

G2P

Bent Axis Piston Pump - ISO



G2P Pumps have the following advantages ;

- Compact Design,
- Economical Conception,
- High Power Density,
- High Overall Efficiency,
- High Rotating Speeds,
- High Output Pressure,
- From 12cc to 108cc,
- One Piece Pistons with Piston Rings,
- Special Inlet Fittings & Accessories,
- Simple Change of Direction of Rotation,
- For Industrial & Mobile Market.
- Splined or Keyed Shaft

Other Advantages of G2P

New frame sizes to meet market requirements.

For use in mobile & industrial and stationary applications areas.

The pump drive shaft bearings are designed to give the service life expected in these areas of operation.

Interchangeable with other ISO bent axis pumps.

40° bent axis design giving high power, small overall dimensions, optimum efficiency and economic design. Flange and shaft designed for direct mounting on truck gearbox PTO's. The fixed displacement bent axis pumps generates a hydraulic fluid flow. It is designed for use in trucks, commercial vehicles and all stationary hydraulic applications. The G2P is a fixed pump with rotary group in bent-axis design open circuits. Flow is proportional to drive speed and displacement.

For axial piston units with bent-axis design, the Pistons are arranged diagonally with respect to the drive shaft. The pump covers the whole displacement range 12 to 108 cm³/rev. The pump has been developed with modern styling and design to satisfy market demand as to designed new generation plate and pistons with give high flow performance, high pressures with high efficiency and very small dimensions.

The pump is available both to DIN and SAE world standards and can be mounted either directly at the gear box or via a drive shaft. If necessary it can also be augmented with a by-pass valve. Other brand bent axis pumps compatible and interchangeable with G2P bent axis pumps. Refer to the data sheet and order confirmation for the technical data, operating conditions and operating limits of the bent axis piston pumps.

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Ordering Code of G2P Pumps

Pump Code

G2P

Displacement (cm³)

108

Drive Shaft

K2

Mounting Flange

A

Inlet & Outlet Port

12

Direction of Rotation

R

Sealing

H

S Standart

H High Pressure

V Viton

L Left/CW

R Right/CW

11 Threaded (12-18cc)

12 SAE (25-108cc)

A ISO 3019-2 , 4 BOLT

DIN 5480 SPLINED

S1

12

18

25

32

40

50

56

63

80

108

DIN 5480 SPLINED

S2

12

18

25

—

—

50

56

—

80

108

DIN 6885 PARALLEL

K1

12

18

25

32

—

50

56

—

80

108

DIN 6885 PARALLEL

K2

12

18

25

—

40

50

56

63

80

108

12

18

25

32

40

50

56

63

80

108

G2P Bent Axis Piston Pump - ISO, Fixed Displacement,

		12	18	25	32	40	50	56	63	80	108
Displacement	cc	12,00	18,00	25,00	32,00	40,20	50,00	56,40	63,00	80,00	108,4
Theoretical oil flow l/min at pump speed	1000 rpm	12,00	18,00	25,00	32,00	40,20	50,00	56,40	63,00	80,00	108,4
	1500 rpm	18,00	27,00	37,50	48,00	60,30	75,00	84,60	94,50	120,0	162,6
Maximum Pump Speed											
- Continuous	rpm	3100	3100	2500	2500	2300	2300	2300	2300	2300	2000
Max. Continuous Pressure	bar	400	400	400	400	400	400	400	400	400	400
Max. Peak Pressure	bar	450	450	450	450	450	450	450	450	450	450
Max. Torque at 350 bar	Nm	66	98	141	174	225	280	320	350	445	600
Max. Flow	l/min.	37,20	55,80	62,50	80,00	92,46	115,0	129,7	144,9	184,0	216,0
Pump Temperature											
- Minimum	°C	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
- Maximum	°C	110	110	110	110	110	110	110	110	110	110
Weight											
- Without accessories	kg	6,00	6,00	11,50	11,50	11,50	17,50	18,00	18,00	22,00	22,50
- With accessories	kg	6,20	6,20	11,80	11,90	11,90	18,00	18,50	18,50	22,50	23,00
Rotation		CW,CCW	CW,CCW	CW,CCW	CW,CCW	CW,CCW	CW,CCW	CW,CCW	CW,CCW	CW,CCW	CW,CCW

Quick Calculation

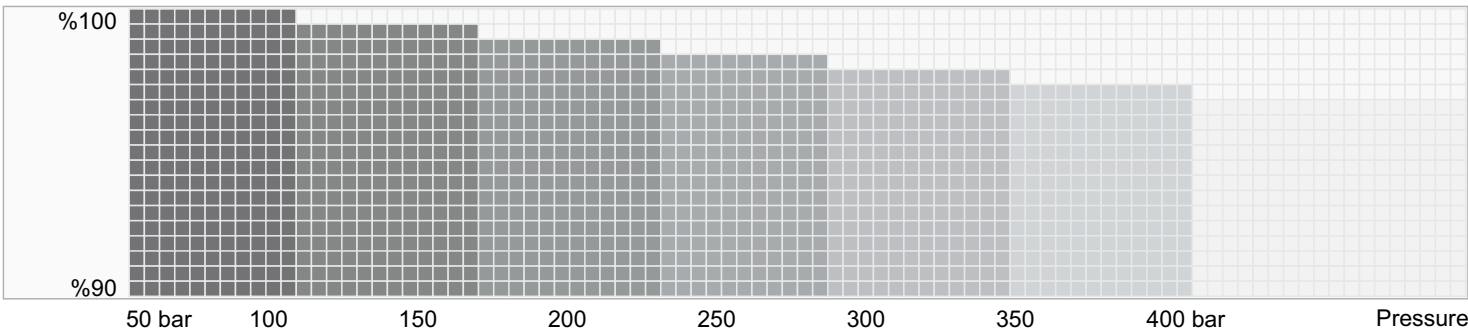
$$\text{Flow } Q = \frac{V_g \cdot n \cdot \eta_v}{1000} \quad \text{l/min}$$

$$\text{Torque } T = \frac{V_g \cdot \Delta P}{20 \cdot \pi \cdot \eta_{mh}} \quad \text{N}\cdot\text{m}$$

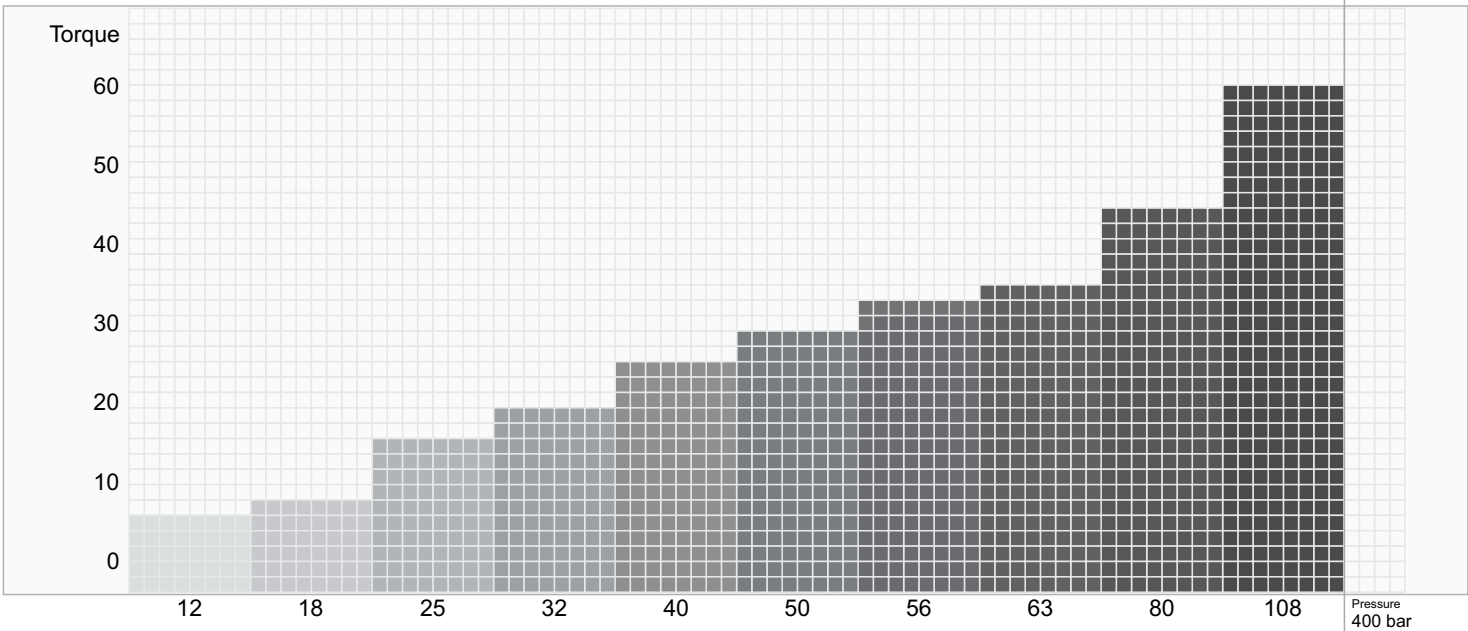
$$\text{Power } N = \frac{Q \cdot \Delta P}{612 \cdot \eta_t} \quad \text{kW}$$

