Q-Flow product information







Variable area flowmeters for gases and liquids



Attractive design and price:

Variable area flowmeters Q-Flow

The proven variable area flowmeter with compact, intelligent and attractive design.

420

300

200

100

Measuring tubes in 3 sizes



The flow meters are available with three different glass tube lengths

Intelligent instrument design

Aluminium or stainless steel

The compact and attractive design enables quick replacement of components

Measuring tube scales





In addition to mm scales with flow rate table, glass tubes with direct reading or custom scales are available



The bodies are available in aluminium or stainless steel. Sealing materials FKM or EPDM



Q-Flow 80 Stainless steel version

Tightly closing precision control valves



The devices are equipped with precise, hysteresisfree 15-way control valves. Different rotary knobs are available:

- Standard knob (see above picture)
- Standard knob and locking ring
- Hex socket and locking nut instead of standard knob

Technical specifications variable area flowmeters Q-Flow

Footures	Construction	Chart maunting langth	O inatrumant aizaa								
Features	Construction		Short mounting length, 3 instrument sizes On the rear								
	Connections		Millimetric scale, direct reading scale and customer-specific scale.								
	Scale	The scales are highly w		mer-specilic scale.							
	Float type	Spherical									
	Valve	Precisely adjustable, 15-turn micro valve, practically hysteresis-free The control range (Kv-value) is optimized for the full scale									
	Rotary knob	3 different versions are	available								
	Body material	Aluminium or stainless	steel								
	Seals material	FKM or EPDM									
	Customization	We provide customer-specific versions									
nstrument versions	Setup	Standard* Installation into control Customer-specific vers	Installation into control panel, retractable								
	Material	Anodized aluminium/Nickelized brass (valve)/FKM									
		Stainless steel/FKM Stainless steel/EPDM									
	Connection	G 1/4" female* G 1/8" female	G 1/8" female G 1/4" female for compression fittings								
	Valve at inlet* or outlet	With standard knob* With standard knob and locking ring With hex socket and locking nut Without valve									
Technical data	Туре	Q-Flow 55	Q-Flow 80	Q-Flow 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 certi										
	Panel mounting kit										
	Locking ring (for standard knob))									
		Locking nut (instead of standard knob)									
		Customized measuring tube scale									
	•										
Setup	Standard setup without valve	Standard setup with v	valve								
	←	+ •									

^{*}Standard – Subject to technical alterations

Measuring ranges variable area flowmeters Q-Flow

The measuring tubes are available with three different scales:

Measuring range for direct reading scales – Standard scales										
Medium	Air									
Reference conditions	<u>ln.</u>	<u>/h</u> / 1.21 bara / 20	°C	mln/ı	<u>/min</u> / 1.013 bara / 20 °C					
	Q-Flow 55	Q-Flow 80	Q-Flow 140	Q-Flow 55	Q-Flow 80	Q-Flow 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>ln/m</u>	<u>nin</u> / 1.013 bara / 2	0 °C				
	1.6 – 16	1.6 – 16	1.6 – 16	Q-Flow 55	Q-Flow 80	Q-Flow 140				
	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							
Medium			Wa	ater						
Reference conditions			<u>l/h</u> /	20 °C						
	Q-Flo	ow 55	Q-Flo	08 wc	Q-Flow 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		-	4 – 40					
	-	_		-	6 -	- 60				
	-	-		-	7 -	- 70				

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Reference conditions	<u>ln/h</u> / 1.21 k	oara / 20 °C	<u>l/h</u> / :	20 °C					
Medium	А	ir	Water						
2. Measuring range for mm scales (with flow table) – For varying operating conditions (temperature, pressure, medium)									

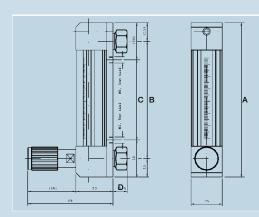
Reference conditions	<u>In/h</u> / 1.21 bara / 20 °C		<u>l/h</u> / :	20 °C			
Measuring range	smallest	highest	smallest	highest			
Q-Flow 80	0.04 - 1.75	850 – 3000	0.001 - 0.03	0.8 – 40			
Q-Flow 140	0.15 - 2.25	500 – 5000	0.002 - 0.03	12 – 150			

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 Q-Flow



Type	Dimensions in mm							
Туре	Α	В	С					
Q-Flow 55	100	70	40					
Q-Flow 80	125	95	65					
Q-Flow 140	ow 140 185		125					
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					
Find detailed dimensions in the V-Flow Line manual								

Type code variable area flowmeters Q-Flow

Instrument type	Q-Flow	F	L	()									
Instrument size	55					Α								
	80					В								
	140					С								
Materials (body, seals)	Aluminium/brass, FKM						S							
	Stainless steel, FKM						Е							
	Stainless steel, EPDM						Т							
	Customer-specific / OEM						K							
Setup	Setup S**							S						
	Customer-specific / OEM							K						
Valve (position)	Valve at the inlet**								S					
	Valve at the outlet								Α					
	Without valve								0					
	Customer-specific / OEM								K					
Process connection (in- and oulet)	G 1/4" female**										S			
	G 1/8" female										В			
	G 1/4" female (for compression fittings)										С			
	NPT 1/4" female										D			
	Customer-specific / OEM										K			
Measuring tube scale	Millimetric scale											М		
	Direct reading scale											D		
	Customer-specific / OEM											K		
Options	Additional flow rate table for mm-scale													Т
	Calibration report													Р
	Panel mounting kit													Е
	Locking ring (for standard-knob)													Α
	Locking nut (instead of standard-knob)													В
	Hose connectors PVC, G 1/4" / 4mm													N
	Hose connectors PVC, G 1/4" / 6mm													0
	Hose connectors PVC, G 1/4" / 8mm													Q
	Customized measuring tube scale													М
	Customer-specific / OEM													K
Type code		F	L	(Q –					-			_	

^{**} Standard

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

flow technology by vögtlin

Do you have any questions about our products? Give us a call:

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