

# Pump SCP 012-130

ISO



Sunfab SCP-ISO is a series of piston pumps with a fixed displacement for mobile and stationary hydraulics.

Sunfab **SCP-ISO** covers the entire displacement range 12–130 cm<sup>3</sup>/revs at a maximum working pressure of 40 MPa. The pump is drained externally.

Sunfab **SCP-ISO** are speed optimised and therefore supplied in either left (L) or right (R) handed designs.

Sunfab **SCP-ISO**'s well dimensioned, double tapered roller bearings permit high shaft loads and lead to excellent speed characteristics.

Sunfab **SCP-ISO**'s high level of reliability is based on the choice of materials, hardening methods, surface structures and the quality assured manufacturing process.

Other advantages of Sunfab **SCP-ISO**:

- High maximum speed while maintaining low noise levels
- Smooth operation over the entire speed range
- Long life due to high demands on material selection, such as bearings, seals, etc
- O-rings on all contact surfaces as well as double shaft seals eliminate oil leakage from the pump

Type SCP-ISO		012	017	025	034	047	056	064	084	108	130	
Nominal oil flow at pump speed	rpm	500	5.8	7.9	12.5	17.0	23.5	28.0	31.5	41.5	54.0	65.0
		1000	12.0	16.2	25.0	34.0	47.0	56.0	63.5	83.5	108.0	130.0
		1500	18.3	24.7	37.5	51.0	70.5	84.0	95.5	125.0	162.0	195.0
Displacement	cm <sup>3</sup> /rev.	12.6	17.0	25.4	34.2	47.1	56.0	63.6	83.6	108.0	130.0	
Max pump speed:	rpm	continuous	2300	2300	2300	2300	1900	1900	1900	1500	1500	1500
		limited	3000	3000	3000	3000	2500	2500	2500	2000	2000	2000
Max working pressure	MPa	40	40	40	40	40	40	40	40	40	35	
Weight	kg	7.5	7.5	8.5	8.5	15.5	15.5	15.5	27.0	29.5	29.5	
Tare-weight torque	Nm	6.9	6.9	7.4	7.4	13.0	13.0	13.0	21.0	21.0	21.0	
Direction of rotation	supplied in right or left-hand designs											

Subject to design alteration

# Versions, main data

Example

**SCP 012 L N I4 A TM Z1 3**

Type:

P Pump with fixed displacement

SCP 012-130

Option:

3 External drainage + optimised

Size:

012 Displacement cm<sup>3</sup>/rev.

017

025

034

047

056

064

084

108

130

SCP 012-130

Connection cover

Z1 Suction 40°, pressure outlet standard orientation

SCP 012-017  
SCP 025-130

Connections:

TM Thread M

FM Flange M

Type of shaft:

Spline shaft (DIN 5480)

A

C

E

SCP 012-017

W25x1.25x18x9g

W20x1.25x14x9g

SCP 025

W30x2x14x9g

W25x1.25x18x9g

SCP 034

W30x2x14x9g

SCP 047-056

W35x2x16x9g

W32x2x14x9g

W30x2x14x9g

SCP 064

W35x2x16x9g

SCP 084

W40x2x18x9g

W35x2x16x9g

SCP 108

W45x2x21x9g

W40x2x18x9g

SCP 130

W45x2x21x9g

Direction of rotation:

L Left-hand

R Right-hand

Shaft seal:

N Nitrile

H Nitrile, high pressure

V Viton, high temperature

Key shaft (DIN 6885)

B

D

SCP 012-017

Ø 25 k6

Ø 20 k6

SCP 025

Ø 30 k6

Ø 25 k6

SCP 034

Ø 30 k6

SCP 047-056

Ø 35 h8

Ø 30 k6

SCP 064

Ø 35 h8

SCP 084

Ø 40 k6

SCP 108-130

Ø 45 k6

Mounting flange:

I4 ISO 4-bolt (ISO 3019-2)

