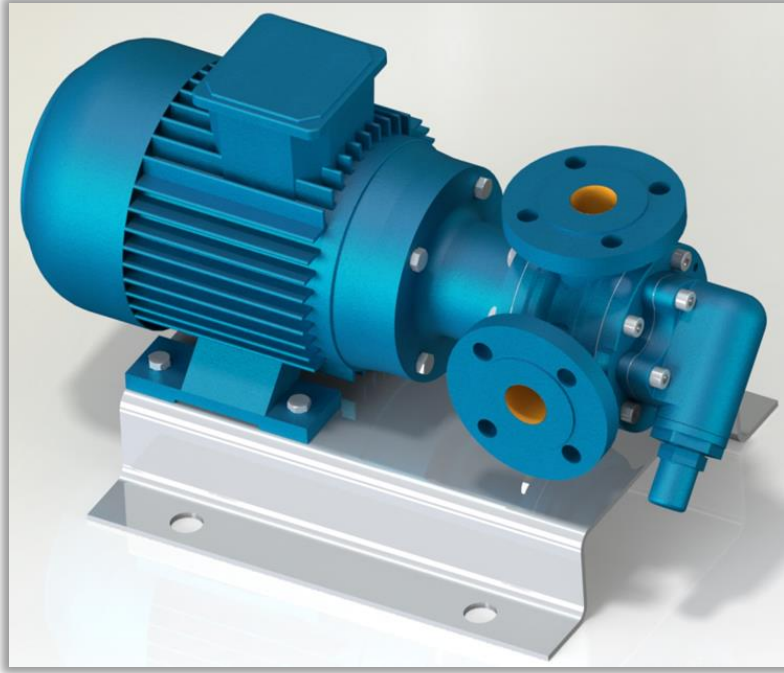




## YMB 1" POMPA INTERNAL ECCENTRIC GEAR PUMP



### POMPA DEĞERLERİ / PUMP PROPERTIES

Q	: 3 m <sup>3</sup> /h
Hm	:1 ~ 10 Bar
T	:0 ~ 70 °C
n	:1400 d/d
Visc.	:100 ~ 2.500 SSU

### KULLANIM ALANLARI

- Fuel Oil Servis Tankları, Gaz Yağı, Mazot Tankerlerinde
- Kağıt ve Boya Sanayinde,
- Küçük çapta kızgın yağ sirkülasyonlarında
- İlaç, kimya ve deterjan sanayinde,
- Gıda Sanayinde.

### USE AREAS

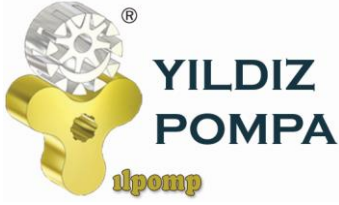
- Fuel Oil Service Tanks, Gasoil, Diesel Tankers
- Paper and Paint/dye industry
- Circulation of Hot Oil (limited)
- Medicine, Chemical and Detergent Industry
- Food Industry.

### MALZEME SEÇENEKLERİ

- Pompa Gövdesi, Kapaklar : Dökme (pik) demir, çelik döküm, paslanmaz AISI 304 / 316 döküm
- Dişliler : Dökme (pik) demir, çelik döküm, paslanmaz AISI 304 / 316 döküm, sfero döküm
- Yataklar : Snbz 12 bronz, karbon grafit, Silisyum Karbür, Sert Metal Kaplama
- Sızdırmazlık: Mekanik Salmastralı

### MATERIAL OPTIONS

- Pump Body, covers : Cast iron, steel cast, stainless AISI 304 / 316 cast.
- Gears : Cast iron, steel cast, stainless AISI 304 / 316 cast, Spheroidal cast iron.
- Bearings: Snbz 12 bronze, carbon graphite, silicon carbide, hard metal coated steel.
- Sealing: Mechanical Seal



## YMB 1" POMPA INTERNAL ECCENTRIC GEAR PUMP



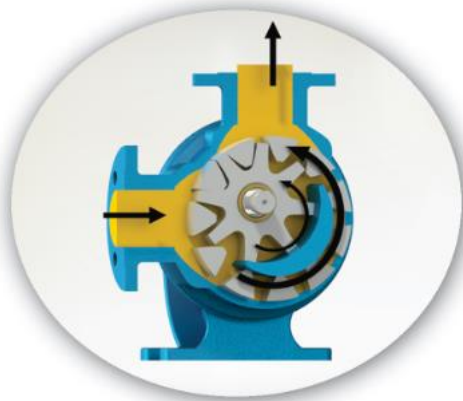
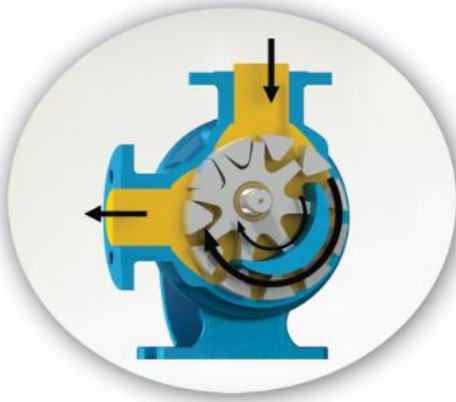
### İÇTEN EKSANTİK DİŞLİ POMPA ÇALIŞMA PRENSİBİ / WORKING PRINCIPLE OF INTERNAL ECCENTRIC GEAR PUMP

Yıldız Pompa' nın "dişli içinde dişli" prensibinde sadece iki tane hareketli parça vardır. Bütün pozitif deplasmanlı YILDIZ dişli pompalarının güvenilir ve verimli çalışmasının sırrı budur. Sıvının pozitif deplasmanı (yer değiştirmesi) rotor ve avare dişlisinin dişleri arasındaki boşluğun komple dolmasıyla sağlanmaktadır. Bütün dişli pompalarda olduğu gibi, YILDIZ POMPA' da da performansın en üst noktaya çıkmasını sınırlayıcı yegane faktör, pompalanan sıvının diğerlerine göre daha temiz olmasını istemesidir.

