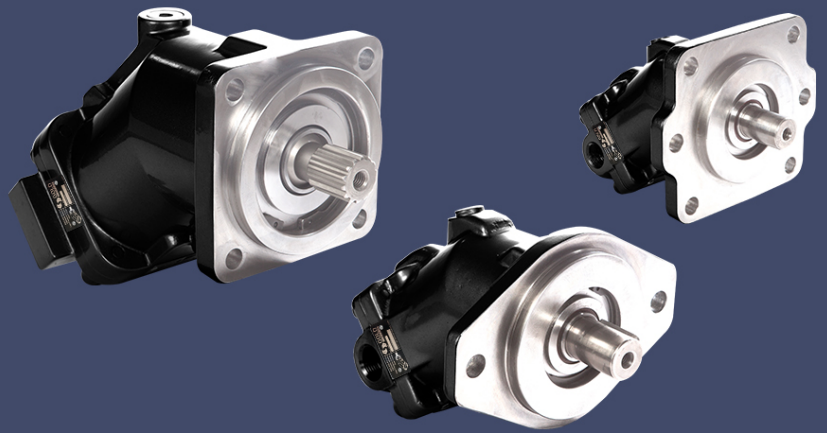


A9MS

Bent Axis Piston Motors - SAE



A9MS 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 A9MS

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 A9MS 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 cm³/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 A9MS 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 A9MS Motors

Motor Code

A9MS

Displacement (cm³)

108

Drive Shafts

J2

Inlet Ports A - B

R1

Mounting Flange

A

Sealing

N

N Nitrile

V Viton

A	5	10	12	18	25	32	40	50	56	63	80	108	130
	SAE A-B	SAE B	SAE B	SAE B	SAE C	SAE C	SAE C	SAE C	SAE C	SAE C	SAE C	SAE C-D	SAE D

		5	10	12	18	25	32	40	50	56	63	80	108	130
SAE Flange Ports	B1 Bottom	—	—	—	—	●	●	●	●	●	●	●	●	●
	R1 Rear	—	—	—	—	●	●	●	●	●	●	●	●	●
	D1 Side	—	—	—	—	●	●	●	●	●	●	●	●	●
		—	—	—	—	●	●	●	●	●	●	●	●	●
Threaded	R2 Rear	●	●	●	●	●	●	●	●	●	●	—	—	—
	D3 Side	●	●	●	●	●	●	—	—	—	—	—	—	—
		D4	—	—	—	—	●	●	—	—	—	—	—	—

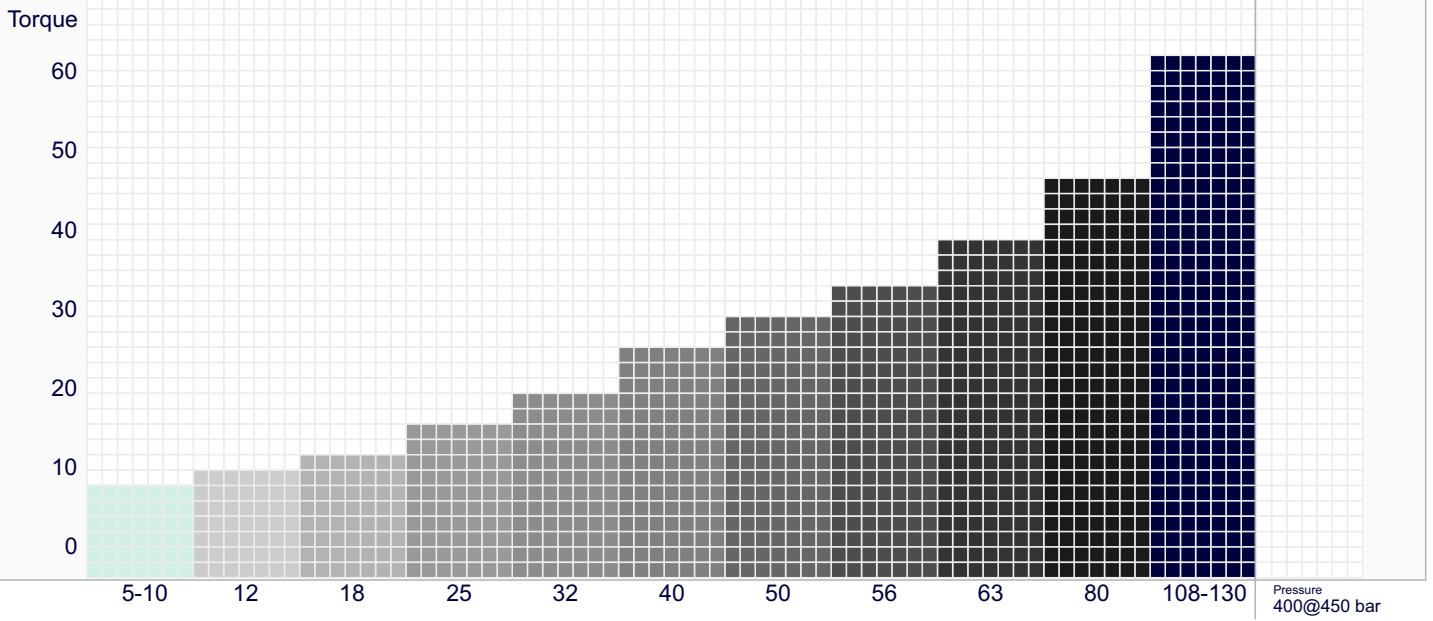
		5	10	12	18	25	32	40	50	56	63	80	108	130
SAE J498b SPLINED	J1	●	●	●	●	●	●	●	●	●	●	●	●	●
SAE J744 KEYED	J2	●	●	●	●	●	●	●	●	●	●	●	●	●

5	10	12	18	25	32	40	50	56	63	80	108	130
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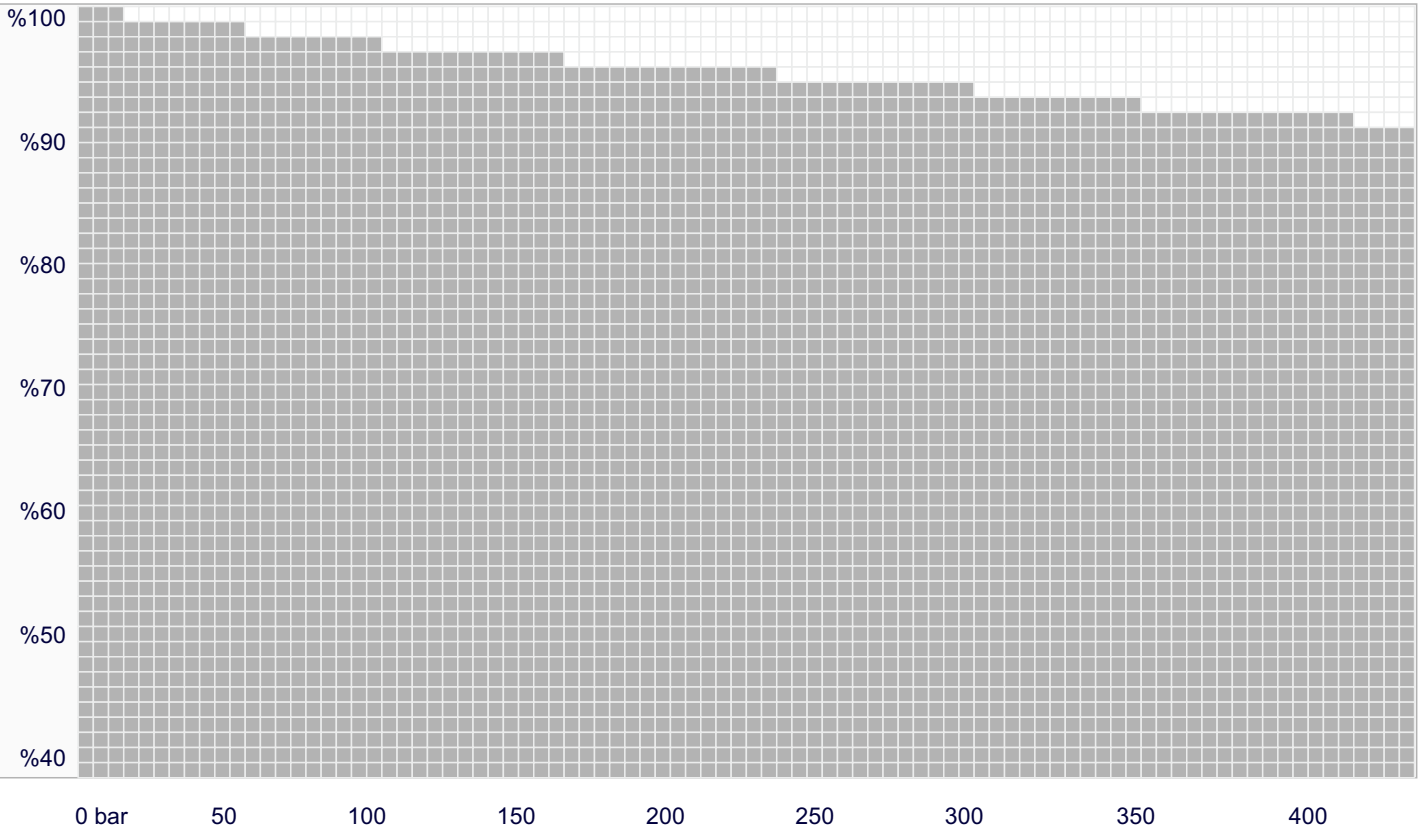
A9MS Bent Axis Piston Motor - SAE, Fixed Displacement.

Performance

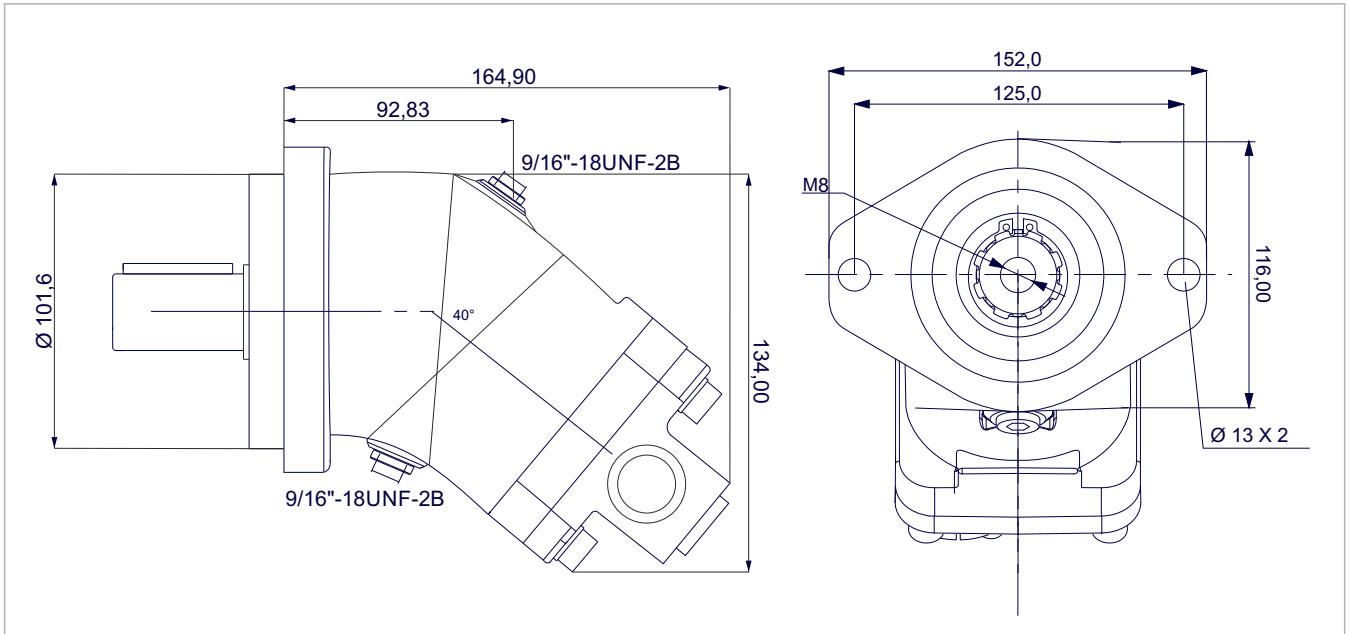
Compare Table of Torque



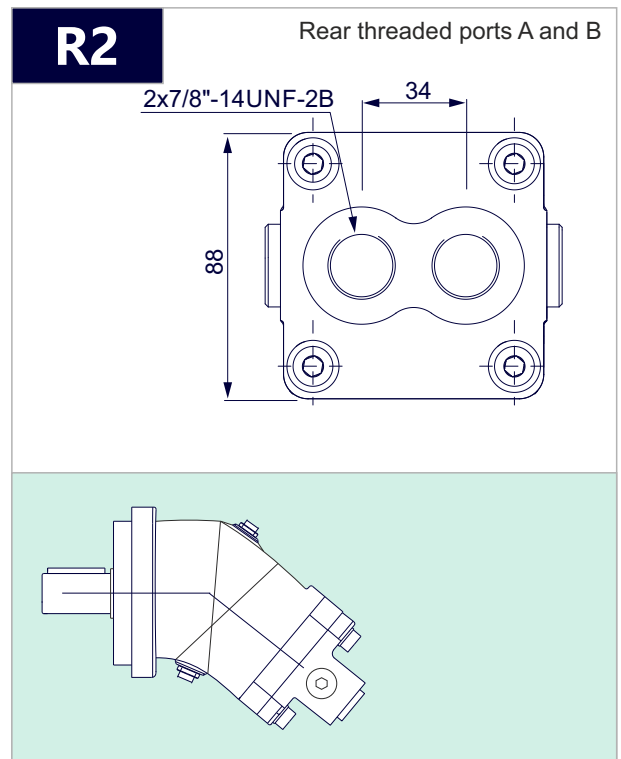
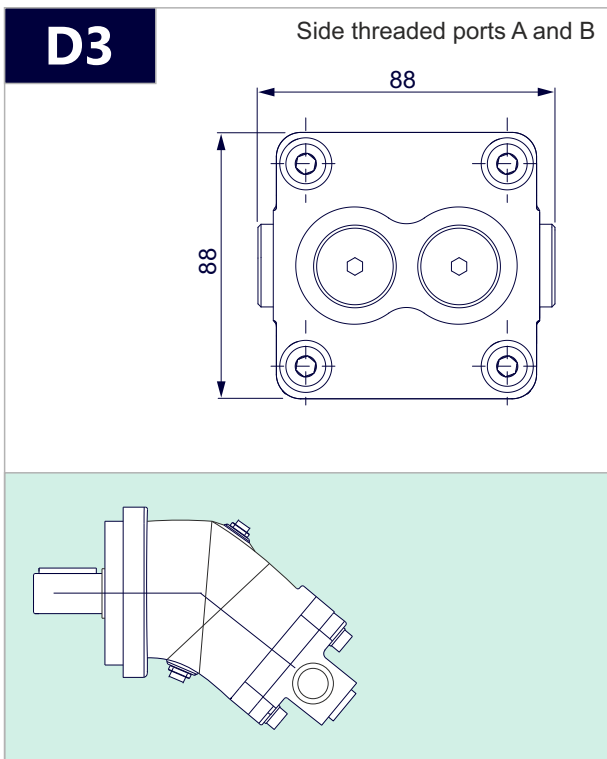
Efficiency of A9MS Motors



A9MS 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°



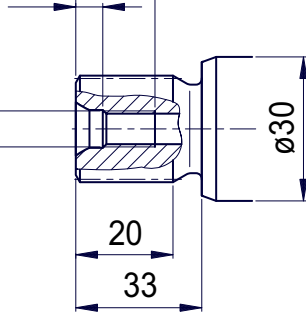
A9MS 5 - SAE A - 2 BOLT

J1

5/16"-18UNC-2B

19

Splined shaft
13T 16/32DP 7/8"

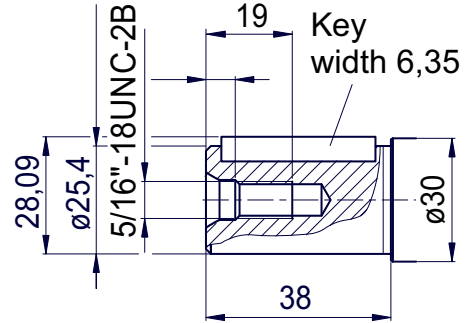


20
33

ø30

J2

Cylindrical keyed shaft
ø 1"



28,09

ø25,4

5/16"-18UNC-2B

19

Key
width 6,35

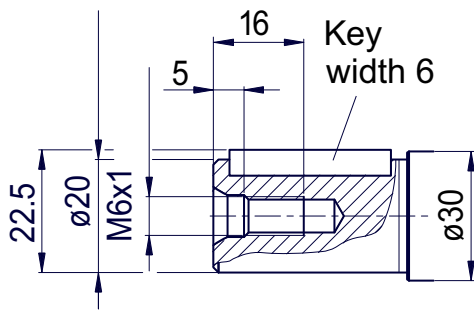
38

ø30

K2

!! Special

Parallel keyed shaft
DIN 6885, AS6x6x32



22.5

ø20

M6x1

5

16

Key
width 6

ø30

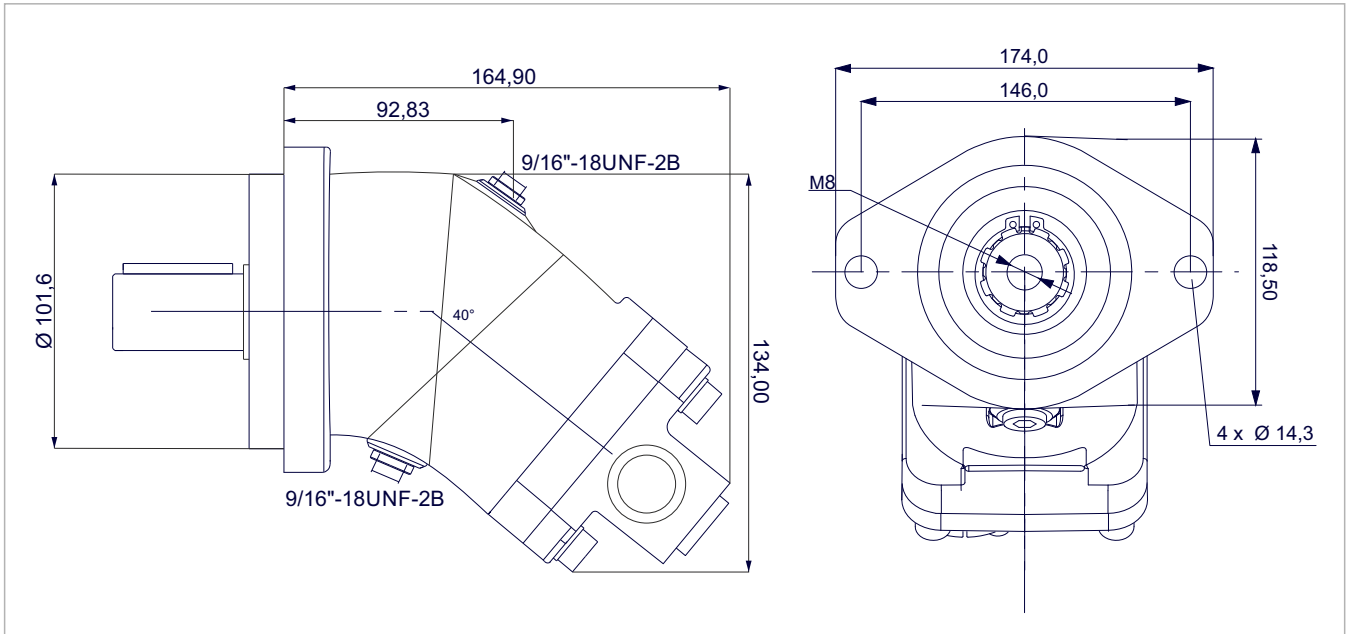
ALL SPLINED AND KEYED

SPECIAL DIMENSION

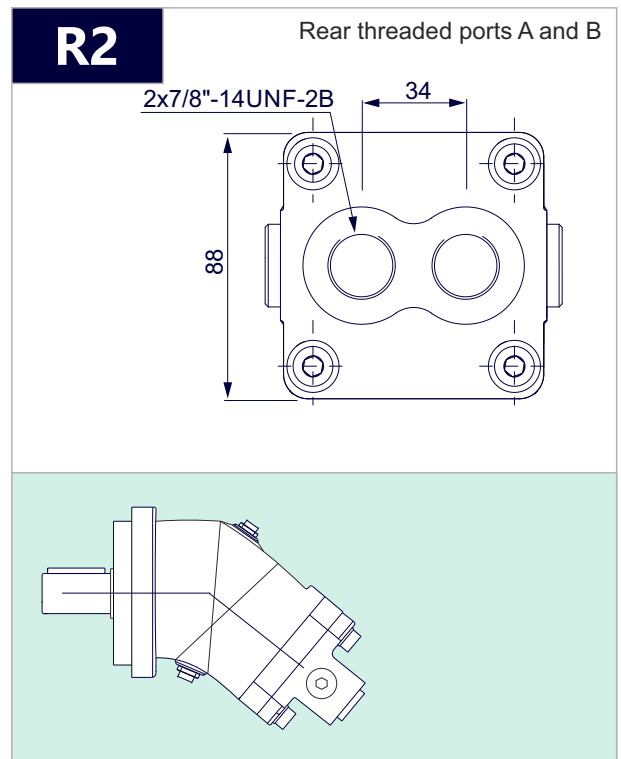
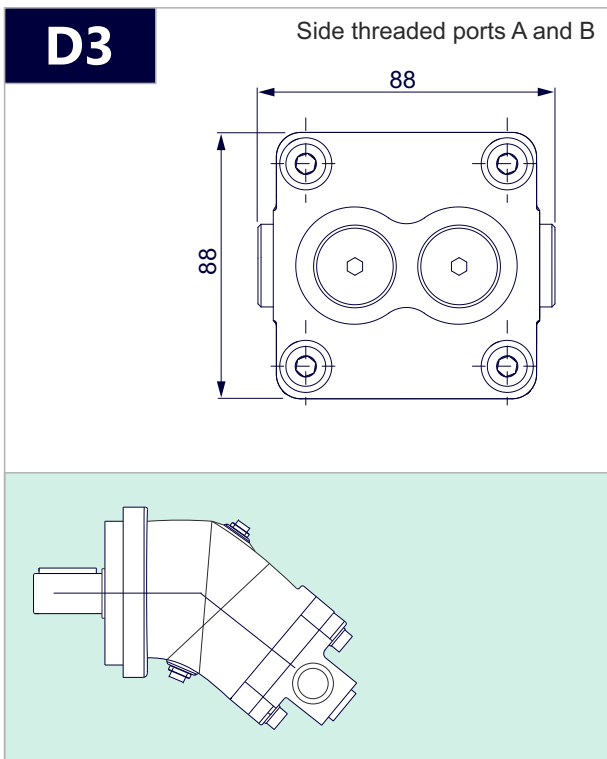
SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE
DEPENDS ON THE COUNTRIES)

