V-100 product information



Variable area flowmeters for gases and liquids



Wide-ranging and modular: Variable area flowmeters V-100

Highly modular and adaptable for almost any requirement: Variable area flow meter with a wide range of options.



Various instruments options

We offer a range of options for the flow meters:

- Laboratory base
- Limit contact (inductive)
- Adaptation to customized gas line routing



Technical specifications variable area flowmeters V-100

Features	Construction	Short mounting length, 3 instrument sizes								
	Connections	Rear, lateral or axial								
	Scale	Millimetric scale, direct The scales are highly w		omer-specific scale.						
Technical data	Float type	Spherical								
	Valve	Precisely adjustable, 15 The control range (Kv-v								
	Body material	Aluminium or stainless								
	Seals material	FKM, EPDM or FFKM	51001							
	Customization We provide customer-specific versions									
	•	T 0+ (0) 1 1	`							
Instrument versions Technical data Options Setup	Setup	Type S* (Standard setur Setup L, R, A, T and O								
	Material	Anodized aluminium/Nickelized brass (valve)/FKM Stainless steel/FKM Stainless steel/EPDM Stainless steel/FFKM								
	Connection	G 1/4" female* G 1/8" female G 1/4" female for compression fittings NPT 1/4" female								
	Valve at inlet* or outlet	With standard knob* Without valve	9							
Technical data	Туре	V-100 55	V-100 80	V-100 140						
	Turndown ratio	10:1	10:1	10:1						
	Accuracy in % of full scale	±5%	+5%	+5%						
	Turndown ratio 10:1 10:1 10:1									
		120 mm								
		acy in % of full scale±5%±5%ring tube length55 mm80 mm140 mmength40 mm65 mm120 mmsphericalsphericalsphericalressure20 bar20 bar16 baremperature100 °C100 °C100 °C								
			•	10:1 ±5% 140 mm 120 mm spherical 16 bar 100 °C						
	Max. pressure 20 bar									
	Max. pressure drop	20 mbar	20 mbar	30 mbar						
Options	Calibration report (factory certificate)									
	Additional flow rate table for mm-scale									
	Laboratory base									
	Back cover (milky plexiglass)									
	Limit switch: min. limit switch, max. limit switch									
	Relays 24 Vdc for limit switch, re	lays 230 Vac for limit sv	vitch							
	Hose connectors PVC									
	Customized measuring tube scal	le								
Setup	Setup S (standard)	Setup L (stainless-stee	I only) Setup R (Setup R (stainless-steel only)						
	Setup A (stainless-steel only)	Setup T (stainless-stee	I only) Setup O () Setup O (stainless-steel only)						
		1 •								

Measuring ranges variable area flowmeters V-100

The measuring tubes are available with three different scales:

1. Measuring range for dire	ct reading scales -	- Standard scales	5								
Medium		Air									
Reference conditions	<u>In</u>	<u>/h</u> / 1.21 bara / 20	°C	<u>mln/</u>	<u>min</u> / 1.013 bara / 2	20 °C					
	V-100 55	V-100 80	V-100 140	V-100 55	V-100 80	V-100 140					
	0.12 – 1.2	0.12 – 1.2	-	-	10 – 120	10 – 100					
	0.2 – 2	0.2 – 2	0.2 – 2	-	20 - 240	40 – 220					
	0.3 – 3	0.3 – 3	0.3 – 3	-	60 - 640	50 - 540					
	0.5 – 5	0.5 – 5	0.5 – 5								
	0.8 – 8	0.8 – 8	0.8 - 8	<u>In/m</u>	<u>nin</u> / 1.013 bara / 2	O°C					
	1.6 – 16	1.6 – 16	1.6 – 16	V-100 55	V-100 80	V-100 140					
Леdium	4 - 40	4 - 40	4 - 40	-	0.1 – 1	0.1 – 1					
	6 - 60	6 - 60	6 - 60	-	0.3 – 2.2	0.2 – 2.2					
	10 – 100	10 – 100	10 – 100	-	0.5 – 5	0.5 - 6.0					
	25 – 250	25 – 250	25 – 250	-	0.2 – 10	1.5 – 10.5					
	50 - 500	50 - 500	50 - 500	-	2 – 20	2 – 26					
	80 - 800	80 - 800	80 - 800	-	4 - 32	6 – 51					
	120 – 1200	120 – 1200	120 – 1200		X						
	140 - 1400	-	140 – 1400								
	-	-	200 - 2000								
Medium			Wa	ater							
Reference conditions	<u>l/h</u> / 20 °C										
	V-10	0 55	V-10	08.00	V-100 140 0.25 – 2.5						
	0.25	- 2.5									
	0.5	- 5		- *	0.5	- 5					
	-	_		_	1.2	- 12					
	2.5	- 25		-	2.5 - 25 4 - 40 6 - 60						
	4 -	40	e l	-							
	6 -	-60		-							
	7 -	- 70		_	7 – 70						