Q – flow, l/min
T – torque, N•m
N – power, kW
V_g – displacement, ccm/rev
n – shaft speed, rpm
ΔP – pressure difference, bar
η_v – volume efficiency
η_{mh} – hydraulic mechanical efficiency
η_t = η_v • η_{mh} – full efficiency coefficient

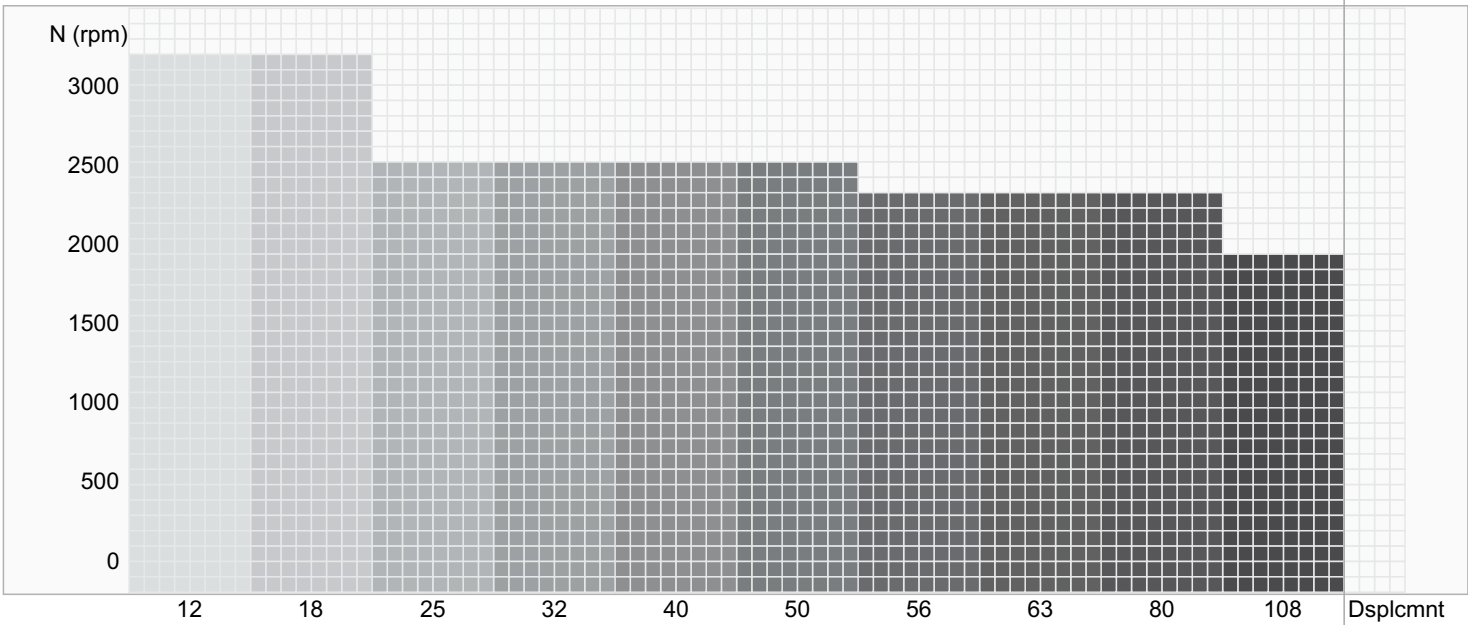
Efficiency Curves (1000 rpm)

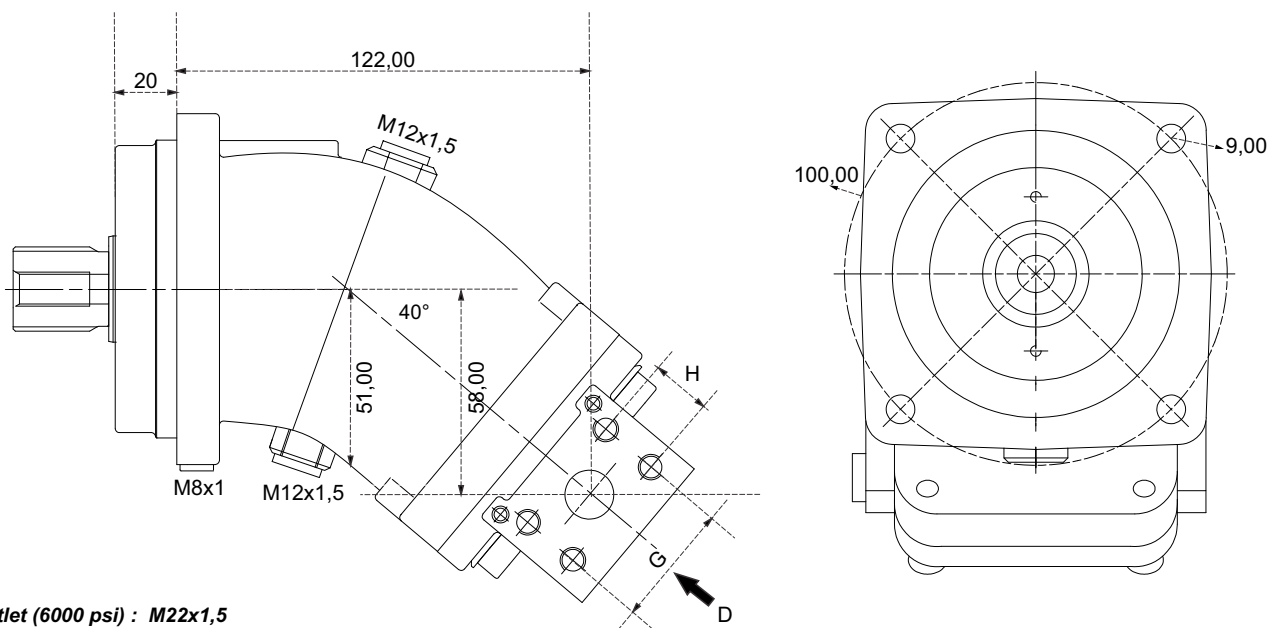


Torque with Pump Output Pressure

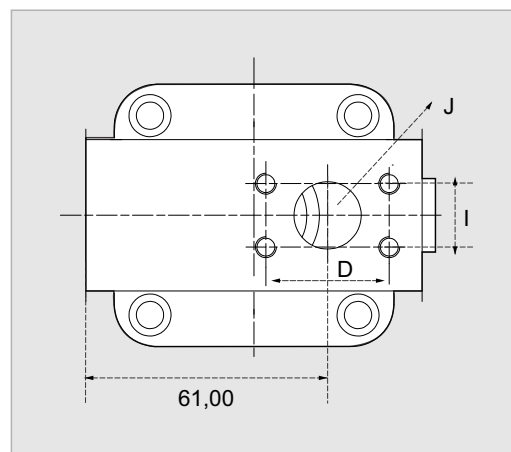


Flow with Pump Speed



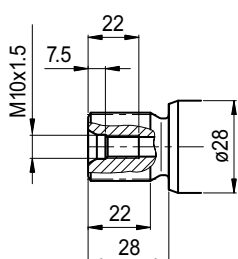


x 1000 rpm	12,00 cc
x 1500 rpm	18,00 cc
Max. Continuous Pump Speed	3100 rpm
Max. Continuous Pressure	400 bar
Max. Peak Pressure	450 bar
Max. Torque at 350 bar	66 Nm
Max. Flow	37,20 l/min.
Min. Pump Temperature	-25 °C
Max. Pump Temperature	110 °C
Weight without accessories	6,00 kg
Weight with accessories	6,20 kg
Rotation	CW-CCW



