

Product Information

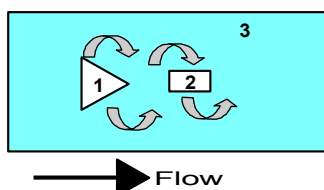
Flow Transmitter CF



- Flow measurement device using the vortex measurement principle
- High precision
- High stability to excessive flow rates
- No moving parts
- Rapid installation and removal thanks to clamp fastening
- Various connections using building block system

Characteristics

A narrow triangular body (1), which goes through the complete cross-section of the measurement pipe, creates vortices in the medium when there is a flow (Kármán vortex street, vortex effect). The frequency of the vortex is proportional to the flow, and is detected using a piezo-sensor (2), which lies behind the triangular body. The complete unit, vortex body, and detector are designed as a plug-in unit (3), and are inserted into the pipe. Here, a lightning fast separation between measurement pipe and the complete measurement unit is possible.



The frequency signal is made available to the output via a push-pull transistor stage, and is resistant to short circuits and reversed polarity protected. The push-pull output can as desired be connected as a PNP or an NPN output.

Technical data

Sensor	vortex principle	
Nominal width	DN 8..25	
Process connection	female thread G 1/4..G 1 (others available on request)	
Metering ranges	0.9..150 l/min for details, see table "Ranges"	
Measurement accuracy	up to 50 % of full scale value: ±1 % of measured value from 50 % of full scale value: ±2 % of measured value	
Pressure resistance	PN 10 bar	
Media temperature	0..60 °C	
Ambient temperature	-20..+70 °C	
Materials medium-contact	Housing	CW614N plated, 1.4571 or POM GF
	Connection	CW614N plated, 1.4571 or POM
	Detector	ETFE PA6T6I 40 % GF
	Seal	EPDM
Supply voltage	10..30 V DC	
Current consumption at rest	approx. 20 mA (without load)	
Signal output	transistor output "push-pull" (resistant to short circuits and polarity reversal) $I_{out} = 100 \text{ mA max.}$ for output frequencies see table "Ranges"	
Electrical connection	for round plug connector M12x1, 4-pole	
Ingress protection	IP 67	
Weight	see table "Dimensions"	
Conformity	CE	

Ranges

G	Types	Range l/min H ₂ O	Frequency Hz
G 1/4	CF-008GM.	0.9.. 15 l/min	approx. 34..437
G 3/8	CF-010GM.	1.8.. 32 l/min	approx. 24..382
G 1/2	CF-015GM.	3.5.. 50 l/min	approx. 19..269
G 3/4	CF-020GM.	5.0.. 85 l/min	approx. 14..229
G 1	CF-025GM.	9.0..150 l/min	approx. 12..202

