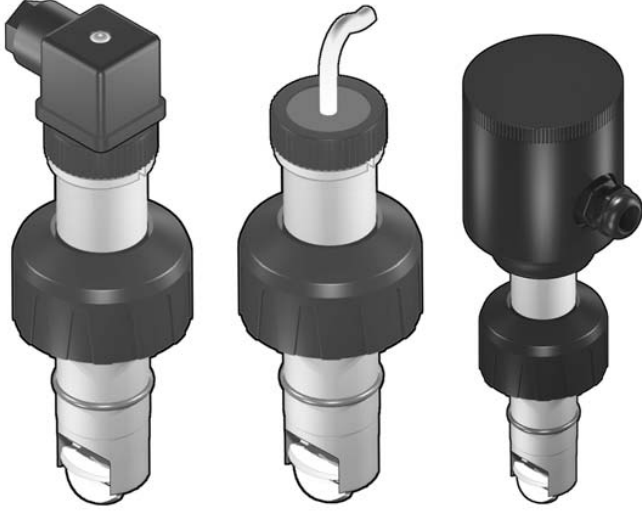


FLOWX3 F3.00 Paddlewheel Flow Sensor

3.00



The simple and reliable paddlewheel flow sensor type F3.00 is designed for use with every kind of solid-free liquids.

The sensor can measure flow from 0.15 m/s (0.5 ft/s) producing a frequency output signal highly repeatable.

A rugged construction and a proven technology guarantee exceptional performances with little or no maintenance required.

A new electronic, with a push-pull output, is now available for a safe connection to any kind of PLC/Instrument digital input.

A specially designed family of fittings ensures an easy and quick installation into all pipe materials in sizes from DN15 to DN600 (0.5" to 24").

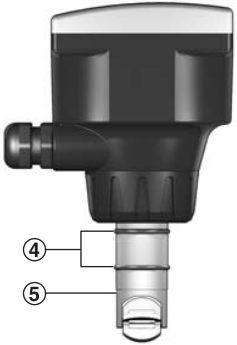
Main Features

- CPVC, PVDF, Brass or Stainless Steel sensor body.
- Easy insertion system.
- Different versions for remote and compact installations.
- Measurement range over 50:1.
- High chemical resistance.
- Battery powered version.
- 4-20 mA output.
- MIN alarm relay output.
- Push-Pull output for universal electrical connection.

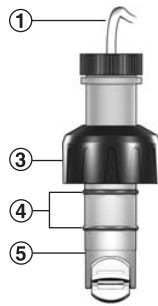
Applications

- Water treatment and regeneration.
- Industrial wastewater treatment and recovery.
- Textile finishing.
- Water distribution.
- Processing and manufacturing industry.
- Filtration systems.
- Chemical production.
- Liquid delivery systems.
- Cooling water monitoring.
- Heat Exchangers.
- Swimming pools.
- Pump protection.

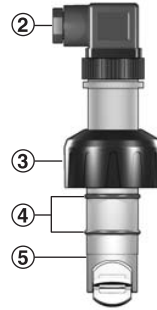
Technical Features



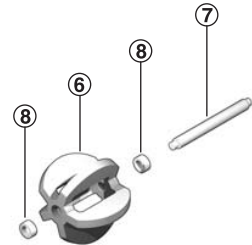
Sensor for compact installation (F3.01) with field-mount transmitter (sold separately)



Sensor for remote installation in IP68 configuration



Sensor for remote installation in IP65 configuration



Paddlewheel system

- 1) Electrical cable: 8 m. (26.4 ft) standard
- 2) 4 pole cable plug according to DIN 43650-B/ISO 6952
- 3) UPVC cap for installation into fittings
- 4) O-Ring seals available in EPDM or FPM
- 5) CPVC, PVDF, Brass or Stainless Steel sensor body
- 6) ECTFE (Halar®) Open-cell rotor
- 7) Ceramic shaft
- 8) Ceramic bearings

Halar® is a registered trademark of Ausimont-Solvay.

Operating principle

The flow sensor consists of a transducer and a five-blade open cell paddlewheel using insertion technology. The paddlewheel is equipped with a permanent magnet integrated into each blade. As the magnet passes close to the transducer a pulse is generated.

When liquid flows into the pipe, the paddlewheel is set in rotation producing a square wave output signal. The frequency is proportional to the flow velocity. The sensor is installed into the pipe using a wide range of insertion type fittings supplied by the flow sensor manufacturer.

Engineering Data

- The flow sensor is available with Hall effect transducer (standard) and Coil effect transducer (battery operated).
- The Hall sensor operates with a power supply from 5 to 24 VDC @ < 30 mA.
- The Coil sensor operates with a power supply from 3 to 5 VDC @ < 10 μ A or with a 3.6V Lithium Battery.
- The P version operates with power supply from 12 to 24 VDC @ < 30 mA.
- The standard output is a square wave with a frequency of 45 Hz per m/s (13.7 Hz per ft/s) nominal.

- The output signal is provided directly via electric cable or via a cable plug according to DIN 43650-B/ISO 6952. Supplied cable is standard 8 m (26.4 ft) long, with a maximum length of 300 m (990 ft) for Hall sensor and 16 m (52.8 ft) for Coil sensor
- In the versions with 4-20 mA or MIN alarm output, an additional IP65 housing is plugged onto the sensor. Output signals are available on a terminal strip inside via a PG11 cable gland.
- The sensor F3.30 with 4-20 mA output and the sensor F3.15 with MIN alarm output require a power supply from 12 to 24 VDC.
- The nominal measuring range is from 0.15 to 8 m/s (0.5 to 25 ft/s).

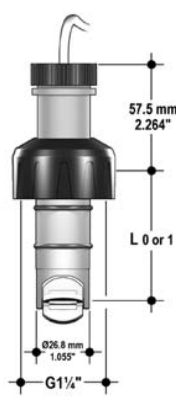
Connections to FlowX3 Instruments

FLOWX3 Sensors	FLOW X3 Instruments						PLC/ other brand
	F9.00.L	F9.02.L	F9.03	F9.20	F9.50.L	F9.51.L	
F3.00.H	■	■	■		■	■	
F3.00.C				■			
F3.01.H	■	■	■		■	■	
F3.01.C				■			
F3.00.P							■
F3.15.H*		■	■		■	■	
F3.30.H*							

* with Output Kit mounted.

Dimensions

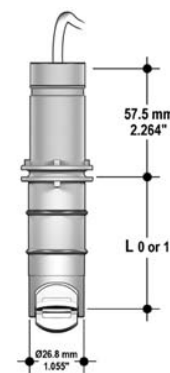
F3.00 IP68 Remote Sensor



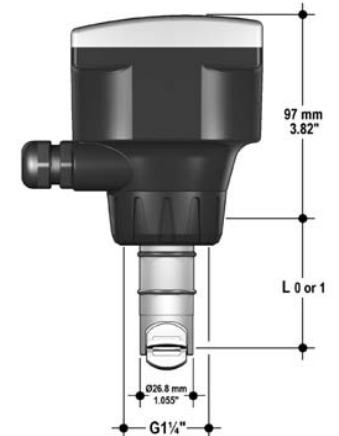
F3.00 IP65 Remote Sensor



F3.01 Compact Sensor



F3.01 Compact Sensor + Transmitter (sold separately)



Sensor length:
L0 = 68.3 mm (2.69")
L1 = 98.5 mm (3.88")