

## Q-Flow product information

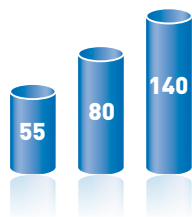


## Variable area flowmeters for gases and liquids

# Attractive design and price: Variable area flowmeters Q-Flow

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

## Measuring tubes in 3 sizes

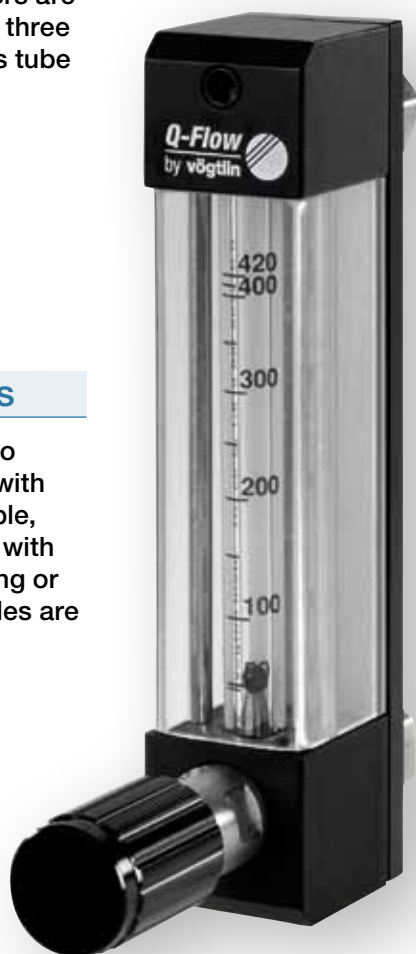


The flow meters are available with three different glass tube lengths

## Measuring tube scales



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



## Intelligent instrument design

The compact and attractive design enables quick replacement of components

## Aluminium or stainless steel



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


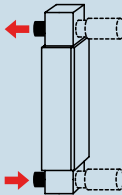


The devices are equipped with precise, hysteresis-free 15-way control valves.

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

<b>Features</b>	<b>Construction</b>	Short mounting length, 3 instrument sizes		
	<b>Connections</b>	On the rear		
	<b>Scale</b>	Millimetric scale, direct reading scale and customer-specific scale. The scales are highly wear-resistant		
	<b>Float type</b>	Spherical		
	<b>Valve</b>	Precisely adjustable, 15-turn micro valve, practically hysteresis-free The control range (Kv-value) is optimized for the full scale		
	<b>Rotary knob</b>	3 different versions are available		
	<b>Body material</b>	Aluminium or stainless steel		
	<b>Seals material</b>	FKM or EPDM		
<b>Customization</b>	We provide customer-specific versions			
<b>Instrument versions</b>	<b>Setup</b>	Standard* Installation into control panel, retractable Customer-specific versions		
	<b>Material</b>	Anodized aluminium/Nickelized brass (valve)/FKM Stainless steel/FKM Stainless steel/EPDM		
	<b>Connection</b>	G 1/4" female* G 1/8" female G 1/4" female for compression fittings NPT 1/4" female		
	<b>Valve at inlet* or outlet</b>	With standard knob* With standard knob and locking ring With hex socket and locking nut Without valve		
<b>Technical data</b>	<b>Type</b>	<b>Q-Flow 55</b>	<b>Q-Flow 80</b>	<b>Q-Flow 140</b>
	<b>Turndown ratio</b>	10:1	10:1	10:1
	<b>Accuracy in % of full scale</b>	±5%	±4%	±2%
	<b>Measuring tube length</b>	55 mm	80 mm	140 mm
	<b>Scale length</b>	40 mm	65 mm	120 mm
	<b>Float</b>	spherical	spherical	spherical
	<b>Max. pressure</b>	20 bar	20 bar	16 bar
	<b>Max. temperature</b>	100 °C	100 °C	100 °C
<b>Max. pressure drop</b>	20 mbar	20 mbar	30 mbar	
<b>Options</b>	Calibration report (factory certificate)			
	Additional flow rate table for mm-scale			
	Panel mounting kit			
	Locking ring (for standard knob)			
	Locking nut (instead of standard knob)			
	Customized measuring tube scale			
<b>Setup</b>	<b>Standard setup without valve</b>	<b>Standard setup with valve</b>		
				

