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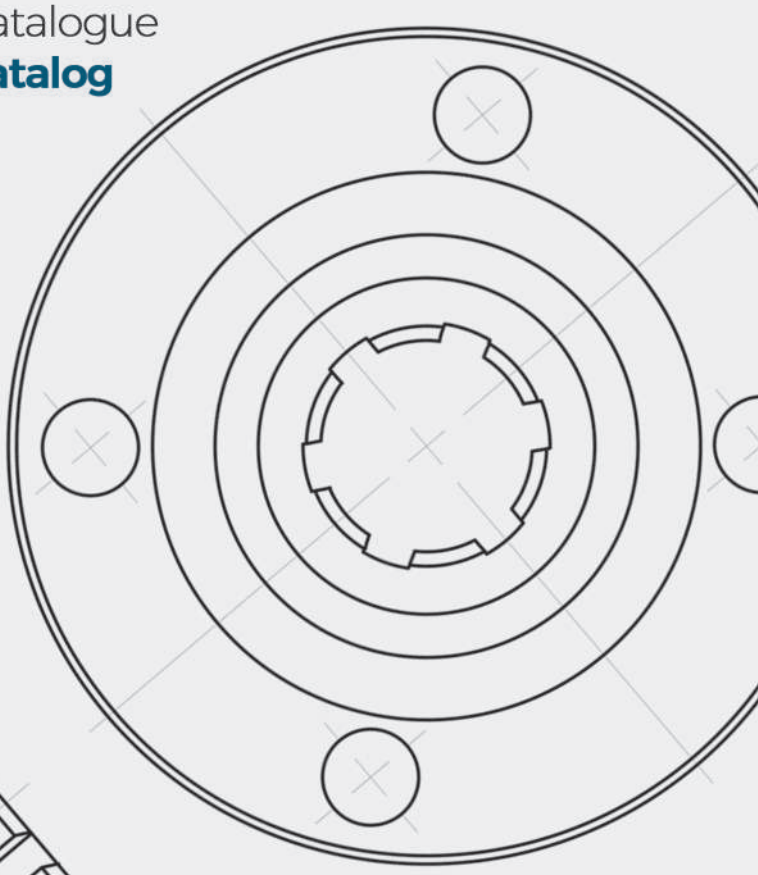

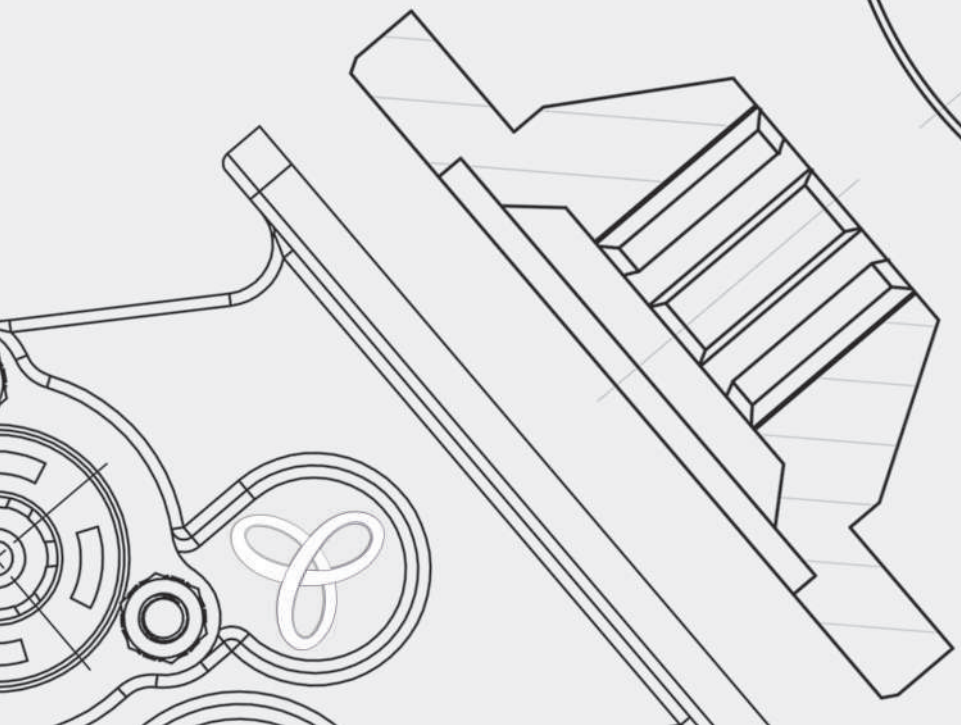

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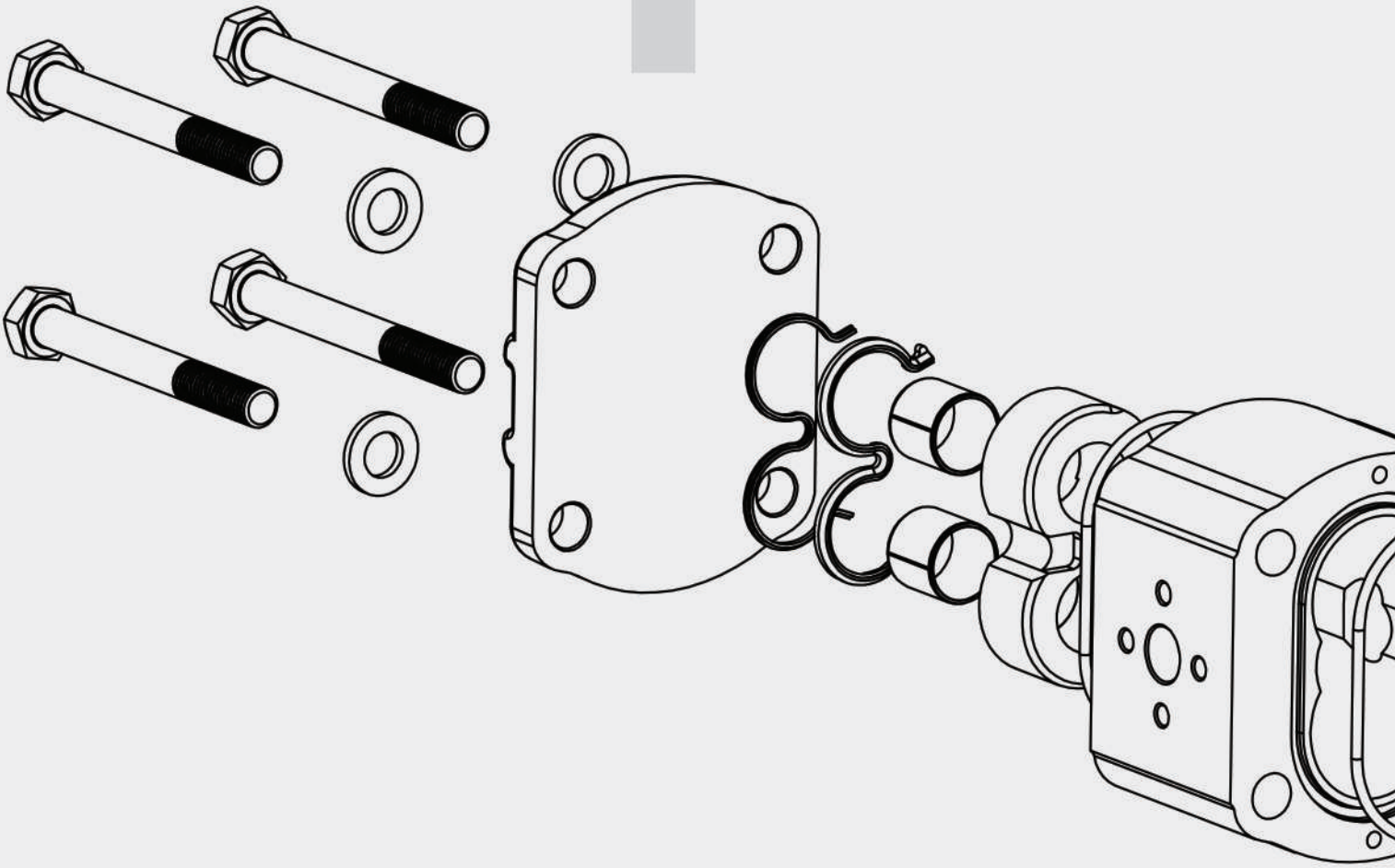
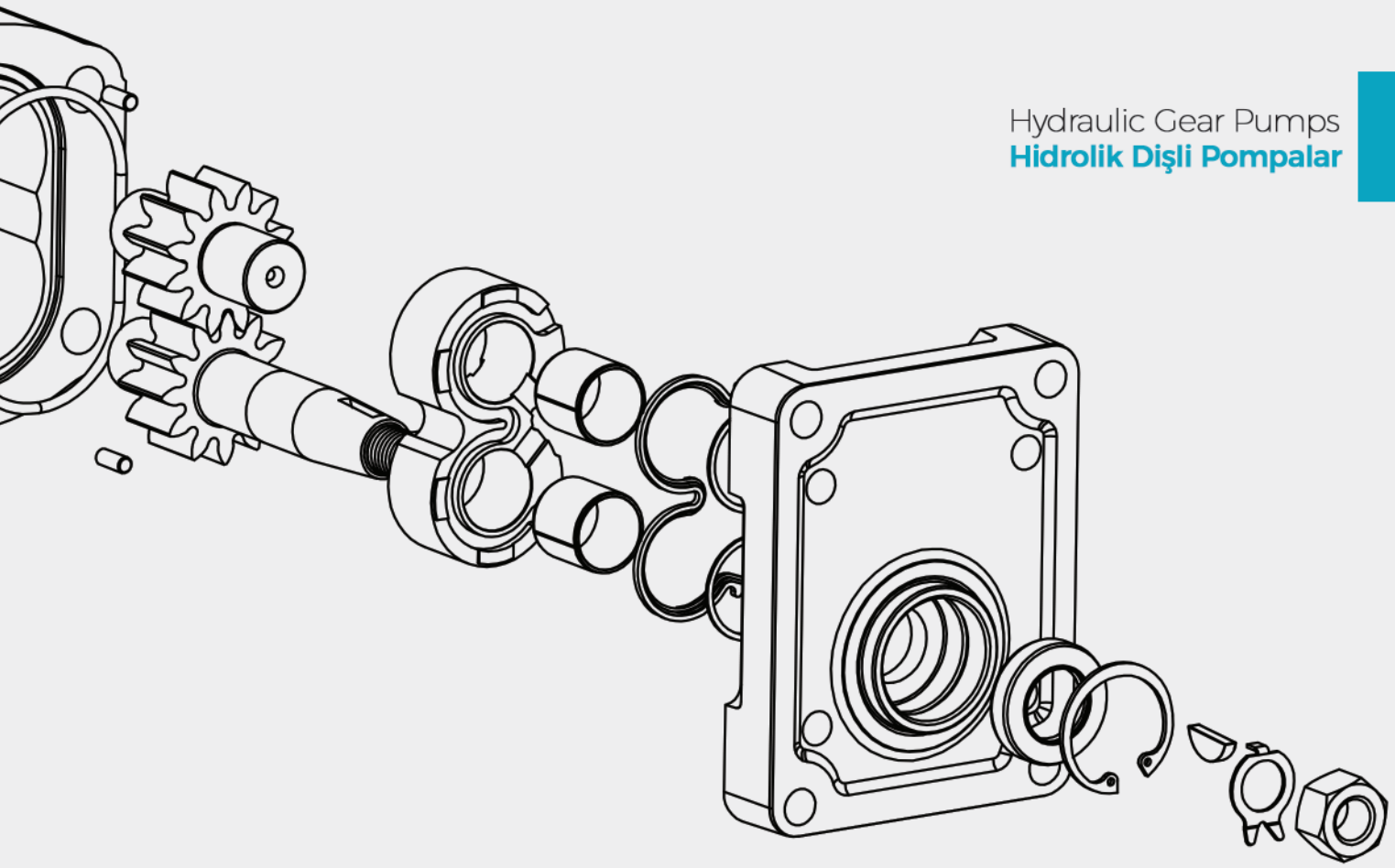


Hydraulic Gear Pumps

blue ascend hydraulics

Hydraulic Gear Pumps

Hidrolik Dişli Pompalar



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1. GENEL BİLGİLER

Blue Ascend dişli pompaları yüksek mukavemetli alüminyum alaşımlı gövde ekstrüzyon/döküm ve üç ana parçadan meydana gelmektedir.
Bu pompalar, yüksek performansı ve uzun çalışma ömrü ve düşük satın almadan dolayı modern hidrolik sistemlerde geniş bir şekilde kullanılmakta ve farklı iletim hacmi ve farklı dişli genişlikleri ile standart pompa grubunda yer almaktadırlar. Daha fazla konfigürasyon varyantlar için farklı flanş ve dişliler ve çoklu pompa kombinasyonları mümkün olacaktır.

2. KONSTRÜKSİYON

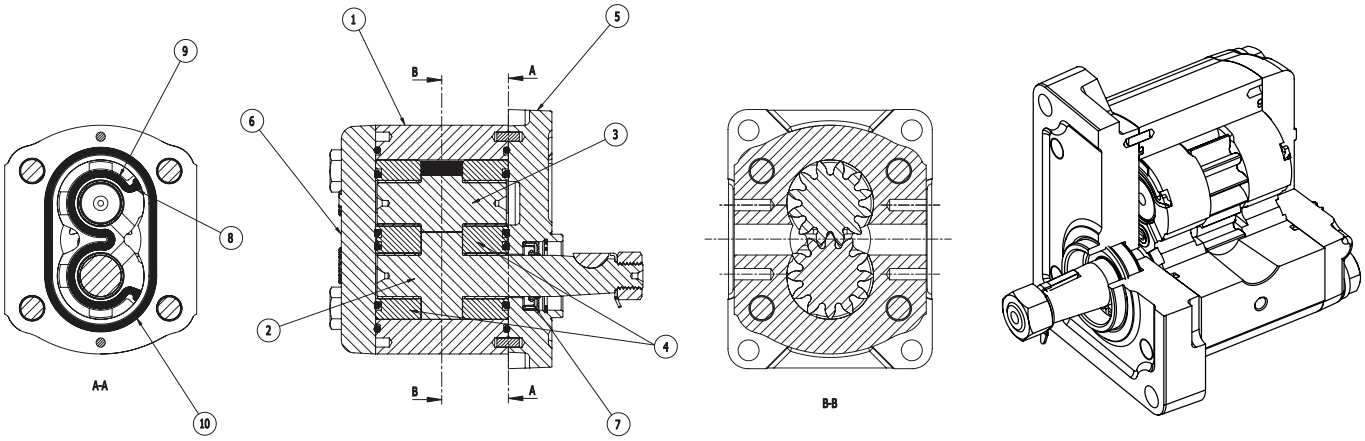
Dişli pompalar genel olarak alüminyum/döküm gövde, bir çift dişli, iki burç yatak, ön kapak ve arka kapaktan oluşur. Tahrik eden mil ön kapaktan geçerek şaft keçesi ile keçelendirilmiştir. Yatak kuvvetleri, özel yatak esnekliği ile temas hattı yerine, yüzey teması üretmek için burç tarafından absorbe özelliği vardır. Ayrıca düşük hızlarda mükemmel direnç sağlar. Debi pulsasyonu ve gürültü seviyesi minimuma indirilmiştir.
Burç iç sızdırmazlık keçeleri üzerinde basınca bağlı olarak kuvvetler elde edilir ve bu optimum verimliliği sağlar.
Aksi belirtilmedikçe, keçeler yüksek çekme mukavemetine ve sıcaklığa dayanıklı nitril kauçuk (NBR) olacaktır. İstenilmesi durumunda viton keçeler kullanılacaktır.

1. GENERAL INFORMATION

Blue Ascend external gear pumps are built in three main pieces with an in high resistance aluminium alloy extruded /cast iron body. These external gear pumps are widely used in modern hydraulic systems due to their long service life and high performance. Blue Ascend external gear pumps are available as standard gear pump with different displacement and gear widths. Further configuration variants are given by different flanges, shafts, and multiple pump combinations.

2. CONSTRUCTION

The external gear pump consists of an aluminium/cast iron body, a pair of gears supported in bearing bushings and a front and a rear cover. The drive shaft protrudes from the front cover where it is sealed by the shaft seal ring. The bearing forces are absorbed by special bearing bushings with sufficient elasticity to produce surface contact instead of line contact. They also ensure excellent resistance to galling especially at low speed. Flow pulsation and noise emission decrease to a minimum level. The internal sealing is achieved by forces which are proportional to delivery pressure. Unless otherwise specified, the seals are in nitrilic compound (NBR) offering high mechanical strength and heat resistance. Viton seals are available on request.



1. Gövde / Body
2. Tahrik Eden Dişli /Drive Gear
3. Tahrik Edilen Dişli /Driven Gear
4. Burç /Bushing
5. Ön Kapak /Front Cover
6. Arka Kapak /Rear Cover
7. Şaft Keçesi /Shaft Seal
8. Takviye Keçesi /Back Up Seals
9. Burç Kulak Keçesi /Bush Lobe Seals
10. Gövde Keçesi / Body Seals

3. POMPA DÖNÜŞ YÖNÜ

Pompanın ön tarafından bakıldığında ve tahrik eden dişli aşağıya gelecek şekilde pompa dönüş yönü belirlenir.(şekillere bakınız).

Sağ dönüşlü pompaların(C) tahrik eden dişlisi sağa (saat yönünde) dönecek, emiş deliği sağda ve basınç deliği solda olacaktır.

Sol dönüşlü pompaların(A) tahrik eden dişlisi sola (saat yönünün tersine) dönecek, emiş deliği solda ve basınç deliği sağda olacaktır.

Resimlerde görüldüğü gibi yağ, emiş deliği tarafından alınarak dişliler vasıtası ile çıkış portuna transfer edilmektedir.

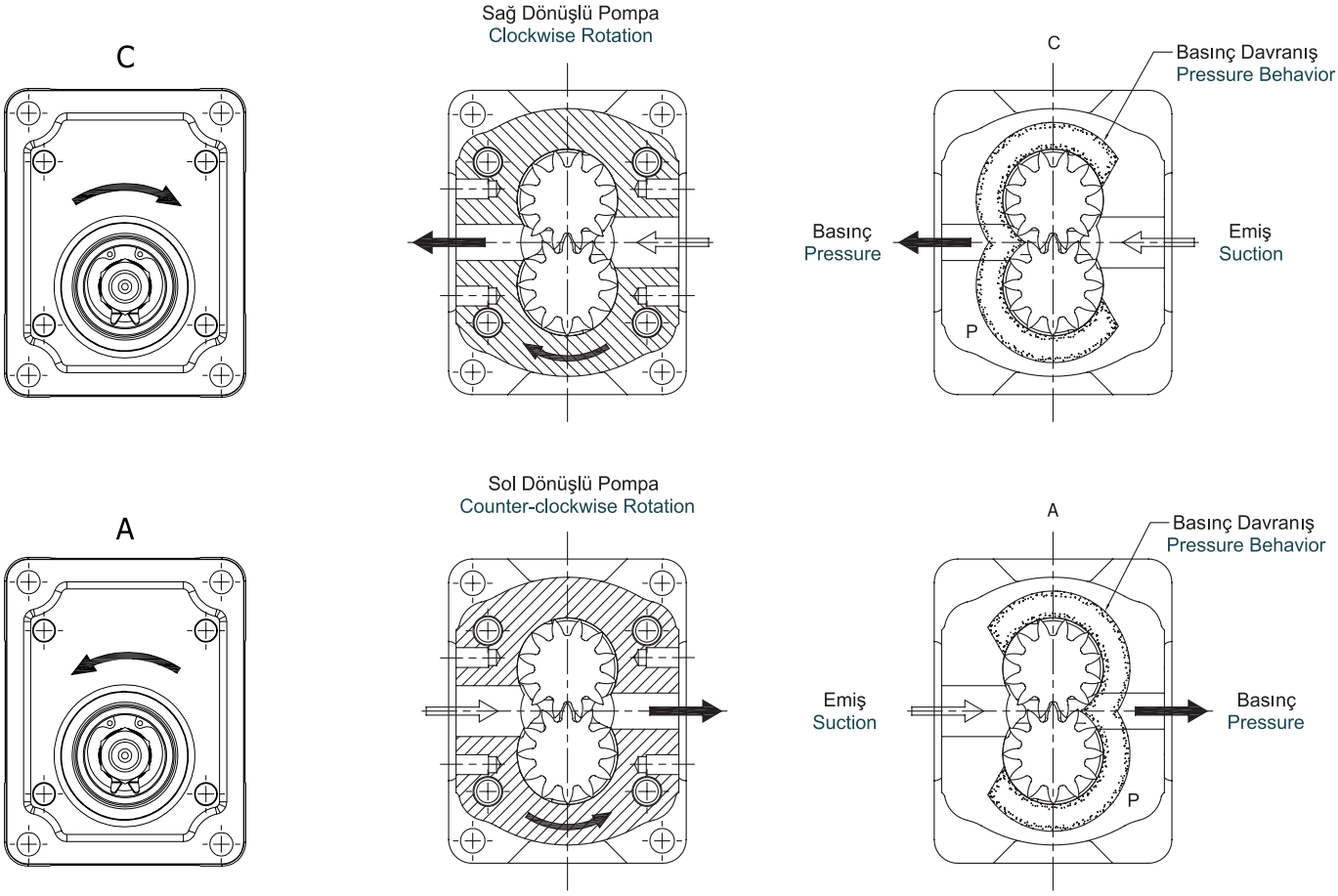
3. PUMP DIRECTION OF ROTATIONS

The direction of rotation of a gear pump is identified by looking at the pump from the front coverside and with the drive gear turned down (see figures below).

Pumps with clockwise rotation (C) have a drive gear which turns clockwise, with the suction port on the right and the pressure port on the left.

Pumps with counter-clockwise rotation (A) have a drive gear which turns counter-clockwise, with the suction port on the left and the pressure port on the right.

The figure also shows the pressure flow inside the pumps as the oil is transferred from the suction port to the pressure port by the gears.



4. POMPANIN BAĞLANMASI

Pompalar, 2 veya 4 cıvata ve merkezleme çapı ile basit olarak ön kapaktan bağlanırlar. Merkezleme çapının oturacağı yuvanın kullanıcı tarafından yapılacak kısımda 1x45o pah kırılarak kaygan geçme toleranslarında işlenmesi, pompanın yerine daha hassas geçmesini sağlar. En az titreşim için, rijit yapılan giriş çıkış bağlamaları yerine, hidrolik hortumlarla yapılacak bağlamalar tercih edilmelidir.

5. POMPANIN EMİŞİ

İşletme şartlarında basınç düşümünü önlemek için uygun boyutta filtre kullanılması tavsiye edilir. Emiş basıncı (absolute) 0,75 (bar) dan küçük olmalıdır. Tavsiye edilen pompa yağ emiş hızı V= 0,6/1,2 m/s olmalıdır.

6. POMPANIN ÇIKIŞI

Pompa çıkış hattı çalışma basıncını sınırlayan bir emniyet valfi ile korunmalıdır. Çıkış boru büyüklüğü, akış hızı, gürültü, aşırı basınç düşmeleri ve ısınmayı minimize edecek şekilde belirlenmelidir. Akış hızı, normal olarak 5m/s 'in altında kabul edilebilir.

4. PUMP MOUNTING

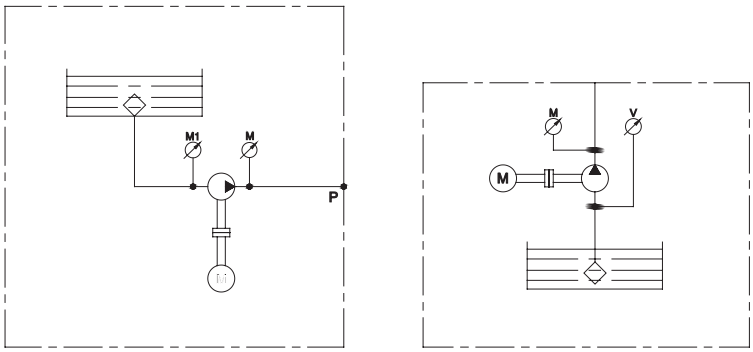
The pumps are easily mounted from the flange with the help 4 or 2 bolts and the spigot location. The counter bore to receive the mounting flange spigot should have a 1 mm chamfer at 45 on the pump side to ensure proper fitting. It is good practice to use flexible hose adjacent to the pump in both the suction and pressure lines to minimize vibration, which can be transmitted to the pump by rigid pipe runs.

5. PUMP SUCTION

It is also advisable to choose a filter of a suitable size to minimize any pressure drop and to take measures to prevent gradual clogging over time. The suction port pressure must be lower than 0,75 bar. The diameter of the suction pipe should ensure that the oil speed within the range from V= 0,6 to 1,2 m/s.

6. PUMP OUTLET

The pump outlet line should normally be protected by a relief valve to limit the working pressure. The outlet pipe sizes should be chosen so it's minimizing flow velocity, avoiding system noise, minimizing excess pressure drops and overheating. The flow rate under 5 m/s is normally acceptable.



Şekil 1 - Figure 1

Bir dişli pompanın ömrü yağ içindeki yabancı maddelerin varlığına bağlıdır. Bu nedenle pompa ve sistemin ömrünü uzun kılmak iyi bir filtreleme ile mümkündür. Her durumda filtreleme sistemi yağ kirliliğini aşağıdaki tabloda verilen değerlere eşit veya altında tutmasını sağlamalıdır.

A short service life of a gear pump is normally due to the presence of impurities in the oil. That is the reason an effective filter in the system to carry out regular maintenance get the system life longer. In any case,the filtering system must constantly ensure an oil contamination class equal to or less than those shown in the following table.

Çalışma basıncı Operating pressure	> 170 bar	< 170 bar
Kirlilik sınıfı Contamination class NAS 1638	9	10
Kirlilik sınıfı Contamination class ISO 4406	18/15	19/16
Filtre Obtain with filter→ (Bx=75)	20	25

7. TAVSİYE EDİLEN YAĞ

Bütün hidrolik sistemlerde ISO/DIN ve SAE standartlarında belirtilen mineral esaslı hidrolik yağ kullanılması tavsiye edilir. Tavsiye edilen viskozite aralığı 20/120 (cSt) ve 700 (cSt)'ye kadar müsaade edilebilir.

8. ÇALIŞMA SICAKLIĞI

Bu pompalarda çalışma sıcaklığı;
* NBR keçeler için 0 C ile +80 C arasında devamlı ve -20 C ile +100 C aralıklı,
* Viton keçeler için 0 C ile +100 C arasında devamlı ve -20 C ile + 120 C arasında aralıklı olarak çalışırlar.

9. KAVİTASYON

Modern hidrolik sistemlerde kullanılan yağın büyük çoğunluğunda hacimsel olarak yaklaşık %10 oranında çözünmüş halde hava vardır. Sistem içinde belirli vakum şartlarında bu hava yağdan ayrışır ve hava kabarcıkları oluşturur. Bu hava cepleri belirli basınçlarda parçalanarak temasta olduğu malzemeyi aşındırarak zarar verir. Yukarıdaki açıklamalardan da anlaşılacağı üzere yağdaki hava oranı ne kadar büyükse yapacağı aşınma da o derece büyük olacaktır. Yağdaki aşırı hava oranının en büyük sebebi özellikle pompa girişindeki hava emişini doğuran kaçaklar ve uygun olmayan boru büyüklükleri, köşeli bağlantılar, ani kesit değişmeleri gibi hususların oluşturduğu akış hattı dirençleridir

7. RECOMMENDED FLUIDS

We recommend using only mineral oil based hydraulic fluids that comply with the ISO/DIN or SAE standards. Recommended viscosity range is 20/120 (cSt) and permitted up to 700 (cSt).

8. OPERATION TEMPERATURE

* Operation for NBR seals between 0 C and +80 C continuously, and between -20 C and +100 C intermittent,
* For viton seals between 0 C and + 100 C continuously and between -20 C and + 120 C intermittent.

9. CAVITATION

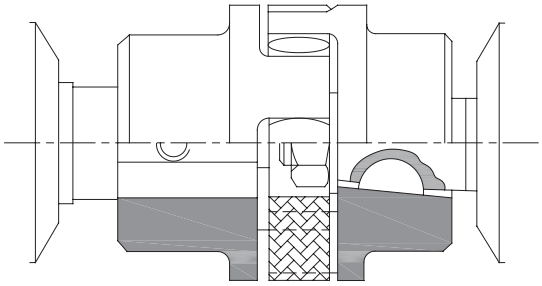
Hydraulic oil used in the majority of systems contains about 10% dissolved air by volume. This air under certain conditions of vacuum within the systems is released from the oil and will cause air bubbles.
These air pockets collapse if then subjected to pressure and this collapse creates erosion of the adjacent metal. It is obvious from the above that the greater the air content within the oil is then the more severe will be the resultant erosion created. The main causes of over aeration of the oil are air leaks particularly on the inlet side of the pump, and flow line restrictions such as inadequate pipe size, elbow fittings and sudden changes in flow line cross sectional area.

10. TAHRİK ŞEKİLLERİ

Elastik kaplinler radyal ve eksenel yük taşımazlar. Eksenel ve radyal yönde minimum 0,25 mm boşluğu olan bir kaplin seçilmelidir. Üç parçalı elastik kaplinler tavsiye edilir (şekil 2).

10. DRIVE ARRANGEMENTS

The flexible coupling does not transfer any radial or axial force to the pump. A coupling with a minimum clearance of 0,25 mm in the axial and radial direction should be chosen. A three pieces flexible couplings are recommended see fig 2.



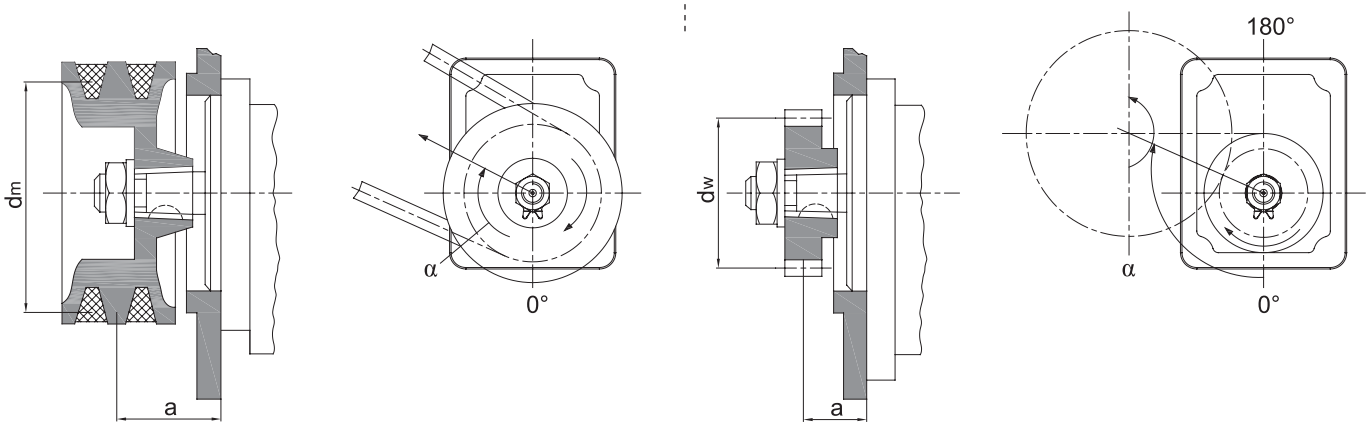
Şekil 2 - Figure 2

11. ÖN YATAKSIZ, KAYIŞ VE DİŞLİ İLE TAHRİK

V kayışı veya dış tahrik dişlisi ile pompa tahriki önerildiği zaman aşağıdaki uygulama detayına bakınız (şekil 3).

11. V-BELTS AND GEAR WHEELS WITHOUT OUTBOARD BEARING

When proposing to use V-belt or gear drive, please see fig 3.



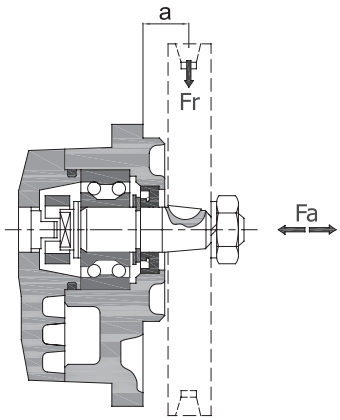
Şekil 3 - Figure 3

12. ÖN YATAK

Ön yataksız pompalar, V kayışı ve dış dişli ile tahrik edildiği zaman, çıkabilecek muhtemel problemler karşısında ön yatak kullanılmaktadır.

12. OUTBOARD BEARING

Outboard bearings eliminate possible problems when the pumps are driven by V-belts or gear wheels.

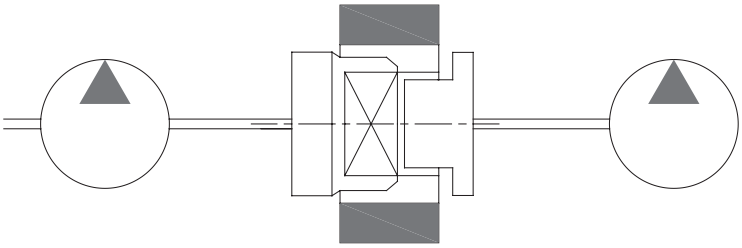


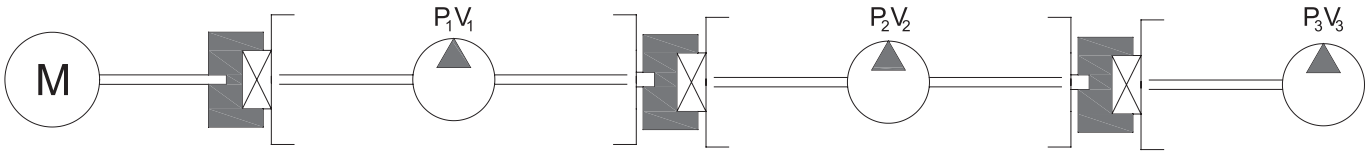
13. ÇOKLU TAHRİK EDEN DİŞLİ POMPALAR

Tahrik eden dişli milleri uzatılarak dişli pompaların ikili veya üçlü pompa kombinasyonlarını yapmak mümkündür. Tahrik kaplini, pompaların iki dişli arasına yerleştirilmektedir. Pompa emiş portları birbirinden ayrı olduğu gibi, ortak emiş yapmak da mümkündür. Basınç, tahrik eden dişli şaft mukavemetine göre sınırlandırılmıştır. Uygun değerler resimler üzerinde verilmiştir.Eğer öndeki pompanın tahrik eden dişlisi kesikli şaftlı ise ön yatak kullanılmalıdır. Pompaların basınç sınırlaması aşağıdaki formüle göre olacaktır.

13. MULTIPLE GEAR PUMPS

Gear pumps are well-suited to tandem or triple combination of pumps in which the drive shaft of the first pump is extended to drive a second pump and sometimes third pump in the same manner. A coupling is fitted between each pair of pumps. The pressures are restricted by the strength of the drive shaft. Appropriate data is given in the dimensional drawings below. If the first stage of the pumps driven gear is getting the power through a tang drive shaft and outboard bearing must be used. The pressure limitations will be according to the table below.





$$M_{max} = \frac{P_1.V_1}{2.\pi.\eta m} + \frac{P_2.V_2}{2.\pi.\eta m} + \frac{P_3.V_3}{2.\pi.\eta m}$$

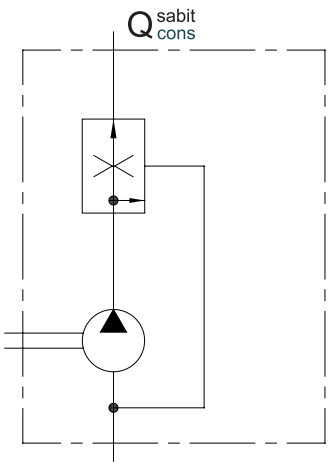
14. VALFLİ POMPALAR

Hidrolik direksiyon veya diğer uygulama sistemlerinde pompaların arka kapağına akış kontrol valfi, akış bölücü valf, yük duyarlı valf veya emniyet valfini uygulamak mümkündür. Akış kontrol ve akış bölücü valflerde, pompanın her devrinde debi sabit olacaktır. Fazla debi kapağın içinde tekrar emiş tarafına geçmekte veya başka bir ekipmanda kullanılmak üzere valfin dışına alınabilmektedir.

14. GEAR PUMPS WITH INTEGRAL VALVES

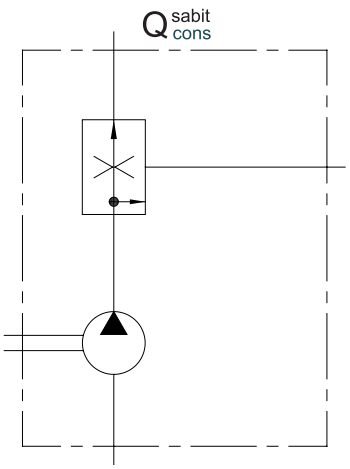
It is possible to apply a flow control valve, flow divider valve, load sensing valve or relief valve in the rear cover of the gear pump. On the flow control valves and the flow divider valves, the flow rate must be fixed at all speed of the pumps. The excess flow is either returned internally to the suction port or distributed externally to other items.

E



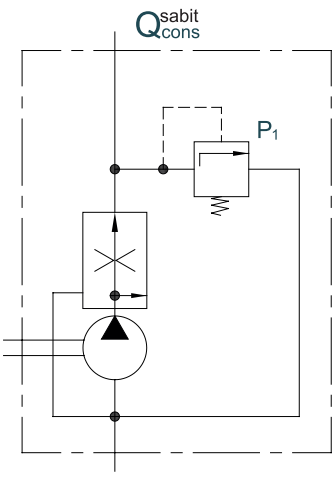
Akış Kontrol Valfi
Flow Control Valve

D



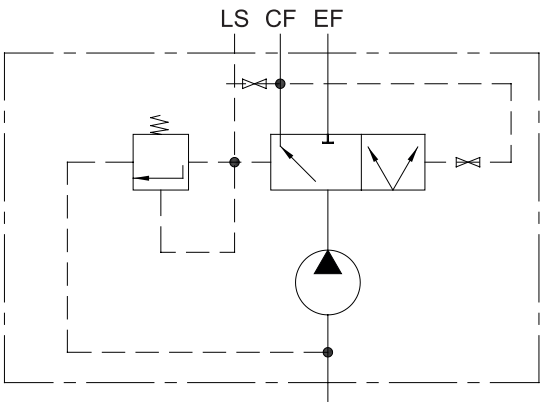
Akış Bölücü Valf
Flow Divider Valve

H



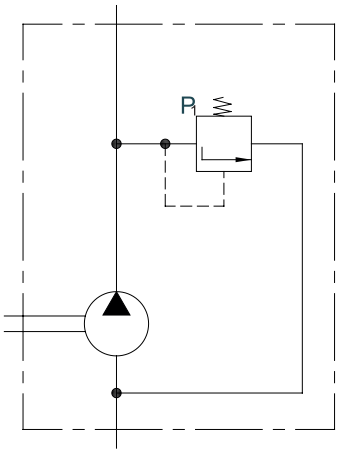
Emniyet Valfli Akış Kontrol Valfi
Flow Control Valve With Relief Valve

L



Yük Duyarlı Valf
Load Sensing Valve

R



Emniyet Valfi
Relief Valve

15. POMPA HESAPLARI

Pompa dizayn hesaplarında aşağıdaki parametreler esas alınır.

V(cm³ / dev)	: İletim Hacmi
Q(lt/dak)	: Debi
P(bar)	: Basınç
M(Nm)	: Döndürme Torku
n(d/d)	: Hız
N(kw)	: Güç
ηv(%)	: Volumetrik Verim
ηm(%)	: Mekanik Verim
ηt(%)	: Toplam Verim

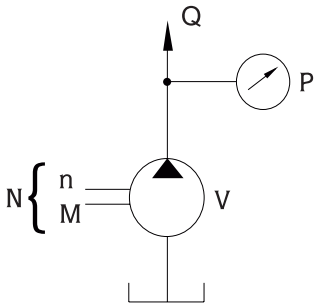
15. CALCULATION THE SPECIFICATION OF A GEAR PUMP

The design calculation for pumps are based on the following parameters.

V(cm³ / rev)	: Displacement
Q(l/min)	: Flow Range
P(bar)	: Pressure
M(Nm)	: Drive Torque
n(rpm)	: Speed
N(kw)	: Power
ηv(%)	: Volumetric Efficiency
ηm(%)	: Mechanical Efficiency
ηt(%)	: Total Efficiency

FORMÜLLER

FORMULAS



$$Q = \frac{V \cdot n}{1000} \cdot \eta v$$

$$N = \frac{Q \cdot P}{600 \cdot \eta t}$$

$$M = \frac{1{,}59 \cdot V \cdot P}{\eta m}$$

$$\eta t = \eta m \cdot \eta v$$

Tavsiye Edilen Verim

Recommended Efficiency

ηv = %95

ηm= %87 - %90

ηt = %82

AP10 POMPALARIN KODLAMA SİSTEMİ
ORDERING CODE OF AP10 PUMPS

AP10 . 030/030/030 . C A B 01 S N - T

AP10: Aluminyum Gövdeli Düz Dişli Pompa / Aluminium Body Gear Pump

030/030/030: İletim Hacmi / Displacement cm^3/dev (cm^3/rev)

009 = 0,9 cm³ /dev (cm³ /rev)
012 = 1,2 cm³ /dev (cm³ /rev)
017 = 1,7 cm³ /dev (cm³ /rev)
023 = 2,3 cm³ /dev (cm³ /rev)
027 = 2,7 cm³ /dev (cm³ /rev)
032 = 3,2 cm³ /dev (cm³ /rev)
038 = 3,8 cm³ /dev (cm³ /rev)
043 = 4,3 cm³ /dev (cm³ /rev)
050 = 5,0 cm³ /dev (cm³ /rev)
059 = 5,9 cm³ /dev (cm³ /rev)
063 =6,3 cm³ /dev (cm³ /rev)
078 = 7,8 cm³ /dev (cm³ /rev)
095 = 9,5 cm³ /dev (cm³ /rev)

C: Dönüş Yönü / Rotation

A = Sol dönüş / Counter-clockwise
C = Sağ dönüş / Clockwise

N: Keçe / Seal

N	NBR
V	Viton

T: Eleman sayısı

	Tekli Single
T	Tandem Tandem

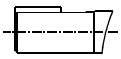
S: Arka Kapak / Rear Cover

S	Standart Standard

A: Ön Kapak / Front Cover

A	Dikdörtgen kapak Square flange	Ø25,38 mm	
B	2 Civatalı - Merkezleme 2 Bolts - Centering	Ø32 mm	
C	2 Civatalı - Merkezleme ve Oringli 2 Bolts - Centering with Oring	Ø32 mm	
F	2 Civatalı - Merkezleme 2 Bolts - Centering	Ø32 mm	
L	Dikdörtgen kapak Square flange	Ø30 mm	
N	Dikdörtgen kapak Square flange	Ø36,47 mm	

B: Tahrik Şaftı / Drive Shaft

A	Konik - Kamalı Tapered key shaft	1:5	
B	Konik - Kamalı Tapered key shaft	1:8	
E	Kesik şaftlı Tang Drive Shaft		
H	Paralel şaft Parallel shaft		

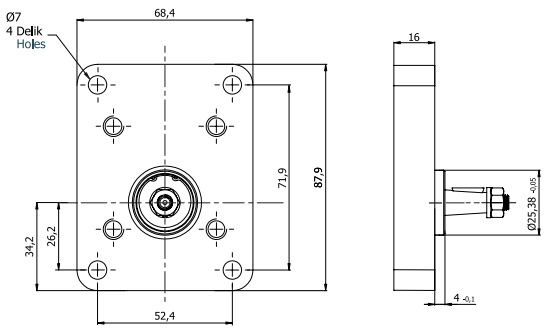
01: Giriş - Çıkış Delikleri / Inlet and Outlet Ports

01		Kare tip Rectangular
03		Metrik diş ISO 6149 thread
05		Boru diş Pipe thread

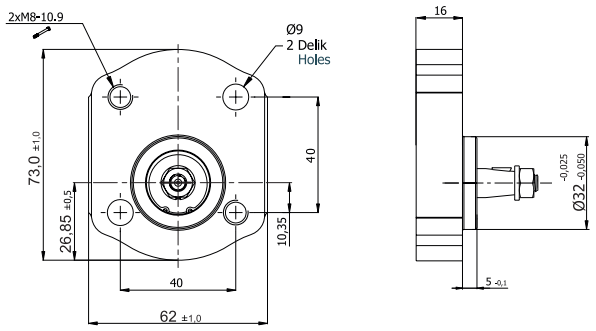
- Kodlama Örneği (Tekli) ; AP10.030.CAB01SN
  Code Example (Single)

- Kodlama Örneği (Tandem) ; AP10.030/030/030.CAB01SN-T
  Code Example (Tandem)

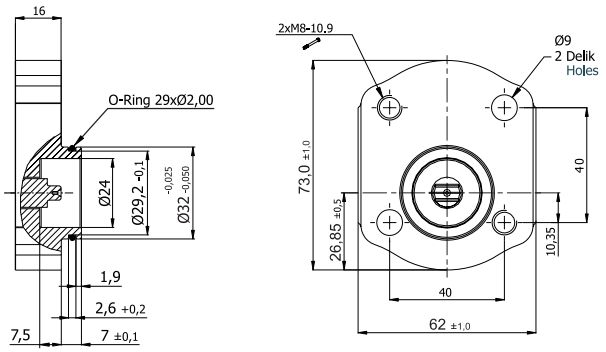
A


Ø7
4 Delik
Holes
68,4
16
71,9
87,9
34,2
26,2
52,4
Ø25,38 -0,05
4 -0,1

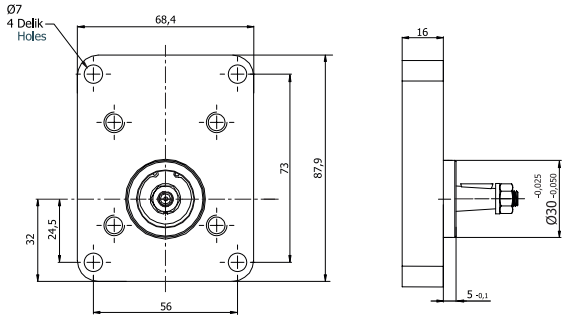
B


2xM8-10.9
Ø9
2 Delik
Holes
16
73,0 ±1,0
26,85 ±0,5
40
10,35
40
62 ±1,0
Ø32 -0,025 -0,050
5 -0,1

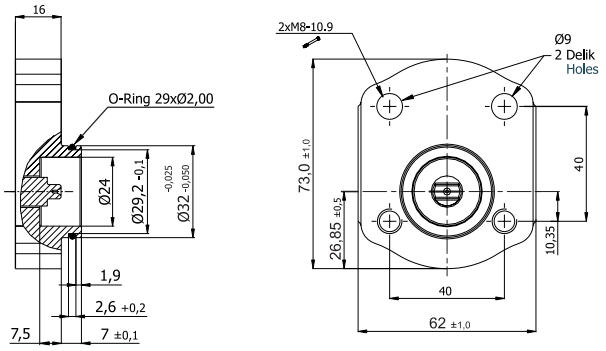
C


16
O-Ring 29xØ2,00
Ø24
Ø29,2 -0,1
Ø32 -0,025 -0,050
1,9
2,6 +0,2
7,5
7 ±0,1
2xM8-10.9
Ø9
2 Delik
Holes
73,0 ±1,0
26,85 ±0,5
40
10,35
40
62 ±1,0

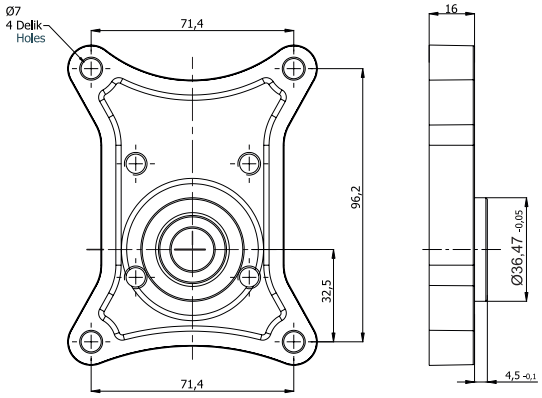
L


Ø7
4 Delik
Holes
68,4
16
73
87,9
32
24,5
56
Ø30 -0,025 -0,050
5 -0,1

F

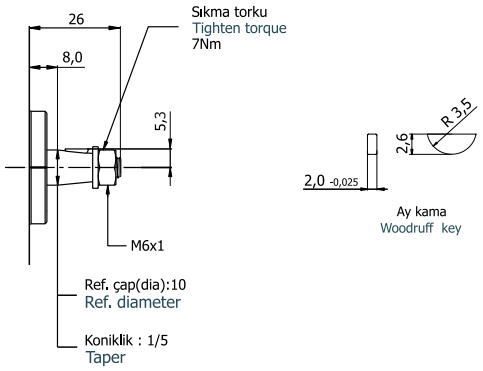

16
O-Ring 29xØ2,00
Ø24
Ø29,2 -0,1
Ø32 -0,025 -0,050
1,9
2,6 +0,2
7,5
7 ±0,1
2xM8-10.9
Ø9
2 Delik
Holes
73,0 ±1,0
26,85 ±0,5
40
10,35
40
62 ±1,0

N

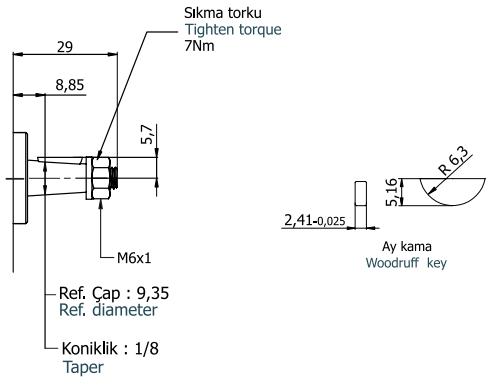

Ø7
4 Delik
Holes
71,4
16
96,2
32,5
71,4
Ø36,47 -0,05
4,5 -0,1

GRUP 10 ŞAFT TİPLERİ / GROUP 10 SHAFT TYPES

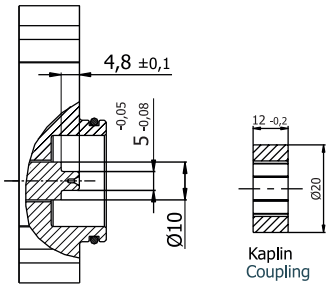
A



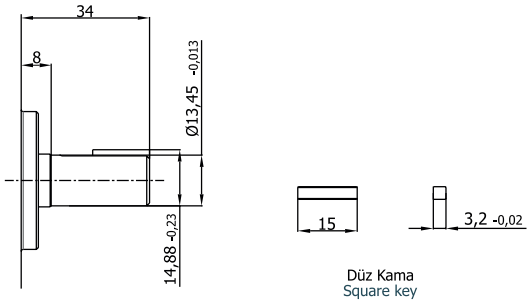
B



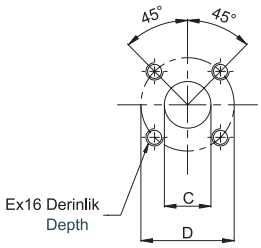
E



H

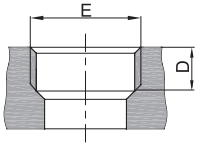


GRUP 10 GÖVDE DELİK TİPLERİ / GROUP 10 BODY HOLE TYPES



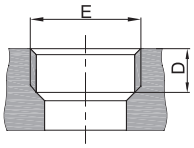
01 Kare Tipi Flanş / Rectangular Flange

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side			Basınç Tarafı Pressure Side		
		C	D	E	c	d	e
01	0,9 - 9,5	12	30	M6	12	30	M6



03 Metrik diş / Metric Thread ISO228/1

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side		İletim Hacmi Displacement cm³/dev (rev)	Basınç Tarafı Pressure Side	
		D	E		d	e
03	0,9 - 3,8	13	M18x1,5	0,9 - 9,5	13	M14x1,5
	4,3 - 9,5		M 22x1,5			



05 Boru diş / Pipe Thread ISO228/1

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side		İletim Hacmi Displacement cm³/dev (rev)	Basınç Tarafı Pressure Side	
		D	E		d	e
05	0,9 - 3,8	13	G 3/8"	1,0 - 4,5	13	G 3/8"
	4,3 - 9,5		G 1/2"			G 1/2"

AP10 TEKNİK ÖZELLİKLER / AP10 TECHNICAL DATA

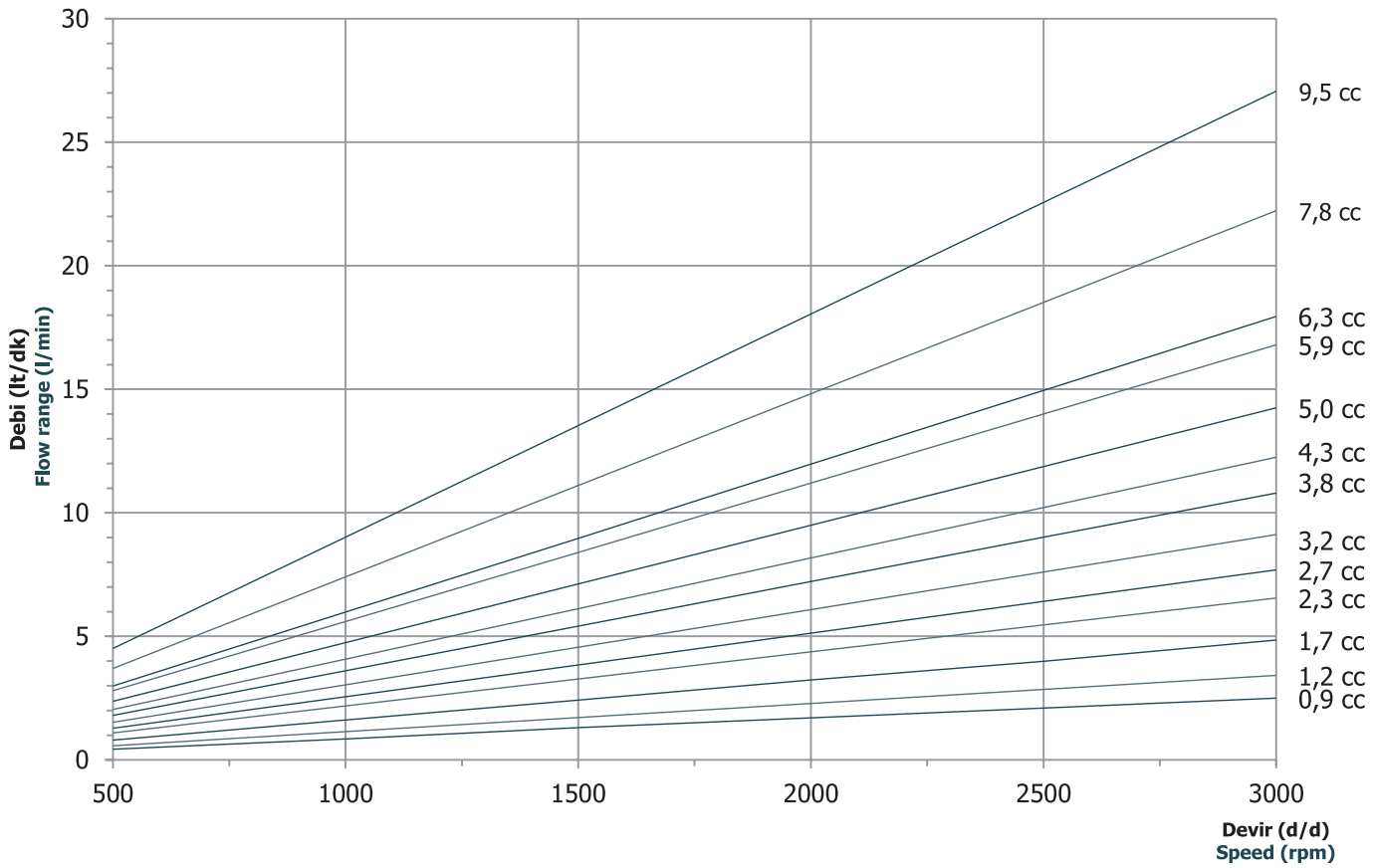
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
AP10.009	0,9	220	240	250	4000	650
AP10.012	1,2	220	240	250	4000	650
AP10.017	1,7	220	240	250	4000	650
AP10.023	2,3	220	240	250	4000	650
AP10.027	2,7	220	240	250	4000	650
AP10.032	3,2	220	240	250	4000	650
AP10.038	3,8	220	240	250	3500	650
AP10.043	4,3	220	240	250	3500	650
AP10.050	5,0	220	240	250	3500	650
AP10.059	5,9	220	240	250	3500	650
AP10.063	6,3	220	240	250	3500	650
AP10.078	7,8	210	230	240	3500	650
AP10.095	9,5	200	220	230	3500	650

P1: Sürekli çalışma basıncı
Continuous pressure

P2 : Aralıklı çalışma basıncı
Intermittent pressure

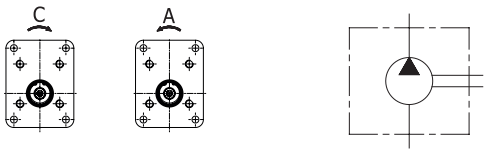
P3 : Ani basınç
Peak pressure

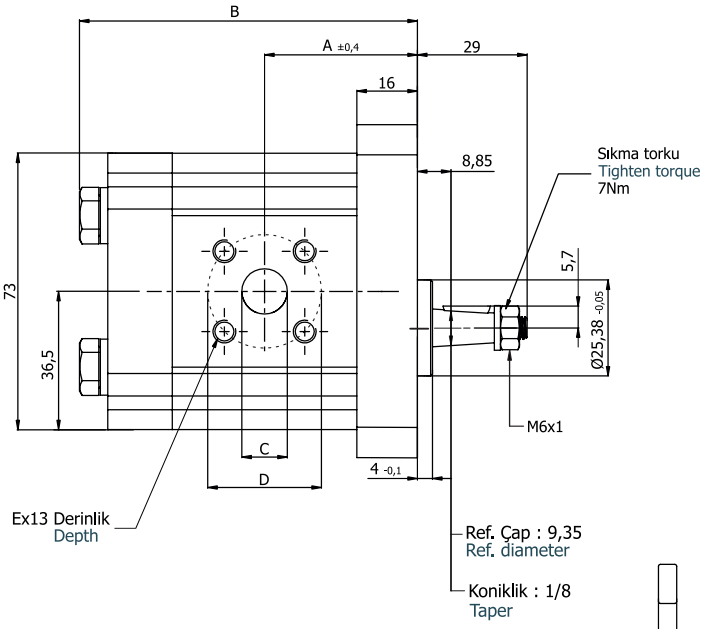
AP10 POMPALARIN DEBİ EĞRİLERİ / FLOW CURVES OF AP10 PUMPS

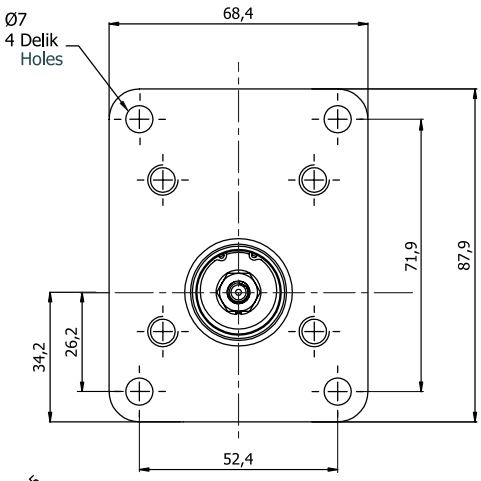


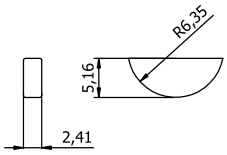
A Ön Kapak Front Cover

B Şaft Tipi Shaft Type







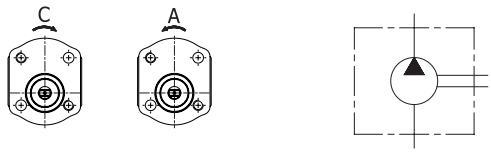


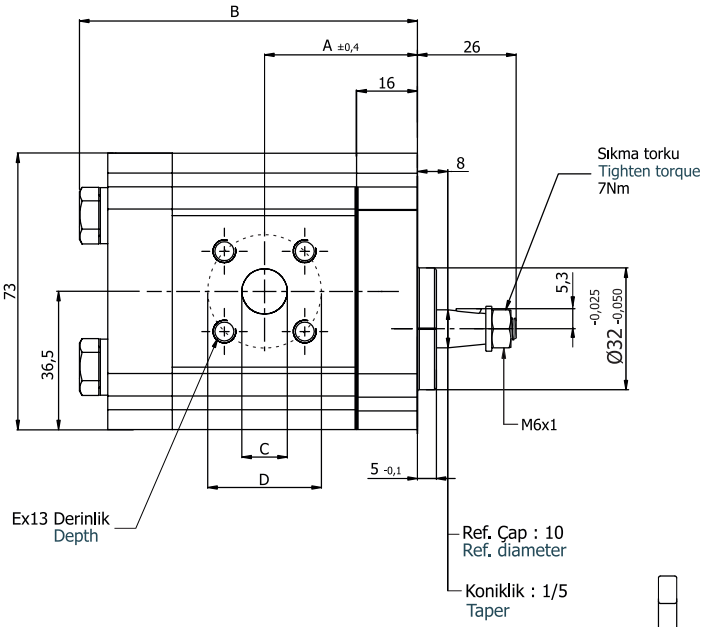
Ay kama
Woodruff key

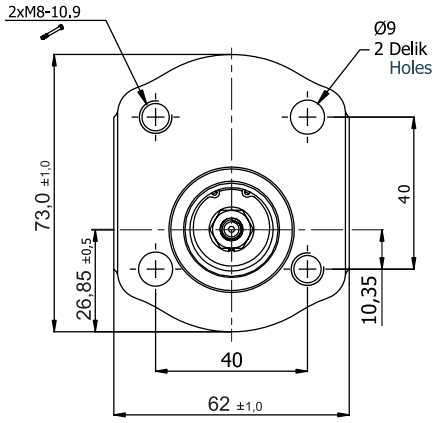
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP10.009.A/CAB01SN	0,9	220	4000	34,9	78,1	12	30	M6	12	30	M6
AP10.012.A/CAB01SN	1,2			35,5	79,3						
AP10.017.A/CAB01SN	1,7			36,5	81,3						
AP10.023.A/CAB01SN	2,3			37,5	83,3						
AP10.027.A/CAB01SN	2,7			38,5	85,3						
AP10.032.A/CAB01SN	3,2			39,3	86,8						
AP10.038.A/CAB01SN	3,8		3500	40,5	89,3						
AP10.043.A/CAB01SN	4,3			41,5	91,3						
AP10.050.A/CAB01SN	5,0			43,0	94,3						
AP10.059.A/CAB01SN	5,9			44,8	97,8						
AP10.063.A/CAB01SN	6,3			45,5	99,3						
AP10.078.A/CAB01SN	7,8	210		48,5	105,3						
AP10.095.A/CAB01SN	9,5	200		52,0	112,3						

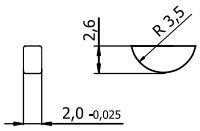
B Ön Kapak
Front Cover

A Şaft Tipi
Shaft Type







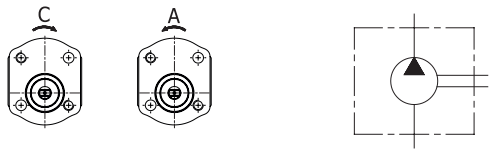


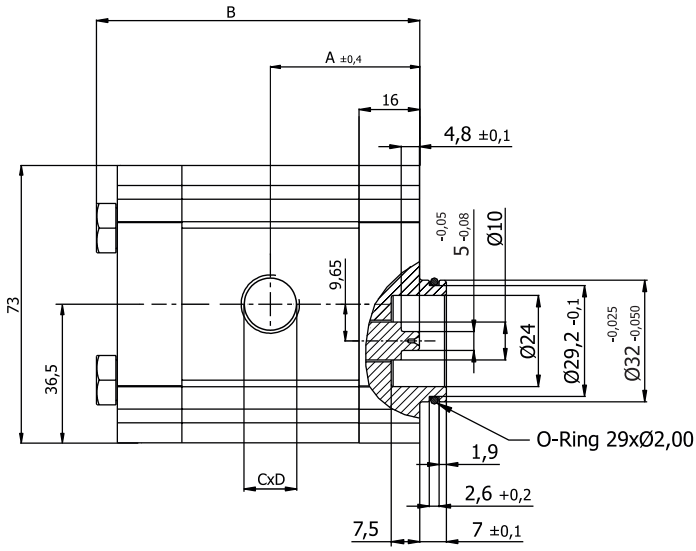
Ay kama
Woodruff key

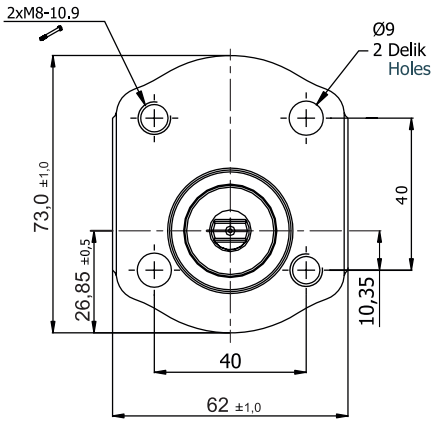
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP10.009.A/CBA01SN	0,9	220	4000	34,9	78,1	12	30	M6	12	30	M6
AP10.012.A/CBA01SN	1,2			35,5	79,3						
AP10.017.A/CBA01SN	1,7			36,5	81,3						
AP10.023.A/CBA01SN	2,3			37,5	83,3						
AP10.027.A/CBA01SN	2,7			38,5	85,3						
AP10.032.A/CBA01SN	3,2			39,3	86,8						
AP10.038.A/CBA01SN	3,8		3500	40,5	89,3						
AP10.043.A/CBA01SN	4,3			41,5	91,3						
AP10.050.A/CBA01SN	5,0			43,0	94,3						
AP10.059.A/CBA01SN	5,9			44,8	97,8						
AP10.063.A/CBA01SN	6,3			45,5	99,3						
AP10.078.A/CBA01SN	7,8	210		48,5	105,3						
AP10.095.A/CBA01SN	9,5	200		52,0	112,3						

C Ön Kapak
Front Cover

E Şaft Tipi
Shaft Type



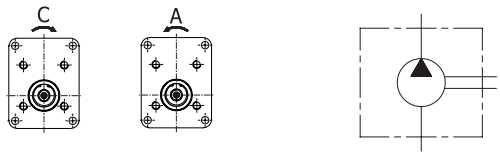


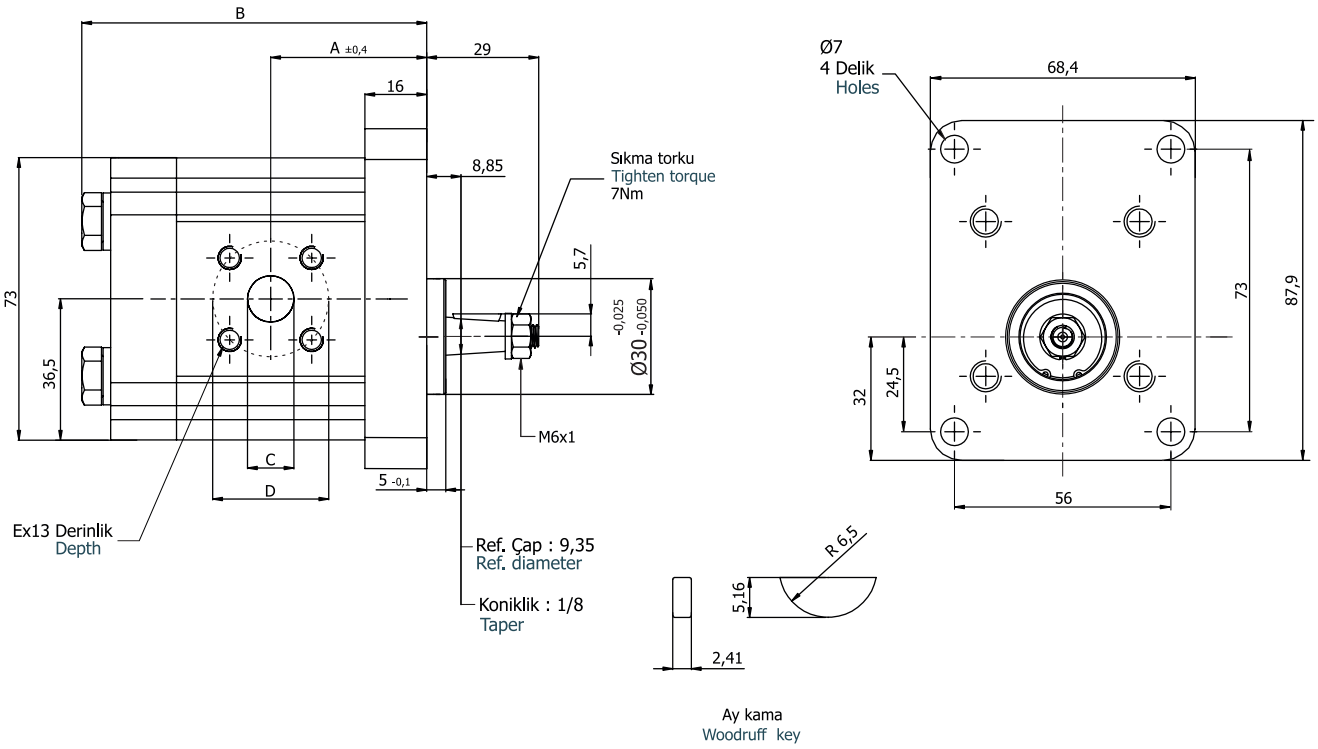


Pompa Tipi Pump Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet		Çıkış - Outlet	
						C	D	c	d
AP10.009.A/CCE05SN	0,9	220	4000	34,9	78,1	G 3/8 "	13	G 3/8 "	13
AP10.012.A/CCE05SN	1,2			35,5	79,3				
AP10.017.A/CCE05SN	1,7			36,5	81,3				
AP10.023.A/CCE05SN	2,3			37,5	83,3				
AP10.027.A/CCE05SN	2,7			38,5	85,3				
AP10.032.A/CCE05SN	3,2			39,3	86,8				
AP10.038.A/CCE05SN	3,8		3500	40,5	89,3				
AP10.043.A/CCE05SN	4,3			41,5	91,3	G 1/2 "		G 1/2 "	
AP10.050.A/CCE05SN	5,0			43,0	94,3				
AP10.059.A/CCE05SN	5,9			44,8	97,8				
AP10.063.A/CCE05SN	6,3			45,5	99,3				
AP10.078.A/CCE05SN	7,8	210		48,5	105,3				
AP10.095.A/CCE05SN	9,5	200		52,0	112,3				

L Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type

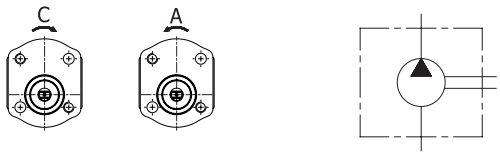


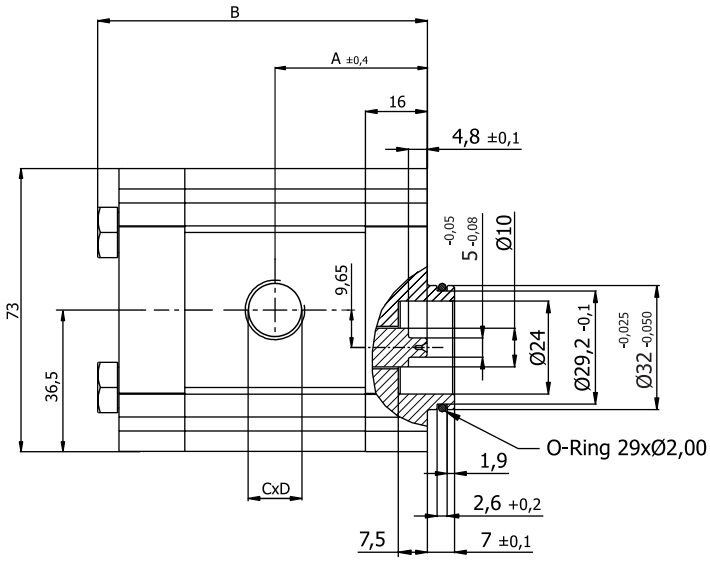


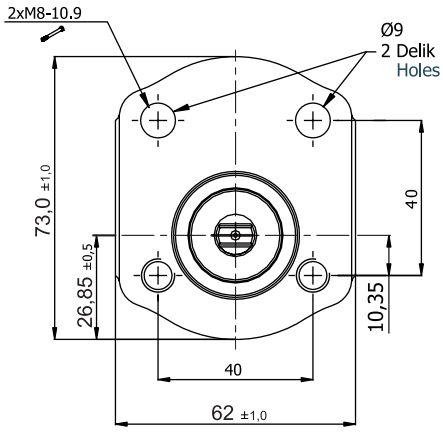
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet		Çıkış - Outlet	
						C	D	c	d
AP10.009.A/CLB03SN	0,9	220	4000	34,9	78,1	M18x1,5	13	M14x1,5	13
AP10.012.A/CLB03SN	1,2			35,5	79,3				
AP10.017.A/CLB03SN	1,7			36,5	81,3				
AP10.023.A/CLB03SN	2,3			37,5	83,3				
AP10.027.A/CLB03SN	2,7			38,5	85,3				
AP10.032.A/CLB03SN	3,2			39,3	86,8				
AP10.038.A/CLB03SN	3,8		3500	40,5	89,3				
AP10.043.A/CLB03SN	4,3			41,5	91,3	M22x1,5			
AP10.050.A/CLB03SN	5,0			43,0	94,3				
AP10.059.A/CLB03SN	5,9			44,8	97,8				
AP10.063.A/CLB03SN	6,3			45,5	99,3				
AP10.078.A/CLB03SN	7,8	210		48,5	105,3				
AP10.095.A/CLB03SN	9,5	200		52,0	112,3				

F Ön Kapak
Front Cover

E Şaft Tipi
Shaft Type







Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet		Çıkış - Outlet	
						C	D	c	d
AP10.009.A/CFE05SN	0,9	220	4000	34,9	78,1	G 3/8 "	13	G 3/8 "	13
AP10.012.A/CFE05SN	1,2			35,5	79,3				
AP10.017.A/CFE05SN	1,7			36,5	81,3				
AP10.023.A/CFE05SN	2,3			37,5	83,3				
AP10.027.A/CFE05SN	2,7			38,5	85,3				
AP10.032.A/CFE05SN	3,2			39,3	86,8				
AP10.038.A/CFE05SN	3,8		3500	40,5	89,3				
AP10.043.A/CFE05SN	4,3			41,5	91,3	G 1/2 "		G 1/2 "	
AP10.050.A/CFE05SN	5,0			43,0	94,3				
AP10.059.A/CFE05SN	5,9			44,8	97,8				
AP10.063.A/CFE05SN	6,3			45,5	99,3				
AP10.078.A/CFE05SN	7,8	210		48,5	105,3				
AP10.095.A/CFE05SN	9,5	200		52,0	112,3				

GRUP 20 POMPALARIN KODLAMA SİSTEMİ
ORDERING CODE OF GROUP 20 PUMPS

AP20 . 115/115/115 . C A B 02 S O N - T

Pompa Tipi / Pump Type	
AP20	Aluminyum Gövdeli Düz Dişli Pompa Aluminium Body Gear Pump
APH20	Aluminyum Gövdeli Helisel Dişli Pompa Aluminium Body Helical Gear Pump
DKP20	Döküm Gövdeli Düz Dişli Pompa Cast Iron Body Gear Pump
DPH20	Döküm Gövdeli Helisel Dişli Pompa Cast Iron Body Helical Gear Pump

İletim Hacmi / Displacement cm^3/dev (cm^3/rev)
040 = 3,9 cm^3 /dev (cm^3 /rev)
060 = 5,9 cm^3 /dev (cm^3 rev)
080 = 8,0 cm^3/dev (cm^3/rev)
095 = 9,4 cm^3/dev (cm^3/rev)
115 = 11,4 cm^3/dev (cm^3/rev)
140 = 13,9 cm^3/dev (cm^3/rev)
160 = 16,0 cm^3/dev (cm^3/rev)
190 = 19,2 cm^3/dev (cm^3/rev)
220 = 21,9 cm^3/dev (cm^3/rev)
250 = 24,8 cm^3/dev (cm^3/rev)
280 = 27,9 cm^3/dev (cm^3/rev)
320= 32,0 cm /dev (cm /rev)
340= 34,0 cm /dev (cm /rev)
380= 38,0 cm /dev (cm /rev)
400= 40,0 cm /dev (cm /rev)

Ön Yatak Outboard Bearing	
O	Var / Available
	Yok / Absent

Eleman sayısı	
	Tekli Single
T	Tandem Tandem
M	Modüler Modular

Keçe / Seal	
N	NBR
V	Viton

Dönüş Yönü / Rotation
A = Sol dönüş / Counter-clockwise
C = Sağ dönüş / Clockwise
R = Çift dönüş / Reversible

Arka Kapak / Rear Cover	
S	Standart Standard
R1	Emniyet Valfi (10 - 90 Bar) Relief Valve
R2	Emniyet Valfi (70 - 140 Bar) Relief Valve
R3	Emniyet Valfi (120 - 190 Bar) Relief Valve
D	Akış Bölücü Valf Flow Divider Valve
H	Emniyet Valfli Akış Kontrol Valfi Flow Control Valve With Relief Valve
L	Yük Duyarlı Valf Load Sensing Valve
T	Çek Valf Check Valve
P	Arkadan Giriş-Çıkış Rear Inlet-Outlet
C	Basınç Kompansatörlü Akış Kontrol Valfi Flow Control Valve Pressure Compensated

Ön Kapak / Front Cover		
A	Dikdörtgen kapak Square flange	Ø36,47 mm
B	2 Civatalı - Merkezleme 2 Bolts - Centering	Ø50 mm
C	2 Civatalı - Merkezleme ve oringli 2 Bolts - Centering with oring	Ø52 mm
D	2 Civatalı SAE ' A' 2 Bolts SAE ' A'	Ø82,55 mm
E	2 Civatalı - Merkezleme 2 Bolts - Centering	Ø50 mm
G	Dikdörtgen kapak Square flange	Ø80 mm
H	Ön yataklı Outboard bearing	Ø80 mm
K	2 Civatalı SAE ' B' 2 Bolts SAE ' B'	Ø101,6 mm
M	2 Civatalı - Merkezleme 2 Bolts - Centering	Ø52,34 mm
N	4 Civatalı - Merkezleme O-ringli 4 Bolts - Centering O-ring	Ø52 mm

Tahrik şaftı / Drive Shaft			
A	Konik - Kamalı Tapered key shaft	1:5	B E G
B	Konik - Kamalı Tapered key shaft	1:8	A
C	SAE spline şaft 9 diş SAE spline shaft 9T		B D
E	Kesik şaftlı Tang drive shaft		C H
F	SAE spline şaft 11 diş SAE spline shaft 11T		D
G	Spline şaft DIN 5482 Spline shaft (B17x14)		A B E G
H	Paralel şaft Parallel shaft		B D G
K	Konik - Kamalı Tapered key shaft	1:5	H
L	Konik - Kamalı Tapered key shaft	1:5	G
M	SAE spline şaft J498 10 diş SAE spline shaft 16/32 DP 10T		D
N	Konik - Kamalı Tapered key shaft	1:8	M
T	Kesik şaftlı Tang drive shaft		N

Giriş - Çıkış Delikleri / Inlet and Outlet Ports	
01	Kare tip Rectangular
02	Baklava tip Diamond
03	Metrik dişli ISO 6149 oring boss
04	UNF diş UNF thread
05	Boru diş Pipe thread
06	SAE Dikdörtgen Flanş Metrik diş SAE Square Flange Thread Metric

- Kodlama Örneği (Tekli) ; AP20.115.CAB02SN
  Code Example (Single)

- Kodlama Örneği (Tandem) ; AP20.115/115/115.CAB02SN-T
  Code Example (Tandem)

- Kodlama Örneği (Modüler) ; AP20.115/115/115.CAB02SN-M
  Code Example (Modular)

Grup 20 pompalar 4 cc ^{3}/dev. 'den 40 cc ^{3}/rev. 'e kadar ki iletim hacmine sahip pompalardır.
Kendi içinde AP20 , APH20 , DKP20 , DPH20 olarak 4 gruba ayrılır. Aşağıdaki Tablo da bu 4 grubun birbirinden farklı olan teknik özellikleri belirtilmiştir;
-AP20 (Aluminyum Gövdeli Düz Dişli Pompalar)
-APH20 (Aluminyum Gövdeli Helisel Dişli Pompalar)
-DKP20 (Döküm Gövdeli Düz Dişli Pompalar)
-DPH20 (Döküm Gövdeli Helisel Dişli Pompalar)

Group 20 pumps has a working capacity from 4 cc^3/rev to 40 cc^3/rev.
It has 4 sub-groups in itself as AP20, APH20, DKP20 and DPH20.The differences between the 4 sub-groups technical specifications can be found on the below table.
-AP20 (Aluminium Body Gear Pumps)
-APH20 (Aluminium Body Helical Gear Pumps)
-DKP20 (Cast Iron Body Gear Pumps)
-DPH20 (Cast Iron Body Helical Gear Pumps)

AP20 TEKNİK ÖZELLİKLER / AP20 TECHNICAL DATA

Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
AP20.040	3,9	250	280	300	3500	650
AP20.060	5,9	250	280	300	3500	650
AP20.080	8,0	250	280	300	3500	650
AP20.095	9,4	250	280	300	3500	600
AP20.115	11,4	250	280	300	3000	600
AP20.140	13,9	250	280	300	3000	600
AP20.160	16,0	250	280	300	3000	600
AP20.190	19,2	250	280	300	3000	600
AP20.220	21,9	210	240	260	2500	600
AP20.250	24,8	190	220	240	2500	600
AP20.280	27,9	170	220	220	2200	600
AP20.320	32,0	160	190	210	2000	500
AP20.340	34,0	150	180	200	2000	500
AP20.380	38,0	140	170	190	1750	500
AP20.400	40,0	130	170	190	1750	500

P1: Sürekli çalışma basıncı
Continuous pressure

P2 : Aralıklı çalışma basıncı
Intermittent pressure

P3 : Ani basınç
Peak pressure

APH20 TEKNİK ÖZELLİKLER / APH20 TECHNICAL DATA

Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
APH20.040	3,9	250	280	300	3500	650
APH20.060	5,9	250	280	300	3500	650
APH20.080	8,0	250	280	300	3500	650
APH20.095	9,4	250	280	300	3500	600
APH20.115	11,4	250	280	300	3000	600
APH20.140	13,9	250	280	300	3000	600
APH20.160	16,0	250	280	300	3000	600
APH20.190	19,2	250	280	300	3000	600
APH20.220	21,9	210	240	260	2500	600
APH20.250	24,8	190	220	240	2500	600
APH20.280	27,9	170	220	220	2200	600
APH20.320	32,0	160	190	210	2000	500
APH20.340	34,0	150	180	200	2000	500
APH20.380	38,0	140	170	190	1750	500
APH20.400	40,0	130	170	190	1750	500

P1: Sürekli çalışma basıncı
Continuous pressure

P2 : Aralıklı çalışma basıncı
Intermittent pressure

P3 : Ani basınç
Peak pressure

DKP20 TEKNİK ÖZELLİKLER / DKP20 TECHNICAL DATA

Pompa Tipi Pump Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
DKP20.040	3,9	280	300	320	3500	650
DKP20.060	5,9	280	300	320	3500	650
DKP20.080	8,0	280	300	320	3500	650
DKP20.095	9,4	280	300	320	3500	600
DKP20.115	11,4	280	300	320	3000	600
DKP20.140	13,9	280	300	320	3000	600
DKP20.160	16,0	280	300	320	3000	600
DKP20.190	19,2	280	300	320	3000	600
DKP20.220	21,9	240	260	280	2500	600
DKP20.250	24,8	220	240	260	2500	600
DKP20.280	27,9	200	240	260	2200	600

P1: Sürekli çalışma basıncı
Continuous pressure

P2 : Aralıklı çalışma basıncı
Intermittent pressure

P3 : Ani basınç
Peak pressure

DPH20 TEKNİK ÖZELLİKLER / DPH20 TECHNICAL DATA

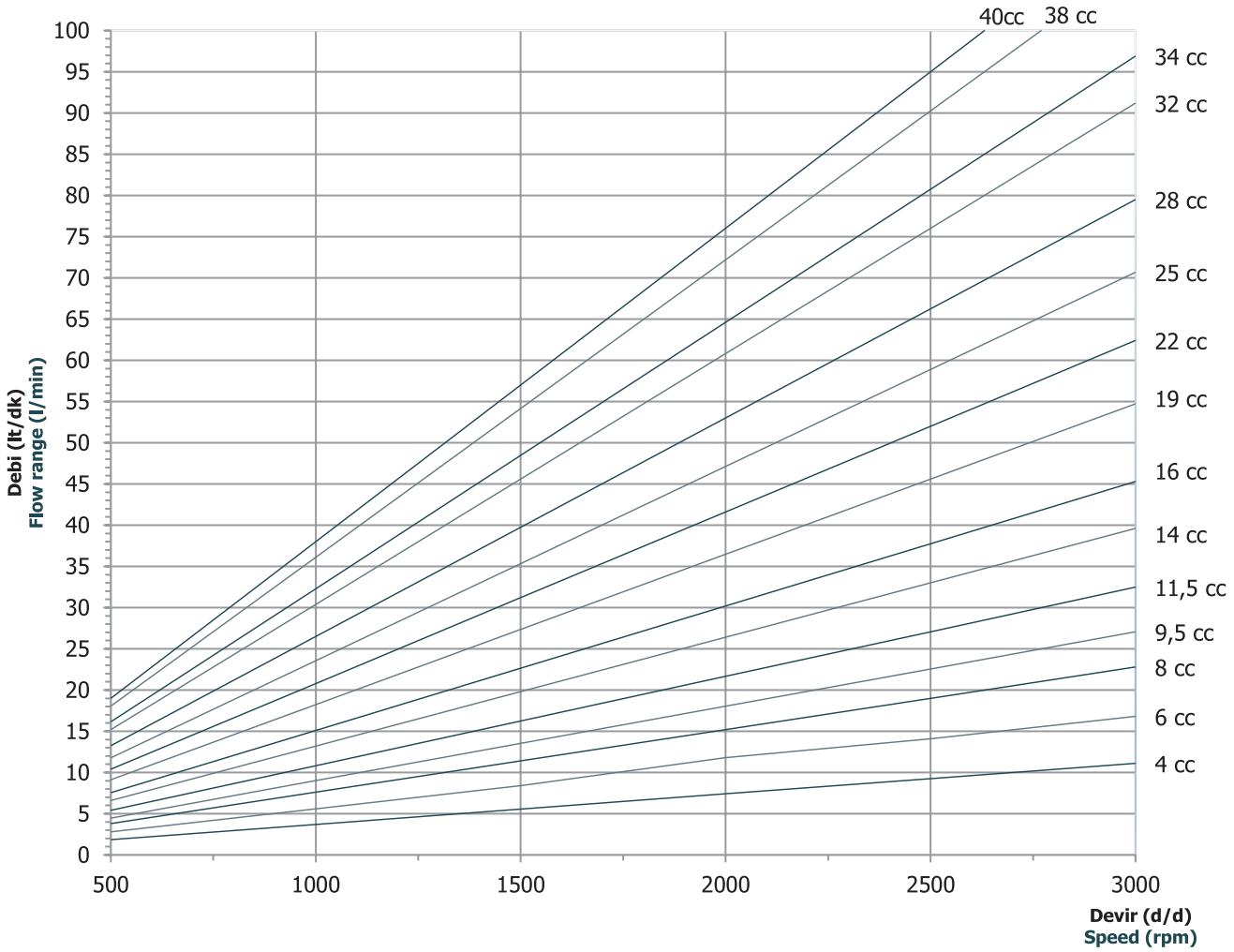
Pompa Tipi Pump Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
DPH20.040	3,9	320	350	370	3500	650
DPH20.060	5,9	320	350	370	3500	650
DPH20.080	8,0	320	350	370	3500	650
DPH20.095	9,4	320	350	370	3500	600
DPH20.115	11,4	320	350	370	3000	600
DPH20.140	13,9	300	330	350	3000	600
DPH20.160	16,0	300	330	350	3000	600
DPH20.190	19,2	280	310	330	3000	600
DPH20.220	21,9	250	280	300	2500	600
DPH20.250	24,8	230	260	280	2500	600
DPH20.280	27,9	210	240	260	2200	600

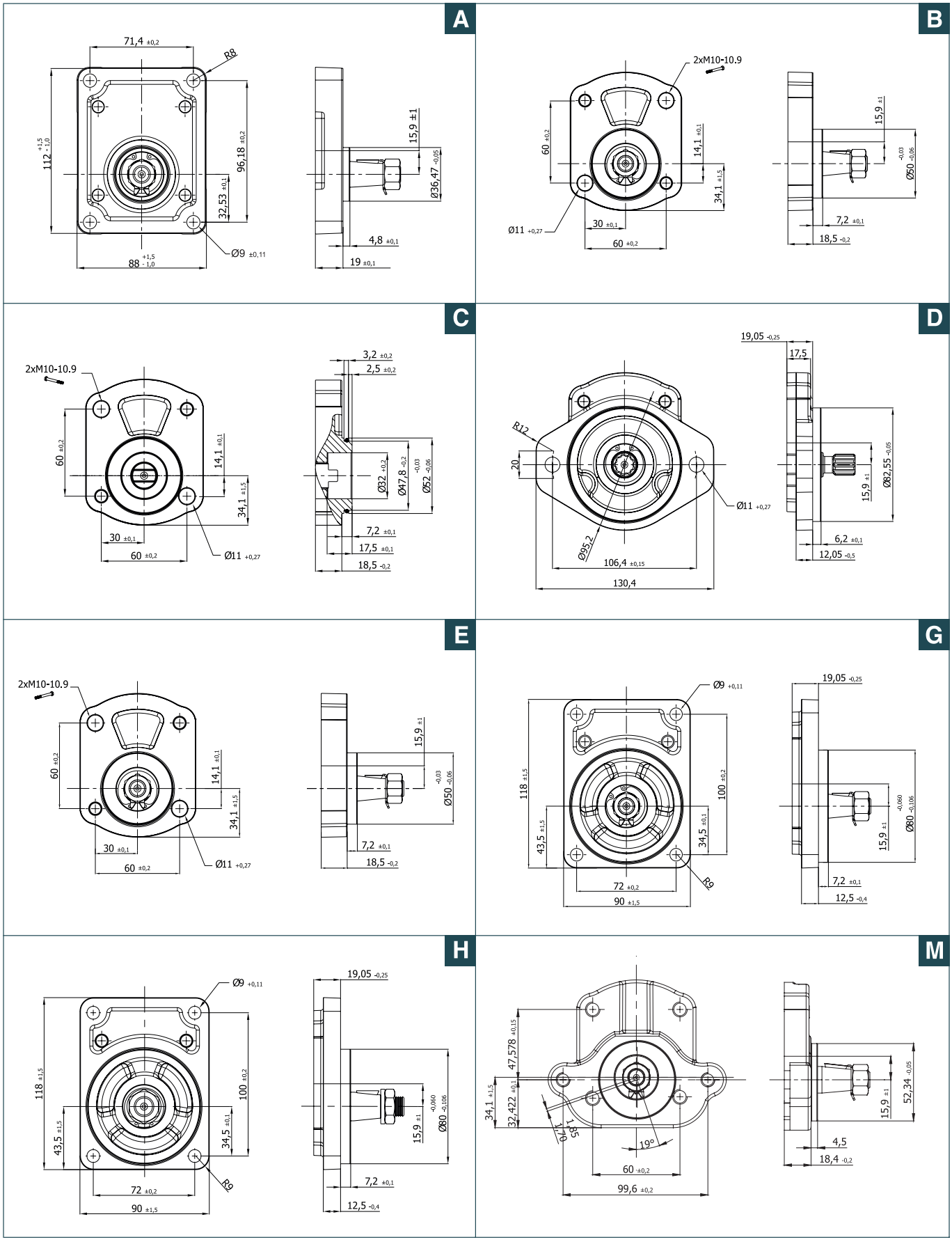
P1: Sürekli çalışma basıncı
Continuous pressure

