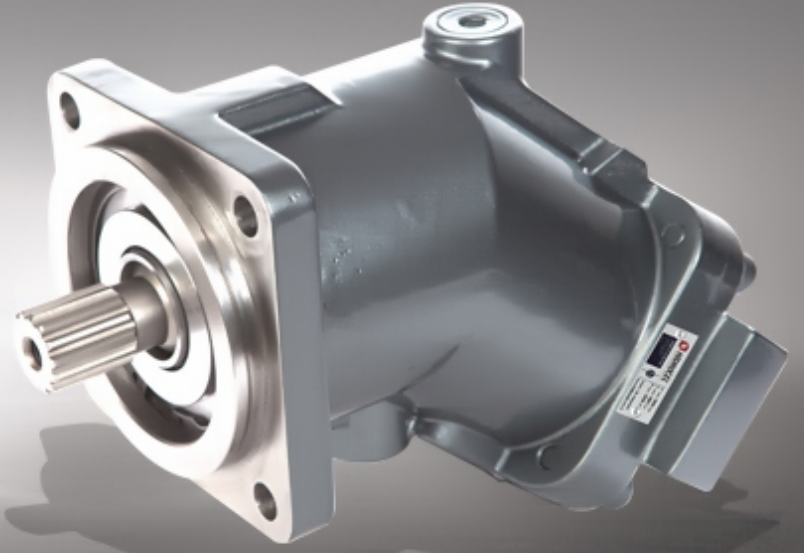


# 2PEM

## Bent Axis Piston Motor - SAE



### **2PEM Motors have the following advantages ;**

- Compact Design,
- Economical Conception,
- High Power Density,
- High Efficiency,
- High Rotating Speeds,
- From 5cc to 130cc,
- High Pressure,
- Good Starting Characteristics,
- Optimized Weight and Size,
- For Use Mobile and Stationary Applications,

### **Other Advantages of 2PEM**

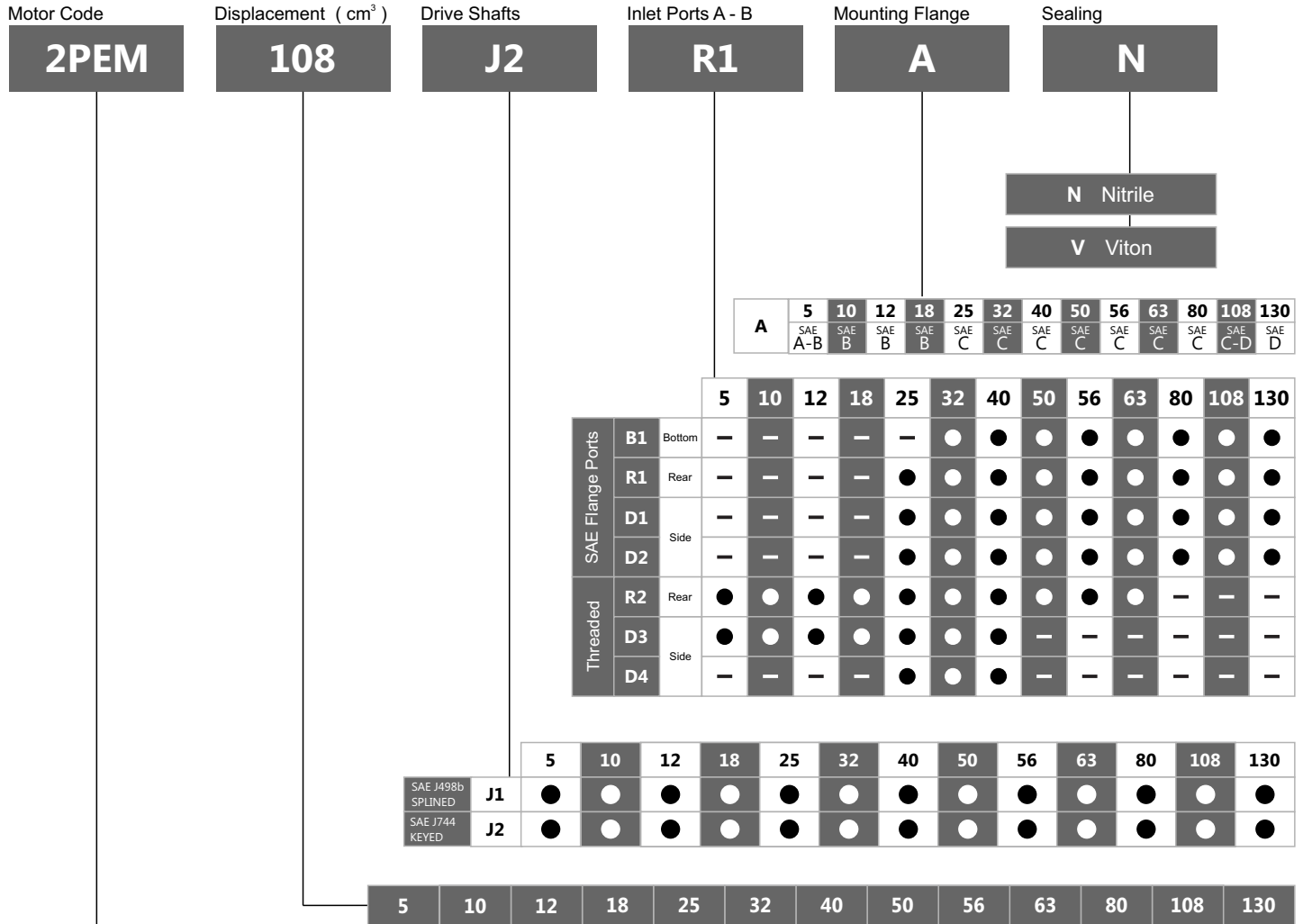
Interchangeable and Compatible with other SAE Bent Axis Motors,  
Special Designed Pistons,  
One-Piece Piston with Piston Rings,  
Compact motor design and extra durable parts,  
High Operational Reliability and High Starting Torque  
Extra Warranty with Wide Service

40° bent axis design giving high power, small overall dimensions, optimum efficiency and economic design. Flange and shaft designed for direct mounting on the equipments. The fixed displacement bent axis motors generates a hydraulic fluid flow. It is designed for use in trucks, commercial vehicles, construction type equipments and all stationary hydraulic applications. The 2PEM is a motor with rotary group in bent-axis design. 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 motor covers the whole displacement range 5 to 130 cm<sup>3</sup>/rev. The motor has been developed with modern styling and design to satisfy market demand as to designed new generation plate, extra parts and pistons with give high flow performance, high pressures with high efficiency and very small dimensions.

The motor is available both to DIN and SAE world standards and can be mounted either directly at the gear box or via a drive shaft. Other brand bent axis motors compatible and interchangeable with 2PEM bent axis motors. Refer to the data sheet and order confirmation for the technical data, operating conditions and operating limits of the bent axis piston motors.

# Ordering Code of 2PEM Motors

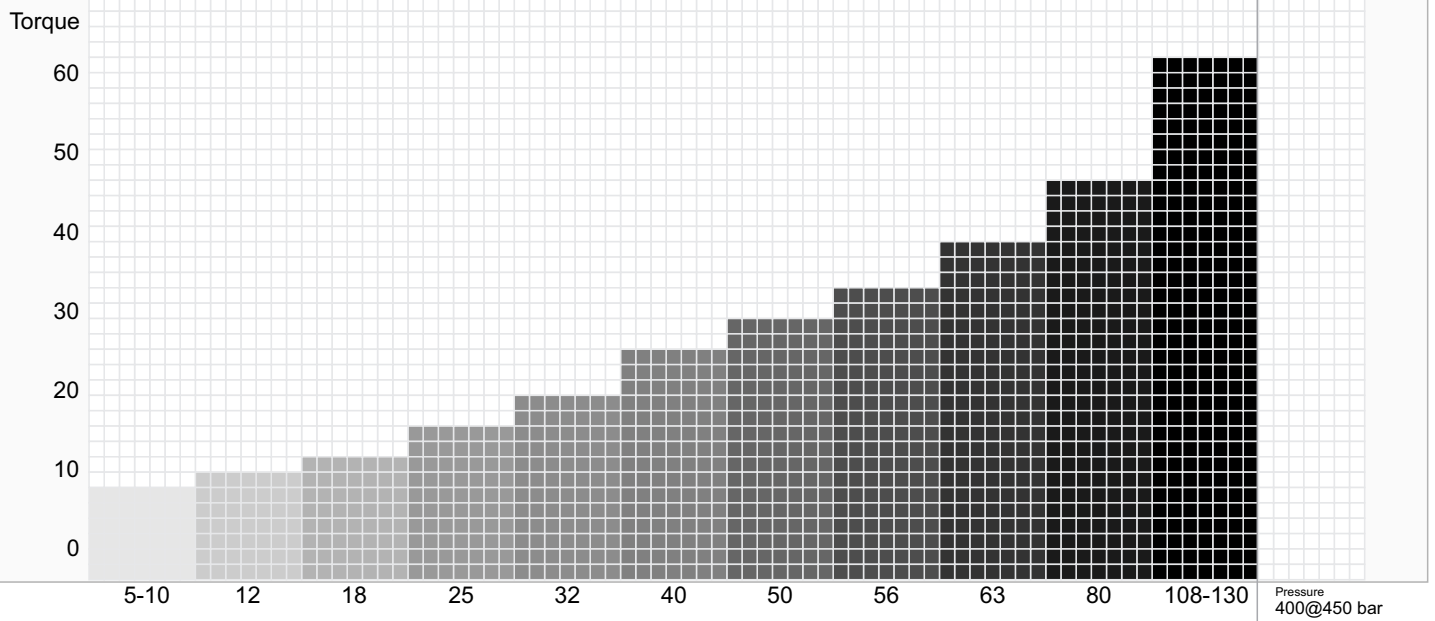


2PEM Bent Axis Piston Motor - SAE, Fixed Displacement.

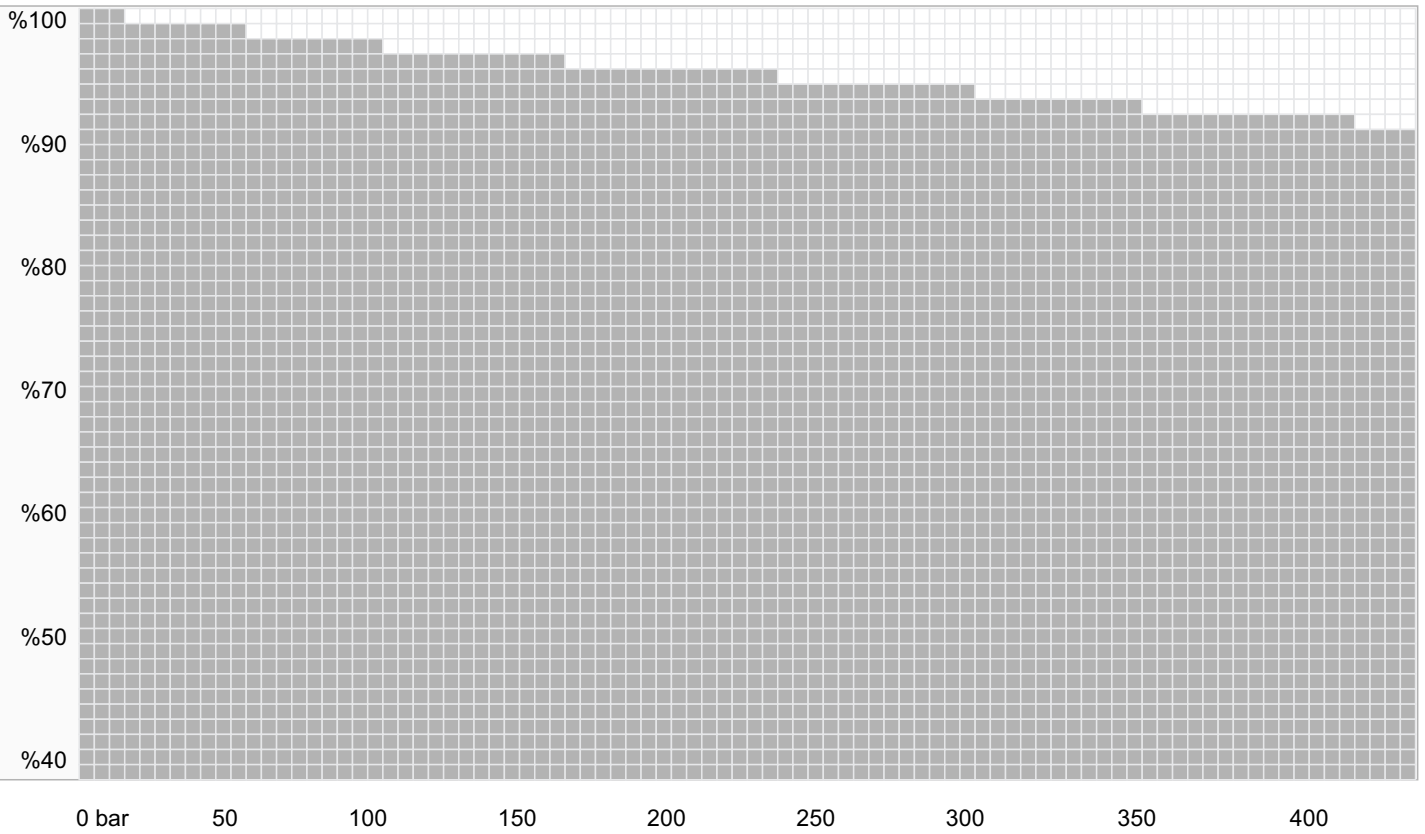


# Performance

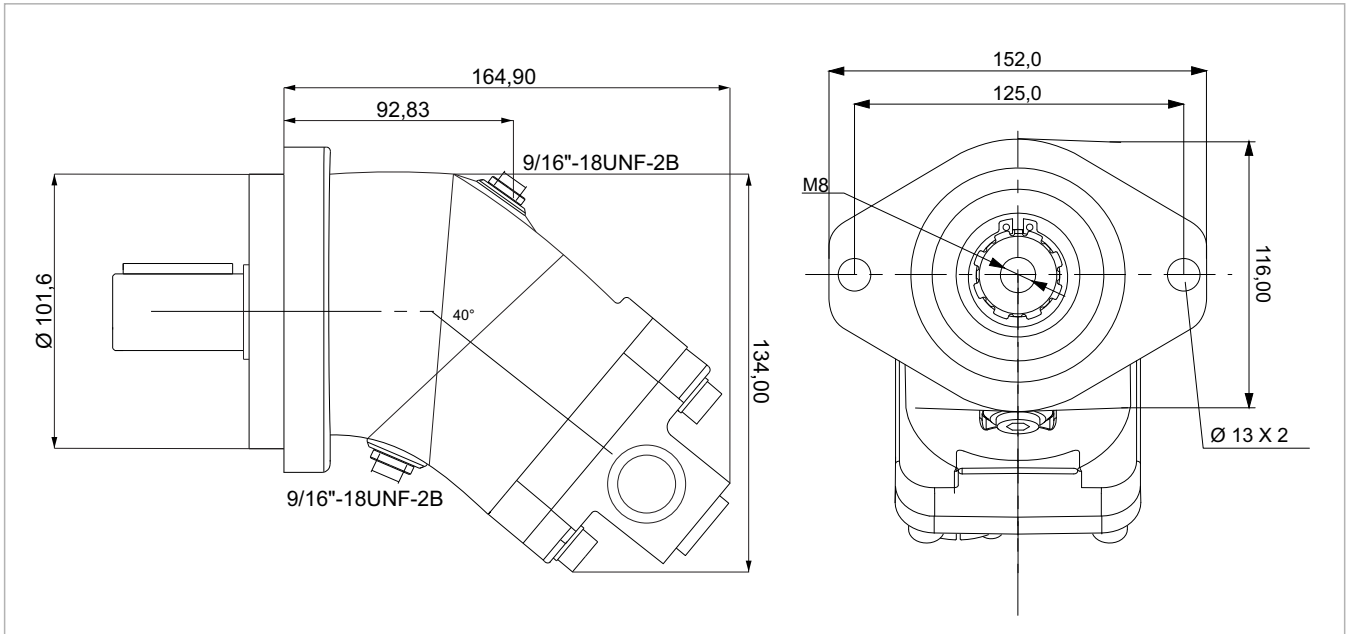
### Compare Table of Torque



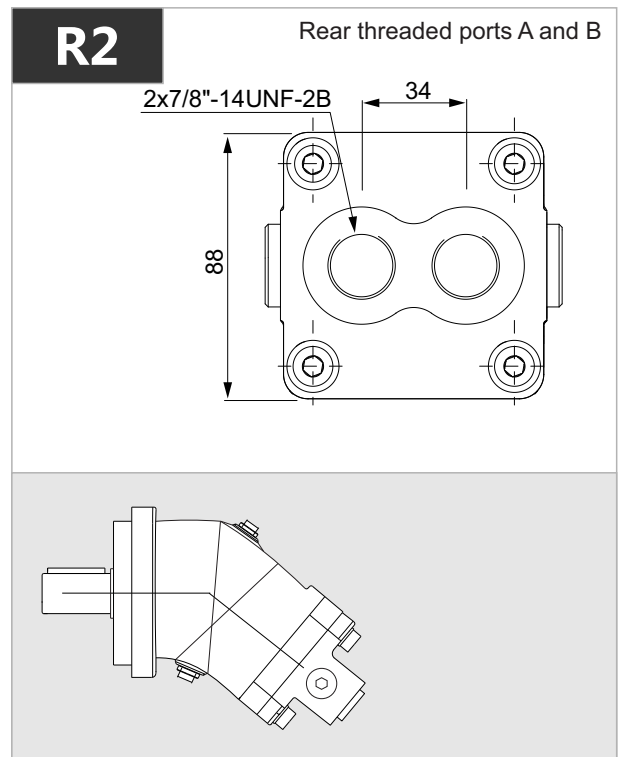
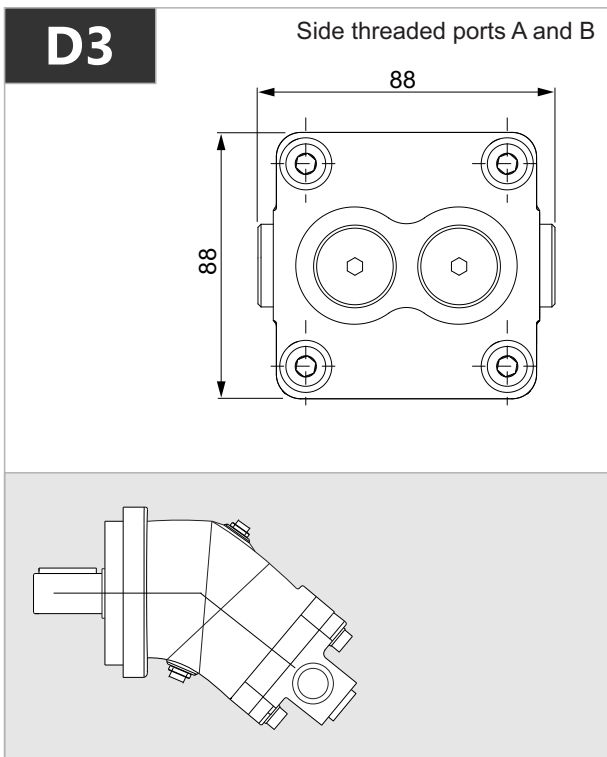
### Efficiency of 2PEM Motors



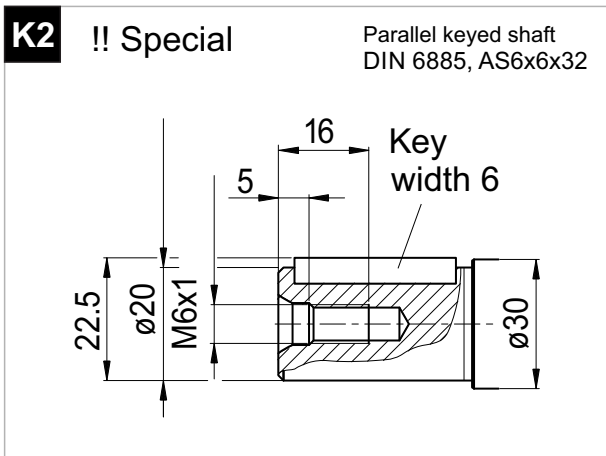
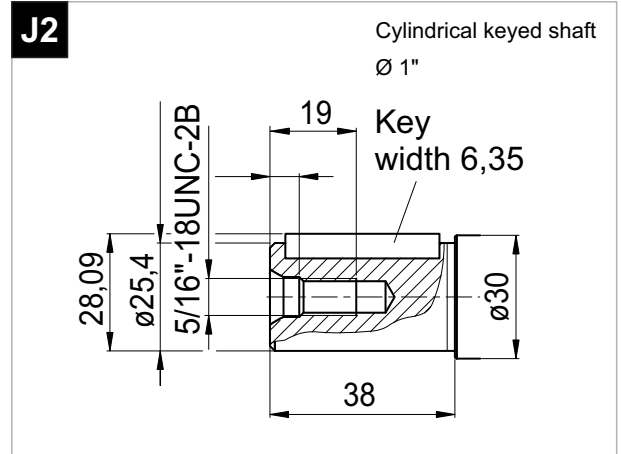
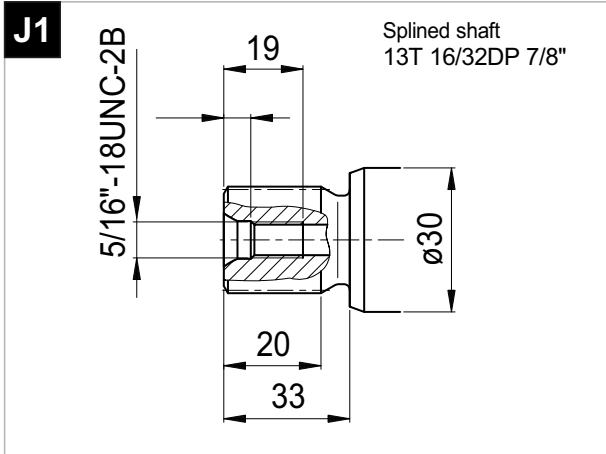
# 2PEM 5 - SAE A - 2 BOLT



x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
5,00 cc	7,50 cc	8800 rpm	9400 rpm	400 bar	450 bar	0.17 m.N/bar	62 m.N	44	6,00 kg	6,50 kg	-25°	110°



# 2PEM 5 - SAE A - 2 BOLT



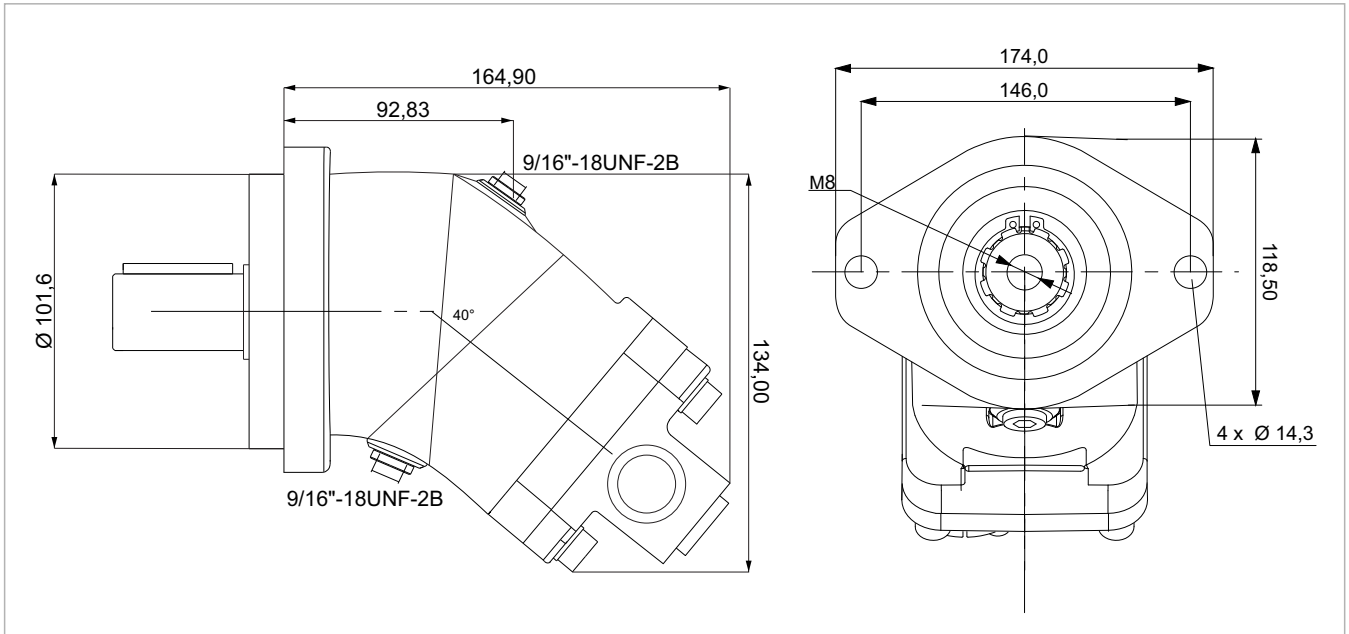
ALL SPLINED AND KEYED

SPECIAL DIMENSION

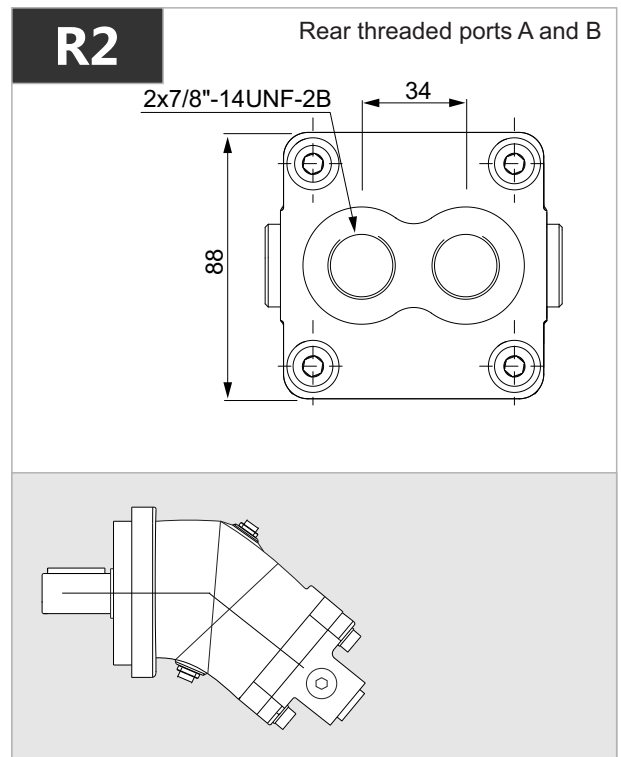
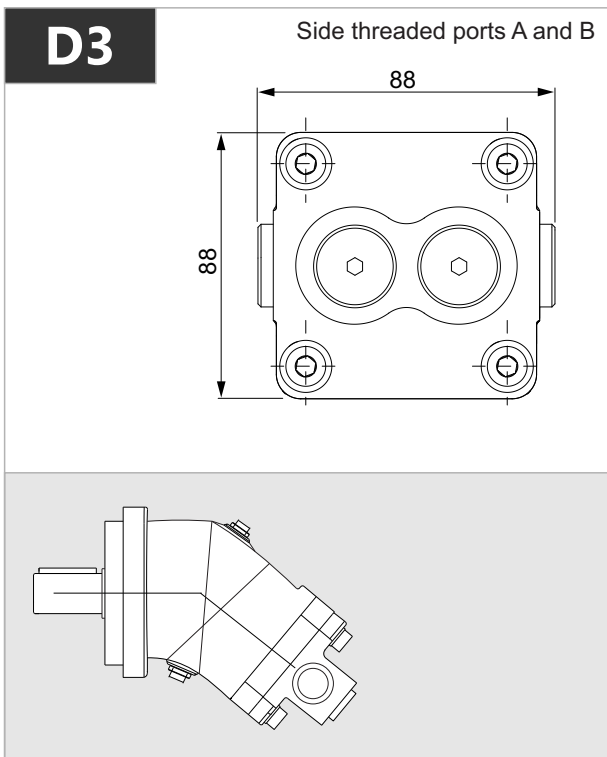
SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE  
DEPENDS ON THE COUNTRIES)