Pompa milinin her devrinde emiş ağızı yoluyla belli bir miktar sıvı pompaya girer. Bu sıvı rotor ile avare dişlisi arasındaki boşluğu doldurur. Pompa kapağında bulunan hilal, çıkış ağızına doğru pürüzsüz şekilde hareket eden sıvının akışını ayırır. Kendi dişleri ile hilalin iç yüzeyi arasında sıvı taşıyan avare dişlisi pompa kapağının desteklediği bir mil üzerinde döner. Dişleri arasında sıvı taşıyan rotor dişlisi pompa gövdesi ile hilalin dış yüzeyi arasında hareket eder ve pompa miline bağlıdır.

*YILDIZ's simple "gear-within a gear" principle has only two moving parts. It is the secret of dependable, efficient operation of all positive displacement YILDIZ POMPA's PUMPS. The positive displacement of liquid is accomplished by the complete filling of the spaces between the teeth of the rotor and idler gears. The only limiting factor to peak performance in YILDIZ POMPA, as with all rotary pumps, is that the liquid pumped must be comparatively clean.*

*With every revolution of the pump's shaft, a definite amount of liquid enters the pump through the suction port. This liquid fills the spaces between the teeth of the rotor and the idler. The crescent on the pump head splits the flow of liquid as it moves smoothly towards the discharge port. The idler gear, which carries the liquid between its teeth and the inside surface of the crescent is connected to pump cover. On the otherhand, rotor gear which is rotated directly with pump shaft delivers the liquid between gear teeth and crescent's souter surface.*



## YMB 1" POMPA INTERNAL ECCENTRIC GEAR PUMP



Yandaki renkli kısım sıvının pompa gövdesindeki emiş ağızı alanına, rotor dişlisi ve avare dişlisi dişleri arasındaki dişli boşlukları alanına girişini gösterir. İki siyah ok pompanın dönüş ve sıvının ilerleyişini gösterir.

*The yellow colored portion at side indicates the liquid as it enters the suction port area of the casing and the area between the rotor teeth and corresponding concave area between the idler teeth. The two black arrows indicate the pump rotation and progress of the liquid.*



"Dişli içinde dişli" prensibinde çalışan dişliler ile pompa içinde sıvının ilerleyişine dikkat edin. Aynı zamanda, pompa kapağı üzerindeki hilal şeklinin sıvıyı nasıl böldüğüne ve emiş ile boşaltma ağızları arasında bir keçe (conta) gibi vazife gördüğüne dikkat ediniz.

*Notice the progress of the liquid through the pump and between the teeth of rotor idler gear. Also, note how the crescent shape on the head divides the liquid and acts as a seal between the suction and discharge ports.*



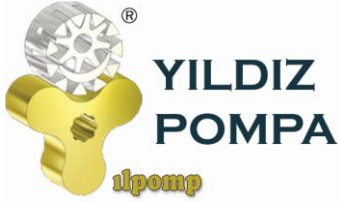
Bu resim pompanın iç kısmının dolup sıvının boşaltma ağızı alanına itilmesinden hemen önceki durumunu göstermektedir. Avare ve rotor dişlilerinin dizaynının sıvı için nasıl bir kapalı cep oluşturduğuna ve bunun tam bir hacim kontrolü sağlanmasını nasıl garantilediğine dikkat ediniz.

*This illustration shows the pump in a nearly flooded condition just previous to the liquid being forced into the discharge port area. Notice how the gear design of the idler and rotor form locked pockets for the liquid to guarantee absolute volume control.*



Bu görüntü pompanın tamamen dolup taşıdığı durumu ve sıvının boşaltma işlemini, boşaltma ağızından ilerleyişini göstermektedir. Emiş ve boşaltma ağızlarına eşit mesafede sızdırmaz bir keçe oluşturan, sıvıyı boşaltma ağızından dışarı doğru iten, rotor ve avare dişlisinin dişleri birbiri içine geçer.