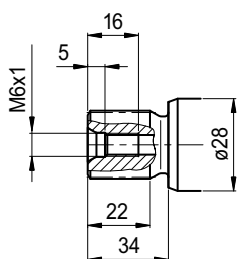
S1

Splined shaft DIN 5480
W25x1.25x18x9g



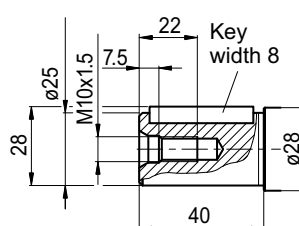
S2

Splined shaft DIN 5480
W20x1.25x14x9g



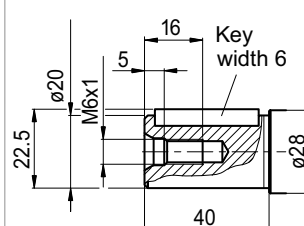
K1

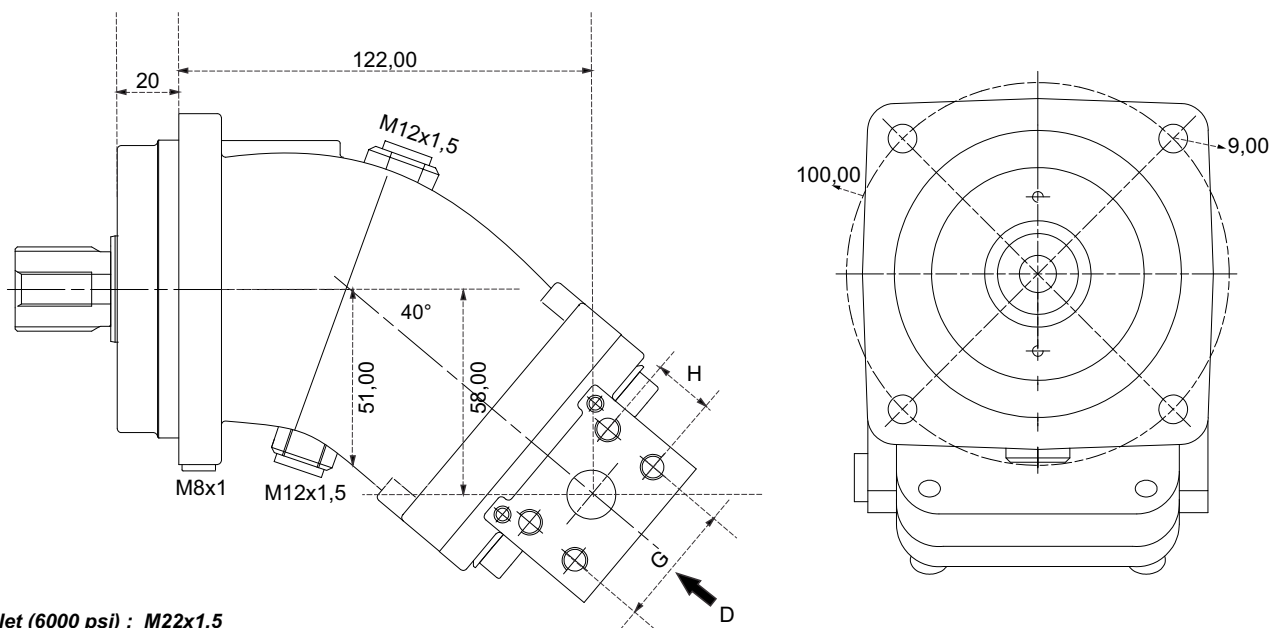
Parallel keyed shaft
DIN 6885, AS8x7x32



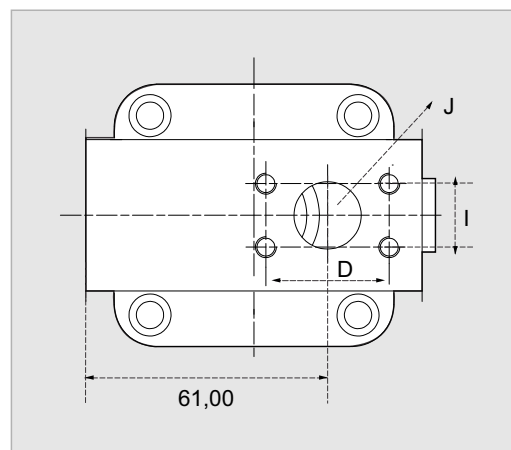
K2

Parallel keyed shaft
DIN 6885, AS6x6x32

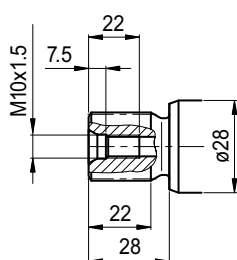




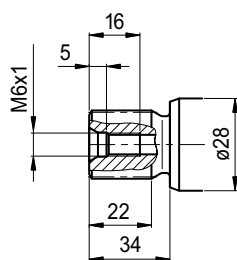
x 1000 rpm	18,00 cc
x 1500 rpm	27,00 cc
Max. Continuous Pump Speed	3100 rpm
Max. Continuous Pressure	400 bar
Max. Peak Pressure	450 bar
Max. Torque at 350 bar	98 Nm
Max. Flow	55,80 l/min.
Min. Pump Temperature	-25 °C
Max. Pump Temperature	110 °C
Weight without accessories	6,00 kg
Weight with accessories	6,20 kg
Rotation	CW-CCW

**S1**

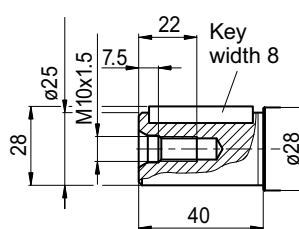
Splined shaft DIN 5480
W25x1.25x18x9g

**S2**

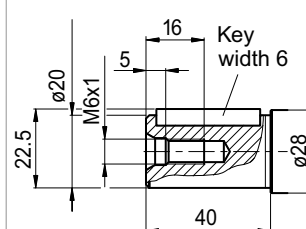
Splined shaft DIN 5480
W20x1.25x14x9g

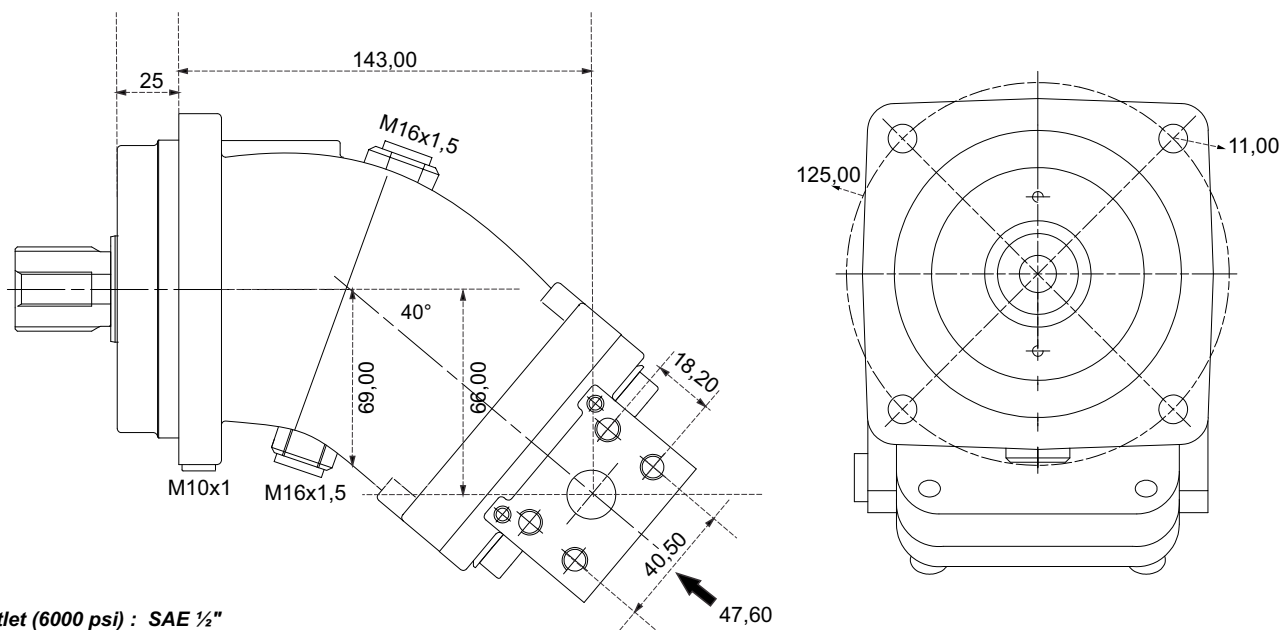
**K1**

Parallel keyed shaft
DIN 6885, AS8x7x32

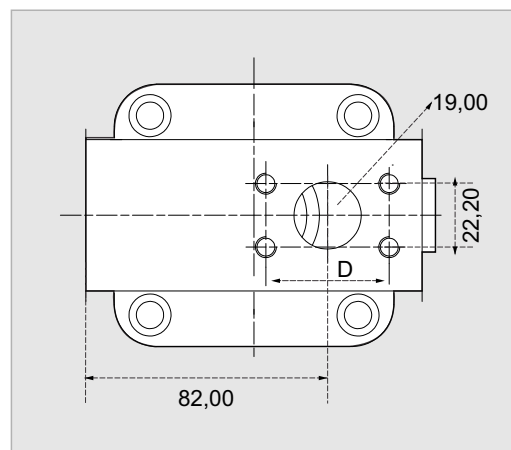
**K2**

Parallel keyed shaft
DIN 6885, AS6x6x32

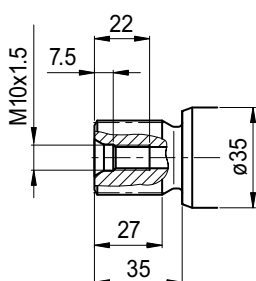




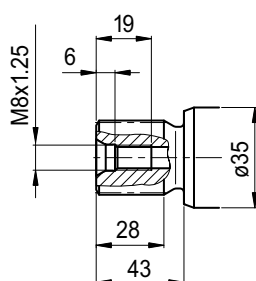
x 1000 rpm	25,00 cc
x 1500 rpm	37,50 cc
Max. Continuous Pump Speed	2500 rpm
Max. Continuous Pressure	400 bar
Max. Peak Pressure	450 bar
Max. Torque at 350 bar	141 Nm
Max. Flow	62,50 l/min.
Min. Pump Temperature	-25 °C
Max. Pump Temperature	110 °C
Weight without accessories	11,50 kg
Weight with accessories	11,80 kg
Rotation	CW-CCW

