	77				C		47	1.3	08
4.8	292	0.12*	66	<0.8	0.08	66				C		44	1.2	09
4.1	344	0.12*	44	<0.8	0.05	44				C		40	1.0	10
3.3	430	0.12*	44	<0.8	0.04	44				C		36	0.8	11

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanşı Delik Konumları  
Motor Flange Holes Position

\* Tablolarda verilen değerlerin üzerindeki motor güçleri için seçimleri  $M_{2R}$  değerini referans alarak yapınız.  
Power higher than the maximum one which can be supported by the gearbox. Select according to the torque  $M_{2R}$

**TR** P5M Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz.  
Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve eksenel yükler tanımlanmıştır.

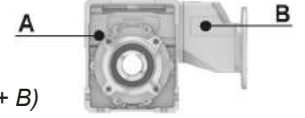
**EN** Unit P5M is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.  
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

### YAĞLAMA P5M

Ortak Yağlama 0,26 lt (A + B)

### LUBRICATION P5M

Common Lubrication 0,26 lt (A + B)



SHELL Omala S4 WE 320

ENI Telium VSF 320

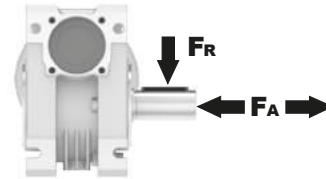
Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

Tablo 1

### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

#### Çıkış Mili

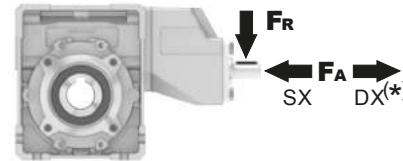
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
75	340	1700
50	380	1900
25	480	2500
15-6	560	2800

#### Giriş Mili

Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	44	220

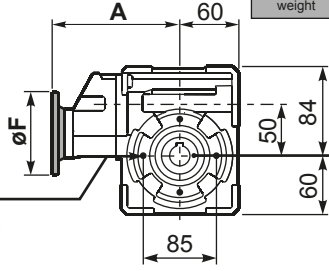
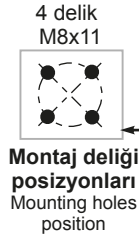
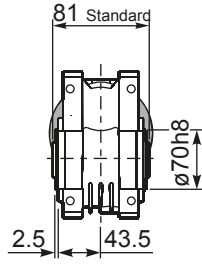
\*DX yönünde eksenel yüke izin verilmez

Strong axial loads in the DX direction are not allowed.

Tablo 2

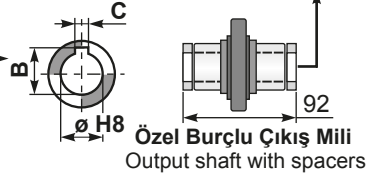
**PP5MFB...** Standart Redüktör  
Basic wormbox

M.Flanşları	Kit Kodu	øF	A
56B5	K050.4.046	120	147
63B5	K050.4.041	138	149
71B5	K050.4.042	160	146.5
63B14	K050.4.047	90	149
71B14	K050.4.045	105	146.5

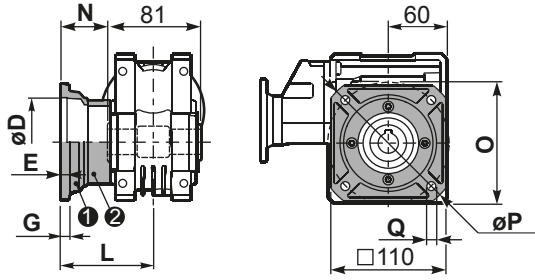


Ağırlık  
Gearbox  
weight **4.60 kg**

ø H8	B	C	Burç Kodu *Spacer code
25 Standard	28.3	8	KM50.3.025
24 Özel on request	27.3	8	KM50.3.024

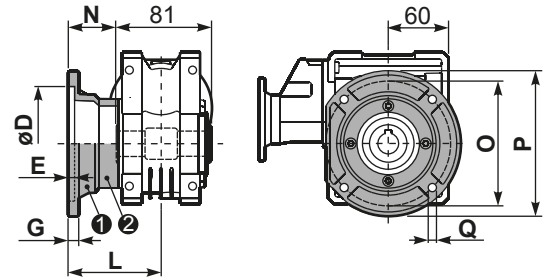


**PP5MFC...** Kare Çıkış Flanşı  
Square flange



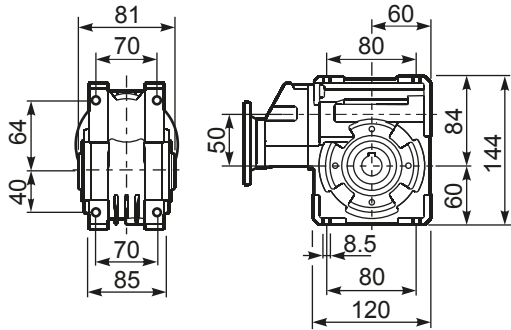
Tip B	øD	E	G	L	N	O	P	Q	Kit Kodu
FC	70 H8	5	9	90	49.5	85	125	11	KM50.9.010
FL	70 H8	5	9	120	79.5	85	125	11	KM50.9.011

**PP5MF1...** Yuvarlak Çıkış Flanşı  
Round flange

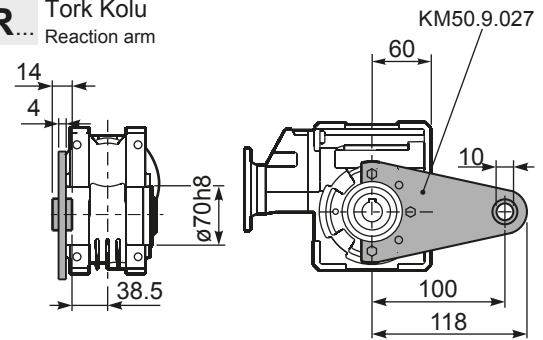


Tip S	øD	E	G	L	N	O	P	Q	Kit Kodu
F1	110 H8	5	10	89	69.5	130	160	9.5	KM50.9.012
F2	95 H8	5	14.5	72	31.5	115	140	11	KM50.9.013

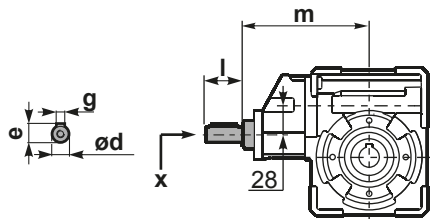
**PP5MFB...** Ayak  
Feet



**PP5MBR...** Tork Kolu  
Reaction arm

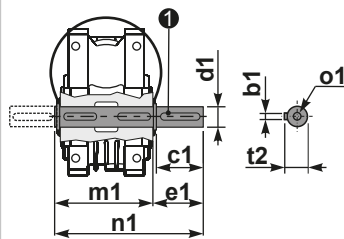


**RP5MFB...** Giriş Mili  
Input shaft



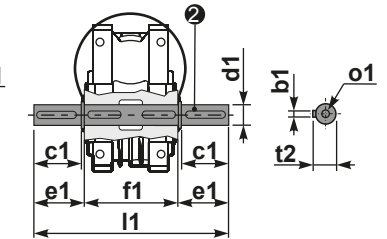
	ød	e	g	l	m	x	
Tip B	14 h6	16	5	25	140.5	M5x13	C35.5.061
Tip S	-	-	-	-	-	-	-

**PP5M....S...** Tek Çıkış Mili  
Single Shaft



① K050.5.028 tip B  
KS050.5.030 tip S

**PP5M....D...** Çift Çıkış Mili  
Double Shaft



② K050.5.029 tip B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	8	52	25 <sup>-0.005</sup> <sub>-0.020</sub>	59.5	81	200	86.5	146	28	M8x20
Tip S	8	50	24 <sup>-0.005</sup> <sub>-0.020</sub>	68.8	-	-	86.5	155	27	M8x20





## HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

	Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flaşları B5 motor flanges				Uygun / Available B14 motor flaşları B14 motor flanges				Dinamik verim Dynamic efficiency <b>RD</b>	Modül Module [mm]	Tahvil kodu Ration code
								-B	-C	-D	-E	-P	-Q	-R	-T			
								63	71	80	90	63	71	80	90			
IEC 90 - 80 - 71	47	29.9	0.75	113	1.5	1.1	165					C	C			74	2.6	01
	37	37.7	0.75	141	1.2	0.88	165					C	C			73	2.0	02
	30	47.1	0.75	169	1.1	0.83	187					C	C			70	3.2	03
	25	56.6	0.55	136	1.4	0.76	187					C	C			64	2.7	04
	19.8	70.7	0.55	164	1.1	0.63	187					C	C			62	2.1	05
	15.9	87.8	0.37	162	1.2	0.43	187					C	C			73	2.6	06
	12.6	111.0	0.37	199	0.9	0.35	187					C	C			71	2.0	07
IEC 71 - 63	10.1	139	0.37	234	0.8	0.30	187					C				67	3.2	08
	8.4	166	0.25	173	1.1	0.27	187					C				61	2.7	09
	6.7	208	0.18	151	1.1	0.20	165					C				59	2.1	10
	4.5	310	0.12	129	1.3	0.15	165					C				51	1.5	11
	3.8	370	0.12	145	1.1	0.14	165					C				48	1.3	12
	3.2	434	0.12	149	0.9	0.11	138					C				42	1.1	13

Uygun Motor Flaşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flaşları Delik Konumları  
Motor Flange Holes Position

**TR** P6M Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz.

Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve aksel yükler tanımlanmıştır.

**EN** Unit P6M is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

### YAĞLAMA P6M

B3-V5-V6 montaj pozisyonlarında ayrı yağlama A (0,30 lt), B (0,08 lt), B6-B7-B8 montaj pozisyonlarında ortak yağlama 0,35 lt (A + B)

LUBRICATION P6M

For B5-V5-V6 separate lubrication for A (0,30 lt), B (0,08 lt),

For B6-B7-B8 common lubrication 0,35 lt (A + B)



SHELL Omala S4 WE 320

ENI Telium VSF 320

Daha fazla ayrıntı için internet sitemizi inceleyiniz.

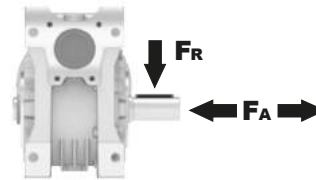
For all details on lubrication and plugs check our website

Tablo 1

### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

#### Çıkış Mili

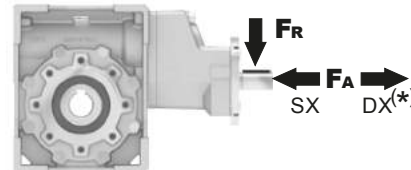
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
75	500	2500
50	600	3000
25	700	3800
15-6	800	4000

#### Giriş Mili

Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	61	305

\*DX yönünde aksel yüke izin verilmez

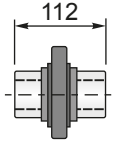
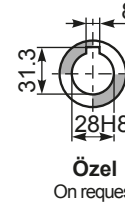
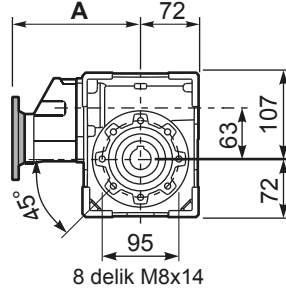
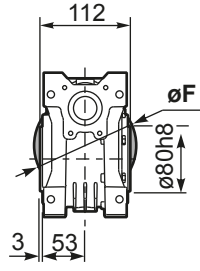
Strong axial loads in the DX direction are not allowed.

Tablo 2



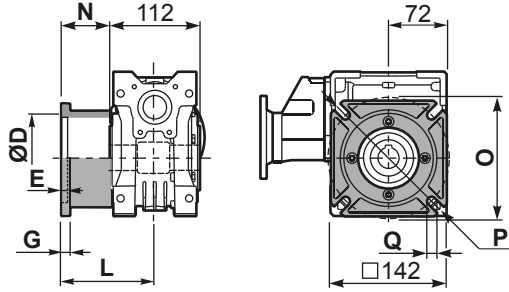
**PP6MFB...** Standart Redüktör  
Basic wormbox

M.Flanşları	Kit Kodu	øF	A
71B5	K063.4.042	160	177.5
80/90B5	K063.4.043	200	179.5
71B14	K063.4.047	105	177.5
80B14	K063.4.046	120	179.5
90B14	K063.4.041	140	179.5
139-434			
63B5	K050.4.041	138	163.5
71B5	K050.4.042	160	161
63B14	K050.4.047	90	163.5
71B14	K050.4.045	105	161



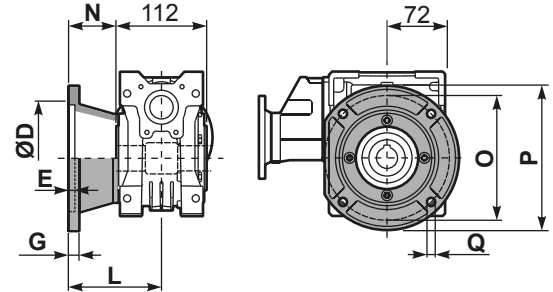
Ağırlık Gearbox weight	29.9+111 Kg	139+434 6.60 Kg
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**PP6MFC...** Kare Çıkış Flanşı  
Square flange



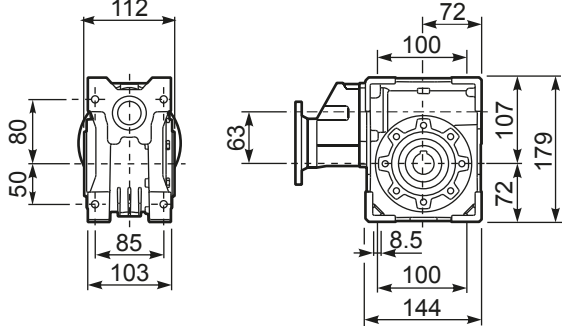
Tip B	øD	E	G	L	N	O	P	Q	Kit Kodu
FC	115 H8	6	10	82	26	150	180	11	KM63.9.010
FL	115 H8	6	10	112	56	150	180	11	KM63.9.011

**PP6MF1...** Yuvarlak Çıkış Flanşı  
Round flange

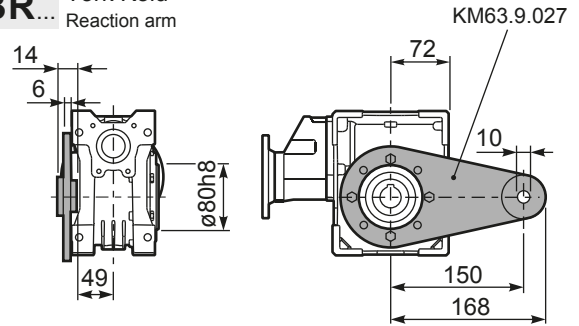


Tip S	øD	E	G	L	N	O	P	Q	Kit Kodu
F1	130 H8	5	10	98	42	165	200	11	KM60.9.012
F2	130 H8	5	10	107	51	165	200	11	KM63.9.013
F3	110 H8	5	16.5	80.5	24.5	130	160	11	KM63.9.014

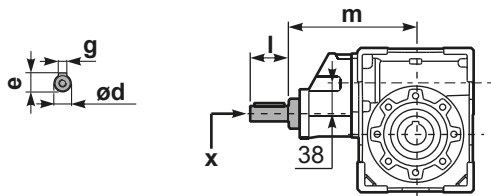
**PP6MFB...** Ayak  
Feet



**PP6MBR...** Tork Kolu  
Reaction arm

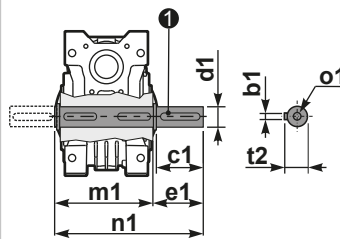


**RP6MFB...** Giriş Milini  
Input shaft



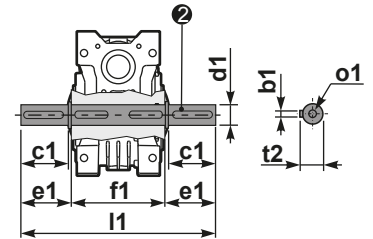
	ød	e	g	l	m	x	Kit Kodu
29.9+111	19 h6	21.5	6	35	170	M6x16	C40.5.062
139+434	14 h6	16	5	25	155	M5x13	C35.5.061

**PP6M.....S...** Tek Çıkış Milini  
Single Shaft



① KM63.5.028 tip B

**PP6M.....D...** Çift Çıkış Milini  
Double Shaft



② KM63.5.029 tip B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	8	50	25h6	53.5	112	219	119.5	173	28	M10x23
Tip S	-	-	-	-	-	-	-	-	-	-



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flaşları B5 motor flanges				Uygun / Available B14 motor flaşları B14 motor flanges			Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
22	<b>62.9</b>	0.75	248	1.2	<b>0.87</b>	<b>286</b>					C	C		77	3.10	01
18	<b>78.5</b>	0.75	293	1.0	<b>0.73</b>	<b>286</b>					C	C		73	2.41	02
15	<b>94.2</b>	0.75	333	0.9	<b>0.70</b>	<b>310</b>					C	C		69	2.10	03
11	<b>126</b>	0.55	297	1.0	<b>0.55</b>	<b>296</b>	B				C	C		63	1.53	04
9	<b>157</b>	0.37	230	1.1	<b>0.41</b>	<b>252</b>	B				C	C		58	1.23	05
8	<b>185</b>	0.37	257	1.2	<b>0.43</b>	<b>296</b>	B				C	C		55	3.10	06
6	<b>231</b>	0.25	193	1.5	<b>0.38</b>	<b>296</b>	B				C	C		49	2.41	07
5	<b>277</b>	0.25	222	1.3	<b>0.33</b>	<b>296</b>	B				C	C		47	2.10	08
4	<b>378</b>	0.18	200	1.5	<b>0.27</b>	<b>296</b>	B				C	C		43	2.10	09

Uygun Motor Flaşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flaşlı Delik Konumları  
Motor Flange Holes Position

\* Tablolarda verilen değerlerin üzerindeki motor güçleri için seçimleri  $M_{2R}$  değerini referans alarak yapınız.  
Power higher than the maximum one which can be supported by the gearbox. Select according to the torque  $M_{2R}$

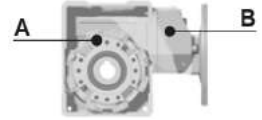
**TR** P7M Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz. Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve aksel yükler tanımlanmıştır.

