

VORTEX METER VTX 3



MAIN CHARACTERISTICS

Product Type:	indirect volume and mass flow meter
Application:	Flow and volume measurement with integrated temperature and pressure compensation for liquids, gases and steams
Measuring accuracy:	from ± 0.75 % of measured value
Ex-approval:	Zone 1
Process temperature:	-40°C up to +240°C
Process pressure:	up to 100 bar
Housing material:	stainless steel
Wetted parts:	stainless steel
Power supply:	24 VDC
Process supply / Display:	2 x 4-20 mA, HART®, pulses, on-site-Display
Process connection:	Flange or Sandwich version
Special features:	direct calculation of energy quantities

MEASURING RANGE

DN	Water		Air		Saturated steam (Values for 170°C, 7 barg)	
	Qmin	Qmax	Qmin	Qmax	Qmin	Qmax
	m³/h		m³/h		kg/h	
15	0.36	5.07	4.34	32.57	9.73	135.7
25	0.81	11.4	9.77	114.00	21.88	474.9
40	2.04	28.58	24.50	326.60	54.86	1361
50	3.53	49.48	42.41	565.50	94.98	2356
80	7.74	108.3	92.90	1239	208.1	5160
100	13.3	186.2	159.60	2128	357.5	8866
150	30.13	421.89	361.60	4822	809.9	20086
200	56.61	792.50	679.30	9057	1521	37730
250	90.49	1267	1086	14478	2432	60316
300	131.40	1840	1577	21028	3532	87601

The values for water and air are operating volumes.
The values for saturated steam depend on pressure and temperature. As an example, the measuring ranges 170°C (7 barg) are given. More ranges can be found in the data sheet or operating instructions.

MEASURING ACCURACY

Volume flow (liquids)	± 0.75 % of measured value ($Re \geq 2000$)
	± 2.0 % of measured value ($10000 Re \geq 2000$)
Volume flow (gases and steams)	± 1 % of measured value ($Re \geq 2000$)
	± 2.0 % of measured value ($10000 Re \geq 2000$)
Mass flow (gases and steams)	± 1 % of measured value ($Re \geq 2000$) ¹
	± 2.0 % of measured value ($10000 Re \geq 2000$) ¹
Mass flow (liquids)	± 1.5 % of measured value ($Re \geq 2000$)
	± 2.5 % of measured value ($10000 Re \geq 2000$)
Standard volume (gases)	± 1.5 % of measured value ($Re \geq 2000$) ¹
	± 2.5 % of measured value ($10000 Re \geq 2000$) ¹

¹The maximum measurement deviation refers to the measurement at an operating pressure > 65 % of the measuring range end value of the pressure sensor used.

Further information and product variants are available on request

