Product Data Sheet
PS-00363, Rev. H
April 2013

Micro Motion® R-Series Coriolis Flow Meters

Micro Motion® R-Series Coriolis meters are simple and reliable, and feature a compact form factor that is easy to install and maintain. Versatile R-Series meters are used in a wide range of industries to obtain the fundamental benefits of Coriolis flow measurement.

Simple to install and easy to use Coriolis flow measurement

- Measure flow in either mass *or* volume units for any application
- Install easily anywhere with compact design that is immune to flow profile effects
- Keep process loops easy to clean and maintain with self-draining design

Broad range of application coverage

- 316L stainless steel construction for compatibility with most fluids

Superior reliability

- 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 R-Series Coriolis Flow 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.

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.

R-Series Coriolis flow meters. Micro Motion R-Series Coriolis meters are designed to handle most common mass and volume flow measurement applications. The compact case of the R-Series meter allows it to fit almost anywhere, and integral electronics make installation and setup easy.

R-Series meters support a number of digital communication protocols, such as HART®, Modbus®, FOUNDATION fieldbus™, and PROFIBUS-PA.

Contents

Liquid flow performance

		Mass		Volume[1]	
		lb/min	kg/h	gal/min	l/h
Maximum flow rate	R025S, R025P	100	2720	12	2720
	R050S	300	8160	36	8160
	R100S	1200	32,650	144	32,650
	R200S	3200	87,100	384	87,100
Mass flow accuracy[2]	±0.5% of rate[3]				
Volume flow accuracy	±0.5% of rate[3]				
Mass and volume flow repeatability	±0.25% of rate[3]				
		lb/min	kg/h	gal/min	l/h
Zero stability	R025, R025P	0.01	0.27	0.0012	0.27
	R050S	0.03	0.82	0.0036	0.82
	R100S	0.12	3.27	0.0144	3.27
	R200S	0.32	8.71	0.0384	8.71

(1) Volumetric measurement is based on a process-fluid density of 1 g/cm^3 (1000 kg/m^3). For fluids with density other than 1 g/cm^3 (1000 kg/m^3), the volume flow rate equals the maximum mass flow rate divided by the fluid's density.

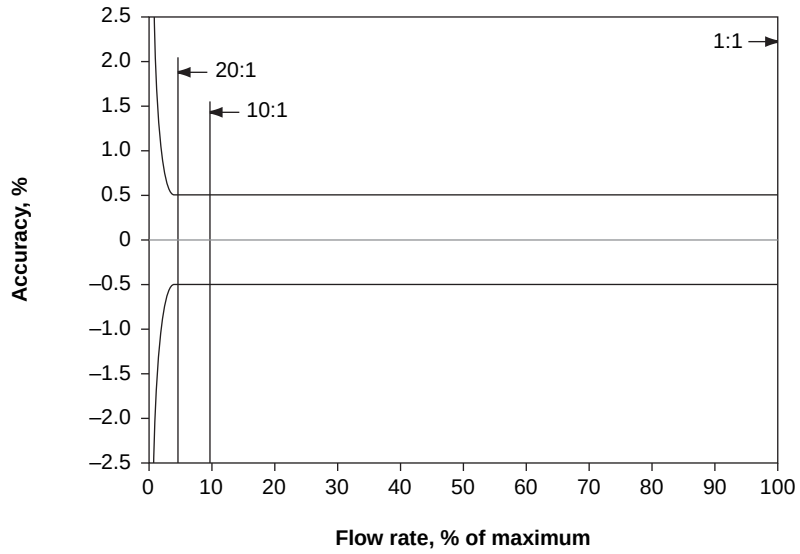
(2) Stated flow accuracy includes the combined effects of repeatability, linearity, and hysteresis. All specifications for liquids are based on reference conditions of water at 68 to 77 °F (20 to 25 °C) and 15 to 30 psig (1 to 2 bar), unless otherwise noted.

(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.

