Overview

SITRANS FVA250 variable area meter

Benefits

- Standard design available at short notice
- Robust all-metal fitting with impact-resistant housing cover
- Can also be used for corrosive and flammable media
- Use possible at high pressures and temperatures
- Product and percentage scales
- Can be optionally fitted with heating and cooling sheaths
- Contamination-insensitive guiding of float

Application

The devices are particularly suitable for measuring:

- Water
- Liquids
- Anti-corrosives and lubricants
- Solvents
- Saturated and superheated steam
- Food and beverages
- Industrial gases

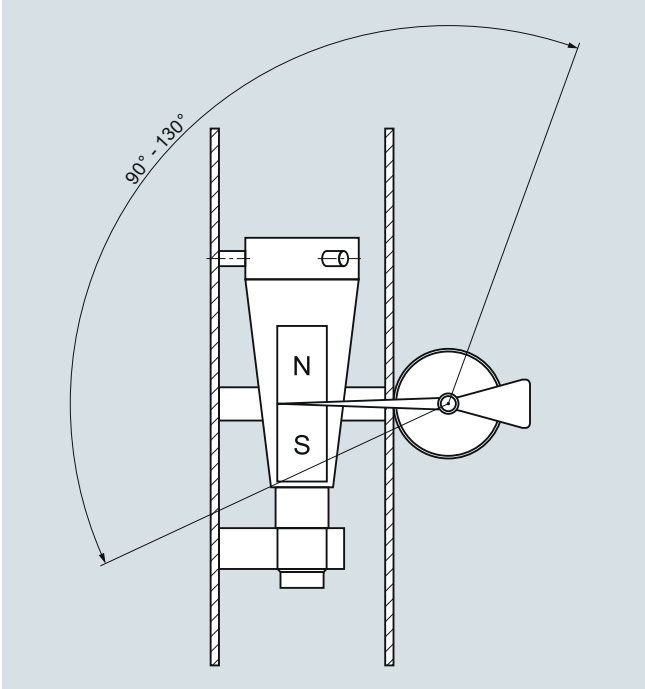
Design

Due to its full metal design, the SITRANS FVA250 variable area meter with a standard length of 250 mm (9.84 inch) can be used to measure many different types of liquids and gases passing through closed piping. The robust design means that it can also be used in harsh conditions. The various types of flange connections, linings and float materials satisfy the requirements of the pharmaceutical and chemical industries.

The measured value is displayed directly on the scale with the standard version. For process monitoring and control, the device can be equipped with a transmitter (MEM) as well as limit switches.

Function

Flow measurement with the SITRANS FVA250 is performed according to the float principle. The flowing medium lifts the conical float in the measuring ring. This increases the ring gap until an equilibrium is established between the buoyant force of the medium and the weight of the float. The height of the float is directly proportional to the flow rate. The movement of the float is transmitted from one magnet to another magnet in the display unit outside of the measuring tube.



Measuring cone/scale angle

3

Technical specifications

Application	See page 3/389
Design and function	See page 3/389
Measuring principle	Variable area flowmeter
Input	
Measuring range	See table on page 3/391
Pressure rating	PN 16 ... PN 100 (232 ... 1450 psi) depending on version (see table on page 3/391)
Installation/flow direction	Vertical/from bottom to top
Rated operating conditions	
Ambient temperature	
• With local display	-40 ... +80 °C (-40 ... +176 °F)
• With limit switches	-40 ... +65 °C (-40 ... +149 °F)
• With electric remote encoder (MEM)	-40 ... +70 °C (-40 ... +156 °F)
Measuring accuracy acc. to VDI/VDE 3513-2	
• For liquids	± 1.6% (q_G = 50 %)
• For gases	± 2.0% (q_G = 50 %)
Reproducibility	0.5 % of the measuring range limit (URV)
Operating temperature	See page 3/391
Operating pressure	Min. operating pressure > 2x pressure drop (see table on page 3/391)
Design	
Flanges	EN 1092-1, ANSI B16.5
Material	
• Fitting	Stainless steel, Hastelloy
• Float	Stainless steel, Hastelloy, PTFE
• Wetted parts materials	Stainless steel, PTFE, Hastelloy, depending on version
Degree of protection (display unit)	
• Display unit made of aluminum	IP65
• Display unit made of stainless steel	IP66
Electromagnetic immunity	
• EN 61000-6-2: 2011	Interference immunity industrial sector
• EN 61000-6-3	Emitted interference residential sector
• EN 55011: 2011	Group 1, Class B
• NAMUR recommendation	NE 21