2. Measuring range for mm scales (with flow table) - For varying operating conditions (temperature, pressure, medium)

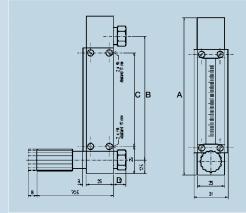
Medium	Air		Water						
Reference conditions	<u>In/h</u> / 1.21 bara / 20 °C		<u>l/h</u> / 20 °C						
Measuring range	smallest	highest	smallest	highest					
V-100 80	0.04 - 1.75	100 – 5000	0.0005 - 0.015	10 – 100					
V-100 140	0.15 - 2.25	500 - 5000	0.001 - 0.018	12 – 150					

3. Customer-specific scales

For customer-specific scales please provide the following specifications:

- Medium, mixture if applicable and max. flow
- Pressure in bar, absolute (only required for gases)
- Medium temperature, if applicable medium viscosity and density

Dimensions variable area flowmeters V-100



Turne	Dimensions in mm							
Туре	А	В	С					
V-100 55	120.5	89.5	61.5					
V-100 80	145.5	114.5	86.5					
V-100 140	205.5	174.5	146.5					
Fittings		D	Thread depth					
G1/4" female		12	7					
G1/8" female		12	8					
G1/4" female for compression fittings		17	12					
NPT 1/4"		16	9					
Blind nipple (setup L & R only)		5.5	-					
Find detailed dimens	ions in the V-Flow Line	e manual						

Type code variable area flowmeters V-100

Instrument type	V-100	F	L	V						
Instrument size	55				Α					
	80				в					
	140				С					
Materials (body, seals)	Aluminium/brass, FKM				S	5				
	Stainless steel, FKM				E	:				
	Stainless steel, EPDM				٦	-				
	Stainless steel, FFKM				v	/				
	Customer-specific / OEM				۲	C C				
Setup	Setup S**					S				
	Setup L (stainless steel only)					L				
	Setup R (stainless steel only)					R				
	Setup A (stainless steel only)					Α				
	Setup T (stainless steel only)					т				
	Setup O (stainless steel only)					0				
	Customer-specific / OEM					к				
Valve (position)	Valve at the inlet**						s			
	Valve at the outlet						А			
	Without valve				X		0			
	Customer-specific / OEM				C		к			
Process connection (in- and oulet)	G 1/4" female**							:	5	
	G 1/8" female	2 4						E	3	
	G 1/4" female (for compression fittings)							(2	
	NPT 1/4" female		C					[2	
	Customer-specific / OEM			11				I	<	
Measuring tube scale	Millimetric scale								М	
	Direct reading scale								D	
	Customer-specific / OEM								к	
Options	Additional flow rate table for mm-scale									
	Calibration report									
	Laboratory base									
	Back cover, plexiglass, milky									
	Min. limit switch									
	Max. limit switch									
	Relays 24 Vdc for limit switch									
	Relays 230 Vac for limit switch									
	Hose connectors PVC, G 1/4" / 4mm									
	Hose connectors PVC, G 1/4" / 6mm									
	Hose connectors PVC, G 1/4" / 8mm									
	Customized measuring tube scale									
	Customer-specific / OEM									
Type code		F	L	v						

Please contact our sales for all questions concerning configuration settings and customized versions: +41 61 756 63 00 or sales@voegtlin.com

Do you have any questions about our products? Give us a call: +41 (0)61 756 63 00

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