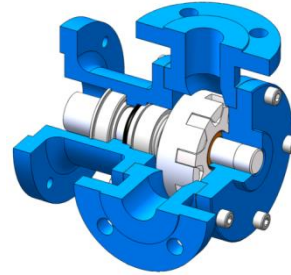
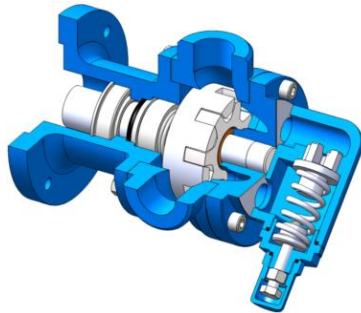
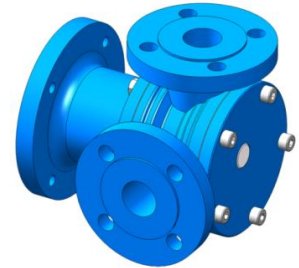
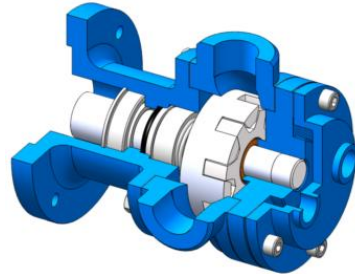
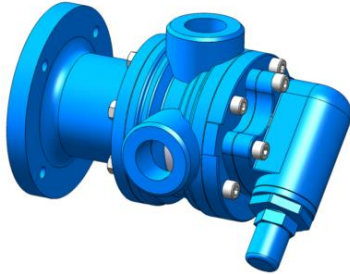
*The view shows the pump in a completely flooded condition and in the process of discharging the liquid through discharge port. The rotor and idler teeth mesh, forming a seal equidistant between the both ports, forcing liquid out the discharge port.*



## YMB 1" POMPA INTERNAL ECCENTRIC GEAR PUMP

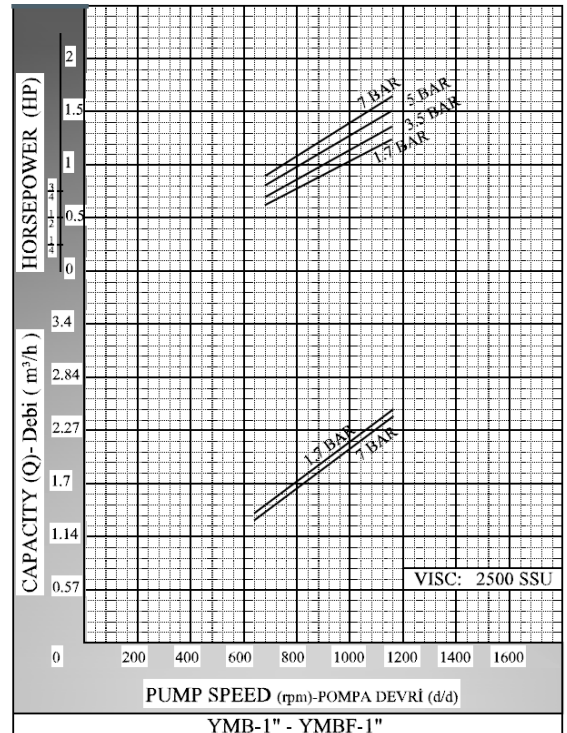
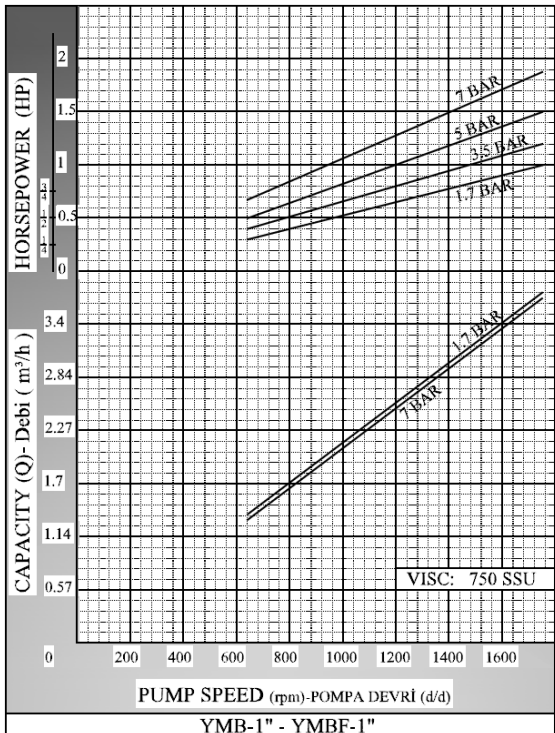
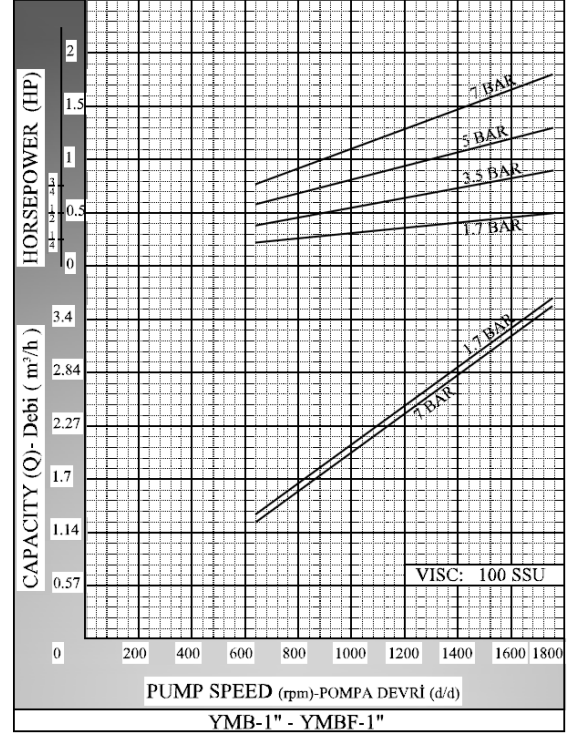
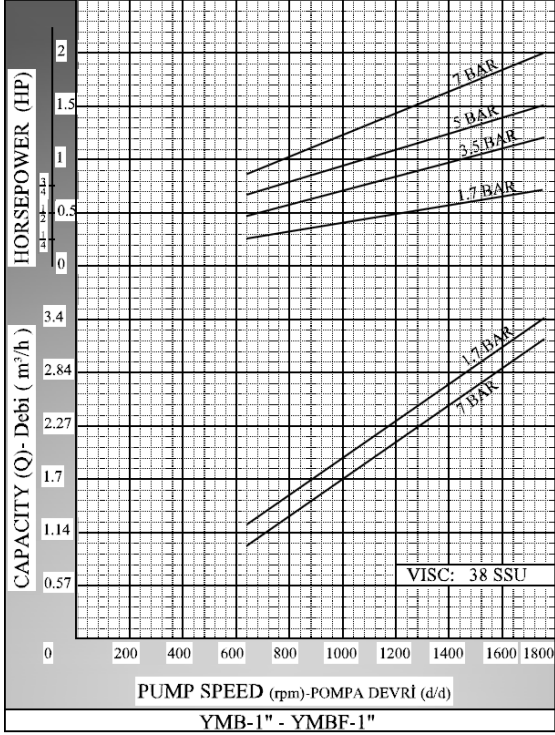


