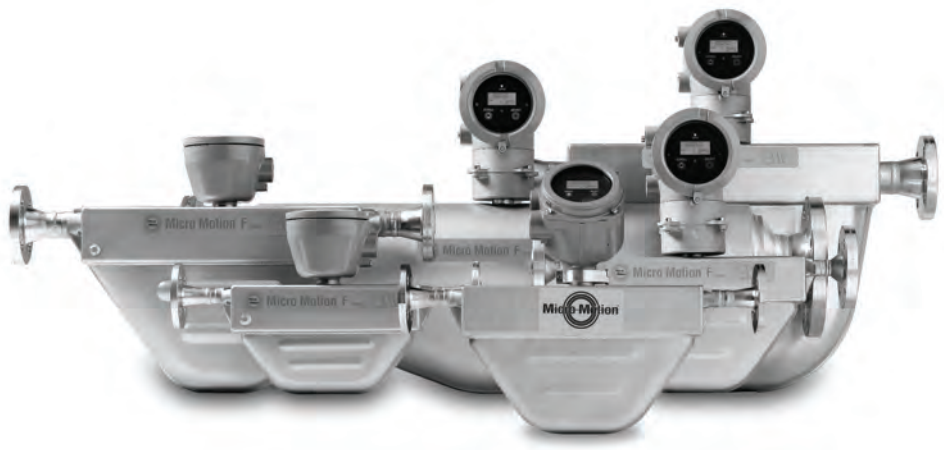
Product Data Sheet
PS-00603, Rev. G
September 2009

Micro Motion® F-Series Coriolis Flow and Density Meters

Micro Motion® F-Series Coriolis meters offer highly accurate mass flow, volume flow, and density measurement in a compact design. F-Series meters come with a smooth exterior finish that can easily be kept clean, and all F-Series meters can be installed to be self-draining.



Best flow and density measurement in a compact, drainable flow meter

- Superior sensitivity in a compact design to reduce variability in process control
- Cleanable self-draining design enables fast product change-over

Broadest range of application coverage

- New 2-wire loop-powered option for installation simplification
- Low operating frequency for better measurement in continuous two-phase flow and gas applications
- Stainless steel or nickel alloy construction and high temperature and pressure options for a variety of process fluids and conditions

Superior reliability and safety

- IEC 61508 certified for SIL 2 and SIL 3 to simplify safety systems compliance
- No moving parts to wear or replace minimizes maintenance for long-term reliability

ELITE®	Peak performance Coriolis meter
ELITE HC	Peak performance high capacity meter
F-Series	**High performance compact drainable Coriolis meter**
H-Series	Hygienic compact drainable Coriolis meter
T-Series	Straight tube full-bore Coriolis meter
R-Series	General purpose flow-only Coriolis meter
LF-Series	Extreme low-flow Coriolis meter

Micro Motion®

EMERSON™
Process Management

Micro Motion F-Series flow and density meters

Micro Motion Coriolis meters meet a vast range of application needs, ranging from extreme low-flow up to high-flow, high-capacity lines. Cryogenic, hygienic, high-temperature, and high-pressure—Micro Motion meters can handle them all. Micro Motion meters are available with a variety of wetted parts to ensure the best material compatibility. Now with the industry's only 2-wire Coriolis option, Micro Motion provides unsurpassed simplicity of installation and application flexibility.

Coriolis meters. Coriolis meters offer dramatic benefits over traditional volumetric measurement technologies. Coriolis meters:

- Deliver accurate and repeatable process data over a wide range of flow rates and process conditions.
- Provide direct inline measurement of mass flow and density, and also measure volume flow and temperature—all from a single device.
- Have no moving parts, so maintenance costs are minimal.
- Have no requirements for flow conditioning or straight pipe runs, so installation is simplified and less expensive.
- Provide advanced diagnostic tools for both the meter and the process.

F-Series Coriolis meters. Micro Motion F-Series Coriolis meters have a compact design that fits into tight spaces while offering highly accurate flow and density measurement for virtually any process fluid. With F-Series meters, expensive recalibrations become a thing of the past—a single F-Series calibration is valid for liquids, gases, and slurries.

The accumulated knowledge of Micro Motion is built into every F-Series meter. F-Series meters are available with either stainless steel or nickel-alloy wetted parts, allowing you to choose the material that is most compatible with your process fluid. And certain F-Series models are available for high-temperature and high-pressure applications.

Contents

Liquid flow performance

		Mass		Volume[1]	
		lb/min	kg/h	gal/min	l/h
Maximum flow rate	F025	100	2720	12	2720
	F050	300	8160	36	8160
	F100	1200	32,650	144	32,650
	F200	3200	87,100	384	87,100
	F300	10,000	272,000	1200	272,000
Mass flow accuracy[2]	All transmitters except Model 2200S	±0.10% of rate[3][4]			
	Model 2200S	±0.20% of rate			
Volume flow accuracy[2]	All transmitters	±0.15% of rate[5][6]			
Repeatability	All transmitters	±0.05% of rate[3]			
		lb/min	kg/h	gal/min	l/h
Zero stability	F025	0.0065	0.1765	0.0008	0.1765
	F050	0.020	0.544	0.002	0.544
	F100	0.080	2.177	0.010	2.177
	F200	0.256	6.965	0.031	6.965
	F300	0.80	21.76	0.096	21.76

(1) Volumetric measurement is based on a process-fluid density of 1 g/cm^3. For fluids with density other than 1 g/cm^3, the volume flow rate equals the mass flow rate divided by the fluid's density.

(2) Stated flow accuracy includes the combined effects of repeatability, linearity, and hysteresis.

(3) When flow rate < (zero stability / 0.001), then mass flow accuracy = ±[(zero stability / flow rate) × 100]% of rate and repeatability = ±[½(zero stability / flow rate) × 100]% of rate.

(4) When ordered with the 0.15% calibration option, mass flow accuracy on liquid = ±0.15% when flow rate ≥ (zero stability / 0.0015). When flow rate < (zero stability / 0.0015), then accuracy = ±[(zero stability / flow rate) × 100]% of rate. When ordered with the 0.20% calibration option, mass flow accuracy on liquid = ±0.20% when flow rate ≥ (zero stability / 0.0020). When flow rate < (zero stability / 0.0020), then mass flow accuracy on liquid = ±[(zero stability / flow rate) × 100]% of rate.

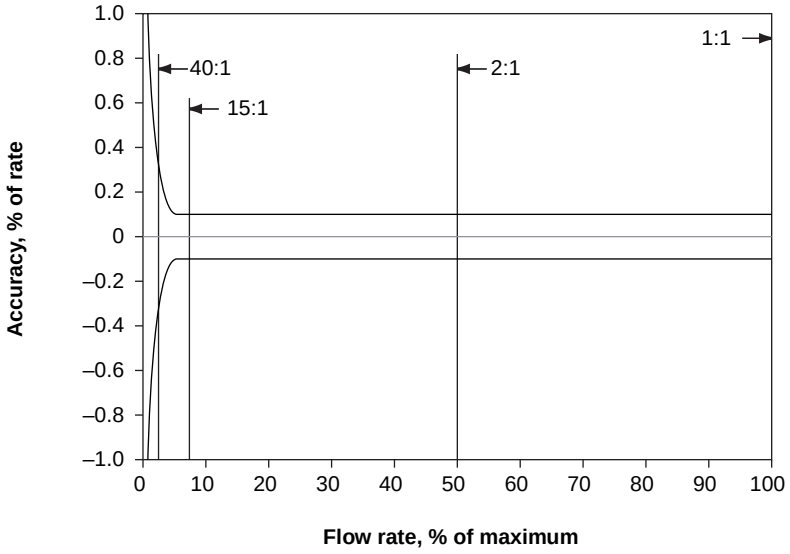
(5) When flow rate < (zero stability / 0.001), then volume flow accuracy on liquid = ±[1.5 × (zero stability / flow rate) × 100]% of rate and repeatability = ±[½(zero stability / flow rate) × 100]% of rate.

(6) When ordered with the ±0.15% calibration option, volume flow accuracy on liquid = ±0.25% when flow rate ≥ (zero stability / 0.0017). When flow rate < (zero stability / 0.0017), then volume accuracy on liquid = ±[1.5 × (zero stability / flow rate) × 100]% of rate. When ordered with the ±0.20% calibration option, volume flow accuracy on liquid = ±0.30% when flow rate ≥ (zero stability / 0.002). When flow rate < (zero stability / 0.002), then volume accuracy on liquid = ±[1.5 × (zero stability / flow rate) × 100]% of rate.

Liquid flow performance *continued*

Typical accuracy, turndown, and pressure drop with transmitter with MVD technology

Pressure drop is dependent on process conditions. To determine accuracy, turndown, and pressure drop with your process variables, use Micro Motion's product selector, available at www.micromotion.com.



Turndown from maximum flow rate	*40:1*	*15:1*	*2:1*
Accuracy (± %)	0.26	0.10	0.10
Pressure drop			
psi	0.1	0.45	14.2
bar	0.01	0.03	0.98

Density performance (liquid only)

Accuracy(1)	±0.001 g/cm^3	±1.0 kg/m^3
Repeatability	±0.0005 g/cm^3	±0.5 kg/m^3
Range	Up to 5 g/cm^3	Up to 5000 kg/m^3

(1) Stated accuracy and repeatability with calibration option 1 (see page 34). With other calibration options, accuracy is ±0.002 g/cm^3 (2.0 kg/m^3) and repeatability is ±0.001 g/cm^3 (±1.0 kg/m^3).

Gas flow performance

When selecting sensors for gas applications, measurement accuracy is a function of fluid mass flow rate independent of operating temperature, pressure, or composition. However, pressure drop through the sensor is dependent upon operating temperature, pressure, and fluid composition. Therefore, when selecting a sensor for any particular gas application, it is highly recommended that each sensor be sized using Micro Motion's product selector, available at www.micromotion.com.

		Mass		**Volume**(1)	
		lb/min	kg/h	SCFM	Nm^3/h
Typical flow rates that produce approximately 10 psid (0.68 bar) pressure drop on *air* at 68 °F (20 °C) and 100 psi (6.8 bar)					
	F025	4	116	57	90
	F050	13	357	174	276
	F100	50	1366	667	1055
	F200	140	3810	1860	2940
	F300	488	14,865	7270	11,512
Typical flow rates that produce approximately 50 psid (3.4 bar) pressure drop on *natural gas* (MW 16.675) at 68 °F (20 °C) and 500 psi (34 bar)					
	F025	16	445	378	598
	F050	49	1358	1154	1825
	F100	189	5162	4387	6936
	F200	523	14,490	12,310	19,470
	F300	1856	50,989	43,331	72,247
Accuracy(2)	All transmitters	±0.50% of rate(3)			
Repeatability	All transmitters	±0.25% of rate(3)			
		lb/min	kg/h		
Zero stability	F025	0.0065	0.1765		
	F050	0.020	0.544		
	F100	0.080	2.177		
	F200	0.256	6.965		
	F300	0.80	21.76		

(1) Standard (SCFM) reference conditions are 14.7 psia and 68 °F. Normal (Nm^3/h) reference conditions are 1.013 bar-a and 0 °C.

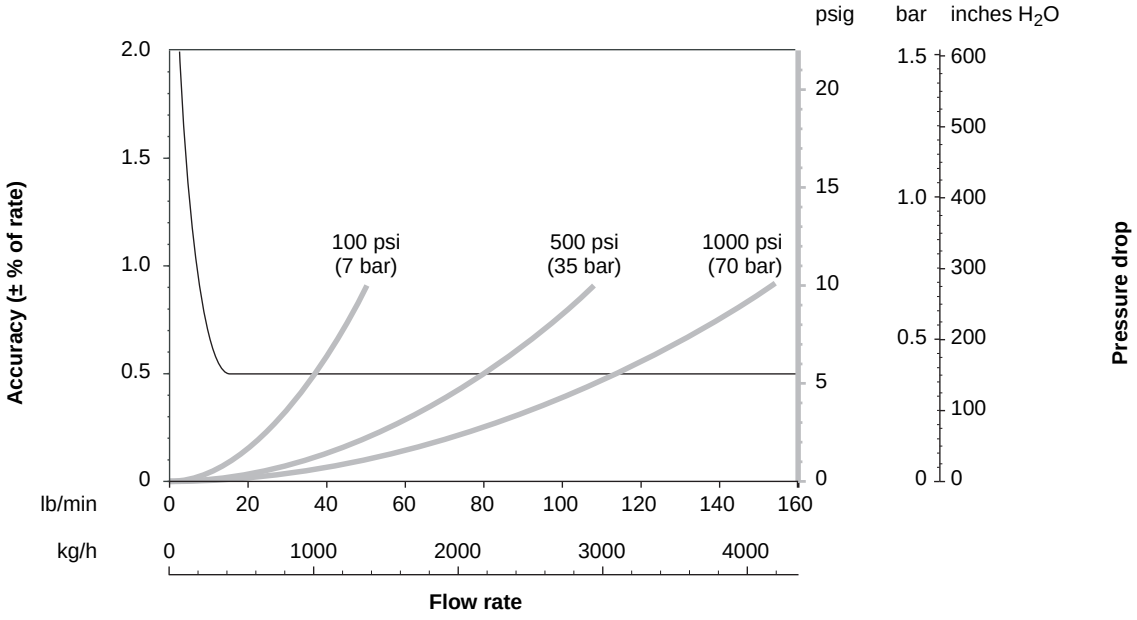
(2) Stated flow accuracy includes the combined effects of repeatability, linearity, and hysteresis.