Classification according to pressure equipment directive (PED 2014/68/EU)

	Article No. 7ME586x-	Permissible media	Category
DN 15	xAxxx-xxxx	Gases of fluid group 1 and liquids of fluid group 1	Article 4.3
DN 20	xBxxx-xxxx		Article 4.3
DN 25	xCxxx-xxxx		Article 4.3
DN 32	xDxxx-xxxx		III
DN 40	xExxx-xxxx		III
DN 50	xFxxx-xxxx		III
DN 65	xGxxx-xxxx		III
DN 80	xHxxx-xxxx		III
DN 100	xJxxx-xxxx		III

Technical specifications of contacts

Limit switch	
Cable gland	M20x1.5
Auxiliary power supply	5 ... 25 V DC
Isolation (2 contacts)	Electrically isolated
Limit switch	SJ3.5-N-BU
• Switching function	NAMUR NC
Nominal voltage U_0	8.2 V DC (R_i approx. 1 kΩ)
Explosion protection	II 2G EEx ia IIC T6 - T4 Gb
EC-Type Examination Certificate for Directive 2014/34/EU	PTB 99 ATEX 2219 X
Transmitter (MEM) with 4 ... 20 mA, pulse output and limit switch	
Cable gland	M20x1.5
Auxiliary power supply	14 ... 30 V DC
Analog output	4 ... 20 mA (2-wire technology)
Binary output	Pulses, limit switch
• Pulses	Max. pulse rate 10 Hz
• Limit switch	SJ3.5-N-BU (NAMUR, IEC 60947-5-6:1999)
Temperature influence	≤ ± 0.5 % of the measuring range limit (URV)/10 K
Explosion protection	II 2G Ex ia IIC T6 Gb
EC-Type Examination Certificate for Directive 2014/34/EU	BVS 07 ATEX E 033
Transmitter (MEM) PROFIBUS PA	
Cable gland	M20x1.5
Auxiliary power supply	10 ... 25 V DC
Basic current	< 16.5 mA
Fault current	< 18 mA
Transfer rate	31.25 kBaud
Temperature influence	≤ ± 0.5 % of the measuring range limit (URV)/10 K
Explosion protection	II 2G Ex ia IIC T6 Gb
EC-Type Examination Certificate for Directive 2014/34/EU	BVS 07 ATEX E 033

Float damping

Float damping is recommended

- Generally for gas measurement
- When air bubbles in the medium cannot be avoided.
- When there are pressure surges in the lines caused by a delay in the flow, for example, due to rapid throttling or blocking
- When turbulence, pulsations or other instabilities cause the float to vibrate.
- When the flow pressure cannot be built up slowly
- When vibrations in the line cannot be avoided

Technical specifications (continued)

Measuring range availability guide

Version	CF-S	EF-H	FF-P
Wetted parts materials	Mat. No. 1.4404/AISI 316L	Hastelloy	PTFE
Fitting	Mat. No. 1.4404/AISI 316L	≤ DN 25 (1"): Hastelloy > DN 25 (1"): Hastelloy/Mat. No. 1.4404/AISI 316L	Mat. No. 1.4404/AISI 316L with PTFE lining
Flange	Mat. No. 1.4404/AISI 316L	≤ DN 25 (1"): Hastelloy > DN 25 (1"): Hastelloy/Mat. No. 1.4404/AISI 316L	Mat. No. 1.4404/AISI 316L with PTFE lining
Float/flow tube	Mat. No. 1.4404/AISI 316L	Hastelloy	PTFE
Max. media temperature	-20 ... +200 °C (-4 ... +392 °F) (optional -80 ... +350 °C (-112 ... +662 °F))		-20 ... +125 °C (-4 ... +257 °F)
Nominal pressure	DN15 ... 50 (½" ... 2") PN 40 (580 psi) DN 65 ... 100 (2 ½" ... 4") PN 16 (232 psi)	DN15 ... 50 (½" ... 2") PN 40 (580 psi) DN 65 ... 100 (2 ½" ... 4") PN 16 (232 psi)	PN 16 (232 psi)
Reference data for measuring range specifications	Fluid in l/h with density: 1,0 kg/l, temperature 20 °C (68 °F), viscosity: 1 mPa·s Gas in m^3/h with density: 1.293 kg/m^3, temperature 0 °C (32 °F), viscosity: 0,0181 mPa·s, p_e = 0 bar (0 psi)		