YMB-1" - YMBF-1" POMPASINA AİT KAPASİTE VE GÜÇ TABLOSU / CAPACITY AND POWER TABLE						
KAPASİTE (m <sup>3</sup> /h) CAPACITY (Q)	DEVİR (d/d) SPEED (rpm)	ÇIKIŞ BASINCI / PRESSURE				VİSKOZİTE VISCOSITY
		2,5 Bar	5 Bar	7,5 Bar	10 Bar	
1,8	900	0,75 HP	1 HP	1,5 HP	2 HP	750 SSU
3	1400	1 HP	1,5 HP	2 HP	3 HP	100 SSU
MOTOR GÜÇLERİ MOTOR POWERS		MOTOR GÜÇLERİ MOTOR POWERS		MOTOR GÜÇLERİ MOTOR POWERS		
1 HP	1400 d/d (rpm)	1 HP	900 d/d (rpm)	1,5 HP	750 d/d (rpm)	
0,75 HP	900 d/d (rpm)	1,5 HP	900 d/d (rpm)	2 HP	900 d/d (rpm)	
MOTOR GÖVDESİ MOTOR BODY		1,5 HP	1400 d/d (rpm)	3 HP	1400 d/d (rpm)	
80		MOTOR GÖVDESİ MOTOR BODY		MOTOR GÖVDESİ MOTOR BODY		
		90		100		





**KAPASİTE EĞRİLERİ / CAPACITY GRAPHS**





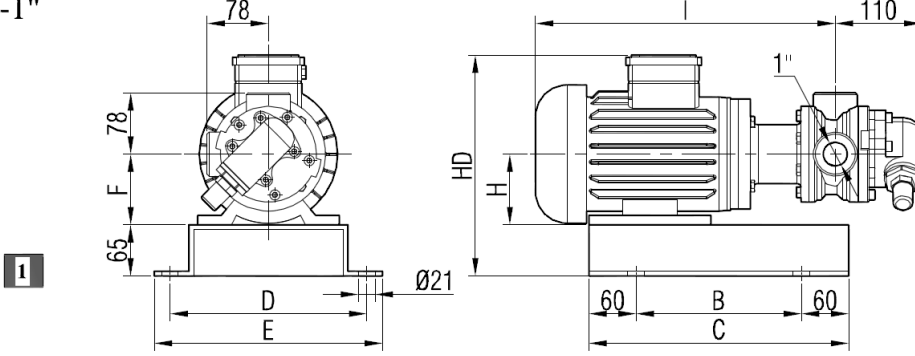
**YILDIZ  
POMPA**

**YMB 1" POMPA  
INTERNAL ECCENTRIC  
GEAR PUMP**

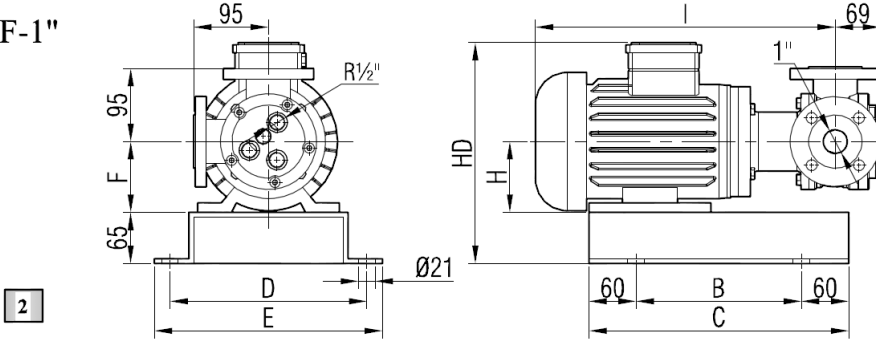


**POMPA BOYUT ÖLÇÜLERİ / PUMP DIMENSIONS**

YMB-1"