P2 : Aralıklı çalışma basıncı
Intermittent pressure

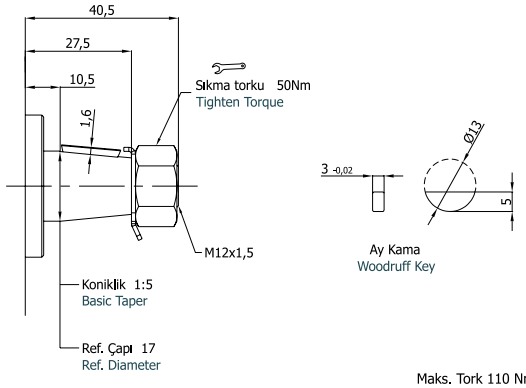
P3 : Ani basınç
Peak pressure

GRUP 20 POMPALARIN DEBİ EĞRİLERİ / FLOW CURVES OF GROUP 20 PUMPS



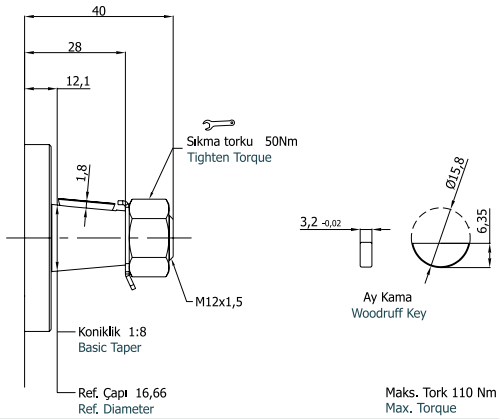

A
71,4 ±0,2
R8
112 +1,5 -1,0
96,18 ±0,2
32,53 ±0,1
Ø9 ±0,11
88 +1,5 -1,0
15,9 ±1
Ø36,47 -0,05
4,8 ±0,1
19 ±0,1
B
2xM10-10.9
60 ±0,2
14,1 ±0,1
34,1 ±1,5
Ø11 +0,27
30 ±0,1
60 ±0,2
15,9 ±1
Ø50 -0,03 -0,06
7,2 ±0,1
18,5 -0,2
C
2xM10-10.9
60 ±0,2
14,1 ±0,1
34,1 ±1,5
30 ±0,1
60 ±0,2
Ø11 +0,27
3,2 ±0,2
2,5 ±0,2
Ø32 +0,2
Ø47,8 -0,2
Ø52 -0,03 -0,06
7,2 ±0,1
17,5 ±0,1
18,5 -0,2
D
19,05 -0,25
17,5
R12
20
Ø11 +0,27
Ø95,2
106,4 ±0,15
130,4
15,9 ±1
Ø82,55 -0,05
6,2 ±0,1
12,05 -0,5
E
2xM10-10.9
60 ±0,2
14,1 ±0,1
34,1 ±1,5
30 ±0,1
60 ±0,2
Ø11 +0,27
15,9 ±1
Ø50 -0,03 -0,06
7,2 ±0,1
18,5 -0,2
G
Ø9 +0,11
118 ±1,5
43,5 ±1,5
100 ±0,2
34,5 ±0,1
72 ±0,2
90 ±1,5
R9
19,05 -0,25
15,9 ±1
Ø80 -0,060 -0,106
7,2 ±0,1
12,5 -0,4
H
Ø9 +0,11
118 ±1,5
43,5 ±1,5
100 ±0,2
34,5 ±0,1
72 ±0,2
90 ±1,5
R9
19,05 -0,25
15,9 ±1
Ø80 -0,060 -0,106
7,2 ±0,1
12,5 -0,4
M
47,578 ±0,15
34,1 ±1,5
32,422 ±0,1
1,85
1,70
19°
60 ±0,2
99,6 ±0,2
15,9 ±1
52,34 -0,05
4,5
18,4 -0,2

A



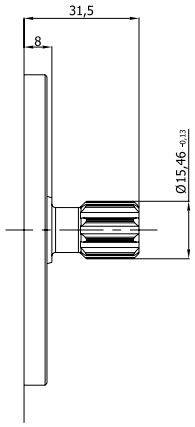
Maks. Tork 110 Nm
Max. Torque

B



Maks. Tork 110 Nm
Max. Torque

C

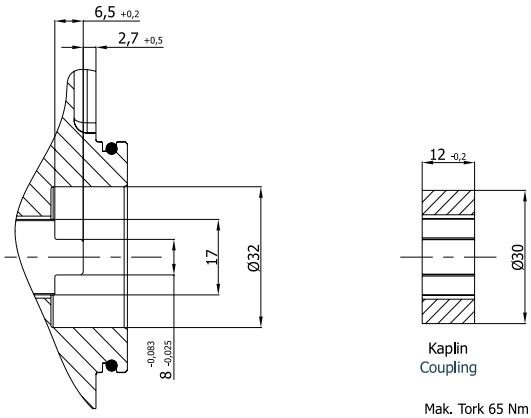


SAE 16-4 (A) 5/8" Spline
Evolvent Spline
Diş Dibi Düz, Yanaktan Alıştırmalı
9 Diş, 16/32 DP

Involute Spline
Flat Root Side Fit
9 Teeth, 16/32 DP

Maks. Tork 90 Nm
Max. Torque

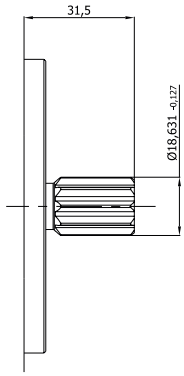
E



Kaplin
Coupling

Mak. Tork 65 Nm
Max. torque

F

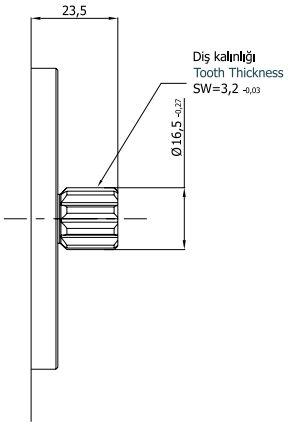


SAE J498 Spline
Evolvent Spline
Diş Dibi Düz, Yanaktan Alıştırmalı
11 Diş, 16/32 DP

Involute spline
Flat root side fit
11 Teeth, 16/32 DP

Maks. Tork 150 Nm
Max. Torque

G

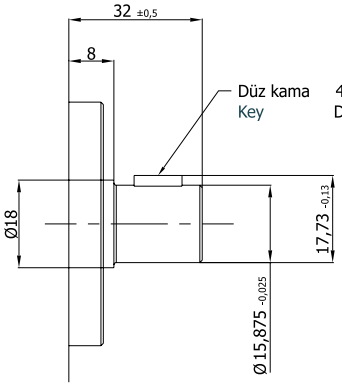


Evolvent Spline
DIN 5482 B17x14
9 Diş

Involute Spline
DIN 5482 B17x14
9 Teeth

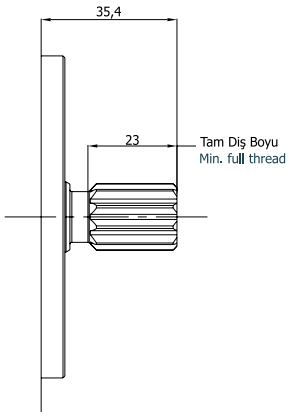
Maks. Tork 115 Nm
Max. Torque

H



Mak. Tork 55 Nm
Max. torque

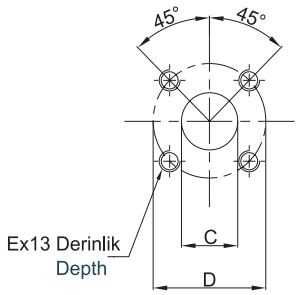
M



SAE J498 A Evolvent Spline
Diş Dibi Düz, Yanaktan Alıştırmalı
10 Diş, 16/32 DP

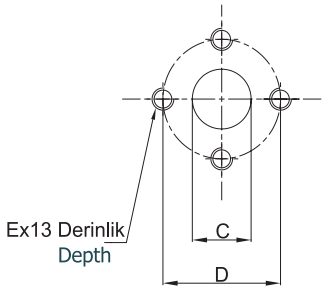
SAE J498 A Involute Spline
Flat Root Side Fit
10 Teeth, 16/32 DP

Maks. Tork 115 Nm
Max. Torque



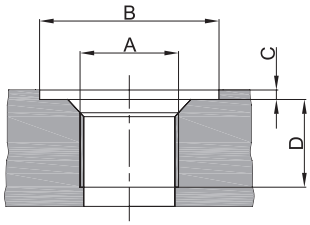
01 Kare Tipi Flanş
Rectangular Flange

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side			Basınç Tarafı Pressure Side		
		C	D	E	c	d	e
01	4	12	40	M6	12	35	M6
	6	13,5			13,5		
	8 – 25	20			15		
	28 - 40				20	40	



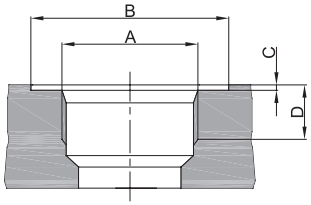
02 Baklava Tipi Flanş
Diamond Flange

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side			Basınç Tarafı Pressure Side		
		C	D	E	c	d	e
02	4	12	30,2	M6	12	30,2	M6
	6 – 8	13,5			13,5		
	9,5 – 25	20	40	M8			
	28 - 40				20	40	M8



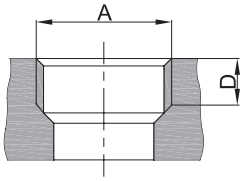
03 Metrik diş / Thread, Oring Boss
Metric ISO 6149 With Seal Ring

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side				Basınç Tarafı Pressure Side			
		A	B	C	D	A	B	C	D
03	4 – 6	M18x1,5	30	0,5	16	M18x1,5	30	0,5	16
	8 – 16	M27x2	40		19	M22x1,5	35		19
	19 – 40	M33x2	45		22				



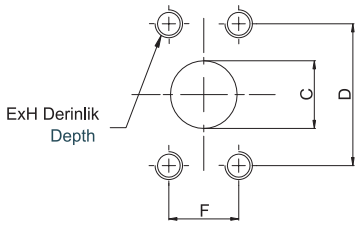
04 Diş / Thread
(UNF-2B) SAE Oring Boss

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side				Basınç Tarafı Pressure Side			
		A	B	C	D	A	B	C	D
04	4 – 6	9/16-18 UNF-2B	25	0,5	13	9/16-18 UNF-2B	25	0,5	13
	8	7/8-14 UNF-2B	35		16	7/8-14 UNF-2B	35		16
	9,5 – 28	1 1/16-12 UN-2B	45		19				
	32 – 40					1 1/16-12 UN-2B	45		19



05 Boru diş / Pipe Thread
ISO228/1

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side		Basınç Tarafı Pressure Side	
		A	D	A	D
05	4 – 16	G ¾	16	G ½	16
	19 – 40	G 1	19	G ¾	

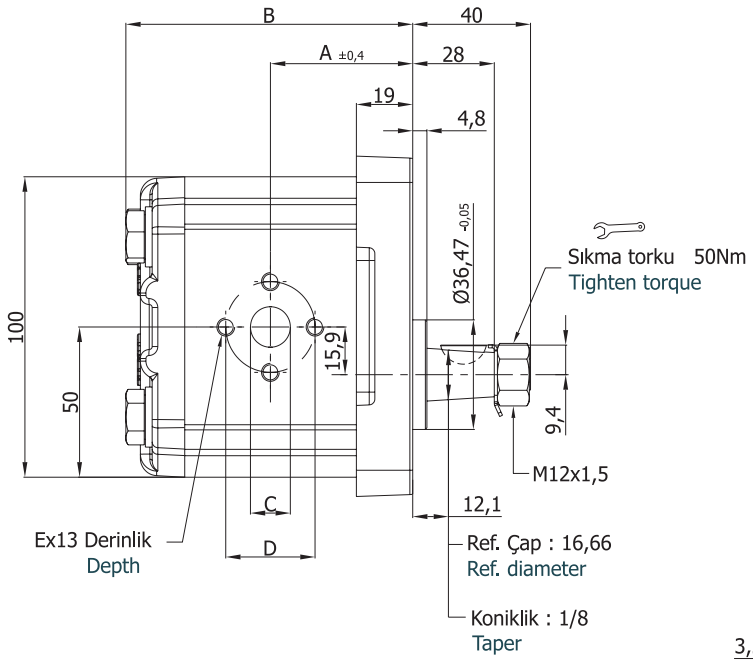


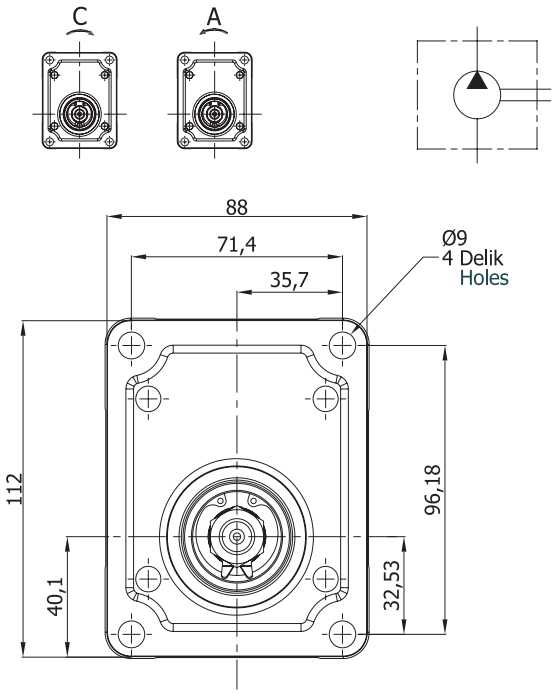
06 SAE Dikdörtgen Flanş Metrik Diş
SAE Square Flange Metric Thread

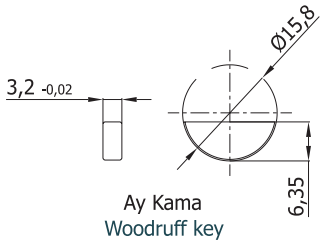
Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side					Basınç Tarafı Pressure Side				
		C	D	E	F	H	c	d	e	f	h
06	4 - 11,5	12	38,1	M8	17,5	13	12	38,1	M8	17,5	13
	14 - 19	20	47,6	M10	22,2	16					
	22 - 40	26	52,4		26,2		20	47,6	M10	22,2	16

A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type



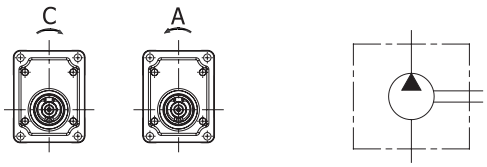


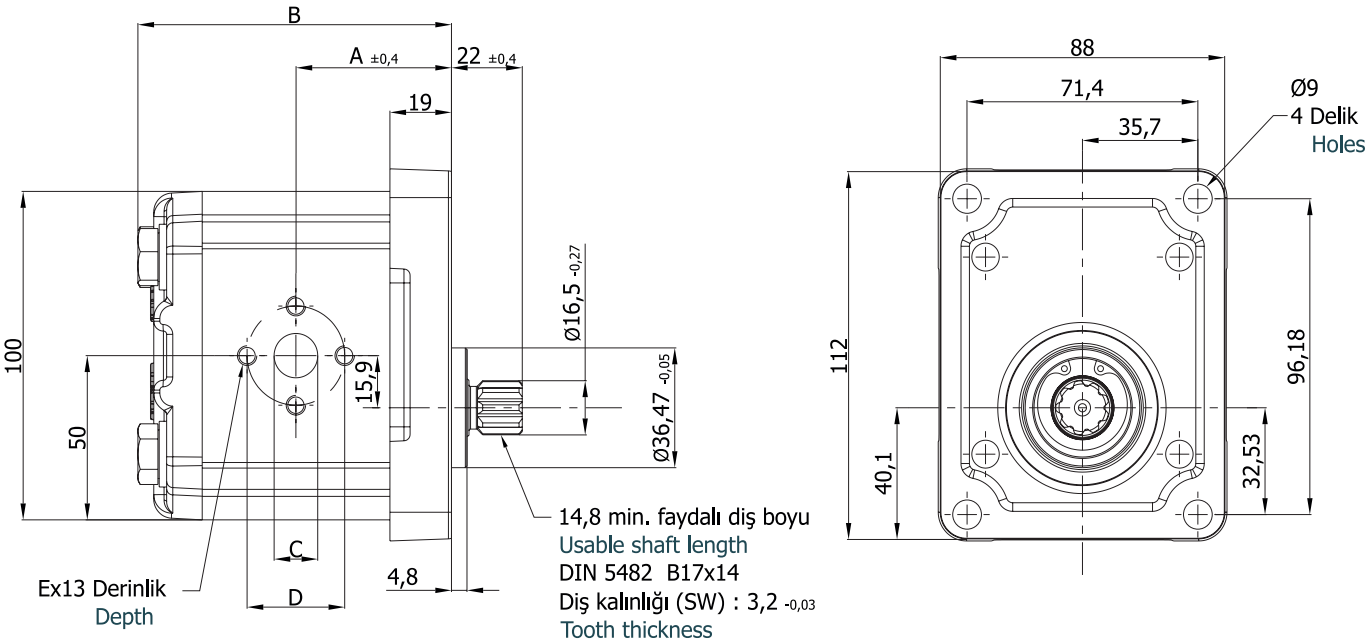


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP20.040.A/CAB02SN	3,9	250	3500	42,2	85,3	12	30,2	M6	12	30,2	M6
AP20.060.A/CAB02SN	5,9			43,8	88,4	13,5			13,5		
AP20.080.A/CAB02SN	8,0			45,4	91,6						
AP20.095.A/CAB02SN	9,4			46,5	93,9	20	40	M8			
AP20.115.A/CAB02SN	11,4		3000	48,2	97,0						
AP20.140.A/CAB02SN	13,9			50,0	101,0						
AP20.160.A/CAB02SN	16,0			51,7	104,1						
AP20.190.A/CAB02SN	19,2			60,2	121,1						
AP20.220.A/CAB02SN	21,9	210	2500	62,3	125,5						
AP20.250.A/CAB02SN	24,8	190		64,8	130,4						
AP20.280.A/CAB02SN	27,9	170	2200	67,0	134,9				20	40	M8
AP20.320.A/CAB02SN	32,0	160	2000	70,0	141,0						
AP20.340.A/CAB02SN	34,0	150		71,5	144,5						
AP20.380.A/CAB02SN	38,0	140	1750	74,8	150,5						
AP20.400.A/CAB02SN	40,0	130		76,5	154,0						

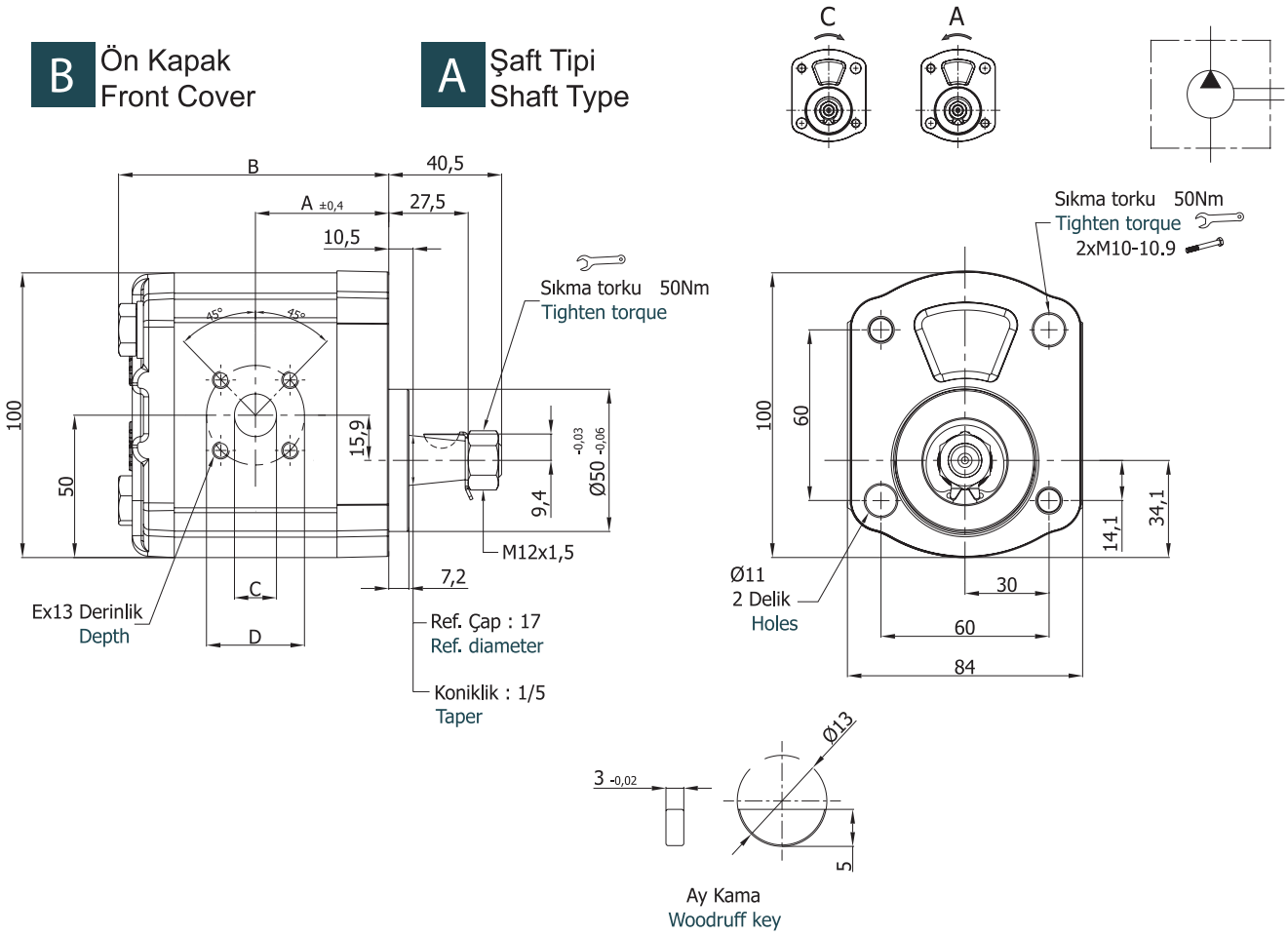
A Ön Kapak
Front Cover

G Şaft Tipi
Shaft Type





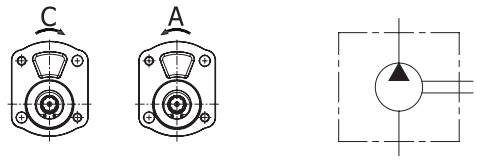
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP20.040.A/CAG02SN	3,9	250	3500	42,2	85,3	12	30,2	M6	12	30,2	M6
AP20.060.A/CAG02SN	5,9			43,8	88,4	13,5			13,5		
AP20.080.A/CAG02SN	8,0			45,4	91,6						
AP20.095.A/CAG02SN	9,4			46,5	93,9	20	40	M8			
AP20.115.A/CAG02SN	11,4		3000	48,2	97,0						
AP20.140.A/CAG02SN	13,9			50,0	101,0						
AP20.160.A/CAG02SN	16,0			51,7	104,1						
AP20.190.A/CAG02SN	19,2			60,2	121,1						
AP20.220.A/CAG02SN	21,9	210	2500	62,3	125,5						
AP20.250.A/CAG02SN	24,8	190		64,8	130,4						
AP20.280.A/CAG02SN	27,9	170	2200	67,0	134,9				20	40	M8
AP20.320.A/CAG02SN	32,0	160	2000	70,0	141,0						
AP20.340.A/CAG02SN	34,0	150		71,5	144,5						
AP20.380.A/CAG02SN	38,0		1750	74,8	150,5						
AP20.400.A/CAG02SN	40,0	130		76,5	154,0						

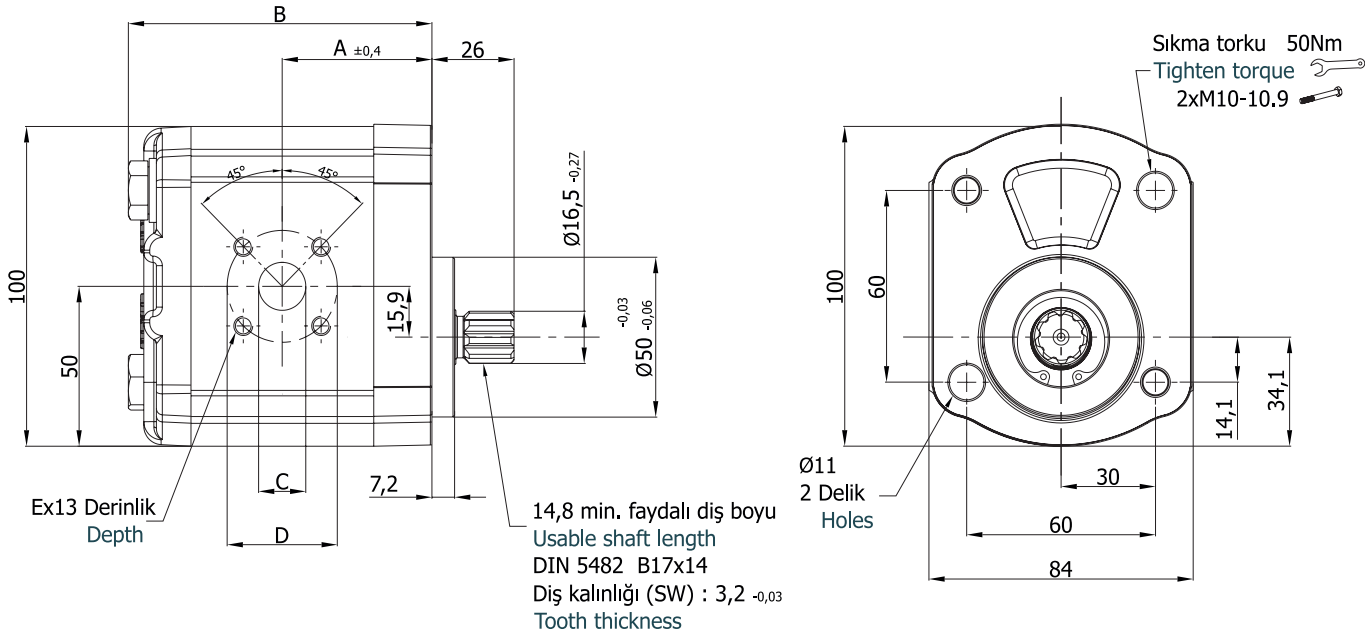


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP20.040.A/CBA01SN	3,9	250	3500	41,6	84,7	12	40	M6	12	35	M6
AP20.060.A/CBA01SN	5,9			43,2	87,8	13,5			13,5		
AP20.080.A/CBA01SN	8,0			44,8	91,0	20			15		
AP20.095.A/CBA01SN	9,4			45,9	93,3						
AP20.115.A/CBA01SN	11,4		3000	47,6	96,4						
AP20.140.A/CBA01SN	13,9			49,4	100,4						
AP20.160.A/CBA01SN	16,0			51,1	103,5						
AP20.190.A/CBA01SN	19,2			59,6	120,5						
AP20.220.A/CBA01SN	21,9	210	2500	61,7	124,9						
AP20.250.A/CBA01SN	24,8	190		64,2	129,8						
AP20.280.A/CBA01SN	27,9	170	2200	66,4	134,3				20	40	
AP20.320.A/CBA01SN	32,0	160	2000	69,4	140,4						
AP20.340.A/CBA01SN	34,0	150		70,9	143,9						
AP20.380.A/CBA01SN	38,0	140	1750	74,2	149,9						
AP20.400.A/CBA01SN	40,0	130		75,9	153,4						

B Ön Kapak
Front Cover

G Şaft Tipi
Shaft Type

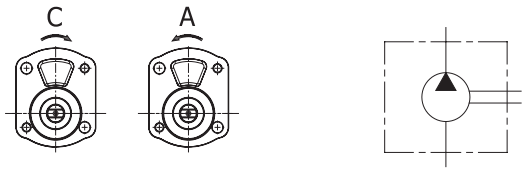


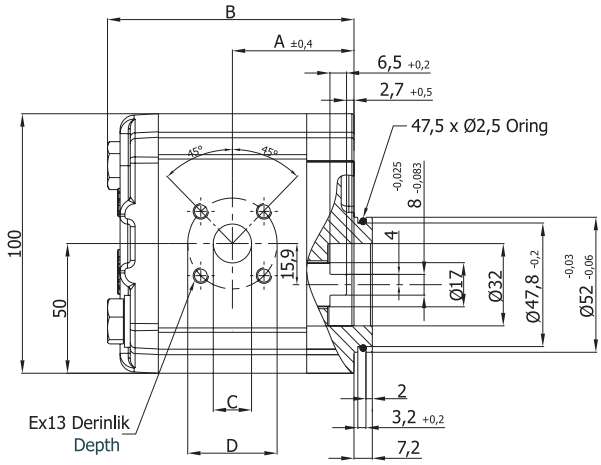


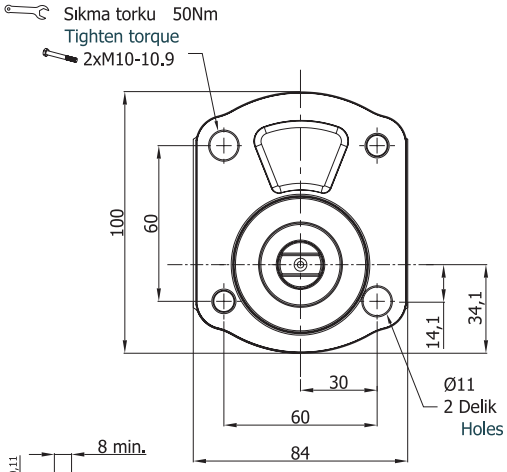
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP20.040.A/CBG01SN	3,9	250	3500	41,6	84,7	12	40	M6	12	35	M6
AP20.060.A/CBG01SN	5,9			43,2	87,8	13,5			13,5		
AP20.080.A/CBG01SN	8,0			44,8	91,0	20			15		
AP20.095.A/CBG01SN	9,4			45,9	93,3						
AP20.115.A/CBG01SN	11,4		3000	47,6	96,4						
AP20.140.A/CBG01SN	13,9			49,4	100,4						
AP20.160.A/CBG01SN	16,0			51,1	103,5						
AP20.190.A/CBG01SN	19,2			59,6	120,5						
AP20.220.A/CBG01SN	21,9	210	2500	61,7	124,9						
AP20.250.A/CBG01SN	24,8	190		64,2	129,8						
AP20.280.A/CBG01SN	27,9	170	2200	66,4	134,3				20	40	
AP20.320.A/CBG01SN	32,0	160	2000	69,4	140,4						
AP20.340.A/CBG01SN	34,0	150		70,9	143,9						
AP20.380.A/CBG01SN	38,0	140	1750	74,2	149,9						
AP20.400.A/CBG01SN	40,0	130		75,9	153,4						

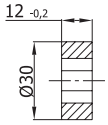
C Ön Kapak
Front Cover

E Şaft Tipi
Shaft Type

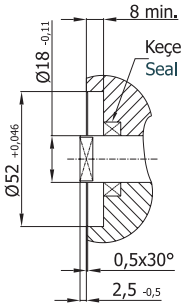








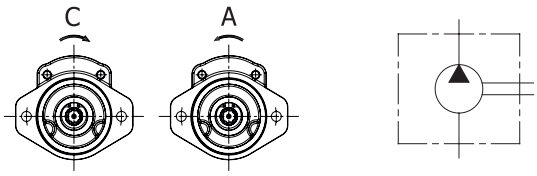
Kavrama
Coupling

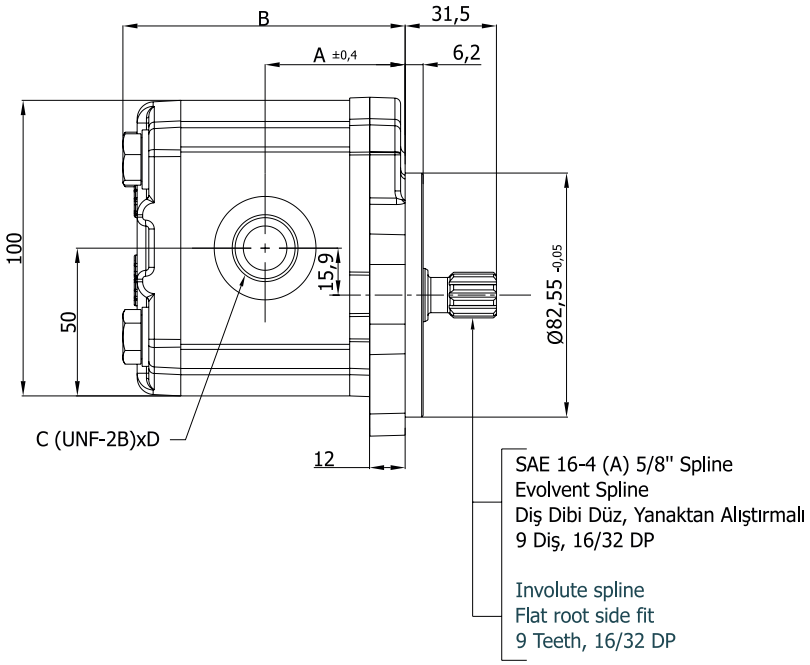


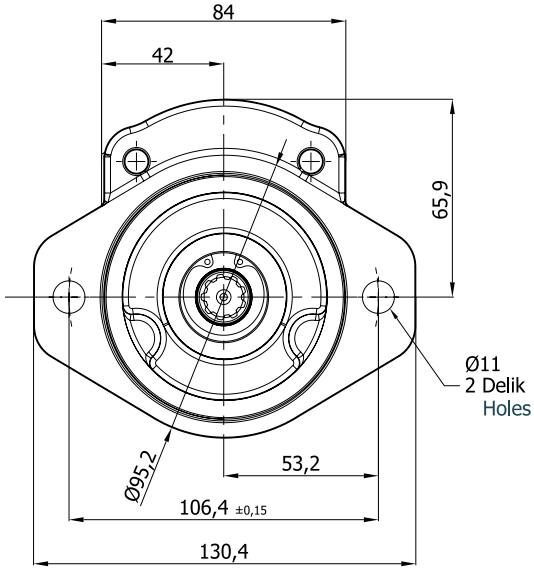
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP20.040.A/CCE01SN	3,9	250	3500	41,6	84,7	12	40	M6	12	35	M6
AP20.060.A/CCE01SN	5,9			43,2	87,8	13,5			13,5		
AP20.080.A/CCE01SN	8,0			44,8	91,0	20			15		
AP20.095.A/CCE01SN	9,4			45,9	93,3						
AP20.115.A/CCE01SN	11,4		3000	47,6	96,4						
AP20.140.A/CCE01SN	13,9			49,4	100,4						
AP20.160.A/CCE01SN	16,0			51,1	103,5						
AP20.190.A/CCE01SN	19,2			59,6	120,5						
AP20.220.A/CCE01SN	21,9	210	2500	61,7	124,9						
AP20.250.A/CCE01SN	24,8	190		64,2	129,8						
AP20.280.A/CCE01SN	27,9	170	2200	66,4	134,3				20	40	
AP20.320.A/CCE01SN	32,0	160	2000	69,4	140,4						
AP20.340.A/CCE01SN	34,0	150		70,9	143,9						
AP20.380.A/CCE01SN	38,0	140	1750	74,2	149,9						
AP20.400.A/CCE01SN	40,0	130		75,9	153,4						

D Ön Kapak
Front Cover

C Şaft Tipi
Shaft Type



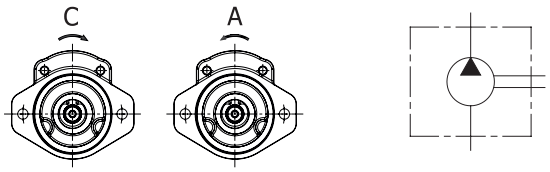


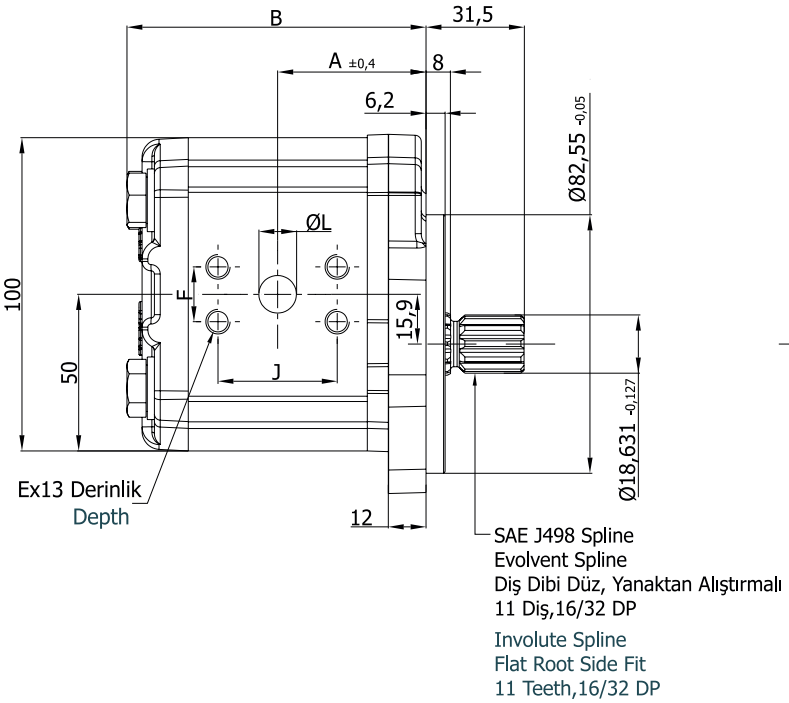


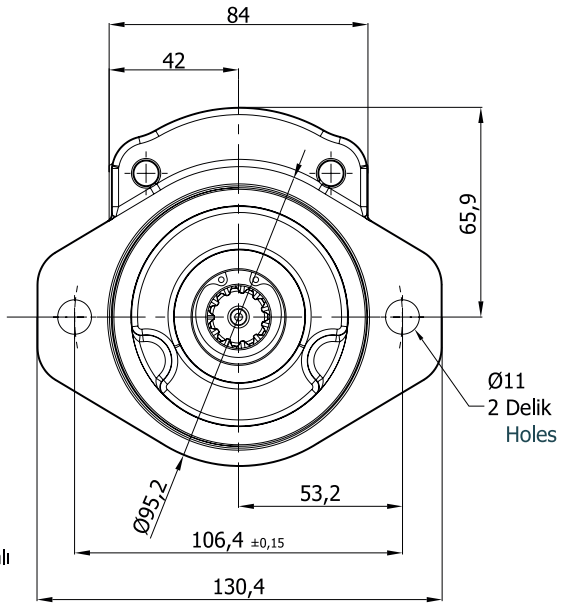
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet		Çıkış - Outlet	
						C	D	c	d
AP20.040.A/CDC04SN	3,9	250	3500	42,2	85,3	9/16-18 UNF	13	9/16-18 UNF	13
AP20.060.A/CDC04SN	5,9			43,8	88,4				
AP20.080.A/CDC04SN	8,0			45,4	91,6	7/8-14 UNF	16	7/8-14 UNF	16
AP20.095.A/CDC04SN	9,4			46,5	93,9	1 1/16-12 UNF	19		
AP20.115.A/CDC04SN	11,4		3000	48,2	97,0				
AP20.140.A/CDC04SN	13,9			50,0	101,0				
AP20.160.A/CDC04SN	16,0			51,7	104,1				
AP20.190.A/CDC04SN	19,2			60,2	121,1				
AP20.220.A/CDC04SN	21,9	210	2500	62,3	125,5				
AP20.250.A/CDC04SN	24,8	190		64,8	130,4				
AP20.280.A/CDC04SN	27,9	170	2200	67,0	134,9				
AP20.320.A/CDC04SN	32,0	160	2000	70,0	141,0			1 1/16-12 UNF	19
AP20.340.A/CDC04SN	34,0	150		71,5	144,5				
AP20.380.A/CDC04SN	38,0	140	1750	74,8	150,5				
AP20.400.A/CDC04SN	40,0	130		76,5	154,0				

D Ön Kapak
Front Cover

F Şaft Tipi
Shaft Type



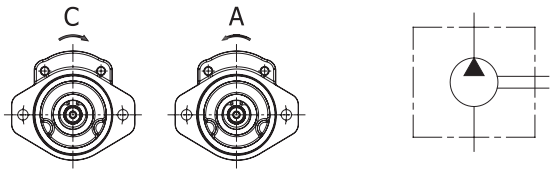


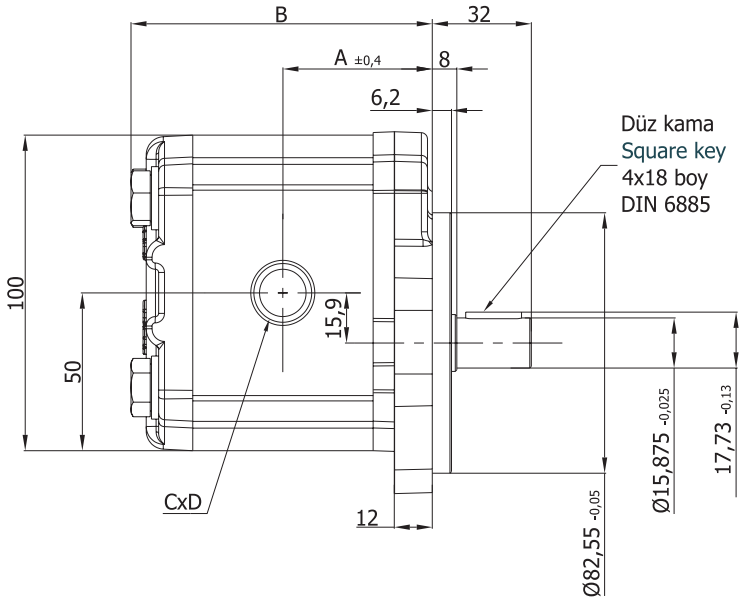


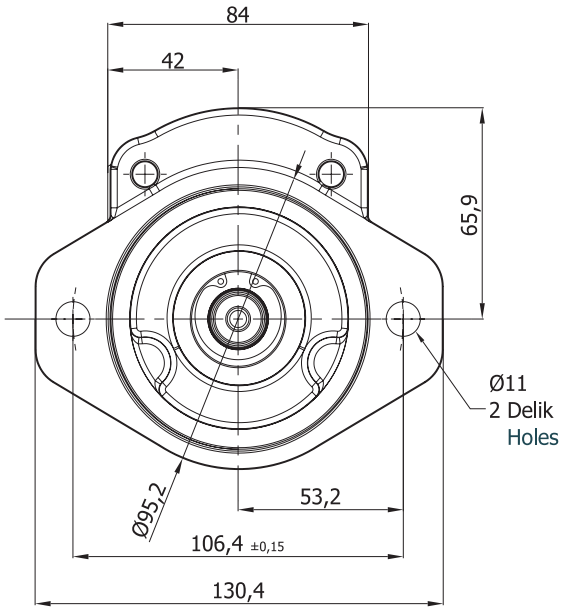
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet				Çıkış - Outlet			
						L	J	F	E	l	j	f	e
AP20.040.A/CDF06SN	3,9	250	3500	42,2	87,3	12	38,1	17,5	M8	12	38,1	17,5	M8
AP20.060.A/CDF06SN	5,9			43,8	90,4								
AP20.080.A/CDF06SN	8,0			45,4	93,6								
AP20.095.A/CDF06SN	9,4			46,5	95,9								
AP20.115.A/CDF06SN	11,4		3000	48,2	99,0								
AP20.140.A/CDF06SN	13,9			50,0	103,0	20	47,6	22,2	M10				
AP20.160.A/CDF06SN	16,0			51,7	106,1								
AP20.190.A/CDF06SN	19,2			60,2	121,1								
AP20.220.A/CDF06SN	21,9	210	2500	62,3	125,5	26	52,4	26,2		20	47,6	22,2	M10
AP20.250.A/CDF06SN	24,8	190		64,8	130,4								
AP20.280.A/CDF06SN	27,9	170	2200	67,0	134,9								
AP20.320.A/CDF06SN	32,0	160	2000	70,0	141,0								
AP20.340.A/CDF06SN	34,0	150		71,5	144,5								
AP20.380.A/CDF06SN	38,0	140	1750	74,8	150,5								
AP20.400.A/CDF06SN	40,0	130		76,5	154,0								

D Ön Kapak
Front Cover

H Şaft Tipi
Shaft Type



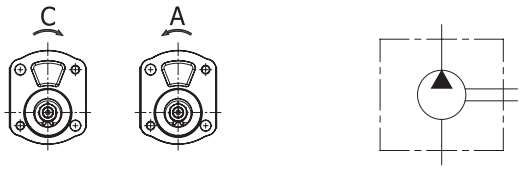


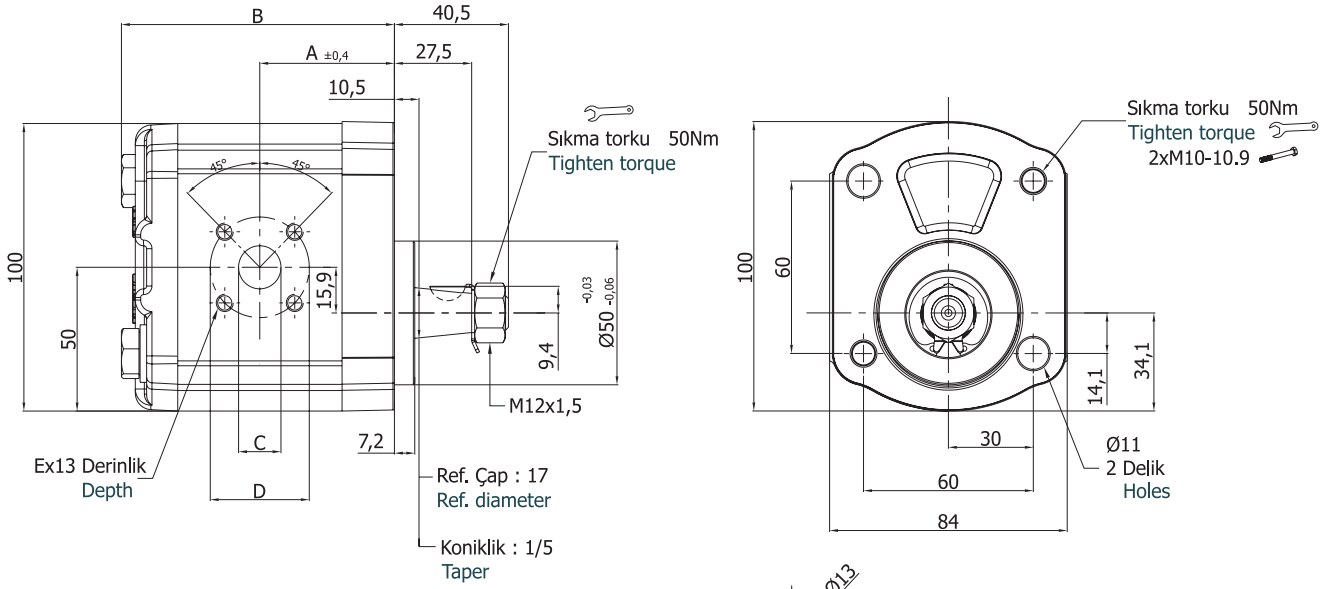


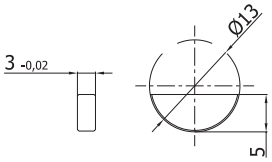
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet		Çıkış - Outlet	
						C	D	c	d
AP20.040.A/CDH05SN	3,9	250	3500	42,2	85,3	G 3/4"	16	G 1/2"	16
AP20.060.A/CDH05SN	5,9			43,8	88,4				
AP20.080.A/CDH05SN	8,0			45,4	91,6				
AP20.095.A/CDH05SN	9,4			46,5	93,9				
AP20.115.A/CDH05SN	11,4		3000	48,2	97,0				
AP20.140.A/CDH05SN	13,9			50,0	101,0				
AP20.160.A/CDH05SN	16,0			51,7	104,1				
AP20.190.A/CDH05SN	19,2			60,2	121,1	G 1"	19	G3/4"	16
AP20.220.A/CDH05SN	21,9	210	2500	62,3	125,5				
AP20.250.A/CDH05SN	24,8	190		64,8	130,4				
AP20.280.A/CDH05SN	27,9	170	2200	67,0	134,9				
AP20.320.A/CDH05SN	32,0	160	2000	70,0	141,0				
AP20.340.A/CDH05SN	34,0	150		71,5	144,5				
AP20.380.A/CDH05SN	38,0	140	1750	74,8	150,5				
AP20.400.A/CDH05SN	40,0	130		76,5	154,0				

E Ön Kapak
Front Cover

A Şaft Tipi
Shaft Type





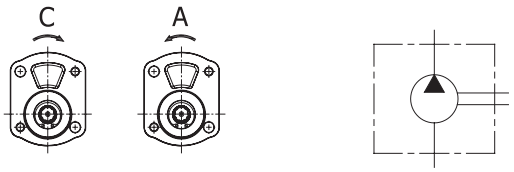


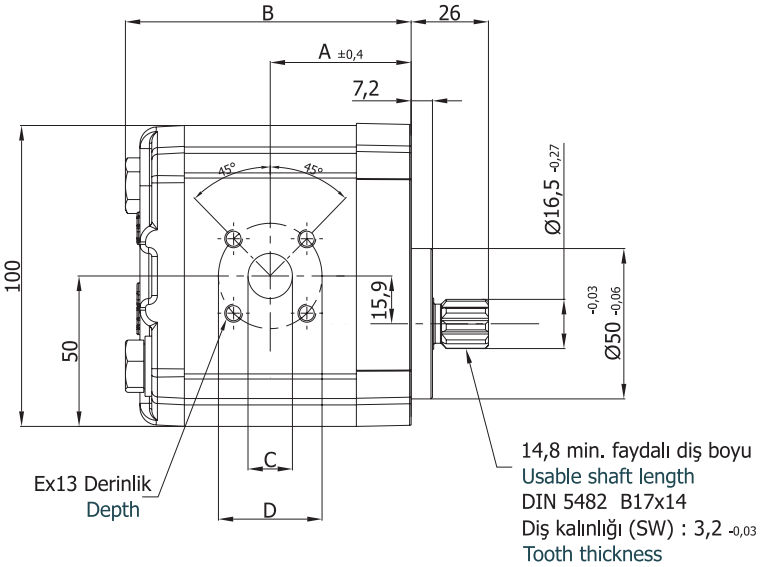
Ay Kama
Woodruff key

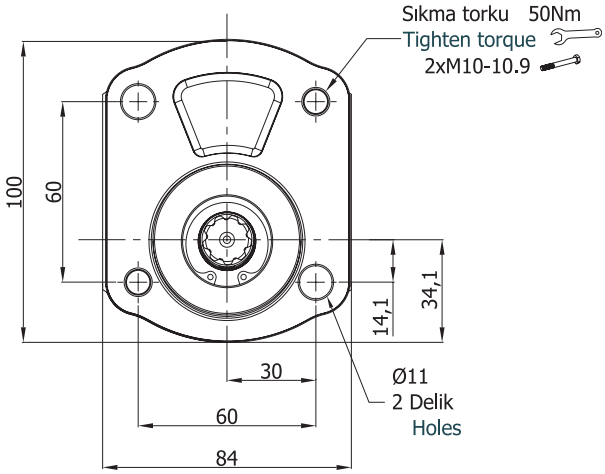
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP20.040.A/CEA01SN	3,9	250	3500	41,6	84,7	12	40	M6	12	35	M6
AP20.060.A/CEA01SN	5,9			43,2	87,8	13,5			13,5		
AP20.080.A/CEA01SN	8,0			44,8	91,0	20			15		
AP20.095.A/CEA01SN	9,4			45,9	93,3						
AP20.115.A/CEA01SN	11,4		3000	47,6	96,4						
AP20.140.A/CEA01SN	13,9			49,4	100,4						
AP20.160.A/CEA01SN	16,0			51,1	103,5						
AP20.190.A/CEA01SN	19,2			59,6	120,5						
AP20.220.A/CEA01SN	21,9	210	2500	61,7	124,9						
AP20.250.A/CEA01SN	24,8	190		64,2	129,8						
AP20.280.A/CEA01SN	27,9	170	2200	66,4	134,3				20	40	
AP20.320.A/CEA01SN	32,0	160	2000	69,4	140,4						
AP20.340.A/CEA01SN	34,0	150		70,9	143,9						
AP20.380.A/CEA01SN	38,0	140	1750	74,2	149,9						
AP20.400.A/CEA01SN	40,0	130		75,9	153,4						

E Ön Kapak
Front Cover

G Şaft Tipi
Shaft Type



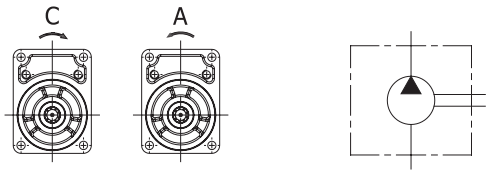


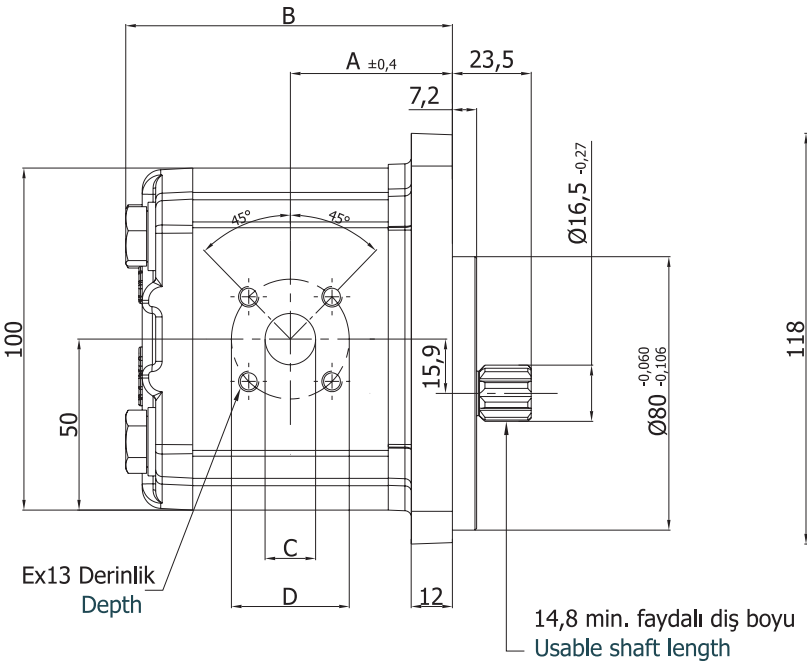


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP20.040.A/CEG01SN	3,9	250	3500	41,6	84,7	12	40	M6	12	35	M6
AP20.060.A/CEG01SN	5,9			43,2	87,8	13,5			13,5		
AP20.080.A/CEG01SN	8,0			44,8	91,0	20			15		
AP20.095.A/CEG01SN	9,4			45,9	93,3						
AP20.115.A/CEG01SN	11,4		3000	47,6	96,4						
AP20.140.A/CEG01SN	13,9			49,4	100,4						
AP20.160.A/CEG01SN	16,0			51,1	103,5						
AP20.190.A/CEG01SN	19,2			59,6	120,5						
AP20.220.A/CEG01SN	21,9	210	2500	61,7	124,9						
AP20.250.A/CEG01SN	24,8	190		64,2	129,8						
AP20.280.A/CEG01SN	27,9	170	2200	66,4	134,3				20	40	
AP20.320.A/CEG01SN	32,0	160	2000	69,4	140,4						
AP20.340.A/CEG01SN	34,0	150		70,9	143,9						
AP20.380.A/CEG01SN	38,0	140	1750	74,2	149,9						
AP20.400.A/CEG01SN	40,0	130		75,9	153,4						

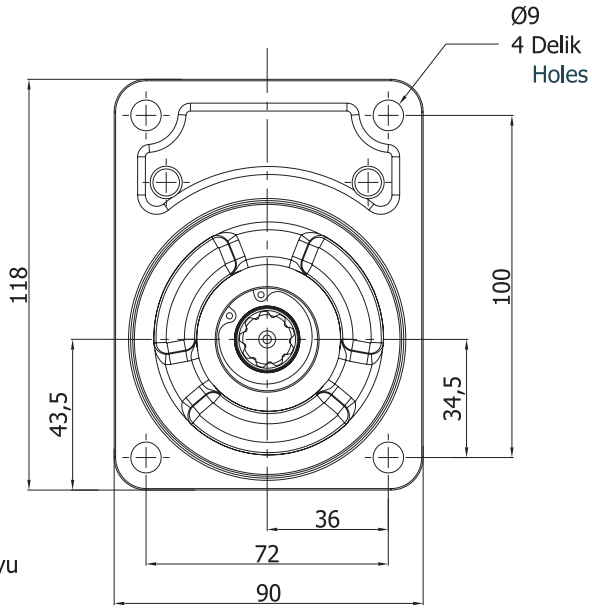
G Ön Kapak
Front Cover

G Şaft Tipi
Shaft Type





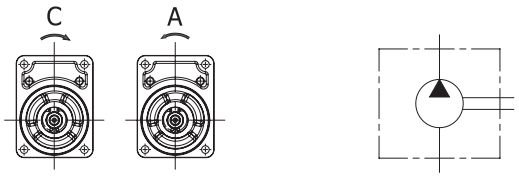
14,8 min. faydalı diş boyu
Usable shaft length
DIN 5482 B17x14
Diş kalınlığı (SW) : 3,2 -0,03
Tooth thickness

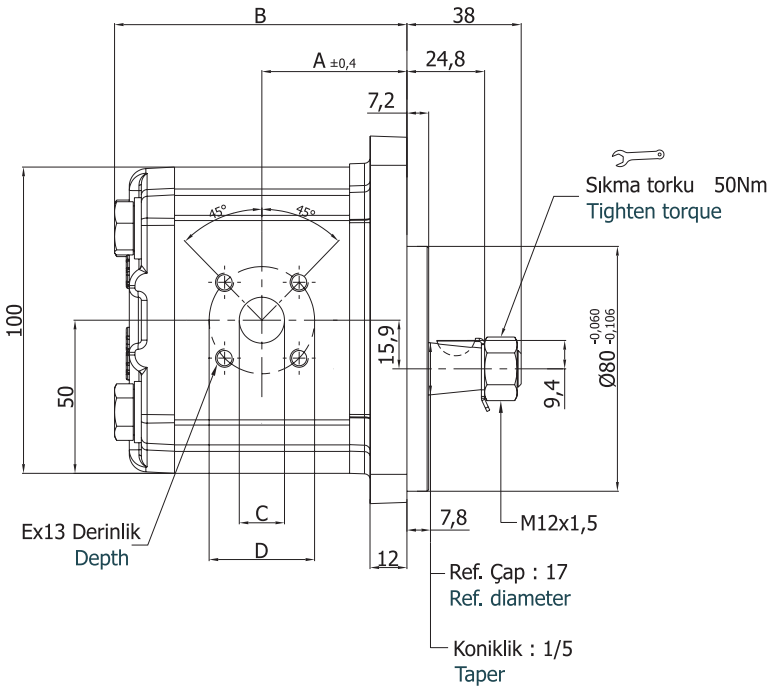


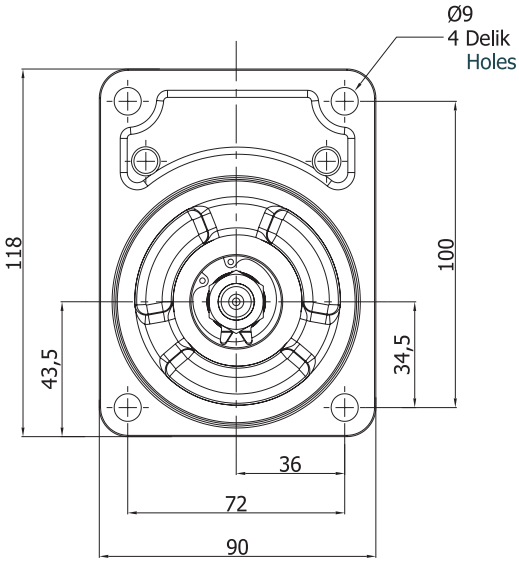
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP20.040.A/CGG01SN	3,9	250	3500	42,2	85,3	12	40	M6	12	35	M6
AP20.060.A/CGG01SN	5,9			43,8	88,4	13,5			13,5		
AP20.080.A/CGG01SN	8,0			45,4	91,6	20			15		
AP20.095.A/CGG01SN	9,4			46,5	93,9						
AP20.115.A/CGG01SN	11,4		3000	48,2	97,0						
AP20.140.A/CGG01SN	13,9			50,0	101,0						
AP20.160.A/CGG01SN	16,0			51,7	104,1						
AP20.190.A/CGG01SN	19,2			60,2	121,1						
AP20.220.A/CGG01SN	21,9	210	2500	62,3	125,5						
AP20.250.A/CGG01SN	24,8	190		64,8	130,4						
AP20.280.A/CGG01SN	27,9	170	2200	67,0	134,9				20	40	
AP20.320.A/CGG01SN	32,0	160	2000	70,0	141,0						
AP20.340.A/CGG01SN	34,0	150		71,5	144,5						
AP20.380.A/CGG01SN	38,0	140	1750	74,8	150,5						
AP20.400.A/CGG01SN	40,0	130		76,5	154,0						

G Ön Kapak
Front Cover

L Şaft Tipi
Shaft Type



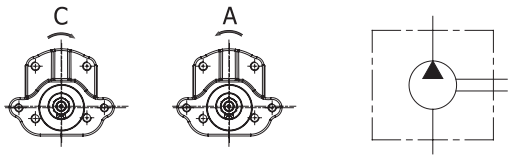


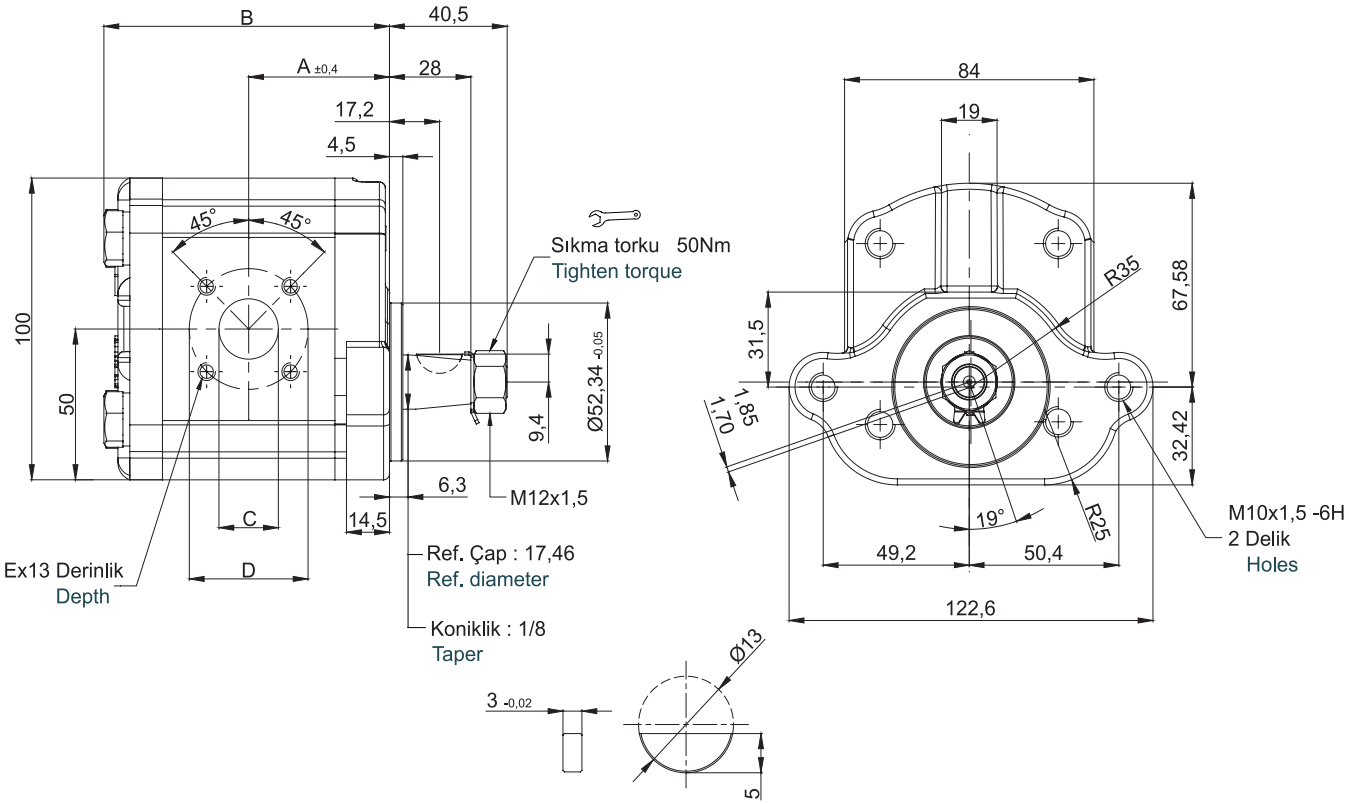


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP20.040.A/CGL01SN	3,9	250	3500	42,2	85,3	12	40	M6	12	35	M6
AP20.060.A/CGL01SN	5,9			43,8	88,4	13,5			13,5		
AP20.080.A/CGL01SN	8,0			45,4	91,6	20			15		
AP20.095.A/CGL01SN	9,4			46,5	93,9						
AP20.115.A/CGL01SN	11,4		3000	48,2	97,0						
AP20.140.A/CGL01SN	13,9			50,0	101,0						
AP20.160.A/CGL01SN	16,0			51,7	104,1						
AP20.190.A/CGL01SN	19,2			60,2	121,1						
AP20.220.A/CGL01SN	21,9	210	2500	62,3	125,5						
AP20.250.A/CGL01SN	24,8	190		64,8	130,4						
AP20.280.A/CGL01SN	27,9	170	2200	67,0	134,9				20	40	
AP20.320.A/CGL01SN	32,0	160	2000	69,4	141,0						
AP20.340.A/CGL01SN	34,0	150		70,9	144,5						
AP20.380.A/CGL01SN	38,0	140	1750	74,2	150,5						
AP20.400.A/CGL01SN	40,0	130		75,9	154,0						

M Ön Kapak
Front Cover

N Şaft Tipi
Shaft Type

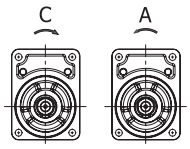


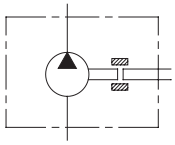


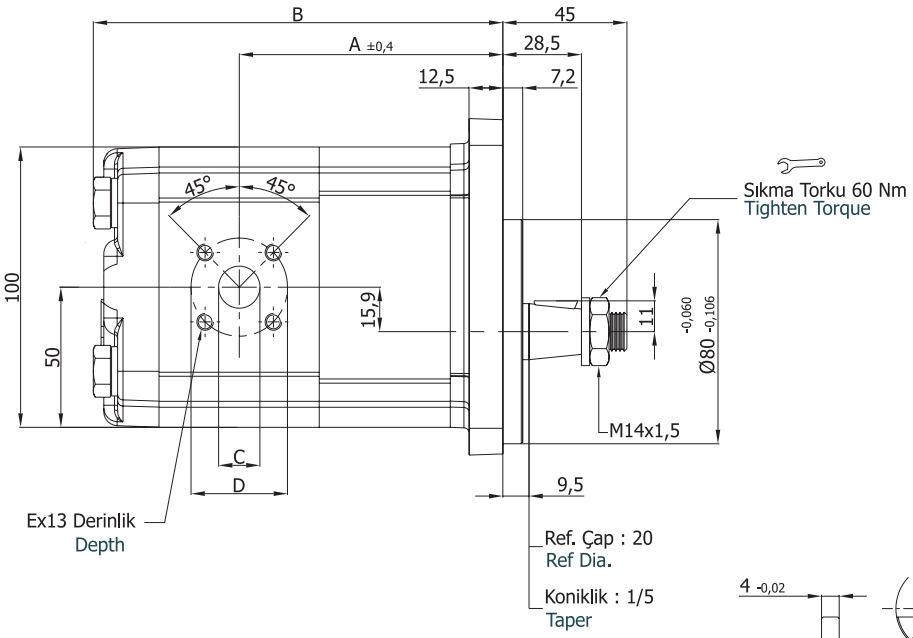
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP20.040.A/CMN01SN	3,9	250	3500	41,6	84,7	12	40	M6	12	35	M6
AP20.060.A/CMN01SN	5,9			43,2	87,8	13,5			13,5		
AP20.080.A/CMN01SN	8,0			44,8	91,0	20			15		
AP20.095.A/CMN01SN	9,4			45,9	93,3						
AP20.115.A/CMN01SN	11,4		3000	47,6	96,4						
AP20.140.A/CMN01SN	13,9			49,4	100,4						
AP20.160.A/CMN01SN	16,0			51,1	103,5						
AP20.190.A/CMN01SN	19,2			59,6	120,5						
AP20.220.A/CMN01SN	21,9	210	2500	61,7	124,9						
AP20.250.A/CMN01SN	24,8	190		64,2	129,8						
AP20.280.A/CMN01SN	27,9	170	2200	66,4	134,3				20	40	
AP20.320.A/CMN01SN	32,0	160	2000	69,4	140,4						
AP20.340.A/CMN01SN	34,0	150		70,9	143,9						
AP20.380.A/CMN01SN	38,0	140	1750	74,2	149,9						
AP20.400.A/CMN01SN	40,0	130		75,9	153,4						

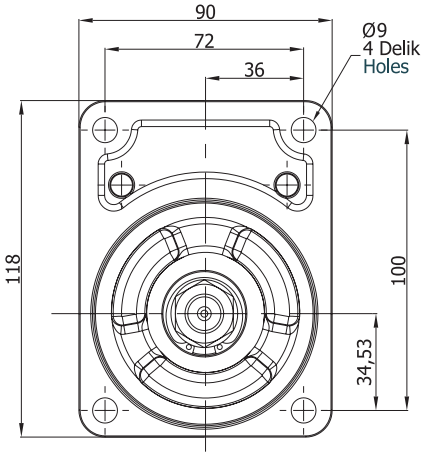
H Ön Kapak
Front Cover

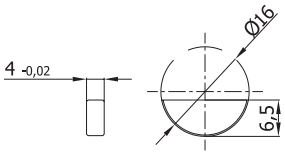
K Şaft Tipi
Shaft Type









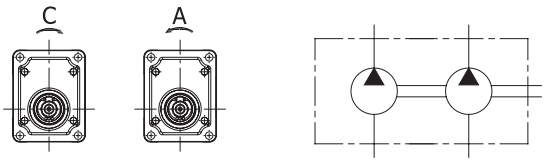


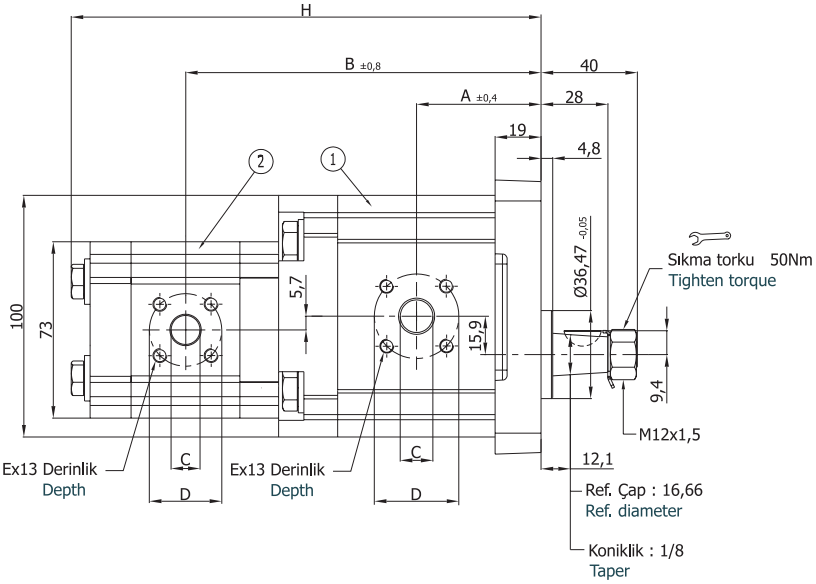
Ay Kama
Woodruff key

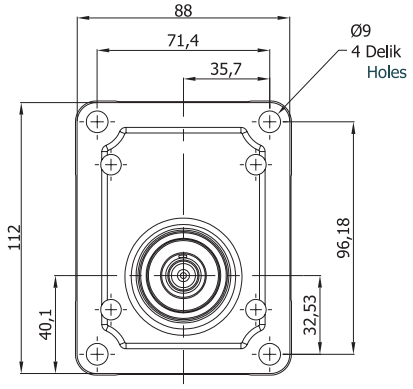
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP20.040.A/CHK01SON	3,9	250	3500	89,7	136,7	12	40	M6	12	35	M6
AP20.060.A/CHK01SON	5,9			91,2	139,8	13,5			13,5		
AP20.080.A/CHK01SON	8,0			92,8	142,9	20			15		
AP20.095.A/CHK01SON	9,4			94,0	145,2						
AP20.115.A/CHK01SON	11,4		3000	95,5	148,4						
AP20.140.A/CHK01SON	13,9			97,5	152,3						
AP20.160.A/CHK01SON	16,0	230		99,0	155,4						
AP20.190.A/CHK01SON	19,2	190		107,5	172,4						
AP20.220.A/CHK01SON	21,9	160	2500	109,7	176,8						
AP20.250.A/CHK01SON	24,8	130		112,3	181,9						
AP20.280.A/CHK01SON	27,9		2200	114,5	186,2				20	40	
AP20.320.A/CHK01SON	32,0		2000	117,5	192,4						
AP20.340.A/CHK01SON	34,0	110		119,0	195,9						
AP20.380.A/CHK01SON	38,0		1750	122,3	201,9						
AP20.400.A/CHK01SON	40,0			124,0	205,4						

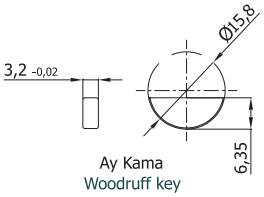
A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type









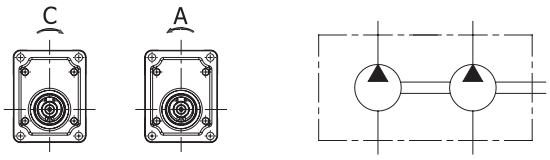
* 012-032 arka pompalar için / For 012-032 rear pumps
C = 12 ; D = 30; E = M6

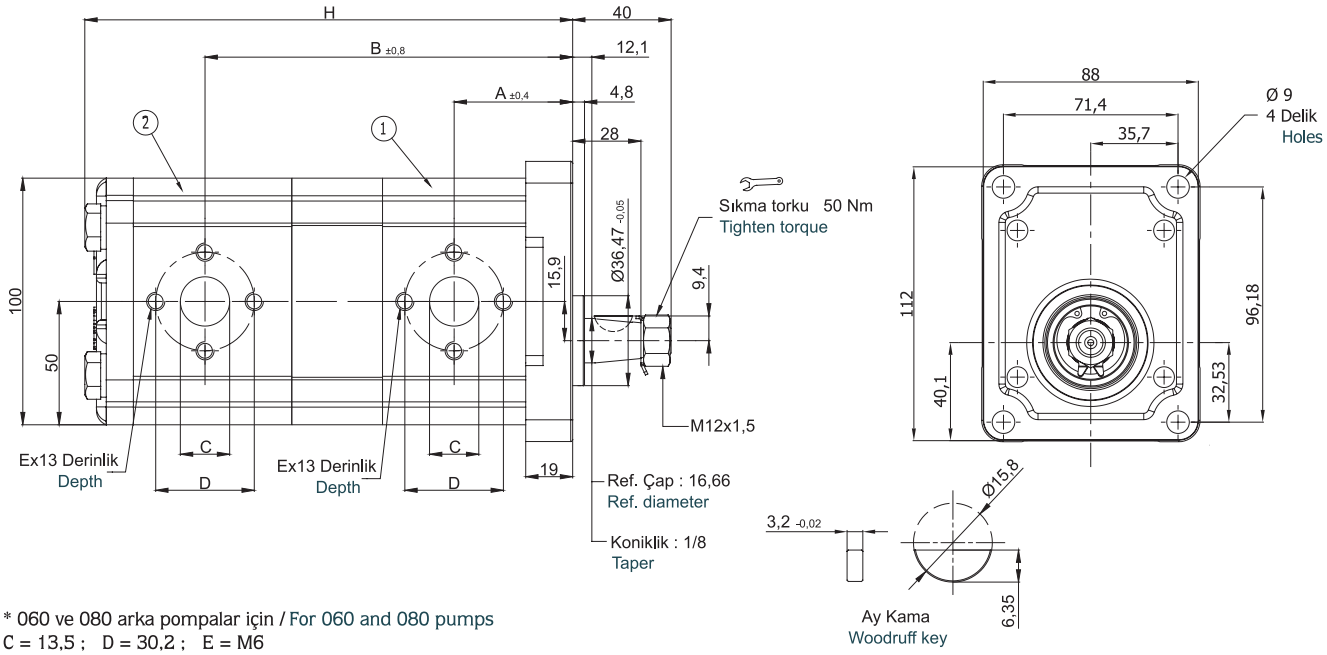
* 035-095 arka pompalar için / For 035-095 rear pumps
C = 15 ; D = 35; E = M6

Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)		Maks. Basınç Max. Pressure (bar)		Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B ±0,8	H	Giriş – Inlet			Çıkış - Outlet		
	1	2	1	2					C	D	E	c	d	e
AP20.060/AP10.012.AAB01SN	5,9	1,2	250	220	3500	43,8	128,5	172,5	13,5	40 *	M6 *	13,5	35	M6
AP20.060/AP10.012.CAB01SN														
AP20.080/AP10.017.AAB01SN	8,0	1,7				45,4	132,7	177,7	20 *			15		
AP20.080/AP10.017.CAB01SN														
AP20.095/AP10.023.AAB01SN	9,4	2,3				46,5	136	182						
AP20.095/AP10.023.CAB01SN														
AP20.115/AP10.032.AAB01SN	11,4	3,2			3000	48,2	140,9	188,7						
AP20.115/AP10.032.CAB01SN														
AP20.140/AP10.038.AAB01SN	13,9	3,8				50,0	146,1	195,1						
AP20.140/AP10.038.CAB01SN														
AP20.160/AP10.043.AAB01SN	16,0	4,3				51,7	150,2	200,3						
AP20.160/AP10.043.CAB01SN														
AP20.190/AP10.050.AAB01SN	19,2	5,0				60,2	168,7	220,3						
AP20.190/AP10.050.CAB01SN														
AP20.220/AP10.063.AAB01SN	21,9	6,3	210		2500	62,3	175,6	229,6						
AP20.220/AP10.063.CAB01SN														
AP20.250/AP10.078.AAB01SN	24,8	7,8	190	210		64,8	183,6	240,6						
AP20.250/AP10.078.CAB01SN														
AP20.280/AP10.095.AAB01SN	27,9	9,5	170	200	2200	67	191,5	252				20	40	
AP20.280/AP10.095.CAB01SN														

A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type





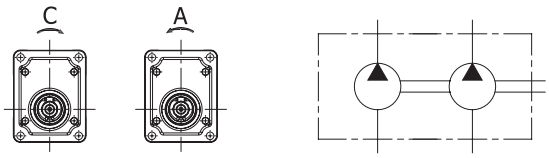
* 060 ve 080 arka pompalar için / For 060 and 080 pumps
C = 13,5 ; D = 30,2 ; E = M6

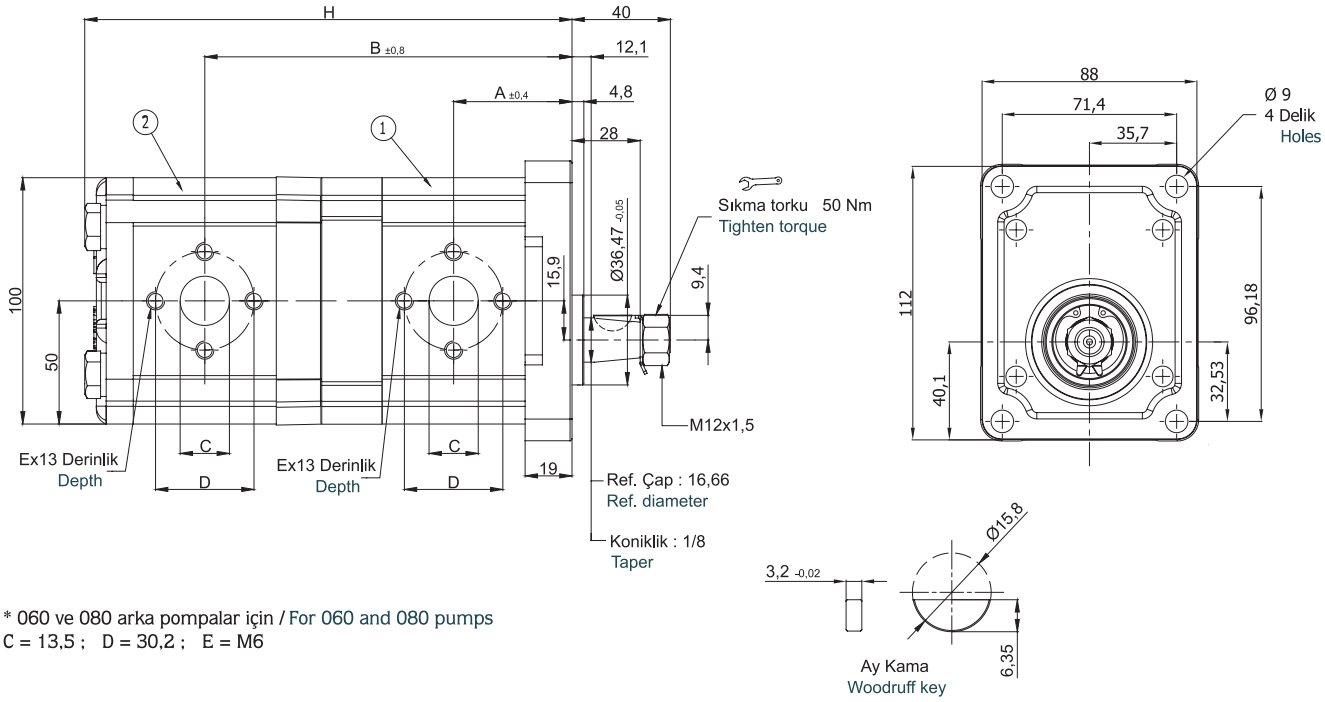
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)		Maks. Basınç Max. Pressure (bar)		Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B ±0,8	H	Giriş – Inlet			Çıkış - Outlet		
	1	2	1	2					C	D	E	c	d	e
AP20.115/060.A/CAB02SN-T	11,4	5,9	250	250	3000	48	138,8	183,6	20 *	40 *	M8 *	13,5	30,2	M6
AP20.115/080.A/CAB02SN-T	11,4	8,0					140,6	186,7						
AP20.115/115.A/CAB02SN-T	11,4	11,4					143,1	192,2						
AP20.140/060.A/CAB02SN-T	13,9	5,9				50	142,8	187,5						
AP20.140/080.A/CAB02SN-T	13,9	8,0					144,3	190,6						
AP20.140/115.A/CAB02SN-T	13,9	11,4					147,0	196,1						
AP20.140/140.A/CAB02SN-T	13,9	13,9					149,0	200,0						
AP20.160/060.A/CAB02SN-T	16,0	16,0				51,5	145,9	190,6						
AP20.160/080.A/CAB02SN-T	16,0	8,0					147,4	193,8						
AP20.160/115.A/CAB02SN-T	16,0	11,4					150,1	199,2						
AP20.160/140.A/CAB02SN-T	16,0	13,9					152,1	203,1						
AP20.160/160.A/CAB02SN-T	16,0	16,0					153,7	206,3						
AP20.190/060.A/CAB02SN-T	19,2	5,9				60,0	162,9	208,1						
AP20.190/080.A/CAB02SN-T	19,2	8,0					164,5	211,2						
AP20.190/115.A/CAB02SN-T	19,2	11,4					167,2	216,3						

Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$		Maks. Basınç Max. Pressure (bar)		Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B ±0,8	H	Giriş – Inlet			Çıkış - Outlet		
	1	2	1	2					C	D	E	c	d	e
AP20.190/140.A/CAB02SN-T	19,2	13,9	250	250	3000	60,2	169,2	220,2	20 *	40 *	M8 *	13,5	30,2	M6
AP20.190/160.A/CAB02SN-T	19,2	16,0		230			170,7	223,3						
AP20.190/190.A/CAB02SN-T	19,2	19,2		190			179,2	240,3						
AP20.220/060.A/CAB02SN-T	21,9	5,9	210	250	2500	62,3	166,9	211,9						
AP20.220/080.A/CAB02SN-T	21,9	8,0					168,8	215,1						
AP20.220/115.A/CAB02SN-T	21,9	11,4					171,5	220,6						
AP20.220/140.A/CAB02SN-T	21,9	13,9					173,5	224,5						
AP20.220/160.A/CAB02SN-T	21,9	16,0		230			175,0	227,6						
AP20.220/190.A/CAB02SN-T	21,9	19,2		190			183,5	244,7						
AP20.220/220.A/CAB02SN-T	21,9	21,9		170			185,7	249,1						
AP20.250/060.A/CAB02SN-T	24,8	5,9	190	250		64,8	172,4	217,0						
AP20.250/080.A/CAB02SN-T	24,8	8,0					173,9	220,2						
AP20.250/115.A/CAB02SN-T	24,8	11,4					176,6	225,7						
AP20.250/140.A/CAB02SN-T	24,8	13,9					178,6	229,6						
AP20.250/160.A/CAB02SN-T	24,8	16,0		230			180,1	232,7						
AP20.250/190.A/CAB02SN-T	24,8	19,2		190			188,6	249,7						
AP20.250/220.A/CAB02SN-T	24,8	21,9		170			190,9	254,1						
AP20.250/250.A/CAB02SN-T	24,8	24,8		150			195,6	259,2						
AP20.280/060.A/CAB02SN-T	27,9	5,9	170	250	2200	67,0	176,7	221,4						
AP20.280/080.A/CAB02SN-T	27,9	8,0					178,2	224,5						
AP20.280/115.A/CAB02SN-T	27,9	11,4					180,9	230,0						
AP20.280/140.A/CAB02SN-T	27,9	13,9					182,9	233,9						
AP20.280/160.A/CAB02SN-T	27,9	16,0		230			184,4	237,1						
AP20.280/190.A/CAB02SN-T	27,9	19,2		190			192,9	254,1						
AP20.280/220.A/CAB02SN-T	27,9	21,9		170			195,2	258,4						
AP20.280/250.A/CAB02SN-T	27,9	24,8		150			197,7	263,5						
AP20.280/280.A/CAB02SN-T	27,9	27,9		140			199,9	267,8						
AP20.320/060.A/CAB02SN-T	32,0	5,9	160	250	2000	70,0	182,9	227,6						
AP20.320/080.A/CAB02SN-T	32,0	8,0					184,4	230,7						
AP20.320/115.A/CAB02SN-T	32,0	11,4					187,1	236,2						
AP20.320/140.A/CAB02SN-T	32,0	13,9					189,1	240,1						
AP20.320/160.A/CAB02SN-T	32,0	16,0		230			190,6	243,3						
AP20.320/190.A/CAB02SN-T	32,0	19,2		190			199,1	260,3						

A Ön Kapak
Front Cover

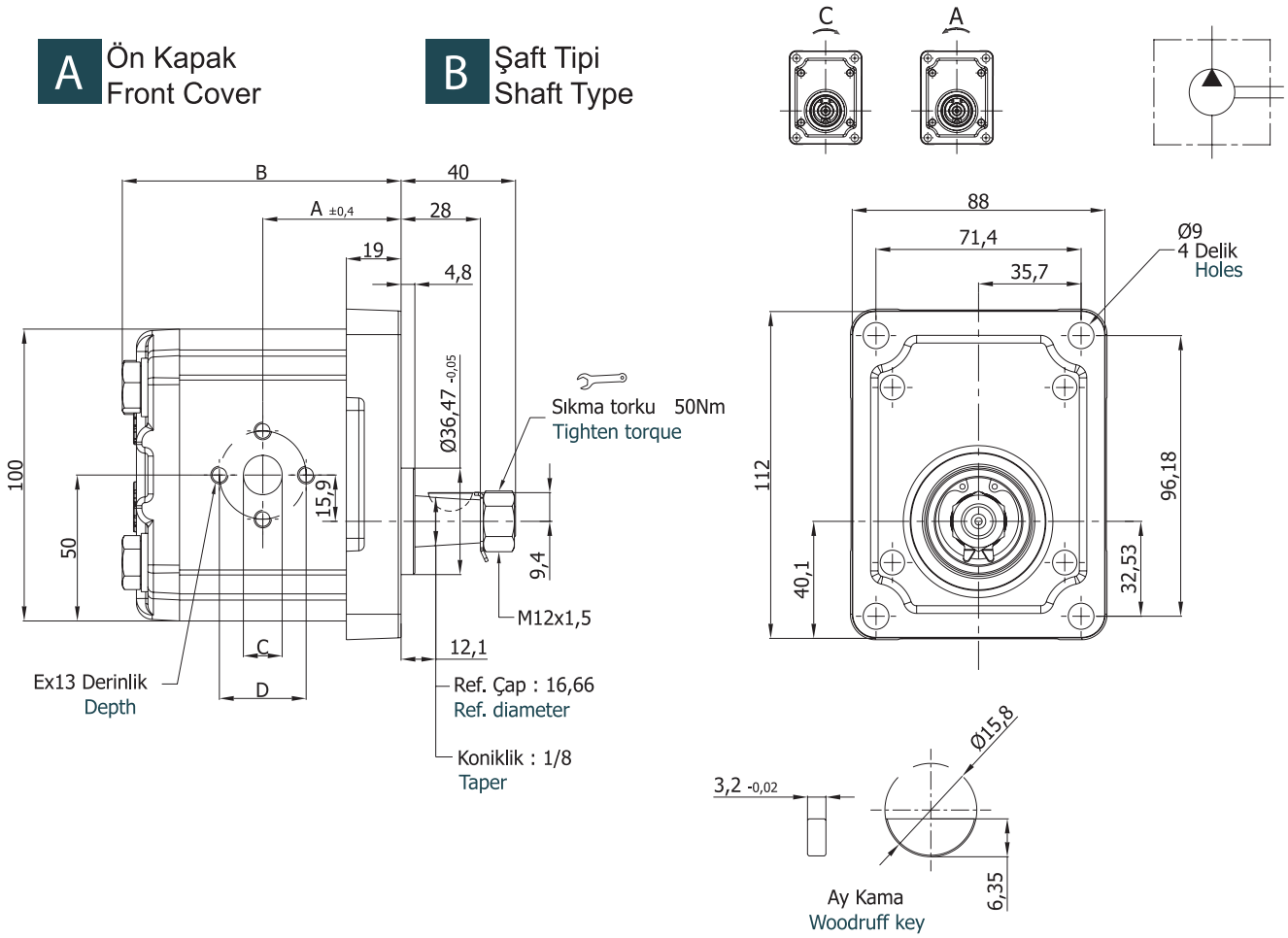
B Şaft Tipi
Shaft Type





* 060 ve 080 arka pompalar için / For 060 and 080 pumps
C = 13,5 ; D = 30,2 ; E = M6

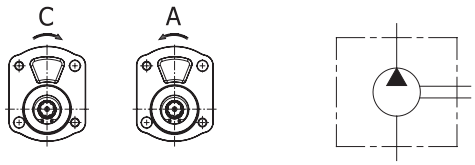
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)		Maks. Basınç Max. Pressure (bar)		Maks. Hız Max. Speed d/d (rpm)	A	B	H	Giriş – Inlet			Çıkış - Outlet		
	1	2	1	2					C	D	E	c	d	e
AP20.115/060.AAB02SN-M	11,4	5,9	250	250	3000	48	144,8	189,6	20 *	40 *	M8 *	13,5	30,2	M6
AP20.115/060.CAB02SN-M														
AP20.115/080.AAB02SN-M	11,4	8,0					146,6	192,7						
AP20.115/080.CAB02SN-M														
AP20.115/115.AAB02SN-M	11,4	11,4					149,1	198,2						
AP20.115/115.CAB02SN-M														
AP20.140/060.AAB02SN-M	13,9	5,9				50	148,8	193,5						
AP20.140/060.CAB02SN-M														
AP20.140/080.AAB02SN-M	13,9	8,0					150,3	196,6						
AP20.140/080.CAB02SN-M														
AP20.140/115.AAB02SN-M	13,9	11,4					153	202,1						
AP20.140/115.CAB02SN-M														
AP20.140/140.AAB02SN-M	13,9	13,9					155	206						
AP20.140/140.CAB02SN-M														
AP20.160/060.AAB02SN-M	16,0	5,9				51,5	151,9	196,6						
AP20.160/060.CAB02SN-M														
AP20.160/080.AAB02SN-M	16,0	8,0					153,4	199,8						
AP20.160/080.CAB02SN-M														
AP20.160/115.AAB02SN-M	16,0	11,4					156,1	205,2						
AP20.160/115.CAB02SN-M														

