

7710 Series

STAINLESS STEEL TUBE

This all 316L stainless steel meter utilizes a float and tapered tube design which offers longer, more linear scales, better pointer stability and 40% greater accuracy than competitively priced products. A 4-20mA transmitter option adds to its versatility.



DESCRIPTION

| | |
|------------------------------|---|
| Metering Tube | 316L SS |
| Internal Components | 316L SS |
| Fitting Material | 316L SS |
| Inlet/Outlet Fittings | 316L SS NPT or flange, vertical |
| O-Ring | Standard: Viton® Optional: Buna N, EPR, Kalrez® |
| Indicator Housing | Die-cast Aluminum / Powder Coated with Chemfilm base (RoHS Compliant) Rated IP66 (Excludes Alarm and Transmitter Cases) |

PERFORMANCE

| Capacities | Water 33 GPH to 450 GPM Air 4 to 100 SCFM | | | | | | | | | | | | | | | | |
|----------------------------|--|-----------------|-----------------|------|-----------------|--------|-----------------|---------|-----------------|---------|-----------------|---------|-----------|------|---------|---------|-----------|
| Scale | 120 mm direct reading, detachable | | | | | | | | | | | | | | | | |
| Accuracy | ± 3% of full scale flow | | | | | | | | | | | | | | | | |
| Turndown | 10:1 | | | | | | | | | | | | | | | | |
| Repeatability | 1 % | | | | | | | | | | | | | | | | |
| Maximum Temperature | <table border="1"> <thead> <tr> <th>O-Ring Material</th> <th>Max Temperature</th> </tr> </thead> <tbody> <tr> <td>EPR</td> <td>225° F (107° C)</td> </tr> <tr> <td>Buna-N</td> <td>275° F (135° C)</td> </tr> <tr> <td>Viton®</td> <td>350° F (177° C)</td> </tr> <tr> <td>Kalrez®</td> <td>400° F (204° C)</td> </tr> </tbody> </table> | O-Ring Material | Max Temperature | EPR | 225° F (107° C) | Buna-N | 275° F (135° C) | Viton® | 350° F (177° C) | Kalrez® | 400° F (204° C) | | | | | | |
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| Buna-N | 275° F (135° C) | | | | | | | | | | | | | | | | |
| Viton® | 350° F (177° C) | | | | | | | | | | | | | | | | |
| Kalrez® | 400° F (204° C) | | | | | | | | | | | | | | | | |
| Maximum Pressure | NPT fittings 1,500 psi | | | | | | | | | | | | | | | | |
| | SS flange class | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>Temp F</th> <th>150#</th> <th>300#</th> <th>600#</th> </tr> </thead> <tbody> <tr> <td>200°</td> <td>225 psi</td> <td>600 psi</td> <td>1,200 psi</td> </tr> <tr> <td>300°</td> <td>200 psi</td> <td>540 psi</td> <td>1,100 psi</td> </tr> <tr> <td>400°</td> <td>180 psi</td> <td>515 psi</td> <td>1,000 psi</td> </tr> </tbody> </table> | Temp F | 150# | 300# | 600# | 200° | 225 psi | 600 psi | 1,200 psi | 300° | 200 psi | 540 psi | 1,100 psi | 400° | 180 psi | 515 psi | 1,000 psi |
| Temp F | 150# | 300# | 600# | | | | | | | | | | | | | | |
| 200° | 225 psi | 600 psi | 1,200 psi | | | | | | | | | | | | | | |
| 300° | 200 psi | 540 psi | 1,100 psi | | | | | | | | | | | | | | |
| 400° | 180 psi | 515 psi | 1,000 psi | | | | | | | | | | | | | | |
| Ambient Temperature | -40° F to 125° F (-40° C to 52° C) | | | | | | | | | | | | | | | | |

OPTIONS

| | |
|-------------------------------|--|
| Alarm | Single or dual, Inductive Slot Sensor (Page 57) 4-20 mA transmitter (Page 58) |
| Certified Calibrations | Conform to ISA RP 16.6 |
| CRNs | All Canadian provinces |
| Scales | Any volumetric unit |
| High Ambient Temp. | See meter maximum temperature. |

