## 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 | 12.3 | 12.1 |

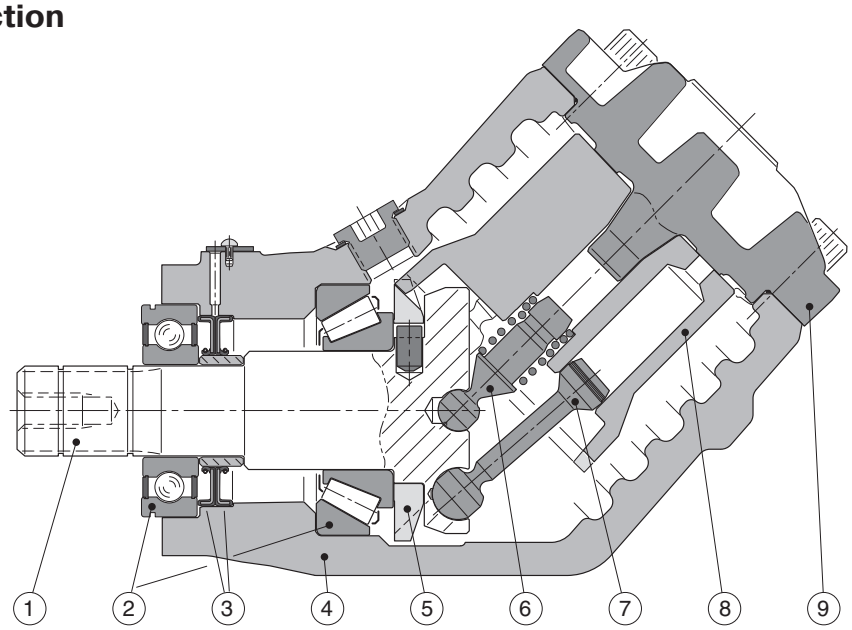
1) Theoretical values

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

3) Max 6 seconds in any one minute.

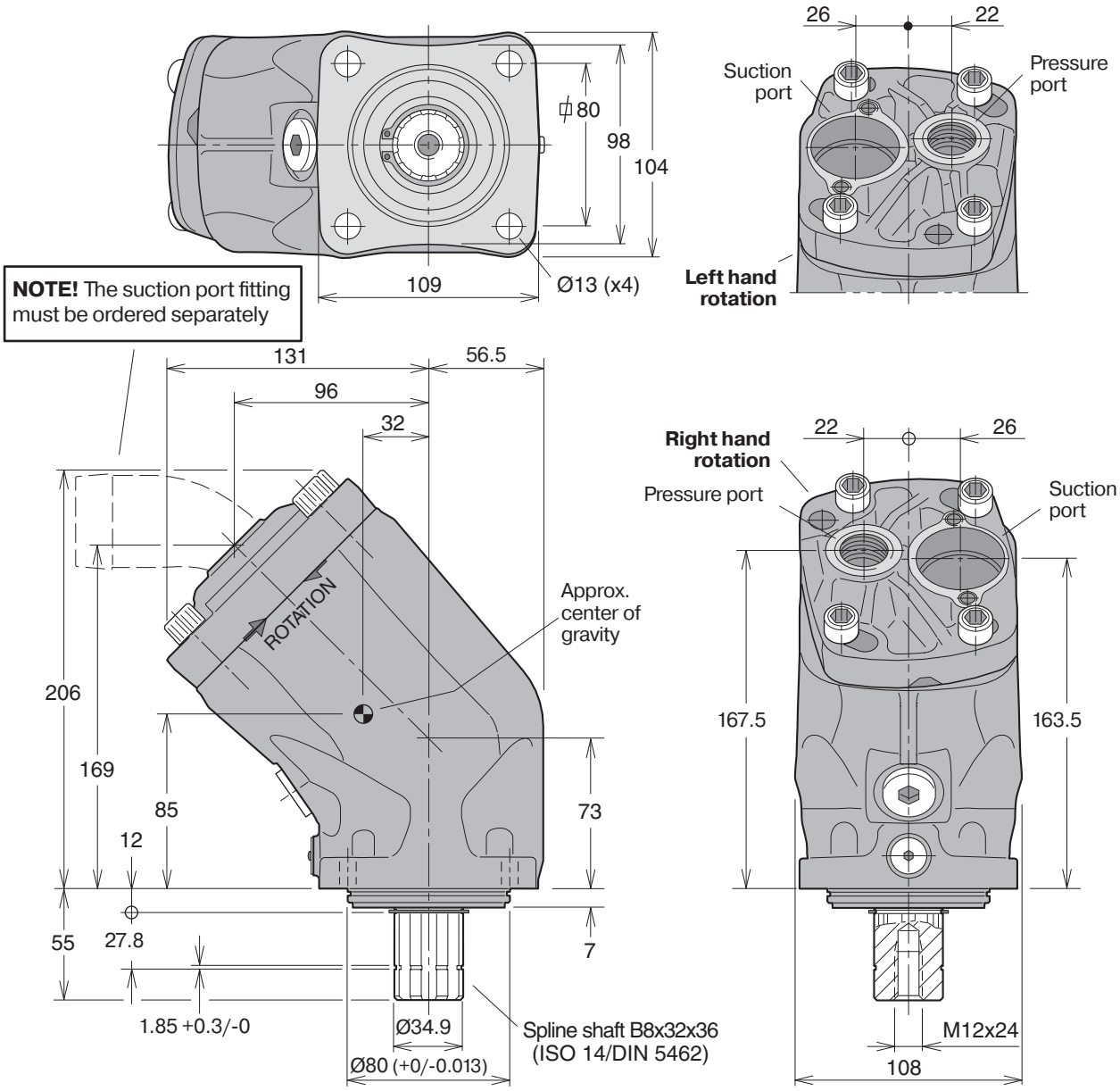
**NOTE:** For noise level information, contact Parker Hannifin