**EN** Unit P7M is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

#### YAĞLAMA P7M

B3-V5-V6 montaj pozisyonlarında ayrı yağlama A (0,40 lt), B (0,14 lt), B6-B7-B8 montaj pozisyonlarında ortak yağlama 0,65 lt (A + B)  
LUBRICATION P7M

For B5-V5-V6 separate lubrication for A (0,40 lt) , B (0,14 lt),  
For B6-B7-B8 common lubrication 0,65 lt (A + B)



SHELL Omala S4 WE 320

ENI Telium VSF 320

Daha fazla ayrıntı için internet sitemizi inceleyiniz.

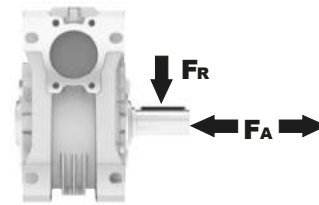
For all details on lubrication and plugs check our website

Tablo 1

#### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

##### Çıkış Mili

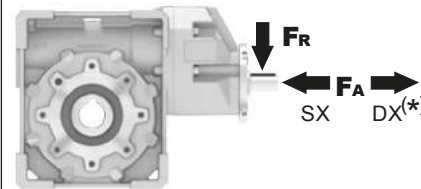
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
75	620	3100
50	720	3600
25	880	4400
15-6	1000	5000

##### Giriş Mili

Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	108	540

\*DX yönünde aksel yükü izin verilmez.

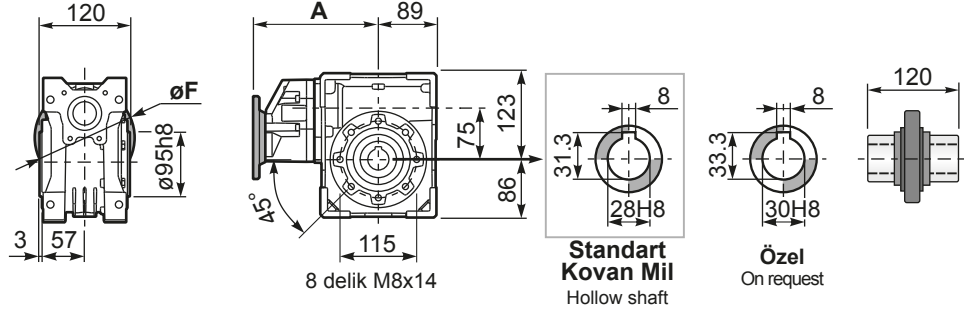
Strong axial loads in the DX direction are not allowed.

Tablo 2

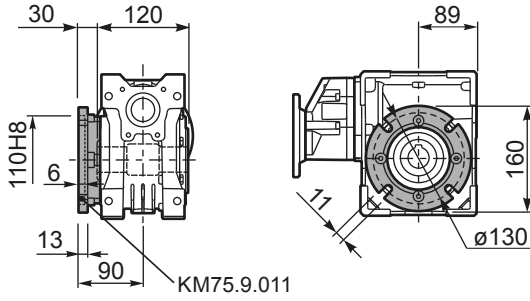
**PP7MFB...** Standart Redüktör  
Basic wormbox

Ağırlık  
Gearbox  
weight **9.90 kg**

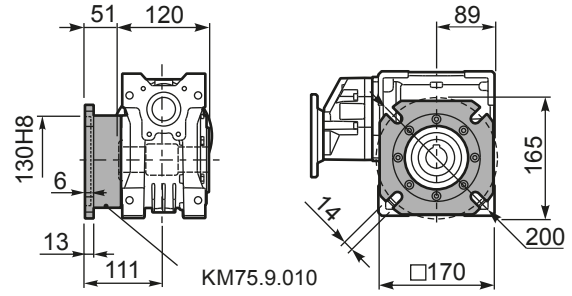
M.Flanşları	Kit Kodu	øF	A
<b>63B5</b>	K063.4.041	140	192.7
<b>71B5</b>	K063.4.042	160	190.7
<b>80/90B5</b>	K063.4.043	200	192.7
<b>71B14</b>	K063.4.047	105	190.7
<b>80B14</b>	K063.4.046	120	192.7
<b>90B14</b>	K063.4.041	140	192.7



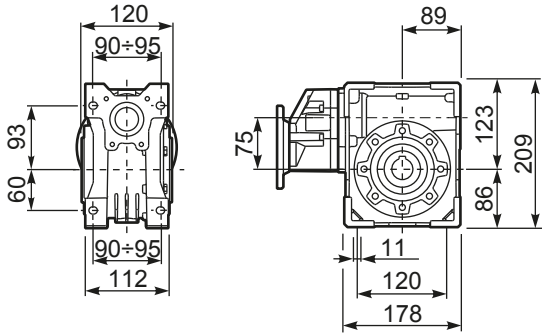
**PP7MFC...** Kare Çıkış Flanşı  
Square flange



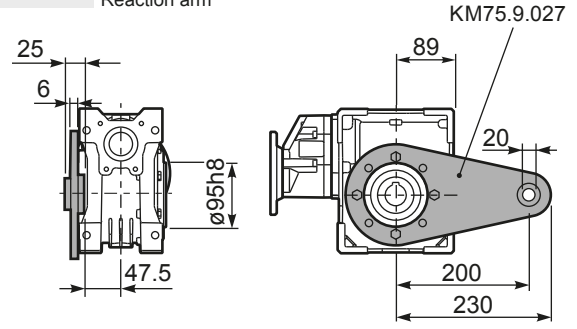
**PP7MFL...** Yuvarlak Çıkış Flanşı  
Round flange



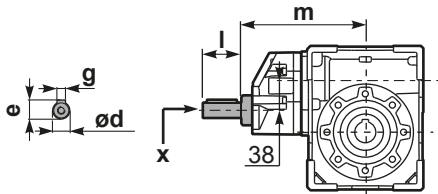
**PP7MFB...** Ayak  
Feet



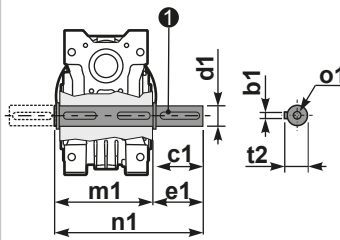
**PP7MBR...** Tork Kolu  
Reaction arm



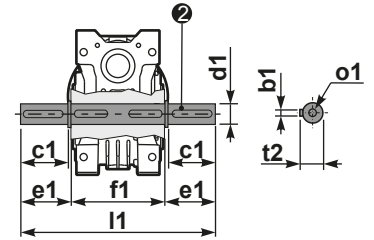
**RP7MFB...** Giriş Mili  
Input shaft



**PP7M.....S...** Tek Çıkış Mili  
Single Shaft



**PP7M.....D...** Çift Çıkış Mili  
Double Shaft



① KM75.5.028 Standart

② KM75.5.029 Standart

	ød	e	g	l	m	x	Kit Kodu
Tip B	19 h6	21.5	6	35	185.5	M6x16	C40.5.062

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standart	8	60	28 h6	63.5	120	247	128.5	192	31	M10
Özel	-	-	-	-	-	-	-	-	-	-



## HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flaşları B5 motor flanges				Uygun / Available B14 motor flaşları B14 motor flanges			Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
23.5	<b>59.7</b>	1.1	300	1.4	1.5	418					C	C		67	3.5	01
19.4	<b>72.3</b>	1.1	347	1.2	1.3	407					C	C		64	3.1	02
17.1	<b>81.7</b>	1.1	374	1.1	1.2	418					C	C		61	2.7	03
13.3	<b>105</b>	0.75	323	1.2	0.89	385					C	C		60	2.1	04
8.0	<b>176</b>	0.55	415	1.1	0.58	440	B				C	C		63	3.5	05
6.6	<b>213</b>	0.37	322	1.3	0.47	407	B				C	C		60	3.1	06
5.8	<b>240</b>	0.37	321	1.3	0.48	418	B				C	C		53	2.7	07
4.3	<b>328</b>	0.37	438	1.0	0.35	418	B				C	C		53	2.7	08
3.3	<b>422</b>	0.25	374	1.0	0.26	385	B				C	C		52	2.1	09
3.0	<b>466</b>	0.25	358	0.9	0.23	330	B				C	C		45	1.9	10
2.3	<b>605</b>	0.18	297	1.1	0.20	330	B				C	C		40	1.5	11

Uygun Motor Flaşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flaşlı Delik Konumları  
Motor Flange Holes Position

\* Tablolarda verilen değerlerin üzerindeki motor güçleri için seçimleri  $M_{2R}$  değerini referans alarak yapınız.  
Power higher than the maximum one which can be supported by the gearbox. Select according to the torque  $M_{2R}$

**TR** P8M Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz. Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve aksel yükler tanımlanmıştır.

**EN** Unit P8M is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

### YAĞLAMA P8M

B3-V5-V6 montaj pozisyonlarında ayrı yağlama A (1,20 lt), B (0,14 lt), B6-B7-B8 montaj pozisyonlarında ortak yağlama 1,00 lt (A + B)

#### LUBRICATION P8M

For B5-V5-V6 separate lubrication for A (1,20 lt) , B (0,14 lt),

For B6-B7-B8 common lubrication 1,00 lt (A + B)



SHELL Omala S4 WE 320

ENI Telium VSF 320

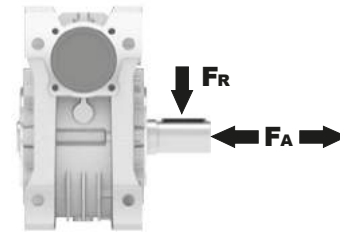
Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

Tablo 1

### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

#### Çıkış Mili

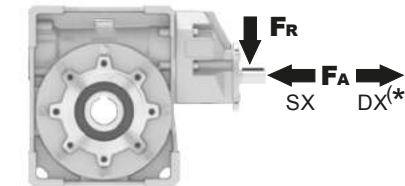
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
75	700	3500
50	800	4000
25	1000	5000
15-6	1160	5800

#### Giriş Mili

Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	108	540

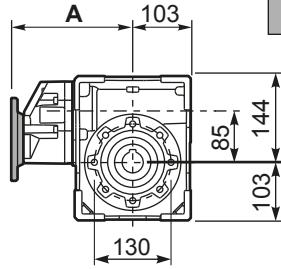
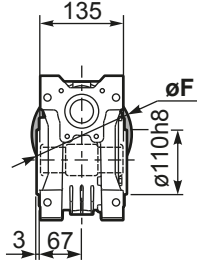
\*DX yönünde aksel yüküne izin verilmez

Strong axial loads in the DX direction are not allowed.

Tablo 2

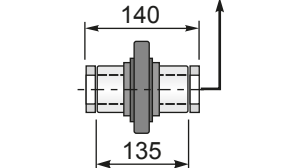
**PP8MFB...** Standart Redüktör  
Basic wormbox

M.Flanşları	Kit Kodu	øF	A
63B5	K063.4.041	140	195.2
71B5	K063.4.042	160	193.2
80/90B5	K063.4.043	200	195.2
71B14	K063.4.047	105	193.2
80B14	K063.4.046	120	195.2
90B14	K063.4.041	140	195.2

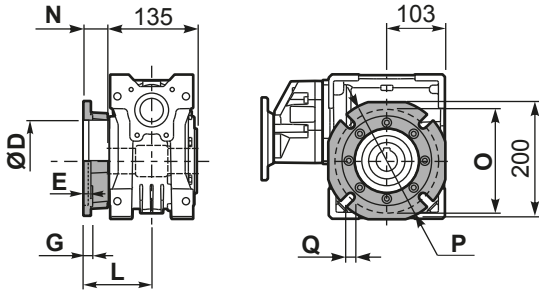


Ağırlık  
Gearbox  
weight **12.3 kg**

ø H8	B	C	Burç Kodu *Spacer code
35 Standard	38.3	10	KM85.3.035
38 Özel on request	41.3	10	KM85.3.038

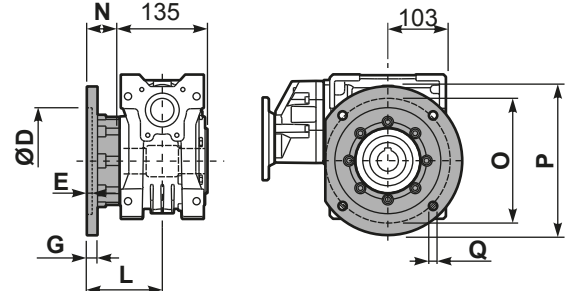


**PP8MFC...** Yuvarlak Çıkış Flanşı  
Round flange



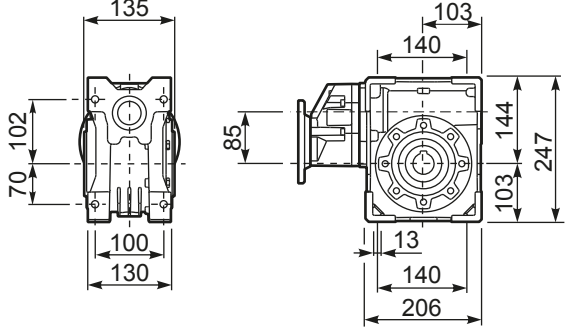
Tip B	øD	E	G	L	N	O	P	Q	Kit Kodu
FC	152 H8	5	16	111	43.5	176	205	13	K085.9.010
FL	180 H8	6	18	122	54.5	215	250	14	KM85.9.011

