

# 1CM1 DİŞLİ MOTOR SERİSİ

## 1CM1 GEAR MOTOR SERIES



**Алматы** (7273)495-231  
**Ангарск** (3955)60-70-56  
**Архангельск** (8182)63-90-72  
**Астрахань** (8512)99-46-04  
**Барнаул** (3852)73-04-60  
**Белгород** (4722)40-23-64  
**Благовещенск** (4162)22-76-07  
**Брянск** (4832)59-03-52  
**Владивосток** (423)249-28-31  
**Владикавказ** (8672)28-90-48  
**Владимир** (4922)49-43-18  
**Волгоград** (844)278-03-48  
**Вологда** (8172)26-41-59  
**Воронеж** (473)204-51-73  
**Екатеринбург** (343)384-55-89

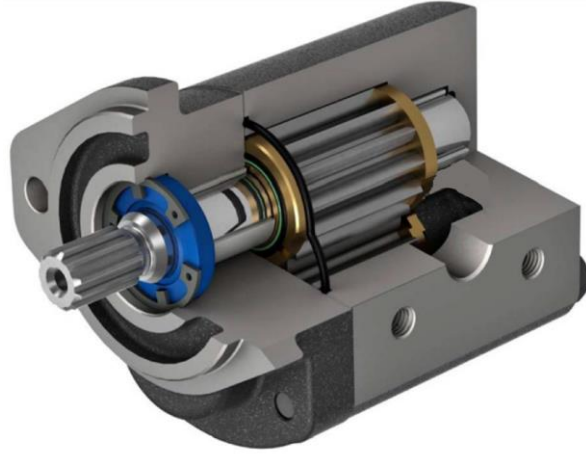
**Иваново** (4932)77-34-06  
**Ижевск** (3412)26-03-58  
**Иркутск** (395)279-98-46  
**Казань** (843)206-01-48  
**Калининград** (4012)72-03-81  
**Калуга** (4842)92-23-67  
**Кемерово** (3842)65-04-62  
**Киров** (8332)68-02-04  
**Коломна** (4966)23-41-49  
**Кострома** (4942)77-07-48  
**Краснодар** (861)203-40-90  
**Красноярск** (391)204-63-61  
**Курск** (4712)77-13-04  
**Курган** (3522)50-90-47  
**Липецк** (4742)52-20-81

**Магнитогорск** (3519)55-03-13  
**Москва** (495)268-04-70  
**Мурманск** (8152)59-64-93  
**Набережные Челны** (8552)20-53-41  
**Нижний Новгород** (831)429-08-12  
**Новокузнецк** (3843)20-46-81  
**Ноябрьск** (3496)41-32-12  
**Новосибирск** (383)227-86-73  
**Омск** (3812)21-46-40  
**Орел** (4862)44-53-42  
**Оренбург** (3532)37-68-04  
**Пенза** (8412)22-31-16  
**Петрозаводск** (8142)55-98-37  
**Псков** (8112)59-10-37  
**Пермь** (342)205-81-47

**Ростов-на-Дону** (863)308-18-15  
**Рязань** (4912)46-61-64  
**Самара** (846)206-03-16  
**Санкт-Петербург** (812)309-46-40  
**Саратов** (845)249-38-78  
**Севастополь** (8692)22-31-93  
**Саранск** (8342)22-96-24  
**Симферополь** (3652)67-13-56  
**Смоленск** (4812)29-41-54  
**Сочи** (862)225-72-31  
**Ставрополь** (8652)20-65-13  
**Сургут** (3462)77-98-35  
**Сыктывкар** (8212)25-95-17  
**Тамбов** (4752)50-40-97  
**Тверь** (4822)63-31-35

**Тольятти** (8482)63-91-07  
**Томск** (3822)98-41-53  
**Тула** (4872)33-79-87  
**Тюмень** (3452)66-21-18  
**Ульяновск** (8422)24-23-59  
**Улан-Удэ** (3012)59-97-51  
**Уфа** (347)229-48-12  
**Хабаровск** (4212)92-98-04  
**Чебоксары** (8352)28-53-07  
**Челябинск** (351)202-03-61  
**Череповец** (8202)49-02-64  
**Чита** (3022)38-34-83  
**Якутск** (4112)23-90-97  
**Ярославль** (4852)69-52-93

▪ İÇİNDEKİLER / TABLE OF CONTENT.....	2
▪ ÜRÜN BİLGİLERİ / PRODUCT INFORMATION.....	3
▪ ÜRÜN ÖZELLİKLERİ / PRODUCT FEATURES.....	4
▪ TEKNİK ÖZELLİKLERİ / TECHNICAL FEATURES.....	5
▪ DİŞLİ MOTOR KODLAMA SİSTEMİ / GEAR MOTOR CODING SYSTEM.....	6
▪ MOTOR ÖLÇÜLERİ / MOTOR DIMENSIONS.....	7
▪ DELİK TİPLERİ / PORT TYPES.....	8
▪ ŞAFT TİPLERİ / SHAFT TYPES.....	11
▪ ÖN KAPAK TİPİ / MOUNTING FLANGES.....	13
▪ DÖNÜŞ YÖNÜ / DIRECTION OF ROTATION.....	14



Piyasa ihtiyaçlarına cevap olarak, 1CM1 motorlar, kesin olarak kanıtlanmış dişli motorların sağlam sadeliğini korurken, yüksek verimlilik, yüksek güç ile düşük ses seviyesini birleştirerek geliştirilmiştir.

Döküm gövdeli motorlardaki yüksek kaliteli çelik dişliler hidrodinamik kaymalı yataklarla desteklenir.

