

VA 500/ 520

Flow sensors for
compressed air
and gases incl.
temperature
measurement





What are the advantages of our flow measuring technology?

1) Even under pressure, the flow sensor VA 500 is mounted by means of a standard 1/2" ball valve. During mounting and dismounting the safety ring avoids an uncontrolled ejection of the probe which may be caused by the operating pressure.

For the mounting into different pipe diameters VA 500 is available in the following probe lengths: 120, 160, 220, 300, 400 mm.

So the flow sensors are being mounted into existing pipelines with inner diameters of 1/2" upwards.

The exact positioning of the sensor in the middle of the pipe is granted by means of the engraved depth scale. The maximum mounting depth corresponds with the respective probe length. Example: VA 500 with probe length 220 mm has a maximum mounting depth of 220 mm.

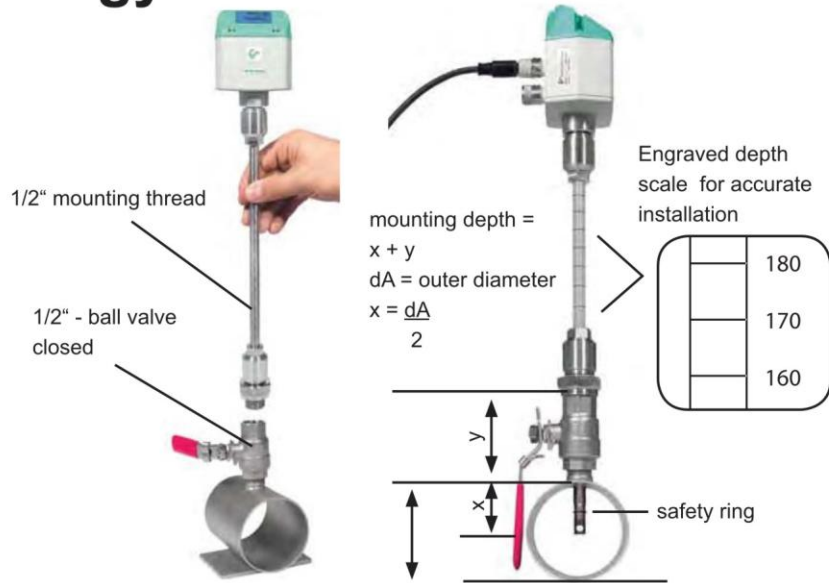
2) If there is no suitable measuring site with a 1/2" ball valve present there are two simple possibilities to set up a measuring point:

A Weld on a 1/2" screw neck and screw on a 1/2" ball valve

B Mount spot drilling collar incl. ball valve (see accessories)

By means of the drilling jig it is possible to drill under pressure through the 1/2" ball valve into the existing pipeline. The drilling chips are collected in a filter. Then the probe can be mounted as described under point A.

3) Due to the large measuring range of the probe even extreme requirements to the consumption measurement (high volume flow in small pipe diameters) can be met. The measuring range is depending on the pipe diameter - see table on the right hand side.



A Screw neck



B Spot drilling collar



Drilling under pressure

Flow measuring ranges VA 500 for compressed air (ISO 1217:1000 mbar, 20 °C)					
Inner diameter of pipe			VA 500 Standard (92.7 m/s)	VA 500 Max. (185.0 m/s)	VA 500 High-Speed (224.0 m/s)
Inch	mm		Measuring range from to	Measuring range from to	Measuring range 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"	36.0	DN 32	0.9...280 m³/h	1.2...531 m³/h	2.5...644 m³/h
1 1/2"	41.9	DN 40	1.2...366 m³/h	1.5...732 m³/h	3.0...886 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"	110.0	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"	200.0	DN 200	26...8786 m³/h	33...17533 m³/h	50...21230 m³/h
10"	250.0	DN 250	40...13744 m³/h	52...27429 m³/h	80...33211 m³/h
12"	300.0	DN 300	60...19815 m³/h	80...39544 m³/h	100...47881 m³/h