

**MODEL FT3 INSERTION METER**

	Code	Description
<b>Parent Model No.*</b>	FT3	Insertion Mass Flowmeter & Temperature Transmitter
<b>Feature 1: Probe*</b>	06IE	Insertion meter with 6-inch probe (all 6" probes will have an equal length sensor)
<div style="border: 1px dashed black; padding: 5px; margin-bottom: 5px;">See "Calculating Probe Lengths" Below</div> <div style="border: 1px dashed black; padding: 5px; margin-bottom: 5px;">3/4" MNPT compression fitting incl. standard</div> <div style="border: 1px dashed black; padding: 5px;">Adding an "E" after the probe code (i.e. 09IE, 18RE) will provide an equal length sensor. Equal length sensors are required for 1.5" (40mm) and 2" (50mm) pipes. 15R includes an equal length sensor standard.</div>	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-inch probe w/ 125-psi retractor & full-port valve, 3/4" male NPT, 316 SS wetted parts
	18R	18-inch probe w/ 125-psi retractor & full-port valve, 3/4" male NPT, 316 SS wetted parts
	24R	24-inch probe w/ 125-psi retractor & full-port valve, 3/4" male NPT, 316 SS wetted parts
30R	30-inch probe w/ 125-psi retractor & full-port valve, 3/4" male NPT, 316 SS wetted parts	
36R	36-inch probe w/ 125-psi retractor & full-port valve, 3/4" male NPT, 316 SS wetted parts	
		Probes over 36" and flange mounting options
<b>Feature 2: Sensor Material*</b>	SS	316 stainless wetted parts: sensor, probe, and compression fitting
	SH	Hastelloy C-276 sensor and probe; 316 stainless steel compression fitting
	SJ	Hastelloy C-276 sensor and probe; Monel compression fitting
	SL	Hastelloy C-276 sensor and probe; Hastelloy C-276 compression fitting
<b>Feature 3: Sensor Type*</b>	ST	Standard temperature sensor, -40 to 250F (-40 to 121C)
	HT	High temp. sensor, -40 to 650F (-40 to 343C), E3 or E4 required, calibration and accuracy limitations apply, not available in 06IE probe size
<b>Feature 4: Enclosure and Power*</b>	E1	Local explosion-proof enclosure, 24VDC powered
	E2	Local explosion-proof enclosure, 85-264VAC powered
	E3	Remote J-box, 24VDC powered, 100' max. cable length (sold separately), option board required**
	E4	Remote J-box, 85-264VAC powered, 100' max. cable length (sold separately), option board required**
<b>Feature 5: Display*</b>	D0	No display & configuration panel
	DD	Include rate/total display & configuration panel
	DL	Include rate/total display & configuration panel with datalogger option***
<b>Feature 6: Option Boards*</b>	B0	Blank option board (cannot be selected with E3 or E4 features)
<div style="border: 1px dashed black; padding: 5px;">Do not specify B0 when ordering a remote sensor.</div>	B1	Isolated 24VDC power + terminal block for remote sensor
	MB	RS485 Modbus RTU (includes isolated 24VDC power + terminal block for remote sensor)
	BH	HART (includes isolated 24VDC power + terminal block for remote sensor)
<b>Feature 7: Calibration*</b>	G1	Air, N2: MF less than 1200 SCFM (2040 NM3H)
<div style="border: 1px dashed black; padding: 5px;">MF = Maximum Flow Rate Calibration prices listed here are for new flowmeter orders only. Contact Fox for recalibration prices.</div>	G2	Air, N2: MF above 1200 SCFM (2040 NM3H)
	G3	Ar, CH4, CO2, H2, O2, Natural Gas****: MF less than 1000 SCFM (1700 NM3H)
	G4	Ar, CH4, CO2, H2, O2, Natural Gas****: MF above 1000 SCFM (1700 NM3H)
	G5	C3H8, CO, He, NH3: MF less than 700 SCFM (1190 NM3H)
	G6	C3H8, CO, He, NH3: MF above 700 SCFM (1190 NM3H)
	G7	Biogas, Digester Gas, Flare Gas, Flash Gas, Vent Gas, and other mixed gases****