### ÜRÜN ÖZELLİKLERİ

- Azaltılmış basınç dalgalanması ve düşük ses seviyeleri için 13 dişli gelişmiş dişli tasarımı
- Yüksek çalışma basınçları
- Yüksek güç
- 16 - 35 cc/rev iletim hacmi aralığı
- Döküm gövdeli kompakt tasarım
- Uzun ömürlü kaymalı yataklar
- Çok sayıda tahrik mili, ön kapak ve port tipi

*In response to market needs, the 1CM1 motors have been developed to combine high efficiencies, high power with low noise levels while retaining the rugged simplicity of well-proven hydraulic gear motors.*

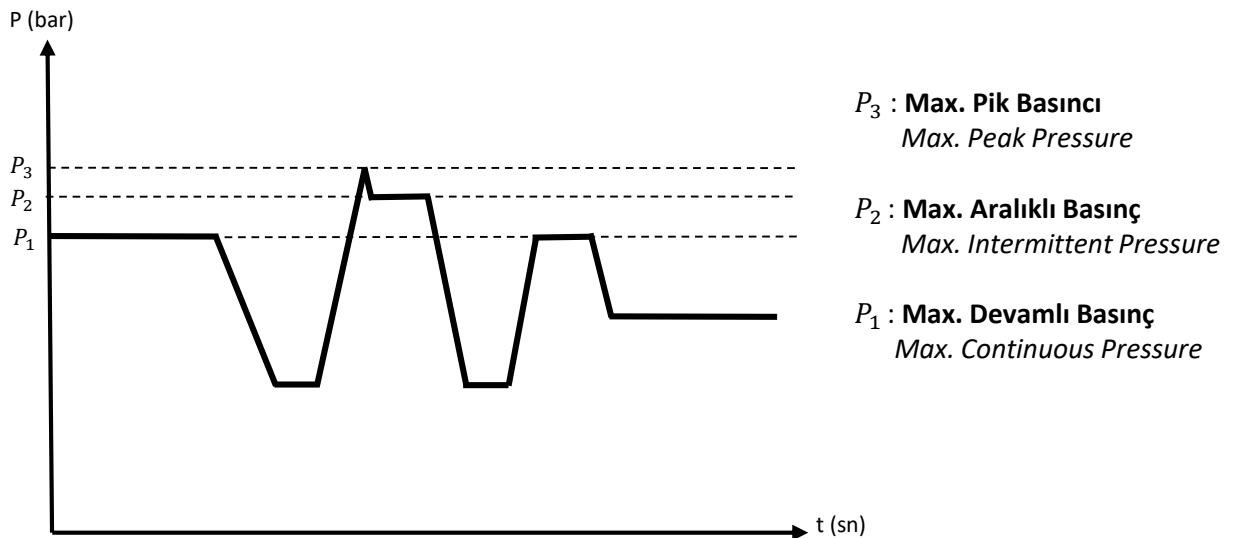
*Quality steel gears are supported by hydrodynamic plain bearings at cast iron motors*