A9MS 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°



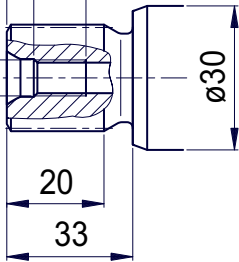
A9MS 5 - SAE B - 2 BOLT

J1

5/16"-18UNC-2B

19

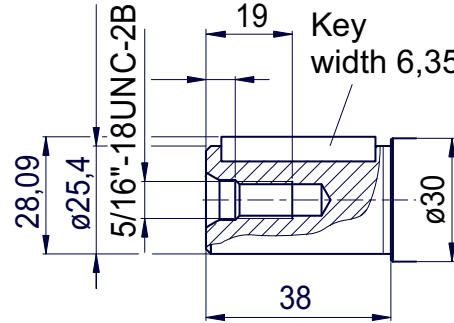
Splined shaft
13T 16/32DP 7/8"



J2

Cylindrical keyed shaft
ø 1"

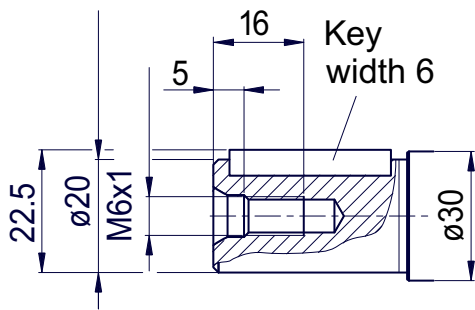
Key
width 6,35



K2

!! Special

Parallel keyed shaft
DIN 6885, AS6x6x32



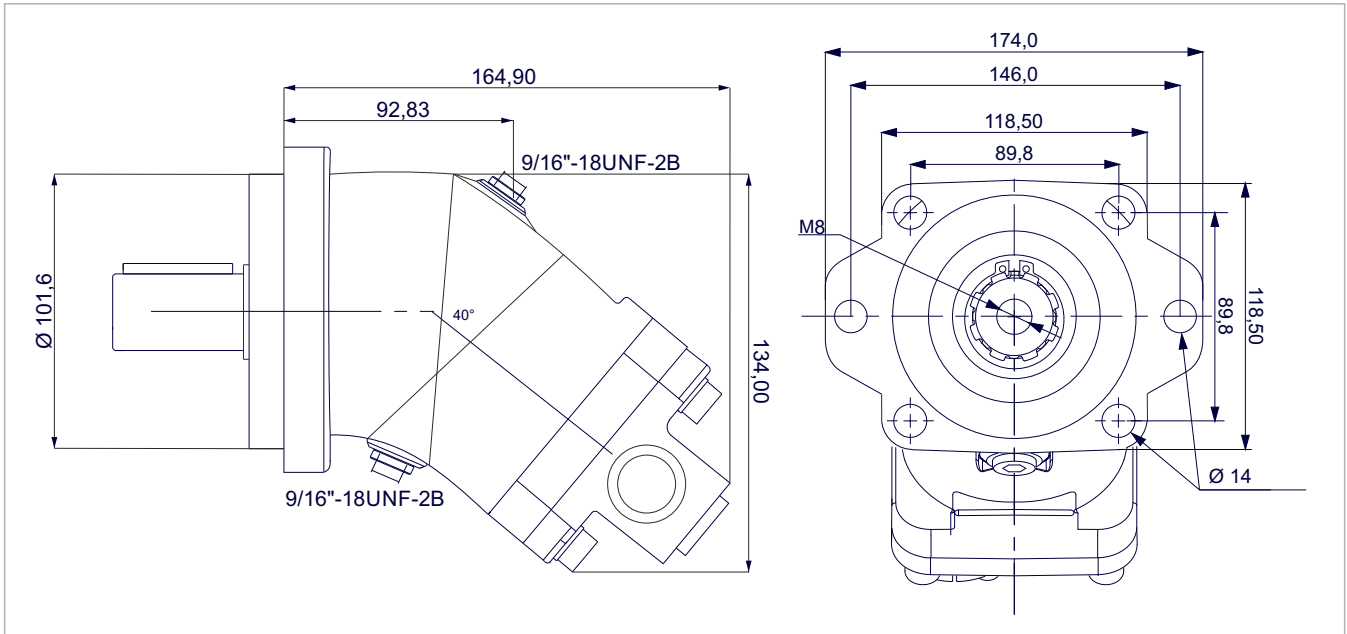
ALL SPLINED AND KEYED

SPECIAL DIMENSION

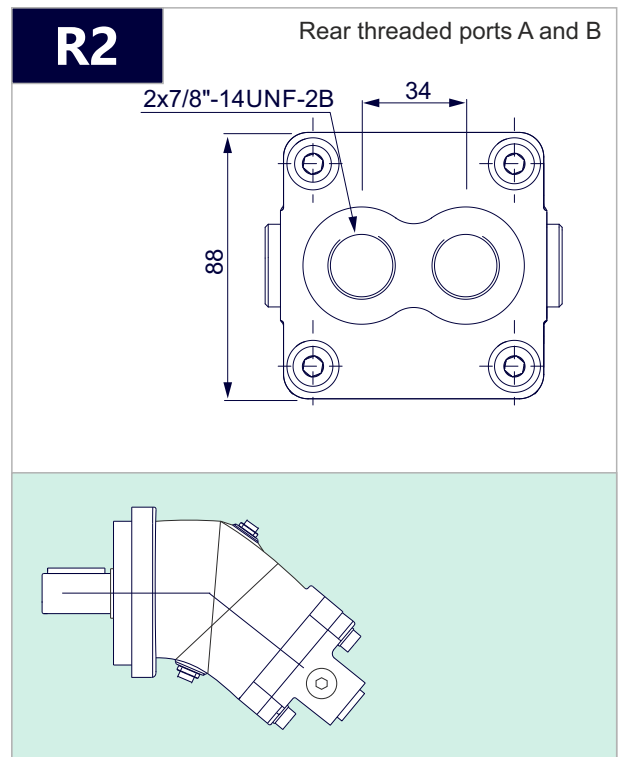
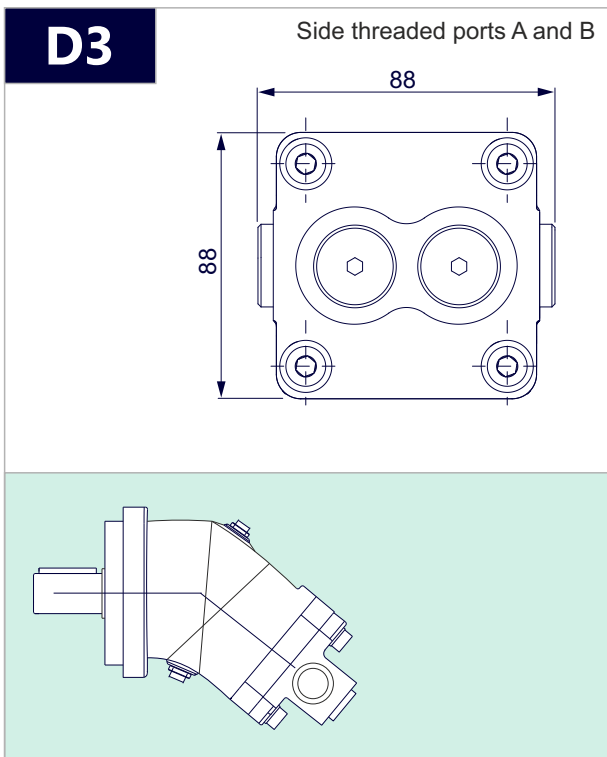
SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE
DEPENDS ON THE COUNTRIES)

A9MS 5 - SAE B - 6 BOLT



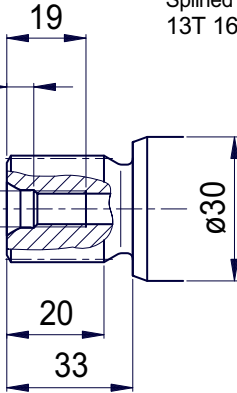
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
5,00 cc	7,50 cc	8800 rpm	9400 rpm	400 bar	450 bar	0.17 m.N/bar	62 m.N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



A9MS 5 - SAE B - 6 BOLT

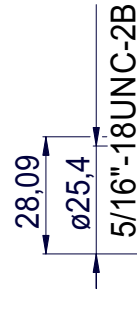
J1

5/16"-18UNC-2B



Splined shaft
13T 16/32DP 7/8"

J2



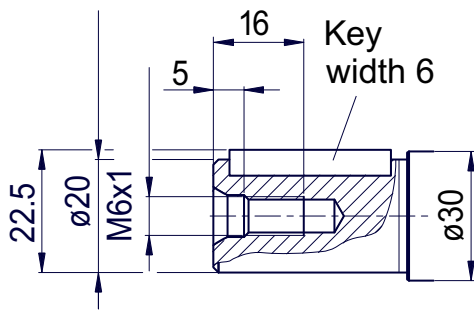
Cylindrical keyed shaft
ø 1"

Key
width 6,35

K2

!! Special

Parallel keyed shaft
DIN 6885, AS6x6x32



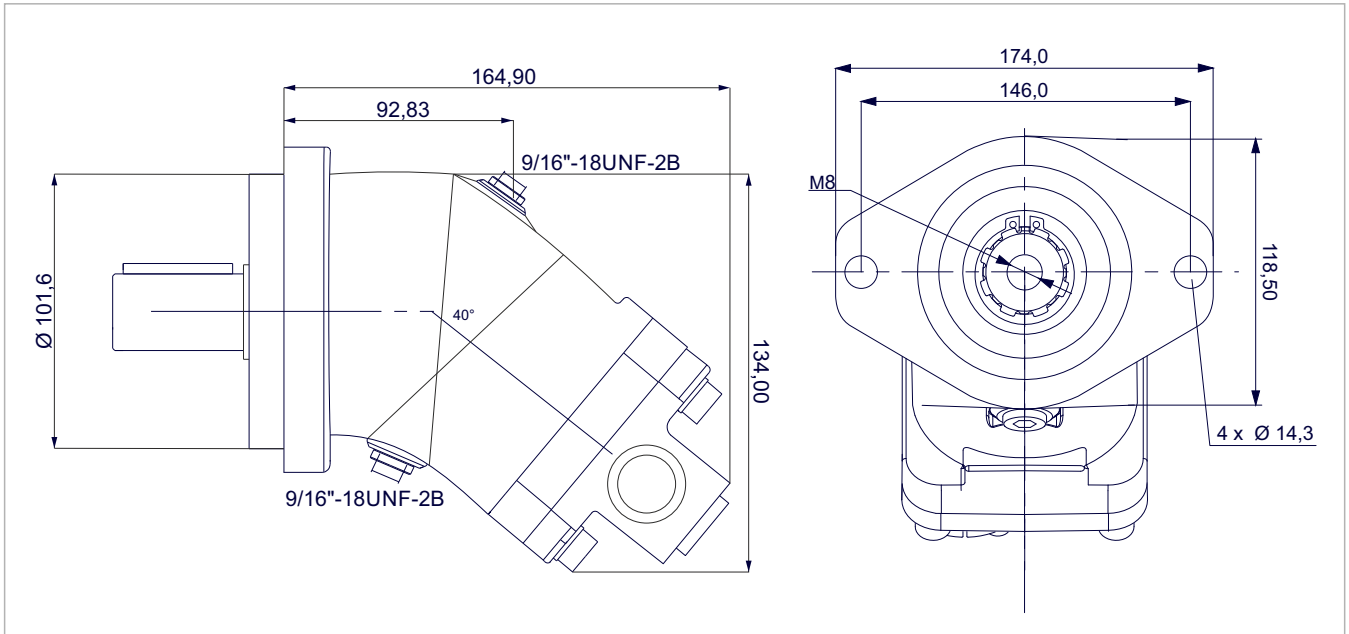
ALL SPLINED AND KEYED

SPECIAL DIMENSION

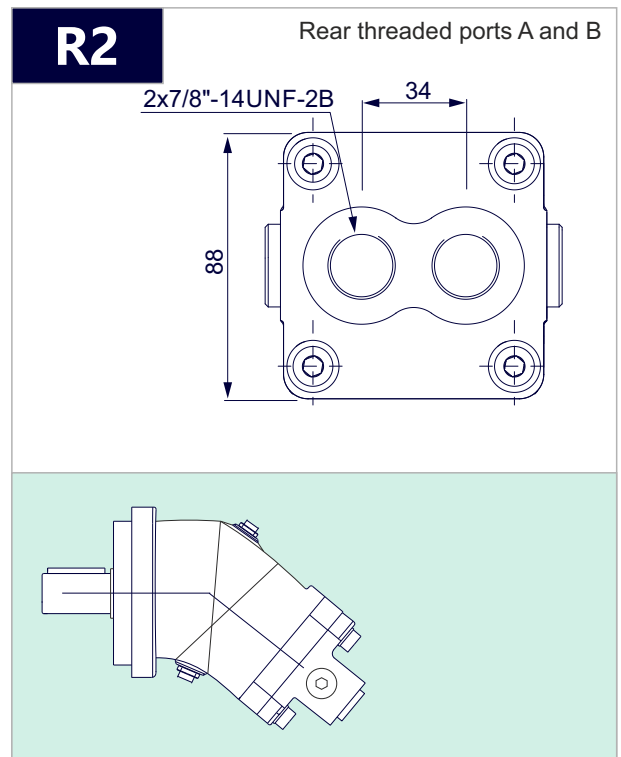
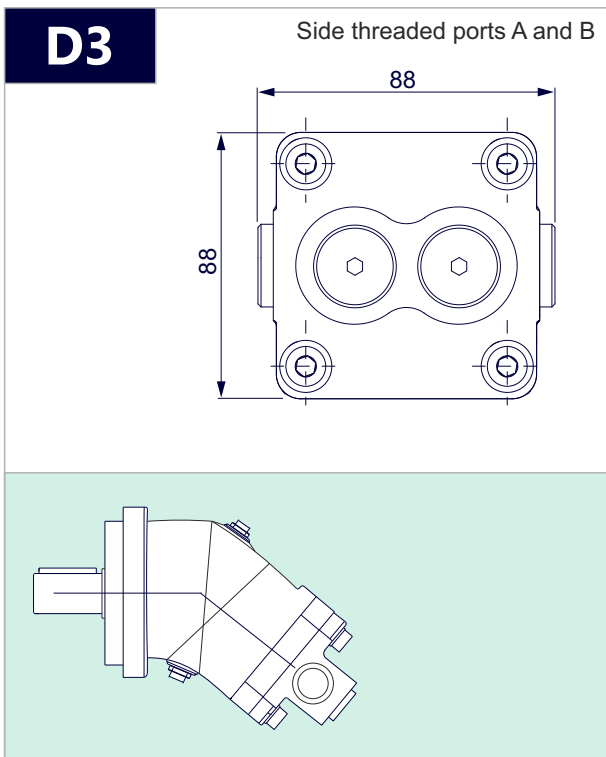
SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE
DEPENDS ON THE COUNTRIES)

A9MS 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°



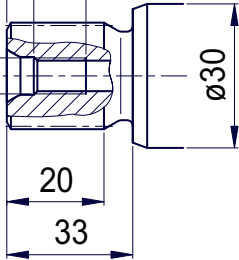
A9MS 10 - SAE B - 2 BOLT

J1

5/16"-18UNC-2B

19

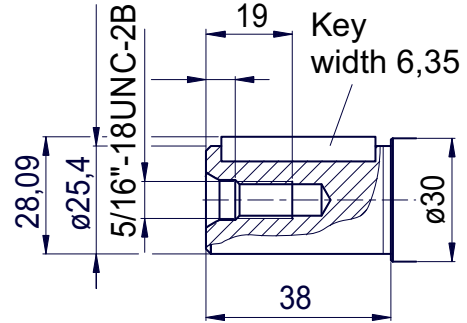
Splined shaft
13T 16/32DP 7/8"



20
33

J2

Cylindrical keyed shaft
ø 1"



28,09
ø25,4

5/16"-18UNC-2B

19

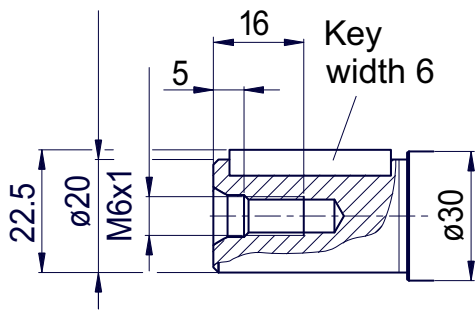
Key
width 6,35

38

K2

!! Special

Parallel keyed shaft
DIN 6885, AS6x6x32



22.5
ø20

M6x1

5
16

Key
width 6

ø30

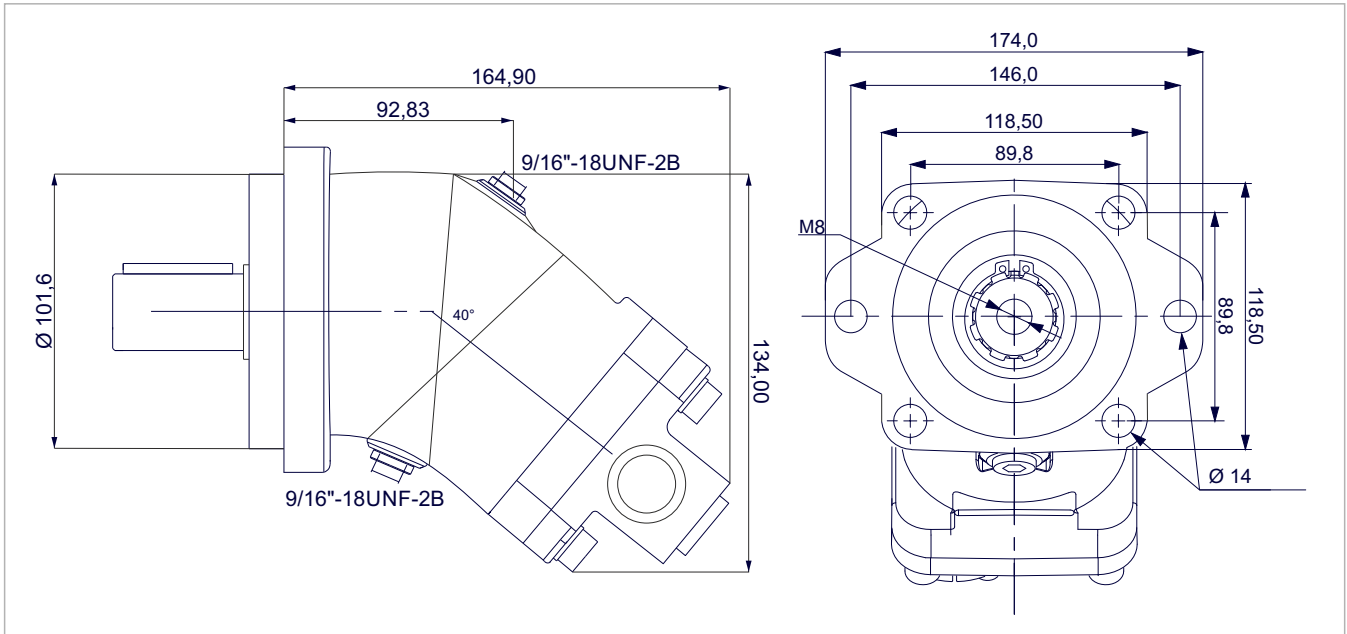
ALL SPLINED AND KEYED

SPECIAL DIMENSION

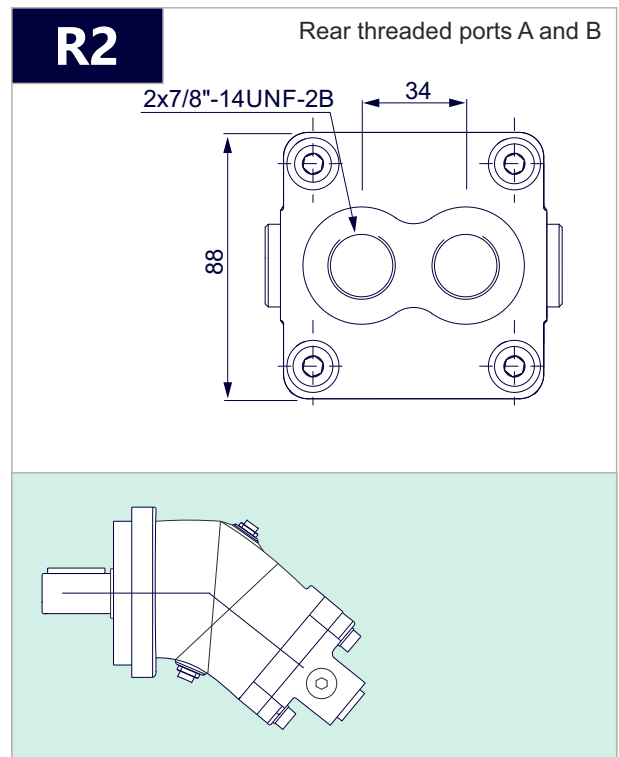
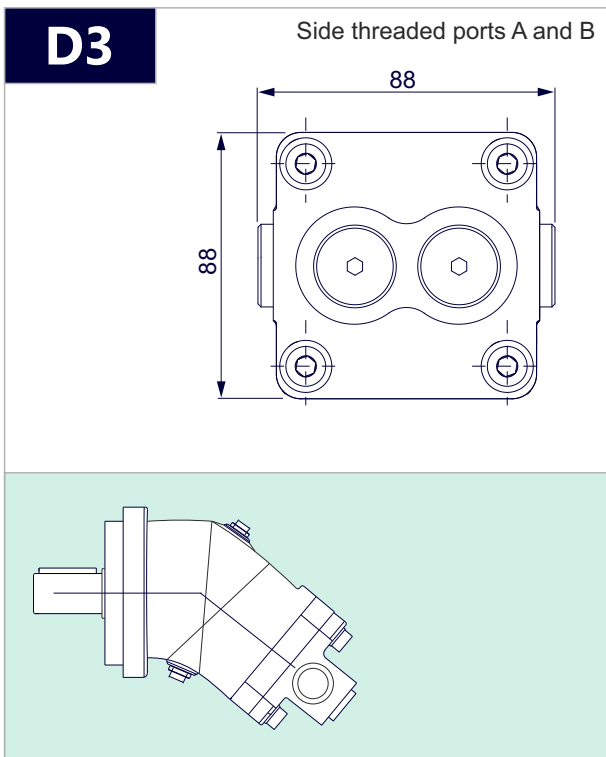
SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE
DEPENDS ON THE COUNTRIES)