# 2PEM 5 - SAE B - 2 BOLT

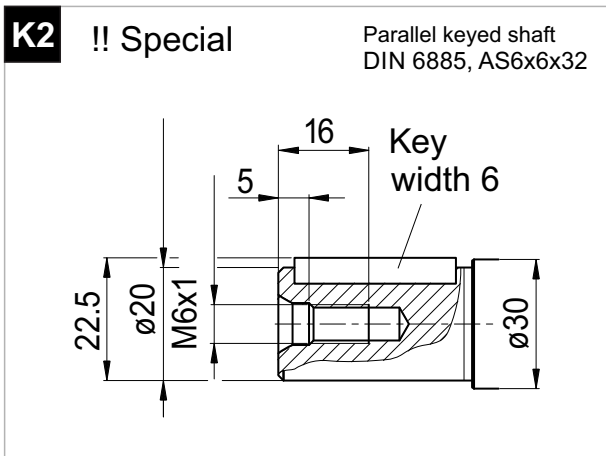
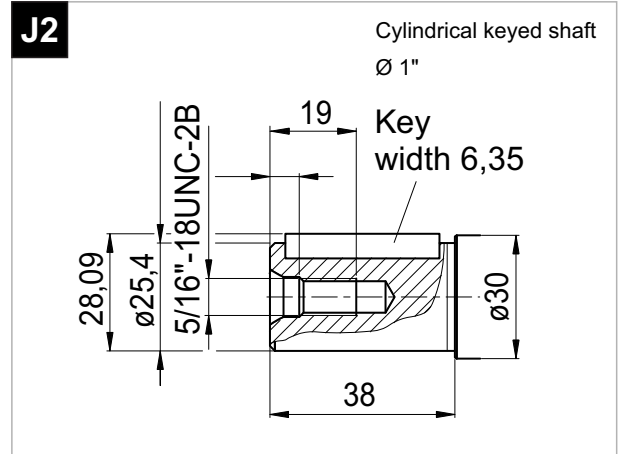
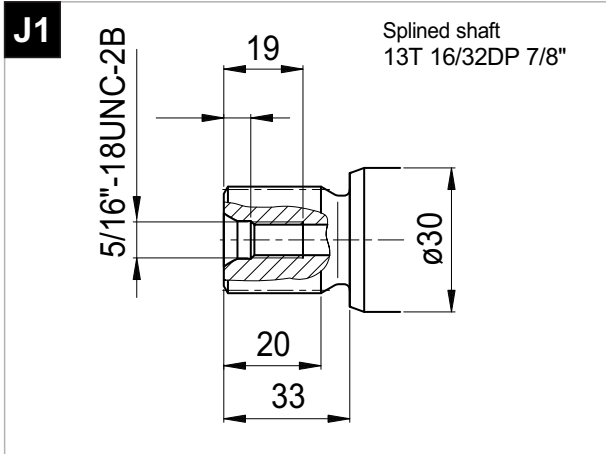


x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
5,00 cc	7,50 cc	8800 rpm	9400 rpm	400 bar	450 bar	0.17 m.N/bar	62 m.N	44	6,00 kg	6,50 kg	-25°	110°





# 2PEM 5 - SAE B - 2 BOLT



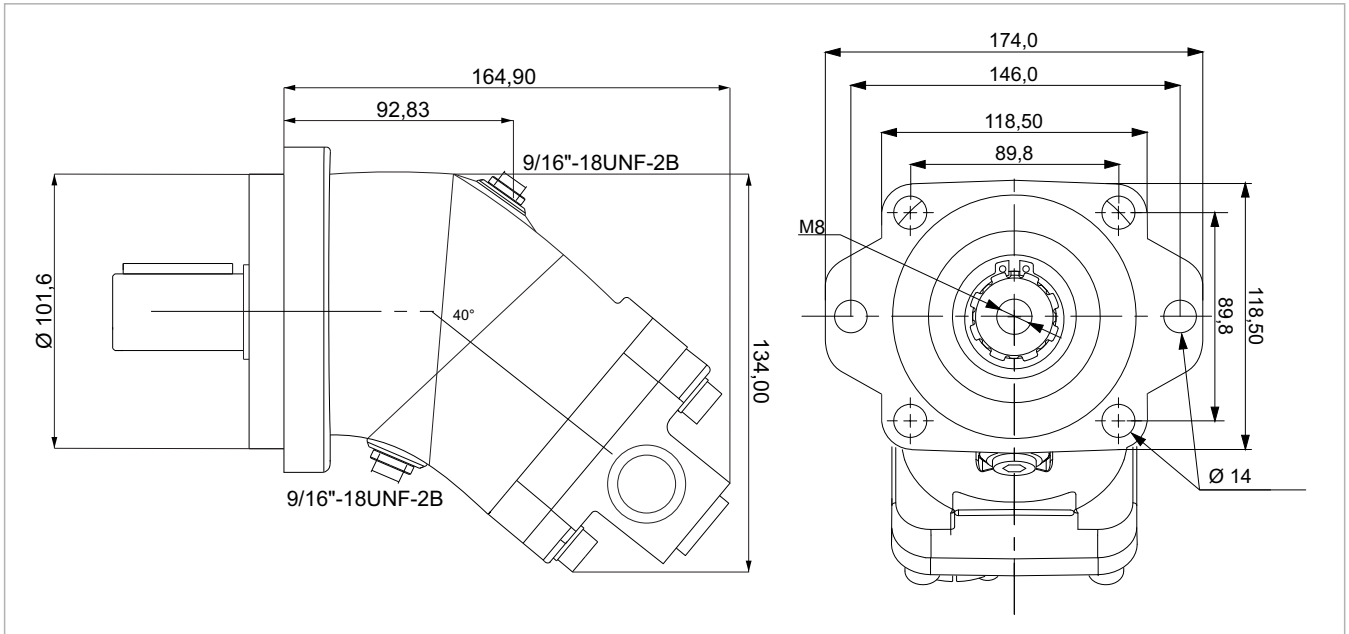
ALL SPLINED AND KEYED

SPECIAL DIMENSION

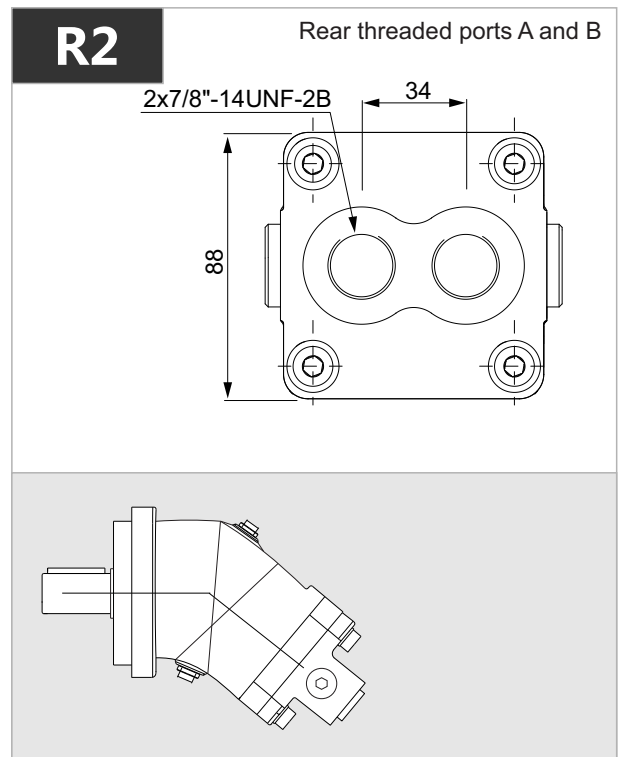
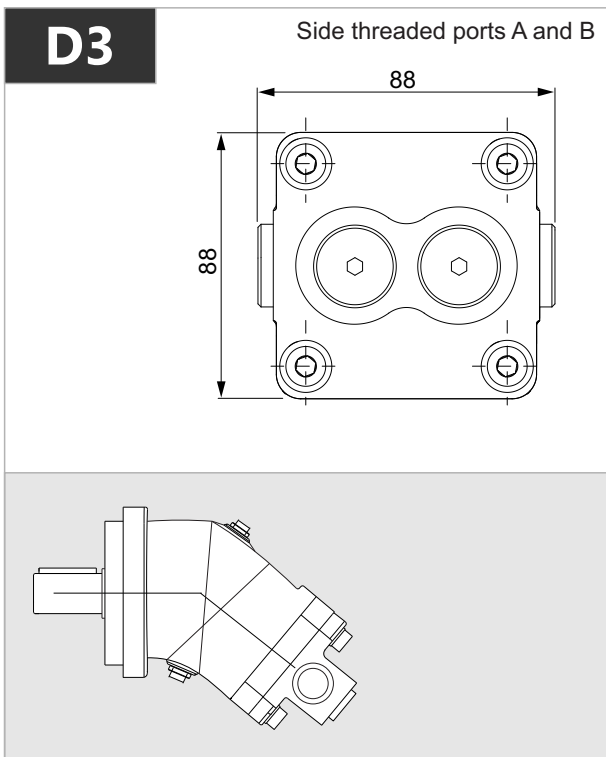
SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE  
DEPENDS ON THE COUNTRIES)

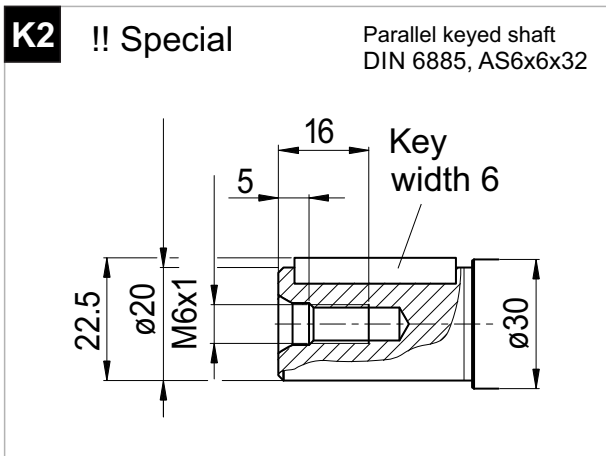
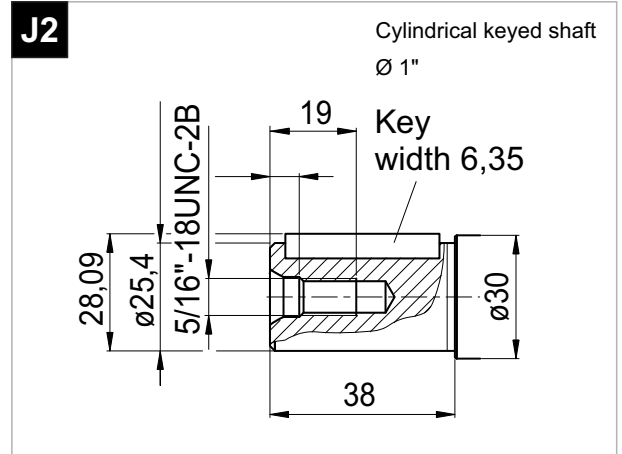
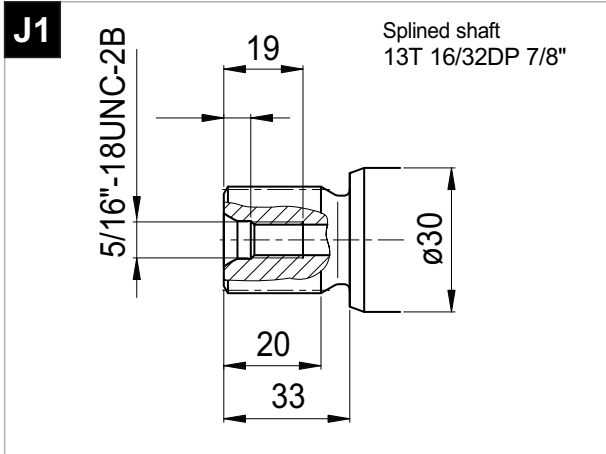
# 2PEM 5 - SAE B - 6 BOLT



x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
5,00 cc	7,50 cc	8800 rpm	9400 rpm	400 bar	450 bar	0.17 m.N/bar	62 m.N	44	6,00 kg	6,50 kg	-25°	110°



# 2PEM 5 - SAE B - 6 BOLT



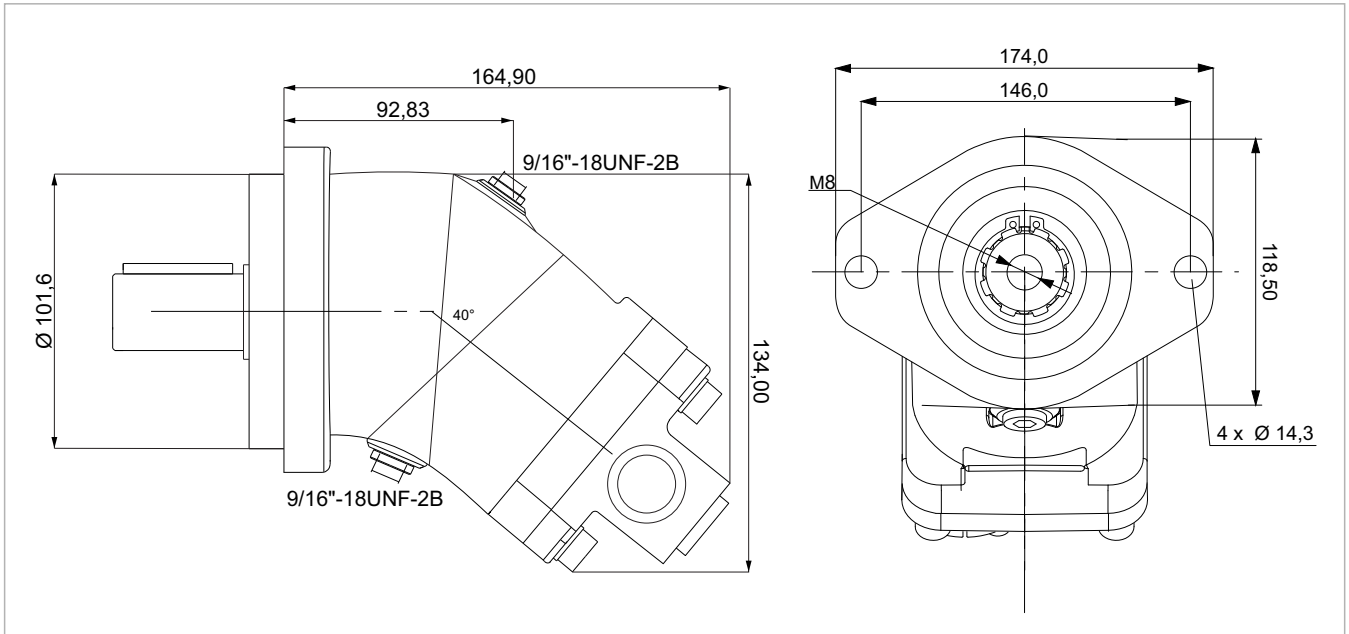
ALL SPLINED AND KEYED

SPECIAL DIMENSION

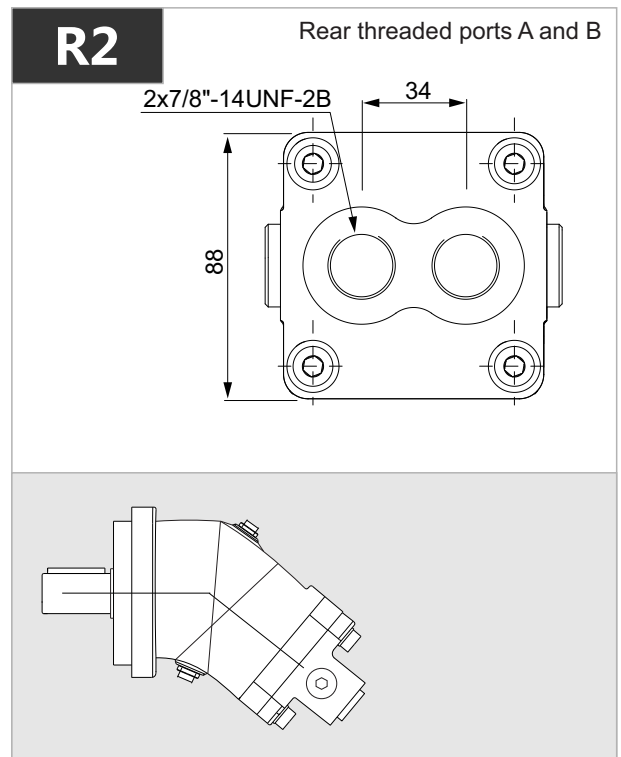
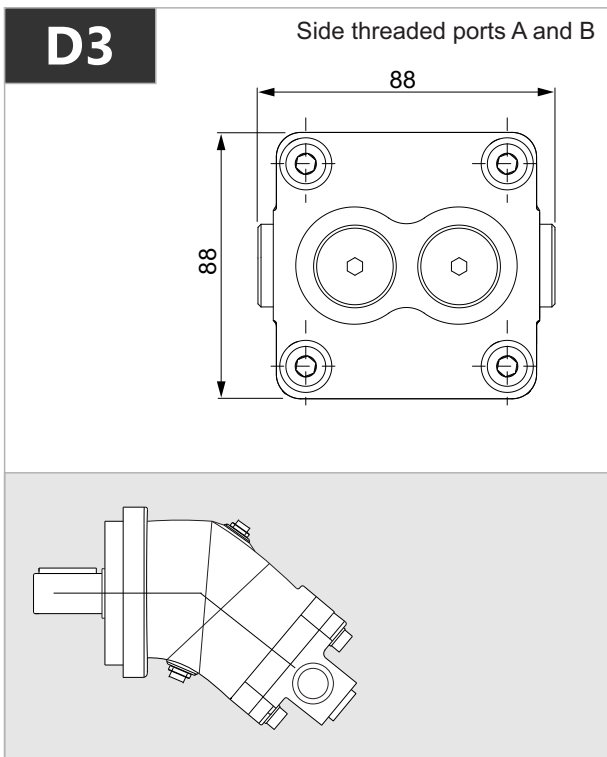
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(THE DIMENSIONS CHANGE  
DEPENDS ON THE COUNTRIES)

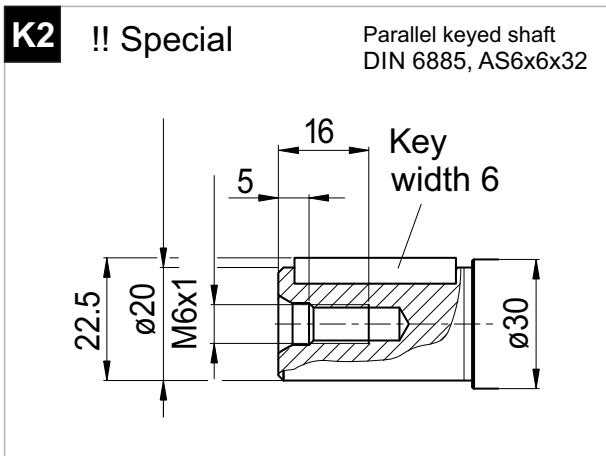
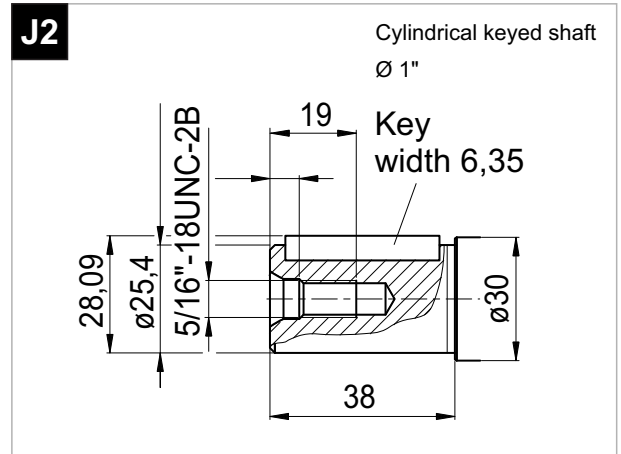
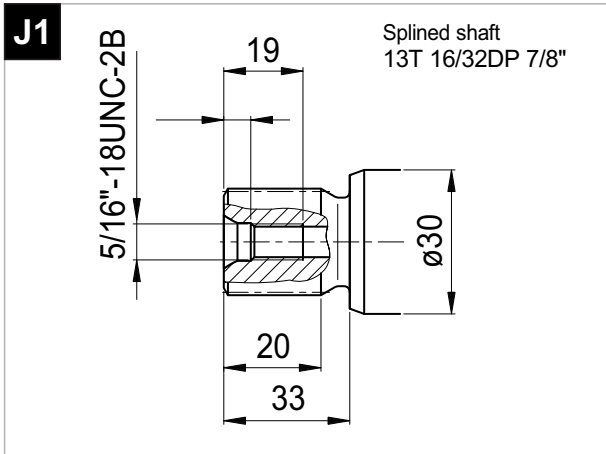
# 2PEM 10 - SAE B - 2 BOLT



x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
10,00 cc	15,00 cc	8000 rpm	8800 rpm	400 bar	450 bar	0.17 m.N/bar	64 m.N	80	6,50 kg	7,00 kg	-25°	110°



