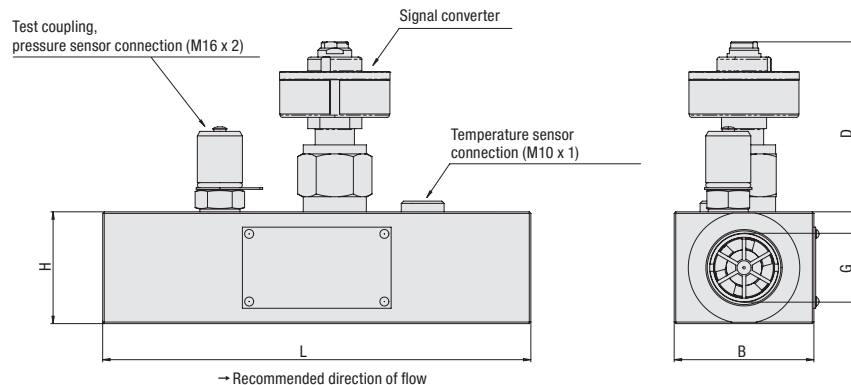


Flow Turbine ■ Type Flow-meter-PPC-04/12-SFM

B



Product Description

The Flow-meter-PPC-04/12-SFM Flow Turbine is permanently installed in the pipeline. The oil flow rotates the internal axial turbine. The frequencies generated are processed by digital electronics (a signal converter). Interferences caused by flow effects are compensated by this process.

The signal converter is now directly integrated into the 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 Flow Turbine also improves the response time (from previously 400 ms to 50 ms) and increases the measuring accuracy.

The Flow-meter-PPC-04/12-SFM is available in five versions for various flow speeds. A Pressure Sensor-PPC-04/12-P (see page 36) can be connected in parallel to the Flow Turbine by way of the integrated test coupling. In addition, the oil temperature can also be measured using the connection of the Temperature Sensor-PPC-04/12-T (see page 38).

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

Note: A Connection Cable-PPC-04/12-3 (3 m / 9.84 ft) is needed to connect the Flow Turbine to the current Hydraulic Testers. An Extension Cable-PPC-04/12-5-EXT (5 m / 16.40 ft) is also available as an option. See page 46 for further information.

Order Codes

Flow-meter-PPC-04/12 - SFM-015 - CAL

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②

③

① Series and Type

Flow Turbine **Flow-meter-PPC-04/12**

② Version

1 ... 15 l/min / .27 ... 3.90 US GPM	SFM-015
3 ... 60 l/min / .79 ... 15.90 US GPM	SFM-060
5 ... 150 l/min / 1.32 ... 39.60 US GPM	SFM-150
8 ... 300 l/min / 2.11 ... 79.00 US GPM	SFM-300
15 ... 600 l/min / 3.96 ... 158.00 US GPM	SFM-600

③ Calibration

Without calibration certificate	(none)
With calibration certificate (factory calibration)	CAL

UNF version available on request.

Technical Data

Materials

■ Housing:	Aluminium (black anodised)
■ Gaskets:	FKM (Viton®)
■ 5-pin connection	
■ Pressure measurement connection:	SMK-20 (M16 x 2)
■ Temperature measurement connection:	M10 x 1 (standard screw plug)

Ambient Conditions

■ Media temperature:	-20 °C ... +90 °C / -4 °F ... +194 °F
■ Ambient temperature:	-10 °C ... +50 °C / +14 °F ... +122 °F
■ Storage temperature:	-20 °C ... +80 °C / -4 °F ... +176 °F
■ Rel. humidity:	< 80%
■ Permissible particle size:	<10 Micron for SFM-015, <25 Micron for others
■ Viscosity range:	10 ... 100 cSt

Electrical Data

■ Response time:	50 ms
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Process Connection

■ Please see table below

Protection Rating

■ IP 54 protection rating: Dust protected and protected against splashing water

Dimensions and Measuring Range

Version	Measuring Range		Operating Pressure (bar/PSI)	Max. Pressure (bar/PSI)	Accuracy (at 21 cSt)	Max. Pressure Drop (at FS*) (bar/PSI)	Dimensions (mm/in)						Weight (kg/lbs)
	Measuring Range (l/min / US GPM)	Max. Flow (l/min / US GPM)					G ** (BSP)	G (UNF)	B	D	L	H	
SFM-015	1 ... 15	16.5	350	420	±1 (% FS*)	1.5	G1/2	3/4-16	37	71	136	37	650
	.27 ... 3.90	4.4	5076	6091		21.8			1.46	2.80	5.35	1.46	1.4
SFM-060	3 ... 60	66	350	420	±1 (% of the displayed value)***	1.5	G3/4	1-1/16-16	62	72	190	50	750
	.79 ... 15.90	17.4	5076	6091		21.8			2.44	2.83	7.48	1.97	1.6
SFM-150	5 ... 150	165	350	420	±1 (% of the displayed value)***	1.5	G3/4	1-1/16-16	62	72	190	50	750
	1.32 ... 39.60	43.6	5076	6091		21.8			2.44	2.83	7.48	1.97	1.6
SFM-300	8 ... 300	330	350	420	±1 (% of the displayed value)***	4	G1	1-5/16-16	62	76	190	50	1200
	2.11 ... 79.00	87.2	5076	6091		58			2.44	2.99	7.48	1.97	2.6
SFM-600	15 ... 600	660	290	348	±1 (% of the displayed value)***	5	G1-1/4	1-5/8-12	62	66	212	75	1800
	3.96 ... 158.00	174.4	4206	5047		72.5			2.44	2.60	8.35	2.95	4

* FS = Full Scale

** Standard option *** for measured values ≥ 15% FS; for measured values < 15% FS accuracy 0.15% FS
Dimensional drawings: All dimensions in mm (in).