

F1 Pump

F1-ISO



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F1-25 to -101, ISO

Specifications

Frame size F1-	25	41	51	61	81	101
Displacement [cm ³ /rev]	25.6	40.9	51.1	59.5	81.6	102.9
Max flow ¹⁾ [l/min]	78	104	125	143	180	216
Max operating pressure [bar]	400	400	400	400	400	400
Mass moment of inertia J [kgm ²]	0.00274	0.00266	0.00261	0.00257	0.00532	0.00524
Shaft speed [rpm]						
- short circuited pump (low press.)	3100	2700	2700	2700	2300	2300
- max selfpriming speed ²⁾	3050	2550	2450	2400	2200	2100
Torque ¹⁾ [Nm]	163	260	324	378	518	653
Max Input power ³⁾ [kW]	45	61	73	83	105	126
Weight [kg]	8.5	8.5	8.5	8.5	12.5	12.5

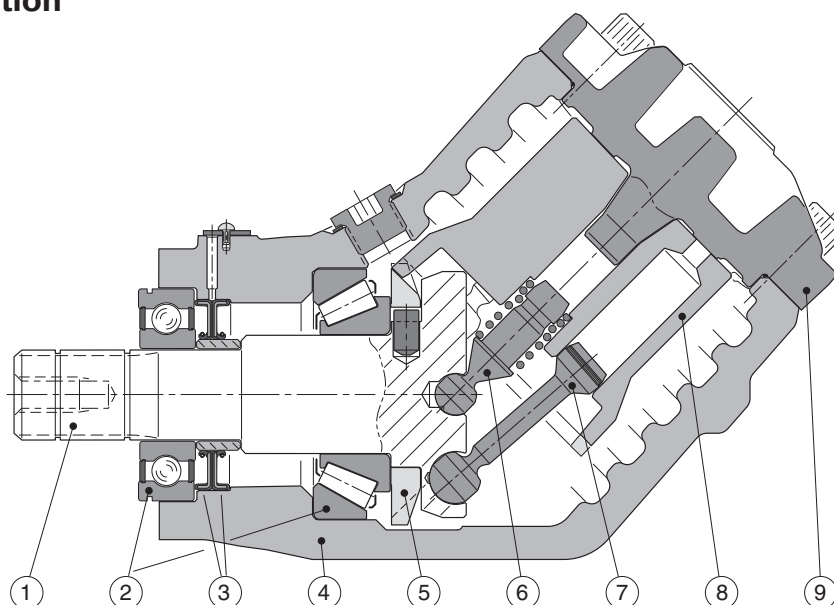
1) Theoretical values

2) Valid at an inlet pressure of 1.0 bar (abs.) when operating on mineral oil at a viscosity of 30 mm²/s (cSt).

3) Max 6 seconds in any one minute.