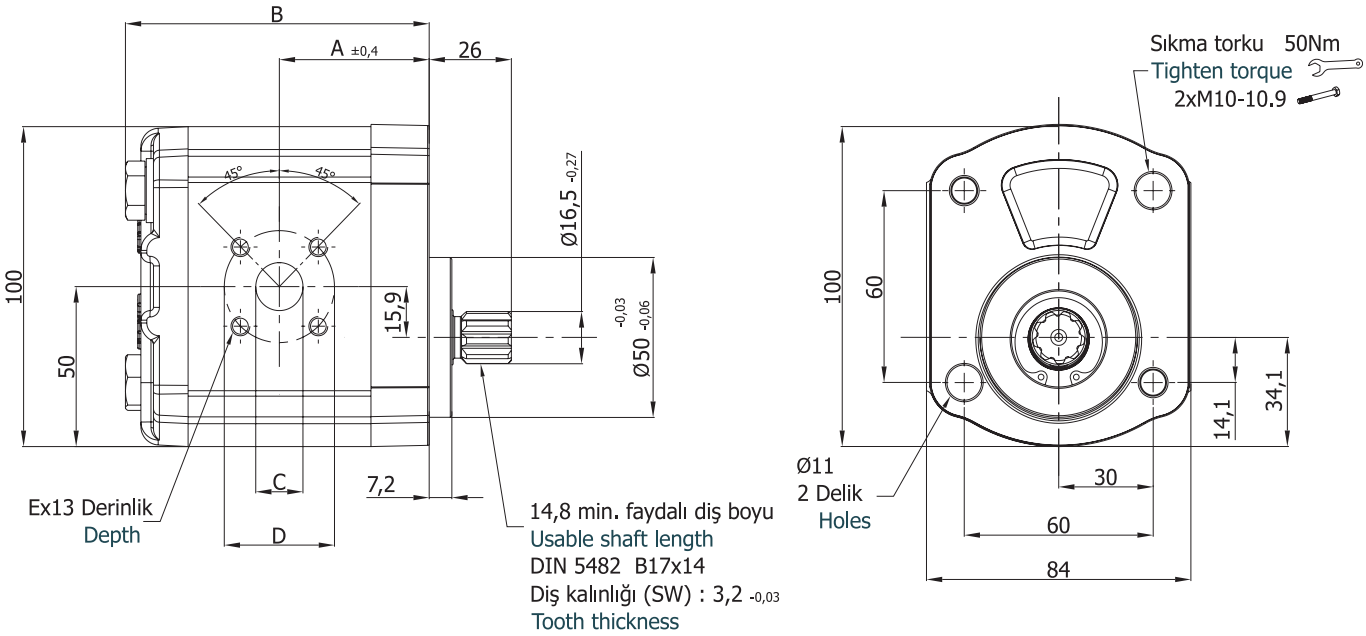


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
APH20.040.A/CAB02SN	3,9	250	3500	42,2	85,3	12	30,2	M6	12	30,2	M6
APH20.060.A/CAB02SN	5,9			43,8	88,4	13,5			13,5		
APH20.080.A/CAB02SN	8,0			45,4	91,6						
APH20.095.A/CAB02SN	9,4			46,5	93,9	20	40	M8			
APH20.115.A/CAB02SN	11,4		3000	48,2	97,0						
APH20.140.A/CAB02SN	13,9			50,0	101,0						
APH20.160.A/CAB02SN	16,0			51,7	104,1						
APH20.190.A/CAB02SN	19,2			60,2	121,1						
APH20.220.A/CAB02SN	21,9	210	2500	62,3	125,5						
APH20.250.A/CAB02SN	24,8	190		64,8	130,4						
APH20.280.A/CAB02SN	27,9	170	2200	67,0	134,9				20	40	M8
APH20.320.A/CAB02SN	32,0	160	2000	70,0	141,0						
APH20.340.A/CAB02SN	34,0	150		71,5	144,5						
APH20.380.A/CAB02SN	38,0	140	1750	74,8	150,5						
APH20.400.A/CAB02SN	40,0	130		76,5	154,0						

B Ön Kapak
Front Cover

G Şaft Tipi
Shaft Type

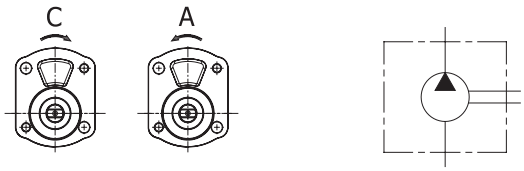


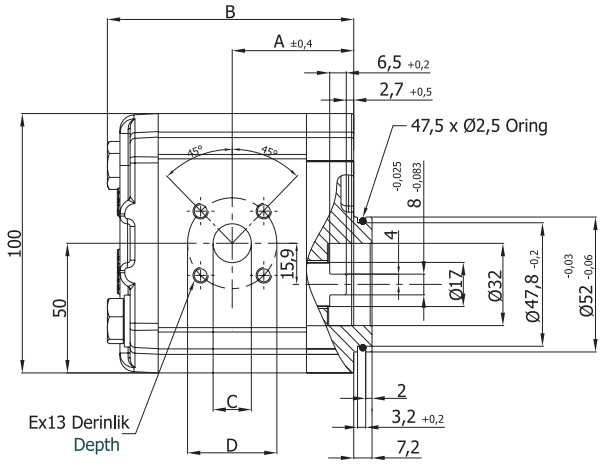


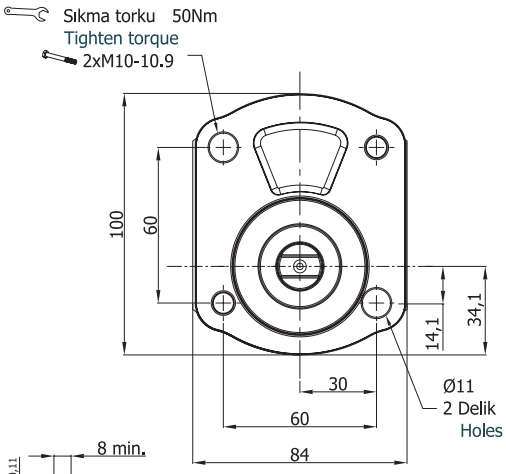
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
APH20.040.A/CBG01SN	3,9	250	3500	41,6	84,7	12	40	M6	12	35	M6
APH20.060.A/CBG01SN	5,9			43,2	87,8	13,5			13,5		
APH20.080.A/CBG01SN	8,0			44,8	91,0	20			15		
APH20.095.A/CBG01SN	9,4			45,9	93,3						
APH20.115.A/CBG01SN	11,4		3000	47,6	96,4						
APH20.140.A/CBG01SN	13,9			49,4	100,4						
APH20.160.A/CBG01SN	16,0			51,1	103,5						
APH20.190.A/CBG01SN	19,2			59,6	120,5						
APH20.220.A/CBG01SN	21,9	210	2500	61,7	124,9						
APH20.250.A/CBG01SN	24,8	190		64,2	129,8						
APH20.280.A/CBG01SN	27,9	170	2200	66,4	134,3				20	40	
APH20.320.A/CBG01SN	32,0	160	2000	69,4	140,4						
APH20.340.A/CBG01SN	34,0	150		70,9	143,9						
APH20.380.A/CBG01SN	38,0	140	1750	74,2	149,9						
APH20.400.A/CBG01SN	40,0	130		75,9	153,4						

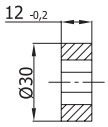
C Ön Kapak
Front Cover

E Şaft Tipi
Shaft Type

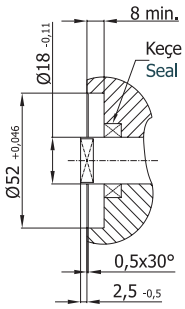








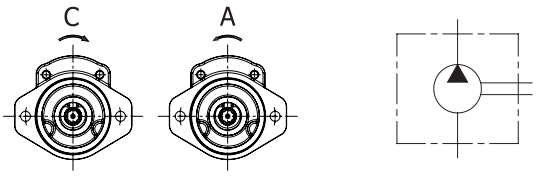
Kavrama
Coupling

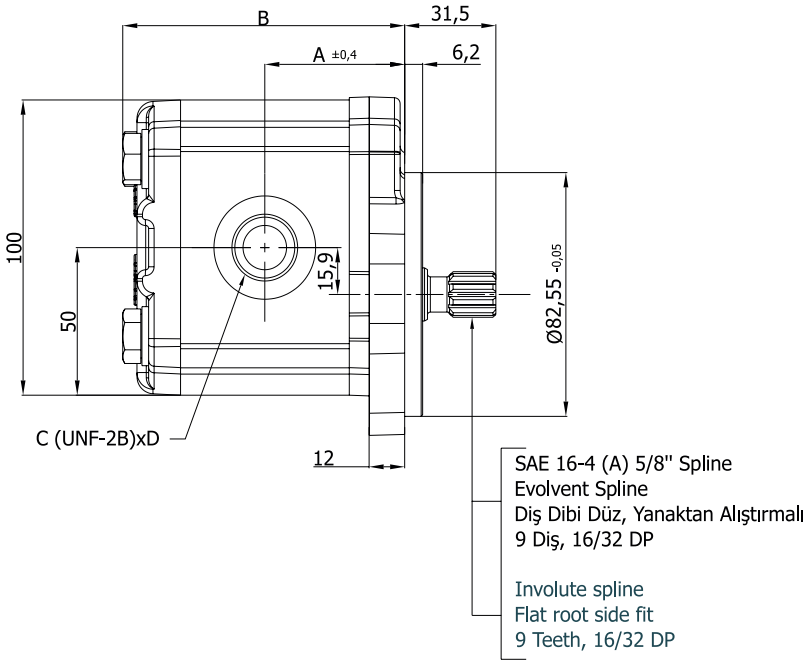


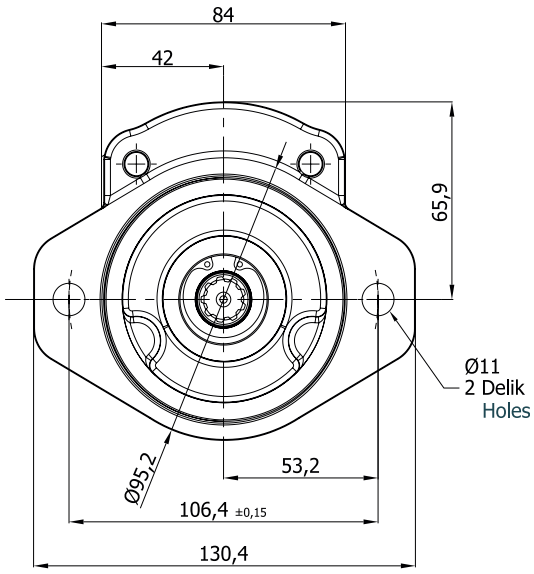
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
APH20.040.A/CCE01SN	3,9	250	3500	41,6	84,7	12	40	M6	12	35	M6
APH20.060.A/CCE01SN	5,9			43,2	87,8	13,5			13,5		
APH20.080.A/CCE01SN	8,0			44,8	91,0	20			15		
APH20.095.A/CCE01SN	9,4			45,9	93,3						
APH20.115.A/CCE01SN	11,4		3000	47,6	96,4						
APH20.140.A/CCE01SN	13,9			49,4	100,4						
APH20.160.A/CCE01SN	16,0			51,1	103,5						
APH20.190.A/CCE01SN	19,2			59,6	120,5						
APH20.220.A/CCE01SN	21,9	210	2500	61,7	124,9						
APH20.250.A/CCE01SN	24,8	190		64,2	129,8						
APH20.280.A/CCE01SN	27,9	170	2200	66,4	134,3				20	40	
APH20.320.A/CCE01SN	32,0	160	2000	69,4	140,4						
APH20.340.A/CCE01SN	34,0	150		70,9	143,9						
APH20.380.A/CCE01SN	38,0	140	1750	74,2	149,9						
APH20.400.A/CCE01SN	40,0	130		75,9	153,4						

D Ön Kapak
Front Cover

C Şaft Tipi
Shaft Type



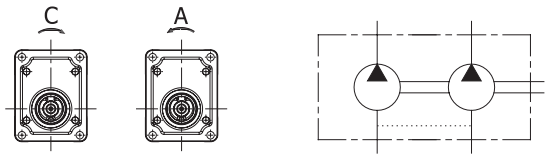


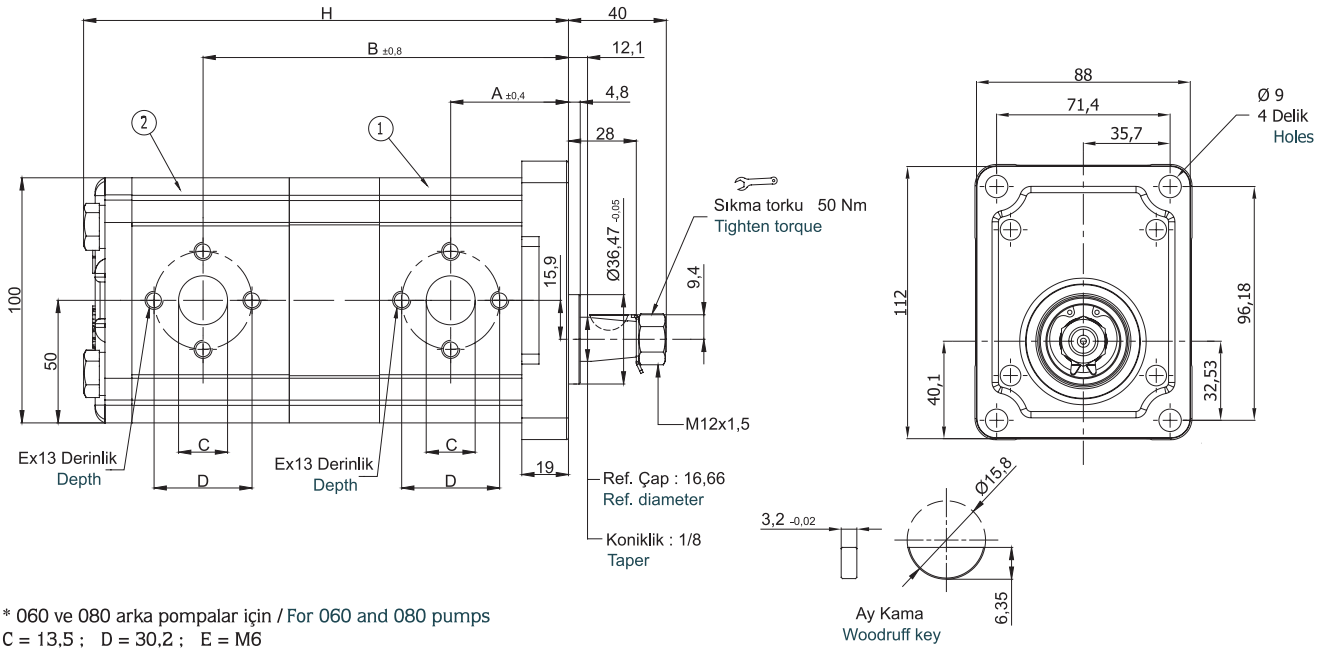


Pompa Tipi Pump Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet		Çıkış - Outlet	
						C	D	c	d
APH20.040.A/CDC04SN	3,9	250	3500	42,2	85,3	9/16-18 UNF	13	9/16-18 UNF	13
APH20.060.A/CDC04SN	5,9			43,8	88,4				
APH20.080.A/CDC04SN	8,0			45,4	91,6	7/8-14 UNF	16	7/8-14 UNF	16
APH20.095.A/CDC04SN	9,4			46,5	93,9	1 1/16-12 UNF	19		
APH20.115.A/CDC04SN	11,4		3000	48,2	97,0				
APH20.140.A/CDC04SN	13,9			50,0	101,0				
APH20.160.A/CDC04SN	16,0			51,7	104,1				
APH20.190.A/CDC04SN	19,2			60,2	121,1				
APH20.220.A/CDC04SN	21,9	210	2500	62,3	125,5				
APH20.250.A/CDC04SN	24,8	190		64,8	130,4				
APH20.280.A/CDC04SN	27,9	170	2200	67,0	134,9				
APH20.320.A/CDC04SN	32,0	160	2000	70,0	141,0			1 1/16-12 UNF	19
APH20.340.A/CDC04SN	34,0	150		71,5	144,5				
APH20.380.A/CDC04SN	38,0	140	1750	74,8	150,5				
APH20.400.A/CDC04SN	40,0	130		76,5	154,0				

A Ön Kapak / Front Cover

B Şaft Tipi / Shaft Type





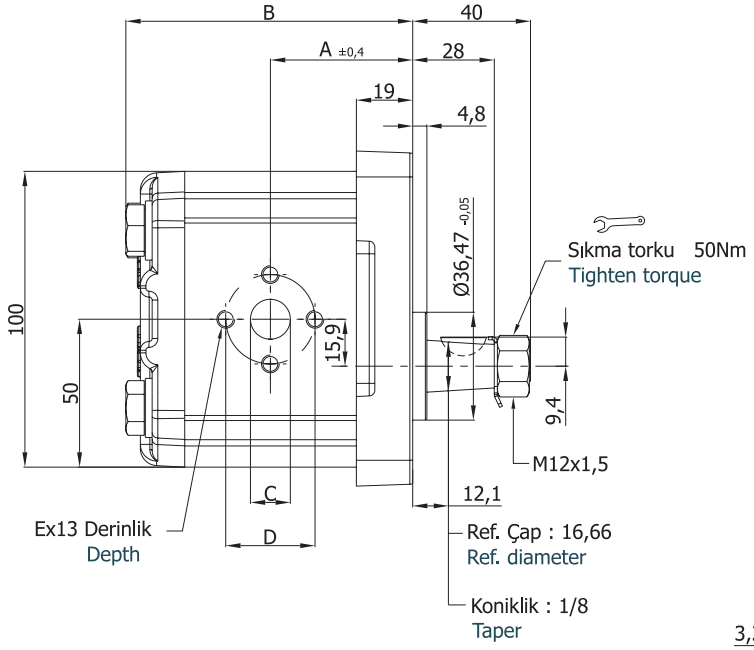
* 060 ve 080 arka pompalar için / For 060 and 080 pumps
C = 13,5 ; D = 30,2 ; E = M6

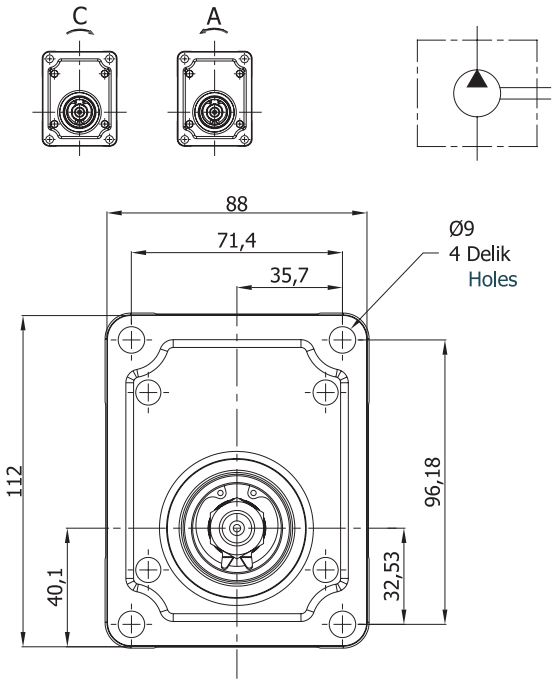
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)		Maks. Basınç Max. Pressure (bar)		Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B ±0,8	H	Giriş – Inlet			Çıkış - Outlet		
	1	2	1	2					C	D	E	c	d	e
APH20.115/060.A/CAB02SN-T	11,4	5,9	250	250	3000	48	138,8	183,6	20 *	40 *	M8 *	13,5	30,2	M6
APH20.115/080.A/CAB02SN-T	11,4	8,0					140,6	186,7						
APH20.115/115.A/CAB02SN-T	11,4	11,4					143,1	192,2						
APH20.140/060.A/CAB02SN-T	13,9	5,9				50	142,8	187,5						
APH20.140/080.A/CAB02SN-T	13,9	8,0					144,3	190,6						
APH20.140/115.A/CAB02SN-T	13,9	11,4					147,0	196,1						
APH20.140/140.A/CAB02SN-T	13,9	13,9					149,0	200,0						
APH20.160/060.A/CAB02SN-T	16,0	16,0				51,5	145,9	190,6						
APH20.160/080.A/CAB02SN-T	16,0	8,0					147,4	193,8						
APH20.160/115.A/CAB02SN-T	16,0	11,4					150,1	199,2						
APH20.160/140.A/CAB02SN-T	16,0	13,9					152,1	203,1						
APH20.160/160.A/CAB02SN-T	16,0	16,0					153,7	206,3						
APH20.190/060.A/CAB02SN-T	19,2	5,9				60,0	162,9	208,1						
APH20.190/080.A/CAB02SN-T	19,2	8,0					164,5	211,2						
APH20.190/115.A/CAB02SN-T	19,2	11,4					167,2	216,3						

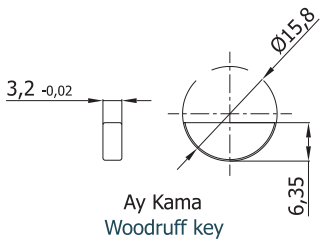
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)		Maks. Basınç Max. Pressure (bar)		Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B ±0,8	H	Giriş – Inlet			Çıkış - Outlet		
	1	2	1	2					C	D	E	c	d	e
APH20.190/140.A/CAB02SN-T	19,2	13,9	250	250	3000	60,2	169,2	220,2	20 *	40 *	M8 *	13,5	30,2	M6
APH20.190/160.A/CAB02SN-T	19,2	16,0		230			170,7	223,3						
APH20.190/190.A/CAB02SN-T	19,2	19,2		190			179,2	240,3						
APH20.220/060.A/CAB02SN-T	21,9	5,9	210	250	2500	62,3	166,9	211,9						
APH20.220/080.A/CAB02SN-T	21,9	8,0					168,8	215,1						
APH20.220/115.A/CAB02SN-T	21,9	11,4					171,5	220,6						
APH20.220/140.A/CAB02SN-T	21,9	13,9					173,5	224,5						
APH20.220/160.A/CAB02SN-T	21,9	16,0		230			175,0	227,6						
APH20.220/190.A/CAB02SN-T	21,9	19,2		190			183,5	244,7						
APH20.220/220.A/CAB02SN-T	21,9	21,9		170			185,7	249,1						
APH20.250/060.A/CAB02SN-T	24,8	5,9	190	250		64,8	172,4	217,0						
APH20.250/080.A/CAB02SN-T	24,8	8,0					173,9	220,2						
APH20.250/115.A/CAB02SN-T	24,8	11,4					176,6	225,7						
APH20.250/140.A/CAB02SN-T	24,8	13,9					178,6	229,6						
APH20.250/160.A/CAB02SN-T	24,8	16,0		230			180,1	232,7						
APH20.250/190.A/CAB02SN-T	24,8	19,2		190			188,6	249,7						
APH20.250/220.A/CAB02SN-T	24,8	21,9		170			190,9	254,1						
APH20.250/250.A/CAB02SN-T	24,8	24,8		150			195,6	259,2						
APH20.280/060.A/CAB02SN-T	27,9	5,9	170	250	2200	67,0	176,7	221,4						
APH20.280/080.A/CAB02SN-T	27,9	8,0					178,2	224,5						
APH20.280/115.A/CAB02SN-T	27,9	11,4					180,9	230,0						
APH20.280/140.A/CAB02SN-T	27,9	13,9					182,9	233,9						
APH20.280/160.A/CAB02SN-T	27,9	16,0		230			184,4	237,1						
APH20.280/190.A/CAB02SN-T	27,9	19,2		190			192,9	254,1						
APH20.280/220.A/CAB02SN-T	27,9	21,9		170			195,2	258,4						
APH20.280/250.A/CAB02SN-T	27,9	24,8		150			197,7	263,5						
APH20.280/280.A/CAB02SN-T	27,9	27,9		140			199,9	267,8						
APH20.320/060.A/CAB02SN-T	32,0	5,9	160	250	2000	70,0	182,9	227,6						
APH20.320/080.A/CAB02SN-T	32,0	8,0					184,4	230,7						
APH20.320/115.A/CAB02SN-T	32,0	11,4					187,1	236,2						
APH20.320/140.A/CAB02SN-T	32,0	13,9					189,1	240,1						
APH20.320/160.A/CAB02SN-T	32,0	16,0		230			190,6	243,3						
APH20.320/190.A/CAB02SN-T	32,0	19,2		190			199,1	260,3						

A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type



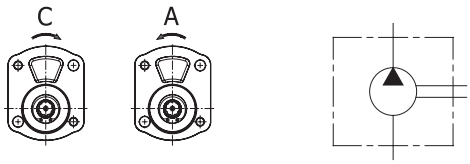


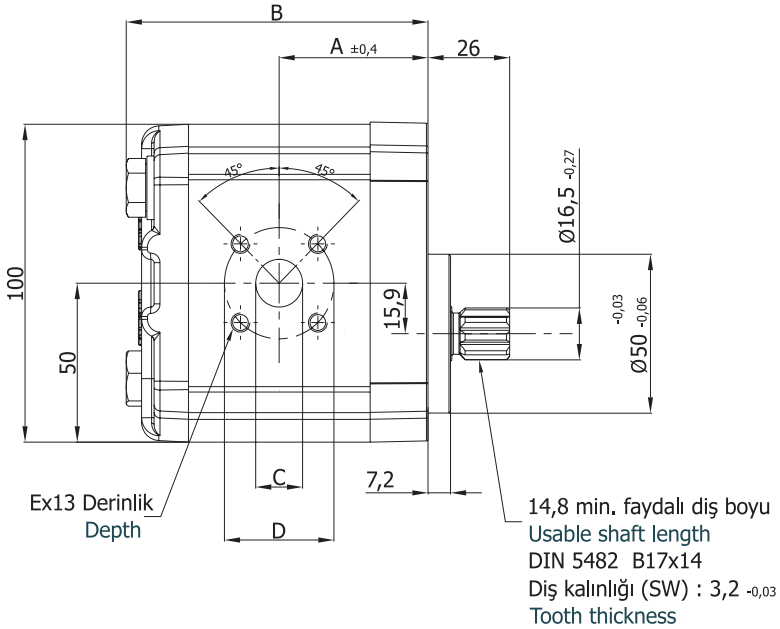


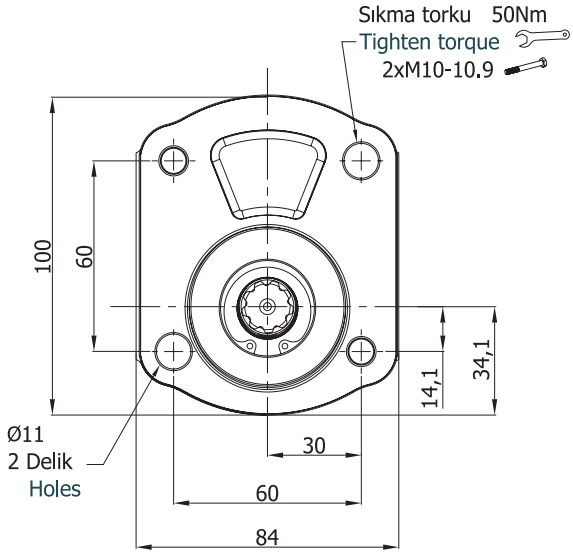
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DKP20.040.A/CAB02SN	3,9	280	3500	42,2	85,3	12	30,2	M6	12	30,2	M6
DKP20.060.A/CAB02SN	5,9			43,8	88,4	13,5			13,5		
DKP20.080.A/CAB02SN	8,0			45,4	91,6						
DKP20.095.A/CAB02SN	9,4			46,5	93,9	20	40	M8			
DKP20.115.A/CAB02SN	11,4		3000	48,2	97,0						
DKP20.140.A/CAB02SN	13,9			50,0	101,0						
DKP20.160.A/CAB02SN	16,0			51,7	104,1						
DKP20.190.A/CAB02SN	19,2			60,2	121,1						
DKP20.220.A/CAB02SN	21,9	240	2500	62,3	125,5						
DKP20.250.A/CAB02SN	24,8	220		64,8	130,4						
DKP20.280.A/CAB02SN	27,9	200	2200	67,0	134,9				20	40	M8

B Ön Kapak
Front Cover

G Şaft Tipi
Shaft Type



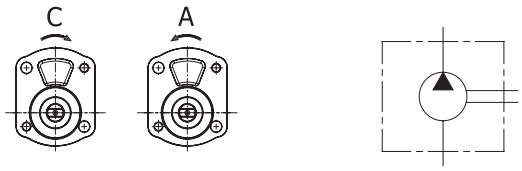


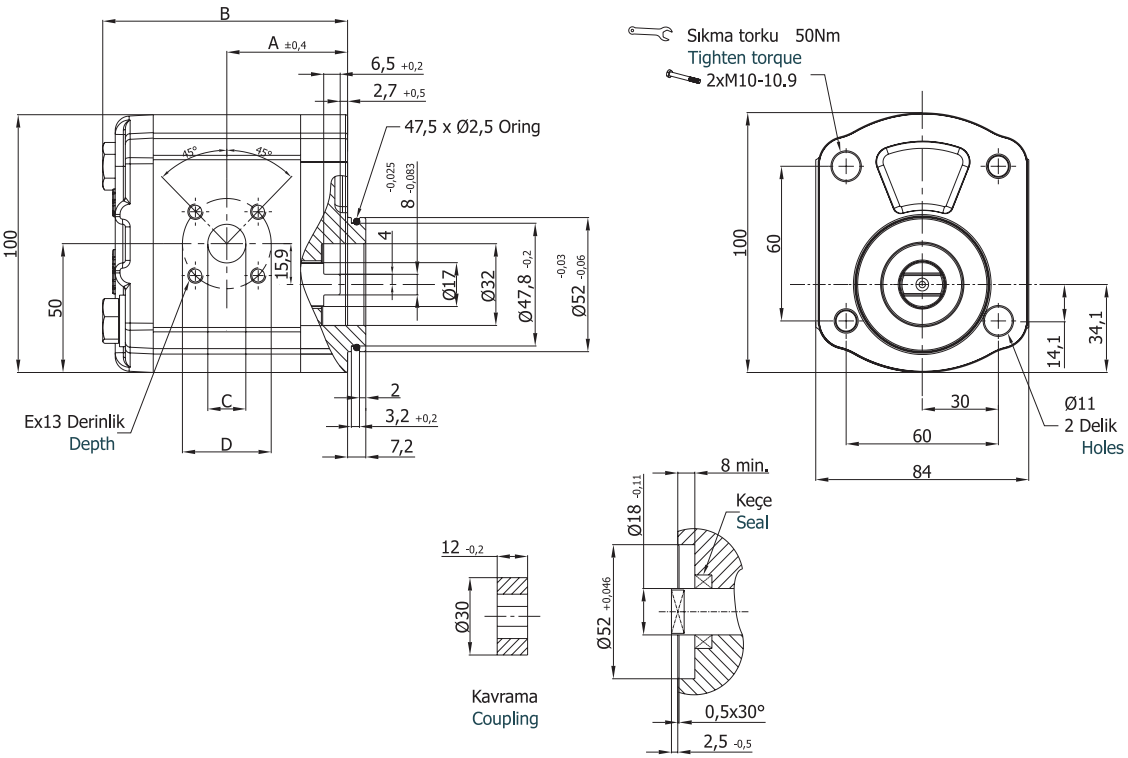


Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DKP20.040.A/CBG01SN	3,9	280	3500	41,6	84,7	12	40	M6	12	35	M6
DKP20.060.A/CBG01SN	5,9			43,2	87,8	13,5			13,5		
DKP20.080.A/CBG01SN	8,0			44,8	91,0	20			15		
DKP20.095.A/CBG01SN	9,4			45,9	93,3						
DKP20.115.A/CBG01SN	11,4		3000	47,6	96,4						
DKP20.140.A/CBG01SN	13,9			49,4	100,4						
DKP20.160.A/CBG01SN	16,0			51,1	103,5						
DKP20.190.A/CBG01SN	19,2			59,6	120,5						
DKP20.220.A/CBG01SN	21,9	240	2500	61,7	124,9						
DKP20.250.A/CBG01SN	24,8	220		64,2	129,8						
DKP20.280.A/CBG01SN	27,9	200	2200	66,4	134,3				20	40	

C Ön Kapak
Front Cover

E Şaft Tipi
Shaft Type

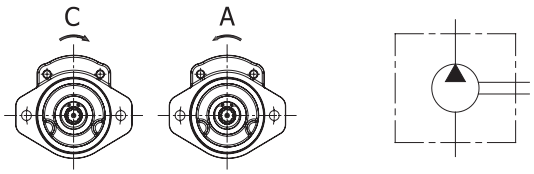


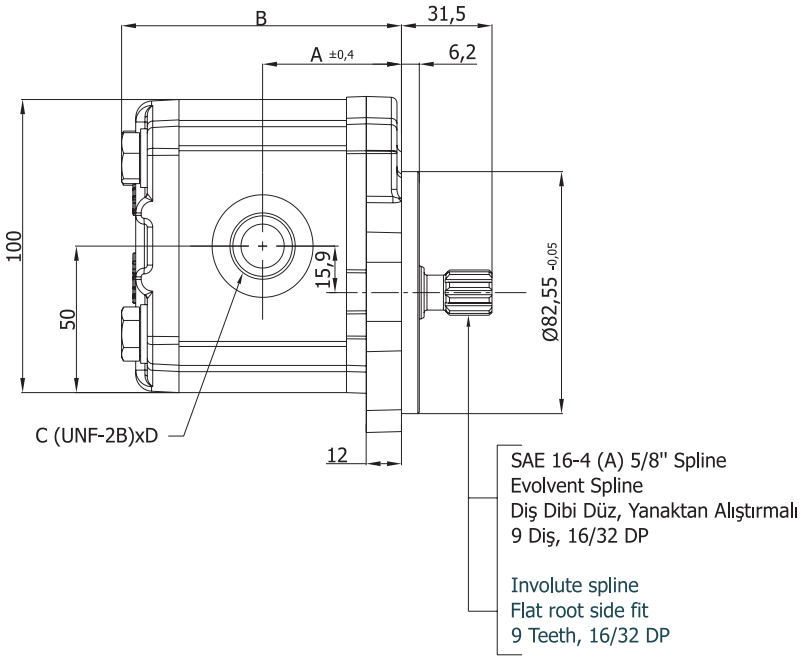


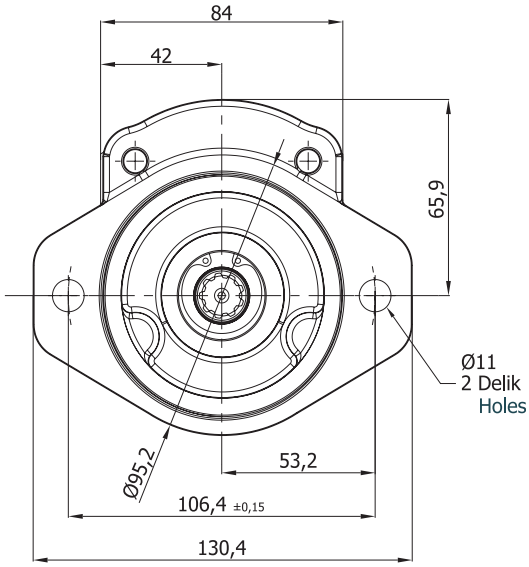
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DKP20.040.A/CCE01SN	3,9	280	3500	41,6	84,7	12	40	M6	12	35	M6
DKP20.060.A/CCE01SN	5,9			43,2	87,8	13,5			13,5		
DKP20.080.A/CCE01SN	8,0			44,8	91,0	20			15		
DKP20.095.A/CCE01SN	9,4			45,9	93,3						
DKP20.115.A/CCE01SN	11,4		3000	47,6	96,4						
DKP20.140.A/CCE01SN	13,9			49,4	100,4						
DKP20.160.A/CCE01SN	16,0			51,1	103,5						
DKP20.190.A/CCE01SN	19,2			59,6	120,5						
DKP20.220.A/CCE01SN	21,9	240	2500	61,7	124,9						
DKP20.250.A/CCE01SN	24,8	220		64,2	129,8						
DKP20.280.A/CCE01SN	27,9	200	2200	66,4	134,3				20	40	

D Ön Kapak
Front Cover

C Şaft Tipi
Shaft Type



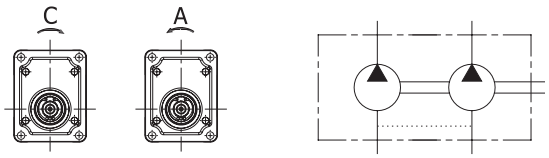


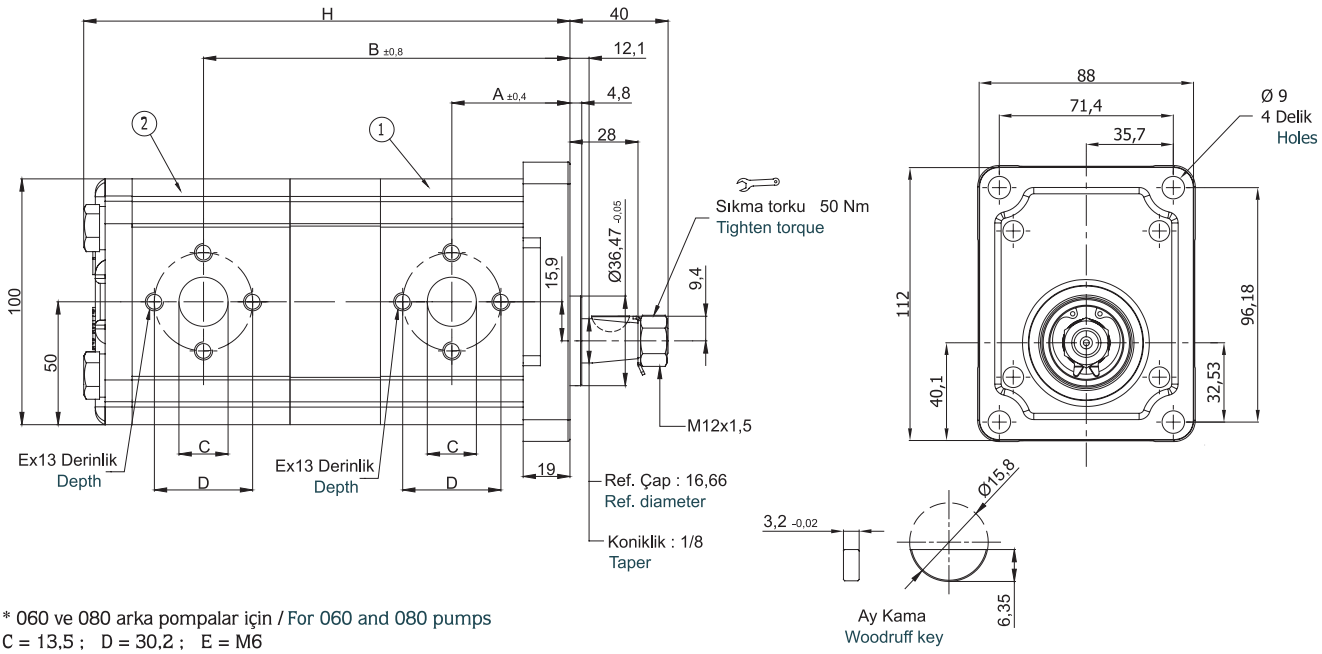


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet		Çıkış - Outlet	
						C	D	c	d
DKP20.040.A/CDC04SN	3,9	280	3500	42,2	85,3	9/16-18 UNF	13	9/16-18 UNF	13
DKP20.060.A/CDC04SN	5,9			43,8	88,4				
DKP20.080.A/CDC04SN	8,0			45,4	91,6	7/8-14 UNF	16	7/8-14 UNF	16
DKP20.095.A/CDC04SN	9,4			46,5	93,9	1 1/16-12 UNF	19		
DKP20.115.A/CDC04SN	11,4		3000	48,2	97,0				
DKP20.140.A/CDC04SN	13,9			50,0	101,0				
DKP20.160.A/CDC04SN	16,0			51,7	104,1				
DKP20.190.A/CDC04SN	19,2			60,2	121,1				
DKP20.220.A/CDC04SN	21,9	240	2500	62,3	125,5				
DKP20.250.A/CDC04SN	24,8	220		64,8	130,4				
DKP20.280.A/CDC04SN	27,9	200	2200	67,0	134,9				

A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type

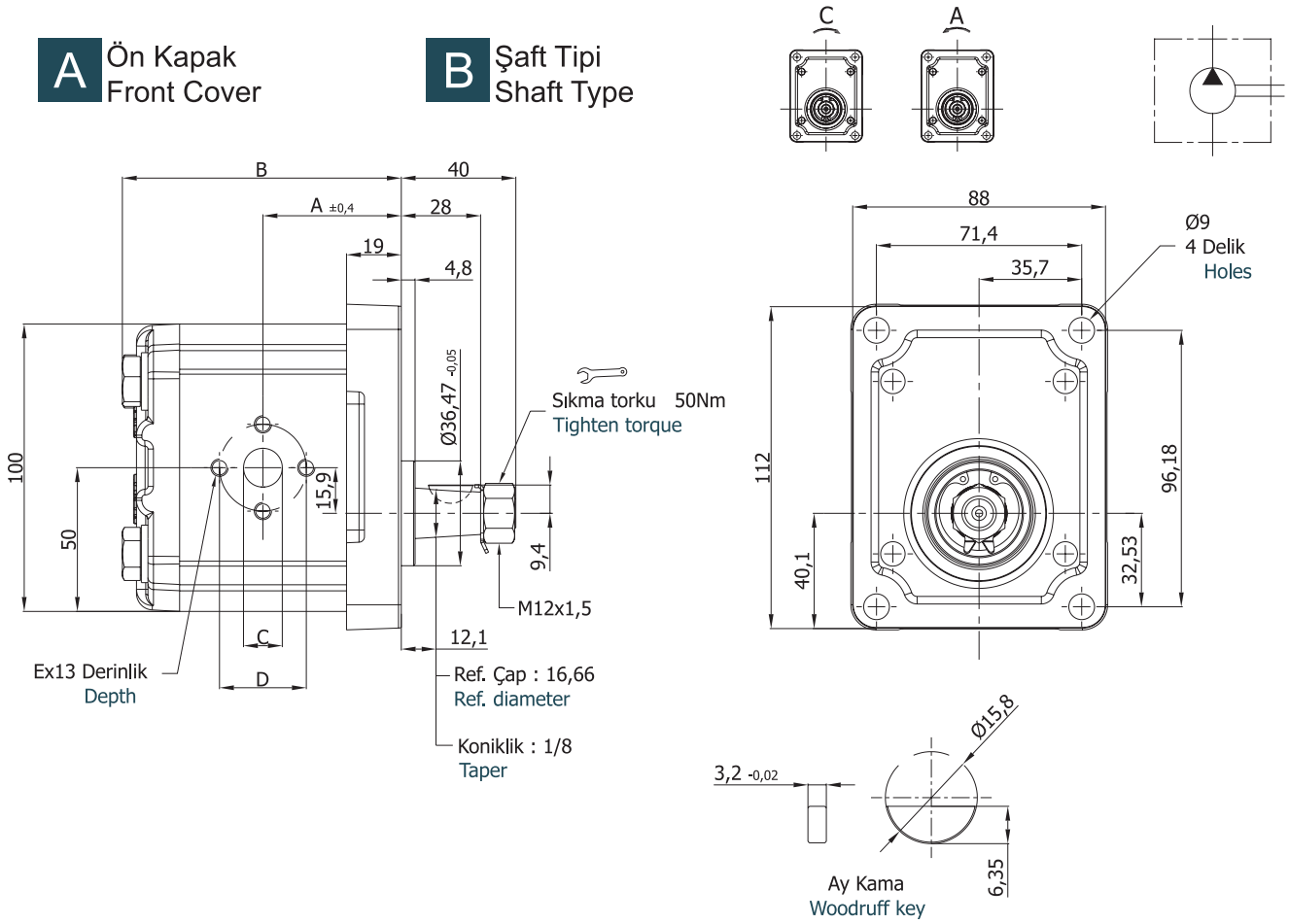




* 060 ve 080 arka pompalar için / For 060 and 080 pumps
C = 13,5 ; D = 30,2 ; E = M6

Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)		Maks. Basınç Max. Pressure (bar)		Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B ±0,8	H	Giriş – Inlet			Çıkış - Outlet		
	1	2	1	2					C	D	E	c	d	e
DKP20.115/060.A/CAB02SN-T	11,4	5,9	280	280	3000	48	138,8	183,6	20 *	40 *	M8 *	13,5	30,2	M6
DKP20.115/080.A/CAB02SN-T	11,4	8,0					140,6	186,7						
DKP20.115/115.A/CAB02SN-T	11,4	11,4					143,1	192,2						
DKP20.140/060.A/CAB02SN-T	13,9	5,9				50	142,8	187,5						
DKP20.140/080.A/CAB02SN-T	13,9	8,0					144,3	190,6						
DKP20.140/115.A/CAB02SN-T	13,9	11,4					147,0	196,1						
DKP20.140/140.A/CAB02SN-T	13,9	13,9					149,0	200,0						
DKP20.160/060.A/CAB02SN-T	16,0	16,0				51,5	145,9	190,6						
DKP20.160/080.A/CAB02SN-T	16,0	8,0					147,4	193,8						
DKP20.160/115.A/CAB02SN-T	16,0	11,4					150,1	199,2						
DKP20.160/140.A/CAB02SN-T	16,0	13,9					152,1	203,1						
DKP20.160/160.A/CAB02SN-T	16,0	16,0					153,7	206,3						
DKP20.190/060.A/CAB02SN-T	19,2	5,9				60,0	162,9	208,1						
DKP20.190/080.A/CAB02SN-T	19,2	8,0					164,5	211,2						
DKP20.190/115.A/CAB02SN-T	19,2	11,4					167,2	216,3						

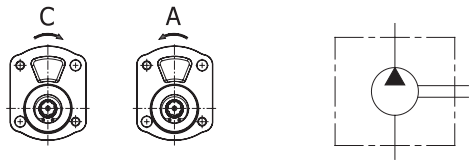
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)		Maks. Basınç Max. Pressure (bar)		Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B ±0,8	H	Giriş – Inlet			Çıkış - Outlet		
	1	2	1	2					C	D	E	c	d	e
DKP20.190/140.A/CAB02SN-T	19,2	13,9	250	280	3000	60,2	169,2	220,2	20 *	40 *	M8 *	13,5	30,2	M6
DKP20.190/160.A/CAB02SN-T	19,2	16,0		280			170,7	223,3						
DKP20.190/190.A/CAB02SN-T	19,2	19,2		280			179,2	240,3						
DKP20.220/060.A/CAB02SN-T	21,9	5,9	240	280	2500	62,3	166,9	211,9						
DKP20.220/080.A/CAB02SN-T	21,9	8,0					168,8	215,1						
DKP20.220/115.A/CAB02SN-T	21,9	11,4					171,5	220,6						
DKP20.220/140.A/CAB02SN-T	21,9	13,9					173,5	224,5						
DKP20.220/160.A/CAB02SN-T	21,9	16,0					175,0	227,6						
DKP20.220/190.A/CAB02SN-T	21,9	19,2					183,5	244,7						
DKP20.220/220.A/CAB02SN-T	21,9	21,9		240			185,7	249,1						
DKP20.250/060.A/CAB02SN-T	24,8	5,9	220	280		64,8	172,4	217,0						
DKP20.250/080.A/CAB02SN-T	24,8	8,0					173,9	220,2						
DKP20.250/115.A/CAB02SN-T	24,8	11,4					176,6	225,7						
DKP20.250/140.A/CAB02SN-T	24,8	13,9					178,6	229,6						
DKP20.250/160.A/CAB02SN-T	24,8	16,0					180,1	232,7						
DKP20.250/190.A/CAB02SN-T	24,8	19,2					188,6	249,7						
DKP20.250/220.A/CAB02SN-T	24,8	21,9		240			190,9	254,1						
DKP20.250/250.A/CAB02SN-T	24,8	24,8		220			195,6	259,2						
DKP20.280/060.A/CAB02SN-T	27,9	5,9	200	280	2200	67,0	176,7	221,4						
DKP20.280/080.A/CAB02SN-T	27,9	8,0					178,2	224,5						
DKP20.280/115.A/CAB02SN-T	27,9	11,4					180,9	230,0						
DKP20.280/140.A/CAB02SN-T	27,9	13,9					182,9	233,9						
DKP20.280/160.A/CAB02SN-T	27,9	16,0					184,4	237,1						
DKP20.280/190.A/CAB02SN-T	27,9	19,2					192,9	254,1						
DKP20.280/220.A/CAB02SN-T	27,9	21,9		240			195,2	258,4						
DKP20.280/250.A/CAB02SN-T	27,9	24,8		220			197,7	263,5						
DKP20.280/280.A/CAB02SN-T	27,9	27,9		200			199,9	267,8						

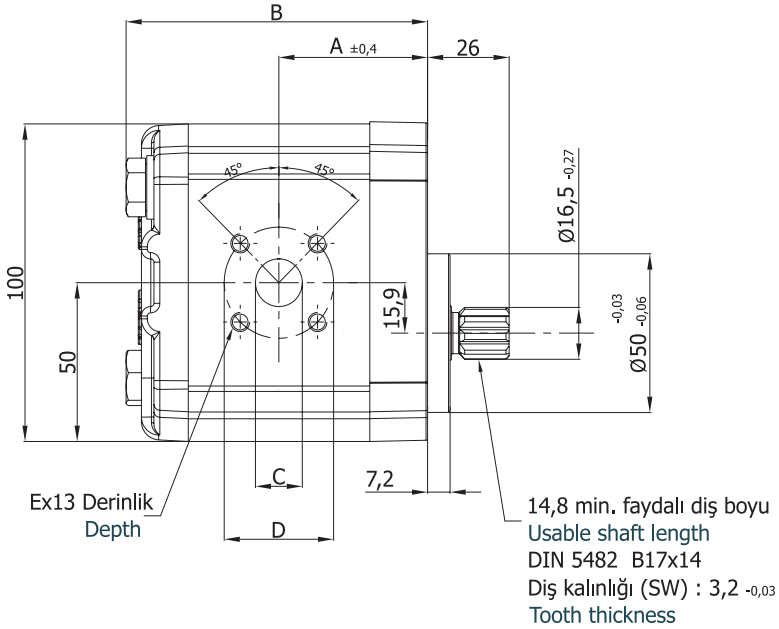


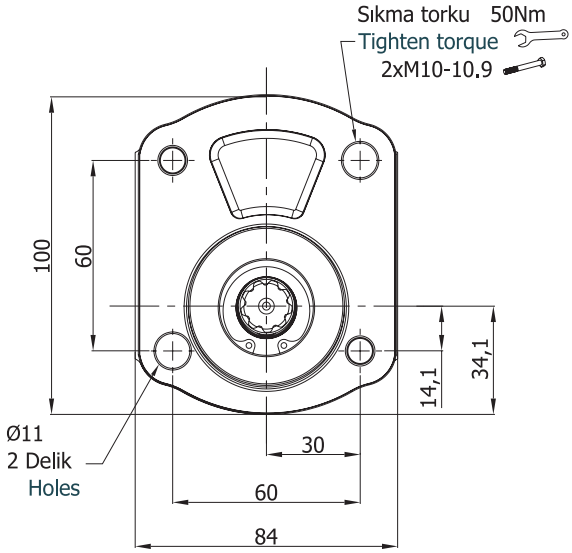
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DPH20.040.A/CAB02SN	3,9	320	3500	48,2	101,3	12	30,2	M6	12	30,2	M6
DPH20.060.A/CAB02SN	5,9			49,8	104,4	13,5			13,5		
DPH20.080.A/CAB02SN	8,0			51,4	107,6						
DPH20.095.A/CAB02SN	9,4			52,5	109,9	20	40	M8			
DPH20.115.A/CAB02SN	11,4		3000	54,2	113,0						
DPH20.140.A/CAB02SN	13,9	300		56,0	117,0						
DPH20.160.A/CAB02SN	16,0			57,7	120,1						
DPH20.190.A/CAB02SN	19,2	280		66,2	137,1						
DPH20.220.A/CAB02SN	21,9	250	2500	68,3	141,5						
DPH20.250.A/CAB02SN	24,8	230		70,8	146,4						
DPH20.280.A/CAB02SN	27,9	210	2200	73,0	150,9				20	40	M8

B Ön Kapak
Front Cover

G Şaft Tipi
Shaft Type



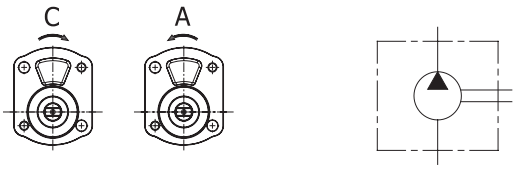


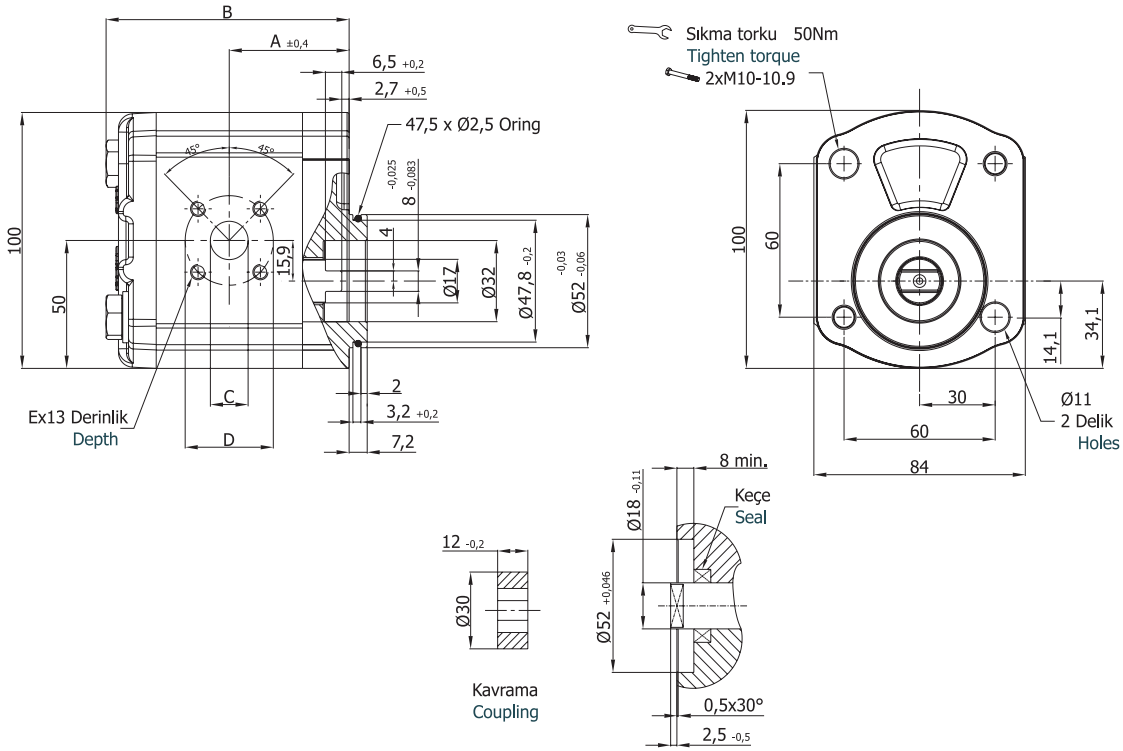


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DPH20.040.A/CBG01SN	3,9	320	3500	47,6	100,7	12	40	M6	12	35	M6
DPH20.060.A/CBG01SN	5,9			49,2	103,8	13,5			13,5		
DPH20.080.A/CBG01SN	8,0			50,8	107,0	20			15		
DPH20.095.A/CBG01SN	9,4			51,9	109,3						
DPH20.115.A/CBG01SN	11,4		3000	53,6	112,6						
DPH20.140.A/CBG01SN	13,9	300		55,4	116,4						
DPH20.160.A/CBG01SN	16,0			57,1	119,5						
DPH20.190.A/CBG01SN	19,2	280		65,6	136,5						
DPH20.220.A/CBG01SN	21,9	250	2500	67,7	140,9						
DPH20.250.A/CBG01SN	24,8	230		70,2	145,8						
DPH20.280.A/CBG01SN	27,9	210	2200	73,0	150,3				20	40	

C Ön Kapak
Front Cover

E Şaft Tipi
Shaft Type

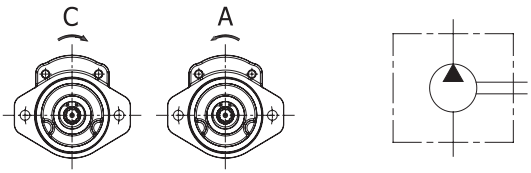


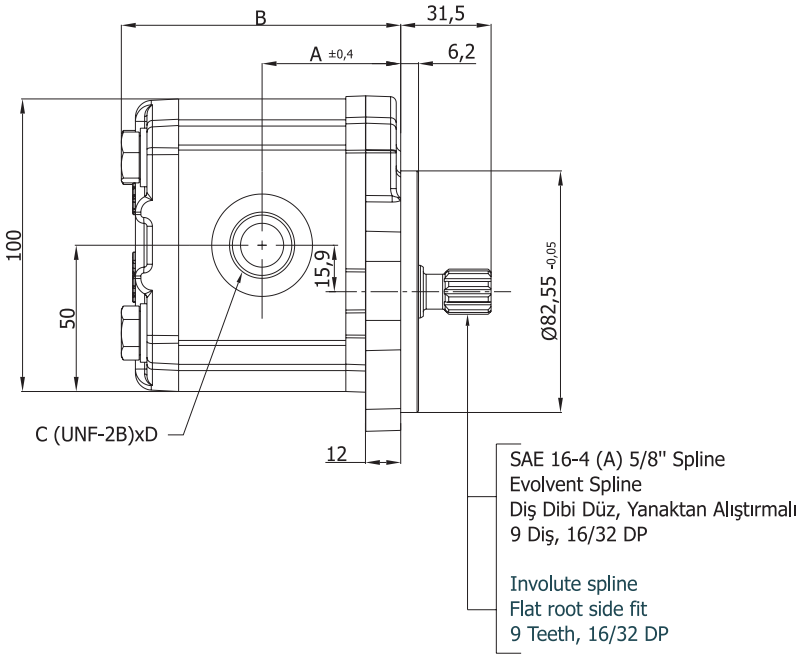


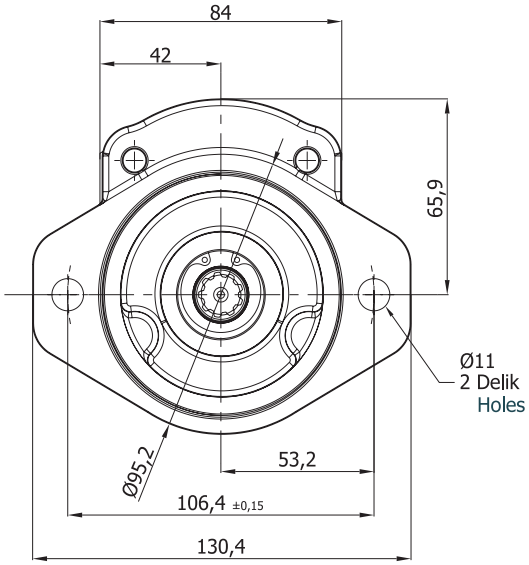
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DPH20.040.A/CCE01SN	3,9	320	3500	47,6	100,7	12	40	M6	12	35	M6
DPH20.060.A/CCE01SN	5,9			49,2	103,8	13,5			13,5		
DPH20.080.A/CCE01SN	8,0			50,8	107,0	20			15		
DPH20.095.A/CCE01SN	9,4			51,9	109,3						
DPH20.115.A/CCE01SN	11,4		3000	53,6	112,6						
DPH20.140.A/CCE01SN	13,9	300		55,4	116,4						
DPH20.160.A/CCE01SN	16,0			57,1	119,5						
DPH20.190.A/CCE01SN	19,2	280		65,6	136,5						
DPH20.220.A/CCE01SN	21,9	250	2500	67,7	140,9						
DPH20.250.A/CCE01SN	24,8	230		70,2	145,8						
DPH20.280.A/CCE01SN	27,9	210	2200	73,0	150,3				20	40	

D Ön Kapak
Front Cover

C Şaft Tipi
Shaft Type



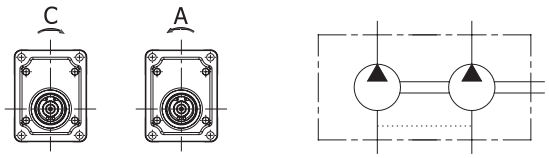


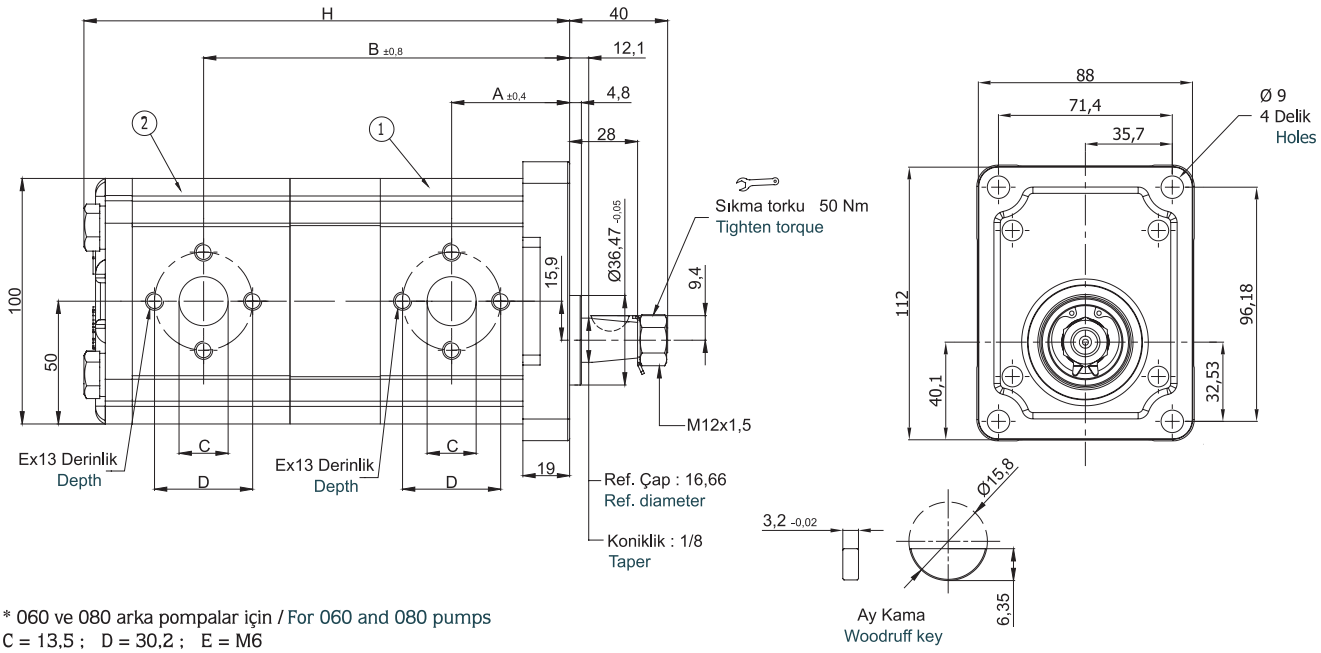


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet		Çıkış - Outlet	
						C	D	c	d
DPH20.040.A/CDC04SN	3,9	320	3500	48,2	101,3	9/16-18 UNF	13	9/16-18 UNF	13
DPH20.060.A/CDC04SN	5,9			49,8	104,4				
DPH20.080.A/CDC04SN	8,0			51,4	107,6	7/8-14 UNF	16	7/8-14 UNF	16
DPH20.095.A/CDC04SN	9,4			52,5	109,9	1 1/16-12 UNF	19		
DPH20.115.A/CDC04SN	11,4		3000	54,2	113,0				
DPH20.140.A/CDC04SN	13,9	300		56,0	117,0				
DPH20.160.A/CDC04SN	16,0			57,7	120,1				
DPH20.190.A/CDC04SN	19,2	280		66,2	137,1				
DPH20.220.A/CDC04SN	21,9	250	2500	68,3	141,5				
DPH20.250.A/CDC04SN	24,8	230		70,8	146,4				
DPH20.280.A/CDC04SN	27,9	210	2200	73,0	150,9				

A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type





* 060 ve 080 arka pompalar için / For 060 and 080 pumps
C = 13,5 ; D = 30,2 ; E = M6

Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)		Maks. Basınç Max. Pressure (bar)		Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B ±0,8	H	Giriş – Inlet			Çıkış - Outlet		
	1	2	1	2					C	D	E	c	d	e
DPH20.115/060.A/CAB02SN-T	11,4	5,9	320	320	3000	54	155,4	208,8	20 *	40 *	M8 *	13,5	30,2	M6
DPH20.115/080.A/CAB02SN-T	11,4	8,0					158,5	214,8						
DPH20.115/115.A/CAB02SN-T	11,4	11,4					161,2	220,3						
DPH20.140/060.A/CAB02SN-T	13,9	5,9	300			56	160,8	215,6						
DPH20.140/080.A/CAB02SN-T	13,9	8,0					162,4	218,7						
DPH20.140/115.A/CAB02SN-T	13,9	11,4					165,1	224,2						
DPH20.140/140.A/CAB02SN-T	13,9	13,9		300			167,2	228,1						
DPH20.160/060.A/CAB02SN-T	16,0	16,0		320		57,6	163,9	218,7						
DPH20.160/080.A/CAB02SN-T	16,0	8,0					165,5	221,9						
DPH20.160/115.A/CAB02SN-T	16,0	11,4					168,2	227,4						
DPH20.160/140.A/CAB02SN-T	16,0	13,9		300			170,2	231,3						
DPH20.160/160.A/CAB02SN-T	16,0	16,0					171,8	234,4						
DPH20.190/060.A/CAB02SN-T	19,2	5,9	280	320		66,1	180,9	235,7						
DPH20.190/080.A/CAB02SN-T	19,2	8,0					182,5	238,9						
DPH20.190/115.A/CAB02SN-T	19,2	11,4					185,2	244,4						

Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)		Maks. Basınç Max. Pressure (bar)		Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B ±0,8	H	Giriş – Inlet			Çıkış - Outlet		
	1	2	1	2					C	D	E	c	d	e
DPH20.190/140.A/CAB02SN-T	19,2	13,9	280	300	3000	66,1	187,2	248,3	20 *	40 *	M8 *	13,5	30,2	M6
DPH20.190/160.A/CAB02SN-T	19,2	16,0		300			188,8	251,4						
DPH20.190/190.A/CAB02SN-T	19,2	19,2		280			197,3	268,4						
DPH20.220/060.A/CAB02SN-T	21,9	5,9	250	320	2500	68,2	185,3	240,1						
DPH20.220/080.A/CAB02SN-T	21,9	8,0					186,9	243,2						
DPH20.220/115.A/CAB02SN-T	21,9	11,4					189,6	248,7						
DPH20.220/140.A/CAB02SN-T	21,9	13,9		300			191,6	252,6						
DPH20.220/160.A/CAB02SN-T	21,9	16,0					193,2	255,8						
DPH20.220/190.A/CAB02SN-T	21,9	19,2		280			201,7	272,8						
DPH20.220/220.A/CAB02SN-T	21,9	21,9		250			203,8	277,1						
DPH20.250/060.A/CAB02SN-T	24,8	5,9	230	320		70,8	190,3	245,1						
DPH20.250/080.A/CAB02SN-T	24,8	8,0					191,9	248,3						
DPH20.250/115.A/CAB02SN-T	24,8	11,4					194,6	253,8						
DPH20.250/140.A/CAB02SN-T	24,8	13,9		300			196,6	257,7						
DPH20.250/160.A/CAB02SN-T	24,8	16,0					198,2	260,8						
DPH20.250/190.A/CAB02SN-T	24,8	19,2		280			206,7	277,8						
DPH20.250/220.A/CAB02SN-T	24,8	21,9		250			208,8	282,2						
DPH20.250/250.A/CAB02SN-T	24,8	24,8		230			213,6	291,6						
DPH20.280/060.A/CAB02SN-T	27,9	5,9	210	320	2200	73,0	194,7	249,5						
DPH20.280/080.A/CAB02SN-T	27,9	8,0					196,3	252,6						
DPH20.280/115.A/CAB02SN-T	27,9	11,4					199,0	258,1						
DPH20.280/140.A/CAB02SN-T	27,9	13,9		300			201,0	262,0						
DPH20.280/160.A/CAB02SN-T	27,9	16,0					202,6	265,2						
DPH20.280/190.A/CAB02SN-T	27,9	19,2		280			211,1	282,2						
DPH20.280/220.A/CAB02SN-T	27,9	21,9		250			213,2	286,5						
DPH20.280/250.A/CAB02SN-T	27,9	24,8		230			215,8	291,6						
DPH20.280/280.A/CAB02SN-T	27,9	27,9		210			218,0	295,9						

GRUP 30 POMPALARIN KODLAMA SİSTEMİ
ORDERING CODE OF GROUP 30 PUMPS

AP30 . 340/340/340 . C A B 02 S O N

Pompa Tipi / Pump Type	
AP30	Aluminyum Gövdeli Düz Dişli Pompa Aluminium Body Gear Pump
APH30	Aluminyum Gövdeli Helisel Dişli Pompa Aluminium Body Helical Gear Pump
DKP30	Döküm Gövdeli Düz Dişli Pompa Cast Iron Body Gear Pump
DPH30	Döküm Gövdeli Helisel Dişli Pompa Cast Iron Body Helical Gear Pump

İletim Hacmi / Displacement cm^3/dev (cm^3/rev)
170 = 17 cm^3/dev (cm^3/rev)
220 = 22 cm^3/dev (cm^3/rev)
270 = 27 cm^3/dev (cm^3/rev)
320 = 32 cm^3 /dev (cm^3 /rev)
340 = 34 cm^3/dev (cm^3/rev)
380 = 38 cm^3/dev (cm^3/rev)
430 = 43 cm^3/dev (cm^3/rev)
470 = 47 cm^3/dev (cm^3/rev)
510 = 51 cm^3/dev (cm^3/rev)
560 = 56 cm^3/dev (cm^3/rev)
610 = 61 cm^3/dev (cm^3/rev)
730 = 73 cm^3/dev (cm^3/rev)
820 = 82 cm^3/dev (cm^3/rev)
900 = 90 cm^3/dev (cm^3/rev)
1000 = 100 cm^3 /dev (cm^3 /rev)

Ön Yatak Outboard Bearing	
O	Var / Available
	Yok / Absent

Keçe / Seal	
N	NBR
V	Viton

Arka Kapak / Rear Cover	
S	Standart Standard
R1	Emniyet Valfi (10 - 90 Bar) Relief Valve
R2	Emniyet Valfi (70 - 140 Bar) Relief Valve
R3	Emniyet Valfi (120 - 190 Bar) Relief Valve
D	Akış Bölücü Valf Flow Divider Valve
H	Emniyet Valfli Akış Kontrol Valfi Flow Control Valve With Relief Valve
L	Yük Duyarlı Valf Load Sensing Valve
T	Çek Valf Check Valve
P	Arkadan Giriş-Çıkış Rear Inlet-Outlet
C	Basınç Kompansatörlü Akış Kontrol Valfi Flow Control Valve Pressure Compensated

Dönüş Yönü / Rotation
A = Sol dönüş / Counter-clockwise
C = Sağ dönüş / Clockwise
R = Çift dönüş / Reversible

Ön Kapak / Front Cover			
A	Dikdörtgen kapak Square flange	Ø50,78 mm	
D	2 Civatalı SAEJ 744 101-2B 2 Bolts SAEJ 744 101-2B	Ø101,6 mm	
G	Dikdörtgen kapak Square flange	Ø105 mm	
H	2 Civatalı SAE ' A' 2 Bolts SAE ' A'	Ø82,55 mm	
K	2 Civatalı SAE ' B' 2 Bolts SAE ' B'	Ø101,6 mm	
L	Dikdörtgen kapak Square flange	Ø60,3 mm	
S	3 Civatalı UNI Tipi 3 Bolts UNI Type	Ø52 mm	
M	Dikdörtgen kapak Square flange	Ø60 mm	
N	SAE 4 Civatalı SAE 4 Bolts	Ø127 mm	

Tahrik şaftı / Drive Shaft			
A	Konik - Kamalı Tapered key shaft	1:5	G
B	Konik - Kamalı Tapered key shaft	1:8	A
C	SAE spline şaft 13 diş SAE spline shaft 13T		D
D	SAE spline şaft 15 diş SAE spline shaft 15T		D
H	Paralel şaft Parallel shaft		A D
K	Konik - Kamalı Tapered key shaft	1:8	L
M	SAE spline şaft J498B 13 diş SAE spline shaft J498B 13T		K
P	Paralel şaft Parallel shaft		H
U	DIN 5463 spline şaft 6 diş DIN 5463 spline shaft 6T		S

Giriş - Çıkış Delikleri / Inlet and Outlet Ports		
01		Kare tip Rectangular
02		Baklava tip Diamond
03		SAE Dikdörtgen Flanş Metrik diş SAE Square Flange Thread Metric
04		UN-2B diş UN-2B thread
05		Boru diş Pipe thread
06		SAE Dikdörtgen Flanş UNC diş SAE Square Flange Thread UNC

- Kodlama Örneği (Tekli) ; AP30.340.CAB02SN
  Code Example (Single)

- Kodlama Örneği (Tandem) ; AP30.340/340/340.CAB02SN
  Code Example (Tandem)

Grup 30 pompalar 17 cc³/dev.'den 100 cc³/rev.'e kadar ki iletim hacmine sahip pompalardır.
Kendi içinde AP30 , APH30 , DKP30 , DPH30 olarak 4 gruba ayrılır. aşağıdaki tablo da bu 4 grubun birbirinden farklı olan teknik özellikleri belirtilmiştir;
-AP30 (Aluminyum Gövdeli Düz Dişli Pompalar)
-APH30(Aluminyum Gövdeli Helisel Dişli Pompalar)
-DKP30 (Döküm Gövdeli Düz Dişli Pompalar)
-DPH30 (Döküm Gövdeli Helisel Dişli Pompalar)

Group 30 pumps has a working capacity from 17 cc³/rev to 100 cc³/rev.
It has 4 sub-groups in itself as AP30, APH30, DKP30 and DPH30.The differences between the 4 sub-groups technical specifications can be found on the below table.
-AP30 (Aluminium Body Gear Pumps)
-APH30 (Aluminium Body Helical Gear Pumps)
-DKP30 (Cast Iron Body Gear Pumps)
-DPH30 (Cast Iron Body Helical Gear Pumps)

AP30 TEKNİK ÖZELLİKLER / AP30 TECHNICAL DATA

Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
AP30.170	17,0	250	270	290	3000	400
AP30.220	22,0	250	270	290	3000	400
AP30.270	27,0	250	270	290	3000	400
AP30.320	32,0	240	260	280	3000	400
AP30.340	34,0	240	260	280	3000	400
AP30.380	38,0	240	260	280	3000	400
AP30.430	43,0	230	250	270	3000	400
AP30.470	47,0	230	250	270	2500	400
AP30.510	51,0	210	230	250	2500	400
AP30.560	56,0	200	220	240	2500	400
AP30.610	61,0	180	200	220	2500	400
AP30.730	73,0	170	190	210	2500	400
AP30.820	82,0	160	180	200	2500	400
AP30.900	90,0	150	170	190	2000	400
AP30.1000	100,0	140	160	180	2000	400

P1: Sürekli çalışma basıncı
Continuous pressure

P2 : Aralıklı çalışma basıncı
Intermittent pressure

P3 : Ani basınç
Peak pressure

APH30 TEKNİK ÖZELLİKLER / APH30 TECHNICAL DATA

Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
APH30.170	17,0	250	270	290	3000	400
APH30.220	22,0	250	270	290	3000	400
APH30.270	27,0	250	270	290	3000	400
APH30.320	32,0	240	260	280	3000	400
APH30.340	34,0	240	260	280	3000	400
APH30.380	38,0	240	260	280	3000	400
APH30.430	43,0	230	250	270	3000	400
APH30.470	47,0	230	250	270	2500	400
APH30.510	51,0	210	230	250	2500	400
APH30.560	56,0	200	220	240	2500	400
APH30.610	61,0	180	200	220	2500	400
APH30.730	73,0	170	190	210	2500	400
APH30.820	82,0	160	180	200	2000	400
APH30.900	90,0	150	170	190	2000	400
APH30.1000	100,0	140	160	180	2000	400

P1: Sürekli çalışma basıncı
Continuous pressure

P2 : Aralıklı çalışma basıncı
Intermittent pressure

P3 : Ani basınç
Peak pressure

DKP30 TEKNİK ÖZELLİKLER / DKP30 TECHNICAL DATA

Pompa Tipi Pump Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
DKP30.170	17,0	280	300	320	3000	400
DKP30.220	22,0	280	300	320	3000	400
DKP30.270	27,0	280	300	320	3000	400
DKP30.320	32,0	260	280	300	3000	400
DKP30.340	34,0	260	280	300	3000	400
DKP30.380	38,0	260	280	300	3000	400
DKP30.430	43,0	260	280	300	3000	400
DKP30.470	47,0	250	270	290	2500	400
DKP30.510	51,0	240	260	280	2500	400
DKP30.560	56,0	230	250	270	2500	400
DKP30.610	61,0	220	240	260	2500	400
DKP30.730	73,0	200	220	240	2500	400
DKP30.820	82,0	190	210	230	2000	400
DKP30.900	90,0	180	200	220	2000	400
DKP30.1000	100,0	180	200	220	2000	400

P1: Sürekli çalışma basıncı
Continuous pressure

P2 : Aralıklı çalışma basıncı
Intermittent pressure

P3 : Ani basınç
Peak pressure

DPH30 TEKNİK ÖZELLİKLER / DPH30 TECHNICAL DATA

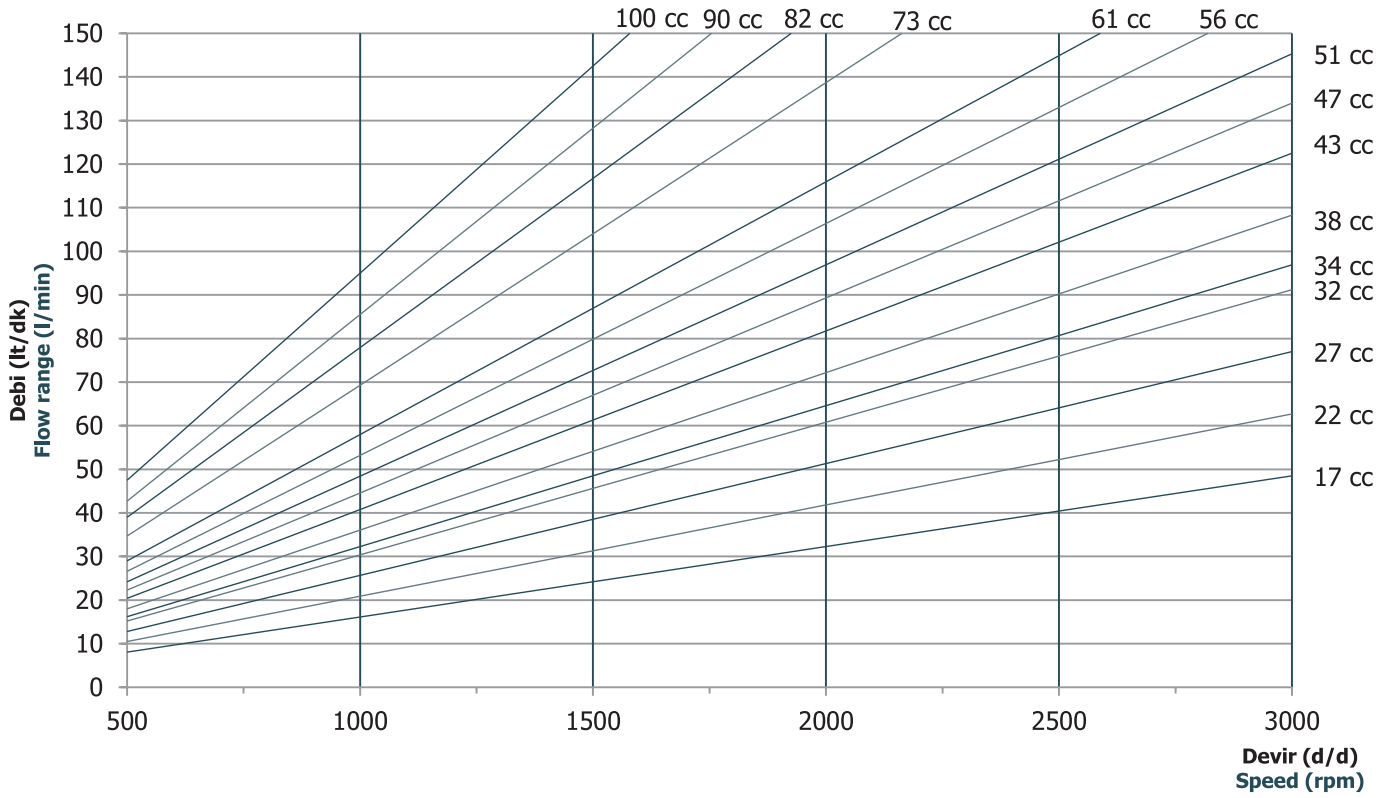
Pompa Tipi Pump Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
DPH30.170	17,0	300	320	340	3000	400
DPH30.220	22,0	300	320	340	3000	400
DPH30.270	27,0	300	320	340	3000	400
DPH30.320	32,0	280	300	320	3000	400
DPH30.340	34,0	280	300	320	3000	400
DPH30.380	38,0	280	300	320	3000	400
DPH30.430	43,0	280	300	320	3000	400
DPH30.470	47,0	260	280	290	2500	400
DPH30.510	51,0	260	280	300	2500	400
DPH30.560	56,0	250	270	290	2500	400
DPH30.610	61,0	240	260	280	2500	400
DPH30.730	73,0	220	240	260	2500	400
DPH30.820	82,0	210	230	250	2000	400
DPH30.900	90,0	200	220	240	2000	400
DPH30.1000	100,0	200	220	240	2000	400

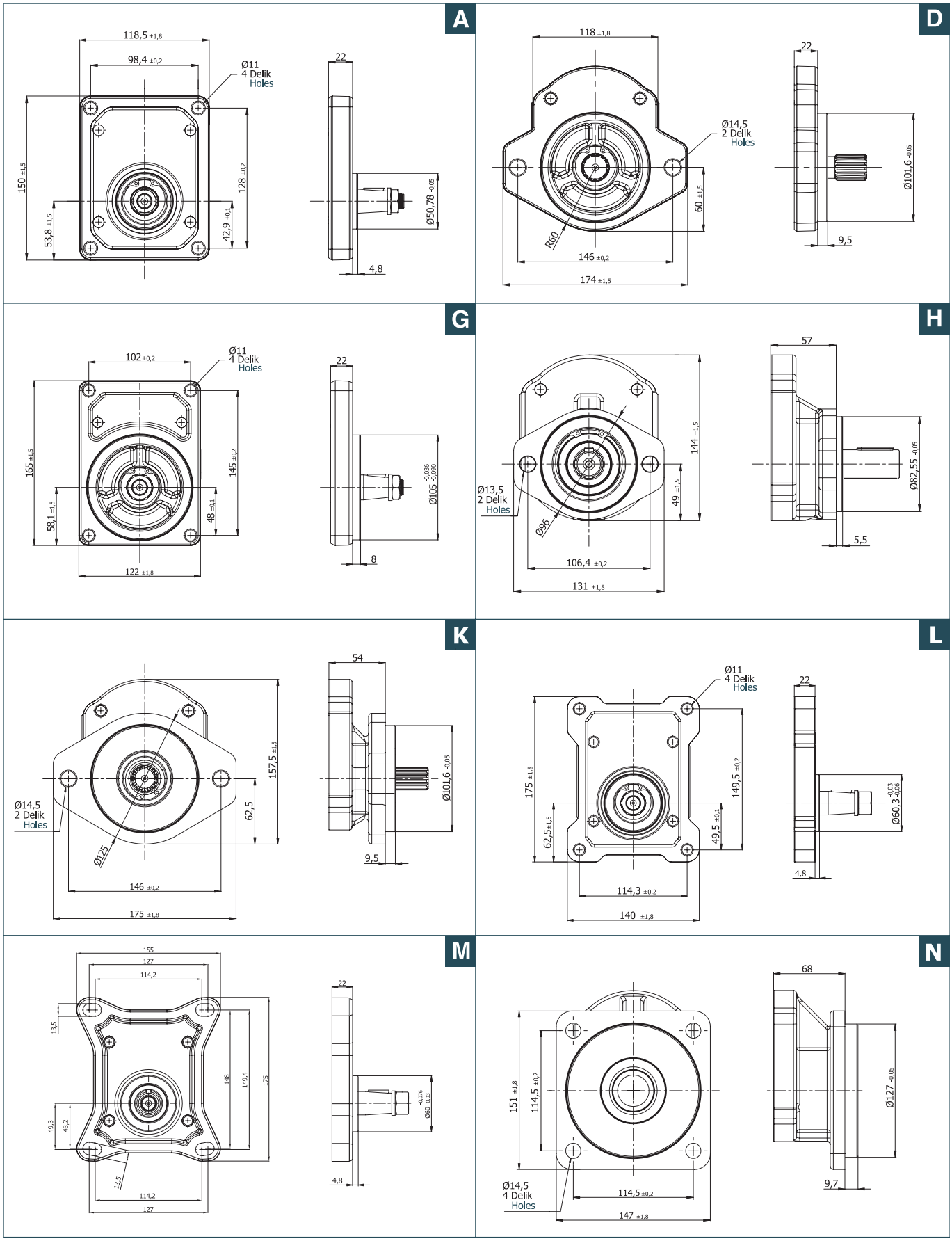
P1: Sürekli çalışma basıncı
Continuous pressure

P2 : Aralıklı çalışma basıncı
Intermittent pressure

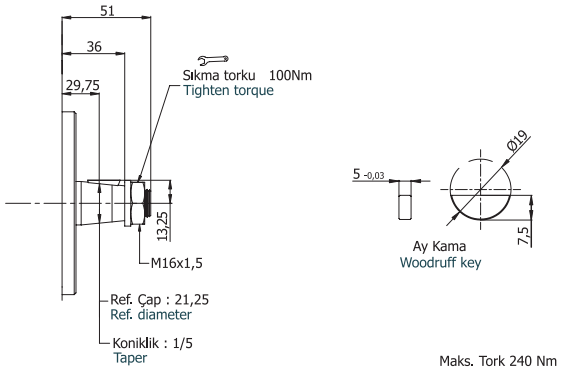
P3 : Ani basınç
Peak pressure

GRUP 30 POMPALARIN DEBİ EĞRİLERİ / FLOW CURVES OF GROUP 30 PUMPS



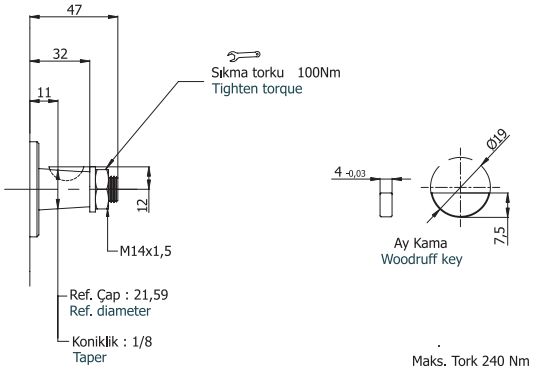

A
118,5 ±1,8
98,4 ±0,2
Ø11
4 Delik
Holes
150 ±1,5
53,8 ±1,5
128 ±0,2
42,9 ±0,1
22
Ø50,78 -0,05
4,8
D
118 ±1,8
Ø14,5
2 Delik
Holes
R60
60 ±1,5
146 ±0,2
174 ±1,5
22
Ø101,6 -0,05
9,5
G
102 ±0,2
Ø11
4 Delik
Holes
165 ±1,5
58,1 ±1,5
145 ±0,2
48 ±0,1
122 ±1,8
22
Ø105 -0,036 -0,090
8
H
57
144 ±1,5
Ø13,5
2 Delik
Holes
Ø96
49 ±1,5
106,4 ±0,2
131 ±1,8
Ø82,55 -0,05
5,5
K
54
157,5 ±1,5
Ø14,5
2 Delik
Holes
62,5
Ø125
146 ±0,2
175 ±1,8
Ø101,6 -0,05
9,5
L
Ø11
4 Delik
Holes
175 ±1,8
62,5 ±1,5
149,5 ±0,2
49,5 ±0,1
114,3 ±0,2
140 ±1,8
22
Ø60,3 -0,03 -0,06
4,8
M
155
127
114,2
13,5
148
149,4
175
49,3
48,2
13,5
114,2
127
22
Ø60 -0,076 -0,03
4,8
N
68
151 ±1,8
114,5 ±0,2
Ø14,5
4 Delik
Holes
114,5 ±0,2
147 ±1,8
Ø127 -0,05
9,7

A



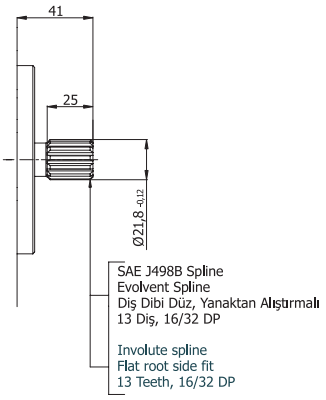
Maks. Tork 240 Nm
Max. Torque

B



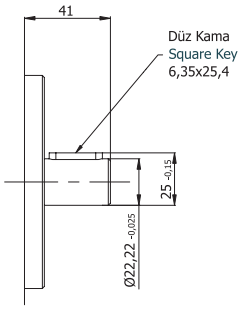
Maks. Tork 240 Nm
Max. Torque

C



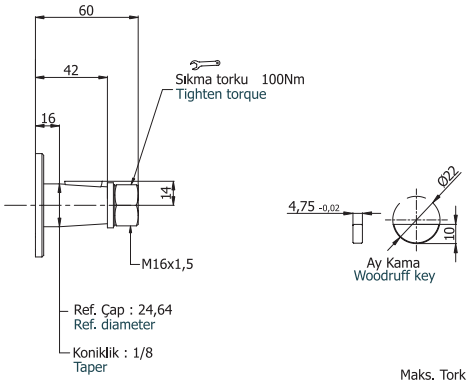
Maks. Tork 280 Nm
Max. Torque

H



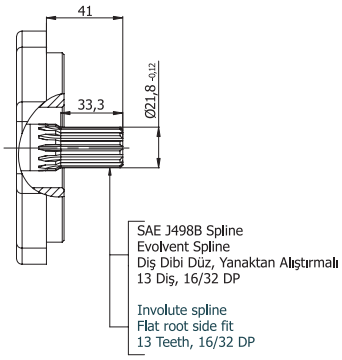
Maks. Tork 200 Nm
Max. Torque

K



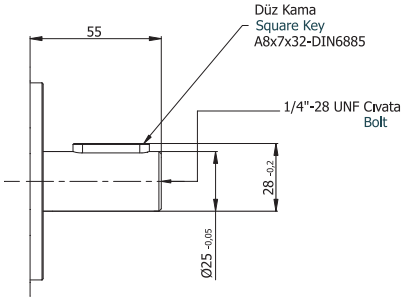
Maks. Tork 350 Nm
Max. Torque

M



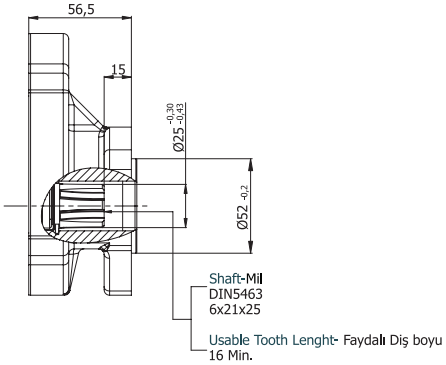
Maks. Tork 330 Nm
Max. Torque

P

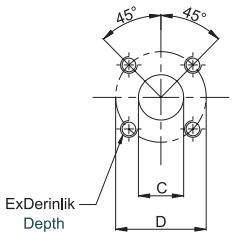


Maks. Tork 340 Nm
Max. Torque

U

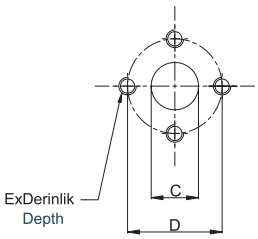


Maks. Tork 280 Nm
Max. Torque



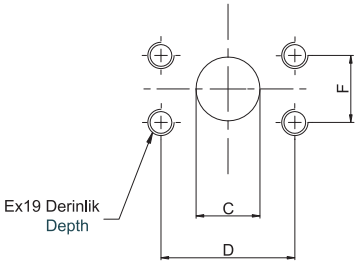
01 Kare Tipi Flanş / Rectangular Flange

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side			Basınç Tarafı Pressure Side		
		C	D	E	c	d	e
01	17 - 100	27	55	M8x16	19	55	M8x16