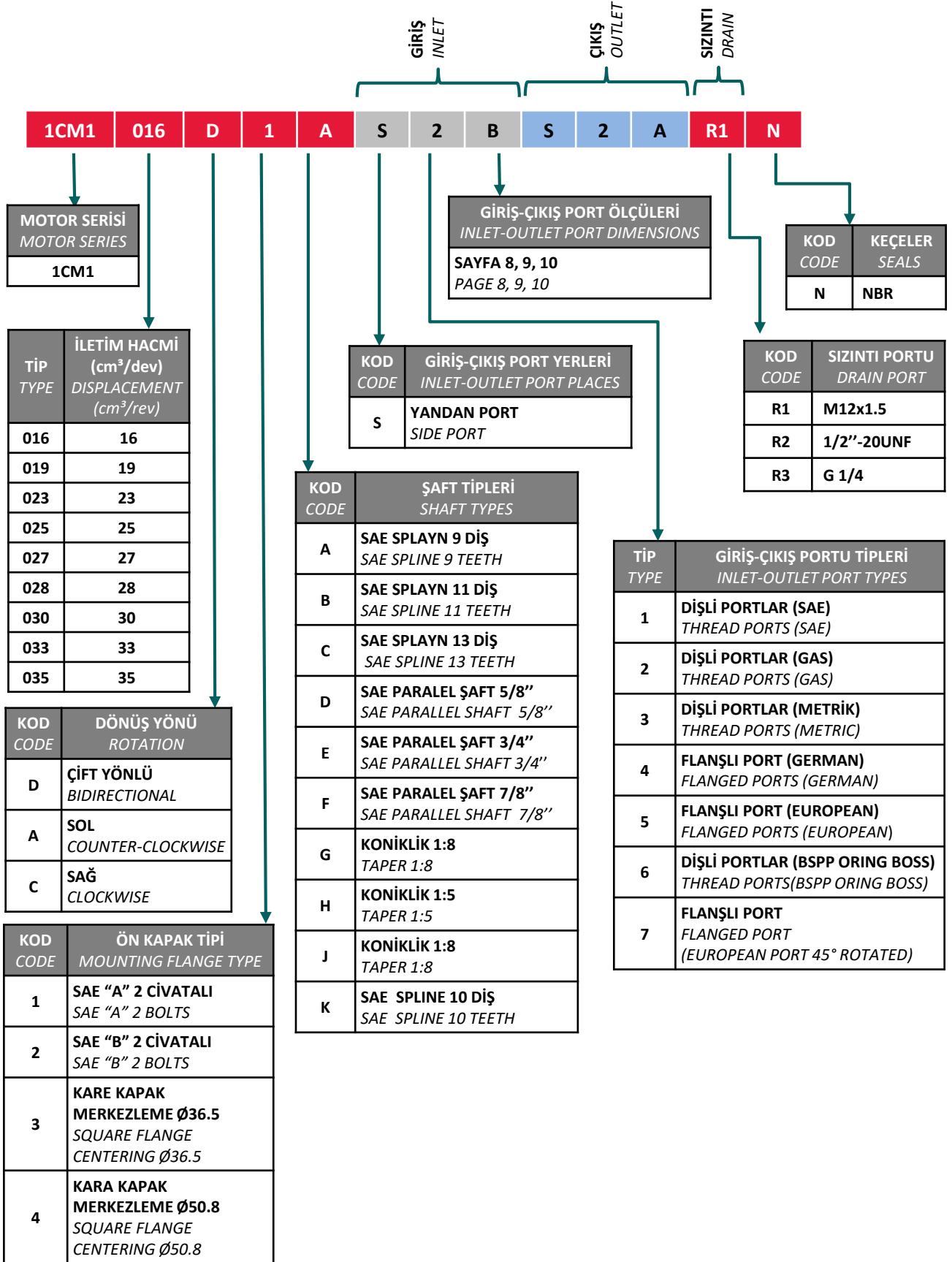
### PRODUCT FEATURES

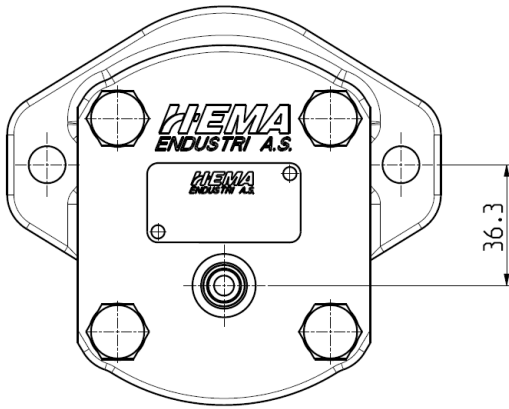
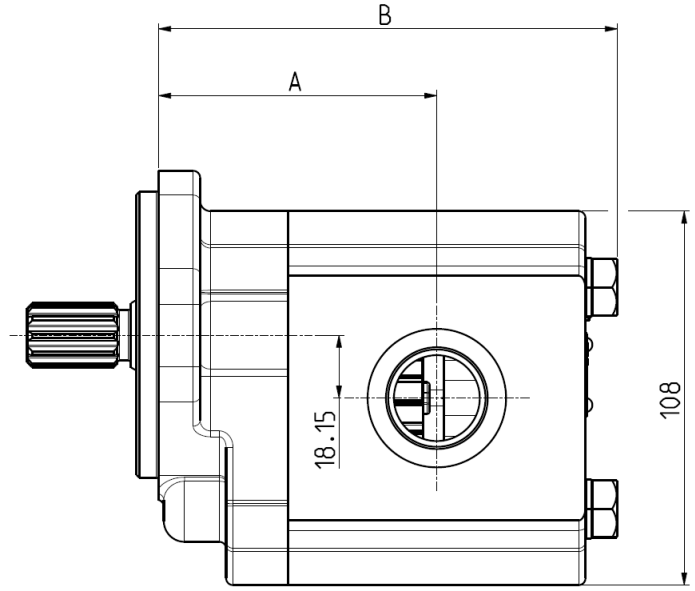
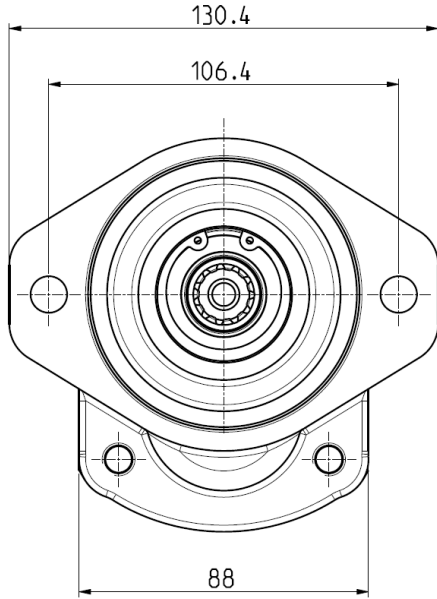
- 13 teeth advanced gear design for reduced pressure pulsation and low noise levels.
- High pressure ratings
- High power
- Displacement range from 16 to 35 cc/rev
- Compact design with cast iron body
- Long life plain bearings
- Wide range of drives, mountings and ports

Ürün Özellikleri <i>Product Features</i>	Açıklamalar <i>Description</i>	
Motor Tipi <i>Motor Type</i>	Döküm gövde, dış dişli <i>Heavy-duty, cast iron, external gear</i>	
Montaj <i>Mounting Flanges</i>	SAE A, SAE B, KARE KAPAK <i>SAE A, SAE B, SQUARE FLANGE</i>	
Portlar <i>Ports</i>	SAE/GAS/METRİK dişli, SAE/GERMAN flanşlı portlar <i>SAE /GAS/METRIC thread, SAE/GERMAN split flange</i>	
Şaft tipleri <i>Shaft Types</i>	SAE Spline Şaft , Paralel Şaft, Konik Şaft <i>SAE Spline Shafts, Straight Shafts, Taper Shafts</i>	
İletim Hacmi <i>Displacement</i>	16cm <sup>3</sup> /dev - 35cm <sup>3</sup> /dev <i>16cm<sup>3</sup>/rev - 35cm<sup>3</sup>/rev</i>	
Çalışma Basıncı <i>Working Pressure</i>	Sayfa 5'e bakınız <i>See page 5</i>	
Devir <i>Speed</i>	500 - 3000 RPM	
Çalışma Sıcaklığı <i>Operating Temperature</i>	İlk çalışma anında min./ <i>Min. at start up</i>	-20 °C
	Sürekli çalışmada maks./ <i>Max. Continuous</i>	+80 °C
	Aralıklı çalışmada maks./ <i>Max. Intermittent</i>	+100 °C
Akışkan viskozitesi <i>Fluid Viscosity</i>	İlk çalışma anında min./ <i>Min. at start up</i>	2000 cSt
	Sürekli çalışmada maks./ <i>Max. Continuous</i>	250 cSt
	Sürekli çalışmada min./ <i>Min. Continuous</i>	10 cSt
	Önerilen/ <i>Recommended</i>	12-100 cSt
Yağ kirliliği ISO 4406'ya göre <i>Fluid cleanliness to ISO 4406</i>	ΔP<200 bar	21/18/15
	ΔP>200 bar	19/17/14
Yağlar <i>Fluids</i>	Mineral yağlar <i>Mineral Oils</i>	
Dönüş yönü <i>Rotation</i>	Çift yönlü <i>Reversible</i>	

