FLS F6.50

Paddlewheel flow transmitter

aliaxis

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The new FLS F6.50 transmitter is a paddlewheel-based device and can be used for measuring any type of solid-free liquid. The F6.50 transmitter provides a 4-20 mA current output and is equipped with a Bluetooth® connection for interaction with the Smart Connect FIP app, which allows the user to set the transmitter configuration and installation parameters and other features. The specific design guarantees accurate flow measurements over a wide range of pipe sizes, from DN15 (0.5") to DN600 (24").

PADDLEWHEEL FLOW TRANSMITTER

APPLICATIONS

- Water and industrial wastewater treatment
- Water cooling systems
- Swimming pools
- Flow control and monitoring
- Water treatment
- Water regeneration plants
- Processing and manufacturing industry
- Water distribution

MAIN CHARACTERISTICS

- High chemical resistance
- Pipe size range: DN15 (0.5") to DN600 (24")
- Low pressure drop
- Setting the functional parameters of the instrument and reading the proximity of the information detected during its use through the Smart Connect FIP application
- 4-20 mA signal transmission via cable connection

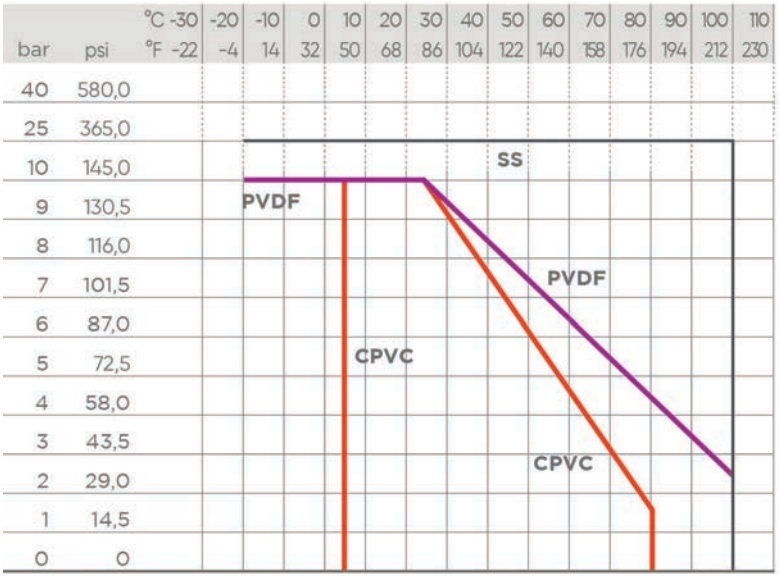
TECHNICAL DATA	
General information	**Pipe size range:** from DN15 to DN600 (0.5-24"). For more details, refer to the "Installation Adapters section"
	Wireless connection standards: Bluetooth® 5.0 compatible with iOS and Android
	Flow range: from 0.15 to 8 m/s (0.5-25 ft/s)
	Linearity: ±0.75% of full scale
	Repeatability: ±0.5% of full scale
	Minimum Reynolds number required: 4500
	Protection class: IP65
	Materials in contact with liquids: – Sensor body: C-PVC, PVDF or AISI 316L stainless steel – O-ring: EPDM or FKM – Rotor: ECTFE (Halar®) – Shaft: Ceramic (Al2O3) / AISI 316 Stainless Steel (for metal sensors) – Bearings: Ceramic (Al_2O_3) absent for metal sensors
Electrical data	**Power supply:** 12 to 24 VDC ±10% regulated (reverse polarity and short circuit protection)
	Max electrical consumption: EPT150 mA – Ground connection: < 10 Ω
	Current output: – 4-20 mA, isolated – Max loop impedance: 800 Ω @ 24 VDC - 250 Ω @ 12 VDC
Environmental data	**Storage temperature:** -30 to +80°C (from -22 to 176°F)
	Ambient temperature: -20 to +70°C (from -4 to 158°F)
	Relative humidity: from 0 to 95% not condensing