A9MS 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°



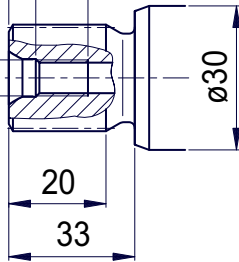
A9MS 10 - SAE B - 6 BOLT

J1

5/16"-18UNC-2B

19

Splined shaft
13T 16/32DP 7/8"

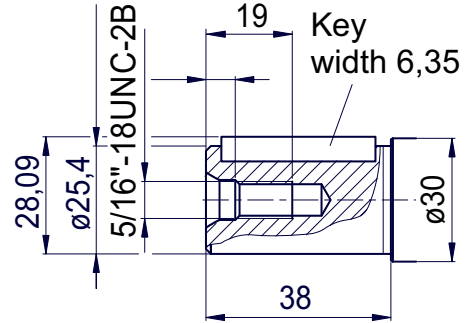


20

33

J2

Cylindrical keyed shaft
Ø 1"



Ø 1"

Key
width 6,35

28,09

ø25,4

5/16"-18UNC-2B

19

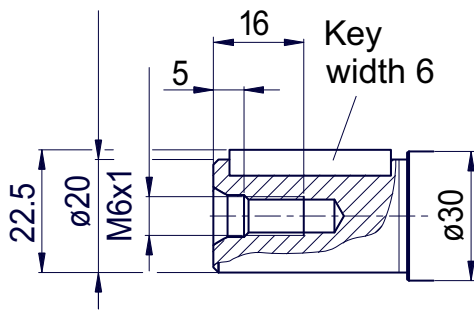
38

ø30

K2

!! Special

Parallel keyed shaft
DIN 6885, AS6x6x32



16

Key
width 6

5

22.5

ø20

M6x1

ø30

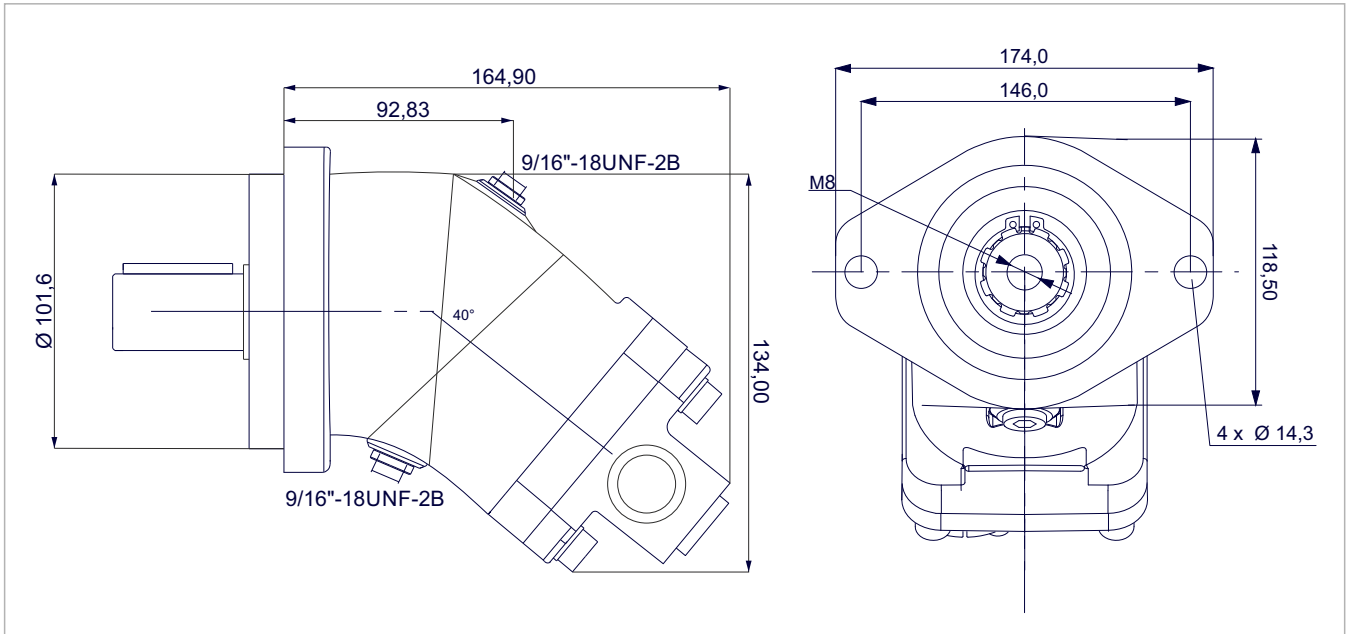
ALL SPLINED AND KEYED

SPECIAL DIMENSION

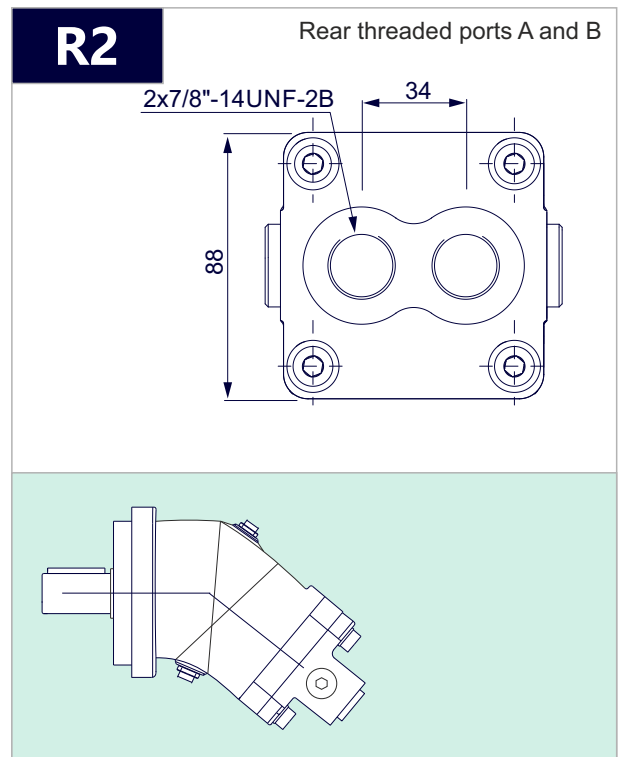
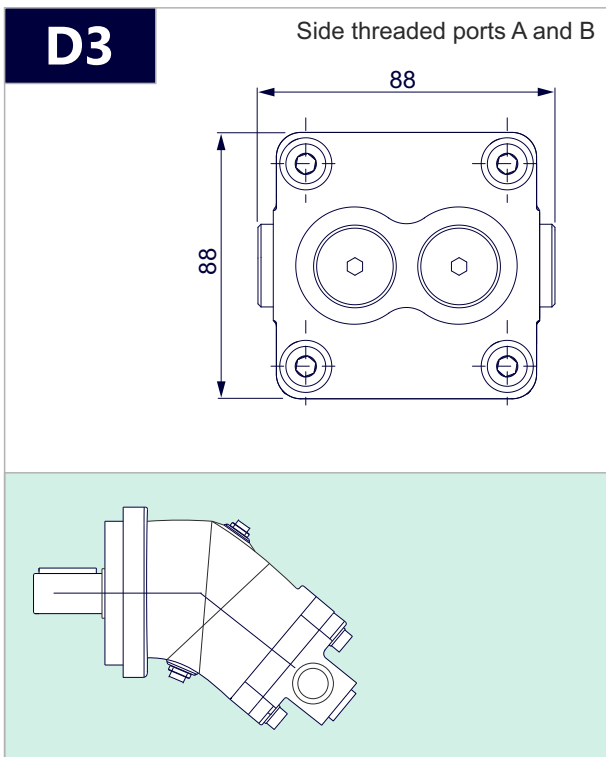
SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE
DEPENDS ON THE COUNTRIES)

A9MS 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°



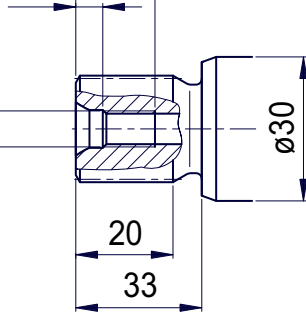
A9MS 12 - SAE B - 2 BOLT

J1

5/16"-18UNC-2B

19

Splined shaft
13T 16/32DP 7/8"



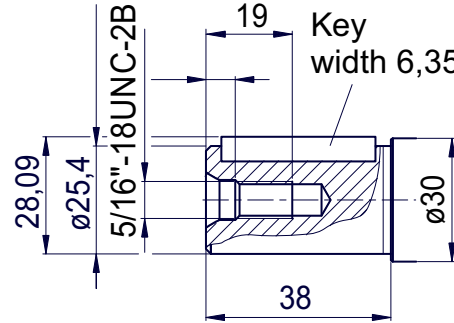
20
33

ø30

J2

Cylindrical keyed shaft
ø 1"

Key
width 6,35



28,09
ø25,4

5/16"-18UNC-2B

19

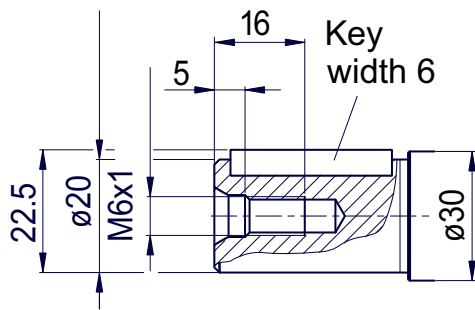
ø30

38

K2

!! Special

Parallel keyed shaft
DIN 6885, AS6x6x32



22.5
ø20

M6x1

16

Key
width 6

ø30

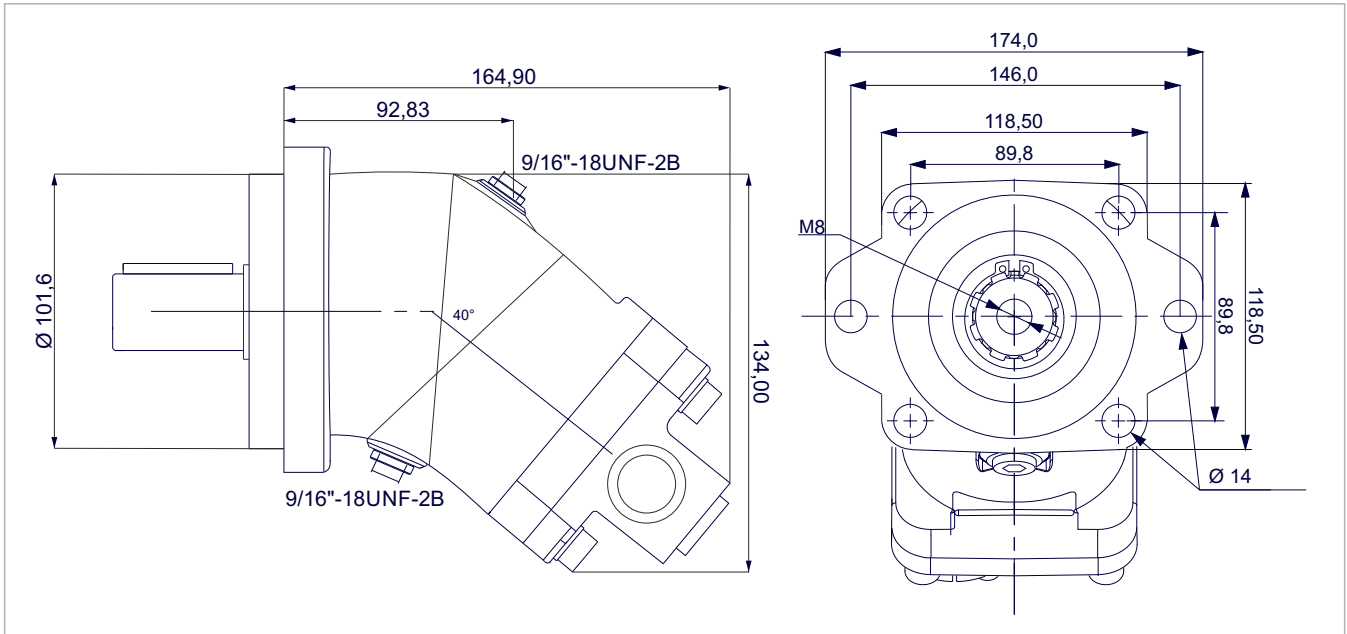
ALL SPLINED AND KEYED

SPECIAL DIMENSION

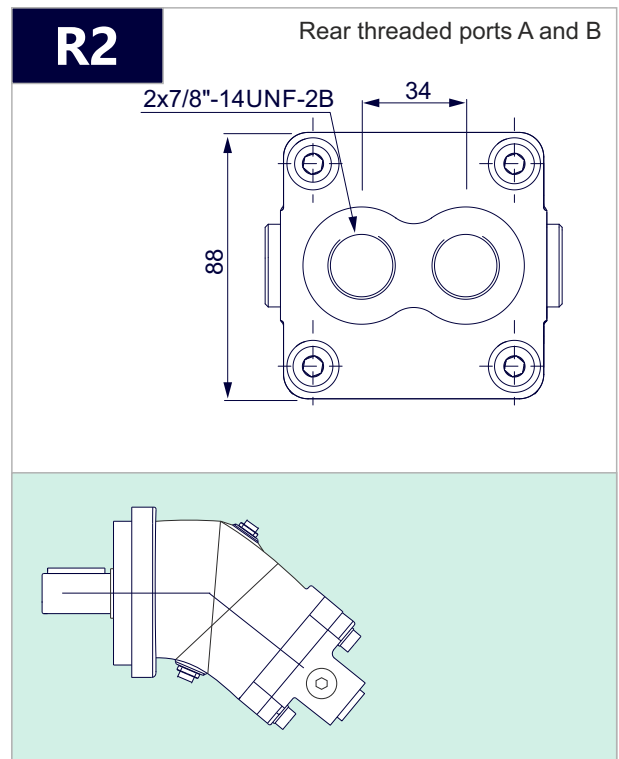
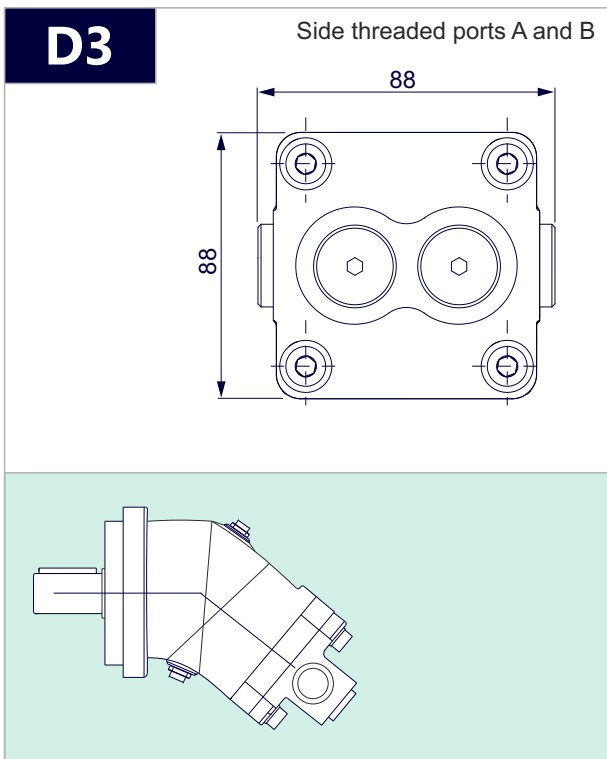
SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE
DEPENDS ON THE COUNTRIES)

A9MS 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°



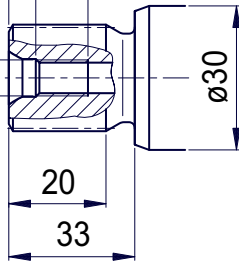
A9MS 12 - SAE B - 6 BOLT

J1

5/16"-18UNC-2B

19

Splined shaft
13T 16/32DP 7/8"

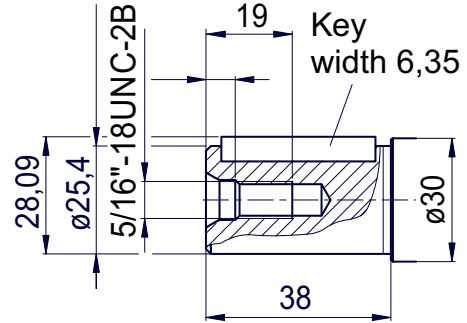


20

33

J2

Cylindrical keyed shaft
ø 1"



ø 1"

Key
width 6,35

28,09

ø25,4

5/16"-18UNC-2B

19

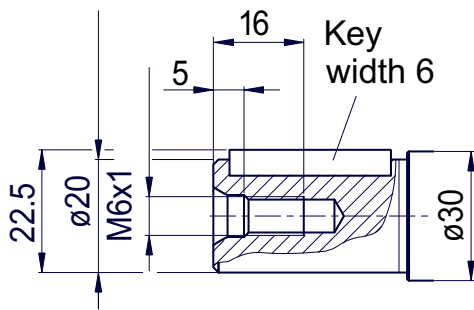
38

ø30

K2

!! Special

Parallel keyed shaft
DIN 6885, AS6x6x32



16

Key
width 6

5

22.5

ø20

M6x1

ø30

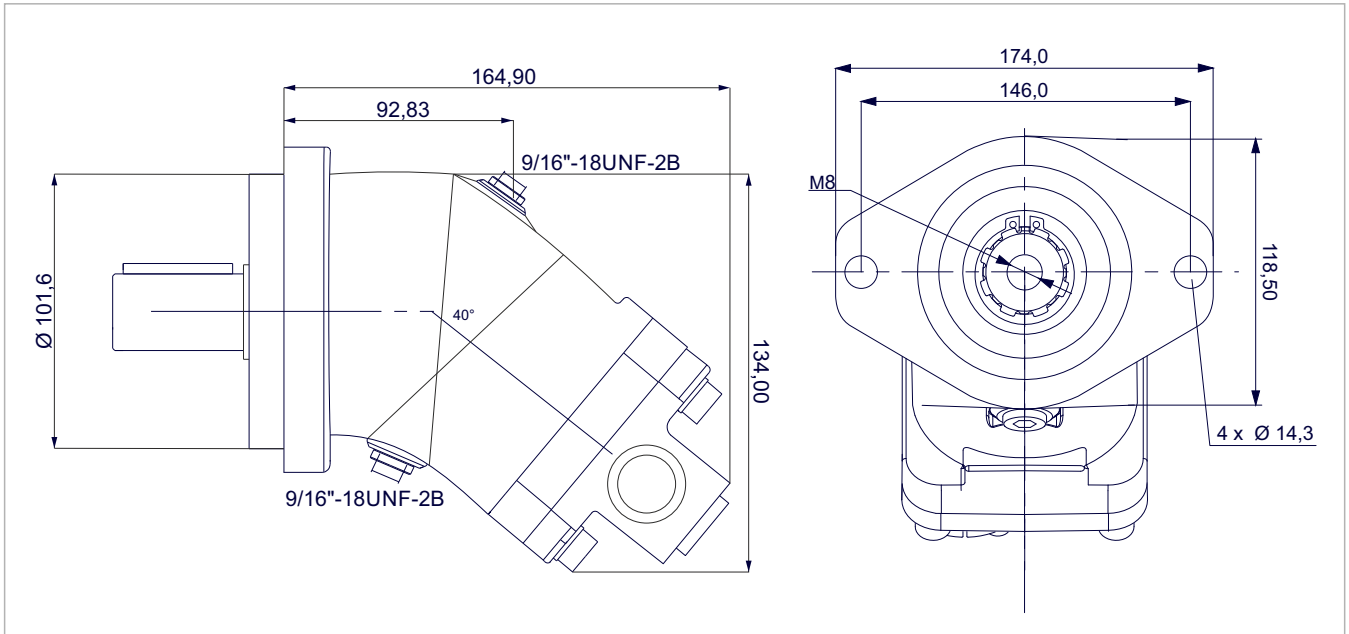
ALL SPLINED AND KEYED

SPECIAL DIMENSION

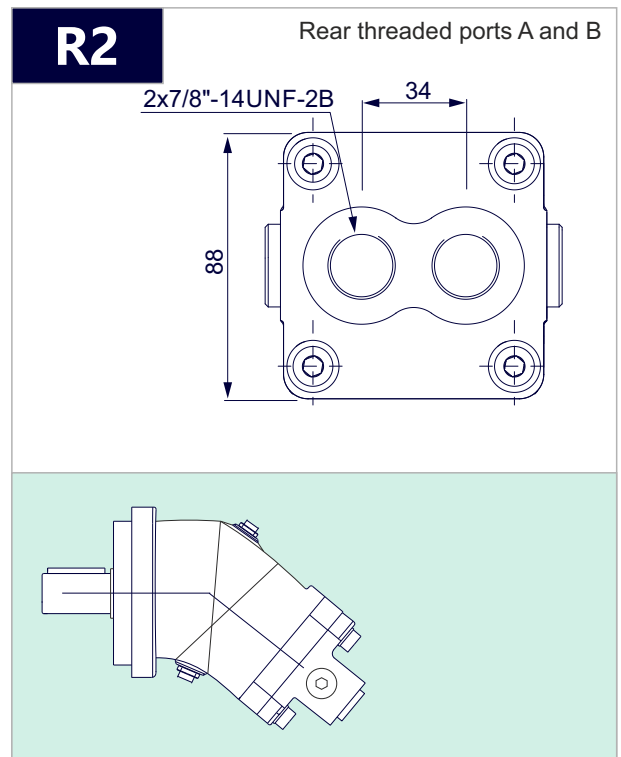
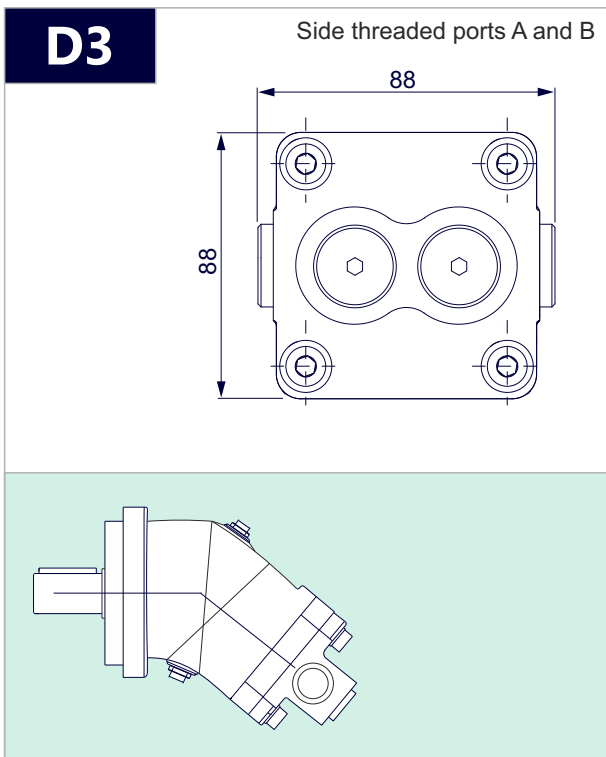
SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE
DEPENDS ON THE COUNTRIES)