**PP8MF1...** Yuvarlak Çıkış Flanşı  
Round flange

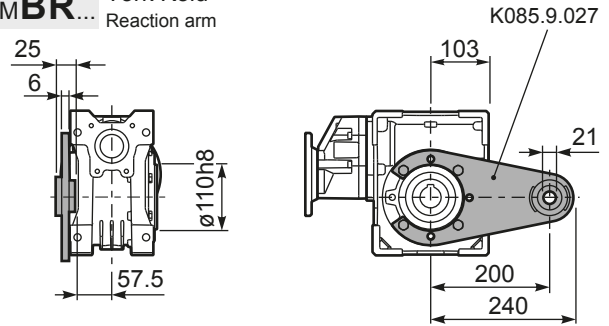


Tip S	øD	E	G	L	N	O	P	Q	Kit Kodu
F1	130 H8	5	13	109.5	42	165	200	13	KS085.9.015
F2	152 H8	5	16	151.5	84	176	205	13	K085.9.010 K085.0.201

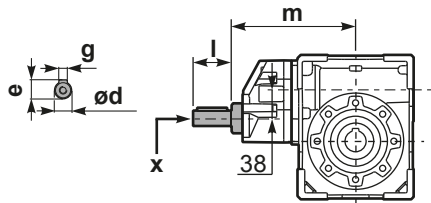
**PP8MFB...** Ayak  
Feet



**PP8MBR...** Tork Kolu  
Reaction arm

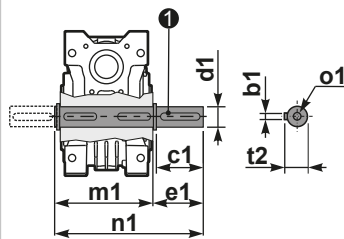


**RP8MFB...** Giriş Mili  
Input shaft

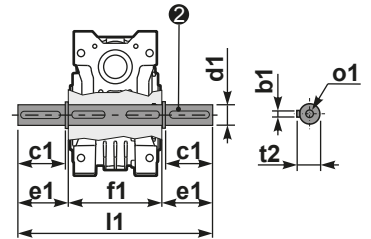


Tip B	ød	e	g	l	m	x	Kit Kodu
Tip B	19 h6	21.5	6	35	186	M6x16	C40.5.062
Tip S	-	-	-	-	-	-	-

**PP8M.....S...** Tek Çıkış Mili  
Single Shaft



**PP8M.....D...** Çift Çıkış Mili  
Double Shaft



① K085.5.028 type B

② K085.5.029 type B

Tip B	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	10	60	35 <sup>-0.005</sup> <sub>-0.020</sub>	73.5	135	282	141	214.5	38	M10x23
Tip S	-	-	-	-	-	-	-	-	-	-



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flaşları B5 motor flanges				Uygun / Available B14 motor flaşları B14 motor flanges			Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
16.8	83.2	1.5	587	1.1	1.7	660					C	C		69	3.5	01
13.9	100.5	1.5	699	0.8	1.3	594					C	C		68	2.9	02
10.6	132	1.1	634	0.9	0.95	550					C	C		64	2.2	03
8.0	176	0.75	666	1.2	0.90	803	B				C	C		74	4.7	04
6.7	208	0.75	766	0.9	0.65	660	B				C	C		72	4.0	05
5.7	245	0.55	634	1.0	0.57	660	B				C	C		69	3.5	06
4.7	296	0.55	755	0.8	0.43	594	B				C	C		68	2.9	07
4.2	334	0.55	865	0.8	0.42	660	B				C	C		69	3.5	08
3.5	403	0.37	692	0.9	0.32	594	B				C	C		68	2.9	09
2.6	529	0.25	577	1.0	0.24	550	B				C	C		64	2.2	10
2.2	624	0.25	628	0.8	0.21	528	B				C	C		59	1.9	11

Uygun Motor Flaşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flaşlı Delik Konumları  
Motor Flange Holes Position

**TR** P1M Kare Gövde Sonsuz Vidalı Redüktörler yağsız olarak sevk edilir. Redüktör üzerinde havalandırma tapası, yağ göstergesi ve tahliye tapası mevcuttur. Mineral yağlar bu ekipmanlar ile birlikte kullanılır. Sentetik yağ kullanılmak istenirse bu ekipmanların körtapa ile değiştirilmesi önerilir.

Tablo 1'de montaj pozisyonuna göre uygun yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve eksele yük değerleri tanımlanmıştır.

**EN** Unit P1M is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. Primary reduction unit is supplied with closed plugs and lubricated for life with synthetic oil. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

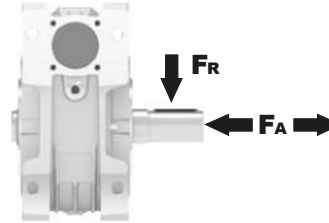
B3	B6	B7	B8	V5	V6
1.9/0.14LT	1.35/0.14 LT	1.35/0.14 LT	2.0/0.14 LT	2.0/0.14 LT	2.0/0.14 LT
SHELL Omala S2 GX 460			ENI Blasias 460		

Tablo 1

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

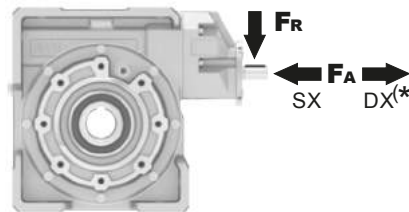
### RADYAL VE EKSELE YÜKLER / RADIAL AND AXIAL LOADS

Çıkış Mili  
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
75	800	4000
50	920	4600
25	1200	6000
15-6	1400	7000

Giriş Mili  
Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	150	760

\*DX yönünde eksele yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

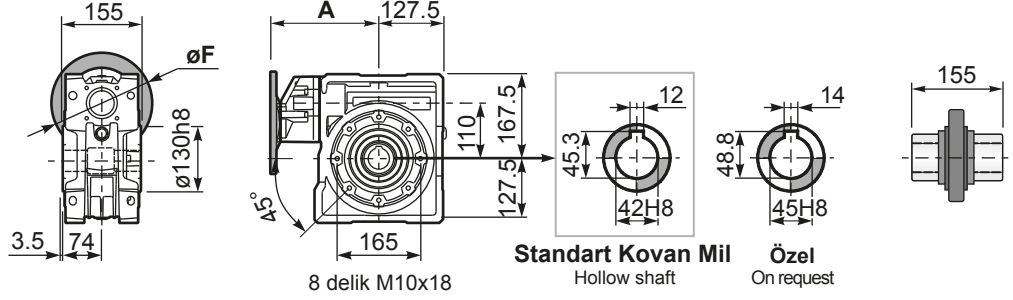
Tablo 2



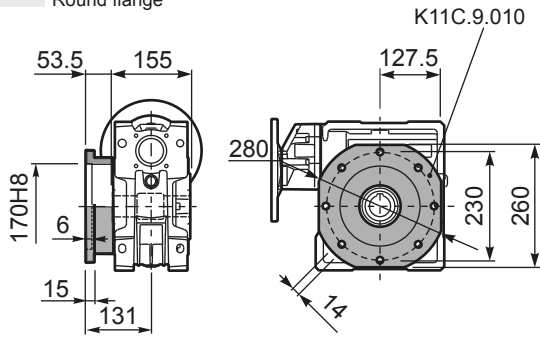
**PP1MFB...** Standart Redüktör  
Basic wormbox

Ağırlık  
Gearbox  
weight **37.3 kg**

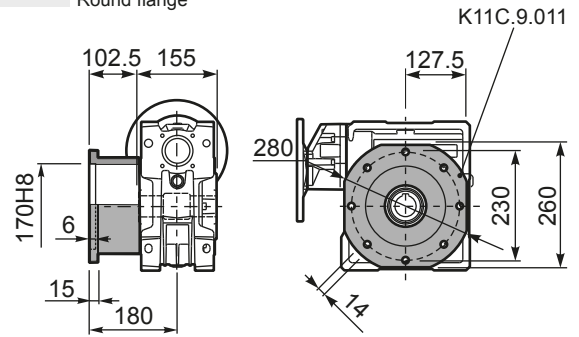
M.Flanşları	Kit Kodu	øF	A
<b>63B5</b>	K063.4.041	140	214.7
<b>71B5</b>	K063.4.042	160	212.7
<b>80/90B5</b>	K063.4.043	200	214.7
<b>71B14</b>	K063.4.047	105	212.7
<b>80B14</b>	K063.4.046	120	214.7
<b>90B14</b>	K063.4.041	140	214.7



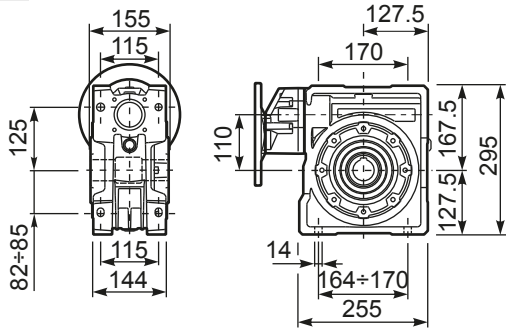
**PP1MFC...** Yuvarlak Çıkış Flanşı  
Round flange



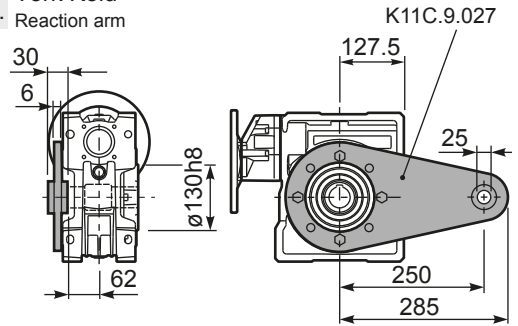
**PP1MFL...** Yuvarlak Çıkış Flanşı  
Round flange



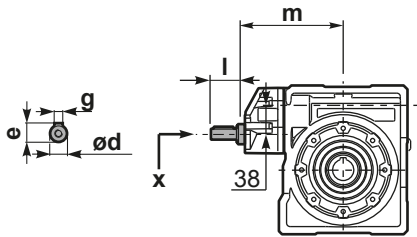
**PP1MFB...** Ayak  
Feet



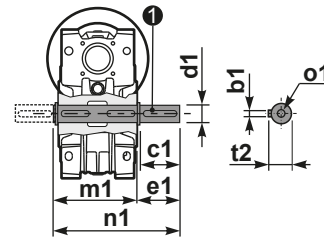
**PP1MBR...** Tork Kolu  
Reaction arm



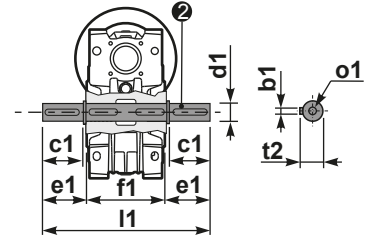
**RP1MFB...** Giriş Milini  
Input shaft



**PP1M.....S...** Tek Çıkış Milini  
Single Shaft



**PP1M.....D...** Çift Çıkış Milini  
Double Shaft

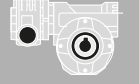


① K11C.5.028 tip B

② K11C.5.029 tip B

	ød	e	g	l	m	x
Tip B	19 h6	21.5	6	35	205	M6x16
Tip S	-	-	-	-	-	-

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	12	80	42h6	84.5	155	324	164.5	249	45	M16x28
Tip S	-	-	-	-	-	-	-	-	-	-



## HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor $f.s.$	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flaşları B5 motor flanges		Uygun / Available B14 motor flaşları B14 motor flanges		Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code
							-A	-B	-O	-P			
							56	63	56	63			
9.3	150	0.06	29	1.3	0.08	38	B		B-C		48	1.44	01
6.7	210	0.06	39	1.0	0.06	38	B		B-C		45	1.44	02
4.7	300	0.06	44	0.9	0.05	38	B		B-C		36	1.44	03
3.1	450	0.06*	38	<0.8	0.04	38	B		B-C		33	1.44	04
2.3	600	0.06*	38	<0.8	0.03	38	B		B-C		30	1.44	05
1.6	900	0.06*	38	<0.8	0.02	38	B		B-C		27	1.44	06
1.2	1200	0.06*	38	<0.8	0.02	38	B		B-C		26	1.44	07
0.8	1830	0.06*	38	<0.8	0.01	38	B		B-C		24	1.44	08
0.6	2400	0.06*	38	<0.8	0.01	38	B		B-C		22	1.44	09

Uygun Motor Flaşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flaşlı Delik Konumları  
Motor Flange Holes Position

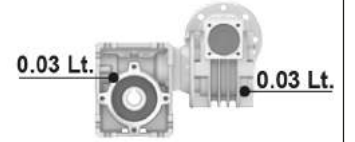
\* Tablolarda verilen değerlerin üzerindeki motor güçleri için seçimleri  $M_{2R}$  değerini referans alarak yapınız.  
Power higher than the maximum one which can be supported by the gearbox. Select according to the torque  $M_{2R}$

**TR** 33M Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz. Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve aksel yükler tanımlanmıştır.

**EN** Unit 33M is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**YAĞLAMA 33M**  
Yağ Miktarı 0.03 / 0.03 lt

LUBRICATION 33M  
Quantity 0.03 / 0.03 lt



SHELL Omala S4 WE 320

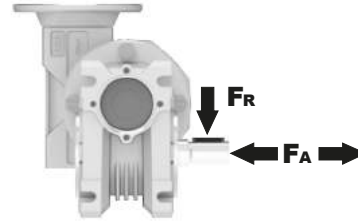
ENI Telium VSF 320

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

Tablo 1

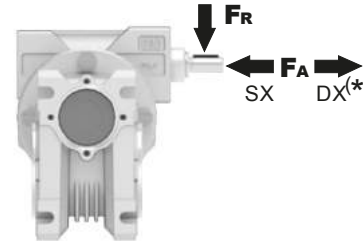
## RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

Çıkış Mili  
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
25	300	1800
15	400	2000

Giriş Mili  
Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	20	100

\*DX yönünde aksel yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

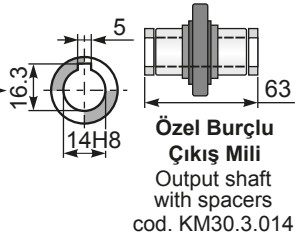
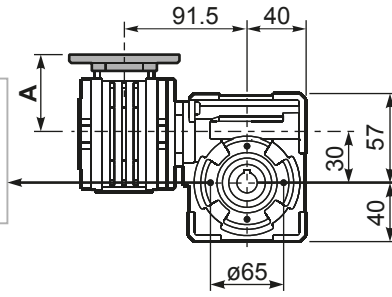
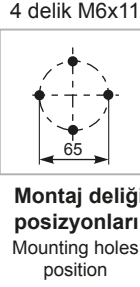
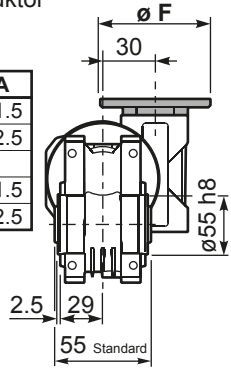
Tablo 2



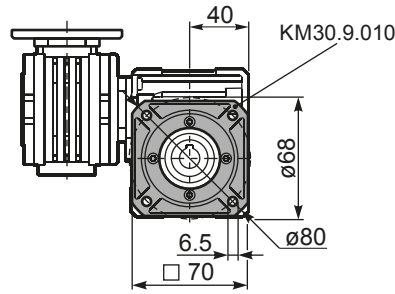
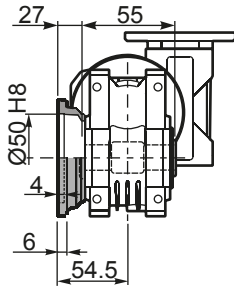
**P33MFB...** Standart Redüktör  
Basic wormbox

Ağırlık  
Gearbox  
weight **2.25 kg**

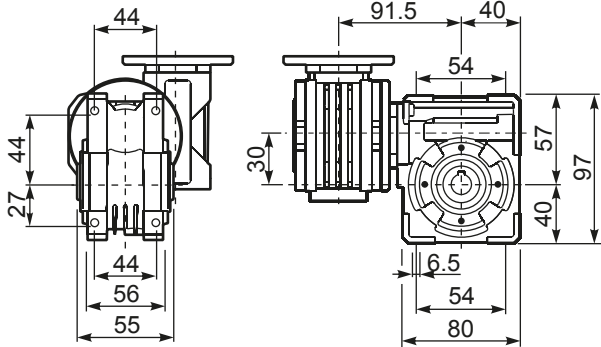
M. Flanşları	Kit kodu	øF	A
<b>56B5</b>	K030.4.041	120	61.5
<b>63B5</b>	K030.4.042	140	62.5
<b>56B14</b>	K030.4.046	80	61.5
<b>63B14</b>	K030.4.045	90	62.5



