

P710 Series

Metal Tube Flow Meters



Parker P Series metal tube variable area flowmeters (armored rotameters) feature a robust design particularly suited for severe duty applications where safety is a concern. P710 Series flow meters utilize a float and tapered tube design which offers longer, more linear scales, better pointer stability and greater accuracy than competitively priced products. Available 4-20mA transmitter adds versatility.



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Product Features and Options:

- 316L metering tube and internal components.
- 304 stainless steel housing.
- Max Pressure: 1500 PSIG (with NPT connections).
- Inductive slot sensor alarm is available as an option.
- Viton®, Buna, EPR and Kalrez® elastomers available.
- Certified calibrations conforming to ISA RP 16.6 available.
- Scales can be produced in any volumetric unit.
- Vertical NPT or flanged process connections.

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Specifications

Materials

Metering Tube	316L Stainless Steel
Internal Components	316L Stainless Steel
Inlet/Outlet Fittings	316L Stainless Steel NPT or Flange, Vertical
Fitting Material	316L Stainless Steel
Elastomers	Standard Viton® Optional Buna, EPR, and Kalrez®

Options

Alarm	Single or Dual Inductive Slot Sensor, 4-20mA Transmitter
Certified Calibrations	Conform to ISA RP 16.6
Scales	Can be produced in any volumetric unit

Performance

Capacities	Water 33 GPH to 450 GPM Air 4 to 100 SCFM
Scale	120mm Direct reading, detachable
Accuracy	±3% of Full Scale Flow
Turndown	10:1 to 12.5:1, unless otherwise indicated
Repeatability	1%
Maximum Temperature	O-Ring Material Max Temp EPR 225°F (107°C) Buna 275°F (135°C) Viton® 350°F (177°C) Kalrez® 400°F (204°C)
Maximum Pressures	NPT Fittings 1,500psi Stainless Steel Flange Class Temp 150# 300# 600# 200°F 225psi 600psi 1,200psi 300°F 200psi 540psi 1,100psi 400°F 180psi 515psi 1,000psi
Ambient Temperature	33°F to 125°F (1°C to 52°C)

Alarm Options:



Inductive Slot Sensor

Like inductive ring sensors, slot sensors are 2-wire, DC, low-current devices and are designed to be used with a remote intrinsic safety barrier/switch isolator. Single or dual slot sensors are available for the P710 Series.

Sensor Specifications

Power Supply	5-25 VDC (from Switch Isolator)
Maximum Current	Target Present 1 mA Target Absent 15 mA
Temperature Limits	-14°F to +212°F (-26°C to +100°C)
Output	NAMUR
Repeatability	0.01mm
Switching Frequency	2 kHz
Sensor Approvals	UL Listed General Purpose FM Approved Intrinsically Safe* CSA Certified Intrinsically Safe* Cenelec Intrinsically Safe*

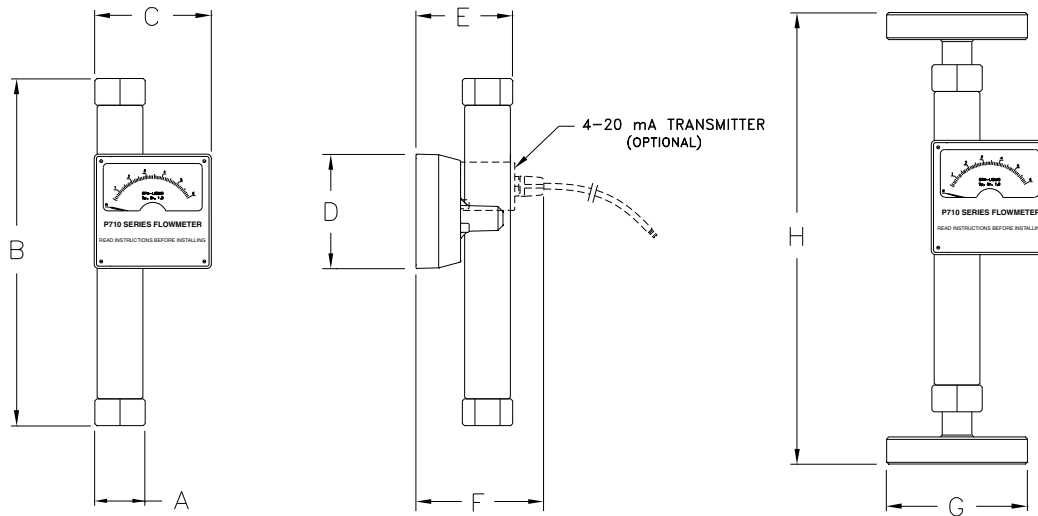
*Additional cost, call for pricing

4-20mA Transmitter*

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 mAdc
Accuracy	<0.5%
Linearity	+0.4%
Influence from Bearing Play	±0.1%
Temperature Influence (amb)	0.03% per °C
Power Supply Influence	±0.1%
Load Resistance Influence	±0.1% at R Max.