A9MS 18 - SAE B - 2 BOLT



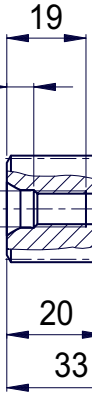
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
18,00 cc	27,00 cc	8000 rpm	8800 rpm	400 bar	450 bar	0,28 m.N/bar	98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



A9MS 18 - SAE B - 2 BOLT

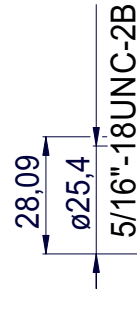
J1

5/16"-18UNC-2B



Splined shaft
13T 16/32DP 7/8"

J2



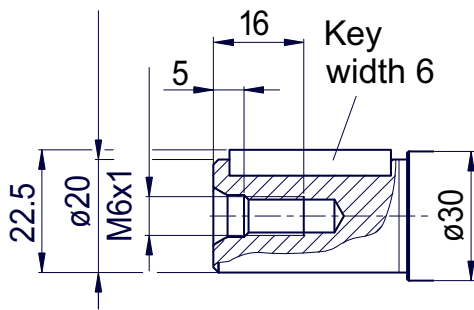
Cylindrical keyed shaft
ø 1"

Key
width 6,35

K2

!! Special

Parallel keyed shaft
DIN 6885, AS6x6x32



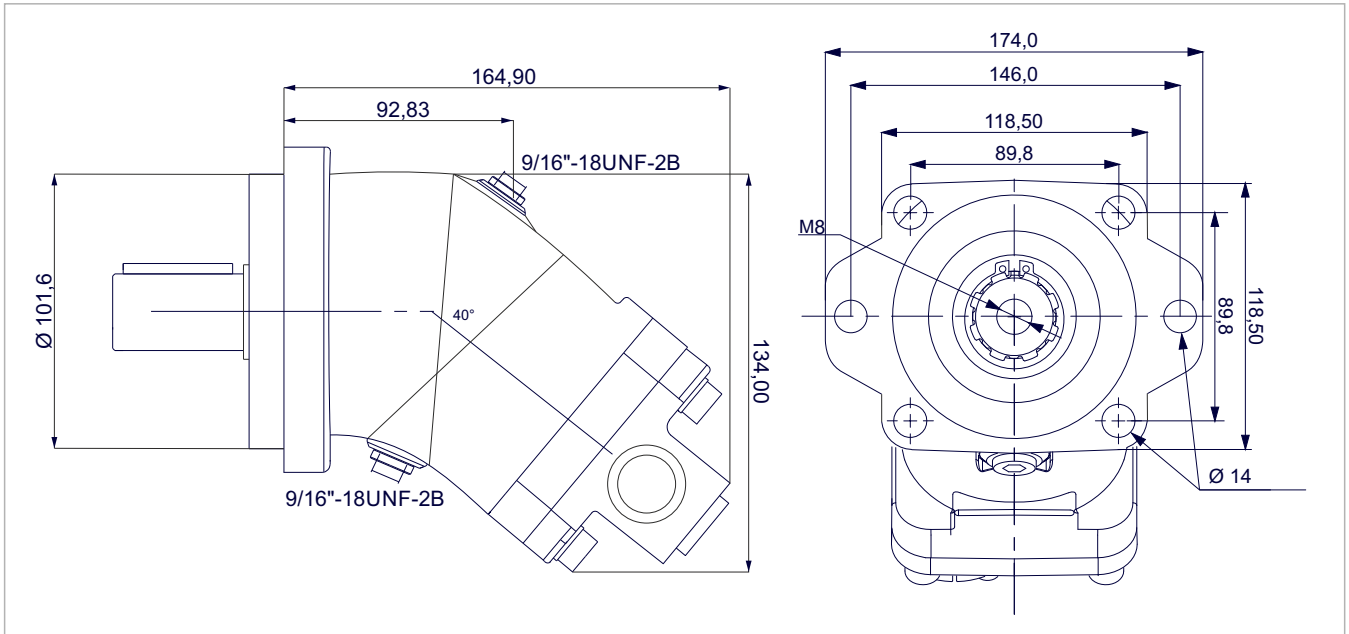
ALL SPLINED AND KEYED

SPECIAL DIMENSION

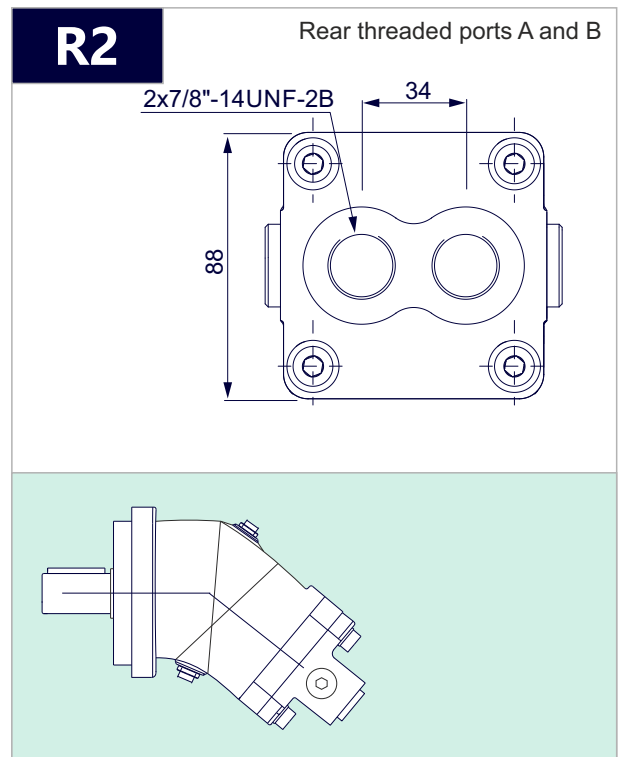
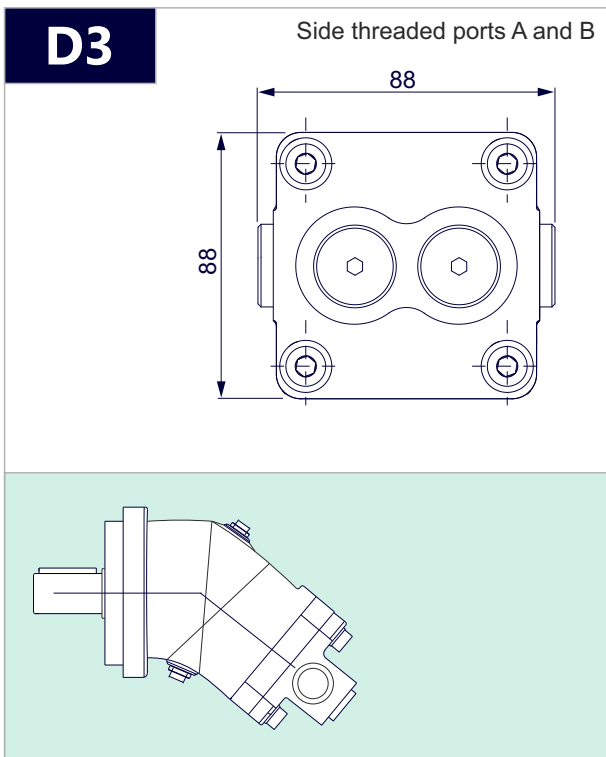
SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE
DEPENDS ON THE COUNTRIES)

A9MS 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°



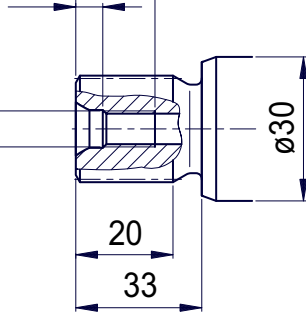
A9MS 18 - SAE B - 6 BOLT

J1

5/16"-18UNC-2B

19

Splined shaft
13T 16/32DP 7/8"

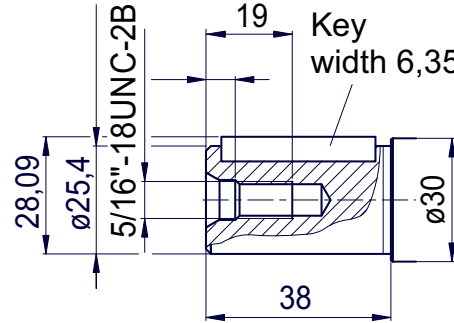


20
33

J2

Cylindrical keyed shaft
 $\varnothing 1"$

Key
width 6,35



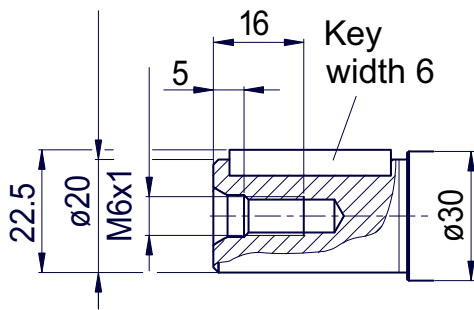
28,09
 $\varnothing 25,4$

38

K2

!! Special

Parallel keyed shaft
DIN 6885, AS6x6x32



22,5
 $\varnothing 20$
M6x1

16

Key
width 6

$\varnothing 30$

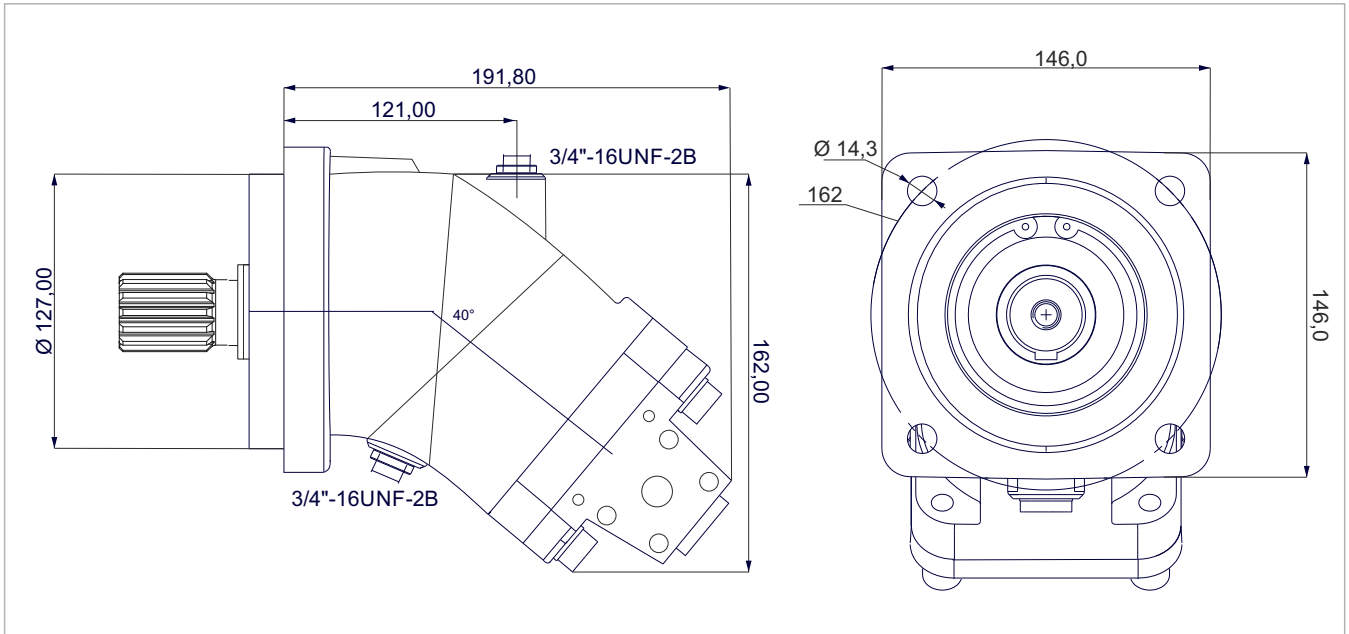
ALL SPLINED AND KEYED

SPECIAL DIMENSION

SHAFTS AVAILABLE

(THE DIMENSIONS CHANGE
DEPENDS ON THE COUNTRIES)

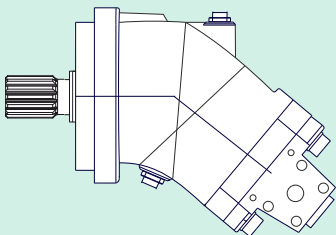
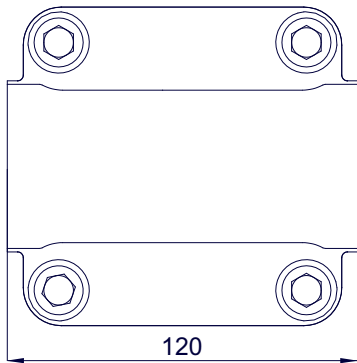
A9MS 25 - SAE C - 4 BOLT



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°

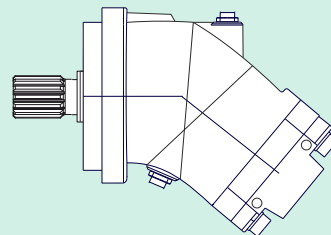
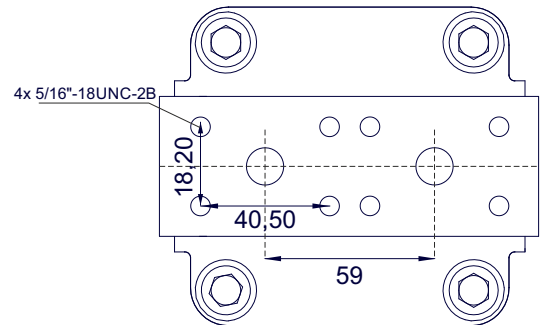
D1-D2

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



R1

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

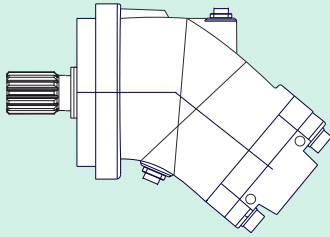
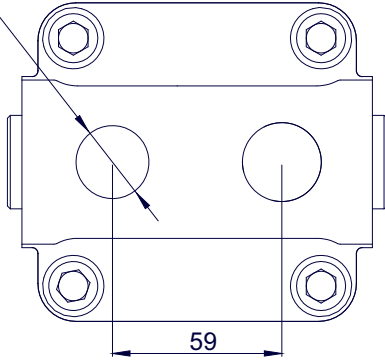


A9MS 25 - SAE C - 4 BOLT

R2

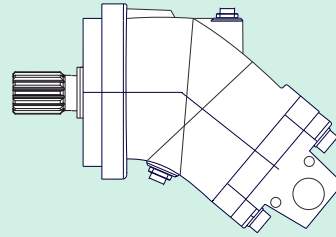
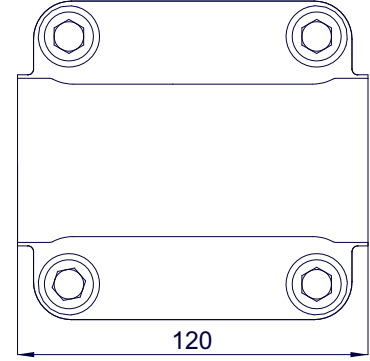
Rear threaded ports A and B

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



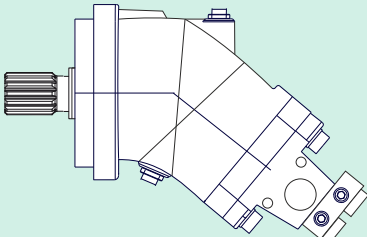
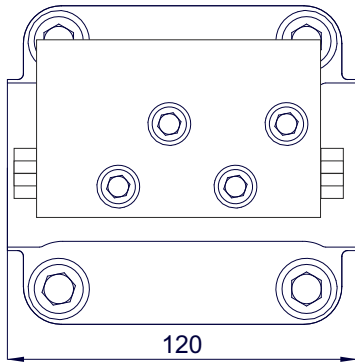
D3

Side threaded ports



D4

Side threaded ports



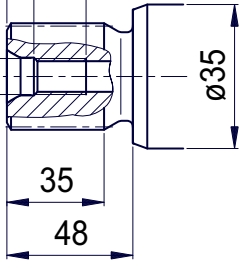
A9MS 25 - SAE C - 4 BOLT

J1

7/16"-14UNC-2B

22

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



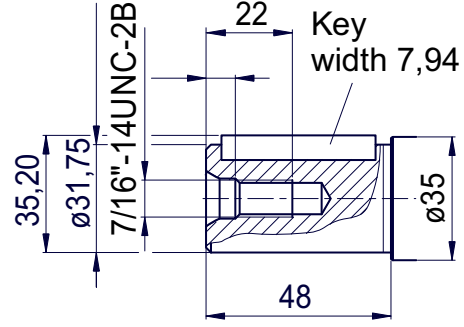
35

48

$\phi 35$

J2

Cylindrical keyed shaft
 $\phi 1 1/4"$



35,20

$\phi 31,75$

7/16"-14UNC-2B

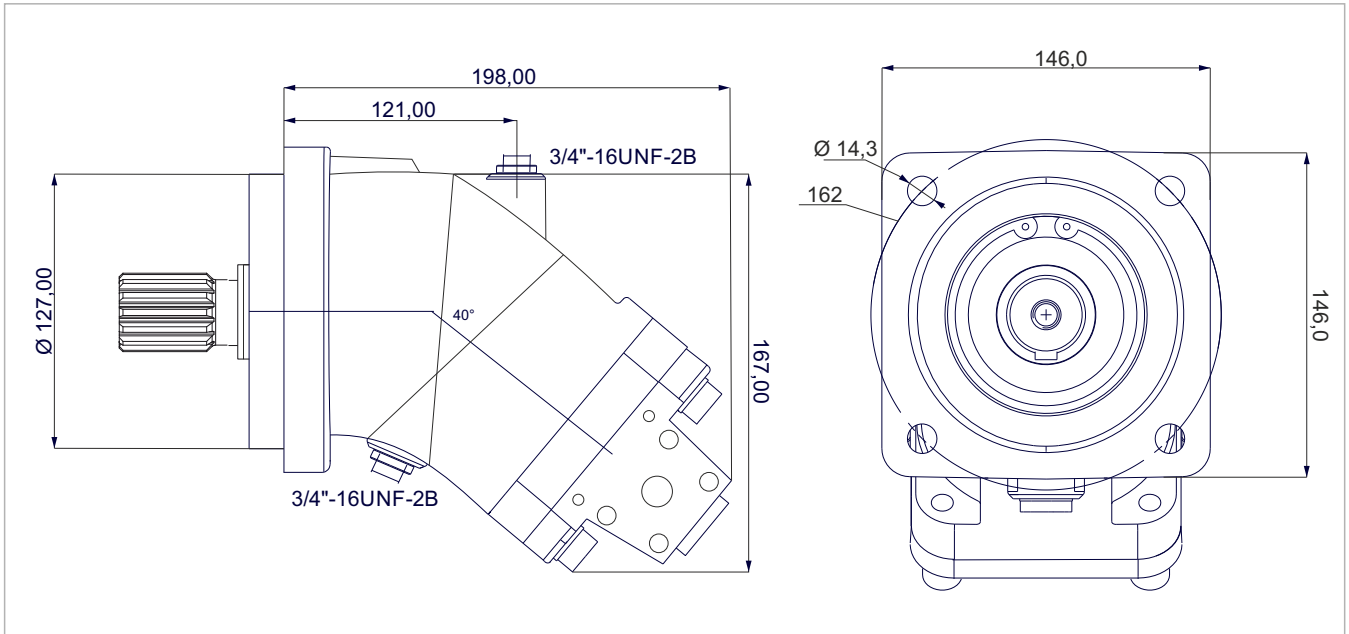
22

Key
width 7,94

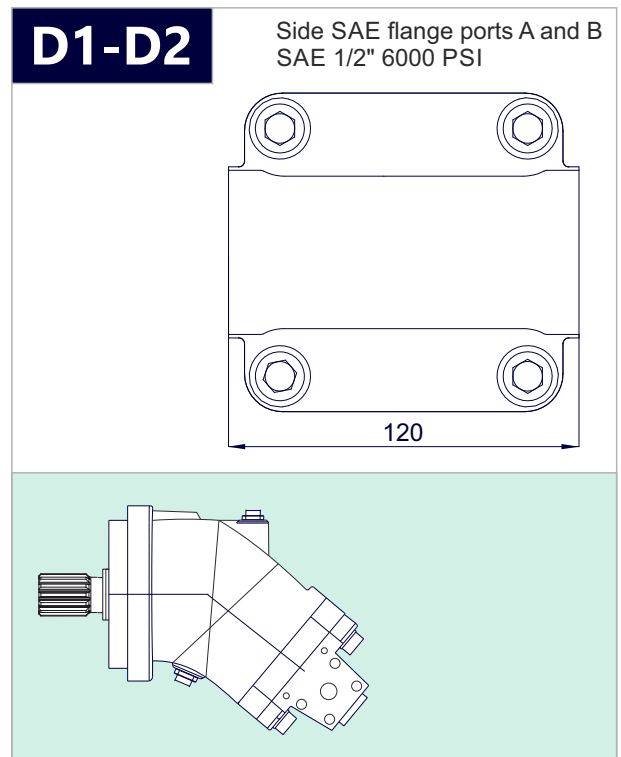
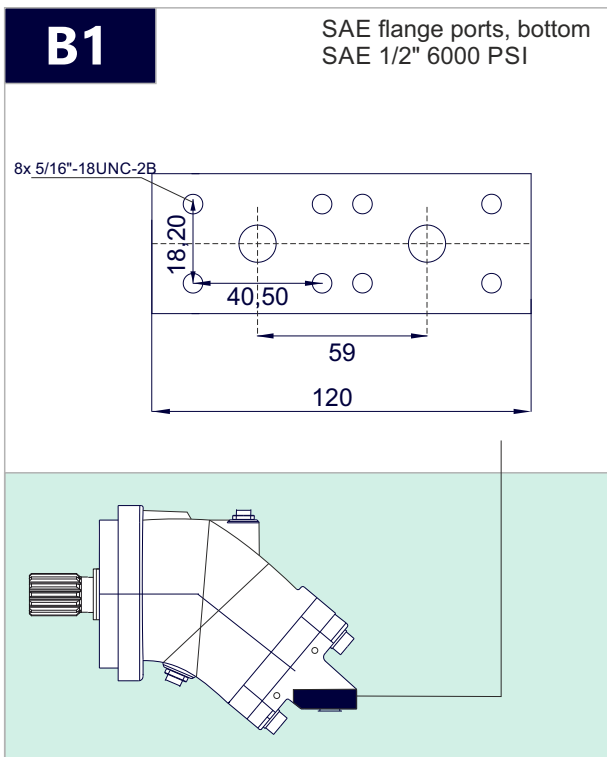
48