## Choice of shaft seal

Pump SCP-ISO	Code	Temp. °C	Max. housing pressure MPa at rpm					
			500	1000	1500	2000	2500	3000
012-034	N	75	1.09	0.55	0.36	0.27	0.22	0.18
	H	75	4.91	2.46	1.64	1.23	0.98	0.82
	V	90	1.09	0.55	0.36	0.27	0.22	0.18
047-064	N	75	1.09	0.55	0.36	0.27	0.22	0.18
	H	75	4.91	2.46	1.64	1.23	0.98	0.82
	V	90	1.09	0.55	0.36	0.27	0.22	0.18
084-130	N	75	0.76	0.38	0.25	0.19	0.15	0.13
	H	75	3.44	1.72	1.15	0.86	0.69	0.57
	V	90	0.76	0.38	0.25	0.19	0.15	0.13

Subject to design modifications  
without notice

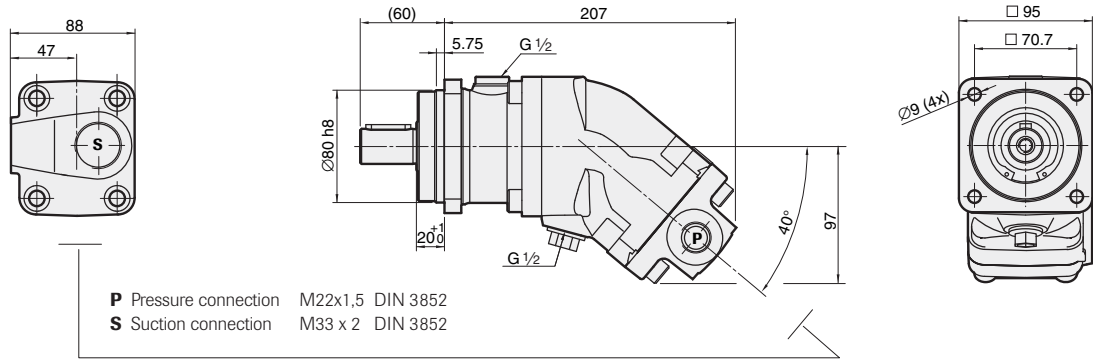
Factors affecting the choice of shaft seal include the hydraulic pump housing pressure and the drainage oil temperature.

The drainage oil should have a maximum temperature of 75 °C with a Nitrile shaft seal and 90 °C with a Viton shaft seal. These temperatures must not be exceeded.

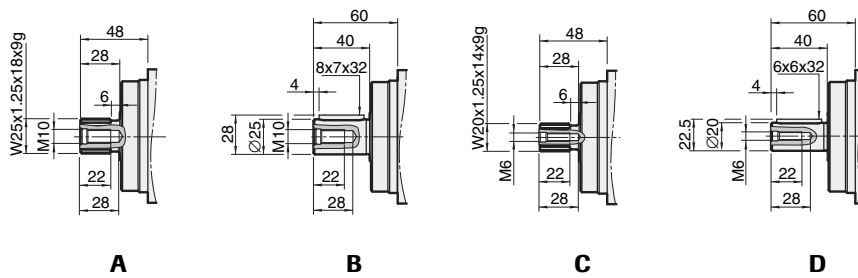
Code according to Versions, main data.

The housing pressure must be equal to or greater than the external pressure on the shaft seal.

