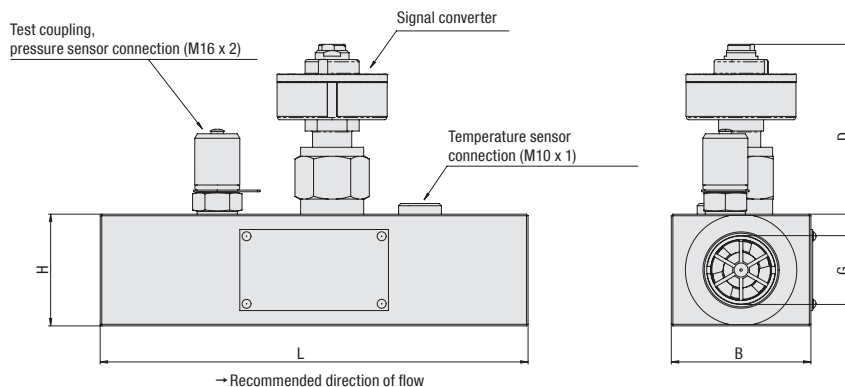


Flow Turbine ■ Type PPC-04/12-SFM

B



Product Description

The 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 PPC-04/12-SFM is available in five versions for various flow speeds. A Pressure Sensor PPC-04/12-P (see page 34) 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 36).

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 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-CAB3 (3 m / 9.84 ft) is needed to connect the Flow Turbine to the current Hydraulic Testers.

An Extension Cable PPC-04/12-CAB5-EXT (5 m / 16.40 ft) is also available as an option. See page 44 for further information.

Technical Data

Materials

- Housing: Aluminium (black anodised)
- Gaskets: FKM/FPM (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
- Permissible particle size: <10 Micron for SFM-015, <25 Micron for others
- Viscosity range: 10 ... 100 cSt

Electrical Data

- Response time: 50 ms

Process Connection

- Please see table below

Order Codes



① Series and Type

Flow Turbine **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 | CAL |

UNF version available on request.

Dimensions and Measuring Range

| Version | Measuring Range | | Accuracy | | | | Dimensions (mm/in) | | | | | | | Weight (lb/ks) |
|---------|----------------------------|-------------------------------------|-------------------------------|------------------------------|-------------------------------|----------------------|---------------------------------------|------------|---------|----|-----|----|------|----------------|
| | Flow Turbine PPC-04/12- | Measuring Range (l/min / US GPM) | Max. Flow (l/min / US GPM) | Operating Pressure (bar/PSI) | Max. Pressure (bar/PSI) | Accuracy (at 21 cSt) | Max. Pressure Drop (at FS*) (bar/PSI) | 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |

* FS = Full Scale

** Standard option

Dimensional drawings: All dimensions in mm (in).