$\phi 35$

A9MS 32 - SAE C - 4 BOLT



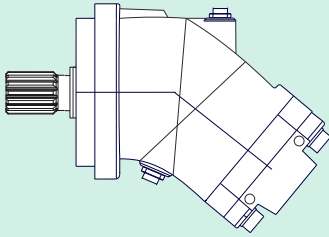
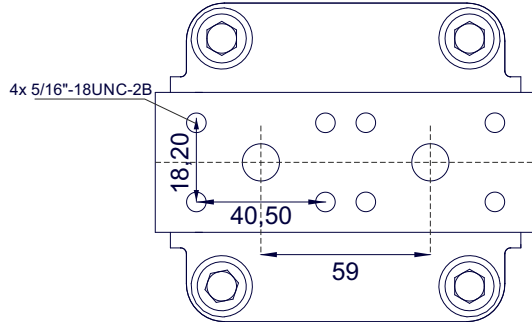
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
32,00 cc	48,00 cc	6250 rpm	6800 rpm	400 bar	450 bar	0.51 m.N/bar	174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



A9MS 32 - SAE C - 4 BOLT

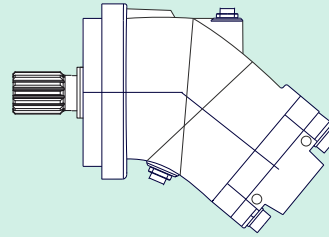
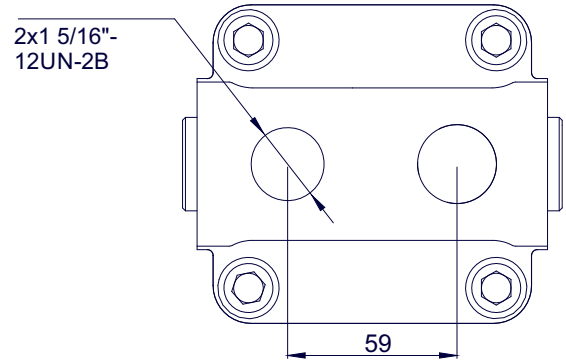
R1

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



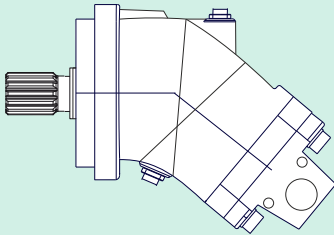
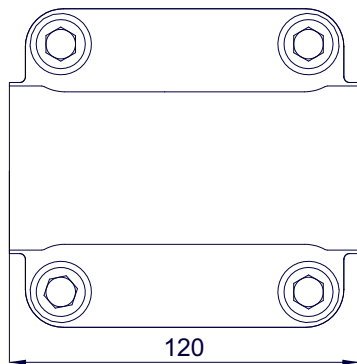
R2

Rear threaded ports



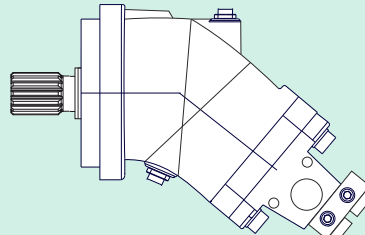
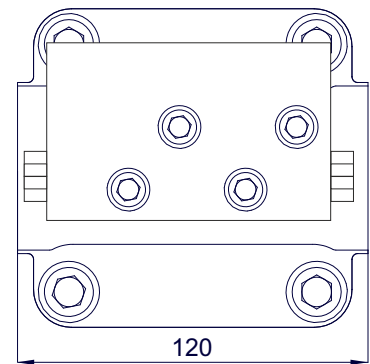
D3

Side threaded ports A and B



D4

Side threaded ports A and B



A9MS 32 - SAE C - 4 BOLT

J1

7/16"-14UNC-2B

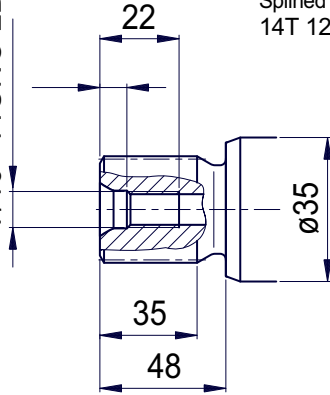
22

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

35

48

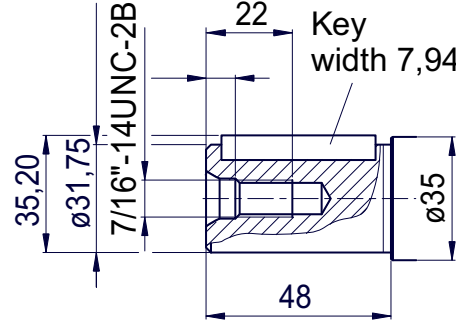
ø35



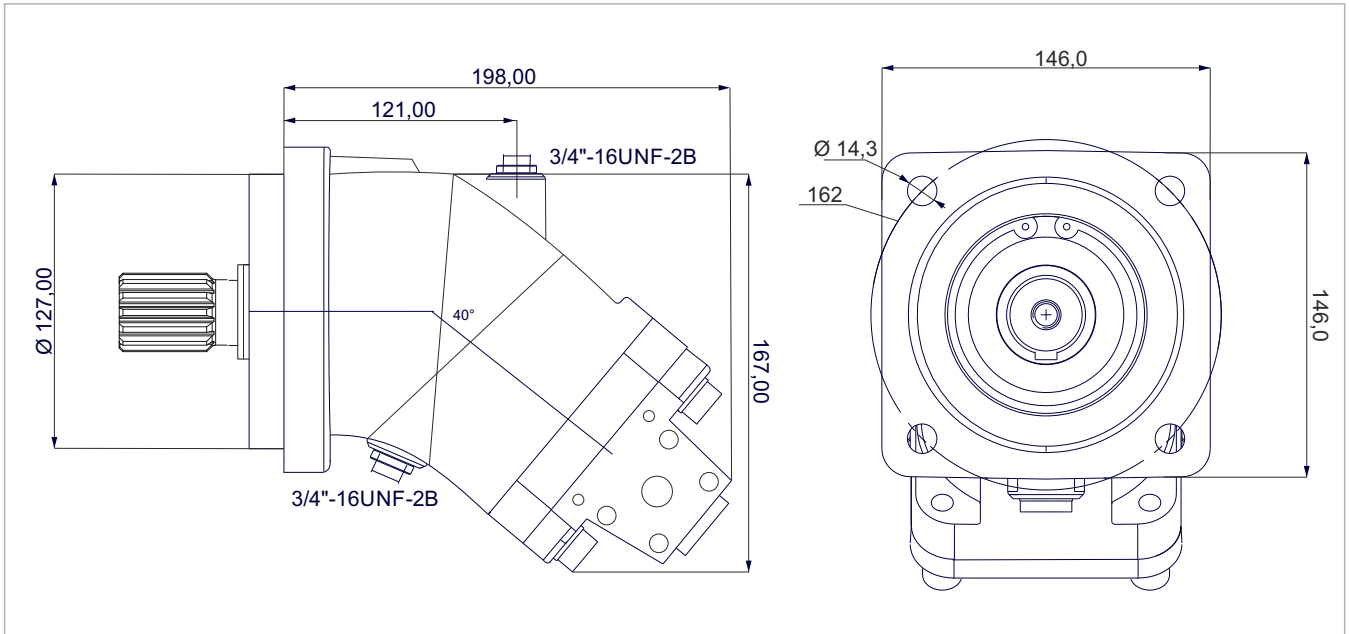
J2

Cylindrical keyed shaft
ø 1 1/4"

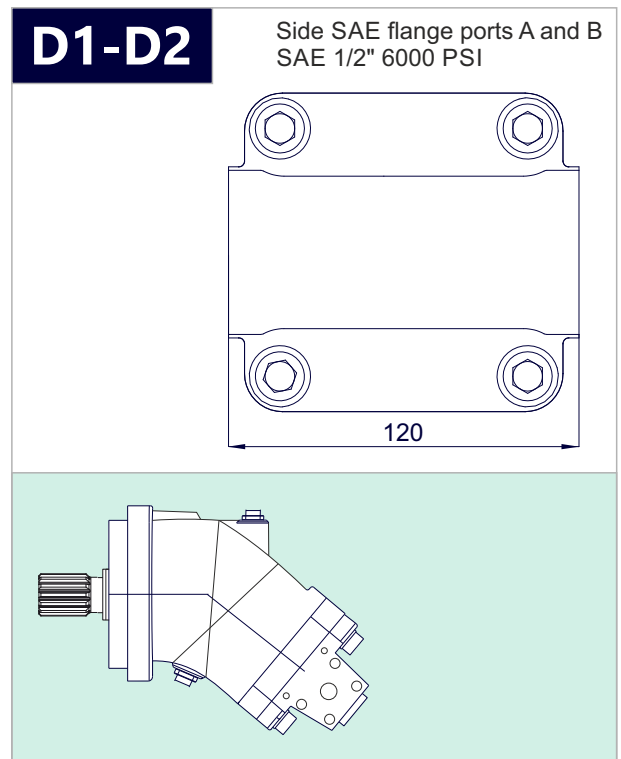
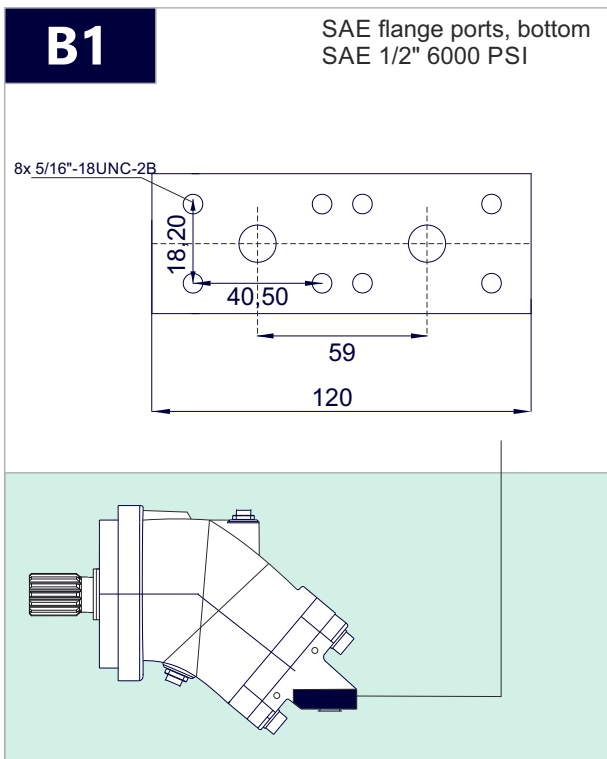
Key
width 7,94



A9MS 40 - SAE C - 4 BOLT



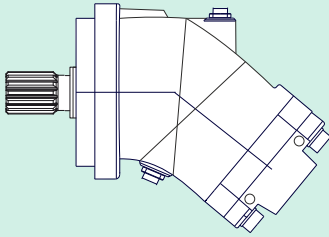
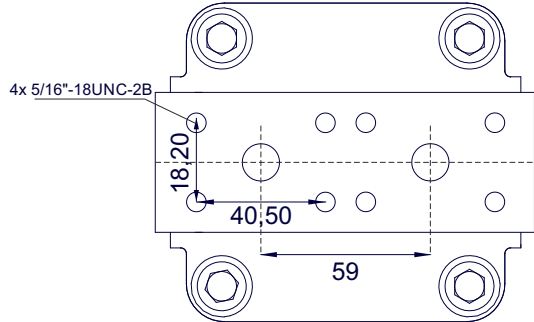
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
40,20 cc	60,30 cc	5600 rpm	6300 rpm	400 bar	450 bar	0.68 m.N/bar	228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



A9MS 40 - SAE C - 4 BOLT

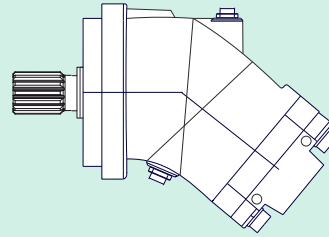
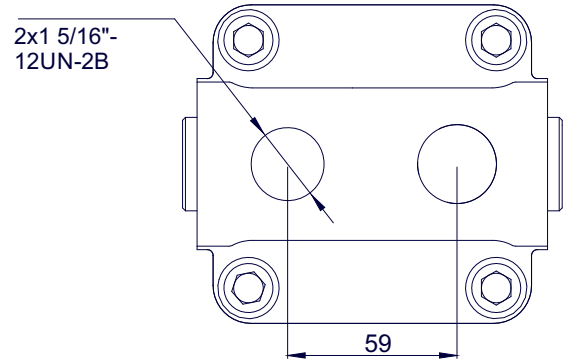
R1

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



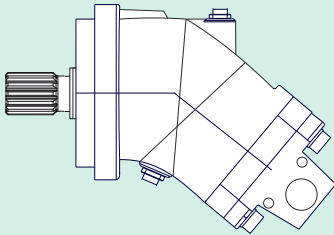
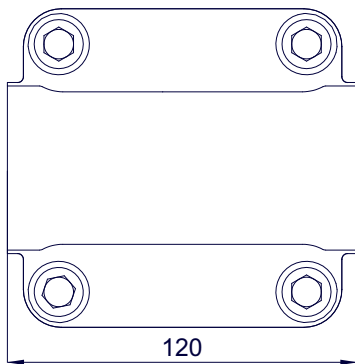
R2

Rear threaded ports



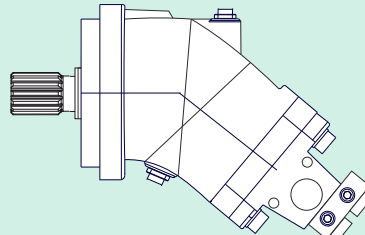
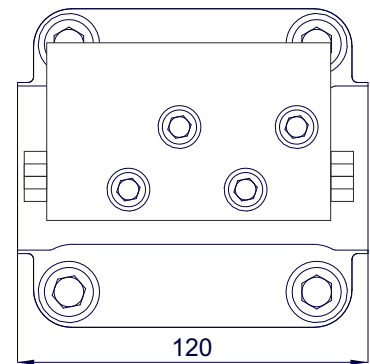
D3

Side threaded ports A and B



D4

Side threaded ports A and B



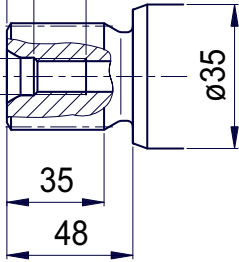
A9MS 40 - SAE C - 4 BOLT

J1

7/16"-14UNC-2B

22

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



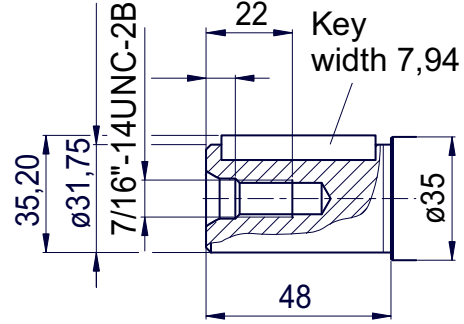
35

48

$\phi 35$

J2

Cylindrical keyed shaft
 $\phi 1 1/4"$



35,20

$\phi 31,75$

7/16"-14UNC-2B

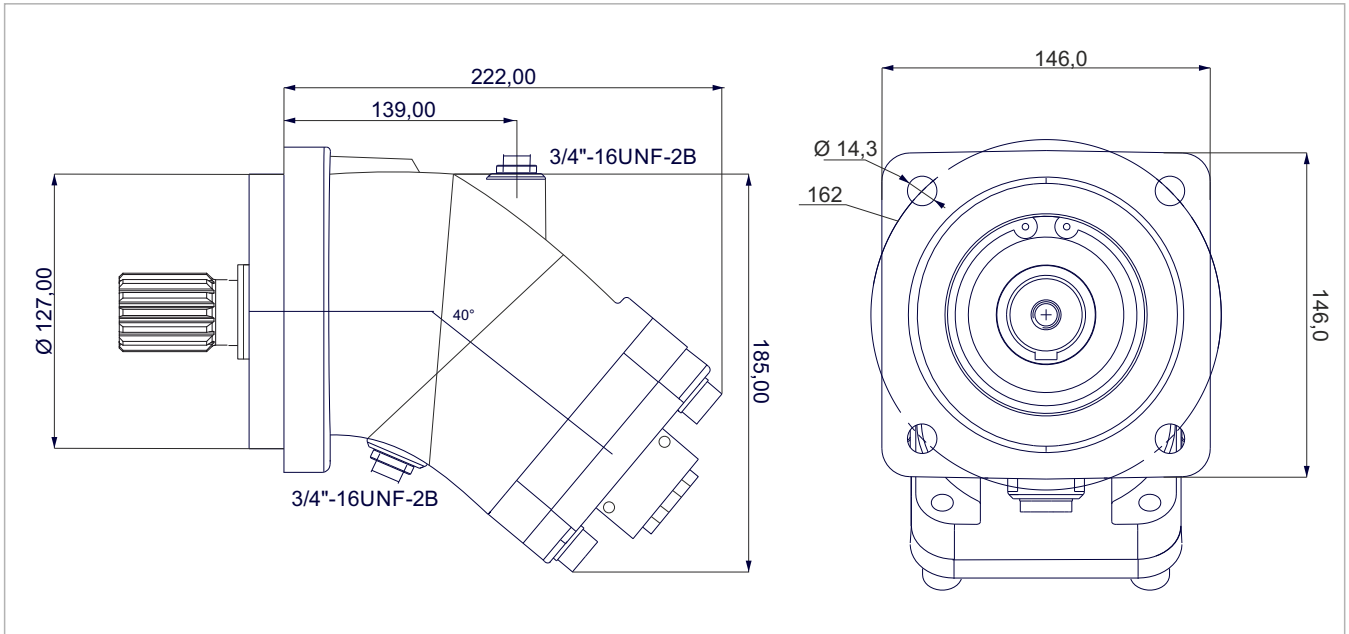
22

Key
width 7,94

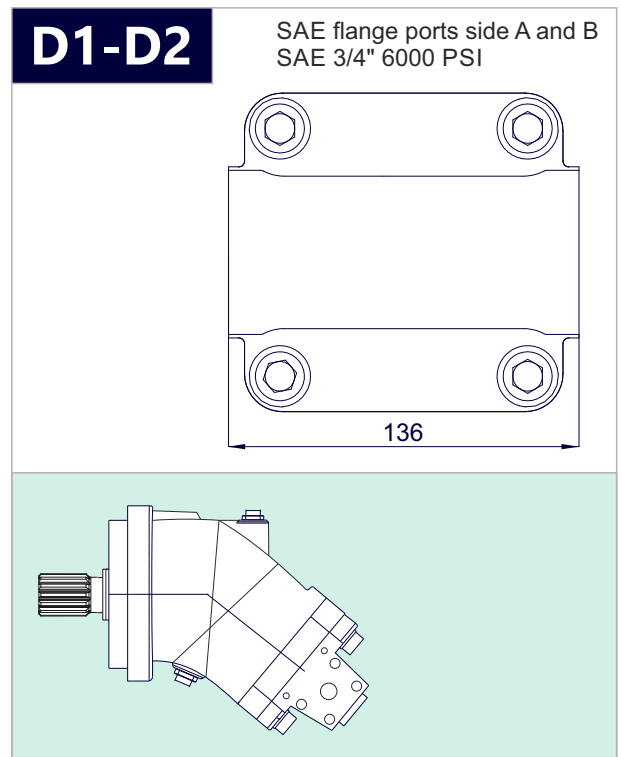
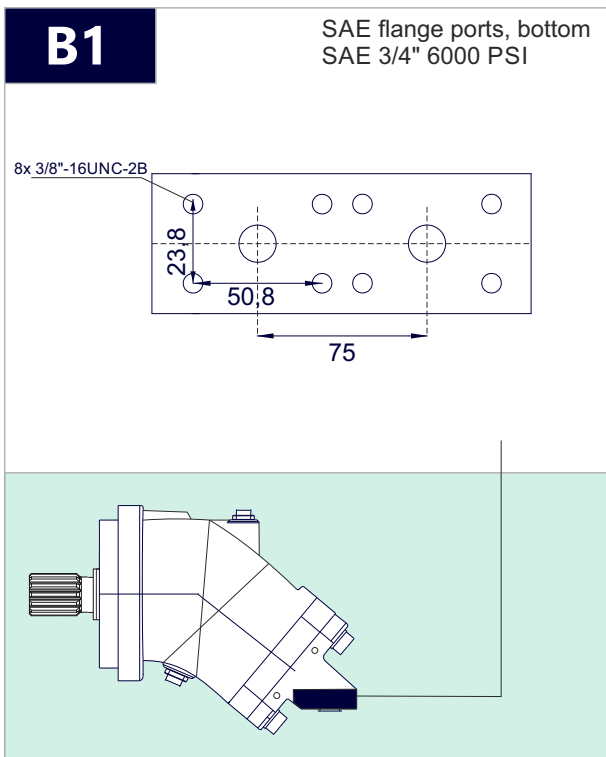
48

$\phi 35$

A9MS 50 - SAE C - 4 BOLT



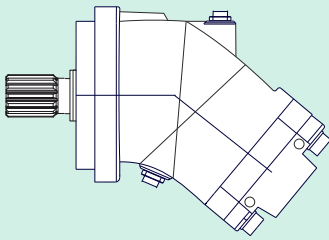
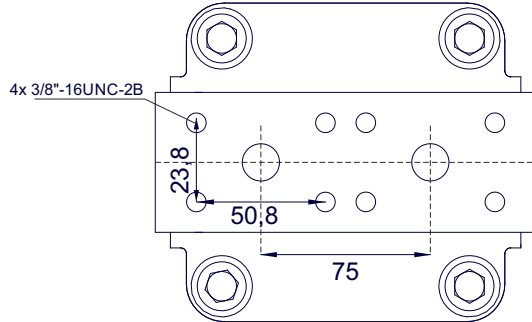
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
50,00 cc	75,00 cc	5000 rpm	5500 rpm	400 bar	450 bar	0.80 m.N/bar	280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