# 2PEM 10 - SAE B - 2 BOLT



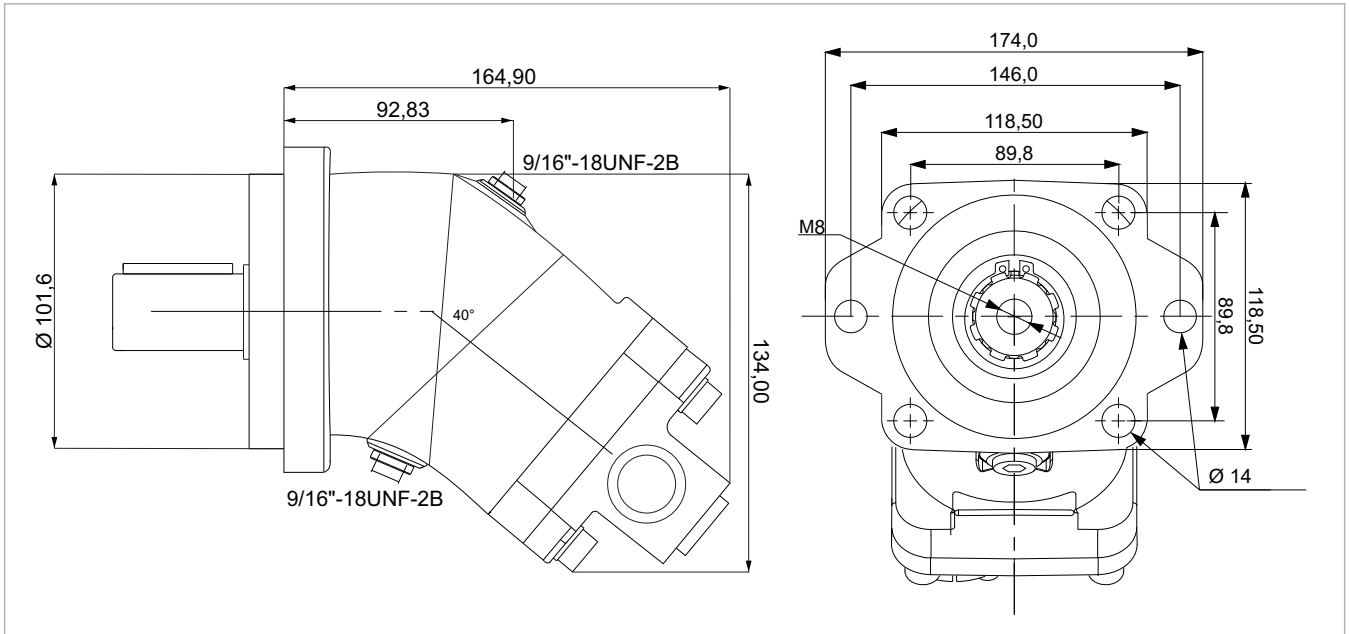
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SPECIAL DIMENSION

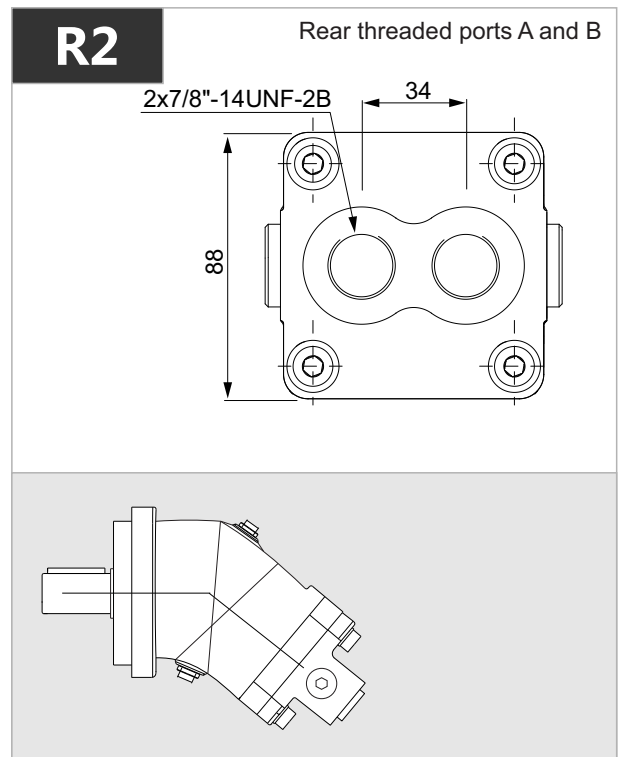
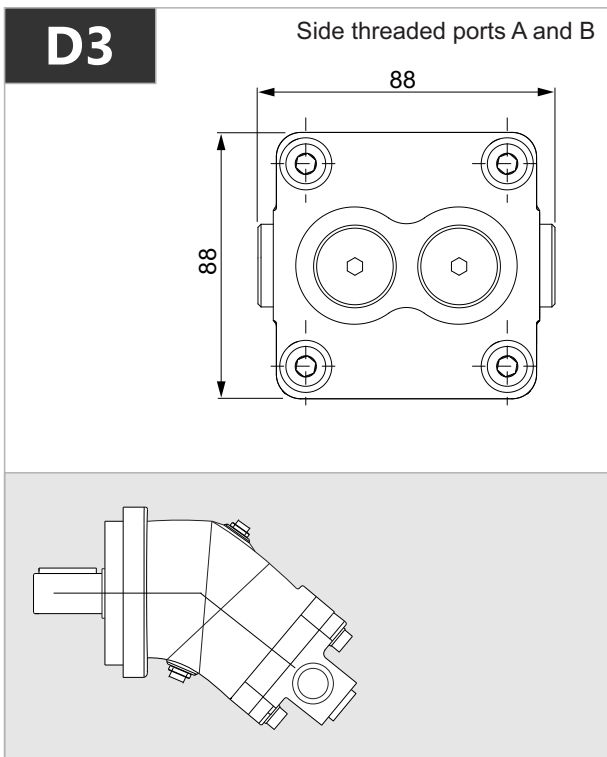
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(THE DIMENSIONS CHANGE  
DEPENDS ON THE COUNTRIES)

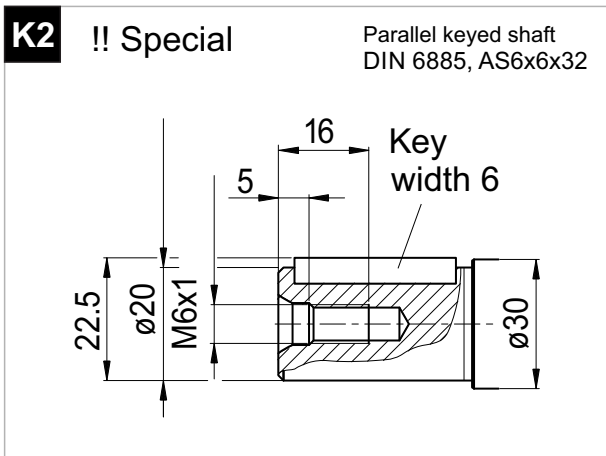
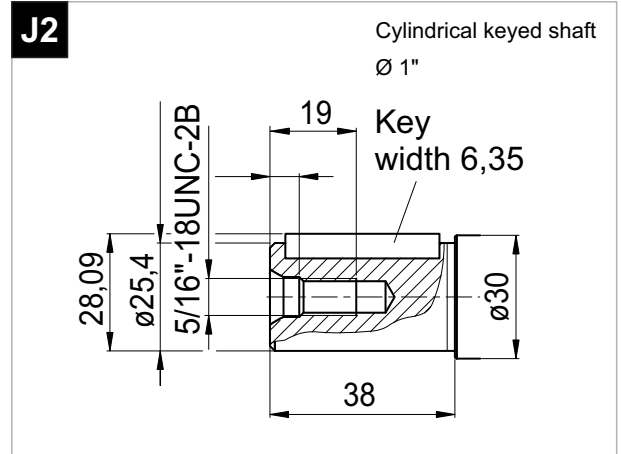
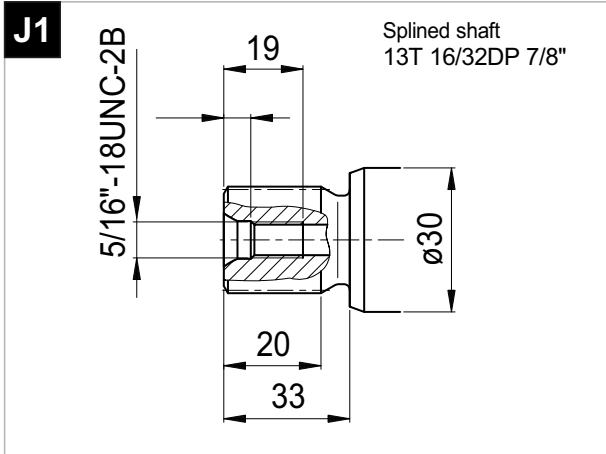
# 2PEM 10 - SAE B - 6 BOLT



x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
10,00 cc	15,00 cc	8000 rpm	8800 rpm	400 bar	450 bar	0.17 m.N/bar	64 m.N	80	6,50 kg	7,00 kg	-25°	110°



# 2PEM 10 - SAE B - 6 BOLT



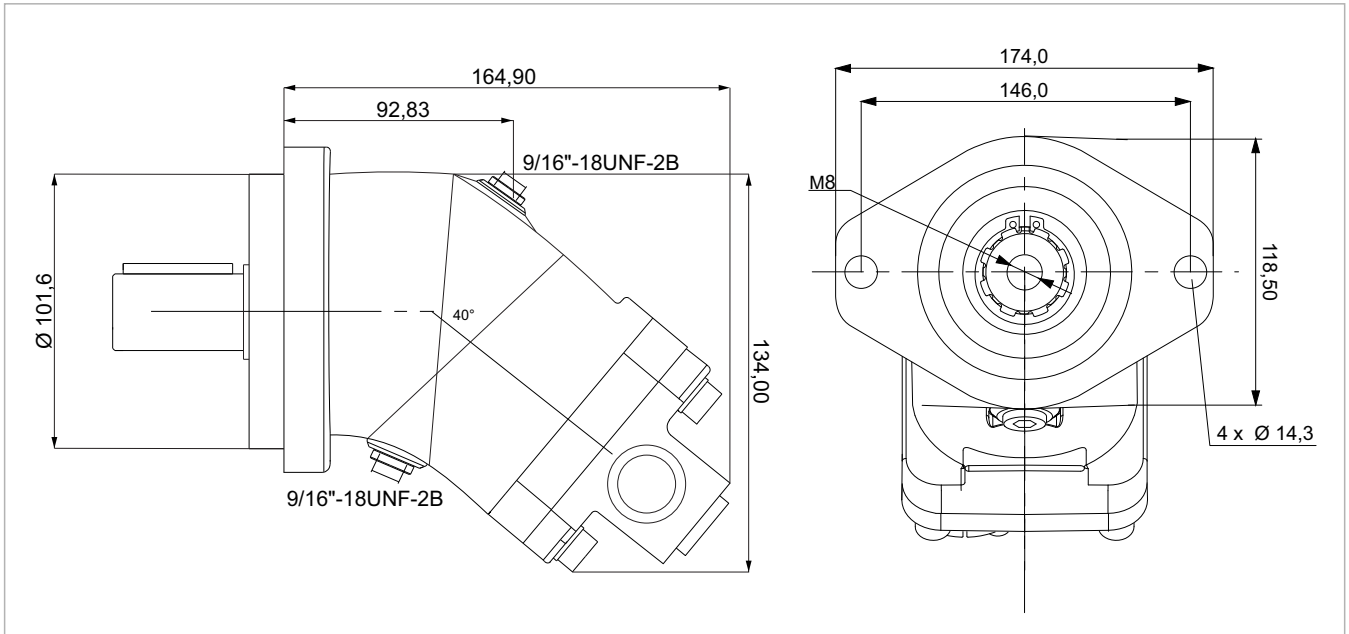
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SPECIAL DIMENSION

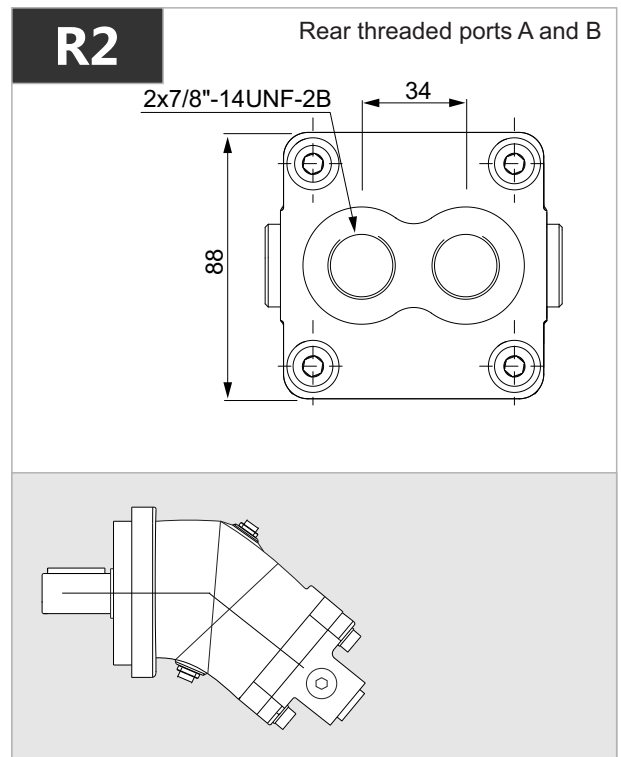
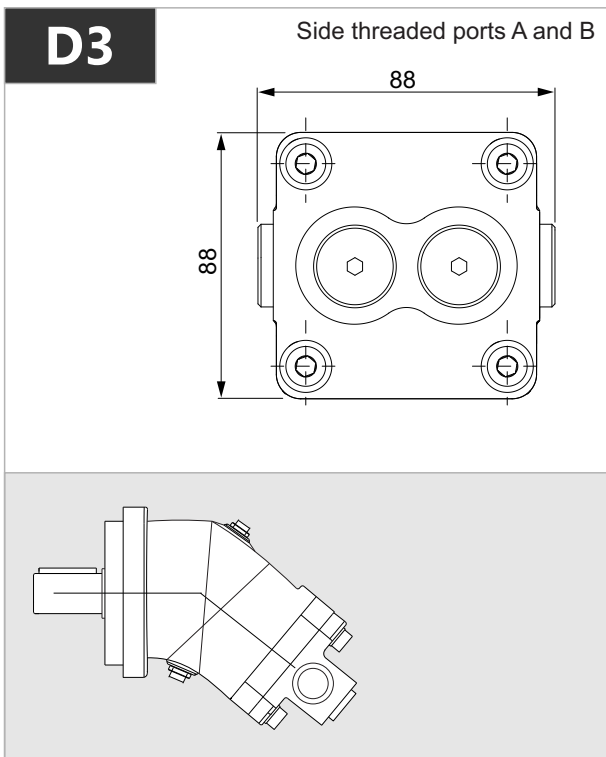
SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE  
DEPENDS ON THE COUNTRIES)

# 2PEM 12 - SAE B - 2 BOLT

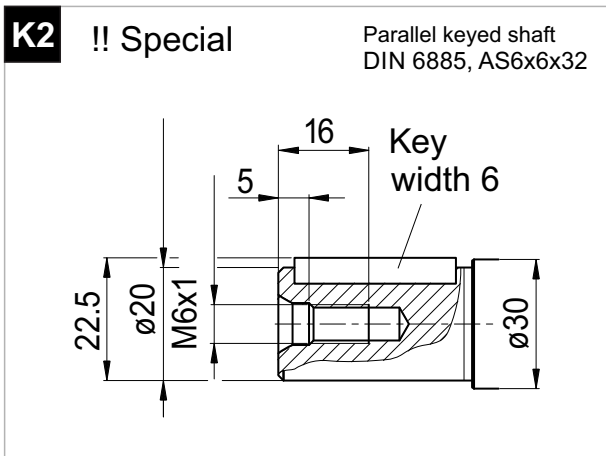
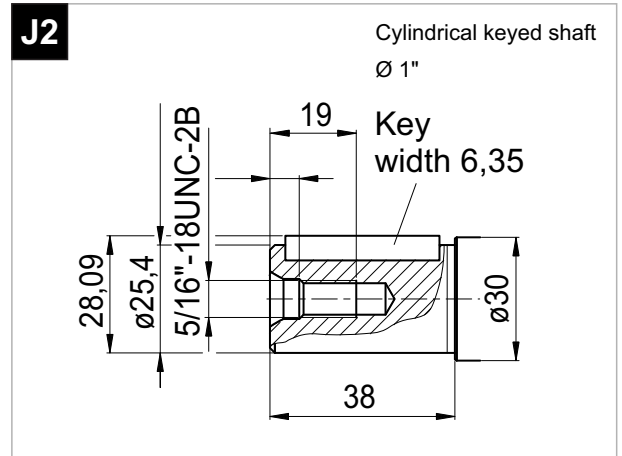
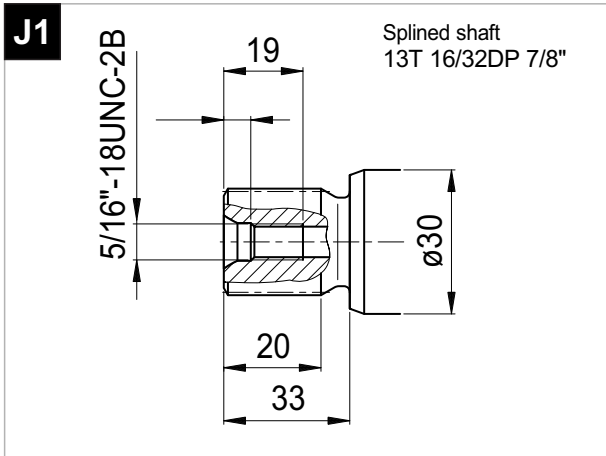


x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
12,00 cc	18,00 cc	8000 rpm	8800 rpm	400 bar	450 bar	0.18 m.N/bar	66 m.N	96	6,50 kg	7,00 kg	-25°	110°





# 2PEM 12 - SAE B - 2 BOLT



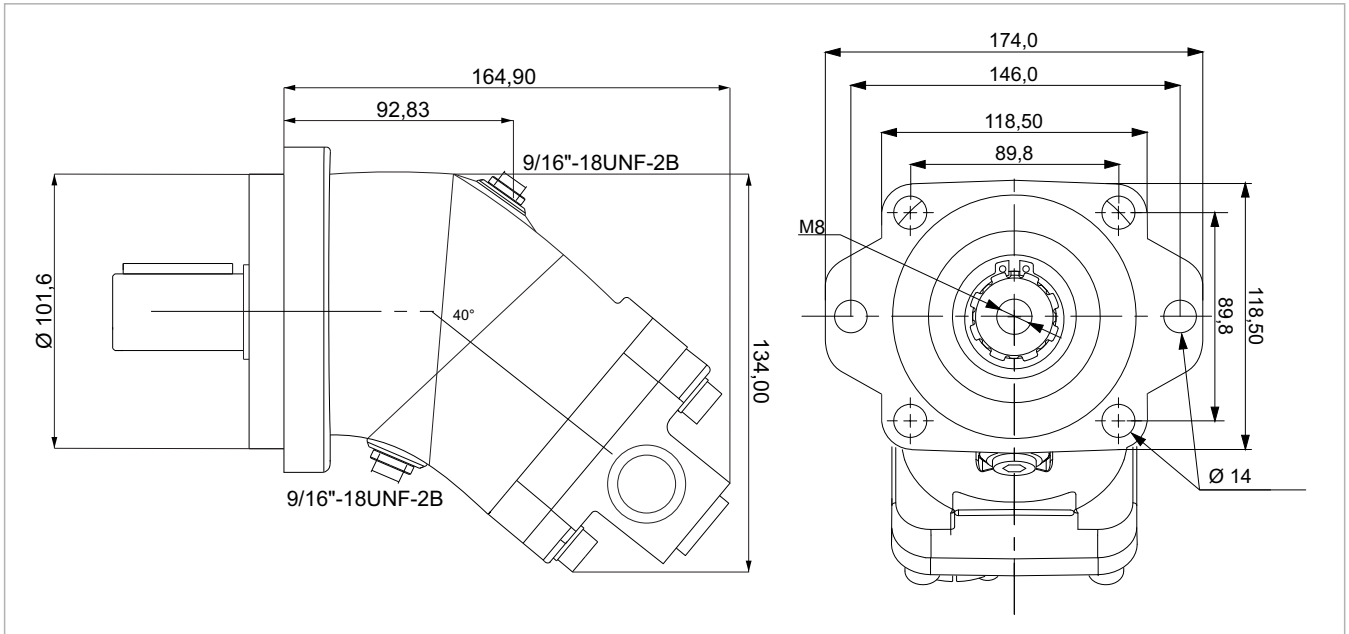
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SPECIAL DIMENSION

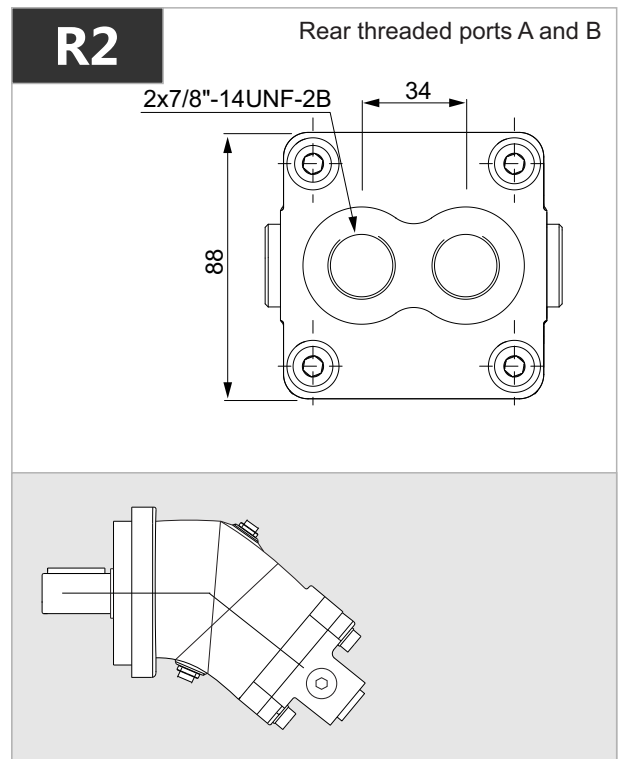
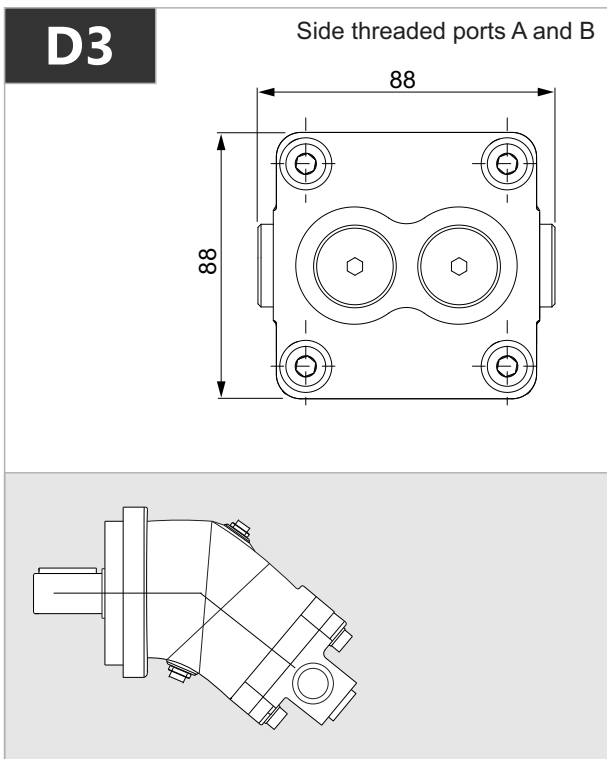
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(THE DIMENSIONS CHANGE  
DEPENDS ON THE COUNTRIES)

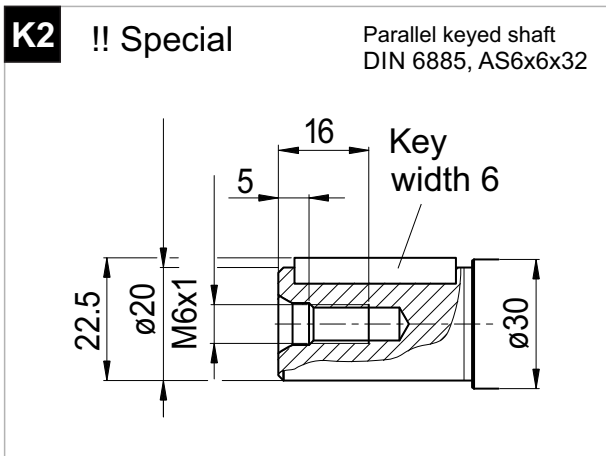
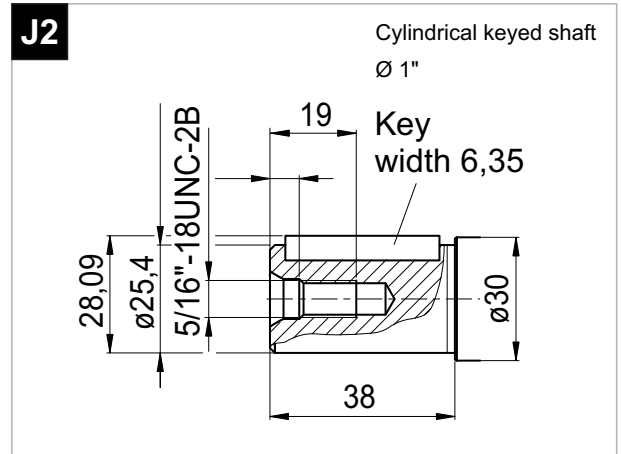
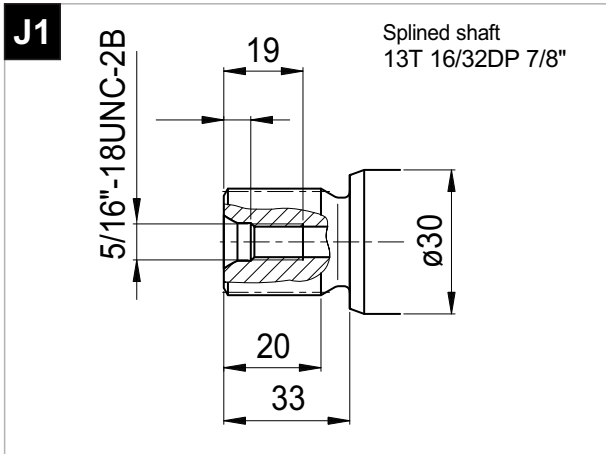
# 2PEM 12 - SAE B - 6 BOLT



x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
12,00 cc	18,00 cc	8000 rpm	8800 rpm	400 bar	450 bar	0.18 m.N/bar	66 m.N	96	6,50 kg	7,00 kg	-25°	110°