MOTOR TİPİ MOTOR TYPE	İLETİM HACMİ cm <sup>3</sup> /dev DISPLACEMENT (cm <sup>3</sup> /rev)	MAKS. ÇIKIŞ BASINCI MAX. OUTLET PRESSURE (bar)			MİN. HIZ (dev/dk) MIN. SPEED (RPM)	MAKS. HIZ (dev/dk) MAX. SPEED (RPM)
		$P_1$	$P_2$	$P_3$		
<b>1CM1-016</b>	16.0	$P_1=276$	$P_2=290$	$P_3=300$	500	3000
<b>1CM1-019</b>	19.0	$P_1=276$	$P_2=290$	$P_3=300$	500	3000
<b>1CM1-023</b>	23.0	$P_1=276$	$P_2=290$	$P_3=300$	500	3000
<b>1CM1-025</b>	25.0	$P_1=276$	$P_2=290$	$P_3=300$	500	3000
<b>1CM1-027</b>	27.0	$P_1=276$	$P_2=290$	$P_3=300$	500	3000
<b>1CM1-028</b>	28.0	$P_1=276$	$P_2=290$	$P_3=300$	500	3000
<b>1CM1-030</b>	30.0	$P_1=276$	$P_2=290$	$P_3=300$	500	3000
<b>1CM1-033</b>	33.0	$P_1=250$	$P_2=265$	$P_3=270$	500	2800
<b>1CM1-035</b>	35.0	$P_1=225$	$P_2=240$	$P_3=250$	500	2600

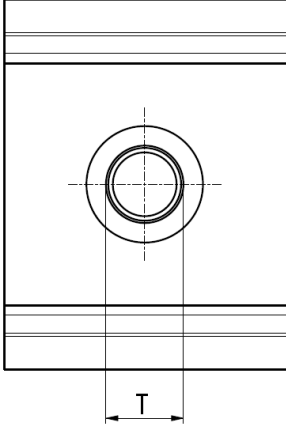






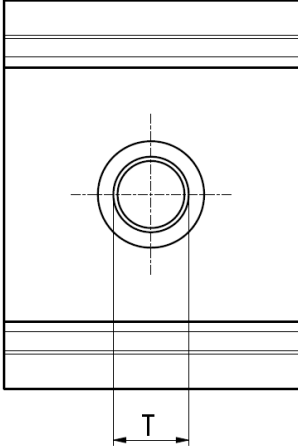
MODEL MODEL	İLETİM HACMİ (cm <sup>3</sup> /dev) DISPLACEMENT (cm <sup>3</sup> /rev)	A (mm)	B (mm)	AĞIRLIK WEIGHT (kg)
1CM1-016	16	77.8	119.2	6.5
1CM1-019	19	79.6	122.9	6.7
1CM1-023	23	82.0	127.7	6.9
1CM1-025	25	83.2	130.1	7.1
1CM1-027	27	84.4	132.5	7.2
1CM1-028	28	85.0	133.7	7.3
1CM1-030	30	86.2	136.2	7.4
1CM1-033	33	88.0	139.8	7.6
1CM1-035	35	89.3	142.2	7.7

1

**DİŞLİ PORTLAR (SAE)**  
**THREAD PORTS (SAE)**

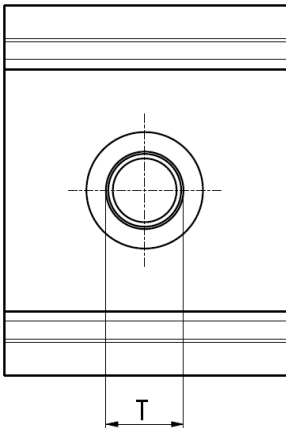
KOD CODE	T
A	7/8"-14 UNF 2B ↓22
B	1 1/16"-12 UN 2B ↓22
C	1 5/16"-12 UN 2B ↓21
D	1 5/8"-12 UN 2B ↓23

2

**DİŞLİ PORTLAR (GAS)**  
**THREAD PORTS (GAS)**

KOD CODE	T
A	G 1/2 ↓22
B	G 3/4 ↓22
C	G 1 ↓21
D	G 1 1/4 ↓23

3

**DİŞLİ PORTLAR (METRİK)**  
**THREAD PORTS (METRIC)**

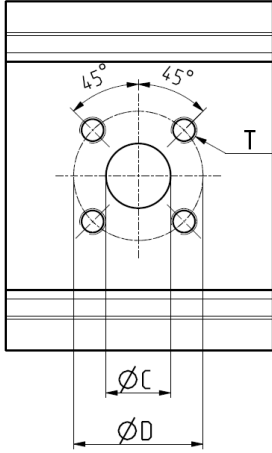
KOD CODE	T
A	M22x1.5 ↓22
B	M27x2 ↓22
C	M33x2 ↓21
D	M42x2 ↓23