Part #	Description	OPTIONS
104488	Extra FT3 Instruction Manual	
100657	Stainless Steel Tags	
999992	Certificate of Conformance	
999995	Certificate of Origin	
104870	USB Cable, A-male/mini USB-B male, 6' length	

Part#	Description	OPTIONS
101570	5-conductor, 18 AWG PVC shielded cable for remote (E3 or E4), 100' max. length	
104740	Remote Enclosure Mounting Kit (E3 or E4)	
109040	Sun Shade accessory	
890000	Flow meter cleaned and bagged for Oxygen service	
102878	Teflon Ferrule Kit, 60 psi max. pressure	

**Notes:**

- \* The Parent Model Number and one of each Feature must be specified.  
Example: FT3-09I-SS-ST-E3-DD-B1-G1
- \*\* Recommend 104740 Remote Mounting Kit option
- \*\*\* Datalogger information is only retrievable from the display and over RS485 Modbus. Selecting Modbus (MB) for "Feature 6: Options Boards" is recommended. "Feature 6: Option Boards" is advisable.
- \*\*\*\* 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

See separate price list for FC20 Flow Conditioners for use with insertion style flow meters.

Insertion flow meters can be installed on 1.5" (40mm) pipes or larger. Select Inline flow meters for pipes smaller than 1.5" (40mm). Always quote an equal length sensor for 1.5" and 2" pipes (e.g. 06IE, 09IE, 12IE, etc.).

Calculating Probe Length - To position the Fox sensor in the center of the pipe, use the following calculation for probe length:  
 Probe Length = 1/2 the Pipe Diameter + Fitting Height [3" (76mm) default assumption] + Insulation Thickness + Retractor [10" (254mm) for codes 15R through 36R].  
 Round up to next probe size.

Example 1: Pipe ID = 10" (254mm), no insulation, no retractor: 5" (127mm) + 3" (76mm) + 0" (0mm) + 0" (0mm) = 8" (203mm). Round up to use 09I probe option.  
 Example 2: Pipe ID = 10" (254mm), no insulation, with retractor: 5" (127mm) + 3" (76mm) + 0" (0mm) + 10" (254mm) = 18" (457mm): 18R probe option