# 2PEM 12 - SAE B - 6 BOLT



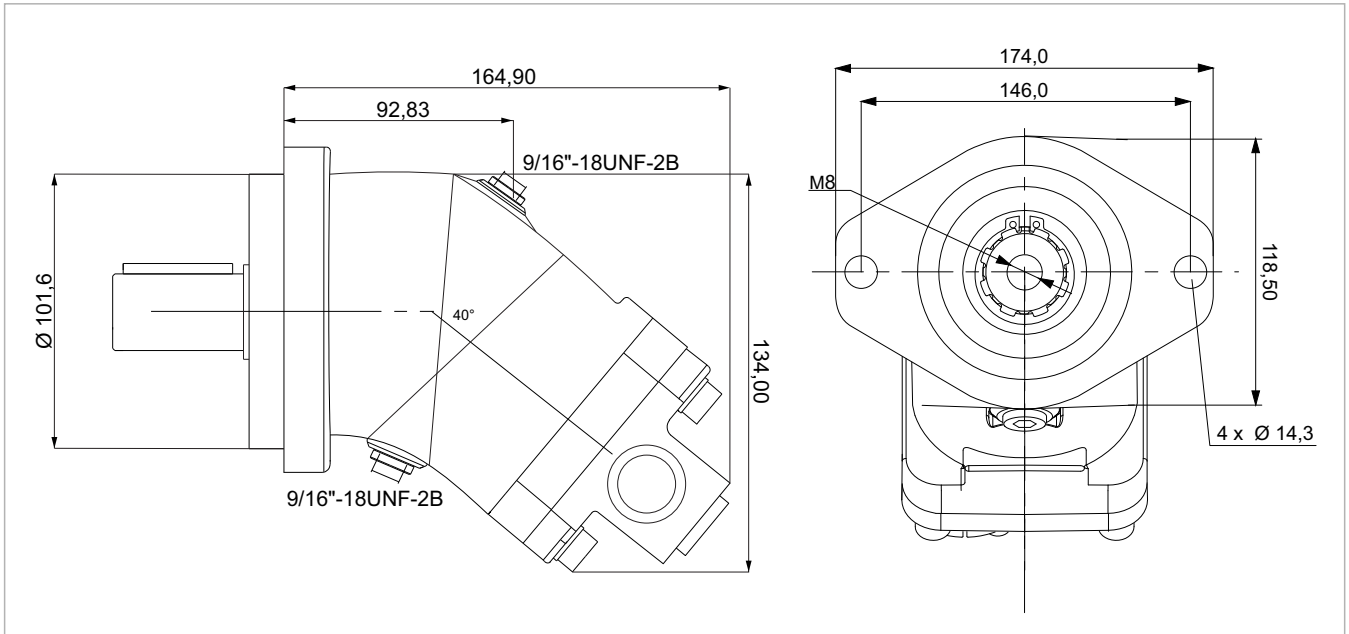
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SPECIAL DIMENSION

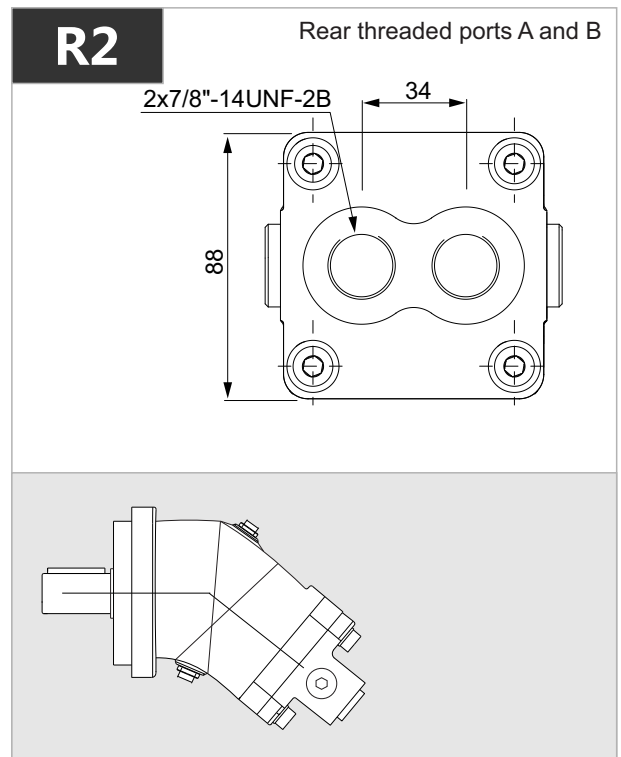
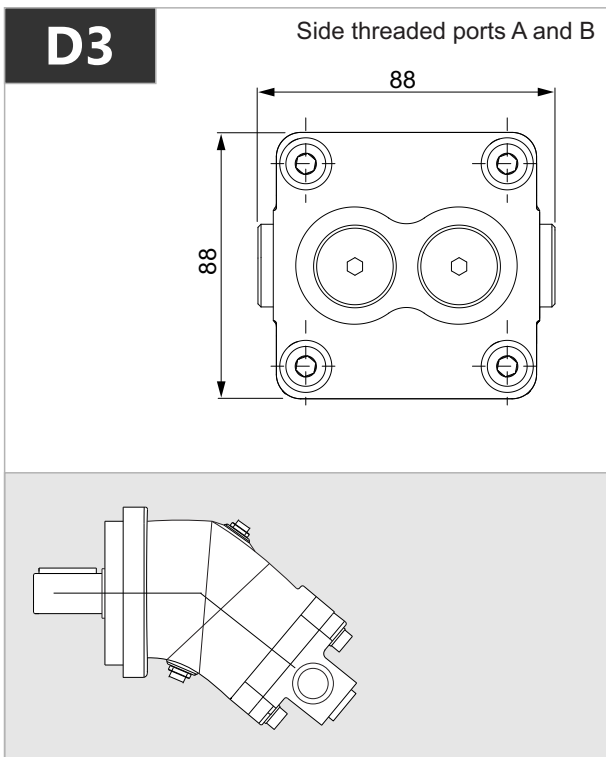
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(THE DIMENSIONS CHANGE  
DEPENDS ON THE COUNTRIES)

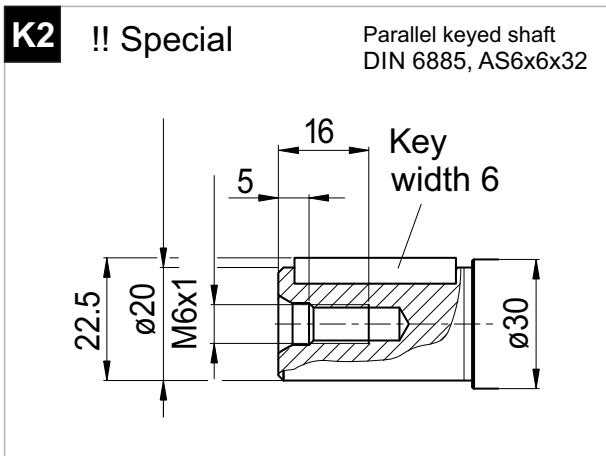
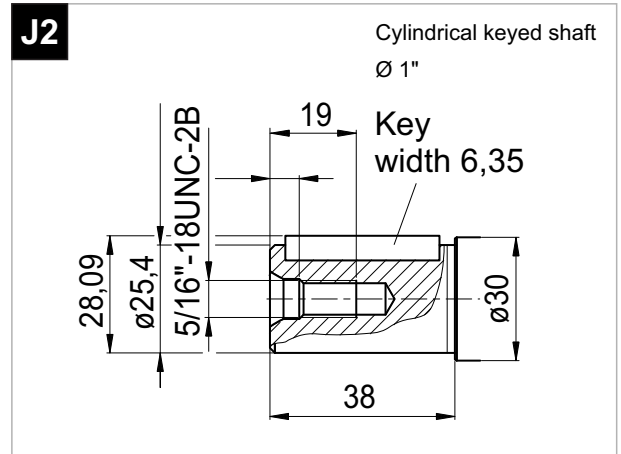
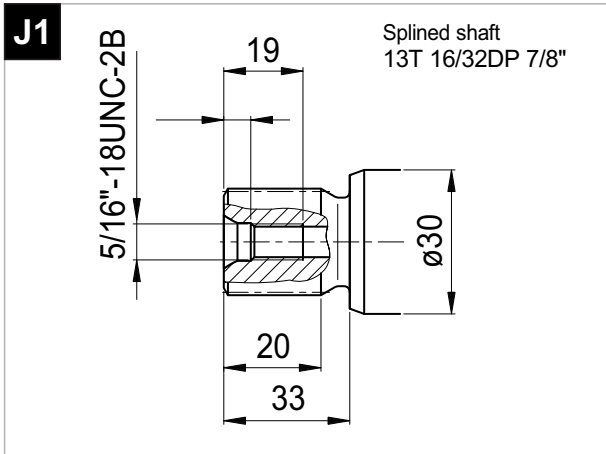
# 2PEM 18 - SAE B - 2 BOLT



x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
18,00 cc	27,00 cc	8000 rpm	8800 rpm	400 bar	450 bar	0,28 m.N/bar	98 m.N	144	6,50 kg	7,0 kg	-25°	110°



# 2PEM 18 - SAE B - 2 BOLT



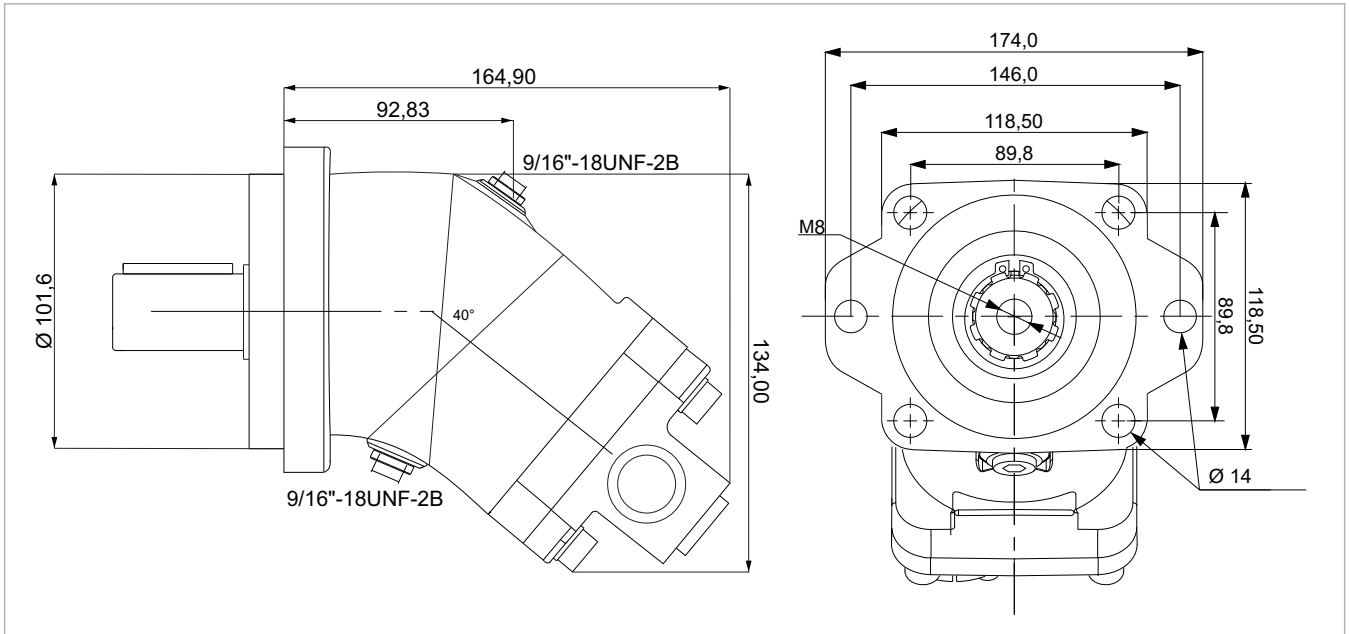
ALL SPLINED AND KEYED

SPECIAL DIMENSION

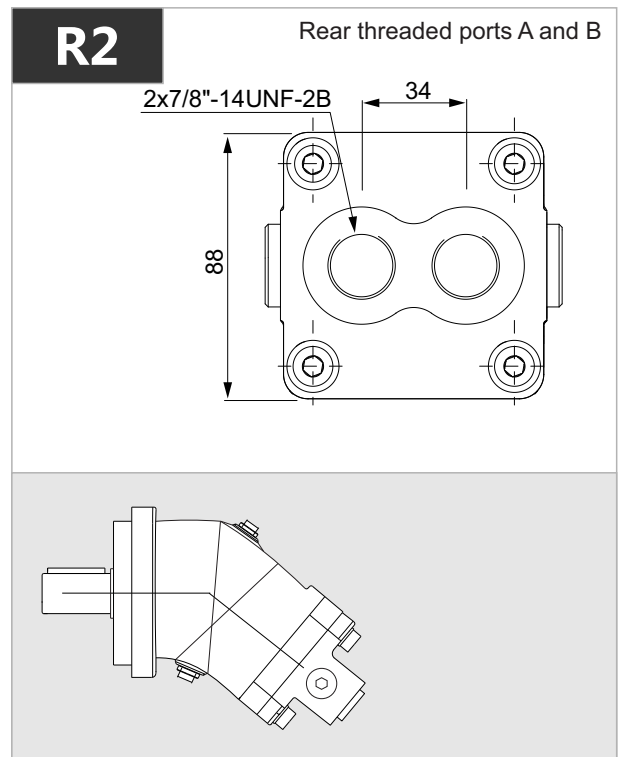
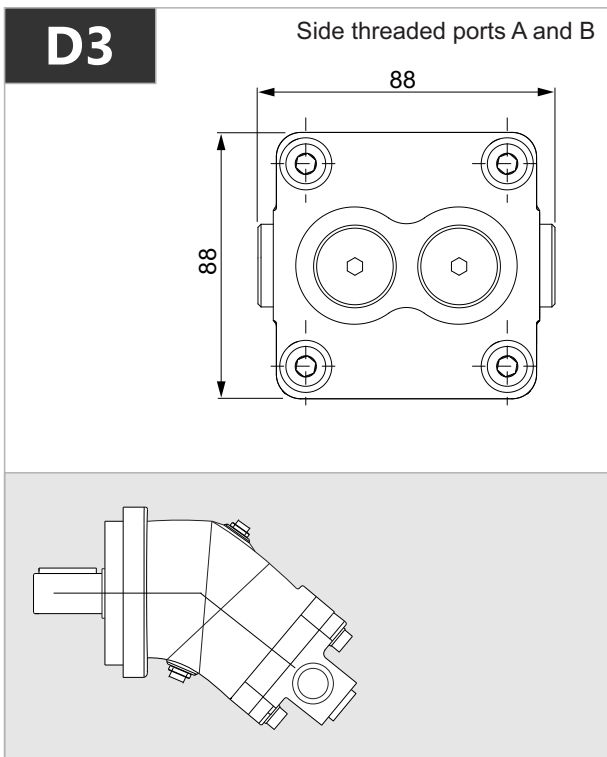
SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE  
DEPENDS ON THE COUNTRIES)

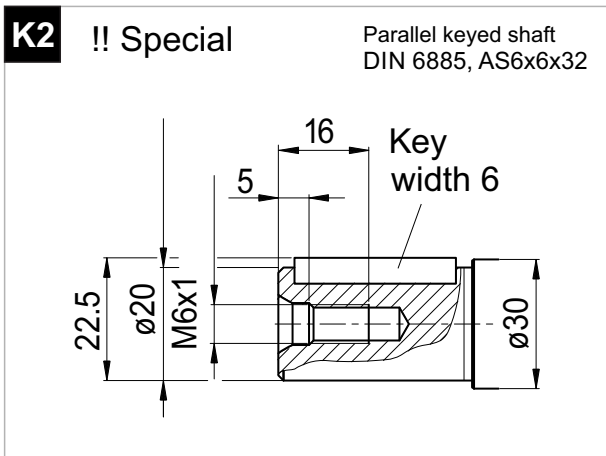
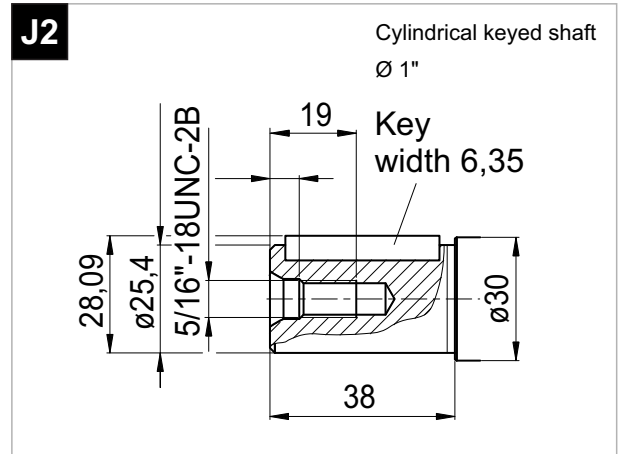
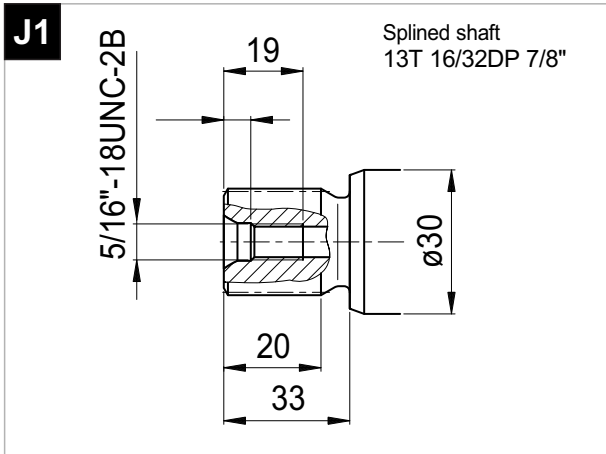
# 2PEM 18 - SAE B - 6 BOLT



x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
18,00 cc	27,00 cc	8000 rpm	8800 rpm	400 bar	450 bar	0,28 m.N/bar	98 m.N	144	6,50 kg	7,0 kg	-25°	110°



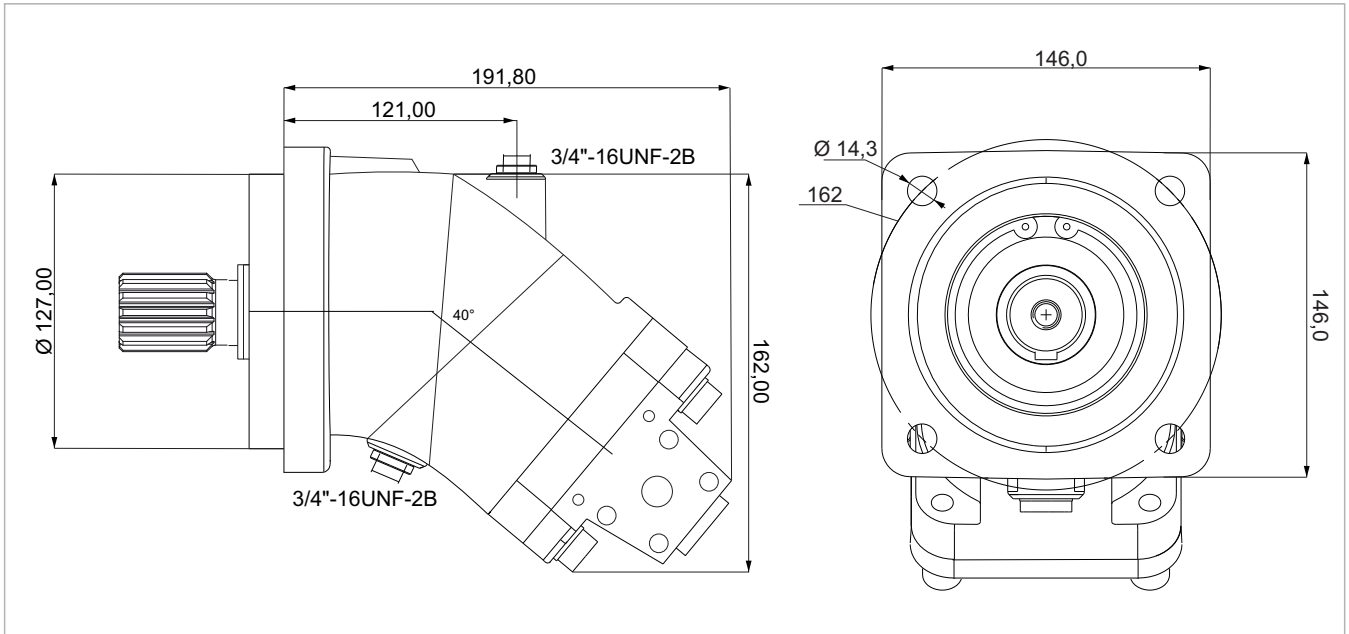
# 2PEM 18 - SAE B - 6 BOLT



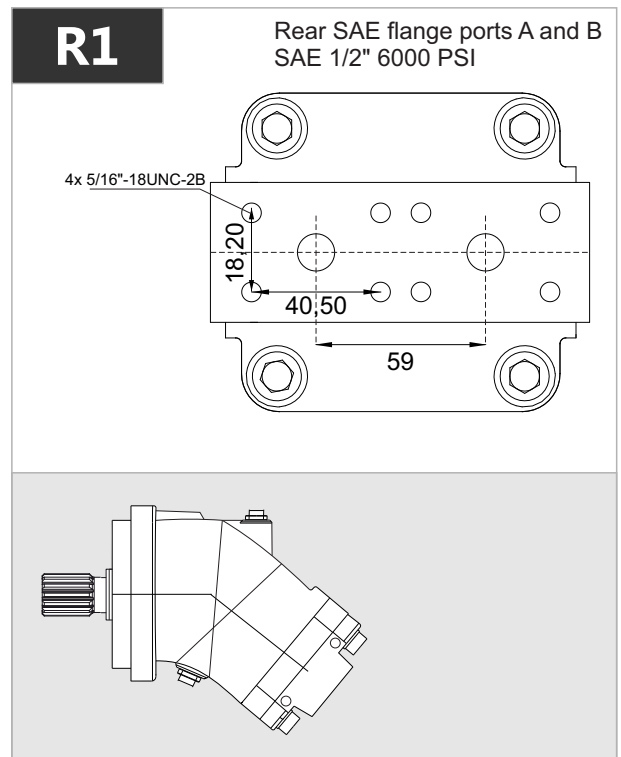
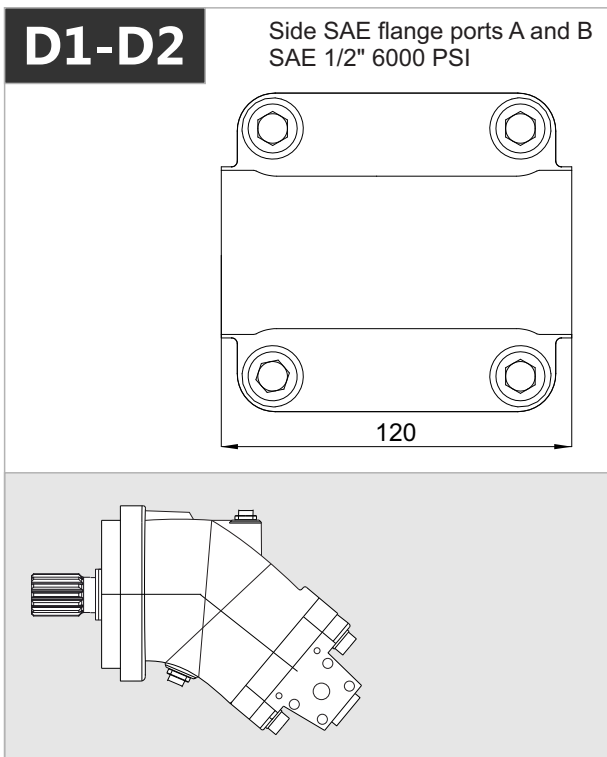
ALL SPLINED AND KEYED  
SPECIAL DIMENSION  
SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE  
DEPENDS ON THE COUNTRIES)

# 2PEM 25 - SAE C - 4 BOLT



x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
25,00 cc	37,50 cc	6250 rpm	6800 rpm	400 bar	450 bar	0.40 m.N/bar	140 m.N	156	11,50 kg	11,80 kg	-25°	110°



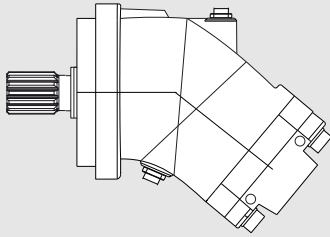
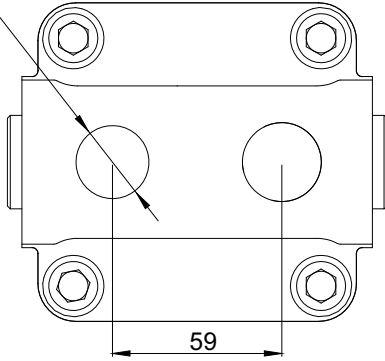