NOTE: For noise level information, contact Parker Hannifin

Pump cross section

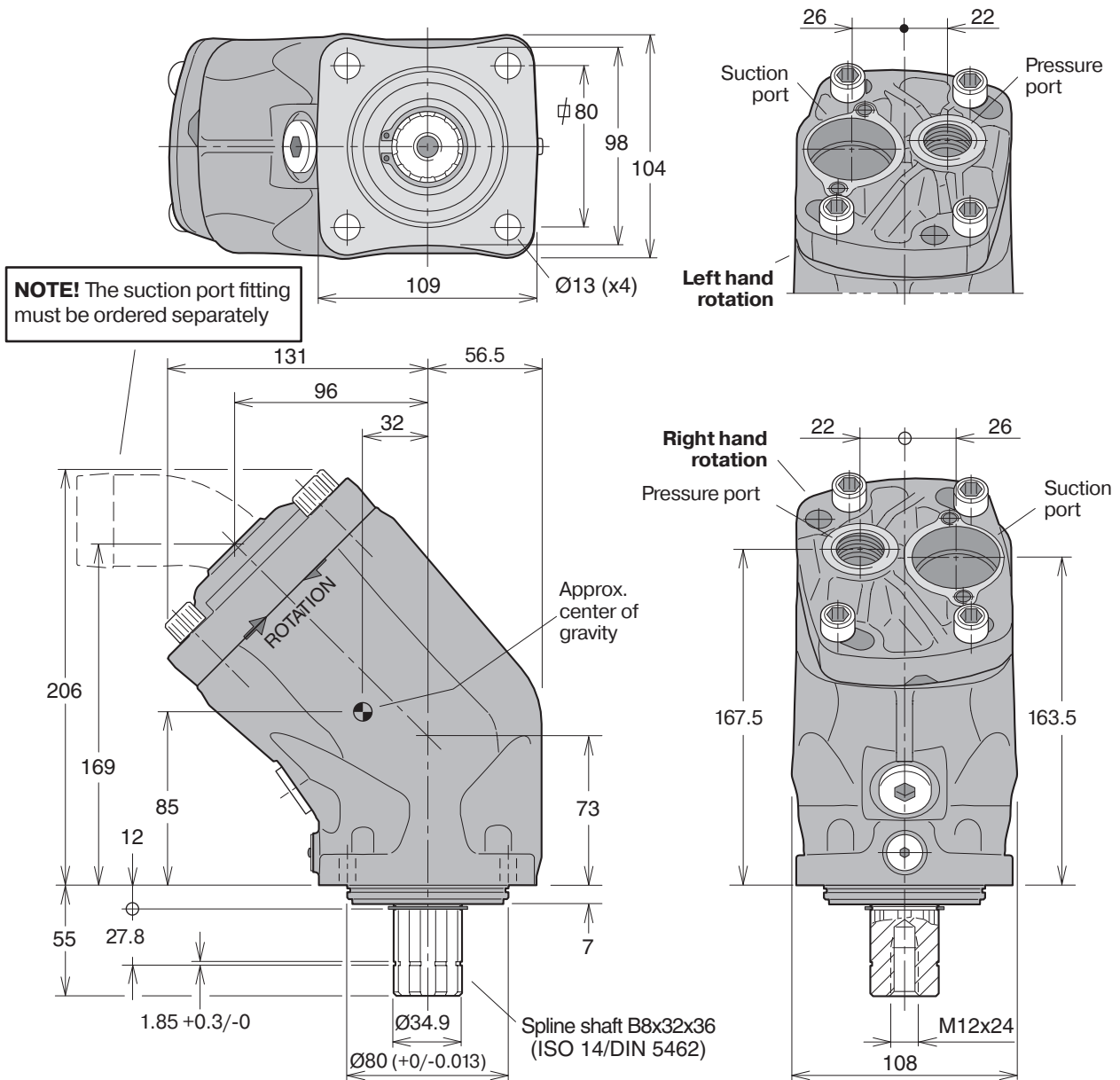


- 1. Input shaft
- 2. Bearings
- 3. Shaft seals

- 4. Housing
- 5. Timing gear
- 6. Barrel support

- 7. Piston with piston ring
- 8. Cylinder barrel
- 9. End cap

F1-25, -41, -51 and -61



Ordering code

Example: **F1 - 81 - R**

F1 frame size
25, 41, 51, 61, 81 or 101

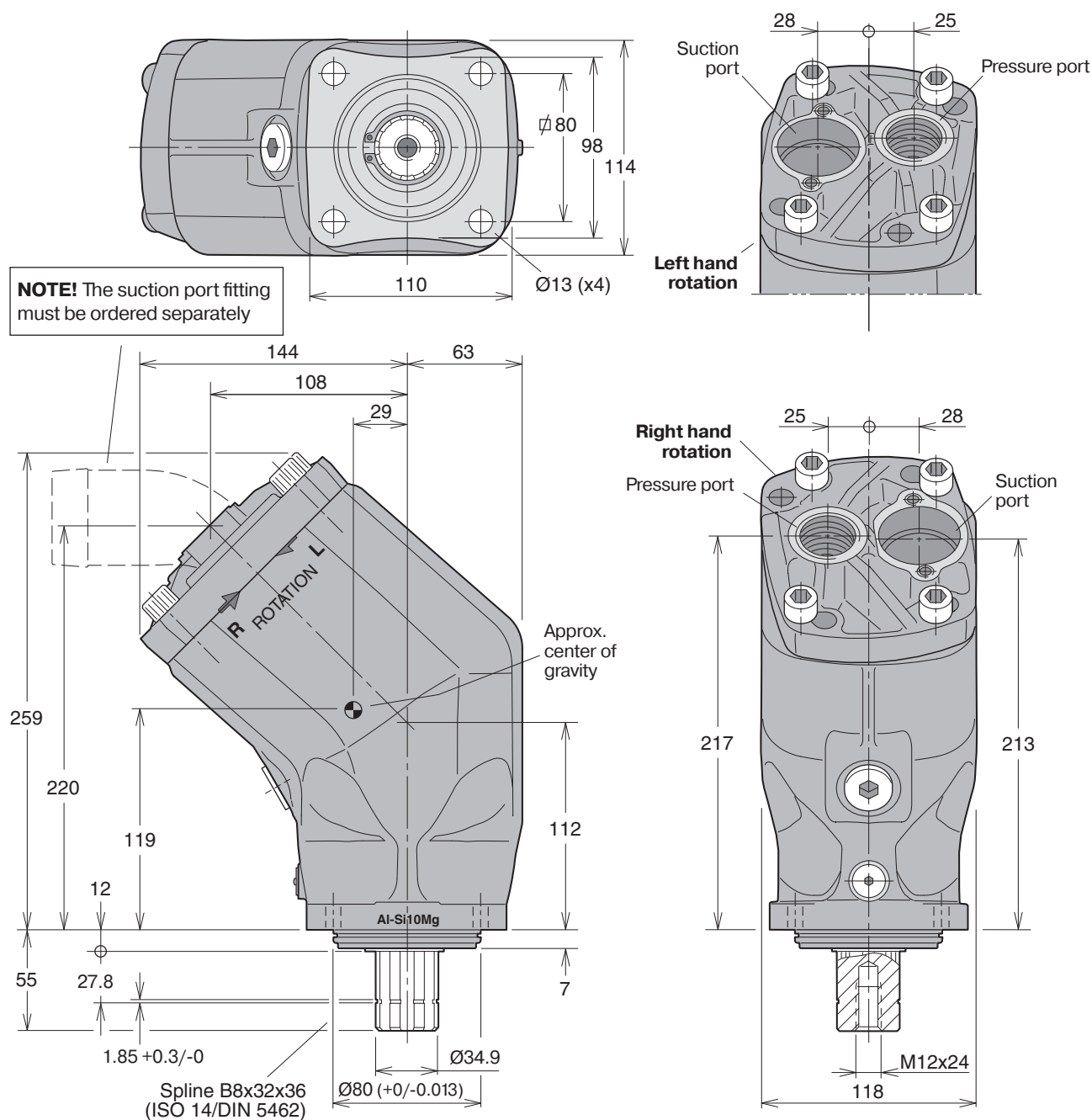
Shaft rotation
R Right hand
L Left hand

NOTE: The pump **does not** include a suction fitting; it must be ordered separately. See page 57ff.

Standard versions

Designation	Ordering no.
F1-25-R	378 1024
F1-25-L	378 1025
F1-41-R	378 1040
F1-41-L	378 1041
F1-51-R	378 1050
F1-51-L	378 1051
F1-61-R	378 1060
F1-61-L	378 1061

F1-81 and -101



Port size

F1 frame size	Pressure port ¹⁾
-25	3/4"
-41	3/4"
-51	3/4"
-61	3/4"
-81	1"
-101	1"

¹⁾ BSP thread (fitting not included)

Standard versions

Designation	Ordering no.
F1-81-R	378 1080
F1-81-L	378 1081
F1-101-R	378 1100
F1-101-L	378 1101

NOTE: The pump **does not** include a suction fitting; it must be ordered separately. See page 57ff.

