

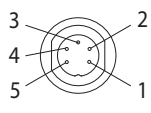
Turbine volume flow sensor



Turbine volume flow sensor with high precision and inside thread connector acc. to DIN ISO 228 for use with water and similar media, preferably.

The turbines are equipped with floating bearings and factory calibrated for water at 1 cSt. Other calibration viscosities are available on request.

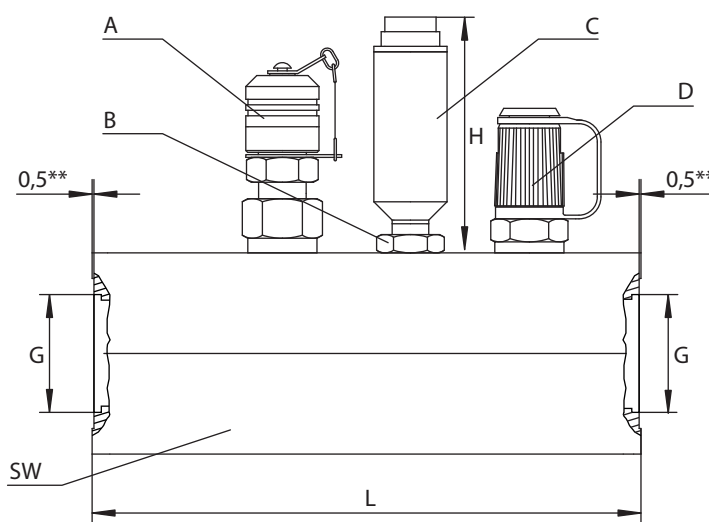
Qualities	
Measuring principle	volume flow
Viscosity range	1 ... 10 mm ² /s (cSt)
Medium temperature	max. +120 °C
Environmental temperature	-20 ... +85 °C
Storage temperature	-20 ... +85 °C
Output signal	frequency (rectangle) / 4 ... 20 mA
Supply voltage U _b	12 ... 24 VDC
Error limit*	± 2.5 %
Electrical measuring connector	5 pole device connector, M16 x 0,75
Protection type (EN 60529 / IEC 529)	IP 40
Tightening torque	10 Nm (± 2 Nm)
Calibration viscosity	1 mm ² /s (cSt)
Material turbine casing	Edelstahl X12CrNiS18 8 (passiviert)
Material turbine wheel	1.4122 (for measuring range 1.0 ... 10 l/min) 1.0718 (for all other measuring ranges)
Material sealings	FKM
Material sensor casing	1.4301
Suitable measuring cable	MK 01

Pin assignment	QT 200 (frequency)	QT 210 (4 ... 20 mA)
	Pin 1 = signal +	Pin 1 = signal +
	Pin 2 = - U _b / signal - / GND	Pin 2 = signal - / GND
	Pin 3 = + U _b	Pin 3 = + U _b
	Pin 4 = free	Pin 4 = free
	Pin 5 = free	Pin 5 = free

Measuring range	Maximum working pressure		Order number / Weight			
			QT 200 (frequency)	Weight (g)	QT 210 (4 ... 20 mA)	Weight (g)
l/min	bar	MPa				
1.0 ... 10.0	420	42	33V7-01-35.001	686	33G7-01-35.001	736
7.5 ... 75.0	420	42	33V7-77-35.001G	1,926	33G7-77-35.001G	1,980
15 ... 300	420	42	33V7-78-35.001G	3,304	33G7-78-35.001G	3,574
25 ... 600	350	35	33V7-79-35.001G	4,033	33G7-79-35.001G	4,033

Dimensions

QT 200 / QT 210



Measuring range	L	SW	G
l/min	mm		
1.0 ... 10.0	120	41	ISO 228-G $\frac{1}{4}$
7.5 ... 75.0	130	46	ISO 228-G $\frac{3}{4}$
15 ... 300	150	55	ISO 228-G1
25 ... 600	174	60	ISO 228-G1 $\frac{1}{4}$

- A MINIMESS® p/T test point for pressure and temperature, series 1620
- B max. tightening torque $M = 10 \pm 2$ Nm
- C inductive sensor / amplifier
- D MINIMESS® test point, series 1620
- H height is appr. 58 mm (for QT 200) and appr. 108 mm (for QT 210)
- * of current value for QT 200 and factory calibrated viscosity;
for QT 210 additional ± 0.2 % of final value (error f/l-converter)
- ** depth of spot face