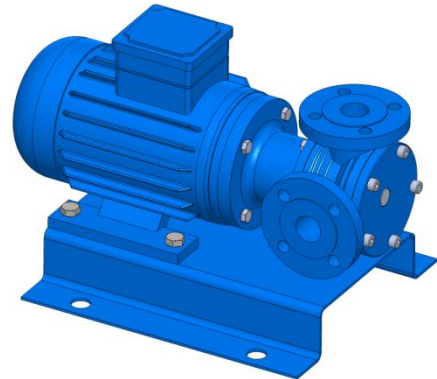
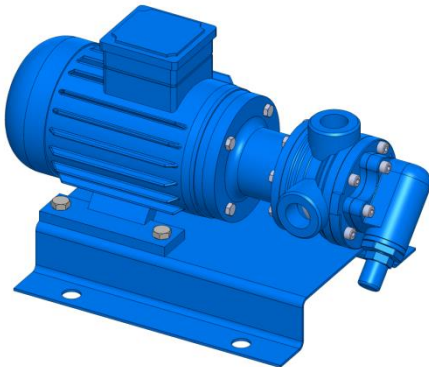


YMBF-1"



MOTOR GÜÇ VE DEVİRLERİ / MOTOR POWER AND SPEED			I	HD	H	B	C	D	E	F	kg.
0,75 hp	/ 0,55 kw	900 d/d (rpm)	MOTOR 80	361	263	80				80	28
0,75 hp	/ 0,55 kw	1400 d/d (rpm)									26
1 hp	/ 0,75 kw	1400 d/d (rpm)									27
1 hp	/ 0,75 kw	900 d/d (rpm)	MOTOR 90S	380						90	30
1,5 hp	/ 1,1 kw	1400 d/d (rpm)									30
1,5 hp	/ 1,1 kw	900 d/d (rpm)	MOTOR 90L	400	281	90	210	330	250	290	32
2 hp	/ 1,5 kw	1400 d/d (rpm)									32
1,5 hp	/ 1,1 kw	750 d/d (rpm)	MOTOR 100L	470	300	100				100	38
2 hp	/ 1,5 kw	900 d/d (rpm)									38
3 hp	/ 2,2 kw	1400 d/d (rpm)									36

Açıklama / Explanation	1	2
	Baypasslı Pompa / Pump With Bypass	Ceketli Pompa / Pump With Jacket