Order code	Pressure loss [mbar]							Measuring ranges (dynamic 1:10)			
	Flow tube							Liquids		Gases	
	1	2	3	4	5	6	7	[l/h]	[USgpm]	[m³/h]	[scfm]
10	40[1]	-	-	-	-	-	-	0.5 ... 5	0.0022 ... 0.022	0.015 ... 0.15	0.0088 ... 0.088
11	44[1]	-	-	-	-	-	-	0 ... 10	0.0044 ... 0.044	0.03 ... 0.3	0.0177 ... 0.177
12	40[1]	-	-	-	-	-	-	1.6 ... 16	0.007 ... 0.07	0.045 ... 0.48	0.0265 ... 0.283
13	40[1]	-	-	-	-	-	-	2.5 ... 25	0.011 ... 0.11	0.075 ... 0.75	0.0441 ... 0.441
14	40[1]	-	-	-	-	-	-	4 ... 40	0.018 ... 0.18	0.13 ... 1.3	0.0765 ... 0.765
15	-	40[2]	-	-	-	-	-	5 ... 50	0.022 ... 0.22	0.15 ... 1.5	0.0883 ... 0.883
16	-	40[2]	-	-	-	-	-	7 ... 70	0.031 ... 0.31	0.2 ... 2.1	0.12 ... 1.24
17	-	60	-	-	-	-	-	10 ... 100	0.044 ... 0.44	0.3 ... 3	0.177 ... 1.77
20	-	60	-	-	-	-	-	16 ... 160	0.07 ... 0.7	0.5 ... 4.6	0.29 ... 2.71
21	-	60	-	-	-	-	-	25 ... 250	0.11 ... 1.1	0.7 ... 7	0.412 ... 4.12
22	-	70	-	-	-	-	-	40 ... 400	0.176 ... 1.76	1.0 ... 11	0.589 ... 6.47
23	-	80	-	-	-	-	-	60 ... 600	0.264 ... 2.64	1.7 ... 17	1 ... 10
24	-	-	60	-	-	-	-	100 ... 1 000	0.44 ... 4.4	2 ... 30	1.77 ... 17.66
25	-	-	70	-	-	-	-	160 ... 1 600	0.7 ... 7	3 ... 46	2.35 ... 27.07
26	-	-	100	50[2]	-	-	-	250 ... 2 500	1.1 ... 11	6 ... 70	4.12 ... 41.2
27	-	-	240[2]	120[2]	80	-	-	400 ... 4 000	1.76 ... 17.6	10 ... 110	6.47 ... 64.74
30	-	-	-	180[2]	90	-	-	600 ... 6 000	2.64 ... 26.4	16 ... 170	10 ... 100
31	-	-	-	-	110	-	-	1 000 ... 10 000	4.4 ... 44	28 ... 290	17.1 ... 170.7
32	-	-	-	-	230	70	-	1 600 ... 16 000	7 ... 70	45 ... 460	27.1 ... 270.7
33	-	-	-	-	230	70[2]	-	2 000 ... 20 000	8.8 ... 88	55 ... 550	32.4 ... 323.7
34	-	-	-	-	500[2]	100	-	2 500 ... 25 000	11 ... 110	69 ... 700	41.2 ... 412
35	-	-	-	-	-	350[2]	120	4 000 ... 40 000	17.6 ... 176	109 ... 1 100	64.7 ... 647.4
36	-	-	-	-	-	350[2]	120[2]	5 000 ... 50 000	22 ... 220	134 ... 1 350	79.5 ... 794.6
37	-	-	-	-	-	-	360[2]	6 000 ... 60 000	26.4 ... 264	169 ... 1 700	100 ... 1 000
40	-	-	-	-	-	-	600[2]	8 000 ... 80 000	35.2 ... 352	239 ... 2 400	141.3 ... 1 413
41	-	-	-	-	-	-	600[2]	10 000 ... 100 000	44 440	299 ... 3 000	176.6 ... 1 766

- Not available

1) Not available for EF-H and FF-P.

2) Not available for FF-P.

Note: Female thread connection (DIN ISO 228. NPT ANSI B 1.20.1) not available for FF-P.