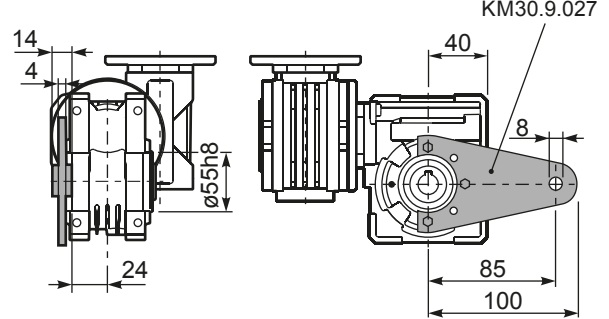
**P33MFC...** Kare Çıkış Flanşı  
Square flange



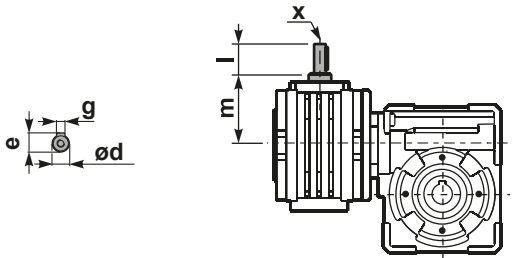
**P33MFB...** Ayak  
Feet



**P33MBR...** Tork Kolu  
Reaction arm

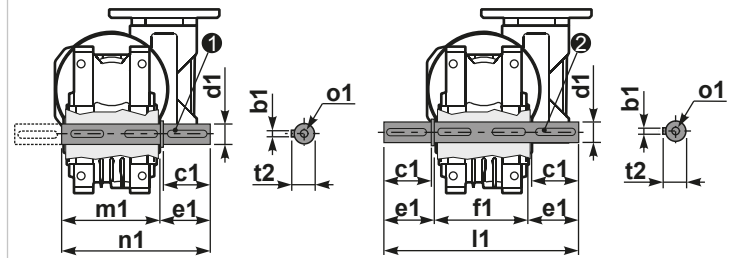


**R33MFB...** Giriş Mili  
Input shaft



**P33M.....S...** Tek Çıkış Mili  
Single Shaft

**P33M.....D...** Çift Çıkış Mili  
Double Shaft

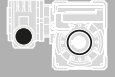


① K030.5.028 tip B

② K030.5.029 tip B

	ød	e	g	l	m	x	Kit Kodu
Tip B	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
Tip S	-	-	-	-	-	-	-

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	5	25	14 <sup>-0.005</sup> <sub>-0.020</sub>	35.5	55	126	59	94.5	16	M5x14
Tip S	-	-	-	-	-	-	-	-	-	-



## HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flaşları B5 motor flanges		Uygun / Available B14 motor flaşları B14 motor flanges		Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code
							-A	-B	-O	-P			
							56	63	56	63			
10.0	140	0.12	57	1.3	0.15	72	B		B-C		50	2.2	01
7.0	200	0.12	79	0.9	0.11	72	B		B-C		48	2.2	02
5.0	280	0.09	77	0.9	0.08	72	B		B-C		45	2.4	03
3.3	420	0.06	62	1.2	0.07	72	B		B-C		36	1.6	04
2.5	560	0.06	76	1.0	0.06	72	B		B-C		33	2.5	05
1.9	740	0.06	91	0.8	0.05	72	B		B-C		30	1.8	06
1.5	920	0.06*	72	<0.8	0.04	72	B		B-C		27	1.5	07
1.3	1120	0.06*	72	<0.8	0.04	72	B		B-C		26	2.5	08
0.9	1480	0.06*	72	<0.8	0.03	72	B		B-C		24	1.8	09
0.8	1840	0.06*	72	<0.8	0.03	72	B		B-C		22	1.5	10
0.6	2400	0.06*	72	<0.8	0.02	72	B		B-C		21	1.2	11

Uygun Motor Flaşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flaşlı Delik Konumları  
Motor Flange Holes Position

\* Tablolarda verilen değerlerin üzerindeki motor güçleri için seçimleri  $M_{2R}$  değerini referans alarak yapınız.  
Power higher than the maximum one which can be supported by the gearbox. Select according to the torque  $M_{2R}$

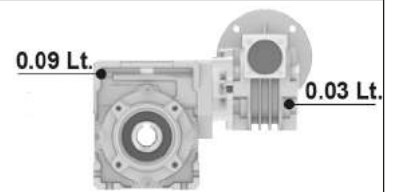
**TR** 43M Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz. Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve aksel yükler tanımlanmıştır.

**EN** Unit 43M is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

### YAĞLAMA 43M

Yağ Miktarı 0.09 / 0.03 lt

LUBRICATION 43M  
Quantity 0.09 / 0.03 lt



SHELL Omala S4 WE 320

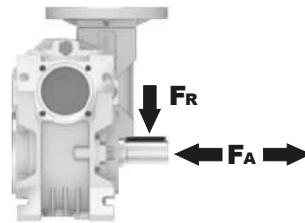
ENI Telium VSF 320

Tablo 1

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

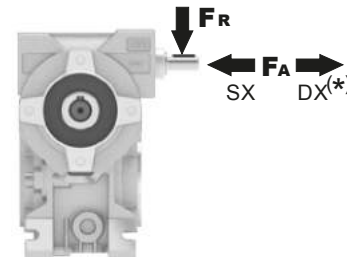
### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

Çıkış Mili  
Output shaft



$n_2$ [r.p.m]	$F_A$ [N]	$F_R$ [N]
25	300	1800
15	400	2000

Giriş Mili  
Input shaft



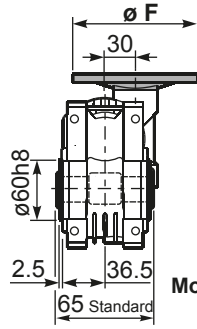
$n_1$ [r.p.m]	$F_A$ [N]	$F_R$ [N]
1400	20	100

\*DX yönünde aksel yükü izin verilmez  
Strong axial loads in the DX direction are not allowed.

Tablo 2

**P43MFB...** Standart Redüktör  
Basic wormbox

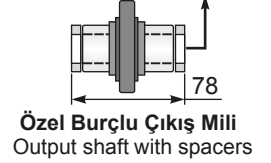
M. Flanşları	Kit kodu	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



Montaj deliği pozisyonları  
Mounting holes position

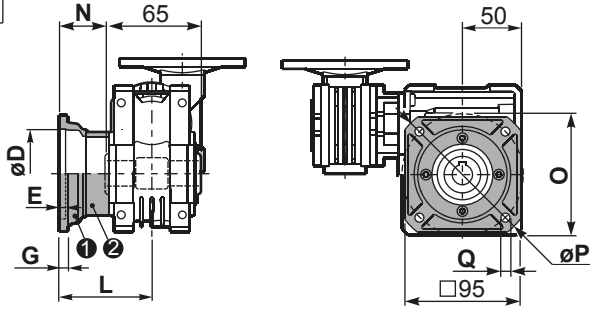
Ağırlık  
Gearbox weight **3.60 kg**

ø H8	B	C	Burç Kodu *Spacer code
18 Standard	20.8	6	KM45.3.018
19 Özel on request	21.8	6	KM45.3.019
20 Özel on request	22.8	6	KM45.3.020



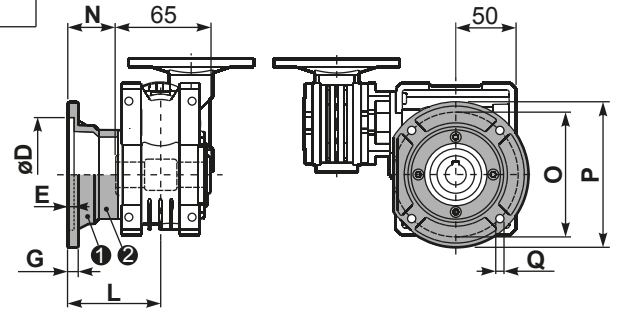
Özel Burçlu Çıkış Mili  
Output shaft with spacers

**P43MFC...** Kare Çıkış Flanşı  
Square flange



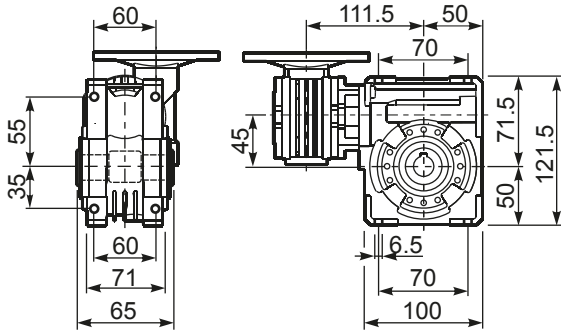
Tip B	øD	E	G	L	N	O	P	Q	Kit Kodu
FC	60 H8	4	7	67	34.5	75	110	9	KM45.9.010
FL	60 H8	4	7	97	64.5	75	110	9	KM45.9.011

**P43MF1...** Yuvarlak Çıkış Flanşı  
Round flange

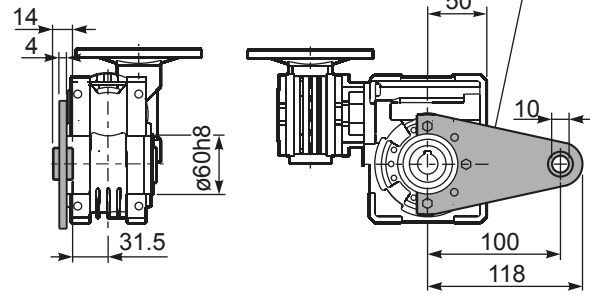


Tip S	øD	E	G	L	N	O	P	Q	Kit Kodu
F1	95H8	5	9	80	47.5	115	140	9.5	KM45.9.012
F2	-	-	-	-	-	-	-	-	-

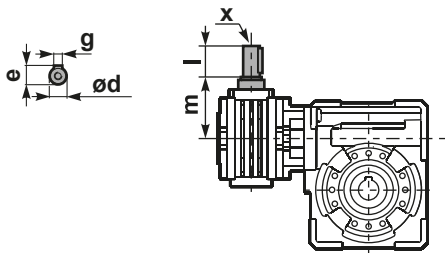
**P43MFB...** Ayak  
Feet



**P43MBR...** Tork Kolu  
Reaction arm

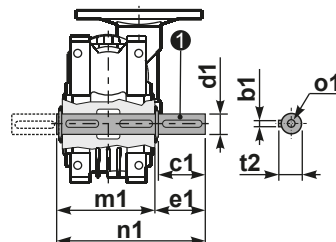


**R43MFB...** Giriş Mili  
Input shaft



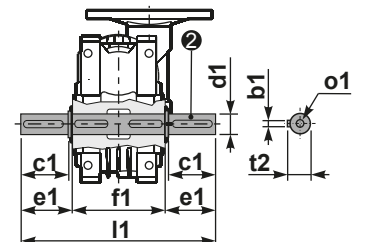
	ød	e	g	l	m	x	Kit Kodu
Tip B	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
Tip S	-	-	-	-	-	-	-

**P43M.....S...** Tek Çıkış Mili  
Single Shaft



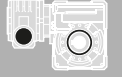
① K045.5.028 tip B  
KS045.5.030 tip S

**P43M.....D...** Çift Çıkış Mili  
Double Shaft



② K045.5.029 tip B

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	6	32	18 <sup>-0.005</sup> <sub>-0.020</sub>	43	65	151	70	113	20.5	M6x18
Tip S	6	40	19 <sup>-0.005</sup> <sub>-0.020</sub>	58.5	-	-	70	128.5	21.5	M8x20



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor $f.s.$	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges		Uygun / Available B14 motor flanşları B14 motor flanges		Dinamik verim Dynamic efficiency <b>RD</b>	Modül Module [mm]	Tahvil kodu Ration code
							-A	-B	-O	-P			
							56	63	56	63			
5.6	<b>252</b>	0.12	97	1.4	<b>0.17</b>	<b>138</b>	<b>B</b>		<b>B-C</b>		47	2.1	01
3.9	<b>360</b>	0.12	124	1.1	<b>0.13</b>	<b>138</b>	<b>B</b>		<b>B-C</b>		42	2.1	02
2.6	<b>540</b>	0.09	129	1.1	<b>0.10</b>	<b>138</b>	<b>B</b>		<b>B-C</b>		39	2.1	03
1.9	<b>720</b>	0.09	159	0.9	<b>0.08</b>	<b>138</b>	<b>B</b>		<b>B-C</b>		36	2.1	04
1.6	<b>860</b>	0.06	113	1.2	<b>0.07</b>	<b>138</b>	<b>B</b>		<b>B-C</b>		32	1.8	05
1.2	<b>1200</b>	0.06	133	1.0	<b>0.06</b>	<b>138</b>	<b>B</b>		<b>B-C</b>		27	1.3	06
1.0	<b>1440</b>	0.06	153	0.9	<b>0.05</b>	<b>138</b>	<b>B</b>		<b>B-C</b>		26	2.1	07
0.8	<b>1720</b>	0.06	176	0.8	<b>0.05</b>	<b>138</b>	<b>B</b>		<b>B-C</b>		25	1.8	08
0.6	<b>2400</b>	0.06*	132	<0.8	<b>0.04</b>	<b>132</b>	<b>B</b>		<b>B-C</b>		21	1.3	09

**Uygun Motor Flanşları**  
Motor Flanges Available

**B) Burç ile montaj yapılabilir**  
Supplied with Reduction Bushing

**B) Burç Kullanılmadan Montajı Yapılabilir**  
Available on Request without reduction bushing

**C) Motor Flanşı Delik Konumları**  
Motor Flange Holes Position

\* Tablolarda verilen değerlerin üzerindeki motor güçleri için seçimleri  $M_{2R}$  değerini referans alarak yapınız.  
Power higher than the maximum one which can be supported by the gearbox. Select according to the torque  $M_{2R}$

**TR** 53M Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz. Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve aksel yükler tanımlanmıştır.