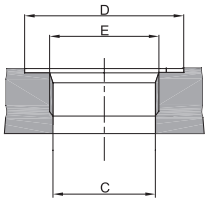
02 Baklava Tipi Flanş / Diamond Flange

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side			Basınç Tarafı Pressure Side		
		C	D	E	c	d	e
02	17 - 61	27	51	M10x19	19	40	M8x16
	73 - 100	33	62	M12x19	27	51	M10x19



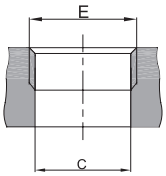
03 SAE Dikdörtgen Flanş Metrik Diş / SAE Square Flange Metric Thread

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side				Basınç Tarafı Pressure Side			
		C	D	E	F	c	d	e	f
03	17 - 22	19	47,6	M8	22,2	12,5	38,1	M8	17,5
	27 - 34	25,4	52,4	M10	26,2	19	47,6	M8	22,2
	38 - 51	30,5	58,7		30,2	25,4	52,4	M10	26,2
	56 - 82	39,3	69,8	M12	35,7	30,5	58,7	M10	30,2
	90 - 100	51	77,8		42,9	39,3	69,8	M12	35,7



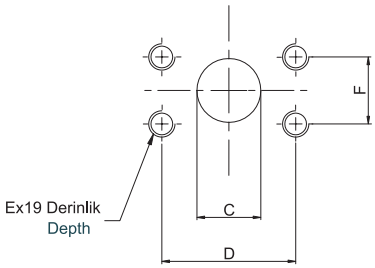
04 Diş / Thread (UN-2B) SAE Oring Boss

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side			Basınç Tarafı Pressure Side		
		C	D	E	c	d	e
04	17 - 34	30,5	49	1 5/16"-12 UN-2B	24,8	42	1 1/16"-12 UN-2B
	38 - 51	39,1	58	1 5/8"-12 UN-2B	30,5	49	1 5/16"-12 UN-2B
	56 - 100	45	65	1 7/8"-12 UN-2B	39,1	58	1 5/8"-12 UN-2B



05 Boru diş / Pipe Thread ISO228/1

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side		Basınç Tarafı Pressure Side	
		C	E	c	e
05	17 - 51	30,5	G 1	30,5	G 1
	56 - 73	39	G 1 1/4		
	82 - 100	45	G 1 1/2	39	G 1 1/4

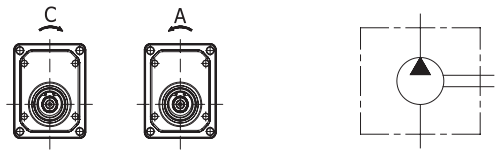


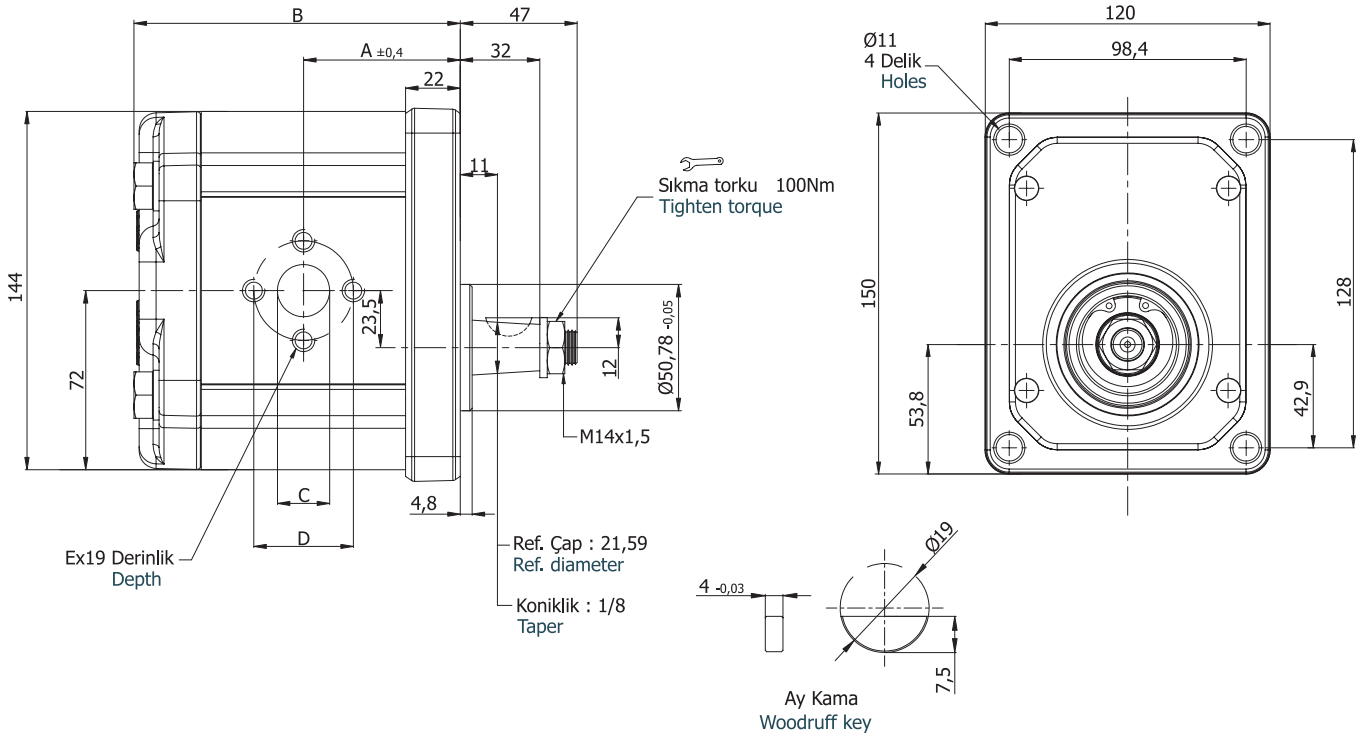
06 SAE Dikdörtgen Flanş UNC Diş / SAE Square Flange UNC Thread

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side				Basınç Tarafı Pressure Side			
		C	D	E	F	c	d	e	f
06	17 - 22	19	47,6	3/8-16 UNC-2B	22,2	12,5	38,1	5/16-18 UNC-2B	17,5
	27 - 34	25,4	52,4		26,2	19	47,6	3/8-16 UNC-2B	22,2
	38 - 51	30,5	58,7	7/16-14 UNC-2B	30,2	25,4	52,4		26,2
	56 - 82	39,3	69,8	1/2-13 UNC-2B	35,7	30,5	58,7	7/16-14 UNC-2B	30,2
	90 - 100	51	77,8		42,9	39,3	69,8	1/2-13 UNC-2B	35,7

A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type

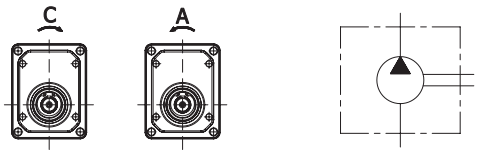


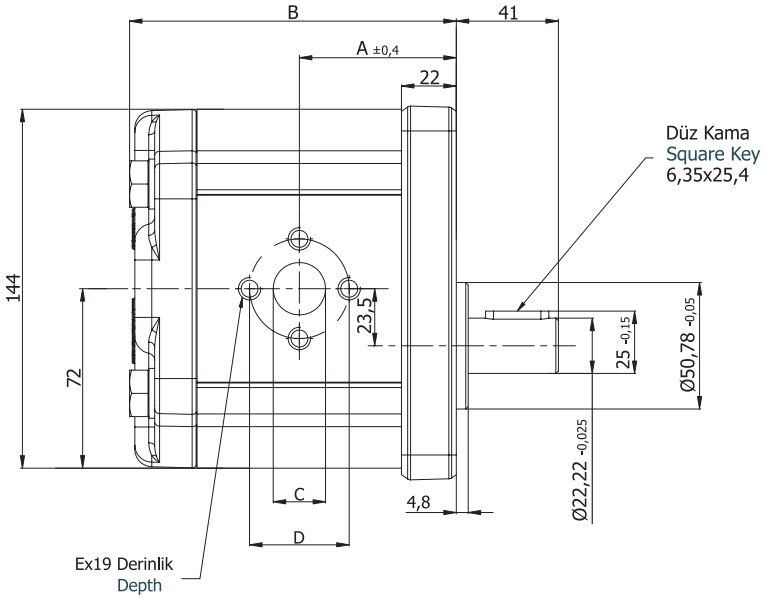


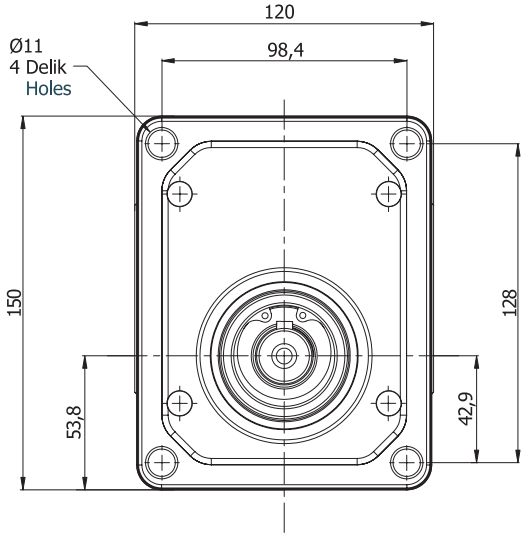
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP30.170.A/CAB02SN	17,0	250	3000	59,5	124,1	27	51	M10x19	19	40	M8x16
AP30.220.A/CAB02SN	22,0			61,5	128,1						
AP30.270.A/CAB02SN	27,0			63,0	131,1						
AP30.320.A/CAB02SN	32,0	240		64,5	134,1						
AP30.340.A/CAB02SN	34,0			65,0	135,1						
AP30.380.A/CAB02SN	38,0			66,5	138,1						
AP30.430.A/CAB02SN	43,0	230		68,0	141,1						
AP30.470.A/CAB02SN	47,0		2500	69,5	144,1						
AP30.510.A/CAB02SN	51,0	210		70,5	146,1						
AP30.560.A/CAB02SN	56,0	200		71,5	148,1						
AP30.610.A/CAB02SN	61,0	180		74,0	153,1						
AP30.730.A/CAB02SN	73,0	170		77,0	160,1	33	62	M12x19	27	51	M10x19
AP30.820.A/CAB02SN	82,0	160	2000	80,0	166,1						
AP30.900.A/CAB02SN	90,0	150		83,0	172,1						
AP30.1000.A/CAB02SN	100,0	140		86,0	178,1						

A Ön Kapak
Front Cover

H Şaft Tipi
Shaft Type



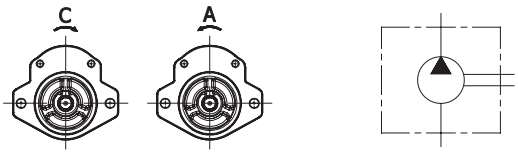


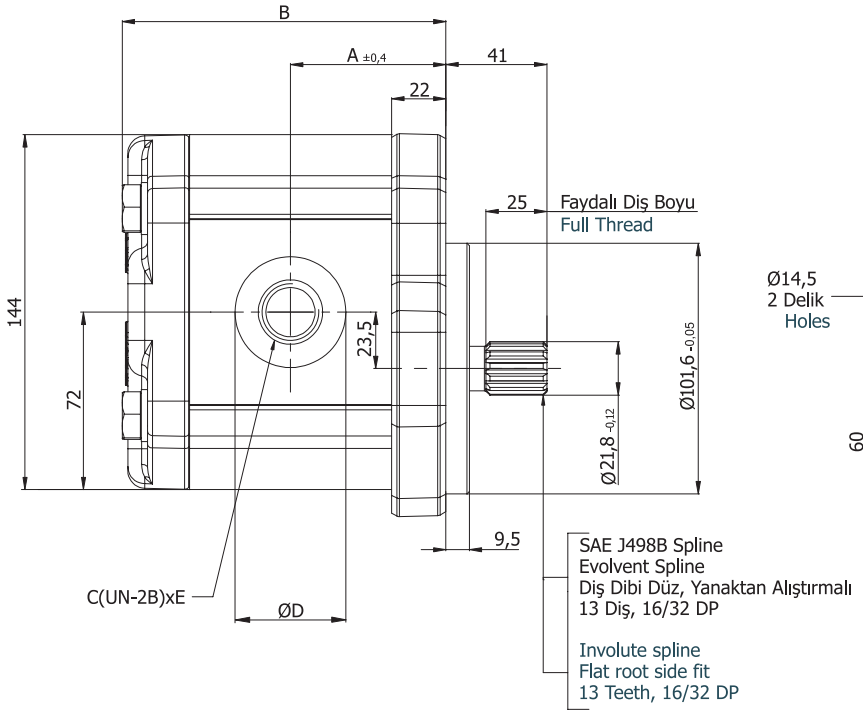


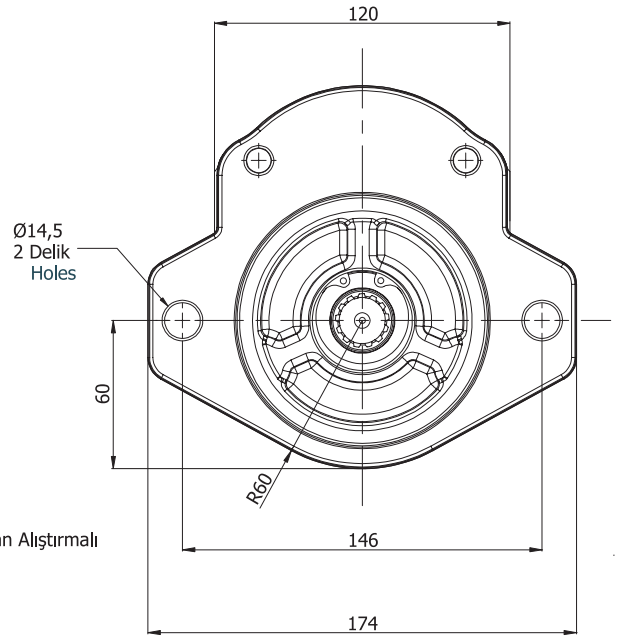
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP30.170.A/CAH02SN	17,0	250	3000	59,5	124,1	27	51	M10x19	19	40	M8x16
AP30.220.A/CAH02SN	22,0			61,5	128,1						
AP30.270.A/CAH02SN	27,0			63,0	131,1						
AP30.320.A/CAH02SN	32,0	240		64,5	134,1						
AP30.340.A/CAH02SN	34,0			65,0	135,1						
AP30.380.A/CAH02SN	38,0			66,5	138,1						
AP30.430.A/CAH02SN	43,0	230		68,0	141,1						
AP30.470.A/CAH02SN	47,0		2500	69,5	144,1						
AP30.510.A/CAH02SN	51,0	210		70,5	146,1						
AP30.560.A/CAH02SN	56,0	200		71,5	148,1						
AP30.610.A/CAH02SN	61,0	180		74,0	153,1						
AP30.730.A/CAH02SN	73,0	170		77,0	160,1	33	62	M12x19	27	51	M10x19
AP30.820.A/CAH02SN	82,0	160	2000	80,0	166,1						
AP30.900.A/CAH02SN	90,0	150		83,0	172,1						
AP30.1000.A/CAH02SN	100,0	140		86,0	178,1						

D Ön Kapak
Front Cover

C Şaft Tipi
Shaft Type



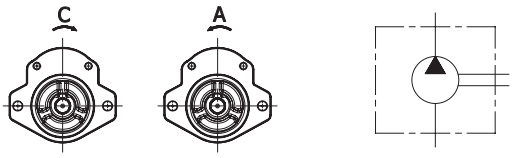


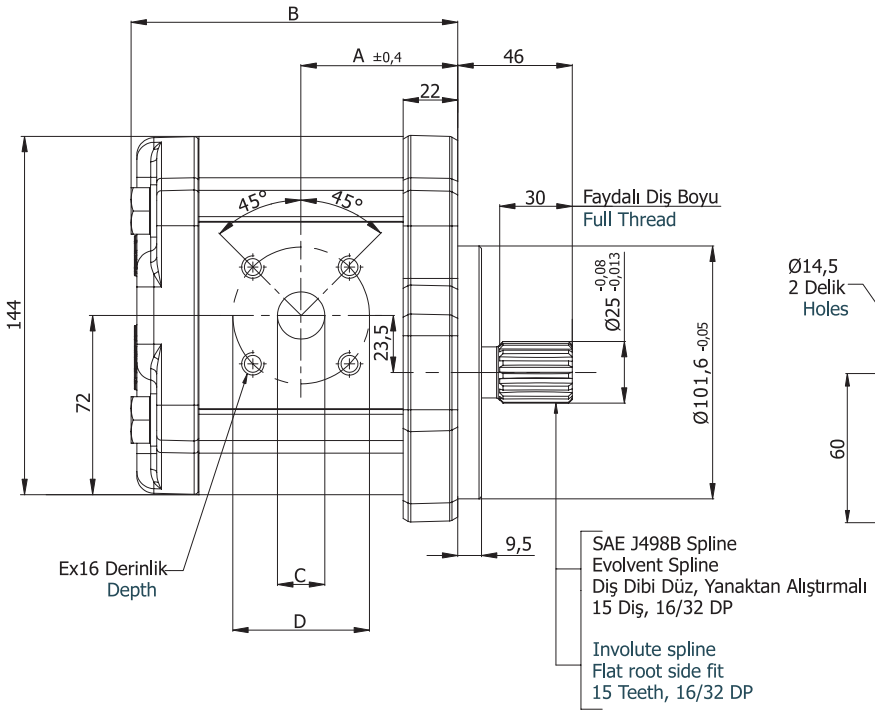


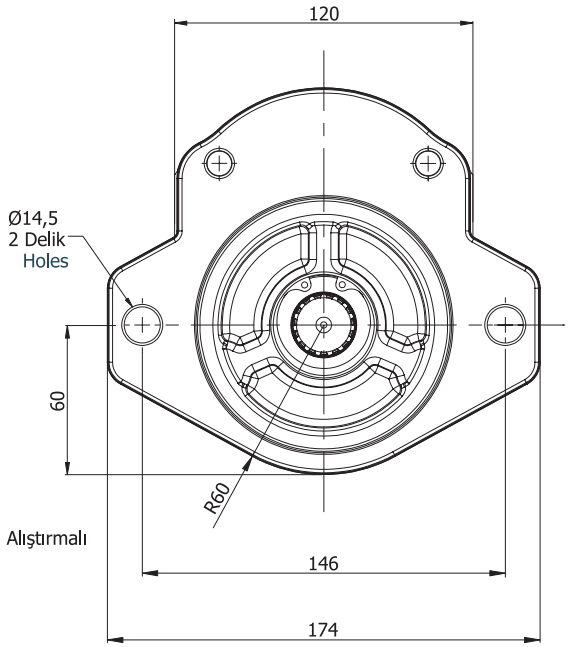
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP30.170.A/CDC04SN	17,0	250	3000	59,5	124,1	30,5	49	1 5/16"-12 UNF-2B	24,8	42	1 1/16"-12 UNF-2B
AP30.220.A/CDC04SN	22,0			61,5	128,1						
AP30.270.A/CDC04SN	27,0			63,0	131,1						
AP30.320.A/CDC04SN	32,0	240		64,5	134,1						
AP30.340.A/CDC04SN	34,0			65,0	135,1						
AP30.380.A/CDC04SN	38,0			66,5	138,1	39,1	58	1 5/8"-12 UNF-2B	30,5	49	1 5/16"-12 UNF-2B
AP30.430.A/CDC04SN	43,0	230		68,0	141,1						
AP30.470.A/CDC04SN	47,0		2500	69,5	144,1						
AP30.510.A/CDC04SN	51,0	210		70,5	146,1						
AP30.560.A/CDC04SN	56,0	200		71,5	148,1	45	65	1 7/8"-12 UNF-2B	39,1	58	1 5/8"-12 UNF-2B
AP30.610.A/CDC04SN	61,0	180		74,0	153,1						
AP30.730.A/CDC04SN	73,0	170		77,0	160,1						
AP30.820.A/CDC04SN	82,0	160	2000	80,0	166,1						
AP30.900.A/CDC04SN	90,0	150		83,0	172,1						
AP30.1000.A/CDC04SN	100,0	140		86,0	178,1						

D Ön Kapak Front Cover

D Şaft Tipi Shaft Type



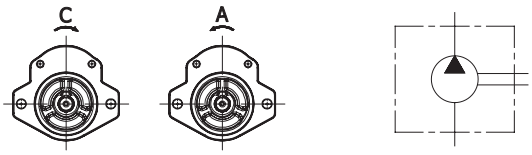


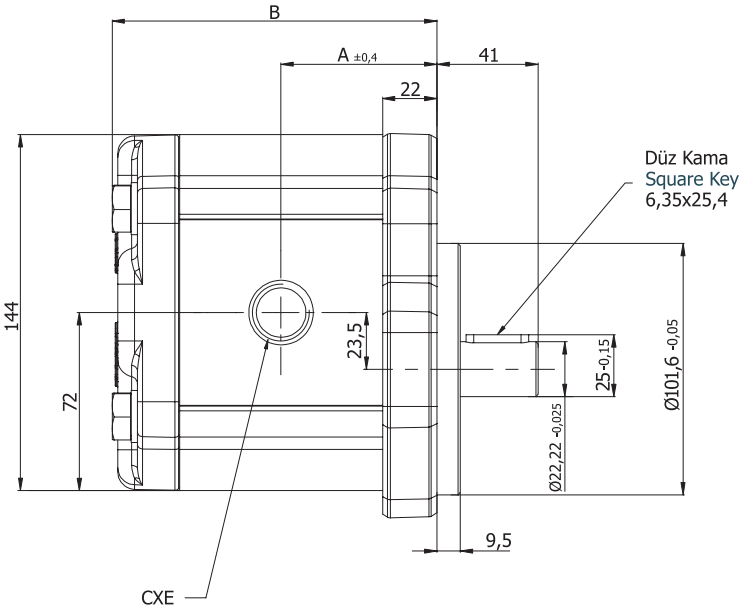


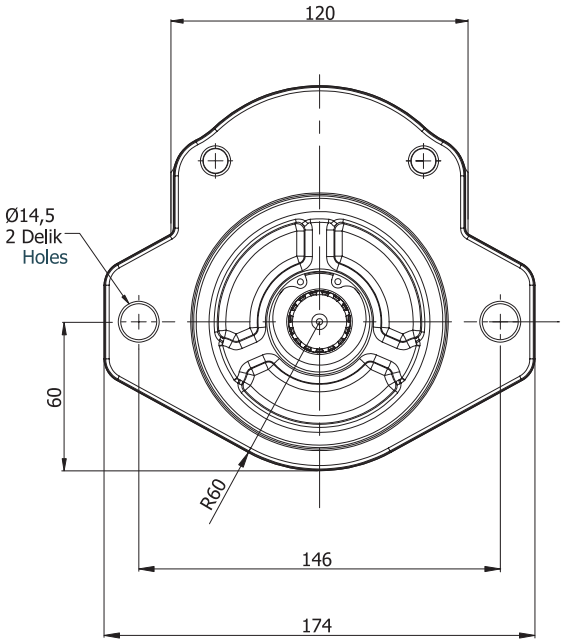
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP30.170.A/CDD01SN	17,0	250	3000	59,5	124,1	27	55	M8x16	19	55	M8x16
AP30.220.A/CDD01SN	22,0			61,5	128,1						
AP30.270.A/CDD01SN	27,0			63,0	131,1						
AP30.320.A/CDD01SN	32,0	240		64,5	134,1						
AP30.340.A/CDD01SN	34,0			65,0	135,1						
AP30.380.A/CDD01SN	38,0			66,5	138,1						
AP30.430.A/CDD01SN	43,0	230		68,0	141,1						
AP30.470.A/CDD01SN	47,0		2500	69,5	144,1						
AP30.510.A/CDD01SN	51,0	210		70,5	146,1						
AP30.560.A/CDD01SN	56,0	200		71,5	148,1						
AP30.610.A/CDD01SN	61,0	180		74,0	153,1						
AP30.730.A/CDD01SN	73,0	170		77,0	160,1						
AP30.820.A/CDD01SN	82,0	160	2000	80,0	166,1						
AP30.900.A/CDD01SN	90,0	150		83,0	172,1						
AP30.1000.A/CDD01SN	100,0	140		86,0	178,1						

D Ön Kapak
Front Cover

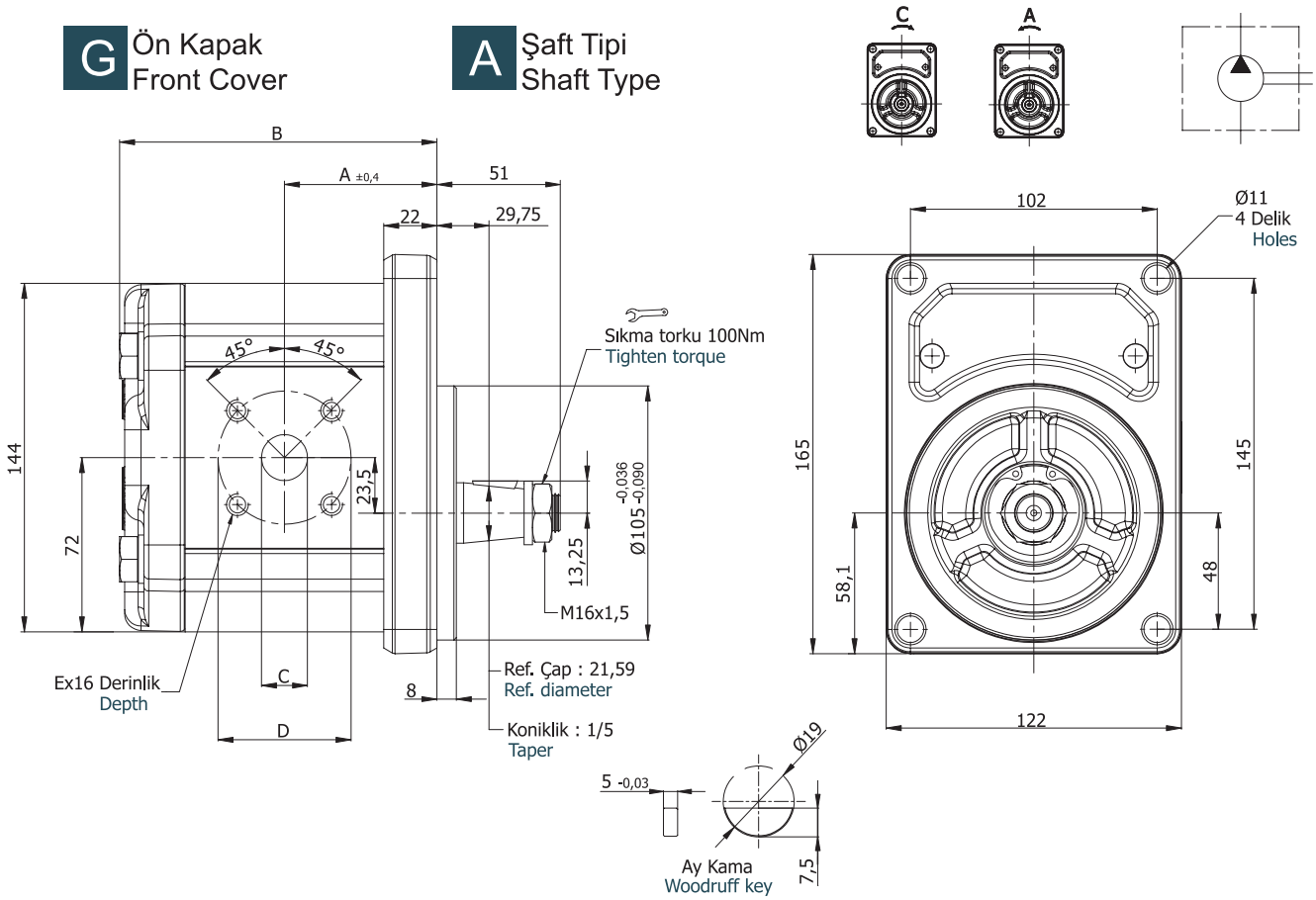
H Şaft Tipi
Shaft Type







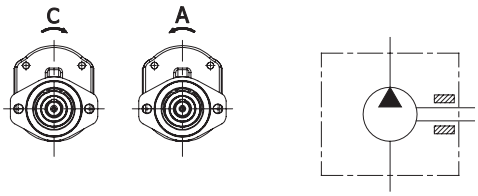
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet		Çıkış - Outlet	
						C	E	c	e
AP30.170.A/CDH05SN	17,0	250	3000	59,5	124,1	30,5	G1"	30,5	G 1"
AP30.220.A/CDH05SN	22,0			61,5	128,1				
AP30.270.A/CDH05SN	27,0			63,0	131,1				
AP30.320.A/CDH05SN	32,0	240		64,5	134,1				
AP30.340.A/CDH05SN	34,0			65,0	135,1				
AP30.380.A/CDH05SN	38,0			66,5	138,1				
AP30.430.A/CDH05SN	43,0	230		68,0	141,1				
AP30.470.A/CDH05SN	47,0		2500	69,5	144,1				
AP30.510.A/CDH05SN	51,0	210		70,5	146,1				
AP30.560.A/CDH05SN	56,0	200		71,5	148,1	39	G 1 1/4"		
AP30.610.A/CDH05SN	61,0	180		74,0	153,1				
AP30.730.A/CDH05SN	73,0	170		77,0	160,1				
AP30.820.A/CDH05SN	82,0	160	2000	80,0	166,1	45	G 1 1/2"	39	G 1 1/4"
AP30.900.A/CDH05SN	90,0	150		83,0	172,1				
AP30.1000.A/CDH05SN	100,0	140		86,0	178,1				

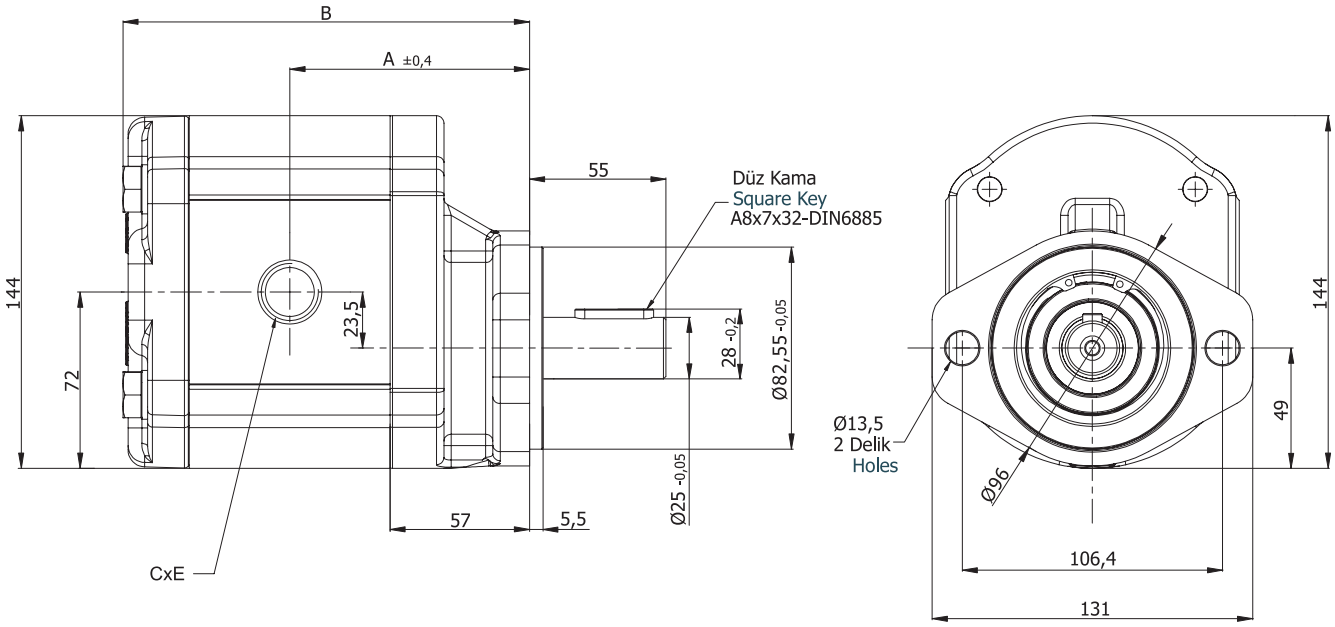


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP30.170.A/CGA01SN	17,0	250	3000	59,5	124,1	27	55	M8x16	19	55	M8x16
AP30.220.A/CGA01SN	22,0			61,5	128,1						
AP30.270.A/CGA01SN	27,0			63,0	131,1						
AP30.320.A/CGA01SN	32,0	240		64,5	134,1						
AP30.340.A/CGA01SN	34,0			65,0	135,1						
AP30.380.A/CGA01SN	38,0			66,5	138,1						
AP30.430.A/CGA01SN	43,0	230		68,0	141,1						
AP30.470.A/CGA01SN	47,0		2500	69,5	144,1						
AP30.510.A/CGA01SN	51,0	210		70,5	146,1						
AP30.560.A/CGA01SN	56,0	200		71,5	148,1						
AP30.610.A/CGA01SN	61,0	180		74,0	153,1						
AP30.730.A/CGA01SN	73,0	170		77,0	160,1						
AP30.820.A/CGA01SN	82,0	160	2000	80,0	166,1						
AP30.900.A/CGA01SN	90,0	150		83,0	172,1						
AP30.1000.A/CGA01SN	100,0	140		86,0	178,1						

H Ön Kapak
Front Cover

P Şaft Tipi
Shaft Type

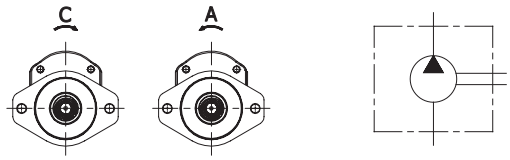


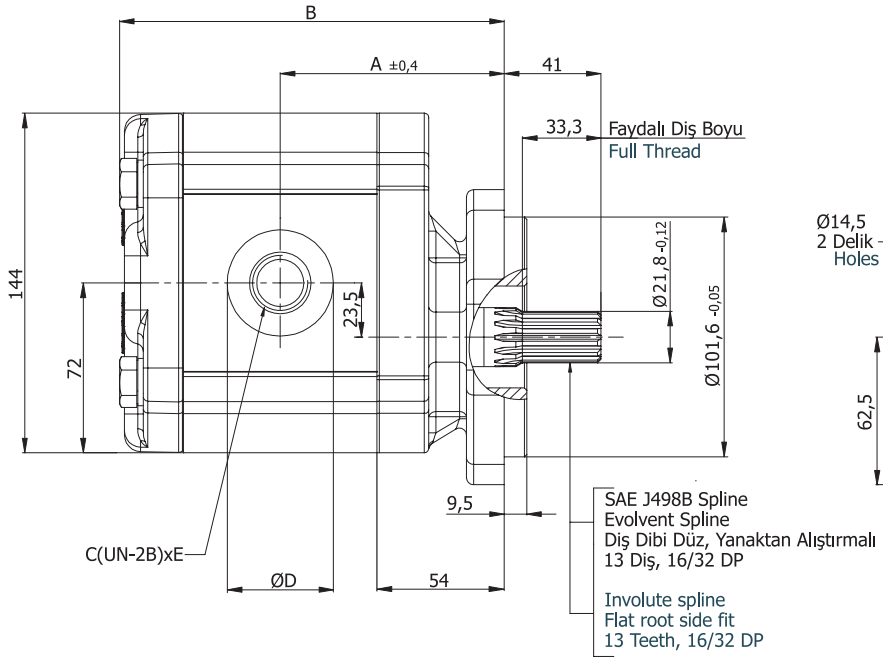


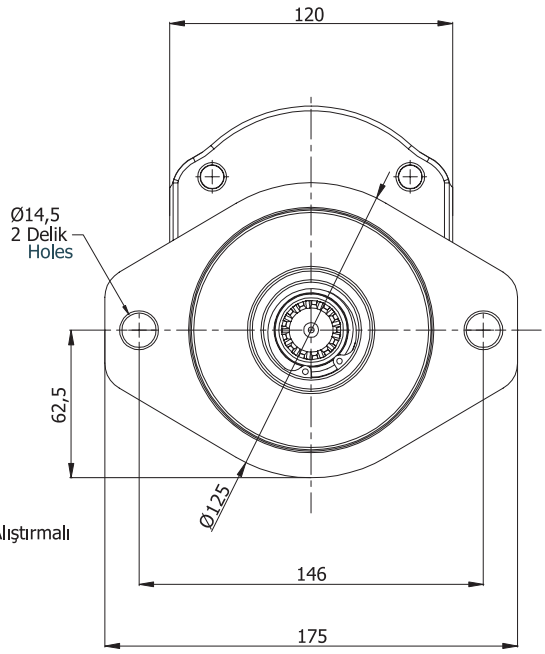
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet		Çıkış - Outlet	
						C	E	c	e
AP30.170.A/CHP05SN	17,0	250	3000	94,5	159,1	30,5	G1"	30,5	G 1"
AP30.220.A/CHP05SN	22,0			96,5	163,1				
AP30.270.A/CHP05SN	27,0			98,0	166,1				
AP30.320.A/CHP05SN	32,0	240		99,5	169,1				
AP30.340.A/CHP05SN	34,0			100,0	170,1				
AP30.380.A/CHP05SN	38,0			101,5	173,1				
AP30.430.A/CHP05SN	43,0	230		103,0	176,1				
AP30.470.A/CHP05SN	47,0		2500	104,5	179,1				
AP30.510.A/CHP05SN	51,0	210		105,5	181,1				
AP30.560.A/CHP05SN	56,0	200		106,5	183,1	39	G 1 1/4"		
AP30.610.A/CHP05SN	61,0	180		109,0	188,1				
AP30.730.A/CHP05SN	73,0	170		112,0	195,1				
AP30.820.A/CHP05SN	82,0	160	2000	115,0	201,1	45	G 1 1/2"	39	G 1 1/4"
AP30.900.A/CHP05SN	90,0	150		118,0	207,1				
AP30.1000.A/CHP05SN	100,0	140		121,0	213,1				

K Ön Kapak
Front Cover

M Şaft Tipi
Shaft Type



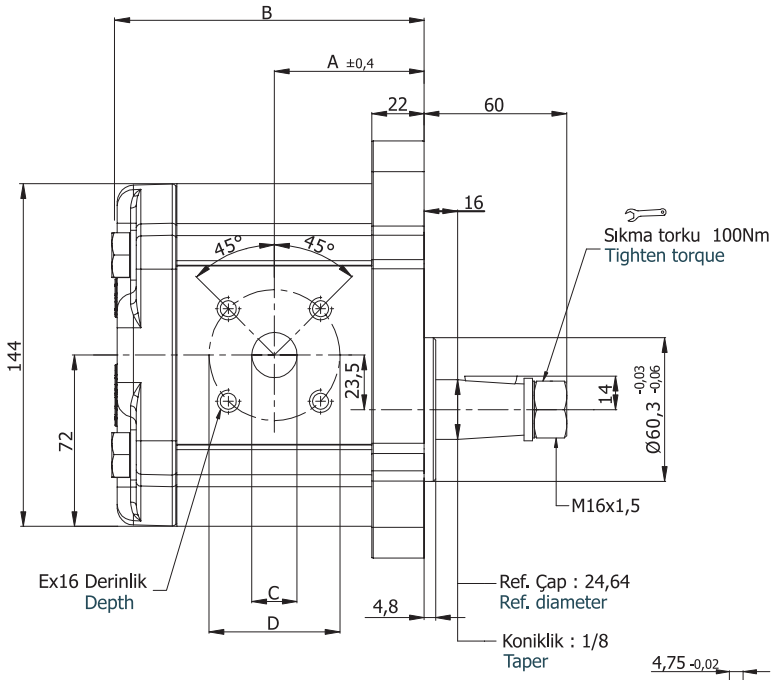


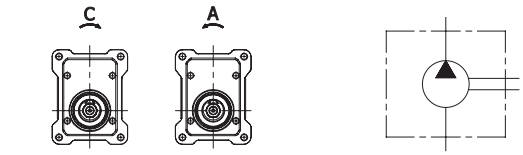


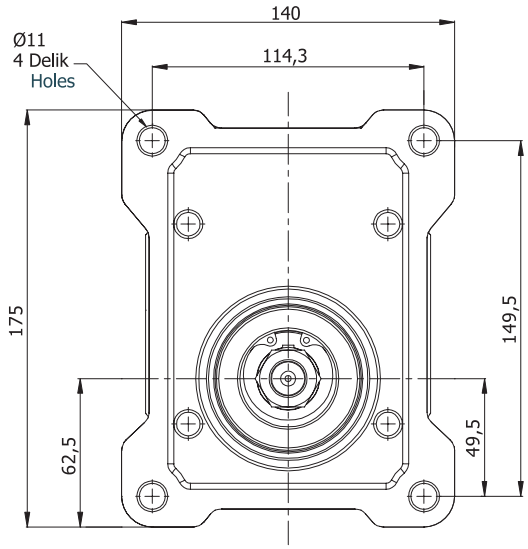
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP30.170.A/CKM04SN	17,0	250	3000	91,5	156,1	30,5	49	1 5/16"-12 UNF-2B	24,8	42	1 1/16"-12 UNF-2B
AP30.220.A/CKM04SN	22,0			93,5	160,1						
AP30.270.A/CKM04SN	27,0			95,0	163,1						
AP30.320.A/CKM04SN	32,0	240		96,5	166,1						
AP30.340.A/CKM04SN	34,0			97,0	167,1						
AP30.380.A/CKM04SN	38,0			98,5	170,1	39,1	58	1 5/8"-12 UNF-2B	30,5	49	1 5/16"-12 UNF-2B
AP30.430.A/CKM04SN	43,0	230		100,0	173,1						
AP30.470.A/CKM04SN	47,0		2500	101,5	176,1						
AP30.510.A/CKM04SN	51,0	210		102,5	178,1						
AP30.560.A/CKM04SN	56,0	200		103,5	180,1	45	65	1 7/8"-12 UNF-2B	39,1	58	1 5/8"-12 UNF-2B
AP30.610.A/CKM04SN	61,0	180		106,0	185,1						
AP30.730.A/CKM04SN	73,0	170		109,0	192,1						
AP30.820.A/CKM04SN	82,0	160	1500	112,0	198,1						
AP30.900.A/CKM04SN	90,0	150		115,0	204,1						
AP30.1000.A/CKM04SN	100,0	140		118,0	210,1						

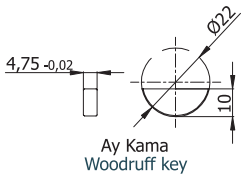
L Ön Kapak
Front Cover

K Şaft Tipi
Shaft Type





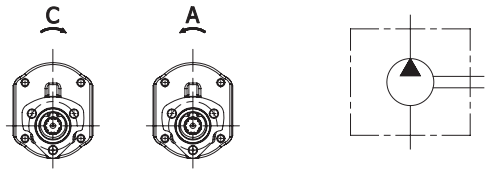


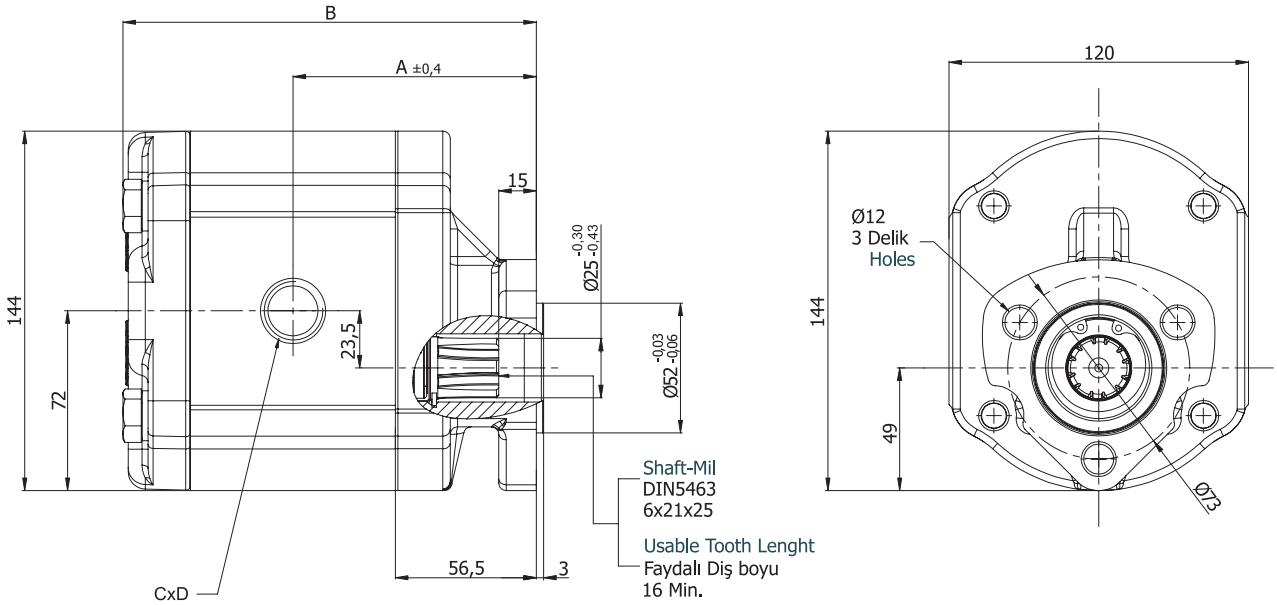


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP30.170.A/CLK01SN	17,0	250	3000	59,5	124,1	27	55	M8x16	19	55	M8x16
AP30.220.A/CLK01SN	22,0			61,5	128,1						
AP30.270.A/CLK01SN	27,0			63,0	131,1						
AP30.320.A/CLK01SN	32,0	240		64,5	134,1						
AP30.340.A/CLK01SN	34,0			65,0	135,1						
AP30.380.A/CLK01SN	38,0			66,5	138,1						
AP30.430.A/CLK01SN	43,0	230		68,0	141,1						
AP30.470.A/CLK01SN	47,0		2500	69,5	144,1						
AP30.510.A/CLK01SN	51,0	210		70,5	146,1						
AP30.560.A/CLK01SN	56,0	200		71,5	148,1						
AP30.610.A/CLK01SN	61,0	180		74,0	153,1						
AP30.730.A/CLK01SN	73,0	170		77,0	160,1						
AP30.820.A/CLK01SN	82,0	160	2000	80,0	166,1						
AP30.900.A/CLK01SN	90,0	150		83,0	172,1						
AP30.1000.A/CLK01SN	100,0	140		86,0	178,1						

S Ön Kapak
Front Cover

U Şaft Tipi
Shaft Type

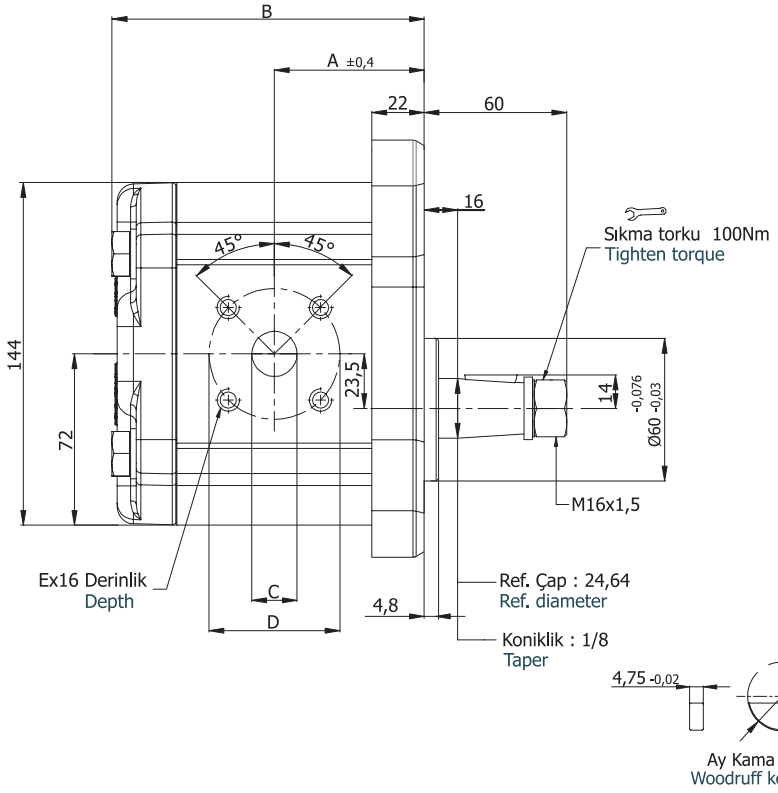


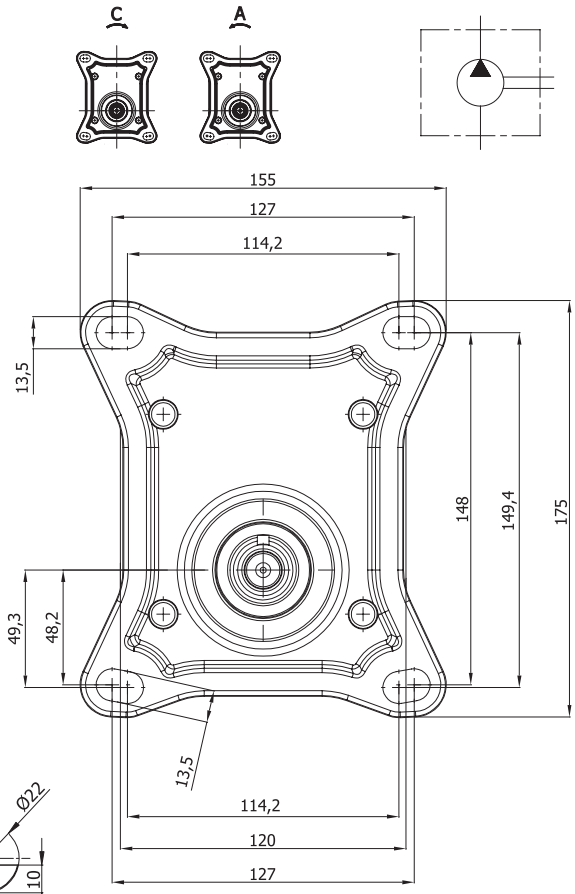


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet		Çıkış - Outlet	
						C	E	c	e
AP30.170.A/CSU05SN	17,0	250	3000	94,0	158,6	30,5	G1"	30,5	G 1"
AP30.220.A/CSU05SN	22,0			96,0	162,6				
AP30.270.A/CSU05SN	27,0			97,5	165,6				
AP30.320.A/CSU05SN	32,0	240		99,0	168,6				
AP30.340.A/CSU05SN	34,0			99,5	169,6				
AP30.380.A/CSU05SN	38,0			101,0	172,6				
AP30.430.A/CSU05SN	43,0	230		102,5	175,6				
AP30.470.A/CSU05SN	47,0		2500	104,0	178,6				
AP30.510.A/CSU05SN	51,0	210		105,0	180,6				
AP30.560.A/CSU05SN	56,0	200		106,0	182,6	39	G 1 1/4"		
AP30.610.A/CSU05SN	61,0	180		108,5	187,6				
AP30.730.A/CSU05SN	73,0	170		111,5	194,6				
AP30.820.A/CSU05SN	82,0	160	2000	114,5	200,6	45	G 1 1/2"	39	G 1 1/4"
AP30.900.A/CSU05SN	90,0	150		117,5	206,6				
AP30.1000.A/CSU05SN	100,0	140		120,5	212,6				

M Ön Kapak
Front Cover

K Şaft Tipi
Shaft Type

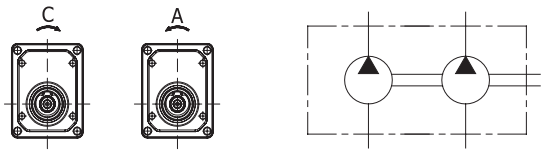


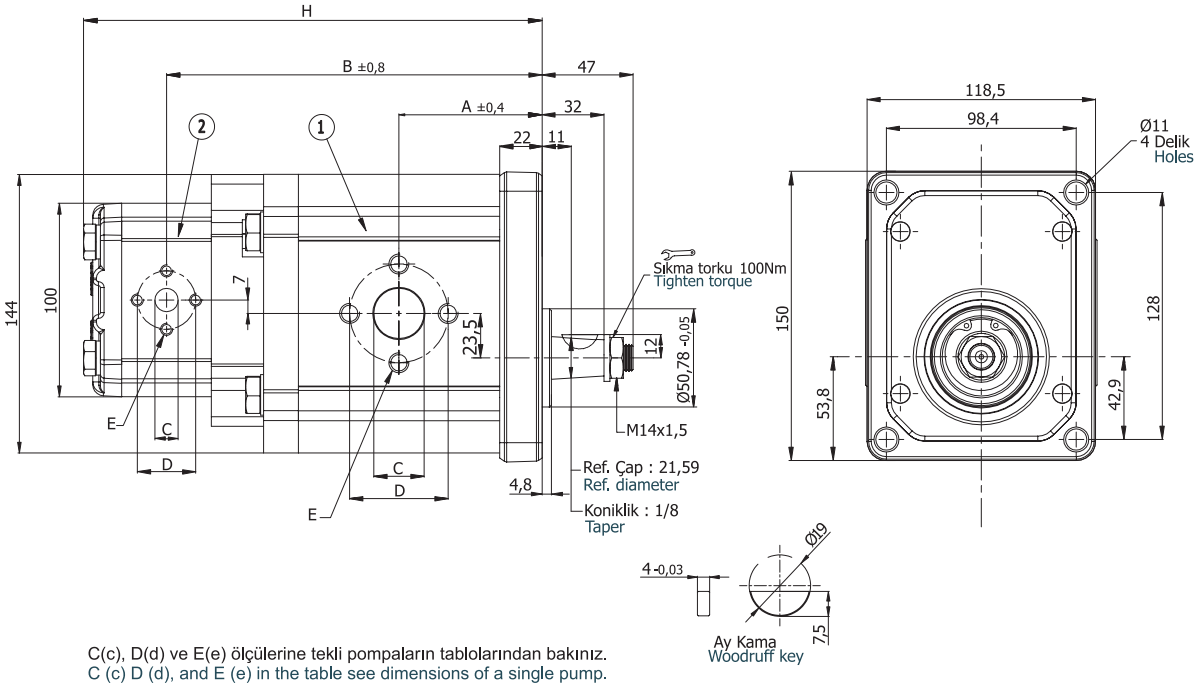


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
AP30.170.A/CMK01SN	17,0	250	3000	59,5	124,1	27	55	M8x16	19	55	M8x16
AP30.220.A/CMK01SN	22,0			61,5	128,1						
AP30.270.A/CMK01SN	27,0			63,0	131,1						
AP30.320.A/CMK01SN	32,0	240		64,5	134,1						
AP30.340.A/CMK01SN	34,0			65,0	135,1						
AP30.380.A/CMK01SN	38,0			66,5	138,1						
AP30.430.A/CMK01SN	43,0	230		68,0	141,1						
AP30.470.A/CMK01SN	47,0		2500	69,5	144,1						
AP30.510.A/CMK01SN	51,0	210		70,5	146,1						
AP30.560.A/CMK01SN	56,0	200		71,5	148,1						
AP30.610.A/CMK01SN	61,0	180		74,0	153,1						
AP30.730.A/CMK01SN	73,0	170		77,0	160,1						
AP30.820.A/CLK01SN	82,0	160	2000	80,0	166,1						
AP30.900.A/CMK01SN	90,0	150		83,0	172,1						
AP30.1000.A/CMK01SN	100,0	140		86,0	178,1						

A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type



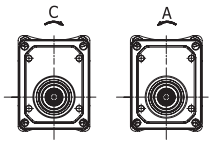


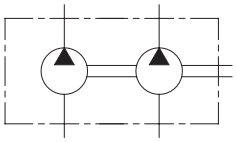
C(c), D(d) ve E(e) ölçülerine tekli pompaların tablolarından bakınız.
C (c) D (d), and E (e) in the table see dimensions of a single pump.

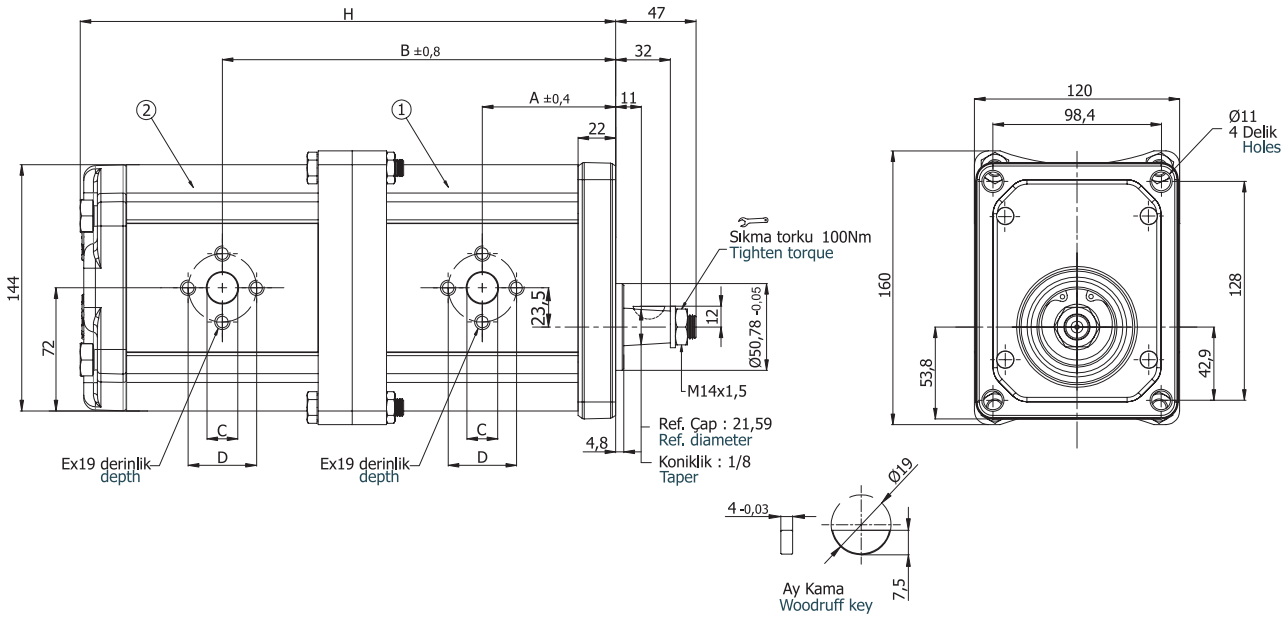
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)		Maks. Basınç Max. Pressure (bar)		Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B ±0,8	H
	1	2	1	2				
AP30.170/AP20.040.A/CAB02SN	17,0	3,9	250	230	3000	59,5	166,3	209,5
AP30.220/AP20.060.A/CAB02SN	22,0	5,9				61,5	171,8	216,6
AP30.270/AP20.080.A/CAB02SN	27,0	8,0	240			63,0	176,4	222,7
AP30.320/AP20.095.A/CAB02SN	32,0	9,4				64,5	180,6	228,0
AP30.340/AP20.115.A/CAB02SN	34,0	11,4		210		65,0	183,1	232,2
AP30.380/AP20.140.A/CAB02SN	38,0	13,9				66,5	188,1	239,1
AP30.430/AP20.160.A/CAB02SN	43,0	16,0	230			68,0	192,6	245,3
AP30.470/AP20.190.A/CAB02SN	47,0	19,2			2500	69,5	204,1	265,3
AP30.510/AP20.220.A/CAB02SN	51,0	21,9	210	200		70,5	208,4	271,6
AP30.560/AP20.250.A/CAB02SN	56,0	24,8	200	190		71,5	212,9	278,7
AP30.610/AP20.280.A/CAB02SN	61,0	27,9	180	180	1750	74,0	220,1	288,0
AP30.730/AP20.320.A/CAB02SN	73,0	32,0	170	170	1500	77,0	230,1	301,2
AP30.820/AP20.340.A/CAB02SN	82,0	34,0	160	160		80,0	237,6	310,7
AP30.900/AP20.380.A/CAB02SN	90,0	38,0	150	150		83,0	246,9	322,7
AP30.1000/AP20.400.A/CAB02SN	100,0	40,0	140	140		86,0	254,6	332,2

A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type



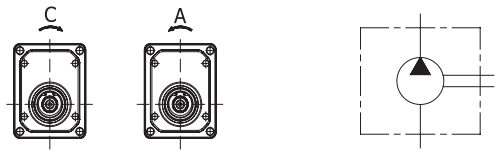


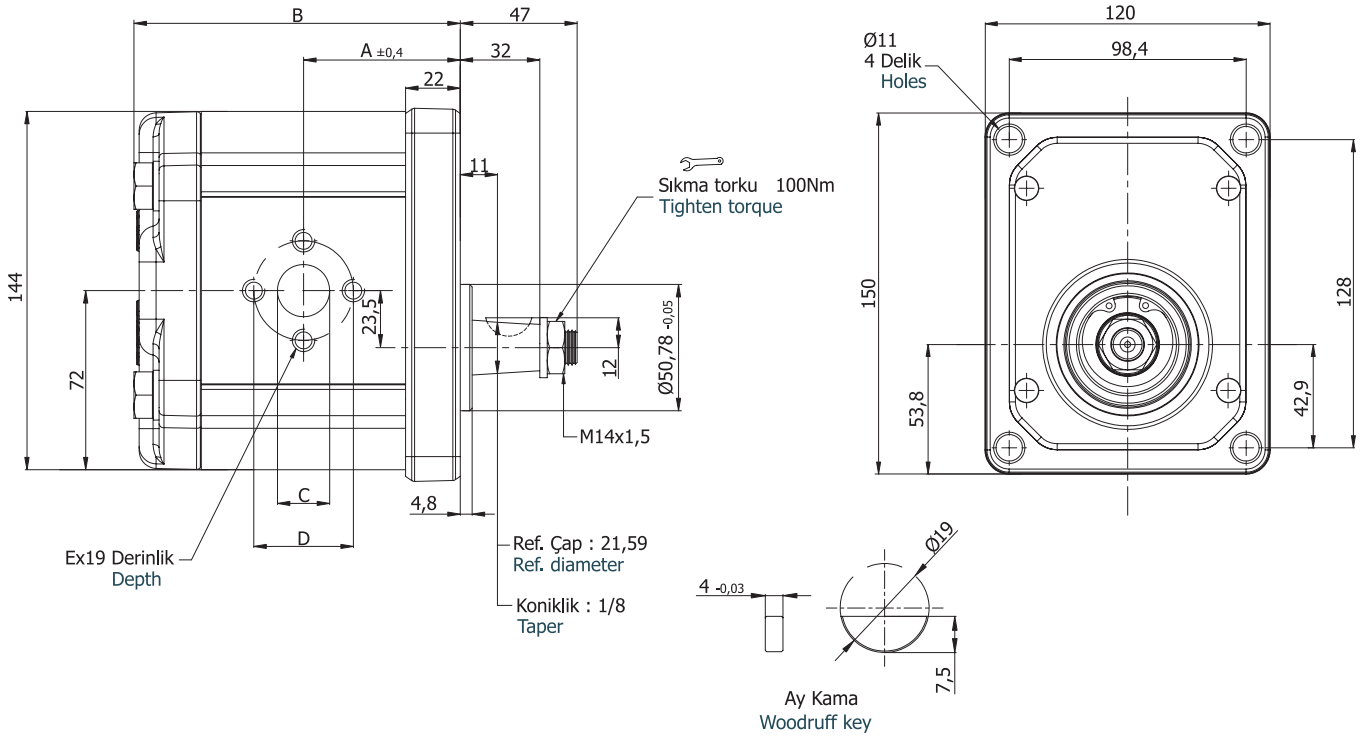


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)		Maks. Basınç Max. Pressure (bar)		Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B ±0,8	H	Giriş – Inlet			Çıkış - Outlet		
	1	2	1	2					C	D	E	c	d	e
AP30.170/170.A/CAB02SN	17,0	17,0	250	250	3000	59,5	174,6	239,2	27	51	M10 x19	19	40	M8 x16
AP30.220/220.A/CAB02SN	22,0	22,0				61,5	180,6	247,2						
AP30.270/270.A/CAB02SN	27,0	27,0				63,0	185,1	253,2						
AP30.320/320.A/CAB02SN	32,0	32,0	240	240		64,5	189,6	259,2						
AP30.340/340.A/CAB02SN	34,0	34,0				65,0	191,1	261,2						
AP30.380/380.A/CAB02SN	38,0	38,0				66,5	195,6	267,2						
AP30.430/430.A/CAB02SN	43,0	43,0	230	230		68,0	200,1	273,2						
AP30.470/470.A/CAB02SN	47,0	47,0			2500	69,5	204,6	279,2						
AP30.510/510.A/CAB02SN	51,0	51,0	210	200		70,5	207,6	283,2						
AP30.560/560.A/CAB02SN	56,0	56,0	200	190		71,5	210,6	287,2						
AP30.610/610.A/CAB02SN	61,0	61,0	180	180		74,0	218,1	297,2						
AP30.730/730.A/CAB02SN	73,0	73,0	170	170		77,0	228,1	311,2	33	62	M12 x19	27	51	M10 x19
AP30.820/820.A/CAB02SN	82,0	82,0	160	160	2000	80,0	237,1	323,2						
AP30.900/900.A/CAB02SN	90,0	90,0	150	150		83,0	246,1	335,2						
AP30.100/100.A/CAB02SN	100,0	100,0	140	140		86,0	255,1	347,2						

A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type

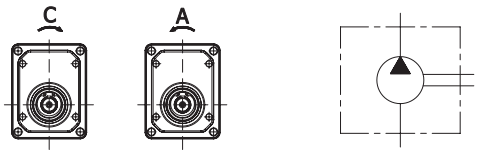


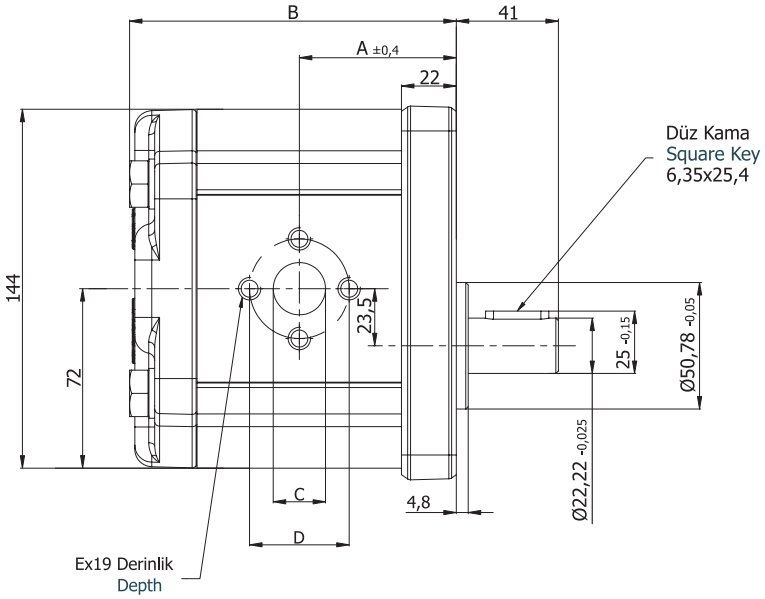


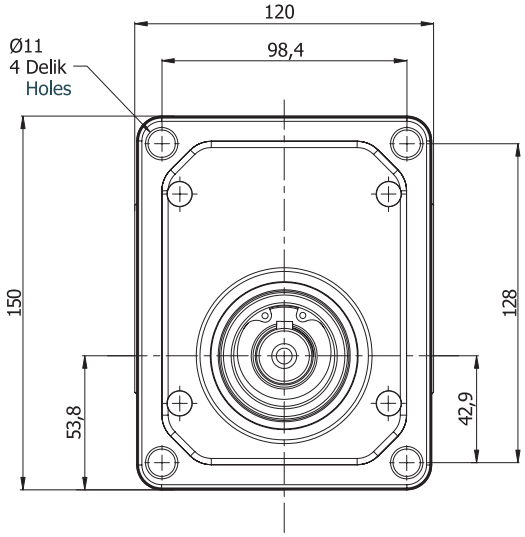
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
APH30.170.A/CAB02SN	17,0	250	3000	59,5	124,1	27	51	M10x19	19	40	M8x16
APH30.220.A/CAB02SN	22,0			61,5	128,1						
APH30.270.A/CAB02SN	27,0			63,0	131,1						
APH30.320.A/CAB02SN	32,0	240		64,5	134,1						
APH30.340.A/CAB02SN	34,0			65,0	135,1						
APH30.380.A/CAB02SN	38,0			66,5	138,1						
APH30.430.A/CAB02SN	43,0	230		68,0	141,1						
APH30.470.A/CAB02SN	47,0		2500	69,5	144,1						
APH30.510.A/CAB02SN	51,0	210		70,5	146,1						
APH30.560.A/CAB02SN	56,0	200		71,5	148,1						
APH30.610.A/CAB02SN	61,0	180	1750	74,0	153,1						
APH30.730.A/CAB02SN	73,0	170	1500	77,0	160,1	33	62	M12x19	27	51	M10x19
APH30.820.A/CAB02SN	82,0	160		80,0	166,1						
APH30.900.A/CAB02SN	90,0	150		83,0	172,1						
APH30.1000.A/CAB02SN	100,0	140		86,0	178,1						

A Ön Kapak
Front Cover

H Şaft Tipi
Shaft Type



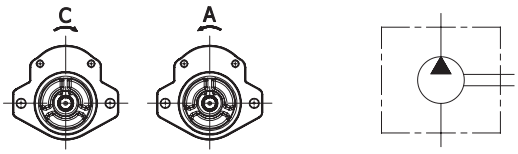


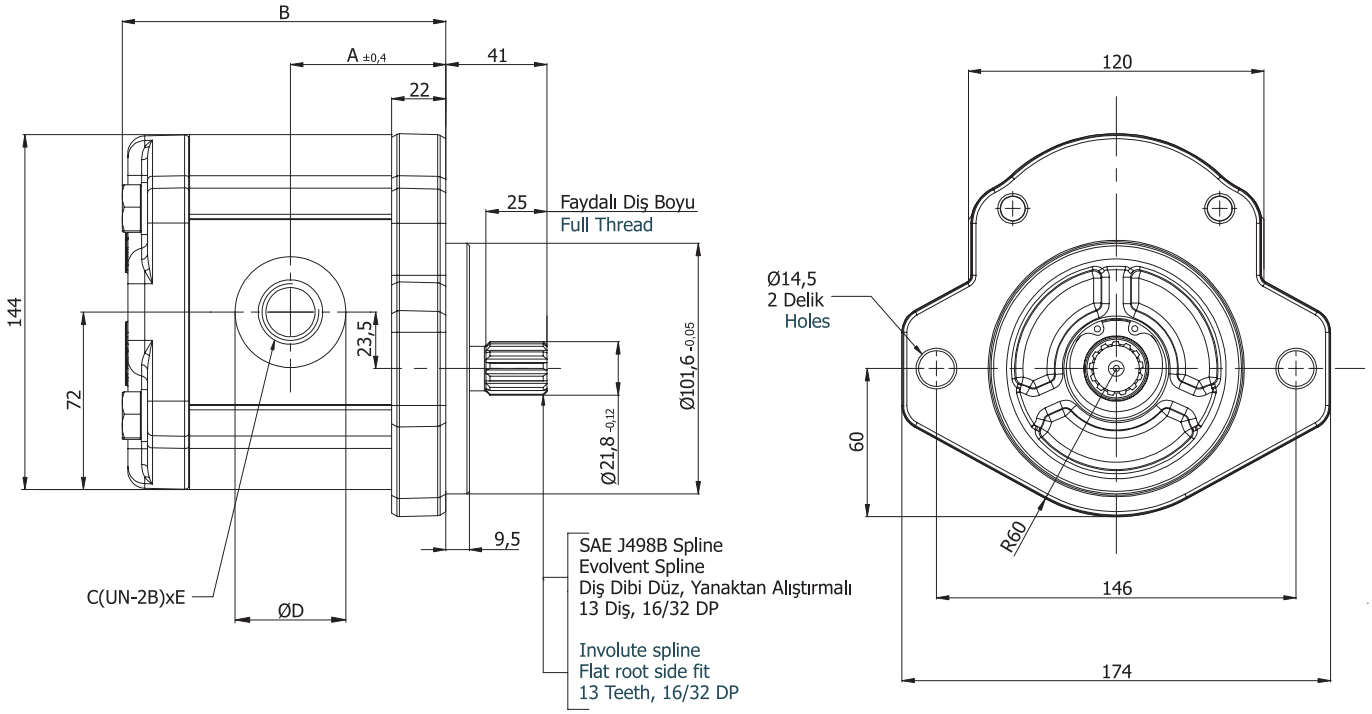


Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
APH30.170.A/CAH02SN	17,0	250	3000	59,5	124,1	27	51	M10x19	19	40	M8x16
APH30.220.A/CAH02SN	22,0			61,5	128,1						
APH30.270.A/CAH02SN	27,0			63,0	131,1						
APH30.320.A/CAH02SN	32,0	240		64,5	134,1						
APH30.340.A/CAH02SN	34,0			65,0	135,1						
APH30.380.A/CAH02SN	38,0			66,5	138,1						
APH30.430.A/CAH02SN	43,0	230		68,0	141,1						
APH30.470.A/CAH02SN	47,0		2500	69,5	144,1						
APH30.510.A/CAH02SN	51,0	210		70,5	146,1						
APH30.560.A/CAH02SN	56,0	200		71,5	148,1						
APH30.610.A/CAH02SN	61,0	180	1750	74,0	153,1						
APH30.730.A/CAH02SN	73,0	170	1500	77,0	160,1	33	62	M12x19	27	51	M10x19
APH30.820.A/CAH02SN	82,0	160		80,0	166,1						
APH30.900.A/CAH02SN	90,0	150		83,0	172,1						
APH30.1000.A/CAH02SN	100,0	140		86,0	178,1						

D Ön Kapak
Front Cover

C Şaft Tipi
Shaft Type

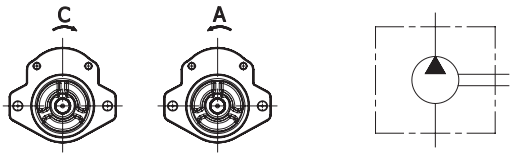


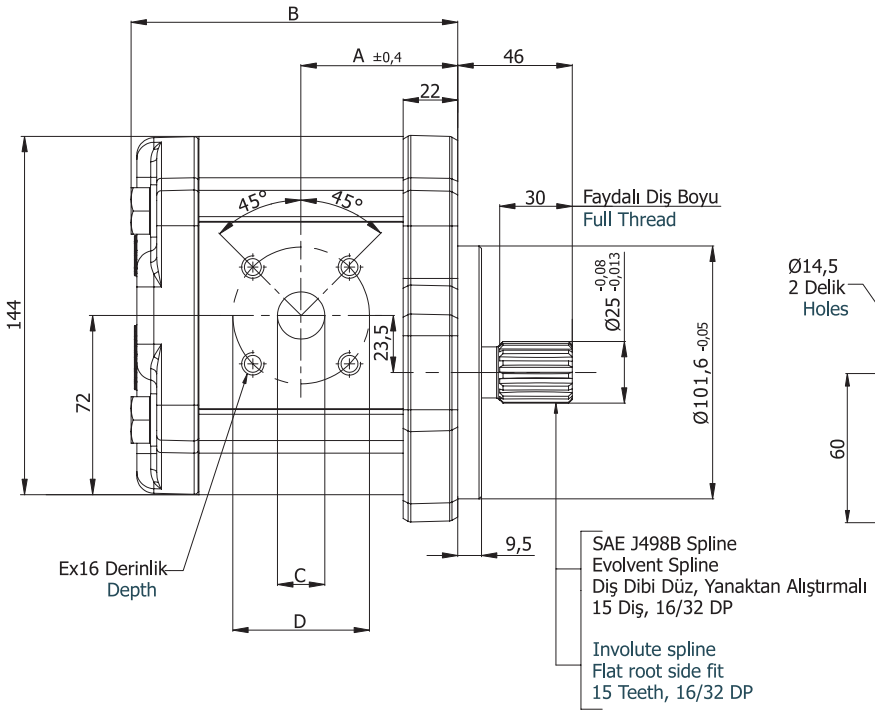


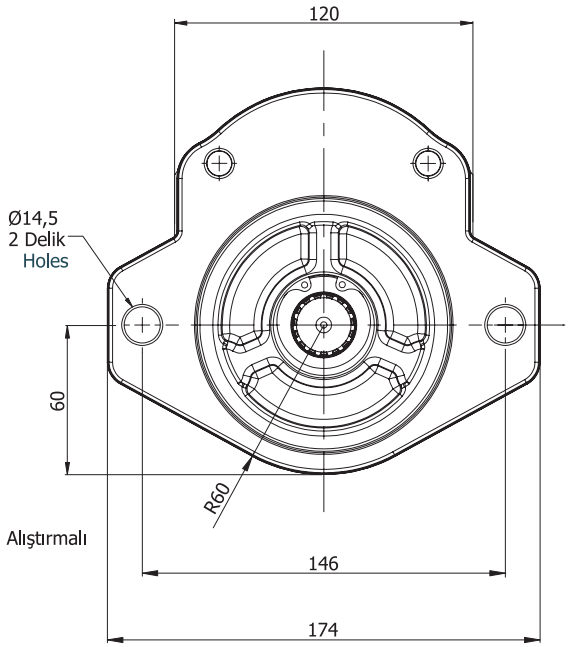
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
APH30.170.A/CDC04SN	17,0	250	3000	59,5	124,1	30,5	49	1 5/16"-12 UNF-2B	24,8	42	1 1/16"-12 UNF-2B
APH30.220.A/CDC04SN	22,0			61,5	128,1						
APH30.270.A/CDC04SN	27,0			63,0	131,1						
APH30.320.A/CDC04SN	32,0	240		64,5	134,1						
APH30.340.A/CDC04SN	34,0			65,0	135,1						
APH30.380.A/CDC04SN	38,0			66,5	138,1	39,1	58	1 5/8"-12 UNF-2B	30,5	49	1 5/16"-12 UNF-2B
APH30.430.A/CDC04SN	43,0	230		68,0	141,1						
APH30.470.A/CDC04SN	47,0		2500	69,5	144,1						
APH30.510.A/CDC04SN	51,0	210		70,5	146,1						
APH30.560.A/CDC04SN	56,0	200		71,5	148,1	45	65	1 7/8"-12 UNF-2B	39,1	58	1 5/8"-12 UNF-2B
APH30.610.A/CDC04SN	61,0	180	1750	74,0	153,1						
APH30.730.A/CDC04SN	73,0	170	1500	77,0	160,1						
APH30.820.A/CDC04SN	82,0	160		80,0	166,1						
APH30.900.A/CDC04SN	90,0	150		83,0	172,1						
APH30.1000.A/CDC04SN	100,0	140		86,0	178,1						

D Ön Kapak
Front Cover

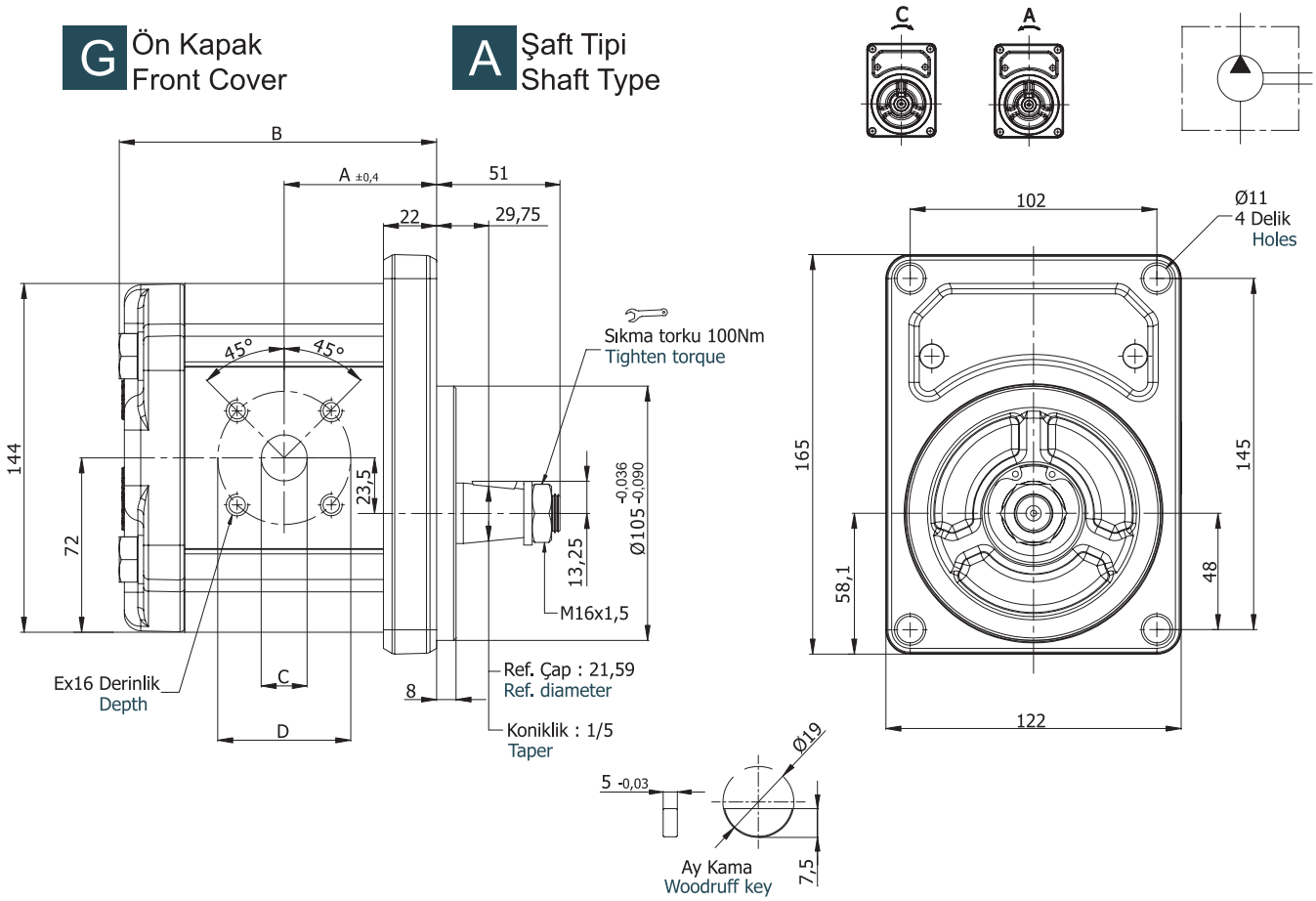
D Şaft Tipi
Shaft Type







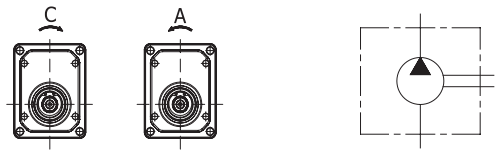
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
APH30.170.A/CDD01SN	17,0	250	3000	59,5	124,1	27	55	M8x16	19	55	M8x16
APH30.220.A/CDD01SN	22,0			61,5	128,1						
APH30.270.A/CDD01SN	27,0			63,0	131,1						
APH30.320.A/CDD01SN	32,0	240		64,5	134,1						
APH30.340.A/CDD01SN	34,0			65,0	135,1						
APH30.380.A/CDD01SN	38,0			66,5	138,1						
APH30.430.A/CDD01SN	43,0	230		68,0	141,1						
APH30.470.A/CDD01SN	47,0		2500	69,5	144,1						
APH30.510.A/CDD01SN	51,0	210		70,5	146,1						
APH30.560.A/CDD01SN	56,0	200		71,5	148,1						
APH30.610.A/CDD01SN	61,0	180	1750	74,0	153,1						
APH30.730.A/CDD01SN	73,0	170	1500	77,0	160,1						
APH30.820.A/CDD01SN	82,0	160		80,0	166,1						
APH30.900.A/CDD01SN	90,0	150		83,0	172,1						
APH30.1000.A/CDD01SN	100,0	140		86,0	178,1						

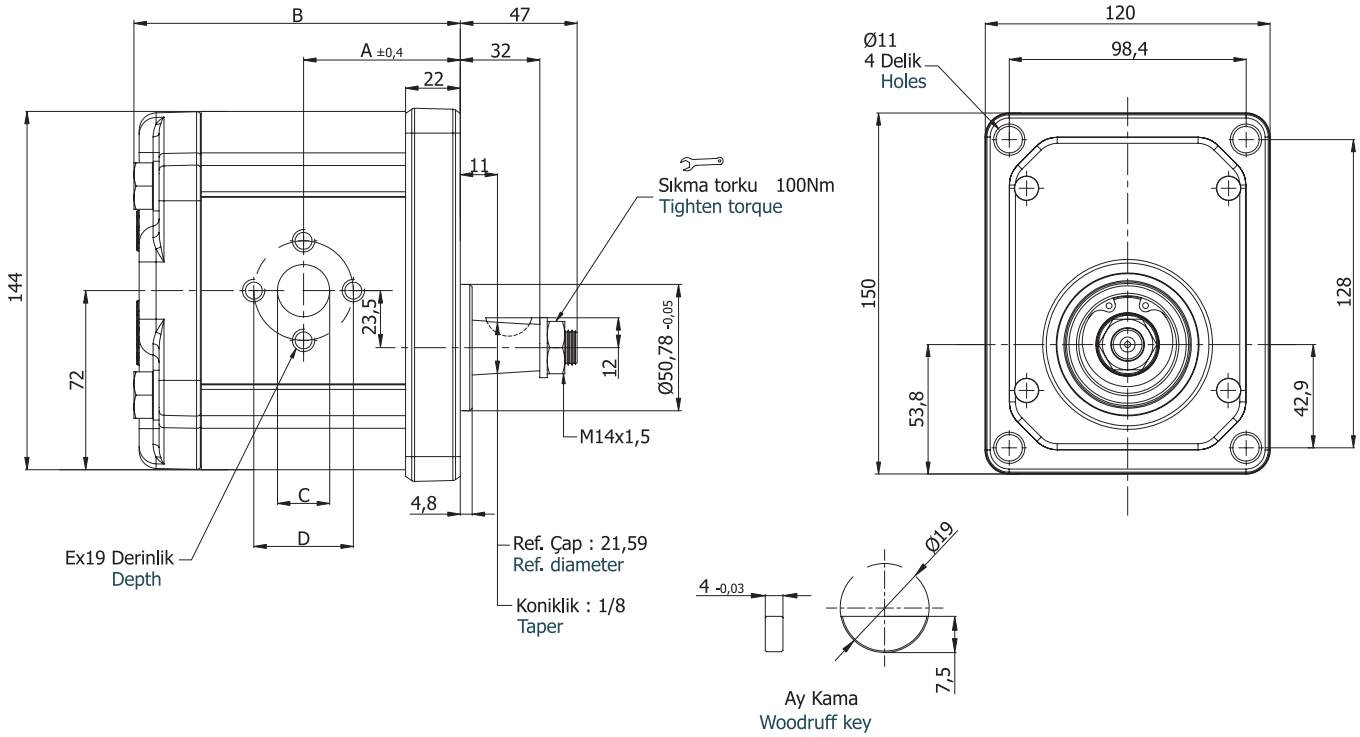


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
APH30.170.A/CGA01SN	17,0	250	3000	59,5	124,1	27	55	M8x16	19	55	M8x16
APH30.220.A/CGA01SN	22,0			61,5	128,1						
APH30.270.A/CGA01SN	27,0			63,0	131,1						
APH30.320.A/CGA01SN	32,0	240		64,5	134,1						
APH30.340.A/CGA01SN	34,0			65,0	135,1						
APH30.380.A/CGA01SN	38,0			66,5	138,1						
APH30.430.A/CGA01SN	43,0	230		68,0	141,1						
APH30.470.A/CGA01SN	47,0		2500	69,5	144,1						
APH30.510.A/CGA01SN	51,0	210		70,5	146,1						
APH30.560.A/CGA01SN	56,0	200		71,5	148,1						
APH30.610.A/CGA01SN	61,0	180	1750	74,0	153,1						
APH30.730.A/CGA01SN	73,0	170	1500	77,0	160,1						
APH30.820.A/CGA01SN	82,0	160		80,0	166,1						
APH30.900.A/CGA01SN	90,0	150		83,0	172,1						
APH30.1000.A/CGA01SN	100,0	140		86,0	178,1						

A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type

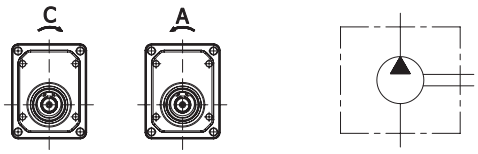


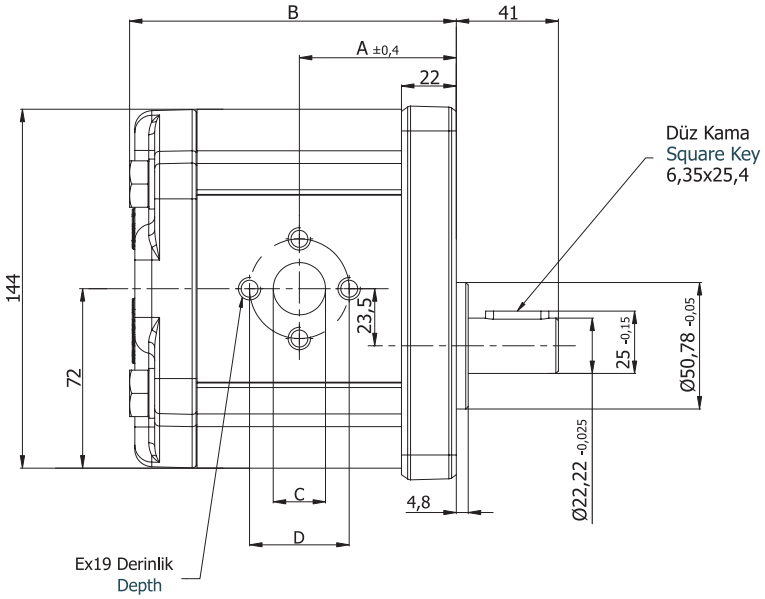


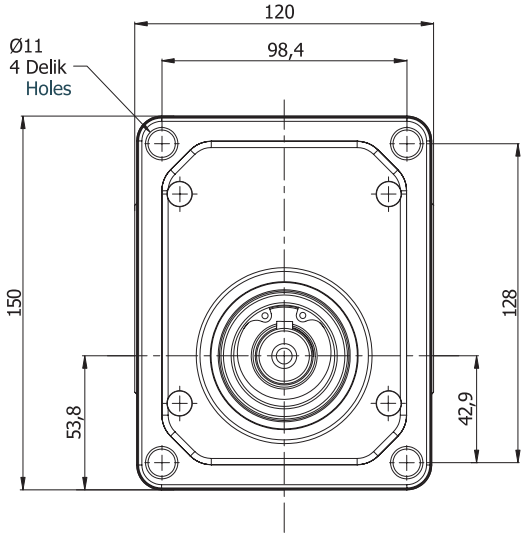
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DKP30.170.A/CAB02SN	17,0	280	3000	59,5	124,1	27	51	M10x19	19	40	M8x16
DKP30.220.A/CAB02SN	22,0			61,5	128,1						
DKP30.270.A/CAB02SN	27,0			63,0	131,1						
DKP30.320.A/CAB02SN	32,0	260		64,5	134,1						
DKP30.340.A/CAB02SN	34,0			65,0	135,1						
DKP30.380.A/CAB02SN	38,0			66,5	138,1						
DKP30.430.A/CAB02SN	43,0			68,0	141,1						
DKP30.470.A/CAB02SN	47,0	250	2500	69,5	144,1						
DKP30.510.A/CAB02SN	51,0	240		70,5	146,1						
DKP30.560.A/CAB02SN	56,0	230		71,5	148,1						
DKP30.610.A/CAB02SN	61,0	220		74,0	153,1						
DKP30.730.A/CAB02SN	73,0	200		77,0	160,1	33	62	M12x19	27	51	M10x19
DKP30.820.A/CAB02SN	82,0	190	1500	80,0	166,1						
DKP30.900.A/CAB02SN	90,0	180		83,0	172,1						
DKP30.1000.A/CAB02SN	100,0			86,0	178,1						

