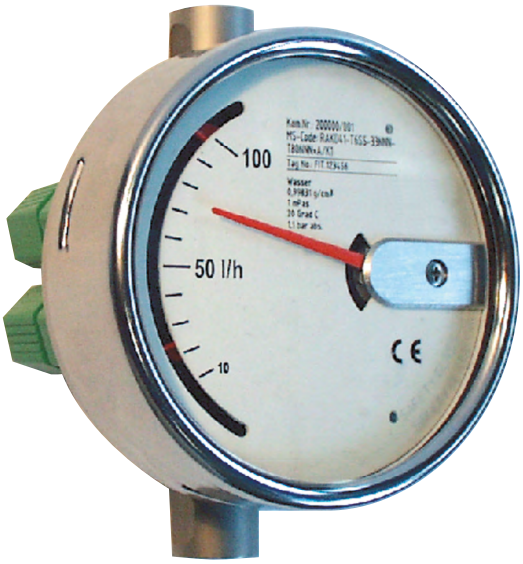
SM-20

Variable Area Flowmeter for Small Flow Volumes in Compact Design



Features

/ For fluids and gases
/ Operating pressures up to 400 bar
/ Operating temperatures up to 250°C
/ Scales for all operational conditions individually designed
/ Local display, MIN. MAX. contacts or analogue output
/ Measuring tube fully st. steel 1.4571
/ Optionally available with valve

Description:

The SM-20 series of flowmeters operates according to the proven variable area principle. The conical float is introduced into a cylindrical measuring tube. The flowing medium moves the float in the direction of flow. The movement of the float is magnetically transferred to a display unit situated outside the measuring tube. The display unit is provided with a scale that is designed to match the operational conditions. Additionally, it can also be equipped with contacts or an analogue output.

Application:

The SM-20 series of variable area flowmeters is intended for measuring and monitoring low-viscosity fluid or gaseous media, for example, in cooling systems for welding machines, laser and pipe installations, pump monitoring, compressors and so on. Due to the fact that for all wetted parts high quality stainless steel 1.4571 has been used, the device is excellently suited for even hostile media.

Technical Specifications:

Materials / wetted parts made of stainless steel 1.4571
housing made of 1.4301

max. Pressure / PN 100 (standard), PN 10, 40, as per ordering codes (higher pressures up to 400 bar on request)

max. Temperature /

- local display: -25. . .+250°C (+150°C with valve)
- with contacts: -25. . .+135°C
- with analogue output: -25. . .+ 65°C (lower temperatures on request)

Protection class / IP 66/67

Accuracy / ± 4% of operating range value

Options / Ex-approval, pulse output

Contact /

- Type: inductive (as per DIN EN 60947-5-6) SC2-NO
- Nominal voltage: 8 VDC
- Output signal: ≤ 1 mA or ≥ 3 mA
- Hysteresis: < 0.5mm

Analogue output /

- Supply: 14. . .30 VDC
- Output: 4. . .20 mA
- Load resistance: (U-14V) / 20 mA, 500Ω max.
- El. connection: quick connect QUICKON
- Pulse output: available on request
- Ex-Version: available on request

Ranges:

No. of operating range	Water 20°C - l/h	Air 20°C. 1.013 bar abs. Nl/h	Pressure drop mbar
1 (W/A)	0.1. . .1	4. . .40	6
2 (W/A)	0.16. . .1.6	6. . .60	6
3 (W/A)	0.25. . .2.5	10. . .100	6
4 (W/A)	0.4. . .4	15. . .150	6
5 (W/A)	0.6. . .6	20. . .200	6
6 (W/A)	1. . .10	32.5. . .325	8
7 (W/A)	1.6. . .16	50. . .500	8
8 (W/A)	2.5. . .25	80. . .800	8
9 (W/A)	4. . .40	140. . .1400	11
10 (W/A)	6. . .60	200. . .2000	11
11 (W/A)	10. . .100	325. . .3250	11
12 (W/A)	16. . .160	500. . .5000	13
13 (W/A)	25. . .250	800. . .8000	13

Attention: For versions without valve, operating ranges 12 and 13 come with connection joints 3/8" (Code 42...)

Ordering Codes:

Order number	SM-20.	41G4.	4W.	0.	1.	0

SM-20 Variable Area Flowmeter

Process connection /

41G4 =G 1/4 female, PN40
41G6 =G 1/4 female, PN100
41T4 = 1/4"NPT-female, PN40
41T6 = 1/4"NPT-female, PN100
53C4 = cutting ring joint 6 mm, PN40
53C6 = cutting ring joint 6 mm, PN100
53P1 = hose spout 6 mm, PN10
54C4 = cutting ring joint 8 mm, PN40
54C6 = cutting ring joint 8 mm, PN100
54P1 = hose spout 8 mm, PN10
55C4 = cutting ring joint 10 mm, PN40
55C6 = cutting ring joint 10 mm, PN100
56C4 = cutting ring joint 12 mm, PN40
56C6 = cutting ring joint 12 mm, PN100
01D4 = flanges DN15 PN40
02D4 = flanges DN25 PN40
01A1 = flanges ANSI 1/2", 150 lbs RF (only operating ranges 12 and 13 without valve)
02A1 = flanges ANSI 1", 150 lbs RF (only operating ranges 12 and 13 without valve)
01A2 = flanges ANSI 1/2", 300 lbs RF (only operating ranges 12 and 13 without valve)
02A2 = flanges ANSI 1", 300 lbs RF (only operating ranges 12 and 13 without valve)

Operating range, air (A) or water (W) /

1. . .13 = as per table, for example 4W (0.4. . .4 l/h water)
99 = special operating range

Valve /

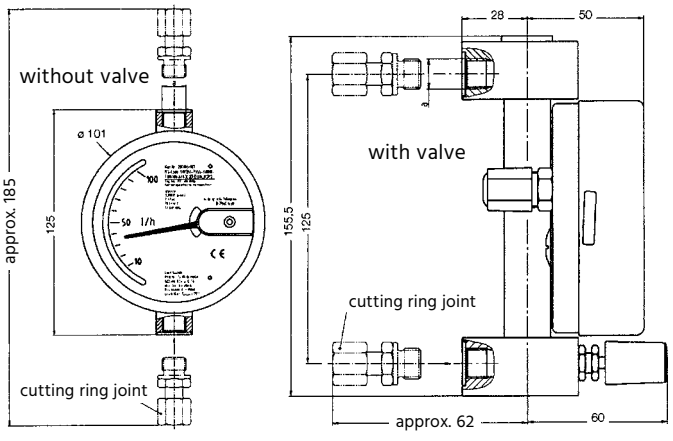
0 = none
1 = valve at inlet, valve seat silver
2 = valve at inlet, valve seat PCTFE
3 = valve at outlet, valve seat silver
4 = valve at outlet, valve seat PCTFE

Display unit /

1 = local indicator
2 = local indicator, 1 MIN contact
3 = local indicator, 1 MAX contact
4 = local indicator, 1 MIN, 1 MAX contact
5 = local indicator, analogue output 4. . .20 mA

Options /

0 = none
9 = please specify in detailed text



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