**EN** Unit 53M is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

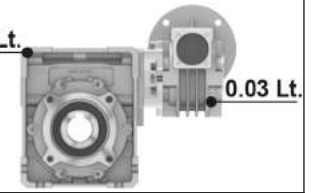
#### YAĞLAMA 53M

Yağ Miktarı 0.14 / 0.03 lt

0.14 Lt.

#### LUBRICATION 53M

Quantity 0.14 / 0.03 lt



**SHELL** Omala S4 WE 320

**ENI** Telium VSF 320

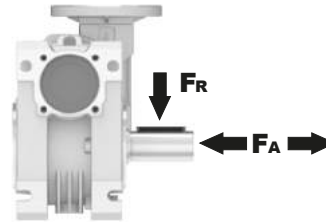
Tablo 1

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

#### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

##### Çıkış Mili

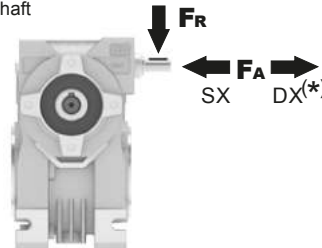
Output shaft



$n_2$ [r.p.m]	$F_A$ [N]	$F_R$ [N]
<b>25</b>	480	2500
<b>15</b>	560	2800

##### Giriş Mili

Input shaft



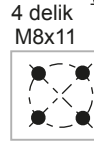
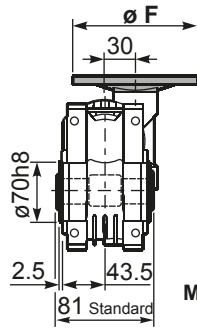
$n_1$ [r.p.m]	$F_A$ [N]	$F_R$ [N]
<b>1400</b>	20	100

\*DX yönünde aksel yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

Tablo 2

**P53MFB...** Standart Redüktör  
Basic wormbox

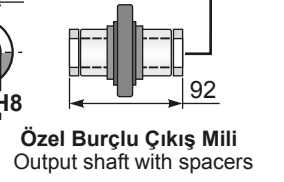
M. Flanşları	Kit kodu	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



Montaj deliği pozisyonları  
Mounting holes position

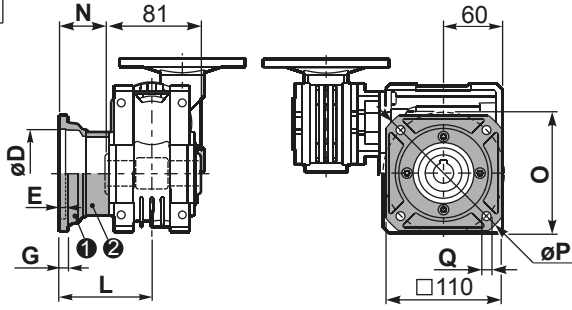
Ağırlık  
Gearbox weight  
**4.61 kg**

ø H8	B	C	Burç Kodu *Spacer code
25 Standard	28.3	8	KM50.3.025
24 Özel on request	27.3	8	KM50.3.024



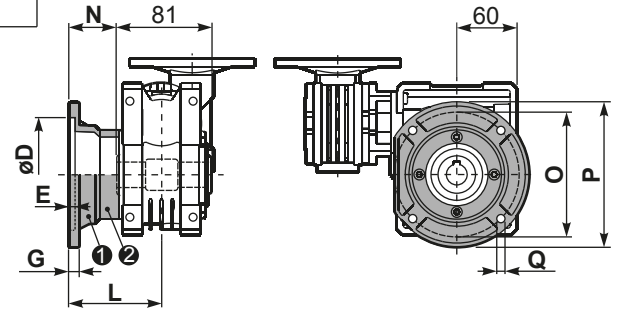
Özel Burçlu Çıkış Mili  
Output shaft with spacers

**P53MFC...** Kare Çıkış Flanşı  
Square flange



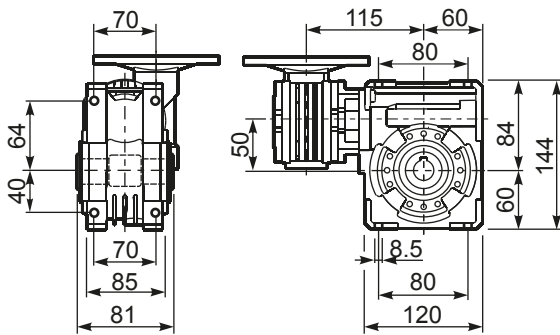
Tip B	øD	E	G	L	N	O	P	Q	Kit Kodu
FC	70 H8	5	9	90	49.5	85	125	11	KM50.9.010
FL	70 H8	5	9	120	79.5	85	125	11	KM50.9.011

**P53MF1...** Yuvarlak Çıkış Flanşı  
Round flange

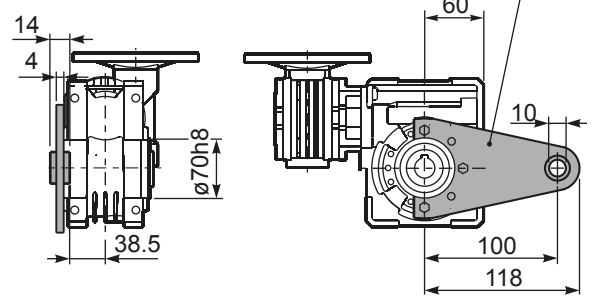


Tip S	øD	E	G	L	N	O	P	Q	Kit Kodu
F1	110 H8	5	10	89	48.5	130	160	9.5	KM50.9.012
F2	95 H8	5	14.5	72	31.5	115	140	11	KM50.9.013

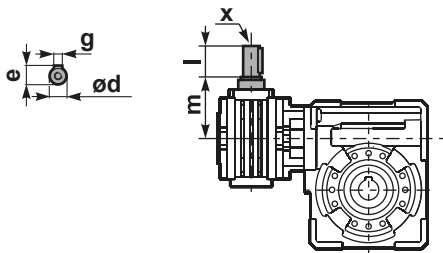
**P53MFB...** Ayak  
Feet



**P53MBR...** Tork Kolu  
Reaction arm

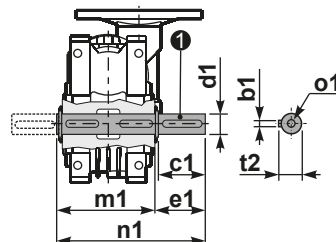


**R53MFB...** Giriş Mili  
Input shaft



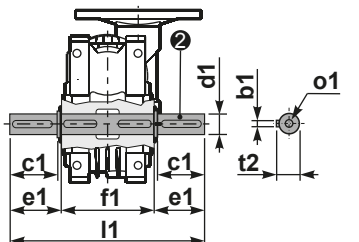
Tip B	ød	e	g	l	m	x	Kit Kodu
Tip B	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
Tip S	-	-	-	-	-	-	-

**P53M.....S...** Tek Çıkış Mili  
Single Shaft



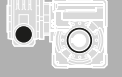
① K050.5.028 type B  
KS050.5.030 type S

**P53M.....D...** Çift Çıkış Mili  
Double Shaft



② K050.5.029 type B

Tip B	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	8	52	25 <sup>-0.005</sup> <sub>-0.020</sub>	59.5	81	200	86.5	146	28	M8x20
Tip S	8	50	24 <sup>-0.005</sup> <sub>-0.020</sub>	68.8	-	-	86.5	155	27	M8x20



## HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges		Uygun / Available B14 motor flanşları B14 motor flanges		Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code
							-A	-B	-O	-P			
5.6	252	0.18	142	1.9	0.34	270	B		B-C		46	2.7	01
3.9	360	0.18	181	1.5	0.27	270	B		B-C		41	2.7	02
2.6	540	0.18	245	1.1	0.20	270	B		B-C		37	2.7	03
1.9	720	0.12	200	1.3	0.16	270	B		B-C		34	2.7	04
1.3	1080	0.12	265	1.0	0.12	270	B		B-C		30	2.7	05
1.0	1440	0.09	239	1.1	0.10	270	B		B-C		27	2.7	06
0.5	2745	0.06	258	1.0	0.06	270	B		B-C		23	2.1	07

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanşı Delik Konumları  
Motor Flange Holes Position

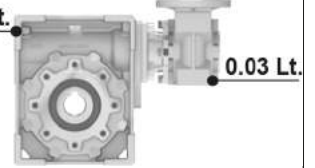
\* Tablolarda verilen değerlerin üzerindeki motor güçleri için seçimleri  $M_{2R}$  değerini referans alarak yapınız.  
Power higher than the maximum one which can be supported by the gearbox. Select according to the torque  $M_{2R}$

**TR** 63M Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz. Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve aksel yükler tanımlanmıştır.

**EN** Unit 63M is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

## YAĞLAMA 63M

Yağ Miktarı 0.30 / 0.03 lt 0.30 Lt.

LUBRICATION 63M  
Quantity 0.30 / 0.03 lt

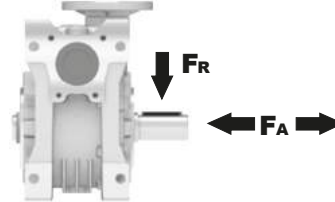
SHELL Omala S4 WE 320

ENI Telium VSF 320

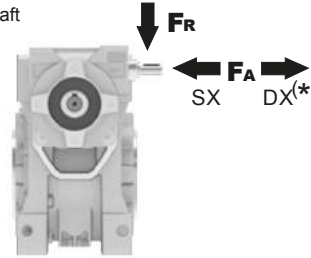
Tablo 1

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

## RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

Çıkış Mili  
Output shaft

$n_2$ [r.p.m]	FA [N]	FR [N]
25	700	3800
15	800	4000

Giriş Mili  
Input shaft

$n_1$ [r.p.m]	FA [N]	FR [N]
1400	20	100

\*DX yönünde aksel yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

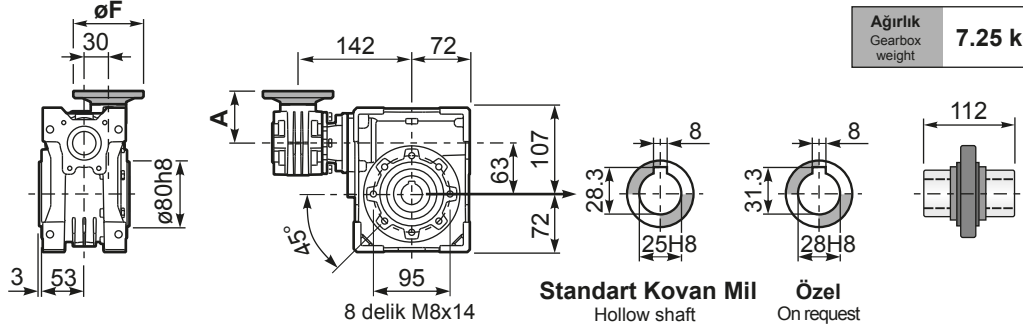
Tablo 2



**P63MFB...** Standart Redüktör  
Basic wormbox

Ağırlık  
Gearbox  
weight **7.25 kg**

M. Flanşları	Kit kodu	øF	A
<b>56B5</b>	K030.4.041	120	61.5
<b>63B5</b>	K030.4.042	140	62.5
<b>56B14</b>	K030.4.046	80	61.5
<b>63B14</b>	K030.4.045	90	62.5



**P63MFC...** Kare Çıkış Flanşı  
Square Flange

**P63MF1...** Yuvarlak Çıkış Flanşı  
Round flange

Technical drawings of the P63MFC gearbox with square flange. The main view shows a front view with dimensions: 112, N, 72, 72, O, P, Q, 142, L, G, E, øD. The side view shows dimensions: 72, O, P, Q, 142, L, G, E, øD.

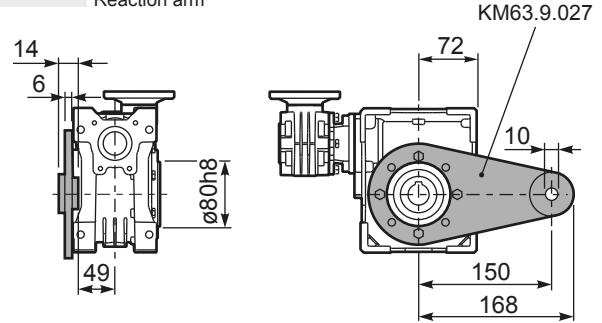
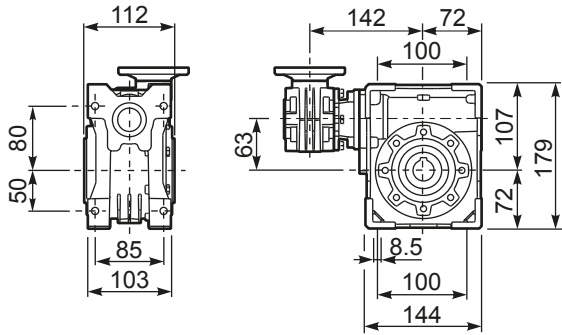
Tip B	øD	E	G	L	N	O	P	Q	Kit Kodu
<b>FC</b>	115 H8	6	10	82	26	150	180	11	KM63.9.010
<b>FL</b>	115 H8	6	10	112	56	150	180	11	KM63.9.011

Technical drawings of the P63MF1 gearbox with round flange. The main view shows a front view with dimensions: 112, N, 72, 72, O, P, Q, L, G, E, øD. The side view shows dimensions: 72, O, P, Q, L, G, E, øD.

Tip S	øD	E	G	L	N	O	P	Q	Kit Kodu
<b>F1</b>	130 H8	5	10	98	42	165	200	11	KM60.9.012
<b>F2</b>	130 H8	5	10	107	51	165	200	11	KM63.9.013
<b>F3</b>	110 H8	5	16.5	80.5	24.5	130	160	11	KM63.9.014

**P63MFB...** Ayak  
Feet

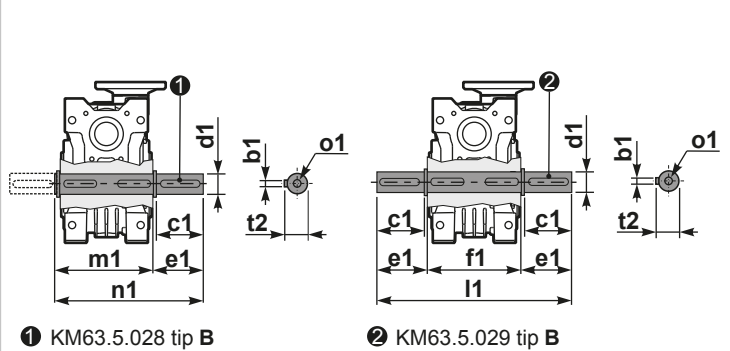
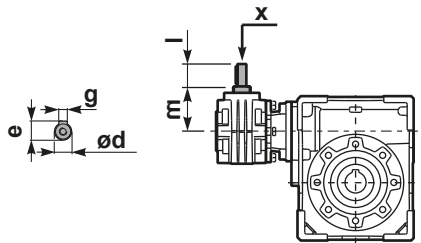
**P63MBR...** Tork Kolu  
Reaction arm



**R63MFB...** Giriş Mili  
Input shaft

**P63M.....S...** Tek Çıkış Mili  
Single Shaft

**P63M.....D...** Çift Çıkış Mili  
Double Shaft



	ød	e	g	l	m	x	Kit Kodu
Tip B	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
Tip S	-	-	-	-	-	-	-

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	8	50	25h6	53.5	112	219	119.5	173	28	M10x23
Tip S	-	-	-	-	-	-	-	-	-	-



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor $f.s.$	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges		Uygun / Available B14 motor flanşları B14 motor flanges			Dinamik verim Dynamic efficiency <b>RD</b>	Modül Module [mm]	Tahvil kodu Ration code
							-B	-C	-O	-P	-Q			
							63	71	56	63	71			
5.6	<b>252</b>	0.25	198	1.5	<b>0.37</b>	<b>290</b>	<b>B</b>		<b>B-C</b>	<b>B-C</b>		46	2.7	01
3.9	<b>360</b>	0.25	258	1.1	<b>0.28</b>	<b>290</b>	<b>B</b>		<b>B-C</b>	<b>B-C</b>		42	2.7	02
2.8	<b>504</b>	0.18	241	1.2	<b>0.22</b>	<b>290</b>	<b>B</b>		<b>B-C</b>	<b>B-C</b>		39	2.7	03
1.9	<b>756</b>	0.18	306	0.9	<b>0.17</b>	<b>290</b>	<b>B</b>		<b>B-C</b>	<b>B-C</b>		33	2.7	04
1.4	<b>1008</b>	0.12	256	1.1	<b>0.14</b>	<b>290</b>	<b>B</b>		<b>B-C</b>	<b>B-C</b>		31	2.7	05
1.1	<b>1332</b>	0.12	327	0.9	<b>0.11</b>	<b>290</b>	<b>B</b>		<b>B-C</b>	<b>B-C</b>		30	2.7	06
0.8	<b>1656</b>	0.09	285	1.0	<b>0.09</b>	<b>290</b>	<b>B</b>		<b>B-C</b>	<b>B-C</b>		28	2.7	07
0.6	<b>2160</b>	0.06	230	1.3	<b>0.08</b>	<b>290</b>	<b>B</b>		<b>B-C</b>	<b>B-C</b>		26	2.7	08
0.6	<b>2520</b>	0.06	258	1.1	<b>0.07</b>	<b>290</b>	<b>B</b>		<b>B-C</b>	<b>B-C</b>		25	2.7	09

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanşı Delik Konumları  
Motor Flange Holes Position

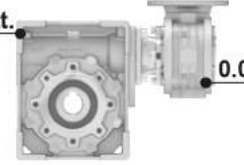
\* Tablolarda verilen değerlerin üzerindeki motor güçleri için seçimleri  $M_{2R}$  değerini referans alarak yapınız.  
Power higher than the maximum one which can be supported by the gearbox. Select according to the torque  $M_{2R}$

**TR** 64M Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz. Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve eksenel yükler tanımlanmıştır.