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

Flow Ranges and Dimensions



Order Number	Full Scale Flow Water	Dimensions (Inches) FNPT Connections						150# Flange		300# Flange	
		A	B	C	D	E	F	G	H	G	H
706	33.0 GPH – 1/2" FNPT	1.312	11.00	5.00	5	3.375	4.625	3.50	13.125	3.75	13.625
708	1.1 GPM – 1/2" FNPT	1.312	11.00	5.00	5	3.375	4.625	3.50	13.125	3.75	13.625
710	2.0 GPM – 1/2" FNPT	1.312	11.00	5.00	5	3.375	4.625	3.50	13.125	3.75	13.625
712	4.0 GPM – 1/2" FNPT	1.312	11.00	5.00	5	3.375	4.625	3.50	13.125	3.75	13.625
714	6.0 GPM – 1/2" FNPT	1.312	11.00	5.00	5	3.375	4.625	3.50	13.125	3.75	13.625
716	5.0 GPM – 1" FNPT	1.875	13.25	5.25	5	4.000	4.625	4.25	16.75	4.88	17.500
718	10.0 GPM – 1" FNPT	1.875	13.25	5.25	5	4.000	4.625	4.25	16.75	4.88	17.500
720	16.5 GPM – 1" FNPT	1.875	13.25	5.25	5	4.000	4.625	4.25	16.75	4.88	17.500
722	25.0 GPM – 1" FNPT	1.875	13.25	5.25	5	4.000	4.625	4.25	16.75	4.88	17.500
724	35.0 GPM – 1-1/2" FNPT	2.375	13.875	5.625	5	4.500	4.625	5.00	18.625	6.12	19.250
726	60.0 GPM – 1-1/2" FNPT	2.375	13.875	5.625	5	4.500	4.625	5.00	18.625	6.12	19.250
728	76.0 GPM – 2" FNPT	3.500	13.875	6.75	5	5.625	4.625	6.00	17.156	6.50	17.750
730	100.0 GPM – 2" FNPT	3.500	13.875	6.75	5	5.625	4.625	6.00	17.156	6.50	17.750
732	120.0 GPM – 2" FNPT	3.500	13.875	6.75	5	5.625	4.625	6.00	17.156	6.50	17.750
734	152.0 GPM – 2" FNPT	3.500	13.875	6.75	5	5.625	4.625	6.00	17.156	6.50	17.750
736	150.0 GPM – 3" Flange	—	—	—	—	—	—	7.50	17.867	8.25	18.187
738	225.0 GPM – 3" Flange	—	—	—	—	—	—	7.50	17.867	8.25	18.187
740	300.0 GPM – 4" Flange	—	—	—	—	—	—	9.00	18.562	10.00	19.750
742	375.0 GPM – 4" Flange	—	—	—	—	—	—	9.00	18.562	10.00	19.750
744	450.0 GPM – 4" Flange	—	—	—	—	—	—	9.00	18.562	10.00	19.750

Order Number	Full Scale Flow Air	FNPT	Dimensions (Inches) FNPT Connections						150# Flange		300# Flange	
			A	B	C	D	E	F	G	H	G	H
707	4.0 SCFM	1/2"	1.312	11.00	5.125	5	3.375	4.625	3.50	13.125	3.75	13.625
709	8.0 SCFM	1/2"	1.312	11.00	5.125	5	3.375	4.625	3.50	13.125	3.75	13.625
711	16.5 SCFM	1/2"	1.312	11.00	5.125	5	3.375	4.625	3.50	13.125	3.75	13.625
713	24.0 SCFM	1/2"	1.312	11.00	5.125	5	3.375	4.625	3.50	13.125	3.75	13.625
715	20.0 SCFM	1"	1.875	13.25	5.250	5	4.000	4.625	4.25	16.75	3.75	13.625
717	42.0 SCFM	1"	1.875	13.25	5.250	5	4.000	4.625	4.25	16.75	3.75	17.500
719	76.0 SCFM	1"	1.875	13.25	5.250	5	4.000	4.625	4.25	16.75	4.88	17.500
721	100.0 SCFM	1"	1.875	13.25	5.250	5	4.000	4.625	4.25	16.75	4.88	17.500

Ordering Information

Use the following guide to determine the specific product number you require.

The following example describes a P710 flow meter with FNPT connections, 316L stainless steel float, EPR O-rings, transmitter, and full scale flow rate of 5 GPM water with 1" connections.

Example: P710121T716

Meter Series	Connection Type	Float Material	O-Ring Material	Optional Alarm/Transmitter	Order Number
P710	1 FNPT Connections 2 150# R.F. Flanged 3 300# R.F. Flanged 4* 600# R.F. Flanged	2 316L Stainless Steel	1 Ethylene Propylene Rubber 2 Buna 3 Viton® 4 Kalrez®	0 None T With Transmitter A One Alarm (Inductive Slot Sensor) B Two Alarms (Inductive Slot Sensor)	See Flow Ranges and Dimensions Table

*Call factory for 600# R.F. Flange availability.

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