

HySense® QT 300

Turbine volume flow sensor



The completely new HySense® QT 300 measures volume flow rates up to 1,000 l/min and is capable of a pressure load up to 420 bar.

Two MINIMESS® test points serially enable problem-free collection of further measurands (pressure, temperature) simultaneously.

Safe integration into existing pressure systems is possible with the 2" SAE flange connectors delivered with the turbines.

Contained in delivery:

- 4 pc. SAE-flange halves 2", straight (420 bar)
- 1 pc. SAE-sealing (O ring) ID 56.74x3.53 90 shore A, NBR
- 8 pc. cylinder screws DIN 912 (ISO 4762) M20 x 70 – 8.8

Qualities	
Measuring principle	volume flow
Viscosity range	1 ... 100 mm ² /s (cSt)
Medium temperature	max. +120 °C
Environmental temperature	-20 ... +85 °C
Storage temperature	-20 ... +85 °C
Output signal	frequency (rectangular signal)
Supply voltage U _b	6.5 ... 30 VDC
Error limit	± 3.0 % of current value
Electrical measuring connector	5 pole device connector, M16 x 0.75
Protection type ¹ (EN 60529/IEC 529)	IP 67
Tightening torque	10 Nm (± 2 Nm)
Calibration viscosity	30 mm ² /s (cSt)
Material turbine casing	high-grade steel X10CrNiS189 (1.4305)
Material turbine wheel	1.4104
Material sealings	FKM
Material sensor casing	3.1645
Suitable measuring cable	MK 01

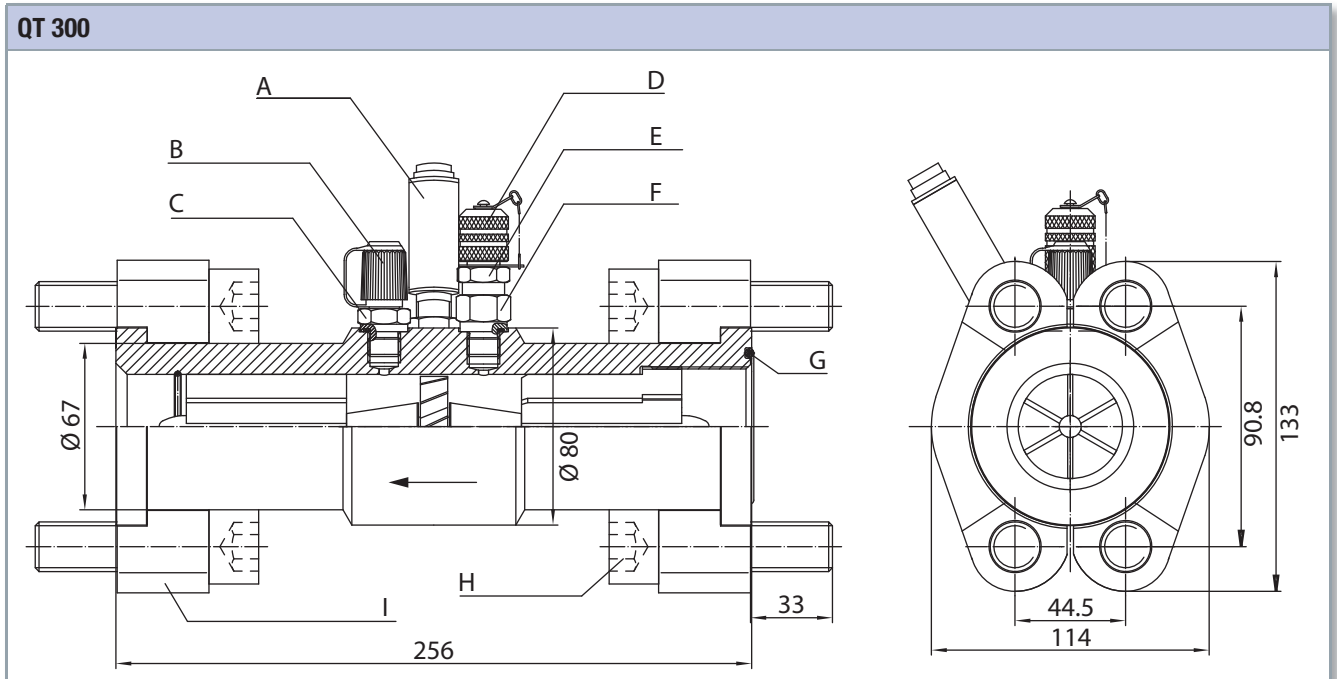
Pin assignment	Frequency (rectangular signal)
	Pin 1 = signal +
	Pin 2 = – U _b / signal – / GND
	Pin 3 = + U _b
	Pin 4 = free
	Pin 5 = free

Measuring range	Max. working pressure		Error limit	Weight	Order number
	l/min	bar			
45 ... 1,000	420	42	± 3.0 %	11,440*	31WD-88-35.030

*: with flanges and cylinder screws

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Dimensions and delta-P curve



- A Inductive sensor with amplifier, screw-in thread M14 x 1
- B MINIMESS® test point, series 1620
- C max. tightening torque $M_{Amax} = 40 \text{ Nm}$
- D MINIMESS® p/T-test point for pressure and temperature, series 1620
- E max. tightening torque $M_{Amax} = 16 \text{ Nm}$
- F max. tightening torque $M_{Amax} = 40 \text{ Nm}$
- G SAE sealing (O ring) ID 56.74 x 3.53 90 shore A, NBR
- H 8 pc. hexagon cylinder screws, ISO 4762-M20 x 70 – 8.8
- I 4 pc. SAE flange halves 2", high-pressure version 42 MPa (6,000 PSI)

Q = 45 ... 1,000 l/min