**S1**

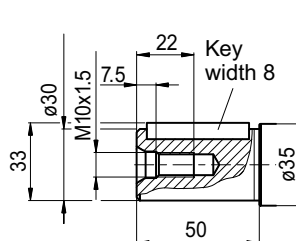
Splined shaft DIN 5480
W30x2x14x9g

**S2**

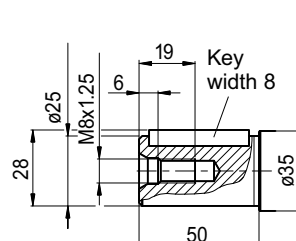
Splined shaft DIN 5480
W25x1.25x18x9g

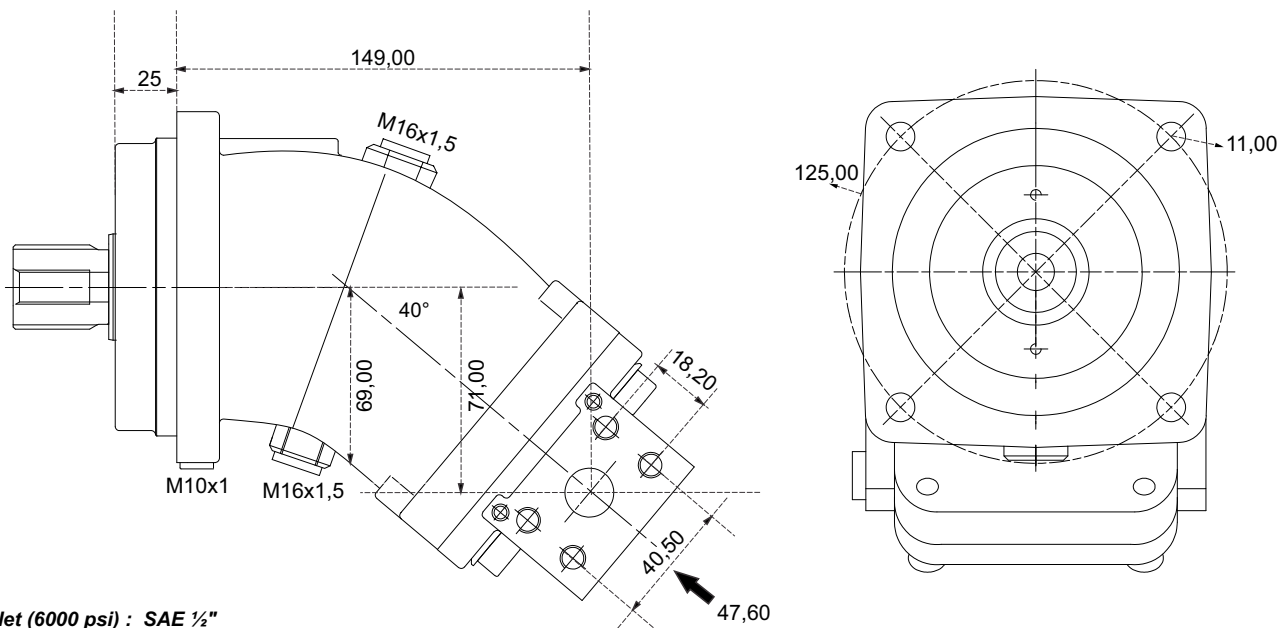
**K1**

Parallel keyed shaft
DIN 6885, As8x7x40

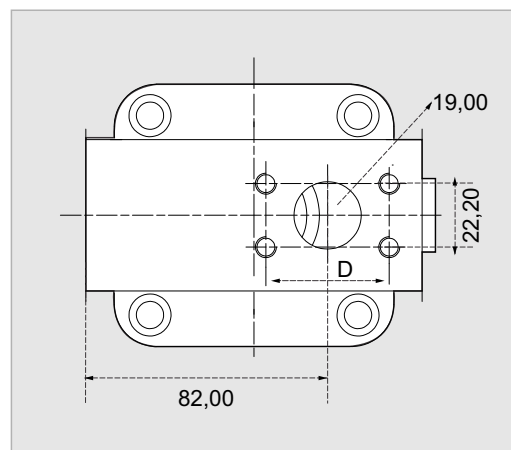
**K2**

Parallel keyed shaft
DIN 6885, As8x7x40



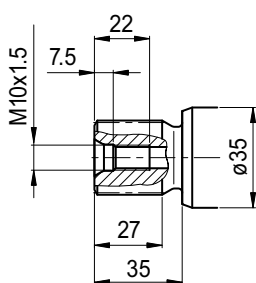


x 1000 rpm	32,00 cc
x 1500 rpm	48,00 cc
Max. Continuous Pump Speed	2500 rpm
Max. Continuous Pressure	400 bar
Max. Peak Pressure	450 bar
Max. Torque at 350 bar	174 Nm
Max. Flow	80,00 l/min.
Min. Pump Temperature	-25 °C
Max. Pump Temperature	110 °C
Weight without accessories	11,50 kg
Weight with accessories	11,90 kg
Rotation	CW-CCW



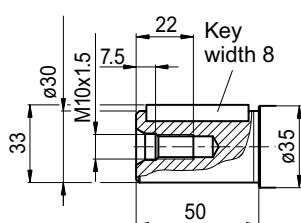
S1

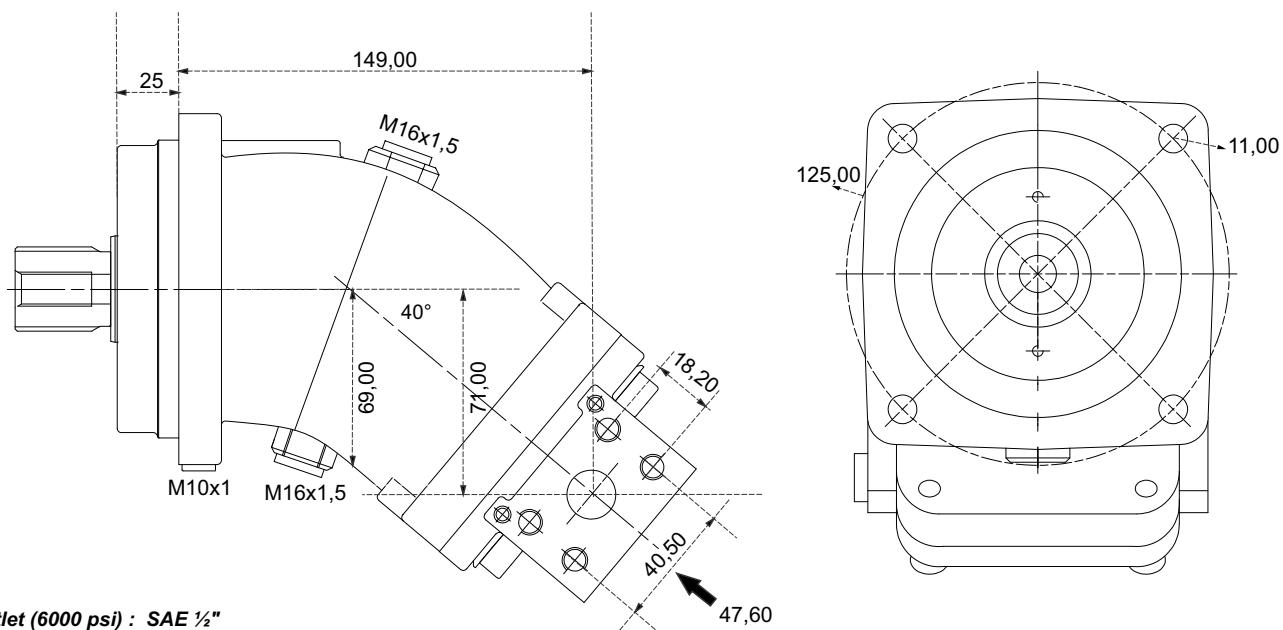
Splined shaft DIN 5480
W30x2x14x9g



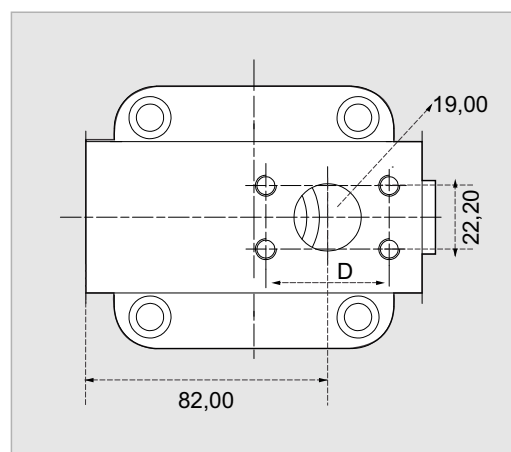
K1

Parallel keyed shaft
DIN 6885, As8x7x40

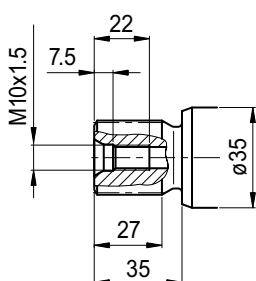




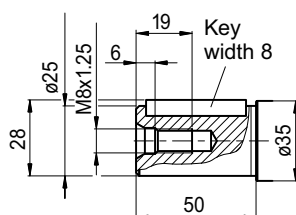
x 1000 rpm	40,20 cc
x 1500 rpm	60,30 cc
Max. Continuous Pump Speed	2300 rpm
Max. Continuous Pressure	400 bar
Max. Peak Pressure	450 bar
Max. Torque at 350 bar	225 Nm
Max. Flow	92,46 l/min.
Min. Pump Temperature	-25 °C
Max. Pump Temperature	110 °C
Weight without accessories	11,50 kg
Weight with accessories	11,90 kg
Rotation	CW-CCW