SITRANS FVA250 variable area meter

Sensor size availability guide

Type CF-S and EF-H

Order Code	Diameter Flange		Flow tube						
			1	2	3	4	5	6	7
A	DN 15	½“	•[1]	•	•	–	–	–	–
B	DN 20	¾“	•[1]	•	•	–	–	–	–
C	DN 25	1“	•[1]	•	•	•[2]	–	–	–
D	DN 32	1¼“	•[1]	•	•	•	–	–	–
E	DN 40	1½“	•[1]	•	•	•	•[2]	–	–
F	DN 50	2“	•[1]	•	•	•	•	–	–
G	DN 65	2½“	–	–	•	•	•	•[2]	–
H	DN 80	3“	–	–	–	•	•	•	–
J	DN 100	4“	–	–	–	–	•	•	•

Type FF-P

Order Code	Diameter Flange		Flow tube						
			1	2	3	4	5	6	7
A	DN 15	½“	–	•[2]	–	–	–	–	–
B	DN 20	¾“	–	•[3]	–	–	–	–	–
C	DN 25	1“	–	•	•	–	–	–	–
D	DN 32	1¼“	–	–	–	–	–	–	–
E	DN 40	1½“	–	–	–	•	–	–	–
F	DN 50	2“	–	–	–	–	•	–	–
G	DN 65	2½“	–	–	–	–	–	–	–
H	DN 80	3“	–	–	–	–	–	•	–
J	DN 100	4“	–	–	–	–	–	–	•

Type CF-S and EF-H

Order Code	Diameter Female thread		Flow tube						
			1	2	3	4	5	6	7
Q	G ¼“	¼“ NPT	•	•	–	–	–	–	–
R	G 3/8“	3/8“ NPT	•	•	–	–	–	–	–
S	G ½“	½“ NPT	•	•	•	•	–	–	–
T	G ¾“	¾“ NPT	•	•	•	•	–	–	–
U	G 1“	1“ NPT	•	•	•	•	•	–	–
V	G 1¼“	1¼“ NPT	–	–	–	•	•	–	–
W	G 1½“	1½“ NPT	–	–	–	•	•	–	–
X	G 2“	2“ NPT	–	–	–	–	•	–	–

Note: Female thread not available for type FF-P

- • Available
- \- Not available

[1] Not available for type EF-H.
[2] Only with EN 1092-1 flange.
[3] Only with ANSI B16.5 flange.

Flange sealing surface selection guide

Order Code	Diameter flange EN 1092-1	Flow tube						
		1	2	3	4	5	6	7
A	DN 15	**N11**	**N11**	**N11**	–	–	–	–
B	DN 20	**N12**	**N12**	**N12**	–	–	–	–
C	DN 25	–	–	**N13**	**N13**	–	–	–
D	DN 32	–	–	–	**N14**	–	–	–
E	DN 40	–	–	–	**N15**	**N15**	–	–
F	DN 50	–	–	–	–	**N16**	–	–
G	DN 65	–	–	–	–	–	**N17**	–
H	DN 80	–	–	–	–	–	**N18**	–
J	DN 100	–	–	–	–	–	–	**N19**

Order Code	Diameter flange ANSI B16.5	Flow tube						
		1	2	3	4	5	6	7
A	½“	**N21**	**N21**	**N21**	–	–	–	–
B	¾“	**N22**	**N22**	**N22**	–	–	–	–
C	1“	–	–	**N23**	–	–	–	–
D	1¼“	–	–	–	**N24**	–	–	–
E	1½“	–	–	–	**N25**	–	–	–
F	2“	–	–	–	–	**N26**	–	–
G	2½“	–	–	–	–	**N27**	–	–
H	3“	–	–	–	–	–	**N28**	–
J	4“	–	–	–	–	–	–	**N29**

