

Product Description

The PPC-04/12-SFM flow turbine is permanently installed in the pipeline where the oil flow rotates the internal axial turbine. The frequencies generated are processed by digital electronics (a signal converter). Flow effects causing interference are compensated in this process. In the new, redesigned version, the signal converter is now directly integrated into the PPC-04/12-SFM flow turbine. This allows even simpler operation and supports permanent coupling of the turbine and signal converter components that are matched to one another.

The new turbine also improves the response times/reaction times (from a previous 400 ms to 50 ms) and increases measurement accuracy. The PPC-04/12-SFM flow turbine is available in six versions for various flow speeds. A pressure sensor (see page D44) can be connected in parallel to the flow turbine by way of the integrated test point. In addition, the oil temperature can also be measured using the temperature sensor connection (see page D48).

Specifications

- Housing material: Aluminium (black anodized)
- Gaskets: FKM (Viton)
- 5-pin connection
- Flow measurement connection: See the table on page 23
- Pressure measurement connection: SMK 20 (M 16 x 2)
- Temperature measurement connection: M 10 x 1 (standard screw plug)



Technical Data

Ambient Conditions

- Max. media temperature: 80°C (176°F)
- Ambient temperature: 10°C ... 60°C (50°F ... 140°F)
- Storage temperature: -20°C ... 80°C (-4°F ... 176°F)
- Permissible particle size: < 25 Micron
- Viscosity range: 15 ... 100 cSt

Electrical Data

- Response time: 50 ms

Measuring Range

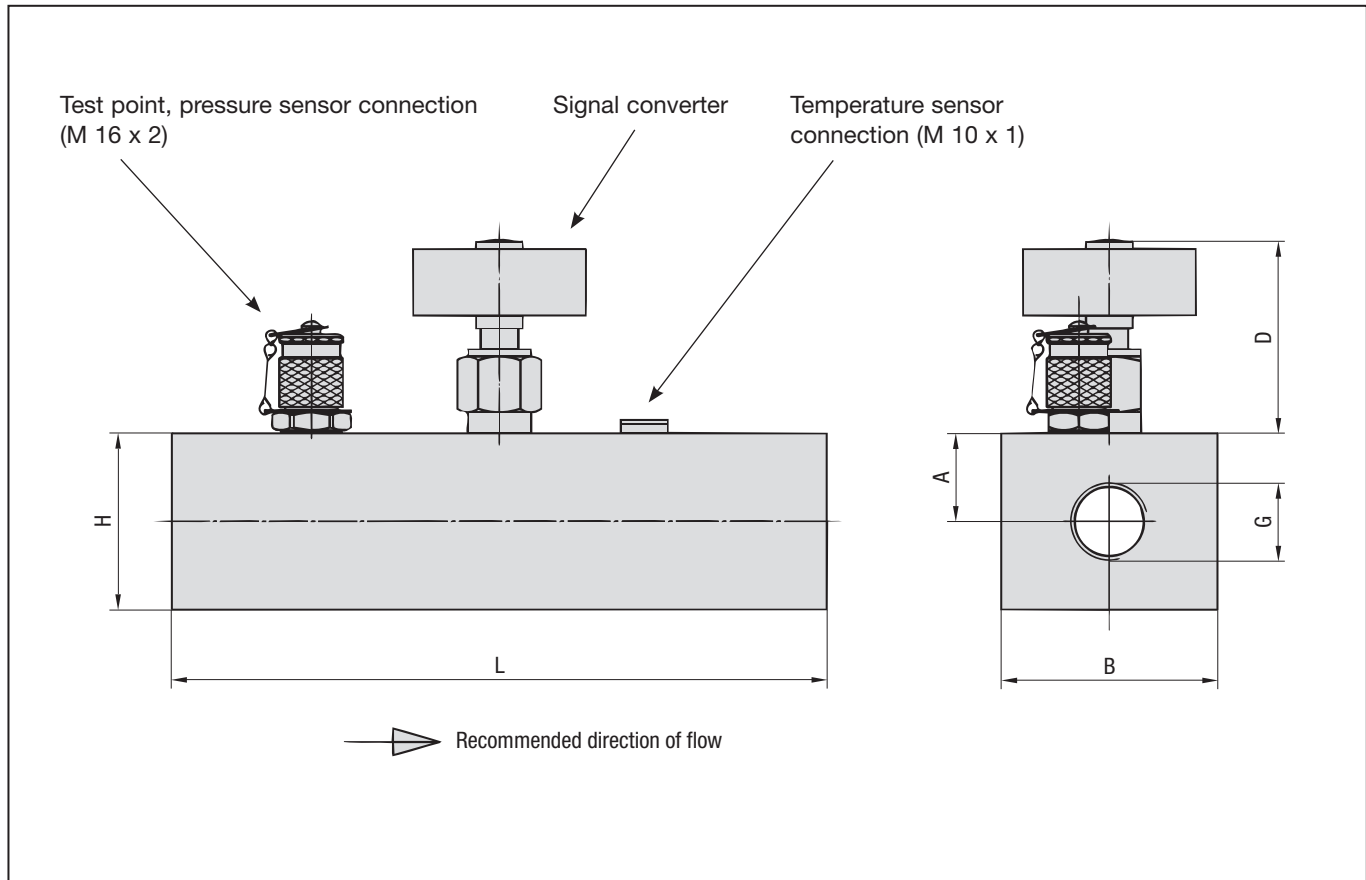
Flow Turbine PPC-04/12-	SFM-015	SFM-060	SFM-150	SFM-300	SFM-600	SFM-750
Measuring Range l/min (US GPM)	1 ... 15 (0,3 ... 3,9)	4 ... 60 (1,0 ... 15,9)	6 ... 150 (1,6 ... 39,6)	10 ... 300 (2,7 ... 79)	20 ... 600 (5,3 ... 158)	25 ... 750 (6,6 ... 198)
Maximum Flow l/min (US GPM)	16,5 (4,4)	66 (17,4)	165 (43,6)	330 (87,2)	660 (174,4)	825 (218)
Operating Pressure bar (PSI)	420 (6.090)	420 (6.090)	420 (6.090)	420 (6.090)	350 (5.000)	480 (6.960)
Maximum Pressure bar (PSI)	500 (7.300)	500 (7.300)	500 (7.300)	500 (7.300)	420 (6.090)	575 (8.340)
Accuracy (at 21 cSt) (% FS*)	1	1	1	1	1	1
	(% of the displayed value)					
Maximum Pressure Drop Bar (PSI) (at FS*)	1,5 (21,8)	1,5 (21,8)	1,5 (21,8)	4,0 (58)	4,0 (58)	5,0 (72,5)
Weight g (lbs.)	650 (1,4)	750 (1,6)	750 (1,6)	1.200 (2,6)	1.800 (4)	2.100 (4,6)