F1-12 ISO with BSP port threads

Specifications

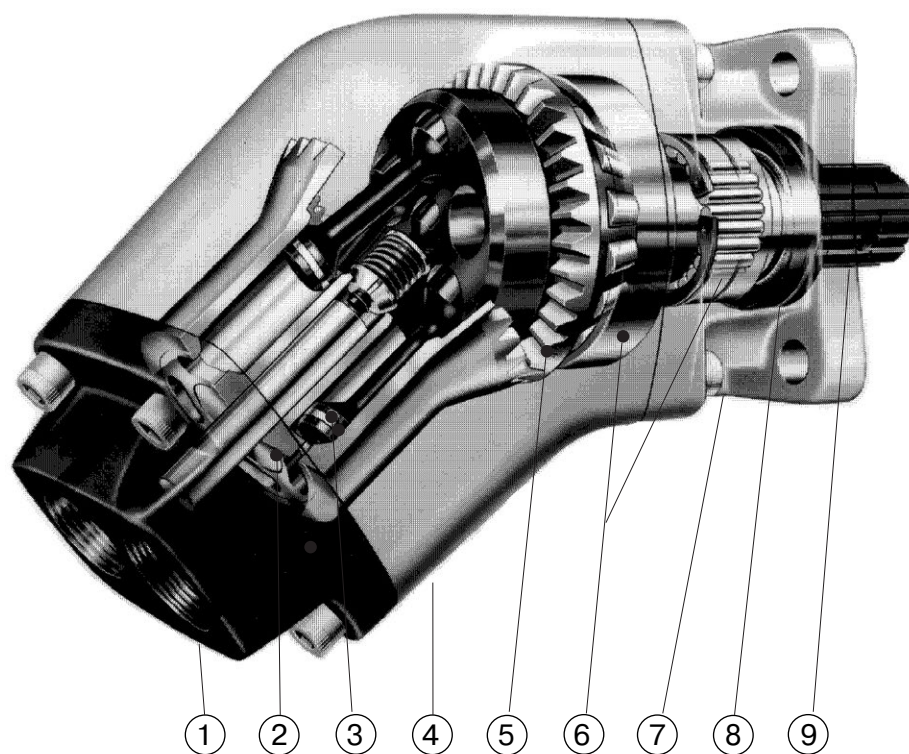
Frame size F1-	12
Displacement [cm ³ /rev]	12
Max flow ¹⁾ [l/min]	28
Max operating pressure [bar]	350
Shaft speed [rpm]	
- short circuited pump (low press.)	3100
- max selfpriming speed	2300
Torque ¹⁾ [Nm]	67
Max input power [kW]	16
Weight [kg]	6.7

¹⁾ Theoretical values

NOTE:

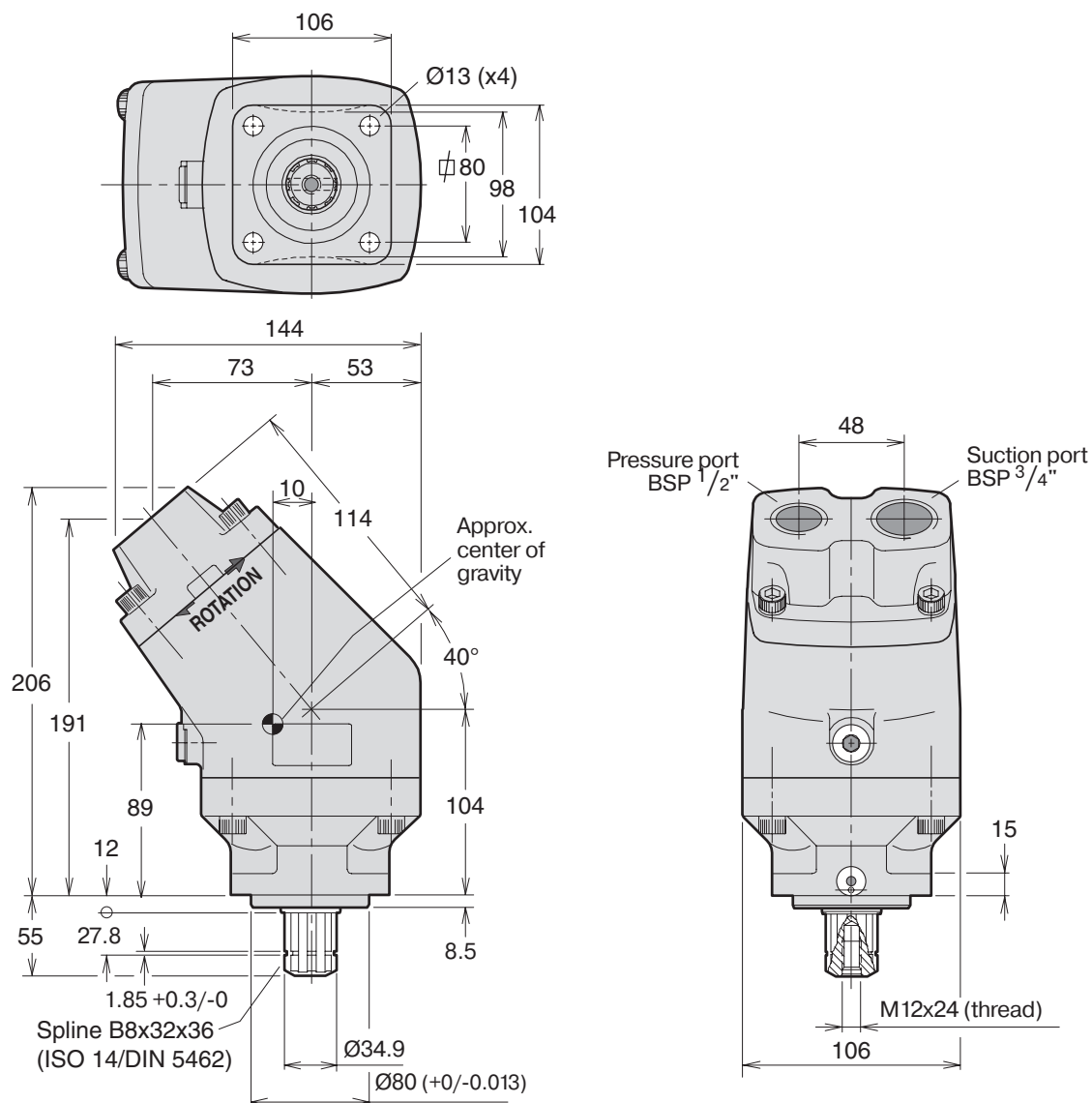
For noise level information, contact Parker Hannifin

Pump cross section



- | | | |
|---------------------------|-------------------|-------------------------------|
| 1 End cap | 4 Barrel housing | 7 Bearing housing with flange |
| 2 Cylinder barrel | 5 Timing gear | 8 Shaft seals |
| 3 Piston with piston ring | 6 Roller bearings | 9 Input shaft |

F1-12 with BSP port treads



Ordering code

Example:

F1-12-R

F1 frame size **12**

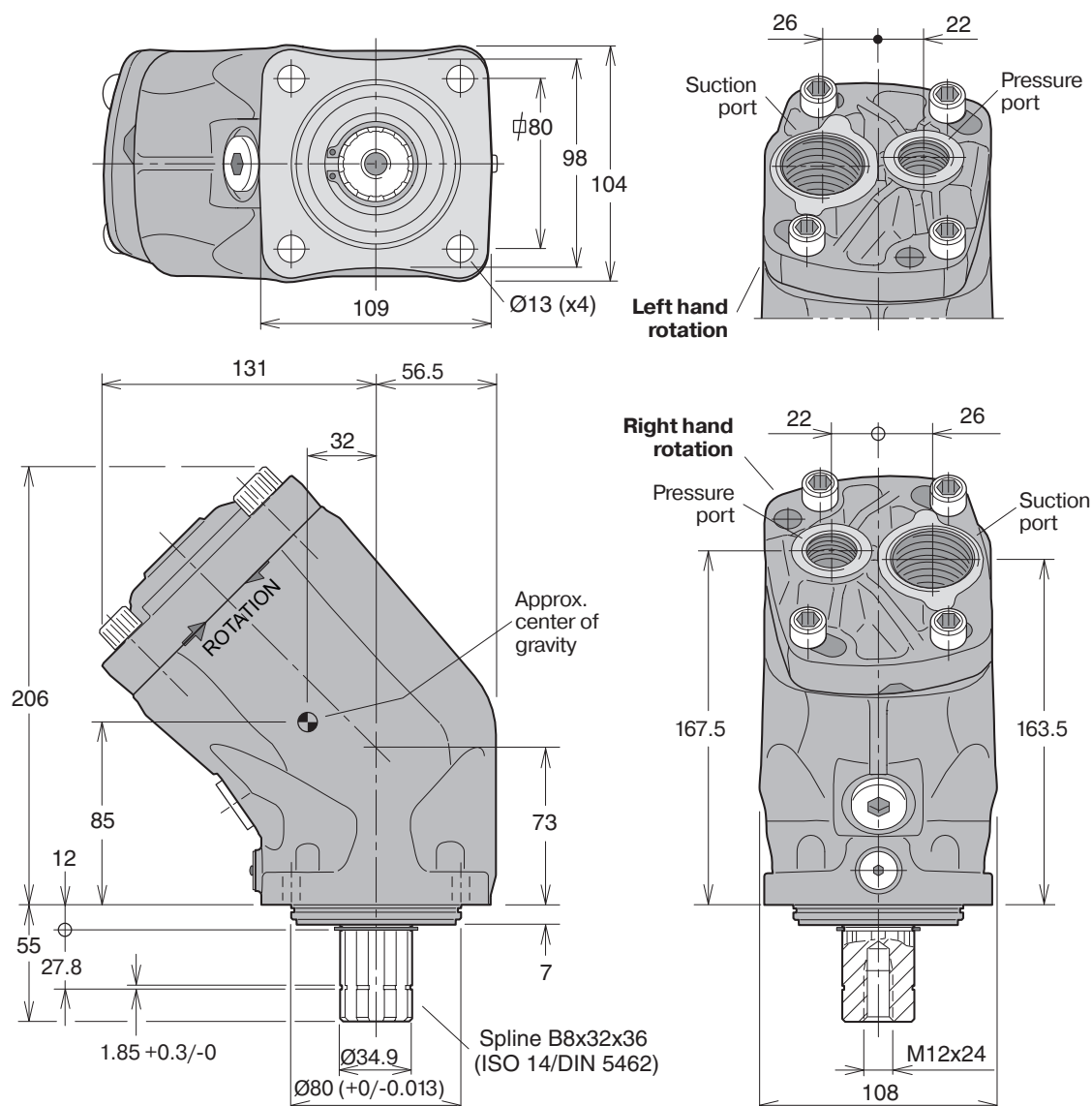
Shaft rotation
R Right hand
L Left hand

Standard versions

Designation	Ordering no.
F1-12-R	378 2212
F1-12-L	378 2211

NOTE: The pump **does not** include a suction fitting; it must be ordered separately. See page 57ff.

F1-25, -41, -51 and -61 with BSP port treads



Port size (all ports are BSP)

F1 frame size	Pressure port ¹⁾	Suction port
-25	3/4"	1"
-41	3/4"	1"
-51	3/4"	1"
-61	3/4"	1"