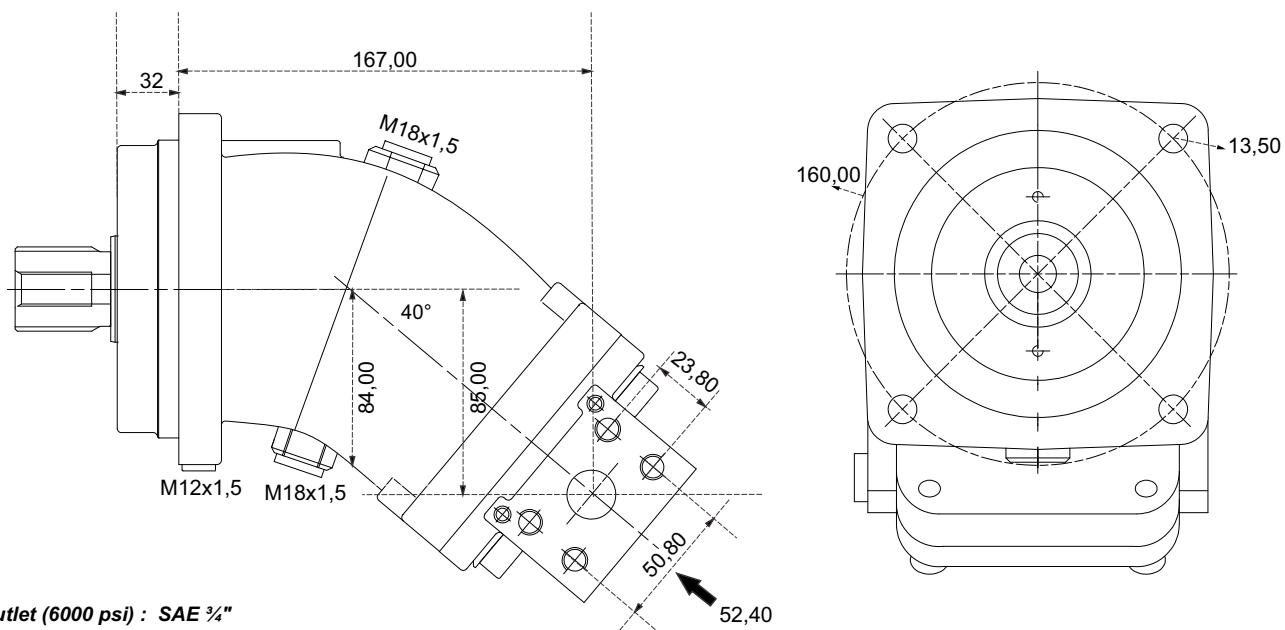
**S1**

Splined shaft DIN 5480
W30x2x14x9g

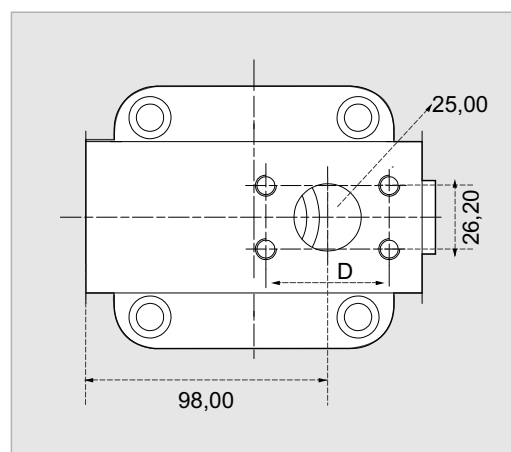
**K2**

Parallel keyed shaft
DIN 6885, As8x7x40

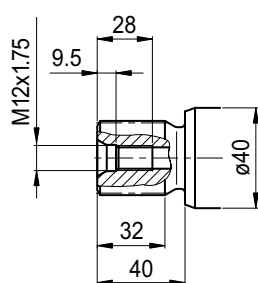




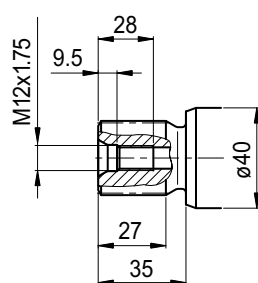
x 1000 rpm	50,00 cc
x 1500 rpm	75,00 cc
Max. Continuous Pump Speed	2300 rpm
Max. Continuous Pressure	400 bar
Max. Peak Pressure	450 bar
Max. Torque at 350 bar	280 Nm
Max. Flow	115,00 l/min.
Min. Pump Temperature	-25 °C
Max. Pump Temperature	110 °C
Weight without accessories	17,50 kg
Weight with accessories	18,00 kg
Rotation	CW-CCW

**S1**

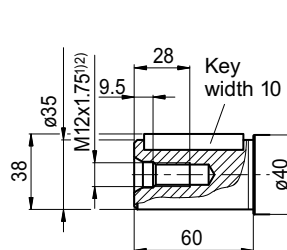
Splined shaft DIN 5480
W35x2x16x9g

**S2**

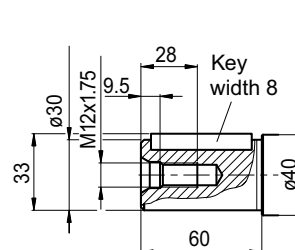
Splined shaft DIN 5480
W30x2x14x9g

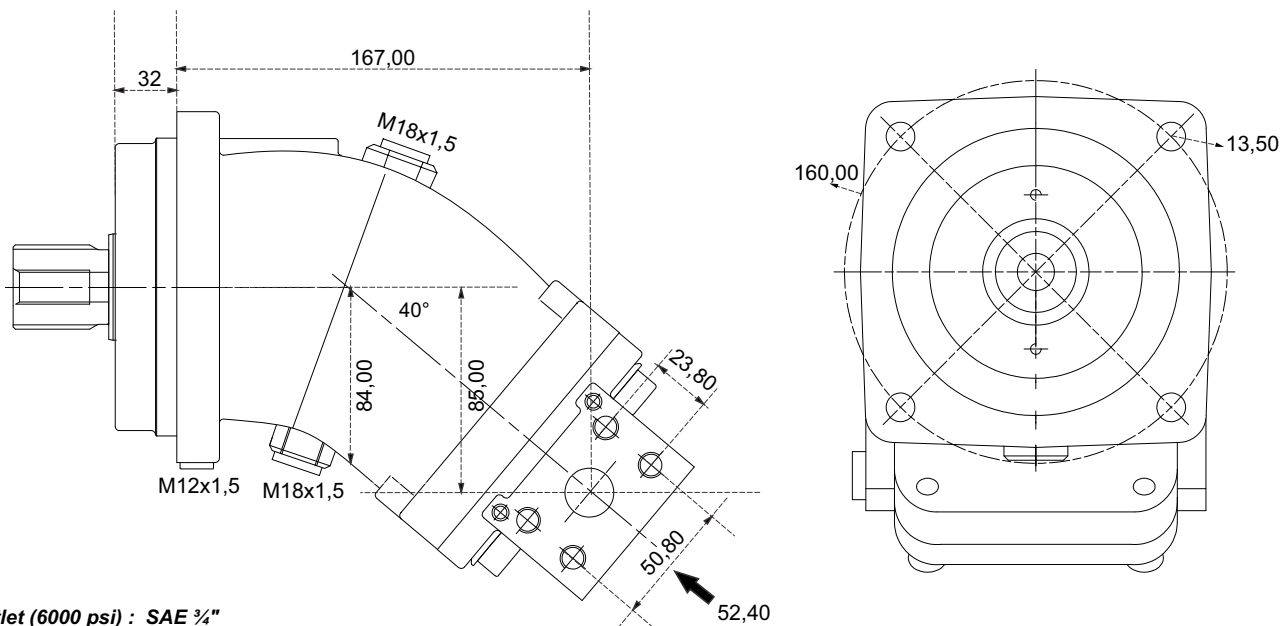
**K1**

Parallel keyed shaft
DIN 6885, As10x8x50

**K2**

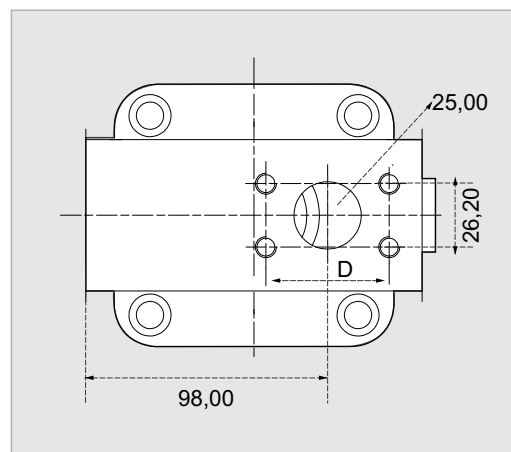
Parallel keyed shaft
DIN 6885, As8x7x50





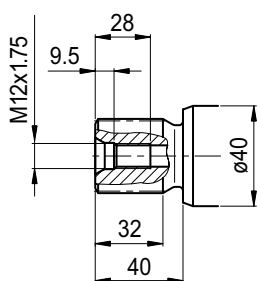
Outlet (6000 psi) : SAE 3/4"
Inlet (3000 psi) : SAE 1"