A Ön Kapak
Front Cover

H Şaft Tipi
Shaft Type



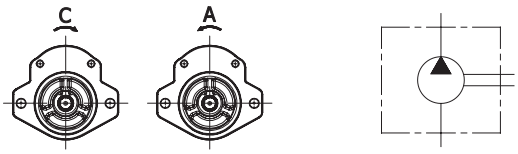


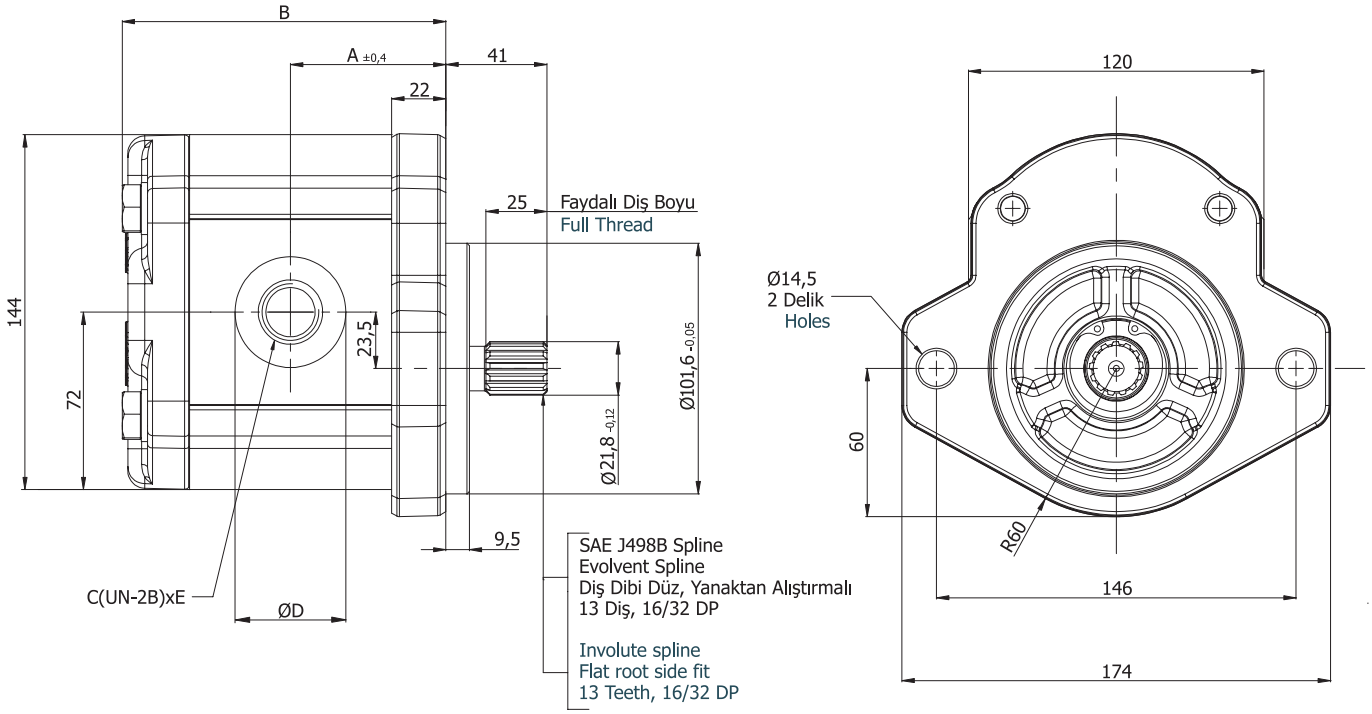


Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DKP30.170.A/CAH02SN	17,0	280	3000	59,5	124,1	27	51	M10x19	19	40	M8x16
DKP30.220.A/CAH02SN	22,0			61,5	128,1						
DKP30.270.A/CAH02SN	27,0			63,0	131,1						
DKP30.320.A/CAH02SN	32,0	260		64,5	134,1						
DKP30.340.A/CAH02SN	34,0			65,0	135,1						
DKP30.380.A/CAH02SN	38,0			66,5	138,1						
DKP30.430.A/CAH02SN	43,0			68,0	141,1						
DKP30.470.A/CAH02SN	47,0	250	2500	69,5	144,1						
DKP30.510.A/CAH02SN	51,0	240		70,5	146,1						
DKP30.560.A/CAH02SN	56,0	230		71,5	148,1						
DKP30.610.A/CAH02SN	61,0	220		74,0	153,1						
DKP30.730.A/CAH02SN	73,0	200		77,0	160,1	33	62	M12x19	27	51	M10x19
DKP30.820.A/CAH02SN	82,0	190	2000	80,0	166,1						
DKP30.900.A/CAH02SN	90,0	180		83,0	172,1						
DKP30.1000.A/CAH02SN	100,0			86,0	178,1						

D Ön Kapak
Front Cover

C Şaft Tipi
Shaft Type

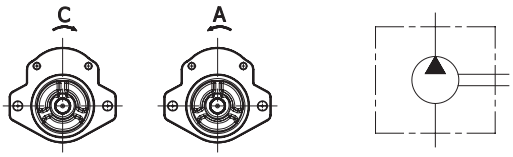


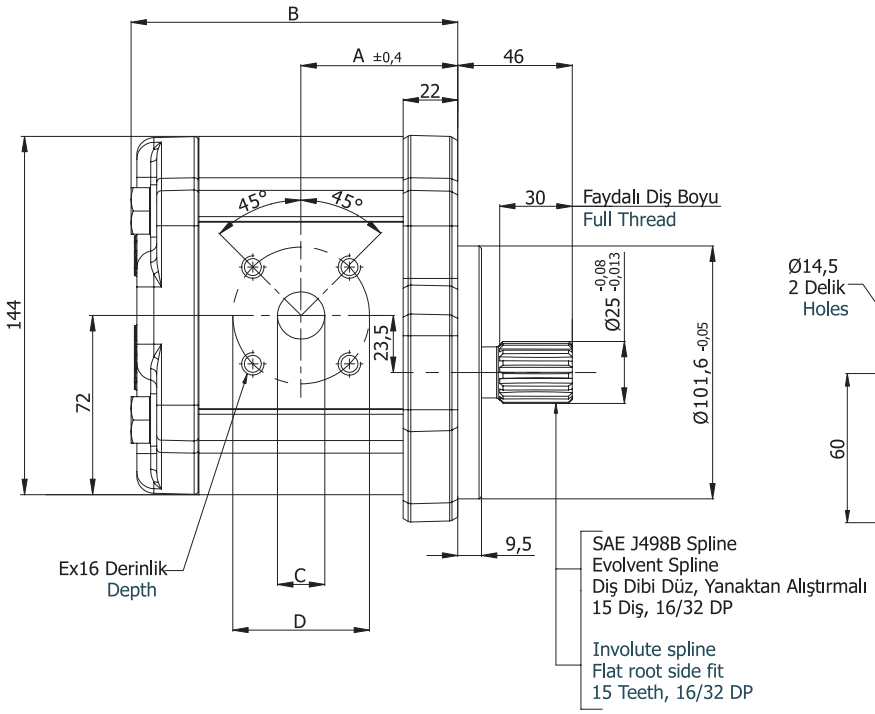


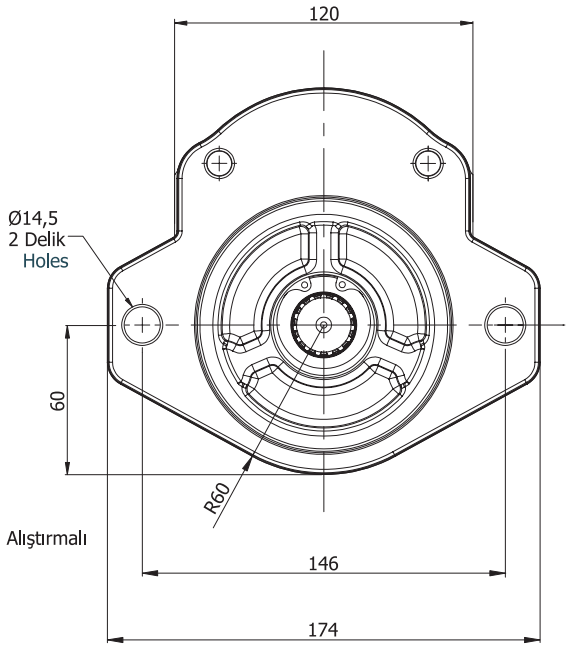
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DKP30.170.A/CDC04SN	17,0	280	3000	59,5	124,1	30,5	49	1 5/16"-12 UNF-2B	24,8	42	1 1/16"-12 UNF-2B
DKP30.220.A/CDC04SN	22,0			61,5	128,1						
DKP30.270.A/CDC04SN	27,0			63,0	131,1						
DKP30.320.A/CDC04SN	32,0	260		64,5	134,1						
DKP30.340.A/CDC04SN	34,0			65,0	135,1						
DKP30.380.A/CDC04SN	38,0			66,5	138,1	39,1	58	1 5/8"-12 UNF-2B	30,5	49	1 5/16"-12 UNF-2B
DKP30.430.A/CDC04SN	43,0			68,0	141,1						
DKP30.470.A/CDC04SN	47,0	250	2500	69,5	144,1						
DKP30.510.A/CDC04SN	51,0	240		70,5	146,1						
DKP30.560.A/CDC04SN	56,0	230		71,5	148,1	45	65	1 7/8"-12 UNF-2B	39,1	58	1 5/8"-12 UNF-2B
DKP30.610.A/CDC04SN	61,0	220		74,0	153,1						
DKP30.730.A/CDC04SN	73,0	200		77,0	160,1						
DKP30.820.A/CDC04SN	82,0	190	2000	80,0	166,1						
DKP30.900.A/CDC04SN	90,0	180		83,0	172,1						
DKP30.1000.A/CDC04SN	100,0			86,0	178,1						

D Ön Kapak
Front Cover

D Şaft Tipi
Shaft Type



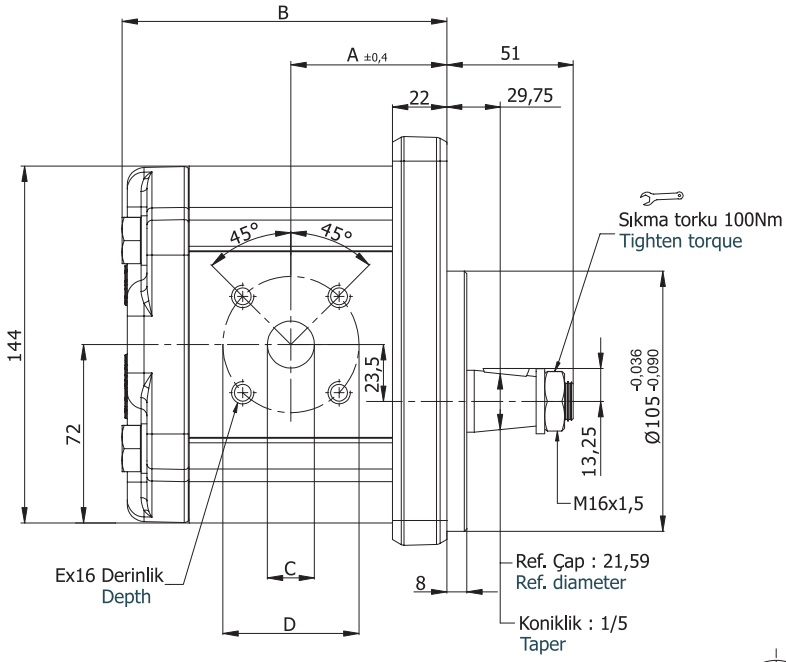


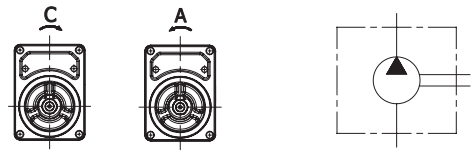


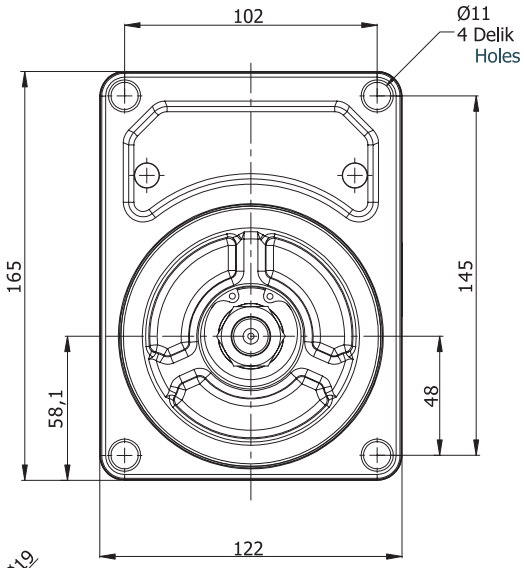
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DKP30.170.A/CDD01SN	17,0	280	3000	59,5	124,1	27	55	M8x16	19	55	M8x16
DKP30.220.A/CDD01SN	22,0			61,5	128,1						
DKP30.270.A/CDD01SN	27,0			63,0	131,1						
DKP30.320.A/CDD01SN	32,0	260		64,5	134,1						
DKP30.340.A/CDD01SN	34,0			65,0	135,1						
DKP30.380.A/CDD01SN	38,0			66,5	138,1						
DKP30.430.A/CDD01SN	43,0			68,0	141,1						
DKP30.470.A/CDD01SN	47,0	250	2500	69,5	144,1						
DKP30.510.A/CDD01SN	51,0	240		70,5	146,1						
DKP30.560.A/CDD01SN	56,0	230		71,5	148,1						
DKP30.610.A/CDD01SN	61,0	220		74,0	153,1						
DKP30.730.A/CDD01SN	73,0	200		77,0	160,1						
DKP30.820.A/CDD01SN	82,0	190	2000	80,0	166,1						
DKP30.900.A/CDD01SN	90,0	180		83,0	172,1						
DKP30.1000.A/CDD01SN	100,0			86,0	178,1						

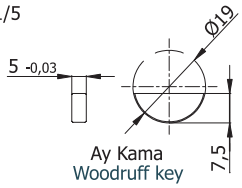
G Ön Kapak
Front Cover

A Şaft Tipi
Shaft Type





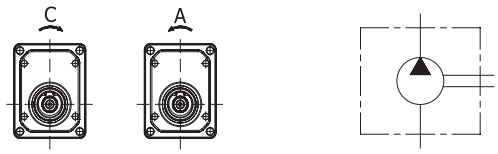


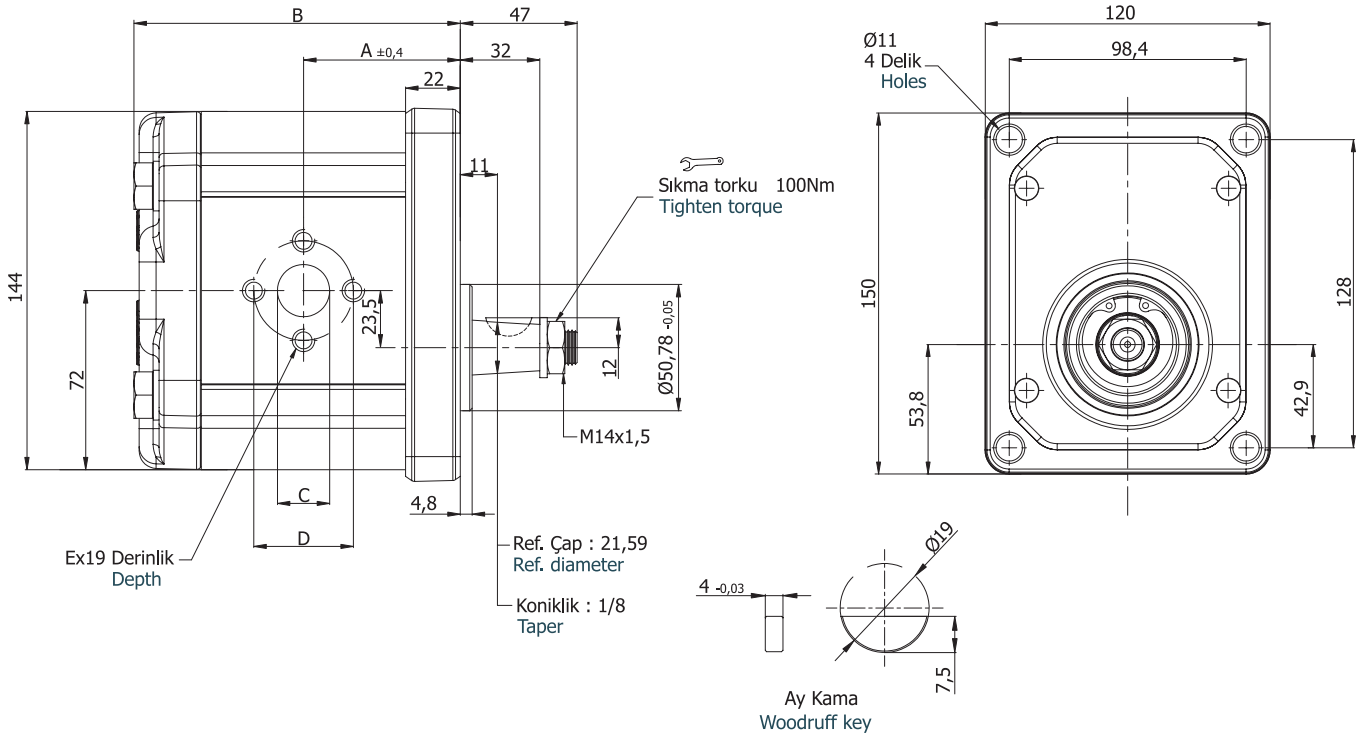


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DKP30.170.A/CGA01SN	17,0	280	3000	59,5	124,1	27	55	M8x16	19	55	M8x16
DKP30.220.A/CGA01SN	22,0			61,5	128,1						
DKP30.270.A/CGA01SN	27,0			63,0	131,1						
DKP30.320.A/CGA01SN	32,0	260		64,5	134,1						
DKP30.340.A/CGA01SN	34,0			65,0	135,1						
DKP30.380.A/CGA01SN	38,0			66,5	138,1						
DKP30.430.A/CGA01SN	43,0			68,0	141,1						
DKP30.470.A/CGA01SN	47,0	250	2500	69,5	144,1						
DKP30.510.A/CGA01SN	51,0	240		70,5	146,1						
DKP30.560.A/CGA01SN	56,0	230		71,5	148,1						
DKP30.610.A/CGA01SN	61,0	220		74,0	153,1						
DKP30.730.A/CGA01SN	73,0	200		77,0	160,1						
DKP30.820.A/CGA01SN	82,0	190	2000	80,0	166,1						
DKP30.900.A/CGA01SN	90,0	180		83,0	172,1						
DKP30.1000.A/CGA01SN	100,0			86,0	178,1						

A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type

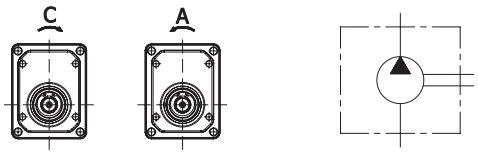


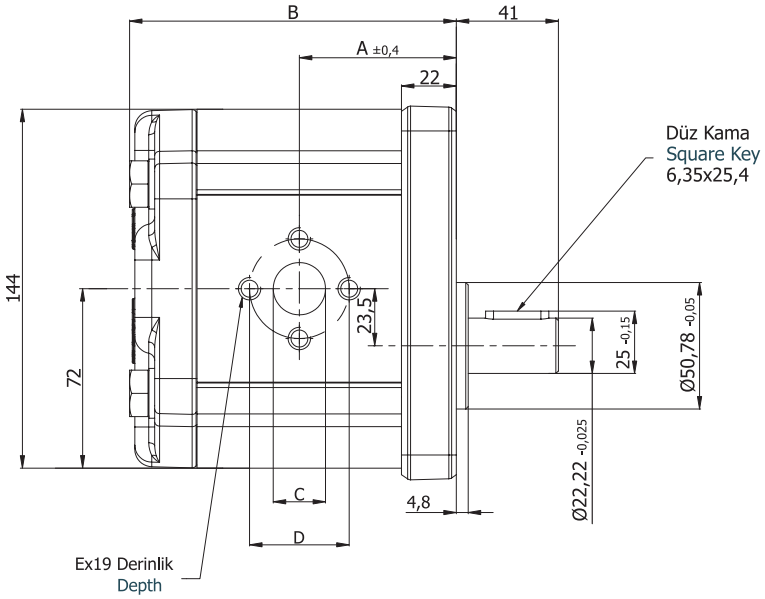


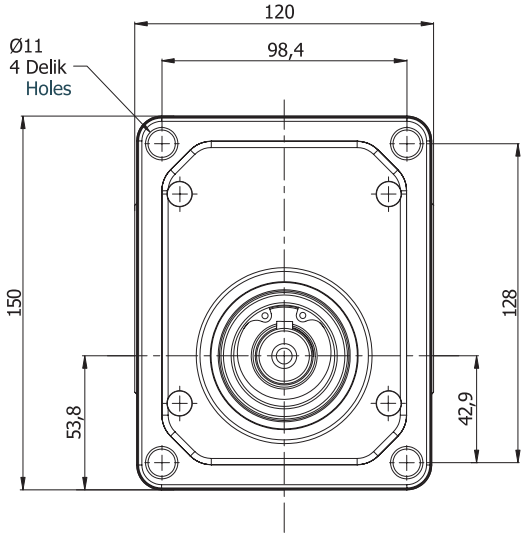
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DPH30.170.A/CAB02SN	17,0	300	3000	59,5	124,1	27	51	M10x19	19	40	M8x16
DPH30.220.A/CAB02SN	22,0			61,5	128,1						
DPH30.270.A/CAB02SN	27,0			63,0	131,1						
DPH30.320.A/CAB02SN	32,0	280		64,5	134,1						
DPH30.340.A/CAB02SN	34,0			65,0	135,1						
DPH30.380.A/CAB02SN	38,0			66,5	138,1						
DPH30.430.A/CAB02SN	43,0			68,0	141,1						
DPH30.470.A/CAB02SN	47,0	260	2500	69,5	144,1						
DPH30.510.A/CAB02SN	51,0			70,5	146,1						
DPH30.560.A/CAB02SN	56,0	250		71,5	148,1						
DPH30.610.A/CAB02SN	61,0	240		74,0	153,1						
DPH30.730.A/CAB02SN	73,0	220		77,0	160,1	33	62	M12x19	27	51	M10x19
DPH30.820.A/CAB02SN	82,0	210	2000	80,0	166,1						
DPH30.900.A/CAB02SN	90,0	200		83,0	172,1						
DPH30.1000.A/CAB02SN	100,0			86,0	178,1						

A Ön Kapak
Front Cover

H Şaft Tipi
Shaft Type



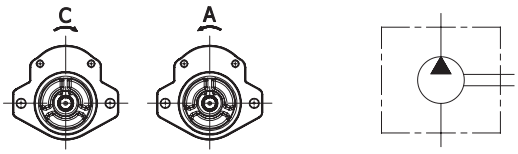


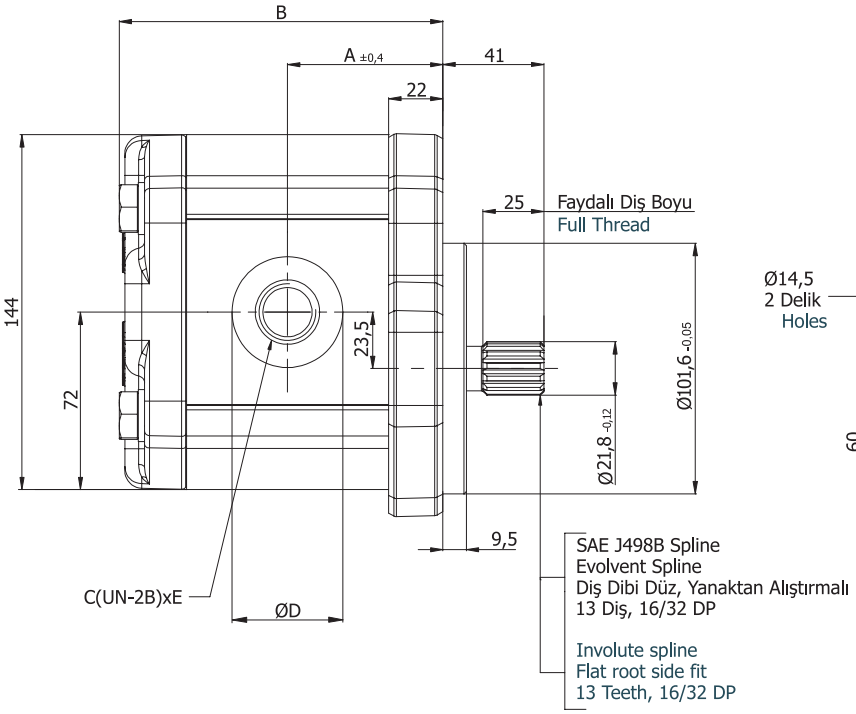


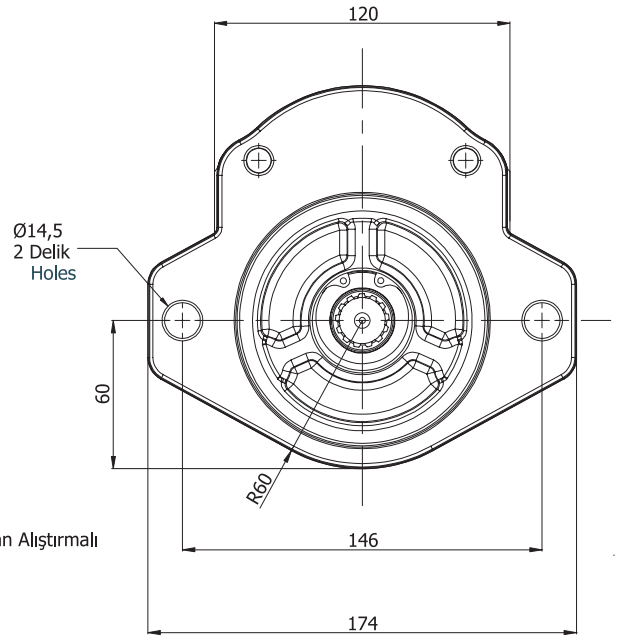
Pompa Tipi Pump Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DPH30.170.A/CAH02SN	17,0	300	3000	59,5	124,1	27	51	M10x19	19	40	M8x16
DPH30.220.A/CAH02SN	22,0			61,5	128,1						
DPH30.270.A/CAH02SN	27,0			63,0	131,1						
DPH30.320.A/CAH02SN	32,0	280		64,5	134,1						
DPH30.340.A/CAH02SN	34,0			65,0	135,1						
DPH30.380.A/CAH02SN	38,0			66,5	138,1						
DPH30.430.A/CAH02SN	43,0			68,0	141,1						
DPH30.470.A/CAH02SN	47,0	260	2500	69,5	144,1						
DPH30.510.A/CAH02SN	51,0			70,5	146,1						
DPH30.560.A/CAH02SN	56,0	250		71,5	148,1						
DPH30.610.A/CAH02SN	61,0	240		74,0	153,1						
DPH30.730.A/CAH02SN	73,0	220		77,0	160,1	33	62	M12x19	27	51	M10x19
DPH30.820.A/CAH02SN	82,0	210	2000	80,0	166,1						
DPH30.900.A/CAH02SN	90,0	200		83,0	172,1						
DPH30.1000.A/CAH02SN	100,0			86,0	178,1						

D Ön Kapak
Front Cover

C Şaft Tipi
Shaft Type







Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
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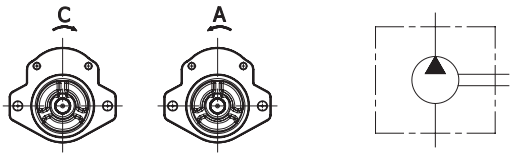
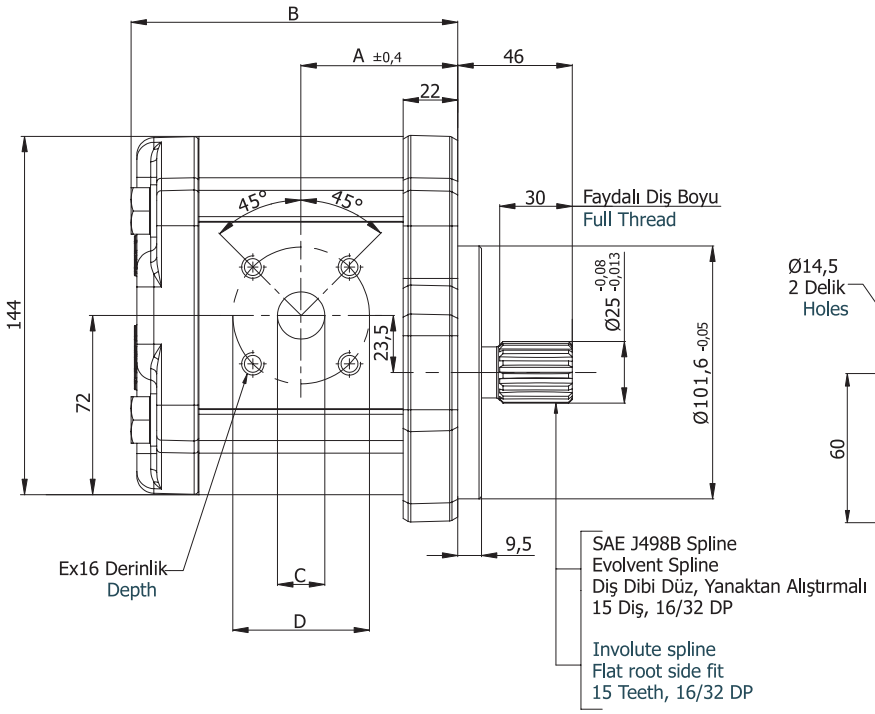
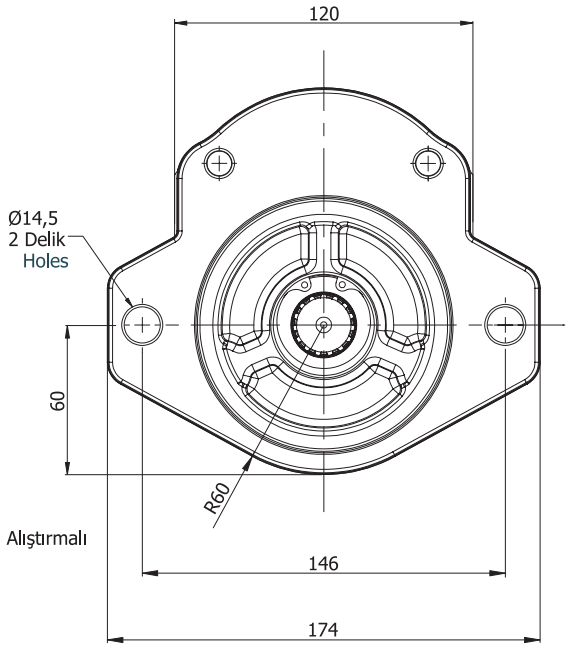
DPH30.170.A/CDC04SN	17,0	300	3000	59,5	124,1	30,5	49	1 5/16"-12 UNF-2B	24,8	42	1 1/16"-12 UNF-2B
DPH30.220.A/CDC04SN	22,0			61,5	128,1						
DPH30.270.A/CDC04SN	27,0			63,0	131,1						
DPH30.320.A/CDC04SN	32,0	280		64,5	134,1						
DPH30.340.A/CDC04SN	34,0			65,0	135,1						
DPH30.380.A/CDC04SN	38,0			66,5	138,1	39,1	58	1 5/8"-12 UNF-2B	30,5	49	1 5/16"-12 UNF-2B
DPH30.430.A/CDC04SN	43,0			68,0	141,1						
DPH30.470.A/CDC04SN	47,0	260	2500	69,5	144,1						
DPH30.510.A/CDC04SN	51,0			70,5	146,1						
DPH30.560.A/CDC04SN	56,0	250		71,5	148,1	45	65	1 7/8"-12 UNF-2B	39,1	58	1 5/8"-12 UNF-2B
DPH30.610.A/CDC04SN	61,0	240		74,0	153,1						
DPH30.730.A/CDC04SN	73,0	220		77,0	160,1						
DPH30.820.A/CDC04SN	82,0	210	2000	80,0	166,1						
DPH30.900.A/CDC04SN	90,0	200		83,0	172,1						
DPH30.1000.A/CDC04SN	100,0			86,0	178,1						

D Ön Kapak
Front Cover

D Şaft Tipi
Shaft Type







Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DPH30.170.A/CDD01SN	17,0	300	3000	59,5	124,1	27	55	M8x16	19	55	M8x16
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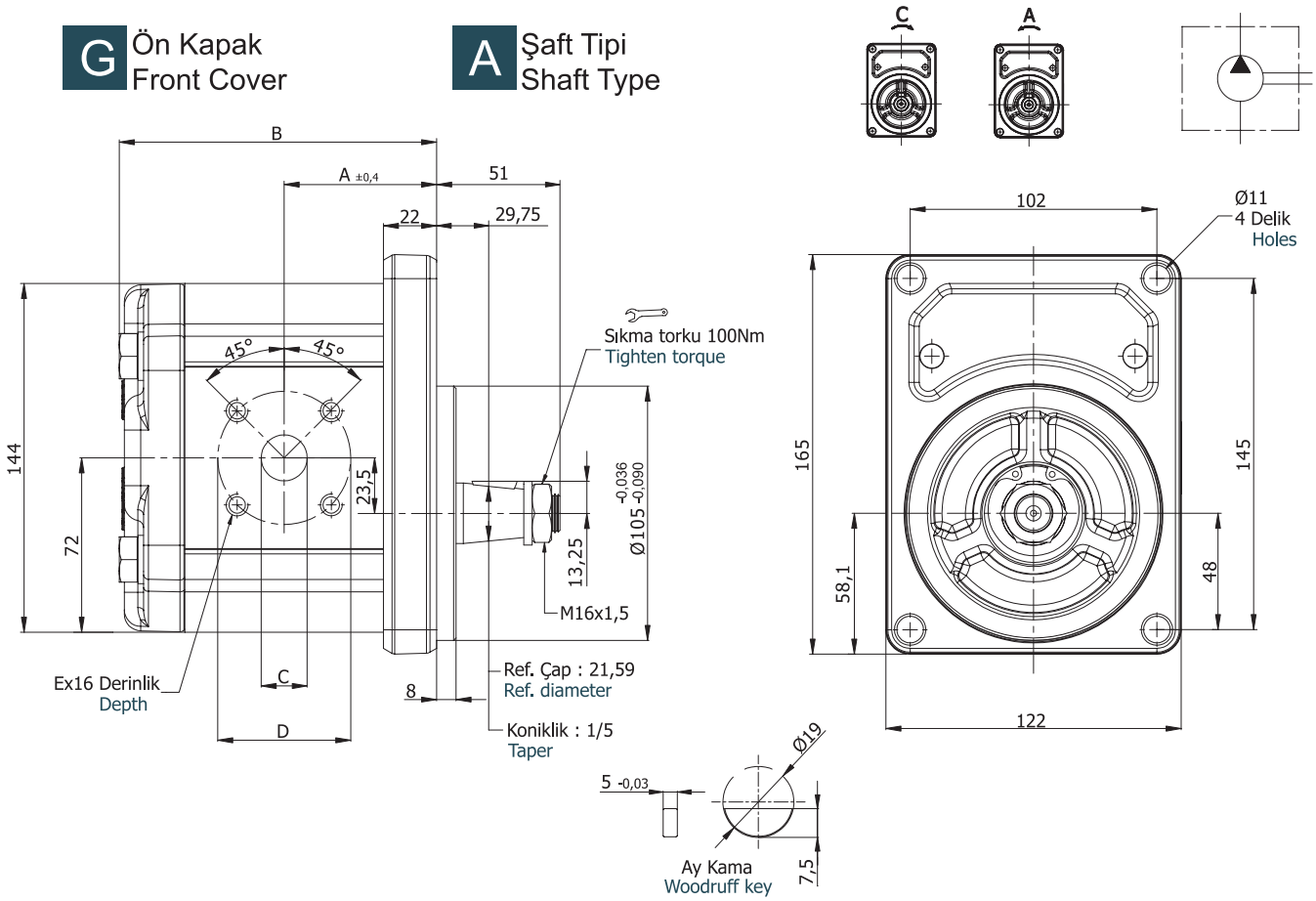
DPH30.270.A/CDD01SN	27,0			63,0	131,1						
DPH30.320.A/CDD01SN	32,0	280		64,5	134,1						
DPH30.340.A/CDD01SN	34,0			65,0	135,1						
DPH30.380.A/CDD01SN	38,0			66,5	138,1						
DPH30.430.A/CDD01SN	43,0			68,0	141,1						
DPH30.470.A/CDD01SN	47,0	260	2500	69,5	144,1						
DPH30.510.A/CDD01SN	51,0			70,5	146,1						
DPH30.560.A/CDD01SN	56,0	250		71,5	148,1						
DPH30.610.A/CDD01SN	61,0	240		74,0	153,1						
DPH30.730.A/CDD01SN	73,0	220		77,0	160,1						
DPH30.820.A/CDD01SN	82,0	210	2000	80,0	166,1						
DPH30.900.A/CDD01SN	90,0	200		83,0	172,1						
DPH30.1000.A/CDD01SN	100,0			86,0	178,1						



Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet			Çıkış - Outlet		
						C	D	E	c	d	e
DPH30.170.A/CGA01SN	17,0	300	3000	59,5	124,1	27	55	M8x16	19	55	M8x16
DPH30.220.A/CGA01SN	22,0			61,5	128,1						
DPH30.270.A/CGA01SN	27,0			63,0	131,1						
DPH30.320.A/CGA01SN	32,0	280		64,5	134,1						
DPH30.340.A/CGA01SN	34,0			65,0	135,1						
DPH30.380.A/CGA01SN	38,0			66,5	138,1						
DPH30.430.A/CGA01SN	43,0			68,0	141,1						
DPH30.470.A/CGA01SN	47,0	260	2500	69,5	144,1						
DPH30.510.A/CGA01SN	51,0			70,5	146,1						
DPH30.560.A/CGA01SN	56,0	250		71,5	148,1						
DPH30.610.A/CGA01SN	61,0	240		74,0	153,1						
DPH30.730.A/CGA01SN	73,0	220		77,0	160,1						
DPH30.820.A/CGA01SN	82,0	210	2000	80,0	166,1						
DPH30.900.A/CGA01SN	90,0	200		83,0	172,1						
DPH30.1000.A/CGA01SN	100,0			86,0	178,1						

GP30 POMPALARIN KODLAMA SİSTEMİ
ORDERING CODE OF GP30 PUMPS

GP30 . 082/082 . C S T1 T N

GP30	Yandan Giriş-Çıkış Side Inlet-Outlet
GPR30	Arkadan Giriş-Çıkış Rear Inlet-Outlet

İletim Hacmi / Displacement cm³/dev(cm³/rev)
017 = 17,2 cm³/dev(rev)
027 = 27,1 cm³/dev(rev)
034 = 34,4 cm³/dev(rev)
043 = 42,9 cm³/dev(rev)
051 = 51,2 cm³/dev(rev)
061 = 60,7 cm³/dev(rev)
073 = 73,0 cm³/dev(rev)
082 = 81,4 cm³/dev(rev)
100 = 99,7 cm³/dev(rev)

Dönüş Yönü / Rotation	
A	Sol Dönüş / Counter-clockwise
C	Sağ Dönüş / Clockwise
R	Çift Dönüş / Reversible

Şaft Tipi / Shaft Type	
T1	Çok Kamalı Mil Spline Shaft 6x24x25 DIN 5463
M1	Çok Kamalı Mil Spline Shaft 8x32x35 DIN 5462
S2	Çok Kamalı Mil Spline Shaft B6x30x35 DIN 9611 SAE 1 3/8"
S	Paralel Şaft Parallel Shaft A8x7x32 DIN 6885
B1	Konik - Kamalı Tapered key shaft 1:8

İç sızıntı Hattı / Internal Drain Port	
T	Var / Available
	Yok / Absent

Keçeler / Seals	
N	NBR
V	VITON

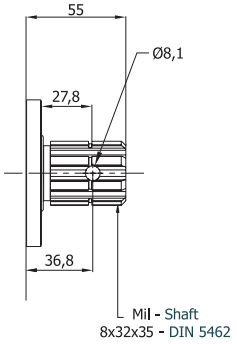
Ön Kapak / Front Cover		
S	3 Delikli Ø73 / 3 Holes	Ø73
R	4 Delikli Ø80 / 4 Holes	Ø80
P	6 Delikli Ø52 / 6 Holes	Ø52
D	2 Delikli Ø82,5 / 2 Holes	Ø82,5
A	Dikdörtgen Kapak Square Flange	Ø50,78

- Kodlama Örneği (Tekli) ; GP30.082.CST1N
  Code Example (Single)

- Kodlama Örneği (Tandem) ; GP30.082/082.CST1N
  Code Example (Tandem)

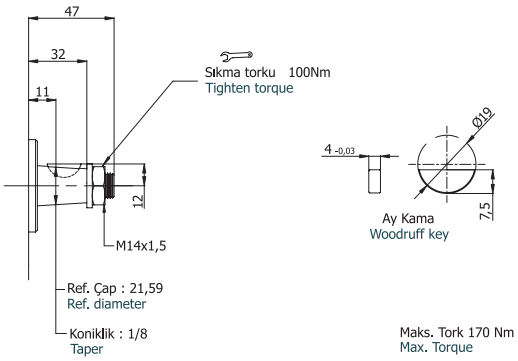
GP30 ŞAFT TİPLERİ / GP30 SHAFT TYPES

M1



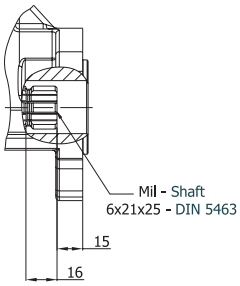
Maks. Tork 300 Nm
Max. Torque

B1



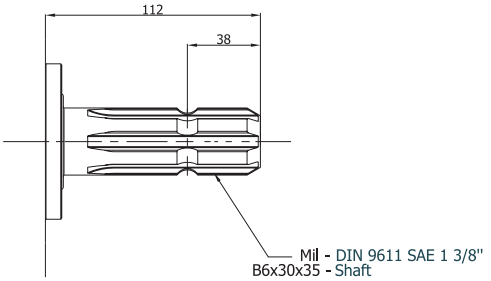
Maks. Tork 170 Nm
Max. Torque

T1



Maks. Tork 360 Nm
Max. Torque

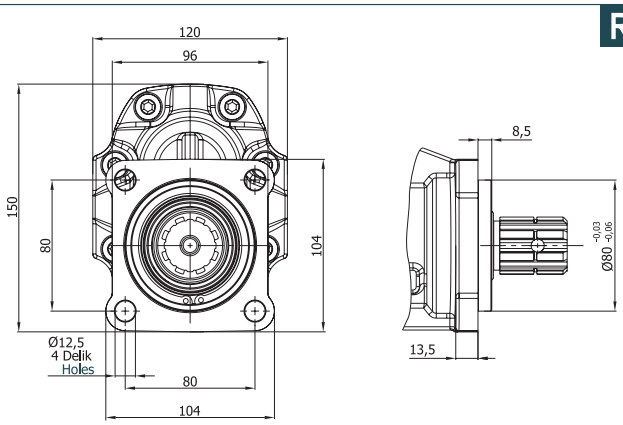
S2



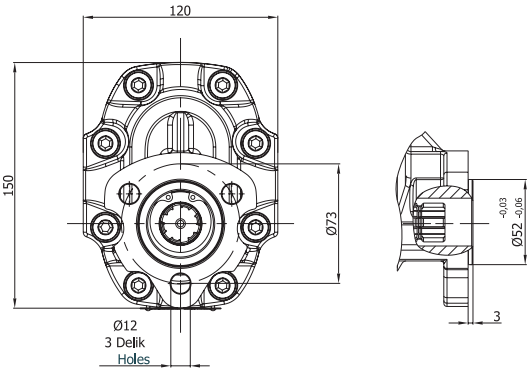
Maks. Tork 250 Nm
Max. Torque

GP30 ÖN KAPAKLAR / GP30 FRONT COVERS

R



S



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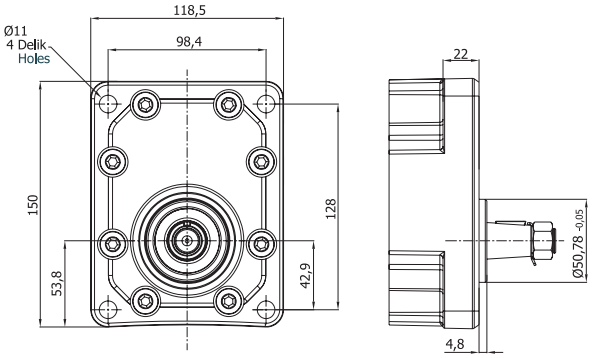

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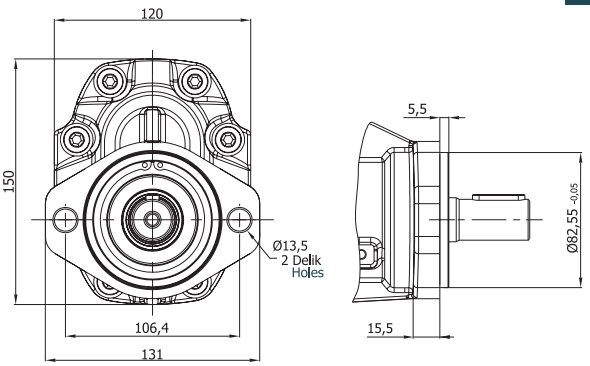


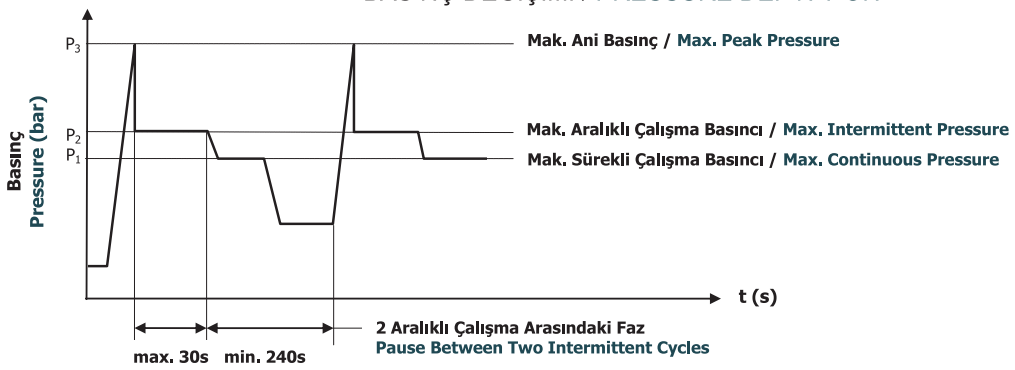
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev (cm³/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
GP30.017	17,2	300	320	340	3000	300
GP30.027	27,1	290	310	330		
GP30.034	34,4	280	300	320	2750	
GP30.043	42,9	270	290	310	2500	
GP30.051	51,2	240	260	280		
GP30.061	60,7	220	240	260	2000	
GP30.073	73,0	200	220	240	1750	
GP30.082	81,4	190	210	230		
GP30.100	99,7	180	200	220		

P1: Sürekli çalışma basıncı
Continuous pressure

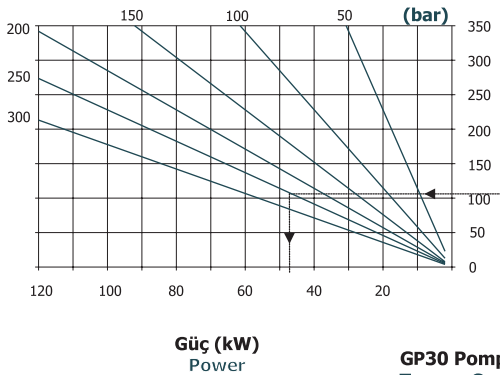
P2 : Aralıklı çalışma basıncı
Intermittent pressure

P3 : Ani basınç
Peak pressure

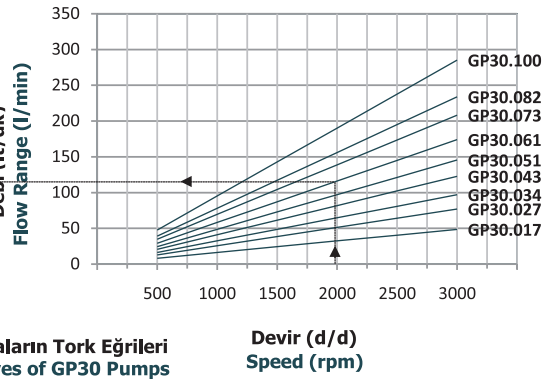
BASINÇ DEĞİŞİMİ / PRESSURE DEFINITION



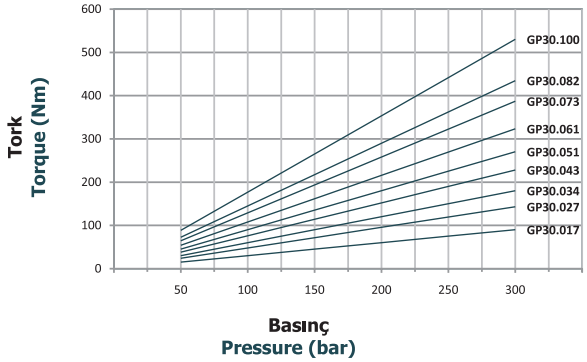
GP30 Pompaların Güç Eğrileri
Power Curves of GP30 Pumps



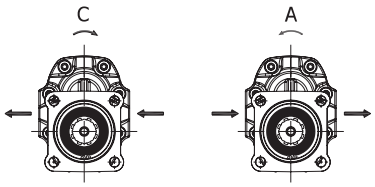
GP30 Pompaların Debi Eğrileri
Flow Curves of GP30 Pumps

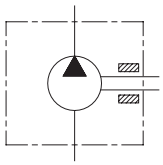


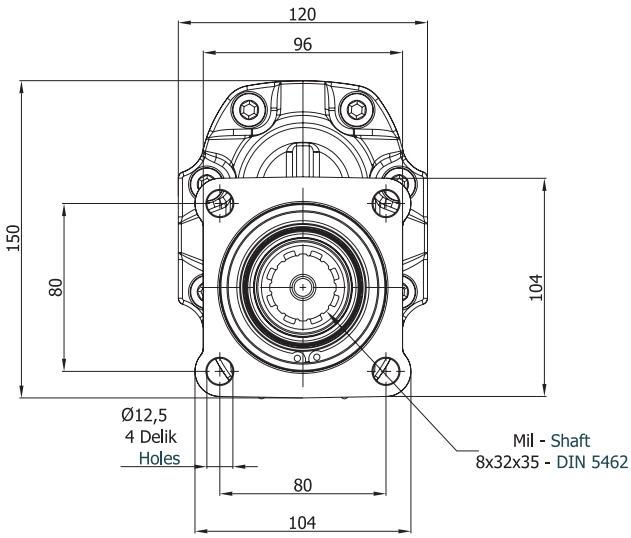
GP30 Pompaların Tork Eğrileri
Torque Curves of GP30 Pumps

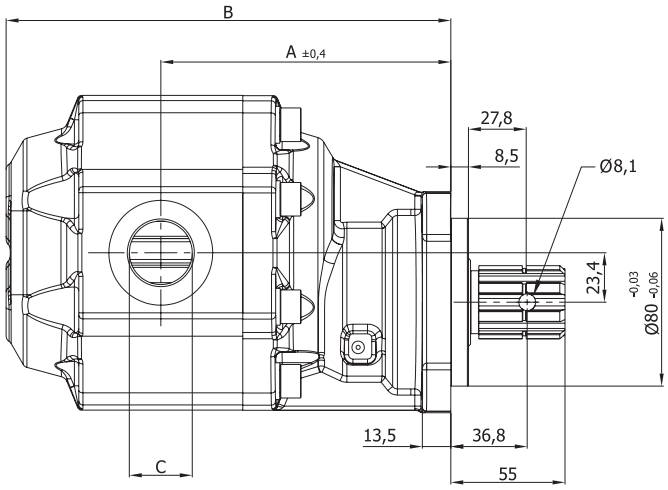


ISO TİPİ TYPE



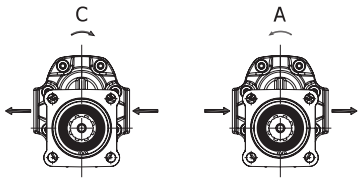


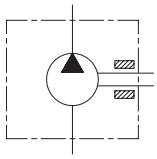


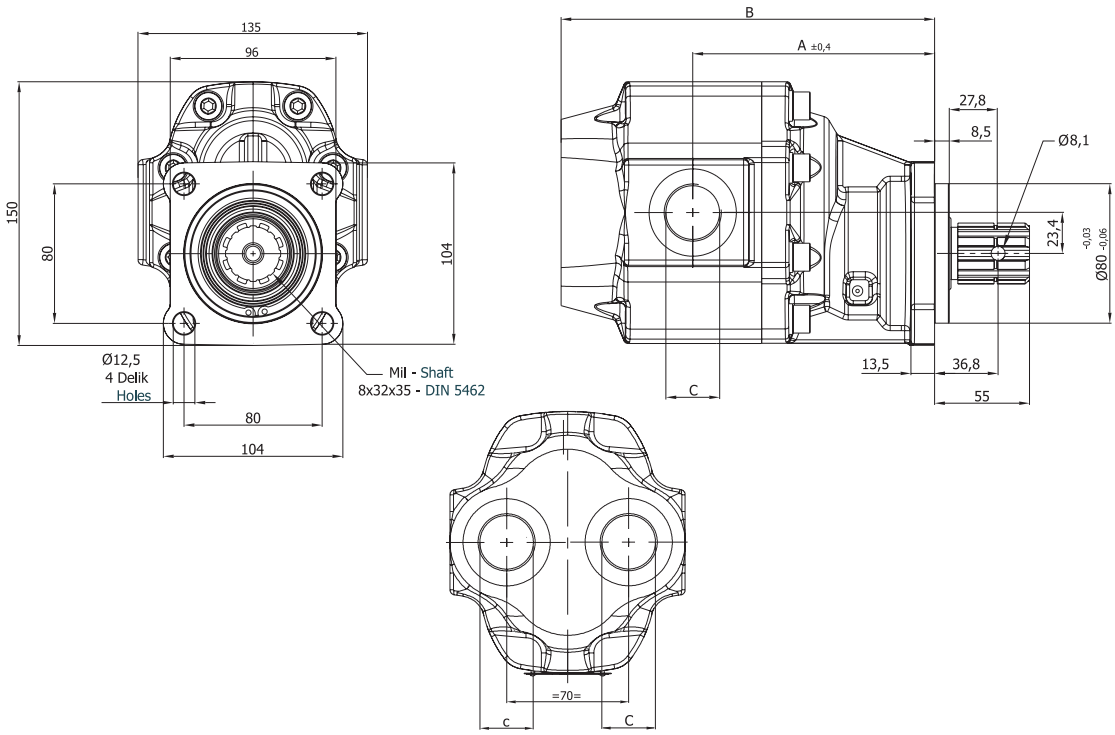


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GP30.017.CRM1N	17,2	300	3000	119,0	172,6	G 1/2"	G 1/2"
GP30.017.ARM1N							
GP30.027.CRM1N	27,1	290		122,2	179,0	G 3/4"	G 3/4"
GP30.027.ARM1N							
GP30.034.CRM1N	34,4	280	2750	124,5	183,6		
GP30.034.ARM1N							
GP30.043.CRM1N	42,9	270	2500	127,4	189,4		
GP30.043.ARM1N							
GP30.051.CRM1N	51,2	240		129,5	193,5	G 1"	G 1"
GP30.051.ARM1N							
GP30.061.CRM1N	60,7	220	2000	133,2	201,0		
GP30.061.ARM1N							
GP30.073.CRM1N	73,0	200	1750	137,1	208,7		
GP30.073.ARM1N							
GP30.082.CRM1N	81,4	190		140,0	214,5	G 1-1/4"	G 1-1/4"
GP30.082.ARM1N							
GP30.100.CRM1N	99,7	180		145,8	226,1		
GP30.100.ARM1N							

ISO TİPİ TYPE

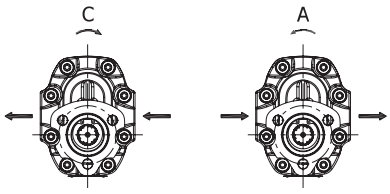


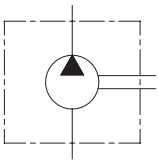


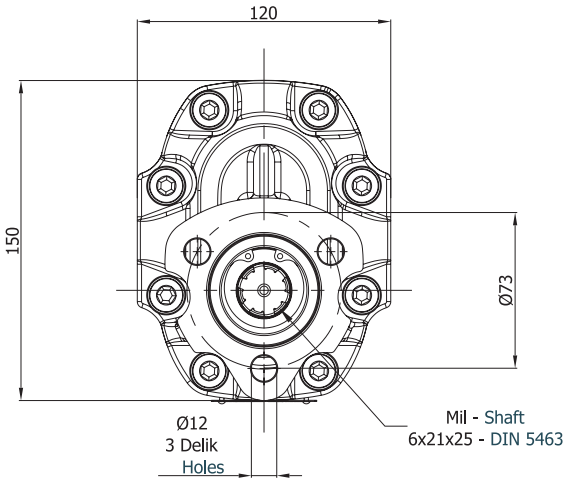


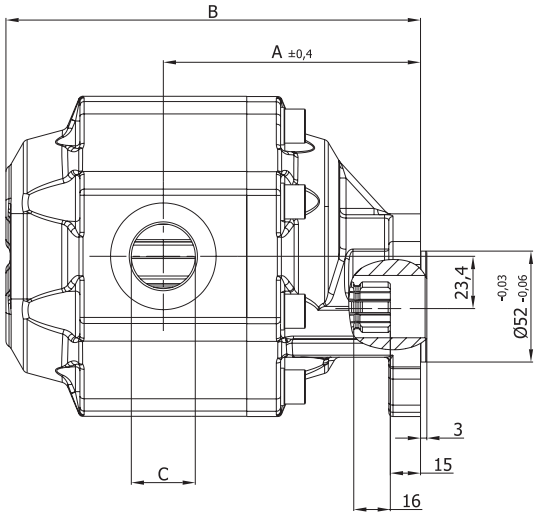
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev (cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A	B	Giriş – Inlet C	Çıkış - Outlet c
GPR30.017.CRM1N	17,2	300	3000	119,0	173,6	G 1/2"	G 1/2"
GPR30.017.ARM1N							
GPR30.027.CRM1N	27,1	290		122,2	180,0	G 3/4"	G 3/4"
GPR30.027.ARM1N							
GPR30.034.CRM1N	34,4	280	2750	124,5	184,6		
GPR30.034.ARM1N							
GPR30.043.CRM1N	42,9	270	2500	127,4	190,4		
GPR30.043.ARM1N							
GPR30.051.CRM1N	51,2	240		129,5	194,5	G 1"	G 1"
GPR30.051.ARM1N							
GPR30.061.CRM1N	60,7	220	2000	133,2	202,0		
GPR30.061.ARM1N							
GPR30.073.CRM1N	73,0	200	1750	137,1	209,7		
GPR30.073.ARM1N							
GPR30.082.CRM1N	81,4	190		140,1	215,5	G 1-1/4"	G 1-1/4"
GPR30.082.ARM1N							
GPR30.100.CRM1N	99,7	180		145,8	227,1		
GPR30.100.ARM1N							

UNI TİPİ TYPE



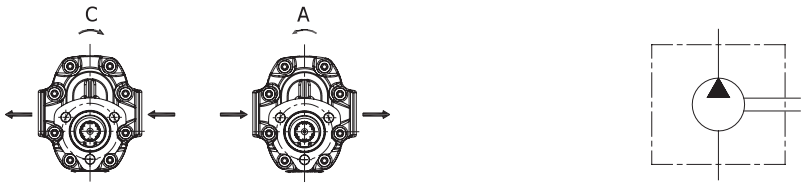


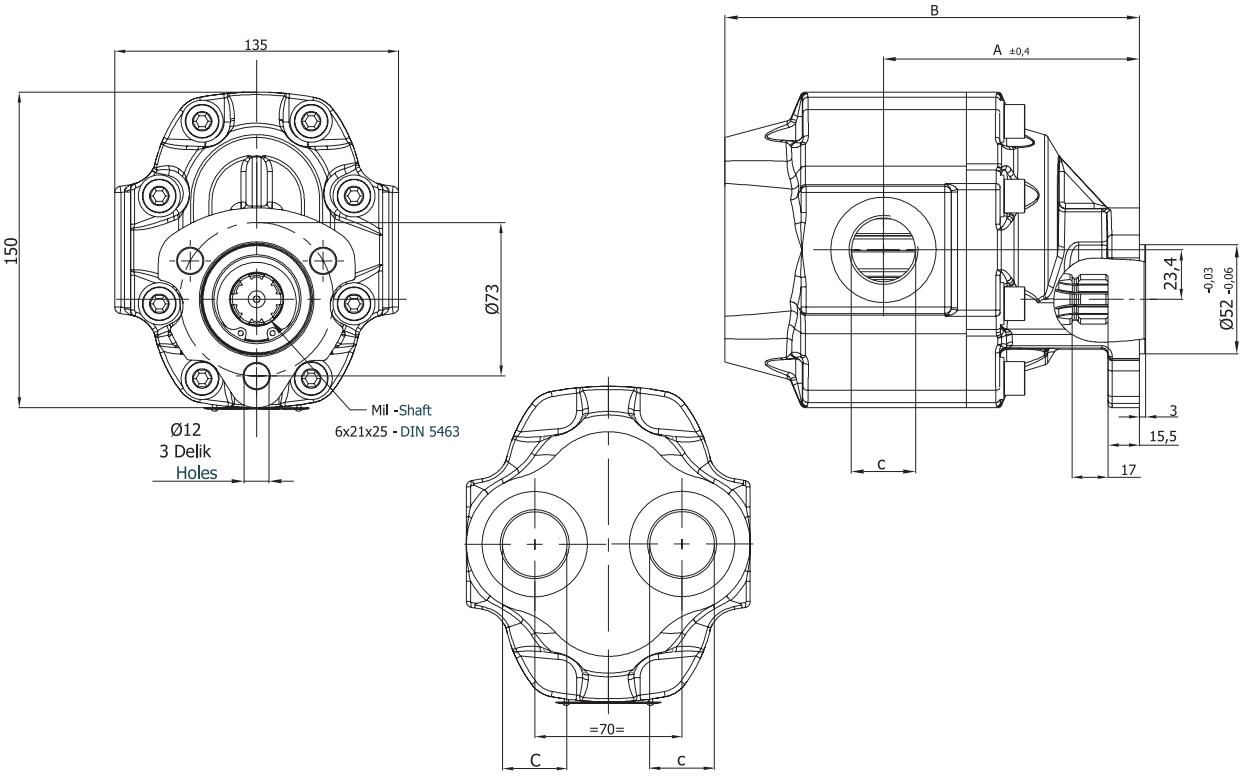




Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GP30.017.CST1N	17,2	300	3000	100,8	154,4	G 1/2"	G 1/2"
GP30.017.AST1N							
GP30.027.CST1N	27,1	290		104,0	160,8	G 3/4"	G 3/4"
GP30.027.AST1N							
GP30.034.CST1N	34,4	280	2750	106,3	165,4		
GP30.034.AST1N							
GP30.043.CST1N	42,9	270	2500	109,2	171,2		
GP30.043.AST1N							
GP30.051.CST1N	51,2	240		111,3	175,3	G 1"	G 1"
GP30.051.AST1N							
GP30.061.CST1N	60,7	220	2000	115,0	182,8		
GP30.061.AST1N							
GP30.073.CST1N	73,0	200	1750	118,9	190,5		
GP30.073.AST1N							
GP30.082.CST1N	81,4	190		121,8	196,3	G 1-1/4"	G 1-1/4"
GP30.082.AST1N							
GP30.100.CST1N	99,7	180		127,6	207,9		
GP30.100.AST1N							

UNI TİPİ TYPE

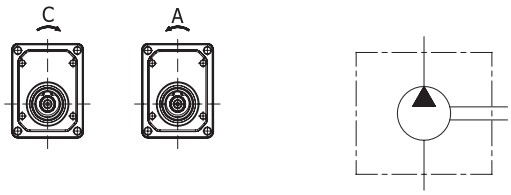


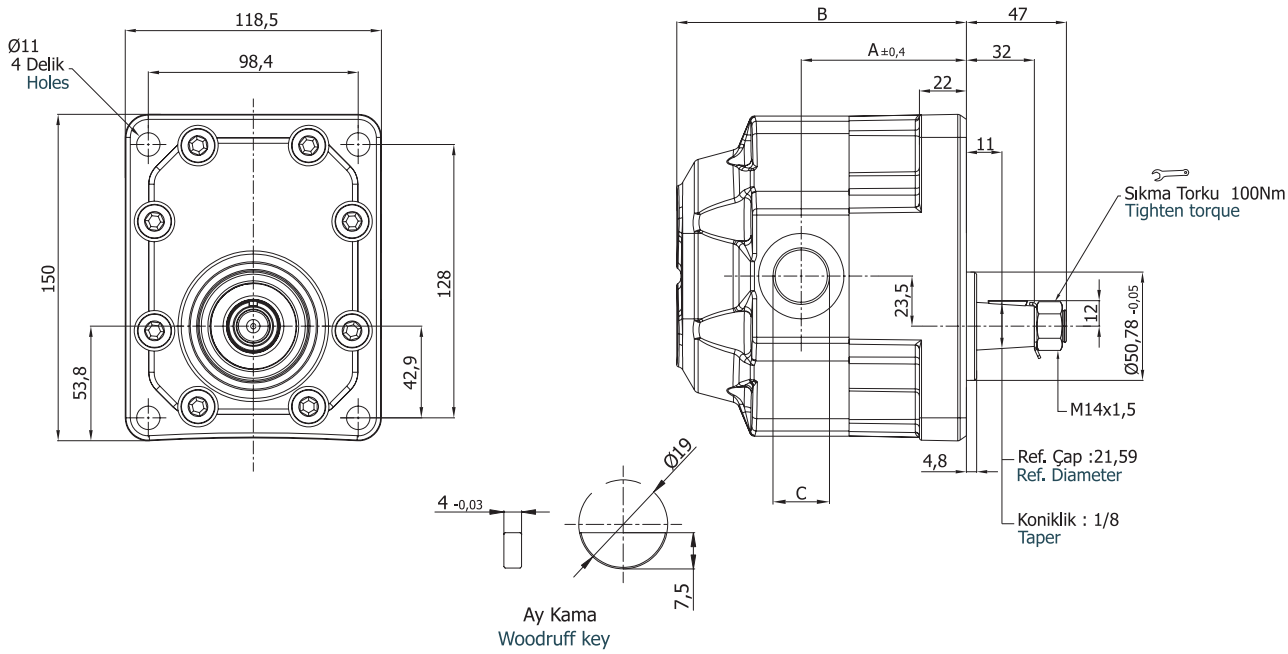


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev (cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GPR30.017.CST1N	17,2	300	3000	100,8	155,4	G 1/2"	G 1/2"
GPR30.017.AST1N							
GPR30.027.CST1N	27,1	290		104,0	161,8	G 3/4"	G 3/4"
GPR30.027.AST1N							
GPR30.034.CST1N	34,4	280	2750	106,3	166,4		
GPR30.034.AST1N							
GPR30.043.CST1N	42,9	270	2500	109,2	172,2		
GPR30.043.AST1N							
GPR30.051.CST1N	51,2	240		111,3	176,3	G 1"	G 1"
GPR30.051.AST1N							
GPR30.061.CST1N	60,7	220	2000	115,0	183,8		
GPR30.061.AST1N							
GPR30.073.CST1N	73,0	200	1750	118,9	191,5		
GPR30.073.AST1N							
GPR30.082.CST1N	81,4	190		121,8	197,3	G 1-1/4"	G 1-1/4"
GPR30.082.AST1N							
GPR30.100.CST1N	99,7	180		127,6	208,9		
GPR30.100.AST1N							

A Ön Kapak Front Cover

B1 Şaft Tipi Shaft Type

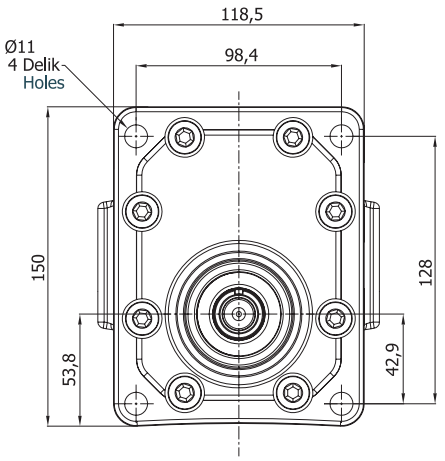


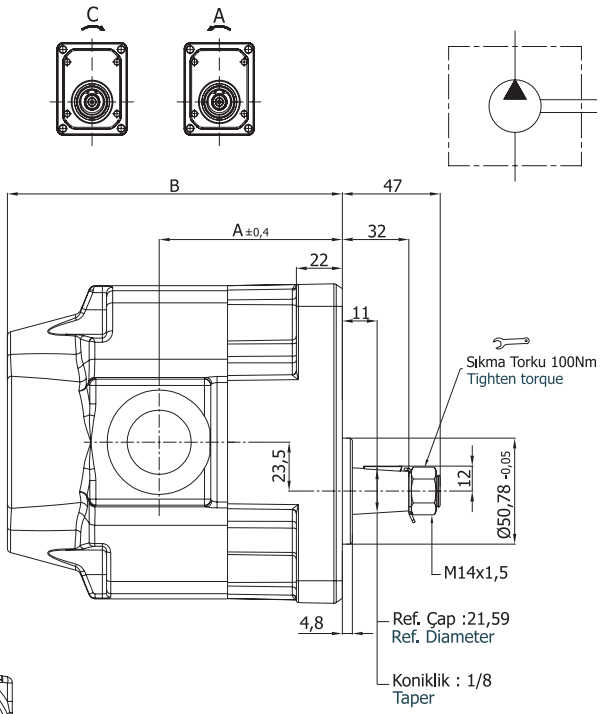


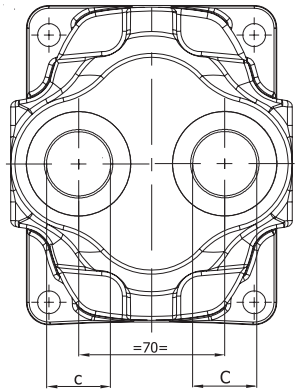
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GP30.017.CAB1N	17,2	300	3000	73,5	127,2	G 1/2"	G 1/2"
GP30.017.AAB1N							
GP30.027.CAB1N	27,1	290		76,7	133,5	G 3/4"	G 3/4"
GP30.027.AAB1N							
GP30.034.CAB1N	34,4	280	2750	79,0	138,2		
GP30.034.AAB1N							
GP30.043.CAB1N	42,9	270	2500	81,9	144,0		
GP30.043.AAB1N							
GP30.051.CAB1N	51,2	240		84,0	148,0	G 1"	G 1"
GP30.051.AAB1N							
GP30.061.CAB1N	60,7	220	2000	87,7	155,5		
GP30.061.AAB1N							
GP30.073.CAB1N	73,0	200	1750	91,6	163,3		
GP30.073.AAB1N							
GP30.082.CAB1N	81,4	190		94,5	169,0	G 1-1/4"	G 1-1/4"
GP30.082.AAB1N							
GP30.100.CAB1N	99,7	180		100,3	180,7		
GP30.100.AAB1N							

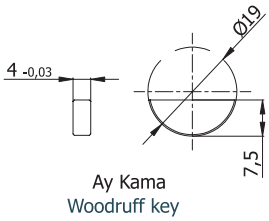
A Ön Kapak
Front Cover

B1 Şaft Tipi
Shaft Type



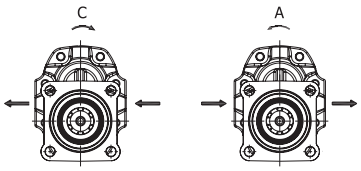


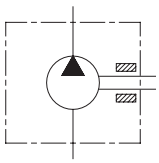


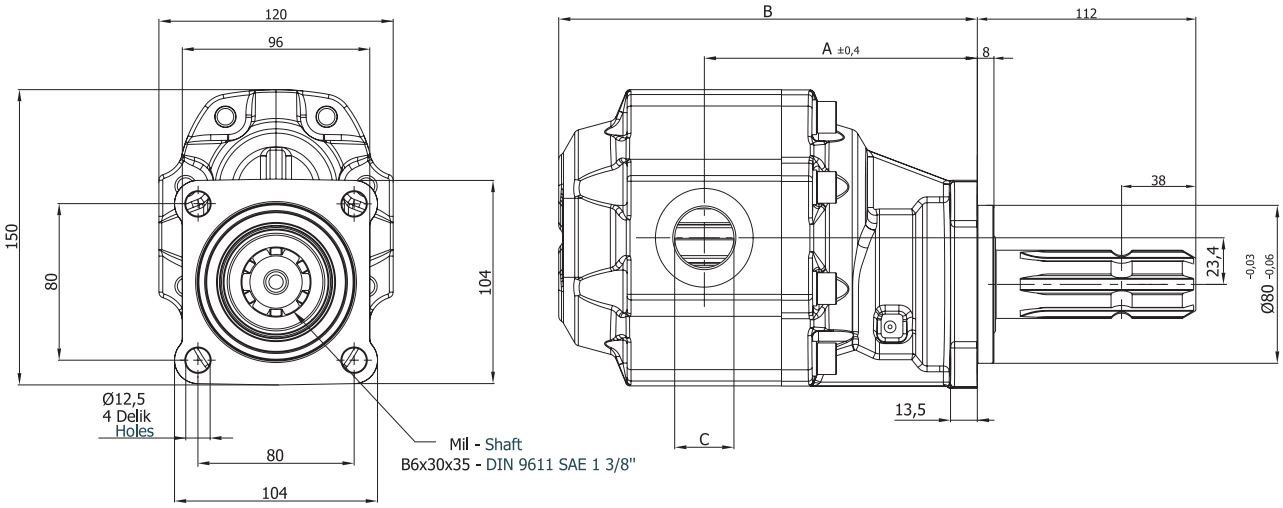


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet	Çıkış - Outlet
						C	c
GPR30.017.CAB1N GPR30.017.CAB1N	17,2	300	3000	73,5	128,1	G 1/2"	G 1/2"
GPR30.027.CAB1N GPR30.027.CAB1N	27,1	290		76,7	134,5	G 3/4"	G 3/4"
GPR30.034.CAB1N GPR30.034.CAB1N	34,4	280	2750	79,0	139,1		
GPR30.043.CAB1N GPR30.043.CAB1N	42,9	270	2500	81,9	144,9		
GPR30.051.CAB1N GPR30.051.CAB1N	51,2	240		84,0	149,0	G 1"	G 1"
GPR30.061.CAB1N GPR30.061.CAB1N	60,7	220	2000	87,7	156,5		
GPR30.073.CAB1N GPR30.073.CAB1N	73,0	200	1750	91,6	164,2		
GPR30.082.CAB1N GPR30.082.CAB1N	81,4	190		94,5	170,0	G 1-1/4"	G 1-1/4"
GPR30.100.CAB1N GPR30.100.CAB1N	99,7	180		100,3	181,6		

SAE TİPİ TYPE

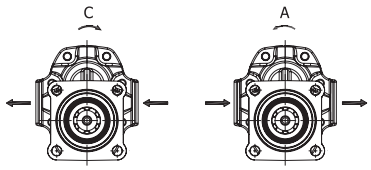


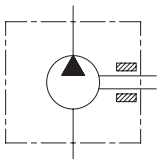


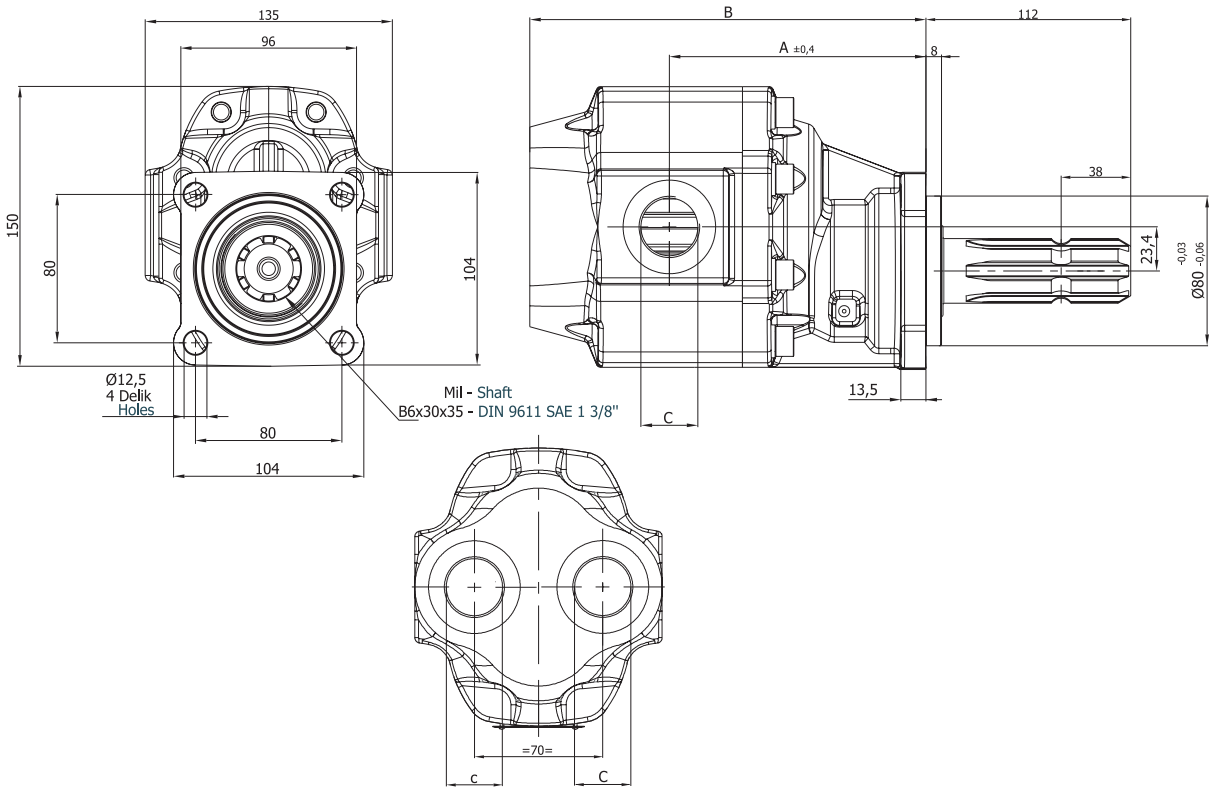


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GP30.017.CRS2N	17,2	300	3000	119,0	172,6	G 1/2"	G 1/2"
GP30.017.ARS2N							
GP30.027.CRS2N	27,1	290		122,2	179,0	G 3/4"	G 3/4"
GP30.027.ARS2N							
GP30.034.CRS2N	34,4	280	2750	124,5	183,6		
GP30.034.ARS2N							
GP30.043.CRS2N	42,9	270	2500	127,4	189,4		
GP30.043.ARS2N							
GP30.051.CRS2N	51,2	240		129,5	193,5	G 1"	G 1"
GP30.051.ARS2N							
GP30.061.CRS2N	60,7	220	2000	133,2	201,0		
GP30.061.ARS2N							
GP30.073.CRS2N	73,0	200	1750	137,1	208,7		
GP30.073.ARS2N							
GP30.082.CRS2N	81,4	190		140,0	214,5	G 1-1/4"	G 1-1/4"
GP30.082.ARS2N							
GP30.100.CRS2N	99,7	180		145,8	226,1		
GP30.100.ARS2N							

SAE TİPİ TYPE

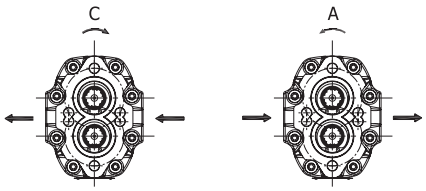


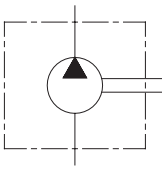


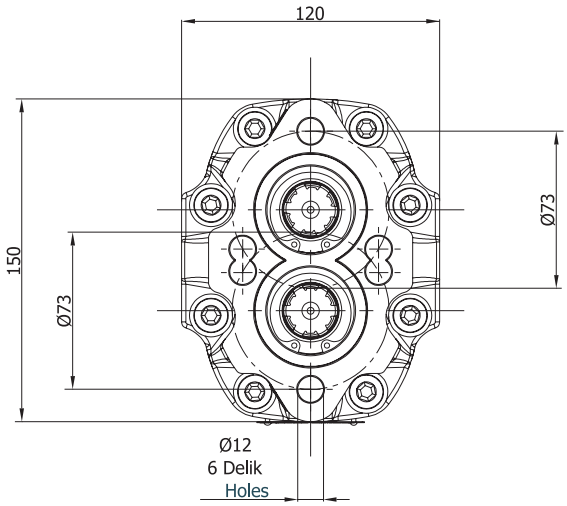


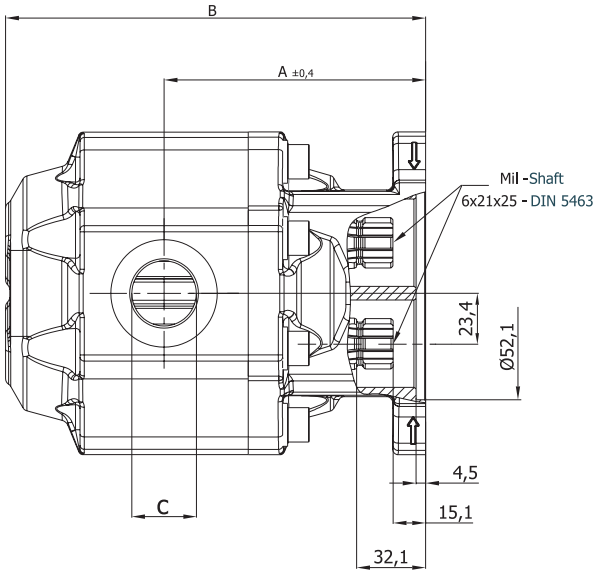
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev (cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GPR30.017.CRS2N	17,2	300	3000	119,0	173,6	G 1/2"	G 1/2"
GPR30.017.ARS2N							
GPR30.027.CRS2N	27,1	290		122,2	180,0	G 3/4"	G 3/4"
GPR30.027.ARS2N							
GPR30.034.CRS2N	34,4	280	2750	124,5	184,6		
GPR30.034.ARS2N							
GPR30.043.CRS2N	42,9	270	2500	127,4	190,4		
GPR30.043.ARS2N							
GPR30.051.CRS2N	51,2	240		129,5	194,5	G 1"	G 1"
GPR30.051.ARS2N							
GPR30.061.CRS2N	60,7	220	2000	133,2	202,0		
GPR30.061.ARS2N							
GPR30.073.CRS2N	73,0	200	1750	137,1	209,7		
GPR30.073.ARS2N							
GPR30.082.CRS2N	81,4	190		140,1	215,5	G 1-1/4"	G 1-1/4"
GPR30.082.ARS2N							
GPR30.100.CRS2N	99,7	180		145,8	227,1		
GPR30.100.ARS2N							

T2 TİPİ TYPE



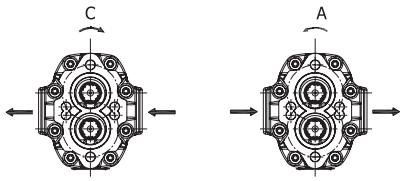


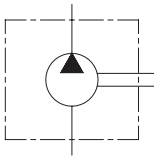


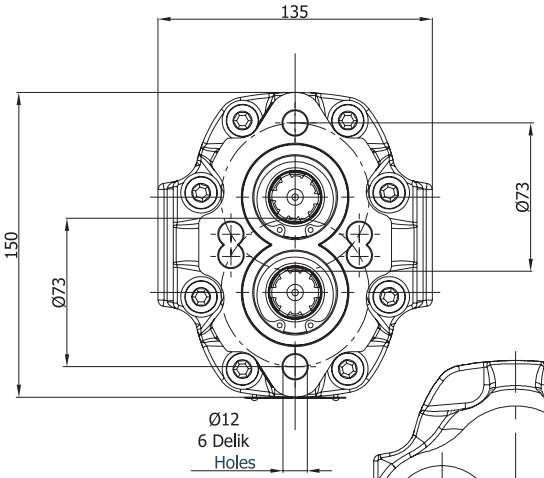


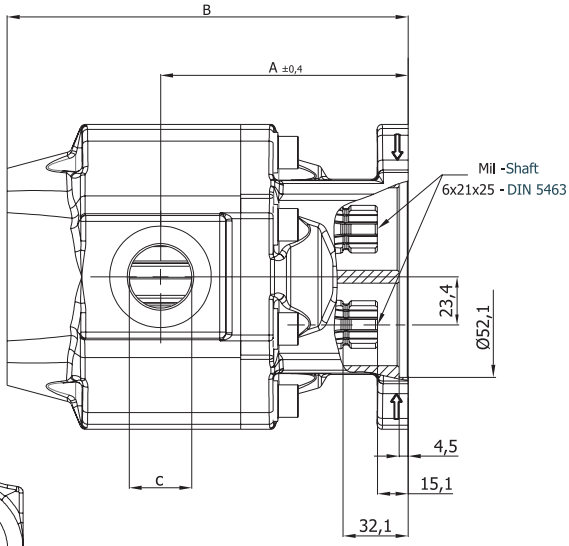
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GP30.017.CPT2N	17,2	300	3000	101,0	154,6	G 1/2"	G 1/2"
GP30.017.APT2N							
GP30.027.CPT2N	27,1	290		104,2	161,0	G 3/4"	G 3/4"
GP30.027.APT2N							
GP30.034.CPT2N	34,4	280	2750	106,5	165,6		
GP30.034.APT2N							
GP30.043.CPT2N	42,9	270	2500	109,5	171,4		
GP30.043.APT2N							
GP30.051.CPT2N	51,2	240		111,5	175,5	G 1"	G 1"
GP30.051.APT2N							
GP30.061.CPT2N	60,7	220	2000	115,2	183,0		
GP30.061.APT2N							
GP30.073.CPT2N	73,0	200	1750	119,2	190,7		
GP30.073.APT2N							
GP30.082.CPT2N	81,4	190		122,0	196,5	G 1-1/4"	G 1-1/4"
GP30.082.APT2N							
GP30.100.CPT2N	99,7	180		127,8	208,1		
GP30.100.APT2N							

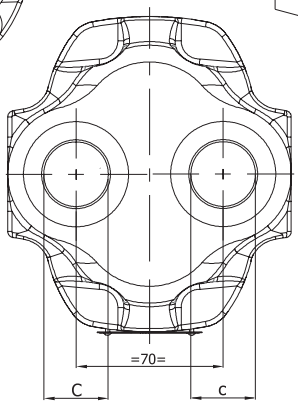
T2 TİPİ TYPE











Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GPR30.017.CPT2N	17,2	300	3000	101,0	155,6	G 1/2"	G 1/2"
GPR30.017.APT2N							
GPR30.027.CPT2N	27,1	290		104,2	162,0	G 3/4"	G 3/4"
GPR30.027.APT2N							
GPR30.034.CPT2N	34,4	280	2750	106,5	166,6		
GPR30.034.APT2N							
GPR30.043.CPT2N	42,9	270	2500	109,5	172,4		
GPR30.043.APT2N							
GPR30.051.CPT2N	51,2	240		111,5	176,5	G 1"	G 1"
GPR30.051.APT2N							
GPR30.061.CPT2N	60,7	220	2000	115,2	184,0		
GPR30.061.APT2N							
GPR30.073.CPT2N	73,0	200	1750	119,2	191,7		
GPR30.073.APT2N							
GPR30.082.CPT2N	81,4	190		122,0	197,5	G 1-1/4"	G 1-1/4"
GPR30.082.APT2N							
GPR30.100.CPT2N	99,7	180		127,8	209,1		
GPR30.100.APT2N							

GP40 POMPALARIN KODLAMA SİSTEMİ
ORDERING CODE OF GP40 PUMPS

GP40 . 087/087 . C S T1 T N

GP40	Yandan Giriş-Çıkış Side Inlet-Outlet
GPR40	Arkadan Giriş-Çıkış Rear Inlet-Outlet

İletim Hacmi / Displacement cm³/dev (cm³/rev)
063 = 63,8 cm³/dev(rev)
073 = 72,2 cm³/dev(rev)
087 = 86,1 cm³/dev(rev)
109 = 107,3 cm³/dev(rev)
133 = 131,6 cm³/dev(rev)
151 = 148,3 cm³/dev(rev)

Dönüş Yönü / Rotation	
A	Sol Dönüş / Counter-clockwise
C	Sağ Dönüş / Clockwise
R	Çift Dönüş / Reversible

Ön Kapak / Front Cover	
S	3 Delikli Ø73 / 3 Holes Ø73
R	4 Delikli Ø80 / 4 Holes Ø80

Şaft Tipi / Shaft Type	
T1	Çok Kamalı Mil Spline Shaft 6x21x25 DIN 5463
M1	Çok Kamalı Mil Spline Shaft 8x32x36 DIN 5462
S2	Çok Kamalı Mil Spline Shaft B6x30x35 DIN 9611 SAE 1 3/8"

İç sızıntı Hattı / Internal Drain Port	
T	Var / Available
	Yok / Absent

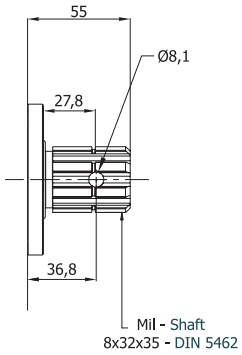
Keçeler / Seals	
N	NBR
V	VITON

- Kodlama Örneği (Tekli) ; GP40.087.CST1N
  Code Example (Single)

- Kodlama Örneği (Tandem) ; GP40.087/087.CST1N
  Code Example (Tandem)

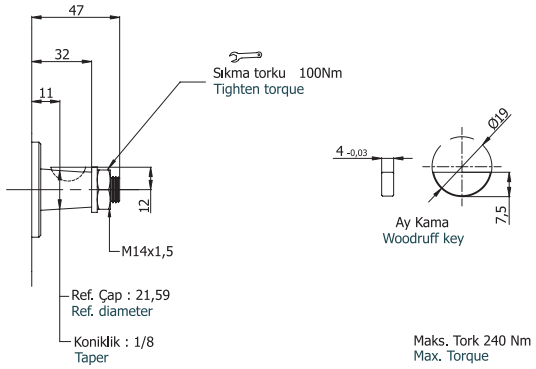
GP40 ŞAFT TİPLERİ / GP40 SHAFT TYPES

M1



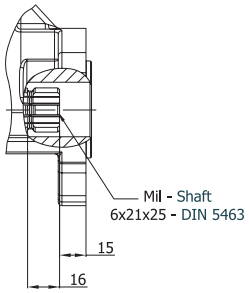
Maks. Tork 350 Nm
Max. Torque

B1



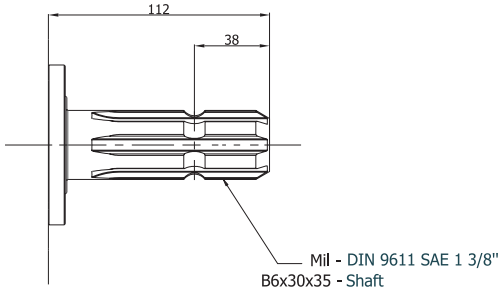
Maks. Tork 240 Nm
Max. Torque

T1



Maks. Tork 400 Nm
Max. Torque

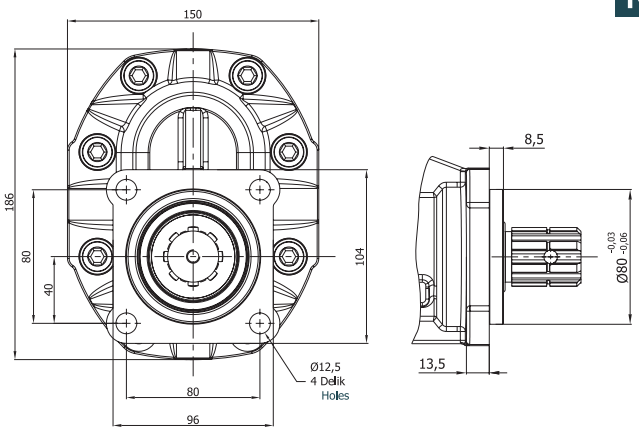
S2



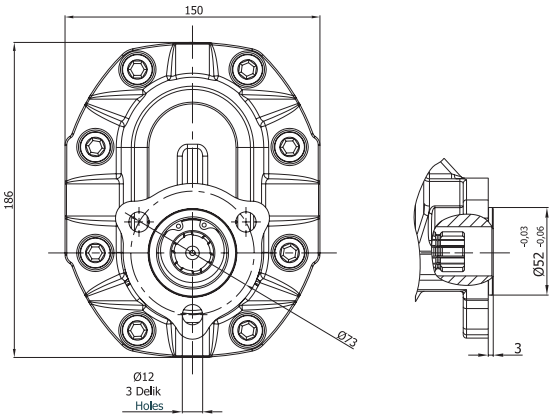
Maks. Tork 300 Nm
Max. Torque

GP40 ÖN KAPAKLAR / GP40 FRONT COVERS

R



S



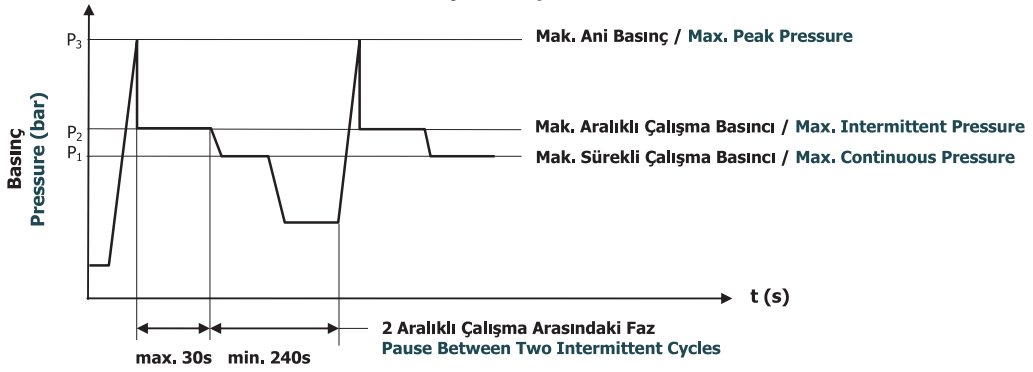
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev (cm³/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
GP40.063	63,8	280	300	320	2750	300
GP40.073	72,2					
GP40.087	86,1	260	280	300		
GP40.109	107,3	240	260	280		
GP40.133	131,6	220	240	260	2500	
GP40.151	148,3	180	200	220		

