

PADDLEWHEEL FLOW TRANSMITTER







F6.50

The new 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 Aliaxis Smart Connect app, which allows the user to set the transmitter configuration and installation parameters and other features.

The specific design guarantees an 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 FEATURES

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

TECHNICAL DATA				
General Information	Pipe size range : 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: 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: 4.500			
	Protection class: IP65			
	Materials in contact with liquids: - Sensor body: PVC-C, PVDF or AISI 316L stainless steel - O-ring: EPDM or FKM - Rotor: ECTFE (Halar®) - Shaft: Ceramic (Al ₂ O ₃) / AISI 316L Stainless Steel (for metal sensors) - Bearings: Ceramic (Al ₂ O ₃) / absent (for metal sensors)			
Electrical	Power supply: 12 to 24 VDC ±10% regulated (reverse polarity and short circuit protection)			
	Max power consumption: 150 mA – Ground connection: < 10 Ω			
	 Current output: - 4-20 mA, isolated - Max loop impedance: 800 Ω @ 24 VDC - 250 Ω @ 12 VDC 			

Environmental	Storage temperature: -30°C to +80°C (-22°F to +176°F)				
	Ambient temperature: -20°C to +70°C (-4°F to +158°F)				
	Relative humidity: 0 to 95% not condensing				
Standards & Approvals	Manufactured under ISO 9001 Manufactured under ISO 14001 CE RoHS Compliance EAC FDA on request for PVC-C/EPDM, PVDF/EPDM, SS316L/ EPDM rotor.				

MAX OPERATING PRESSURE/ TEMPERATURE 25 YEARS LIFETIME

Transmitter F6.50

- PVC-C 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)

		°C -30	-20	-10	0	10	20	30	40	50	60	70	80	90	100	110
bar	psi	°F -22	-4	14	32	50	68	86	104	122	140	158	176	194	212	230
40	580,0															
25	365,0															
10	145,0									SS						
9	130,5			PVD	F											
8	116,0															
7	101,5										P١	/DF				
6	87,0															
5	72,5					C	PVC									
4	58,0															
3	43,5															
2	29,0										CP	/C				
1	14,5															
0	0															

ELECTRICAL CONNECTIONS TRANSMITTER F6.50



SMART CONNECT





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

Smart Connect 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 App:

- Maximum signal range: 10 m, even in the presence of obstacles
- Setting installation parameters: pipe material and size, K-factor
- Protection of access to transmitter settings via user password
- Multilingual interface
- Reading of the instantaneous and totalized 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 4-20 mA range
- $\ensuremath{\cdot}$ Simulation of current values for evaluation of calibration and linearity of the output
- Data logger

The Smart Connect App is compatible with Android and IOs.







PRODUCT CODES



F6.50.XX Paddlewheel flow transmitters

Code	Power supply	Length	Main materials in contact with liquids	Protection class	Measurement range	Weight
F6.50.01	12 - 24 VDC	LO	PVC-C EPDM	IP65	0.15 to 8 m/s*	250
F6.50.02	12 - 24 VDC	LO	PVC-C FKM	IP65	0.15 to 8 m/s*	250
F6.50.03	12 - 24 VDC	L1	PVC-C EPDM	IP65	0.15 to 8 m/s*	300
F6.50.04	12 - 24 VDC	L1	PVC-C FKM	IP65	0.15 to 8 m/s*	300
F6.50.05	12 - 24 VDC	LO	PVDF EPDM	IP65	0.15 to 8 m/s*	250
F6.50.06	12 - 24 VDC	LO	PVDF FKM	IP65	0.15 to 8 m/s*	250
F6.50.07	12 - 24 VDC	L1	PVDF EPDM	IP65	0.15 to 8 m/s*	300
F6.50.08	12 - 24 VDC	L1	PVDF FKM	IP65	0.15 to 8 m/s*	300
F6.50.09	12 - 24 VDC	LO	STAINLESS STEEL** EPDM	IP65	0.15 to 8 m/s*	450
F6.50.10	12 - 24 VDC	LO	STAINLESS STEEL** FKM	IP65	0.15 to 8 m/s*	450
F6.50.11	12 - 24 VDC	L1	STAINLESS STEEL** EPDM	IP65	0.15 to 8 m/s*	500
F6.50.12	12 - 24 VDC	L1	STAINLESS STEEL** FKM	IP65	0.15 to 8 m/s*	500

*0.15 at 8 m/s = (0.5-25 ft/s) **AISI 316L

TECHNICAL DRAWINGS





Transmitter F6.50

- 1 4 pole cable plug according to DIN 43650-B/ISO 6952
- 2 PVC-U cap for installation on adapters (AISI 316L stainless steel for metal sensors)
- **3** O-ring available in EPDM or FKM
- 4 Sensor body in PVC-C, PVDF or AISI 316L stainless steel

Paddlewheel system

- 5 ECTFE Halar[®] open cell paddlewheel (registered trademark of Ausimont-Solvay)
- 6 Ceramic shaft (AISI 316L stainless steel for metal sensors)
- 7 Ceramic bearings (absent for metal sensors)