

# F1 Pump

## F1-ISO



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## F1-25 to -101, ISO Specifications

F1 frame size	25	41	51	61	81	101
<b>Displacement</b> [cm <sup>3</sup> /rev]	25.6	40.9	51.1	59.5	81.6	102.9
<b>Max flow</b> <sup>1)</sup> [l/min]						
at 350 bar	67	98	112	131	163 <sup>3)</sup>	185 <sup>3)</sup>
at 400 bar	56	86	97	113	143	160
<b>Max operating pressure</b> [bar]						
continuous	350	_____				350
intermittent	400	_____				400
<b>Shaft speed</b> [rpm]						
- short circuited pump (low press.)	2700	2700	2700	2700	2300	2300
- max speed at 350 bar <sup>2)</sup>	2600	2400	2200	2200	2000 <sup>3)</sup>	1800 <sup>3)</sup>
at 400 bar <sup>2)</sup>	2200	2100	1900	1900	1750	1550 <sup>3)</sup>
<b>Torque</b> <sup>1)</sup> [Nm]						
at 350 bar	142	227	284	331	453	572
at 400 bar	163	260	324	378	518	653
<b>Input power</b> [kW]						
- continuous	31	46	52	61	76	86
- intermittent <sup>4)</sup>	39	57	66	76	95	108
<b>Weight</b> [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 mm<sup>2</sup>/s (cSt).

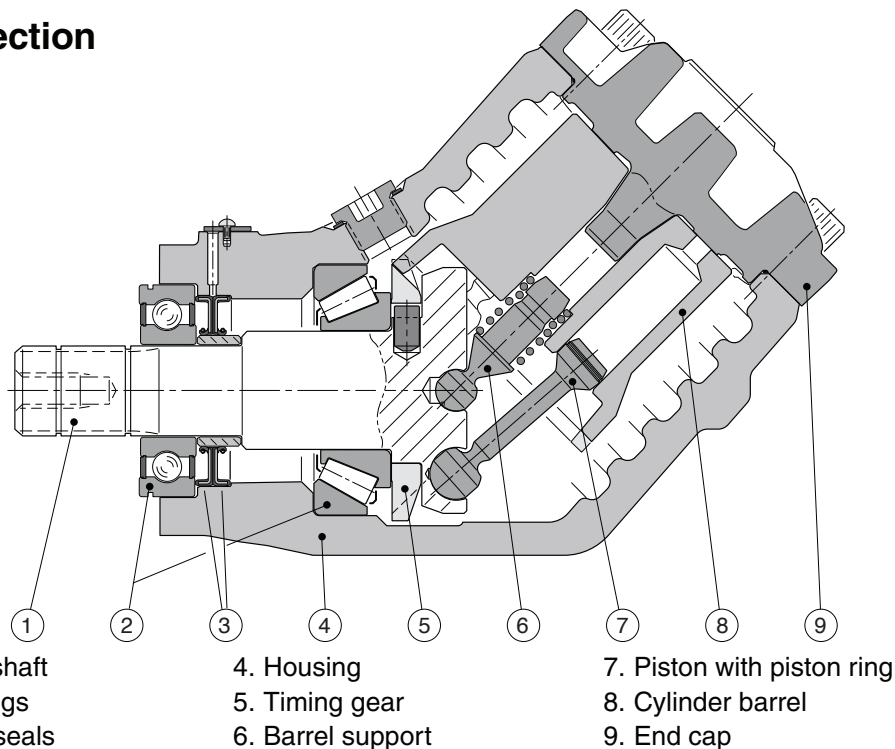
3) Valid with 2<sup>1</sup>/<sub>2</sub>" inlet (suction) line.

With 2" suction line: F1-81 – max 1400 rpm (Q≈120 l/min);  
 F1-101 – max 1000 rpm (Q≈120 l/min).

4) Max 6 seconds in any one minute.