Ordering code

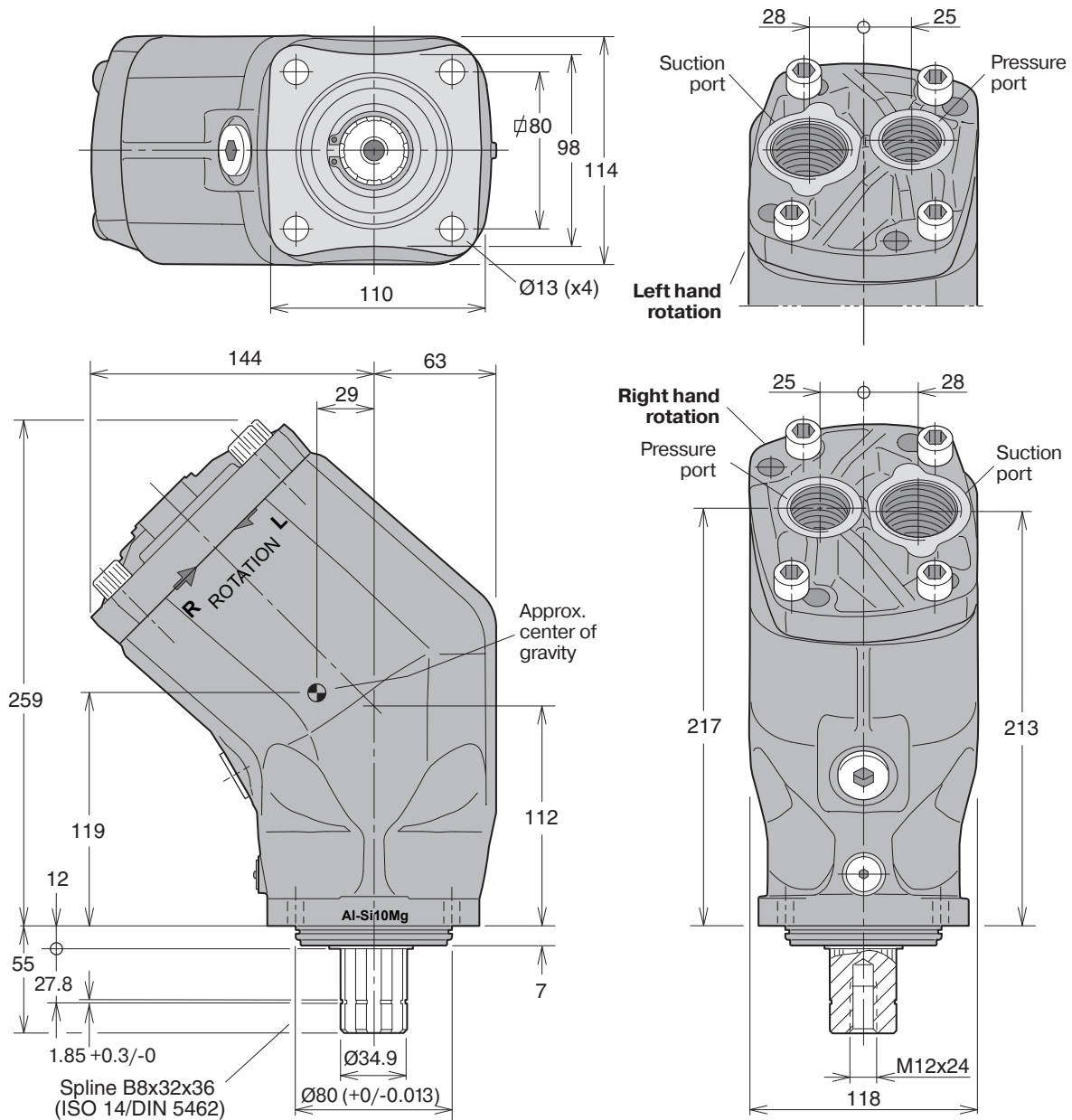
Example: **F1 - 61 - RB**
 F1 frame size **25, 41, 51, 61, 81 or 101**
 Shaft rotation/port threads **RB** Right hand/BSP
LB Left hand/BSP

Standard versions

Designation	Ordering no.
F1-25-RB	378 4024
F1-25-LB	378 4025
F1-41-RB	378 4040
F1-41-LB	378 4041
F1-51-RB	378 4050
F1-51-LB	378 4051
F1-61-RB	378 4060
F1-61-LB	378 4061

NOTE: The pump **does not** include a suction fitting; it must be ordered separately. See page 57ff.

F1-81 and -101 with BSP port threads



Port size (all ports are BSP)

F1 frame size	Pressure port ¹⁾	Suction port
-81	1"	1 1/4"
-101	1"	1 1/4"

Ordering code

Example: **F1 - 81 - RB**

F1 frame size **25, 41, 51, 61, 81 or 101**

Shaft rotation/port threads **RB** Right hand/BSP
LB Left hand/BSP

Standard versions

Designation	Ordering no.
F1-81-RB	378 4080
F1-81-LB	378 4081
F1-101-RB	378 4100
F1-101-LB	378 4101

NOTE: The pump **does not** include a suction fitting; it must be ordered separately. See page 57ff.