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	***20:1***	***10:1***	***1:1***
Accuracy, ± %	0.50	0.50	0.50
Pressure drop			
psi	0.1	0.813	54
bar	0.007	0.05	3.4

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 psi (0.68 bar) pressure drop on air(2)					
	R025S, R025P	5	130	60	100
	R050S	15	400	190	310
	R100S	50	1300	660	1000
	R200S	140	3800	1900	2900
Typical flow rates that produce approximately 50 psi (3.4 bar) pressure drop on natural gas(3)					
	R025S, R025P	15	410	350	580
	R050S	42	1100	970	1600
	R100S	150	4000	3400	5900
	R200S	420	11,000	9700	16,000
Mass flow accuracy(4)	±0.75% of rate(5)				
Mass flow repeatability(4)	±0.5% of rate(5)				
		lb/min	kg/h		
Zero stability	R025S, R025P	0.01	0.27		
	R050S	0.03	0.82		
	R100S	0.12	3.27		
	R200S	0.32	8.71		

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

(2) Air at 68 °F (20 °C) and 100 psia (6.8 bar).

(3) Natural gas at MW 16.675 at 68 °F (20 °C) and 500 psia (34 bar).

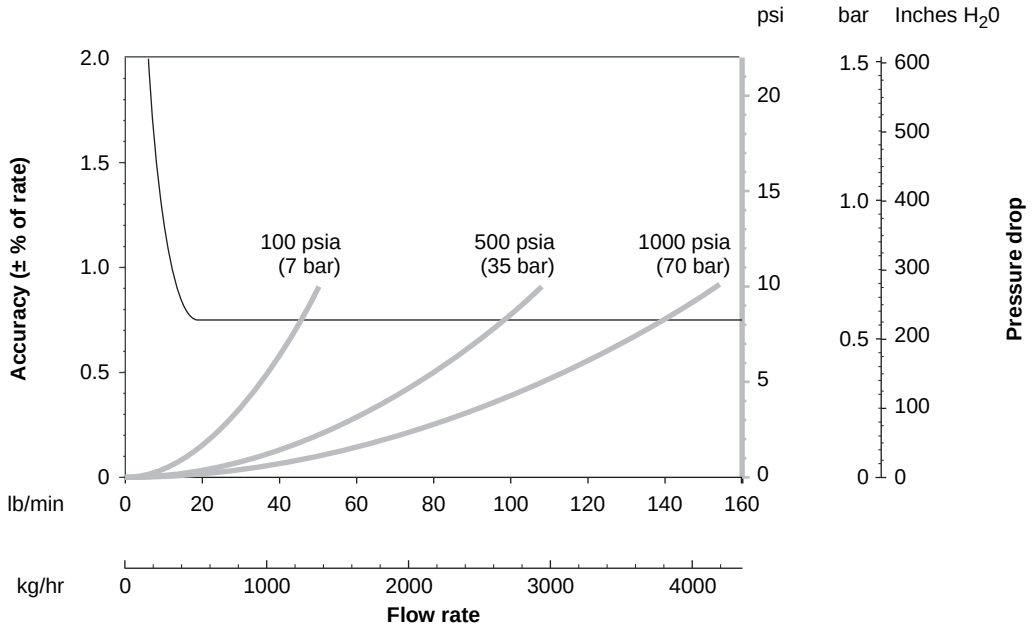
(4) Stated flow accuracy includes the combined effects of repeatability, linearity, and hysteresis.

(5) When flow rate < (zero stability / 0.0075), then accuracy = ±[(zero stability / flow rate) × 100]% of rate and repeatability = ±[(zero stability / flow rate) × 100]% of rate.