(3) When flow rate < (zero stability / 0.005), then accuracy = ±[(zero stability / flow rate) × 100]% of rate and repeatability = ±[½(zero stability / flow rate) × 100]% of rate.

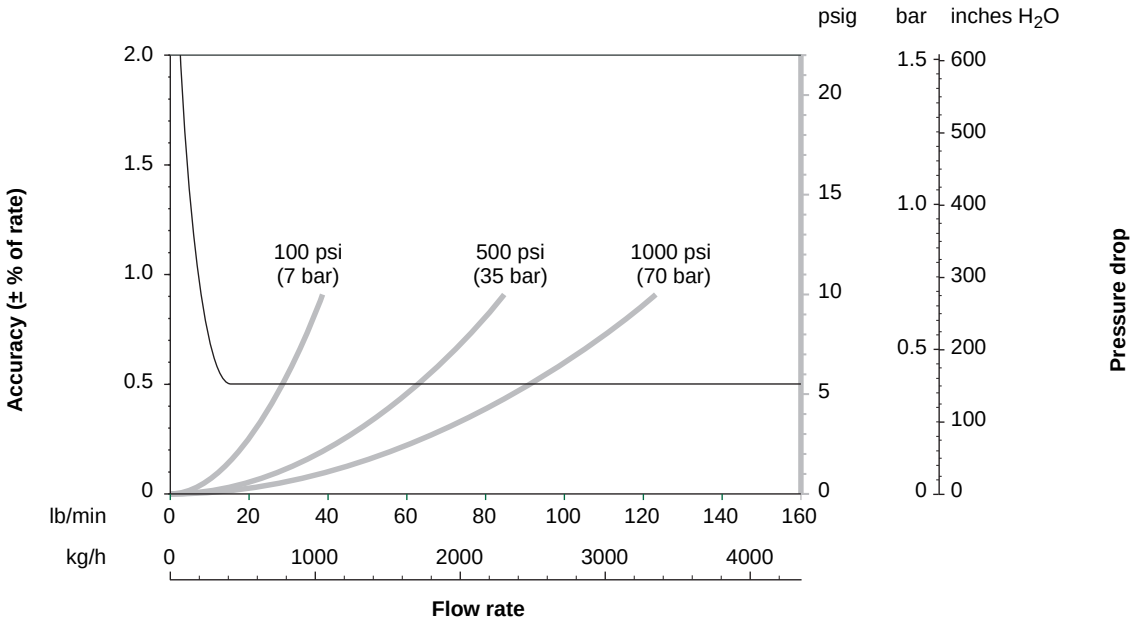
Gas flow performance *continued*

Typical accuracy and pressure drop with F100 with MVD technology

Air at 68 °F (20 °C), static pressures as indicated on graph



Natural gas (MW 16.675) at 68 °F (20 °C), static pressures as indicated on graph

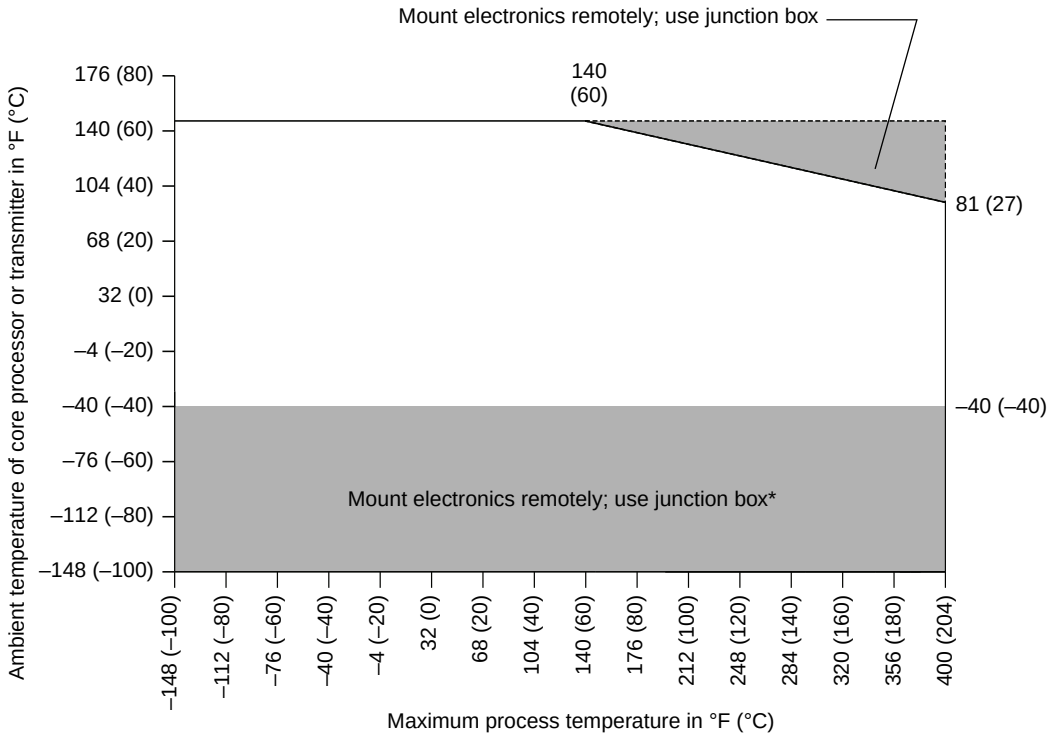


Standard or normal volumetric capability

Standard and normal volumes are “quasi mass” flow units for any fixed composition fluid. Standard and normal volumes do not vary with operating pressure, temperature, or density. With knowledge of density at standard or normal conditions (available from reference sources), a Micro Motion meter can be configured to output in standard or normal volume units without the need for pressure, temperature, or density compensation. Contact your local sales representative for more information.

Temperature specifications

Accuracy	All models	±1 °C ±0.5% of reading in °C
Repeatability	All models	±0.2 °C
Temperature limits[1][2][3]	All models *except* high-temperature models	



* *When ambient temperature is below –40 °F (–40 °C), a core processor must be heated to bring its local ambient temperature to between –40 °F (–40 °C) and +140 °F (+60 °C). Long-term storage of electronics at ambient temperatures below –40 °F (–40 °C) is not recommended.*

	High-temperature models	Ambient temperature: –40 to +140 °F (–40 to +60 °C) Process temperature: –50 to +662 °F (–40 to +350 °C)

(1) Temperature limits may be further restricted by hazardous area approvals. See pages 10–16.

(2) For F300 sensors, the difference between the process fluid temperature and the average temperature of the case must be less than 120 °F (66 °C).

(3) The extended mount option allows the sensor case to be insulated without covering the transmitter, core processor, or junction box, but does not affect temperature ratings.

Pressure ratings

		Material	psi	bar
Flow tube rating[1]	F025P	Stainless steel	2300	158
	F050P	Stainless steel	5000	345
	F300H	Alloy C-22	2220	153
	All other models	Stainless steel	1450	100
		Alloy C-22	2160	148

PED compliance Sensors comply with council directive 97/23/EC of 29 May 1997 on Pressure Equipment

		ASME B31.3 secondary containment rating[1]		**Burst pressure used to determine ASME B31.3 secondary containment rating**	
		psi	bar	psi	bar
Housing rating[2]	F025	166	11.4	1884	130
	F050	135	9.3	1530	105
	F100	109	7.5	1281	88.3
	F200	64	4.4	760	52.4
	F300	256	17.7	2630	180

(1) Pressure rating at 77 °F (25 °C), according to ASME B31.3. For operating temperatures above 300 °F (148 °C), pressure needs to be derated as follows. Linear interpolation may be used between specified temperatures.

	Flow tubes		***Housing***
	316L sensors	*Alloy C-22 sensors*	*All sensors*
up to 300 °F (up to 148 °C)	*None*	*None*	*None*
at 400 °F (at 204 °C)	*7.2% derating*	*None*	*5.4% derating*
at 500 °F (at 260 °C)	*13.8% derating*	*4.7% derating*	*11.4% derating*
at 600 °F (at 316 °C)	*19.2% derating*	*9.7% derating*	*16.2% derating*
at 650 °F (at 343 °C)	*21.0% derating*	*11.7% derating*	*18.0% derating*
at 700 °F (at 371 °C)	*22.8% derating*	*13.7% derating*	*19.2% derating*

(2) Sensor housing is rated only when the secondary containment case option is purchased. The secondary containment case option is not available on high-temperature sensors.

Environmental effects

Process temperature effect

Process temperature effect is defined as:

- For mass flow measurement, the worst-case zero offset due to process fluid temperature change away from the zeroing temperature.
- For density measurement, the maximum measurement offset due to process fluid temperature change away from the density calibration temperature.

	Process temperature effect		
	% of maximum flow rate per °C	density accuracy per °C[1]	
		g/cm^3	kg/m^3
F025	±0.00175	±0.0001	±0.1
F050	±0.00175	±0.0001	±0.1
F100	±0.00175	±0.0001	±0.1
F200	±0.00175	±0.0001	±0.1
F300	±0.0040	±0.0001	±0.1

Pressure effect

Pressure effect is defined as the change in sensor flow and density sensitivity due to process pressure change away from the calibration pressure[2]. Pressure effect can be corrected.

	Pressure effect on mass flow accuracy	
	% of rate per psi	% of rate per bar
F025	None	None
F050	None	None
F100	None	None
F200	–0.001	–0.015
F300	–0.001	–0.015

	Pressure effect on density accuracy	
	g/cm^3 per psi	kg/m^3 per bar
F025	None	None
F050	None	None
F100	None	None
F200	–0.00003	–0.43
F300	–0.00003	–0.43

(1) For –100 °C and above.

(2) To determine factory calibration pressure, refer to the calibration document shipped with your sensor. If the data is unavailable, use 20 psi (1.4 bar).

Vibration limits

Meets IEC 68.2.6, endurance sweep, 5 to 2000 Hz, 50 sweep cycles at 1.0 g

Hazardous area classifications

CSA and CSA C-US

Models F025, F050, F100, and F200 with junction box	Ambient temperature: +140 °F max. (+60 °C max.) Class I, Div. 1, Groups C and D Class I, Div. 2, Groups A, B, C, and D Class II, Div. 1, Groups E, F, and G
Models F025, F050, F100, and F200 with core processor, Model 2200S, or Model 1700/2700 transmitter	Ambient temperature: –40 to +140 °F (–40 to +60 °C) Class I, Div. 1, Groups C and D Class I, Div. 2, Groups A, B, C, and D Class II, Div. 1, Groups E, F, and G
Models F300S and F300H with junction box	Ambient temperature: +140 °F max. (+60 °C max.) Class I, Div. 1, Groups C and D Class I, Div. 2, Groups A, B, C, and D Class II, Div. 1, Groups E, F, and G
Models F300S and F300H with core processor, Model 2200S, or Model 1700/2700 transmitter	Ambient temperature: –40 to +140 °F (–40 to +60 °C) Class I, Div. 1, Groups C and D Class I, Div. 2, Groups A, B, C, and D Class II, Div. 1, Groups E, F, and G
All high-temperature models with junction box, core processor, or Model 1700/2700 transmitter	Ambient temperature: –40 to +140 °F (–40 to +60 °C) Class I, Div. 1, Groups C and D Class I, Div. 2, Groups A, B, C, and D Class II, Div. 1, Groups E, F, and G

Hazardous area classifications *continued*

IECEx[(1)]

Models F025, F050, F100, F200 with core processor or Model 1700/2700 transmitter	Ex ib IIC T1–T5
Models F025, F050, F100 and F200 with junction box	Ex ib IIC T1–T6
Model F300S and F300H with core processor or Model 1700/2700 transmitter	Ex ib IIB T1–T5
Models F300S and F300H with junction box	Ex ib IIB T1–T6
Models F025, F050, F100, F200 with Model 2200S transmitter	Ex ib IIC T1–T4
Model F300S and F300H with Model 2200S transmitter	Ex ib IIB T1–T4

NEPSI[(1)]

Models F025, F050, F100, F200 with core processor or Model 1700/2700 transmitter	Ex ib IIC T1–T5
Models F025, F050, F100 and F200 with junction box	Ex ib IIC T1–T6
Model F300S and F300H with core processor or Model 1700/2700 transmitter	Ex ib IIB T1–T5
Models F300S and F300H with junction box	Ex ib IIB T1–T6

UL

Models F025, F050, F100, and F200 with junction box	Ambient temperature: –4 to +104 °F (–20 to +40 °C) Class I, Div. 1, Groups C and D Class I, Div. 2, Groups A, B, C, and D Class II, Div. 1, Groups E, F, and G

(1) Refer to the ATEX temperature graphs on the following pages for ambient and process temperature limits.

