



**Heavy Duty
Metal Tube
Rotameter**

771	Base Model Number - 316L Stainless Steel Construction					
	Code	Connection Type				
	1	FNPT Connections - 316L Stainless Steel				
	2	150# ANSI R.F. Flanged Connections				
	3	300# ANSI R.F. Flanged Connections				
	4	600# ANSI R.F. Flanged Connections				
	Code	Float Material				
	2	316L Stainless Steel				
	Code	O-Ring Material				
	1	EPDM				
	2	Buna-N				
	3	Viton				
	4	Kalrez				
	5	Zalak				
	A	Aflas				
	Code	Optional Alarm / Transmitter				
	0	Without Alarm / Transmitter				
	T	4-20 mA DC 2-wire Transmitter				
	A	Single Alarm Inductive Slot Sensor				
	D	Dual Alarm Inductive Slot Sensor				
	Code	Range Code from Tables on Page 2				
771	1	2	3	0	714	◀ Typical Model Number

Features

- Full 120 mm scale length (160° pointer sweep)
- Dual, direct reading scale for liquid (USGPM water and percent)
- Percent scale for air or gas flows with correction factor
- All 316L Stainless Steel wetted parts (except O-Ring seals)
- Non-protruding float extensions (when float is at rest)
- Non-intrusive, magnetically coupled flow indicator assembly
- 304 Stainless Steel indicator housing with Nema 4 style, gasket sealed acrylic cover
- In-line threaded (FNPT) or flanged connections.

Options

- Direct reading scales corrected for specific gravity, pressure and temperature are available at no extra charge
- Certified calibrations to 2% F.S. (conforms to ISA RP 16.6)
- 2-wire 4-20 mA transmitter
- Adjustable high/low inductive alarm switches (Intrinsically Safe)

Optional Transmitter Specifications

Power Supply: 12 to 33 VDC
 Maximum Current Consumption: 40 mA
 Temperature Limits: -13°F to 158°F (-25°C to 70°C)
 Output: 4 to 20 mA DC
 Accuracy: ≤ 0.5%
 Linearity: ± 0.4%
 Influence from bearing play: ± 0.1%
 Temperature influence (ambient): 0.03% per °C
 Power supply influence: ± 0.1%
 Load resistance influence: ± 0.1% at R max

Optional Inductive Alarm Switches Specifications

Power Supply: 5 to 25 VDC (Switch Isolator/Barrier Required)
 Maximum Current, Target Present: 1 mA
 Maximum Current, Target Absent: 15 mA
 Temperature Limits: -14°F to +212°F
 Output: NAMUR
 Repeatability: 0.01 mm
 Switching Frequency: 2 kHz
 Sensor Approvals: UL Listed: General Purpose
 FM Approved: Intrinsically Safe
 CSA Certified: Intrinsically Safe
 Cenelec Certified: Intrinsically Safe
 UL Listed: General Purpose

Specifications shown here are for the transmitter only and should not be confused with the actual performance capabilities of the flow meter.

Alarm switch slot sensors are 2-wire, DC, low-current devices designed to be used with a remote intrinsic safety barrier / switch isolator. Single and dual slot sensors are available for high and / or low flow alarms.

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Materials of Construction

Part	Standard	Optional
Metering Tube	316LSS	-
Float	316LSS	Hastelloy C-276
Guide Rod	316LSS	-
Fittings, Flanges	316LSS	-
O-Rings	Viton/EPDM/Buna-N	Kalrez, Zalak, Aflas
Float Stops	316LSS	-
Indicator Housing	Aluminum	-
Indicator Window	Cast Acrylic	-

Maximum Pressure and Temperature

		Flanges		
Max. Temp.	FNPT	150#	300#	600#
220°F	1500 PSIG	225 PSIG	600 PSIG	1200 PSIG
300°F	1500 PSIG	200 PSIG	540 PSIG	1100 PSIG
400°F	1500 PSIG	180 PSIG	515 PSIG	1000 PSIG
O-Rings	Max. Temp.	O-Rings	Max. Temp.	
EPDM	225°F	Kalrez	400°F	
Buna-N	275°F	Zalak	400°F	
Viton	350°F	Aflas	400°F	

