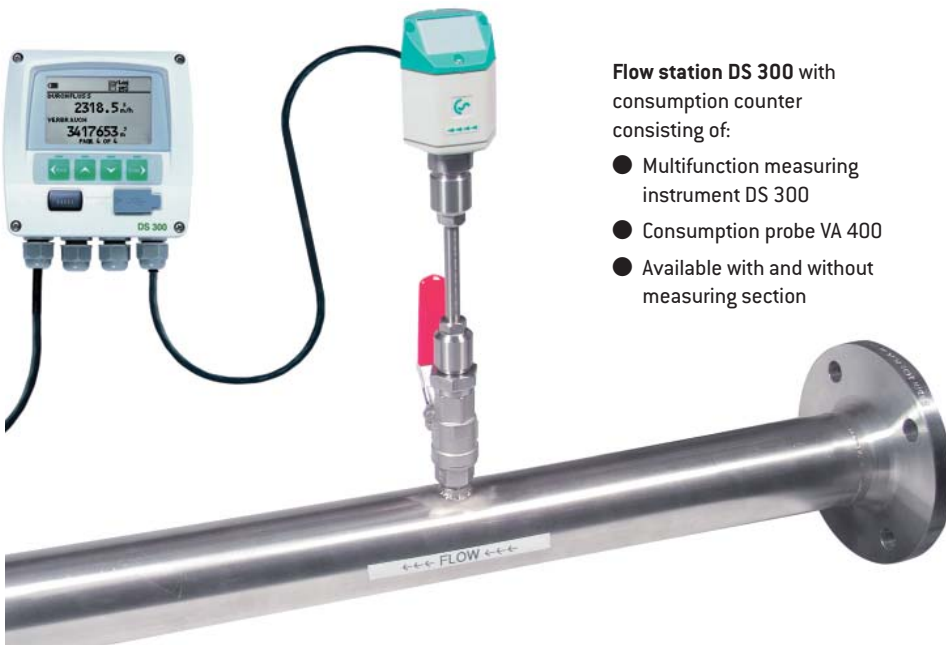




Flow station DS 300 with consumption counter

DS 300 displays the actual value [m³/h, m³/min] and the total consumption. A 4...20 mA output for m³/h and a pulse output for m³ are available for routing to a superior building management system (PLC)

The large measuring range of the consumption sensors enable the recordings of high consumptions (e. g. on weekdays) and the determination of leakages of a few litres/min (e. g. weekends).



Flow station DS 300 with consumption counter consisting of:

- Multifunction measuring instrument DS 300
- Consumption probe VA 400
- Available with and without measuring section

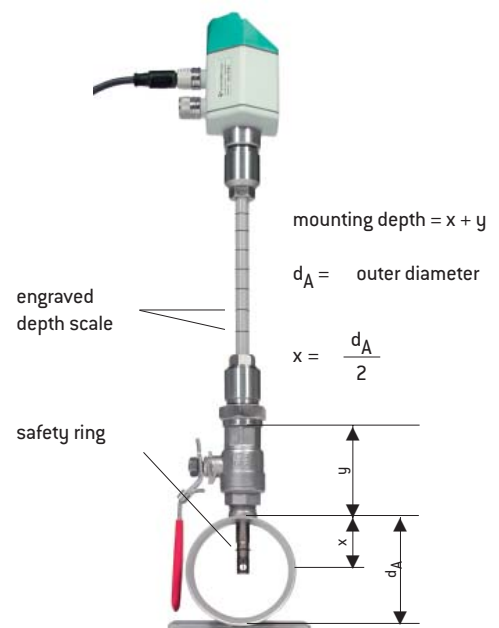
Special features

- Usable from 1/2" to 12" [DN 300]
- All-in-one solution, small installation expenditure
- 2 displays, actual flow and total consumption
- Easy installation and removal of the sensor under pressure
- Highest accuracy due to 5 point precision calibration
- Output 4 to 20 mA for m³/h, pulse output for m³
- Easy handling:
 - Inner diameter freely adjustable in DS 300
 - 2 alarm values freely adjustable
 - Optical display in case of alarm
 - Consumption counter resettable
- Dew point sensor connectable

Flow measuring ranges VA 400

DIN 1945 / ISO 1217: 20 °C, 1000 mbar

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 m ³ /h	0.4...178 m ³ /h	0.7...215 m ³ /h
1"	27.3	DN 25	0.5...148 m ³ /h	0.6...295 m ³ /h	1.1...357 m ³ /h
1 1/4"	36.0	DN 32	0.9...280 m ³ /h	1.2...531 m ³ /h	2.5...644 m ³ /h
1 1/2"	41.8	DN 40	1.2...365 m ³ /h	1.5...728 m ³ /h	3.0...882 m ³ /h
2"	53.1	DN 50	2...600 m ³ /h	2.5...1198 m ³ /h	4.6...1450 m ³ /h
2 1/2"	71.1	DN 65	3.5...1096 m ³ /h	5...2187 m ³ /h	7...2648 m ³ /h
3"	84.9	DN 80	5...1570 m ³ /h	7...3133 m ³ /h	12...3794 m ³ /h
4"	110.0	DN 100	9...2645 m ³ /h	12...5279 m ³ /h	16...6391 m ³ /h
5"	133.7	DN 125	13...3912 m ³ /h	18...7808 m ³ /h	24...9453 m ³ /h
6"	159.3	DN 150	18...5560 m ³ /h	25...11097 m ³ /h	43...13436 m ³ /h
8"	200.0	DN 200	26...8786 m ³ /h	33...17533 m ³ /h	50...21230 m ³ /h
10"	250.0	DN 250	40...13744 m ³ /h	52...27429 m ³ /h	80...33211 m ³ /h
12"	300.0	DN 300	60...19815 m ³ /h	80...39544 m ³ /h	100...47881 m ³ /h