# 2PEM 25 - SAE C - 4 BOLT

**R2**

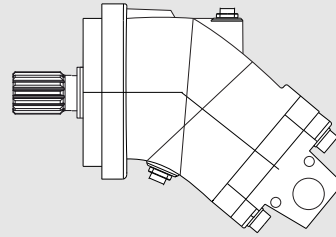
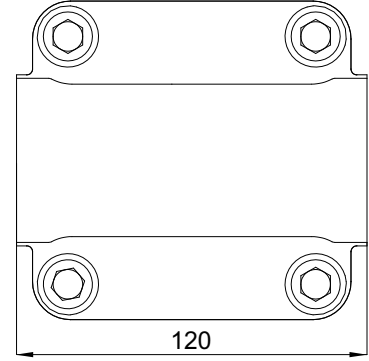
Rear threaded ports A and B

2x1 5/16"-  
12UN-2B



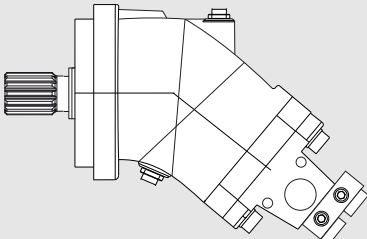
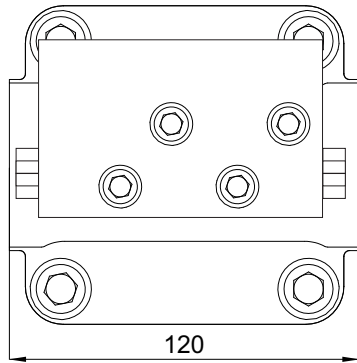
**D3**

Side threaded ports

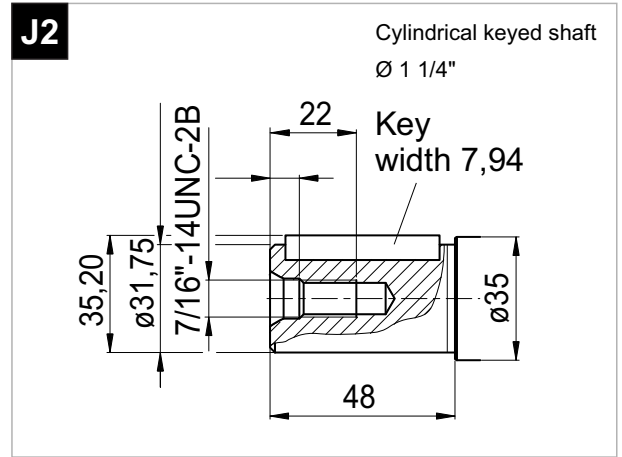
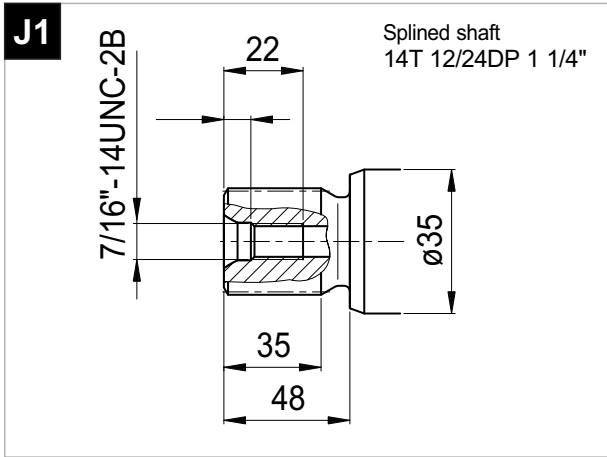


**D4**

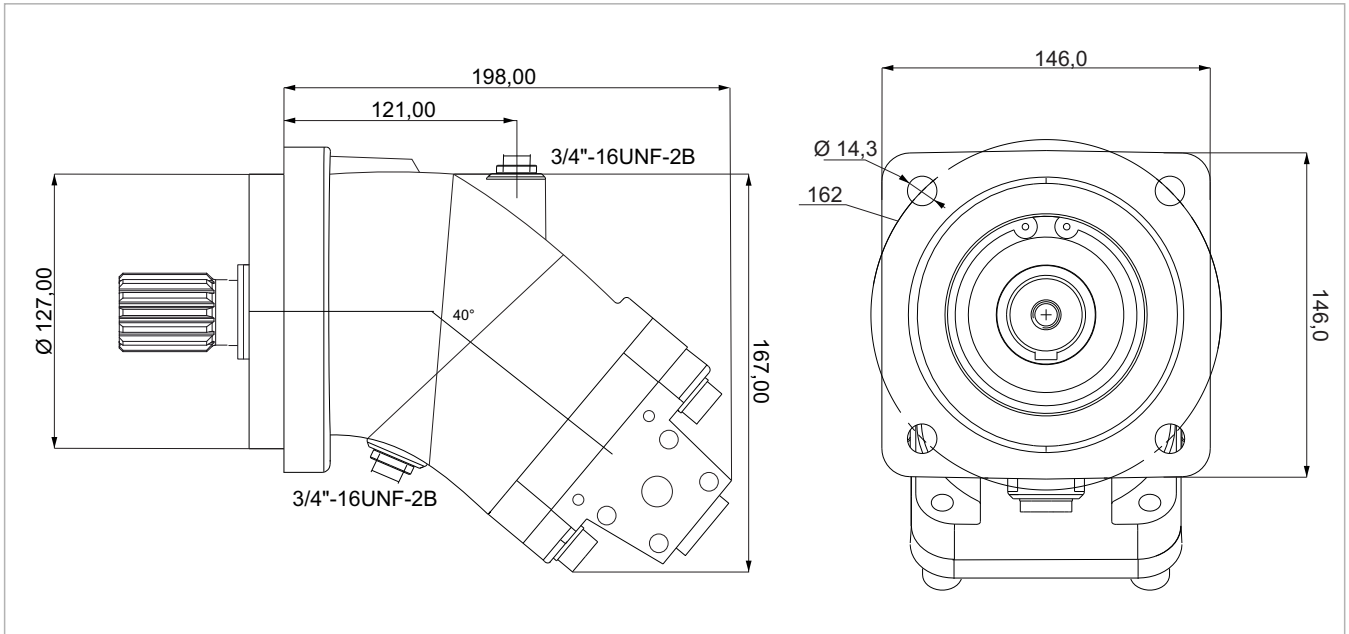
Side threaded ports



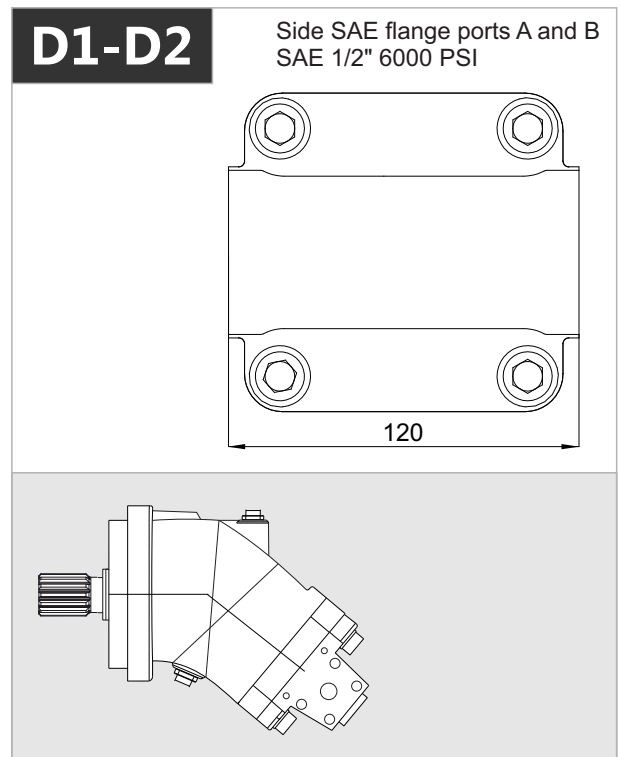
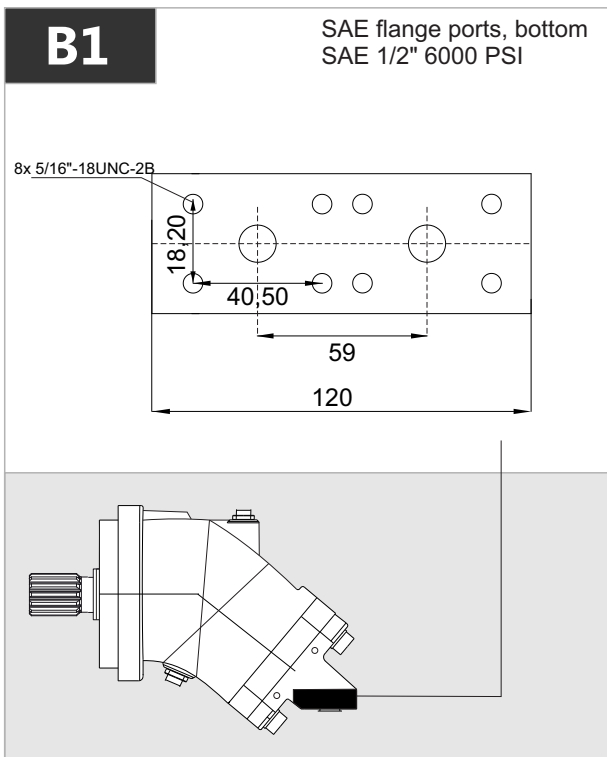
# 2PEM 25 - SAE C - 4 BOLT



# 2PEM 32 - SAE C - 4 BOLT



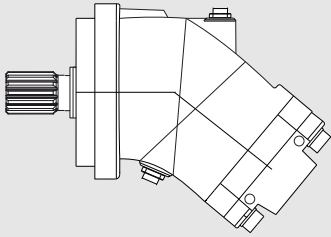
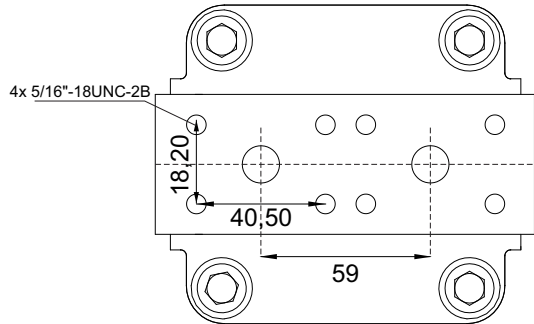
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
32,00 cc	48,00 cc	6250 rpm	6800 rpm	400 bar	450 bar	0.51 m.N/bar	174 m.N	200	11,50 kg	11,90 kg	-25°	110°



# 2PEM 32 - SAE C - 4 BOLT

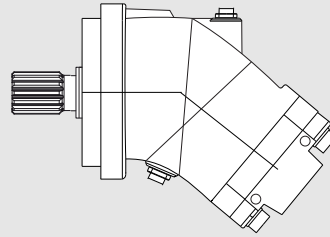
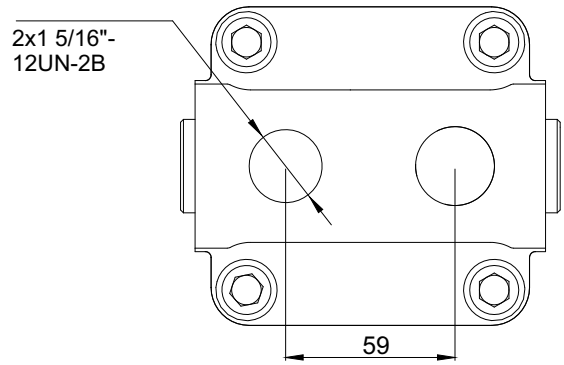
**R1**

Rear SAE flange ports A and B  
SAE 1/2" 6000 PSI



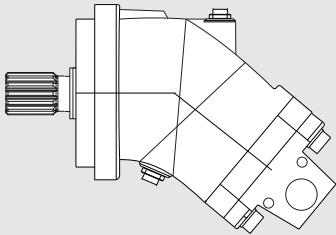
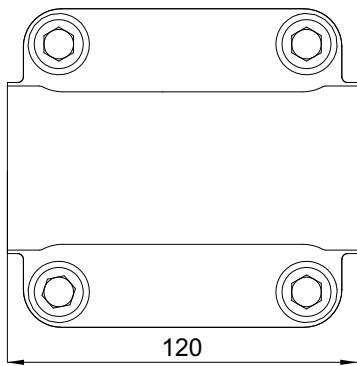
**R2**

Rear threaded ports



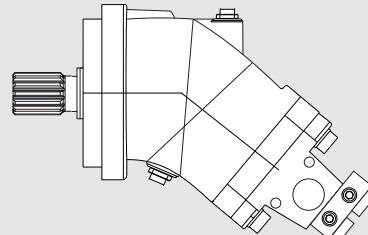
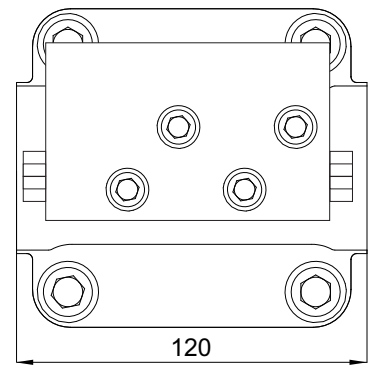
**D3**

Side threaded ports A and B

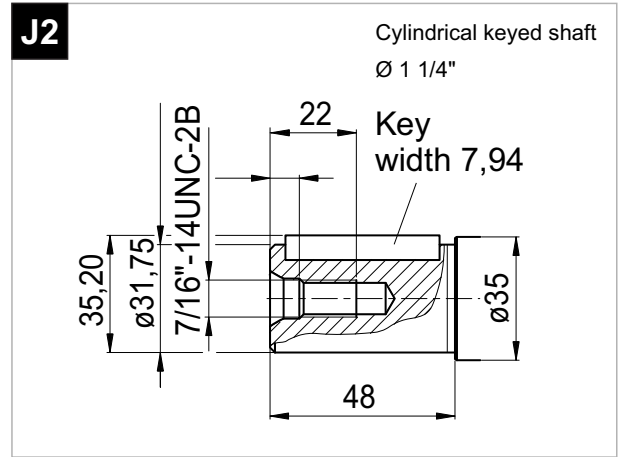
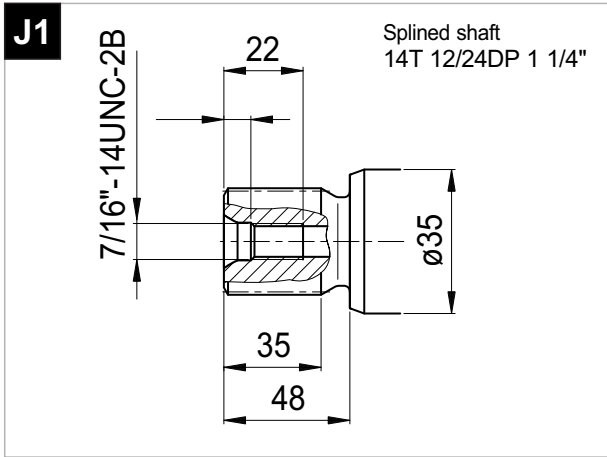


**D4**

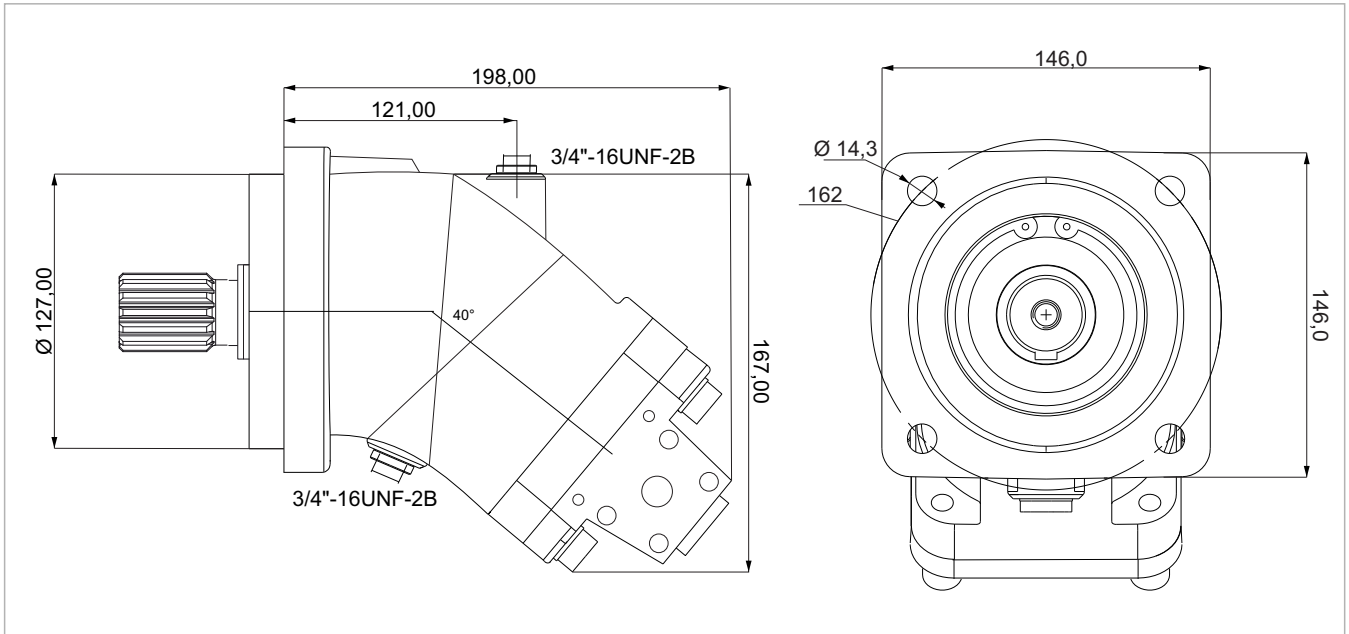
Side threaded ports A and B



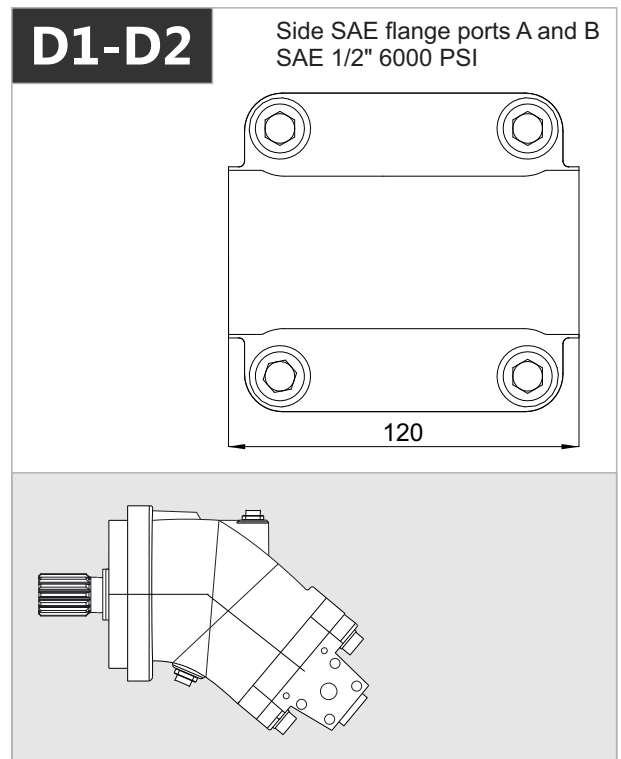
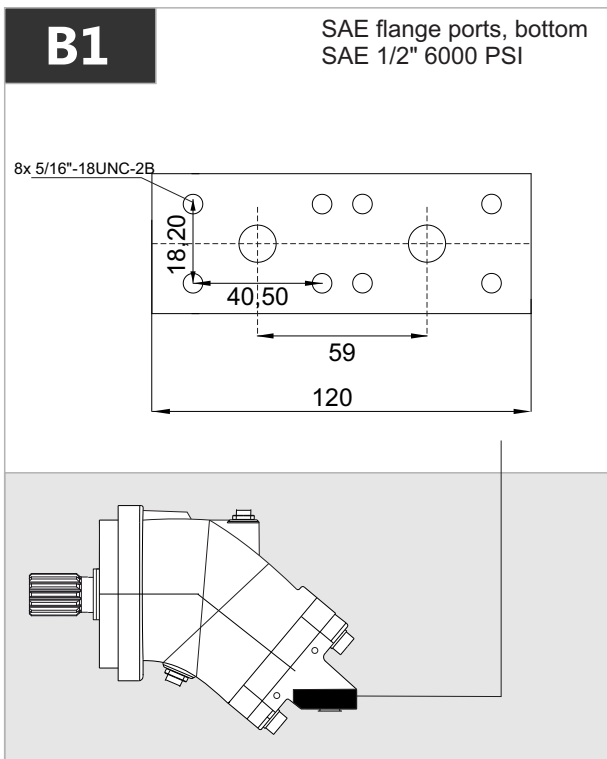
# 2PEM 32 - SAE C - 4 BOLT



# 2PEM 40 - SAE C - 4 BOLT



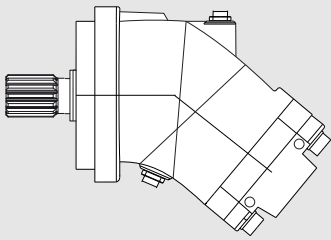
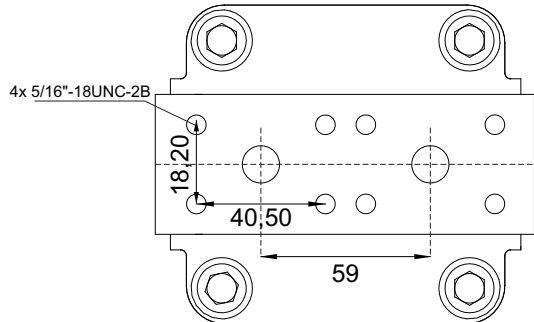
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
40,20 cc	60,30 cc	5600 rpm	6300 rpm	400 bar	450 bar	0.68 m.N/bar	228 m.N	225	11,50 kg	11,90 kg	-25°	110°



# 2PEM 40 - SAE C - 4 BOLT

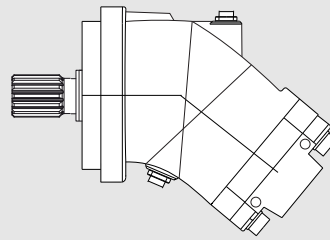
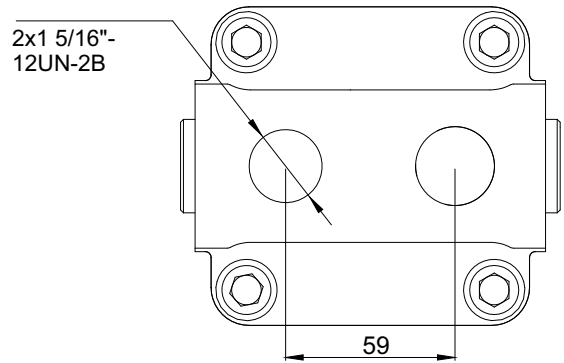
**R1**

Rear SAE flange ports A and B  
SAE 1/2" 6000 PSI



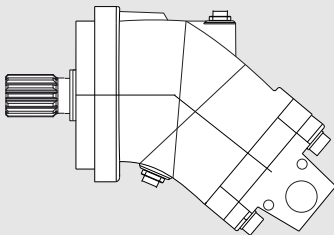
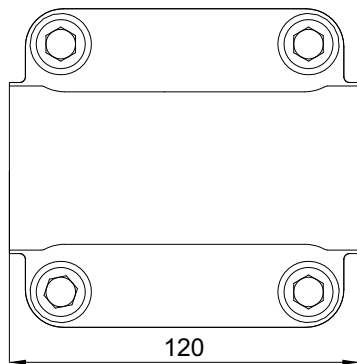
**R2**

Rear threaded ports



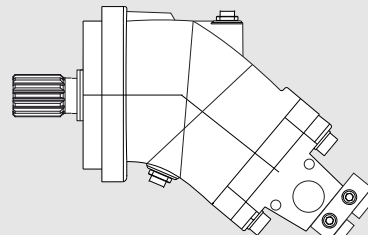
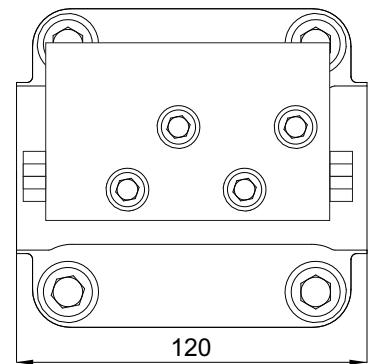
**D3**

Side threaded ports A and B

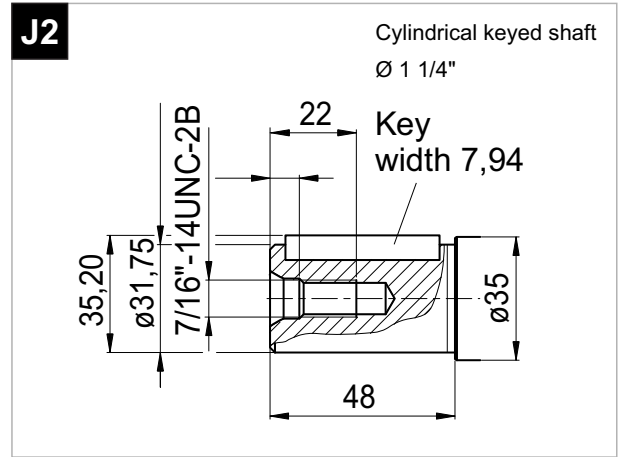
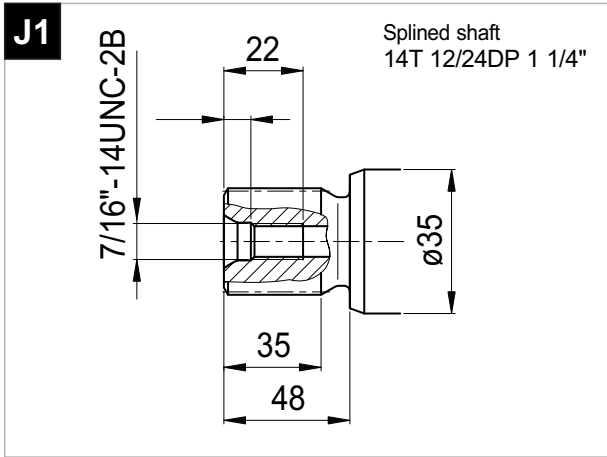