SITRANS FVA250 variable area meter

Selection and ordering data		Article No.
SITRANS FVA250 Full metal variable area meter	↗	**7ME586 - ■■■■■ - ■■■■**
↗ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.		
Flow tube		
Liquid	Gas	
5 ... 40 l/h	0.15 ... 1.3 m^3/h	**1**
50 ... 600 l/h	1.5 ... 17 m^3/h	**2**
1 000 ... 4 000 l/h	30 ... 110 m^3/h	**3**
2.5 ... 6 m^3/h	70 ... 170 m^3/h	**4**
4 ... 25 m^3/h	30 ... 700 m^3/h	**5**
16 ... 50 m^3/h	460 ... 1 350 m^3/h	**6**
60 ... 100 m^3/h	1 700 ... 3 000 m^3/h	**7**
Design		
Type: CF-S (standard) Fitting: Stainless steel Flange: Stainless steel Float: Stainless steel		**2**
Type: EF-H Fitting: Stainless steel, Hastelloy Flange: Stainless steel, Hastelloy Float: Hastelloy		**4**
Type: FF-P Fitting: Stainless steel with PTFE lining Flange: Stainless steel with PTFE lining Float: PTFE		**5**
Diameter		
DN 15/ANSI ½“		**A**
DN 20/ANSI ¾“		**B**
DN 25/ANSI 1“		**C**
DN 32/ANSI 1¼“		**D**
DN 40/ANSI 1½“		**E**
DN 50/ANSI 2“		**F**
DN 65/ANSI 2½“		**G**
DN 80/ANSI 3“		**H**
DN 100/ANSI 4“		**J**
Female thread ¼"		**Q**
Female thread 3/8"		**R**
Female thread ½"		**S**
Female thread ¾"		**T**
Female thread 1"		**U**
Female thread 1¼"		**V**
Female thread 1½"		**W**
Female thread 2"		**X**
Process connection		
EN 1092-1, PN 16, Form B1		**B**
EN 1092-1, PN 40, Form B1		**D**
EN 1092-1, PN 63, Form B2		**E**
EN 1092-1, PN 100, Form B2		**F**
ANSI B16.5, class 150 RF		**J**
ANSI B16.5, class 300 RF		**K**
ANSI B16.5, class 600 RF		**L**
ISO 228-1 G pipe thread PN 63		**T**
ISO 228-1 G pipe thread PN 100		**U**
ANSI B1.20.1 NPT pipe thread 900 lbs		**N**
ANSI B1.20.1 NPT pipe thread 1500 lbs		**P**

Selection and ordering data

Article No.

SITRANS FVA250 Full metal variable area meter — **7ME586 ■ - ■■■■ ■ - ■■■■**

Measuring ranges

Liquids l/h	(USgpm)	Gases m^3/h	(scfm)	
0.5 ... 5	(0.0022 ... 0.022)	0.015 ... 0.15	(0.0088 ... 0.088)	1 0
0 ... 10	(0.0044 ... 0.044)	0.03 ... 0.3	(0.0177 ... 0.177)	1 1
1.6 ... 16	(0.007 ... 0.07)	0.045 ... 0.45	(0.0265 ... 0.283)	1 2
2.5 ... 25	(0.011 ... 0.11)	0.075 ... 0.75	(0.0441 ... 0.441)	1 3
4 ... 40	(0.018 ... 0.18)	0.13 ... 1.3	(0.0765 ... 0.765)	1 4
5 ... 50	(0.022 ... 0.22)	0.15 ... 1.5	(0.0883 ... 0.883)	1 5
7 ... 70	(0.031 ... 0.31)	0.2 ... 2	(0.12 ... 1.24)	1 6
10 ... 100	(0.044 ... 0.44)	0.3 ... 3	(0.177 ... 1.77)	1 7
16 ... 160	(0.07 ... 0.7)	0.5 ... 5	(0.29 ... 2.71)	2 0
25 ... 250	(0.11 ... 1.1)	0.7 ... 7	(0.412 ... 4.12)	2 1
40 ... 400	(0.176 ... 1.76)	1.0 ... 11	(0.589 ... 6.47)	2 2
60 ... 600	(0.264 ... 2.64)	1.7 ... 17	(1 ... 10)	2 3
100 ... 1 000	(0.44 ... 4.4)	2 ... 30	(1.77 ... 17.66)	2 4
160 ... 1 600	(0.7 ... 7)	3 ... 46	(2.35 ... 27.07)	2 5
250 ... 2 500	(1.1 ... 11)	6 ... 70	(4.12 ... 41.2)	2 6
400 ... 4 000	(1.76 ... 17.6)	10 ... 110	(6.47 ... 64.74)	2 7
600 ... 6 000	(2.64 ... 26.4)	16 ... 170	(10 ... 100)	3 0
1 000 ... 10 000	(4.4 ... 44)	28 ... 290	(17.1 ... 170.7)	3 1
1 600 ... 16 000	(7 ... 70)	45 ... 460	(27.1 ... 270.7)	3 2
2 000 ... 20 000	(8.8 ... 88	55 ... 550	(32.4 ... 323.7)	3 3
2 500 ... 25 000	(11 ... 110)	69 ... 700	(41.2 ... 412)	3 4
4 000 ... 40 000	(17.6 ... 176)	109 ... 1 100	(64.7 ... 647.4)	3 5
5 000 ... 50 000	(22 ... 220)	134 ... 1 350	(79.5 ... 794.6)	3 6
6 000 ... 60 000	(26.4 ... 264)	169 ... 1 700	(100 ... 1 000)	3 7
8 000 ... 80 000	(35.2 ... 352)	239 ... 2 400	(141.3 ... 1 413)	4 0
10 000 ... 100 000	(44 ... ... 440)	299 ... 3 000	(176.6 ... 1 766)	4 1