**NOTE:** For noise level information, contact Parker Hannifin

### Pump cross section

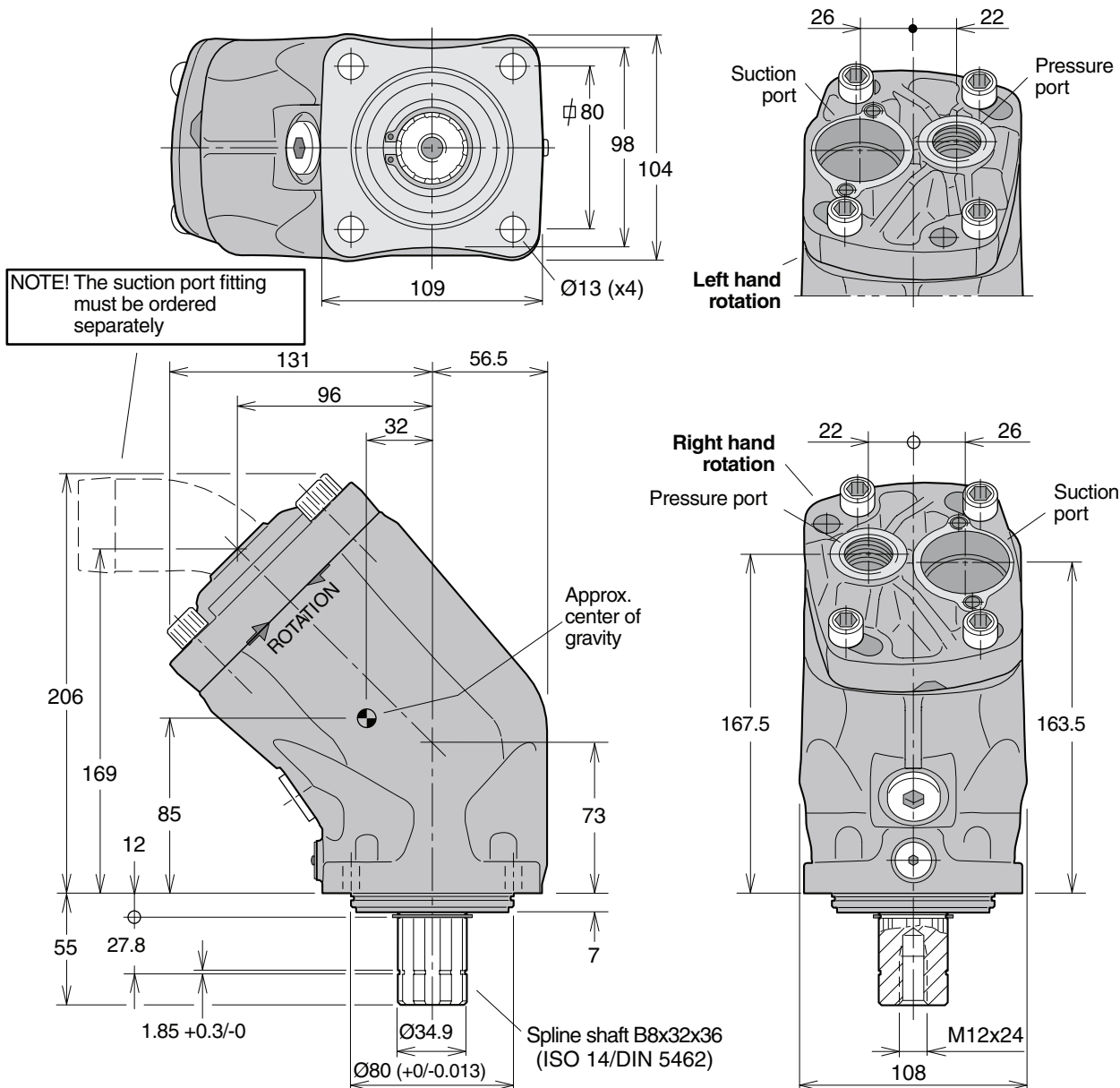


- 1. Input shaft
- 2. Bearings
- 3. Shaft seals

- 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**



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**Ordering code**

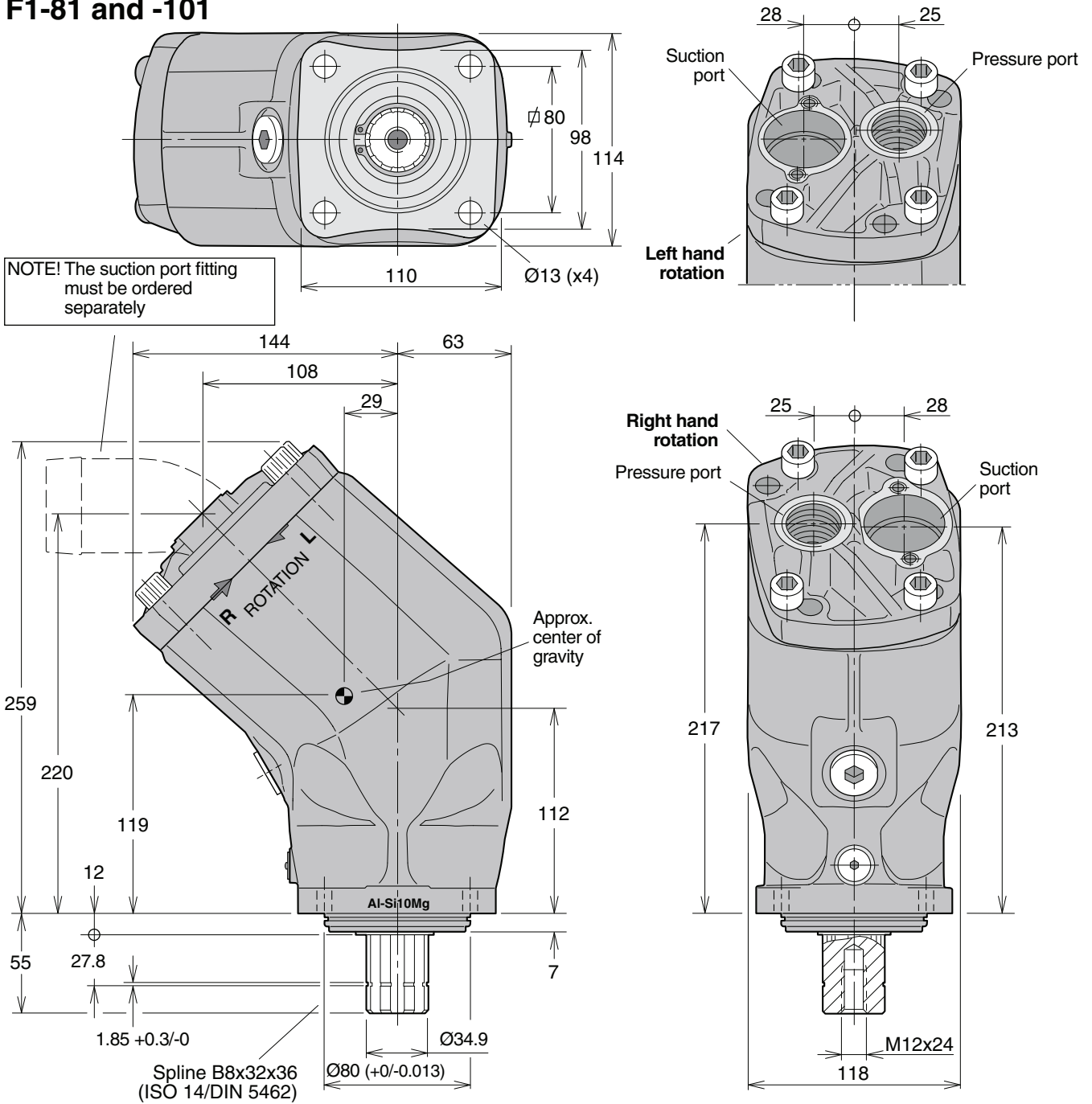
Example: **F1- 81 - R**  
 F1 frame size **25, 41, 51, 61, 81 or 101**  
 Shaft rotation **R** Right hand  
**L** Left hand

**Standard versions**

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

**NOTE:** The pump **does not** include a suction fitting; it must be ordered separately. See chapter 10.

**F1-81 and -101**



**Port size**

F1 frame size	Pressure port <sup>1)</sup>
-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
-L	378 1081
F1-101-R	378 1100
-L	378 1101

**NOTE:** The pump **does not** include a suction fitting; it must be ordered separately. See chapter 10.