P1: Sürekli çalışma basıncı
Continuous pressure

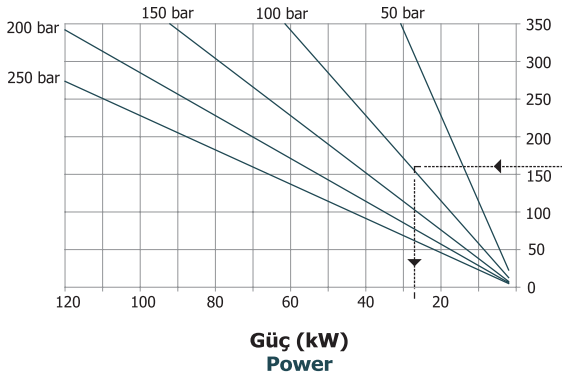
P2 : Aralıklı çalışma basıncı
Intermittent pressure

P3 : Ani basınç
Peak pressure

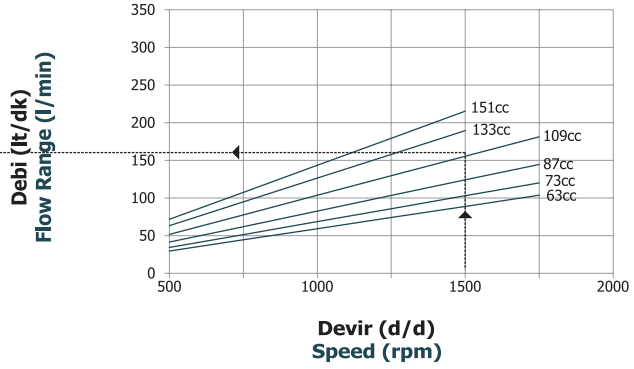
BASINÇ DEĞİŞİMİ / PRESSURE DEFINITION



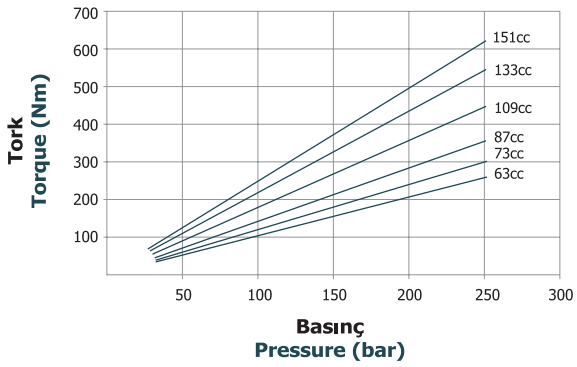
GP40 Pompaların Güç Eğrileri
Power Curves of GP40 Pumps



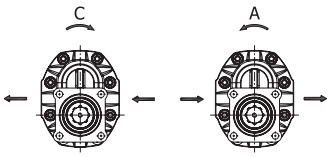
GP40 Pompaların Debi Eğrileri
Flow Curves of GP40 Pumps

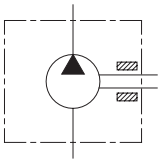


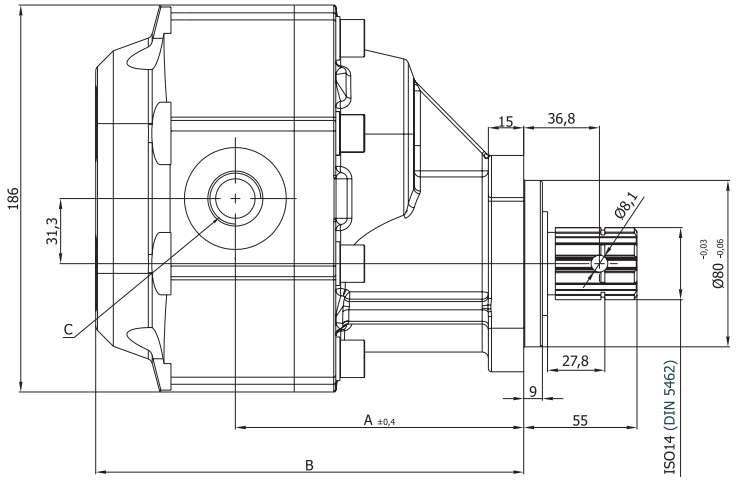
GP40 Pompaların Tork Eğrileri
Torque Curves of GP40 Pumps

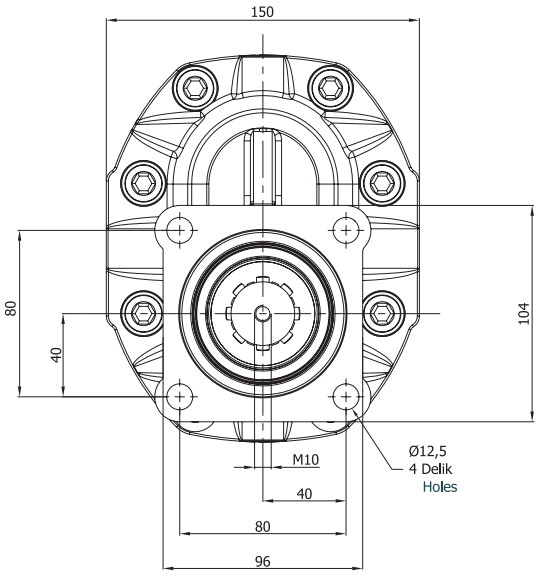


ISO TİPİ TYPE



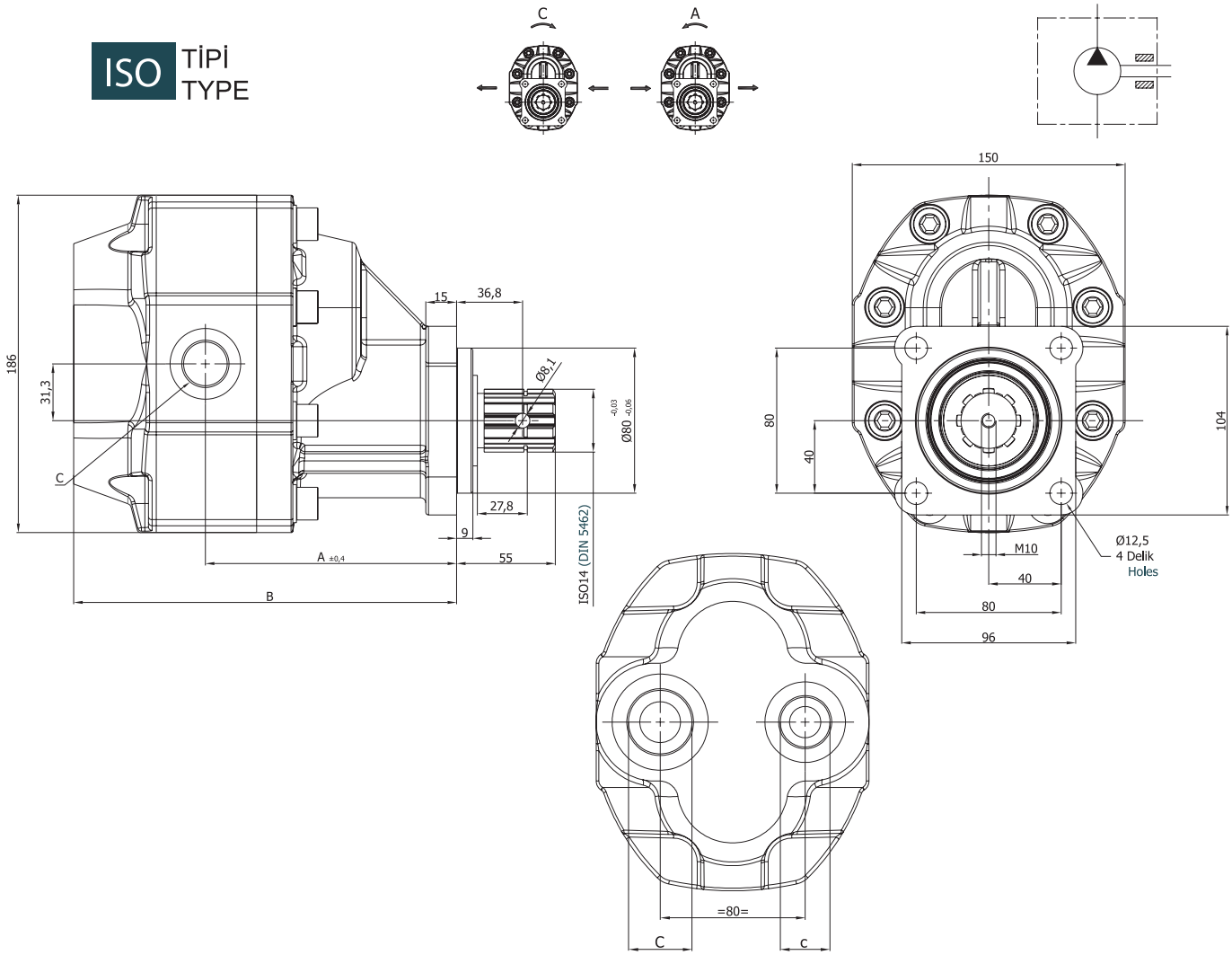






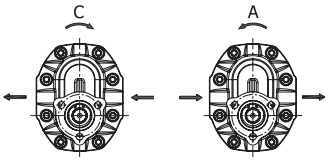
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev (cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GP40.063.CRM1N	63,8	280	2750	136,3	203,0	G 1"	G 3/4"
GP40.063.ARM1N							
GP40.073.CRM1N	72,2			137,3	204,6		
GP40.073.ARM1N							
GP40.087.CRM1N	86,1	260		141,0	209,6	G 1-1/4"	G 1"
GP40.087.ARM1N							
GP40.109.CRM1N	107,3	240		145,0	217,3		
GP40.109.ARM1N							
GP40.133.CRM1N	131,6	220	2500	148,0	225,9	G 1-1/2"	
GP40.133.ARM1N							
GP40.151.CRM1N	148,3	180		153,3	232,3		
GP40.151.ARM1N							

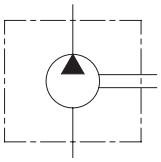
ISO TİPİ TYPE

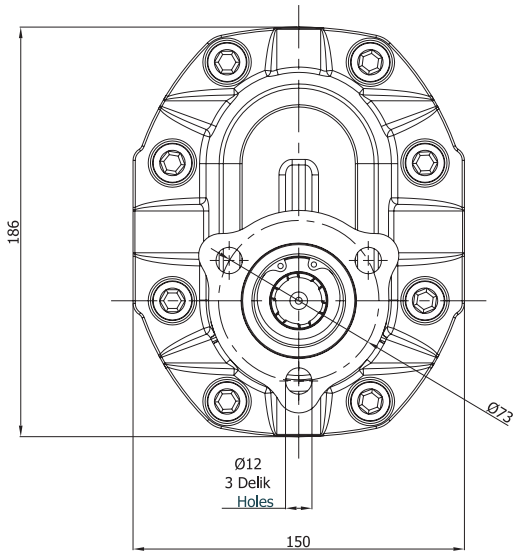


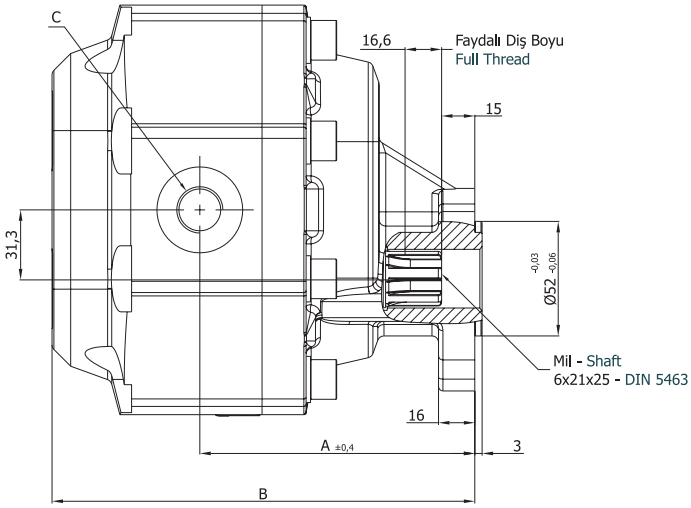
Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev (cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GPR40.063.CRM1N	63,8	280	2750	136,3	208,5	G 1"	G 3/4"
GPR40.063.ARM1N							
GPR40.073.CRM1N	72,2			137,3	210,0		
GPR40.073.ARM1N							
GPR40.087.CRM1N	86,1	260		141,0	214,0	G 1-1/4"	G 1"
GPR40.087.ARM1N							
GPR40.109.CRM1N	107,3	240		145,0	221,5		
GPR40.109.ARM1N							
GPR40.133.CRM1N	131,6	220	2500	148,0	230,5	G 1-1/2"	
GPR40.133.ARM1N							
GPR40.151.CRM1N	148,3	180		153,3	236,5		
GPR40.151.ARM1N							

UNI TİPİ TYPE



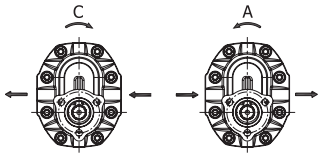


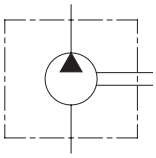


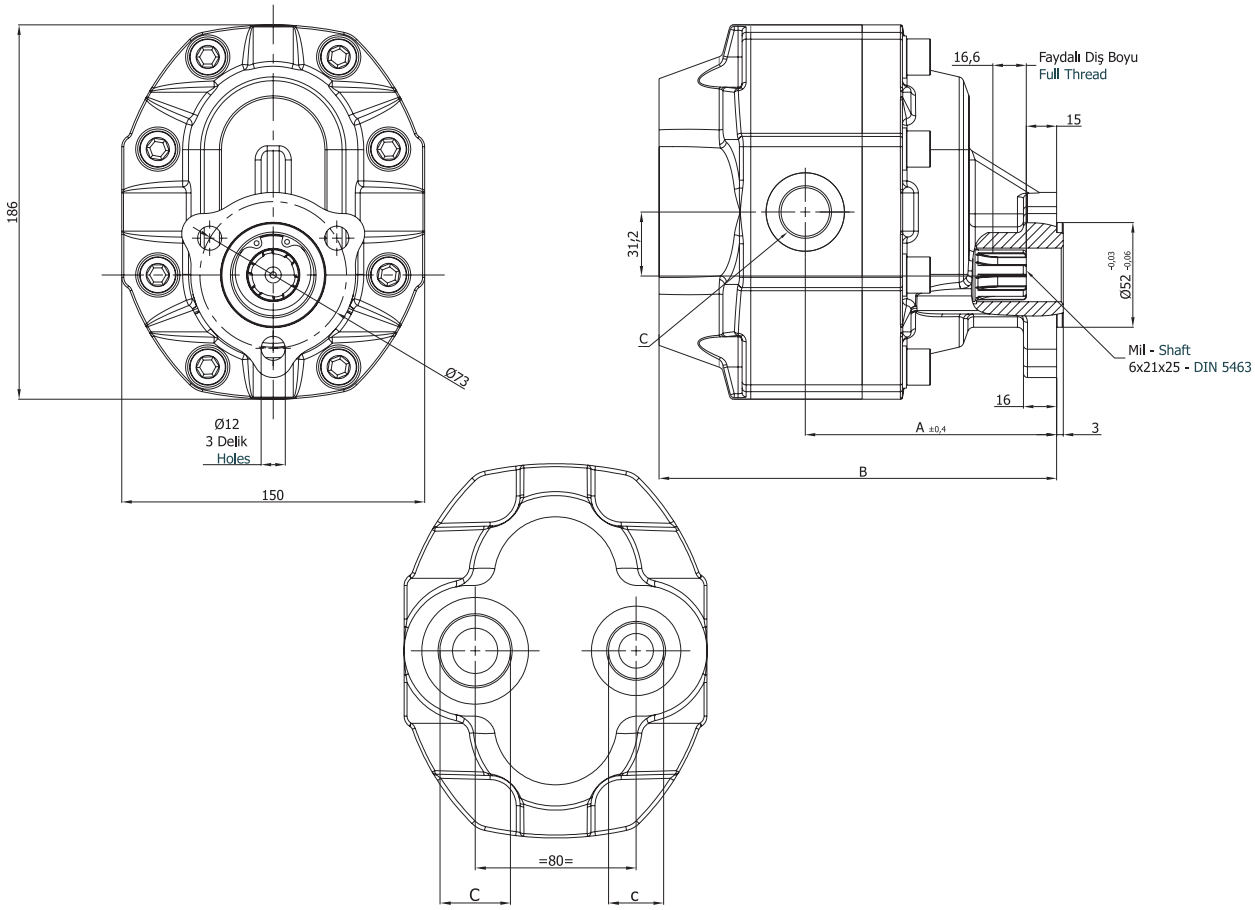


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev (cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GP40.063.CST1N	63,8	280	2750	124,0	190,7	G 1"	G 3/4"
GP40.063.AST1N							
GP40.073.CST1N	72,2			125,0	192,3		
GP40.073.AST1N							
GP40.087.CST1N	86,1	260		128,7	197,3	G 1-1/4"	G 1"
GP40.087.AST1N							
GP40.109.CST1N	107,3	240		132,7	205,0		
GP40.109.AST1N							
GP40.133.CST1N	131,6	220	2500	135,7	213,6	G 1-1/2"	
GP40.133.AST1N							
GP40.151.CST1N	148,3	180		141,0	220,0		
GP40.151.AST1N							

UNI TİPİ TYPE

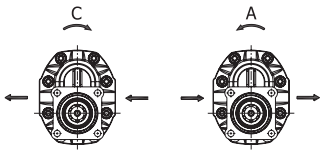


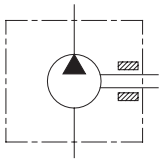


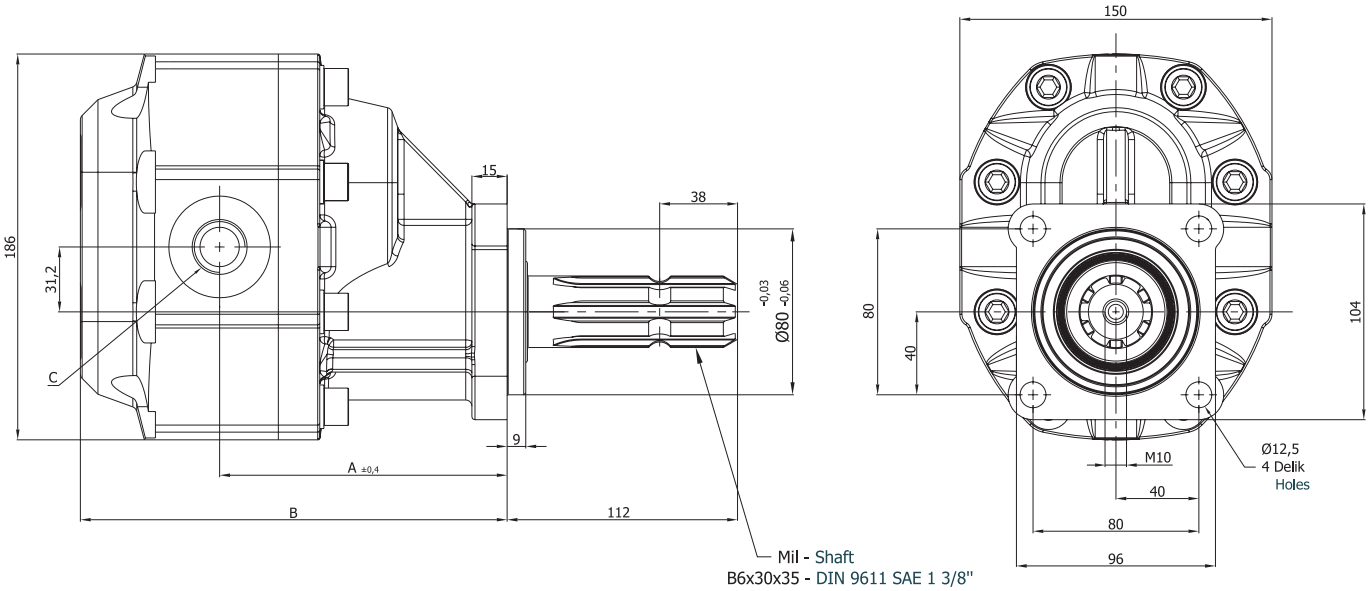


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GPR40.063.CST1N	63,8	280	2750	124,0	196,2	G 1”	G 3/4”
GPR40.063.AST1N							
GPR40.073.CST1N	72,2			125,0	197,7		
GPR40.073.AST1N							
GPR40.087.CST1N	86,1	260		128,7	201,7	G 1-1/4”	G 1”
GPR40.087.AST1N							
GPR40.109.CST1N	107,3	240		132,7	209,2		
GPR40.109.AST1N							
GPR40.133.CST1N	131,6	220	2500	135,7	218,2	G 1-1/2”	
GPR40.133.AST1N							
GPR40.151.CST1N	148,3	180		141,0	224,2		
GPR40.151.AST1N							

SAE TİPİ TYPE

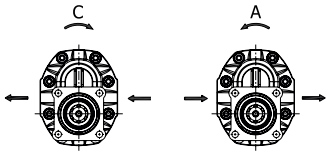


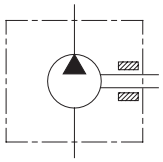


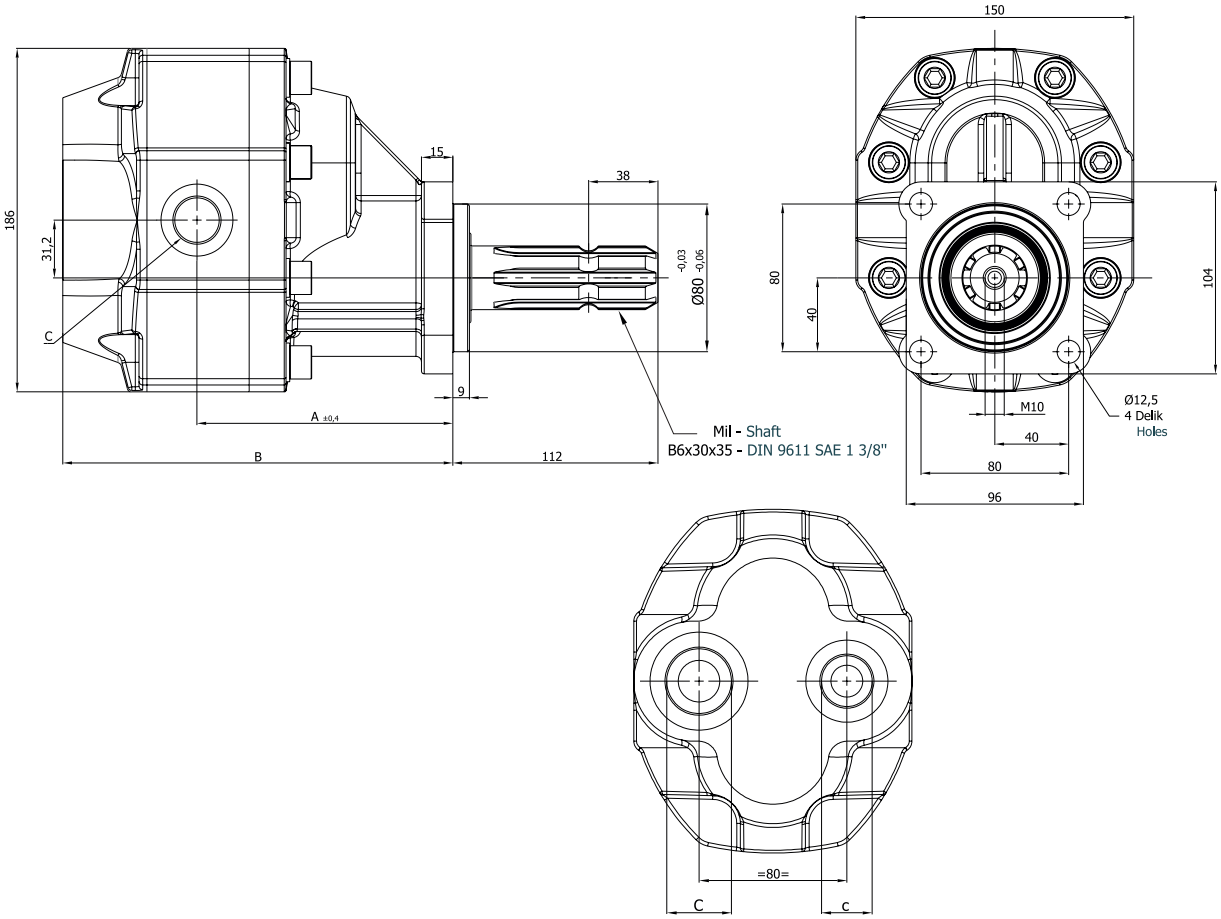


Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – İnlet	Çıkış - Outlet
						C	c
GP40.063.CRS2N	63,8	280	2750	136,3	203,0	G 1”	G 3/4”
GP40.063.ARS2N							
GP40.073.CRS2N	72,2			137,3	204,6		
GP40.073.ARS2N							
GP40.087.CRS2N	86,1	260		141,0	209,6	G 1-1/4”	G 1”
GP40.087.ARS2N							
GP40.109.CRS2N	107,3	240		145,0	217,3		
GP40.109.ARS2N							
GP40.133.CRS2N	131,6	220	2500	148,0	225,9	G 1-1/2”	
GP40.133.ARS2N							
GP40.151.CRS2N	148,3	180		153,3	232,3		
GP40.151.ARS2N							

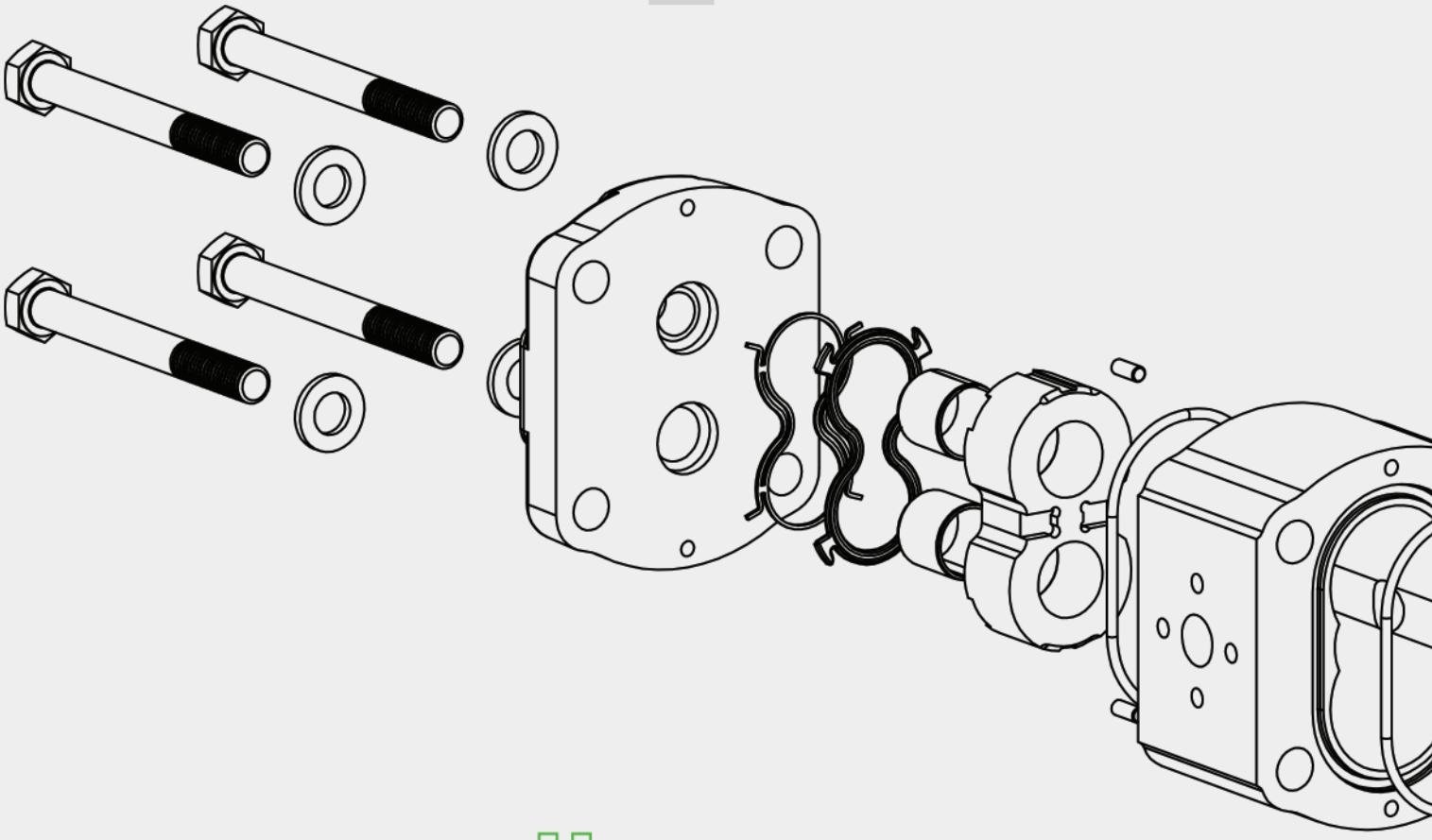
SAE TİPİ TYPE







Pompa Tipi Pump Type	İletim Hacmi Displacement cm³/dev (cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GPR40.063.CRS2N	63,8	280	2750	136,3	208,5	G 1"	G 3/4"
GPR40.063.ARS2N							
GPR40.073.CRS2N	72,2			137,3	210,0		
GPR40.073.ARS2N							
GPR40.087.CRS2N	86,1	260		141,0	214,0	G 1-1/4"	G 1"
GPR40.087.ARS2N							
GPR40.109.CRS2N	107,3	240		145,0	221,5		
GPR40.109.ARS2N							
GPR40.133.CRS2N	131,6	220	2500	148,0	230,5	G 1-1/2"	
GPR40.133.ARS2N							
GPR40.151.CRS2N	148,3	180		153,3	236,5		
GPR40.151.ARS2N							

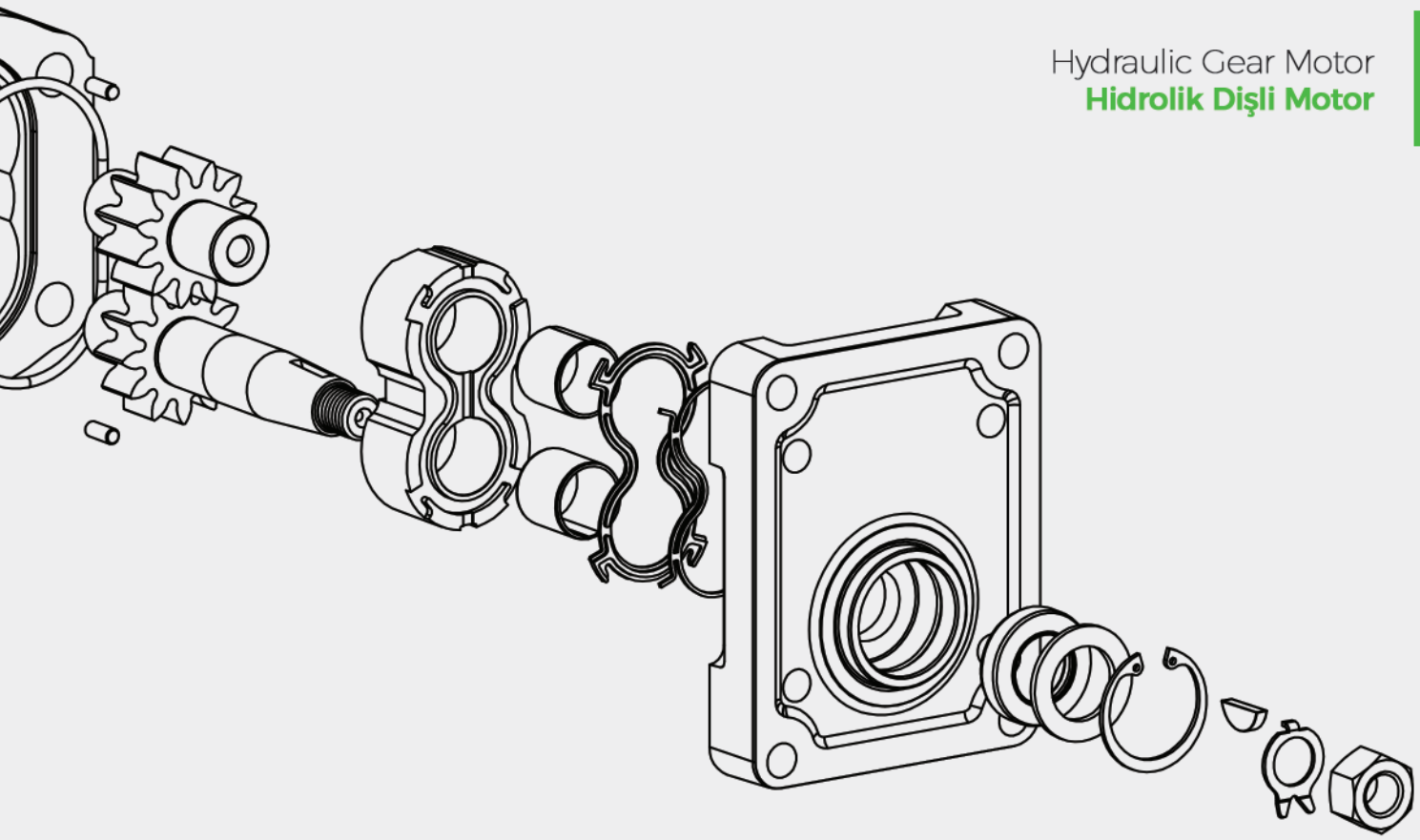


Hydraulic Gear Motor

blue ascend hydraulics

Hydraulic Gear Motor

Hidrolik Dişli Motor



1. GENEL BİLGİLER

Blue Ascend dişli motorları yüksek mukavemetli alüminyum alaşımlı gövde ekstrüzyon/döküm ve üç ana parçadan meydana gelmektedir.
Bu motorlar, yüksek performansı ve uzun çalışma ömründen dolayı modern hidrolik sistemlerde geniş bir şekilde kullanılmaktadır. Blue Ascend dişli motorları farklı iletim hacmi ve farklı dişli genişlikleri ile standart olarak bulunmaktadır. Daha fazla konfigürasyon varyantları için farklı flanş ve dişli kombinasyon seçenekleri mevcuttur.

2. KONSTRÜKSİYON

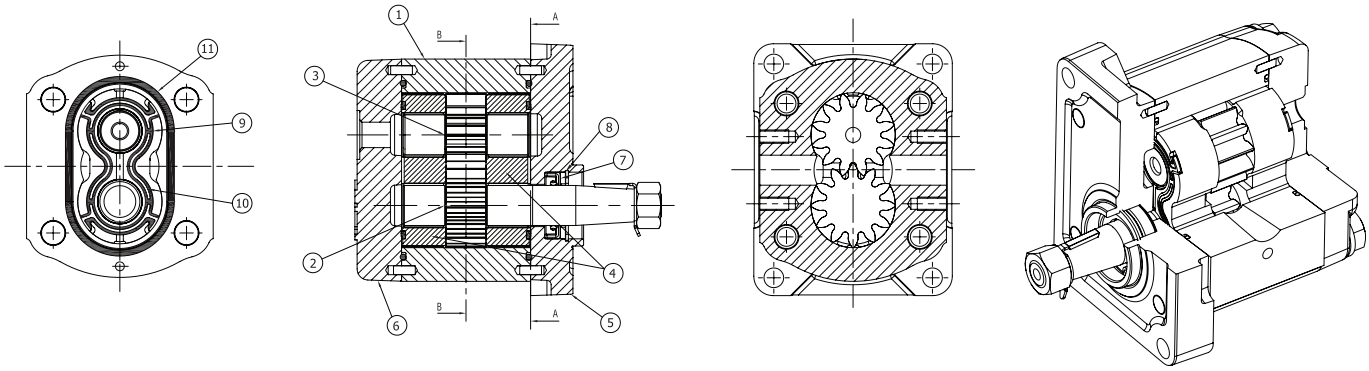
Dişli motorlar genel olarak alüminyum /döküm gövde, bir çift dişli, iki burç yatak, ön kapak ve arka kapaktan oluşur. Tahrik eden mil ön kapaktan geçerek şaft keçesi ile keçelendirilmiştir. Yatak kuvvetleri, özel yatak esnekliği ile temas hattı yerine, yüzey teması üretmek
için burç tarafından absorbe özelliği vardır. Ayrıca düşük hızlarda mükemmel direnç sağlar.Debi pulsasyonu ve gürültü seviyesi minimuma indirilmiştir.
Burç iç sızdırmazlık keçeler üzerinde basınca bağlı olarak kuvvetler elde edilir ve bu optimum verimliliği sağlar.
Aksi belirtilmedikçe, keçeleri yüksek çekme mukavemetine ve sıcaklığa dayanıklı nitril kauçuk (NBR) olmalıdır. İstenilmesi durumunda viton keçeler kullanılmalıdır.

1. GENERAL INFORMATION

Blue Ascend external gear motors are built in three main pieces with an in high resistance aluminium alloy extruded /cast iron body. These external gear motors are widely used in modern hydraulic systems due to their long service life and high performance. Blue Ascend external gear pumps are available as standard gear motors with different displacement and gear widths. Further configuration variants are given by different flanges, shafts, and multiple pump combinations.

2. CONSTRUCTION

The external gear motor consists of an aluminium/cast iron body, a pair of gears supported in bearing bushings and a front and a rear cover. The drive shaft protrudes from the front cover where it is sealed by the shaft seal ring. The bearing forces are absorbed by special bearing bushings with sufficient elasticity to produce surface contact instead of line contact. They also ensure excellent resistance to galling especially at low speed. Flow pulsation and noise emission decrease to a minimum level. The internal sealing is achieved by forces which are proportional to delivery pressure. Unless otherwise specified, the seals are in nitrilic compound (NBR) offering high mechanical strength and heat resistance. Viton seals are available on request.



1. Gövde / Body
2. Tahrik Eden Dişli / Drive Gear
3. Tahrik Edilen Dişli / Driven Gear
4. Burç / Bushing
5. Ön Kapak / Front Cover
6. Arka Kapak / Rear Cover
7. Şaft Keçesi / Shaft Seal
8. Destek Pulu / Backing Washer
9. Takviye Keçesi / Back Up Seals
10. Burç Kulak Keçesi / Bush Lobe Seals
11. Gövde Keçesi / Body Seals

3. MOTOR DÖNÜŞ YÖNÜ

Motorun ön tarafından bakıldığında ve tahrik eden dişli aşağıya gelecek şekilde motor dönüş yönü belirlenir.(şekillere bakınız).

Sağ dönüşlü motorların(C) tahrik eden dişli sağa(saat yönünde) dönecek, çıkış deliği sağda ve giriş deliği solda olacaktır.

Sol dönüşlü motorların(A) tahrik eden dişli sola (saat yönünün tersine) dönecek, çıkış deliği solda ve giriş deliği sağda olacaktır.

Çift yönlü motorlarda dönüş yönünü belirlemeye gerek yoktur. İki portta giriş ve çıkış portu olarak kullanılabilir.

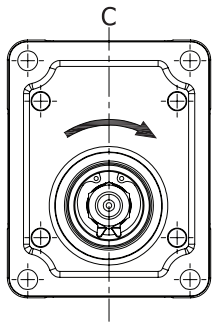
3. MOTOR DIRECTION OF ROTATIONS

The direction of rotation of a gear motor is identified by looking at the pump from the front coverside and with the drive gear turned down (see figures below).

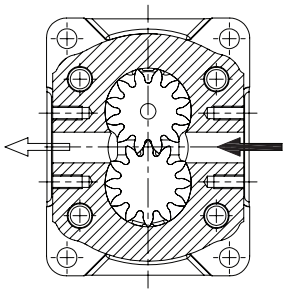
Motors with clockwise rotation (C) have a drive gear which turn clockwise, with the suction port on the right and the pressure port on the left.

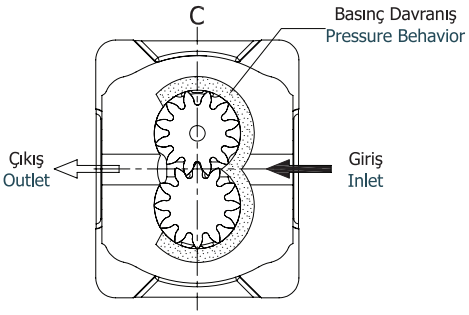
Motors with counter-clockwise rotation (A) have a drive gear which turns counter-clockwise, with the suction port on the left and the pressure port on the right.

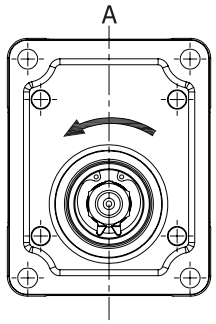
There is no need to identify the direction of rotation of a reversible motor. Both ports can be used either as inlet and outlet port.



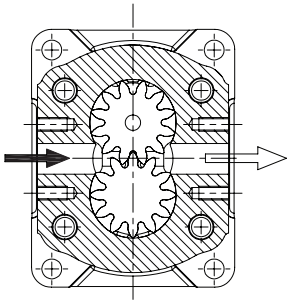
Sağ Dönüşlü Motor
Clockwise Rotation

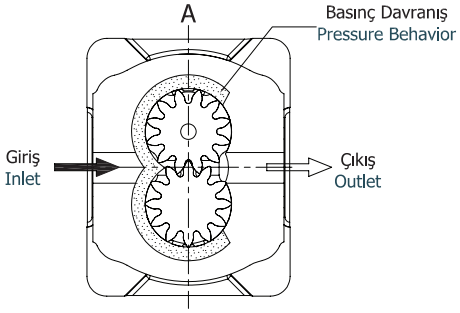


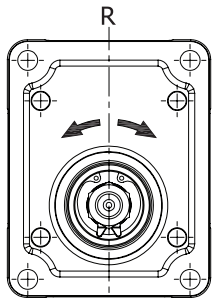




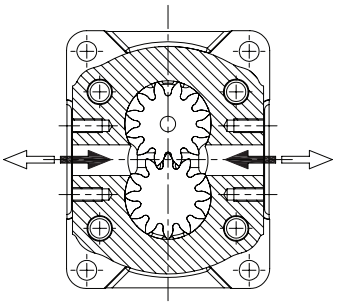
Sol Dönüşlü Motor
Counter-Clockwise Rotation

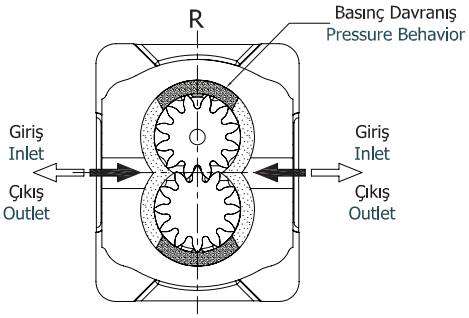






Çift Dönüşlü Motor
Reversible Rotation





4. MOTORUN BAĞLANMASI

Motorlar, 2 veya 4 cıvata ve merkezleme çapı ile basit olarak ön kapaktan bağlanırlar. Merkezleme çapının oturacağı yuvanın kullanıcı tarafından yapılacak kısımda 1x45o pah kırılarak kaygan geçme toleranslarında işlenmesi, motorun yerine daha hassas geçmesini sağlar. En az titreşim için, rijit yapılan giriş çıkış bağlamaları yerine, hidrolik hortumlarla yapılacak bağlamalar tercih edilmelidir.

5. MOTOR GİRİŞ VE ÇIKIŞ

Motorlar pompalara göre ters çalışma prensibine sahiptir. Tahrik ters yönden uygulanırsa hidrolik motorlar pompaya dönüşebilir. Tek yönlü motorlar asimetrik burç sızdırmazlık keçesine sahiplerken, çift yönlü motorlar iki portunun da hem giriş hem de çıkış portu olarak kullanılmasına imkan sağlayan simetrik keçeye sahiptirler. Asimetrik keçe dizanylarından dolayı tek yönlü motorlarda isteğe göre dönüş yönü değişimi yapılamaz bundan dolayı iki yönde çalışma mümkün değildir.

Tek Yönlü Motorlar;

Düşük çıkış basıncı yağın kaçmasını önleyen şaft keçesine basınç uygulamaktadır ve şaft keçesini destekleyen segman da onu desteklemektedir. Kaçak yağ çıkış kısmından tahliye edilmektedir. Maksimum çıkış basıncı değeri şaft keçesi tarafından sınırlandırmıştır ve bu değer 3,5 barı aşmamalıdır.

Çift Yönlü Motorlar;

Sızdırmaz alan yağı tutan şaft alanına bağlıdır ve bu alanın basıncı, arka kapakta yer alan sızıntı hattı vasıtasıyla sınırlandırılmalıdır. Sızıntı hattında kullanılacak boru, sızıntı hattının basıncının 3,5 barı aşmayacak şekilde seçilmelidir. Ayrıca ilave dış sızıntı bağlantı hattından kaçınmak için iç sızıntılı motorlar da kullanılabilir. Bu motorlarda iç sızıntı içteki çek valflerle dışarıya verilmektedir.

4. MOTOR MOUNTING

The motors are easily mounted from the flange with the help 4 or 2 bolts and the spigot location. The counter bore to receive the mounting flange spigot should have a 1 mm chamfer at 45 on the motor side to ensure proper fitting. It is good practice to use flexible hose adjacent to the pump in both the suction and pressure lines to minimize vibration, which can be transmitted to the motor by rigid pipe runs.

5. MOTOR OUTLET AND INLET

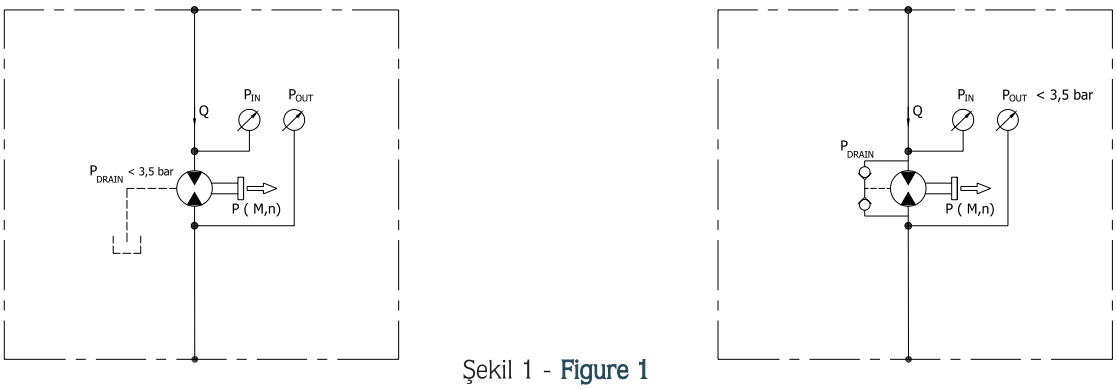
The motors has the inverted working principle with the pumps. Hydraulic motors can become a pump if reverse load occurs. Unidirectional motors has asymmetric balancing seals whereas reversible motors have symmetric balancing seals which allow both port to be; alternatively, as inlet high-pressure and outlet low-pressure port. Because of their asymmetric design, unidirectional motors are not interchangeable at will so reversible operation is not possible for them.

Unidirectional Motors;

The outlet low pressure side loads the back side of the oil retaining shaft seal, a dedicated steel ring for supporting it, is adopting. Leakage oil is discharged internally to the outlet side. The maximum outlet low-pressure value is limited by the shaft seal and must not exceed 3,5 bar.

Reversible Motors;

The sealed area is connected to the back of the oil retaining shaft area and its pressure must be limited connecting it to the tank, through a drain threaded port, which is placed on the motors rear cover. The drain hose must be chosen in order to avoid the pressure at the drain port does not exceed 3,5 bar. Motor with the internal drain are available in order to avoid the need for an additional leakage-oil connection. The internal leakage oil can be discharged via internal check valves.



Şekil 1 - Figure 1

6. FİLTRASYON

Birçok erken dişli motor arızalarının nedeni hidrolik sistemlerdeki kirlilik oranıdır. Bu gibi durumlarda garanti kirlilikten kaynaklanan aşınmaları kapsamaz. Etkin filtreleme sistemi kullanımı ve düzenli bakım programı uygulama hidrolik sistemlerde gereklidir. Her durumda filtreleme sistemi aşağıdaki tabloda yer alan müsade edilebilir kirlilik derecelerine eşit yada düşük kirlilik sağlamalıdır.

6. FILTRATION

The largest number of premature failures of gear motor is happening due to contamination in hydraulic system. In this case the guarantee does not cover the wear resulting from dirtiness in the system. In order to avoid these kinds of failures, it is essential to have an effective filter in the system and to carry out the regular maintenance schedule. In any case, the filtering system must constantly ensure an oil contamination class equal to or less than those shown in the table below.

Çalışma basıncı Operating pressure	> 170 bar	< 170 bar
Kirlilik sınıfı Contamination class NAS 1638	9	10
Kirlilik sınıfı Contamination class ISO 4406	18/15	19/16
Filtre Obtain with filter→ (Bx=75)	20	25

7. TAVSİYE EDİLEN YAĞ

Bütün hidrolik sistemlerde ISO/DIN ve SAE standartlarında belirtilen mineral esaslı hidrolik yağ kullanılması tavsiye edilir. Tavsiye edilen viskozite aralığı 20/120 (cSt) ve 700 (cSt)'ye kadar müsaade edilebilir.

8. ÇALIŞMA SICAKLIĞI

Bu motorlarda çalışma sıcaklığı;

* NBR keçeler için 0 C ile +80 C arasında devamlı ve -20 C ile +100 C aralıklı,
* Viton keçeler için 0 C ile +100 C arasında devamlı ve -20 C ile + 120 C arasında aralıklı olarak çalışırlar.

7. RECOMMENDED FLUIDS

We recommend using only mineral oil based hydraulic fluids that comply with the ISO/DIN or SAE standards. Recommended viscosity range is 20/120 (cSt) and permitted up to 700 (cSt).

8. OPERATION TEMPERATURE

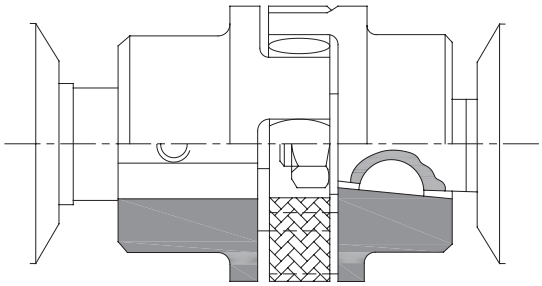
* Operation for NBR seals between 0 C and +80 C continuously, and between -20 C and +100 C intermittent,
* For viton seals between 0 C and + 100 C continuously and between -20 C and + 120 C intermittent.

9. TAHRİK ŞEKİLLERİ

Elastik kaplinler radyal ve eksenel yük taşımazlar. Eksenel ve radyal yönde minimum 0,25 mm boşluğu olan bir kaplin seçilmelidir. Üç parçalı elastik kaplinler tavsiye edilir (şekil 2).

9. DRIVE ARRANGEMENTS

The flexible coupling must not transfer any radial or axial forces to the pump. A coupling allowing a minimum of 0,25 mm radial and axial displacement must be chosen. Flexible compensating with three pieces flexible couplings are recommended (see fig 2).



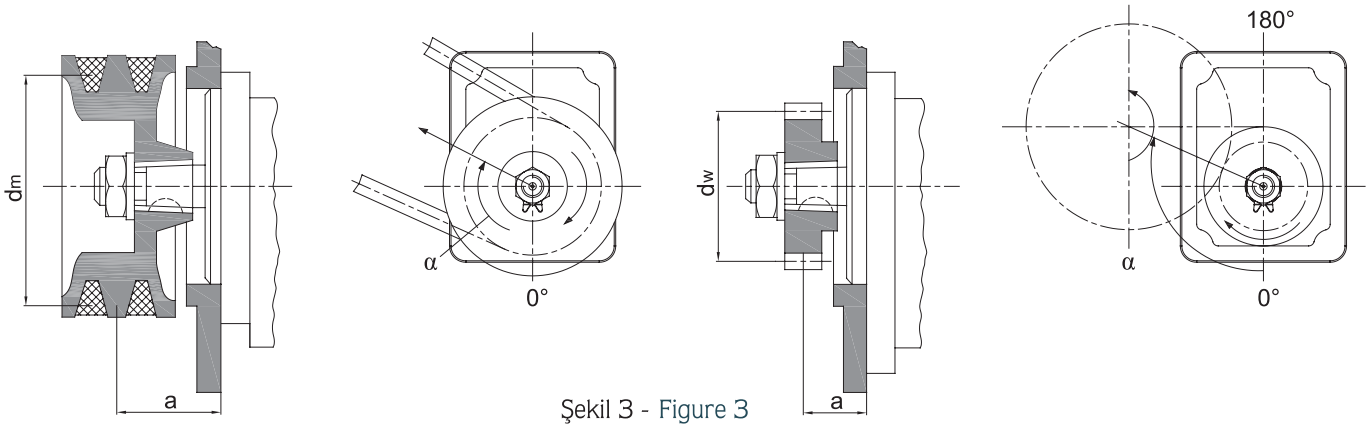
Şekil 2 - Figure 2

10. ÖN YATAKSIZ, KAYIŞ VE DİŞLİ İLE TAHRİK

V kayışı veya dış tahrik dişlisi ile motor tahriki önerildiği zaman aşağıdaki uygulama detayına bakınız (şekil 3).

10. V-BELTS AND GEAR WHEELS WITHOUT OUTBOARD BEARING

When proposing to use V-belt or gear drive, please see fig 3.



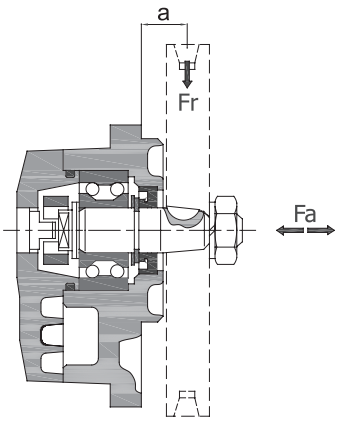
Şekil 3 - Figure 3

11. ÖN YATAK

Ön yataksız motorların V kayışı ve dış dişli ile tahrik edildiği zaman, çıkabilecek muhtemel problemler karşısında ön yatak kullanılmaktadır.

11. OUTBOARD BEARING

Outboard bearings eliminate possible problems when the motors are driven by V-belts gear wheels.



12. DİŞLİ MOTOR HESAPLARI

Motor dizayn hesaplarında aşağıdaki parametreler esas alınır.

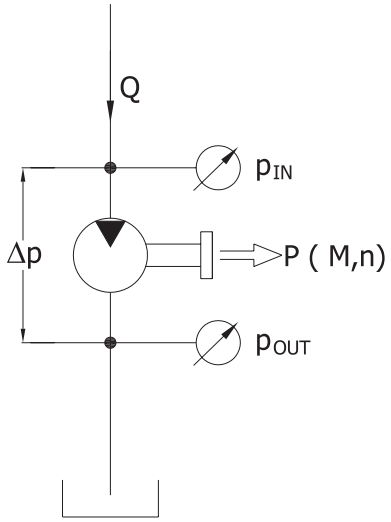
V(cm³ / dev)	: İletim Hacmi
Q(lt/dak)	: Debi
ΔP(bar)	: Basınç
M(Nm)	: Döndürme Torku
n(d/d)	: Hız
N(kw)	: Güç
ηv(%)	: Volumetrik Verim
ηm(%)	: Mekanik Verim
ηt(%)	: Toplam Verim

12. CALCULATION THE SPECIFICATION OF A GEAR MOTOR

The design calculation for motors are based on the following parameters.

V(cm³ / rev)	: Displacement
Q(l/min)	: Flow Range
ΔP(bar)	: Pressure
M(Nm)	: Drive Torque
n(rpm)	: Speed
N(kw)	: Power
ηv(%)	: Volumetric Efficiency
ηm(%)	: Mechanical Efficiency
ηt(%)	: Total Efficiency

FORMÜLLER
FORMULAS



$$Q=\frac{V.n}{1000.\eta v}$$

$$N=\frac{Q.\Delta P.\eta t}{600}$$

$$M=\frac{V.\Delta P.\eta m}{20.\pi}$$

$$\eta t=\eta m.\eta v$$

Tavsiye Edilen Verim
Recommended Efficiency

ηv = %95
ηm= %87 - %90
ηt = %82

GRUP 20 MOTORLARIN KODLAMA SİSTEMİ
ORDERING CODE OF GROUP 20 MOTORS

APM20 . 115 . R A B 02 E G O N

Motor Tipi / Motor Type	
APM20	Aluminyum Gövdeli Düz Dişli Motor Aluminium Body Gear Motor
DKM20	Döküm Gövdeli Düz Dişli Motor Cast Iron Body Gear Motor

İletim Hacmi / Displacement cm³/dev (cm³/rev)
040 = 3,9 cm³/dev (cm³/rev)
060 = 5,9 cm³/dev (cm³/rev)
080 = 8,0 cm³/dev (cm³/rev)
095 = 9,4 cm³/dev (cm³/rev)
115 = 11,4 cm³/dev (cm³/rev)
140 = 13,9 cm³/dev (cm³/rev)
160 = 16,0 cm³/dev (cm³/rev)
190 = 19,2 cm³/dev (cm³/rev)
220 = 21,9 cm³/dev (cm³/rev)
250 = 24,8 cm³/dev (cm³/rev)
280 = 27,9 cm³/dev (cm³/rev)
320= 32,0 cm /dev (cm /rev)
340= 34,0 cm /dev (cm /rev)
380= 38,0 cm /dev (cm /rev)
400= 40,0 cm /dev (cm /rev)

Dönüş Yönü / Rotation
A = Sol dönüş / Counter-clockwise
C = Sağ dönüş / Clockwise
R = Çift dönüş / Reversible

Ön Yatak Outboard Bearing	
O	Var / Available
	Yok / Absent

Keçe / Seal	
N	NBR
V	Viton

Sızıntı Hattı Drain Line	
G	G1/4"
U	7/16-20 UNF
M	M12x1,5

Arka Kapak / Rear Cover	
S	Standart Standard
E	Arkadan Dış Sızıntı Hattı External Drain Rear Port
R1	Emniyet Valfi (10 - 90 Bar) Relief Valve
R2	Emniyet Valfi (70 - 140 Bar) Relief Valve
R3	Emniyet Valfi (120 - 190 Bar) Relief Valve
D	Akış Bölücü Valf Flow Divider Valve
H	Emniyet Valfli Akış Kontrol Valfi Flow Control Valve With Relief Valve
L	Yük Duyarlı Valf Load Sensing Valve
T	Çek Valf Check Valve
P	Arkadan Giriş-Çıkış Rear Inlet-Outlet
C	Basınç Kompansatörlü Akış Kontrol Valfi Flow Control Valve Pressure Compensated

Ön Kapak / Front Cover		
A	Dikdörtgen kapak Square flange	Ø36,47 mm
B	2 Civatalı - Merkezleme 2 Bolts - Centering	Ø50 mm
C	2 Civatalı - Merkezleme ve oringli 2 Bolts - Centering with oring	Ø52 mm
D	2 Civatalı SAE ' A' 2 Bolts SAE ' A'	Ø82,55 mm
E	2 Civatalı - Merkezleme 2 Bolts - Centering	Ø50 mm
G	Dikdörtgen kapak Square flange	Ø80 mm
H	Ön yataklı Outboard bearing	Ø80 mm
K	2 Civatalı SAE ' B' 2 Bolts SAE ' B'	Ø101,6 mm
M	2 Civatalı - Merkezleme 2 Bolts - Centering	Ø52,34 mm
N	4 Civatalı - Merkezleme O-ringli 4 Bolts - Centering O-ring	Ø52 mm

Tahrik şaftı / Drive Shaft			
A	Konik - Kamalı Tapered key shaft	1:5	B E G
B	Konik - Kamalı Tapered key shaft	1:8	A
C	SAE spline şaft 9 diş SAE spline shaft 9T		B D
E	Kesik şaftlı Tang drive shaft		C H
F	SAE spline şaft 11 diş SAE spline shaft 11T		D
G	Spline şaft DIN 5482 Spline shaft (B17x14)		A B E G
H	Paralel şaft Parallel shaft		B D G
K	Konik - Kamalı Tapered key shaft	1:5	H
L	Konik - Kamalı Tapered key shaft	1:5	G
M	SAE spline şaft J498 10 diş SAE spline shaft 16/32 DP 10T		D
N	Konik - Kamalı Tapered key shaft	1:8	M
T	Kesik şaftlı Tang drive shaft		N

Giriş - Çıkış Delikleri / Inlet and Outlet Ports	
01	Kare tip Rectangular
02	Baklava tip Diamond
03	Metrik dişli ISO 6149 oring boss
04	UNF diş UNF thread
05	Boru diş Pipe thread
06	SAE Dikdörtgen Flanş Metrik diş SAE Square Flange Thread Metric

- Kodlama Örneği ; APM20.115.RAB02EGN
  Code Example

Grup 20 motorlar 4 cc ^{3}/dev. 'den 40 cc ^{3}/rev. 'e kadar ki iletim hacmine sahip motorlardır. Kendi içinde APM20,DKM20 olarak 2 gruba ayrılır. Aşağıdaki Tablo da bu 2 grubun birbirinden farklı olan teknik özellikleri belirtilmiştir;
-APM20 (Aluminyum Gövdeli Düz Dişli Motorlar)
-DKM20 (Döküm Gövdeli Düz Dişli Motorlar)

Group 20 motors has a working capacity from 4 cc^3/rev to 40 cc^3/rev. It has 2 sub-groups in itself as APM20, DKM20.The differences between the 2 sub-groups technical specifications can be found on the below table.
-APM20 (Aluminium Body Gear Pumps)
-DKM20 (Aluminium Body Gear Pumps)

APM20 TEKNİK ÖZELLİKLER / APM20 TECHNICAL DATA

Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
APM20.040	3,9	250	280	300	3500	650
APM20.060	5,9	250	280	300	3500	650
APM20.080	8,0	250	280	300	3500	650
APM20.095	9,4	250	280	300	3500	600
APM20.115	11,4	250	280	300	3000	600
APM20.140	13,9	250	280	300	3000	600
APM20.160	16,0	250	280	300	3000	600
APM20.190	19,2	250	280	300	3000	600
APM20.220	21,9	210	240	260	2500	600
APM20.250	24,8	190	220	240	2500	600
APM20.280	27,9	170	220	220	2200	600
APM20.320	32,0	160	190	210	2000	500
APM20.340	34,0	150	180	200	2000	500
APM20.380	38,0	140	170	190	1750	500
APM20.400	40,0	130	170	190	1750	500

P1: Sürekli çalışma basıncı
Continuous pressure

P2 : Aralıklı çalışma basıncı
Intermittent pressure

P3 : Ani basınç
Peak pressure

DKM20 TEKNİK ÖZELLİKLER / DKM20 TECHNICAL DATA

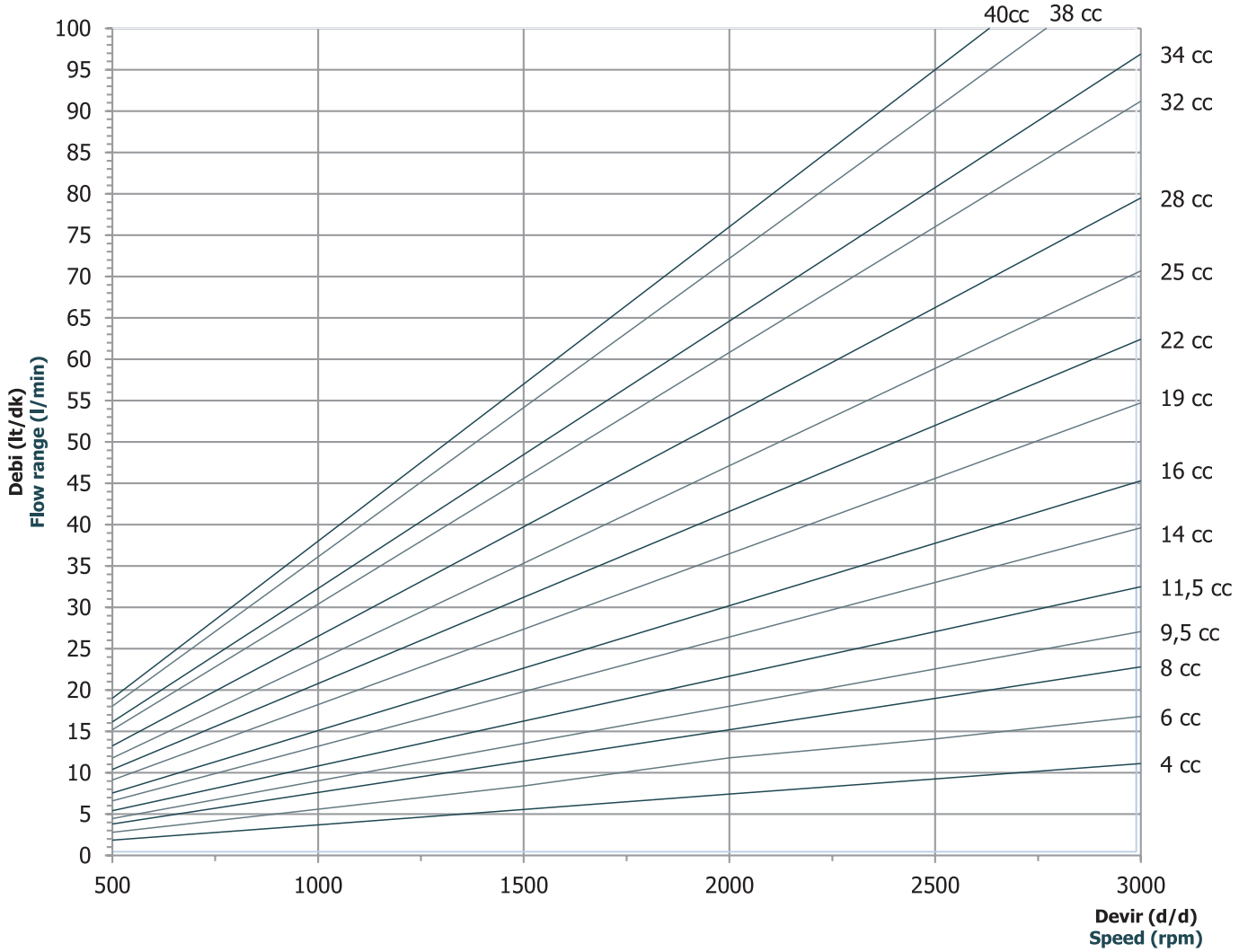
Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
DKM20.040	3,9	280	300	320	3500	650
DKM20.060	5,9	280	300	320	3500	650
DKM20.080	8,0	280	300	320	3500	650
DKM20.095	9,4	280	300	320	3500	600
DKM20.115	11,4	280	300	320	3000	600
DKM20.140	13,9	280	300	320	3000	600
DKM20.160	16,0	280	300	320	3000	600
DKM20.190	19,2	280	300	320	3000	600
DKM20.220	21,9	240	260	280	2500	600
DKM20.250	24,8	220	240	260	2500	600
DKM20.280	27,9	200	240	260	2200	600

P1: Sürekli çalışma basıncı
Continuous pressure

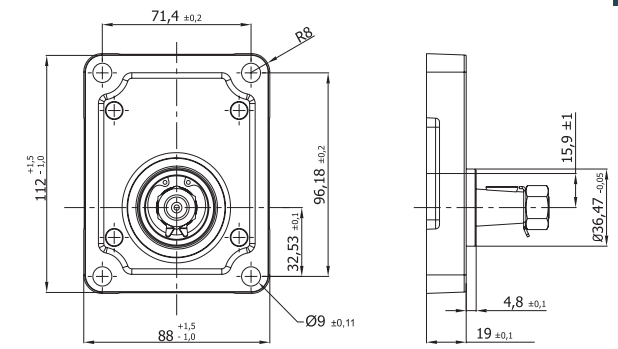
P2 : Aralıklı çalışma basıncı
Intermittent pressure

P3 : Ani basınç
Peak pressure

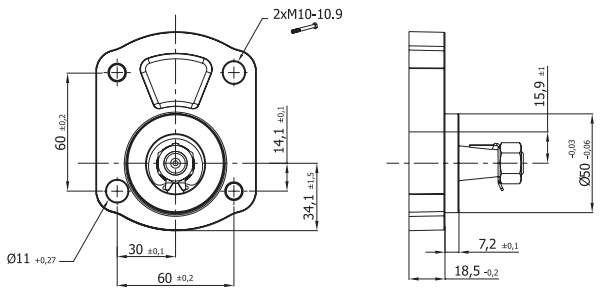
GRUP 20 MOTORLARIN DEBİ EĞRİLERİ / FLOW CURVES OF GROUP 20 MOTORS



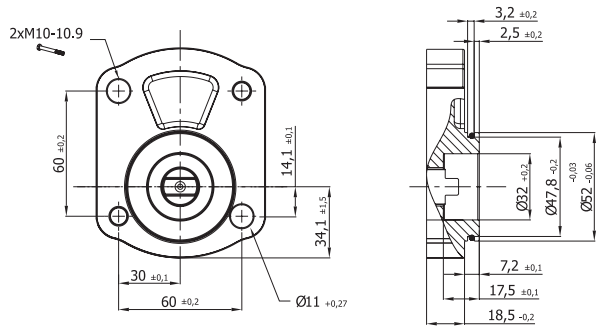
A


71,4 ±0,2
R8
112 +1,5 -1,0
96,18 ±0,2
32,53 ±0,1
Ø9 ±0,11
88 +1,5 -1,0
15,9 ±1
Ø36,47 -0,05
4,8 ±0,1
19 ±0,1

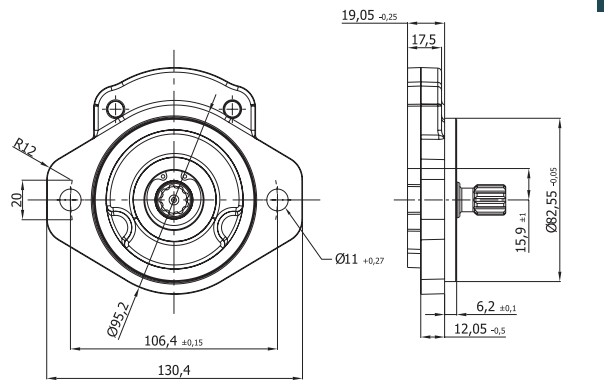
B


2xM10-10.9
60 ±0,2
14,1 ±0,1
34,1 ±1,5
Ø11 +0,27
30 ±0,1
60 ±0,2
15,9 ±1
Ø50 -0,03 -0,06
7,2 ±0,1
18,5 -0,2

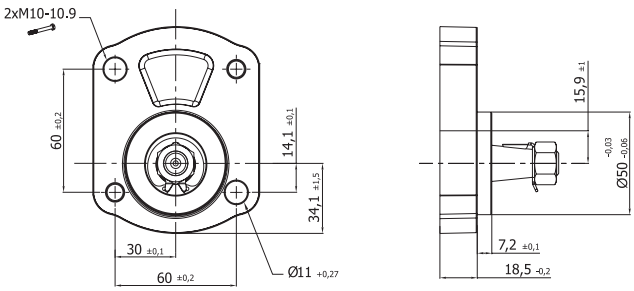
C


2xM10-10.9
60 ±0,2
14,1 ±0,1
34,1 ±1,5
30 ±0,1
60 ±0,2
Ø11 +0,27
3,2 ±0,2
2,5 ±0,2
Ø32 +0,2
Ø47,8 -0,2
Ø52 -0,03 -0,06
7,2 ±0,1
17,5 ±0,1
18,5 -0,2

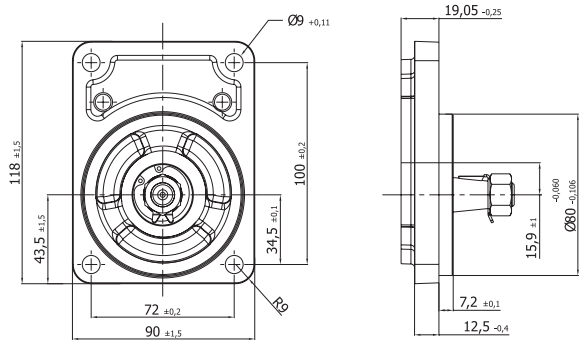
D


19,05 -0,25
17,5
R12
20
Ø11 +0,27
Ø95,2
106,4 ±0,15
130,4
Ø82,55 -0,05
15,9 ±1
6,2 ±0,1
12,05 -0,5

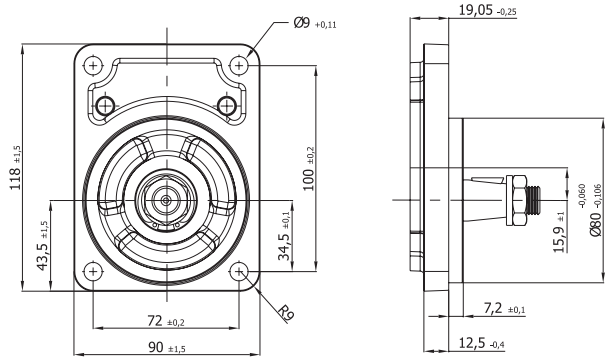
E


2xM10-10.9
60 ±0,2
14,1 ±0,1
34,1 ±1,5
30 ±0,1
60 ±0,2
Ø11 +0,27
15,9 ±1
Ø50 -0,03 -0,06
7,2 ±0,1
18,5 -0,2

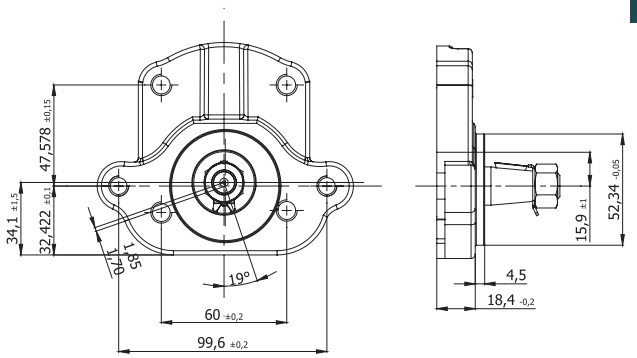
G


Ø9 +0,11
118 ±1,5
100 ±0,2
43,5 ±1,5
34,5 ±0,1
R9
72 ±0,2
90 ±1,5
19,05 -0,25
15,9 ±1
Ø80 -0,060 -0,106
7,2 ±0,1
12,5 -0,4

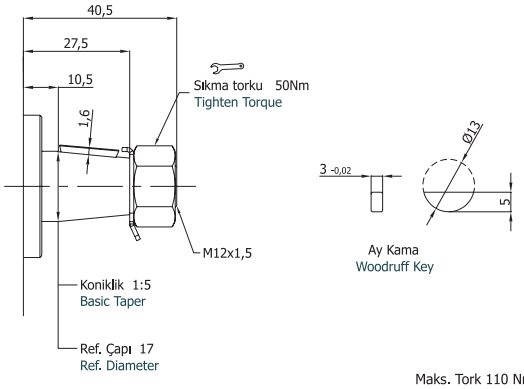
H


Ø9 +0,11
118 ±1,5
100 ±0,2
43,5 ±1,5
34,5 ±0,1
R9
72 ±0,2
90 ±1,5
19,05 -0,25
15,9 ±1
Ø80 -0,060 -0,106
7,2 ±0,1
12,5 -0,4

M

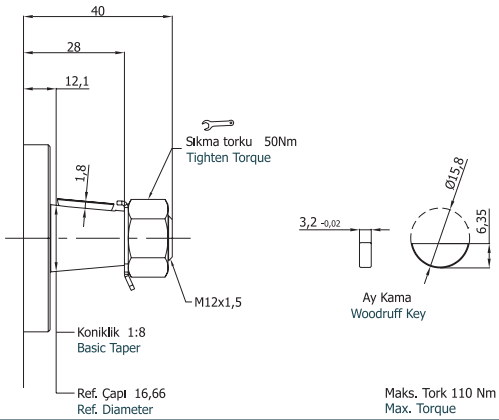

47,578 ±0,15
34,1 ±1,5
32,422 ±0,1
1,85
17,0
19°
60 ±0,2
99,6 ±0,2
15,9 ±1
52,34 -0,05
4,5
18,4 -0,2

A



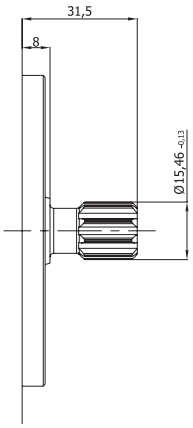
Maks. Tork 110 Nm
Max. Torque

B



Maks. Tork 110 Nm
Max. Torque

C

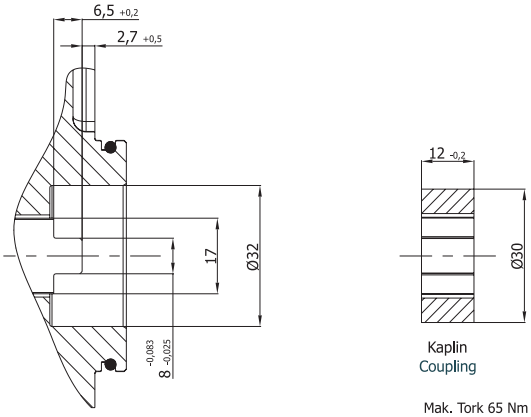


SAE 16-4 (A) 5/8" Spline
Evolvent Spline
Diş Dibi Düz, Yanaktan Alıştırmalı
9 Diş, 16/32 DP

Involute Spline
Flat Root Side Fit
9 Teeth, 16/32 DP

Maks. Tork 90 Nm
Max. Torque

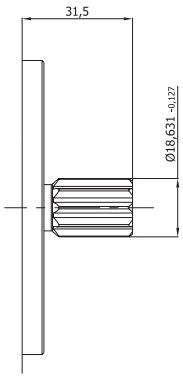
E



Kaplin
Coupling

Mak. Tork 65 Nm
Max. torque

F

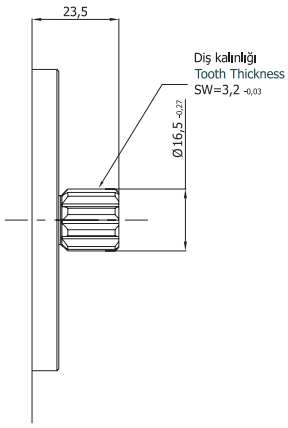


SAE J498 Spline
Evolvent Spline
Diş Dibi Düz, Yanaktan Alıştırmalı
11 Diş, 16/32 DP

Involute spline
Flat root side fit
11 Teeth, 16/32 DP

Maks. Tork 150 Nm
Max. Torque

G

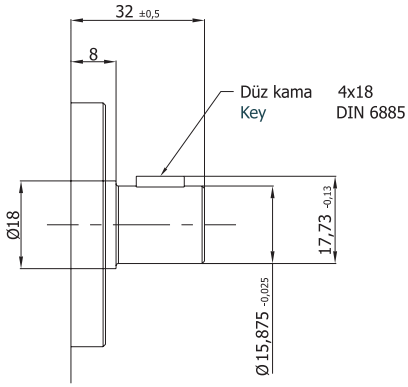


Evolvent Spline
DIN 5482 B17x14
9 Diş

Involute Spline
DIN 5482 B17x14
9 Teeth

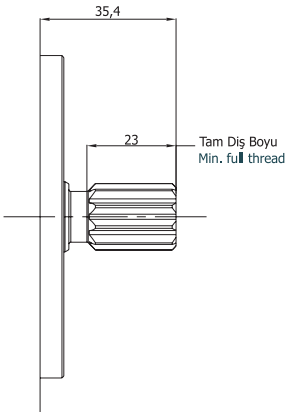
Maks. Tork 115 Nm
Max. Torque

H



Mak. Tork 55 Nm
Max. torque

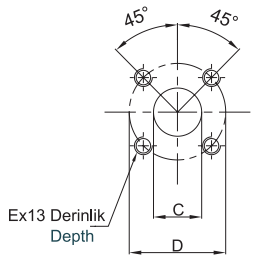
M



SAE J498 A Evolvent Spline
Diş Dibi Düz, Yanaktan Alıştırmalı
10 Diş, 16/32 DP

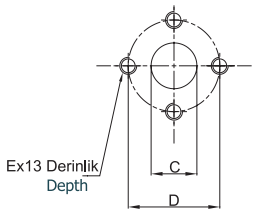
SAE J498 A Involute Spline
Flat Root Side Fit
10 Teeth, 16/32 DP

Maks. Tork 115 Nm
Max. Torque



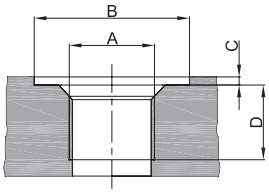
01 Kare Tipi Flanş / Rectangular Flange

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side			Basınç Tarafı Pressure Side		
		C	D	E	c	d	e
	4	12	40	M6	12	35	M6
	6	13,5			13,5		
	8 – 25	20			15		
	28 – 40				20	40	
	4 – 16	15	35	M6	15	35	M6
	19 – 40	20	40		20	40	



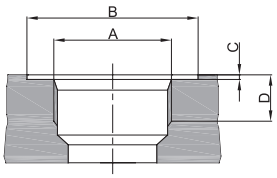
02 Baklava Tipi Flanş / Diamond Flange

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side			Basınç Tarafı Pressure Side		
		C	D	E	c	d	e
	4	12	30,2	M6	12	30,2	M6
	6 – 8	13,5			13,5		
	9,5 – 25	20	40	M8			
	28 – 40				20	40	M8
	4 – 16	13,5	30,2	M6	13,5	30,2	M6
	19 – 40	20	40	M8	20	40	M8



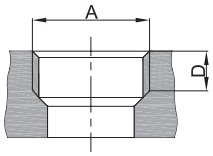
03 Metrik diş / Thread, Oring Boss Metric ISO 6149 With Seal Ring

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side				Basınç Tarafı Pressure Side			
		A	B	C	D	A	B	C	D
	4 – 6	M18x1,5	30	0,5	16	M18x1,5	30	0,5	16
	8 – 16	M27x2	40		19	M22x1,5	35		19
	19 – 40	M33x2	45		22				
	4 – 16	M22x1,5	35	0,5	19	M22x1,5	35	0,5	19
	19 – 40	M26x1,5	40			M26x1,5	40		



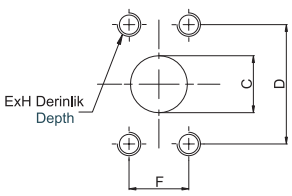
04 Diş / Thread (UNF-2B) SAE Oring Boss

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side				Basınç Tarafı Pressure Side			
		A	B	C	D	A	B	C	D
	4 – 6	9/16-18 UNF-2B	25	0,5	13	9/16-18 UNF-2B	25	0,5	13
	8	7/8-14 UNF-2B	35		16	7/8-14 UNF-2B	35		16
	9,5 – 40	1 1/16-12 UNF-2B	45		19				
	4 – 16	7/8-14 UNF-2B	35	0,5	16	7/8-14 UNF-2B	35	0,5	16
	19 – 40	1 1/16-12 UNF-2B	45		19	1 1/16-12 UNF-2B	45		19



05 Boru diş / Pipe Thread ISO228/1

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side		Basınç Tarafı Pressure Side	
		A	D	A	D
	4 – 16	G ¾	16	G ½	16
	19 – 40	G 1		G ¾	
	4 – 16	G ½	16	G ½	16
	19 – 40	G ¾		G ¾	16

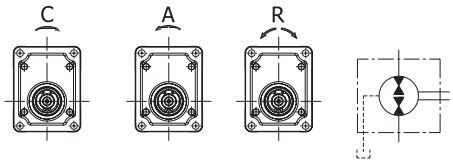


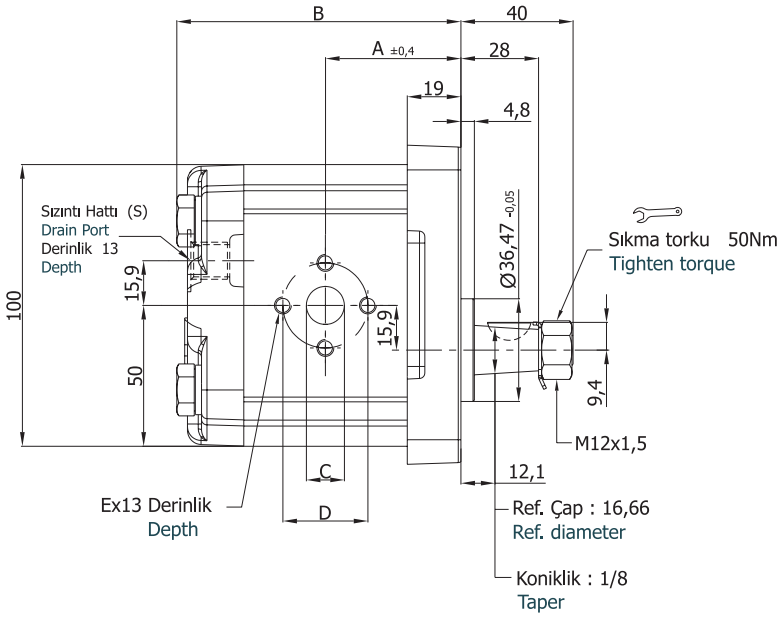
06 SAE Dikdörtgen Flanş Metrik Diş / SAE Square Flange Metric Thread

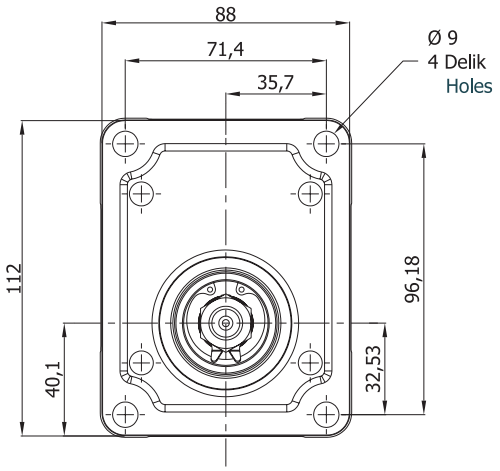
Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side					Basınç Tarafı Pressure Side				
		C	D	E	F	H	c	d	e	f	h
	4 - 11,5	12	38,1	M8	17,5	13	12	38,1	M8	17,5	13
	14 - 19	20	47,6	M10	22,2	16					
	22 - 40	26	52,4		26,2		20	47,6	M10	22,2	16
	4 - 11,5	12	38,1	M8	17,5	13	12	38,1	M8	17,5	13
	14 - 22	20	47,6	M10	22,2	16	20	47,6	M10	22,2	16
	25 - 40	26	52,4		26,2		26	52,4		26,2	

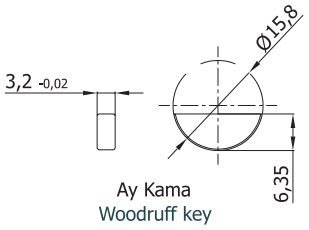
A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type





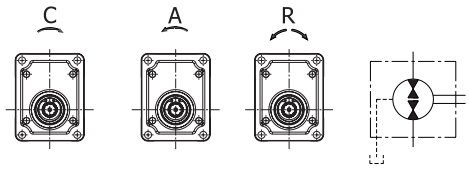


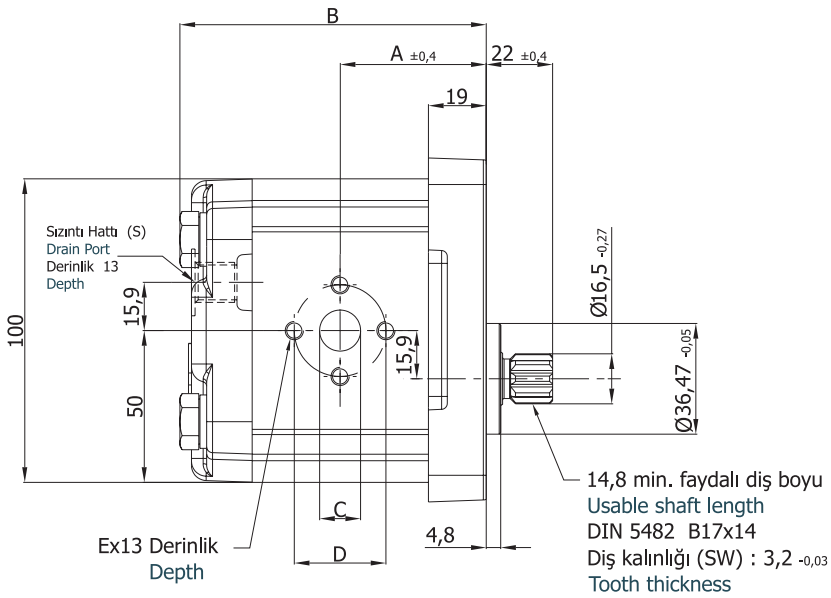


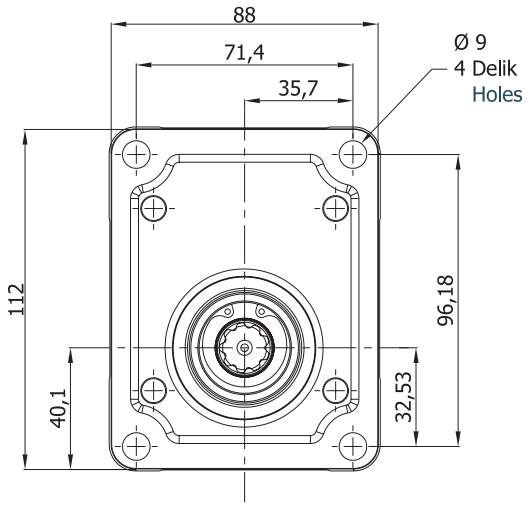
Motor Tipi Motor Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM20.040.RAB02EGN	3,9	250	3500	42,2	89,3	13,5	30,2	M6	G1/4
APM20.060.RAB02EGN	5,9			43,8	92,4				
APM20.080.RAB02EGN	8,0			45,4	95,6				
APM20.095.RAB02EGN	9,4			46,5	97,9				
APM20.115.RAB02EGN	11,4		3000	48,2	101,0				
APM20.140.RAB02EGN	13,9			50,0	105,0				
APM20.160.RAB02EGN	16,0			51,7	108,1				
APM20.190.RAB02EGN	19,2			60,2	125,1	20	40	M8	
APM20.220.RAB02EGN	21,9	210	2500	62,3	129,5				
APM20.250.RAB02EGN	24,8	190		64,8	134,6				
APM20.280.RAB02EGN	27,9	170	2200	67,0	138,9				
APM20.320.RAB02EGN	32,0	160	2000	70,0	145,0				
APM20.340.RAB02EGN	34,0	150		71,5	148,0				
APM20.380.RAB02EGN	38,0	140	1750	74,8	154,5				
APM20.400.RAB02EGN	40,0	140		76,5	158,0				