Hazardous area classifications *continued*

ATEX[(1)] **(Certified per BVS 03 ATEX E 176 X)**

All models with integral core processor or Model 1700/2700 transmitter

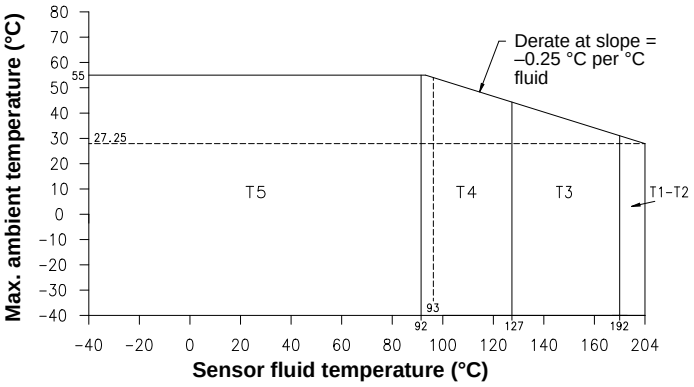
Transmitter with display:

CE 0575 ⟨Ex⟩ II 2 (1) G EEx ib IIB+H_2 T1–T5
II 2 D IP65 T °C

Core processor or transmitter without display:

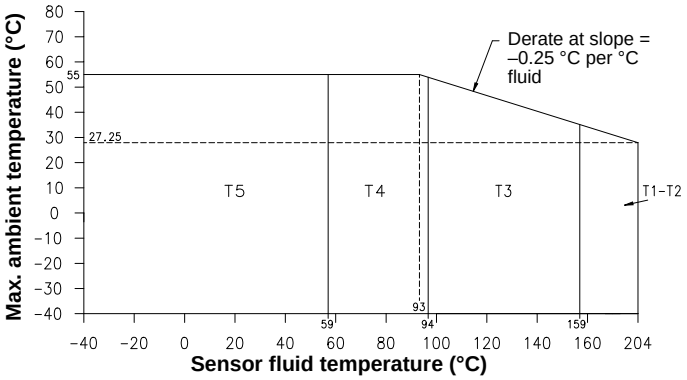
CE 0575 ⟨Ex⟩ II 2 G EEx ib IIC T1–T5
II 2 D IP65 T °C

F025 and F050 with C.I.C. A2



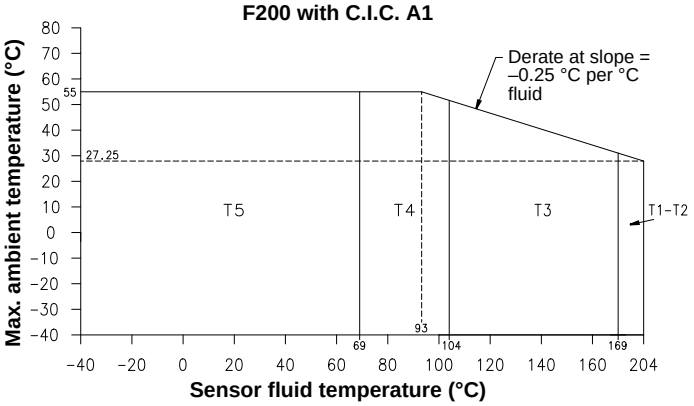
The maximum surface temperature for dust is as follows: T5:T 95°C, T4:T 130°C, T3:T 195°C, T2 to T1:T 207°C.

F100 with C.I.C. A2



The maximum surface temperature for dust is as follows: T5:T 95°C, T4:T 130°C, T3:T 195°C, T2 to T1:T 240°C.

F200 with C.I.C. A1



The maximum surface temperature for dust is as follows: T5:T 95°C, T4:T 130°C, T3:T 195°C, T2 to T1:T 230°C.

(1) ATEX "T" rating depends on the maximum temperature shown in the graphs above.

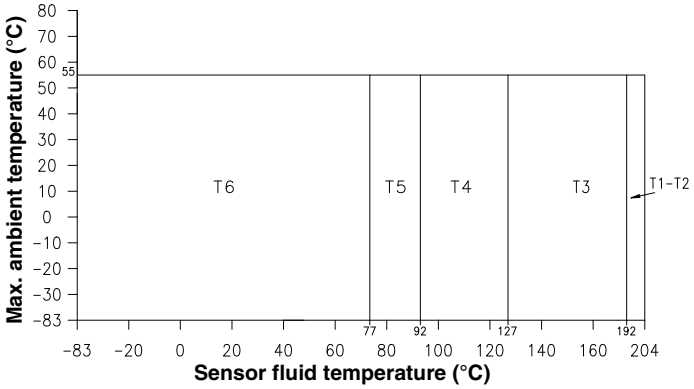
Hazardous area classifications *continued*

ATEX[1] **(Certified per BVS 03 ATEX E 176 X)**

Models F025, F050, F100, and F200 with junction box when connected to MVD transmitter

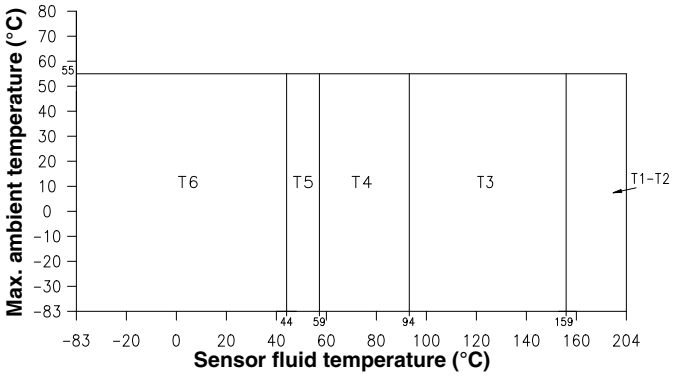
CE 0575 ⟨Ex⟩ II 2 G EEx ib IIC T1–T6
II 2 D IP65 T °C

F025 and F050 with C.I.C. A2



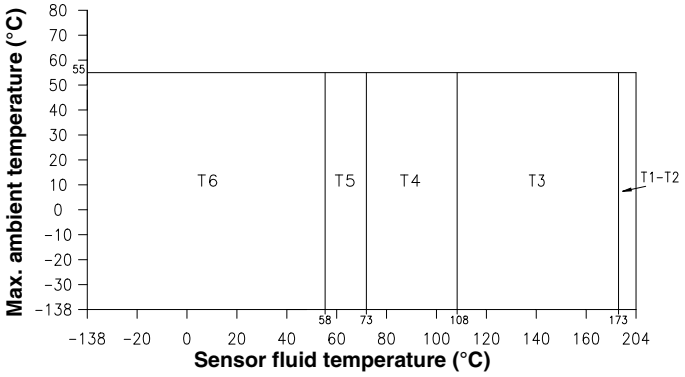
The maximum surface temperature for dust is as follows: T6:T 80°C, T5:T 95°C, T4:T 130°C, T3:T 195°C, T2 to T1:T 207°C
The minimum ambient and process fluid temperature allowed for dust is –40°C.

F100 with C.I.C. A2



The maximum surface temperature for dust is as follows: T6:T 80°C, T5:T 95°C, T4:T 130°C, T3:T 195°C, T2 to T1:T 240°C
The minimum ambient and process fluid temperature allowed for dust is –40°C.

F200 with C.I.C. A1



The maximum surface temperature for dust is as follows: T6:T 80°C, T5:T 95°C, T4:T 130°C, T3:T 195°C, T2 to T1:T 226°C
The minimum ambient and process fluid temperature allowed for dust is –40°C.

(1) ATEX "T" rating depends on the maximum temperature shown in the graphs above.

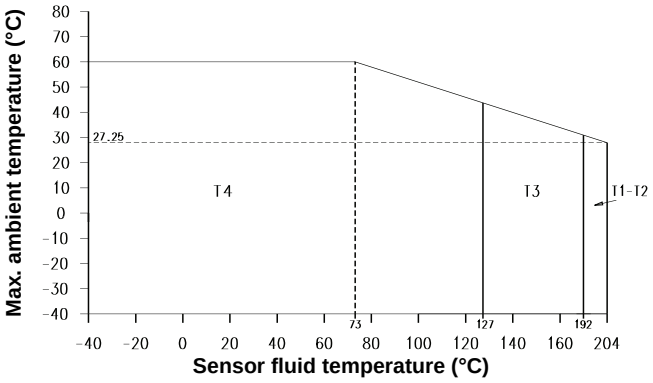
Hazardous area classifications *continued*

ATEX[(1)] **(Certified per BVS 03 ATEX E 176 X)**

Models F025, F050, F100, F200, and F300 with Model 2200S transmitter

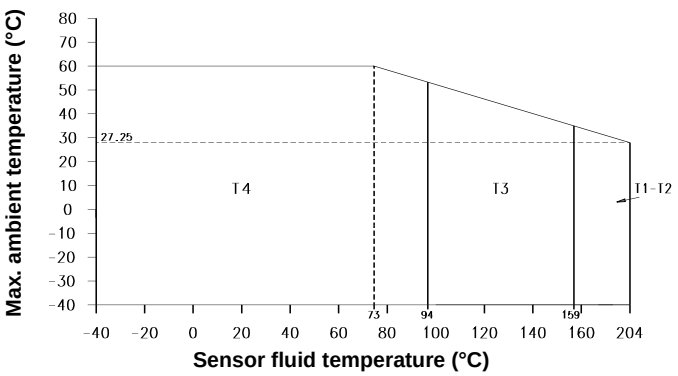
CE 0575 ⟨Ex⟩ II 2 G EEx ib IIC T1–T4
II 2 D IP65 T °C

F025 and F050



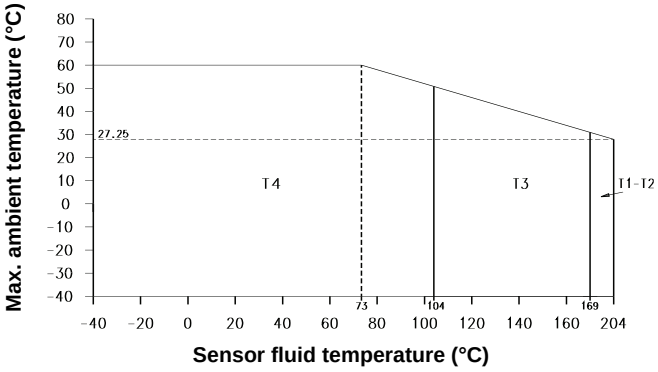
The maximum surface temperature for dust is as follows: T4:T 130°C, T3:T 195°C, T2 to T1:T 207°C

F100



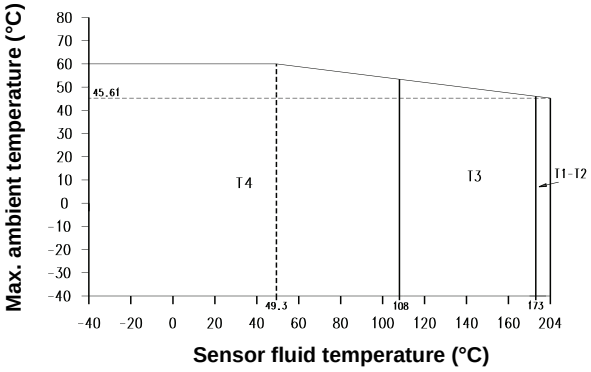
The maximum surface temperature for dust is as follows: T4:T 130°C, T3:T 195°C, T2 to T1:T 240°C

F200



The maximum surface temperature for dust is as follows: T4:T 130°C, T3:T 195°C, T2 to T1:T 230°C

F300



The maximum surface temperature for dust is as follows: T4:T 130°C, T3:T 195°C, T2 to T1:T 226°C

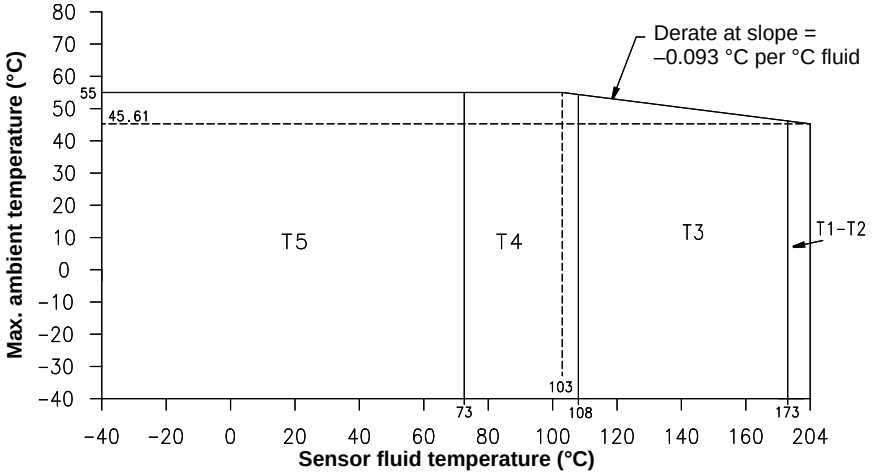
(1) ATEX "T" rating depends on the maximum temperature shown in the graphs above.