Display unit / process temperature

Standard (aluminum) - up to 200 °C with local display/150 °C with electrical output	0
Standard (aluminum) with displaced display - up to 350 °C with local display and electrical outputs	1
Stainless steel IP66 - up to 200 °C with local display/150 °C with electrical outputs	2
Stainless steel IP66 with displaced display - up to 350 °C with local display and electrical outputs	3

Heating/cooling jacket

Without (standard)	A
With flange connection EN1092-1 DN 15 PN 40	B
With flange connection ½ " ANSI B16.5 Class 150 RF	C

Display/outputs

With display	A
With display, 1 limit switch	B
With display, 2 limit switches	C
With display, HART and 4 to 20 mA	D
With display, HART, 4 to 20 mA, 2 limit switches	E
With display, HART, 4 to 20 mA, 1 limit switch	F
With display, PROFIBUS PA	G

Calibration

Standard calibration	
• Without calibration certificate	0
• With calibration certificate	1

SITRANS FVA250 variable area meter

Selection and ordering data	Order code
Other types of liquid and gas measurement	
Please add "-Z" to Article No. and specify Order code.	
Certificates	
Certificate of compliance EN 10204-2.1	**C10**
Factory inspection certificate EN 10204-2.2	**C11**
Material certificate according to EN 10204-3.1	**C12**
Dye penetration test on pressure bearing weldings	**C13**
X-ray test of pressure bearing weldings	**C14**
Pressure test with acceptance test certificate 3.1 according to EN 10204	**C15**
PMI (positive material identification) test of pressure bearing metal parts	**C16**
Float damping	
With float damping	**D01**
Flange sealing surface	
Sealing surface according to EN 1092-1 welding neck flange	
• DN 15	**N11**
• DN 20	**N12**
• DN 25	**N13**
• DN 32	**N14**
• DN 40	**N15**
• DN 50	**N16**
• DN 65	**N17**
• DN 80	**N18**
• DN 100	**N19**
Sealing surface according to ANSI B16.5 welding neck flange	
• ½ inch	**N21**
• ¾ inch	**N22**
• 1 inch	**N23**
• 1¼ inch	**N24**
• 1½ inch	**N25**
• 2 inch	**N26**
• 2½ inch	**N27**
• 3 inch	**N28**
• 4 inch	**N29**
Specification of medium process data (specify in plain text)	
Specification always required for each order: Medium Operating pressure Operating temperature Density (only for customer-specified medium) Viscosity (only for customer-specified medium) Measuring range	**Y01**
TAG plate	
TAG plate in stainless steel (add plain text)	**Y17**
Cleaning to company standard	
Cleaning Class 2, with identification free of oil and grease	**K46**
Cleaning Class 1, with identification free of oil, grease and silicon	**K48**
Approvals	
With ATEX approval	**M51**
Special version (specify in plain text)	**Y99**