**D4**

Side threaded ports A and B

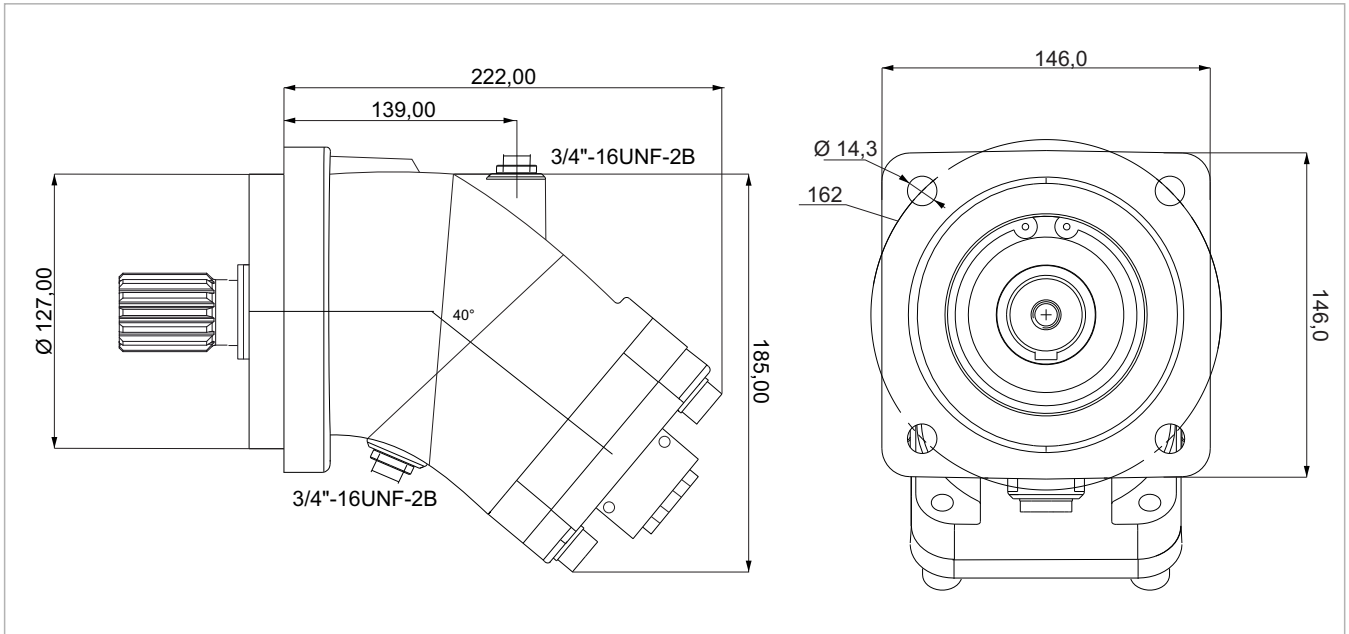


# 2PEM 40 - SAE C - 4 BOLT

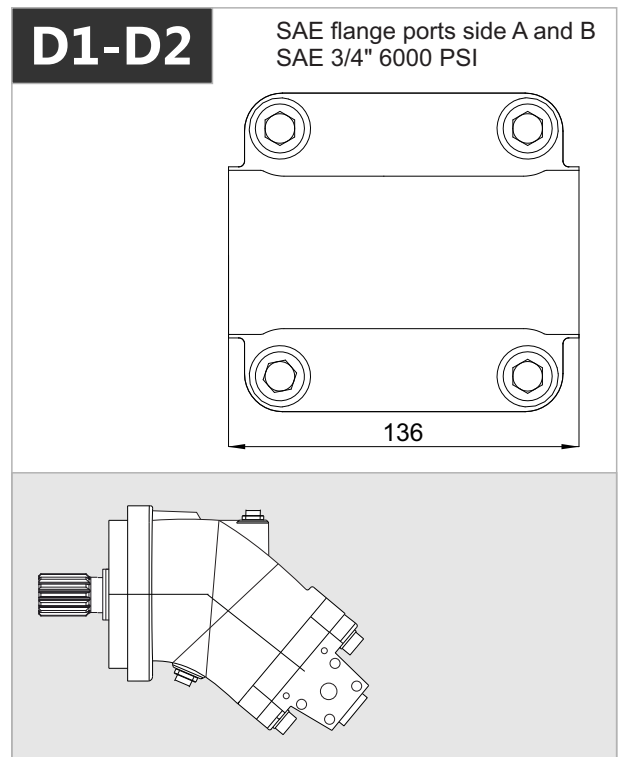
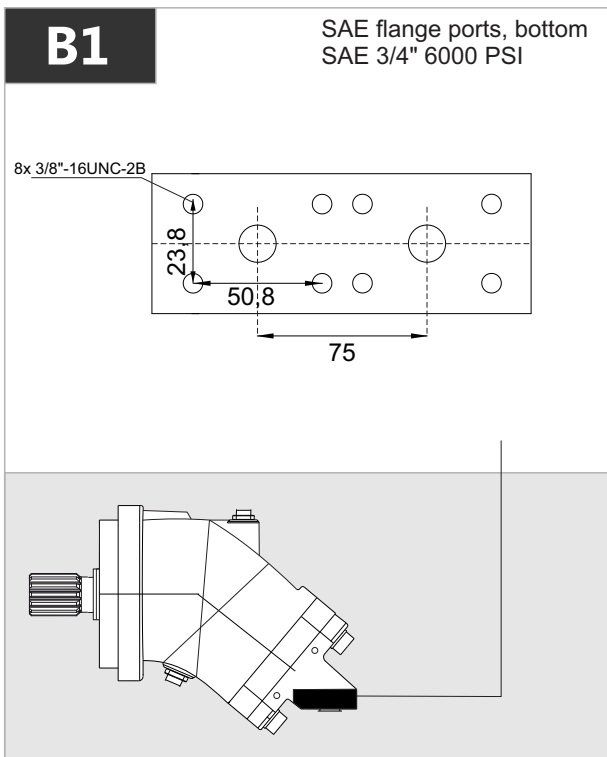




# 2PEM 50 - SAE C - 4 BOLT



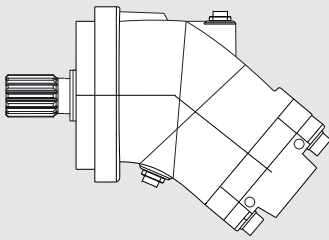
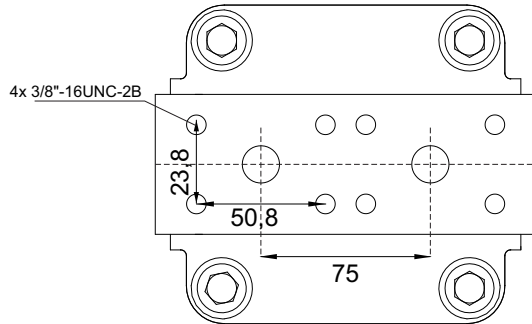
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
50,00 cc	75,00 cc	5000 rpm	5500 rpm	400 bar	450 bar	0.80 m.N/bar	280 m.N	250	17,50 kg	18,00 kg	-25°	110°



# 2PEM 50 - SAE C - 4 BOLT

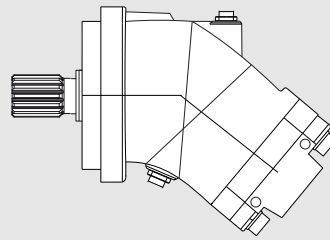
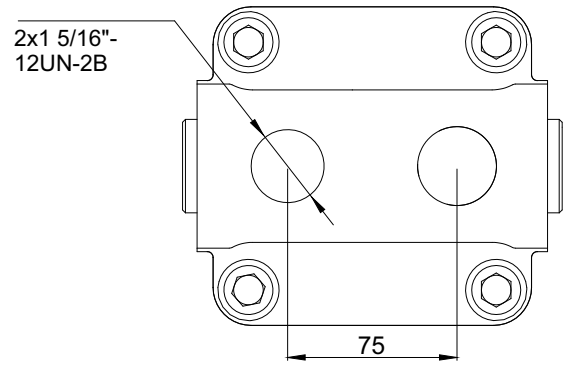
**R1**

SAE flange ports rear  
SAE 3/4" 6000 PSI



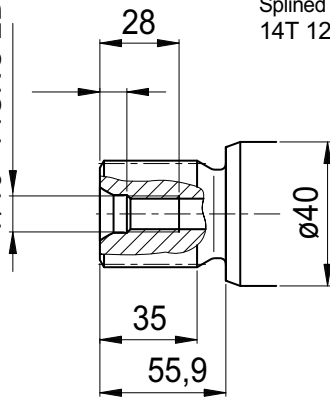
**R2**

Rear threaded ports



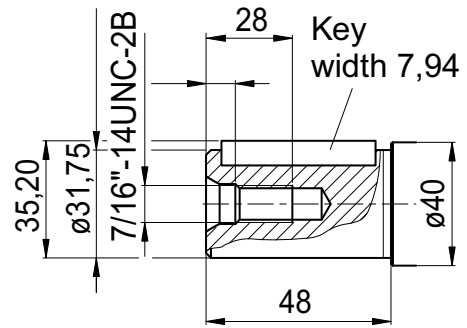
**J1**

7/16"-14UNC-2B

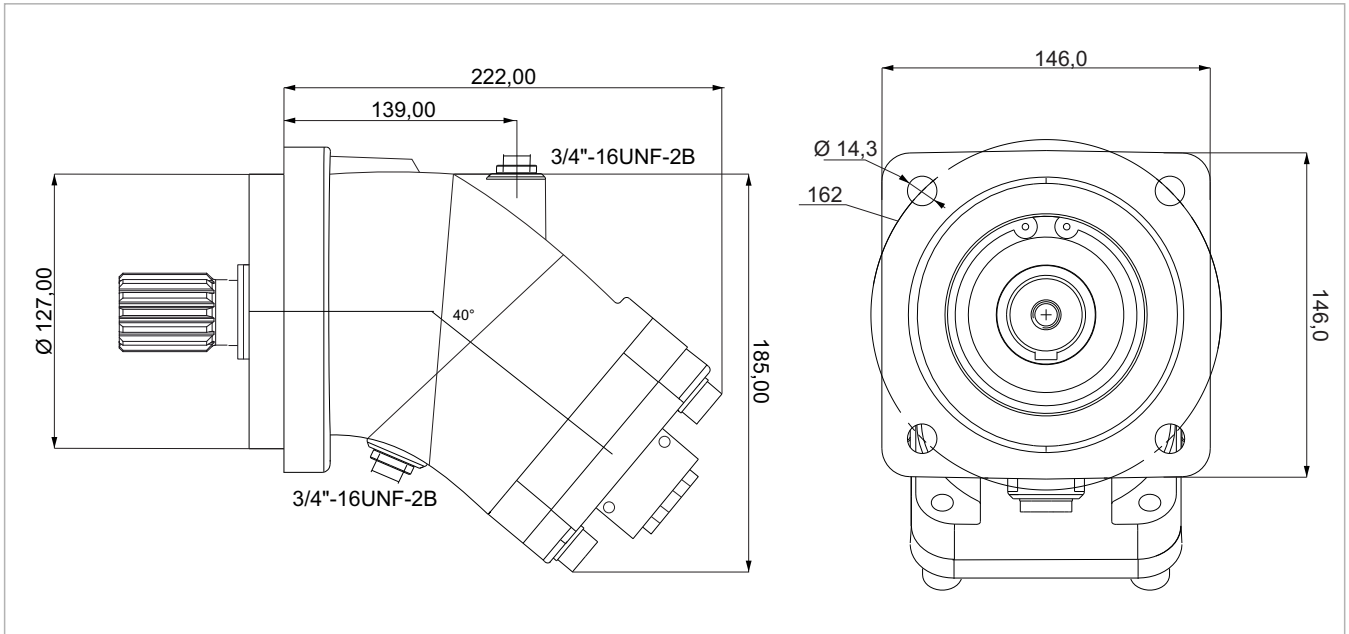


**J2**

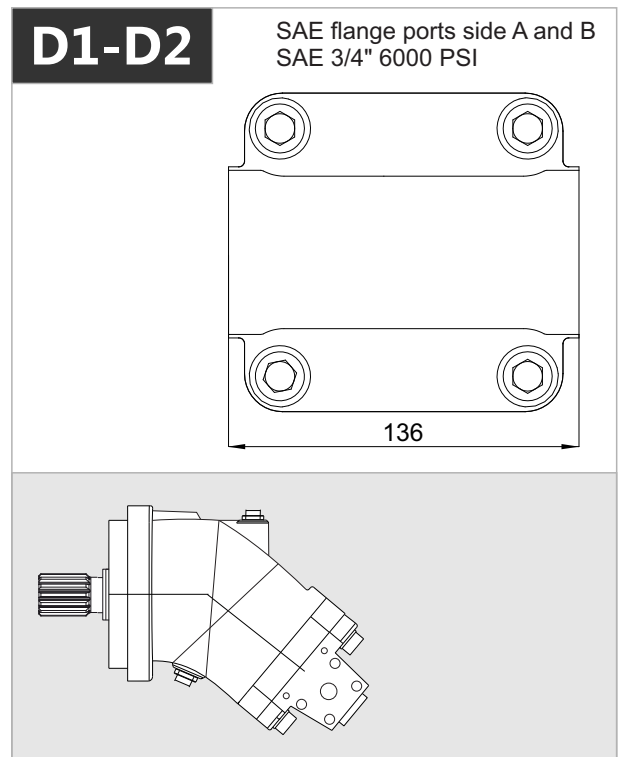
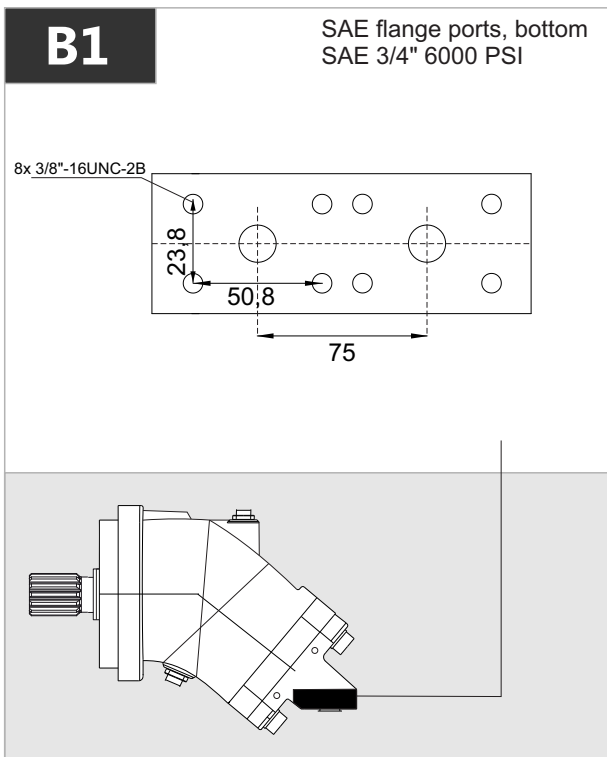
Cylindrical keyed shaft  
Ø 1 1/4"



# 2PEM 56 - SAE C - 4 BOLT



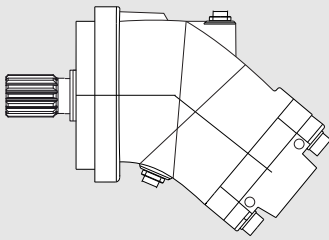
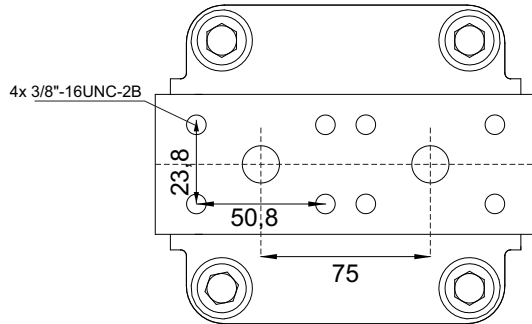
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
56,40 cc	84,60 cc	5000 rpm	5500 rpm	400 bar	450 bar	0.92 m.N/bar	320 m.N	282	18,00 kg	18,50 kg	-25°	110°



# 2PEM 56 - SAE C - 4 BOLT

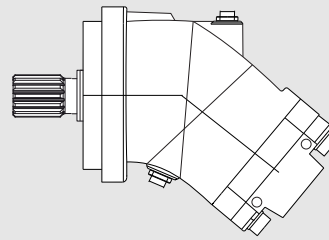
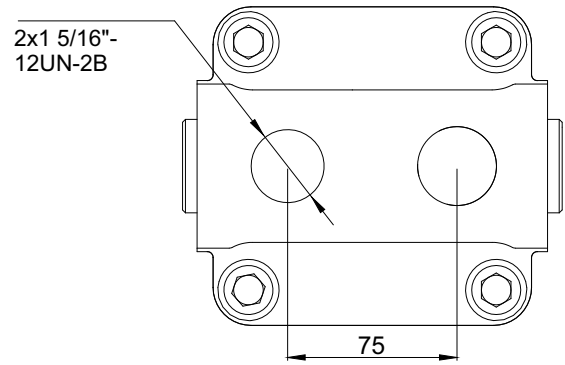
**R1**

SAE flange ports rear  
SAE 3/4" 6000 PSI



**R2**

Rear threaded ports

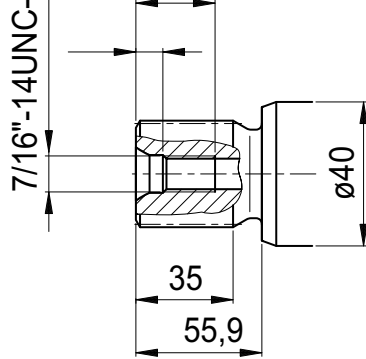


**J1**

7/16"-14UNC-2B

28

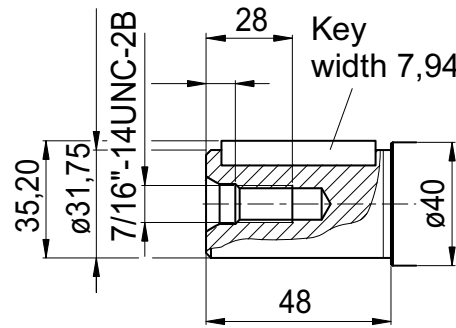
Splined shaft  
14T 12/24DP 1 1/4"



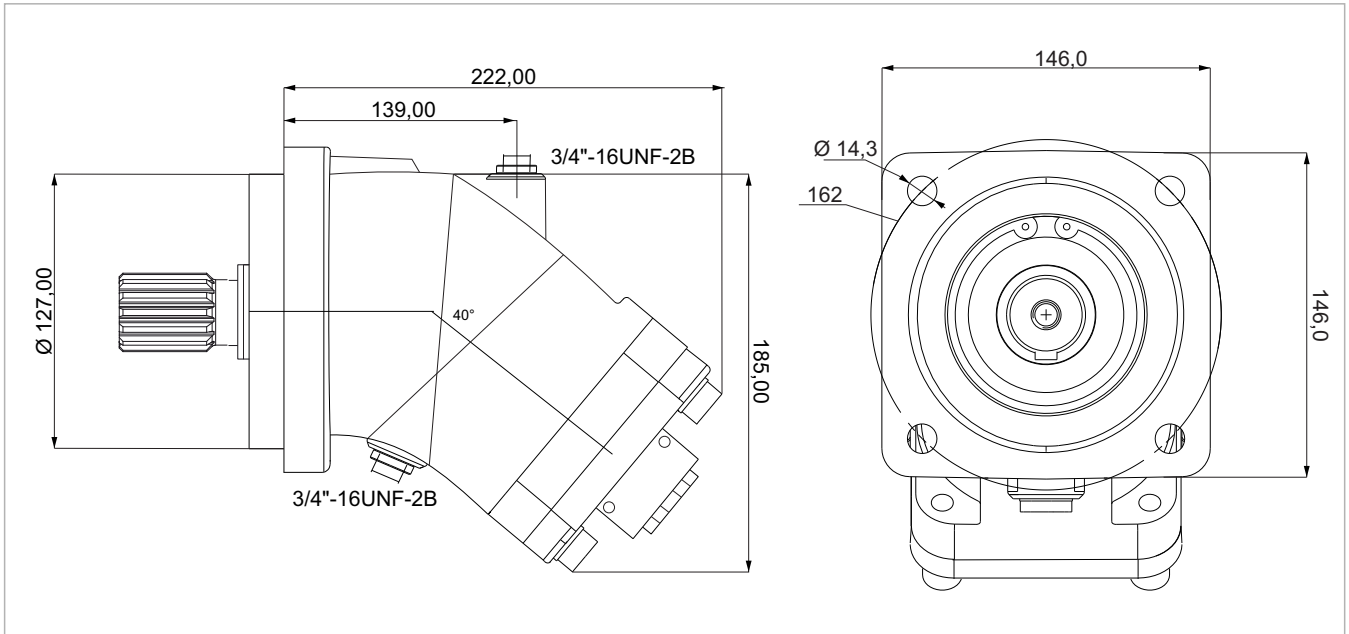
**J2**

Cylindrical keyed shaft  
Ø 1 1/4"

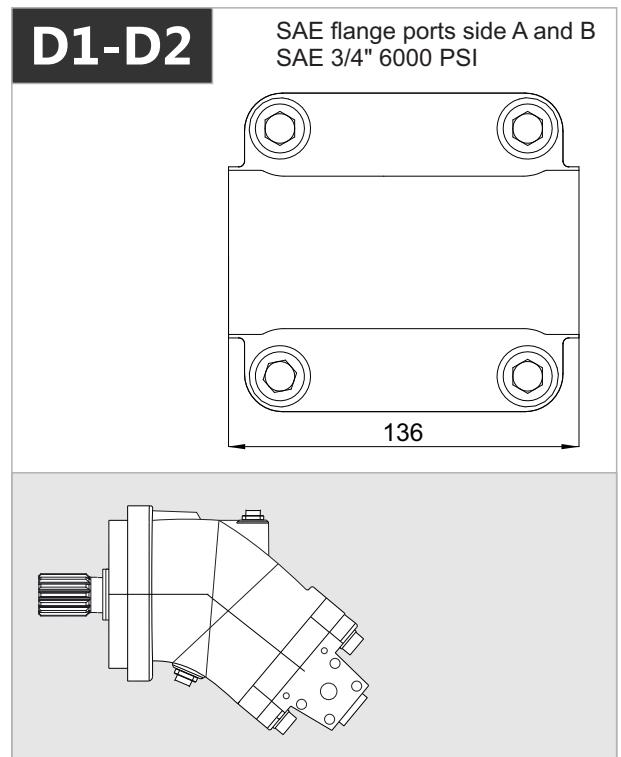
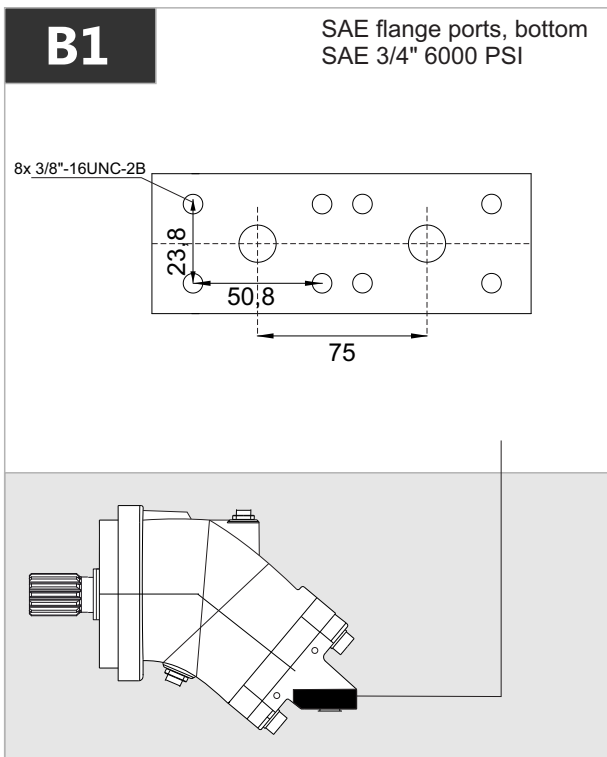
Key  
width 7,94



