
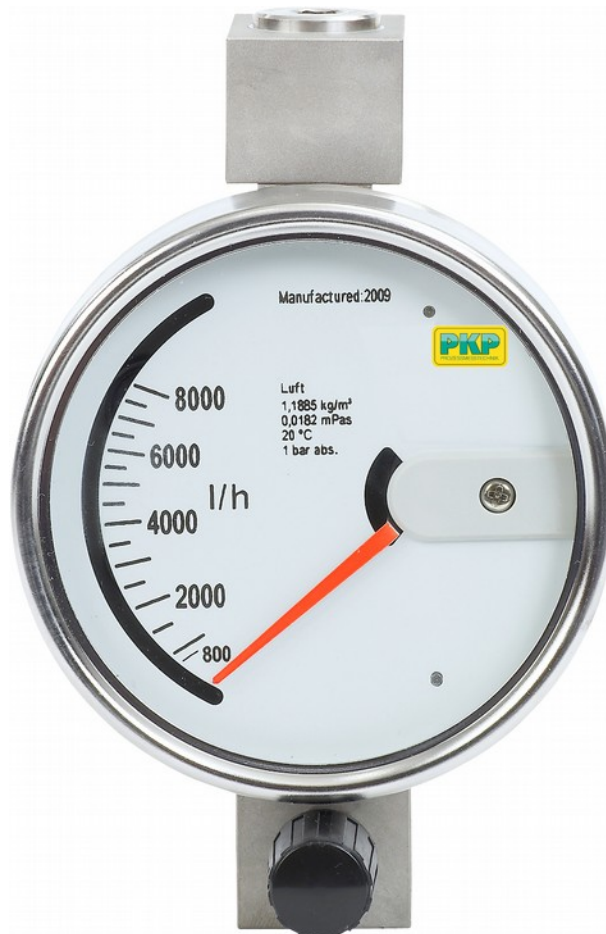


DS20

Variable Area Flowmeter for Low Flow Volumes Compact Construction

- for liquids and gases
- measuring range: 0,1...1 up to 25...250 l/h water
4...40 up to 800...8000 NI/h
- measuring tube completely st. steel 1.4571
- max. pressure: 160 bar, max. temperature: 200 °C
- scales for all operating conditions
designed as required
- local display, min./max. contacts or
analogue output
- optional available with valve
-  Ex-Version acc. to ATEX



Description:

The model series DS20 flow meters work according to the suspended float principle of measurement. The device has a cone-shaped float that moves within a cylindrical measuring tube. The flowing gas or liquid moves the float in the direction of the flow. The movement of the float is transmitted magnetically to a dial indicator mounted outside on the measuring tube. The indicator is fitted with a scale appropriate for the operating range encountered. If necessary, the indicator can also be fitted with contacts or an analogue output.

Typical applications:

Model series DS20 flow meters are intended to measure and monitor gases or low- viscosity liquids, such as those found in applications like cooling systems for welding machines, laser and tube systems, pump monitoring, compressors, etc. Since all parts coming in contact with the medium being monitored are made of high- quality st. steel 1.4571, this device is also suitable for use with caustic/ corrosive media.

Models:

- Flowmeter with local dial indicator display
- Dial indicator display, 1 MIN contact
- Dial indicator display, 1 MAX contact
- Dial indicator display, 1 MIN contact, 1 MAX contact
- Dial indicator display, analogue output: 4 to 20 mA

Process Connection:

Version without needle valve (connection at top/ bottom):

all threaded connections as per model code, PN 100 (standard) or PN 160, all flange connections

Version with needle valve (connection at back):

all threaded connections as per model code, PN 40 (standard) or PN 100, flange connections not possible

Measuring Ranges:

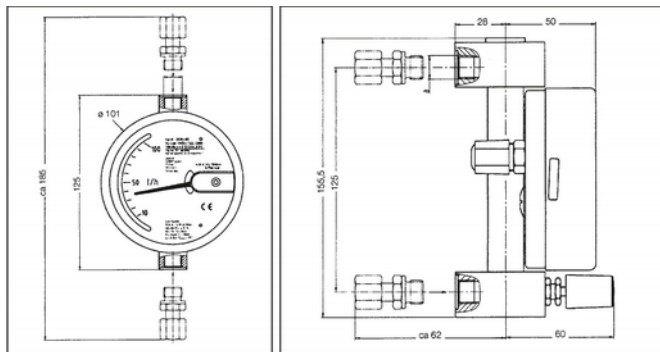
Code (water)	Measuring range water 20 °C [l/h]	Code (air)	Meas. range air, 0 °C, 1,013 bar abs. [NI/h]	Pressure loss [mbar]
W1	0,1...1	L1	4...40	6
W2	0,16...1,6	L2	6...60	6
W3	0,25...2,5	L3	10...90	6
W4	0,4...4	L4	14...140	6
W5	0,6...6	L5	20...200	6
W6	1...10	L6	32,5...325	8
W7	1,6...16	L7	50...500	8
W8	2,5...25	L8	80...800	8
W9	4...40	L9	140...1400	11
W10	6...60	L10	200...2000	11
W11	10...100	L11	325...3250	11
W12	16...160	L12	500...5000	13
W13	25...250	L13	800...8000	13

The indicated measuring ranges -especially for air- serve for orientation. Please specify the following process conditions when making enquiries:

Medium, pressure and temperature

We create an individual scale for you at no extra charge.

Dimensions:



Technical Data:

- Materials:** wetted parts made of st. steel 1.4571
housing made of 1.4301
- Max. pressure:** PN 100 (standard), PN 10, 40, 160
acc. to order code
- Max. media-temperature:**
local display: - 80 °C...+200 °C (+150 °C with valve)
with contacts: - 40 °C...+150 °C
with analogue output.: - 40 °C...+150 °C
- Protection class:** IP65
- Accuracy:** ± 4 % of measured range value

Order Code:

Order number: **DS20. 41G4. 6. 0. 1. 0**

Float Type Flowmeter

Process connection:

- 41G4 = G 1/4 female, PN 40
- 41G6 = G 1/4 female, PN 100 (standard)
- 4266 = G 3/8 fem., PN 100 (at meas. ranges 12 + 13)
- 41G7 = G 1/4 female, PN 160
- 41T4 = 1/4" NPT female, PN 40
- 41T6 = 1/4" NPT female, PN 100
- 41T7 = 1/4" NPT female, PN 160
- 53C4 = compression fitting 6 mm, PN 40
- 53C6 = compression fitting 6 mm, PN 100
- 53C7 = compression fitting 6 mm, PN 160
- 53P1 = hose connection 6 mm, PN 10
- 54C4 = compression fitting 8 mm, PN 40
- 54C6 = compression fitting 8 mm, PN 100
- 54C7 = compression fitting 8 mm, PN 160
- 54P1 = hose connection 8 mm, PN 10
- 55C4 = compression fitting 10 mm, PN 40
- 55C6 = compression fitting 10 mm, PN 100
- 55C7 = compression fitting 10 mm, PN 160
- 56C4 = compression fitting 12 mm, PN 40
- 56C6 = compression fitting 12 mm, PN 100
- 56C7 = compression fitting 12 mm, PN 160
- 01D4 = flanges DN 15, PN 40
- 02D4 = flanges DN 25, PN 40
- 01A1 = flanges ANSI 1/2", 150 lbs RF
- 02A1 = flanges ANSI 1", 150 lbs RF
- 01A2 = flanges ANSI 1/2", 300 lbs RF
- 02A2 = flanges ANSI 1", 300 lbs RF

Measuring range:

- 1...13 = acc. to table
- 99 = special measuring range

Valve:

- 0 = without
- 1 = valve on input side, valve seat made of silver
- 2 = valve on input side, valve seat made of PCTFE
- 3 = valve on output side, valve seat made of silver
- 4 = valve on output side, valve seat made of PCTFE

Display:

- 1 = local pointer display
- 2 = local pointer display, 1 MIN-contact
- 3 = local pointer display, 1 MAX-contact
- 4 = local pointer display, 1 MIN-, 1 MAX-contact
- 5 = local pointer display, analogue output 4...20 mA
- 6 = local pointer display, analogue output 4...20 mA, 1 MIN-contact
- 7 = local pointer display, analogue output 4...20 mA, 1 MAX-contact

Options:

- 0 = without
- 9 = please specify in plain text

Contacts:

- Type:** Inductive (NAMUR acc. to EN 50227)
- Nominal voltage:** 8 VDC
- Recommended for operating the contacts: Switch amplifier P+F (see Data sheet P+F)

Analogue Output:

- Power supply:** 24 VDC
- Output:** 4...20 mA, 2-wire
- Load impedance:** (U-13,5 V) / 20 mA
- Electr. connection:** QUIKON quick connection