

**MODEL FT2A INSERTION METER**

Code	Description																																		
<b>Parent Model No.*</b>	<b>FT2A Insertion Mass Flow meter &amp; Temperature Transmitter; includes display</b>																																		
<b>Feature 1: Probe*</b>	<table border="1"> <tr><td>06IE</td><td>Insertion meter with 6-inch probe (all 6" probes will have an equal length sensor)</td></tr> <tr><td>09I</td><td>Insertion meter with 9-inch probe</td></tr> <tr><td>12I</td><td>Insertion meter with 12-inch probe</td></tr> <tr><td>15I</td><td>Insertion meter with 15-inch probe</td></tr> <tr><td>18I</td><td>Insertion meter with 18-inch probe</td></tr> <tr><td>24I</td><td>Insertion meter with 24-inch probe</td></tr> <tr><td>30I</td><td>Insertion meter with 30-inch probe</td></tr> <tr><td>36I</td><td>Insertion meter with 36-inch probe</td></tr> <tr><td>15R</td><td>15" Probe w/ 125 PSI retractor &amp; full port valve - 3/4" male NPT, 316 SS wetted parts</td></tr> <tr><td>18R</td><td>18" Probe w/ 125 PSI retractor &amp; full port valve - 3/4" male NPT, 316 SS wetted parts</td></tr> <tr><td>24R</td><td>24" Probe w/ 125 PSI retractor &amp; full port valve - 3/4" male NPT, 316 SS wetted parts</td></tr> <tr><td>30R</td><td>30" Probe w/ 125 PSI retractor &amp; full port valve - 3/4" male NPT, 316 SS wetted parts</td></tr> <tr><td>36R</td><td>36" Probe w/ 125 PSI retractor &amp; full port valve - 3/4" male NPT, 316 SS wetted parts</td></tr> <tr><td>R1</td><td>Crank Retractor 1.5" NPT, 600 PSI, no valve - 316 SS wetted parts**</td></tr> <tr><td>R2</td><td>Crank Retractor 1.5", 150# flange, no valve - 316 SS wetted parts**</td></tr> <tr><td>R3</td><td>Crank Retractor 1.5", 300# flange, no valve - 316 SS wetted parts**</td></tr> <tr><td colspan="2">Probes over 36" and flange mounting options</td></tr> </table>	06IE	Insertion meter with 6-inch probe (all 6" probes will have an equal length sensor)	09I	Insertion meter with 9-inch probe	12I	Insertion meter with 12-inch probe	15I	Insertion meter with 15-inch probe	18I	Insertion meter with 18-inch probe	24I	Insertion meter with 24-inch probe	30I	Insertion meter with 30-inch probe	36I	Insertion meter with 36-inch probe	15R	15" Probe w/ 125 PSI retractor & full port valve - 3/4" male NPT, 316 SS wetted parts	18R	18" Probe w/ 125 PSI retractor & full port valve - 3/4" male NPT, 316 SS wetted parts	24R	24" Probe w/ 125 PSI retractor & full port valve - 3/4" male NPT, 316 SS wetted parts	30R	30" Probe w/ 125 PSI retractor & full port valve - 3/4" male NPT, 316 SS wetted parts	36R	36" Probe w/ 125 PSI retractor & full port valve - 3/4" male NPT, 316 SS wetted parts	R1	Crank Retractor 1.5" NPT, 600 PSI, no valve - 316 SS wetted parts**	R2	Crank Retractor 1.5", 150# flange, no valve - 316 SS wetted parts**	R3	Crank Retractor 1.5", 300# flange, no valve - 316 SS wetted parts**	Probes over 36" and flange mounting options	
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3/4" MNPT compression fitting included at no charge																																			
Adding an "E" after the probe code (i.e. 09IE, 18RE, etc.) will provide an equal length sensor. Equal length sensors must be specified for 1.5" (40mm) and 2" (50mm) pipes. 15R is shipped standard with an equal length sensor.																																			
<b>Feature 2: Sensor Material*</b>	<table border="1"> <tr><td>SS</td><td>316 stainless steel sensor and compression fitting</td></tr> <tr><td>SH</td><td>Hastelloy C-276 sensor w/ 316SS compression fitting</td></tr> <tr><td>SJ</td><td>Hastelloy C-276 sensor and probe; Monel compression fitting</td></tr> <tr><td>SL</td><td>Hastelloy C-276 sensor and probe; Hastelloy C-276 compression fitting</td></tr> </table>	SS	316 stainless steel sensor and compression fitting	SH	Hastelloy C-276 sensor w/ 316SS compression fitting	SJ	Hastelloy C-276 sensor and probe; Monel compression fitting	SL	Hastelloy C-276 sensor and probe; Hastelloy C-276 compression fitting																										
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<b>Optional</b>	<b>NRT Non Resettable Totalizer</b>																																		