Hazardous area classifications *continued*

ATEX[1] **(Certified per BVS 03 ATEX E 176 X)**

Model F300 with integral core processor or Model 1700/2700 transmitter

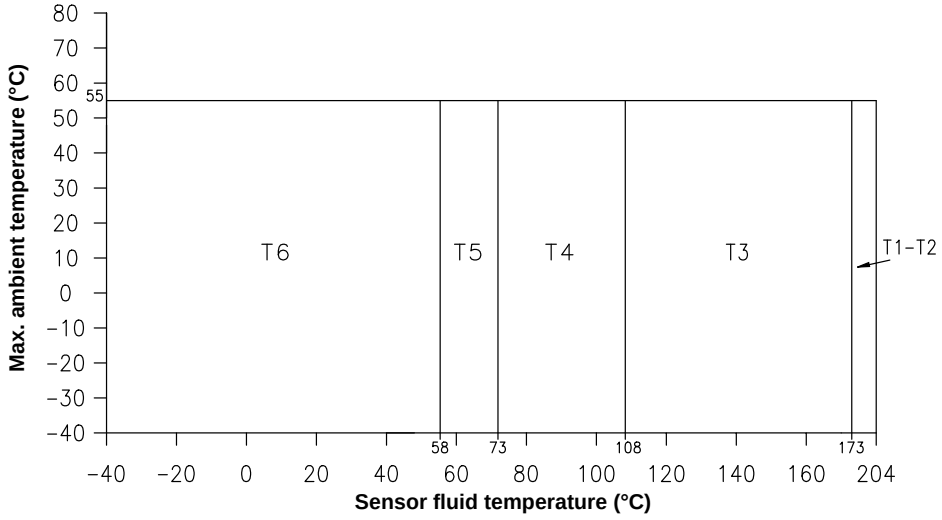
CE 0575 ⟨Ex⟩ II 2 G EEx ib IIB T1–T5
II 2 D IP65 T °C



The maximum surface temperature for dust is as follows: T5:T 95°C, T4:T 130°C, T3:T 195°C, T2 to T1:T 226°C.

Model F300 with junction box connected to MVD transmitter

CE 0575 ⟨Ex⟩ II 2 G EEx ib IIB T1–T6
II 2 D IP65 T °C



The maximum surface temperature for dust is as follows: T6:T 80°C, T5:T 95°C, T4:T 130°C, T3:T 195°C, T2–T1:T 226°C.

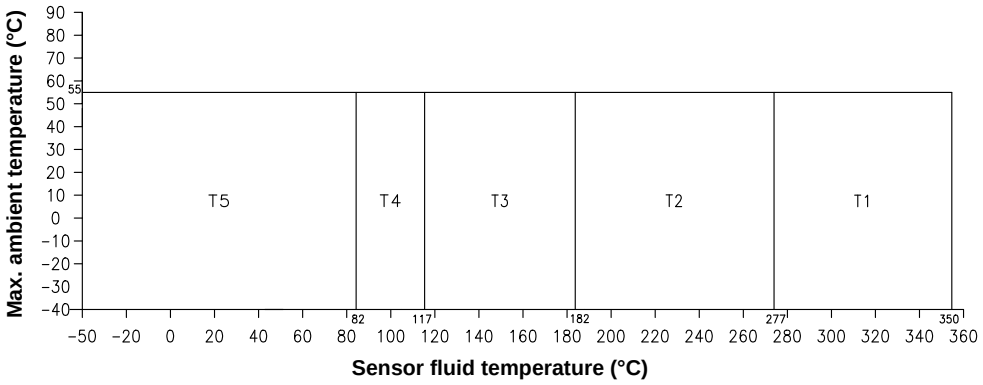
(1) ATEX "T" rating depends on the maximum temperature shown in the graphs above.

Hazardous area classifications *continued*

ATEX[(1)] **(Certified per BVS 03 ATEX E 176 X)**

Models F025(A or B), F050(A or B), and F100(A or B) with C.I.C. no marking or A3 with core processor or Model 1700/2700 transmitter

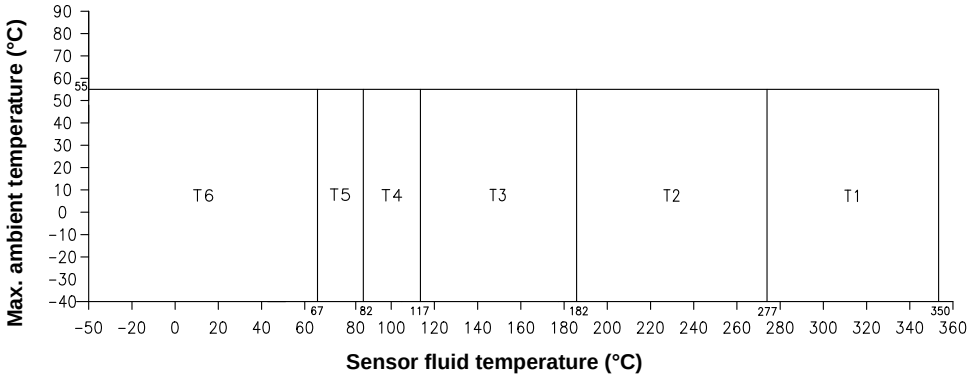
CE 0575 ⟨Ex⟩ II 2 G EEx ib IIC T1–T5
II 2 D IP65 T °C



The maximum surface temperature for dust is as follows: T5:T 95°C, T4:T 130°C, T3:T 195°C, T2: T 290°C, T1:T 363°C. The minimum ambient and process fluid temperature allowed for dust is –40°C.

Models F025(A or B), F050(A or B), and F100(A or B) with C.I.C. no marking or A3 with junction box connected to MVD transmitter

CE 0575 ⟨Ex⟩ II 2 G EEx ib IIC T1–T6
II 2 D IP65 T °C



The maximum surface temperature for dust is as follows: T6:T 80°C, T5:T 95°C, T4:T 130°C, T3:T 195°C, T2:T 290°C, T1:T 363°C. The minimum ambient and process fluid temperature allowed for dust is –40°C.

(1) ATEX "T" rating depends on the maximum temperature shown in the graphs above.

Materials of construction

Wetted parts[1]	All models	316L stainless steel or alloy C-22[2]
Housing	Sensor	304L stainless steel
	Core processor	CF-3M stainless steel or polyurethane-painted aluminum; NEMA 4X (IP 66)
	Model 2200S transmitter	316L stainless steel or polyurethane-painted aluminum; NEMA 4X (IP66/67)
	Junction box	Stainless steel or polyurethane-painted aluminum; NEMA 4X (IP 66)

(1) General corrosion guidelines do not account for cyclical stress, and therefore should not be relied upon when choosing a wetted material for your Micro Motion meter. Please refer to the Micro Motion Corrosion Guide for material compatibility information.

(2) The outer flange ring on lap joint type flanges is non-wetted and is 304L stainless steel. Consult factory for other materials.

Weight

Weights provided are the weight of the meter with ANSI CL150 weld neck raised face flanges. All weights are in lb (kg).

	Core processor or 2200S transmitter[1]	Extended core processor or 2200S transmitter[1]	1700/2700 transmitter	Junction box	Extended junction box
F025S and F025P	11 (5)	12 (6)	17 (8)	10 (5)	11 (5)
F025H	13 (6)	14 (6)	18 (8)	13 (6)	14 (6)
F025A[2]	17 (8)	—	22 (10)	17 (8)	—
F025B[2]	18 (9)	—	23 (11)	18 (9)	—
F050S and F050P	12 (6)	13 (6)	18 (9)	11 (5)	12 (6)
F050H	14 (6)	15 (7)	19 (9)	14 (6)	15 (7)
F050A[2]	18 (8)	—	23 (11)	18 (8)	—
F050B[2]	19 (9)	—	24 (11)	19 (9)	—
F100S	22 (10)	23 (11)	27 (13)	21 (10)	22 (10)
F100H	22 (10)	23 (11)	27 (12)	22 (10)	23 (11)
F100A or F100B[2]	27 (12)	—	32 (15)	27 (12)	—
F200S	43 (20)	44 (20)	49 (23)	42 (20)	43 (20)
F200H	57 (25)	58 (26)	61 (27)	57 (25)	58 (26)
F300S	157 (71)	158 (72)	162 (74)	156 (71)	157 (71)
F300H	161 (73)	162 (73)	168 (76)	160 (73)	161 (73)

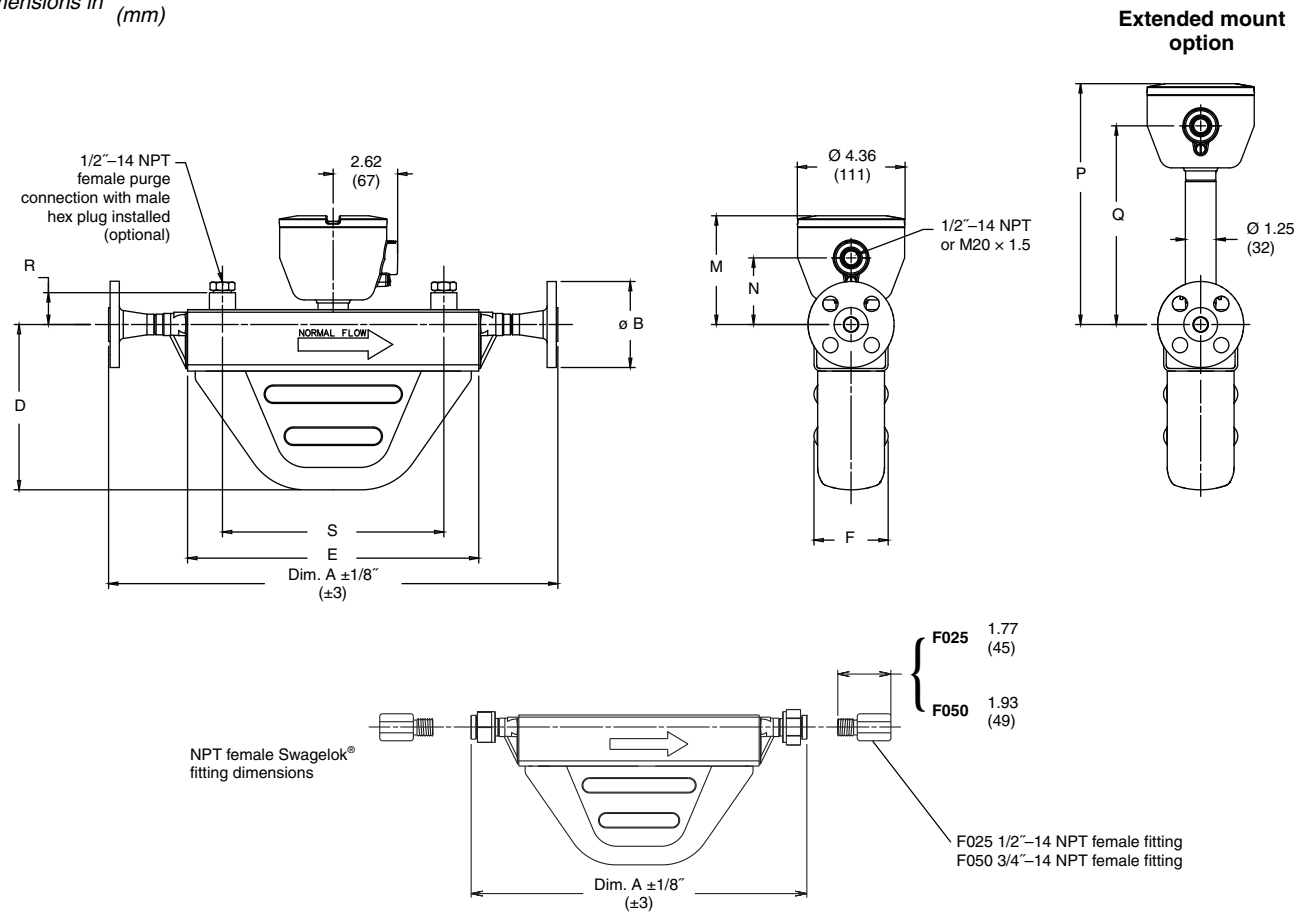
(1) Weight stated for sensor with aluminum transmitter or core processor. Add 4 lb (2 kg) for stainless steel core housing option (electronics interface codes A and B).

(2) For high-temperature models, the integral electronics are mounted at the end of a flexible conduit. The weights listed include the weight of the conduit.