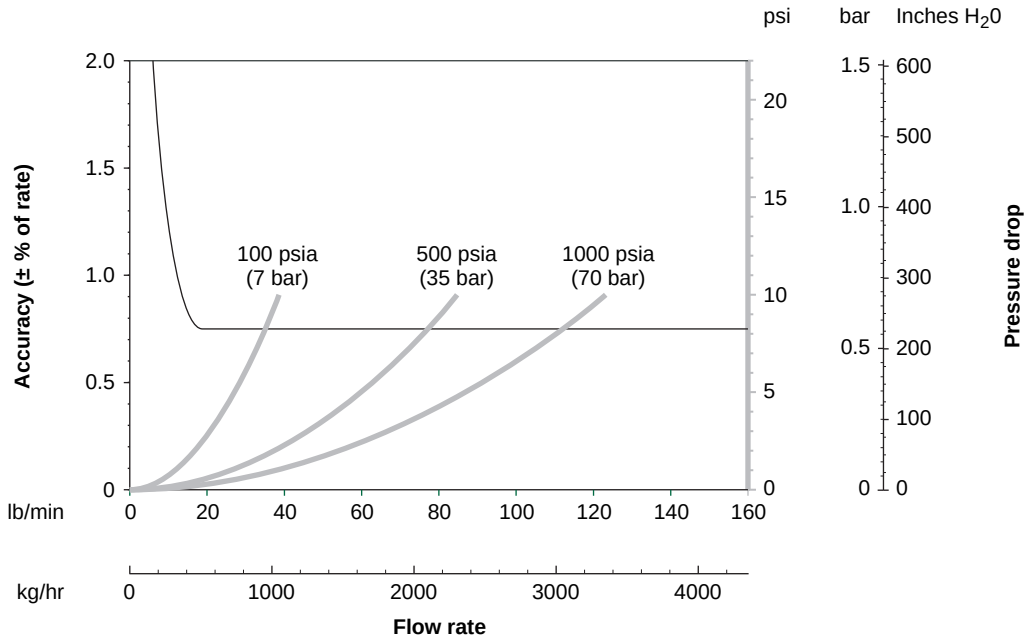
Gas flow performance *continued*

Typical accuracy and pressure drop with R100S 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



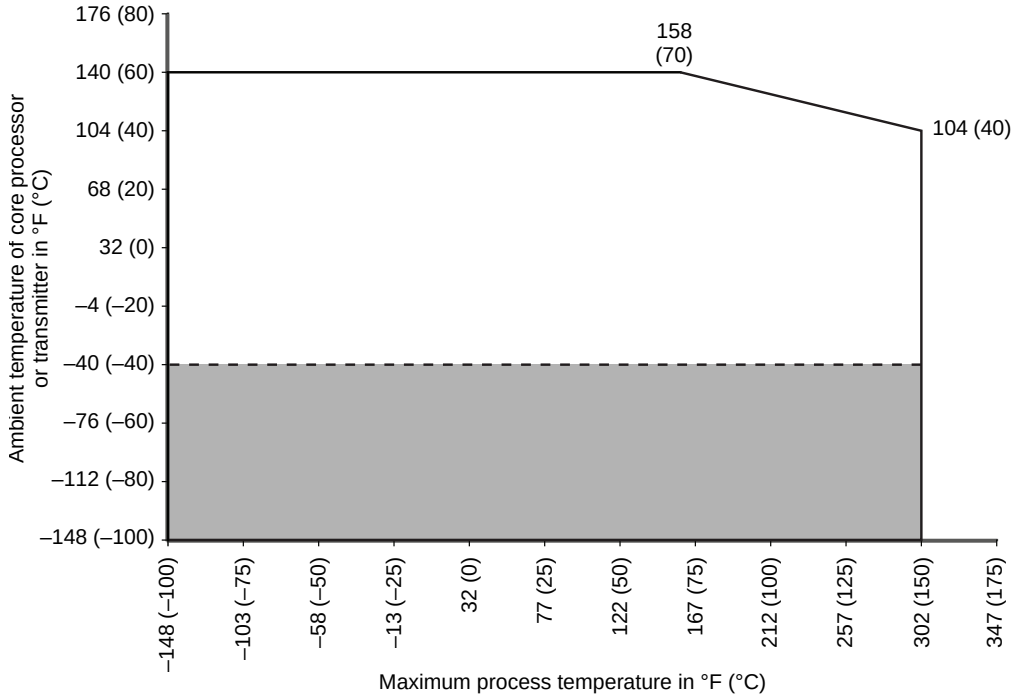
Standard or normal volumetric capability

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]



(1) Temperature limits may be further restricted by hazardous area approvals. See pages 12–14.