Standards & Approvals	Manufactured under ISO 9001 Manufactured under ISO 14001 CE RoHS Compliance EAC

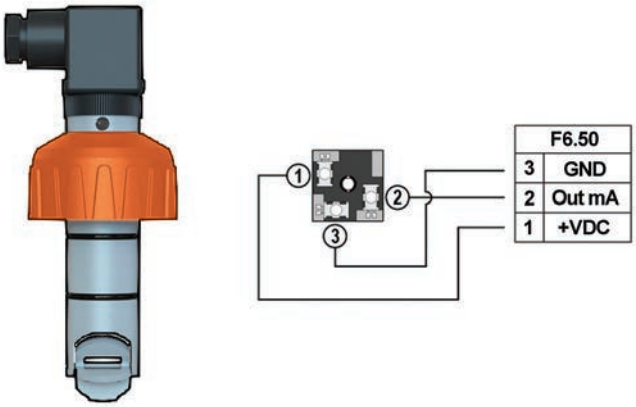
MAX OPERATING PRESSURE/ TEMPERATURE (25-YEAR DURATION)

Transmitter F6.50

• C-PVC body:
- 10 bar (145 psi) at 25°C (77°F)
- 1.5 bar (22 psi) at 80°C (176°F)
• PVDF body:
- 10 bar (145 psi) at 25°C (77°F)
- 2.5 bar (36 psi) at 100°C (212°F)
• Stainless steel body:
- 25 bar (363 psi) at 100°C (212°F)



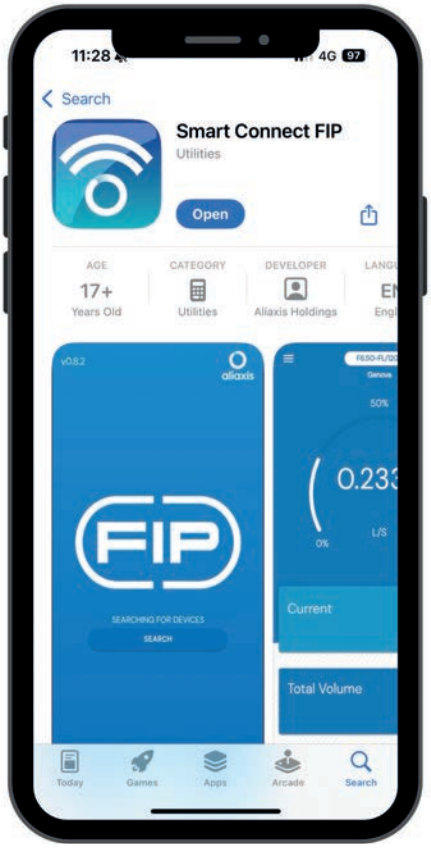
F6.50 TRANSMITTER ELECTRICAL CONNECTIONS



SMART CONNECT FIP APP

GET IT ON Google Play

Download on the App Store



The new F6.50 series rotor flow transmitters are able to communicate with the user via Bluetooth® connection and the Smart Connect FIP app.

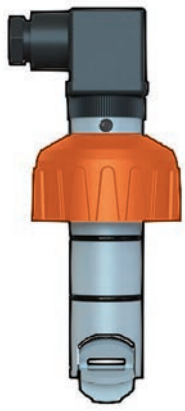
Smart Connect FIP allows the user to interact with the transmitter in a simple and fast way to access the settings of the instrument or for a proximity reading of the information detected during its use.

Main features of the Smart Connect FIP app:
- Maximum signal range: 10 m, even in the presence of obstacles
- Setting of installation parameters: pipe material and size, K-factor
- Protecting access to transmitter settings via user password
- Multilingual interface
- Reading of the instantaneous and totalised flow rate and related current output value
- Auto Flow Rate Calibration
- Setting the units of measurement, filters and percentage correction of measurement
- Setting of the flow measurement range corresponding to the 4-20mA range
- Simulation of current values for evaluation of calibration and linearity of the output
- Data logger

The Smart Connect FIP app is compatible with Android and iOS, and it is downloadable from Google Play and App Store.