Part #	Description
105397	Extra instruction manual
104870	USB Cable, A-male/mini USB-B male, 6 feet
100657	Stainless Steel Tags
999992	Certificate of Conformance
999995	Certificate of Origin

Part#	Description
101570	5-conductor, 18 AWG PVC shielded cable for remote. Specify feet (100' max.)
102299	90 degree elbow kit - makes housing upright in vertical pipes (E1 or E2 only)
890000	Flow meter cleaned and bagged for Oxygen service
105758	Remote Mounting Kit (E3 or E4 only)
102878	Teflon Ferrule Kit, 60psi max.

**NOTES:**

- \* The Parent Model Number and one of each Feature must be specified.  
Example: FT2A-09I-SS-ST-E2-B0-G1
- \*\* Retractors R1 - R3: Minimum pipe size is 2.5". Maximum pipe size is 1/2 the pipe diameter + valve dimension cannot exceed 19.5"
- \*\*\* Recommend 105758 Remote Mounting Kit option
- \*\*\*\*G3 and G4 refer to pipeline-quality dry natural gas, whereas naturally occurring gas from oil fields constitutes a mixed gas requiring a G7 calibration

Insertion flow meters can be installed on 1.5" pipes or larger. Quote Inline Flow meters for pipes smaller than 1.5".  
**Calculating Probe Length - Position the Fox Sensor in the center of the pipe. Use the following to calculate the probe length:**  
 Probe Length = 1/2 pipe diameter (D) + 3" + insulation + retractor (for codes 15R through 36R, add 10"). Round up to next larger probe available.  
 Always quote an equal length sensor for 1.5" (40mm) and 2" (50mm) pipes.  
 D = pipe diameter; Insulation = Thickness of insulation (if any); Retractor = Dimension of retractor (10"), if supplied.  
 Example 1: Pipe ID = 10", no insulation or retractor: 5" + 3" = 8". Round up to 9" probe (09I).  
 Example 2: Pipe ID = 10" with retractor, no insulation: 5" + 3" + 10" (retractor) = 18" (18R probe with retractor).



