

FLS F3.05

PADDLEWHEEL FLOW SWITCH



The simple insertion paddlewheel flow switch type F3.05 is designed to protect a pump from running dry or pumping against a closed valve. It is equipped with a mechanical SPST contact activated when the flow velocity drops below the factory preset value of 0.15 m/s (0.5 ft/s). The F3.05 features a LED which shows the flow status locally.

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

APPLICATIONS

- Pump protection
- Filtration systems
- Cooling water systems

MAIN FEATURES

- C-PVC, PVDF, Stainless Steel body
- Easy insertion system
- High chemical resistance
- No-Flow alarm relay output
- Highly visible Local Bicolour Status Indicator
- Maintenance free
- Very low pressure drop



TECHNICAL DATA

General

- Pipe Size Range: DN15 to DN600 (0.5 to 24 in.)
Please refer to Installation Fittings section for more details
- Supply voltage: 12 to 24 VDC \pm 10% regulated
- Supply current: < 50 mA
- Relay Output: mechanical SPDT contact, 1A @ 24 VDC, 0.1A @ 230 VAC
- Local Status Indicator:
 - GREEN Led = Flow
 - RED Led = No Flow
- No-Flow Rate Point: 0.15 m/s (0.5 ft./s)
- Enclosure: IP65
- Wetted Materials:
 - sensor Body: C-PVC or PVDF or 316L SS
 - o-rings: EPDM or FPM
 - rotor: ECTFE (Halar®)
 - shaft: Ceramic (Al_2O_3), 316L SS (for metal sensors)
 - bearings: Ceramic (Al_2O_3), none (for metal sensors)

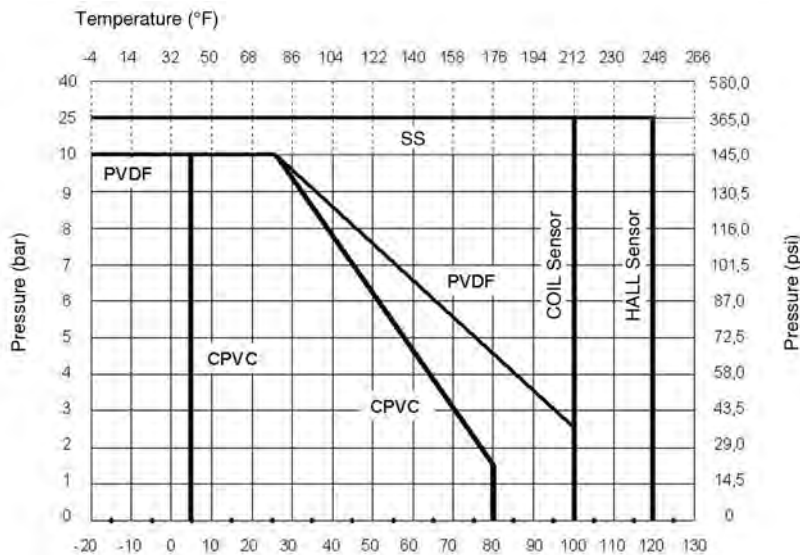
Standards & Approvals

- Manufactured under ISO 9001
- Manufactured under ISO 14001
- CE
- RoHS Compliant
- EAC
- FDA on request for paddlewheel in C-PVC/EPDM, PVDF/EPDM, SS316L/EPDM.

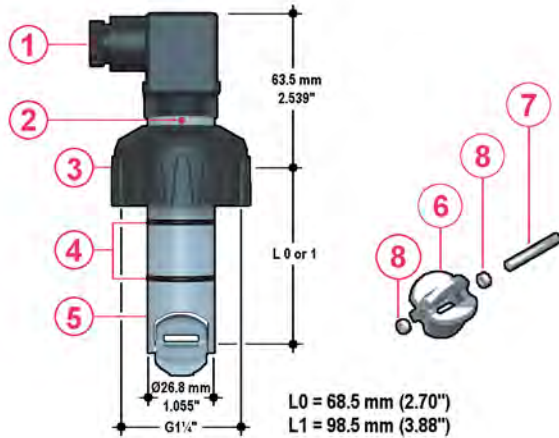
Maximum Operating Pressure / Temperature (25 years lifetime)

F3.05 Sensor

- C-PVC body:
 - 10 bar (145 psi) @ 25°C (77°F)
 - 1,5 bar (22 psi) @ 80° C (176°F)
- PVDF body:
 - 10 bar (145 psi) @ 25°C (77°F)
 - 2,5 bar (36 psi) @ 100°C (212°F)
- SS body:
 - 25 bar (363 psi) @ 120°C (248°F)



DIMENSIONS

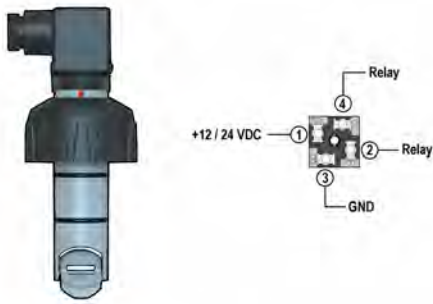


- 1 4 pole cable plug according to DIN 43650-B/ISO 6952
- 2 Local Bicolour Status LED
- 3 U-PVC cap for installation into fittings
- 4 O-Ring seals available in EPDM or FPM

- 5 C-PVC, PVDF or Stainless Steel sensor body
- 6 ECTFE (Halar®) Open-cell rotor
- 7 Ceramic shaft, 316L SS (for metal sensors)
- 8 Ceramic bearings, none (for metal sensors)

WIRING CONNECTIONS

F3.05 sensor wiring connection



ORDERING DATA

F3.05.XX Paddlewheel Flow Switches							
Part No.	Version	Power supply	Length	Main wetted materials	Enclosure	Flow Rate Range	Weight (gr.)
F3.05.01	Hall	12 to 24 VDC	L0	C-PVC/EPDM	IP65	-	250
F3.05.02	Hall	12 to 24 VDC	L0	C-PVC/FPM	IP65	-	250
F3.05.03	Hall	12 to 24 VDC	L1	C-PVC/EPDM	IP65	-	300
F3.05.04	Hall	12 to 24 VDC	L1	C-PVC/FPM	IP65	-	300
F3.05.05	Hall	12 to 24 VDC	L0	PVDF/EPDM	IP65	-	250
F3.05.06	Hall	12 to 24 VDC	L0	PVDF/FPM	IP65	-	250
F3.05.07	Hall	12 to 24 VDC	L1	PVDF/EPDM	IP65	-	300
F3.05.08	Hall	12 to 24 VDC	L1	PVDF/FPM	IP65	-	300
F3.05.09	Hall	12 to 24 VDC	L0	316L SS/EPDM	IP65	-	600
F3.05.10	Hall	12 to 24 VDC	L0	316L SS/FPM	IP65	-	600
F3.05.11	Hall	12 to 24 VDC	L1	316L SS/EPDM	IP65	-	650
F3.05.12	Hall	12 to 24 VDC	L1	316L SS/FPM	IP65	-	650