For further information, it is possible to visit the F6.50 dedicated page on our website aliaxis.it, accessible via this QR code.

PRODUCT CODES



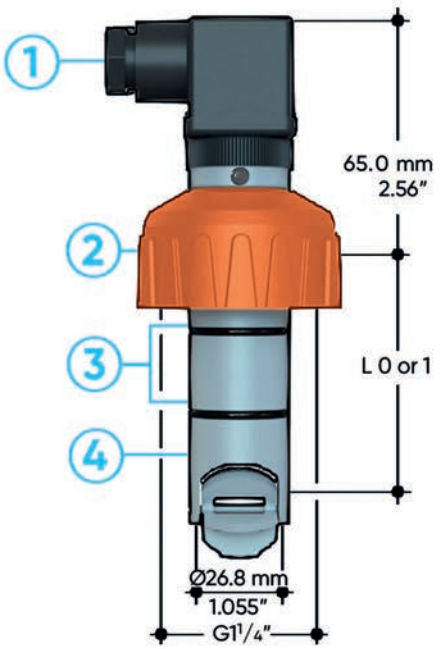
FLS F6.50.XX

Paddlewheel Flow Transmitter

Code	Power supply	Length	Main Wetted Materials	Enclosure	Flow Rate Range	Weight (gr.)
F6.50.01	12 - 24 VDC	L0	C-PVC EPDM	IP65	From 0,15 to 8 m/s*	250
F6.50.02	12 - 24 VDC	L0	C-PVC FKM	IP65	From 0,15 to 8 m/s*	250
F6.50.03	12 - 24 VDC	L1	C-PVC EPDM	IP65	From 0,15 to 8 m/s*	300
F6.50.04	12 - 24 VDC	L1	C-PVC FKM	IP65	From 0,15 to 8 m/s*	300
F6.50.05	12 - 24 VDC	L0	PVDF EPDM	IP65	From 0,15 to 8 m/s*	250
F6.50.06	12 - 24 VDC	L0	PVDF FKM	IP65	From 0,15 to 8 m/s*	250
F6.50.07	12 - 24 VDC	L1	PVDF EPDM	IP65	From 0,15 to 8 m/s*	300
F6.50.08	12 - 24 VDC	L1	PVDF FKM	IP65	From 0,15 to 8 m/s*	300
F6.50.09	12 - 24 VDC	L0	316L SS EPDM	IP65	From 0,15 to 8 m/s*	450
F6.50.10	12 - 24 VDC	L0	316L SS FKM	IP65	From 0,15 to 8 m/s*	450
F6.50.11	12 - 24 VDC	L1	316L SS EPDM	IP65	From 0,15 to 8 m/s*	500
F6.50.12	12 - 24 VDC	L1	316L SS FKM	IP65	From 0,15 to 8 m/s*	500

* from 0,15 to 8 m/s = (0,5-25 feet/s)

TECHNICAL DRAWINGS



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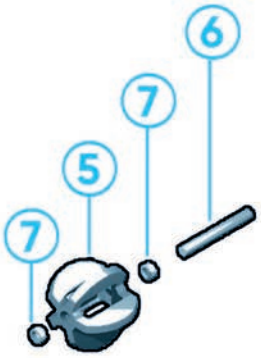

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A Transmitter F6.50

B Paddlewheel

1 Quadrupole plug in accordance with DIN 43650-B/ISO 6952

2 U-PVC cap for installation on adapters (AISI 316L stainless steel for metal sensors)

3 O-ring seals available in EPDM or FKM

4 Sensor body in C-PVC, PVDF or stainless stee

5 ECTFE Halar® (registered trademark of Ausimont-Solvay) open cell rotor

6 Ceramic shaft (AISI 316L stainless steel for metal sensors

7 Ceramic bearings (absent for metal sensors