

FLOWJAM S

BULK FLOW DETECTION



The FlowJam detects solid streams of all kinds of material distinguishing between material flow and material at a standstill

FEATURES AND BENEFITS

- Absolutely insensitive against material deposits
- For any line diameter
- With adapter, usable up to 220°C and 20 bar
- With ceramic mounting, usable up to 1.000°C
- Usable in dust Ex-zones
- Detection through all non-conductive walls
- Optional with trend monitoring (4 ... 20mA)
- Detection of material clogging and material standstill



certified to ATEX

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TECHNICAL SPECIFICATIONS

Sensor	
Voltage	12 V DC powered by transmitter
Power consumption	Approx. 1.5 W
Housing material	Stainless steel 1.4571
Protection type	IP65
Using in Ex-zones	Outside pipe: Cat. 3D (only with process adapter)
Process temperature	-20 ... +80°C -20 ... +220°C (with process adapter) Max. 1000°C (with ceramic flange)
Ambient temperature	-20 ... +60°C
Working pressure	Max. 20 bar (with process adapter)
Detection range	0 ... 2 m (dependent on application)
Required material speed for detection	Min. 0.1 m/s
Measuring frequency	K-Band 24.125 GHz; ±100 MHz
Transmitting power	Max. 5 mW
Dimension FlowJam S	Housing: L 107 mm / Ø 52 mm Thread: L 30 mm / Ø G 1½"
Dimension FlowJam S Ex	Housing: L 155 mm / Ø 60 mm Thread: L 30 mm / Ø G 1½"
Cable gland	M16 (Ø 5-10 mm)
Weight FlowJam S	Approx. 560 g
Weight FlowJam S Ex	Approx. 880 g
Transmitter (DIN Rail)	
Power supply	24 V DC ± 10%
Power consumption	Approx. 3.5 W
	Max. rated load: 250 V AC Max. peak current: 6 A Max. rated load 230 V AC: 250 VA Max. breaking capacity DC1: 3/110/220 V: 3/0.35/0.2 A Min. switching load: 500 mW (10 V/5 mA)
Fall-delay time	250 ms ... 15 s (continuously adjustable)
Analog output (optional)	1 x 4 ... 20 mA (0 ... 20 mA), load < 500 Ω (Active)

USE WITH PRESSURE ADAPTER / TEMPERATURE ADAPTER

The FlowJam S sensor can be used at a pressure of 1 bar and process temperatures up to 80°C.

For higher pressures (up to 20 bar) a pressure adapter made of POM, for higher temperatures a Tecapeek adapter (max. 220°C) and a ceramic adapter (max. +1000°C) are available.

A process adapter for applications in the food industry is also available.

MOUNTING OF PRESSURE ADAPTER / TEMPERATURE ADAPTER

The mounting of the pressure adapter / temperature adapter is identical. It is screwed into a welded G 1½ inch thread neck, provided by the customer.

Only the ceramic adapter is supplied as a flange and must be mounted separately. The housing of the FlowJam S is screwed into the internal thread of the adapter.

TECHNICAL DATA

	Pressure adapter	Temperature adapter
Material	Stainless steel 1.4571 POM diaphragm	Stainless steel 1.4571 Tecapeek diaphragm
Temperature	-20 ... +80°C	Max. +220°C
Pressure	Max. 20 bar	Max. 20 bar
Thread	G 1½" on both sides	G 1½" on both sides
Wrench width	55 mm	55 mm
	Food adapter	High temp adapter
Material	Stainless steel 1.4571 Tecapeek GF30 diaphragm	Steel Ceramic diaphragm
Temperature	Max. +220°C	Max. 1000°C
Pressure	Max. 20 bar	Max. 40 bar
Thread	G 1½" on both sides	G 1½" on sensor side
Wrench width	55 mm	17 mm