

FT2A Insertion Flow Meter/Temperature Transmitter
MODEL CODES

Effective November 1, 2013

MODEL FT2A

	Code	Description
Parent Model No.*	FT2A	Insertion Mass Flow meter & Temperature Transmitter
Feature 1: Probe*	06IE	Insertion meter with 6-inch probe (all 6" probes will have an equal length sensor)
"See Calculating Probe Lengths" Below	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/ 150 PSI retractor & full port valve - 3/4" male NPT, 316 SS wetted parts
	18R	18" Probe w/ 150 PSI retractor & full port valve - 3/4" male NPT, 316 SS wetted parts
	24R	24" Probe w/ 150 PSI retractor & full port valve - 3/4" male NPT, 316 SS wetted parts
30R	30" Probe w/ 150 PSI retractor & full port valve - 3/4" male NPT, 316 SS wetted parts	
36R	36" Probe w/ 150 PSI retractor & full port valve - 3/4" male NPT, 316 SS wetted parts	
Compression fitting included at no charge	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
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.	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
Feature 2: Sensor Material*	ST	Standard Sensor -40 to 250F (-40 to 121C)
	HT	High Temperature Sensor 32 to 650F (0 to 343C) E3 or E4 required - AIR ONLY
Feature 3: Sensor Type*	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 4: Enclosure and Power*	B0	No communication bus
	MB	Modbus (RS 485)
	BN	BACnet MS/TP (RS 485)
	BD	DeviceNet
	BP	Profibus-DP
	BE	Ethernet Modbus TCP
Feature 5: Bus Options*	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
Feature 6: Calibration*		
MF = Maximum Flow Rate		
Optional	NRT	Non Resettable Totalizer

OPTIONS

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Part #	Description
101364	Extra instruction manual
104870	USB Cable, A-male/mini USB-B male, 3 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
890000	Flow meter cleaned and bagged for Oxygen service
104639	Remote Mounting Kit
102878	Teflon Ferrule Kit

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 104639 Remote Mounting Kit option

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).

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Parent Model No.*	FT2A	Inline Mass Flow Meter & Temperature Transmitter
Feature 1 : Flow body*		316 Stainless steel flow body
	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) 18" 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 **
		A106 Grade B carbon steel flow body (+ A105 flanges - if ordered)
	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 32 to 650F (0 to 343C) E3 or E4, required - AIR ONLY
Feature 4: Enclosure and Power*	E1	Local NEMA 4X enclosure, 24VDC powered
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	E3	Remote J-box, 24VDC powered, 100' max, cable sold separately
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Feature 5: Bus Options*	B0	No communication bus
	MB	Modbus (RS 485)
	BN	BACnet MS/TP (RS 485)
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Feature 6: Calibration*	G1	Air, N2: MF less than 1200 SCFM (2040 NM3H)
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	G5	CO, He, Ammonia, Propane: MF less than 700 SCFM (1190 NM3H)
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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
890000	Flow meter cleaned and bagged for Oxygen service
104639	Remote Mounting Kit
999987	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 104639 Remote Mounting Kit option