A9MS 50 - SAE C - 4 BOLT

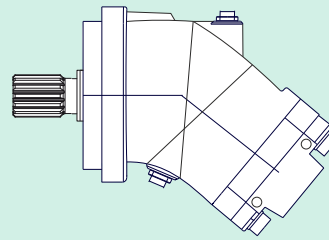
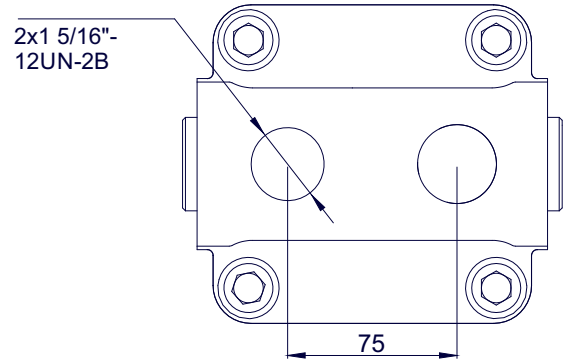
R1

SAE flange ports rear
SAE 3/4" 6000 PSI



R2

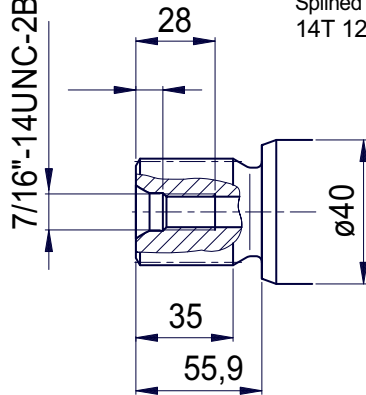
Rear threaded ports



J1

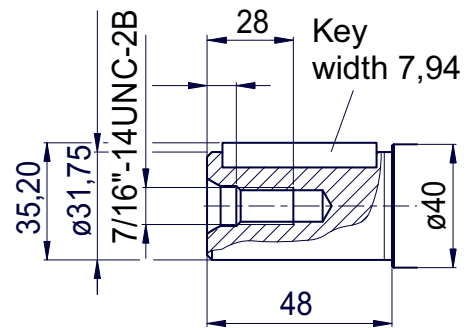
7/16"-14UNC-2B

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

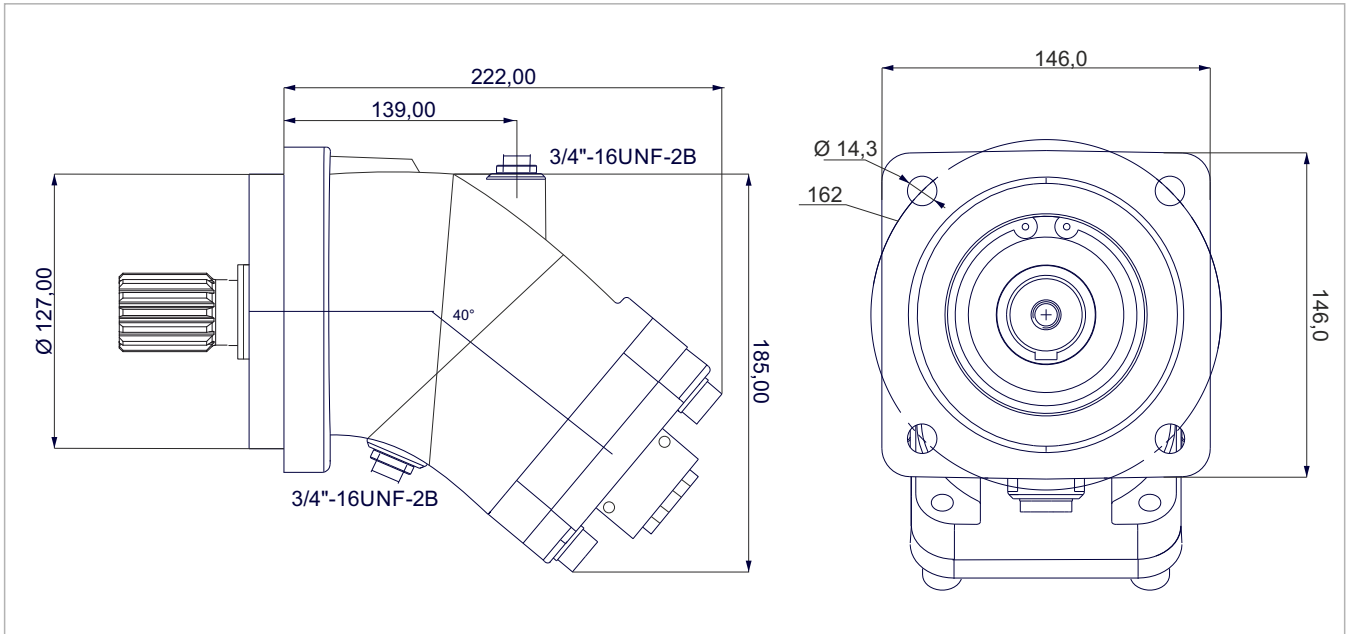


J2

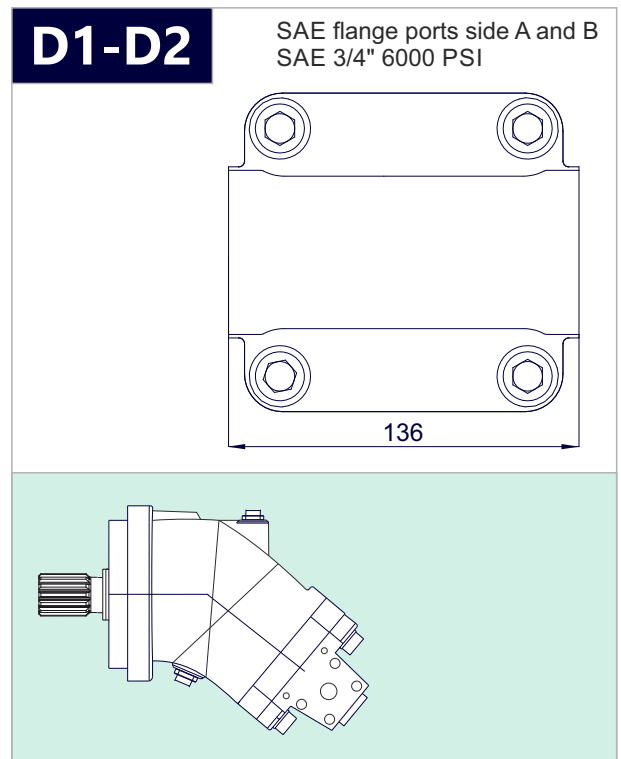
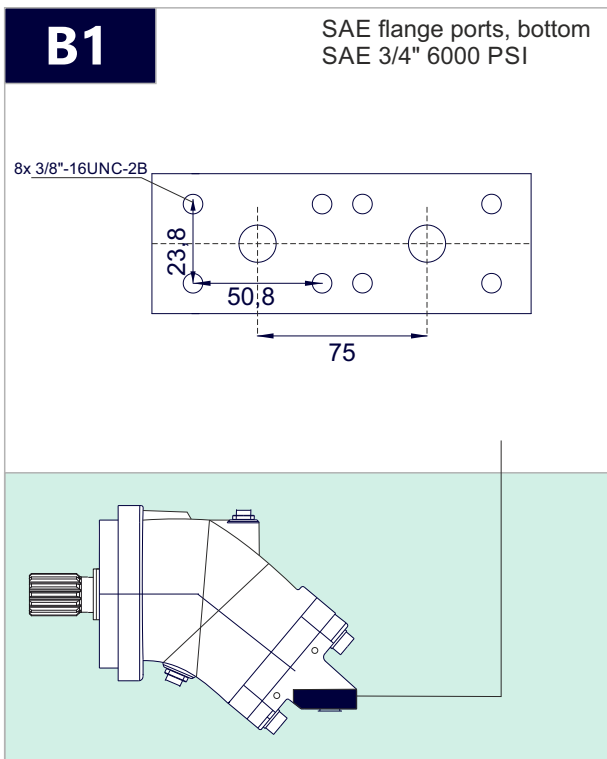
Cylindrical keyed shaft
Ø 1 1/4"



A9MS 56 - SAE C - 4 BOLT



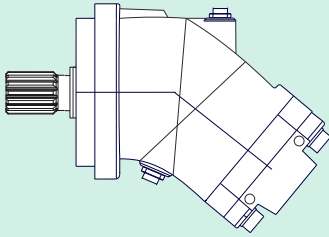
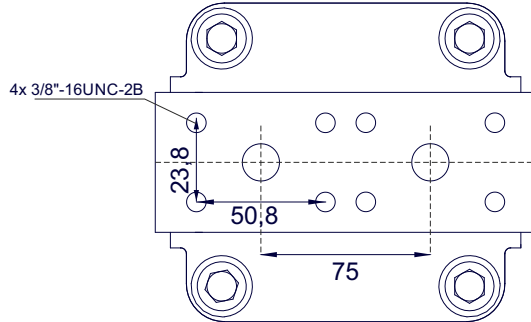
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
56,40 cc	84,60 cc	5000 rpm	5500 rpm	400 bar	450 bar	0.92 m.N/bar	320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



A9MS 56 - SAE C - 4 BOLT

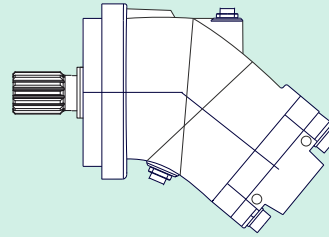
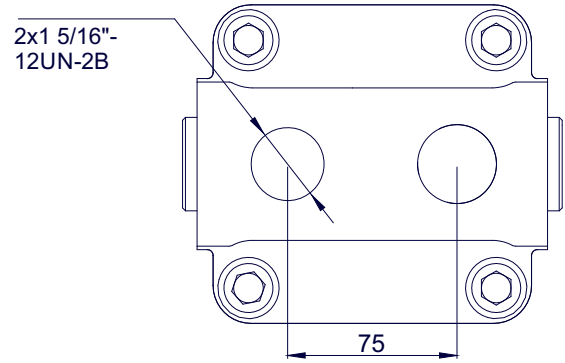
R1

SAE flange ports rear
SAE 3/4" 6000 PSI



R2

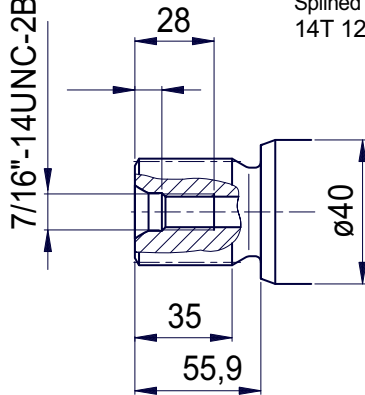
Rear threaded ports



J1

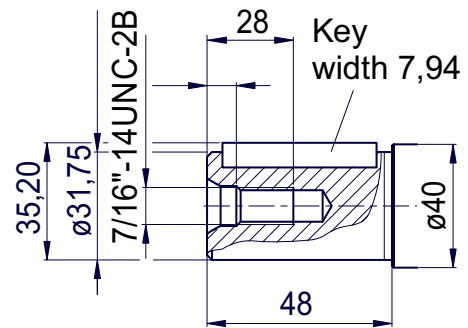
7/16"-14UNC-2B

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

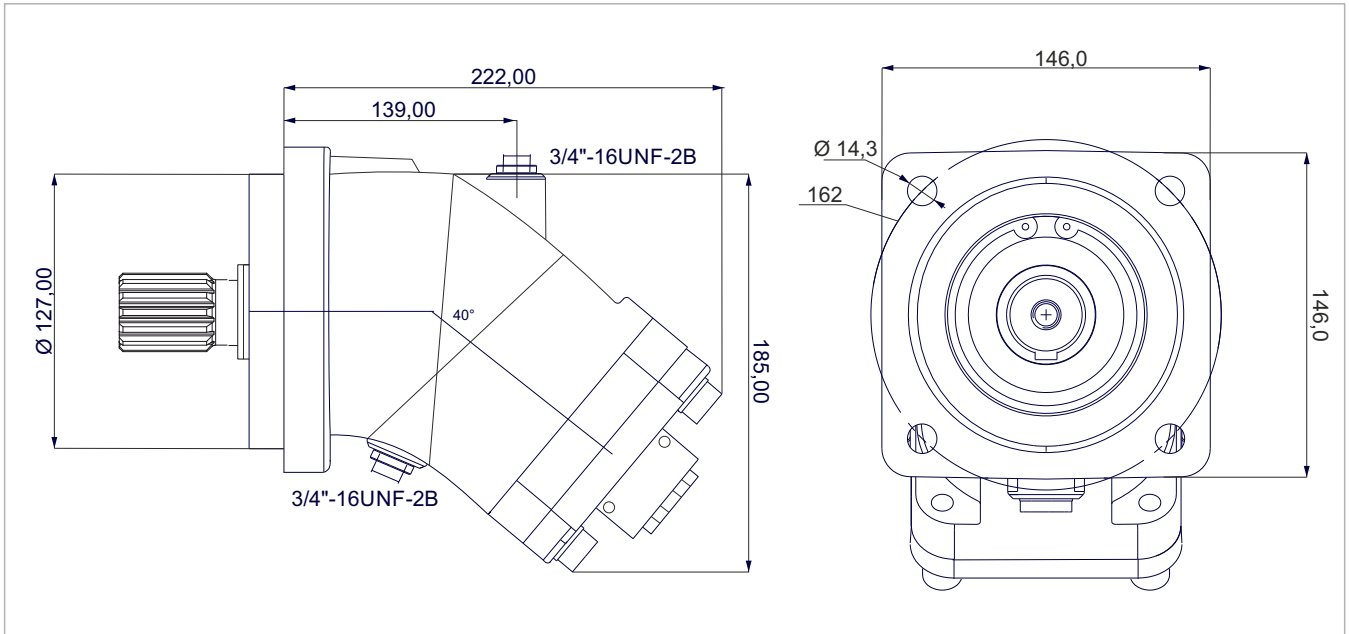


J2

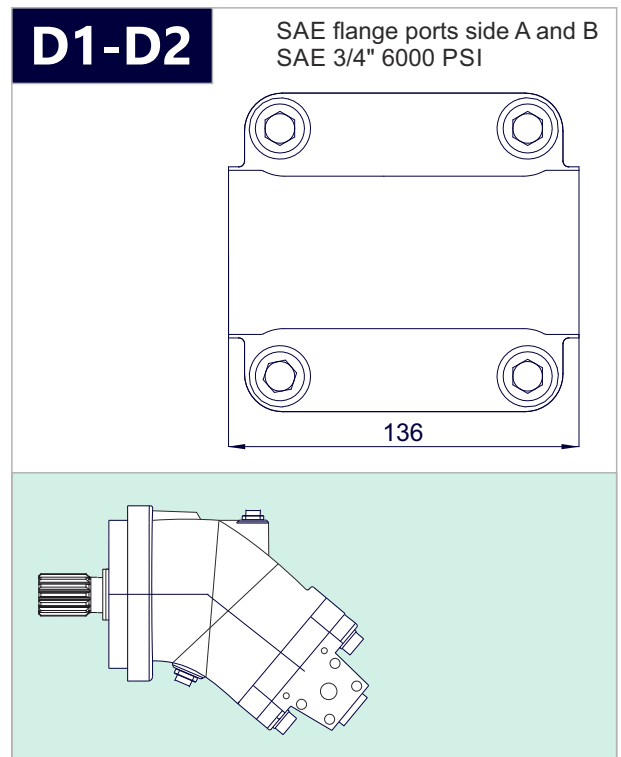
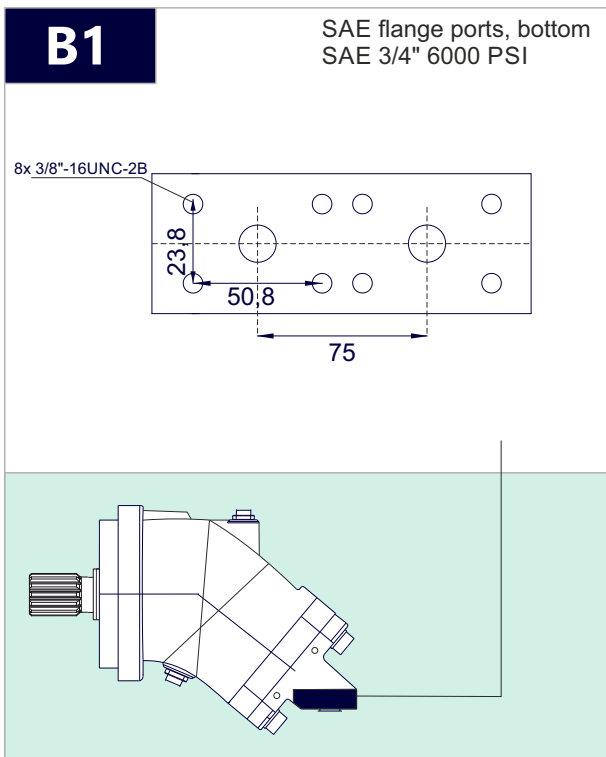
Cylindrical keyed shaft
 $\varnothing 1 1/4"$



A9MS 63 - SAE C - 4 BOLT



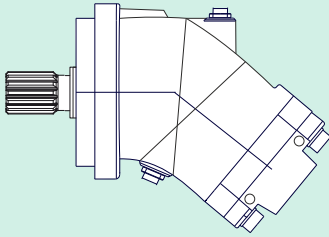
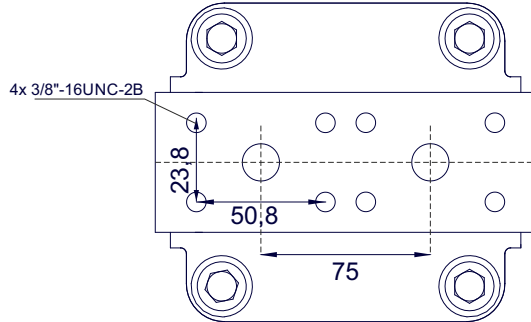
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
63,00 cc	94,50 cc	5000 rpm	5500 rpm	400 bar	450 bar	1.00 m.N/bar	350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



A9MS 63 - SAE C - 4 BOLT

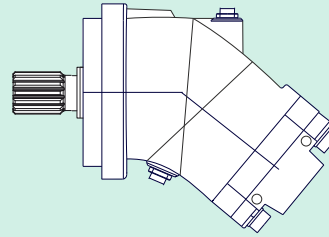
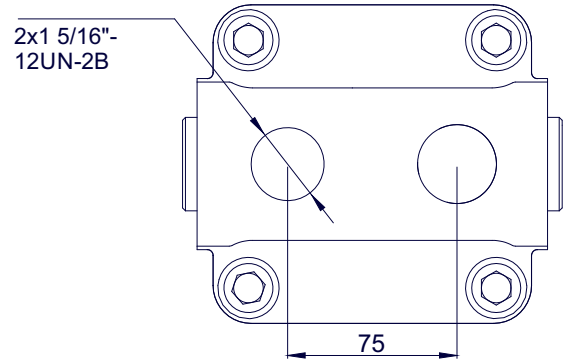
R1

