

# CONSUMPTION SENSOR FOR COMPRESSED AIR AND GASES VA 400



## Technical data VA 400:

<b>Parameters:</b>	m <sup>3</sup> /h, l/min (1000 mbar, 20 °C) in case of compressed air resp. Nm <sup>3</sup> /h, NI/min (1013 mbar, 0 °C) in case of gases;
<b>Adjustable via software:</b>	m <sup>3</sup> /h, m <sup>3</sup> /min, l/min, l/s, ft/min, cfm, m/s, kg/h, kg/min;
<b>Adjustable via keypad:</b>	diameter for volume flow calculation, counter resettable;
<b>Meas. principle:</b>	calorimetric measurement;
<b>Sensor:</b>	2 x silicium chip;
<b>Meas. medium:</b>	air, gases;
<b>Gas types adjustable via software:</b>	air, nitrogen, argon, helium, CO <sub>2</sub> , oxygen;
<b>Meas. range:</b>	see table below;
<b>Accuracy:</b>	± 4 % m.v., ± 3 % m.v. via 5 point, ISO precision calibration;
<b>Operating temp.:</b>	-30...110 °C probe tube, -30...80 °C housing;
<b>Operating press.:</b>	up to 50 bar;
<b>Analogue output:</b>	4...20 mA for m <sup>3</sup> /h resp. l/min; on request: scaling for cfm, m <sup>3</sup> /min, l/min, l/s, ft/min, m/s;
<b>Pulse output:</b>	1 pulse per m <sup>3</sup> , signal high 24 VDC, for 30 ms;
<b>PC connection:</b>	SDI interface;
<b>Power supply:</b>	24 VDC;
<b>Burden:</b>	< 500 Ohm;
<b>Housing:</b>	polycarbonate;
<b>Probe tube:</b>	stainless steel, 1.4301 mounting length 220 mm, Ø 10 mm
<b>Mounting thread:</b>	G1/2";
<b>Diameter housing:</b>	65 mm.

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Flow measuring ranges VA 400 for compressed air (ISO 1217: 1000 mbar, 20°C)

Inner diameter of pipe			VA 400 Standard (92,7 m/s)	VA 400 Max. (185,0 m/s)	VA 400 HighSpeed (224,0 m/s)
Inch	mm		Meas. ranges from ... to	Meas. ranges from ... to	Meas. ranges from ... to
1/2"	16,1	DN 15	2,5...760 l/min	3,5...1516 l/min	6,0...1836 l/min
3/4"	21,7	DN 20	0,3...89 m3/h	0,4...178 m3/h	0,7...215 m3/h
1"	27,3	DN 25	0,5...148 m3/h	0,6...295 m3/h	1,1...357 m3/h
1 1/4"	36	DN 32	0,9...280 m3/h	1,2...531 m3/h	2,5...644 m3/h
1 1/2"	41,8	DN 40	1,2...365 m3/h	1,5...728 m3/h	3,0...882 m3/h
2"	53,1	DN 50	2...600 m3/h	2,5...1198 m3/h	4,6...1450 m3/h
2 1/2"	71,1	DN 65	3,5...1096 m3/h	5...2187 m3/h	7...2648 m3/h
3"	84,9	DN 80	5...1570 m3/h	7...3133 m3/h	12...3794 m3/h
4"	110	DN 100	9...2645 m3/h	12...5279 m3/h	16...6391 m3/h
5"	133,7	DN 125	13...3912 m3/h	18...7808 m3/h	24...9453 m3/h
6"	159,3	DN 150	18...5560 m3/h	25...11097 m3/h	43...13436 m3/h
8"	200	DN 200	26...8786 m3/h	33...17533 m3/h	50...21230 m3/h
10"	250	DN 250	40...13744 m3/h	52...27429 m3/h	80...33211 m3/h
12"	300	DN 300	60...19815 m3/h	80...39544 m3/h	100...47881 m3/h