A Ön Kapak
Front Cover

G Şaft Tipi
Shaft Type



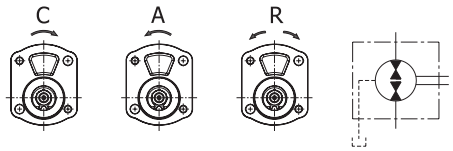


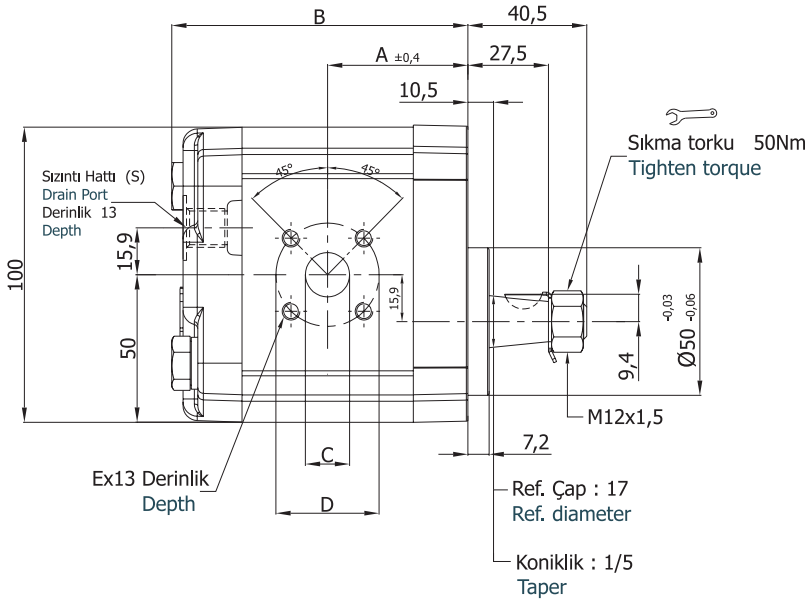


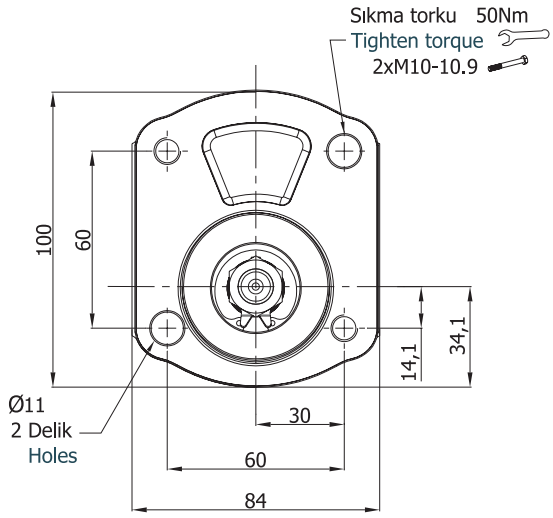
Motor Tipi Motor Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM20.040.RAG02EGN	3,9	250	3500	42,2	89,3	13,5	30,2	M6	G1/4
APM20.060.RAG02EGN	5,9			43,8	92,4				
APM20.080.RAG02EGN	8,0			45,4	95,6				
APM20.095.RAG02EGN	9,4			46,5	97,9				
APM20.115.RAG02EGN	11,4		3000	48,2	101,0				
APM20.140.RAG02EGN	13,9			50,0	105,0				
APM20.160.RAG02EGN	16,0			51,7	108,1				
APM20.190.RAG02EGN	19,2			60,2	125,1	20	40	M8	
APM20.220.RAG02EGN	21,9	210	2500	62,3	129,5				
APM20.250.RAG02EGN	24,8	190		64,8	134,6				
APM20.280.RAG02EGN	27,9	170	2200	67,0	138,9				
APM20.320.RAG02EGN	32,0	160	2000	70,0	145,0				
APM20.340.RAG02EGN	34,0	150		71,5	148,0				
APM20.380.RAG02EGN	38,0	140	1750	74,8	154,5				
APM20.400.RAG02EGN	40,0			76,5	158,0				

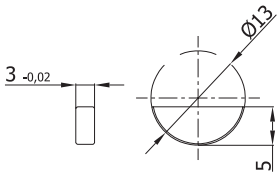
B Ön Kapak
Front Cover

A Şaft Tipi
Shaft Type







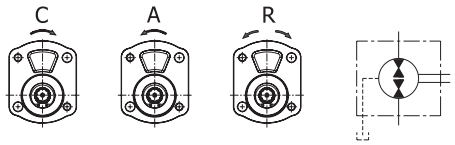


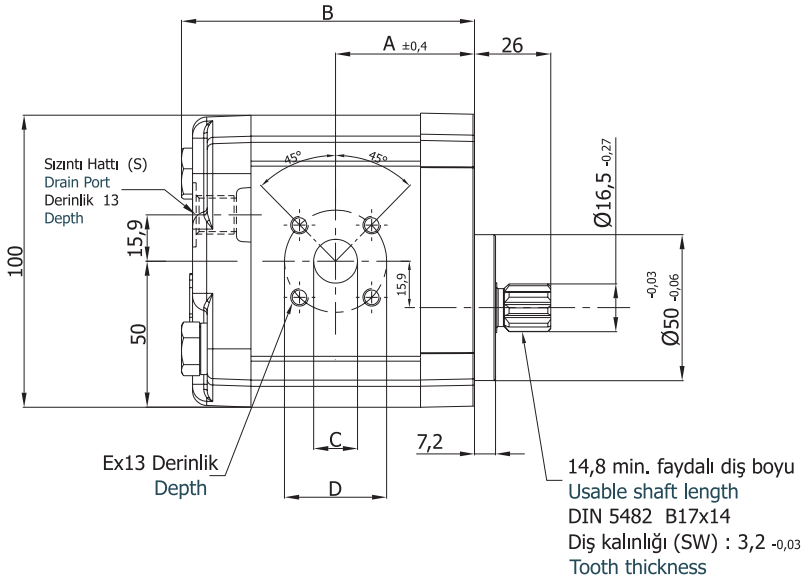
Ay Kama
Woodruff key

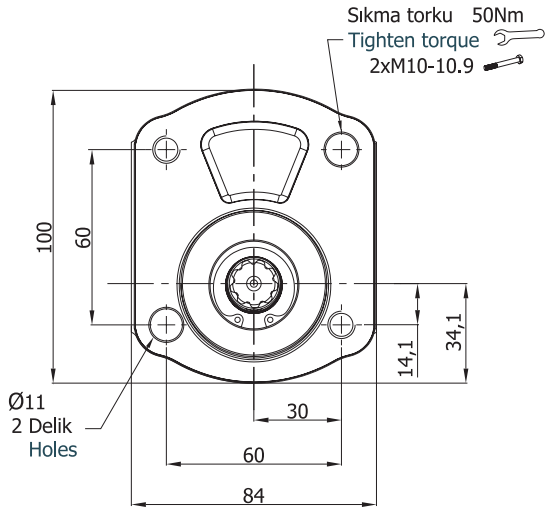
Motor Tipi Motor Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM20.040.RBA01EMN	3,9	250	3500	41,6	88,7	15	35	M6	M12x1,5
APM20.060.RBA01EMN	5,9			43,2	91,8				
APM20.080.RBA01EMN	8,0			44,8	95,0				
APM20.095.RBA01EMN	9,4			45,9	97,3				
APM20.115.RBA01EMN	11,4		3000	47,6	100,4				
APM20.140.RBA01EMN	13,9			49,4	104,6				
APM20.160.RBA01EMN	16,0			51,1	107,5				
APM20.190.RBA01EMN	19,2			59,6	124,5	20	40		
APM20.220.RBA01EMN	21,9	210	2500	61,7	128,9				
APM20.250.RBA01EMN	24,8	190		64,2	134,0				
APM20.280.RBA01EMN	27,9	170	2200	66,4	138,3				
APM20.320.RBA01EMN	32,0	160	2000	70,0	144,4				
APM20.340.RBA01EMN	34,0	150		71,5	147,4				
APM20.380.RBA01EMN	38,0	140	1750	74,8	153,9				
APM20.400.RBA01EMN	40,0			76,5	157,4				

B Ön Kapak
Front Cover

G Şaft Tipi
Shaft Type



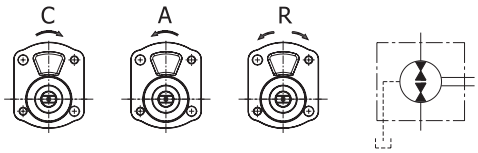


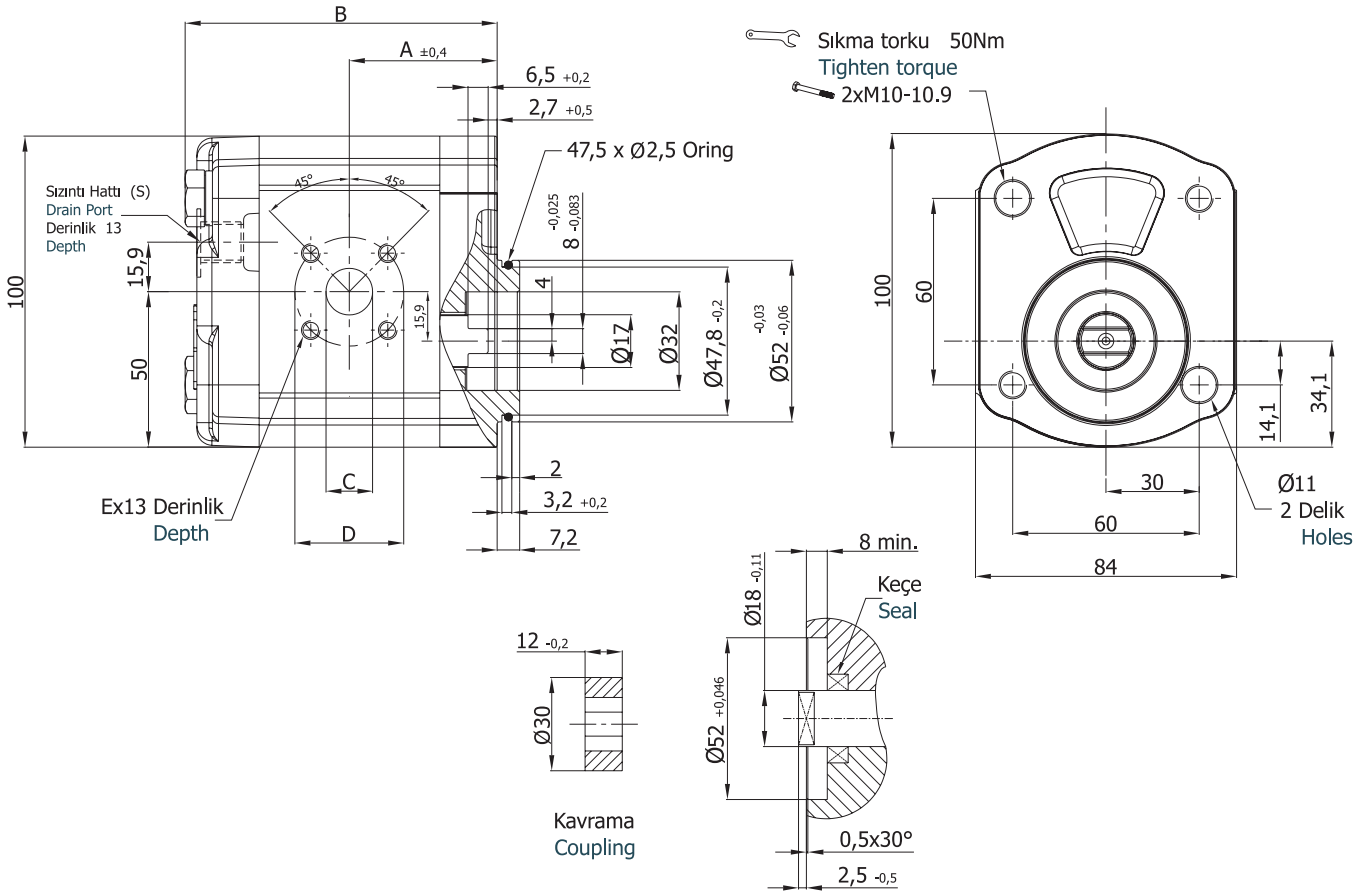


Motor Tipi Motor Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM20.040.RBG01EMN	3,9	250	3500	41,6	88,7	15	35	M6	M12x1,5
APM20.060.RBG01EMN	5,9			43,2	91,8				
APM20.080.RBG01EMN	8,0			44,8	95,0				
APM20.095.RBG01EMN	9,4			45,9	97,3				
APM20.115.RBG01EMN	11,4		3000	47,6	100,4				
APM20.140.RBG01EMN	13,9			49,4	104,6				
APM20.160.RBG01EMN	16,0			51,1	107,5				
APM20.190.RBG01EMN	19,2			59,6	124,5	20	40		
APM20.220.RBG01EMN	21,9	210	2500	61,7	128,9				
APM20.250.RBG01EMN	24,8	190		64,2	134,0				
APM20.280.RBG01EMN	27,9	170	2200	66,4	138,3				
APM20.320.RBG01EMN	32,0	160	2000	70,0	144,4				
APM20.340.RBG01EMN	34,0	150		71,5	147,4				
APM20.380.RBG01EMN	38,0	140	1750	74,8	153,9				
APM20.400.RBG01EMN	40,0			76,5	157,4				

C Ön Kapak
Front Cover

E Şaft Tipi
Shaft Type

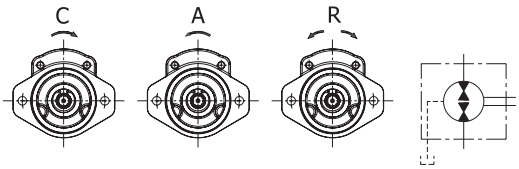


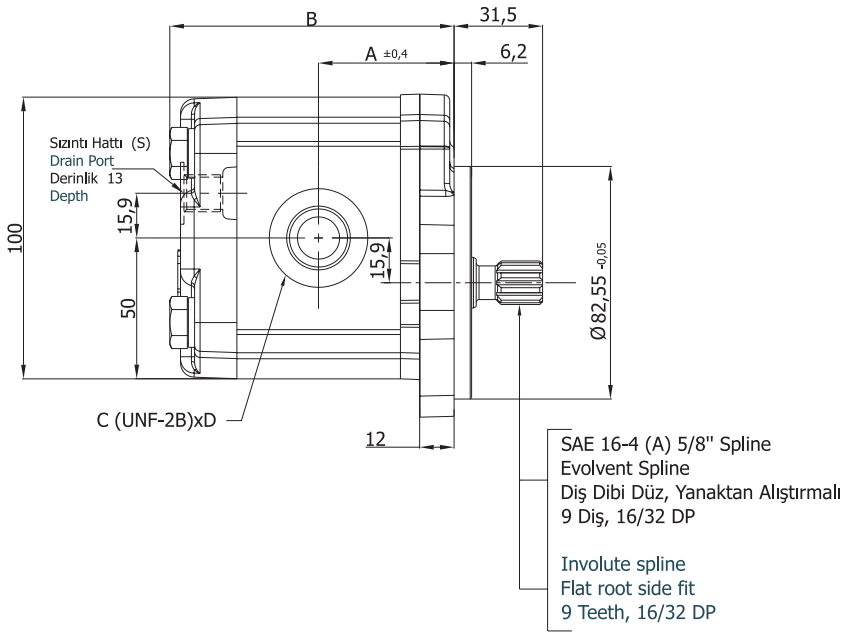


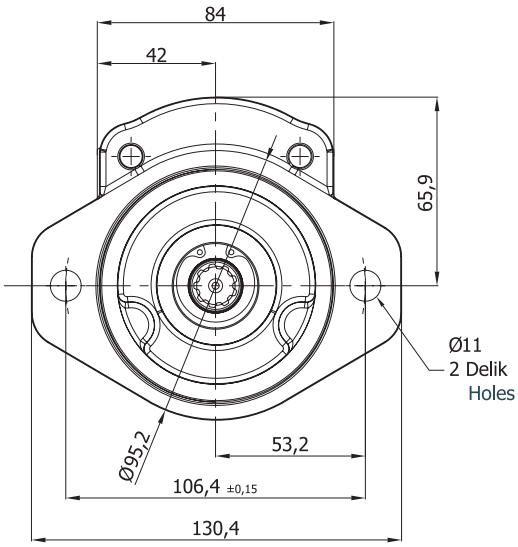
Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM20.040.RCE01EMN	3,9	250	3500	41,6	88,7	15	35	M6	M12x1,5
APM20.060.RCE01EMN	5,9			43,2	91,8				
APM20.080.RCE01EMN	8,0			44,8	95,0				
APM20.095.RCE01EMN	9,4			45,9	97,3				
APM20.115.RCE01EMN	11,4		3000	47,6	100,4				
APM20.140.RCE01EMN	13,9			49,4	104,6				
APM20.160.RCE01EMN	16,0			51,1	107,5				
APM20.190.RCE01EMN	19,2			59,6	124,5	20	40		
APM20.220.RCE01EMN	21,9	210	2500	61,7	128,9				
APM20.250.RCE01EMN	24,8	190		64,2	134,0				
APM20.280.RCE01EMN	27,9	170	2200	66,4	138,3				
APM20.320.RCE01EMN	32,0	160	2000	70,0	144,4				
APM20.340.RCE01EMN	34,0	150		71,5	147,4				
APM20.380.RCE01EMN	38,0	140	1750	74,8	153,9				
APM20.400.RCE01EMN	40,0			76,5	157,4				

D Ön Kapak
Front Cover

C Şaft Tipi
Shaft Type



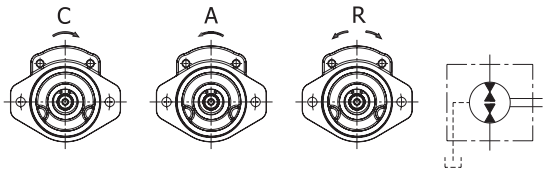


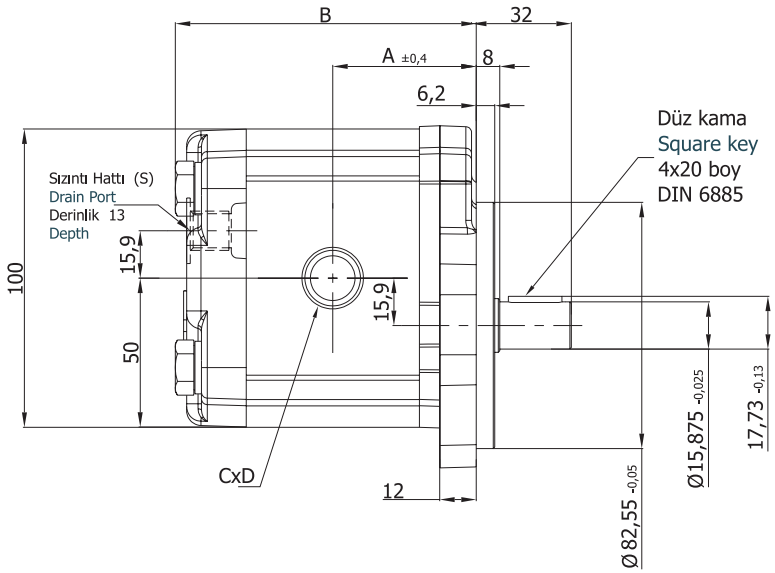


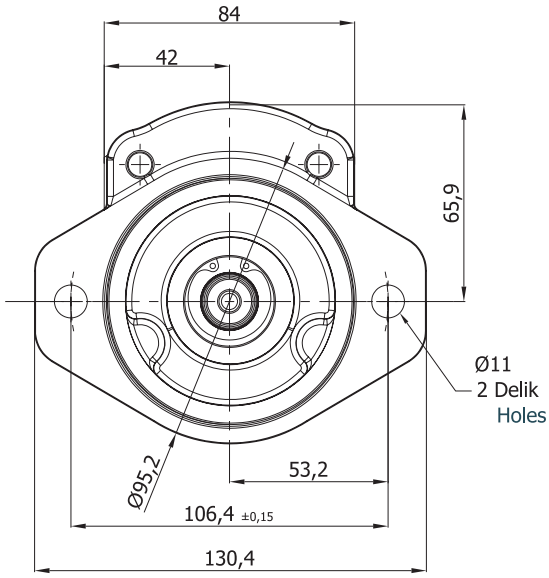
Motor Tipi Motor Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet		Sızıntı - Drain
						C	D	S
APM20.040.RDC04EUN	3,9	250	3500	42,2	89,3	7/8-14 UNF	15	7/16-20 UNF
APM20.060.RDC04EUN	5,9			43,8	92,4			
APM20.080.RDC04EUN	8,0			45,4	95,6			
APM20.095.RDC04EUN	9,4			46,5	97,9			
APM20.115.RDC04EUN	11,4		3000	48,2	101,0			
APM20.140.RDC04EUN	13,9			50,0	105,0			
APM20.160.RDC04EUN	16,0			51,7	108,1			
APM20.190.RDC04EUN	19,2			60,2	125,1	1 1/16-12 UNF	20	
APM20.220.RDC04EUN	21,9	210	2500	62,3	129,5			
APM20.250.RDC04EUN	24,8	190		64,8	134,6			
APM20.280.RDC04EUN	27,9	170	2200	67,0	138,9			
APM20.320.RDC04EUN	32,0	160	2000	70,0	145,0			
APM20.340.RDC04EUN	34,0	150		71,5	148,0			
APM20.380.RDC04EUN	38,0	140	1750	74,8	154,5			
APM20.400.RDC04EUN	40,0			76,5	158,0			

D Ön Kapak
Front Cover

H Şaft Tipi
Shaft Type



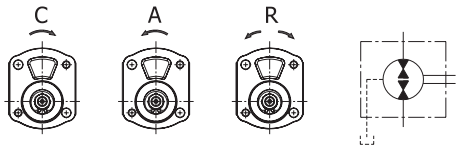


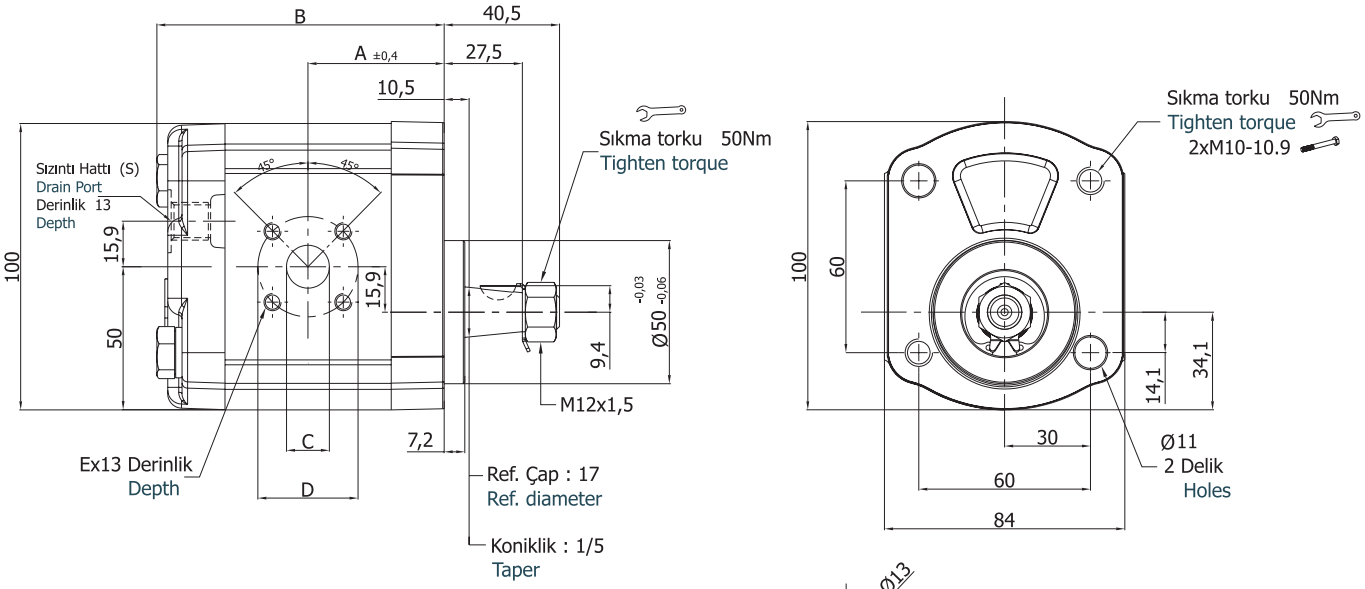


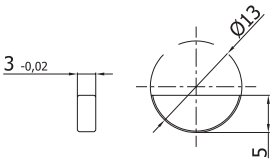
Motor Tipi Motor Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet		Sızıntı - Drain
						C	D	S
APM20.040.RDH05EUN	3,9	250	3500	42,2	89,3	G1/2	15	7/16-20 UNF
APM20.060.RDH05EUN	5,9			43,8	92,4			
APM20.080.RDH05EUN	8,0			45,4	95,6			
APM20.095.RDH05EUN	9,4			46,5	97,9			
APM20.115.RDH05EUN	11,4		3000	48,2	101,0			
APM20.140.RDH05EUN	13,9			50,0	105,0			
APM20.160.RDH05EUN	16,0			51,7	108,1			
APM20.190.RDH05EUN	19,2			60,2	125,1	G3/4	20	
APM20.220.RDH05EUN	21,9	210	2500	62,3	129,5			
APM20.250.RDH05EUN	24,8	190		64,8	134,6			
APM20.280.RDH05EUN	27,9	170	2200	67,0	138,9			
APM20.320.RDH05EUN	32,0	160	2000	70,0	145,0			
APM20.340.RDH05EUN	34,0	150		71,5	148,0			
APM20.380.RDH05EUN	38,0	140	1750	74,8	154,5			
APM20.400.RDH05EUN	40,0			76,5	158,0			

E Ön Kapak
Front Cover

A Şaft Tipi
Shaft Type





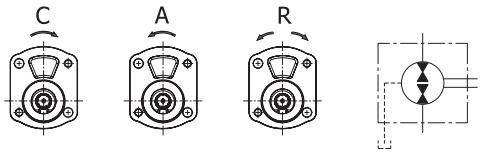


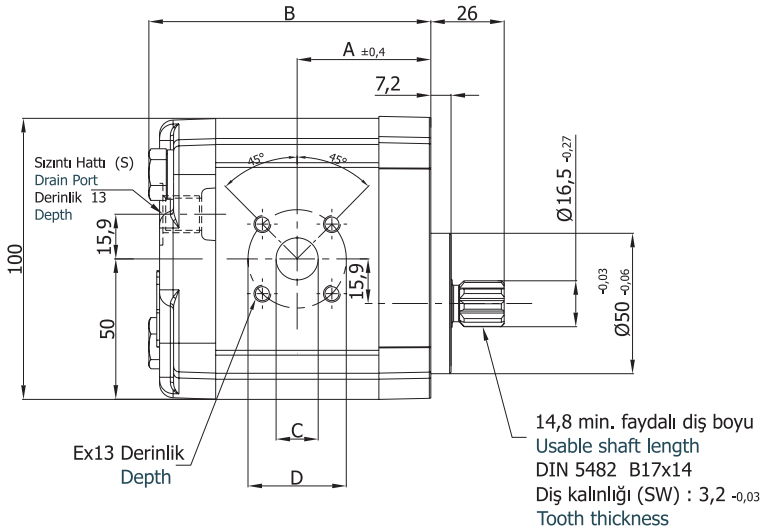
Ay Kama
Woodruff key

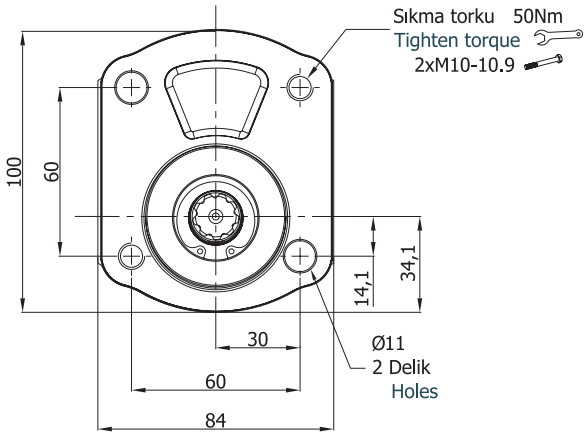
Motor Tipi Motor Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM20.040.REA01EGN	3,9	250	3500	41,6	88,7	15	35	M6	G1/4
APM20.060.REA01EGN	5,9			43,2	91,8				
APM20.080.REA01EGN	8,0			44,8	95,0				
APM20.095.REA01EGN	9,4			45,9	97,3				
APM20.115.REA01EGN	11,4		3000	47,6	100,4				
APM20.140.REA01EGN	13,9			49,4	104,6				
APM20.160.REA01EGN	16,0			51,1	107,5				
APM20.190.REA01EGN	19,2			59,6	124,5	20	40		
APM20.220.REA01EGN	21,9	210	2500	61,7	128,9				
APM20.250.REA01EGN	24,8	190		64,2	134,0				
APM20.280.REA01EGN	27,9	170	2200	66,4	138,3				
APM20.320.REA01EGN	32,0	160	2000	70,0	144,4				
APM20.340.REA01EGN	34,0	150		71,5	147,4				
APM20.380.REA01EGN	38,0	140	1750	74,8	153,9				
APM20.400.REA01EGN	40,0			76,5	157,4				

E Ön Kapak
Front Cover

G Şaft Tipi
Shaft Type



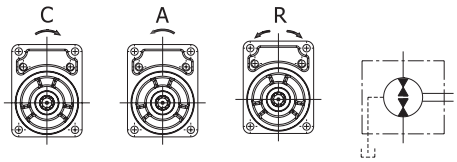


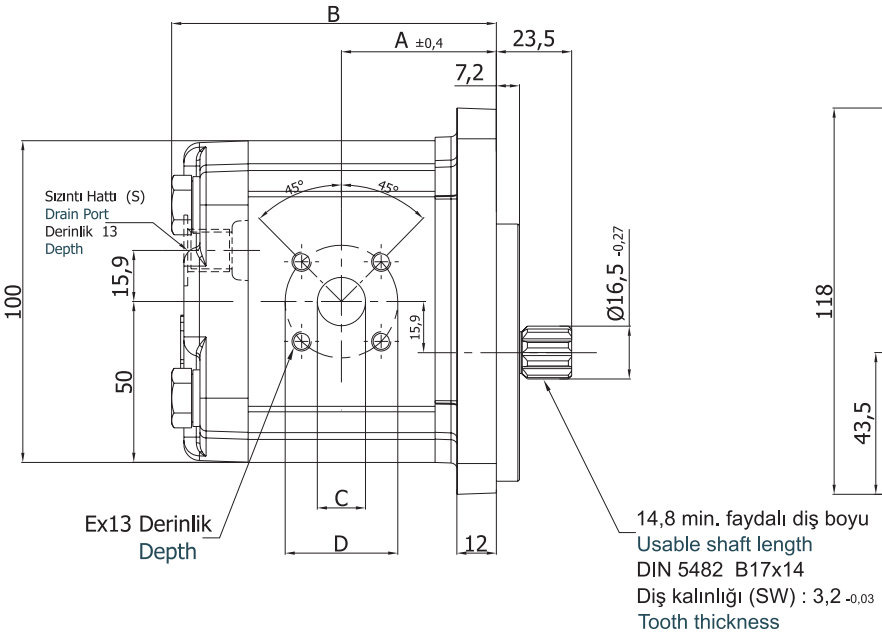


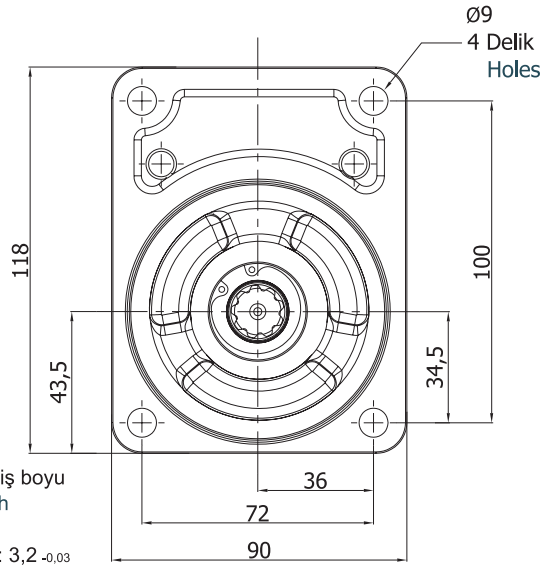
Motor Tipi Motor Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM20.040.REG01EGN	3,9	250	3500	41,6	88,7	15	35	M6	G1/4
APM20.060.REG01EGN	5,9			43,2	91,8				
APM20.080.REG01EGN	8,0			44,8	95,0				
APM20.095.REG01EGN	9,4			45,9	97,3				
APM20.115.REG01EGN	11,4		3000	47,6	100,4				
APM20.140.REG01EGN	13,9			49,4	104,6				
APM20.160.REG01EGN	16,0			51,1	107,5				
APM20.190.REG01EGN	19,2			59,6	124,5	20	40		
APM20.220.REG01EGN	21,9	210	2500	61,7	128,9				
APM20.250.REG01EGN	24,8	190		64,2	134,0				
APM20.280.REG01EGN	27,9	170	2200	66,4	138,3				
APM20.320.REG01EGN	32,0	160	2000	70,0	144,4				
APM20.340.REG01EGN	34,0	150		71,5	147,4				
APM20.380.REG01EGN	38,0	140	1750	74,8	153,9				
APM20.400.REG01EGN	40,0			76,5	157,4				

G Ön Kapak
Front Cover

G Şaft Tipi
Shaft Type



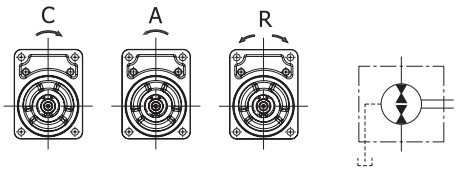


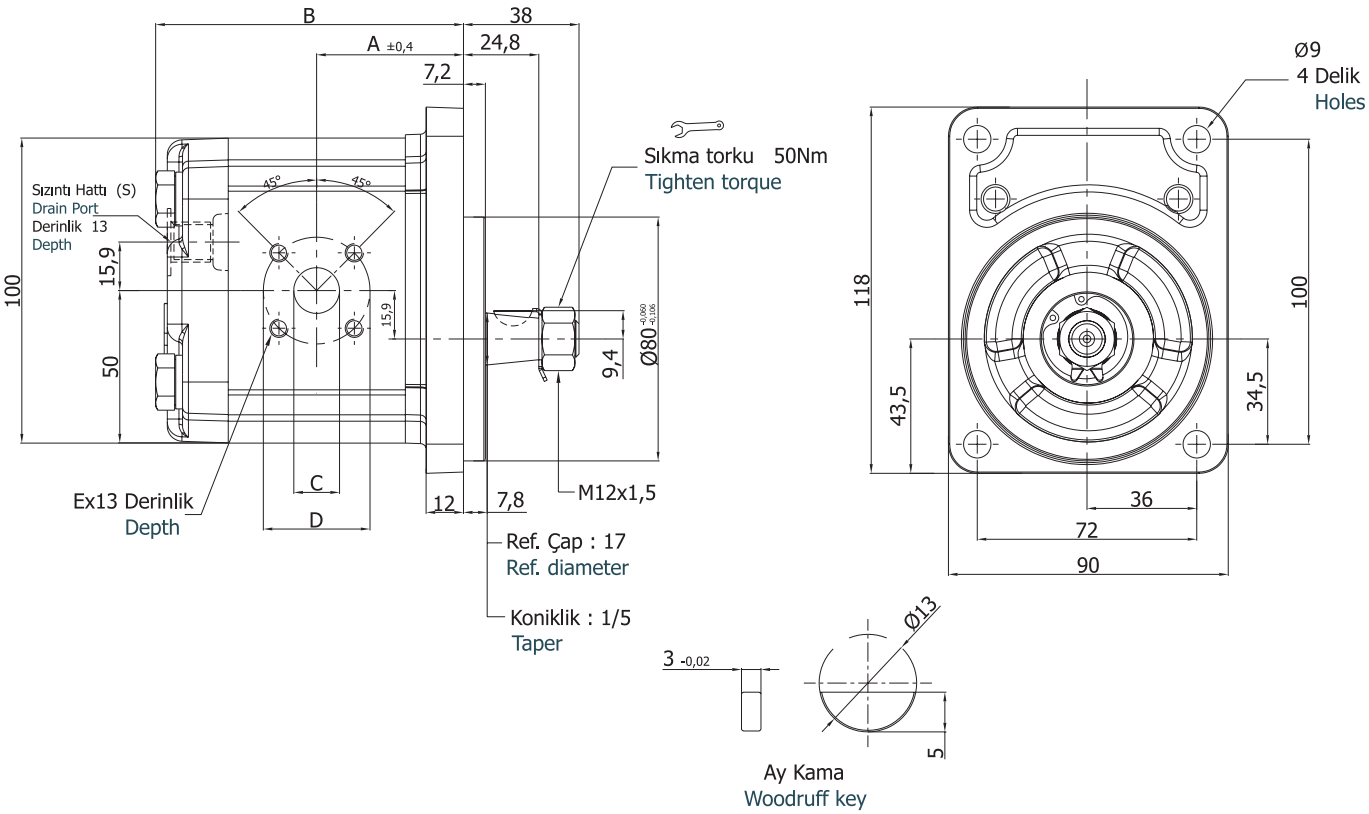


Motor Tipi Motor Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM20.040.RGG01EMN	3,9	250	3500	42,2	89,3	15	35	M6	M12x1,5
APM20.060.RGG01EMN	5,9			43,8	92,4				
APM20.080.RGG01EMN	8,0			45,4	95,6				
APM20.095.RGG01EMN	9,4			46,5	97,9				
APM20.115.RGG01EMN	11,4		3000	48,2	101,0				
APM20.140.RGG01EMN	13,9			50,0	105,0				
APM20.160.RGG01EMN	16,0			51,7	108,1				
APM20.190.RGG01EMN	19,2			60,2	125,1	20	40		
APM20.220.RGG01EMN	21,9	210	2500	62,3	129,5				
APM20.250.RGG01EMN	24,8	190		64,8	134,6				
APM20.280.RGG01EMN	27,9	170	2200	67,0	138,9				
APM20.320.RGG01EMN	32,0	160	2000	70,0	145,0				
APM20.340.RGG01EMN	34,0	150		71,5	148,0				
APM20.380.RGG01EMN	38,0	140	1750	74,8	154,5				
APM20.400.RGG01EMN	40,0			76,5	158,0				

G Ön Kapak
Front Cover

L Şaft Tipi
Shaft Type

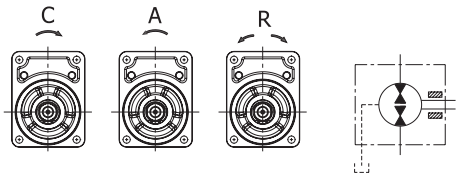


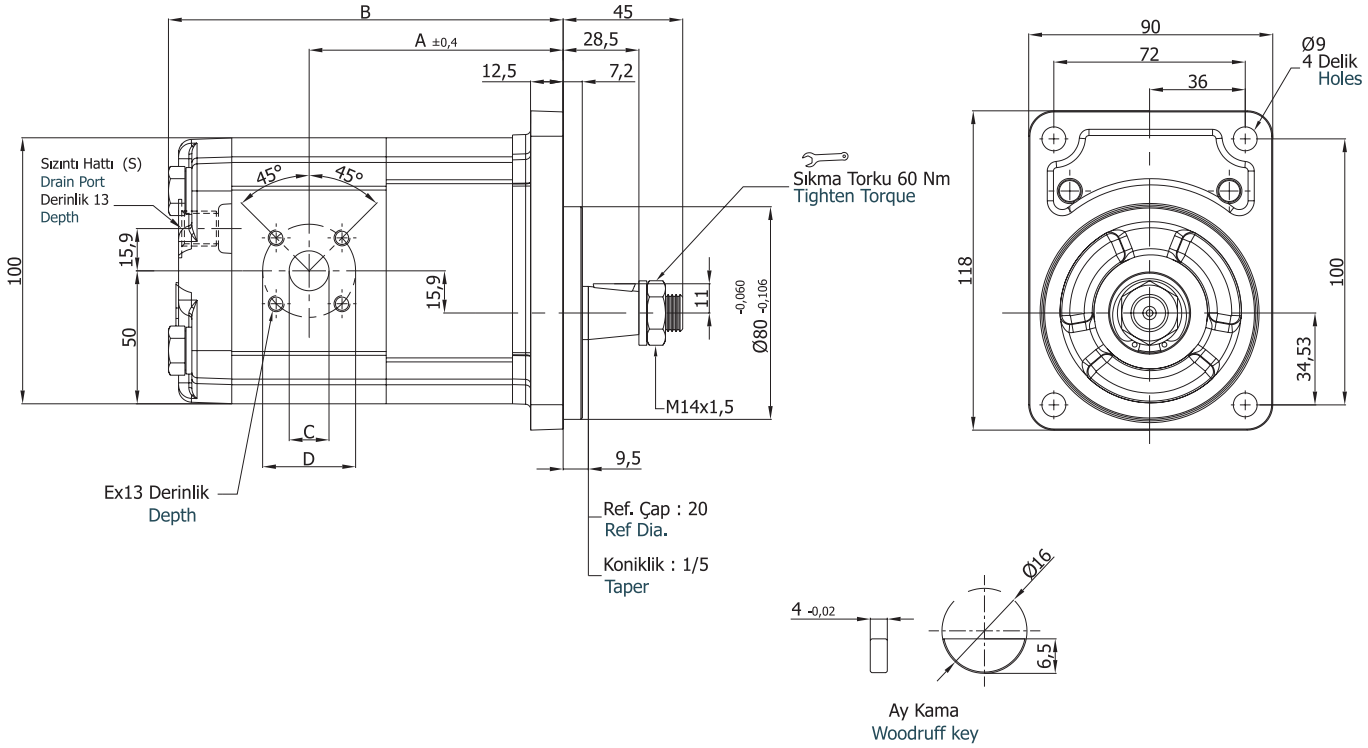


Motor Tipi Motor Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM20.040.RGL01EMN	3,9	250	3500	42,2	89,3	15	35	M6	M12x1,5
APM20.060.RGL01EMN	5,9			43,8	92,4				
APM20.080.RGL01EMN	8,0			45,4	95,6				
APM20.095.RGL01EMN	9,4			46,5	97,9				
APM20.115.RGL01EMN	11,4		3000	48,2	101,0				
APM20.140.RGL01EMN	13,9			50,0	105,0				
APM20.160.RGL01EMN	16,0			51,7	108,1				
APM20.190.RGL01EMN	19,2			60,2	125,1				
APM20.220.RGL01EMN	21,9	210	2500	62,3	129,5	20	40		
APM20.250.RGL01EMN	24,8	190		64,8	134,6				
APM20.280.RGL01EMN	27,9	170	2200	67,0	138,9				
APM20.320.RGL01EMN	32,0	160	2000	70,0	145,0				
APM20.340.RGL01EMN	34,0	150		71,5	148,0				
APM20.380.RGL01EMN	38,0	140	1750	74,8	154,5				
APM20.400.RGL01EMN	40,0			76,5	158,0				

H Ön Kapak
Front Cover

K Şaft Tipi
Shaft Type

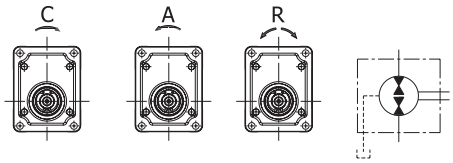


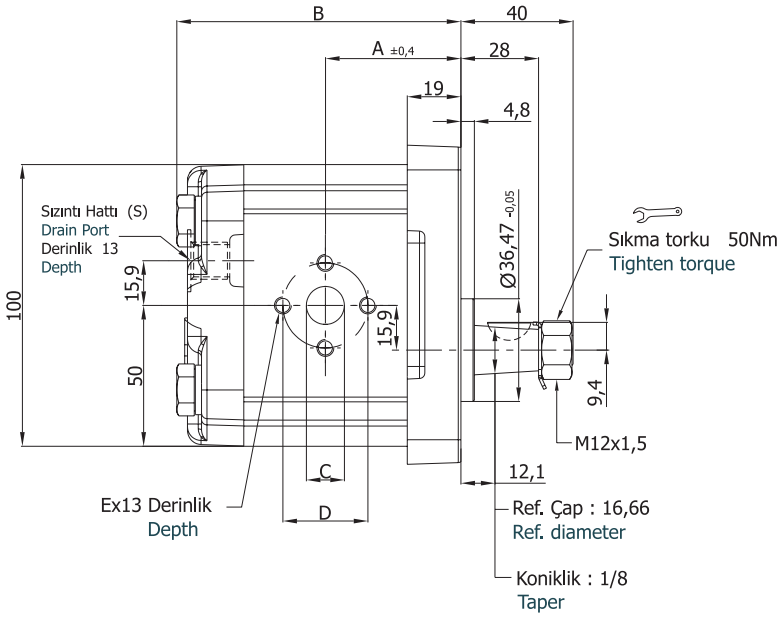


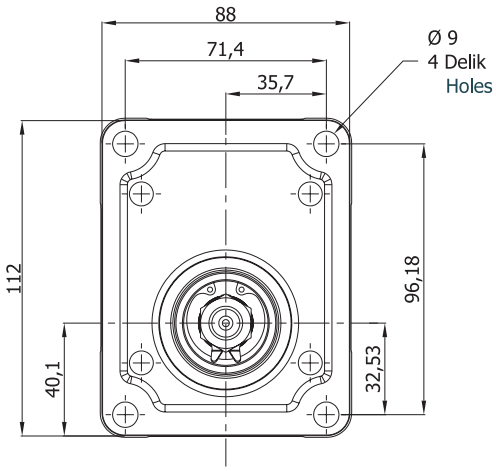
Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM20.040.RHK01EMON	3,9	250	3500	89,7	136,7	15	35	M6	M12x1,5
APM20.060.RHK01EMON	5,9			91,2	139,8				
APM20.080.RHK01EMON	8,0			92,8	142,9				
APM20.095.RHK01EMON	9,4			94,0	145,2				
APM20.115.RHK01EMON	11,4		3000	95,5	148,4				
APM20.140.RHK01EMON	13,9			97,5	152,3				
APM20.160.RHK01EMON	16,0	230		99,0	155,4				
APM20.190.RHK01EMON	19,2	190		107,5	172,4	20	40		
APM20.220.RHK01EMON	21,9	160	2500	109,7	176,8				
APM20.250.RHK01EMON	24,8	150		112,3	181,9				
APM20.280.RHK01EMON	27,9	130	2200	114,5	186,2				
APM20.320.RHK01EMON	32,0	160	2000	117,5	192,4				
APM20.340.RHK01EMON	34,0	150		119,0	195,4				
APM20.380.RHK01EMON	38,0	140	1750	122,3	201,9				
APM20.400.RHK01EMON	40,0			124,0	205,4				

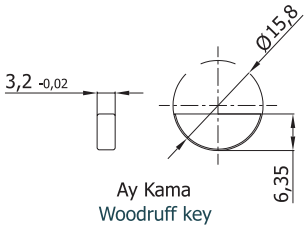
A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type





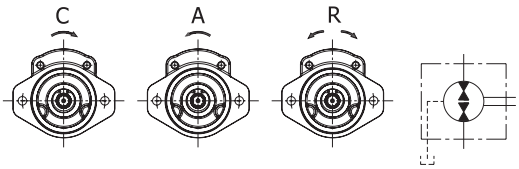


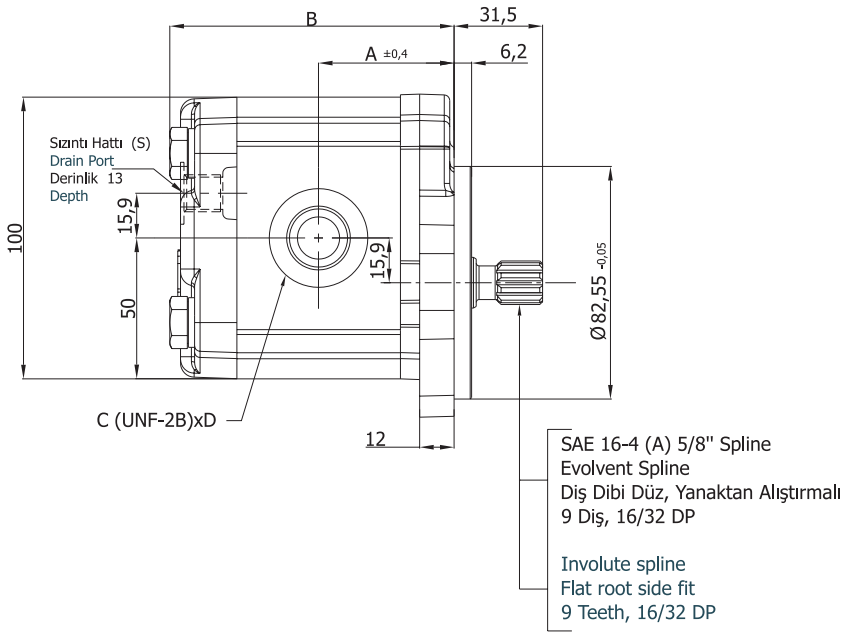


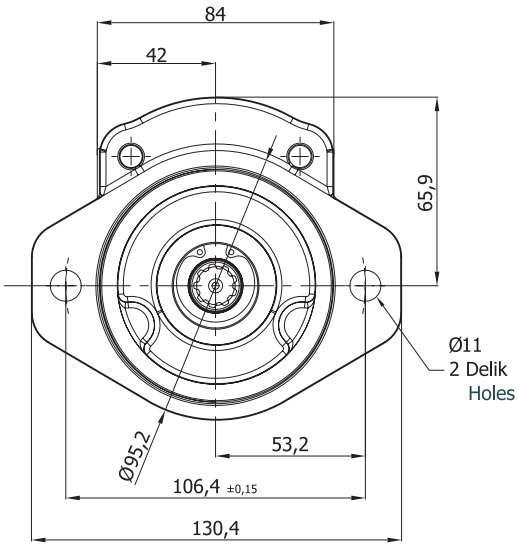
Motor Tipi Motor Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
DKM20.040.RAB02EGN	3,9	280	3500	42,2	89,3	13,5	30,2	M6	G1/4
DKM20.060.RAB02EGN	5,9			43,8	92,4				
DKM20.080.RAB02EGN	8,0			45,4	95,6				
DKM20.095.RAB02EGN	9,4			46,5	97,9				
DKM20.115.RAB02EGN	11,4		3000	48,2	101,0				
DKM20.140.RAB02EGN	13,9			50,0	105,0				
DKM20.160.RAB02EGN	16,0			51,7	108,1				
DKM20.190.RAB02EGN	19,2			60,2	125,1	20	40	M8	
DKM20.220.RAB02EGN	21,9	240	2500	62,3	129,5				
DKM20.250.RAB02EGN	24,8	220		64,8	134,6				
DKM20.280.RAB02EGN	27,9	200	2200	67,0	138,9				

D Ön Kapak
Front Cover

C Şaft Tipi
Shaft Type



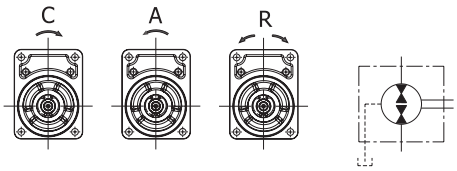


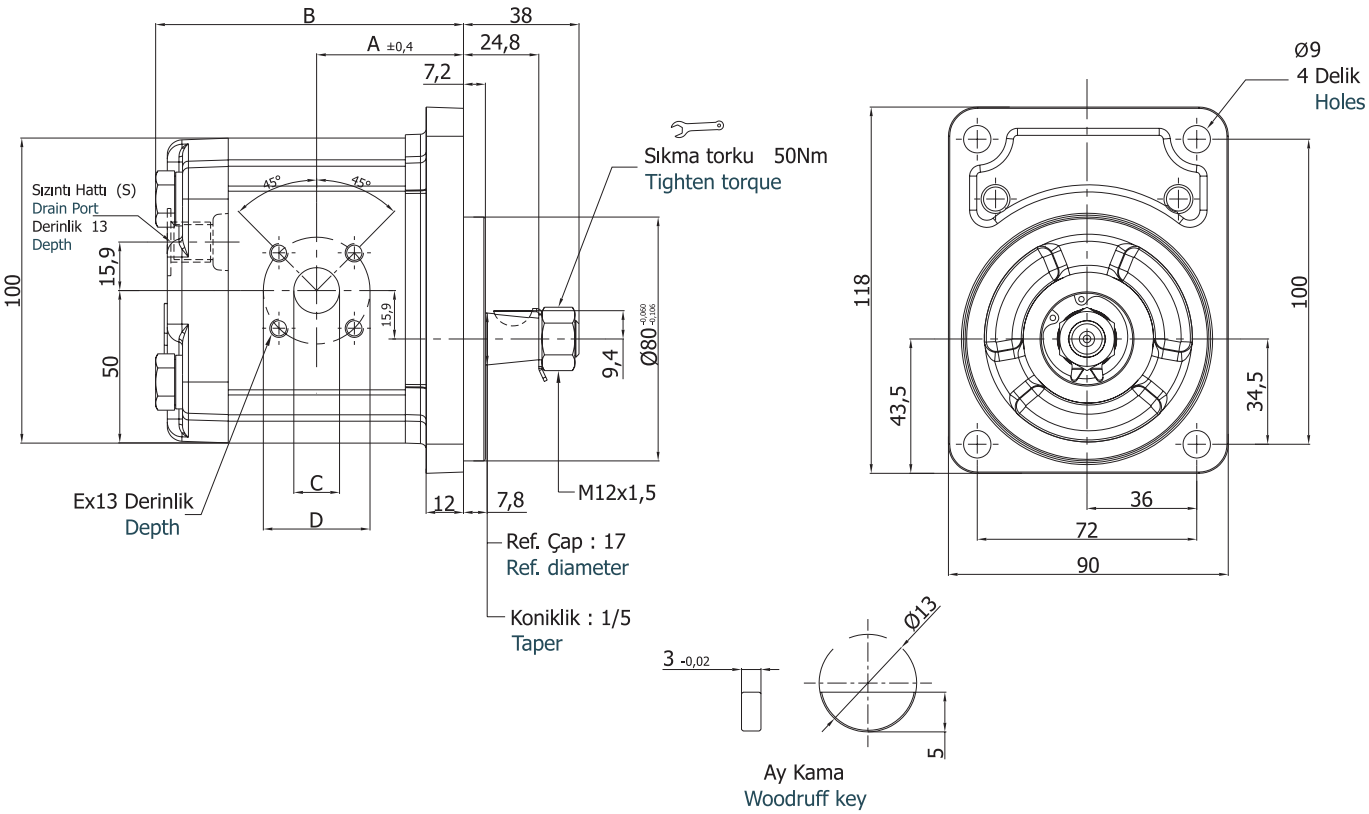


Motor Tipi Motor Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet		Sızıntı - Drain
						C	D	S
DKM20.040.RDC04EUN	3,9	280	3500	42,2	89,3	7/8-14 UNF	15	7/16-20 UNF
DKM20.060.RDC04EUN	5,9			43,8	92,4			
DKM20.080.RDC04EUN	8,0			45,4	95,6			
DKM20.095.RDC04EUN	9,4			46,5	97,9			
DKM20.115.RDC04EUN	11,4		3000	48,2	101,0			
DKM20.140.RDC04EUN	13,9			50,0	105,0			
DKM20.160.RDC04EUN	16,0			51,7	108,1			
DKM20.190.RDC04EUN	19,2			60,2	125,1	1 1/16-12 UNF	20	
DKM20.220.RDC04EUN	21,9	240	2500	62,3	129,5			
DKM20.250.RDC04EUN	24,8	220		64,8	134,6			
DKM20.280.RDC04EUN	27,9	200	2200	67,0	138,9			

G Ön Kapak
Front Cover

L Şaft Tipi
Shaft Type

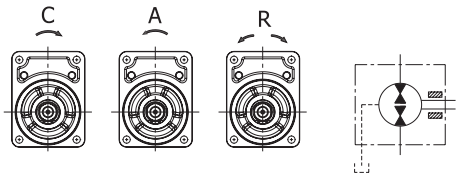


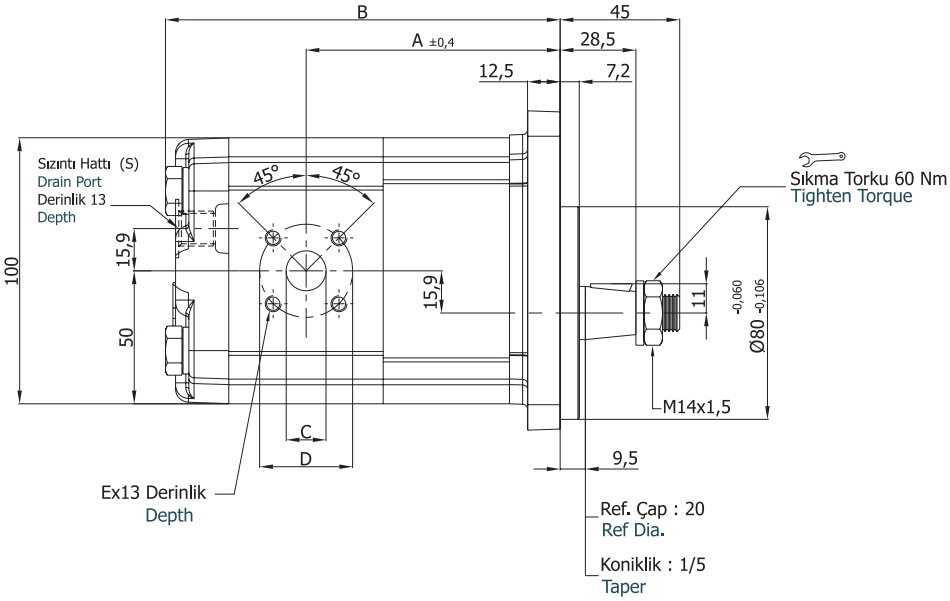


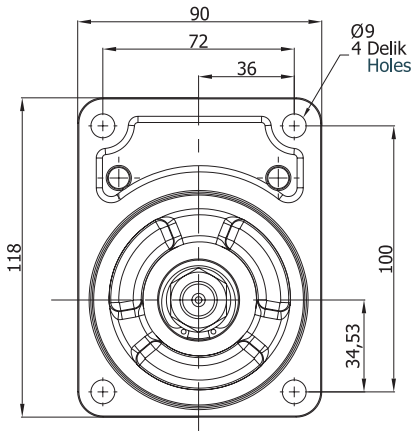
Motor Tipi Motor Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
DKM20.040.RGL01EMN	3,9	280	3500	42,2	89,3	15	35	M6	M12x1,5
DKM20.060.RGL01EMN	5,9			43,8	92,4				
DKM20.080.RGL01EMN	8,0			45,4	95,6				
DKM20.095.RGL01EMN	9,4			46,5	97,9				
DKM20.115.RGL01EMN	11,4		3000	48,2	101,0				
DKM20.140.RGL01EMN	13,9			50,0	105,0				
DKM20.160.RGL01EMN	16,0			51,7	108,1				
DKM20.190.RGL01EMN	19,2			60,2	125,1				
DKM20.220.RGL01EMN	21,9	240	2500	62,3	129,5				
DKM20.250.RGL01EMN	24,8	220		64,8	134,6				
DKM20.280.RGL01EMN	27,9	200	2200	67,0	138,9				

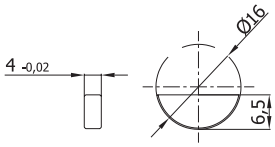
H Ön Kapak
Front Cover

K Şaft Tipi
Shaft Type









Ay Kama
Woodruff key

Motor Tipi Motor Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
DKM20.040.RHK01EMON	3,9	280	3500	89,7	136,7	15	35	M6	M12x1,5
DKM20.060.RHK01EMON	5,9			91,2	139,8				
DKM20.080.RHK01EMON	8,0			92,8	142,9				
DKM20.095.RHK01EMON	9,4			94,0	145,2				
DKM20.115.RHK01EMON	11,4		3000	95,5	148,4				
DKM20.140.RHK01EMON	13,9			97,5	152,3				
DKM20.160.RHK01EMON	16,0	260		99,0	155,4				
DKM20.190.RHK01EMON	19,2	220		107,5	172,4	20	40		
DKM20.220.RHK01EMON	21,9	190	2500	109,7	176,8				
DKM20.250.RHK01EMON	24,8	160		112,3	181,9				
DKM20.280.RHK01EMON	27,9		2200	114,5	186,2				

GRUP 30 MOTORLARIN KODLAMA SİSTEMİ
ORDERING CODE OF GROUP30 MOTORS

APM30 . 340 . R A B 02 E G O N

Motor Tipi / Motor Type: APM30

İletim Hacmi / Displacement (cm³/dev (cm³/rev))

170 = 17 cm³/dev (cm³/rev)
220 = 22 cm³/dev (cm³/rev)
270 = 27 cm³/dev (cm³/rev)
320 = 32 cm³/dev (cm³/rev)
340 = 34 cm³/dev (cm³/rev)
380 = 38 cm³/dev (cm³/rev)
430 = 43 cm³/dev (cm³/rev)
470 = 47 cm³/dev (cm³/rev)
510 = 51 cm³/dev (cm³/rev)
560 = 56 cm³/dev (cm³/rev)
610 = 61 cm³/dev (cm³/rev)
730 = 73 cm³/dev (cm³/rev)
820 = 82 cm³/dev (cm³/rev)
900 = 90 cm³/dev (cm³/rev)
1000 = 100 cm³ /dev (cm³/rev)

Dönüş Yönü / Rotation

A = Sol dönüş / Counter-clockwise
C = Sağ dönüş / Clockwise
R = Çift dönüş / Reversible

Ön Yatak / Outboard Bearing

O	Var / Available
	Yok / Absent

Keçe / Seal

N	NBR
V	Viton

Sızıntı Hattı / Drain Line

G	G1/4"
U	7/16-20 UNF
M	M12x1,5

Arka Kapak / Rear Cover

S	Standart Standard
E	Arkadan Giriş Çıkış Rear Port
R1	Emniyet Valfi (10-90 Bar) Relief Valve
R2	Emniyet Valfi (70-140 Bar) Relief Valve
R3	Emniyet Valfi (120-190 Bar) Relief Valve
D	Akış Bölücü Valf Flow Divider Valve
H	Emniyet Valfli Akış Kontrol Valfi Flow Control Valve With Relief Valve
L	Yük Duyarlı Valf Load Sensing Valve
T	Çek Valf Check Valve
P	Arkadan Giriş-Çıkış Rear Inlet-Outlet
C	Basınç Kompansatörlü Akış Kontrol Valfi Flow Control Valve Pressure Compensated

Ön Kapak / Front Cover

A	Dikdörtgen kapak Square flange	Ø50,78 mm	
D	2 Civatalı SAEJ 744 101-2B 2 Bolts SAEJ 744 101-2B	Ø101,6 mm	
G	Dikdörtgen kapak Square flange	Ø105 mm	
H	2 Civatalı SAE ' A' 2 Bolts SAE ' A'	Ø82,55 mm	
K	2 Civatalı SAE ' B' 2 Bolts SAE ' B'	Ø101,6 mm	
L	Dikdörtgen kapak Square flange	Ø60,3 mm	
S	3 Civatalı UNI Tipi 3 Bolts UNI Type	Ø52 mm	
M	Dikdörtgen kapak Square flange	Ø60 mm	
N	SAE 4 Civatalı SAE 4 Bolts	Ø127 mm	

Tahrik şaftı / Drive Shaft

A	Konik - Kamalı Tapered key shaft	1:5	G
B	Konik - Kamalı Tapered key shaft	1:8	A
C	SAE spline şaft 13 diş SAE spline shaft 13T		D
D	SAE spline şaft 15 diş SAE spline shaft 15T		D
H	Paralel şaft Parallel shaft		A D
K	Konik - Kamalı Tapered key shaft	1:8	L
M	SAE spline şaft J498B 13 diş SAE spline shaft J498B 13T		K
P	Paralel şaft Parallel shaft		H
U	DIN 5463 spline şaft 6 diş DIN 5463 spline shaft 6T		S

Giriş - Çıkış Delikleri / Inlet and Outlet Ports

01		Kare tip Rectangular
02		Baklava tip Diamond
03		SAE Dikdörtgen Flanş Metrik diş SAE Square Flange Thread Metric
04		UN-2B diş UN-2B thread
05		Boru diş Pipe thread
06		SAE Dikdörtgen Flanş UNC diş SAE Square Flange Thread UNC

- Kodlama Örneği ; APM30.340.RAB02EGN
  Code Example

APM30 TEKNİK ÖZELLİKLER / APM30 TECHNICAL DATA

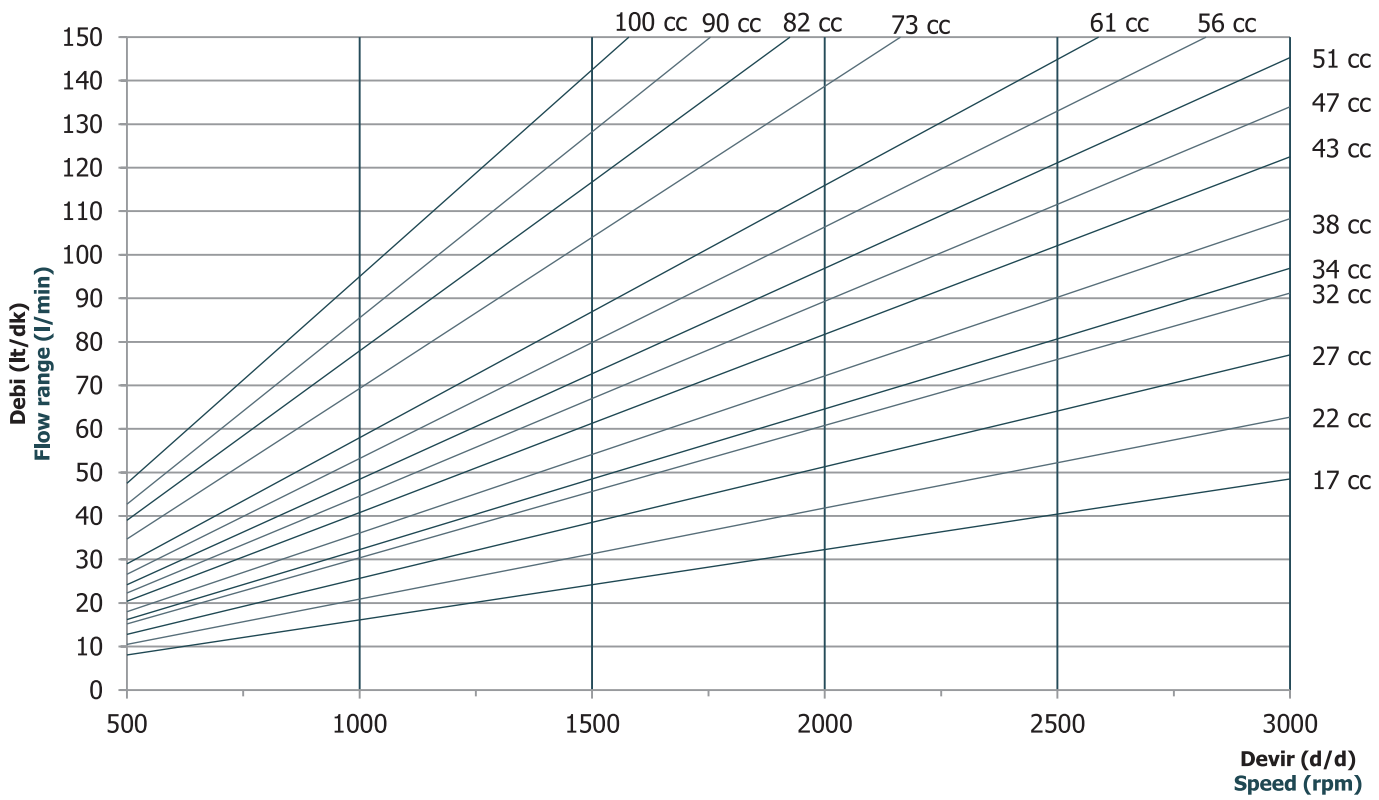
Motor Tipi Motor Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç / Max. Pressure			Maks. Hız Max. Speed	Min. Hız Min. Speed
		P1	P2	P3		
		bar			d/d (rpm)	
APM30.170	17,0	250	270	290	3000	400
APM30.220	22,0	250	270	290	3000	400
APM30.270	27,0	250	270	290	3000	400
APM30.320	32,0	240	260	280	3000	400
APM30.340	34,0	240	260	280	3000	400
APM30.380	38,0	240	260	280	3000	400
APM30.430	43,0	230	250	270	3000	400
APM30.470	47,0	230	250	270	2500	400
APM30.510	51,0	210	230	250	2500	400
APM30.560	56,0	200	220	240	2500	400
APM30.610	61,0	180	200	220	2500	400
APM30.730	73,0	170	190	210	2500	400
APM30.820	82,0	160	180	200	2000	400
APM30.900	90,0	150	170	190	2000	400
APM30.1000	100,0	140	160	180	2000	400

P1: Sürekli çalışma basıncı
Continuous pressure

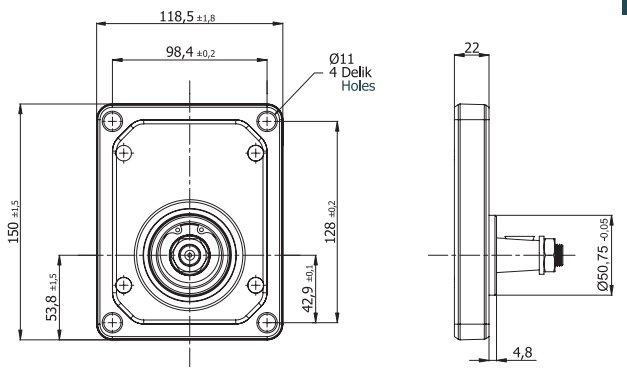
P2 : Aralıklı çalışma basıncı
Intermittent pressure

P3 : Ani basınç
Peak pressure

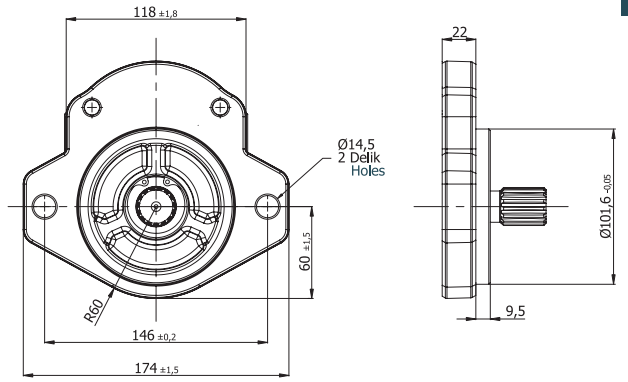
APM30 MOTORLARIN DEBİ EĞRİLERİ / FLOW CURVES OF APM30 MOTORS



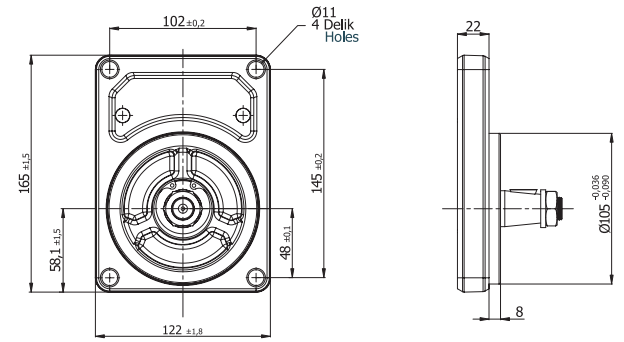
A


118,5 ±1,8
98,4 ±0,2
Ø11
4 Delik
Holes
150 ±1,5
53,8 ±1,5
128 ±0,2
42,9 ±0,1
22
Ø50,75 -0,05
4,8

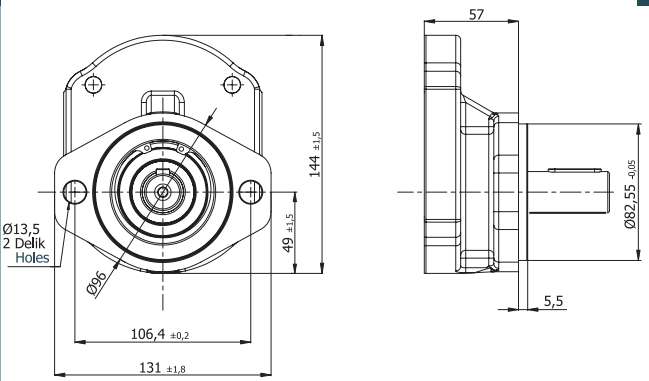
D


118 ±1,8
Ø14,5
2 Delik
Holes
R60
60 ±1,5
146 ±0,2
174 ±1,5
22
Ø101,6 -0,05
9,5

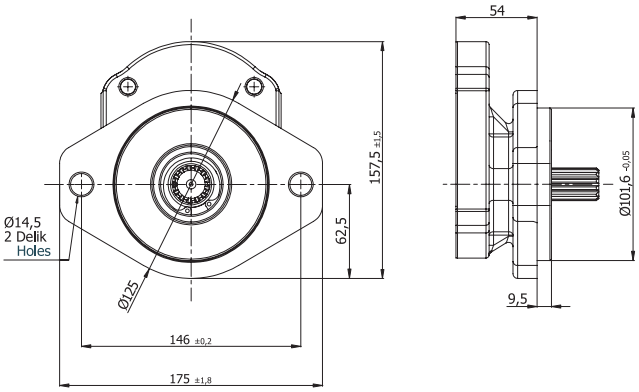
G


102 ±0,2
Ø11
4 Delik
Holes
165 ±1,5
58,1 ±1,5
145 ±0,2
48 ±0,1
122 ±1,8
22
Ø105 -0,036 -0,090
8

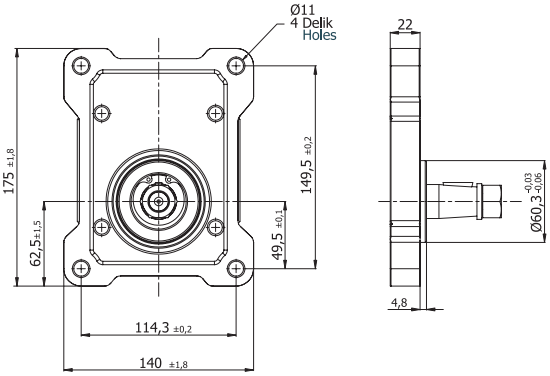
H


Ø13,5
2 Delik
Holes
Ø96
144 ±1,5
49 ±1,5
106,4 ±0,2
131 ±1,8
57
Ø82,55 -0,05
5,5

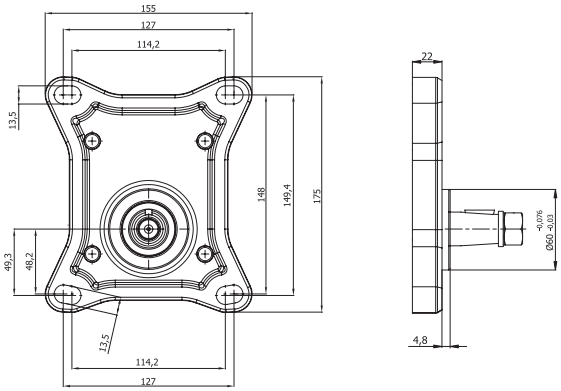
K


Ø14,5
2 Delik
Holes
Ø125
157,5 ±1,5
62,5
146 ±0,2
175 ±1,8
54
Ø101,6 -0,05
9,5

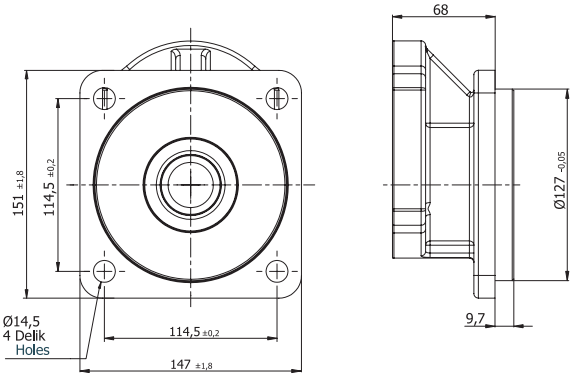
L


Ø11
4 Delik
Holes
175 ±1,8
62,5 ±1,5
149,5 ±0,2
49,5 ±0,1
114,3 ±0,2
140 ±1,8
22
Ø60,3 -0,03 -0,06
4,8

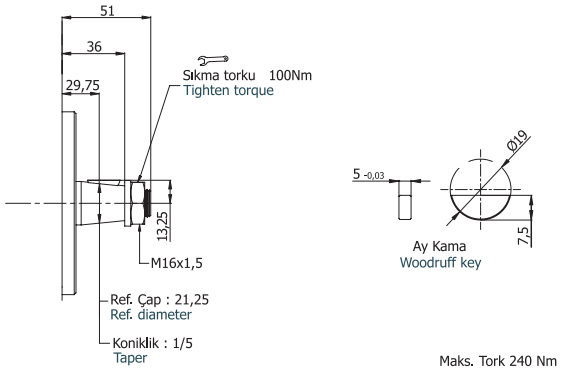
M


155
127
114,2
13,5
49,3
48,2
148
149,4
175
13,5
114,2
127
22
Ø60 -0,076 -0,03
4,8

N

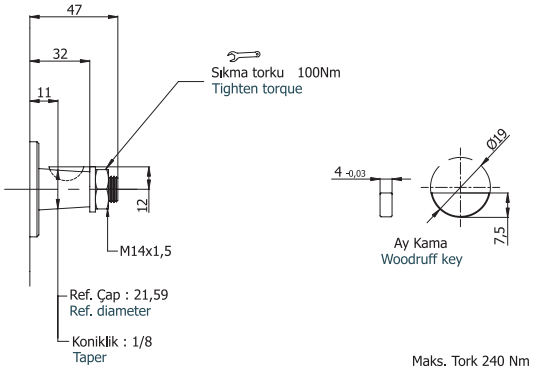

151 ±1,8
114,5 ±0,2
Ø14,5
4 Delik
Holes
114,5 ±0,2
147 ±1,8
68
Ø127 -0,05
9,7

A



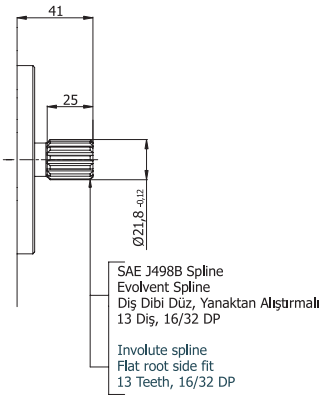
Maks. Tork 240 Nm
Max. Torque

B



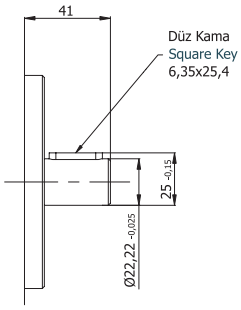
Maks. Tork 240 Nm
Max. Torque

C



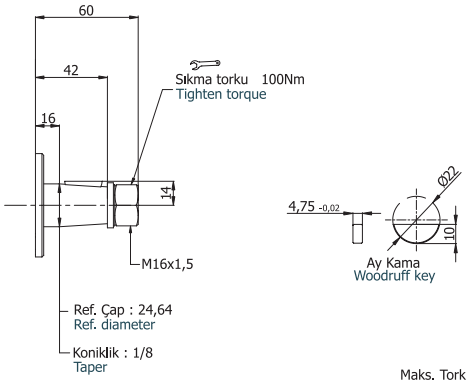
Maks. Tork 280 Nm
Max. Torque

H



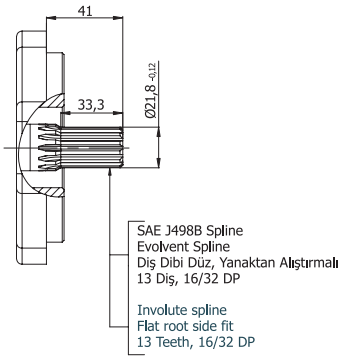
Maks. Tork 200 Nm
Max. Torque

K



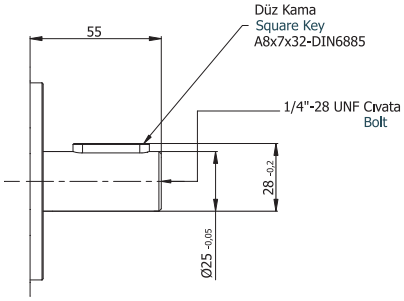
Maks. Tork 350 Nm
Max. Torque

M



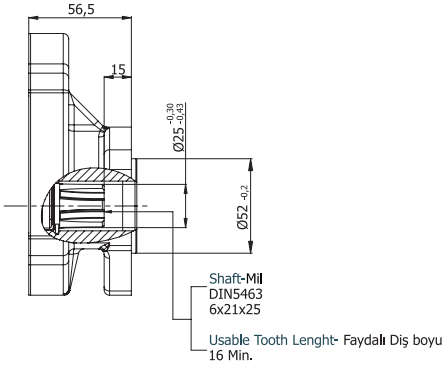
Maks. Tork 330 Nm
Max. Torque

P

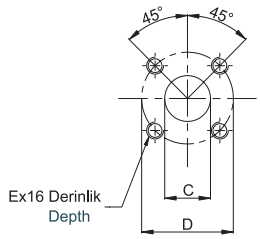


Maks. Tork 340 Nm
Max. Torque

U

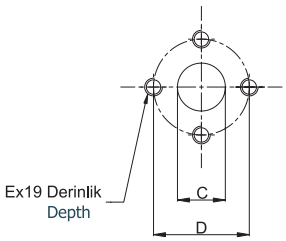


Maks. Tork 280 Nm
Max. Torque



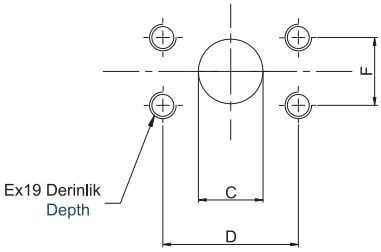
01 Kare Tipi Flanş / Rectangular Flange

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side			Basınç Tarafı Pressure Side		
		C	D	E	c	d	e
	17 - 100	27	55	M8x16	19	55	M8x16
	17 - 32	19	55	M8x16	19	55	M8x16
	34 - 100	27			27		



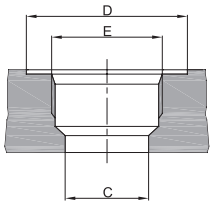
02 Baklava Tipi Flanş / Diamond Flange

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side			Basınç Tarafı Pressure Side		
		C	D	E	c	d	e
	17 - 61	27	51	M10x19	19	40	M8x16
	73 - 100	33	62	M12x19	27	51	M10x19
	17 - 38	20	40	M8x16	20	40	M8x16
	43 - 90	27	51	M10x16	27	51	M10x16
	100	33	62	M12x19	33	62	M12x19



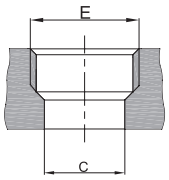
03 SAE Dikdörtgen Flanş Metrik Diş / SAE Square Flange Metric Thread

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side				Basınç Tarafı Pressure Side			
		C	D	E	F	c	d	e	f
	17 - 22	19	47,6	M8x16	22,2	12,5	38,1	M8x16	17,5
	27 - 34	25,4	52,4	M10x19	26,2	19	47,6	M8x16	22,2
	38 - 51	30,5	58,7	M10x19	30,2	25,4	52,4	M10x19	26,2
	56 - 82	39,3	69,8	M12x19	35,7	30,5	58,7	M10x19	30,2
	90 - 100	51	77,8	M12x19	42,9	39,3	69,8	M12x19	35,7
	17 - 27	19	47,6	M10x19	22,2	19	47,6	M10x19	22,2
	32 - 43	25,4	52,4	M10x19	26,2	25,4	52,4	M10x19	26,2
	47 - 56	30,5	58,7	M10x19	30,2	30,5	58,7	M10x19	30,2
	61 - 100	39,3	69,8	M12x19	35,7	39,3	69,8	M12x19	35,7



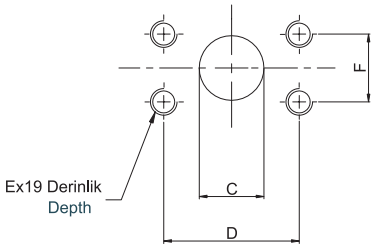
04 Diş / Thread (UN-2B) SAE Oring Boss

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side			Basınç Tarafı Pressure Side		
		C	D	E	c	d	e
	17 - 34	30,5	49	1 5/16"-12 UN-2B	25	42	1 1/16"-12 UN-2B
	38 - 51	39	58	1 5/8"-12 UN-2B	30,5	49	1 5/16"-12 UN-2B
	56 - 100	45	65	1 7/8"-12 UN-2B	39	58	1 5/8"-12 UN-2B
	17 - 27	25	42	1 1/16"-12 UN-2B	25	42	1 1/16"-12 UN-2B
	32 - 47	30,5	49	1 5/16"-12 UN-2B	30,5	49	1 5/16"-12 UN-2B
	51 - 82	39	58	1 5/8"-12 UN-2B	39	58	1 5/8"-12 UN-2B
	90 - 100	45	65	1 7/8"-12 UN-2B	45	65	1 7/8"-12 UN-2B



05 Boru diş / Pipe Thread ISO228/1

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side		Basınç Tarafı Pressure Side	
		C	E	c	e
	17 - 51	30,5	G 1"	30,5	G 1"
	56 - 73	39	G 1 1/4"		
	82 - 100	45	G 1 1/2"	39	G 1 1/4"
	17 - 61	30,5	G 1"	30,5	G 1"
	73 - 82	39	G 1 1/4"	39	G 1 1/4"
	90 - 100	45	G 1 1/2 "	45	G 1 1/2"

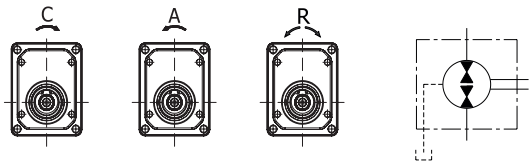


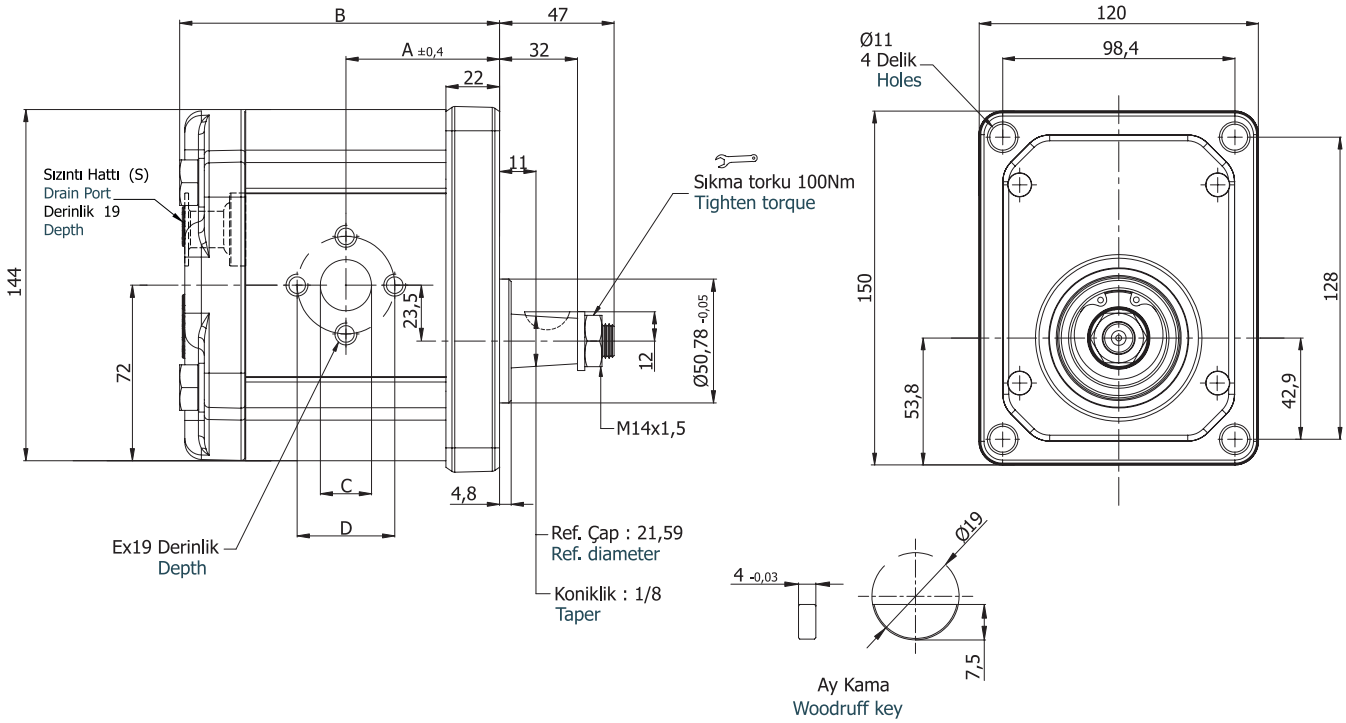
06 SAE Dikdörtgen Flanş UNC Diş / SAE Square Flange UNC Thread

Sipariş Kodu Ordering Code	İletim Hacmi Displacement cm³/dev (rev)	Emiş Tarafı Suction Side				Basınç Tarafı Pressure Side			
		C	D	E	F	c	d	e	f
	17 - 22	19	47,6	3/8-16 UNC-2B	22,2	12,5	38,1	5/16-18 UNC-2B	17,5
	27 - 34	25,4	52,4		26,2	19	52,4	3/8-16 UNC-2B	22,2
	38 - 51	30,5	58,7	7/16-14 UNC-2B	30,2	25,4	52,4		26,2
	56 - 82	39,3	69,8	1/2-13 UNC-2B	35,7	30,5	58,7	7/16-14 UNC-2B	30,2
	90 - 100	51	77,8		42,9	39,3	69,8	1/2-13 UNC-2B	35,7
	17 - 27	19	47,6	3/8-16 UNC-2B	22,2	19	47,6	3/8-16 UNC-2B	22,2
	32 - 43	25,4	52,4		26,2	25,4	52,4		26,2
	47 - 56	30,5	58,7	7/16-14 UNC-2B	30,2	30,5	58,7	7/16-14 UNC-2B	30,2
	90 - 100	39,3	69,8		35,7	39,3	69,8		35,7

A Ön Kapak
Front Cover

B Şaft Tipi
Shaft Type

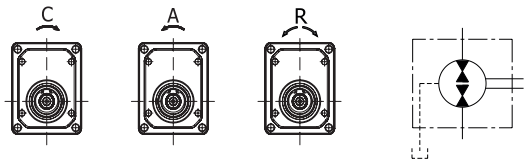


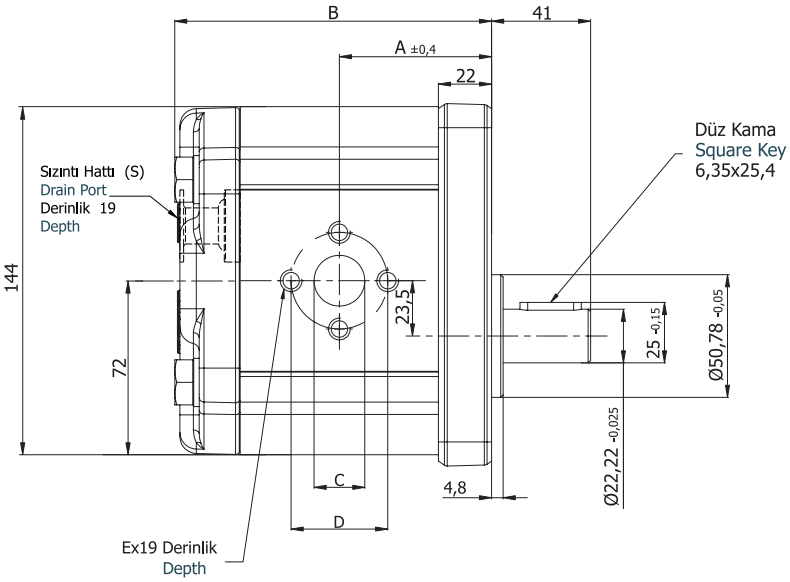


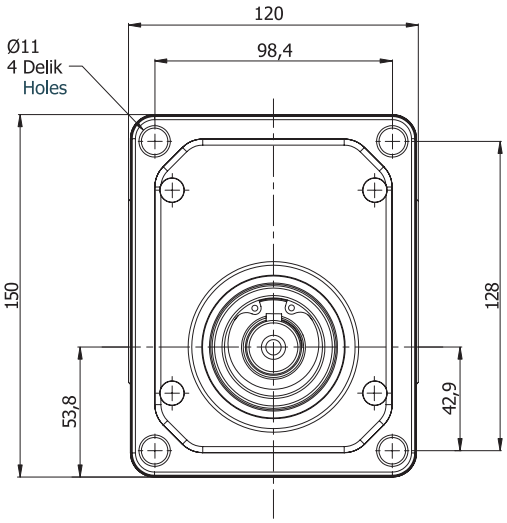
Motor Tipi Motor Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – İnlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM30.170.RAB02EGN	17,0	250	3000	59,5	124,1	20	55	M8x16	G 3/8
APM30.220.RAB02EGN	22,0			61,5	128,1				
APM30.270.RAB02EGN	27,0			63,0	131,1				
APM30.320.RAB02EGN	32,0	240		64,5	134,1				
APM30.340.RAB02EGN	34,0			65,0	135,1				
APM30.380.RAB02EGN	38,0			66,5	138,1				
APM30.430.RAB02EGN	43,0	230		68,0	141,1	27			
APM30.470.RAB02EGN	47,0		2500	69,5	144,1				
APM30.510.RAB02EGN	51,0	210		70,5	146,1				
APM30.560.RAB02EGN	56,0	200		71,5	148,1				
APM30.610.RAB02EGN	61,0	180	1750	74,0	153,1				
APM30.730.RAB02EGN	73,0	170	1500	77,0	160,1				
APM30.820.RAB02EGN	82,0	160		80,0	166,1				
APM30.900.RAB02EGN	90,0	150		83,0	172,1				
APM30.1000.RAB02EGN	100,0	140		86,0	178,1	34			