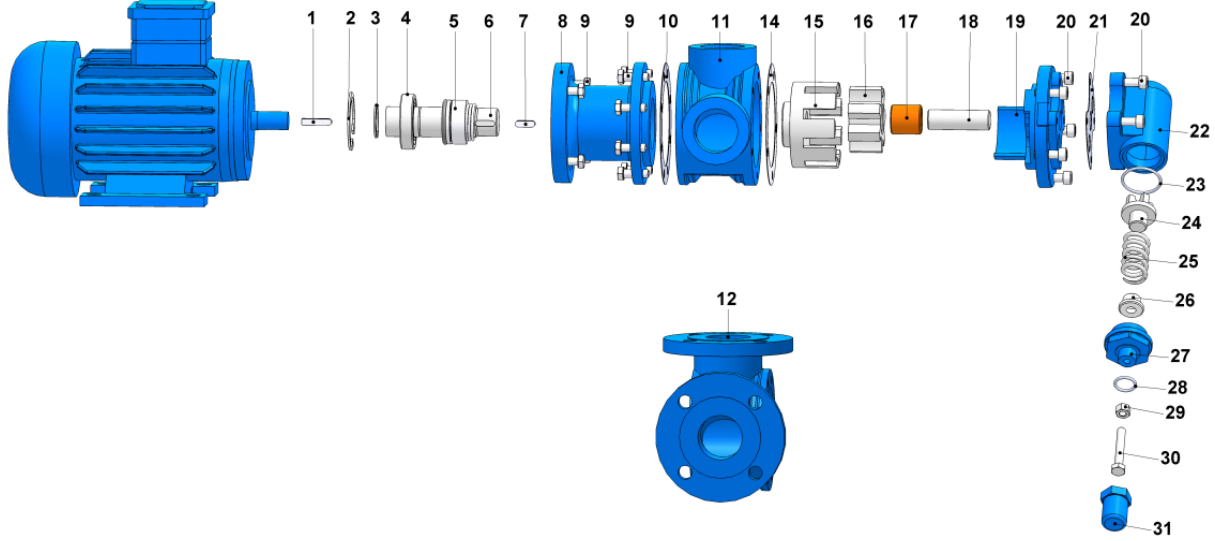


## YMB 1" POMPA INTERNAL ECCENTRIC GEAR PUMP

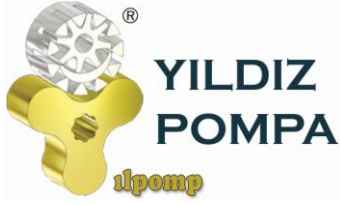


### YEDEK PARÇA LİSTESİ / SPARE PARTS LIST

MEKANİK SALMASTRALI VE BYPASSLI / SEALED WITH MECHANICAL SEAL, AND PRESSURE RELIEF VALVE ON COVER



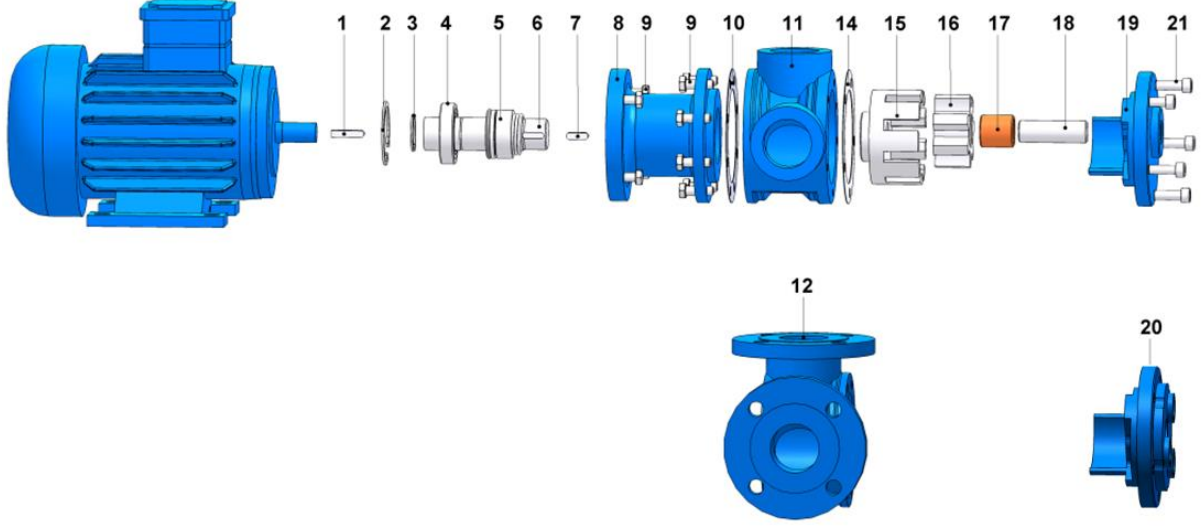
No	PARÇA İSMİ	PART NAME	ADET/ QTY.	No	PARÇA İSMİ	PART NAME	ADET/ QTY.
1	KAMA 6x6x30 AB	MOTOR KEY 6x6x30 AB	1	17	AVARA DİŞLİ BURCU	IDLER BUSHING	1
2	İÇ SEGMAN (ø55)	INTERNAL CIRCLIP (ø55)	1	18	KAPAK MİLİ	COVER PIN	1
3	DIŞ SEGMAN (ø30)	EXTERNAL CIRCLIP (ø30)	1	19	KAPAK (BYPASSLI)	COVER (w/ BYPASS INLETS)	1
4	RULMAN (6006-2RS)	BALL BEARING (6006-2RS)	1	20	IMBUS CİVATA M8x25	IMBUS BOLTS M8x25	9
5	MEKANİK SALMASTRA Ø30	MECHANICAL SEAL Ø30	1	21	BYPASS CONTASI	BYPASS GASKET	1
6	MİL	SHAFT	1	22	BYPASS	PRESSURE RELIEF VALVE – BYPASS	1
7	KAMA 6x6x20 A	ROTOR KEY 6x6x20 A	1	23	BYPASS O-RING	BYPASS O-RING	1
8	ARA FLANŞ	MOUNTING FLANGE	1	24	KLEPE	VALVE	1
9	6 KÖŞE CİVATA M8x25	HEX BOLT M8x25	12	25	YAY	SPRING	1
10	KONSOL CONTASI	BRACKET GASKET	1	26	PUL	WASHER	1
11	ARA GÖVDE (BORU DİŞLİ 90°)	CASING (w/ 90° THREADED PORTS)	1	27	BYPASS KAPAĞI	BYPASS COVER	1
12	ARA GÖVDE (FLANŞLI 90°)	CASING (w/ 90° FLANGED PORTS)	1	28	TİJ KAPAK O-RİNG	CAP O-RING	1
13	-----	-----	-----	29	M8 SOMUN	NUT M8	1
14	KAPAK CONTASI	COVER GASKET	1	30	6 KÖŞE CİVATA M8x55	ADJUSTING SCREW M8x55	1
15	ÇEVRE DİŞLİ	ROTOR GEAR	1	31	TİJ KAPAĞI	CAP	1
16	AVARA DİŞLİ	IDLER GEAR	1				



## YMB 1" POMPA INTERNAL ECCENTRIC GEAR PUMP

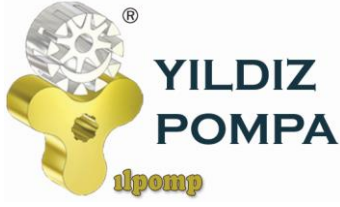


### YEDEK PARÇA LİSTESİ / SPARE PARTS LIST MEKANİK SALMASTRALI, CEKETLİ VE KÖR KAPAKLI / SEALED WITH MECHANICAL SEAL, JACKETED, AND WITH BLIND COVER



