

New
type code

V-100 product information



Variable area flowmeters for gases and liquids

Variable area flowmeters V-100



Features

Construction:	Stable, modular, 3 sizes
Connection:	Rear, lateral or axial
Scale:	Millimetric-scale, direct reading scale and customer-specific scale The scales are highly wear-resistant
Float type:	Spherical
Valve:	Precisely adjustable, 15-turn precision valve, practically hysteresis-free The setting range is adapted to the measuring range
Body material:	Aluminium or stainless steel
Seals material:	FKM, EPDM or FFKM
Customization:	Customer-specific versions available

Versions

* =Standard

Setup	Setup S* (Standard setup) Setup L, R, A, T and O (see next page)
Material	Aluminium / FKM Stainless steel / FKM Stainless steel / EPDM Stainless steel / FFKM
Valve	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

Technical data

Type	V 100 – 55	V 100 – 80	V 100 – 140
Turndown ratio	10:1	10:1	10:1
Accuracy in % of full scale	±5%	±4%	±2%
Measuring tube length	55 mm	80 mm	140 mm
Scale length	40 mm	65 mm	120 mm
Float	spherical	spherical	spherical
Max. pressure	20 bar	20 bar	16 bar
Max. temperature	100°C	100°C	100°C
Max. pressure drop	20 mbar	20 mbar	30 mbar

Options

Calibration report (factory certificate)	Relays 24 Vdc for limit switch
Additional flow table for mm-scale	Relays 230 Vac for limit switch
Laboratory base	Back cover, Plexiglass, milky
Min. limit switch	Hose connectors PVC G 1/4" / 4, 6 & 8mm
Max. limit switch	



Laboratory base

Measuring range for direct reading scales

* = on request

We provide a variety of direct reading scales. Find the most common in the table below:

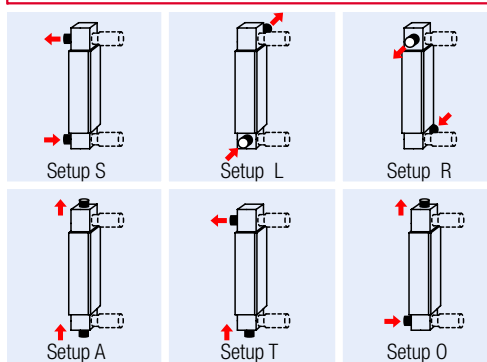
Medium	Air, NI/h			Water, l/h	
Conditions	1.21 bara, 20°C			20°C	
Type	V-100 55	V-100 80	V-100 140	V-100 55	V-100 140
	0.12–1.2	0.12–1.2	–	–	–
	0.2–2	0.2–2	0.2–2	–	–
	0.3–3	0.3–3	0.3–3	–	–
	0.5–5	0.5–5	0.5–5	–	–
	0.8–8	1–10	0.8–8	–	–
	1.6–16	1.6–16	1.6–16	–	–
	4–40	4–40	4–40	–	–
	6–60	6–60	6–60	0.25–2.5	0.25–2.5
	10–100	10–100	10–100	0.50–5	0.50–5
	25–250	25–250	25–250	1.2–12	1.2–12
	50–500	50–500	50–500	2.5–25	2.5–25
	80–800	80–800	80–800	4–40	4–40
	120–1200	120–1200	120–1200	6–60	6–60
	140–1400	–	140–1400	7–70	7–70
	–	–	200–2000	–	–

Measuring range for mm scales

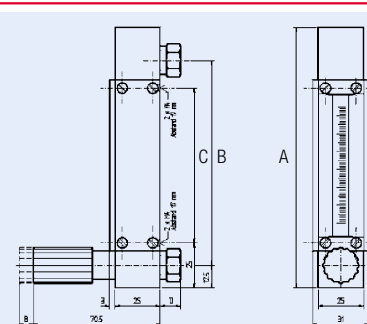
The mm scale with the corresponding flow table permits measurement of almost all media and mixtures.

Medium	Air, NI/h		Water, l/h	
Conditions	1.013 bara, 20°C		20°C	
Measuring Range	smallest	highest	smallest	highest
V-100 80	0.15 – 1.5	500 – 5000	0.002 – 0.02	17 – 170
V-100 140	0.2 – 2	500 – 5000	0.002 – 0.02	17 – 170

Setups



Dimensional drawings (mm)



For customer-specific scales please give us 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

	A	B	C
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

Please indicate your operating conditions. We will promptly propose you an optimal flow meter for your application.

Type code variable area flowmeters V-100

Instrument type	V-100	F	L	V																
Instrument size	55							A												
	80							B												
	140							C												
Materials (body, seals)	Aluminium/brass, FKM							S												
	Stainless steel, FKM							E												
	Stainless steel, EPDM							T												
	Stainless steel, FFKM							W												
	Customer-specific / OEM							K												
Setup	Setup S**							S												
	Setup L							L												
	Setup R							R												
	Setup A (stainless steel only)							A												
	Setup T (stainless steel only)							T												
	Setup O (stainless steel only)							O												
	Customer-specific / OEM							K												
Valve (position)	Valve at the inlet**							S												
	Valve at the outlet							A												
	Without valve							O												
	Customer-specific / OEM							K												
Process connection (in- and outlet)	G 1/4" female**												S							
	G 1/8" female												B							
	G 1/4" female (for compression fittings)												C							
	NPT 1/4" female												D							
	Customer-specific / OEM												K							
Measuring tube scale	Millimetric-scale																M			
	Direct reading scale																D			
	Customer-specific / OEM																K			
Options	Additional flow table for mm-scale																		T	
	Calibration report																		P	
	Laboratory base																		F	
	Back cover, plexiglass, milky																		R	
	Min. limit switch																		G	
	Max. limit switch																		I	
	Relays 24 Vdc for limit switch																		J	
	Relays 230 Vac for limit switch																		H	
	Hose connectors PVC, G 1/4" / 4mm																			N
	Hose connectors PVC, G 1/4" / 6mm																			O
	Hose connectors PVC, G 1/4" / 8mm																			Q
	Customized measuring tube scale																			M
Customer-specific / OEM																			K	
Type code		F	L	V	-															

** Standard