SAE flange ports rear
SAE 3/4" 6000 PSI



R2

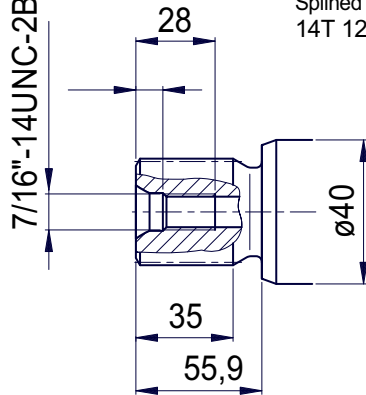
Rear threaded ports



J1

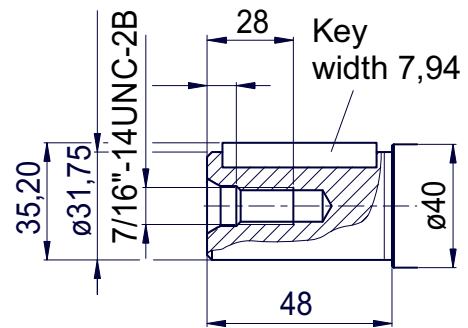
7/16"-14UNC-2B

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

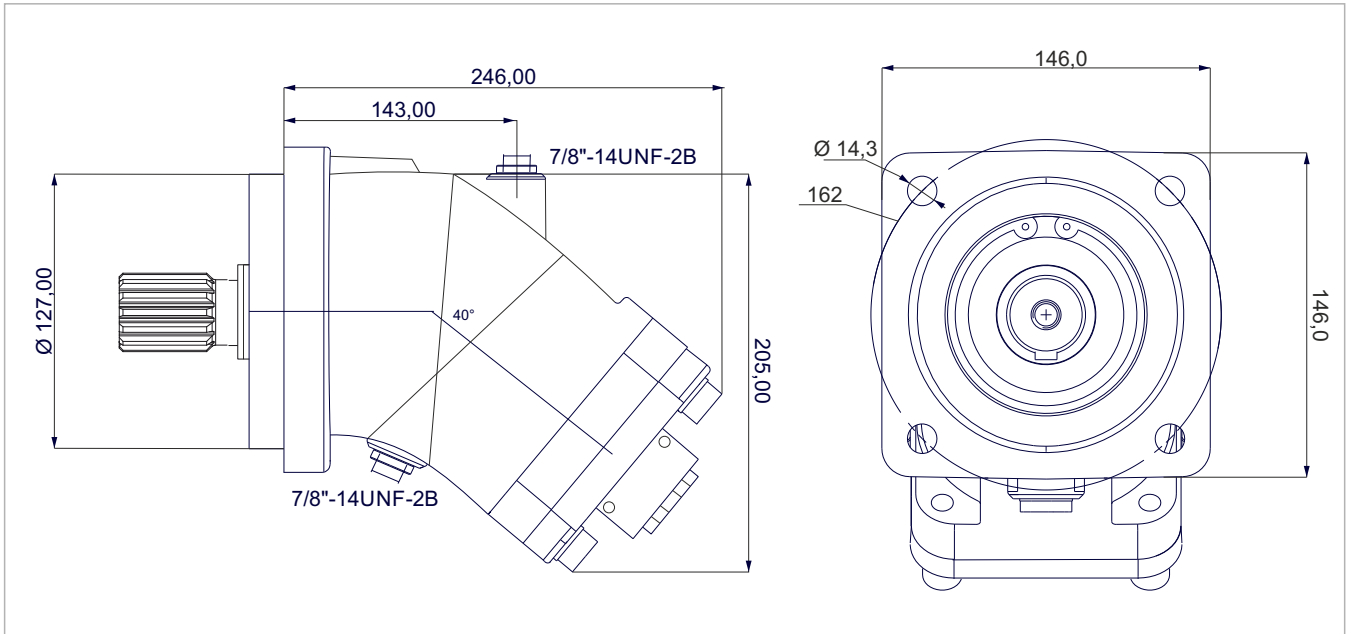


J2

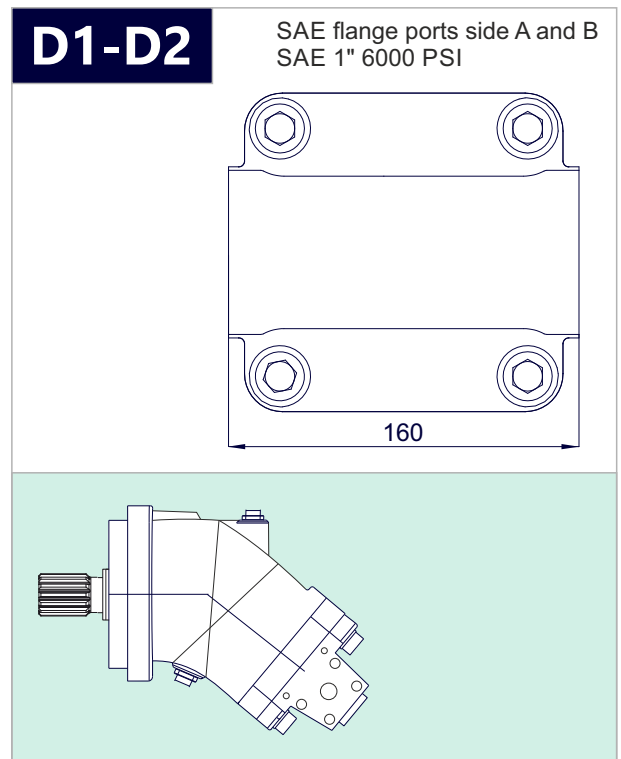
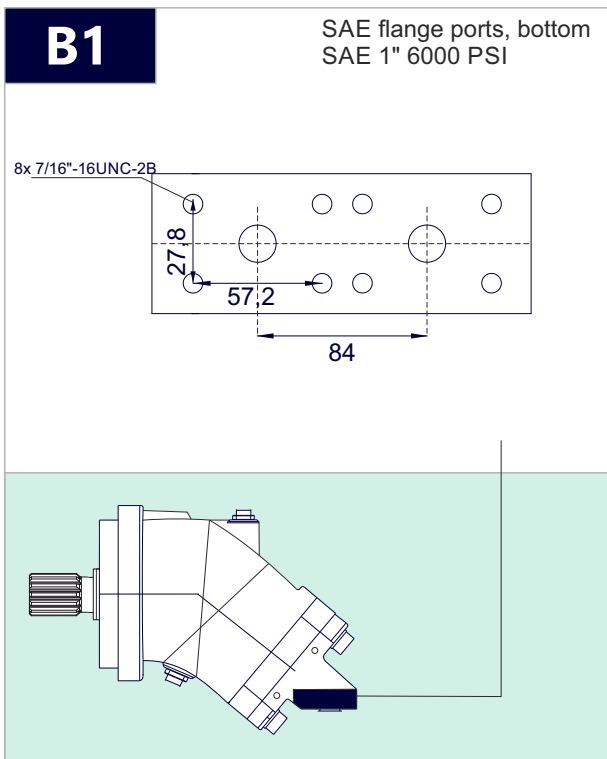
Cylindrical keyed shaft
 $\varnothing 1 1/4"$



A9MS 80 - SAE C - 4 BOLT



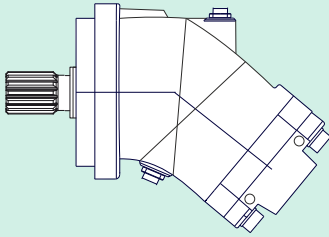
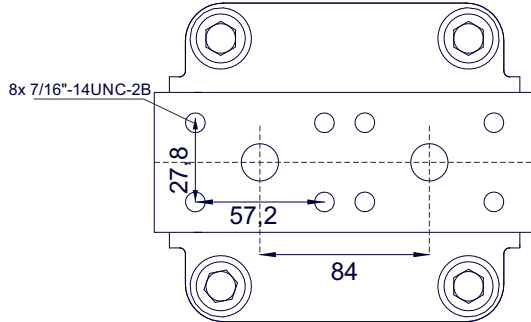
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
80,00 cc	120,00 cc	4400 rpm	4900 rpm	400 bar	450 bar	1.28 m.N/bar	440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



A9MS 80 - SAE C - 4 BOLT

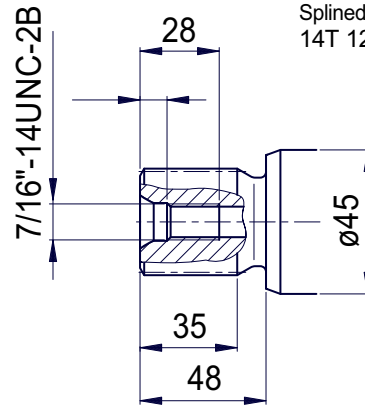
R1

SAE flange ports rear
SAE 1" 6000 PSI



J1

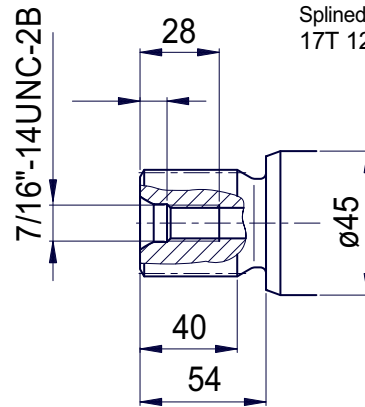
Splined shaft
14T 12/24DP 1 1/4"



!! Special

J1

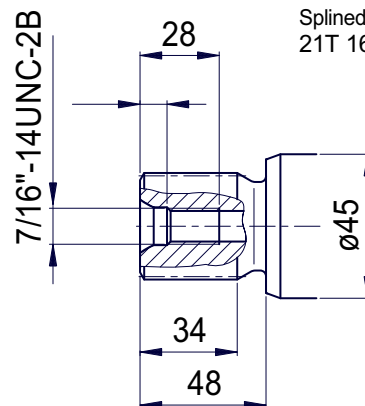
Splined shaft
17T 12/24DP 1 1/2"



!! Special

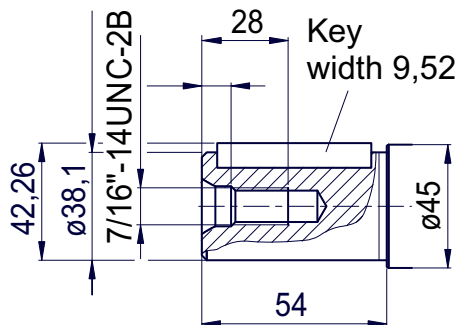
J1

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

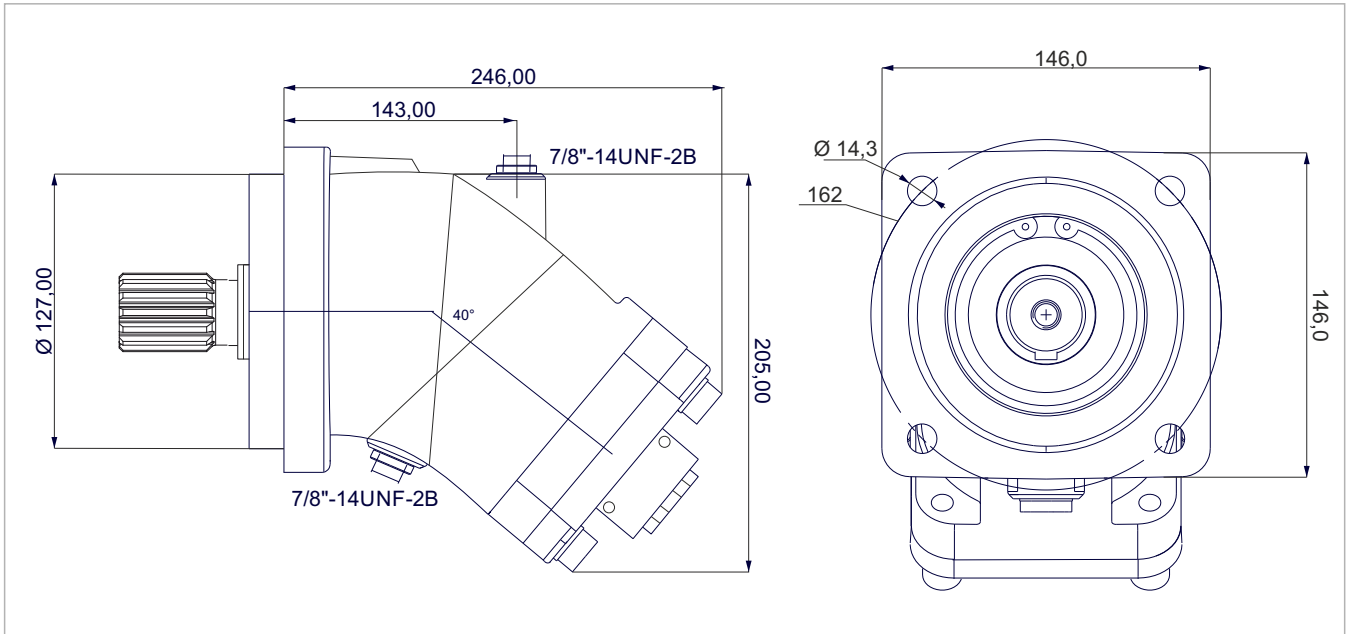


J2

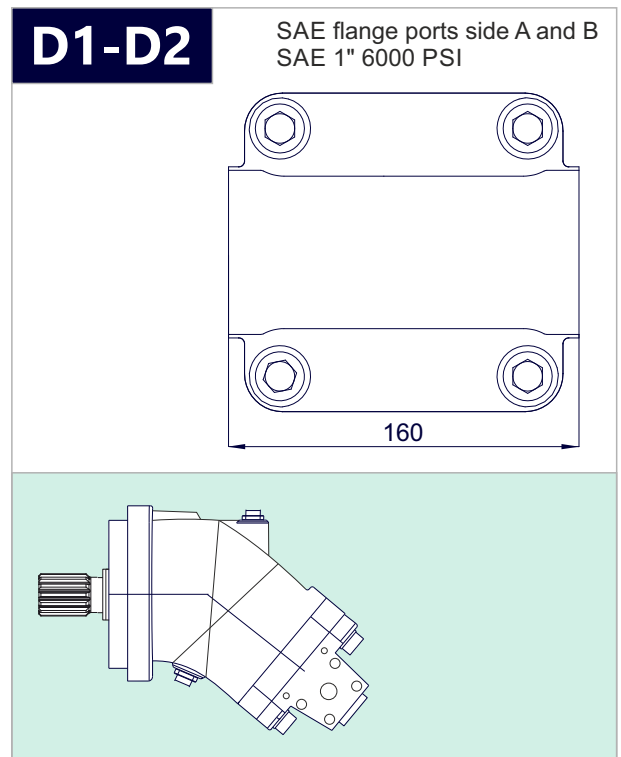
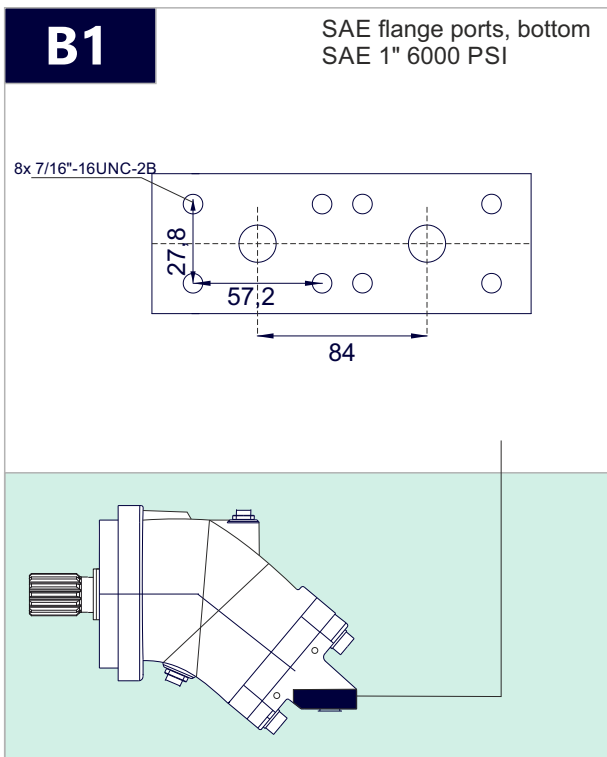
Cylindrical keyed shaft
Ø 1 1/2"



A9MS 108 - SAE C - 4 BOLT



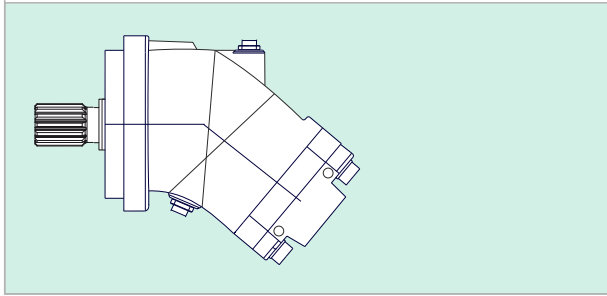
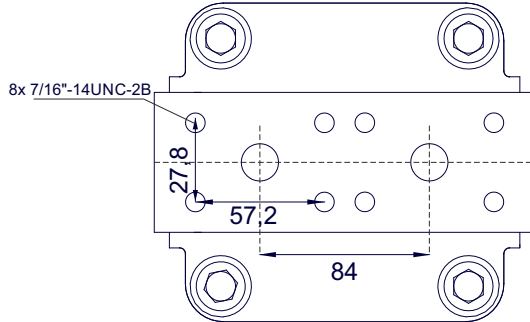
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
108,4 cc	162,6 cc	4000 rpm	4400 rpm	400 bar	450 bar	1.69 m.N/bar	600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



A9MS 108 - SAE C - 4 BOLT

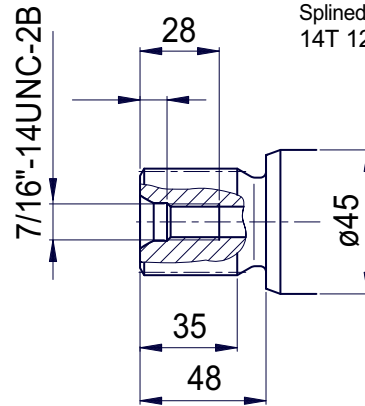
R1

SAE flange ports rear
SAE 1" 6000 PSI



J1

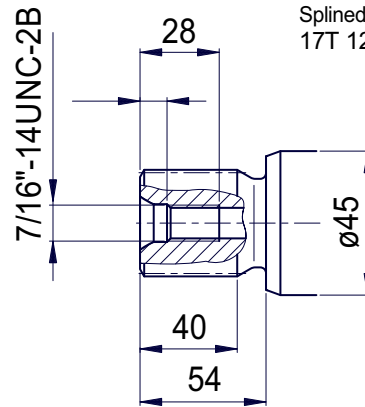
Splined shaft
14T 12/24DP 1 1/4"



!! Special

J1

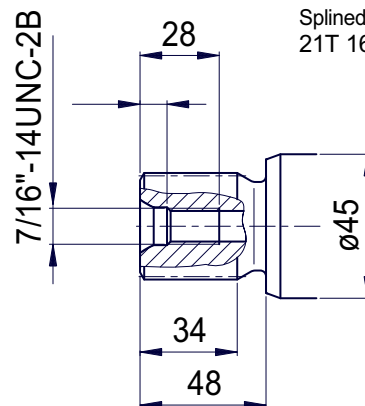
Splined shaft
17T 12/24DP 1 1/2"



!! Special

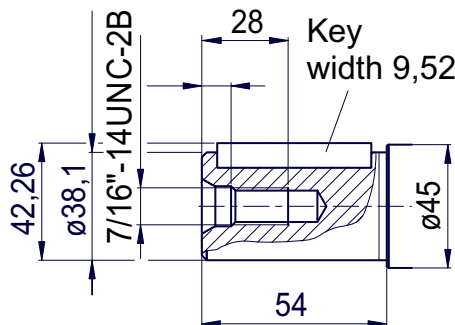
J1

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

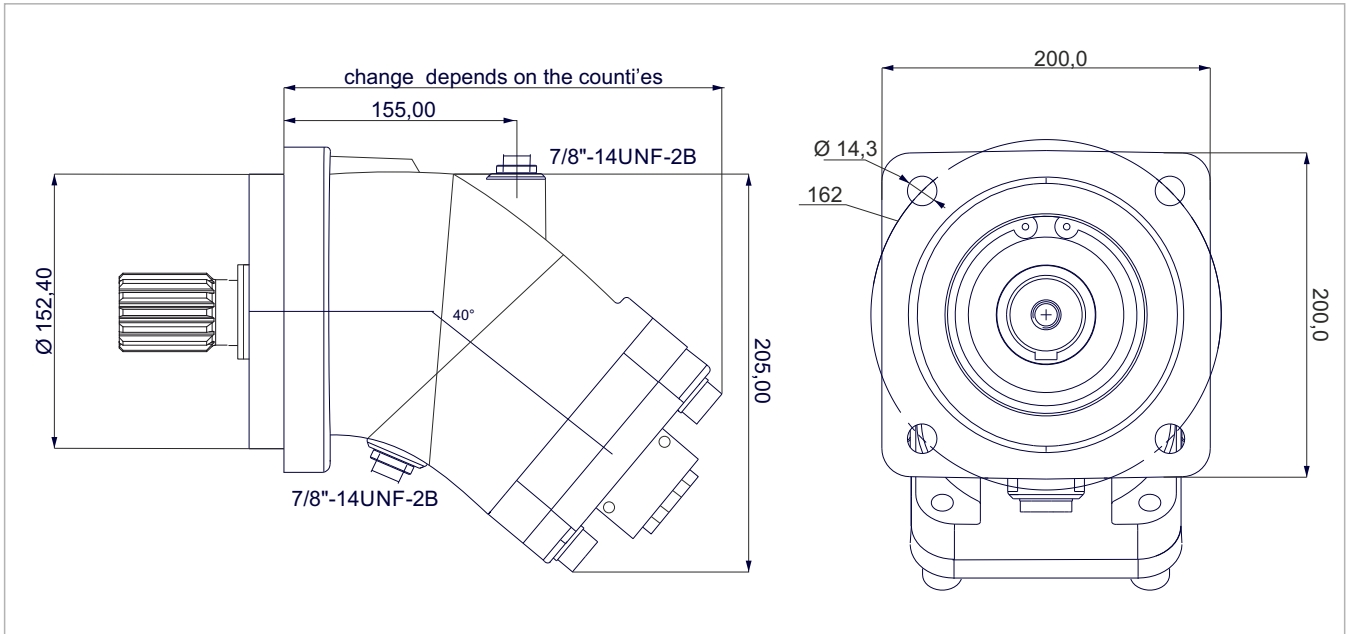


J2

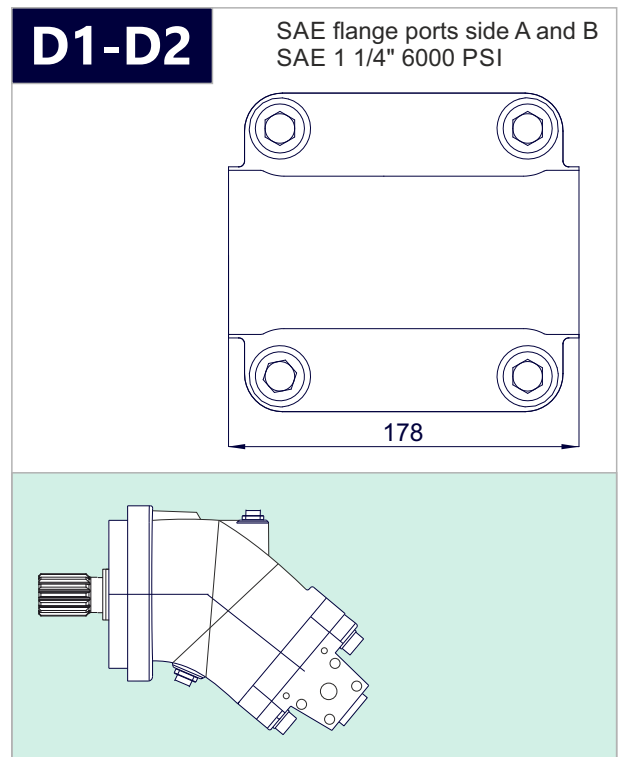
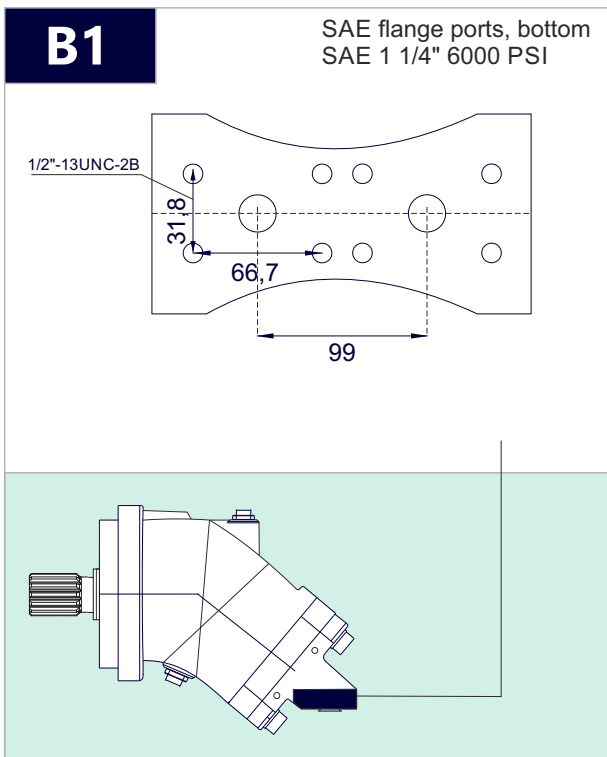
Cylindrical keyed shaft
Ø 1 1/2"