No	PARÇA İSMİ	PART NAME	ADET/ QTY.	No	PARÇA İSMİ	PART NAME	ADET/ QTY.
1	KAMA 6x6x30 AB	MOTOR KEY 6x6x30 AB	1	13	-----	-----	-----
2	İÇ SEGMAN (ø55 )	INTERNAL CIRCLIP (ø55 )	1	14	KAPAK CONTASI	HEAD GASKET	1
3	DIŞ SEGMAN (ø30 )	EXTERNAL CIRCLIP (ø30 )	1	15	ÇEVRE DİŞLİ	ROTOR GEAR	1
4	RULMAN (6006-2RS)	BALL BEARING (6006-2RS)	1	16	AVARA DİŞLİ	IDLER GEAR	1
5	MEKANİK SALMASTRA ø30	MECHANICAL SEAL ø30	1	17	AVARA DİŞLİ BURCU	IDLER BUSHING	1
6	MİL	SHAFT	1	18	KAPAK MİLİ	COVER PIN	1
7	KAMA 6x6x20 A	ROTOR KEY 6x6x20 A	1	19	KAPAK (KÖR)	BLIND COVER	1
8	ARA FLANŞ	MOUNTING FLANGE	1	20	KAPAK (CEKETLİ)	COVER (w/ HEATING JACKET)	1
9	6 KÖŞE CİVATA M8x25	HEX BOLT M8x25	12	21	IMBUS CİVATA M8x25	IMBUS BOLT M8x25	5
10	KONSOL CONTASI	BRACKET GASKET	1		IMBUS CİVATA M8x30 (CEKETLİ KAPAK İÇİN)	IMBUS BOLT M8x30 FOR COVER w/ HEATING JACKET	5
11	ARA GÖVDE (BORU DİŞLİ 90°)	CASING (w/ 90° THEADED PORTS)	1				
12	ARA GÖVDE (FLANŞLI 90°)	CASING (w/ 90° FLANGED PORTS)	1				



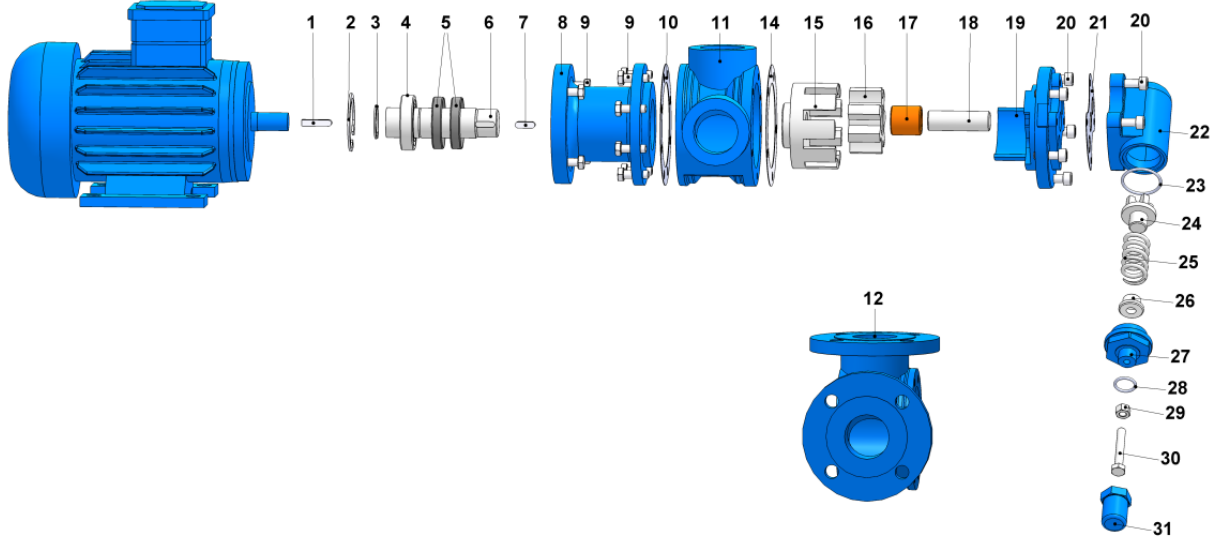


## YMB 1" POMPA INTERNAL ECCENTRIC GEAR PUMP

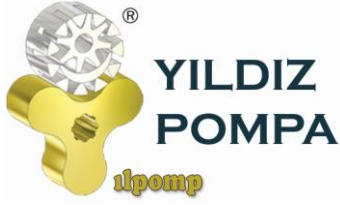


### YEDEK PARÇA LİSTESİ / SPARE PARTS LIST

KEÇELİ VE BYPASSLI / SEALED WITH LIP SEAL, AND PRESSURE RELIEF VALVE ON COVER



No	PARÇA İSMİ	PART NAME	ADET/ QTY.	No	PARÇA İSMİ	PART NAME	ADET/ QTY.
1	KAMA 6x6x30 AB	MOTOR KEY 6x6x30 AB	1	17	AVARA DİŞLİ BURCU	IDLER BUSHING	1
2	İÇ SEGMAN (ø55 )	INTERNAL CIRCLIP (ø55 )	1	18	KAPAK MİLİ	COVER PIN	1
3	DIŞ SEGMAN (ø30 )	EXTERNAL CIRCLIP (ø30 )	1	19	KAPAK (BYPASSLI)	COVER (w/ BYPASS INLETS)	1
4	RULMAN (6006-2RS)	BALL BEARING (6006-2RS)	1	20	IMBUS CİVATA M8x25	HEX SOCKET M8x25	9
5	KEÇE ø30xø52x10	LIP SEAL ø30xø52x10	2	21	BYPASS CONTASI	BYPASS GASKET	1
6	MİL	SHAFT	1	22	BYPASS	PRESSURE RELIEF VALVE – BYPASS	1
7	KAMA 6x6x20 A	ROTOR KEY 6x6x20 A	1	23	BYPASS O-RING	BYPASS O-RING	1
8	ARA FLANŞ	MOUNTING FLANGE	1	24	KLEPE	VALVE	1
9	6 KÖŞE CİVATA M8x25	HEX BOLT M8x25	12	25	YAY	SPRING	1
10	KONSOL CONTASI	BRACKET GASKET	1	26	PUL	WASHER	1
11	ARA GÖVDE (BORU DİŞLİ 90°)	CASING (w/ 90° THEADED PORTS)	1	27	BYPASS KAPAĞI	BYPASS COVER	1
12	ARA GÖVDE (FLANŞLI 90°)	CASING (w/ 90° FLANGED PORTS)	1	28	TIJ KAPAK O-RİNG	CAP O-RING	1
				29	M8 SOMUN	NUT M8	1
14	KAPAK CONTASI	COVER GASKET	1	30	6 KÖŞE CİVATA M8x55	ADJUSTING SCREW M8x55	1
15	ÇEVRE DİŞLİ	ROTOR GEAR	1	31	TIJ KAPAĞI	CAP	1
16	AVARA DİŞLİ	IDLER GEAR	1				