Installation even under pressure via customary 1/2" ball valve



Option: Integrated data logger

- Automatic recording of the compressed air consumption
- Quantifying of leakages, compressed air consumption in production-free times, e. g. weekends
- Memory for 1 million measured values



Option: 2 additional sensor inputs

- For connection of pressure sensors, temperature sensors, clamp-on ammeters
Sensors please see page 23

Description	Order no.		
Flow station DS 300 for installation into existing pipelines (diameter freely adjustable at DS 300): Flow station DS 300 consisting of: Multifunction measuring instrument DS 300 and consumption probe VA 400 in basic version: Standard (92.7 m/s), probe length: 220 mm, without display	0600 4005		
Flow station DS 300 including measuring section (stainless steel) Flow station DS 300 consisting of: Multifunction measuring instrument DS 300 and consumption probe VA 400 in basic version: Standard (92.7 m/s), probe length: 220 mm, without display incl. measuring section with ball valve made from stainless steel 1,4301; up to DN 65 (2 1/2") with external thread, from DN 80 (3") with flange according to DIN 2633			
External thread	Pipe (outerø x wall thickness)	Total length	Order no.
G1/2"	21.3 x 2.6 mm	500 mm	0601 0261
G3/4"	26.9 x 2.6 mm	600 mm	0601 0262
G1"	33.7 x 3.2 mm	750 mm	0601 0263
G1 1/4"	42.4 x 3.2 mm	900 mm	0601 0264
G1 1/2"	48.3 x 3.2 mm	1000 mm	0601 0265
G2"	60.3 x 3.6 mm	1250 mm	0601 0266
G2 1/2"	76.1 x 3.6 mm	1500 mm	0601 0267
From DN 80 with flange DIN 2633			
DN 80/88.9	88.9 x 2.0 mm	1850 mm	0601 0268
DN 100/114.3	114.3 x 2.0 mm	2104 mm	0601 0269
DN 125/139.7	139.7 x 3.0 mm	2860 mm	0601 0270
DN 150/168.3	168.3 x 3.0 mm	3110 mm	0601 0271
Options for multifunction measuring instrument DS 300			
Integrated data logger for 1 million measured values			Z500 3001
RS 485 interface for connection of up to 256 instruments DS 300			Z500 3002
2 additional sensor inputs for connection of pressure sensors, temperature sensors, clamp-on ammeters, third-party sensors with 4...20 mA, 0...10 V, Pt 100, NiCr-Ni			Z500 3003
Options for consumption probe VA 400			
Max. version (185 m/s)			Z695 4003
High Speed version (224 m/s)			Z695 4002
Probe length 120 mm			ZSL 0120
Probe length 160 mm			ZSL 0160
Probe length 300 mm			ZSL 0300
Probe length 400 mm			ZSL 0400
Accessory			
CS Soft Professional software for data evaluation in graphic and in table form including USB interface			0554 7010

Technical data VA 400

Parameters:	m ³ /h Standard, acc. to DIN 1945, ISO 1217 20°C, 1000 mbar
Adjustable via DS 300:	m ³ /h, m ³ /min, l/min, l/s, ft/min, cfm, m/s, kg/h, kg/min
Meas. principle:	calorimetric measurement
Sensor:	2 x silicium chip
Meas. medium:	air, gas
Gas types select. via software:	air, nitrogen, argon, helium, CO ₂ , oxygen
Meas. range:	see table page 18
Accuracy:	± 4 % m.v. ± 3 % m.v. via 5 point ISO precision calibration
Operating temp.:	-30...+110°C probe tube -30...+80°C housing
Operating press.:	up to 50 bar
Analogue output:	4...20 mA
Burden:	< 500 Ohm
Pulse output:	1 pulse per m ³
Probe tube:	stainless steel 1.4301
Mounting thread:	G 1/2"
Housing diameter:	65 mm

Technical data DS 300

Dimensions:	118 x 115 x 93 mm, IP 65 (wall housing) 92 x 92 x 70 mm, IP 65 (panel mounting)
Inputs:	2 digital inputs for VA 400 resp. FA 410
Interface:	USB
Keypad:	4 keys
Power supply:	90-260 VAC, 50-60 Hz
Accuracy:	see VA 400
Alarm outputs:	2 relays, 230 VAC, 3 A
Operating temp.:	0...50 °C
Transport temperature:	-20...70 °C
OPTIONS	
Data logger:	1 million meas. values start/stop time, meas. rate freely adjustable
RS 485 interface:	up to 256 x DS 300 connectable evaluation at the PC with CS Soft Professional RS 485
2 additional sensor inputs:	for connection of pressure sensors, temperature sensors, clamp-on ammeters, third-party sensors with 4...20 mA, 0 bis 10 V, Pt100, NiCr-Ni