* FS = Full Scale

In general, the PPC-04/12-SFM flow meter can handle flows in either direction. The specified technical data and the calibration available as an option (see the ordering table on page D53) apply only when the flow through the flow meter matches the recommended flow direction. A double-headed arrow is shown on the nameplate of the PPC-04/12-SFM. The larger end of the double-headed arrow specifies the recommended direction of flow.

All dimensions in mm (inch)

Dimensions



Flow Meter PPC-04/12- Dimension	SFM-015	SFM-060	SFM-150	SFM-300	SFM-600	SFM-750
G (BSP)	G 1/2	G 3/4	G 3/4	G 1	G 1 1/4	-
G (SAE)	3/4" - 16	1" 1/16 - 16	1" 1/16 - 16	1" 5/16 - 16	1" 5/8 - 12	1" 7/8 - 12
A	18,5 (0,73)	25 (0,98)	25 (0,98)	25 (0,98)	37,5 (1,48)	37,5 (1,48)
B	37 (1,46)	62 (2,44)	62 (2,44)	62 (2,44)	62 (2,44)	100 (3,94)
D	80 (3,15)	80 (3,15)	80 (3,15)	84 (3,31)	75 (2,95)	79 (3,11)
L	136 (5,35)	190 (7,48)	190 (7,48)	190 (7,48)	212 (8,35)	212 (8,35)
H	37 (1,46)	50 (1,97)	50 (1,97)	50 (1,97)	75 (2,95)	75 (2,95)

Connecting the PPC-04/12-SFM flow meter to the hydraulic testers of the current PPC series requires the separately-ordered PPC-04/12-CAB3 (3 m / 10 ft.) cable. As an option, a PPC-04/12-CAB5-EXT extension cable (5 m / 16 ft.) is also available.

All dimensions in mm (inch)