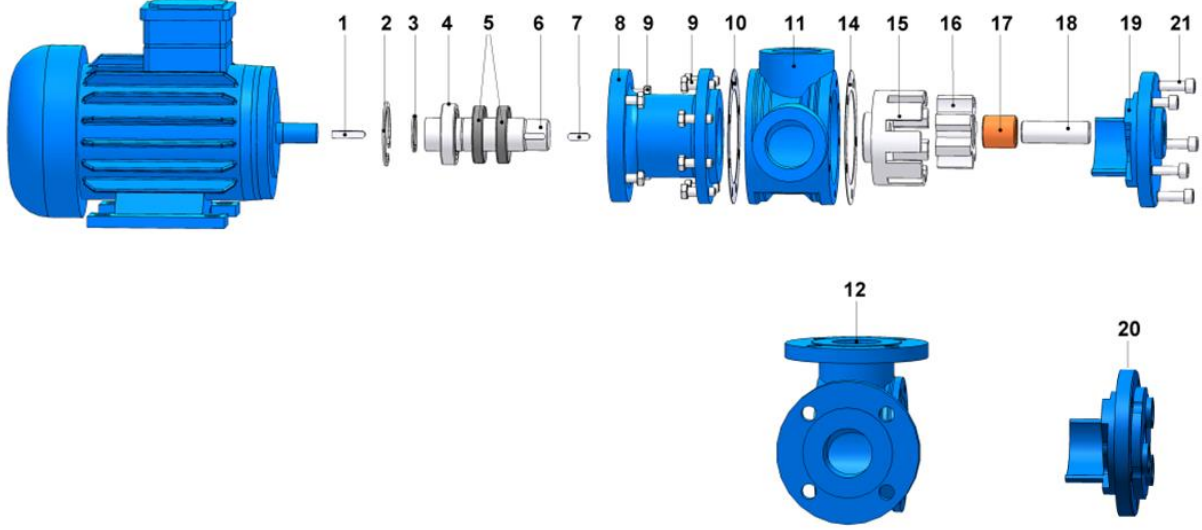


## YMB 1" POMPA INTERNAL ECCENTRIC GEAR PUMP



### YEDEK PARÇA LİSTESİ / SPARE PARTS LIST

KEÇELİ, CEKETLİ VE KÖR KAPAKLI / SEALED WITH LIP SEAL, JACKETED AND WITH BLIND COVER



No	PARÇA İSMİ	PART NAME	ADET/ QTY.	No	PARÇA İSMİ	PART NAME	ADET/ QTY.
1	KAMA 6x6x30 AB	MOTOR KEY 6x6x30 AB	1	13	-----	-----	-----
2	İÇ SEGMAN (ø55)	INTERNAL CIRCLIP (ø55)	1	14	KAPAK CONTASI	COVER GASKET	1
3	DIŞ SEGMAN (ø30)	EXTERNAL CIRCLIP (ø30)	1	15	ÇEVRE DİŞLİ	ROTOR GEAR	1
4	RULMAN (6006-2RS)	BALL BEARING (6006-2RS)	1	16	AVARA DİŞLİ	IDLER GEAR	1
5	KEÇE ø30xø52x10	LIP SEAL ø30xø52x10	2	17	AVARA DİŞLİ BURCU	IDLER BUSHING	1
6	MİL	SHAFT	1	18	KAPAK MİLİ	COVER PIN	1
7	KAMA 6x6x20 A	ROTOR KEY 6x6x20 A	1	19	KAPAK (KÖR)	BLIND COVER	1
8	ARA FLANŞ	MOUNTING FLANGE	1	20	KAPAK (CEKETLİ)	COVER (w/ HEATING JACKET)	1
9	6 KÖŞE CİVATA M8x25	HEX BOLT M8x25	12	21	IMBUS CİVATA M8x25	HEX SOCKET M8x25	5
10	KONSOL CONTASI	BRACKET GASKET	1		IMBUS CİVATA M8x30 (CEKETLİ KAPAK İÇİN)	HEX SOCKET M8x30 FOR COVER w/ HEATING JACKET	5
11	ARA GÖVDE (BORU DİŞLİ 90°)	CASING (w/ 90° THREADED PORTS)	1				
12	ARA GÖVDE (FLANŞLI 90°)	CASING (w/ 90° FLANGED PORTS)	1				