

### **Q-Flow** product information







# Variable area flowmeters for gases and liquids



## vögtlin instruments

## Variable area flowmeters Q-Flow

#### **Features**

- Construction: Short mounting length, 3 sizes

- Connections: On the back side

Scale: Millimetric-scale, direct reading scale and customer-specific scale

The scales are highly wear-resistant

- Float type: Spherical

- **Valve:** Precisely adjustable, 15-turn micro valve,

practically hysteresis-free

The setting range is adapted to the measuring range

**Rotary knob:** 4 different versions are available **Body material:** Aluminium or stainless steel

- **Seals material:** FKM or EPDM

**Customization:** Customer-specific versions available

Versions		* = Standard
Setup	Standard* Installation into control panel, retracted Customized, custom design	
Material	Aluminium / FKM Stainless steel / FKM Stainless steel / EPDM	
Connection	G 1/4" female* G 1/8" female NPT 1/4" 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 certificate)
- Additional flow table for mm-scale
- Panel mounting kit
- Locking ring (for standard-knob)
- Locking nut (instead of standard-knob)
- Customized measuring tube scale

#### **Measuring range for direct reading scales**

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

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

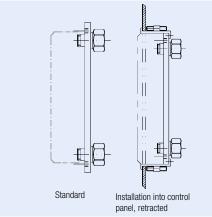
#### **Measuring range for mm scales**

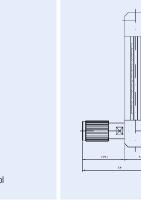
The mm scale with the corresponding flow table permits measurement of almost all media and mixtures.

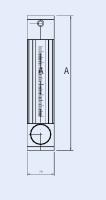
Medium	Air, N	NI/h	Water, I/h				
Conditions	1.013 b	ara, 20°C	20	0°C			
Measuring range	smallest	highest	smallest	highest			
Q-Flow 80 Q-Flow 140	0.15 - 1.5 0.2 - 2	180 – 1800 460 – 4600	0.002 - 0.02 0.002 - 0.02	6 – 60 16 – 160			

#### Mounting

### Dimensional drawings (mm)







\* = on request

For customer-specific scales please g	jive
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

	Α	В	C
Q-Flow 55	100	70	40
Q-Flow 80	125	95	65
Q-Flow 140	185	155	125

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

#### Type code variable area flowmeters Q-Flow

Instrument type	Q-Flow	F	L	Q										
Instrument size	55					Α								
	80					В								
	140					С								
Materials (body, seals)	Aluminium/brass, FKM						S							
	Stainless steel, FKM						Ε							
	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 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													Ν
	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	-					-			-	

<sup>\*\*</sup> Standard

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