**Talep üzerine özel seçenekler mümkündür**  
*Special options are possible upon request.*



4

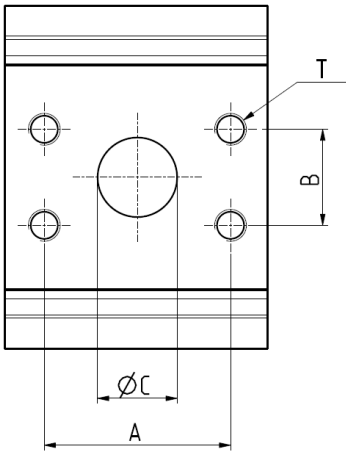
**FLANŞLI PORTLAR (GERMAN)**  
**FLANGED PORTS (GERMAN)**



KOD CODE	Ø C	Ø D	T
A	15	35	M6x1 ↓13
B	18	55	M8x1.25 ↓13
C	20	40	M6x1 ↓13
D	26	55	M8x1.25 ↓13

5

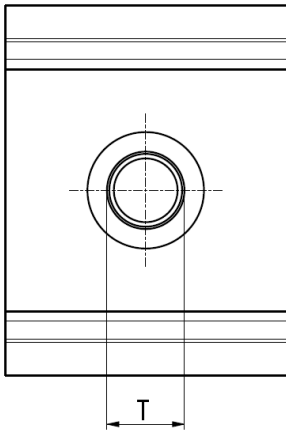
**FLANŞLI PORTLAR (EUROPEAN)**  
**FLANGED PORTS (EUROPEAN)**



KOD CODE	Ø C	A	B	T
A	19	47.6	22.2	M10x1.5 ↓13
B	19	47.6	22.2	3/8"-16 ↓13
C	25	52.4	26.2	M10x1.5 ↓13
D	25	52.4	26.2	3/8"-16 ↓13
E	32	58.6	30.2	M10x1.5 ↓13
F	32	58.6	30.2	7/16"-14 ↓13

6

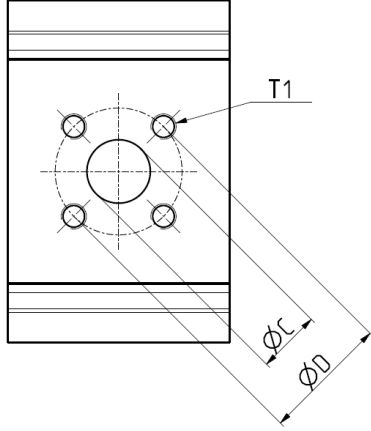
**DİŞLİ PORTLAR (BSPP ORING BOSS)**  
**THREAD PORTS (BSPP ORING BOSS)**



KOD CODE	T
A	1/2 BSPP ↓22
B	3/4 BSPP ↓22
C	1 BSPP ↓21
D	1 1/4 BSPP ↓23

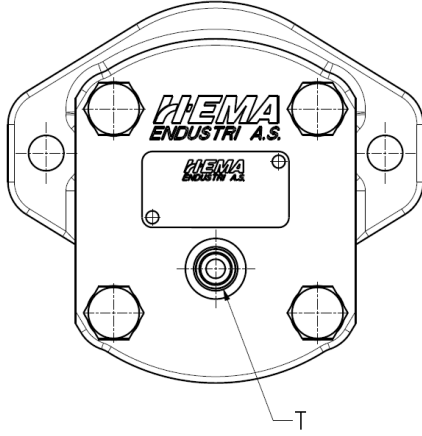
**Talep üzerine özel seçenekler mümkündür**  
*Special options are possible upon request.*

7

**FLANŞLI PORTLAR**  
FLANGED PORTS (EUROPEN-ROTATED 45°)

KOD CODE	$\phi C$	$\phi D$	T
A	13	30	M6x1 ↓13
B	18	40	M8x1.25 ↓13
C	20	40	M8x1.25 ↓13
D	26	51	M10x1.5 ↓13

R

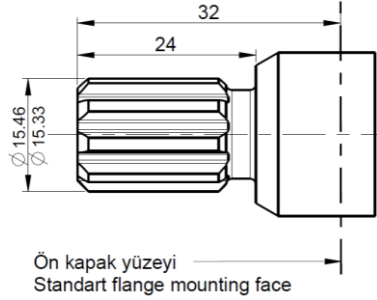
**TAHLİYE PORTLARI**  
DRAIN PORTS

KOD CODE	T
R1	M12x1.5 ↓9.5
R2	1/2"-20 UNF 2B ↓9.5
R3	G 3/8 ↓9.5

**Talep üzerine özel seçenekler mümkündür**  
Special options are possible upon request.

**A** **SAE SPLAYN 9 DİŞ**  
**SAE SPLINE 9 TEETH**

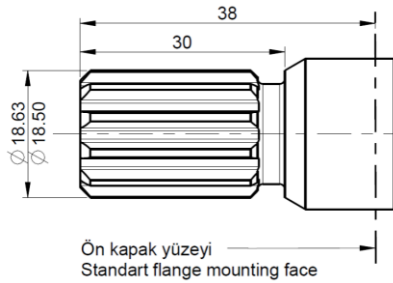
**EVOLVENT SPLINE**  
**SAE J744 16-4**  
**9 DİŞ, 16/32 DP**  
**INVOLUTE SPLINE**  
**SAE J744 16-4**  
**9 TEETH, 16/32 DP**