Dimensions

Sensor with core processor

Dimensions in inches (mm)



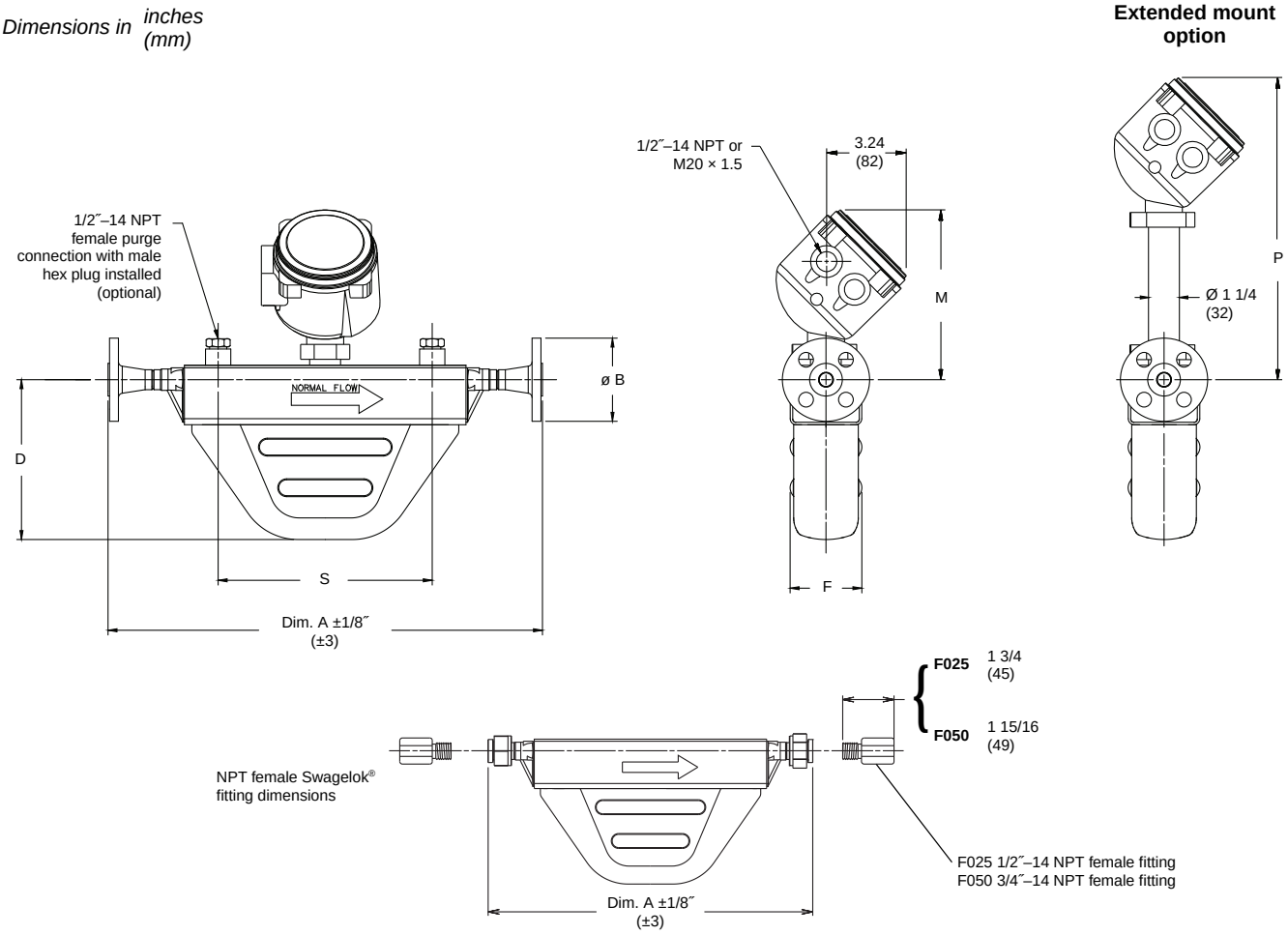
Model		Dimensions[1]								
		D	**E**	**F**	**M**	**N**	**P**	**Q**	**R**	**S**
F025	inches	5.12	9.75	2.81	4.45	2.69	9.83	8.06	1.26	7.5
	mm	130	248	71	113	68	250	205	32	190
F050	inches	6.75	11.88	2.94	4.45	2.69	9.83	8.06	1.26	9
	mm	171	302	75	113	68	250	205	32	229
F100	inches	9.12	14.88	4.13	4.7	2.94	10.08	8.31	1.51	12
	mm	232	378	105	119	75	256	211	38	305
F200	inches	12.56	17.88	5.62	5.64	3.87	11.01	9.25	2.38	14
	mm	319	454	143	143	98	280	235	61	356
F300	inches	7.25	27.72	5.88	7.39	5.62	12.76	11	4.07	21
	mm	184	704	149	188	143	324	279	103	533

(1) For dimensions A and B, see process fitting tables on pages 25–30.

Dimensions *continued*

Sensor with Model 2200S transmitter

Dimensions in inches (mm)



Model		Dimensions[1] D	F	M[2]	P[2]	S
F025	inches	5.12	2.81	6.91	12.28	7.5
	mm	130	71	176	312	190
F050	inches	6.75	2.94	6.91	12.28	9
	mm	171	75	176	312	229
F100	inches	9.12	4.13	7.16	12.53	12
	mm	232	105	182	318	305
F200	inches	12.56	5.62	8.10	13.46	14
	mm	319	143	206	342	356
F300	inches	7.25	5.88	9.85	15.17	21
	mm	184	149	250	385	533

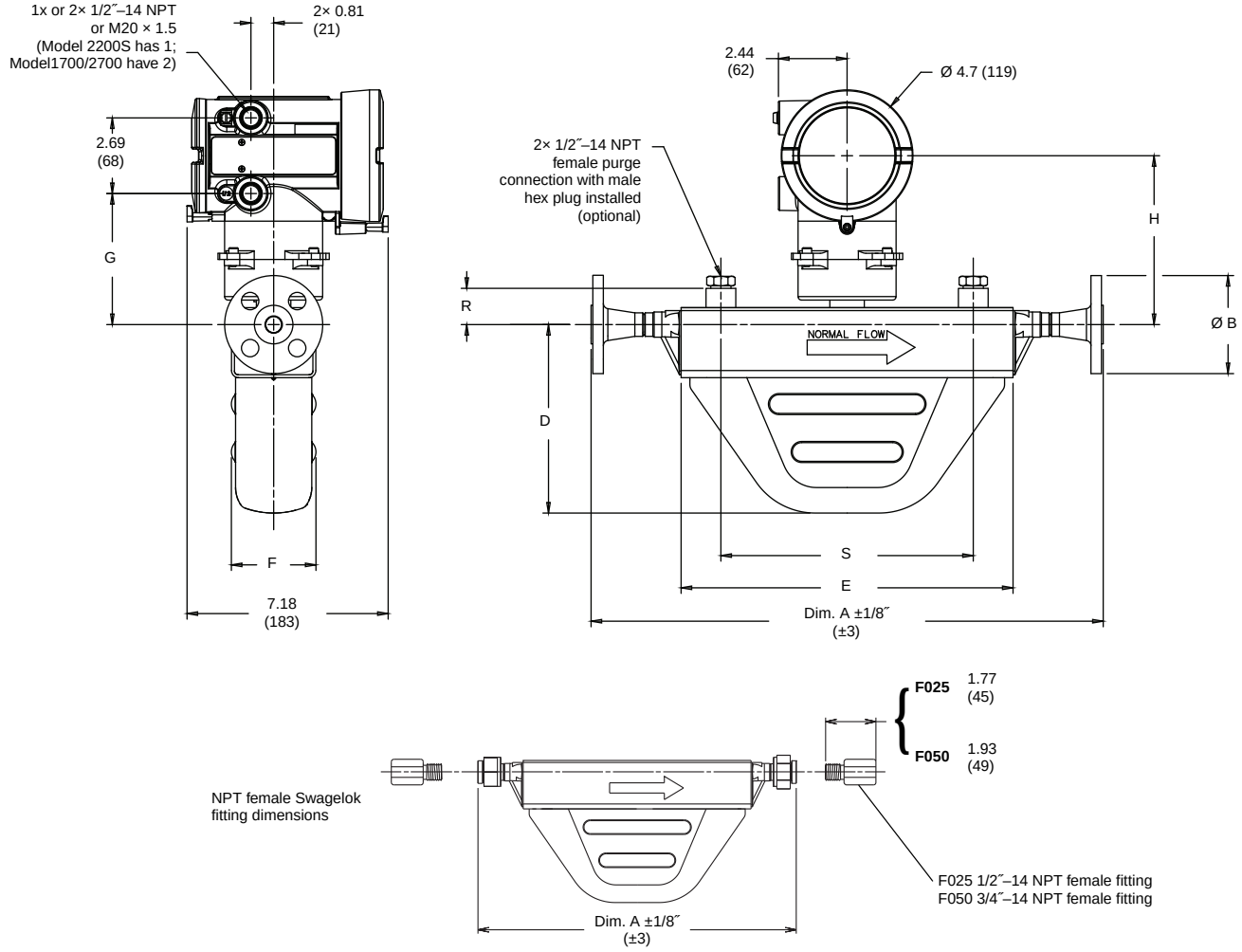
(1) For dimensions A and B, see process fitting tables on pages 25–30.

(2) Dimensions M and P represent the Model 2200S with aluminum housing. For stainless steel housing, add 0.40 in (10 mm).

Dimensions *continued*

Sensor with integrally mounted Model 1700 or 2700 transmitter

Dimensions in inches (mm)



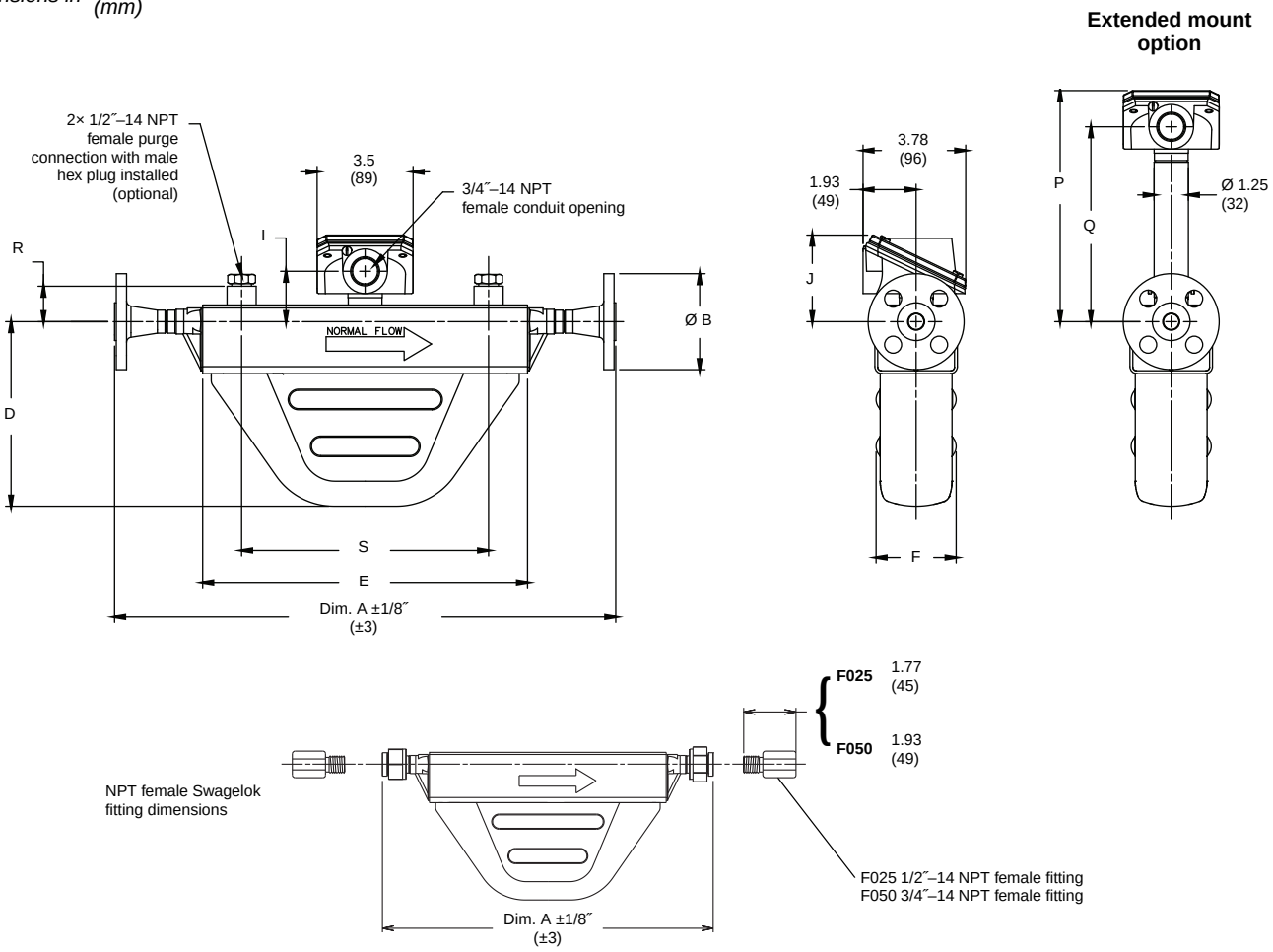
		Dimensions[1]						
Model		**D**	**E**	**F**	**G**	**H**	**R**	**S**
F025	inches	5.12	9.75	2.81	4.66	6	1.26	7.5
	mm	130	248	71	118	152	32	190
F050	inches	6.75	11.88	2.94	4.66	6	1.26	9
	mm	171	302	75	118	152	32	229
F100	inches	9.12	14.88	4.13	4.91	6.25	1.51	12
	mm	232	378	105	125	159	38	305
F200	inches	12.56	17.88	5.62	5.85	7.19	2.38	14
	mm	319	454	143	148	183	61	356
F300	inches	7.25	27.72	5.88	7.6	8.94	4.07	21
	mm	184	704	149	193	227	103	533

(1) For dimensions A and B, see process fitting tables on pages 25–30.

