

# FLS F3.10

## MINI PADDLEWHEEL FLOW SENSOR



The simple and reliable paddlewheel technology has been moved into this miniflow sensor type FLS F3.10, designed for use with every kind of solid-free liquids. The sensor can measure flow from 0.25 m/s (0.8 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. The very small dimension and a special design make it suitable for installation on FIP standard Tee-fittings from DN15 to DN40 (0.5 to 1.5 in.).

### APPLICATIONS

- Water treatment
- Filtration systems
- Pure water production
- Water monitoring
- Fertigation

### MAIN FEATURES

- IP68 enclosure
- ABS body with EPDM or FPM seal
- ABS 4-blade paddlewheel (no bearings)
- Mono-directional design
- Installation on standard FIP tees
- PVDF body version on request



## TECHNICAL DATA

### General

- Pipe Size Range: DN15 to DN40 (0.5 to 1 1/2")
- Please refer to Installation Fittings section for more details
- Flow Rate Range: 0.25 to 4 m/s (0.8 to 12.5 ft./s)
- Linearity:  $\pm 1\%$  of full scale
- Repeatability:  $\pm 0.5\%$  of full scale. Minimum Reynolds Number Required: 4500
- Enclosure: IP68
- Operating Pressure:
  - max 10 bar (145 psi) @ 20 °C (68°F)
  - max 2 bar (30 psi) @ 70 °C (158°F)
- Operating Temperature: -20°C to 70°C (-4°F to 158°F).
- Wetted Materials:
  - sensor Body: ABS (PVDF on request)
  - o-rings: EPDM or FPM
  - rotor: ABS (PVDF on request)
  - shaft: 316L SS
  - magnets: SmCo<sub>5</sub>

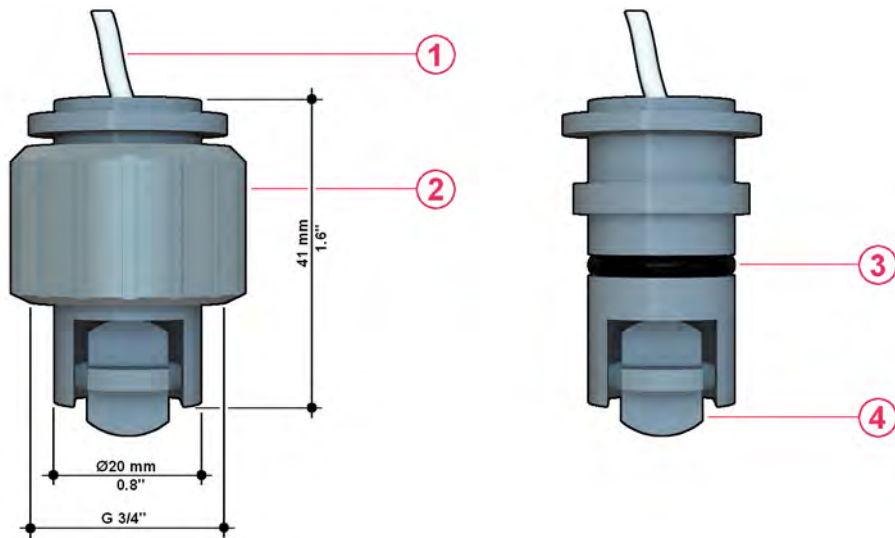
### Electrical

- Supply current: < 30 mA @ 24 VDC
- Output signal:
  - square wave
  - output frequency: 15 Hz per m/s nominal (4.6 Hz per ft/s nominal)
  - output type: transistor NPN open collector
  - output current: 10 mA max
- Cable length: 2 m (6.5 ft) standard, 300 m (990 ft) maximum

### Standards & Approvals

- Manufactured under ISO 9001
- Manufactured under ISO 14001
- CE
- RoHS Compliant
- EAC

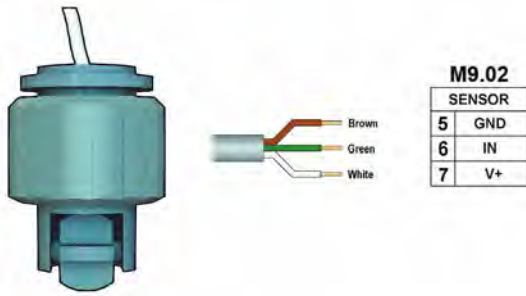
## DIMENSIONS



- 1 Electrical cable: 8 m. (26.4 ft) standard
- 2 U-PVC cap for installation into fittings
- 3 O-Ring seals available in EPDM or FPM
- 4 ABS 4-blade rotor and SS shaft

# WIRING CONNECTIONS

## F3.10 IP68 Sensor wiring connection



### Wiring connections to the other monitors

	M9.00	M9.50	M9.03		M9.07	M9.08	M9.10
GND	7	30	30	16	16	16	37
IN	8	28	28	14	14	14	36
V+	9	27	27	13	13	13	35

## ORDERING DATA

F3.10.H.XX Mini Paddlewheel Flow Sensor							
Part No.	Version	Power supply	Length	Main wetted materials	Enclosure	Flow Rate Range	Weight (gr.)
F3.10.H.01	Hall	5 - 24 VDC	41 mm	ABS/EPDM	IP68	0.25 to 4 m/s (0.8 to 12,5 ft./s)	100
F3.10.H.02	Hall	5 - 24 VDC	41 mm	ABS/FPM	IP68	0.25 to 4 m/s (0.8 to 12,5 ft./s)	100