**Maks. tork = 85 Nm**  
**Max. torque**

**B** **SAE SPLAYN 11 DİŞ**  
**SAE SPLINE 11 TEETH**

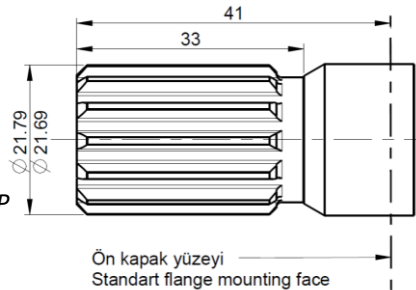
**EVOLVENT SPLINE**  
**SAE J744 19-4**  
**11 DİŞ, 16/32 DP**  
**INVOLUTE SPLINE**  
**SAE J744 19-4**  
**11 TEETH, 16/32 DP**



**Maks. tork = 140 Nm**  
**Max. torque**

**C** **SAE SPLAYN 13 DİŞ**  
**SAE SPLINE 13 TEETH**

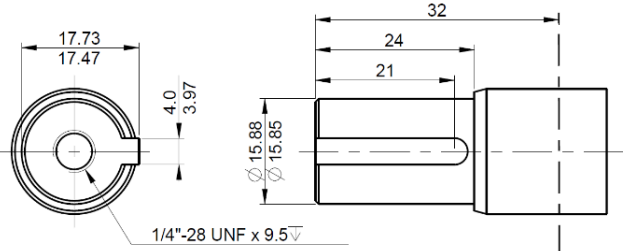
**EVOLVENT SPLINE**  
**SAE J744 22-4**  
**13 DİŞ, 16/32 DP**  
**INVOLUTE SPLINE**  
**SAE J744 12-4**  
**13 TEETH, 16/32 DP**



**Maks. tork = 249 Nm**  
**Max. torque**

**D** **SAE PARALEL ŞAFT 5/8"**  
**SAE PARALEL SHAFT 5/8"**

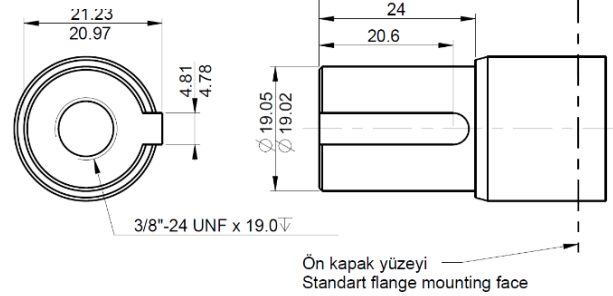
**STRAIGHT SHAFT**  
**SAE J744 16-1 A**



**Maks. tork = 85 Nm**  
**Max. torque**

**E** **SAE PARALEL ŞAFT 3/4"**  
**SAE PARALEL SHAFT 3/4"**

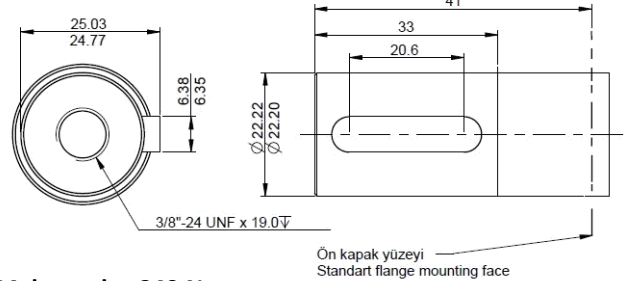
**STRAIGHT SHAFT**  
**SAE J744 19-1**



**Maks. tork = 140 Nm**  
**Max. torque**

**F** **SAE PARALEL ŞAFT 7/8"**  
**SAE PARALEL SHAFT 7/8"**

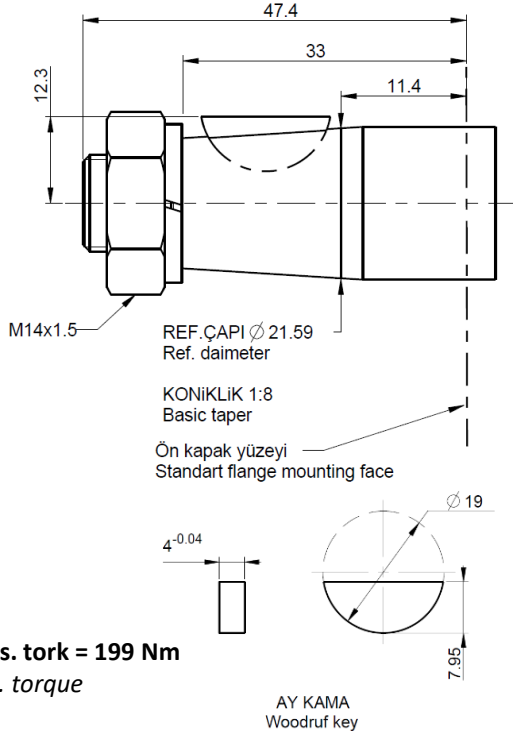
**STRAIGHT SHAFT**  
**SAE J744 22-1 B**