Dimensions *continued*

Sensor with junction box

Dimensions in *inches (mm)*



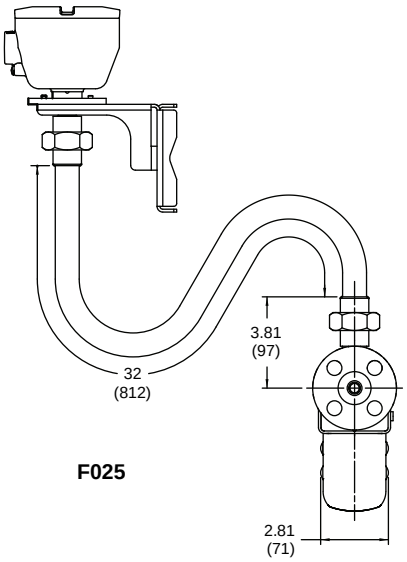
		Dimensions[1]								
Model		**D**	**E**	**F**	**I**	**J**	**P**	**Q**	**R**	**S**
F025	inches	5.12	9.75	2.81	1.82	3.11	8.48	7.19	1.26	7.5
	mm	130	248	71	46	79	216	183	32	190
F050	inches	6.75	11.88	2.94	1.82	3.11	8.48	7.19	1.26	9
	mm	171	302	75	46	79	216	183	32	229
F100	inches	9.12	14.88	4.13	2.06	3.36	8.73	7.44	1.51	12
	mm	232	378	105	52	85	222	189	38	305
F200	inches	12.56	17.88	5.62	3	4.3	9.67	8.37	2.38	14
	mm	319	454	143	76	109	246	213	61	356
F300	inches	7.25	27.72	5.88	4.75	6.05	11.42	10.12	4.07	21
	mm	184	704	149	121	154	290	257	103	533

(1) For dimensions A and B, see process fitting tables on pages 25–30.

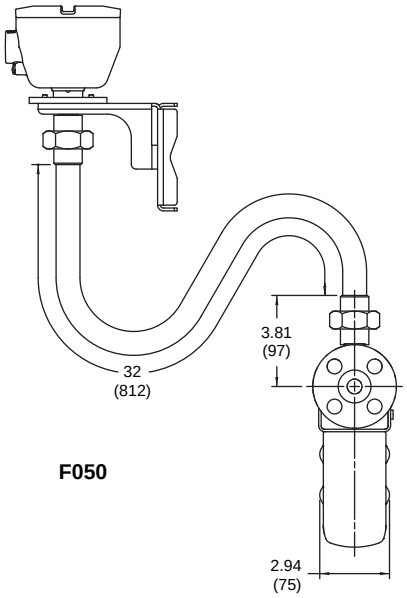
Dimensions *continued*

High-temperature Models F025(A and B), F050(A and B), and F100(A and B)

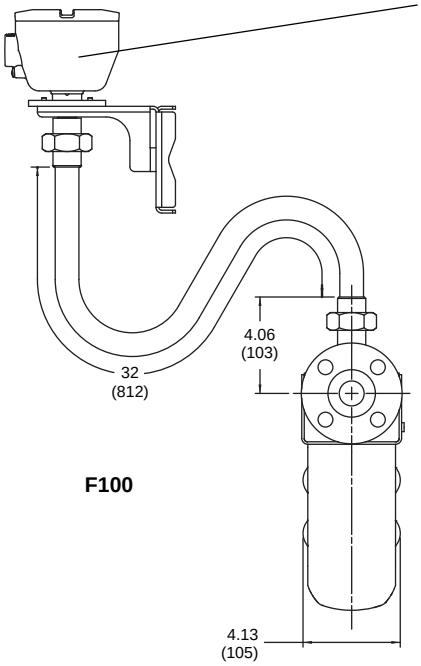
Dimensions in inches (mm)



F025



F050



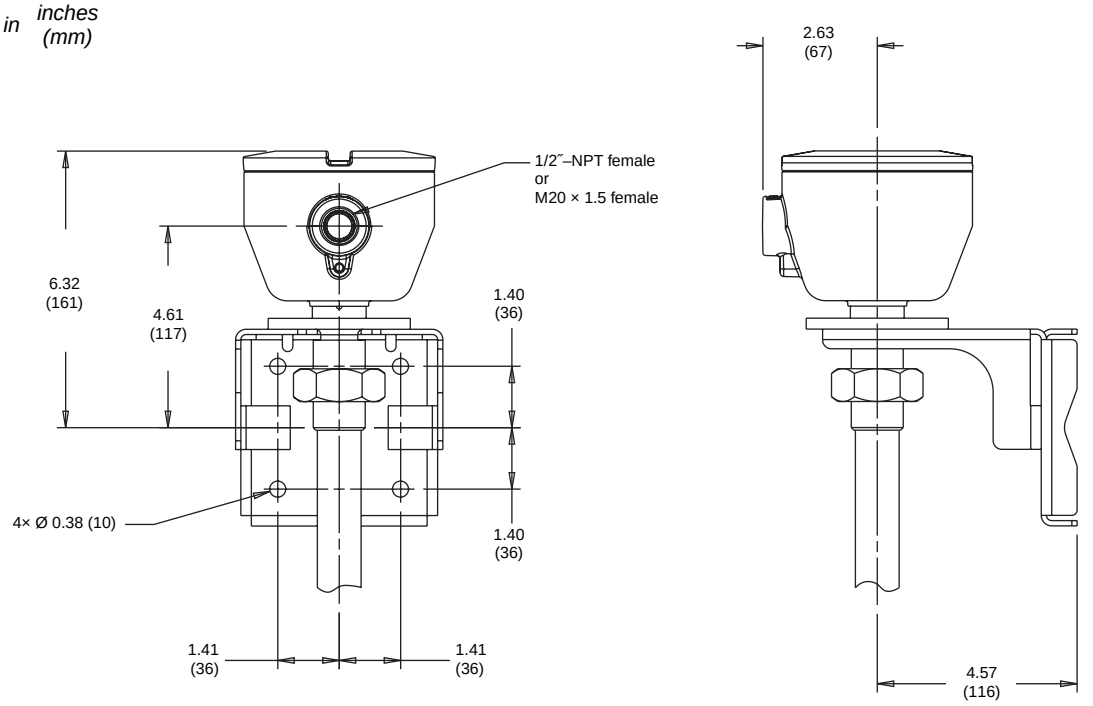
F100

For remaining sensor dimensions, refer to pages 18–21.
For dimensions of electronics, refer to pages 23–24.

Dimensions *continued*

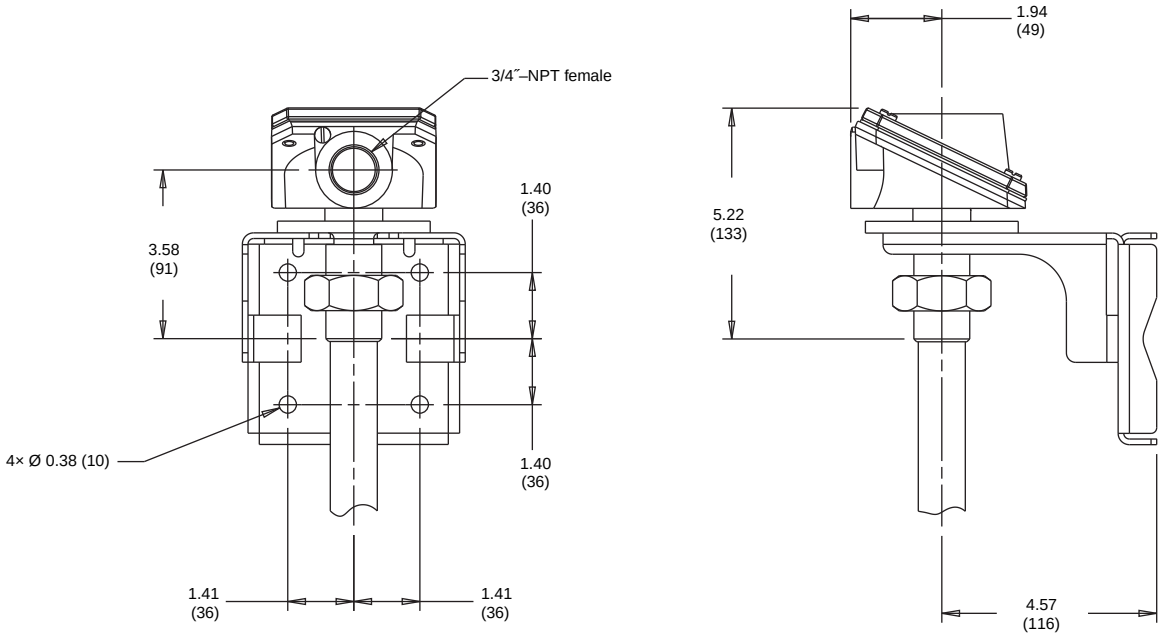
Core processor mounted on high-temperature sensor flexible conduit

Dimensions in inches (mm)



Junction box mounted on high-temperature sensor flexible conduit

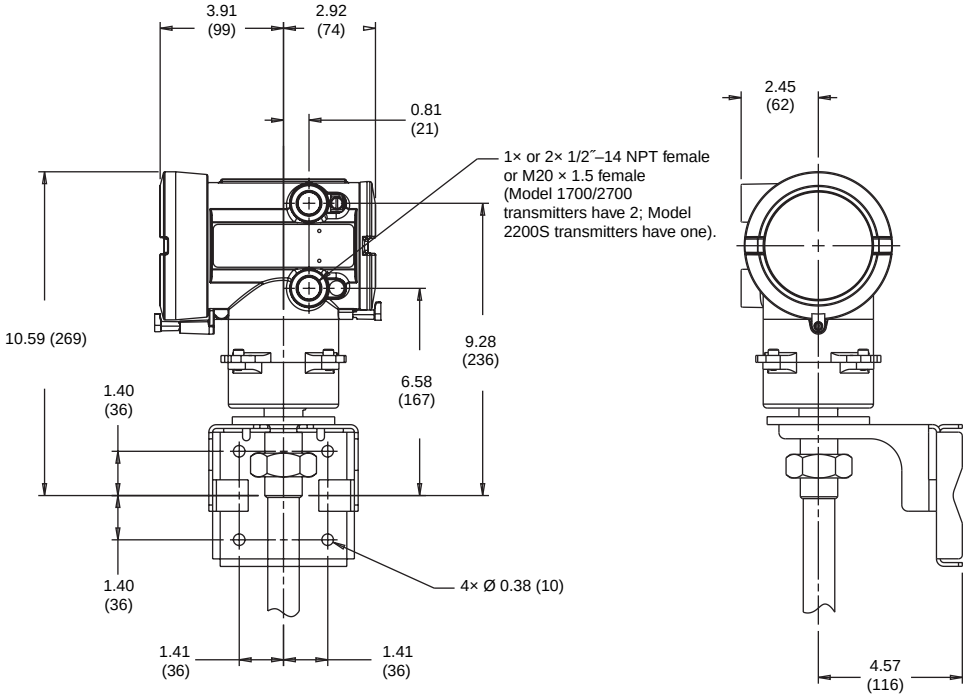
Dimensions in inches (mm)



Dimensions *continued*

Model 1700, 2200S, or 2700 transmitter mounted on high-temperature sensor flexible conduit

Dimensions in inches (mm)



Fitting options

	Fitting code	Dim. A face-to-face inches (mm)	Dim. B outside diam. inches (mm)
F025S fitting options[1]			
1/2-inch ANSI CL150 weld neck raised face flange	113	15.98 (406)	3.50 (89)
1/2-inch ANSI CL300 weld neck raised face flange	114	16.38 (416)	3.75 (95)
1/2-inch ANSI CL600 weld neck raised face flange	115	16.38 (416)	3.75 (95)
1/2-inch NPT female Swagelok size 8 VCO fitting	319	17.63 (448)[2]	not applicable
1/2-inch sanitary fitting (Tri-Clamp® compatible)	121	14.09 (358)	0.98 (25)
DN15 PN40 weld neck; DIN 2635 type C face	116	15.23 (387)	3.74 (95)
DN15 PN40 weld neck flange; EN 1092-1 Form B1	176	15.23 (387)	3.74 (95)
DN15 PN40 weld neck flange; EN 1092-1 Form D	310	15.23 (387)	3.74 (95)
DN25 PN40 weld neck flange; EN 1092-1 Form B1	172	15.39 (391)	4.53 (115)
DN25 PN40 weld neck flange; EN 1092-1 Form D	183	15.39 (391)	4.53 (115)
DN15 PN100/160 weld neck flange; DIN 2638 type E face	120	15.80 (401)	4.13 (105)
DN15 PN100/160 weld neck flange; EN 1092-1 Form B2	170	15.80 (401)	4.13 (105)
DN15 PN100 weld neck flange; EN 1092-1 Form D	178	15.80 (401)	4.13 (105)
15mm DIN 11851 hygienic coupling	222	13.91 (353)	Rd 34 × 1/8
JIS 15mm 10K/20K weld neck raised face flange	122	15.46 (393)	3.74 (95)
JIS 15mm 40K weld neck raised face flange	221	16.52 (420)	4.53 (115)
F025H and F025B fitting options[1]			
1/2-inch ANSI CL150 lap joint flange	520	15.98 (406)	3.50 (89)
1/2-inch ANSI CL300 lap joint flange	521	16.38 (416)	3.75 (95)
1/2-inch ANSI CL600 lap joint flange	517	16.38 (416)	3.75 (95)
JIS 15mm 10K lap joint flange	522	15.46 (393)	3.75 (95)
DN15 PN40 lap joint flange; EN 1092-1 Form B1	524	15.23 (387)	3.74 (95)
F025P fitting options[1]			
15mm DIN PN100/160 weld neck, DIN 2638, type E face	120	15.80 (401)	4.13 (105)
1/2-inch ANSI CL900 weld neck raised face flange	150	17.48 (444)	4.75 (121)
DN15 PN100/160 weld neck flange; EN 1092-1 Form B2	170	15.80 (401)	4.13 (105)
DN15 PN100 weld neck flange; EN 1092-1 Form D	178	15.80 (401)	4.13 (105)
DN25 PN100 weld neck flange; EN 1092-1 Form B2	180	16.82 (427)	5.51 (140)
1/2-inch NPT female Swagelok size 8 VCO fitting	319	17.63 (448)[2]	not applicable

(1) Fittings listed here are standard options. Other types of fittings are available. The face to face dimensions for any custom fittings ordered using a 998 or 999 fitting code are not represented in this table. It is necessary to confirm face to face dimensions of these fittings at time of ordering. Contact your local Micro Motion representative.