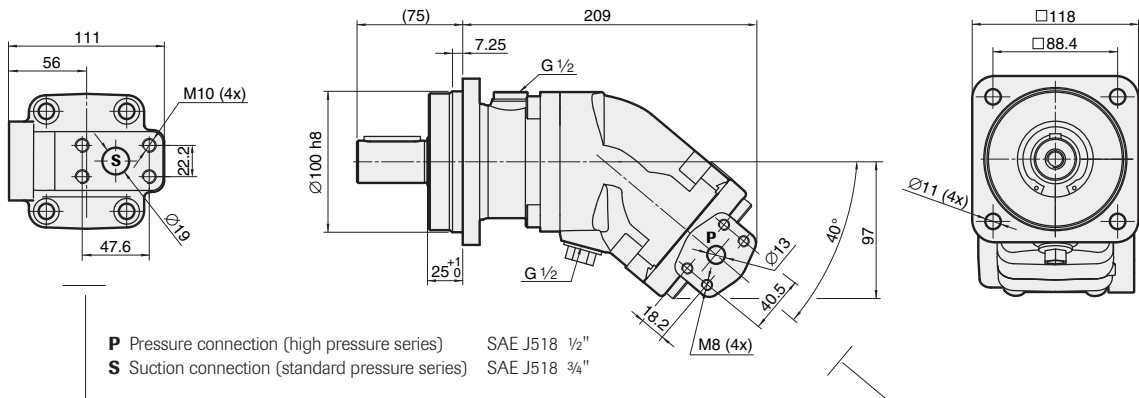
# Dimensions SCP 012-017



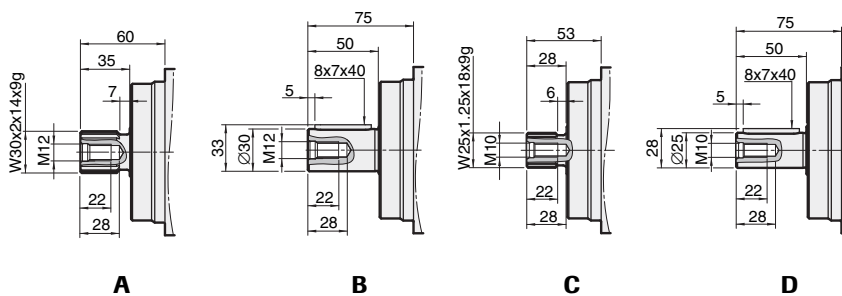
Right-hand design **R**. Left-hand design **L** has pressure outlets on the opposite side



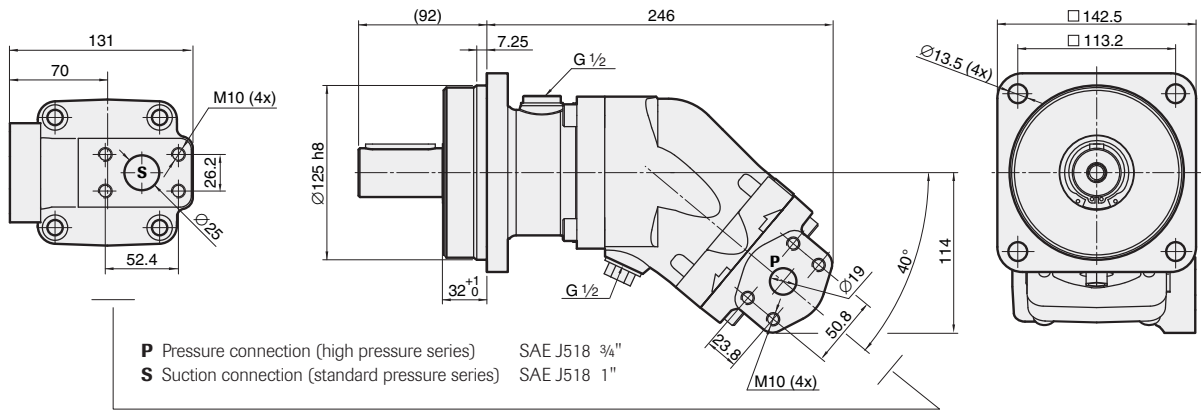
# SCP 025-034



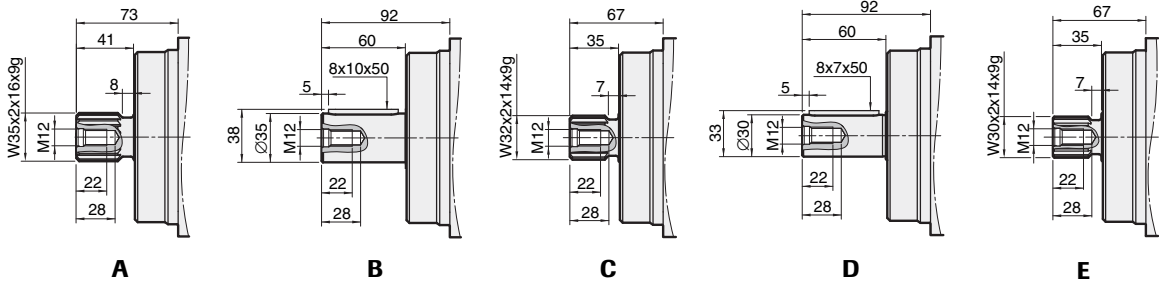
Right-hand design **R**. Left-hand design **L** has pressure outlets on the opposite side.