**Maks. tork = 249 Nm**  
**Max. torque**

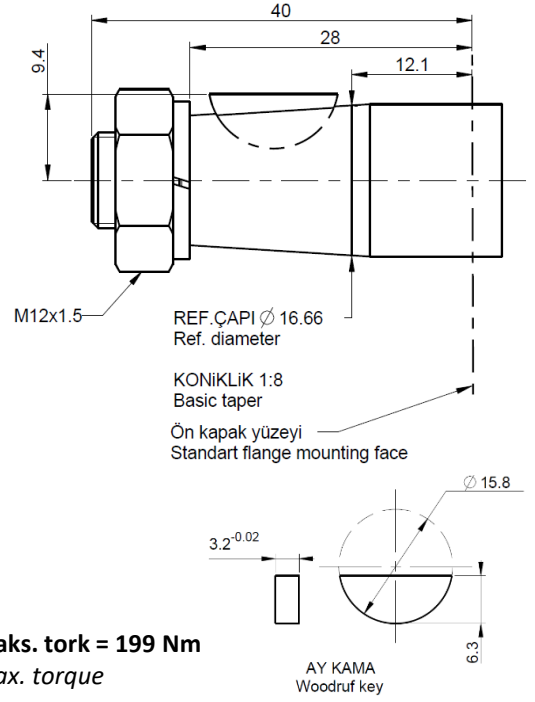
**G**

**KONİKLİK 1:8**  
**TAPER 1:8**



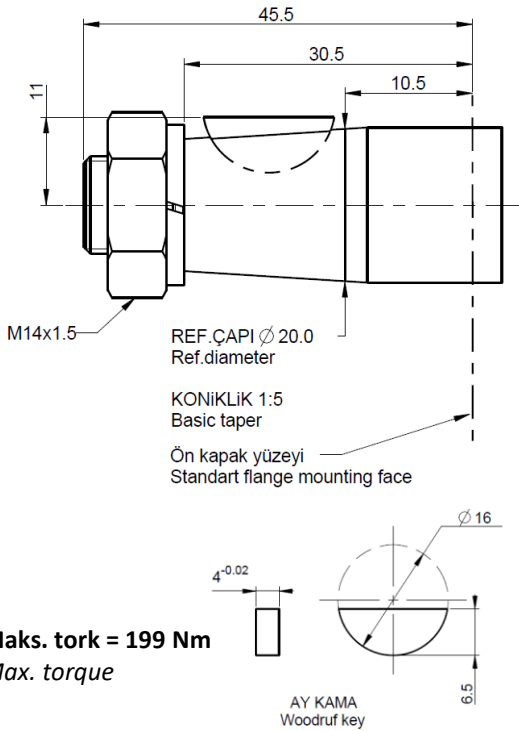
**J**

**KONİKLİK 1:8**  
**TAPER 1:8**



**H**

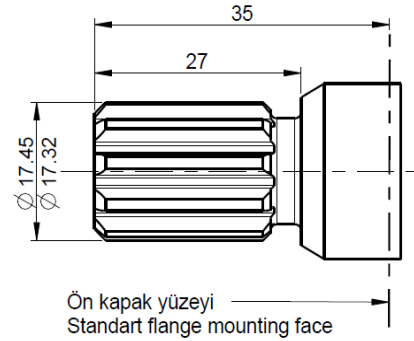
**KONİKLİK 1:5**  
**TAPER 1:5**



**K**

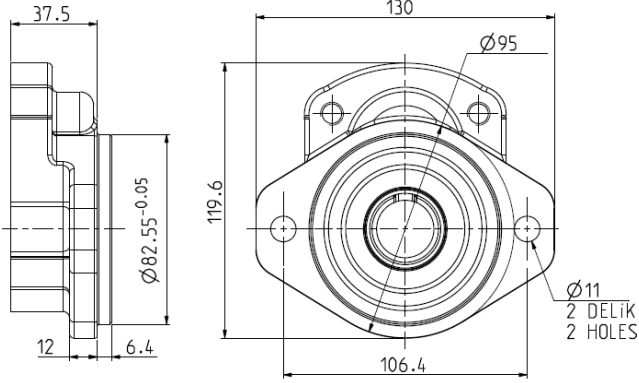
**SAE SPLAYN 10 DİŞ**  
**SAE SPLINE 10 TEETH**

**EVOLVENT SPLINE**  
**SAE J498 A**  
**10 DİŞ, 16/32 DP**  
**INVOLUTE SPLINE**  
**SAE J498 A**  
**10 TEETH, 16/32 DP**