**FT2A Inline Flow Meter/Temperature Transmitter  
MODEL CODES**

399 Reservation Road  
Marina, CA 93933  
831-384-4300  
www.foxthermal.com  
sales@foxthermal.com

**MODEL FT2A INLINE METER**

Code	Description
Parent Model No.*	FT2A Inline Mass Flow Meter & Temperature Transmitter; includes display
Feature 1 : Flow body*	<b>316 Stainless steel flow body</b>
025P	1/4 inch, male NPT ends (schedule 40) 5.8" Face-to-face
05P	1/2 inch, male NPT ends (schedule 40) 12" Face-to-face
075P	3/4 inch, male NPT ends (schedule 40) 12" Face-to-face
10P	1 inch, male NPT ends (schedule 40) 12" Face-to-face
125P	1.25 inch, male NPT ends (schedule 40) 12" Face-to-face
15P	1.5 inch, male NPT ends (schedule 40) 12" Face-to-face
20P	2 inch, male NPT ends (schedule 40) 12" Face-to-face
25P	2.5 inch, male NPT ends (schedule 40) 18" Face-to-face
30P	3 inch, male NPT ends (schedule 40) 18" Face-to-face
05F	1/2 inch, 150# RF flanges (schedule 40) 12" Face-to-face
075F	3/4 inch, 150# RF flanges (schedule 40) 12" Face-to-face
10F	1 inch, 150# RF flanges (schedule 40) 12" Face-to-face
125F	1.25 inch, 150# RF flanges (schedule 40) 12" Face-to-face
15F	1.5 inch, 150# RF flanges (schedule 40) 12" Face-to-face
20F	2 inch, 150# RF flanges (schedule 40) 12" Face-to-face
25F	2.5 inch, 150# RF flanges (schedule 40) 18" Face-to-face
30F	3 inch, 150# RF flanges (schedule 40) 18" Face-to-face
40F	4 inch, 150# RF flanges (schedule 40) 18" Face-to-face **
60F	6 inch, 150# RF flanges (schedule 40) 24" Face-to-face **
	<b>A106 Grade B carbon steel flow body (+ A105 flanges - if ordered)*****</b>
20PC	2 inch, male NPT ends (schedule 40) 12" Face-to-face
25PC	2.5 inch, male NPT ends (schedule 40) 18" Face-to-face
30PC	3 inch, male NPT ends (schedule 40) 18" Face-to-face
20FC	2 inch, 150# RF flanges (schedule 40) 12" Face-to-face
25FC	2.5 inch, 150# RF flanges (schedule 40) 18" Face-to-face
30FC	3 inch, 150# RF flanges (schedule 40) 18" Face-to-face
40FC	4 inch, 150# RF flanges (schedule 40) 18" Face-to-face **
60FC	6 inch, 150# RF flanges (schedule 40) 24" Face-to-face **
Feature 2: Sensor Material*	SS 316 stainless steel sensor and flow body SH 316SS flow body with Hastelloy C276 sensor
Feature 3: Sensor Type*	ST Standard Sensor -40 to 250F (-40 to 121C) HT High Temperature Sensor -40 to 650F (-40 to 343C) E3 or E4, required - AIR ONLY 8,000 SFPM Max
Feature 4: Enclosure and Power*	E1 Local NEMA 4X enclosure, 24VDC powered E2 Local NEMA 4X enclosure, 85 to 264VAC powered E3 Remote J-box, 24VDC powered, 100' max, cable sold separately *** E4 Remote J-box, 85 to 264VAC powered, 100' max, cable sold separately ***
Feature 5: Bus Options*	B0 No communication bus MB Modbus RTU (RS 485) BN BACnet MS/TP (RS 485) BD DeviceNet BP Profibus-DP BE Ethernet Modbus TCP
Feature 6: Calibration*	G1 Air, N2: MF less than 1200 SCFM (2040 NM3H) G2 Air, N2: MF above 1200 SCFM (2040 NM3H) G3 Ar, CO2, H2, CH4, Natural Gas, O2: MF less than 1000 SCFM (1700 NM3H)**** G4 Ar, CO2, H2, CH4, Natural Gas, O2: MF above 1000 SCFM (1700 NM3H)**** G5 CO, He, Ammonia, Propane: MF less than 700 SCFM (1190 NM3H) G6 CO, He, Ammonia, Propane: MF above 700 SCFM (1190 NM3H) G7 Biogas, Digester Gas, Flare Gas, Flash Gas, Vent Gas**** All other gases
Optional	NRT Non Resettable Totalizer

MF = Maximum Flow Rate  
Calibration prices listed here are for new flowmeter orders only.  
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Part #	Description
105397	Extra instruction manual
104870	USB Cable, A-male/mini USB-B male, 6 feet
100657	Stainless Steel Tags
999992	Certificate of Conformance
999995	Certificate of Origin

Part#	Description
101570	5-conductor, 18 AWG PVC shielded cable for remote. Specify feet (100' max.)
102299	90 degree elbow kit - makes housing upright in vertical pipes (E1 or E2 only)
890000	Flow meter cleaned and bagged for Oxygen service
105758	Remote Mounting Kit (E3 or E4 only)
990056	Canadian Registration Number (CRN) engraved on flow body

**Notes:**

- \* The Parent Model Number and one of each Feature must be specified.  
Example: FT2A-20P-SS-ST-E2-B0-G1
- \*\* Above 2,500 SCFM (4,250 NM3H) consult factory for calibration charge.
- \*\*\* Recommend 105758 Remote Mounting Kit option
- \*\*\*\*G3 and G4 refer to pipeline-quality dry natural gas, whereas naturally occurring gas from oil fields constitutes a mixed gas requiring a G7 calibration
- \*\*\*\*\*Canadian Registration Number (CRN) is not available on carbon steel flow bodies