x 1000 rpm	56,40 cc
x 1500 rpm	84,60 cc
Max. Continuous Pump Speed	2300 rpm
Max. Continuous Pressure	400 bar
Max. Peak Pressure	450 bar
Max. Torque at 350 bar	320 Nm
Max. Flow	129,70 l/min.
Min. Pump Temperature	-25 °C
Max. Pump Temperature	110 °C
Weight without accessories	18,00 kg
Weight with accessories	18,50 kg
Rotation	CW-CCW



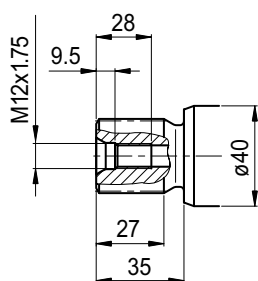
S1

Splined shaft DIN 5480
W35x2x16x9g



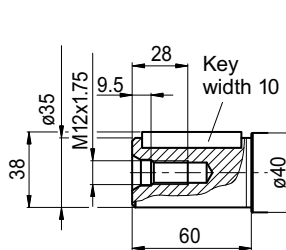
S2

Splined shaft DIN 5480
W30x2x14x9g



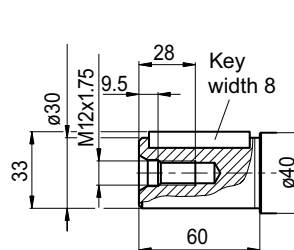
K1

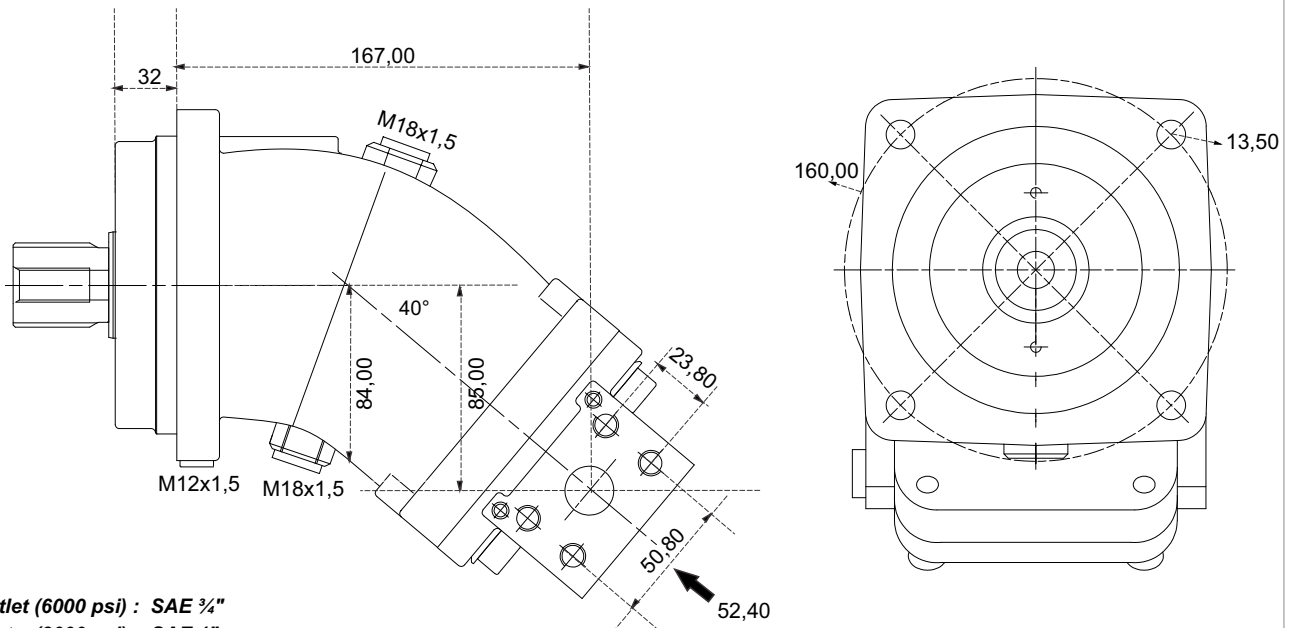
Parallel keyed shaft
DIN 6885, As10x8x50



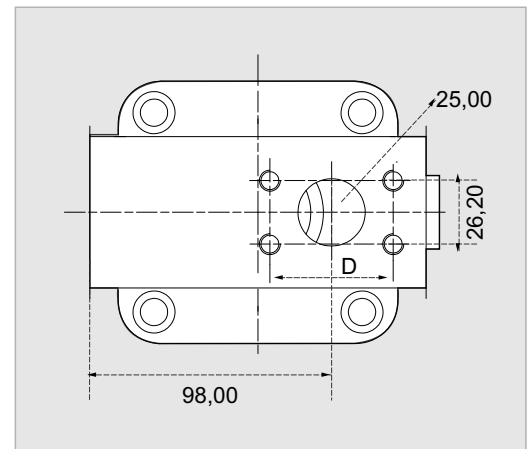
K2

Parallel keyed shaft
DIN 6885, As8x7x50



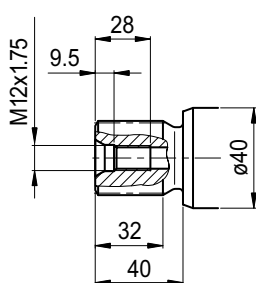


x 1000 rpm	63,00 cc
x 1500 rpm	94,50 cc
Max. Continuous Pump Speed	2300 rpm
Max. Continuous Pressure	400 bar
Max. Peak Pressure	450 bar
Max. Torque at 350 bar	350 Nm
Max. Flow	144,90 l/min.
Min. Pump Temperature	-25 °C
Max. Pump Temperature	110 °C
Weight without accessories	18,00 kg
Weight with accessories	18,50 kg
Rotation	CW-CCW