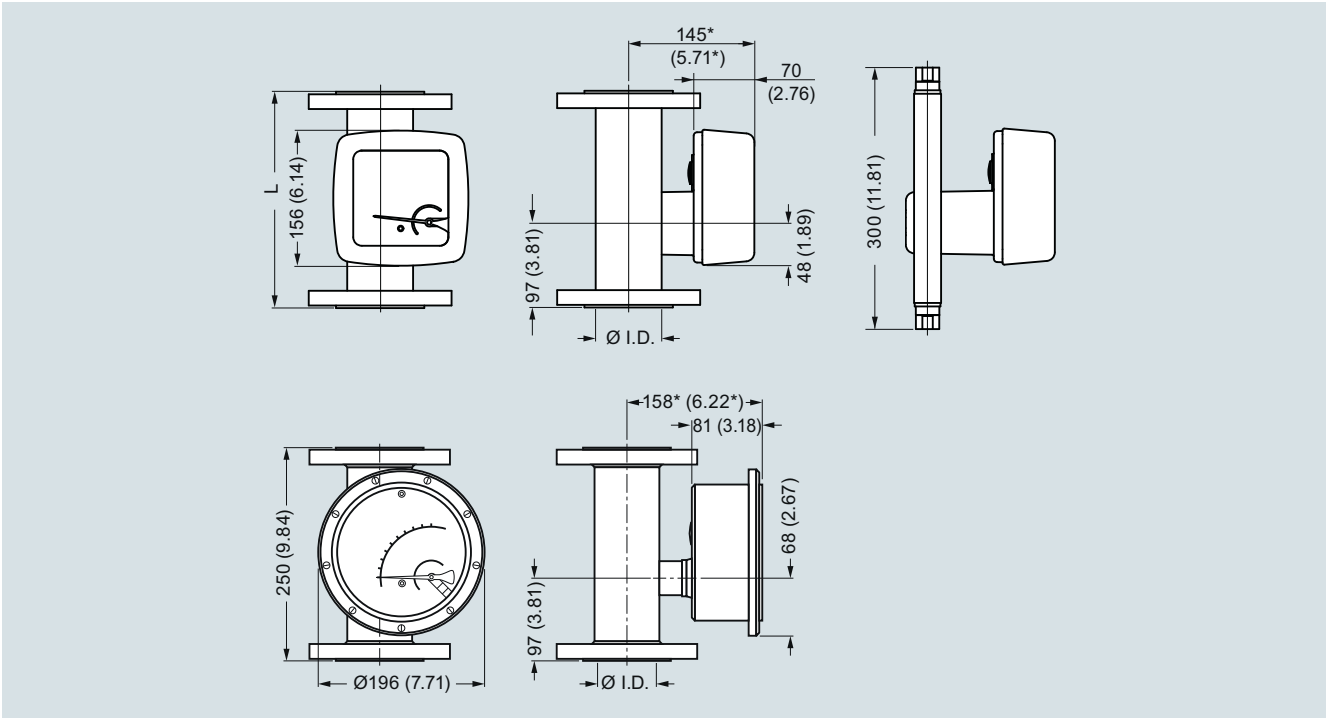
Note:
For possible combinations of nominal diameters and flow tube, see table on page 3/392

Operating instructions

Description	Article-No.
SITRANS FVA250	
• English	**A5E03821131**
• German	**A5E32108136**

All literature is available to download for free, in a range of languages, at
www.siemens.com/processinstrumentation/documentation

Dimensional drawings



Order Code	Diameter flange EN 1092-1	Flow tube I.D. [mm]						
		1	2	3	4	5	6	7
A	DN 15	26[1)]	26[1)]	32[1)]	-	-	-	-
B	DN 20	26[1)]	26[1)]	32[1)]	-	-	-	-
C	DN 25	26	26	32[1)]	46[1)]	-	-	-
D	DN 32	26	26	32	46[1)]	-	-	-
E	DN 40	26	26	32	46[1)]	70[1)]	-	-
F	DN 50	26	26	32	46	70[1)]	-	-
G	DN 65	-	-	32	46	70	102[1)]	-
H	DN 80	-	-	-	46	70	102[1)]	-
J	DN 100	-	-	-	-	70	102	125[1)]

*) +100 mm with displaced display unit.

1) Flange sealing surface not according to EN 1092-1 (Please select N-option for EN 1092-1 compliant flange sealing surface)

