

Sho-Rate™ Series Model 1358

Glass Tube Variable Area Flowmeters (Rotameter)



The Sho-Rate™ Series of low flow indicators provide a cost-effective means of flow indication where the accuracy requirements are not severe. Model 1358 is ideal for flow rates from 0.8 to 5.0 gpm of water. Available options include an integral needle control valve and optional configuration to connect a flow controller to the inlet or outlet of the meter.

Features

10-1 Rangeability

Heavy Wall, Precision Bore Borosilicate Glass Measuring Tube

Interchangeable Tubes and Floats with Integral Float Stops

Easily Panel Mounted

Compatibility with Valve and Flow Controller

Benefits

Meets a wide range of customer specifications

Resistant to thermal shock and corrosive gases and fluids

Easy in-situ maintenance. Prevents loss of float during tube removal

Ability to drop in to customer process

Meets a wider range of customer requirements

Contech

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Product Specifications

Performance

Measuring Range	See Capacity Table
Standard Accuracy	±10% of F.S.
Repeatability	0.5% F.S.
Rangeability	10 - 1
Pressure/Temperature	200 psig at 33°F to 250°F (1°C to 121°C) Fluid temperatures below 32°F (0°C) will cause frosting of the glass metering tube. Consult factory for applications below this temperature. 100 psig at 33°F to 250°F (1°C to 121°C)(CRN Certification)
Pressure Equipment Directive (PED) 97/23/EC	Flowmeters mentioned in this document are Sound Engineering Practice (SEP)

Materials of Construction

Metering Tube	Borosilicate Glass
Tube Packing	Standard: Neoprene™ (Brass meters); Viton-A® fluoroelastomers (316 Stainless Steel meters); Optional: EPM
O-rings	Standard: Buna-N (Brass meters); Viton-A® fluoroelastomers (316 Stainless Steel meters); Optional: EPM
Float	316 Stainless Steel
Float Stops	Stainless Steel
Side Plates	Standard: Black Anodized Aluminum
Window	Scratch resistant, UV stabilized polycarbonate
Back Cover	Milk white polycarbonate
End Fittings	Chrome Plated Brass or 316 Stainless Steel
Connections	Standard: Horizontal female 3/8" NPT threaded adaptors; Optional: Refer to Model Code
Scales	Type (standard): Fused on meter tube Length: 75mm, nominal Graduations: Standard: Direct read on tube in gpm water or scfm air Optional: Special direct read decal on tube. Consult factory for available ranges. Direct read on metal scale plate mounted beside tube

Capacities

		Pressure Drop without Valve Inches W.C.		Pressure Drop with Valve Inches W.C.		Float
Maximum Flow Rate	Water (gpm)	0.8	12.6	13.6		8-RV-8
		1.5	22.2	27.0		8-RJ-10
		2.5	61.0	85.2		8-RJ-23
		3.5	88.7	121.0		8-RJ-30
		5.0	172	238.0		8-RJ-39
	Air (scfm)	3.4	14.34	15.5		8-RV-8
		6.0	25.34	30.8		8-RJ-10
		12.0	69.34	97.3		8-RJ-23
		15.0	101.34	138.3		8-RJ-30

NOTE: All air flows are at 14.7 psia and 70°F. Reference conditions 70°F @ latm.

Model Code

Code Description	Code Option	Option Description
I-V. Base Model Code	1358F	Sho-Rate "50", Size 8
VI. Tube	1	R-8M-75-1
	2	R-8M-75-1 CRN option
	9	No Tube
VII. Float (316 Stainless Steel)	A	8-RV-8
	B	8-RJ-10
	C	8-RJ-23
	D	8-RJ-30
	E	8-RJ-39
	Y	No Float
VIII. Scale Type / Side Plate Arrangement	1	Scale on tube
	2	Aluminum Detachable Scale Mounted to Right Side Plate
IX. Scale Inscription	A	No Inscription
	B	MM Scale
	D	SCFM Air @ 70 F and 14.7 PSIA, Standard 10 % Accuracy
	E	GPM Liquid Specific Gravity 1.0, Viscosity 1.0 cP, Standard 10% Accuracy
	F	Special Inscription, Standard 10% Accuracy
X. Tube Packing & O-ring Materials for Meter/Valve ¹	A	Neoprene Tube Packing, Buna O-ring
	C	Viton Tube Packing, Viton O-ring
	K	EPM Tube Packing, EPM O-ring
	L	No Packing ² , Buna O-ring
	M	No Packing ² , Viton O-ring
	N	No Packing ² , EPM O-ring
XI. Fitting & Adapter Material ³ / Process Connection Size & Type	1*	3/8" NPT Connection, Brass Fitting & Adapter
	2	3/8" NPT Connection, 316 Stainless Steel Fitting & Adapter
	3*	Thd. 3/8" NPT with Locknut Connection, Brass Fitting & Adapter
	4	Thd. 3/8" NPT with Locknut Connection, 316 Stainless Steel Fitting & Adapter
XII. Valve Configuration	A	No Valve (Plain End Fitting on Inlet)
	B	Standard Stainless Steel Needle Valve on Inlet
	C	Standard Stainless Steel Needle Valve on Outlet
	D*	Standard Brass Needle Valve on Inlet
	E*	Standard Brass Needle Valve on Outlet
	F ⁴	To mount 8810 Flow Controller
	G ⁴	To mount 8910 Flow Controller
	H ^{4*}	To mount 8830 Flow Controller
XIII. Connection Orientation	1	Inlet Port Back, Outlet Port Back
	3	Inlet Port Back, Outlet Port Right ⁵
	9	Inlet Port Right, Outlet Port Back ⁶
XIV. Accessories (One or Two Digital Field)	A	None
	G	No Brooks Identification

NOTES: ¹If valve is not required, select proper O-ring material for meter only.
²If tube is not required, select proper O-ring material coded L through P.
³If no adapter is required, select proper code for end fitting material only.
⁴Flow Controller must be a second-line item on customer's order.
* Not available with CRN Certification
⁵For 8912 Controller Only
⁶For 8812/8830 Controller Only

Sample Model Code

I-V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
1358F	1	C	2	D	C	2	B	1	A

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TRADEMARKS

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Data-Sheet 1358-EN/2024-12

The logo for Contech, with the word 'Contech' in a bold, white, sans-serif font. The 'C' is stylized with a horizontal line through it, and the 't' has a similar horizontal line. The background is a dark blue with faint technical drawings of gears and mechanical parts.

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