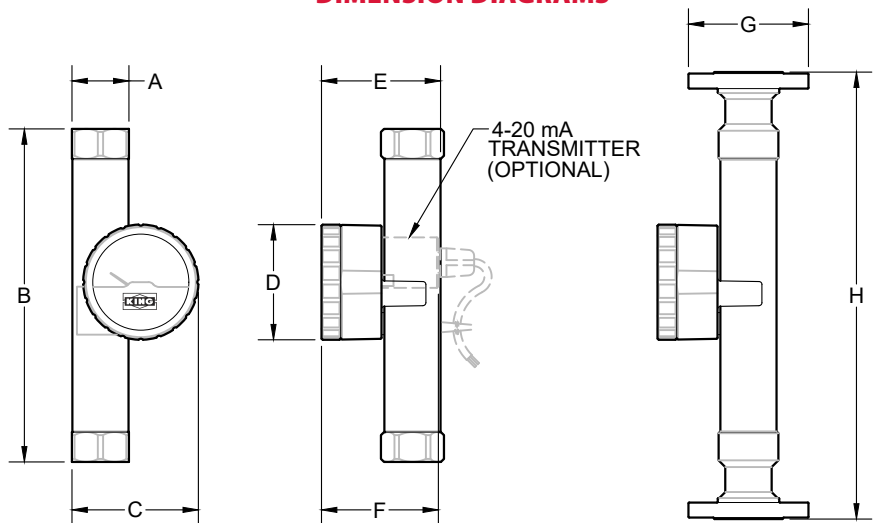
7710 Specifications

STAINLESS STEEL TUBE

| Water Order Number | Full Scale Flow GPM-Water |
|--------------------|--------------------------------|
| 706 | 33.0 GPM - 1/2" FNPT/ Flange |
| 708 | 1.1 GPM - 1/2" FNPT/ Flange |
| 710 | 2.0 GPM - 1/2" FNPT/ Flange |
| 712 | 4.0 GPM - 1/2" FNPT/ Flange |
| 714 | 6.0 GPM - 1/2" FNPT/ Flange |
| 716 | 5.0 GPM - 1" FNPT/ Flange |
| 718 | 10.0 GPM - 1" FNPT/ Flange |
| 720 | 16.5 GPM - 1" FNPT/ Flange |
| 722 | 25.0 GPM - 1" FNPT/ Flange |
| 724 | 35.0 GPM - 1 1/2" FNPT/ Flange |
| 726 | 60.0 GPM - 1 1/2" FNPT/ Flange |
| 728 | 76.0 GPM - 2" FNPT/ Flange |
| 730 | 100.0 GPM - 2" FNPT/ Flange |
| 732 | 120.0 GPM - 2" FNPT/ Flange |
| 734 | 152.0 GPM - 2" FNPT/ Flange |
| 736 | 150.0 GPM - 3" Flange |
| 738 | 225.0 GPM - 3" Flange |
| 740 | 300.0 GPM - 4" Flange |
| 742 | 375.0 GPM - 4" Flange |
| 744 | 450.0 GPM - 4" Flange |

| Air Order Number | Full Scale Flow SCFM - Air |
|------------------|----------------------------|
| 707 | 4.0 SCFM - 1/2" FNPT |
| 709 | 8.0 SCFM - 1/2" FNPT |
| 711 | 16.5 SCFM - 1/2" FNPT |
| 713 | 24 SCFM - 1/2" FNPT |
| 715 | 20 SCFM - 1" FNPT |
| 717 | 42 SCFM - 1" FNPT |
| 719 | 76 SCFM - 1" FNPT |
| 721 | 100 SCFM - 1" FNPT |

DIMENSION DIAGRAMS



| Water Order Number | Dimensions (Inches) FNPT Connections | | | | | | 150 # Flange | | 300 # Flange | |
|--------------------|--------------------------------------|--------|------|-----|------|------|--------------|--------|--------------|--------|
| | A | B | C | D | E | F | G | H | G | H |
| 706 - 714 | 1.30 | 11 | 4.32 | 4.8 | 3.92 | 4.87 | 3.50 | 13.125 | 3.75 | 13.625 |
| 716 - 722 | 1.88 | 13.24 | 4.86 | 4.8 | 4.50 | 4.87 | 4.25 | 16.75 | 4.88 | 17.500 |
| 724 - 726 | 2.34 | 13.864 | 5.24 | 4.8 | 4.96 | 4.87 | 5.00 | 18.625 | 6.12 | 19.250 |
| 728 - 734 | 3.46 | 13.875 | 6.35 | 4.8 | 6.08 | 4.87 | 6.00 | 17.156 | 6.50 | 17.786 |
| 736 - 738 | 4.46 | — | 7.26 | 4.8 | 7.08 | 4.87 | 7.50 | 17.867 | 8.25 | 18.867 |
| 740 - 744 | 5.49 | — | 8.24 | 4.8 | 8.11 | 4.87 | 9.00 | 18.562 | 10.00 | 19.696 |

| Air Order Number | Dimensions (Inches) FNPT Connections | | | | | | 150 # Flange | | 300 # Flange | |
|------------------|--------------------------------------|-------|------|-----|------|------|--------------|--------|--------------|--------|
| | A | B | C | D | E | F | G | H | G | H |
| 707 - 713 | 1.30 | 11 | 4.32 | 4.8 | 3.92 | 4.87 | 3.50 | 13.125 | 3.75 | 13.625 |
| 715-721 | 1.88 | 13.24 | 4.86 | 4.8 | 4.50 | 4.87 | 4.25 | 16.75 | 4.88 | 17.500 |

ORDERING:

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

| | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|
| 7 | 7 | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|

| Meter Series | Connection Type | Float Material | O-Ring Material | Alarm/Transmitter | Order Number | CRN |
|-----------------|-----------------------|----------------|-----------------|----------------------|--------------------|-----------------|
| Std. Temp - 771 | FNPT Connections - 1 | 316L SS - 2 | EPR - 1 | None - 0 | See Specifications | Non-CRN - Blank |
| High Temp - 77H | 150# R.F. Flanged - 2 | | Buna-N - 2 | With Transmitter - T | | CRN Req'd - CRN |
| | 300# R.F. Flanged - 3 | | Viton® - 3 | One Alarm - A | | |
| | 600# R.F. Flanged* | | Kalrez® - 4 | Two Alarms - D | | |

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