**EN** Unit 64M is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**YAĞLAMA 64M**  
Yağ Miktarı 0.30 / 0.09 lt  
**LUBRICATION 64M**  
Quantity 0.30 / 0.09 lt

0.30 Lt.



0.09 Lt.

SHELL Omala S4 WE 320

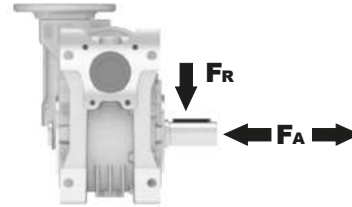
ENI Telium VSF 320

Tablo 1

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

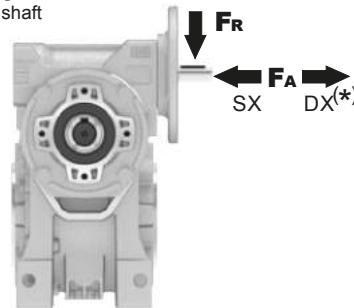
### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

**Çıkış Mili**  
Output shaft



$n_2$ [r.p.m]	$F_A$ [N]	$F_R$ [N]
25	700	3800
15	800	4000

**Giriş Mili**  
Input shaft



$n_1$ [r.p.m]	$F_A$ [N]	$F_R$ [N]
1400	42	210

\*DX yönünde eksenel yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

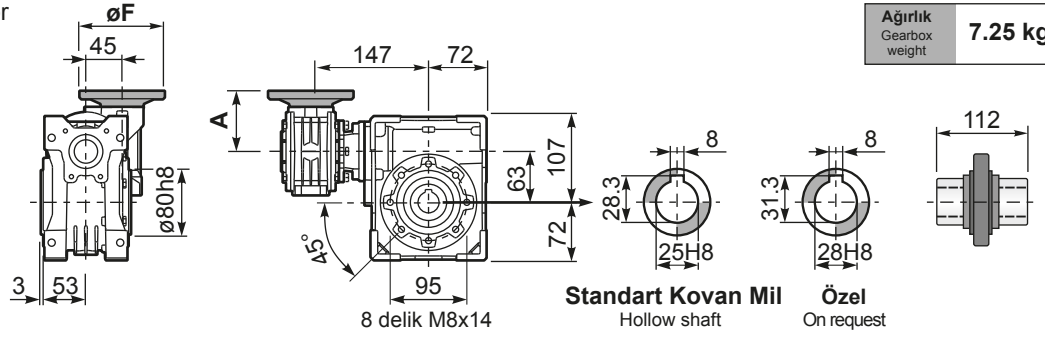
Tablo 2



**P64MFB...** Standart Redüktör  
Basic wormbox

Ağırlık  
Gearbox  
weight **7.25 kg**

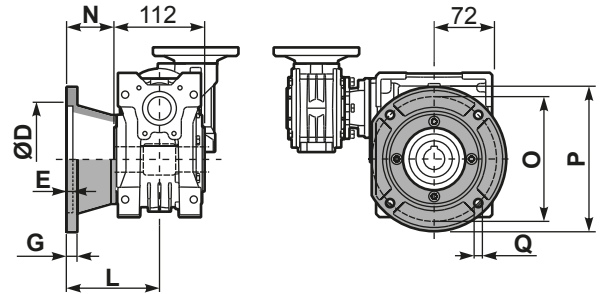
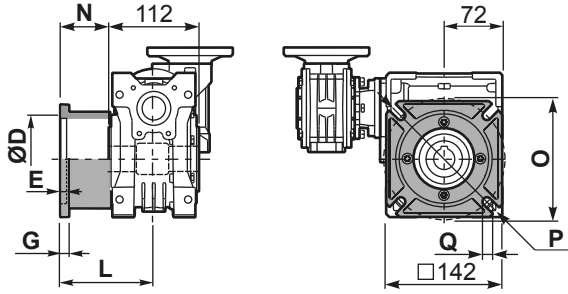
M. Flanşları	Kit kodu	øF	A
<b>63B5</b>	K050.4.041	138	74
<b>71B5</b>	K050.4.042	160	71.5
<b>56B14</b>	KC40.4.049	80	71.5
<b>63B14</b>	K050.4.047	90	74
<b>71B14</b>	K050.4.045	105	71.5



2

**P64MFC...** Kare Çıkış Flanşı  
Square Flange

**P64MF1...** Yuvarlak Çıkış Flanşı  
Round flange

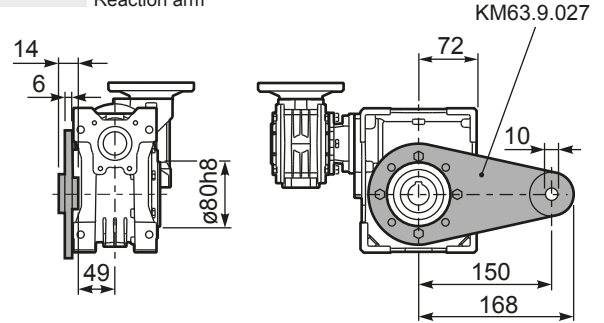
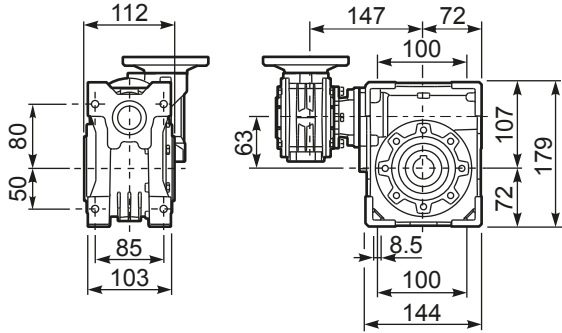


Tip B	øD	E	G	L	N	O	P	Q	Kit Kodu
<b>FC</b>	115 H8	6	10	82	26	150	180	11	KM63.9.010
<b>FL</b>	115 H8	6	10	112	56	150	180	11	KM63.9.011

Tip S	øD	E	G	L	N	O	P	Q	Kit Kodu
<b>F1</b>	130 H8	5	10	98	42	165	200	11	KM60.9.012
<b>F2</b>	130 H8	5	10	107	51	165	200	11	KM63.9.013
<b>F3</b>	110 H8	5	16.5	80.5	24.5	130	160	11	KM63.9.014

**P64MFB...** Ayak  
Feet

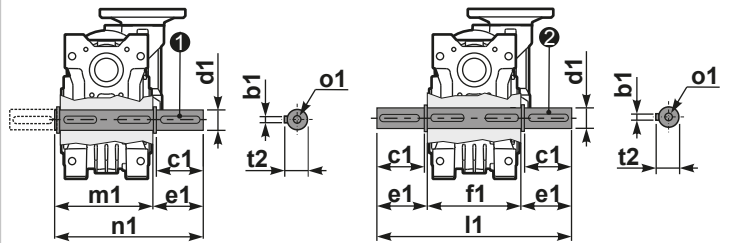
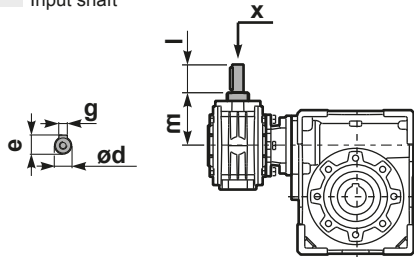
**P64MBR...** Tork Kolu  
Reaction arm



**R64MFB...** Giriş Mili  
Input shaft

**P64M.....S...** Tek Çıkış Mili  
Single Shaft

**P64M.....D...** Çift Çıkış Mili  
Double Shaft

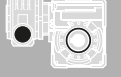


① KM63.5.028 tip B

② KM63.5.029 tip B

	ød	e	g	l	m	x	Kit Kodu
Tip B	11 h6	12.5	4	30	68	-	K045.5.006 PAM71
Tip S	-	-	-	-	-	-	-

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	8	50	25h6	53.5	112	219	119.5	173	28	M10x23
Tip S	-	-	-	-	-	-	-	-	-	-



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor $f.s.$	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges		Uygun / Available B14 motor flanşları B14 motor flanges			Dinamik verim Dynamic efficiency  RD	Modül Module  [mm]	Tahvil kodu Ration code
							-B	-C	-O	-P	-Q			
							63	71	56	63	71			
5	280	0.37	403	1.0	0.39	420	B		B-C	B-C		57	3.10	01
3.5	400	0.25	314	1.3	0.33	420	B		B-C	B-C		46	3.10	02
2.5	560	0.25	420	1.0	0.25	420	B		B-C	B-C		44	3.10	03
1.7	840	0.18	423	1.0	0.18	420	B		B-C	B-C		41	3.10	04
1.3	1120	0.12	339	1.2	0.15	420	B		B-C	B-C		37	3.10	05
0.9	1480	0.09	336	1.2	0.11	420	B		B-C	B-C		37	3.10	06
0.8	1840	0.09	373	1.1	0.10	420	B		B-C	B-C		33	3.10	07
0.6	2400	0.09	413	1.0	0.09	420	B		B-C	B-C		28	3.10	08
0.5	2800	0.06	298	1.4	0.08	420	B		B-C	B-C		26	3.10	09
0.3	4080	0.06	250	1.4	0.09	359	B		B-C	B-C		15	3.10	10

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanşı Delik Konumları  
Motor Flange Holes Position

**TR** 74M Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz. Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve aksel yükler tanımlanmıştır.

**EN** Unit 74M is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

#### YAĞLAMA 74M

Yağ Miktarı 0.40 / 0.09 lt

0.40 Lt.

#### LUBRICATION 74M

Quantity 0.40 / 0.09 lt



SHELL Omala S4 WE 320

ENI Telium VSF 320

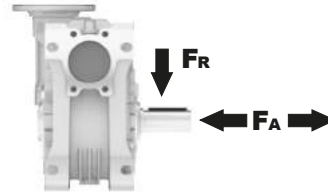
Tablo 1

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

#### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

##### Çıkış Mili

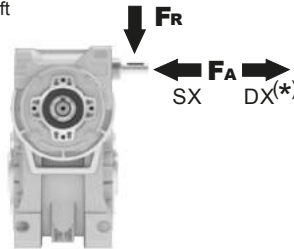
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
25	880	4400
15	1000	5000

##### Giriş Mili

Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	42	210

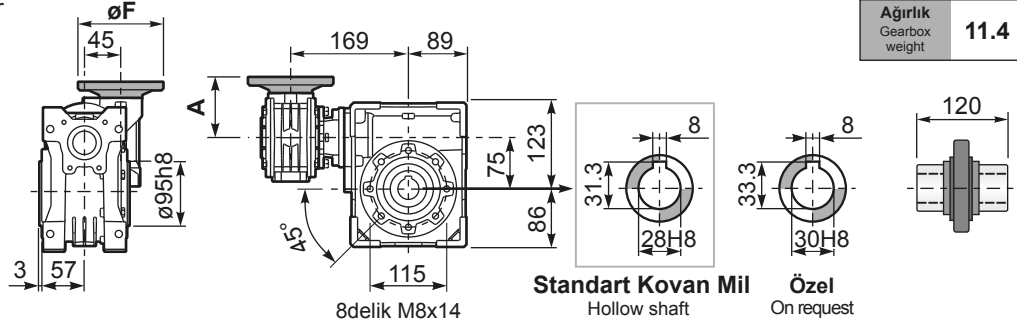
\*DX yönünde aksel yükü izin verilmez.  
Strong axial loads in the DX direction are not allowed.

Tablo 2

**P74MFB...** Standart Redüktör  
Basic wormbox

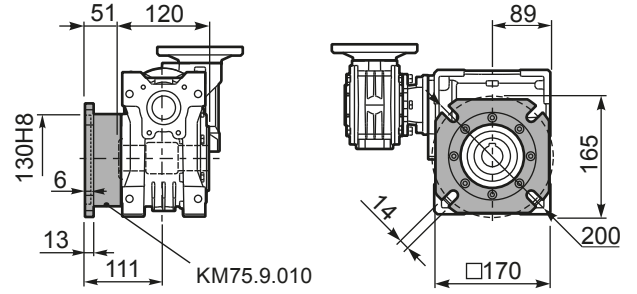
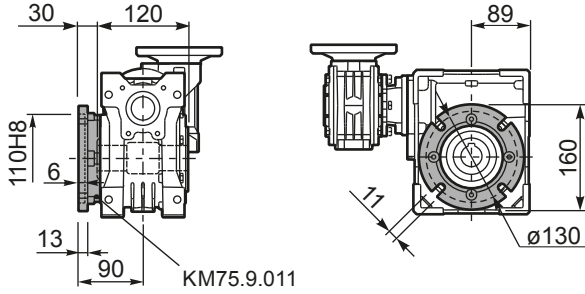
Ağırlık  
Gearbox  
weight **11.4 kg**

M. Flanşları	Kit kodu	øF	A
<b>63B5</b>	K050.4.041	138	74
<b>71B5</b>	K050.4.042	160	71.5
<b>56B14</b>	KC40.4.049	80	71.5
<b>63B14</b>	K050.4.047	90	74
<b>71B14</b>	K050.4.045	105	71.5



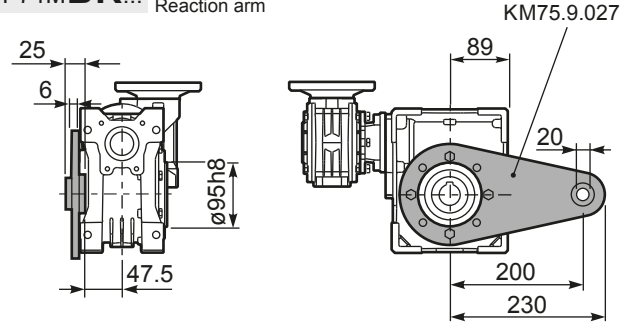
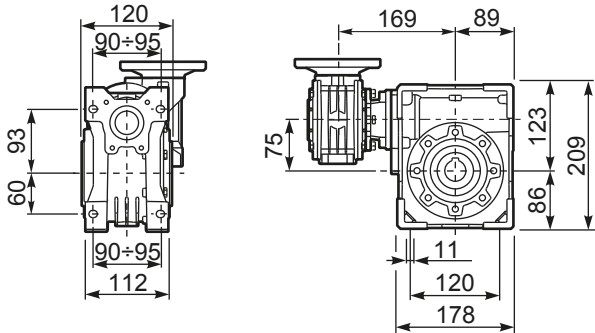
**P74MFC...** Yuvarlak Çıkış Flanşı  
Round flange

**P74MFL...** Kare Çıkış Flanşı  
Square Flange



**P74MFB...** Ayak  
Feet

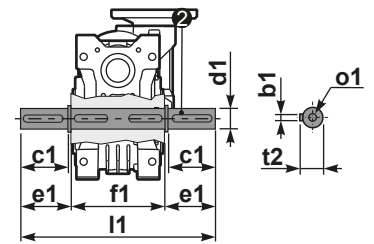
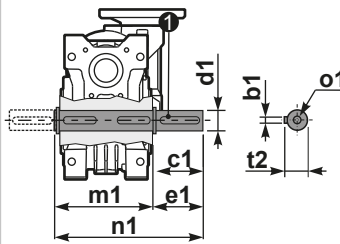
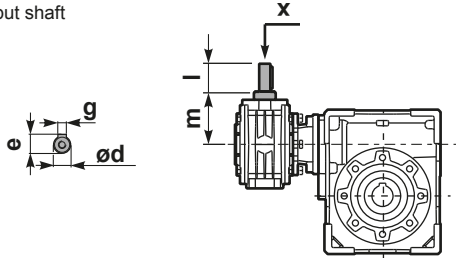
**P74MBR...** Tork Kolu  
Reaction arm



**R74MFB...** Giriş Mil  
Input shaft

**P74M.....S...** Tek Çıkış Mil  
Single Shaft

**P74M.....D...** Çift Çıkış Mil  
Double Shaft

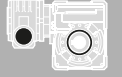


① KM75.5.028 Standart

② KM75.5.029 Standart

	ød	e	g	l	m	x	Kit Kodu
Tip B	11 h6	12.5	4	30	68	-	K045.5.006 PAM71

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standart	8	60	28 h6	63.5	120	247	128.5	192	31	M10
Özel	-	-	-	-	-	-	-	-	-	-



## HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges		Uygun / Available B14 motor flanşları B14 motor flanges			Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code
							-B	-C	-O	-P	-Q			
							63	71	56	63	71			
10	140	0.37	205	2.1	0.76	423	B		B-C	B-C		58	4.5	01
7.1	196	0.37	257	1.6	0.61	423	B		B-C	B-C		52	4.7	02
5.0	280	0.37	332	1.8	0.66	596	B		B-C	B-C		47	4.7	03
3.6	392	0.37	435	1.4	0.51	596	B		B-C	B-C		44	4.7	04
2.4	588	0.37	549	1.1	0.40	596	B		B-C	B-C		37	4.7	05
1.8	784	0.25	455	1.3	0.33	596	B		B-C	B-C		34	4.7	06
1.4	1036	0.25	583	1.0	0.26	596	B		B-C	B-C		33	4.7	07
1.1	1288	0.18	474	1.2	0.22	580	B		B-C	B-C		30	4.7	08
0.7	1960	0.12	449	1.2	0.14	518	B		B-C	B-C		28	4.7	09
0.5	2856	0.12	584	0.9	0.11	518	B		B-C	B-C		25	4.7	10

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanşı Delik Konumları  
Motor Flange Holes Position

**TR** 84M Kare Gövde Sonsuz Vidalı Redüktörler ömürlük sentetik yağ ile yağlanmıştır. V5-V6 montaj pozisyonları için bizimle iletişime geçiniz. Tablo 1'de uygun yağ seçenekleri ve yağ miktarları tanımlanmıştır. Tablo 2'de izin verilebilir radyal ve aksel yükler tanımlanmıştır.