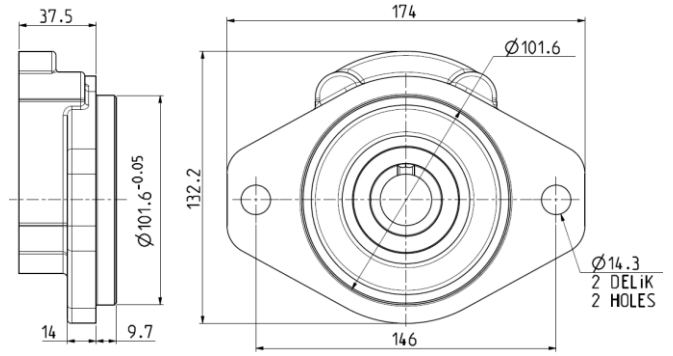
1

**SAE A 2 ÇİVATALI**  
**SAE A 2 BOLTS**



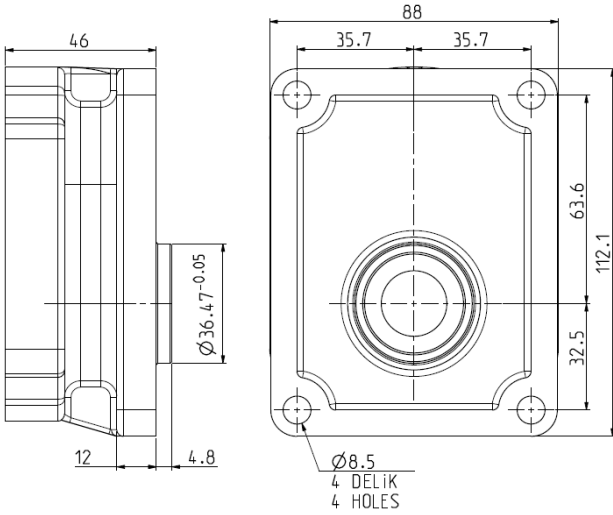
2

**SAE B 2 ÇİVATALI**  
**SAE B 2 BOLTS**



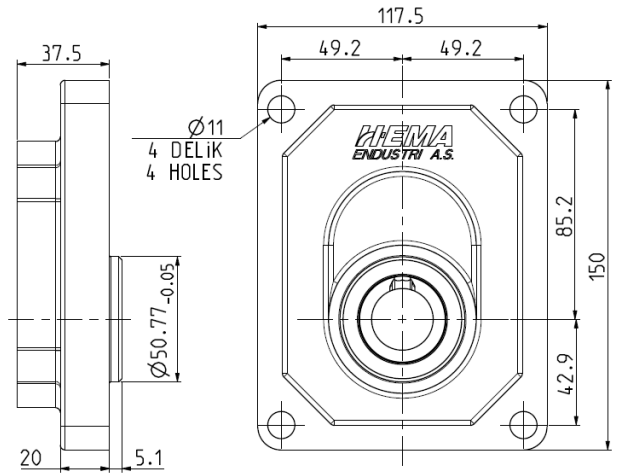
3

**KARE KAPAK MERKEZLEME  $\varnothing$  36.47**  
**SQUARE FLANGE CENTERING  $\varnothing$  36.47**



4

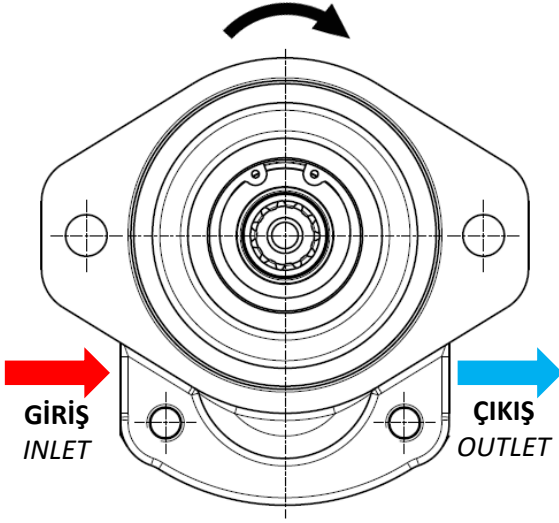
**KARE KAPAK MERKEZLEME  $\varnothing$  50.77**  
**SQUARE FLANGE CENTERING  $\varnothing$  50.77**



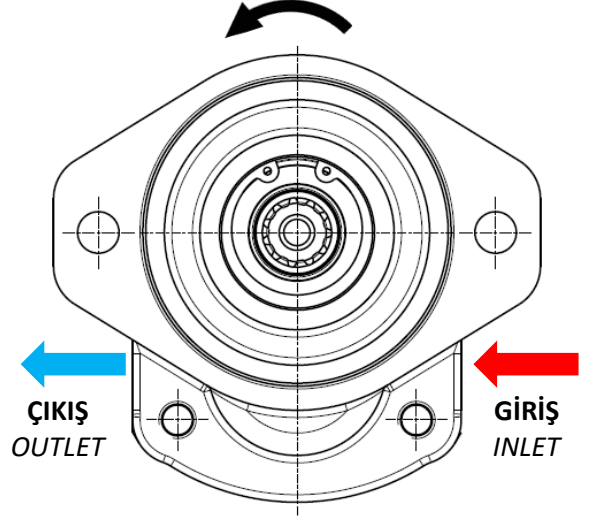
# DÖNÜŞ YÖNÜ

## DIRECTION OF ROTATION

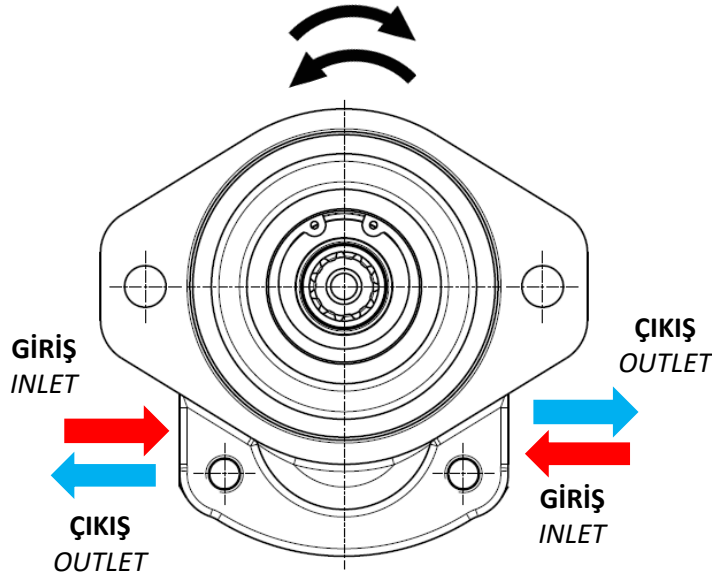
**SOL YÖNLÜ**  
COUNTER CLOCKWISE



**SAĞ YÖNLÜ**  
CLOCKWISE



**ÇİFT YÖNLÜ**  
REVERSIBLE



**Алматы** (7273)495-231  
**Ангарск** (3955)60-70-56  
**Архангельск** (8182)63-90-72  
**Астрахань** (8512)99-46-04  
**Барнаул** (3852)73-04-60  
**Белгород** (4722)40-23-64  
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**Киров** (8332)68-02-04  
**Коломна** (4966)23-41-49  
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**Смоленск** (4812)29-41-54  
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**Ставрополь** (8652)20-65-13  
**Сургут** (3462)77-98-35  
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**Уфа** (347)229-48-12  
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**Чебоксары** (8352)28-53-07  
**Челябинск** (351)202-03-61  
**Череповец** (8202)49-02-64  
**Чита** (3022)38-34-83  
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