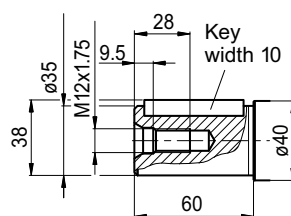
S1

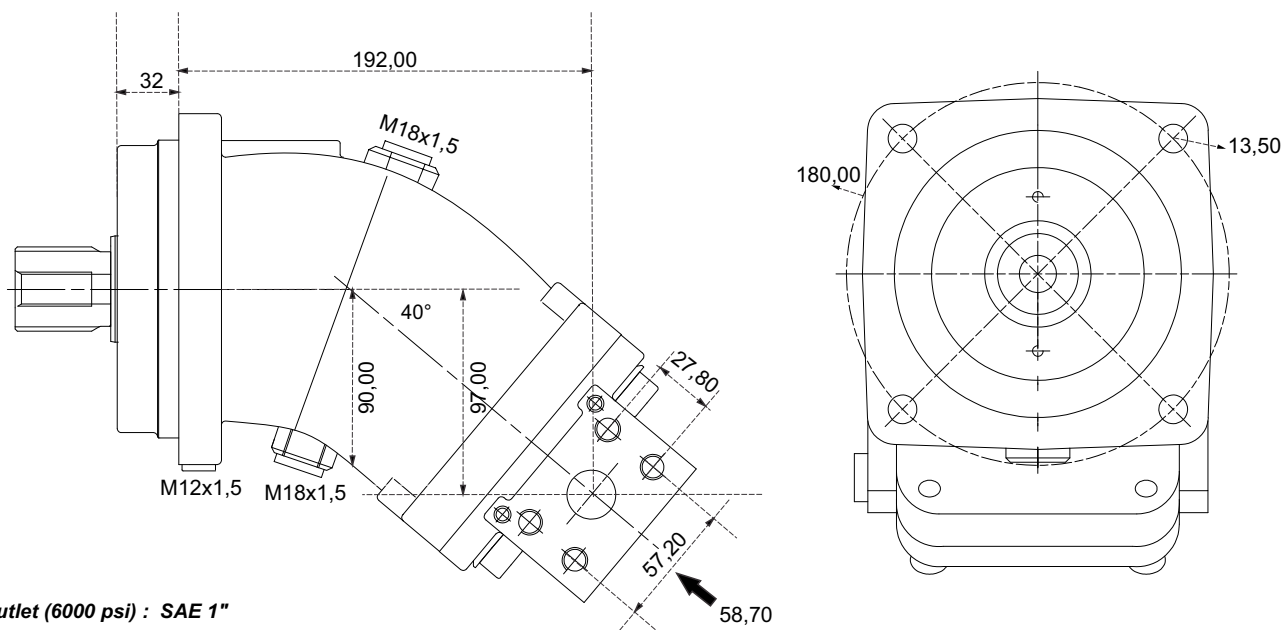
Splined shaft DIN 5480
W35x2x16x9g



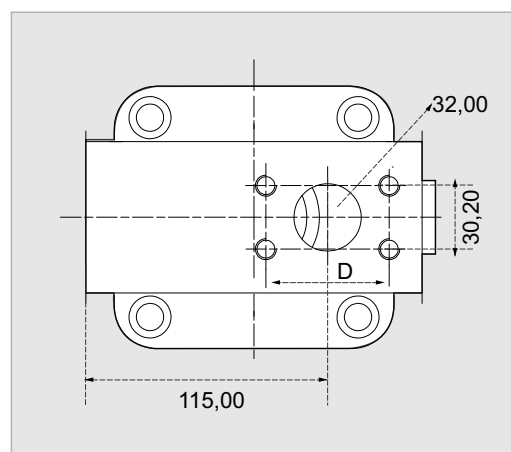
K1

Parallel keyed shaft
DIN 6885, As10x8x50

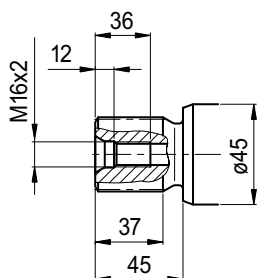




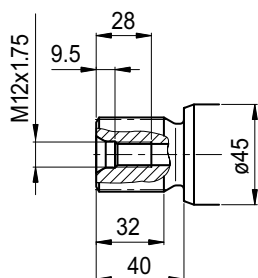
x 1000 rpm	80,00 cc
x 1500 rpm	120,00 cc
Max. Continuous Pump Speed	2300 rpm
Max. Continuous Pressure	400 bar
Max. Peak Pressure	450 bar
Max. Torque at 350 bar	445 Nm
Max. Flow	184,00 l/min.
Min. Pump Temperature	-25 °C
Max. Pump Temperature	110 °C
Weight without accessories	22,00 kg
Weight with accessories	22,50 kg
Rotation	CW-CCW

**S1**

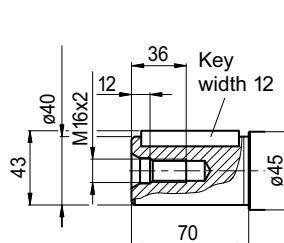
Splined shaft DIN 5480
W40x2x18x9g

**S2**

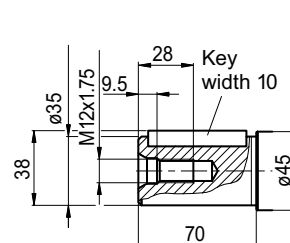
Splined shaft DIN 5480
W35x2x16x9g

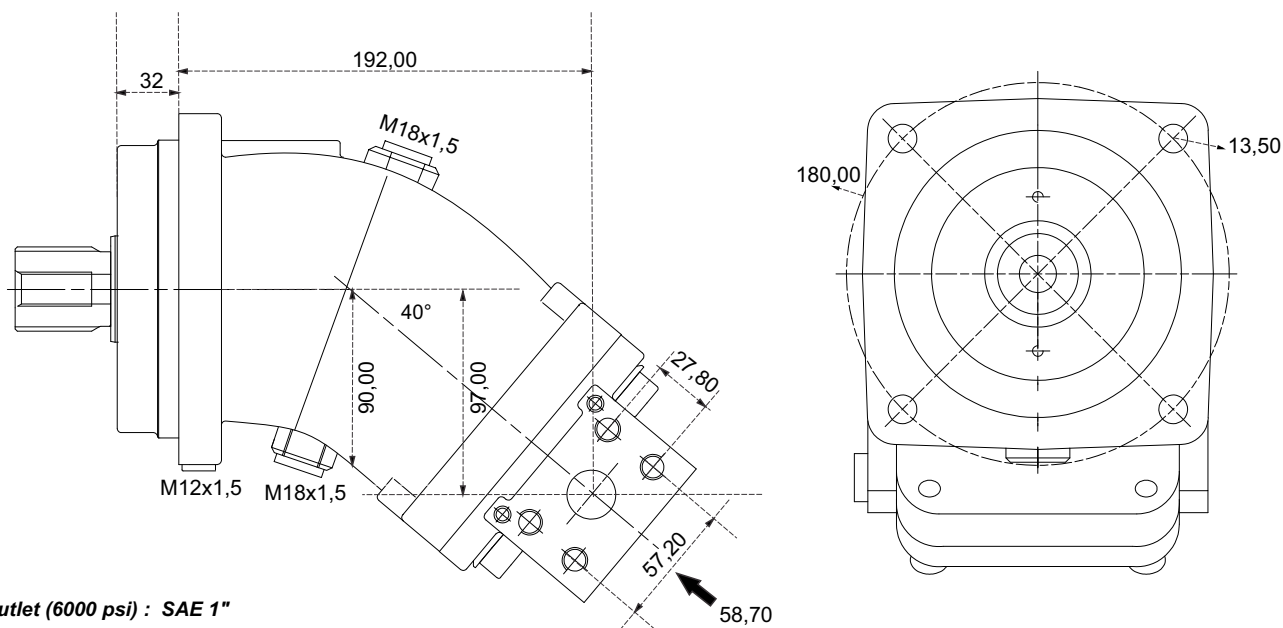
**K1**

Parallel keyed shaft
DIN 6885, As12x8x56

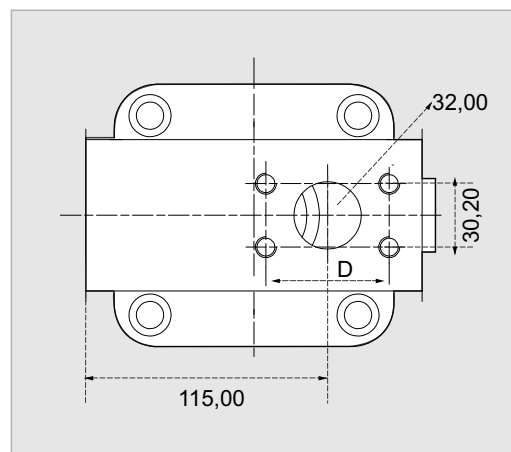
**K2**

Parallel keyed shaft
DIN 6885, As10x8x56

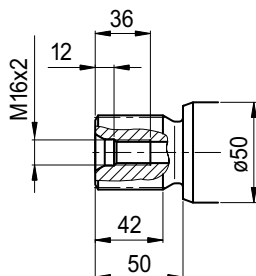




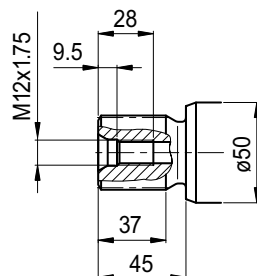
x 1000 rpm	108,40 cc
x 1500 rpm	162,60 cc
Max. Continuous Pump Speed	2000 rpm
Max. Continuous Pressure	400 bar
Max. Peak Pressure	450 bar
Max. Torque at 350 bar	600 Nm
Max. Flow	216,00 l/min.
Min. Pump Temperature	-25 °C
Max. Pump Temperature	110 °C
Weight without accessories	22,50 kg
Weight with accessories	23,00 kg
Rotation	CW-CCW

**S1**

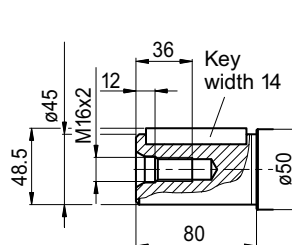
Splined shaft DIN 5480
W45x2x21x9g

**S2**

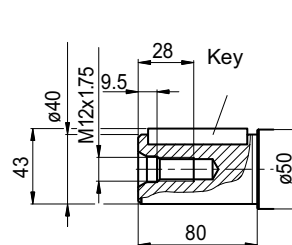
Splined shaft DIN 5480
W40x2x18x9g

**K1**

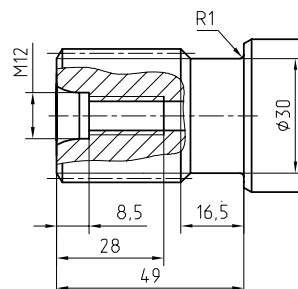
Parallel keyed shaft
DIN 6885, As14x9x63

**K2**

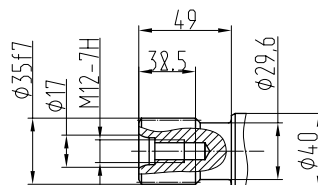
Parallel keyed shaft
DIN 6885, As12x8x63