## 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**

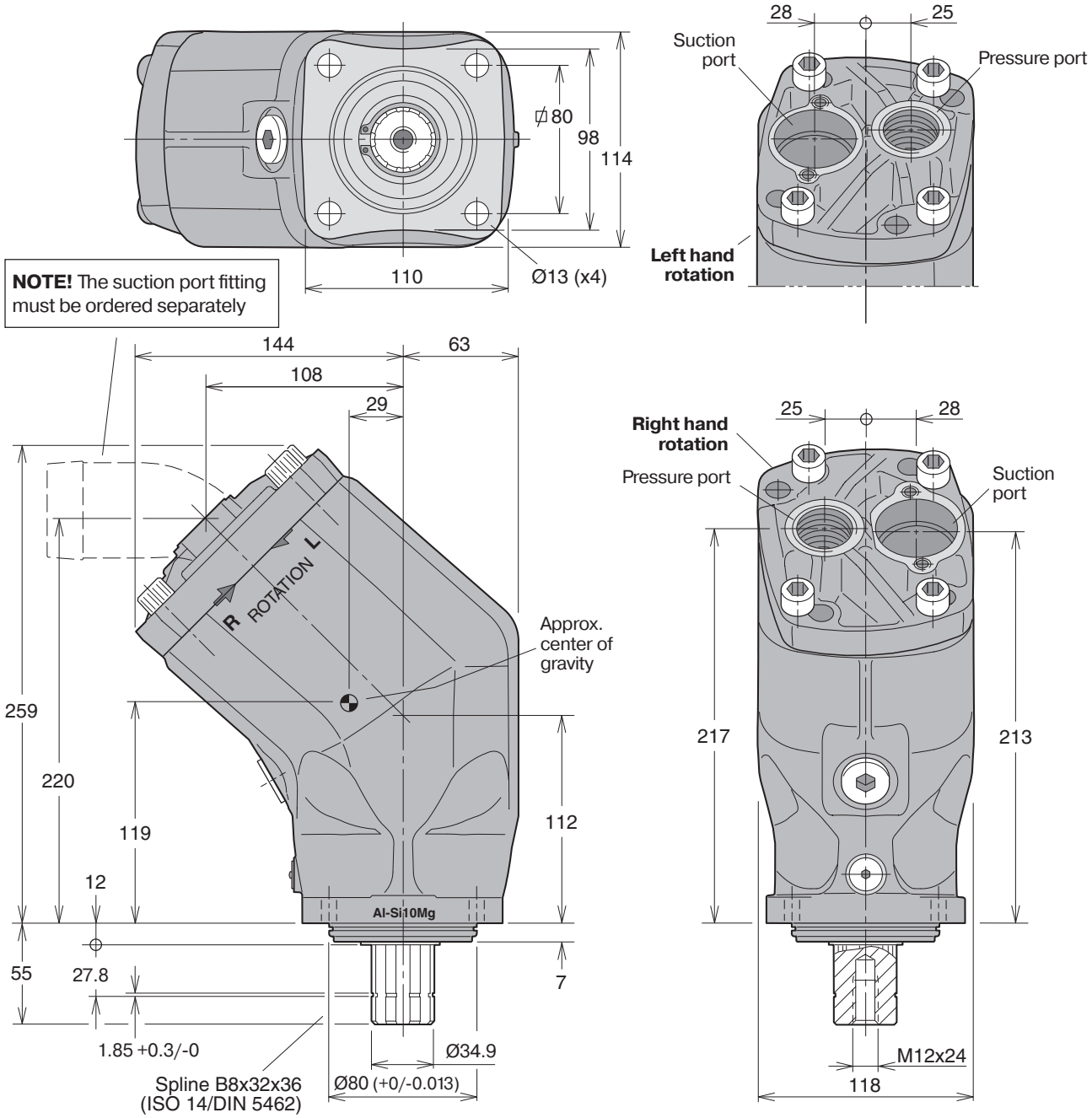
Shaft rotation
**R** Right hand
**L** Left hand

**NOTE:** The pump **does not** include a suction fitting; it must be ordered separately. See page 63ff..

## 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 63ff.