# 2PEM 63 - SAE C - 4 BOLT



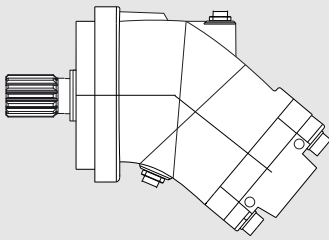
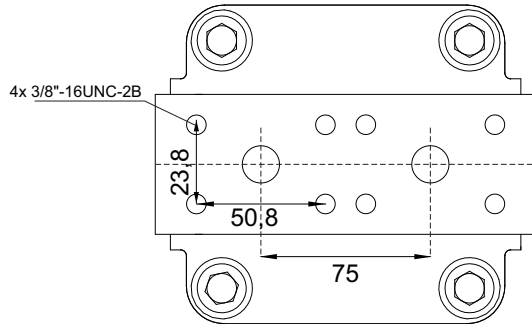
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
63,00 cc	94,50 cc	5000 rpm	5500 rpm	400 bar	450 bar	1.00 m.N/bar	350 m.N	315	18,00 kg	18,50 kg	-25°	110°



# 2PEM 63 - SAE C - 4 BOLT

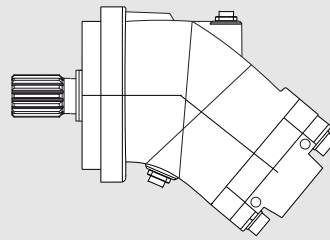
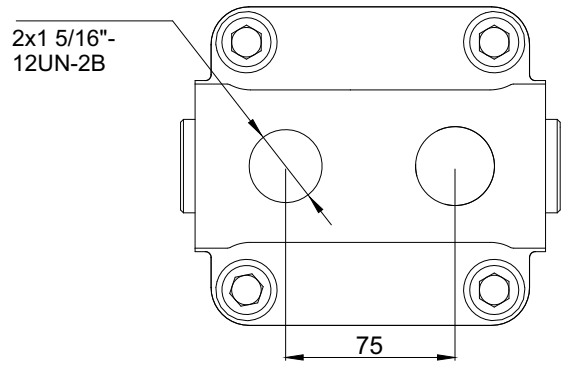
**R1**

SAE flange ports rear  
SAE 3/4" 6000 PSI



**R2**

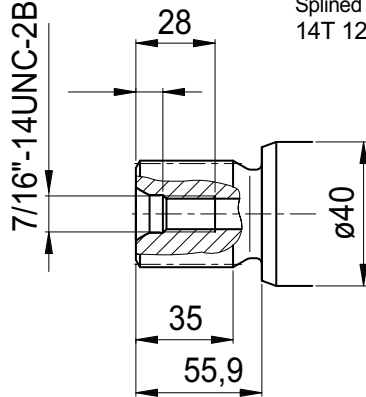
Rear threaded ports



**J1**

7/16"-14UNC-2B

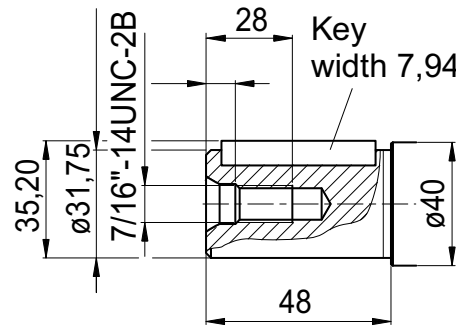
Splined shaft  
14T 12/24DP 1 1/4"



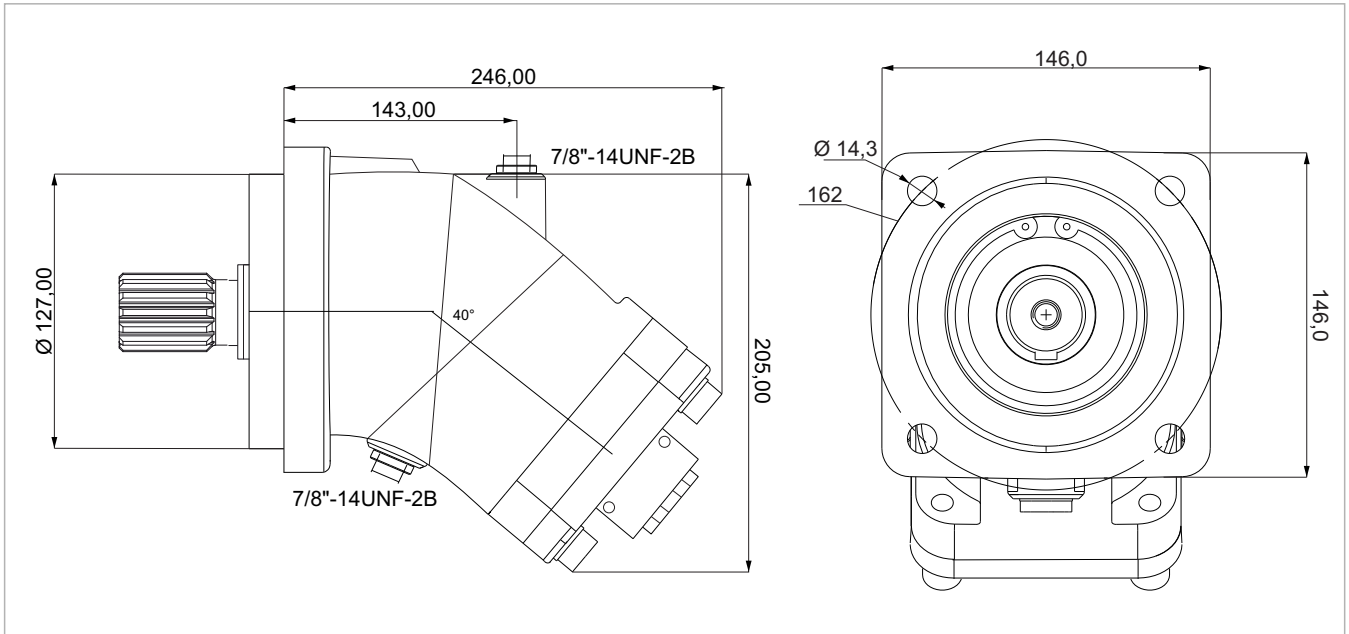
**J2**

Cylindrical keyed shaft  
Ø 1 1/4"

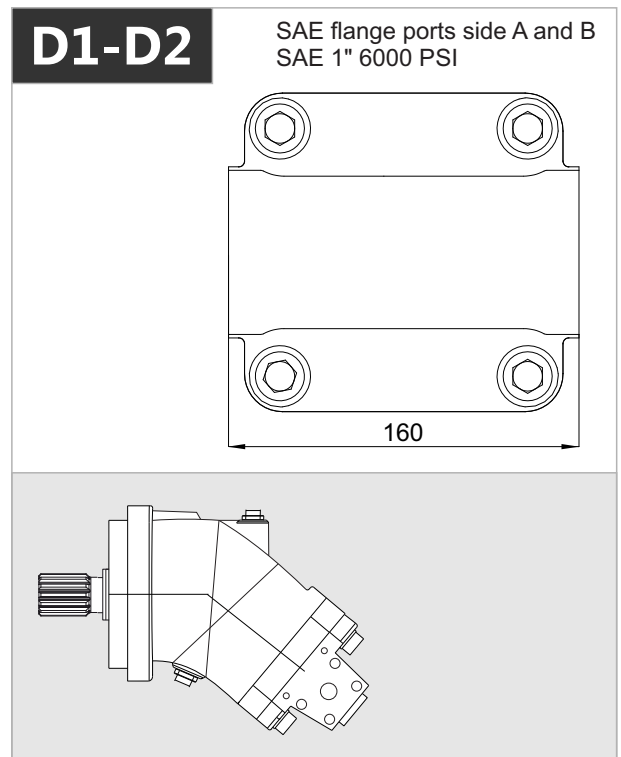
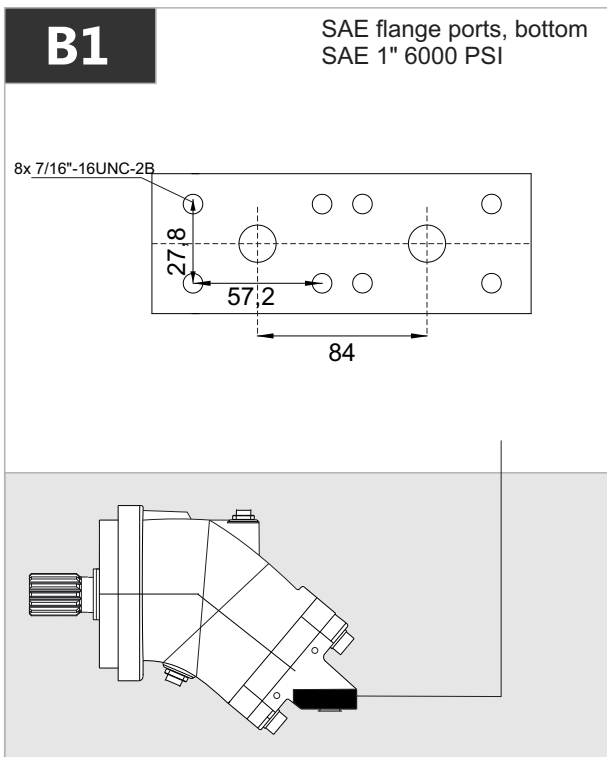
Key  
width 7,94



# 2PEM 80 - SAE C - 4 BOLT



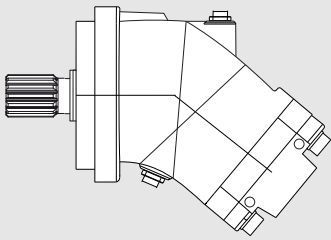
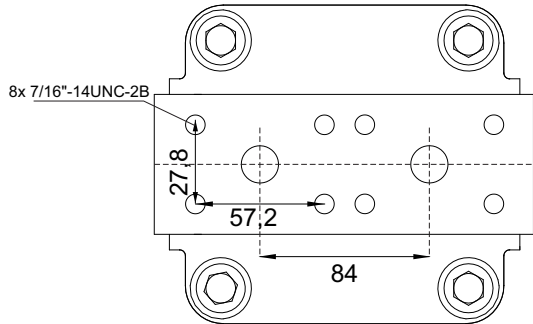
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
80,00 cc	120,00 cc	4400 rpm	4900 rpm	400 bar	450 bar	1.28 m.N/bar	440 m.N	352	22,00 kg	22,50 kg	-25°	110°



# 2PEM 80 - SAE C - 4 BOLT

**R1**

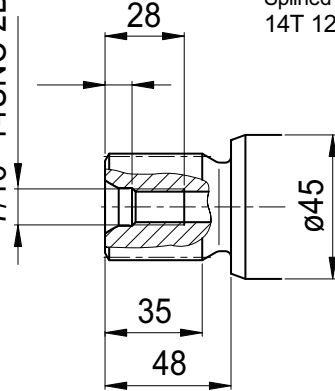
SAE flange ports rear  
SAE 1" 6000 PSI



**J1**

7/16"-14UNC-2B

Splined shaft  
14T 12/24DP 1 1/4"

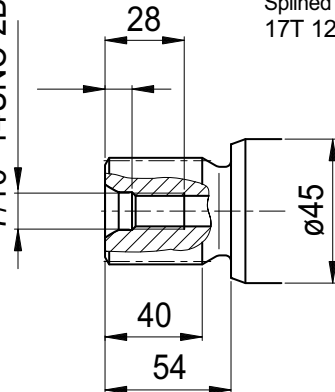


!! Special

**J1**

7/16"-14UNC-2B

Splined shaft  
17T 12/24DP 1 1/2"

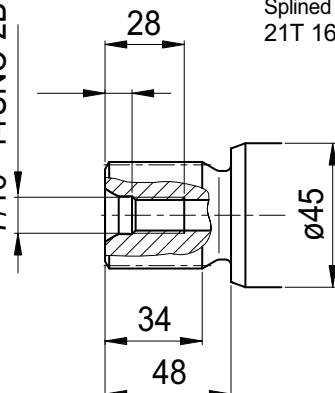


!! Special

**J1**

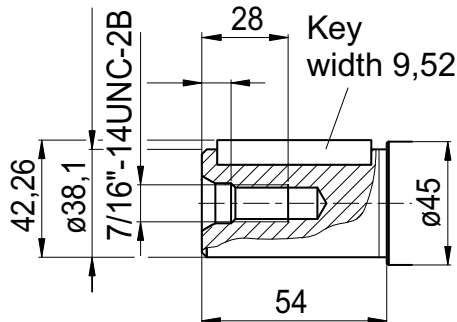
7/16"-14UNC-2B

Splined shaft  
21T 16/32DP 1 3/8"



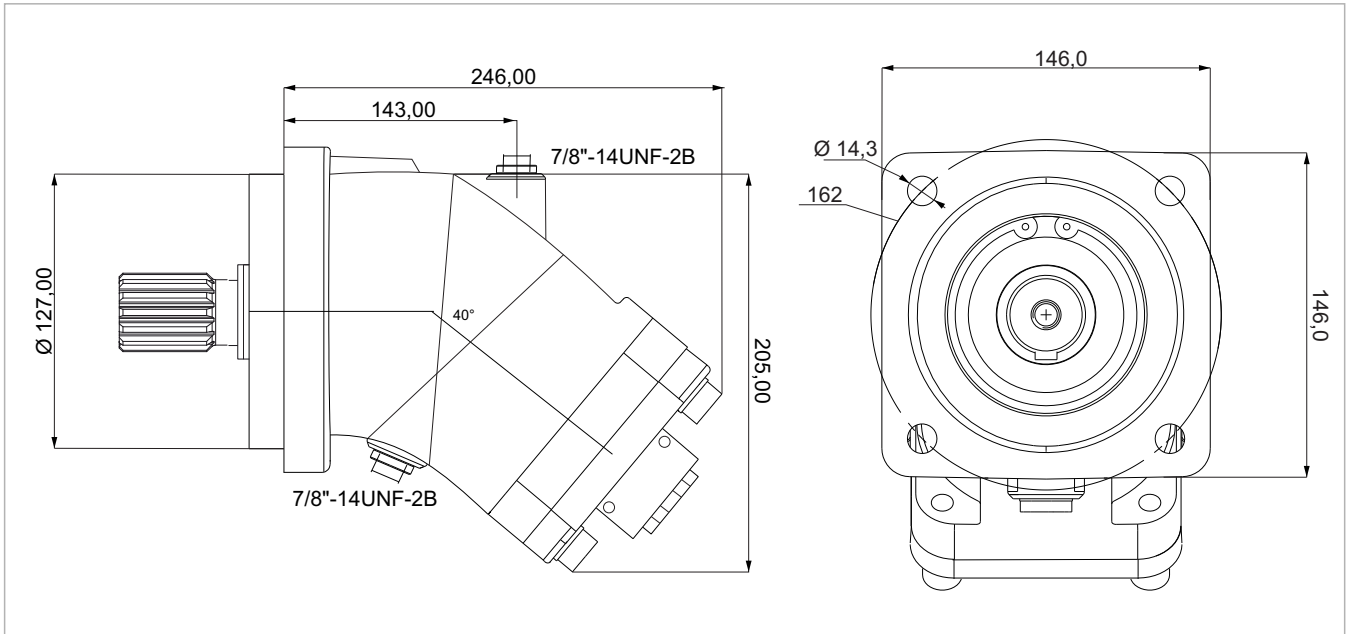
**J2**

Cylindrical keyed shaft  
ø 1 1/2"

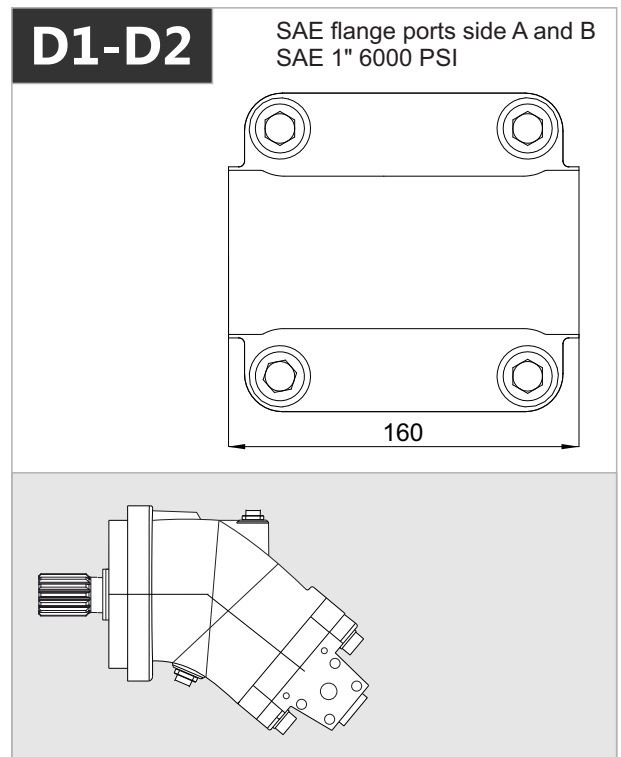
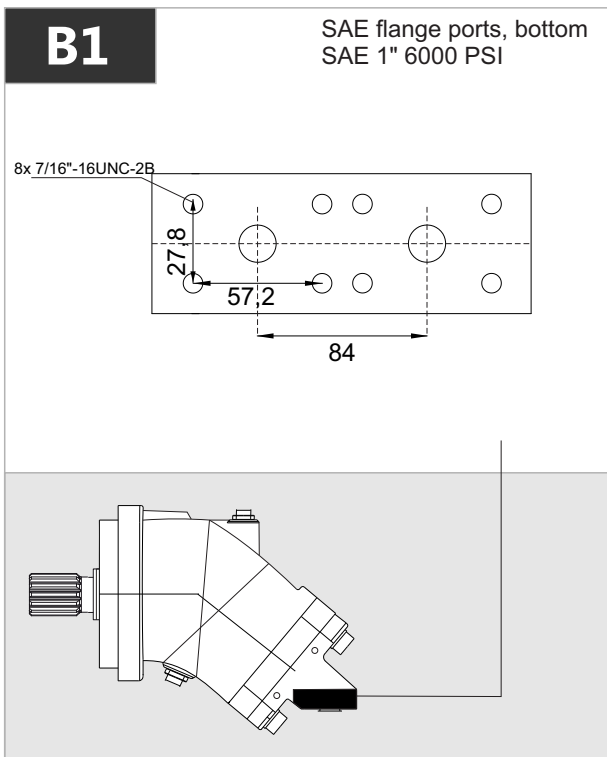




# 2PEM 108 - SAE C - 4 BOLT



x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
108,4 cc	162,6 cc	4000 rpm	4400 rpm	400 bar	450 bar	1.69 m.N/bar	600 m.N	433	22,50 kg	23,00 kg	-25°	110°

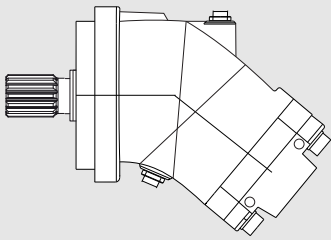
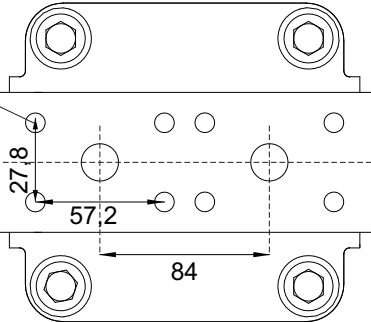


# 2PEM 108 - SAE C - 4 BOLT

**R1**

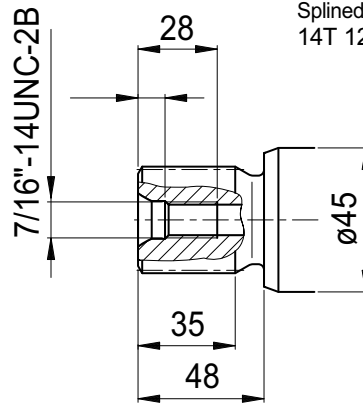
SAE flange ports rear  
SAE 1" 6000 PSI

8x 7/16"-14UNC-2B



**J1**

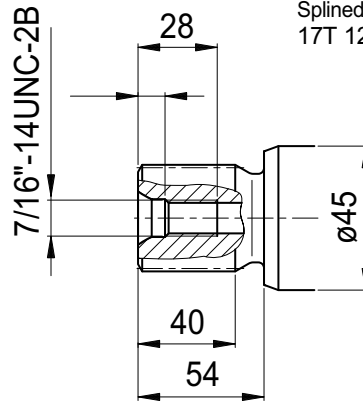
Splined shaft  
14T 12/24DP 1 1/4"



!! Special

**J1**

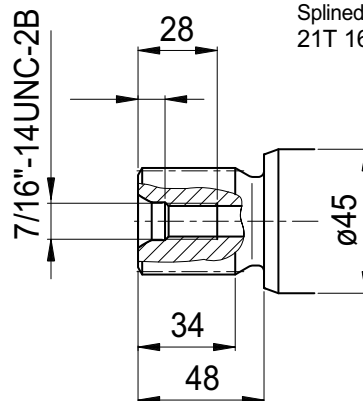
Splined shaft  
17T 12/24DP 1 1/2"



!! Special

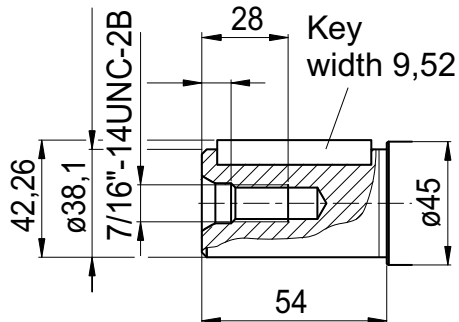
**J1**

Splined shaft  
21T 16/32DP 1 3/8"

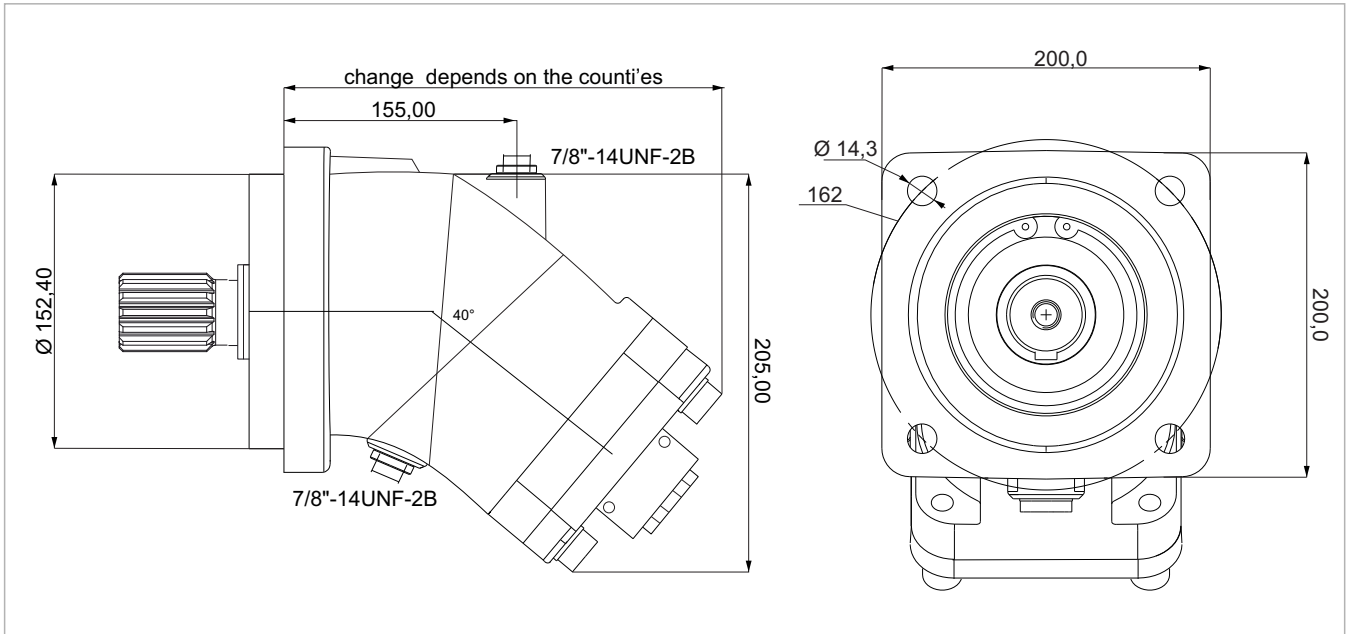


**J2**

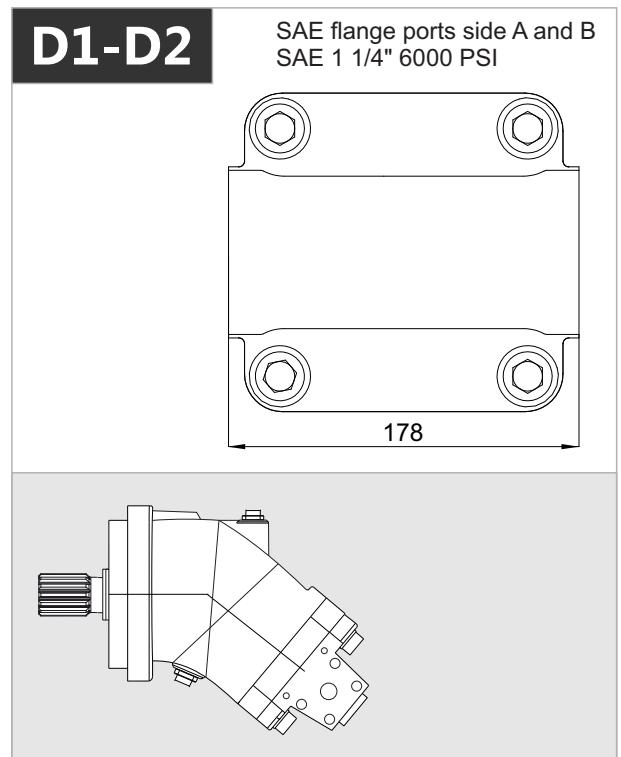
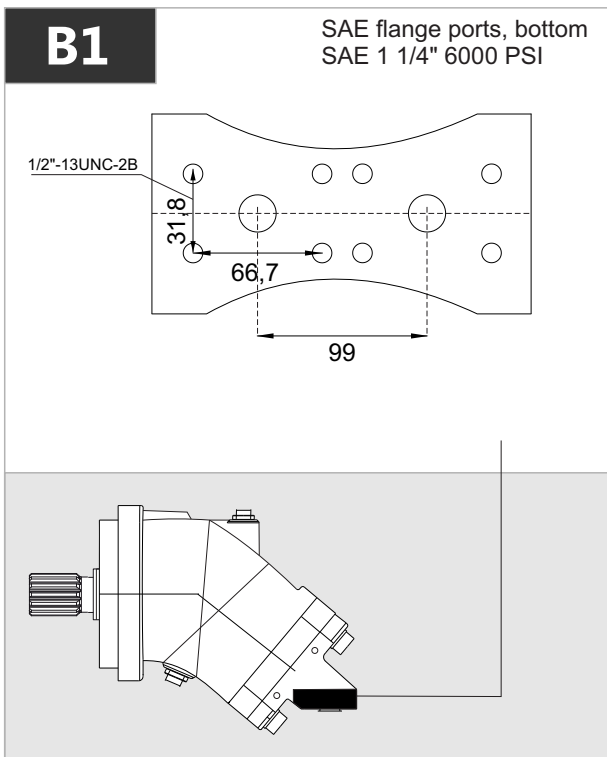
Cylindrical keyed shaft  
Ø 1 1/2"