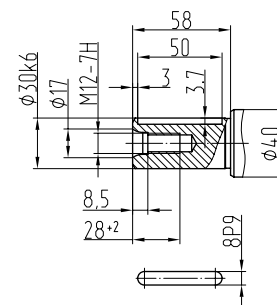
Splined shaft
35xf7x2x9g GOST 6033-80



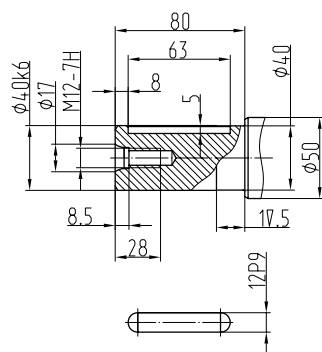
35xf7x2x9g ГOCT6033



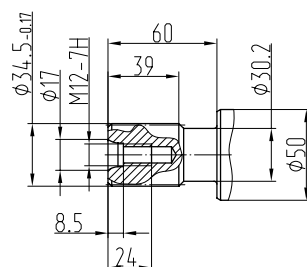
Parallel keyed shafts



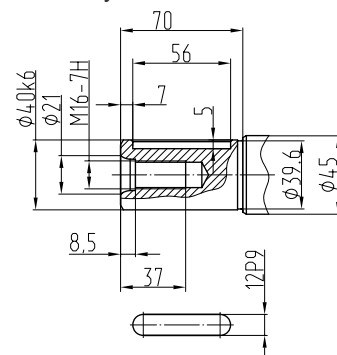
Parallel keyed shafts



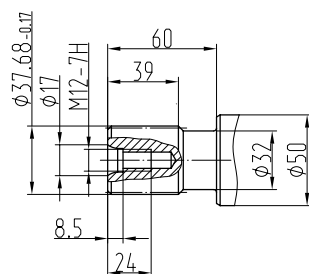
1 3/8" 21T 16/32DP ANSI B92



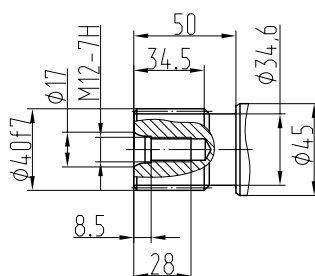
Parallel keyed shafts



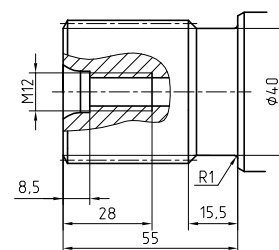
1 1/2" 23T 16/32DP ANSI B92



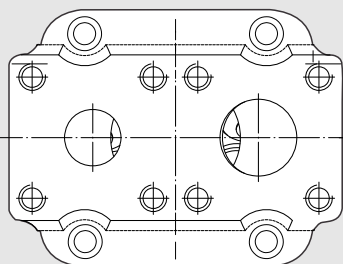
40xf7x2x9g GOST6033



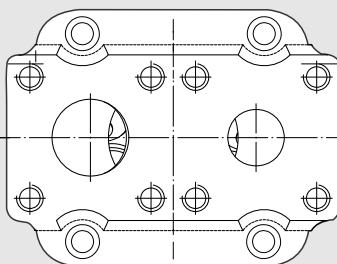
45xh8x2x9g GOST 6033-80



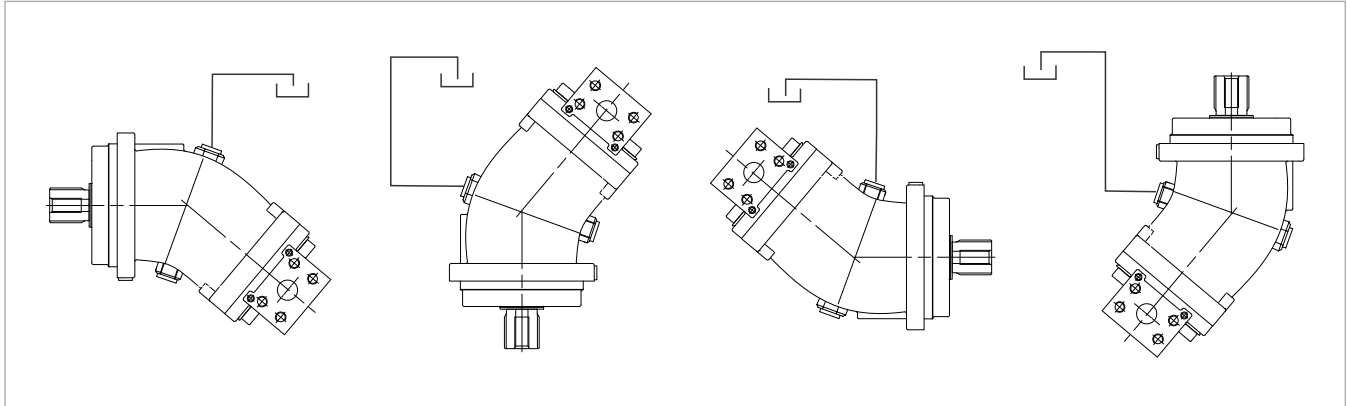
Special Cover / Rotation : LEFT



Special Cover / Rotation : RIGHT



The G2P Pumps can be operate any position.
See following examples.



OIL SUPPLY

Oil and supply line should be clean, and the supply line is airtight.

SUCTION LINE

Connect the suction line, tighten the suction connection bolts in diametric pairs.
Connect the pressure line.

REPAIR

We offers a comprehensive range of services for the repair of our Bent Axis Pumps.

Repairs to the G2P Bent Axis Pump may only be performed by authorized, skilled and instructed personnel.
Only use original and pre-installed our G2P spare parts from supplied to Manufacturer..

Tested and pre-installed G2P pumps successful repair requiring only little time.

SPARE PARTS

The spare parts list and the G2P pump order specific.

When ordering spare parts, quote the material and complete Ordering code number of the G2P Bent Axis Pump as well as the right numbers of the spare parts.

RISK OF DAMAGE!

Do not touch the drive shaft of the G2P Bent Axis Pump

Do not touch sensor, valves and fittings

Do not touch sealing surfaces.

DIMENSIONS & WEIGHTS

Weight												
- Without accessories	kg	6,00	6,00	11,50	11,50	11,50	17,50	18,00	18,00	22,00	22,50	
- With accessories	kg	6,20	6,20	11,80	11,90	11,90	18,00	18,50	18,50	22,50	23,00	

Address all questions regarding spare parts to your responsible Our Service Partner or the technical service department of the manufacture's plant / factory for the G2P Bent Axis Pumps.

Fevziçakmak mh. 10505 Sk.
No: 23/1 Karatay / KONYA

Phone : **+90 (551) 148 26 88**

Fax : +90 (551) 148 26 88

DIN

DIN 5462 / ISO 14
8x32x35
8x32x36
DIN 6885



G2PA



G1PA



G2PM

Piston Pumps

Piston Motors

ISO

ISO 3019-2 (4 BOLTS)
DIN 5480 - W25,30,35,40,45
DIN 6885 - Ø20,25,30,35,40,45



G2P



G2M

SAE

SAE B2 C4 - SAE D
SAE J498b
SAE J 744



G2SE



G2EM

M2

Fixed Plug-in

DIN 5480 / ISO 3019-2
W30 - W35 - W40
M21 - M22 - M23



G2MS

DIN ISO 14
8x32x36



GPA

P2 Connection M8x125
Woodruff key 3x6,5 NF E
27-653 NF R 124-04
(2 BOLTS)



GPH

HYDROLINA HYDRAULICS, LTD.

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G2P

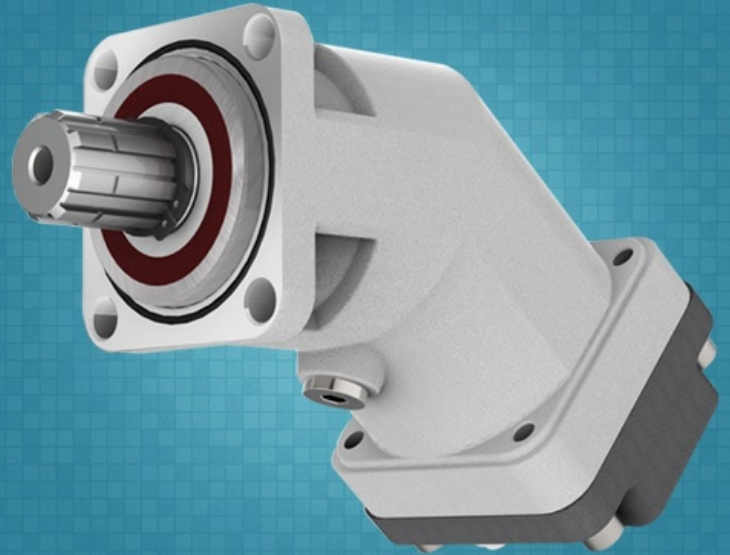


HOME CORPORATE PRODUCT LINE PUMPS MOTORS INDUSTRIAL & MOBILE HYDRAULIC LOCATIONS ENVIRONMENT CATALOGS WorldWide

G2PA

Bent Axis Piston Pumps

- Compact Design,
- Economical Conception,
- High Rotating Speeds,
- High Output Pressure.



hydrolina.com