**MODEL FT3 INLINE METER**

	Code	Description
<b>Parent Model No.*</b>	FT3	Inline Mass Flowmeter & Temperature Transmitter
<b>Feature 1: Flow Body Size*</b>		<b>316 Stainless Steel Flow Body</b>
	05P	1/2 inch flow body (schedule 40), male NPT ends, 12" face-to-face length
	075P	3/4 inch flow body (schedule 40), male NPT ends, 12" face-to-face length
	10P	1 inch flow body (schedule 40), male NPT ends, 12" face-to-face length
	125P	1-1/4 inch flow body (schedule 40), male NPT ends, 12" face-to-face length
	15P	1-1/2 inch flow body (schedule 40), male NPT ends, 12" face-to-face length
	20P	2 inch flow body (schedule 40), male NPT ends, 12" face-to-face length
	25P	2-1/2 inch flow body (schedule 40), male NPT ends, 18" face-to-face length
	30P	3 inch flow body (schedule 40), male NPT ends, 18" face-to-face length
	05F	1/2 inch flow body (schedule 40), 150# RF flange ends, 12" face-to-face length
	075F	3/4 inch flow body (schedule 40), 150# RF flange ends, 12" face-to-face length
	10F	1 inch flow body (schedule 40), 150# RF flange ends, 12" face-to-face length
	125F	1-1/4 inch flow body (schedule 40), 150# RF flange ends, 12" face-to-face length
	15F	1-1/2 inch flow body (schedule 40), 150# RF flange ends, 12" face-to-face length
	20F	2 inch flow body (schedule 40), 150# RF flange ends, 12" face-to-face length
	25F	2-1/2 inch flow body (schedule 40), 150# RF flange ends, 18" face-to-face length
	30F	3 inch flow body (schedule 40), 150# RF flange ends, 18" face-to-face length
	40F	4 inch flow body (schedule 40), 150# RF flange ends, 18" face-to-face length**
	60F	6 inch flow body (schedule 40), 150# RF flange ends, 24" face-to-face length**
		<b>A106 Grade B Carbon Steel Flow Body (w/ A105 flanges if ordered)*****</b>
	20PC	2 inch flow body (schedule 40), male NPT ends, 12" face-to-face length
	25PC	2-1/2 inch flow body (schedule 40), male NPT ends, 18" face-to-face length
	30PC	3 inch flow body (schedule 40), male NPT ends, 18" face-to-face length
	20FC	2 inch flow body (schedule 40), 150# RF flange ends, 12" face-to-face length
	25FC	2-1/2 inch flow body (schedule 40), 150# RF flange ends, 18" face-to-face length
	30FC	3 inch flow body (schedule 40), 150# RF flange ends, 18" face-to-face length
	40FC	4 inch flow body (schedule 40), 150# RF flange ends, 18" face-to-face length**
	60FC	6 inch flow body (schedule 40), 150# RF flange ends, 24" face-to-face length**
<b>Feature 2: Sensor Material*</b>	SS	316 stainless steel sensor and fitting/ferrule
	SH	Hastelloy C-276 sensor w/ 316 stainless steel fitting/ferrule
<b>Feature 3: Sensor Type*</b>	ST	Standard temperature sensor, -40 to 250F (-40 to 121C)
	HT	High temp. sensor, -40 to 650F (-40 to 343C), E3 or E4 required, calibration and accuracy limitations apply
<b>Feature 4: Enclosure and Power*</b>	E1	Local explosion-proof enclosure, 24VDC powered
	E2	Local explosion-proof enclosure, 85-264VAC powered
	E3	Remote J-box, 24VDC powered, 100' max. cable length (sold separately), option board required***
	E4	Remote J-box, 85-264VAC powered, 100' max. cable length (sold separately), option board required***
<b>Feature 5: Display*</b>	D0	No display & configuration panel
	DD	Include rate/total display & configuration panel
	DL	Include rate/total display & configuration panel with datalogger option****
<b>Feature 6: Option Boards*</b>	B0	Blank option board (cannot be selected with E3 or E4 features)
	B1	Isolated 24VDC power + terminal block for remote sensor
	MB	RS485 Modbus RTU (includes isolated 24VDC power + terminal block for remote sensor)
	BH	HART (includes isolated 24VDC power + terminal block for remote sensor)
	Do not specify B0 when ordering a remote sensor.	
<b>Feature 7: Calibration*</b>	G1	Air, N2: MF less than 1200 SCFM (2040 NM3H)
	G2	Air, N2: MF above 1200 SCFM (2040 NM3H)
	G3	Ar, CH4, CO2, H2, O2, Natural Gas*****: MF less than 1000 SCFM (1700 NM3H)
	G4	Ar, CH4, CO2, H2, O2, Natural Gas*****: MF above 1000 SCFM (1700 NM3H)
	G5	C3H8, CO, He, NH3: MF less than 700 SCFM (1190 NM3H)
	G6	C3H8, CO, He, NH3: MF above 700 SCFM (1190 NM3H)
	G7	Biogas, Digester Gas, Flare Gas, Flash Gas, Vent Gas, and other mixed gases*****
		All other gases
	MF = Maximum Flow Rate	

**OPTIONS**

Part #	Description
104488	Extra FT3 Instruction Manual
100657	Stainless Steel Tags
999992	Certificate of Conformance
999995	Certificate of Origin
104870	USB Cable, A-male/mini USB-B male, 6' length

**OPTIONS**

Part#	Description
101570	5-conductor, 18 AWG PVC shielded cable for remote (E3 or E4), 100' max. length
104740	Remote Enclosure Mounting Kit (E3 or E4)
109040	Sun Shade accessory
890000	Flowmeter cleaned and bagged for Oxygen service
990056	Canadian Registration Number (CRN) engraved on flow body*****

<b>Notes:</b>	* The Parent Model Number and one of each Feature must be specified. Example: FT3-20P-SS-ST-E3-DD-B1-G1
	** If max. flow rate above 2,500 SCFM (4,250 NM3H), consult factory for application review
	*** Recommend 104740 Remote Mounting Kit option
	**** Datalogger information is only retrievable from the display and over RS485 Modbus. Selecting Modbus (MB) for "Feature 6: Options Boards" is recommended.
	***** 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), P/N 990056, is not available on carbon steel flow bodies