# 2PEM 108 - SAE D - 4 BOLT



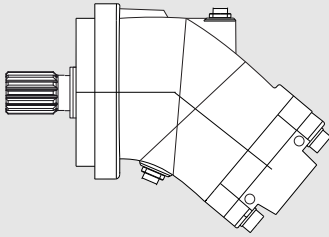
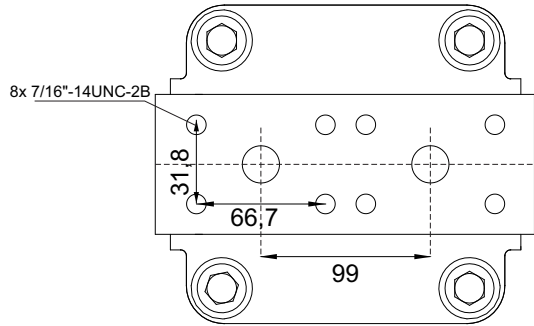
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
108,4 cc	162,6 cc	4000 rpm	4400 rpm	400 bar	450 bar	1.69 m.N/bar	600 m.N	433	22,50 kg	23,00 kg	-25°	110°



# 2PEM 108 - SAE D - 4 BOLT

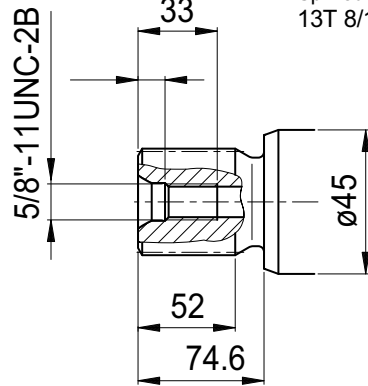
**R1**

SAE flange ports rear  
SAE 1 1/4" 6000 PSI



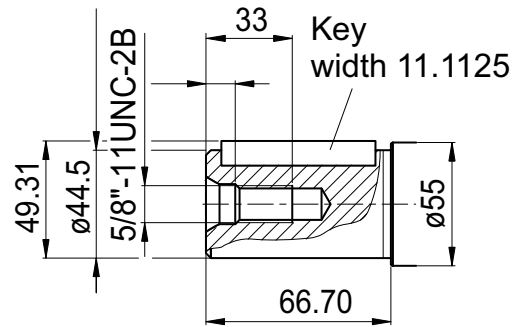
**J1**

Splined shaft  
13T 8/16DP 1 3/4"

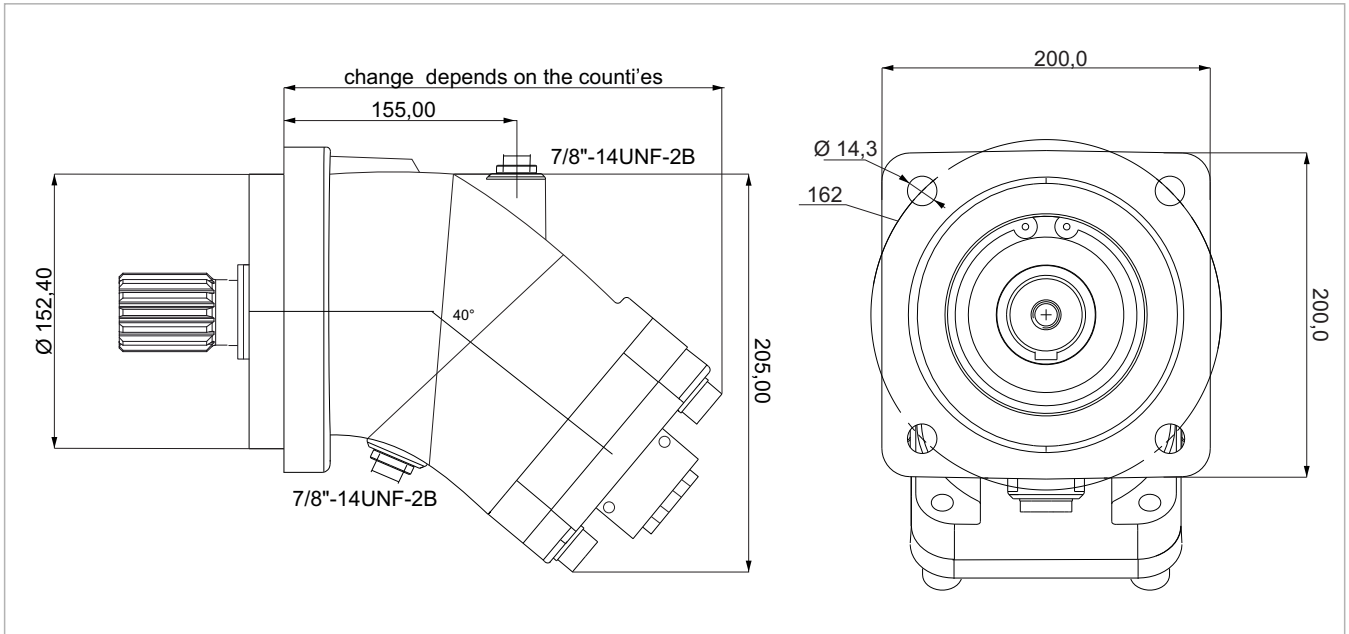


**J2**

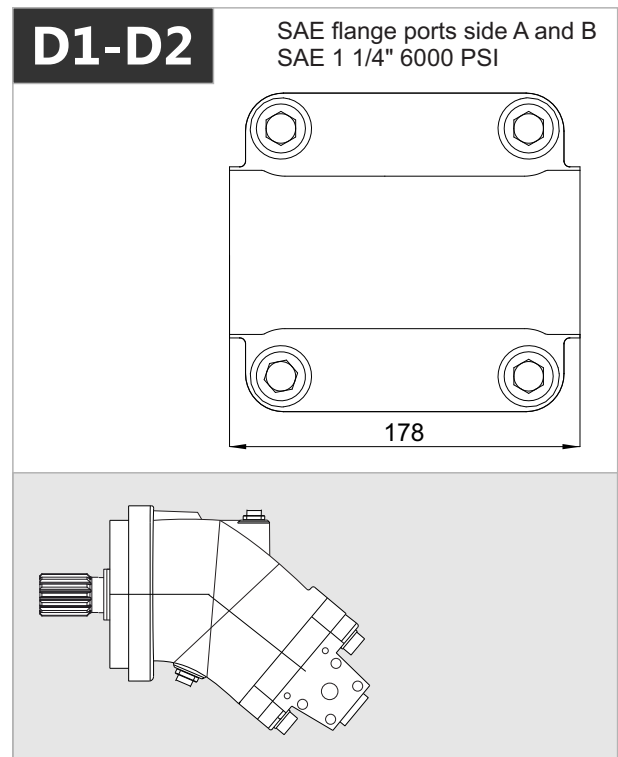
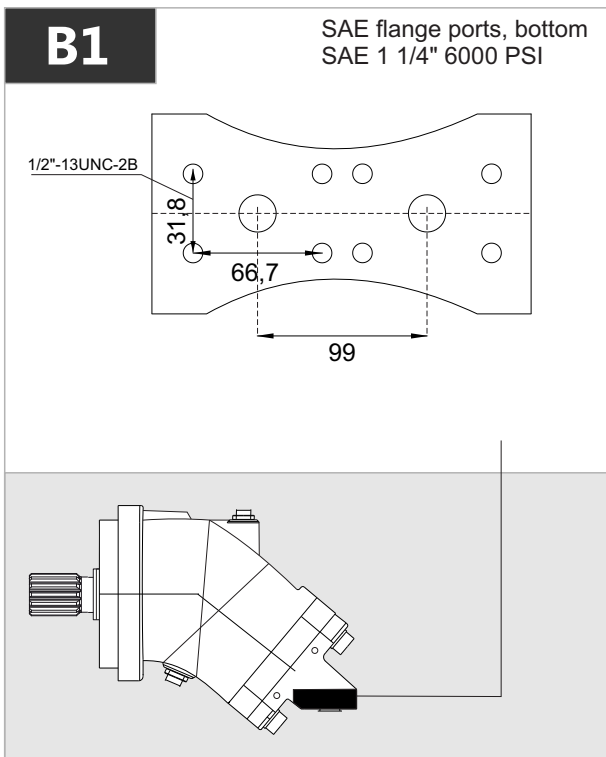
Cylindrical keyed shaft  
 $\varnothing 1 3/4$ "



# 2PEM 130 - SAE D - 4 BOLT



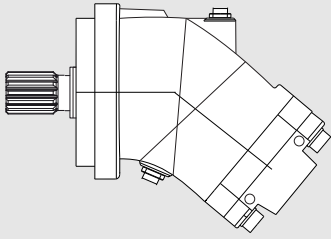
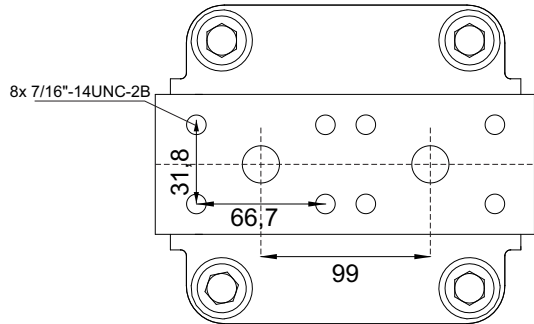
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
130,0 cc	195,0 cc	3400 rpm	4400 rpm	400 bar	450 bar	2.10 m.N/bar	710 m.N	442	30,50 kg	30,90 kg	-25°	110°



# 2PEM 130 - SAE D - 4 BOLT

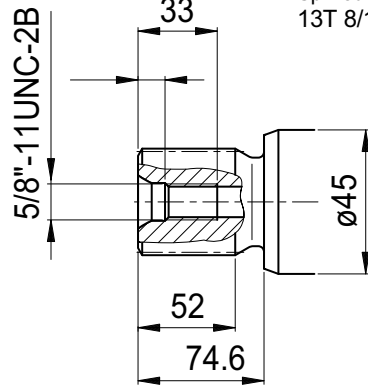
**R1**

SAE flange ports rear  
SAE 1 1/4" 6000 PSI



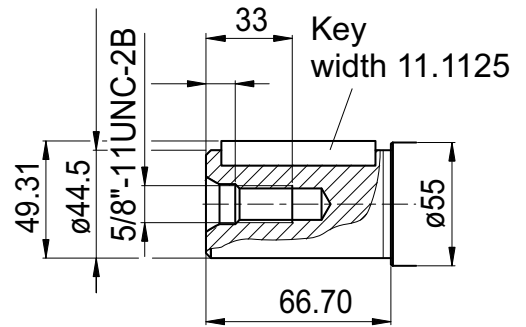
**J1**

Splined shaft  
13T 8/16DP 1 3/4"



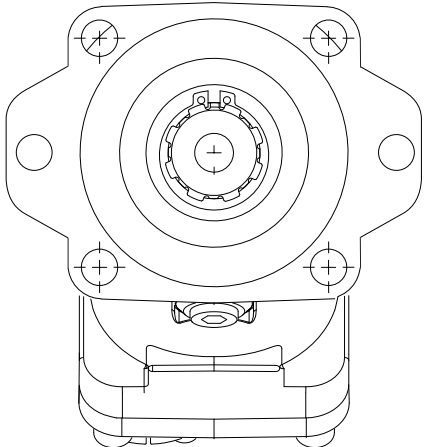
**J2**

Cylindrical keyed shaft  
 $\varnothing 1 3/4$ "

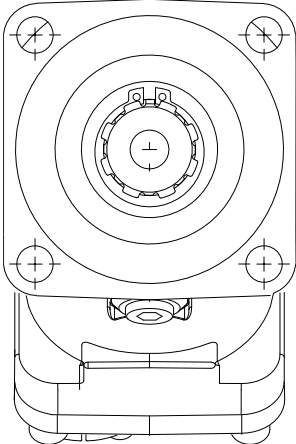


# Special Mounting Flanges

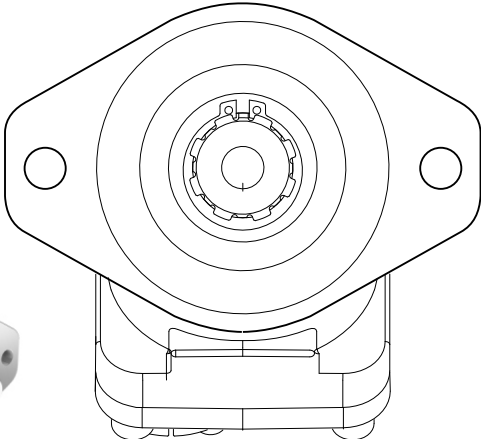
SAE B - 6 BOLT  
Mounting Flange



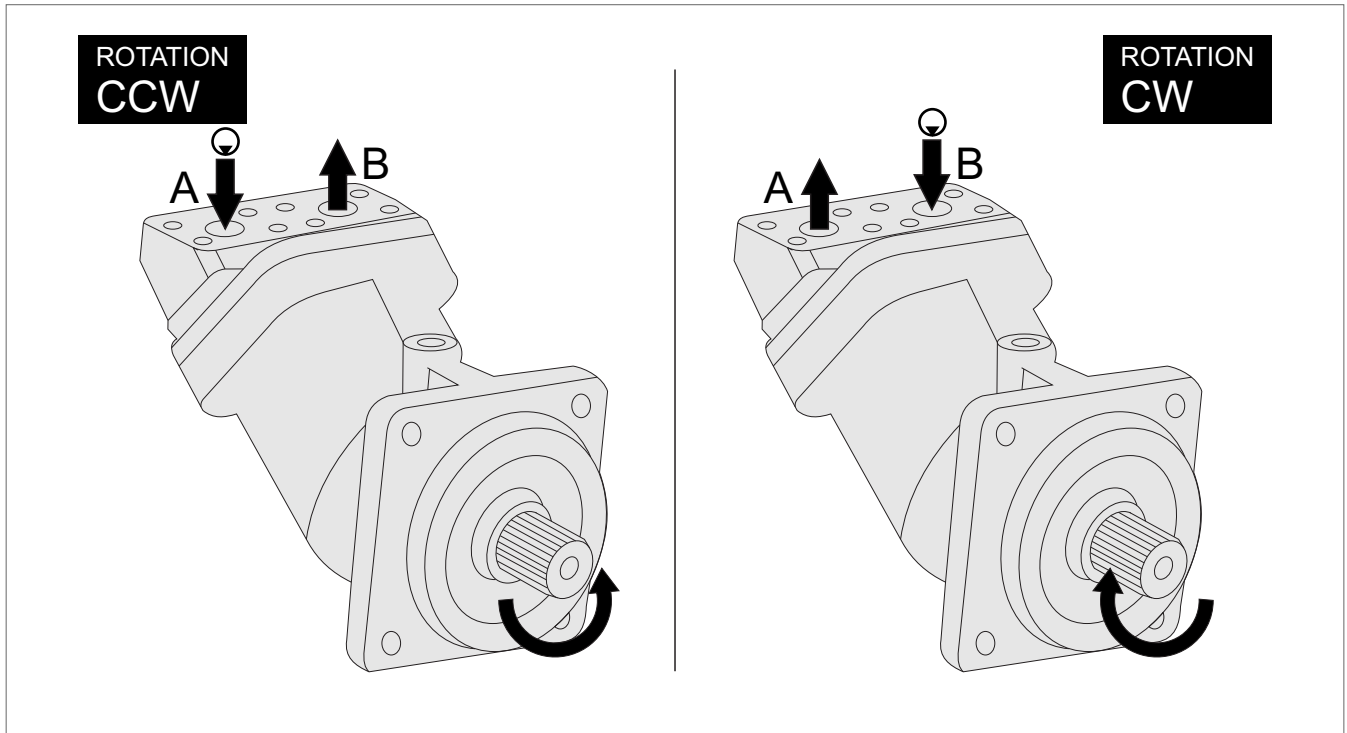
SAE C - 4 BOLT



SAE B - 2 BOLT



# Direction of Rotation



## Quick Calculation

### Flow rate

$$Q = \frac{V_s \cdot n}{1000 \eta_v} \text{ (lpm)}$$

### Torque

$$M = \frac{V_s \cdot \Delta p \cdot \eta_{mh}}{63} \text{ (Nm)}$$

### Power

$$P = \frac{2\pi \cdot M \cdot n}{60000} = \frac{M \cdot n}{9549} = \frac{Q \cdot \Delta p \cdot \eta_t}{600} \text{ (kw)}$$

### Speed

$$n = \frac{1000 \cdot Q \cdot \eta_v}{V_s} \text{ (rpm)}$$

$V_s$  = Displacement (ccm/rev.)

$\Delta p$  = Diff. pressure (bar)

$n$  = Speed (rpm)

$Q$  = Flow (lpm)

$\eta_v$  = Volumetric efficiency

$\eta_{mh}$  = Mechanical-hydraulic efficiency

$\eta_t$  = Total efficiency ( $\eta_t = \eta_v \times \eta_{mh}$ )

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 2PEM Bent Axis Motors.

### ÇELEBİ HİDROCEL OTOM. SAN. TİC. LTD. ŞTİ.

Fevziçakmak mh. Aslım Cd. No: 53 C Karatay / KONYA

Phone : +90 (332) 345 13 70 - +90 (332) 345 13 71

hidrocel@hidrocel.com.tr



# Installation

## POSITION

2PEM Motors can be operate any position.

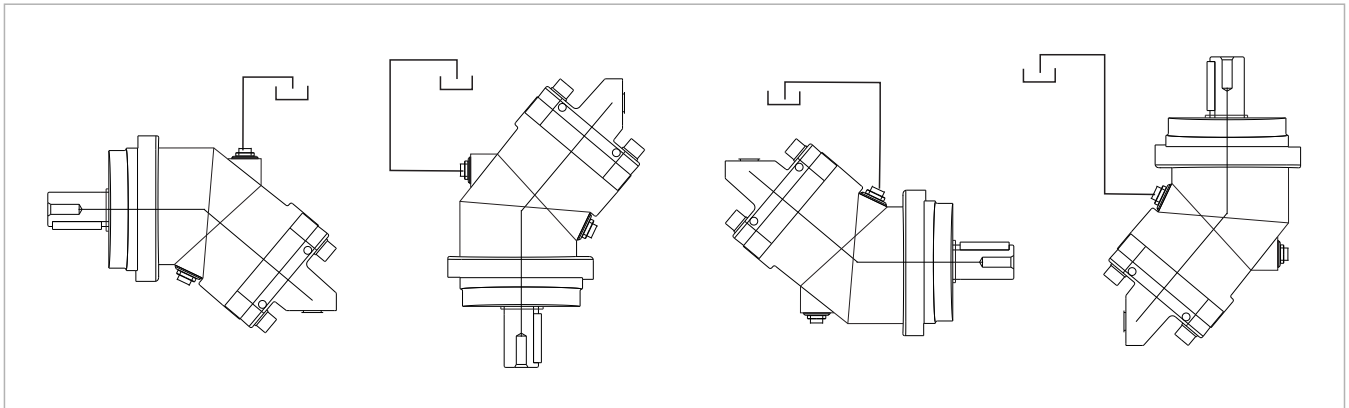
## DIRECTION OF ROTATION

2PEM Motors can be operate in both directions of rotation.

Before of Installation operation, the motor must be filled with hydraulic fluid and air bled.

## INSTALLATION POSITION

See following examples.

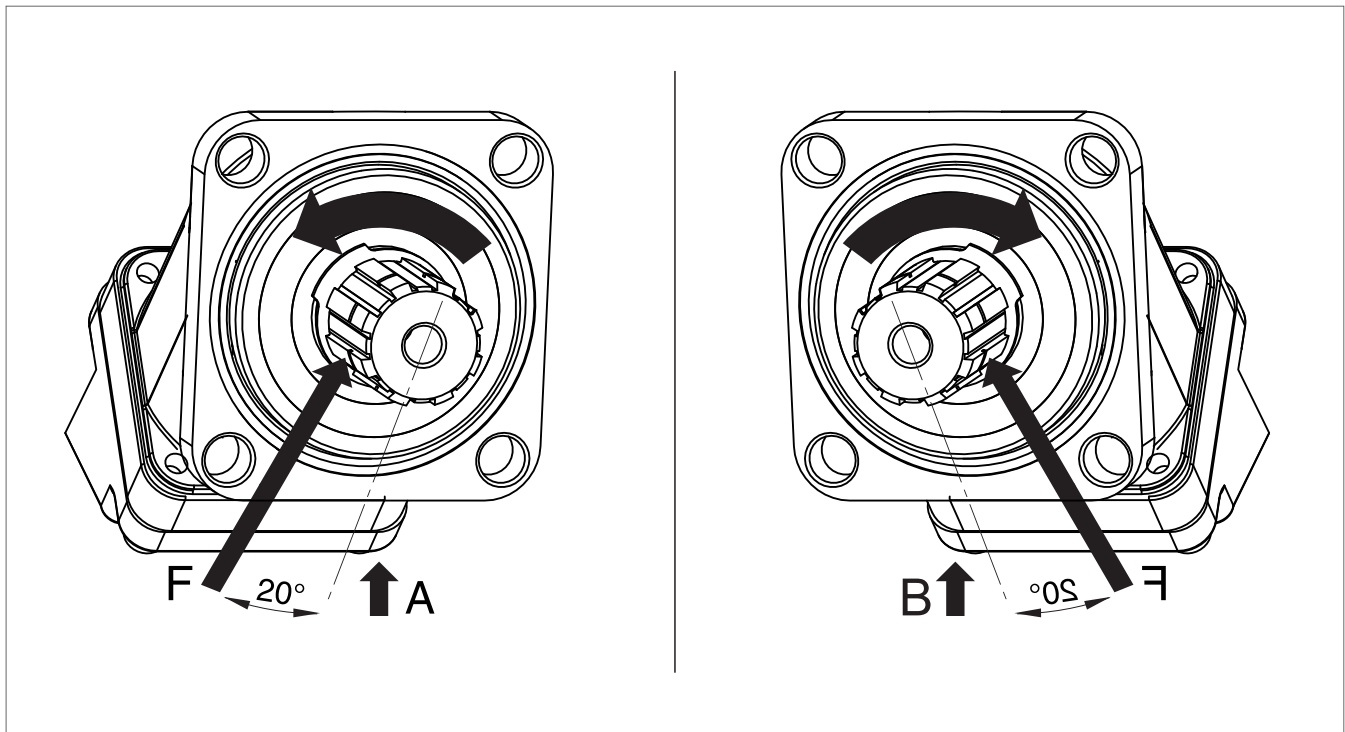


## HYDRAULIC FLUID

Recommended ;

Generally : between 15 and 200 cSt.

Maximum : between 5 and 1600 cSt.



## FOR USE;

Available via e-mail on request or each motor is supplied via Starting datasheet.

For detailed information about 2PEM Bent Axis Motors, please contact with Technical Department !!!

# Complete Product Range

## Piston Pumps

## Piston Motors

# DIN

DIN 5462 / ISO 14  
8x32x35  
8x32x36  
DIN 6885



**2PBA**



**2PBM**

# ISO

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



**2PS**



**2PM**

# SAE

SAE B2 C4 - SAE D  
SAE J498b  
SAE J 744



**2PE**



**2PEM**

# M2

Fixed Plug-in

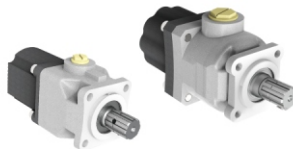
DIN 5480 / ISO 3019-2  
W30 - W35 - W40  
M21 - M22 - M23



**2PMS**

# PA

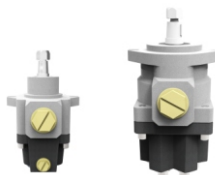
DIN ISO 14  
8x32x36



**PA**

# PH

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



**PH**

# Contact

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