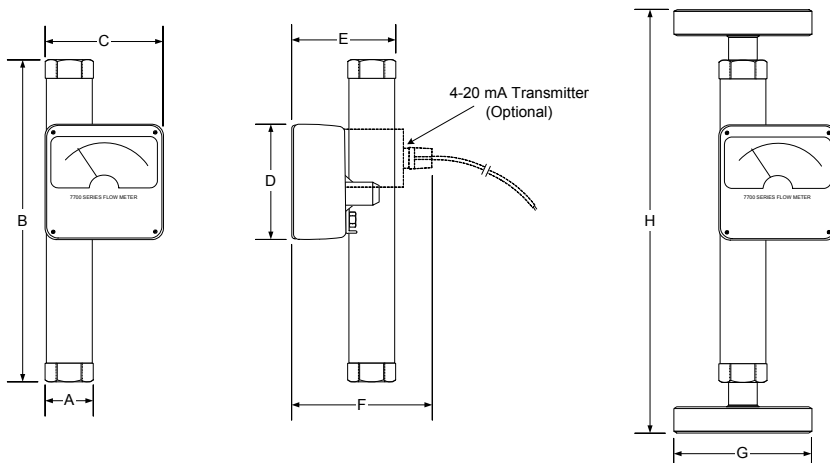
Flow Ranges

Size Code	Range Code	Flow Range Water (70°F)	Range Code	Flow Range Air (STP)
4	706	33.0 USGPH	705	2.2 SCFM
	708	1.1 USGPM	707	4.0 SCFM
	710	2 USGPM	709	8.0 SCFM
	712	4 USGPM	711	16.5 SCFM
	714	6 USGPM	713	24 SCFM
6	716	5 USGPM	715	20 SCFM
	718	10 USGPM	717	40 SCFM
	720	16.5 USGPM	719	76 SCFM
	722	25 USGPM	721	100 SCFM
8	724	35 USGPM	-	-
	726	60 USGPM	-	-

Size Code	Range Code	Flow Range Water (70°F)	Range Code	Flow Range Air (STP)
9	728	76 USGPM	-	-
	730	100 USGPM	-	-
	732	120 USGPM	-	-
	734	152 USGPM	-	-
11	736	150 USGPM	-	-
	738	225 USGPM	-	-
12	740	300 USGPM	-	-
	742	375 USGPM	-	-
	744	450 USGPM	-	-

Dimensions

									ANSI Flange Connections			
FNPT Connections									150#		300#	
Size Code	Accuracy Full Scale	Connection Size	A	B	C	D	E	F	G	H	G	H
4	3%	½"	1 ⁵ / ₁₆ "	11"	5 ¹ / ₈ "	5"	3 ³ / ₈ "	4 ⁵ / ₈ "	3½"	13 ¹ / ₈ "	3¾"	13 ³ / ₈ "
6		1"	1 ⁷ / ₈ "	13¼"	5¼"	5"	4"	4 ⁵ / ₈ "	4¼"	16¾"	4 ⁷ / ₈ "	17½"
8		1½"	2 ³ / ₈ "	13 ⁷ / ₈ "	5 ⁵ / ₈ "	5"	4½"	4 ⁵ / ₈ "	5"	18 ⁵ / ₈ "	6 ¹ / ₈ "	19¼"
9		2"	3½"	13 ⁷ / ₈ "	6¾"	5"	5 ⁵ / ₈ "	4 ⁵ / ₈ "	6"	17 ⁵ / ₃₂ "	6½"	17¾"
11		3"	-	-	-	-	-	-	7½"	17 ¹¹ / ₁₆ "	8¼"	18 ³ / ₁₆ "
12		4"	-	-	-	-	-	-	9"	18 ⁹ / ₁₆ "	10"	19¾"



Also Available From Muis Controls



**7100 Series
Low-Flow Metal
Tube Rotameter**



**Series V4
Paddle Type
Flow Switch**

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