A Ön Kapak
Front Cover

H Şaft Tipi
Shaft Type



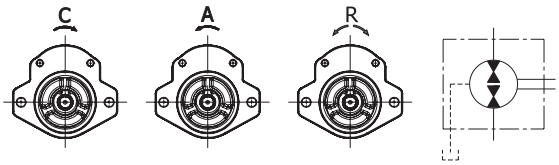


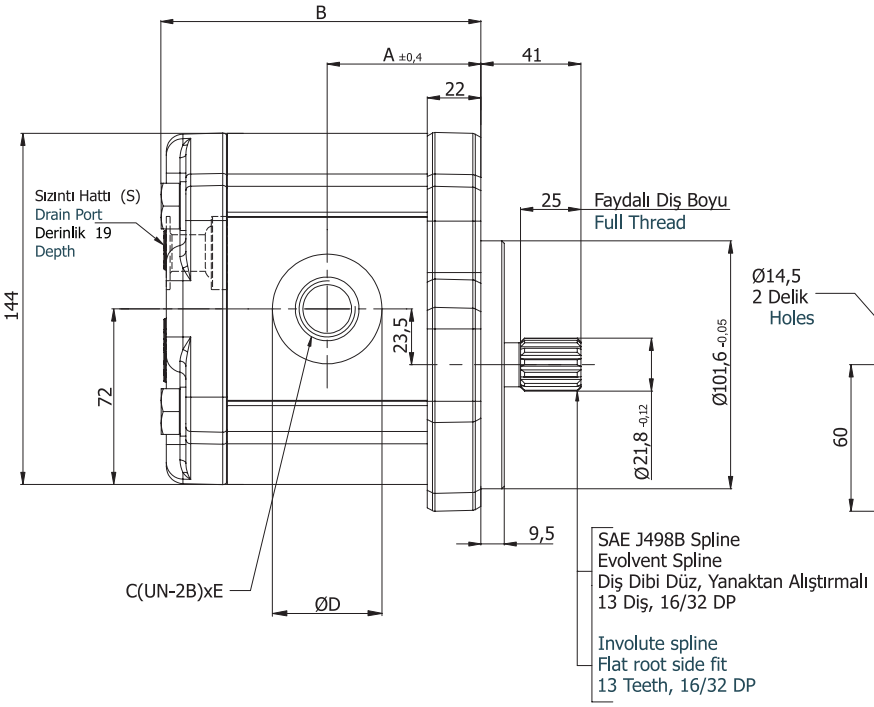


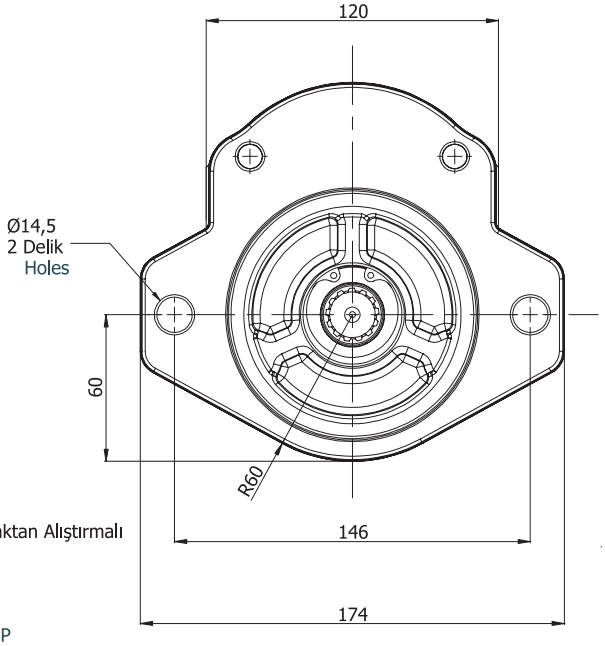
Motor Tipi Motor Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM30.170.RAH02EGN	17,0	250	3000	59,5	124,1	20	40	M8x16	G 3/8
APM30.220.RAH02EGN	22,0			61,5	128,1				
APM30.270.RAH02EGN	27,0			63,0	131,1				
APM30.320.RAH02EGN	32,0	240		64,5	134,1				
APM30.340.RAH02EGN	34,0			65,0	135,1				
APM30.380.RAH02EGN	38,0			66,5	138,1				
APM30.430.RAH02EGN	43,0	230		68,0	141,1	27	51	M8x16	
APM30.470.RAH02EGN	47,0		2500	69,5	144,1				
APM30.510.RAH02EGN	51,0	210		70,5	146,1				
APM30.560.RAH02EGN	56,0	200		71,5	148,1				
APM30.610.RAH02EGN	61,0	180	1750	74,0	153,1				
APM30.730.RAH02EGN	73,0	170	1500	77,0	160,1				
APM30.820.RAH02EGN	82,0	160		80,0	166,1				
APM30.900.RAH02EGN	90,0	150		83,0	172,1				
APM30.1000.RAH02EGN	100,0	140		86,0	178,1	33	62	M12x19	

D Ön Kapak
Front Cover

C Şaft Tipi
Shaft Type



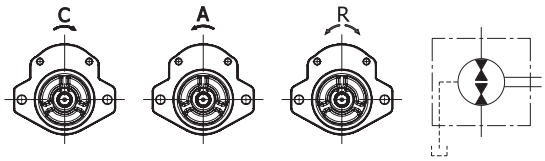


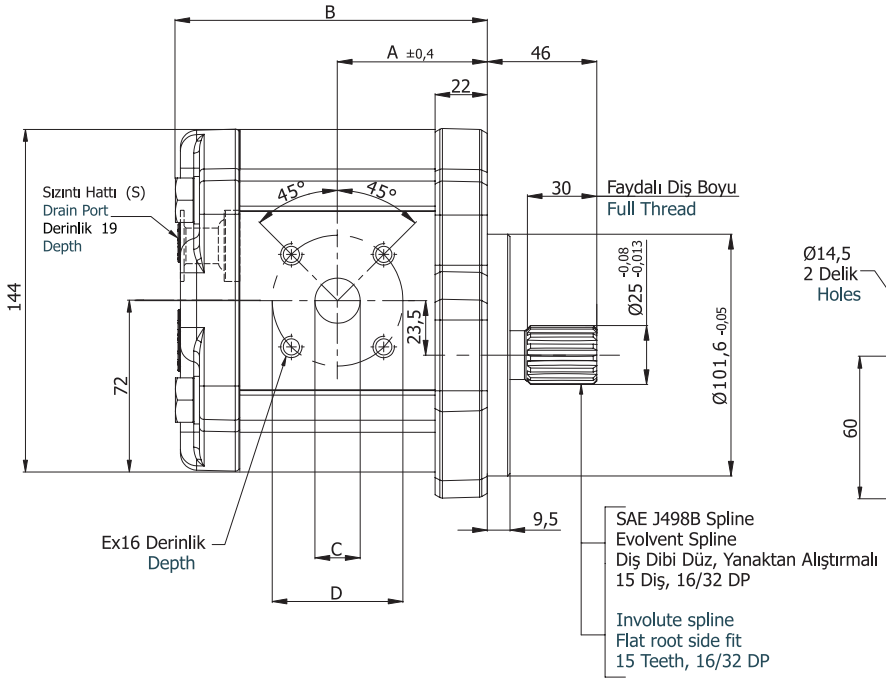


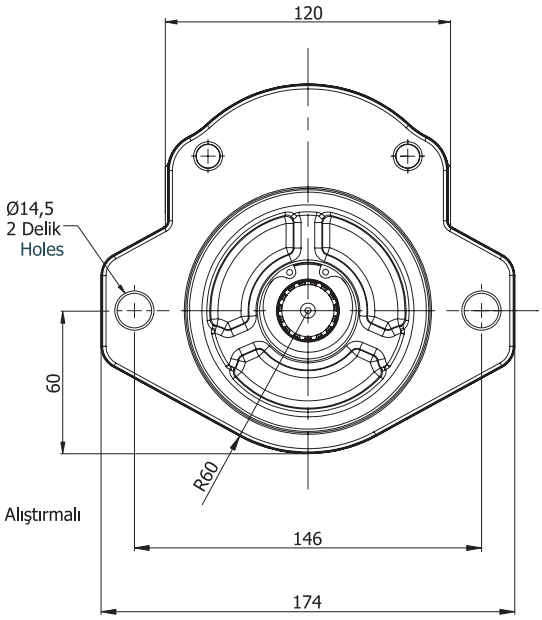
Motor Tipi Motor Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM30.170.RDC04EUN	17,0	250	3000	59,5	124,1	25	42	1 1/16"-12 UNF-2B	7/16-20 UNF
APM30.220.RDC04EUN	22,0			61,5	128,1				
APM30.270.RDC04EUN	27,0			63,0	131,1				
APM30.320.RDC04EUN	32,0	240		64,5	134,1	30,5	49	1 5/16"-12 UNF-2B	
APM30.340.RDC04EUN	34,0			65,0	135,1				
APM30.380.RDC04EUN	38,0			66,5	138,1				
APM30.430.RDC04EUN	43,0	230		68,0	141,1				
APM30.470.RDC04EUN	47,0		2500	69,5	144,1				
APM30.510.RDC04EUN	51,0	210		70,5	146,1	39	58	1 5/8"-12 UNF-2B	
APM30.560.RDC04EUN	56,0	200		71,5	148,1				
APM30.610.RDC04EUN	61,0	180	1750	74,0	153,1				
APM30.730.RDC04EUN	73,0	170	1500	77,0	160,1				
APM30.820.RDC04EUN	82,0	160		80,0	166,1				
APM30.900.RDC04EUN	90,0	150		83,0	172,1	45	65	1 7/8"-12 UNF-2B	
APM30.1000.RDC04EUN	100,0	140		86,0	178,1				

D Ön Kapak
Front Cover

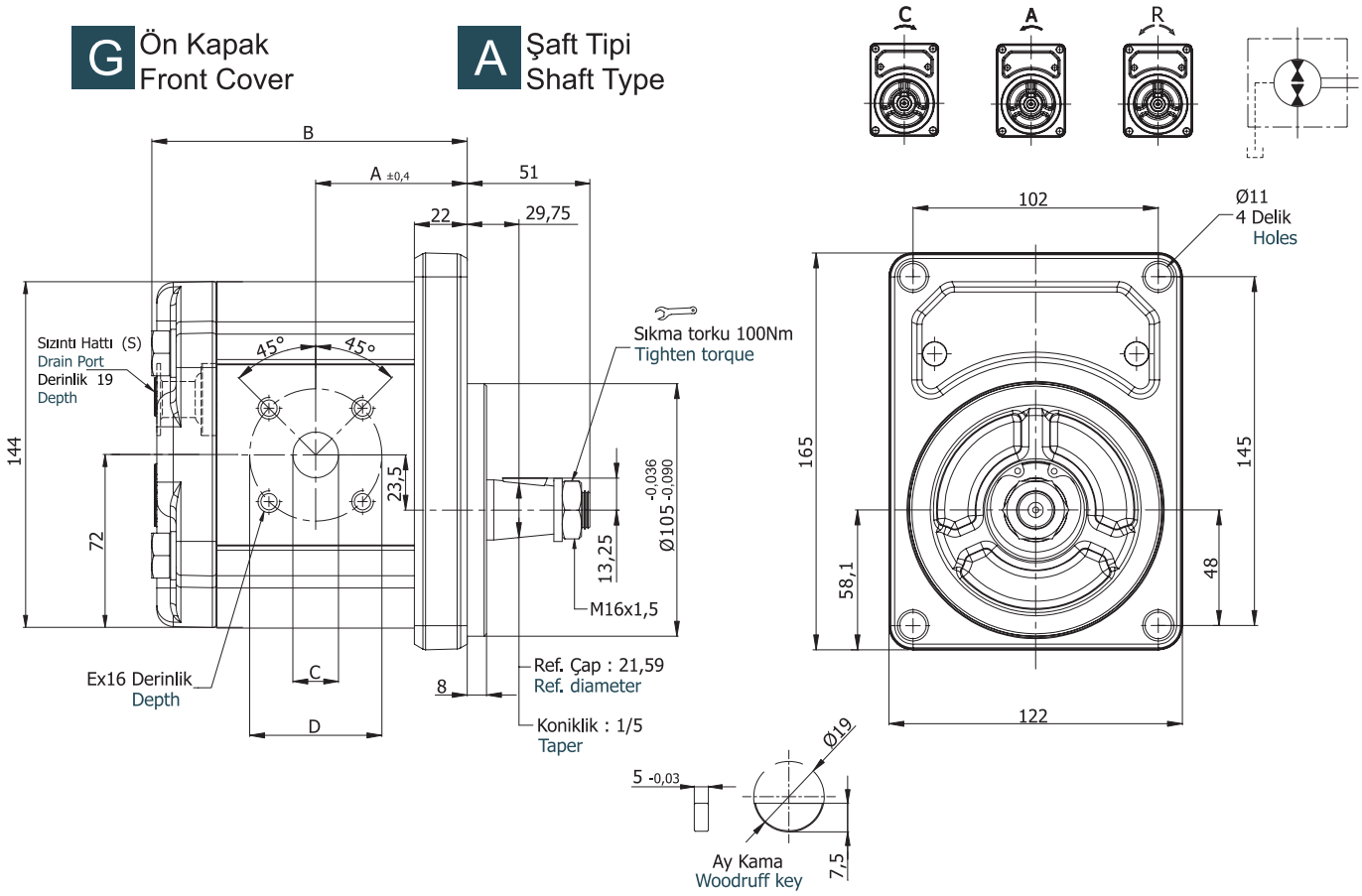
D Şaft Tipi
Shaft Type







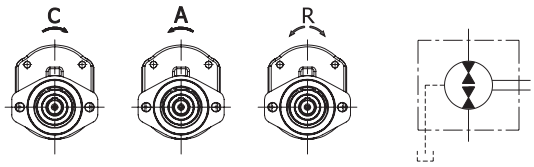
Motor Tipi Motor Type	İletim Hacmi Displacement $cm^3/dev(cm^3/rev)$	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM30.170.RDD01EGN	17,0	250	3000	59,5	124,1	19	55	M8x16	G 3/8"
APM30.220.RDD01EGN	22,0			61,5	128,1				
APM30.270.RDD01EGN	27,0			63,0	131,1				
APM30.320.RDD01EGN	32,0	240		64,5	134,1	27			
APM30.340.RDD01EGN	34,0			65,0	135,1				
APM30.380.RDD01EGN	38,0			66,5	138,1				
APM30.430.RDD01EGN	43,0	230		68,0	141,1				
APM30.470.RDD01EGN	47,0		2500	69,5	144,1				
APM30.510.RDD01EGN	51,0	210		70,5	146,1				
APM30.560.RDD01EGN	56,0	200		71,5	148,1				
APM30.610.RDD01EGN	61,0	180	1750	74,0	153,1				
APM30.730.RDD01EGN	73,0	170	1500	77,0	160,1				
APM30.820.RDD01EGN	82,0	160		80,0	166,1				
APM30.900.RDD01EGN	90,0	150		83,0	172,1				
APM30.1000.RDD01EGN	100,0	140		86,0	178,1				

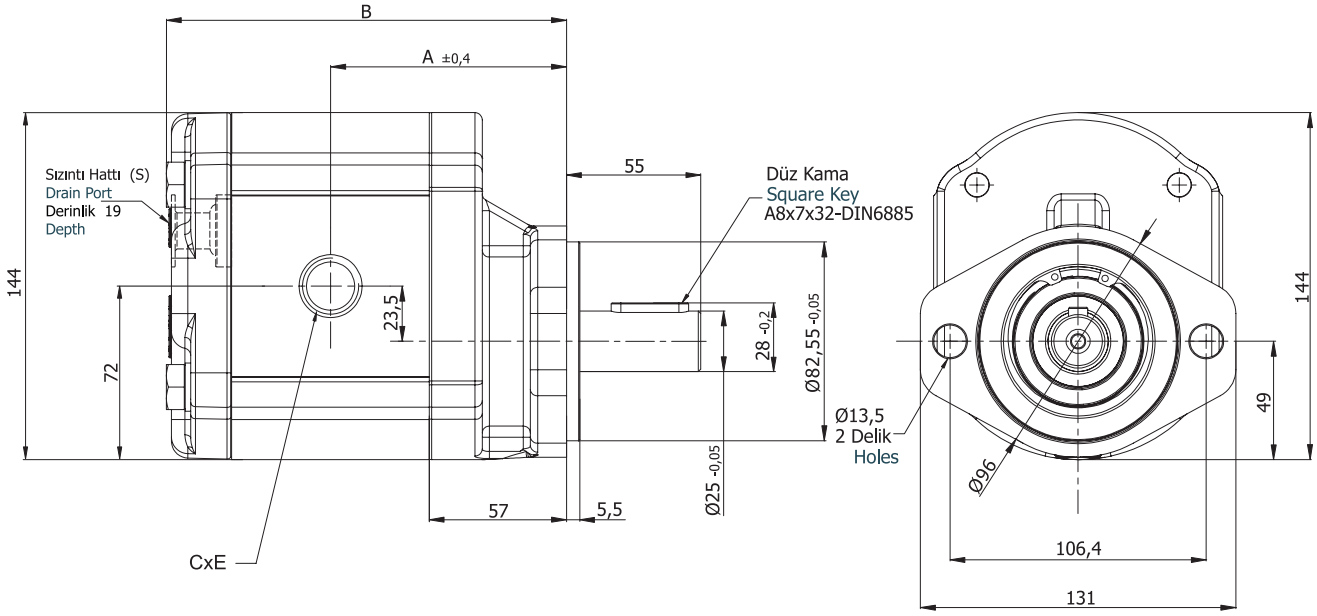


Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş/Çıkış – Inlet/Outlet			Sızıntı - Drain
						C	D	E	S
APM30.170.RGA01EGN	17,0	250	3000	59,5	124,1	19	55	M8x16	G 3/8"
APM30.220.RGA01EGN	22,0			61,5	128,1				
APM30.270.RGA01EGN	27,0			63,0	131,1				
APM30.320.RGA01EGN	32,0	240		64,5	134,1	27			
APM30.340.RGA01EGN	34,0			65,0	135,1				
APM30.380.RGA01EGN	38,0			66,5	138,1				
APM30.430.RGA01EGN	43,0	230		68,0	141,1				
APM30.470.RGA01EGN	47,0		2500	69,5	144,1				
APM30.510.RGA01EGN	51,0	210		70,5	146,1				
APM30.560.RGA01EGN	56,0	200		71,5	148,1				
APM30.610.RGA01EGN	61,0	180	1750	74,0	153,1				
APM30.730.RGA01EGN	73,0	170	1500	77,0	160,1				
APM30.820.RGA01EGN	82,0	160		80,0	166,1				
APM30.900.RGA01EGN	90,0	150		83,0	172,1				
APM30.1000.RGA01EGN	100,0	140		86,0	178,1				

H Ön Kapak
Front Cover

P Şaft Tipi
Shaft Type

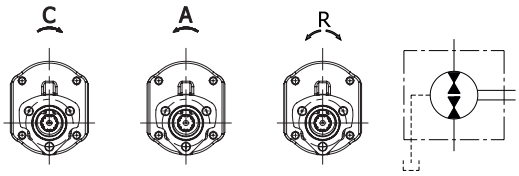


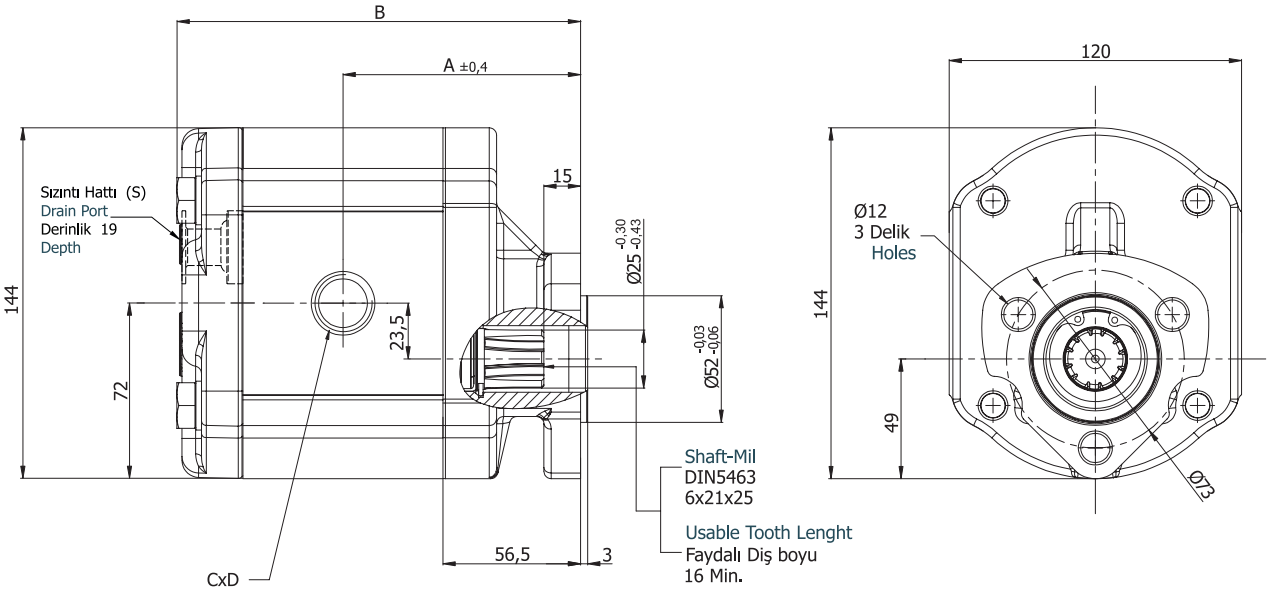


Motor Tipi Motor Type	İletim Hacmi Displacement cm^3/dev(cm^3/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet		Sızıntı - Drain
						C	E	S
APM30.170.RHP05EGN	17,0	250	3000	94,5	159,1	30,5	G1"	G 3/8"
APM30.220.RHP05EGN	22,0			96,5	163,1			
APM30.270.RHP05EGN	27,0			98,0	166,1			
APM30.320.RHP05EGN	32,0	240		99,5	169,1			
APM30.340.RHP05EGN	34,0			100,0	170,1			
APM30.380.RHP05EGN	38,0			101,5	173,1			
APM30.430.RHP05EGN	43,0	230		103,0	176,1			
APM30.470.RHP05EGN	47,0		2500	104,5	179,1			
APM30.510.RHP05EGN	51,0	210		105,5	181,1			
APM30.560.RHP05EGN	56,0	200		106,5	183,1			
APM30.610.RHP05EGN	61,0	180	1750	109,0	188,1			
APM30.730.RHP05EGN	73,0	170	1500	112,0	195,1	39	G 1 1/4"	
APM30.820.RHP05EGN	82,0	160		115,0	201,1			
APM30.900.RHP05EGN	90,0	150		118,0	207,1	45	G 1 1/2"	
APM30.1000.RHP05EGN	100,0	140		121,0	213,1			

S Ön Kapak
Front Cover

U Şaft Tipi
Shaft Type





Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet		Sızıntı - Drain
						C	E	S
APM30.170.RSU05EGN	17,0	250	3000	94,0	158,6	30,5	G1"	G 3/8"
APM30.220.RSU05EGN	22,0			96,0	162,6			
APM30.270.RSU05EGN	27,0			97,5	165,6			
APM30.320.RSU05EGN	32,0	240		99,0	168,6			
APM30.340.RSU05EGN	34,0			99,5	169,6			
APM30.380.RSU05EGN	38,0			101,0	172,6			
APM30.430.RSU05EGN	43,0	230		102,5	175,6			
APM30.470.RSU05EGN	47,0		2500	104,0	178,6			
APM30.510.RSU05EGN	51,0	210		105,0	180,6			
APM30.560.RSU05EGN	56,0	200		106,0	182,6			
APM30.610.RSU05EGN	61,0	180	1750	108,5	187,6			
APM30.730.RSU05EGN	73,0	170	1500	111,5	194,6	39	G 1 1/4"	
APM30.820.RSU05EGN	82,0	160		114,5	200,6			
APM30.900.RSU05EGN	90,0	150		117,5	206,6	45	G 1 1/2"	
APM30.1000.RSU05EGN	100,0	140		120,5	212,6			

GPM30 MOTORLARIN KODLAMA SİSTEMİ
ORDERING CODE OF GPM30 MOTORS

GPM30 . 082 . R S T1 T N

Motor Tipi
Motor Type

Keçeler / Seals	
N	NBR
V	VITON

İç sızıntı Hattı / Internal Drain Port	
T	Var / Available
	Yok / Absent

Şaft Tipi / Shaft Type	
T1	Çok Kamalı Mil Spline Shaft 6x24x25 DIN 5463
M1	Çok Kamalı Mil Spline Shaft 8x32x35 DIN 5462
S2	Çok Kamalı Mil Spline Shaft B6x30x35 DIN 9611 SAE 1 3/8"
S	Paralel Şaft Parallel Shaft A8x7x32 DIN 6885
B1	Konik - Kamalı Tapered key shaft 1:8

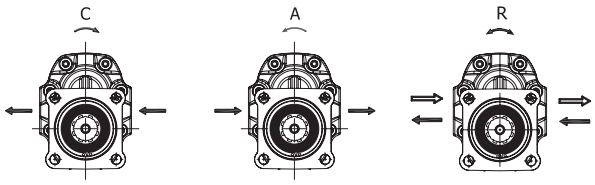
İletim Hacmi / Displacement cm³/dev(cm³/rev)
017 = 17,2 cm³/dev(rev)
027 = 27,1 cm³/dev(rev)
034 = 34,4 cm³/dev(rev)
043 = 42,9 cm³/dev(rev)
051 = 51,2 cm³/dev(rev)
061 = 60,7 cm³/dev(rev)
073 = 73,0 cm³/dev(rev)
082 = 81,4 cm³/dev(rev)
100 = 99,7 cm³/dev(rev)

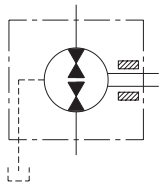
Ön Kapak / Front Cover	
S	3 Delikli Ø73 / 3 Holes Ø73
R	4 Delikli Ø80 / 4 Holes Ø80
P	6 Delikli Ø52 / 6 Holes Ø52
D	2 Delikli Ø82,5 / 2 Holes Ø82,5
A	Dikdörtgen Kapak Square Flange Ø50,78

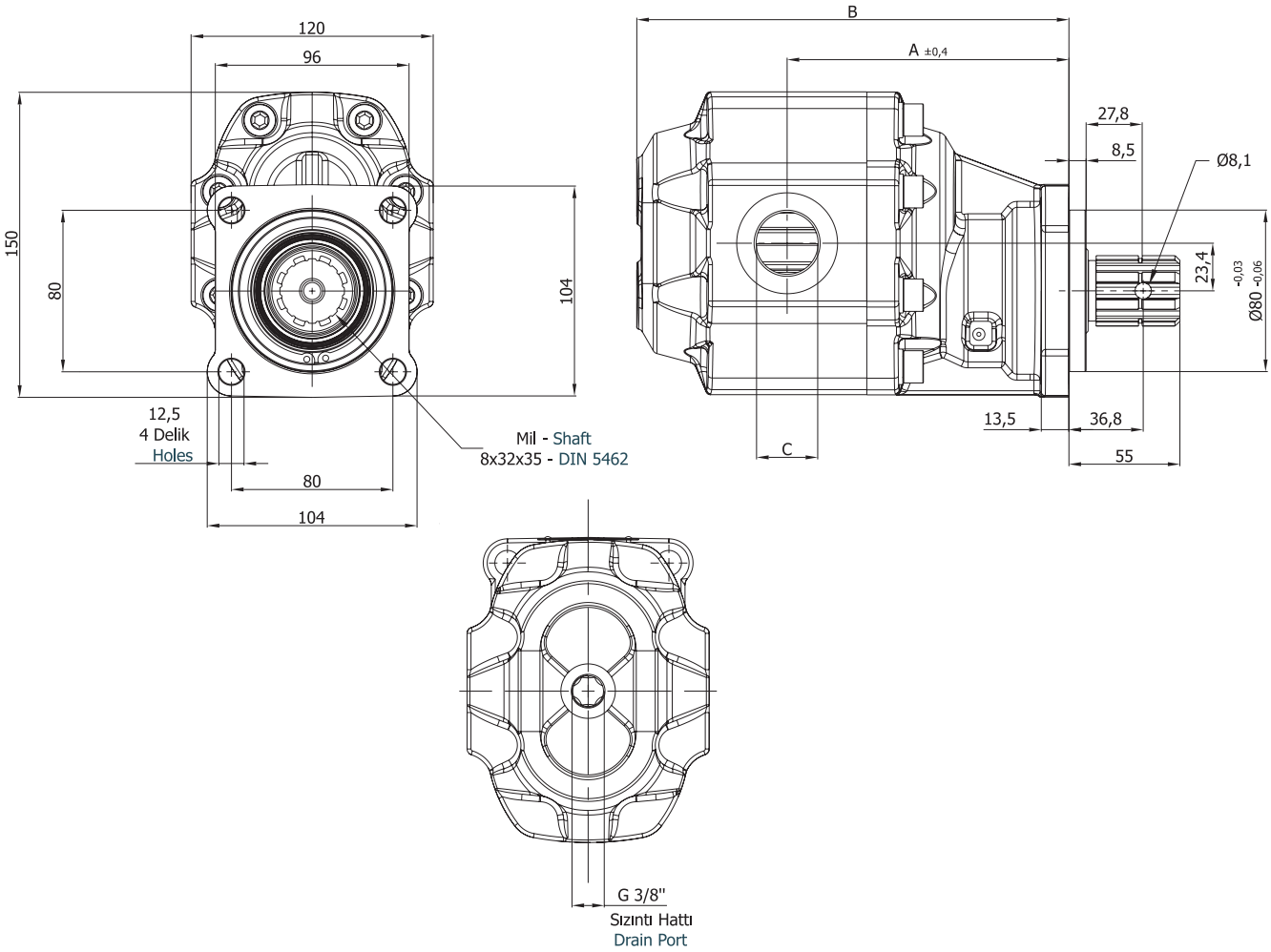
Dönüş Yönü / Rotation	
A	Sol Dönüş / Counter-clockwise
C	Sağ Dönüş / Clockwise
R	Çift Dönüş / Reversible

- Kodlama Örneği ; GPM30.082.RST1N
  Code Example

ISO TİPİ TYPE

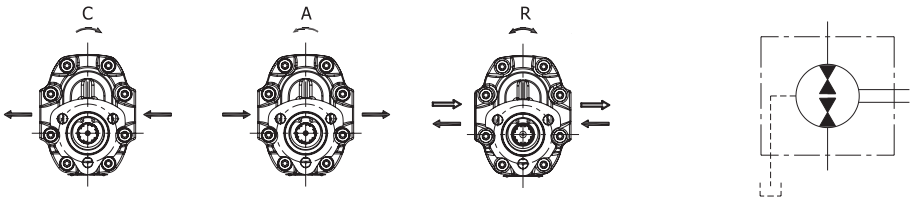


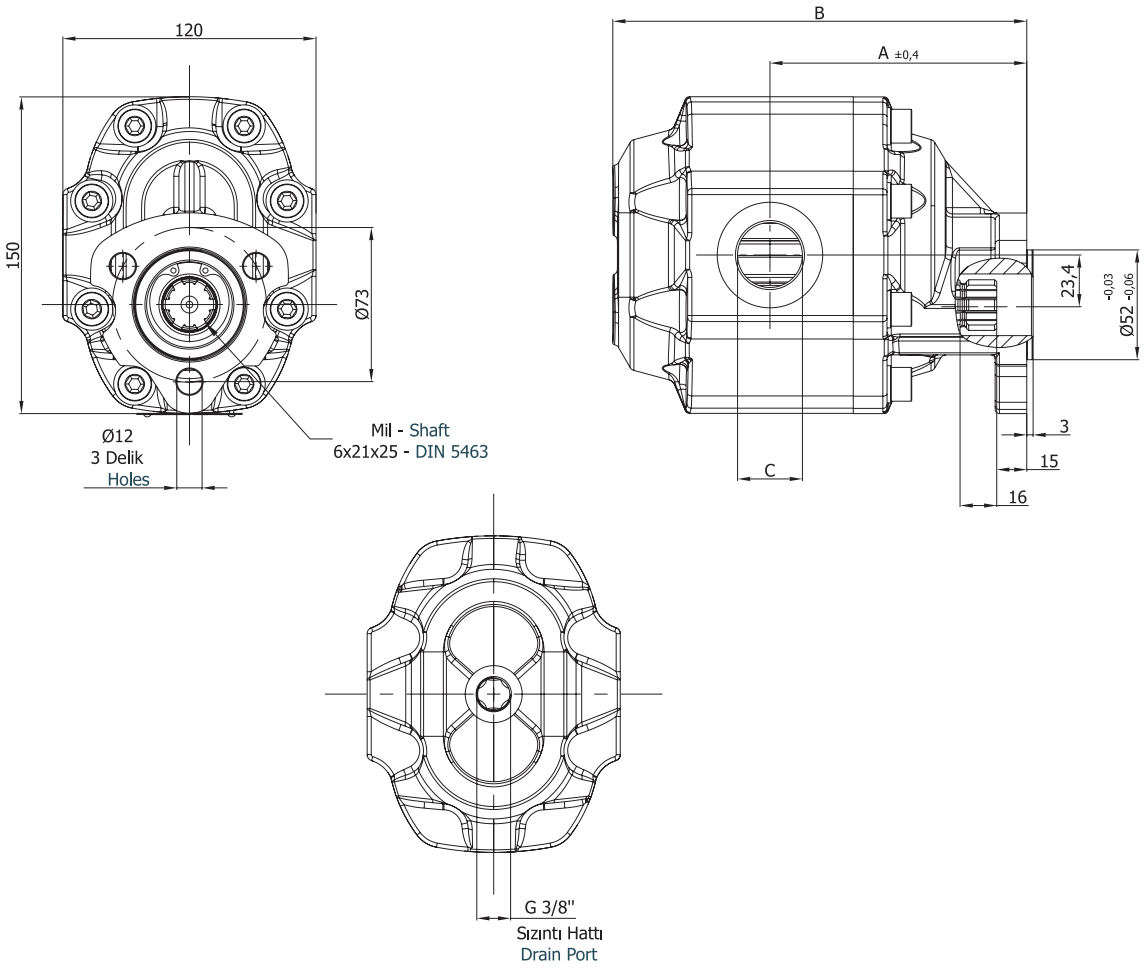




Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev (cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A	B	Giriş – Inlet C	Çıkış - Outlet c
GPM30.017.RRM1N	17,2	300	3000	119,0	172,6	G 1/2"	G 1/2"
GPM30.027.RRM1N	27,1	290		122,2	179,0	G 3/4"	G 3/4"
GPM30.034.RRM1N	34,4	280	2750	124,5	183,6		
GPM30.043.RRM1N	42,9	270	2500	127,4	189,4		
GPM30.051.RRM1N	51,2	240		129,5	193,5	G 1"	G 1"
GPM30.061.RRM1N	60,7	220	2000	133,2	201,0		
GPM30.073.RRM1N	73,0	200	1750	137,1	208,7		
GPM30.082.RRM1N	81,4	190		140,0	214,5	G 1-1/4"	G 1-1/4"
GPM30.100.RRM1N	99,7	180		145,8	226,1		

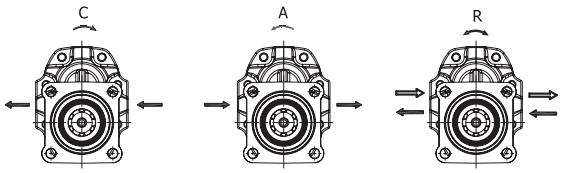
UNI TİPİ TYPE

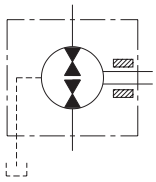


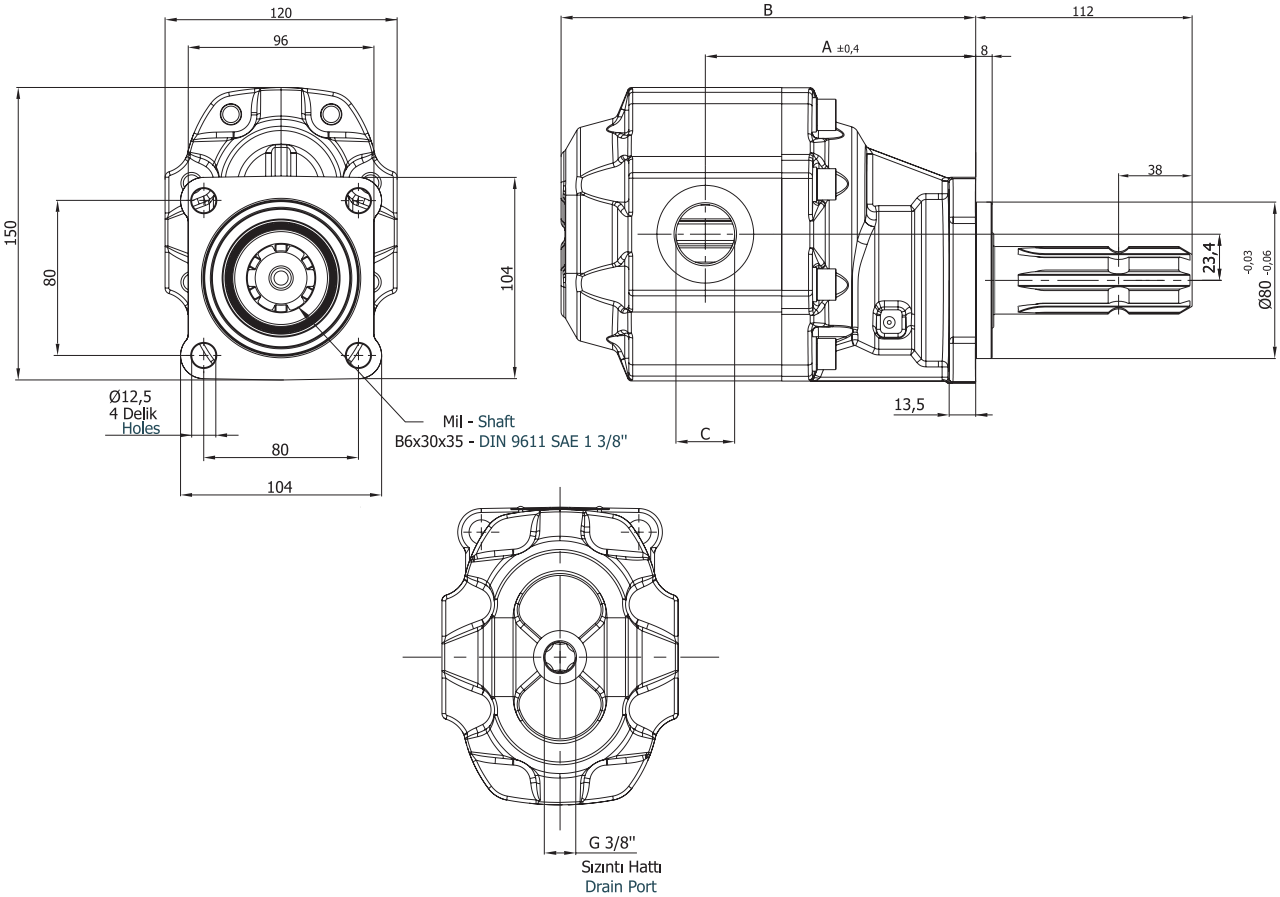


Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet C	Çıkış - Outlet c
GPM30.017.RST1N	17,2	300	3000	100,8	154,4	G 1/2"	G 1/2"
GPM30.027.RST1N	27,1	290		104,0	160,8	G 3/4"	G 3/4"
GPM30.034.RST1N	34,4	280	2750	106,3	165,4		
GPM30.043.RST1N	42,9	270	2500	109,2	171,2		
GPM30.051.RST1N	51,2	240		111,3	175,3	G 1"	G 1"
GPM30.061.RST1N	60,7	220	2000	115,0	182,8		
GPM30.073.RST1N	73,0	200	1750	118,9	190,5		
GPM30.082.RST1N	81,4	190		121,8	196,3	G 1-1/4"	G 1-1/4"
GPM30.100.RST1N	99,7	180		127,6	207,9		

SAE TİPİ TYPE

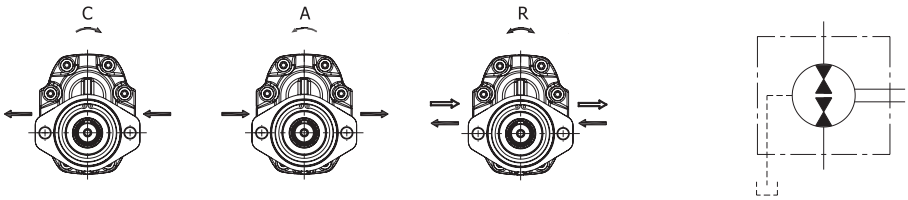


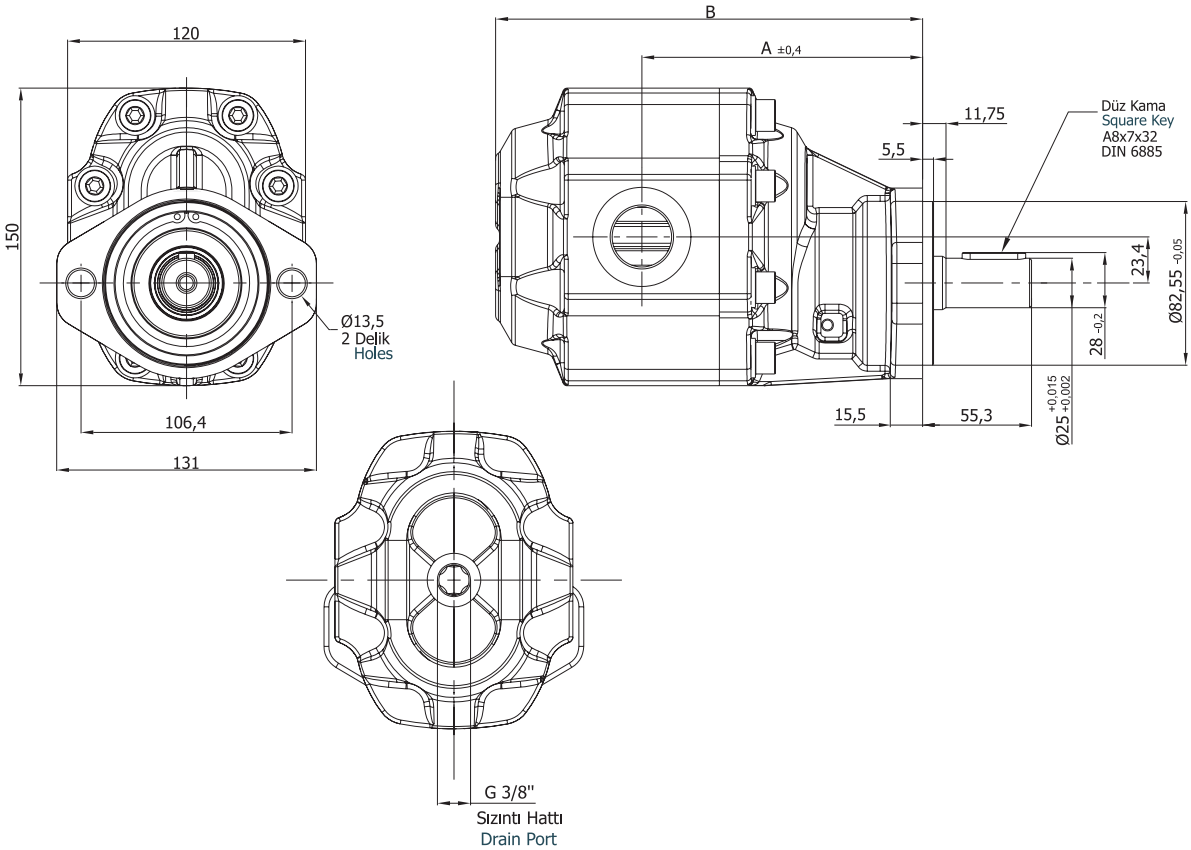




Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev (cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A ±0,4	B	Giriş – Inlet	Çıkış - Outlet
						C	c
GPM30.017.RRS2N	17,2	300	3000	119,0	172,6	G 1/2"	G 1/2"
GPM30.027.RRS2N	27,1	290		122,2	179,0	G 3/4"	G 3/4"
GPM30.034.RRS2N	34,4	280	2750	124,5	183,6		
GPM30.043.RRS2N	42,9	270	2500	127,4	189,4		
GPM30.051.RRS2N	51,2	240		129,5	193,5	G 1"	G 1"
GPM30.061.RRS2N	60,7	220	2000	133,2	201,0		
GPM30.073.RRS2N	73,0	200	1750	137,1	208,7		
GPM30.082.RRS2N	81,4	190		140,0	214,5	G 1-1/4"	G 1-1/4"
GPM30.100.RRS2N	99,7	180		145,8	226,1		

S TİPİ TYPE





Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev (cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A	B	Giriş – Inlet C	Çıkış - Outlet c
GPM30.017.RDSN	17,2	300	3000	121,0	174,6	G 1/2"	G 1/2"
GPM30.027.RDSN	27,1	290		104,0	181,0	G 3/4"	G 3/4"
GPM30.034.RDSN	34,4	280	2750	106,3	185,6		
GPM30.043.RDSN	42,9	270	2500	109,2	191,4		
GPM30.051.RDSN	51,2	240		111,3	195,5	G 1"	G 1"
GPM30.061.RDSN	60,7	220	2000	115,0	203,0		
GPM30.073.RDSN	73,0	200	1750	118,9	210,7		
GPM30.082.RDSN	81,4	190		121,8	216,5	G 1-1/4"	G 1-1/4"
GPM30.100.RDSN	99,7	180		127,6	228,1		

GPM40 MOTORLARIN KODLAMA SİSTEMİ
ORDERING CODE OF GPM40 MOTORS

GPM40 . 087 . R S T1 T N

Motor Tipi / Motor Type

Keçeler / Seals	
N	NBR
V	VITON

İç sızıntı Hattı / Internal Drain Port	
T	Var / Available
	Yok / Absent

Şaft Tipi / Shaft Type	
T1	Çok Kamalı Mil Spline Shaft 6x21x25 DIN 5463
M1	Çok Kamalı Mil Spline Shaft 8x32x35 DIN 5462
S2	Çok Kamalı Mil Spline Shaft B6x30x35 DIN 9611 SAE 1 3/8"

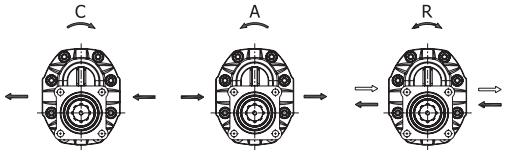
İletim Hacmi / Displacement cm^3/dev(cm^3/rev)
063 = 63,8 cm^3/dev(rev)
073 = 72,2 cm^3/dev(rev)
087 = 86,1 cm^3/dev(rev)
109 = 107,3 cm^3/dev(rev)
133 = 131,6 cm^3/dev(rev)
151 = 148,3 cm^3/dev(rev)

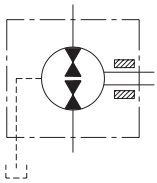
Ön Kapak / Front Cover	
S	3 Delikli Ø73 / 3 Holes Ø73
R	4 Delikli Ø80 / 4 Holes Ø80

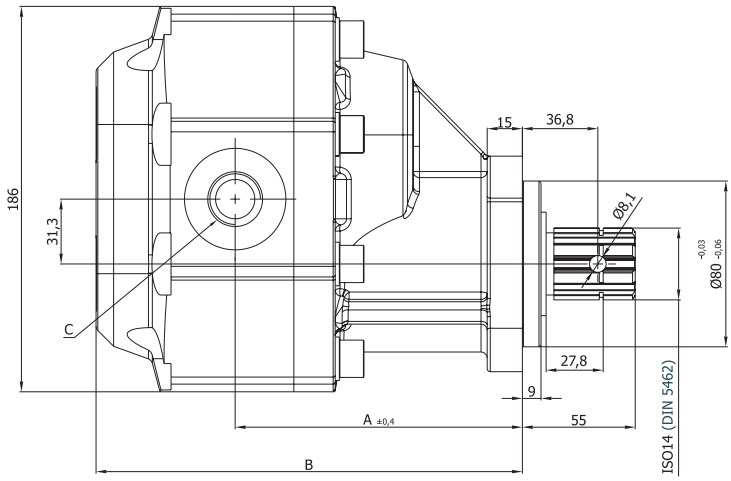
Dönüş Yönü / Rotation	
A	Sol Dönüş / Counter-clockwise
C	Sağ Dönüş / Clockwise
R	Çift Dönüş / Reversible

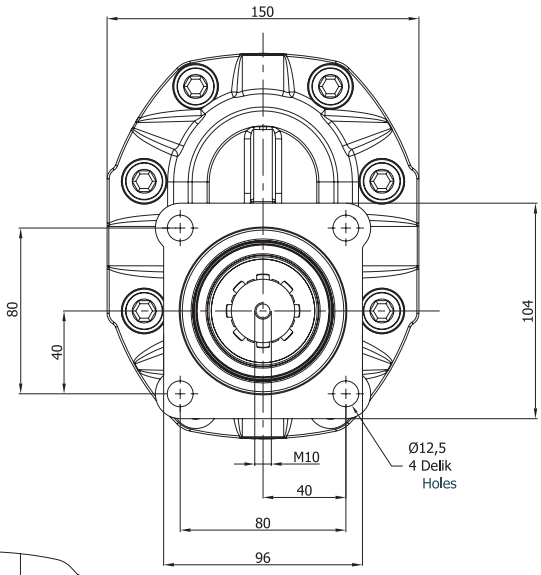
- Kodlama Örneği ; GPM40.087.RST1N
  Code Example

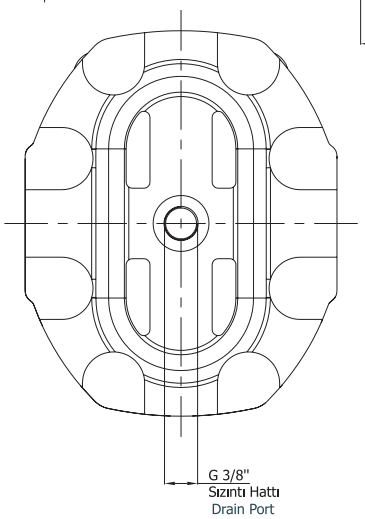
ISO TİPİ TYPE





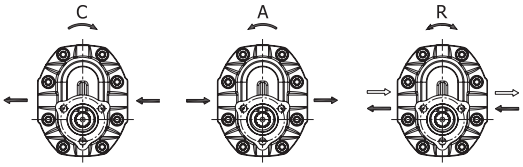


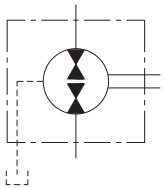


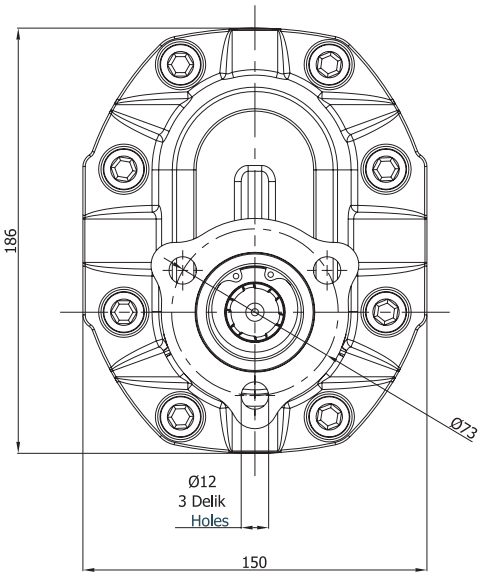


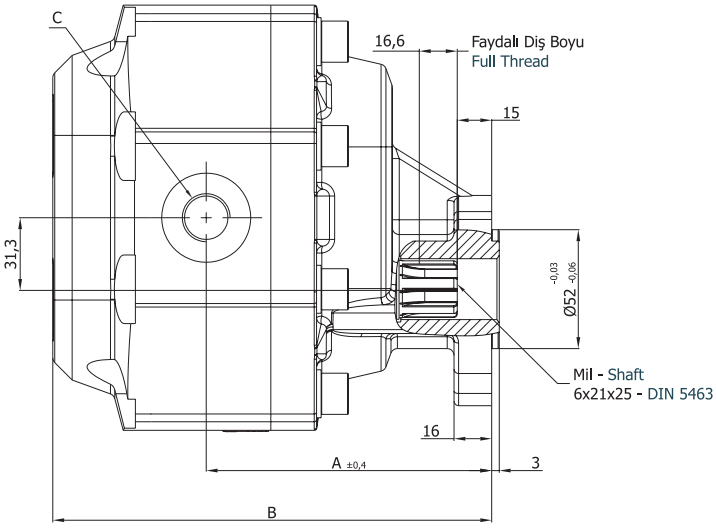
Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A	B	Giriş – Inlet	Çıkış - Outlet
						C	c
GPM40.063.RRM1N	63,8	280	2750	136,3	203,0	G 1"	G 1"
GPM40.073.RRM1N	72,2			137,3	204,6		
GPM40.087.RRM1N	86,1	260		141,0	209,6	G 1-1/4"	G 1-1/4"
GPM40.109.RRM1N	107,3	240		145,0	217,3		
GPM40.133.RRM1N	131,6	220	2500	148,0	225,9		
GPM40.151.RRM1N	148,3	180		153,3	232,3		

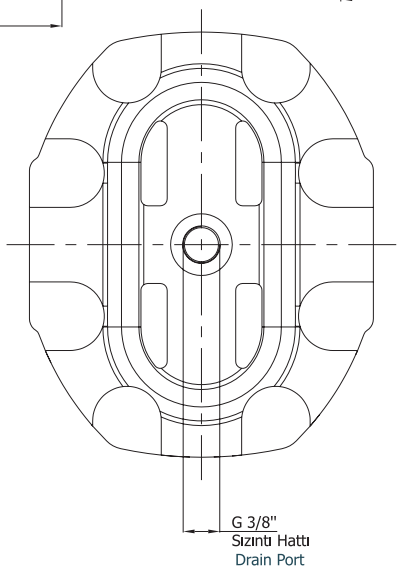
UNI TİPİ TYPE





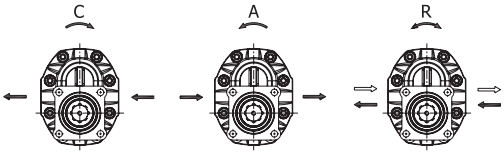


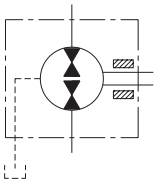


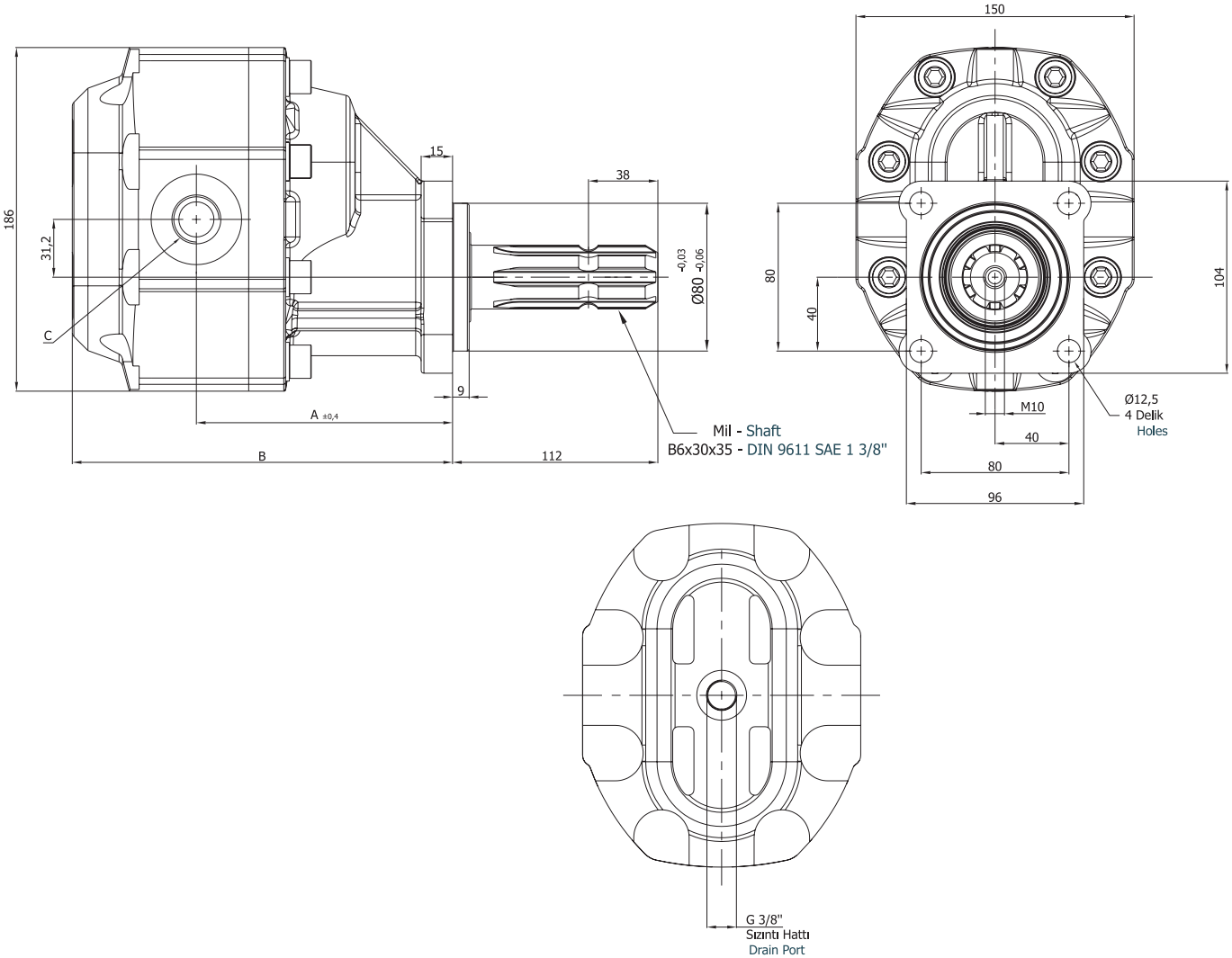


Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A	B	Giriş – Inlet	Çıkış - Outlet
						C	c
GPM40.063.RST1N	63,8	280	2750	124,0	190,7	G 1”	G 1”
GPM40.073.RST1N	72,2			125,0	192,3		
GPM40.087.RST1N	86,1	260		128,7	197,3	G 1-1/4”	G 1-1/4”
GPM40.109.RST1N	107,3	240		132,7	205,0		
GPM40.133.RST1N	131,6	220	2500	135,7	213,6		
GPM40.151.RST1N	148,3	180		141,0	220,0		

SAE TİPİ TYPE

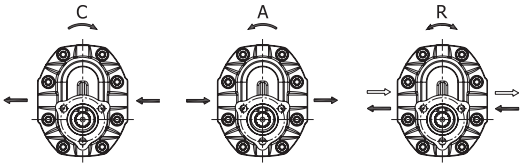


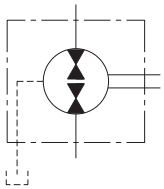


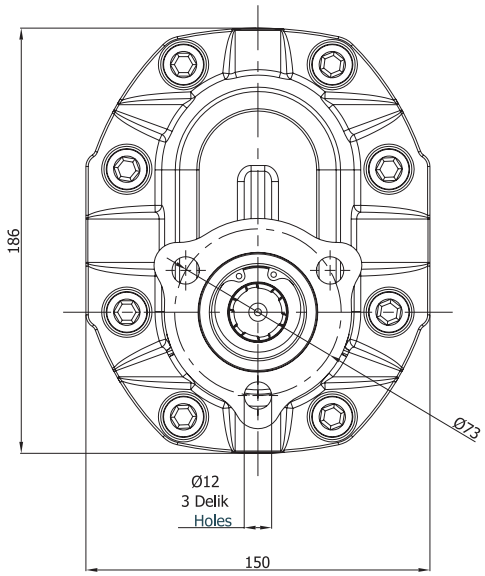


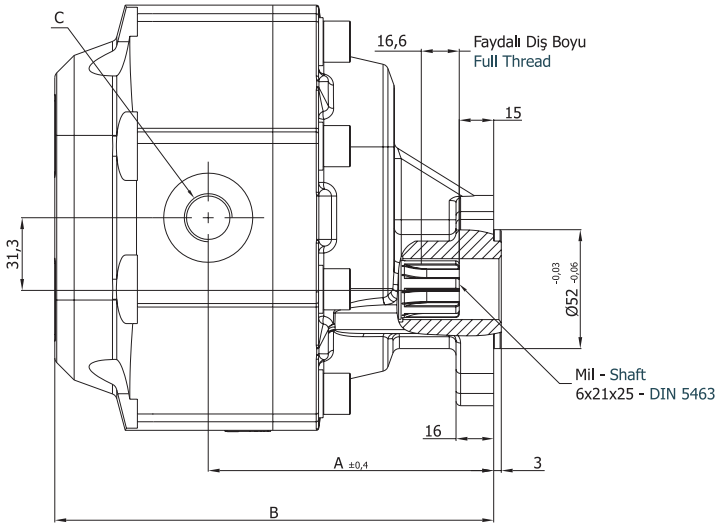
Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A	B	Giriş – Inlet C	Çıkış - Outlet c
GPM40.063.RRS2N	63,8	280	2750	136,3	203,0	G 1"	G 1"
GPM40.073.RRS2N	72,2			137,3	204,6		
GPM40.087.RRS2N	86,1	260		141,0	209,6	G 1-1/4"	G 1-1/4"
GPM40.109.RRS2N	107,3	240		145,0	217,3		
GPM40.133.RRS2N	131,6	220	2500	148,0	225,9		
GPM40.151.RRS2N	148,3	180		153,3	232,3		

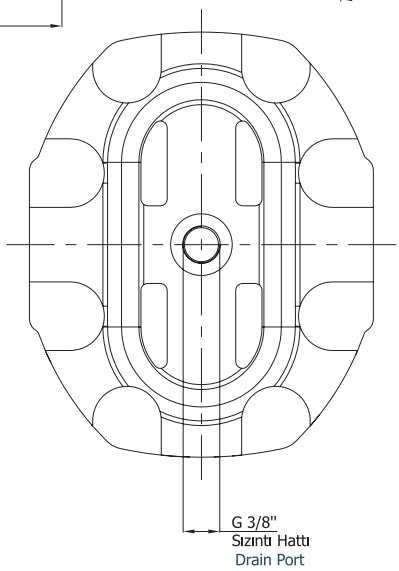
UNI TİPİ TYPE



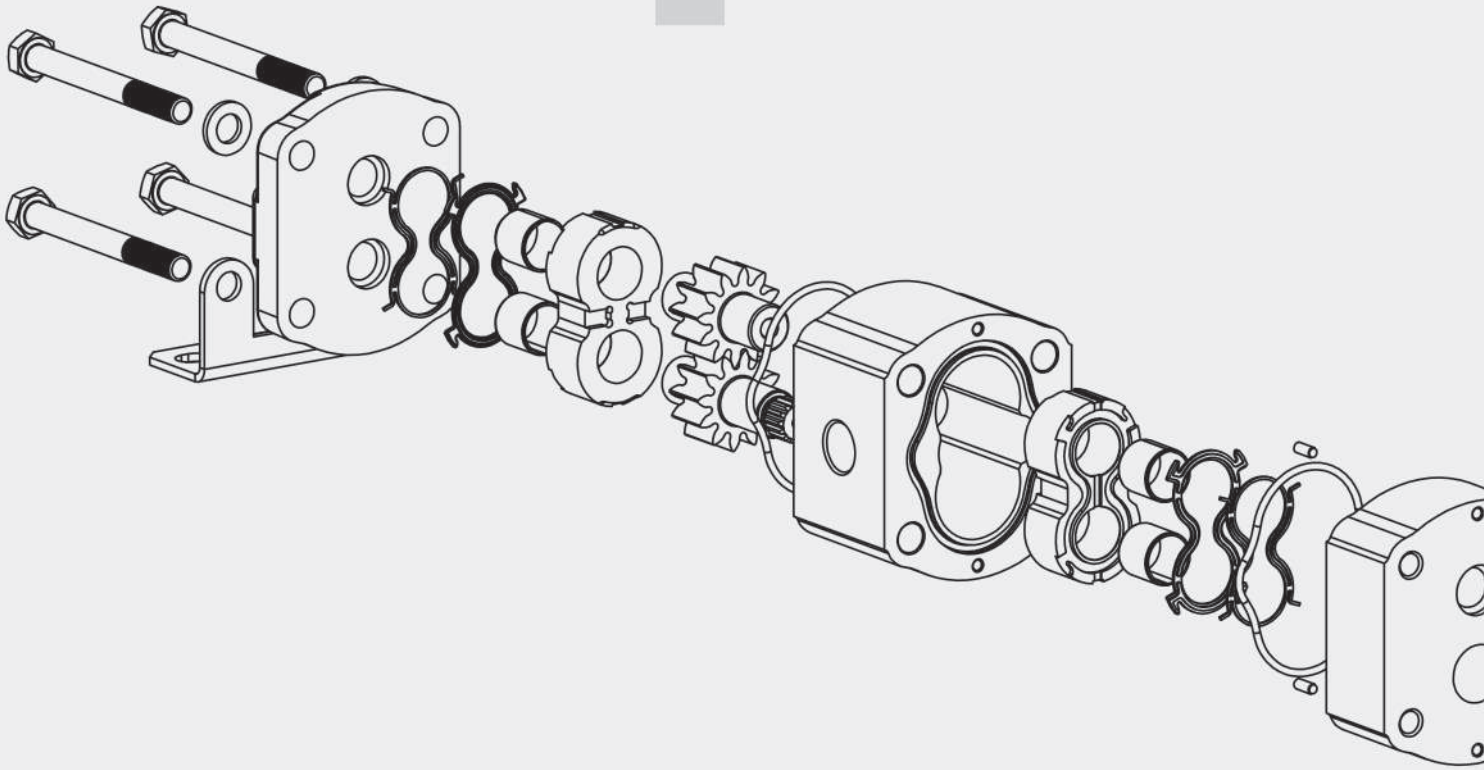








Motor Tipi Motor Type	İletim Hacmi Displacement cm³/dev(cm³/rev)	Maks. Basınç Max. Pressure (bar)	Maks. Hız Max. Speed d/d (rpm)	A	B	Giriş – Inlet C	Çıkış - Outlet c
GPM40.063.RST1N	63,8	280	2750	124,0	190,7	G 1”	G 1”
GPM40.073.RST1N	72,2			125,0	192,3		
GPM40.087.RST1N	86,1	260		128,7	197,3	G 1-1/4”	G 1-1/4”
GPM40.109.RST1N	107,3	240		132,7	205,0		
GPM40.133.RST1N	131,6	220	2500	135,7	213,6		
GPM40.151.RST1N	148,3	180		141,0	220,0		

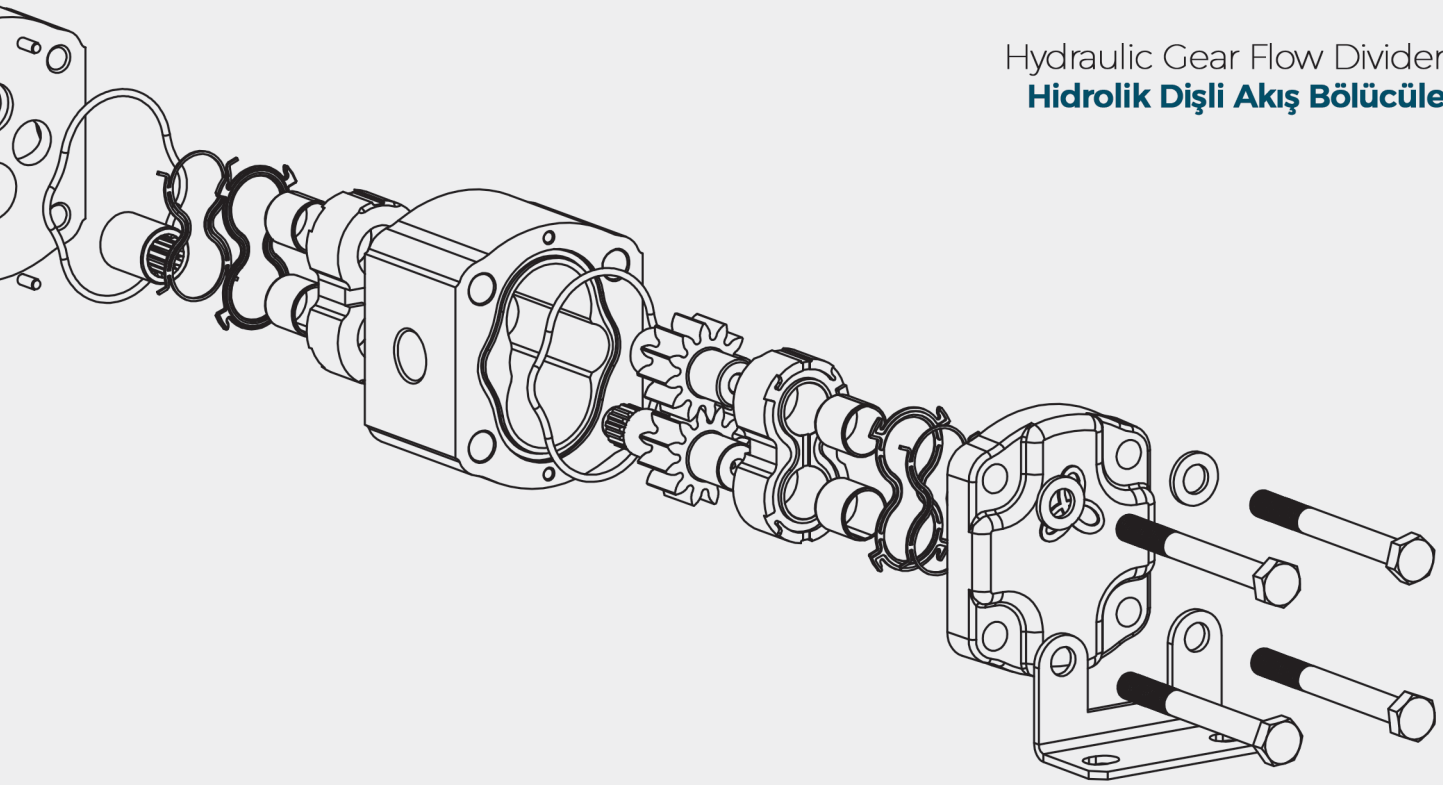


Hydraulic Gear Flow Dividers

blue ascend hydraulics

Hydraulic Gear Flow Dividers

Hidrolik Dişli Akış Bölücüler



1. GENEL BİLGİLER

Akış bölücü bir ya da daha fazla dişli gövdenin bir araya gelmesinden oluşur. Farklı gövdeler içindeki dişliler aynı hızda dönmelerini sağlayan bir kaplin ile birbirlerine bağlıdır.
Tandem pompaların aksine, akış bölücüler gücünü doğrudan bir elektrik motorundan ya da bir şafttan almazlar. Akış bölücülerin çalışmasını sağlayan güç, bir pompadan gelen basınçlı hidrolik yağın eşit bir biçimde akış bölücünün bölümlerini beslemesi ile elde edilir. Böylece akış bölücüler bir hidrolik devrede ki görevlerini yerine getirebilirler.
Her bir akış bölücü bölmesinden çıkacak olan yağ, sadece her bölmenin nominal değeriyle belirlenir. Dişli akış bölücüler çok daha fazla debi hassasiyetine sahiptir ve güç kaybına sebep olmazlar.
Akış bölücüler bir hidrolik devrede kullanılan pompa sayısını düşürürler. Bunun yanı sıra sistem de kullanılan elektrik/mekanik motorların, güç aktarma elemanlarının ve bağlantı elemanlarının sayılarını da düşürür.
Küçük kayıplar göz ardı edildiğinde, herhangi bir anda, akış bölücünün tüm bölmelerinden sağlanan toplam çıkış gücü, toplam giriş gücüne eşittir.
Eğer bir süreliğe bir bölmenin beslediği (aktif olmayan ve sızıntı hattı olan) hidrolik devrede ihtiyaç duyulan güç sıfırsa o bölme farklı bir devrede, emiş basıncından daha yüksek basınçlarda çalışan devreleri beslemek için kullanılabilir.

2. KULLANIM ALANLARI

* Lift platformları ve köprüler
* Hidrolik bükme presleri ve kesme makineleri (testereler)
* Yük konteynırlarının kaldırıcılarında
* Makine Yağlama sistemlerinde
* Hidrolik açılıp/ kapanan kapılarda
* Otomatik hidrolik sürücülü makinelerde
* Yapı malzemesi şekillendirme işlerinde
* Ağaç işleme makinelerinde
* Gıda endüstrisi cihazlarında
* Askeri uygulamalarda
* Hidrolik silindir veya motorlarla hareket eden taşıma arabalarında

Basınç yükseltici olarak :
Bir hidrolik sistemde bir bölüm diğer bölümlerden daha fazla basınca veya pik basınca ihtiyaç duyduğunda, bütün sistemde köklü değişikliğe gitmek yerine, bunu akış bölücü ile çözmek daha güvenilirdir. İki bölmeli bir akış bölücüde, bölmelerden birinin beslediği kısımda basınç ihtiyacı sıfır olursa, akış bölücünün diğer bölmesinin basıncı ani olarak yükselebilir ve istenilen kullanıma cevap verir.
Örneğin ; Ani hızlanan presler ve makine takımlarında.

1. GENERAL INFORMATION

A flow divider is made up of two or more modular elements (sections) with gears mechanically linked by an internal shaft that causes them to turn at the same speed.
Unlike multiple pumps, in which the input power is mechanical (shaft connected to a motor), in a flow divider the input power is of a fluid-mechanical nature, i.e. a flow of oil under pressure parallelly supplies the modular elements, which are in turn connected to the hydraulic circuits serving the users.
The portion of flow utilized by each element is solely determined by its nominal flow rate. Therefore, unlike standard static DIVIDERS with variable ports, the flow DIVIDERS do not cause dissipation and are also much more precise.
The use of flow DIVIDERS in a system reduces the number of pumps necessary as well as the associated individual mechanical power takeoffs and complex mechanical couplers (with greater losses).
Leaving aside small losses for the time being, at any given moment the total input power is equal to the sum of the powers supplied by all elements making up the flow divider.
Therefore, if in an interval of time the power required by a hydraulic circuit is equal to zero (inactive drained circuit), the power supplied by the element feeding that circuit becomes available for the other elements, which may use it in their own circuits, also operating at higher pressures than the intake pressure.

2. APPLICATION AREA

* Lifting platforms and bridges
* Hydraulic bending presses and shearing machines
* Hoisting of freight containers
* Lubrication systems
* Hydraulic opening / closing of gates
* Automatic hydraulically-driven machines
* Actuation of formwork for construction
* Wood processing machinery
* Equipment for the food industry
* Military installations
* Conveyance of trolleys driven by hydraulic cylinders or motors

Pressure amplifiers :
When in a hydraulic system one user requires a much higher operating or peak pressure than all the others, it is more convenient to supply it by means of a flow divider than to upgrade the whole system to work with higherpressure. With a two-element flow divider flow may be discharged from the outlet of one element so that the pressure in the other will become much higher than that of the pump supplying the system.
Examples ; presses with rapid approach and machine tools.

3. TAVSİYE EDİLEN YAĞ

Mineral esaslı anti aşınma tip HLP(DIN 51524), HM(ISO 6743/4) veya ISO VG32, ISO VG46 ve ISO VG68 hidrolik yağların kullanılması tavsiye edilir.
Tavsiye edilen viskozite aralığı : 20 - 120 (cSt)

3. RECOMMENDED FLUIDS

We recommend using only mineral based hydraulic oils with viscosity range of anti-wear type mineral based hydraulic oil HLP(DIN 51524), HM(ISO 6743/4) or ISO VG32, ISO VG46 and ISO VG68.
Recommended viscosity range: 20-120(cSt)

Çalışma basıncı Operating pressure	> 200 bar	< 200 bar
Kirlilik sınıfı Contamination class NAS 1638	8	10
Kirlilik sınıfı Contamination class ISO 4406	17/14	19/16
Filtre Obtain with filter→ (Bx=75)	10 µm	25 µm

4. ÇALIŞMA SICAKLIĞI

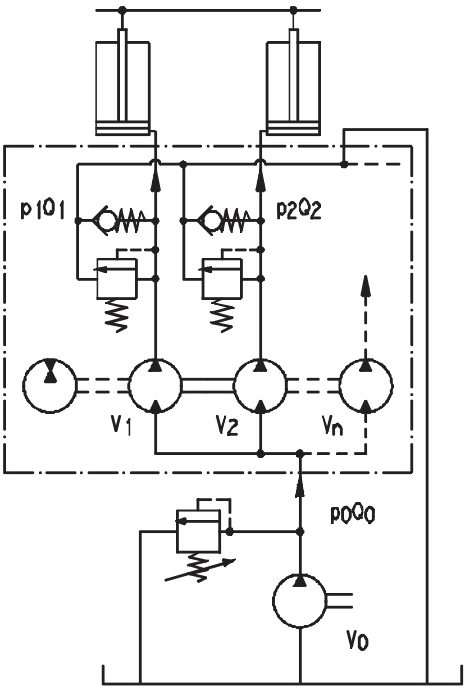
* NBR keçeler için 0oC ile +80oC arasında devamlı ve -20oC ile +100oC aralıklı,
* Viton keçeler için 0oC ile +100oC arasında devamlı ve -20oC ile +120oC arasında aralıklı olarak çalışırlar.

4. OPERATION TEMPERATURE

* Operation for NBR seals between 0oC and +80oC continuously and between -20oC and +100oC intermittent,
* For viton seals between 0oC and +100oC continuously and between -20oC and +120 oC intermittent.

İLETİM HACMİ SEÇİMİ

DISPLACEMENT SELECTION



V(cm³/ dev) : İletim Hacmi
V(cm³/ rev) : Displacement

Q(lt/dak) : Debi
Q(l/min) : Flow Range

p(bar) : Basınç
p(bar) : Pressure

n(d/d) : Hız
n(rpm) : Speed

$$Q_0 = Q_1 + Q_2 \ldots + Q_n$$

$$p_0Q_0 = p_1Q_1 + p_2Q_2 \ldots + p_nQ_n$$

$$V_{(..)} = \frac{1000\, Q_{(..)}}{n}$$

GRUP 10 AKIŞ BÖLÜCÜLERİN KODLAMA SİSTEMİ
ORDERING CODE OF GROUP 10 FLOW DIVIDERS

AFD10 . 4 - 3,2 / 3,2 / 3,2 / 3,2 R1 N

Akış Bölücü Tipi / Flow Divider Type: AFD10

Eleman Sayısı / Number of Elements: 2-3-4-5-6-7-8

İletim Hacmi / Displacement cm³/dev (cm³/rev)

1,2 = 1,2 cm³/dev (cm³ /rev)
1,7 = 1,7 cm³/dev (cm³ /rev)
2,3 = 2,3 cm³/dev (cm³ /rev)
2,7 = 2,7 cm³/dev (cm³ /rev)
3,2 = 3,2 cm³/dev (cm³ /rev)
3,8 = 3,8 cm³/dev (cm³ /rev)
4,3 = 4,3 cm³/dev (cm³ /rev)
5,0 = 5,0 cm³/dev (cm³ /rev)
6,3 = 6,3 cm³/dev (cm³ /rev)
7,8 = 7,8 cm³/dev (cm³ /rev)
9,5 = 9,5 cm³/dev (cm³ /rev)

Valf Basınç Ayarı / Valve Setting (bar)

R1	10-90
R2	70-140
R3	120-190
	Yok / Absent

Keçe / Seal

N	NBR
V	VITON

- Kodlama Örneği (Eşit iletim hacmi) ; AFD10.3-3,2N
  Code Example (Same displacement)
- Kodlama Örneği (Farklı iletim hacmi) ; AFD10.3-3,2/2,7/2,3N
  Code Example (Different displacement)

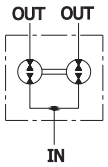
TEKNİK ÖZELLİKLER / TECHNICAL DATA

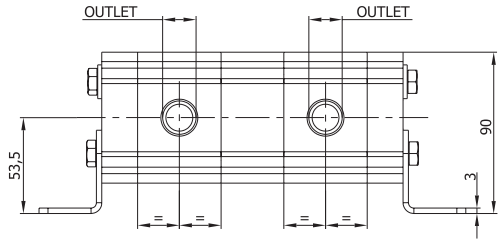
Tipi Type	İletim Hacmi Displacement cm³/dev	Maks. Basınç / Max. Pressure P1 (bar)	Maks. Basınç / Max. Pressure P3 (bar)	ΔP bar	Maks. Hız Max. Speed d/d (rpm)	Min. Hız Min. Speed d/d (rpm)	Min. Debi Min. Flow Rate lt/dk (l/min)	Maks. Debi Maks. Flow Rate lt/dk (l/min)
AFD10.X.1,2N	1,2	220	280	40	3500	1200	1,5	4,2
AFD10.X.1,7N	1,7						2,0	6,0
AFD10.X.2,3N	2,3						2,8	8,0
AFD10.X.2,7N	2,7						3,2	9,5
AFD10.X.3,2N	3,2						3,8	10,8
AFD10.X.3,8N	3,8				3000		4,6	11,4
AFD10.X.4,3N	4,3						5,2	12,9
AFD10.X.5,0N	5,0						6,0	15,0
AFD10.X.6,3N	6,3						7,6	18,9
AFD10.X.7,8N	7,8	210	260				9,4	23,4
AFD10.X.9,5N	9,5	200	240				11,4	28,5

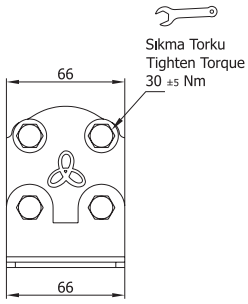
P1: Sürekli çalışma basıncı
Continuous pressure

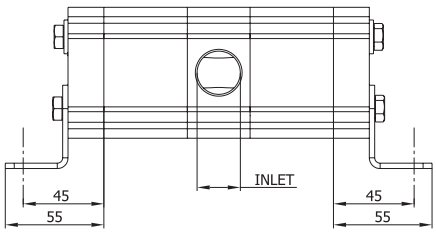
P3 : Ani basınç
Peak pressure

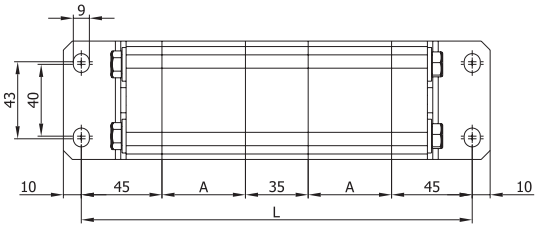
GİRİŞ PORTUNDAN GEÇEBİLECEK MAKS. DEBİ MAX. FLOW FOR INLET SECTION
37,5 lt/dk (l/min)

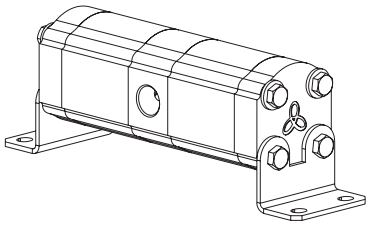


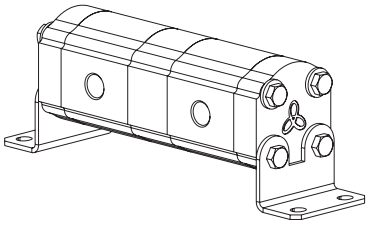












Tipi Type	cm^3/dev (cm^3/rev)	A	Giriş Inlet	Çıkış Outlet	(L) Boyu - Length						
					2	3	4	5	6	7	8
AFD10.X.1,2N	1,2	39	G 1/2"	G 3/8"	203,0	277,0	351,0	425,0	499,0	573,0	647,5
AFD10.X.1,7N	1,7	41			207,0	283,0	359,0	435,0	511,0	587,0	663,5
AFD10.X.2,3N	2,3	43			211,0	289,0	367,0	443,0	523,0	601,0	679,5
AFD10.X.2,7N	2,7	45			215,0	295,0	375,0	455,0	535,0	615,0	695,5
AFD10.X.3,2N	3,2	46,5			218,0	300,0	381,5	463,0	545,0	626,5	708,0
AFD10.X.3,8N	3,8	49			223,0	307,0	391,0	475,0	559,0	643,0	727,5
AFD10.X.4,3N	4,3	51			227,0	313,0	399,0	485,0	571,0	657,0	743,5
AFD10.X.5,0N	5,0	54			233,0	322,0	411,0	500,0	589,0	678,0	767,5
AFD10.X.6,3N	6,3	59			243,0	337,0	431,0	525,0	619,0	713,0	807,5
AFD10.X.7,8N	7,8	65			255,0	355,0	455,0	555,0	655,0	755,0	855,5
AFD10.X.9,5N	9,5	72			269,0	376,0	483,0	590,0	697,0	804,0	911,5

Eleman Sayısı - Number of Elements	2	3	4	5	6	7	8
Giriş Port Sayısı - Number of Inlets	1	1	2	2	3	3	4

GRUP 20 AKIŞ BÖLÜCÜLERİN KODLAMA SİSTEMİ
ORDERING CODE OF GROUP 20 FLOW DIVIDERS

AFD20 . 4 - 16 / 16 / 16 / 16 R1 N

Akış Bölücü Tipi Flow Divider Type
AFD20

Eleman Sayısı Number of elements
2-3-4-5-6-7-8

İletim Hacmi / Displacement cm³/dev(cm³/rev)
4 = 3,9 cm³ /dev (cm³ /rev)
6 = 5,9 cm³ /dev (cm³ /rev)
8 = 8,0 cm³ /dev (cm³ /rev)
9,5 = 9,4 cm³ /dev (cm³ /rev)
11,5 = 11,4 cm³ /dev (cm³ /rev)
14 = 13,9 cm³ /dev (cm³ /rev)
16 = 16,0 cm³ /dev (cm³ /rev)
19 = 19,2 cm³ /dev (cm³ /rev)
22 = 21,9 cm³ /dev (cm³ /rev)
25 = 24,8 cm³ /dev (cm³ /rev)
28 = 27,9 cm³ /dev (cm³ /rev)

Valf Basınç Ayarı Valve Setting (Bar)	
R1	10 - 90
R2	70 - 140
R3	120 - 190
	Yok / Absent

Keçe / Seal	
N	NBR
V	VITON

- Kodlama Örneği (Same displacement) ; AFD20.3-16N
  Code Example (Same displacement)
- Kodlama Örneği (different displacement) ; AFD20.3-16/14/11,5N
  Code Example (Different displacement)

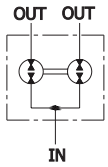
TEKNİK ÖZELLİKLER / TECHNICAL DATA

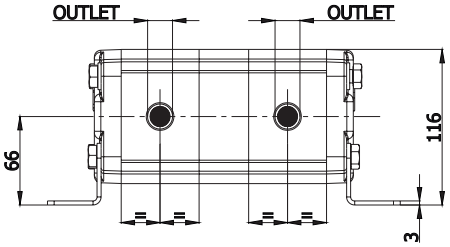
Tipi Type	İletim Hacmi Displacement	Maks. Basınç / Max. Pressure		ΔP	Maks. Hız Max. Speed	Min. Hız Min. Speed	Min. Debi Min. Flow Rate	Maks. Debi Maks. Flow Rate
		P1	P3					
	cm³/dev (cm³/rev)	bar		bar	d/d (rpm)		lt/dk (l/min)	
AFD20.X.4N	3,9	250	280	50	3000	1250	4,8	11,2
AFD20.X.6N	5,9						7,3	16,8
AFD20.X.8N	8,0						10,0	22,8
AFD20.X.9,5N	9,4				2750	1200	11,2	24,6
AFD20.X.11,5N	11,4						13,8	29,8
AFD20.X.14N	13,9	230	260	40			16,6	36,3
AFD20.X.16N	16,0				2500		19,2	38,0
AFD20.X.19N	19,2	210	240			1100	22,0	46,0
AFD20.X.22N	21,9	190	220		2000		25,2	47,8
AFD20.X.25N	24,8	170	200	30			28,5	52,0
AFD20.X.28N	27,9	160	190				32,0	54,7

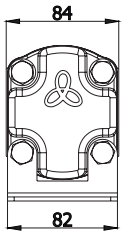
P1: Sürekli çalışma basıncı
Continuous pressure

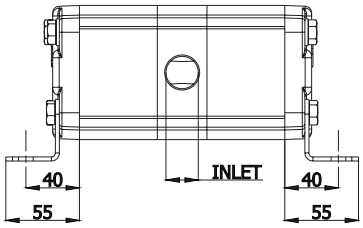
P3 : Ani basınç
Peak pressure

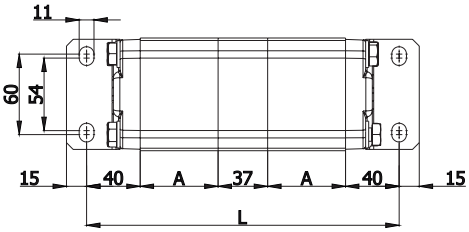
GİRİŞ PORTUNDAN GEÇEBİLECEK MAKS. DEBİ MAX. FLOW FOR INLET SECTION
80 lt/dk (l/min)

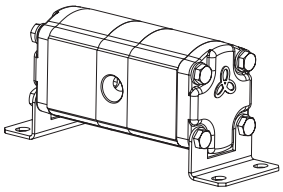


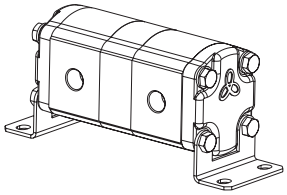












Tipi Type	cm^3/dev (cm^3/rev)	A	Giriş Inlet	Çıkış Outlet	(L) Boyu - Length						
					2	3	4	5	6	7	8
AFD20.X.4N	3,9	46,5	G 3/4"	G 1/2"	210,0	293,5	377,0	460,5	544,0	627,4	710,8
AFD20.X.6N	5,9	49,5			216,0	302,5	389,0	475,5	562,0	648,5	735,0
AFD20.X.8N	8,0	52,5			222,0	311,5	401,0	490,5	580,0	669,6	759,2
AFD20.X.9,5N	9,4	55,0			227,0	319,0	411,0	503,0	595,0	686,9	778,8
AFD20.X.11,5N	11,4	58,0			233,0	328,0	423,0	518,0	613,0	708,1	803,2
AFD20.X.14N	13,9	62,0			241,0	340,0	439,0	538,0	637,0	736,0	835,0
AFD20.X.16N	16,0	65,0			247,0	349,0	451,0	553,0	655,0	757,2	859,4
AFD20.X.19N	19,2	82,0			281,0	400,0	519,0	638,0	757,0	876,2	995,4
AFD20.X.22N	21,9	86,5			290,0	413,5	537,0	660,5	784,0	907,5	1031,0
AFD20.X.25N	24,8	91,6			300,0	429,0	557,5	686,0	815,0	943,6	1072,2
AFD20.X.28N	27,9	96,0			309,0	442,0	575,0	708,0	841,0	973,9	1106,9

Eleman Sayısı - Number of Elements	2	3	4	5	6	7	8
Giriş Port Sayısı - Number of Inlets	1	1	2	2	3	3	4

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Konya Organize San. Böl. Evrenköy Cd.
No: 31 Selçuklu/Konya Türkiye
Tel: +90 332 239 25 41 (3 line)
Fax: +90 332 239 25 44
info@ascendustri.com

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