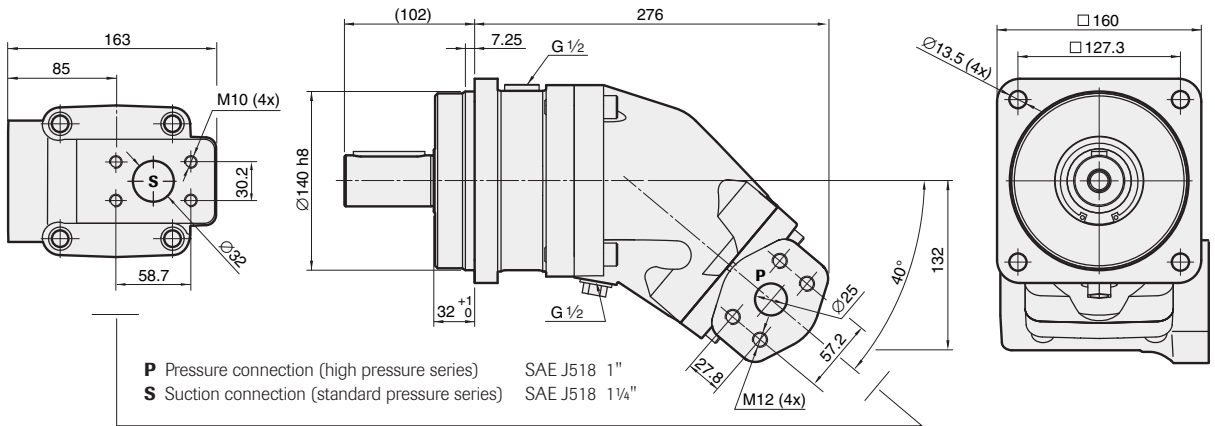
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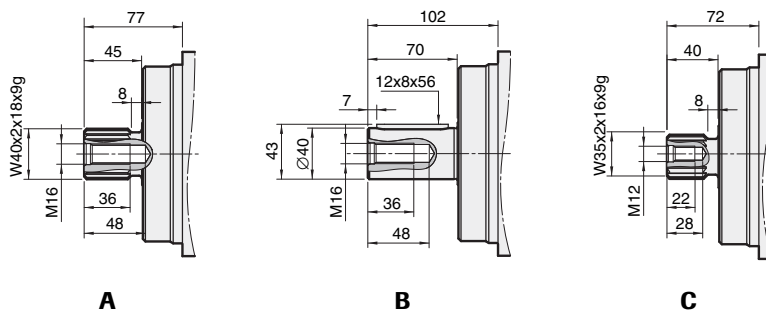
Right-hand design **R**. Left-hand design **L** has pressure outlets on the opposite side.