\*Standard – Subject to technical alterations

# Measuring ranges variable area flowmeters Q-Flow

The measuring tubes are available with three different scales:

1. Measuring range for direct reading scales – Standard scales						
Medium	Air					
Reference conditions	ln/h / 1.21 bara / 20 °C			mln/min / 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	ln/min / 1.013 bara / 20 °C		
	0.8 – 8	0.8 – 8	0.8 – 8	Q-Flow 55	Q-Flow 80	Q-Flow 140
	1.6 – 16	1.6 – 16	1.6 – 16	–	0.1 – 1	0.1 – 1
	4 – 40	4 – 40	4 – 40	–	0.3 – 2.2	0.2 – 2.2
	6 – 60	6 – 60	6 – 60	–	0.5 – 5	0.5 – 6.0
	10 – 100	10 – 100	10 – 100	–	0.2 – 10	1.5 – 10.5
	25 – 250	25 – 250	25 – 250	–	2 – 20	2 – 26
	50 – 500	50 – 500	50 – 500	–	4 – 32	6 – 51
	80 – 800	80 – 800	80 – 800	–		
	120 – 1200	120 – 1200	120 – 1200	–		
Medium	Water					
Reference conditions	l/h / 20 °C					
	Q-Flow 55		Q-Flow 80		Q-Flow 140	
	0.25 – 2.5		–		0.25 – 2.5	
	0.5 – 5		–		0.5 – 5	
	1.2 – 12		–		1.2 – 12	
	2.5 – 25		–		2.5 – 25	
	4 – 40		–		4 – 40	
	–		–		6 – 60	
	–		–		7 – 70	

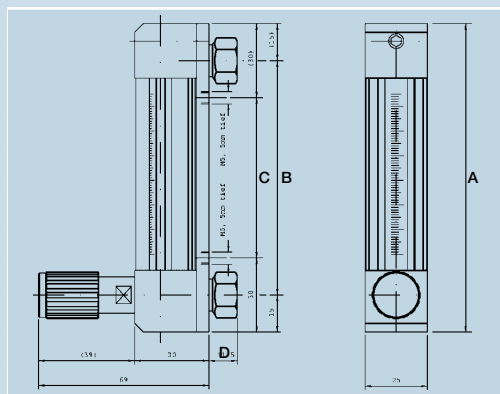
2. Measuring range for mm scales (with flow table) – For varying operating conditions (temperature, pressure, medium)				
Medium	Air		Water	
Reference conditions	ln/h / 1.21 bara / 20 °C		l/h / 20 °C	
Measuring range	smallest	highest	smallest	highest
Q-Flow 80	0.04 – 1.75	850 – 3000	0.001 – 0.03	0.8 – 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		
	A	B	C
Q-Flow 55	100	70	40
Q-Flow 80	125	95	65
Q-Flow 140	185	155	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

<b>Instrument type</b>	Q-Flow	F	L	Q																	
<b>Instrument size</b>	55								A												
	80								B												
	140								C												
<b>Materials (body, seals)</b>	Aluminium/brass, FKM								S												
	Stainless steel, FKM								E												
	Stainless steel, EPDM								T												
	Customer-specific / OEM								K												
<b>Setup</b>	Setup S**								S												
	Customer-specific / OEM								K												
<b>Valve (position)</b>	Valve at the inlet**									S											
	Valve at the outlet									A											
	Without valve									O											
	Customer-specific / OEM									K											
<b>Process connection (in- and outlet)</b>	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							
<b>Measuring tube scale</b>	Millimetric scale														M						
	Direct reading scale													D							
	Customer-specific / OEM													K							
<b>Options</b>	Additional flow rate table for mm-scale																			T	
	Calibration report																			P	
	Panel mounting kit																			E	
	Locking ring (for standard-knob)																			A	
	Locking nut (instead of standard-knob)																			B	
	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	
<b>Type code</b>		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**

Do you have any questions about our products?

Give us a call:

**+41 (0)61 756 63 00**

Or write us an e-mail:

**info@voegtlin.com**

You will find your local Vögtlin sales partner on the internet:

**www.voegtlin.com**

**Vögtlin Instruments AG – flow technology**

Langenhagstrasse 1 | 4147 Aesch (Switzerland)

Phone +41 (0)61 756 63 00 | Fax +41 (0)61 756 63 01

www.voegtlin.com | info@voegtlin.com

**vögtlin**   
instruments