VA 400 flow / consumption sensor (insertion type)

The CS flow sensor **VA 400** is based on the thermal mass flow principle. It measures volumetric standard flow over a wide measuring range. The result is pressure and temperature independent.

The sensor installation into the pipe is done through a ½" ball valve. This makes it possible to do the installation under pressure without shutting down the compressed air line.

The sensor is available in two measuring ranges and with or without display.

The version with display shows the actual volumetric flow and the total consumption. Via the keyboard tube diameters and the consumption counter can be set.

Various settings such as gas type, flow unit, reference standards, can be set ex factory or through our service kit. The service kit consists of PC software and interface box which connects the sensor to the USB port of the PC.

Every sensor includes an analogue output (4~20mA) for flow and an isolated pulse output for the consumption counter.

Volumetric flow ranges

Inch	mm	Standard [m³/h]	Max [m³/h]
1"	27.3	0.5~150	0.6~320
2"	53.1	2~600	2.5~1200
3"	84.9	5~1600	7~3400
4"	100.3	9~2700	12~5700
5"	133.7	13~4000	18~8400
6"	162.3	18~5800	25~12000
8"	200.0	26~8800	33~18000
10"	250.0	40~13700	52~29000
12"	300.0	60~19800	80~40000

Mentioned flow rates are standard flows at 20 $^{\rm o}{\rm C}$ and 1000 mbar



Features

- ◆ Insertion type sensor for installations under pressure
- ◆ Thermal mass flow, independent of pressure and temperature changes
- ◆ IP65 casing provides robust protection in rough industrial environment
- Very fast response time
- High accuracy and wide measuring range
- ◆ Tube diameters of 1/4" to 12". Other diameters on request

Technical data VA 400

Measured unit	m³/h, m³/min, l/min, cfm	
Accuracy	\pm (3% of measured value + 0.3%	
	full scale)	
Medium	Air, gas, non explosive	
Operating temperature	-30 ~ 140 °C probe tube	
	-30 ~ 70 °C casing	
Operating pressure	Up to 50 bar	
Analogue output	Signal: 4 ~ 20 mA	
	Scaling: 0 ~ max range	
Pulse output	1 pulse per m³	
Power supply	12 ~ 30 VDC, 100 mA	

Order no.	Description
0695 4000	VA 400, flow sensor, standard range with
	display, 220 mm shaft, ½" G thread
0695 4001	VA 400, flow sensor, standard range, 220 mm
	shaft, ½" G thread
0695 4003	VA 400, flow sensor, max range with display,
	220 mm shaft, ½" G thread
0695 4004	VA 400, flow sensor, max range, 220 mm shaft,
	½" G thread
0553 0104	Connection cable 5m, 5 pole
0553 0105	Connection cable 10m, 5 pole

Please refer to page 7 for complete order form