**EN** Unit 84M is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

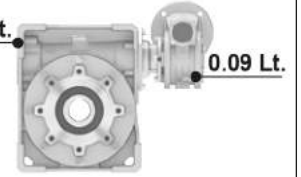
## YAĞLAMA 84M

Yağ Miktarı 1.20 / 0.09 lt

1.20 Lt.

## LUBRICATION 84M

Quantity 1.20 / 0.09 lt



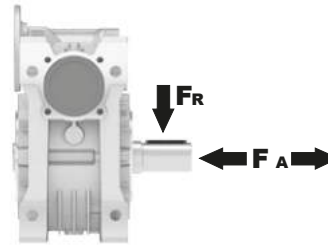
SHELL Omala S4 WE 320

ENI Telium VSF 320

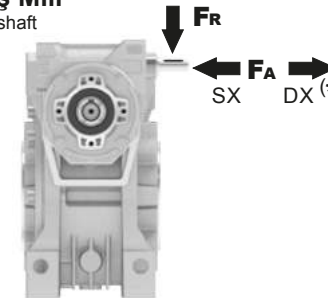
Tablo 1

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

## RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

Çıkış Mili  
Output shaft

$n_2$ [r.p.m]	FA [N]	FR [N]
25	1000	5000
15	1160	5800

Giriş Mili  
Input shaft

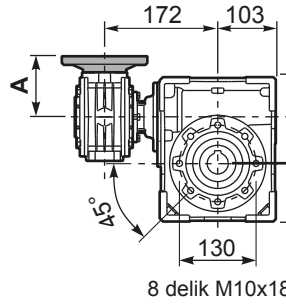
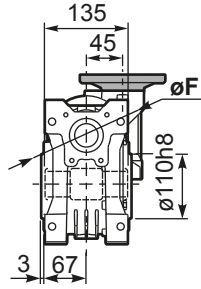
$n_1$ [r.p.m]	FA [N]	FR [N]
1400	42	210

\*DX yönünde aksel yükü izin verilmez  
Strong axial loads in the DX direction are not allowed.

Tablo 2

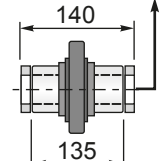
**P84MFB...** Standart Redüktör  
Basic wormbox

M. Flanşları	Kit kodu	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5



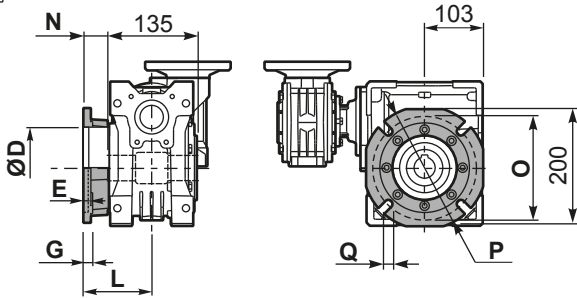
Ağırlık  
Gearbox  
weight **16.2 kg**

ø H8	B	C	Burç Kodu *Spacer code
35 Standard	38.3	10	KM85.3.035
38 Özel On request	41.3	10	KM85.3.038



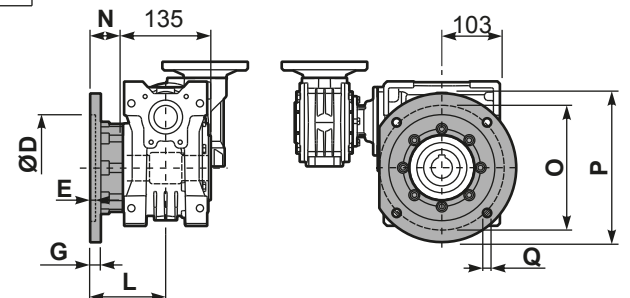
Özel Burçlu Çıkış Mili  
Output shaft with spacers

**P84MFC...** Yuvarlak Çıkış Flanşı  
Round Flange



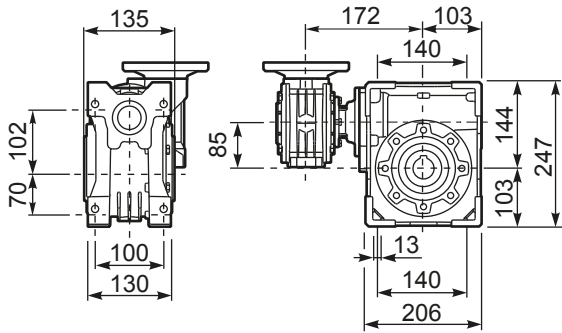
Tip B	øD	E	G	L	N	O	P	Q	Kit Kodu
FC	152 H8	5	16	111	43.5	176	205	13	K085.9.010
FL	180 H8	6	18	122	54.5	215	250	14	KM85.9.011

**P84MF1...** Yuvarlak Çıkış Flanşı  
Round Flange

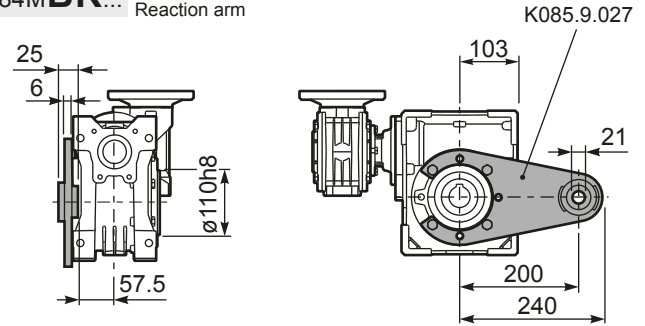


Tip S	øD	E	G	L	N	O	P	Q	Kit Kodu
F1	130 H8	5	13	109.5	42	165	200	13	KS085.9.015
F2	152 H8	5	16	151.5	84	176	205	13	K085.9.010 K085.0.201

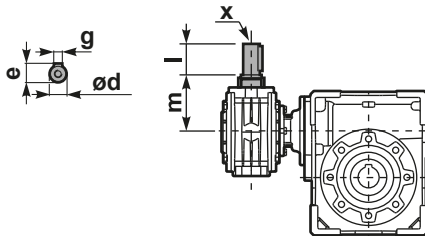
**P84MFB...** Ayak  
Feet



**P84MBR...** Tork Kolu  
Reaction arm

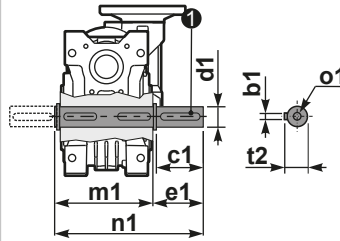


**R84MFB...** Giriş Mili  
Input shaft

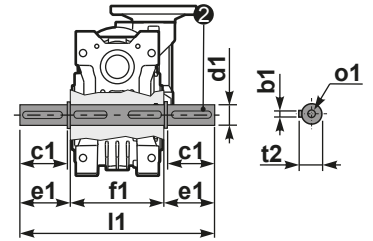


Tip B	ød	e	g	l	m	x	Kit Kodu
Tip B	11 h6	12.5	4	30	68	-	① K045.5.006 PAM71 ② - ③ -
Tip S	-	-	-	-	-	-	① - ② -

**P84M.....S...** Tek Çıkış Mili  
Single Shaft



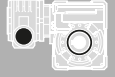
**P84M.....D...** Çift Çıkış Mili  
Double Shaft



① K085.5.028 tip B

② K085.5.029 tip B

Tip B	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	10	60	35 <sup>-0.005</sup> <sub>-0.020</sub>	73.5	135	282	141	214.5	38	M10x23
Tip S	-	-	-	-	-	-	-	-	-	-



### HIZLI SEÇİM / Quick Selection

Giriş Devri / Input Speed ( $n_1$ ) = 1400 r.p.m

Çıkış Devri Output Speed $n_2$ [r.p.m]	Tahvil Ratio $i$	Motor gücü Motor power $P_{1M}$ [kW]	Çıkış Momenti Output torque $M_{2M}$ [Nm]	Servis Faktörü Service Factor f.s.	Nominal Güç Nominal power $P_{1R}$ [kW]	Nominal Moment Nominal torque $M_{2R}$ [Nm]	Uygun / Available B5 motor Flanşları B5 motor flanges			Uygun / Available B14 motor flanşları B14 motor flanges				Dinamik verim Dynamic efficiency RD	Modül Module [mm]	Tahvil kodu Ration code
							-B	-C	-D	-O	-P	-Q	-R			
							63	71	80	56	63	71	80			
6.7	210	0.75	591	1.8	1.3	1036	B	B			B-C	B		55	5.6	01
4.7	300	0.75	752	1.6	1.2	1174	B	B			B-C	B		49	5.6	02
3.3	420	0.75	1010	1.2	0.87	1174	B	B			B-C	B		47	5.6	03
2.6	540	0.55	851	1.4	0.76	1174	B	B			B-C	B		42	5.6	04
1.8	780	0.55	1112	1.1	0.58	1174	B	B			B-C	B		38	5.6	05
1.3	1080	0.37	1009	1.2	0.43	1174	B			B-C	B-C			37	5.6	06
1.1	1290	0.37	1140	1.0	0.38	1174	B			B-C	B-C			35	5.6	07
0.8	1800	0.25	921	1.3	0.32	1174	B			B-C	B-C			30	5.6	08
0.7	2040	0.25	1044	1.1	0.28	1174	B			B-C	B-C			30	5.6	09
0.6	2400	0.25	1228	1.0	0.26	1174	B			B-C	B-C			28	5.6	10
0.5	3000	0.18	958	1.0	0.18	978	B			B-C	B-C			26	5.6	11

2

Uygun Motor Flanşları  
Motor Flanges Available

B) Burç ile montaj yapılabilir  
Supplied with Reduction Bushing

B) Burç Kullanılmadan Montajı Yapılabilir  
Available on Request without reduction bushing

C) Motor Flanşı Delik Konumları  
Motor Flange Holes Position

**TR 15M** Kare Gövde Sonsuz Vidalı Redüktörler yağsız olarak sevk edilir. Redüktör üzerinde havalandırma tapası, yağ göstergesi ve tahliye tapası mevcuttur. Mineral yağlar bu ekipmanlar ile birlikte kullanılır. Sentetik yağ kullanılmak istenirse bu ekipmanların körtapa ile değiştirilmesi önerilir.

Tablo 1'de montaj pozisyonuna göre uygun yağ miktarları tanımlanmıştır.

Tablo 2'de izin verilebilir radyal ve eksenel yük değerleri tanımlanmıştır.

**EN 15M** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a type that are closed. Gearbox 050 is supplied lubricated for life. See tab.1 for oils and recommended quantity. In tab.2 there are radial loads and axial loads applicable to the gearbox.

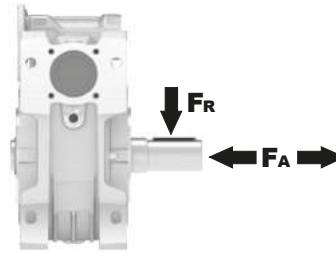
B3	B6	B7	B8	V5	V6
1.9/0.14LT	1.35/0.14 LT	1.35/0.14 LT	2.0/0.14 LT	2.0/0.14 LT	2.0/0.14 LT
SHELL Omala S2 GX 460				ENI Blasia 460	

Daha fazla ayrıntı için internet sitemizi inceleyiniz.  
For all details on lubrication and plugs check our website

Tablo 1

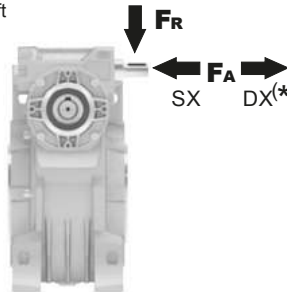
### RADYAL VE EKSENEL YÜKLER / RADIAL AND AXIAL LOADS

Çıkış Mili  
Output shaft



$n_2$ [r.p.m]	FA [N]	FR [N]
25	1200	6000
15	1400	7000

Giriş Mili  
Input shaft



$n_1$ [r.p.m]	FA [N]	FR [N]
1400	76	380

\*DX yönünde eksenel yüke izin verilmez  
Strong axial loads in the DX direction are not allowed.

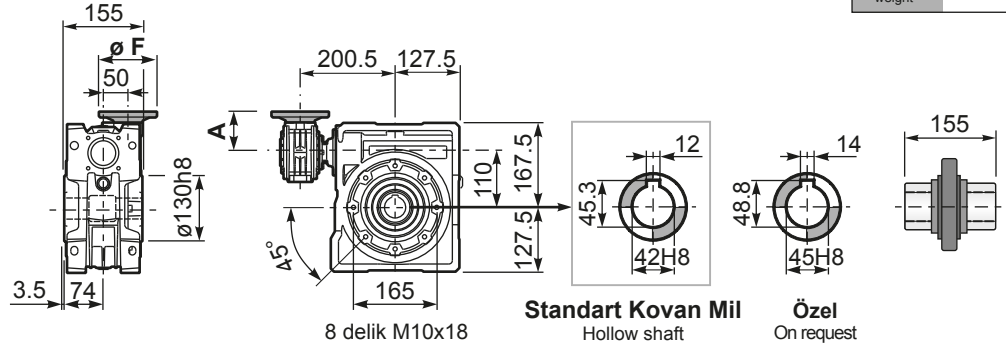
Tablo 2



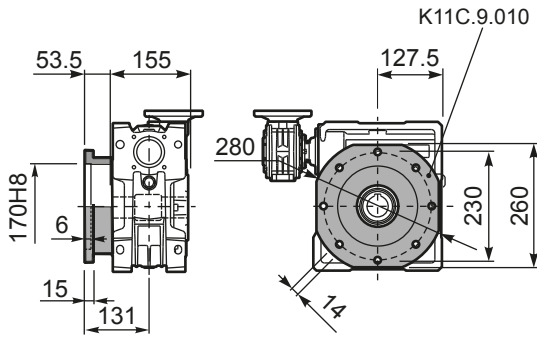
**P15MFB...** Standart Redüktör  
Basic wormbox

Ağırlık  
Gearbox  
weight **38.8 kg**

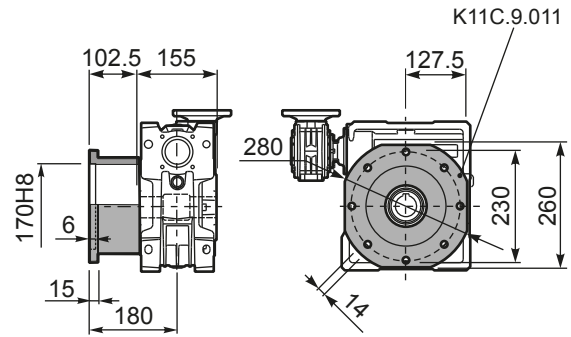
M.Flanşları	Kit Kodu	øF	A
<b>63B5</b>	K050.4.041	138	78.5
<b>71B5</b>	K050.4.042	160	76
<b>80B5</b>	K050.4.043	200	76.5
<b>56B14</b>	KC40.4.049	80	76
<b>63B14</b>	K050.4.047	90	78.5
<b>71B14</b>	K050.4.045	105	76
<b>80B14</b>	K050.4.046	120	76.5