A9MS 108 - SAE D - 4 BOLT



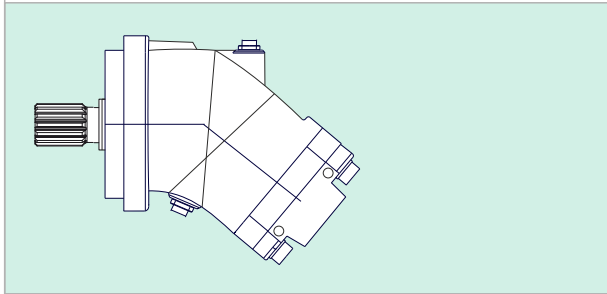
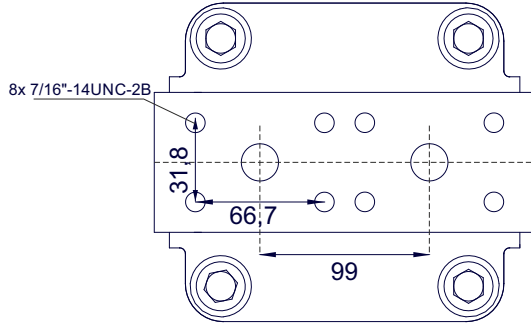
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
108,4 cc	162,6 cc	4000 rpm	4400 rpm	400 bar	450 bar	1.69 m.N/bar	600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



A9MS 108 - SAE D - 4 BOLT

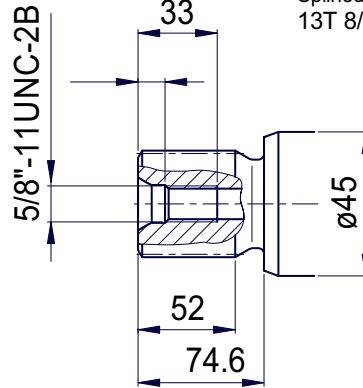
R1

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



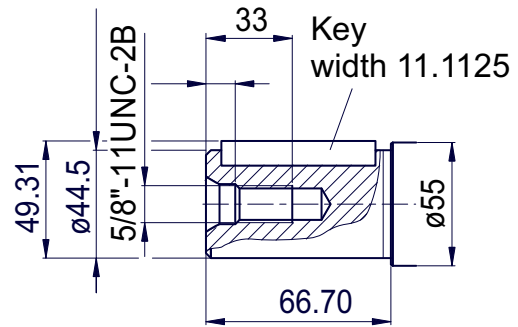
J1

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

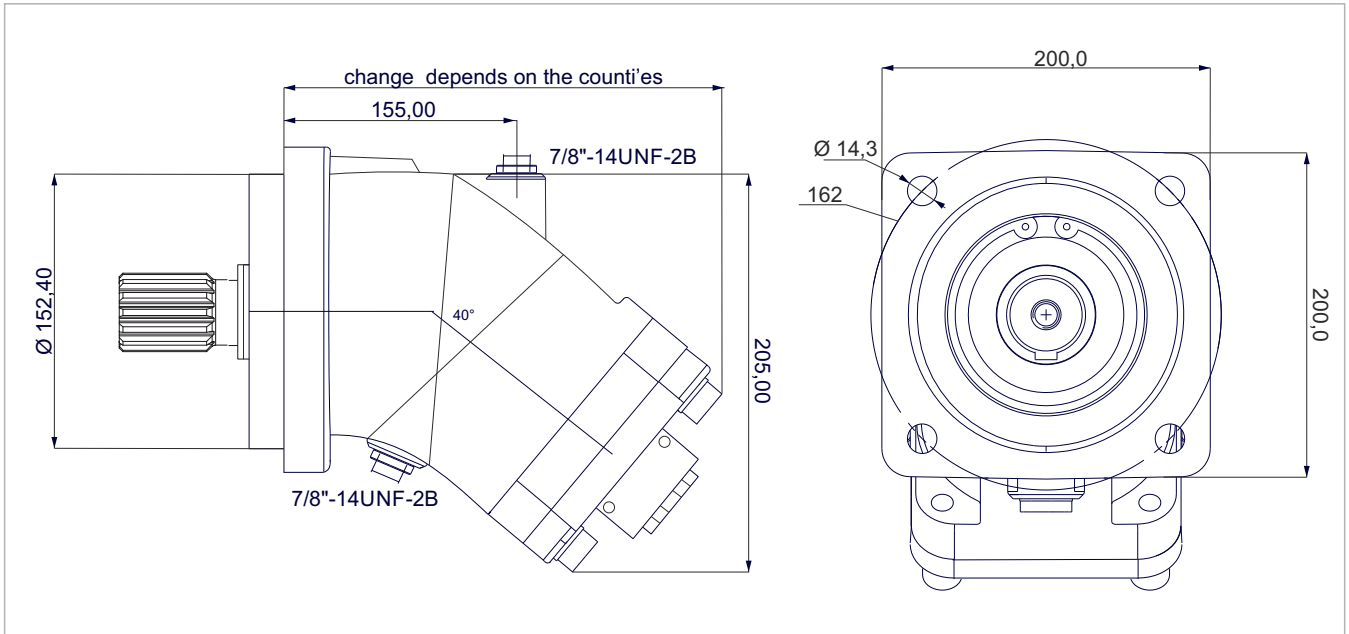


J2

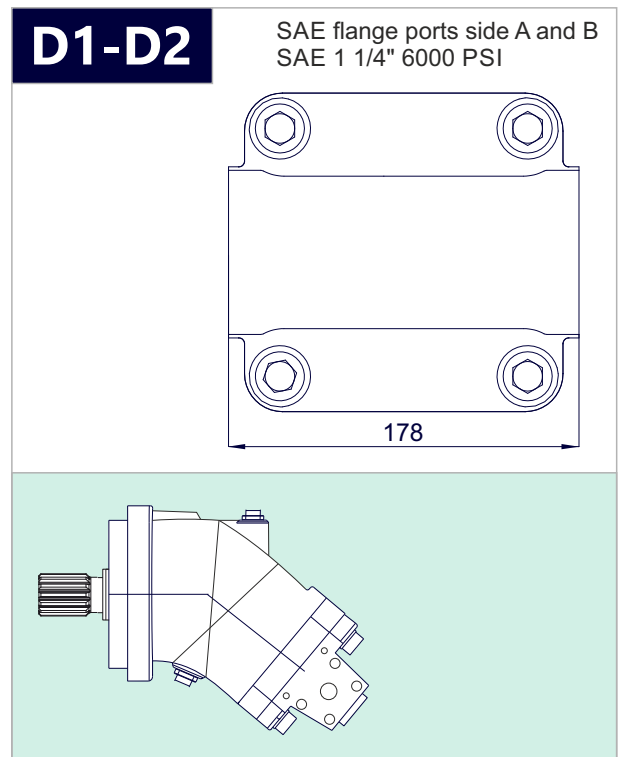
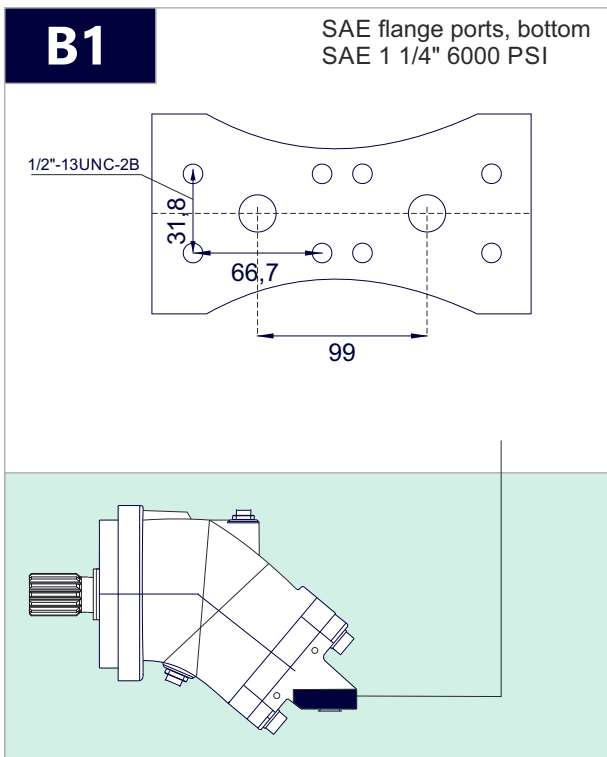
Cylindrical keyed shaft
 $\phi 1 3/4$ "



A9MS 130 - SAE D - 4 BOLT



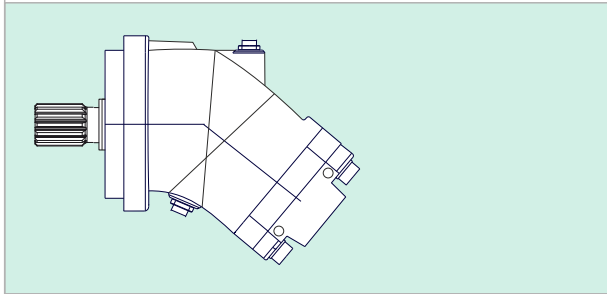
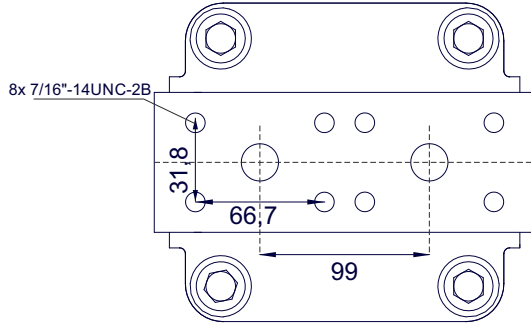
x 1000 rpm	x 1500 rpm	Max. Contin. Pump Speed	Max. Intermit. Pump Speed	Max. Contin. Pressure	Max. Peak Pressure	Torque bar	Torque at 350 bar	Max. Flow	Weight without accessor.	Weight with accessor.	Max. Motor Temp.	Min. Motor Temp.
130,0 cc	195,0 cc	3400 rpm	4400 rpm	400 bar	450 bar	2.10 m.N/bar	710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



A9MS 130 - SAE D - 4 BOLT

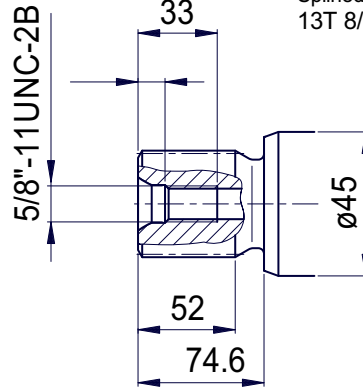
R1

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



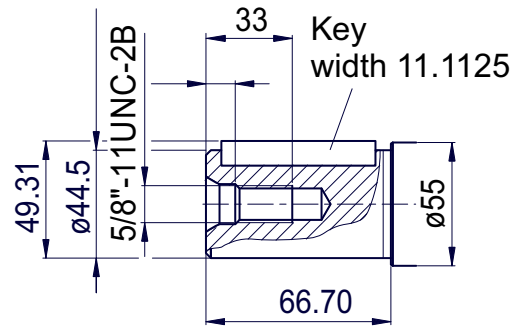
J1

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



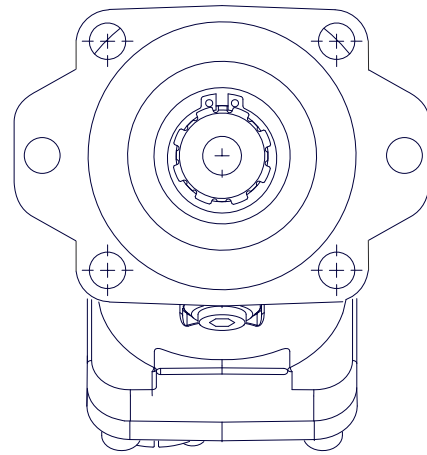
J2

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

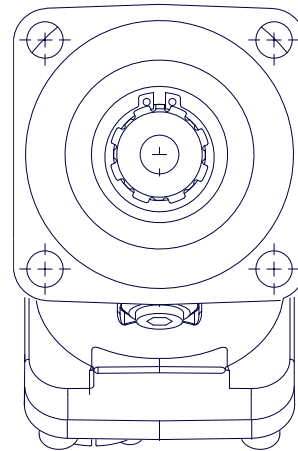


Special Mounting Flanges

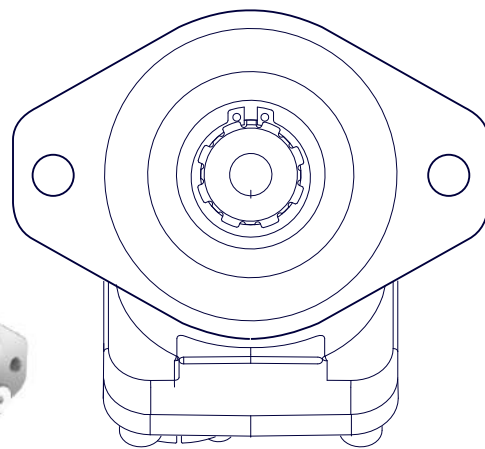
SAE B - 6 BOLT
Mounting Flange



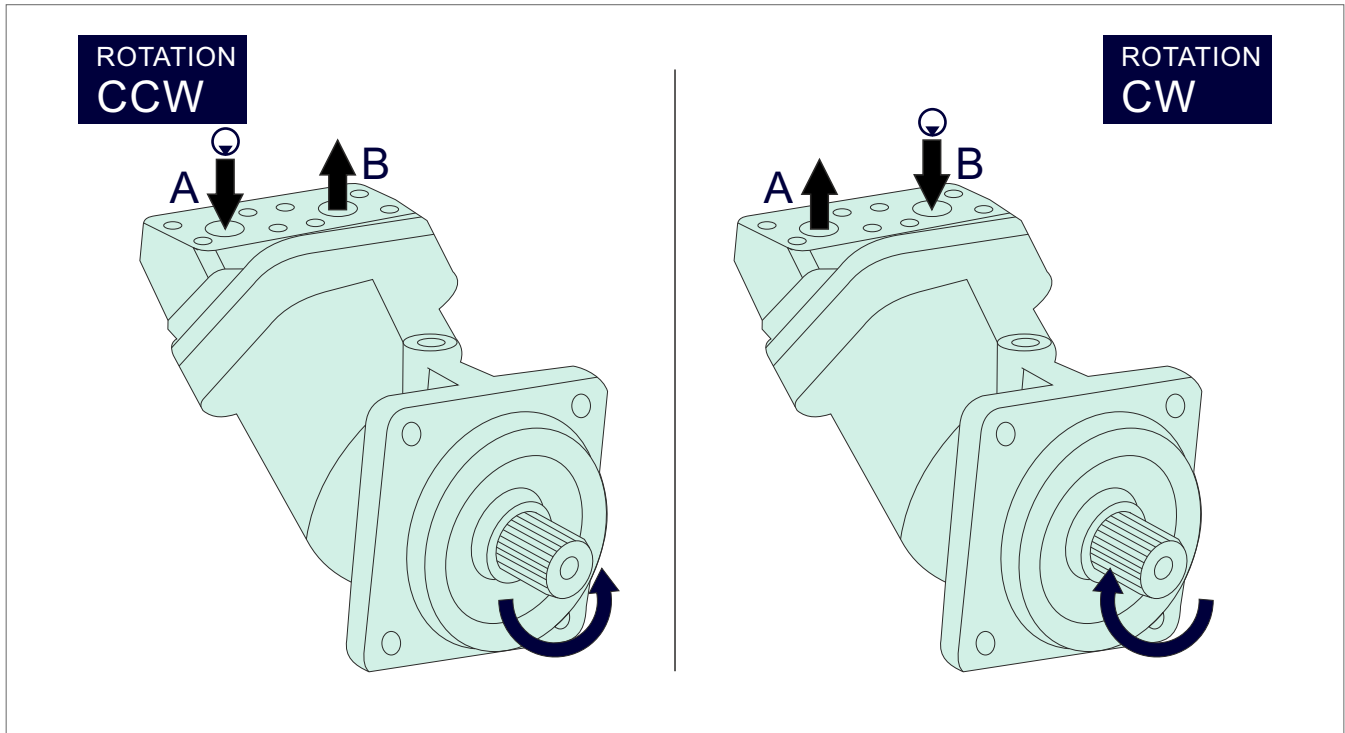
SAE C - 4 BOLT



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.)

Δp = Diff. pressure (bar)

n = Speed (rpm)

Q = Flow (lpm)

η_v = Volumetric efficiency

η_{mh} = Mechanical-hydraulic efficiency

η_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 manufacturer's plant / factory for the A9MS Bent Axis Motors.

Installation

POSITION

A9MS Motors can be operate any position.

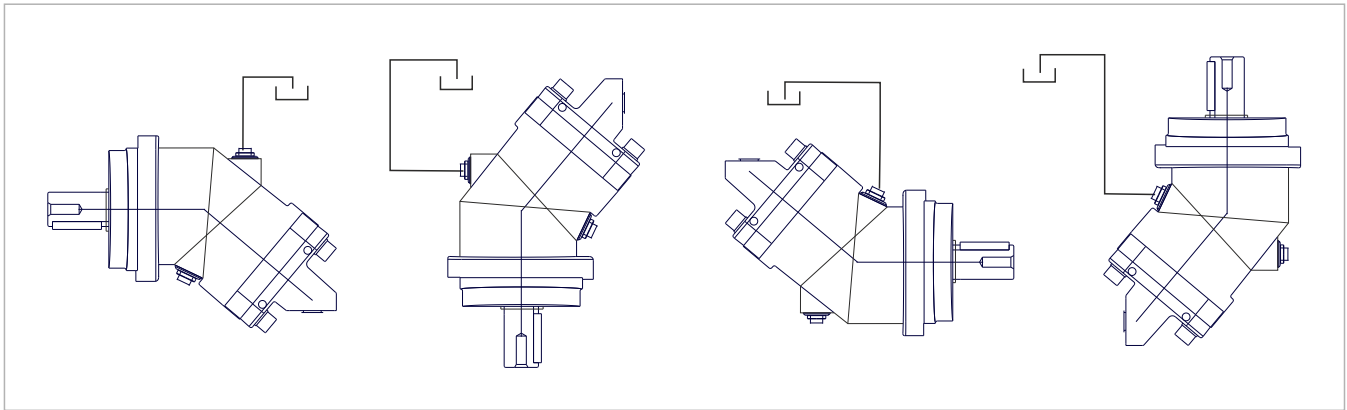
DIRECTION OF ROTATION

A9MS 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.

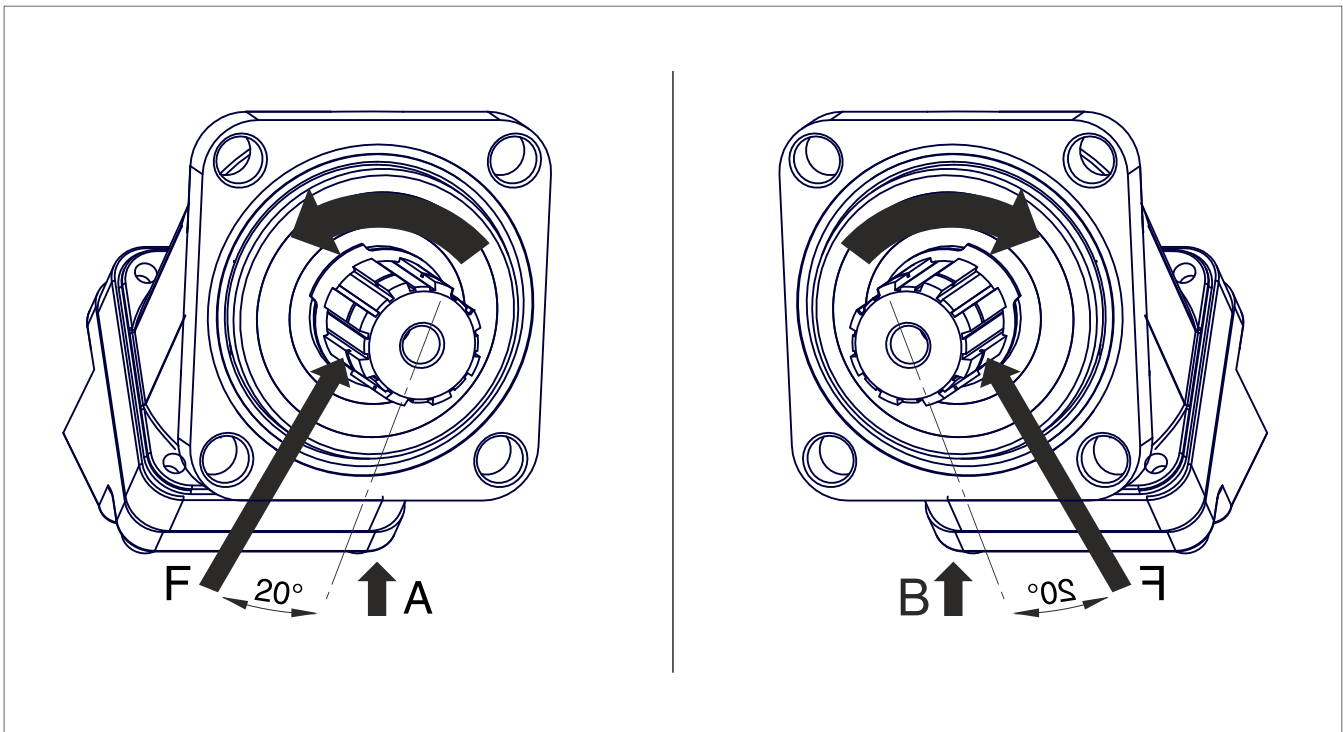


HYDRAULIC FLUID

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 A9MS Bent Axis Motors, please contact with Technical Department !!!

Complete Product Range

Piston Pumps

Piston Motors

DIN

DIN 5462 / ISO 14
8x32x35
8x32x36
DIN 6885



A8PD



A9MD

ISO

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



A8PO



A9MO

SAE

SAE B2 C4 - SAE D
SAE J498b
SAE J 744



A8PS



A9MS

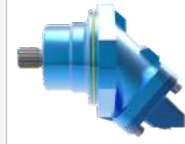
M2

Fixed Plug-in

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



A8PL - Dual Flow



A9MF - Semi integrated

A4

DIN ISO 14
8x32x36



A4PP Single Flow



A4PL Dual Flow

A6

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



A6HP - High Pressure



**A7GP - Gear Pump
A7GM - Gear Motor**

Contact



Gold Hydraulics, Ltd.

2019® Catalogue

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www.goldhydraulics.com

For more details and other catalogs,
please send email to our team.

Hydraulic Bent Axis Piston Pumps
Bent Axis Motors
Dual Flow Piston Pumps and Gear Pumps...

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