(2) Dimension specified in table does NOT include fitting length. For installation, modify Dim. A value to include fitting. See pages 18–24.

Fitting options *continued*

	Fitting code	Dim. A face-to-face inches (mm)	Dim B. outside diam. inches (mm)
F025A fitting options[1]			
1/2-inch ANSI CL150 weld neck raised face flange	113	15.98 (406)	3.50 (89)
1/2-inch ANSI CL300 weld neck raised face flange	114	16.38 (416)	3.75 (95)
1/2-inch ANSI CL600 weld neck raised face flange	115	16.38 (416)	3.75 (95)
1/2-inch ANSI CL900 weld neck raised face flange	150	17.48 (444)	4.75 (121)
DN15 PN40 weld neck flange; EN 1092-1 Form B1	176	15.23 (387)	3.74 (95)
DN15 PN40 weld neck flange; EN 1092-1 Form D	310	15.23 (387)	3.74 (95)
DN15 PN100/160 weld neck flange; EN 1092-1 Form B2	170	15.80 (401)	4.13 (105)
DN15 PN100 weld neck flange; EN 1092-1 Form D	178	15.80 (401)	4.13 (105)
DN25 PN40 weld neck flange; EN 1092-1 Form B1	172	15.39 (391)	4.53 (115)
DN25 PN40 weld neck flange; EN 1092-1 Form D	183	15.39 (391)	4.53 (115)
JIS 15mm 10K/20K weld neck raised face flange	122	15.46 (393)	3.74 (95)
JIS 15mm 40K weld neck raised face flange	221	16.52 (420)	4.53 (115)
F050S fitting options[1]			
1/2-inch ANSI CL150 weld neck raised face flange	113	18.12 (460)	3.50 (89)
1/2-inch ANSI CL300 weld neck raised face flange	114	18.48 (469)	3.75 (95)
1/2-inch ANSI CL600 weld neck raised face flange	115	18.98 (482)	3.75 (95)
3/4-inch NPT female Swagelok size 12 VCO fitting	239	16.43 (417)[2]	not applicable
3/4-inch sanitary fitting (Tri-Clamp compatible)	322	15.86 (403)	0.98 (25)
DN15 PN40 weld neck flange; DIN 2635 type C face	116	17.36 (441)	3.74 (95)
DN15 PN40 weld neck flange; EN 1092-1 Form B1	176	17.36 (441)	3.74 (95)
DN15 PN40 weld neck flange; EN 1092-1 Form D	310	17.36 (441)	3.74 (95)
DN15 PN100/160 weld neck flange; DIN 2638 type E face	120	17.90 (455)	4.13 (105)
DN15 PN100/160 weld neck flange; EN 1092-1 Form B2	170	17.90 (455)	4.13 (105)
DN15 PN100 weld neck flange; EN 1092-1 Form D	178	17.90 (455)	4.13 (105)
DN25 PN40 weld neck flange; DIN 2635 type C face	131	17.50 (445)	4.53 (115)
DN25 PN40 weld neck flange; EN 1092-1 Form B1	172	17.50 (445)	4.53 (115)
DN25 PN40 weld neck flange; EN 1092-1 Form D	183	17.50 (445)	4.53 (115)
15mm DIN 11851 hygienic coupling	222	16.01 (407)	Rd 34 × 1/8
JIS 15mm 10K/20K weld neck raised face flange	122	17.56 (446)	3.74 (95)
JIS 15mm 40K weld neck raised face flange	221	18.62 (473)	4.53 (115)

(1) Fittings listed here are standard options. Other types of fittings are available. The face to face dimensions for any custom fittings ordered using a 998 or 999 fitting code are not represented in this table. It is necessary to confirm face to face dimensions of these fittings at time of ordering. Contact your local Micro Motion representative.

(2) Dimension specified in table does NOT include fitting length. For installation, modify Dim. A value to include fitting. See pages 18–24.

Fitting options *continued*

	Fitting code	Dim. A face-to-face inches (mm)	Dim B. outside diam. inches (mm)
F050P fitting options[1]			
1/2-inch ANSI CL150 weld neck raised face flange	113	18.12 (460)	3.50 (89)
1/2-inch ANSI CL300 weld neck raised face flange	114	18.48 (469)	3.75 (95)
1/2-inch ANSI CL600 weld neck raised face flange	115	18.98 (482)	3.75 (95)
1/2-inch ANSI CL900 weld neck raised face flange	150	19.62 (498)	4.75 (121)
DN15 PN40 weld neck flange; DIN 2635 type C face	116	17.36 (441)	3.74 (95)
DN15 PN100/160 weld neck flange; DIN 2638 type E face	120	17.90 (455)	4.13 (105)
DN25 PN40 weld neck flange; DIN 2635 type C face	131	17.50 (445)	4.53 (115)
DN15 PN100/160 weld neck flange; EN 1092-1 Form B2	170	17.90 (455)	4.13 (105)
DN15 PN100 weld neck flange; EN 1092-1 Form D	178	17.90 (455)	4.13 (105)
DN25 PN100 weld neck flange; EN 1092-1 Form B2	180	18.52 (470)	5.51 (140)
3/4-inch NPT female Swagelok size 12 VCO fitting	239	16.43 (417)[2]	not applicable
3/4-inch sanitary fitting (Tri-Clamp compatible)	322	15.86 (403)	0.98 (25)
JIS 15mm 10K/20K weld neck raised face flange	122	17.56 (446)	3.74 (95)
JIS 15mm 40K weld neck raised face flange	221	18.62 (473)	4.53 (115)
F050H and F050B fitting options[1]			
1/2-inch ANSI CL150 lap joint flange	520	18.12 (460)	3.50 (89)
1/2-inch ANSI CL300 lap joint flange	521	18.48 (469)	3.75 (95)
1/2-inch ANSI CL600 lap joint flange	517	18.48 (469)	3.75 (95)
JIS 15mm 10K lap joint flange	522	17.56 (446)	3.75 (95)
DN15 PN40 lap joint flange; EN 1092-1 Form B1	524	17.36 (441)	3.74 (95)
F050A fitting options[1]			
1/2-inch ANSI CL150 weld neck raised face flange	113	18.12 (460)	3.50 (89)
1/2-inch ANSI CL300 weld neck raised face flange	114	18.48 (469)	3.75 (95)
1/2-inch ANSI CL600 weld neck raised face flange	115	18.98 (482)	3.75 (95)
1/2-inch ANSI CL900 weld neck raised face flange	150	19.62 (498)	4.75 (121)
DN15 PN40 weld neck flange; EN 1092-1 Form B1	176	17.36 (441)	3.74 (95)
DN15 PN40 weld neck flange; EN 1092-1 Form D	310	17.36 (441)	3.74 (95)
DN15 PN100/160 weld neck flange; EN 1092-1 Form B2	170	17.90 (455)	4.13 (105)
DN15 PN100 weld neck flange; EN 1092-1 Form D	178	17.90 (455)	4.13 (105)
DN25 PN40 weld neck flange; EN 1092-1 Form B1	172	17.50 (445)	4.53 (115)
DN25 PN40 weld neck flange; EN 1092-1 Form D	183	17.50 (445)	4.53 (115)
JIS 15mm 10K/20K weld neck raised face flange	122	17.56 (446)	3.74 (95)
JIS 15mm 40K weld neck raised face flange	221	18.62 (473)	4.53 (115)

(1) Fittings listed here are standard options. Other types of fittings are available. The face to face dimensions for any custom fittings ordered using a 998 or 999 fitting code are not represented in this table. It is necessary to confirm face to face dimensions of these fittings at time of ordering. Contact your local Micro Motion representative.

(2) Dimension specified in table does NOT include fitting length. For installation, modify Dim. A value to include fitting. See pages 18–24.

Fitting options *continued*

	Fitting code	Dim. A face-to-face inches (mm)	Dim B. outside diam. inches (mm)
F100S fitting options[(1)]			
1-inch ANSI CL150 weld neck raised face flange	128	22.66 (576)	4.25 (108)
1-inch ANSI CL300 weld neck raised face flange	129	23.16 (588)	4.86 (123)
1-inch ANSI CL600 weld neck raised face flange	130	23.66 (601)	4.88 (124)
1-inch sanitary fitting (Tri-Clamp compatible)	138	21.28 (541)	1.98 (50)
2-inch ANSI CL150 weld neck raised face flange	209	23.04 (585)	6 (152)
DN25 PN40 weld neck flange; DIN 2635 type C face	131	21.42 (544)	4.53 (115)
DN25 PN100/160 weld neck flange; DIN 2638 type E face	137	22.84 (580)	5.51 (140)
25mm DIN 11851 hygienic coupling	230	20.56 (522)	Rd 52 × 1/6
DN25 PN40 weld neck flange; EN 1092-1 Form B1	179	21.42 (544)	4.53 (115)
DN25 PN40 weld neck flange; EN 1092-1 Form D	311	21.42 (544)	4.53 (115)
DN25 PN100 weld neck flange; EN 1092-1 Form B2	180	22.84 (580)	5.51 (140)
DN25 PN100 weld neck flange; EN 1092-1 Form D	181	22.84 (580)	5.51 (140)
JIS 25mm 10K/20K weld neck raised face flange	139	21.36 (543)	4.92 (125)
JIS 25mm 40K weld neck raised face flange	229	22.92 (582)	5.12 (130)
F100H and F100B fitting options[(1)]			
1-inch ANSI CL150 lap joint flange	530	22.66 (576)	4.25 (108)
1-inch ANSI CL300 lap joint flange	531	23.16 (589)	4.87 (124)
1-inch ANSI CL600 lap joint flange	535	23.21 (590)	4.88 (124)
JIS 25mm 10K lap joint flange	532	21.66 (550)	4.92 (125)
DN25 PN40 lap joint flange; EN 1092-1 Form B1	534	21.42 (544)	3.74 (95)
F100A fitting options[(1)]			
1-inch ANSI CL150 weld neck raised face flange	128	22.66 (576)	4.25 (108)
1-inch ANSI CL300 weld neck raised face flange	129	23.16 (588)	4.86 (123)
1-inch ANSI CL600 weld neck raised face flange	130	23.66 (601)	4.88 (124)
2-inch ANSI CL150 weld neck raised face flange	209	23.04 (585)	6 (152)
1-inch ANSI CL900 weld neck raised face flange	928	24.34 (618)	5.88 (149)
DN25 PN40 weld neck flange; EN 1092-1 Form B1	179	21.42 (544)	4.53 (115)
DN25 PN40 weld neck flange; EN 1092-1 Form D	311	21.42 (544)	4.53 (115)
DN25 PN100 weld neck flange; EN 1092-1 Form B2	180	22.84 (580)	5.51 (140)
DN25 PN100 weld neck flange; EN 1092-1 Form D	181	22.84 (580)	5.51 (140)
JIS 25mm 10K/20K weld neck raised face flange	139	21.36 (543)	4.92 (125)
JIS 25mm 40K weld neck raised face flange	229	22.92 (582)	5.12 (130)

(1) Fittings listed here are standard options. Other types of fittings are available. The face to face dimensions for any custom fittings ordered using a 998 or 999 fitting code are not represented in this table. It is necessary to confirm face to face dimensions of these fittings at time of ordering. Contact your local Micro Motion representative.