SITRANS FVA250, dimensions in mm

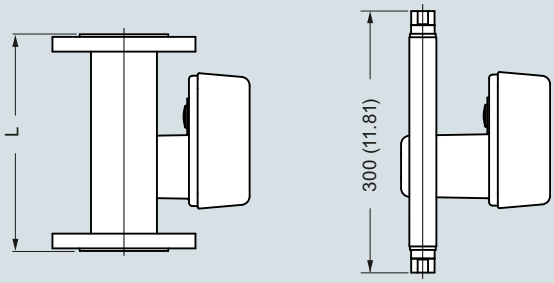
Order Code	Diameter flange ANSI B16.5	Flow tube I.D. [inch]						
		1	2	3	4	5	6	7
A	½“	1.02[1)]	1.02[1)]	1.26[1)2)]	-	-	-	-
B	¾“	1.02[1)]	1.02[1)]	1.26[1)]	-	-	-	-
C	1“	1.02	1.02	1.26[1)]	-	-	-	-
D	1¼“	1.02	1.02	1.26	1.81[1)]	-	-	-
E	1½“	1.02	1.02	1.26	1.81[1)]	-	-	-
F	2“	1.02	1.02	1.26	1.81	2.76[1)]	-	-
G	2½“	-	-	1.26	1.81	2.76	-	-
H	3“	-	-	-	1.81	2.76	4.02[1)]	-
J	4“	-	-	-	-	2.76	4.02	4.92[1)]

*) +3.94 inch with displaced display unit.

1) Flange sealing surface not according to ANSI B16.5 (Please select N-option for ANSI B16.5 compliant flange sealing surface)
2) Flange with threaded holes

SITRANS FVA250, dimensions in inch

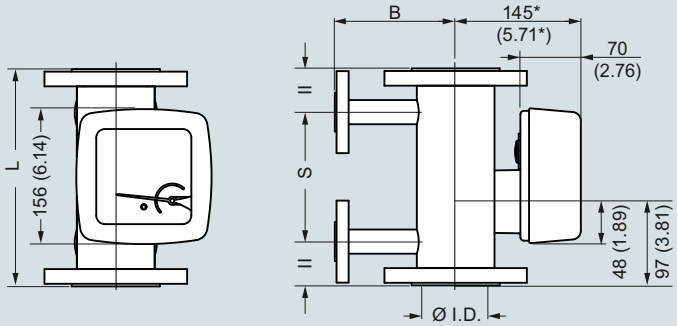
SITRANS FVA250 variable area meter



Diameter	EN 1092-1				Diameter	ANSI B16.5		
	PN 16	PN 40	PN63	PN100		class 150	class 300	class 600
DN 15	-	250 (9.84)	-	250 (9.84)	½"	250 (9.84)	250 (9.84)	250 (9.84)
DN 20	-	250 (9.84)	-	250 (9.84)	¾"	250 (9.84)	250 (9.84)	250 (9.84)
DN 25	-	250 (9.84)	-	250 (9.84)	1"	250 (9.84)	250 (9.84)	250 (9.84)
DN 32	-	250 (9.84)	-	250 (9.84)	1¼"	250 (9.84)	250 (9.84)	250 (9.84)
DN 40	-	250 (9.84)	-	250 (9.84)	1½"	250 (9.84)	250 (9.84)	250 (9.84)
DN 50	-	250 (9.84)	250 (9.84)	300 (11.81)	2"	250 (9.84)	250 (9.84)	300 (11.81)
DN 65	250 (9.84)	250 (9.84)	300 (11.81)	300 (11.81)	2½"	250 (9.84)	300 (11.81)	300 (11.81)
DN 80	250 (9.84)	250 (9.84)	300 (11.81)	300 (11.81)	3"	250 (9.84)	300 (11.81)	300 (11.81)
DN 100	250 (9.84)	250 (9.84)	300 (11.81)	300 (11.81)	4"	250 (9.84)	300 (11.81)	300 (11.81)

- not available

SITRANS FVA250 build-in length, dimensions in mm (inch)



Diameter		B (flange)		B (Ermeto)		S		Weight	
		mm	inch	mm	inch	mm	inch	kg	lb
DN 15	½"	110	4.33	53	2.09	150	5.91	3.0	6.6
DN 20	¾"	110	4.33	53	2.09	150	5.91	3.0	6.6
DN 25	1"	110	4.33	58.5	2.3	150	5.91	4.2	9.3
DN 32	1¼"	110	4.33	58.5	2.3	150	5.91	5.2	11.5
DN 40	1½"	130	5.12	63	2.48	150	5.91	6.0	13.2
DN 50	2"	140	5.51	77.5	3.05	150	5.91	7.5	16.5
DN 65	2½"	140	5.51	77.5	3.05	150	5.91	8.5	18.7
DN 80	3"	160	6.3	93.5	3.68	150	5.91	13	28.7
DN 100	4"	175	6.89	110	4.33	120	4.72	18	39.7

* +100 mm (3.94 inch) with displaced display unit

SITRANS FVA250 with heating/cooling jacket, dimensions in mm (inch)