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

(3) 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.

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
R025	±0.00175
R050	±0.00175
R100	±0.00175
R200	±0.00175

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(1). Pressure effect can be corrected.

	Pressure effect on mass flow accuracy	
	% of rate per psi	% of rate per bar
R025	None	None
R050	None	None
R100	None	None
R200	–0.001	–0.015

(1) 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

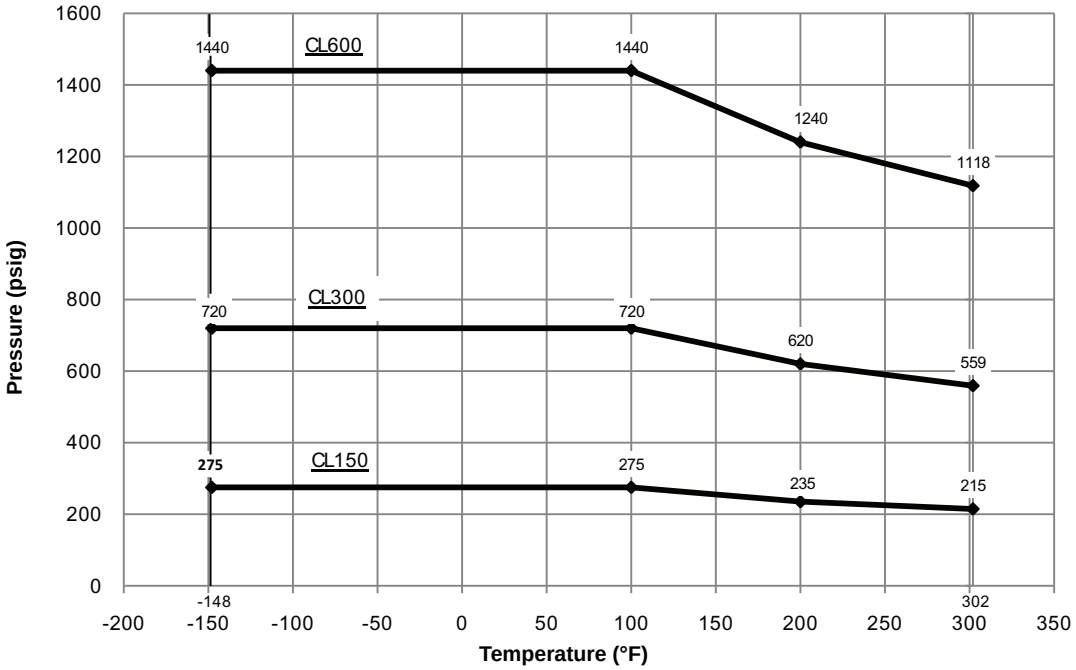
Pressure ratings

Pressure ratings are in accordance with ASME B31.3.

PED compliance	Sensors comply with council directive 97/23/EC of 29 May 1997 on Pressure Equipment.
Housing rating	Housing is not rated for pressure containment.

