FLS F3.05

Paddlewheel Flow Switch

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The FLS F3.05 paddlewheel flow switch is designed to protect pumps from non-lubricating operation or pumping against a closed valve. It is equipped with an electromechanical SPST (Single Pole Single Throw) contact that is activated when the flow speed drops below the factory default value, 0.15 m/s (0.5 ft/s). On the F3.05 model there is an LED indicating the status of the local flow. The family of specially designed adapters reduces installation times in pipes of all materials and sizes, from DN15 to DN600 (0.5-24").

PADDLEWHEEL FLOW SWITCH

APPLICATIONS

- Pump protection
- Filtration systems
- Water cooling systems

MAIN CHARACTERISTICS

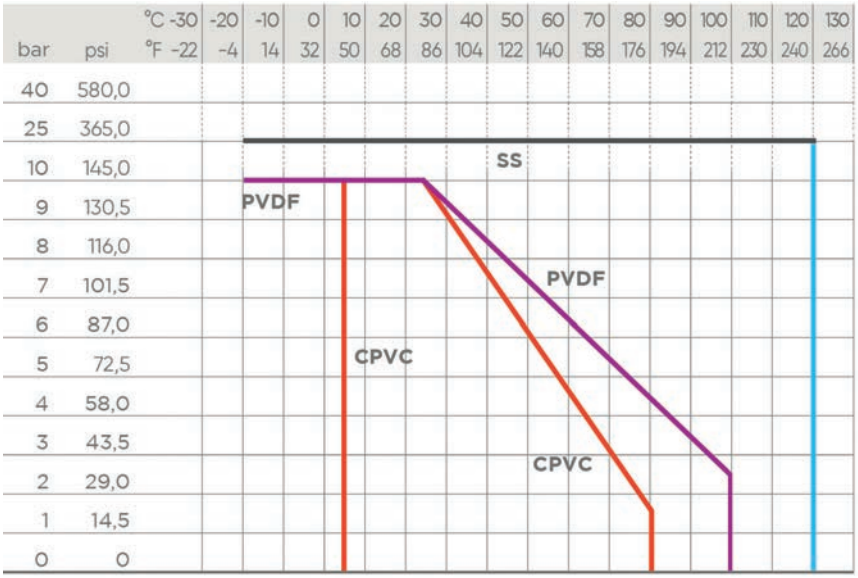
- Sensor body in C-PVC, PVDF or stainless steel
- Simple insertion system
- High chemical resistance
- Flow absence alarm relay output
- Two-tone LED status monitor with high visibility
- Maintenance free
- Very low pressure drop

TECHNICAL DATA	
General information	**Pipe size range:** from DN15 to DN600 (0.5-24"). For more details, refer to the Installation Adapters section
	Supply voltage: from 12 to 24 VDC ±10% regulated
	Supply current: < 50 mA
	Relay output: Mechanical SPDT contact, 1 A at 24 VDC, 0.1 A at 230 VAC
	Local status indicator: – GREEN LED = flow present – RED LED = no flow
	Point without flow rate: 0.15 m/s (0.5 ft/s)
	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 (Al2O3)/ AISI 316 Stainless Steel (for metal sensors) – Bearings: Ceramic (Al2O3)absent for metal sensors
Standards & Approvals	Manufactured under ISO 9001 Manufactured under ISO 14001 CE RoHS Compliance EAC

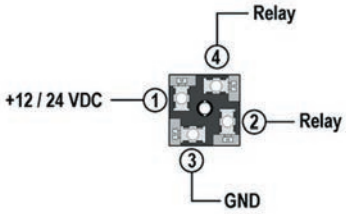
MAX OPERATING PRESSURE/ TEMPERATURE (25-YEAR DURATION)

F3.05 sensor

• 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 120°C (248°F)



F3.05 SENSOR ELECTRICAL CONNECTIONS



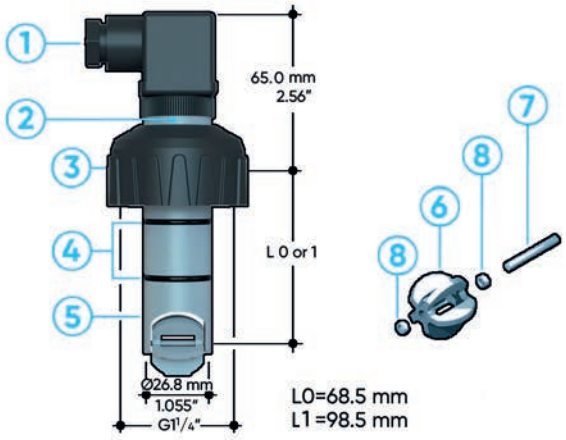
PRODUCT CODES

F3.05.XX

Paddlewheel Flow Switch

Code	Version	Power supply	Length	Main Wetted Materials	Enclosure	Weight (gr.)
F3.05.01	Hall	12 - 24 VDC	L0	C-PVC EPDM	IP65	250
F3.05.02	Hall	12 - 24 VDC	L0	C-PVC FKM	IP65	250
F3.05.03	Hall	12 - 24 VDC	L1	C-PVC EPDM	IP65	300
F3.05.04	Hall	12 - 24 VDC	L1	C-PVC FKM	IP65	300
F3.05.05	Hall	12 - 24 VDC	L0	PVDF EPDM	IP65	250
F3.05.06	Hall	12 - 24 VDC	L0	PVDF FKM	IP65	250
F3.05.07	Hall	12 - 24 VDC	L1	PVDF EPDM	IP65	300
F3.05.08	Hall	12 - 24 VDC	L1	PVDF FKM	IP65	300
F3.05.09	Hall	12 - 24 VDC	L0	316L SS EPDM	IP65	600
F3.05.10	Hall	12 - 24 VDC	L0	316L SS FKM	IP65	600
F3.05.11	Hall	12 - 24 VDC	L1	316L SS EPDM	IP65	650
F3.05.12	Hall	12 - 24 VDC	L1	316L SS FKM	IP65	650

TECHNICAL DRAWINGS



F3.05

1 Quadrupole plug in accordancewith DIN 43650-B/ISO 6952
2 Two-tone local status LED
3 PVC-U cap for installation on adapters
4 O-ring seals available in EPDM or FKM
5 Sensor body in C-PVC PVDF or stainless steel
6 ECTFE (Halar®) open cell rotor
7 Shaft in ceramic, AISI 316L stainless steel (for metal sensors)
8 Ceramic bearings, absent (for metal sensors)