Fitting options *continued*

	Fitting code	Dim. A face-to-face inches (mm)	Dim B. outside diam. inches (mm)
F200S fitting options[1]			
1 1/2-inch ANSI CL150 weld neck raised face flange	341	24.76 (629)	5 (127)
1 1/2-inch ANSI CL300 weld neck raised face flange	342	25.26 (642)	6.12 (155)
1 1/2-inch ANSI CL600 weld neck raised face flange	343	25.76 (654)	6.12 (155)
2-inch ANSI CL150 weld neck raised face flange	418	24.88 (632)	6 (152)
2-inch ANSI CL300 weld neck raised face flange	419	25.38 (645)	6.50 (165)
2-inch ANSI CL600 weld neck raised face flange	420	25.64 (651)	6.50 (165)
1 1/2-inch sanitary fitting (Tri-Clamp compatible)	351	23.26 (591)	1.98 (50)
2-inch sanitary fitting (Tri-Clamp compatible)	352	22.88 (581)	2.52 (64)
DN40 PN40 weld neck flange; DIN 2635 type C face	381	23.55 (598)	5.91 (150)
DN50 PN40 weld neck flange; DIN 2635 type C face	382	23.63 (600)	2.56 (65)
DN50 PN100 weld neck flange; DIN 2637 type E face	378	25.23 (641)	7.68 (195)
DN40 PN40 weld neck flange; EN 1092-1 Form B1	368	23.42 (595)	5.91 (150)
DN40 PN40 weld neck flange; EN 1092-1 Form D	312	23.42 (595)	5.91 (150)
DN40 PN100 weld neck flange; EN 1092-1 Form B2	363	24.73 (628)	6.69 (170)
DN40 PN100 weld neck flange; EN 1092-1 Form D	366	24.73 (628)	6.69 (170)
DN50 PN40 weld neck flange; EN 1092-1 Form B1	369	23.63 (600)	6.50 (165)
DN50 PN40 weld neck flange; EN 1092-1 Form D	316	23.63 (600)	6.50 (165)
DN50 PN100 weld neck flange; EN 1092-1 Form B2	365	25.23 (641)	7.68 (195)
DN50 PN100 weld neck flange; EN 1092-1 Form D	367	25.23 (641)	7.68 (195)
40mm DIN 11851 hygienic coupling	353	23.18 (589)	Rd 65 × 1/6
50mm DIN 11851 hygienic coupling	354	23.26 (591)	Rd 78 × 1/6
JIS 40mm 10K weld neck raised face flange	385	23.44 (595)	5.51 (140)
JIS 40mm 20K weld neck raised face flange	387	23.44 (595)	5.51 (140)
JIS 50mm 10K weld neck raised face flange	386	23.42 (595)	6.10 (155)
JIS 50mm 20K weld neck raised face flange	388	23.62 (600)	6.10 (155)
JIS 50mm 40K weld neck raised face flange	389	25.64 (651)	6.50 (165)
F200H fitting options[1]			
1 1/2-inch ANSI CL150 lap joint flange	540	24.76 (629)	5 (127)
1 1/2-inch ANSI CL300 lap joint flange	541	25.24 (641)	6.12 (155)
1 1/2-inch ANSI CL600 lap joint flange	537	25.24 (641)	6.12 (155)
DN40 PN40 lap joint flange; EN 1092-1 Form B1	548	23.55 (598)	5.91 (150)
DN50 PN40 lap joint flange; EN 1092-1 Form B1	549	23.82 (605)	6.50 (165)
2-inch ANSI CL150 lap joint flange	544	24.74 (628)	6 (152)
2-inch ANSI CL300 lap joint flange	545	25.24 (641)	6.50 (165)
JIS 40mm 10K lap joint flange	542	23.44 (595)	5 (127)
JIS 50mm 10K lap joint flange	546	23.68 (601)	6 (152)

(1) Fittings listed here are standard options. Other types of fittings are available. The face to face dimensions for any custom fittings ordered using a 998 or 999 fitting code are not represented in this table. It is necessary to confirm face to face dimensions of these fittings at time of ordering. Contact your local Micro Motion representative.

Fitting options *continued*

	Fitting code	Dim. A face-to-face inches (mm)	Dim B. outside diam. inches (mm)
F300S fitting options[(1)]			
3-inch ANSI CL150 weld neck raised face flange	355	36.83 (935)	7.50 (191)
3-inch ANSI CL300 weld neck raised face flange	356	37.57 (954)	8.25 (210)
3-inch ANSI CL600 weld neck raised face flange	357	38.33 (974)	8.25 (210)
4-inch ANSI CL150 weld neck raised face flange	425	37.21 (945)	9 (229)
4-inch ANSI CL300 weld neck raised face flange	426	38.15 (969)	10 (254)
4-inch ANSI CL600 weld neck raised face flange	427	39.83 (1012)	10.75 (273)
DN80 PN40 weld neck flange; DIN 2635 type C face	391	36.01 (915)	7.87 (200)
DN100 PN40 weld neck flange; DIN 2635 type C face	392	36.45 (926)	9.25 (235)
DN80 PN40 weld neck flange; DIN 2635 type N grooved face	393	36.01 (915)	7.87 (200)
DN100 PN40 weld neck flange; DIN 2635 type N grooved face	394	36.45 (926)	9.25 (235)
DN80 PN100 weld neck flange; DIN 2637 type E face	395	37.71 (958)	9.05 (230)
DN100 PN100 weld neck flange; DIN 2637 type E face	396	38.71 (983)	10.43 (265)
DN80 PN100 weld neck flange; DIN 2637 type N grooved face	397	37.71 (958)	9.05 (230)
DN100 PN100 weld neck flange; DIN 2637 type N grooved face	398	38.71 (983)	10.43 (265)
DN80 PN40 weld neck flange; EN 1092-1 Form B1	371	37.60 (955)	7.87 (200)
DN80 PN40 weld neck flange; EN 1092-1 Form D	326	37.60 (955)	7.87 (200)
DN80 PN100 weld neck flange; EN 1092-1 Form B2	373	37.47 (952)	9.06 (230)
DN80 PN100 weld neck flange; EN 1092-1 Form D	375	37.47 (952)	9.06 (230)
DN100 PN40 weld neck flange; EN 1092-1 Form B1	372	36.45 (926)	9.25 (235)
DN100 PN40 weld neck flange; EN 1092-1 Form D	333	36.45 (926)	9.25 (235)
DN100 PN100 weld neck flange; EN 1092-1 Form B2	374	38.42 (976)	10.43 (265)
DN100 PN100 weld neck flange; EN 1092-1 Form D	359	38.42 (976)	10.43 (265)
JIS 80mm 10K weld neck raised face flange	400	36.51 (927)	7.28 (185)
JIS 100mm 10K weld neck raised face flange	401	36.71 (932)	8.27 (210)
JIS 80mm 20K weld neck raised face flange	402	36.57 (929)	7.87 (200)
JIS 100mm 20K weld neck raised face flange	403	36.71 (932)	8.86 (225)
3-inch sanitary fitting (Tri-Clamp compatible)	361	35.15 (893)	3.58 (91)
3-inch Victaulic® compatible fitting	410	36.83 (935)	3.50 (89)
F300H fitting options[(1)]			
3-inch ANSI CL150 lap joint flange	550	36.77 (934)	7.50 (191)
3-inch ANSI CL300 lap joint flange	551	37.53 (953)	8.25 (210)
3-inch ANSI CL600 lap joint flange	539	37.53 (953)	8.25 (210)
JIS 80mm 10K lap joint flange	552	36.47 (926)	7.28 (185)
DN80 PN40 lap joint flange; EN 1092-1 Form B1	554	35.97 (914)	7.87 (200)

(1) Fittings listed here are standard options. Other types of fittings are available. The face to face dimensions for any custom fittings ordered using a 998 or 999 fitting code are not represented in this table. It is necessary to confirm face to face dimensions of these fittings at time of ordering. Contact your local Micro Motion representative.

Ordering information

Model	Product description
	Standard sensor models
F025S	F-Series sensor; 1/4-inch (6 mm); 316L stainless steel
F025H	F-Series sensor; 1/4-inch (6 mm); alloy C-22
F050S	F-Series sensor; 1/2-inch (12 mm); 316L stainless steel
F050H	F-Series sensor; 1/2-inch (12 mm); alloy C-22
F100S	F-Series sensor; 1-inch (25 mm); 316L stainless steel
F100H	F-Series sensor; 1-inch (25 mm); alloy C-22
F200S	F-Series sensor; 2-inch (50 mm); 316L stainless steel
F200H	F-Series sensor; 2-inch (50 mm); alloy C-22
F300S	F-Series sensor; 3-inch (75 mm); 316L stainless steel
F300H	F-Series sensor; 3-inch (75 mm); alloy C-22
	High-pressure sensor models
F025P	F-Series sensor; 1/4-inch (6 mm); 316L stainless steel; 2300 psi (158 bar) tube rating
F050P	F-Series sensor; 1/2-inch (12 mm); 316L stainless steel; 5000 psi (345 bar) tube rating
	High-temperature sensor models
F025A	F-Series sensor; 1/4-inch (6 mm); high temperature; 316L stainless steel
F025B	F-Series sensor; 1/4-inch (6 mm); high temperature; alloy C-22
F050A	F-Series sensor; 1/2-inch (12 mm); high temperature; 316L stainless steel
F050B	F-Series sensor; 1/2-inch (12 mm); high temperature; alloy C-22
F100A	F-Series sensor; 1-inch (25 mm); high temperature; 316L stainless steel
F100B	F-Series sensor; 1-inch (25 mm); high temperature; alloy C-22
Code	**Process connection**
###	See fitting options on pages 25–30
Code	**Case options**
C	Compact case
B[(1)]	Secondary containment with test report
P[(1)]	Secondary containment with test report and purge fittings (1/2-inch NPT female)
H[(1)(2)]	Hygienic compact case

Continued on next page

(1) Not available with Model F050P or with high-temperature sensors.

(2) Not available with high-temperature sensors or alloy C-22 sensors.

Ordering information *continued*

Code	Electronics interface
	All models *except* high-temperature models
Q	4-wire polyurethane-painted aluminum integral core processor for remotely mounted transmitter with MVD technology
A	4-wire stainless steel integral core processor for remotely mounted transmitter with MVD technology
V	4-wire polyurethane-painted aluminum integral core processor with extended mount for remotely mounted transmitter with MVD technology
B	4-wire stainless steel integral core processor with extended mount for remotely mounted transmitter with MVD technology
C	Integrally mounted Model 1700 or 2700 transmitter
J(1)	Integrally mounted Model 2200S transmitter
U(1)	Extended Model 2200S transmitter
R	9-wire polyurethane-painted aluminum junction box
H	9-wire polyurethane-painted aluminum junction box with extended mount
S	9-wire stainless steel junction box
T	9-wire stainless steel junction box with extended mount
	High-temperature models
Q	4-wire polyurethane-painted aluminum integral core processor for remotely mounted transmitter with MVD technology
A	4-wire stainless steel integral core processor for remotely mounted transmitter with MVD technology
C	Integrally mounted Model 1700 or 2700 transmitter
R(2)	9-wire polyurethane-painted aluminum junction box
S(2)	9-wire stainless steel junction box
Code	**Conduit connections**
	Electronics interface codes Q, A, V, and B
B	1/2-inch NPT — no gland
E	M20 — no gland
F	Brass/nickel cable gland (cable diameter 0.335 to 0.394 inches [8.5 to 10 mm])
G	Stainless steel cable gland (cable diameter 0.335 to 0.394 inches [8.5 to 10 mm])
	Electronics interface code C (integral transmitter)
A	No gland
	Electronics interface codes R, H, S, and T (9-wire junction box)
A	3/4-inch NPT — no gland
H	Brass/nickel cable gland
J	Stainless steel cable gland

Continued on next page

(1) Only available with calibration option Z.

(2) Only for connection to a transmitter with MVD technology.

Ordering information *continued*

Code	Approvals
	Electronics interface codes Q, A, V, B, C, and S
M	Micro Motion standard (no approval)
N	Micro Motion standard / PED compliant (no approval)
C[1]	CSA (Canada only)
A	CSA C-US (U.S.A. and Canada)
Z	ATEX — Equipment Category 2 (Zone 1) / PED compliant
I	IECEx Zone 1
P[2]	NEPSI
	Electronics interface codes R and H
M	Micro Motion standard (no approval)
N	Micro Motion standard / PED compliant (no approval)
C[1]	CSA (Canada only)
A	CSA C-US (U.S.A. and Canada)
U[1]	UL
Z	ATEX — Equipment Category 2 (Zone 1) / PED compliant
I	IECEx Zone 1
P[2]	NEPSI
	Electronics interface codes J and U
M	Micro Motion standard (no approval)
N	Micro Motion standard / PED compliant (no approval)
C[1]	CSA (Canada only)
A	CSA C-US (U.S.A. and Canada)
Z	ATEX — Equipment Category 2 (Zone 1) / PED compliant
I	IECEx Zone 1
	Electronics interface code T
M	Micro Motion standard (no approval)
N	Micro Motion standard / PED compliant (no approval)
A	CSA C-US (U.S.A. and Canada)

Continued on next page

(1) Not available with high-temperature models or alloy C-22 models.

(2) Available only with language option M (Chinese).

Ordering information *continued*

Code	Language
A	Danish installation manual
C	Czech installation manual
D	Dutch installation manual
E	English installation manual
F	French installation manual
G	German installation manual
H	Finnish installation manual
I	Italian installation manual
J	Japanese installation manual
M	Chinese installation manual
N	Norwegian installation manual
O	Polish installation manual
P	Portuguese installation manual
S	Spanish installation manual
W	Swedish installation manual
B	Hungarian CE requirements and English installation manual
K	Slovak CE requirements and English installation manual
T	Estonian CE requirements and English installation manual
U	Greek CE requirements and English installation manual
L	Latvian CE requirements and English installation manual
V	Lithuanian CE requirements and English installation manual
Y	Slovenian CE requirements and English installation manual
Code	**Future option 1**
Z	Reserved for future use
Code	**Calibration options**
Z	0.20% mass flow and 0.002 g/cm^3 (2.0 kg/m^3) density calibration
A (1)	0.15% mass flow and 0.002 g/cm^3 (2.0 kg/m^3) density calibration
1 (1)	0.10% mass flow and 0.001 g/cm^3 (1.0 kg/m^3) density calibration
Code	**Measurement application software**
Z	No measurement application software
Code	**Factory options**
Z	Standard product
X	ETO product
Typical model number: F050S 113 C Q E Z E Z A Z Z	

(1) Not available with electronics interface option code J or U (Model 2200S transmitter).

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