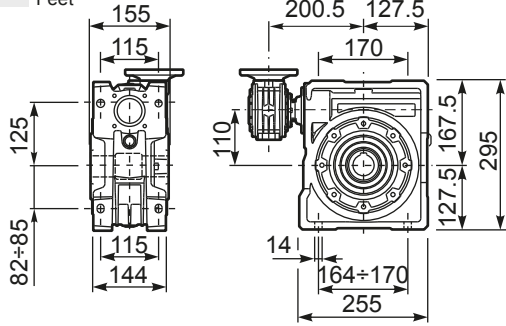
**P15MFC...** Yuvarlak Çıkış Flanşı  
Round Flange



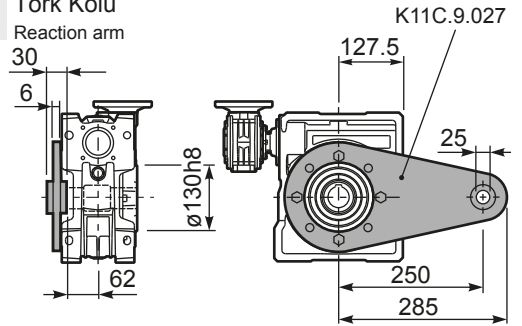
**P15MFL...** Yuvarlak Çıkış Flanşı  
Round Flange



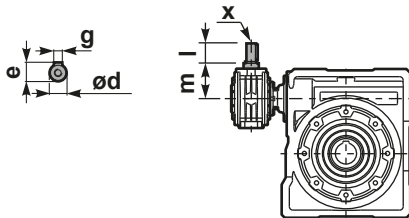
**P15MFB...** Ayak  
Feet



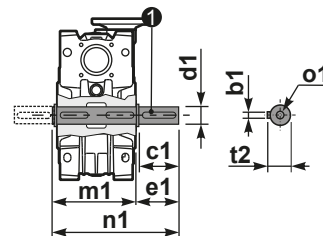
**P15MBR...** Tork Kolu  
Reaction arm



**R15MFB...** Giriş Mili  
Input shaft

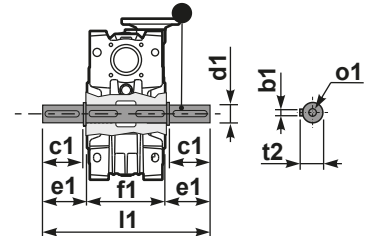


**P15M.....S...** Tek Çıkış Mili  
Single Shaft



① K11C.5.028 type B

**P15M.....D...** Çift Çıkış Mili  
Double Shaft



② K11C.5.029 type B

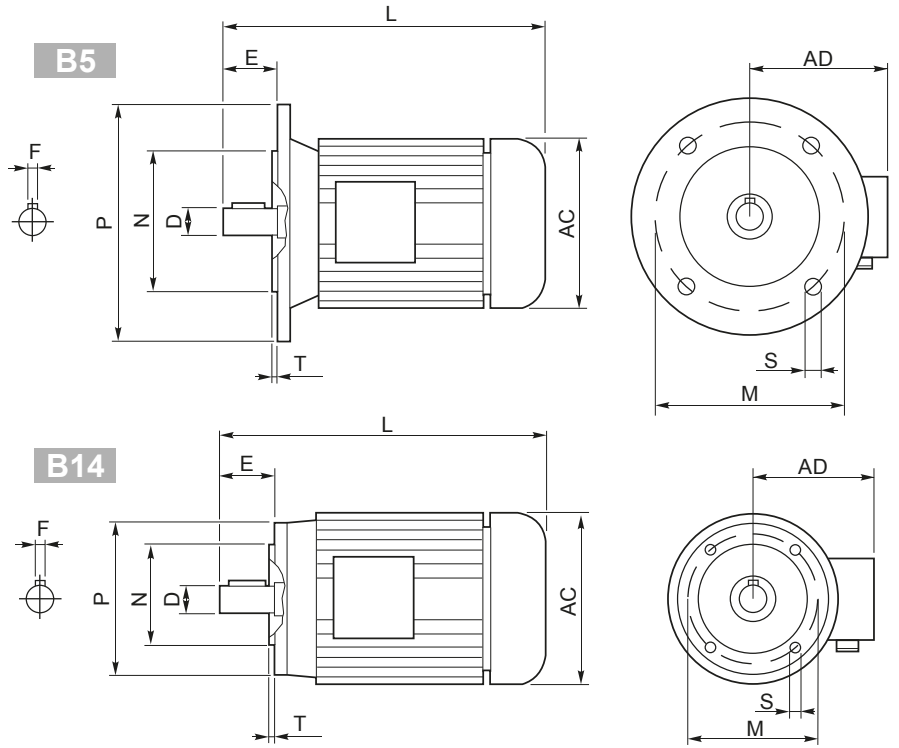
	ød	e	g	l	m	x	Kit Kodu
Tip B	16 h6	18	5	30	79.5	M6x16	① K050.5.006 PAM71 ② K050.5.007 PAM80
Tip S	14 h6	16	5	30	79.5	M5x10	① KS050.5.008 PAM71 ② KS050.5.009 PAM80

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Tip B	12	80	42h6	84.5	155	324	164.5	249	45	M16x28
Tip S	-	-	-	-	-	-	-	-	-	-

# Alüminyum IEC MOTORLAR / Aluminum IEC motors

- 1) 230/400V - 50Hz 3 fazlı asenkron indüksiyon motoru
- 2) F klas izolasyon
- 3) S1
- 4) IP 55 koruma
- 5) Boyasız
- 6) Aktarım sırasında çıkış milini korumak için sert plastik kılıf

- 1) 230/400V - 50 Hz three-phase asynchronous induction motor
- 2) Class F insulation
- 3) S1 duty
- 4) IP 55 protection
- 5) Not painted
- 6) Hard plastic sleeve to protect output shaft during the transportation



**Dış ölçüler ve ağırlık üretici firmaya bağlı olarak farklılık gösterebilir**  
*Outside dimensions and weight may be different according to manufacturers*

	2 poli / poles			4 poli / poles			6 poli / poles			B5-B14					B5					B14					Kg	
	kW	Nm	A (400V)	kW	Nm	A (400V)	kW	Nm	A (400V)	D (mm)	E (mm)	L (mm)	Lm (mm)	Y (mm)	AD (mm)	P (mm)	N (mm)	M (mm)	O (mm)	Q (mm)	P (mm)	N (mm)	M (mm)	O (mm)		Q (mm)
56 A	0.09	0.32	0.38	0.06	0.44	0.27	—	—	—	9	3	20	179	108	96	80	100	120	7	2.5	50	65	80	M5	2.5	2.7
56 B	0.12	0.42	0.46	0.09	0.67	0.37	—	—	—	9	3	20	179	108	96	80	100	120	7	2.5	50	65	80	M5	2.5	2.9
63 A	0.18	0.63	0.60	0.12	0.84	0.50	0.09	0.99	0.57	11	4	23	185	120	99	95	115	140	9.5	3	60	75	90	M5	2.5	3.8
63 B	0.25	0.87	0.76	0.18	1.30	0.69	0.12	1.32	0.74	11	4	23	185	120	99	95	115	140	9.5	3	60	75	90	M5	2.5	4.2
71 A	0.37	1.30	1.00	0.25	1.70	0.91	0.18	1.90	0.80	14	5	30	-	130	104	110	130	160	9.5	3.5	70	85	105	M6	2.5	5.9
71 B	0.55	1.90	1.54	0.37	2.52	1.14	0.25	2.72	1.10	14	5	30	225	141	107	110	130	160	9.5	3.5	70	85	105	M6	2.5	6.5
80 A	0.75	2.60	1.85	0.55	3.77	1.51	0.37	3.84	1.18	19	6	40	256	159	127	130	165	200	11.5	3.5	80	100	120	M6	3	8.5
80 B	1.1	3.90	2.64	0.75	5.11	2.57	0.55	5.84	1.80	19	6	40	256	159	127	130	165	200	11.5	3.5	80	100	120	M6	3	10
90 S	1.5	5.00	3.31	1.1	7.45	2.78	0.75	7.92	2.32	24	8	50	-	170	135	130	165	200	11.5	3.5	95	115	140	M8	3	12.5
90 L	2.2	7.50	4.46	1.5	10.2	3.61	1.1	11.6	3.45	24	8	50	280	170	135	130	165	200	11.5	3.5	95	115	140	M8	3	15
100 LA	3.0	10.0	6.28	2.2	14.8	5.07	1.5	15.4	3.88	28	8	60	-	190	148	180	215	250	13	4	110	130	160	M8	3.5	20
100 LB	—	—	—	3.0	20.1	6.66	—	—	—	28	8	60	-	190	148	180	215	250	13	4	110	130	160	M8	3.5	22
112 M	4.0	13.4	8.10	4.0	26.7	8.55	2.2	22.6	5.30	28	8	60	321	210	164	180	215	250	13	4	110	130	160	M8	3.5	35
132 S	5.5	18.3	11.2	5.5	36.5	11.4	3.0	30.2	7.20	38	10	80	375	244	180	230	265	300	14	4	130	165	200	M10	4	41
132 M	—	—	—	7.5	49.4	15.0	4.0	40.0	9.13	38	10	80	420	244	180	230	265	300	14	4	130	165	200	M10	4	51
160 M	—	—	—	11	72	21.5	—	—	—	42	12	110	503	335	246	250	300	350	18	5	—	—	—	—	—	79.2
160 L	—	—	—	15	98	29	—	—	—	42	12	110	547	335	246	250	300	350	18	5	—	—	—	—	—	97.5
180 M	—	—	—	18.5	121	35.5	—	—	—	48	14	110	602	366	266	250	300	350	19	5	—	—	—	—	—	170
180 L	—	—	—	22	144	42	—	—	—	48	14	110	602	366	266	250	300	350	19	5	—	—	—	—	—	170
200 L	—	—	—	30	196	53	—	—	—	55	16	110	670	405	341	300	350	400	19	5	—	—	—	—	—	240
225 S	—	—	—	37	240	69	—	—	—	60	18	140	748	463	360	350	400	450	19	5	—	—	—	—	—	305
225 M	—	—	—	45	292	84	—	—	—	60	18	140	748	463	360	350	400	450	19	5	—	—	—	—	—	310







## DİĞER ÜRÜNLERİMİZ / OUR OTHER PRODUCT

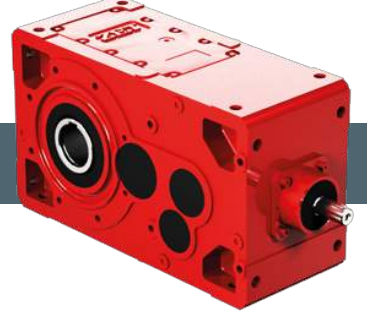


**Monoblok Paralel Millî Ağır Hizmet Redüktörleri**  
*MonoBlock Parallel Shaft Heavy Duty Gearboxes*

**Tahvil Oranı**  
*Ratio* : 2,50-130

**Nominal Moment**  
*Rated Torque* : 2700-80.000 Nm

**Çıkış Mili Çapı**  
*Output Shaft Diameter* : 60-180 mm

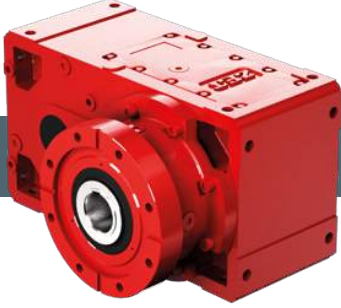


**Monoblok Ağır Hizmet Tipi Konik Helisel Dişli Redüktörleri**  
*MonoBlock Heavy Duty Type Bevel Helical Gearboxes*

**Tahvil Oranı**  
*Ratio* : 6,00-130

**Nominal Moment**  
*Rated Torque* : 1750-73.000 Nm

**Çıkış Mili Çapı**  
*Output Shaft Diameter* : 60-180 mm

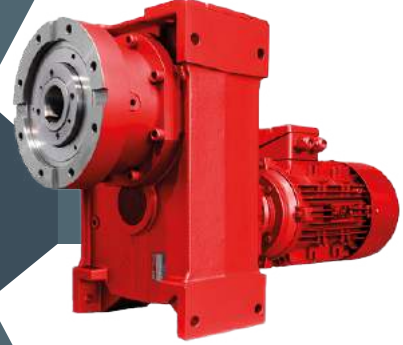


**Monoblok Tek Vida Ekstruder Redüktörleri**  
*MonoBlock Single Screw Extruder Gearboxes*

**Tahvil Oranı**  
*Ratio* : 6,30-25,0

**Nominal Moment**  
*Rated Torque* : 3.400-70.000 Nm

**Çıkış Mili Çapı**  
*Output Shaft Diameter* : 55-160 mm



**H Serisi Tek Vida Ekstruder Redüktörleri**  
*H series Parallel Shaft Gearboxes*

**Tahvil Oranı**  
*Ratio* : 2,65-680

**Nominal Moment**  
*Rated Torque* : 380-2100 Nm

**Çıkış Mili Çapı**  
*Output Shaft Diameter* : 35-40 mm

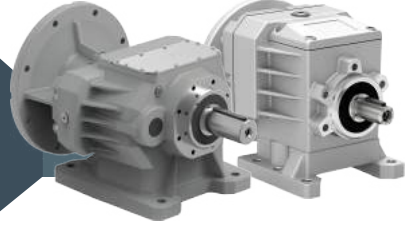


**Sonsuz Vidalı Redüktörleri**  
*Worm Gearboxes*

**Tahvil Oranı**  
*Ratio* : 5,00-4080

**Nominal Moment**  
*Rated Torque* : 21-1550 Nm

**Çıkış Mili Çapı**  
*Output Shaft Diameter* : 14-50 mm



**A-C Serisi Koaksiyel Redüktörleri**  
*A-C Series Coaxial Gearboxes*

**Tahvil Oranı**  
*Ratio* : 1,30-480

**Nominal Moment**  
*Rated Torque* : 20-4600 Nm

**Çıkış Mili Çapı**  
*Output Shaft Diameter* : 14-70 mm

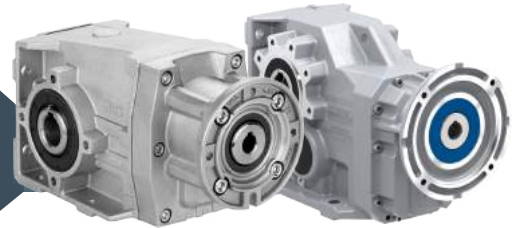


**FA-FC Serisi Şaft Montajlı Redüktörleri**  
*FA-FC Series Shaft Mounted Gearboxes*

**Tahvil Oranı**  
*Ratio* : 2,65-680

**Nominal Moment**  
*Rated Torque* : 2150-2100 Nm

**Çıkış Mili Çapı**  
*Output Shaft Diameter* : 30-50 mm



**X serisi Konik Helisel Redüktörleri**  
*X Series Helical Bevel Gearboxes*

**Tahvil Oranı**  
*Ratio* : 4,83-821

**Nominal Moment**  
*Rated Torque* : 50-4600 Nm

**Çıkış Mili Çapı**  
*Output Shaft Diameter* : 20-70 mm



**H Serisi Paralel Millî Redüktörleri**  
*H series Parallel Shaft Single Screw Extruder Gearboxes*

**Tahvil Oranı**  
*Ratio* : 2,65-680

**Nominal Moment**  
*Rated Torque* : 380-2100 Nm

**Çıkış Mili Çapı**  
*Output Shaft Diameter* : 35-55 mm

# ZET

*R e d ü k t ö r*

## ZET Redüktör Sanayi ve Ticaret A.Ş.

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