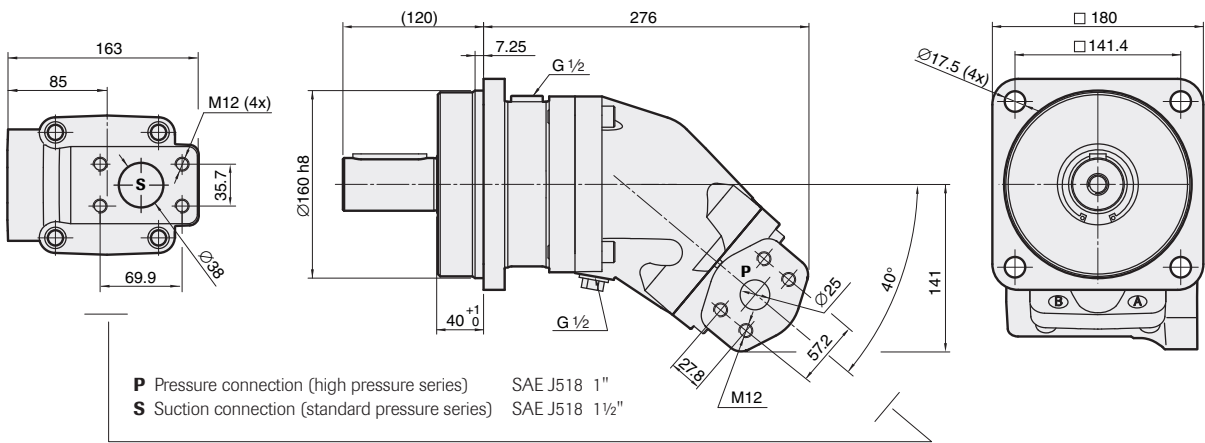
# SCP 084



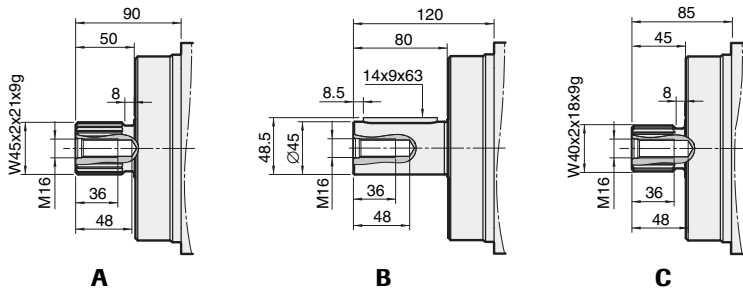
Right-hand design **R**. Left-hand design **L** has pressure outlets on the opposite side.



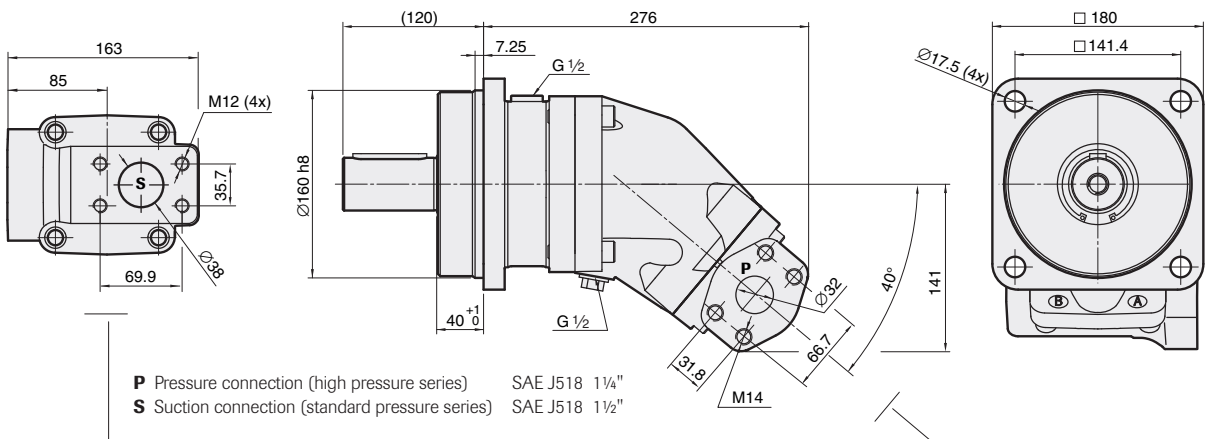
# SCP 108



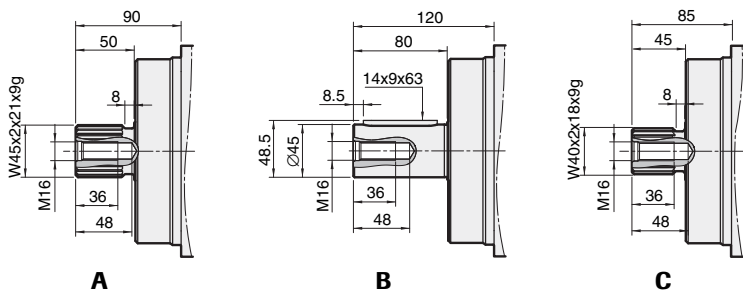
Right-hand design **R**. Left-hand design **L** has pressure outlets on the opposite side.



# SCP 130



Right-hand design **R**. Left-hand design **L** has pressure outlets on the opposite side.



**WARNING**

When the pump is running:

1. Do not touch the pressure hose
2. Watch out for rotating parts
3. The pump and hoses may be hot