Sensor pressure/temperature rating with ASME B16.5 F316/316L weldneck flanges

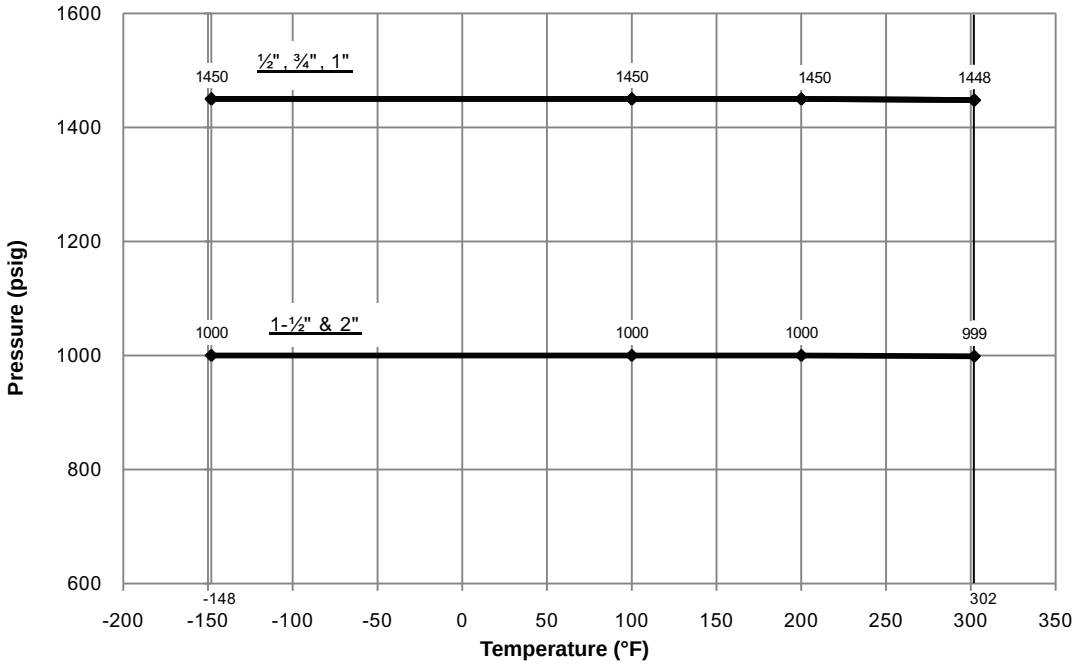
Models R025S through R200S



Pressure ratings *continued*

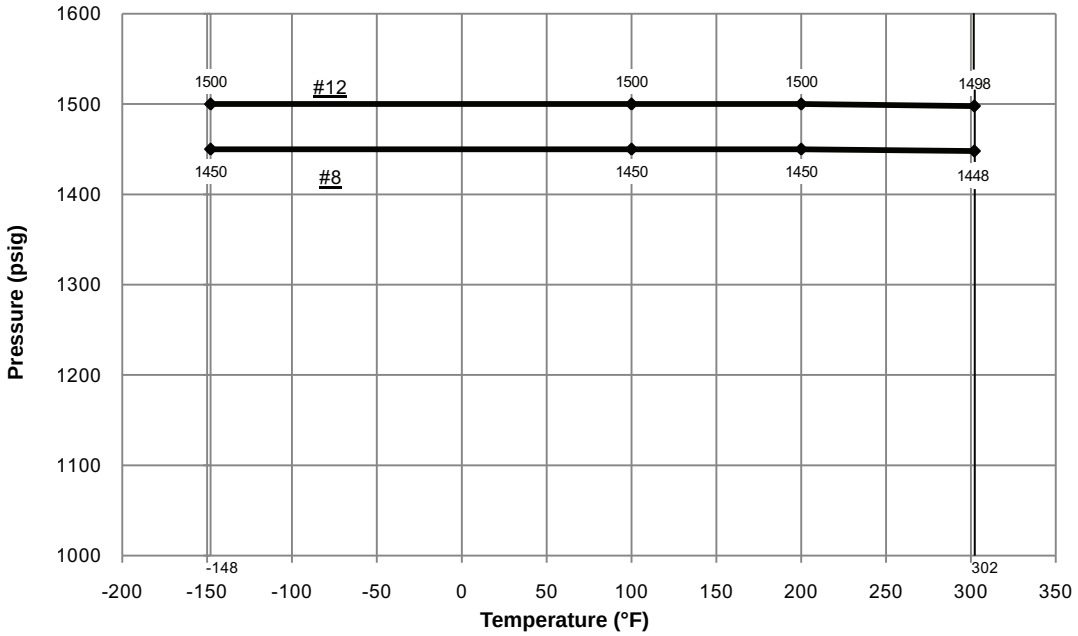
Sensor pressure/temperature rating with Tri-Clamp compatible 316L hygienic fittings

Models R025S through R200S



Sensor pressure/temperature rating with VCO F316/316L process connections

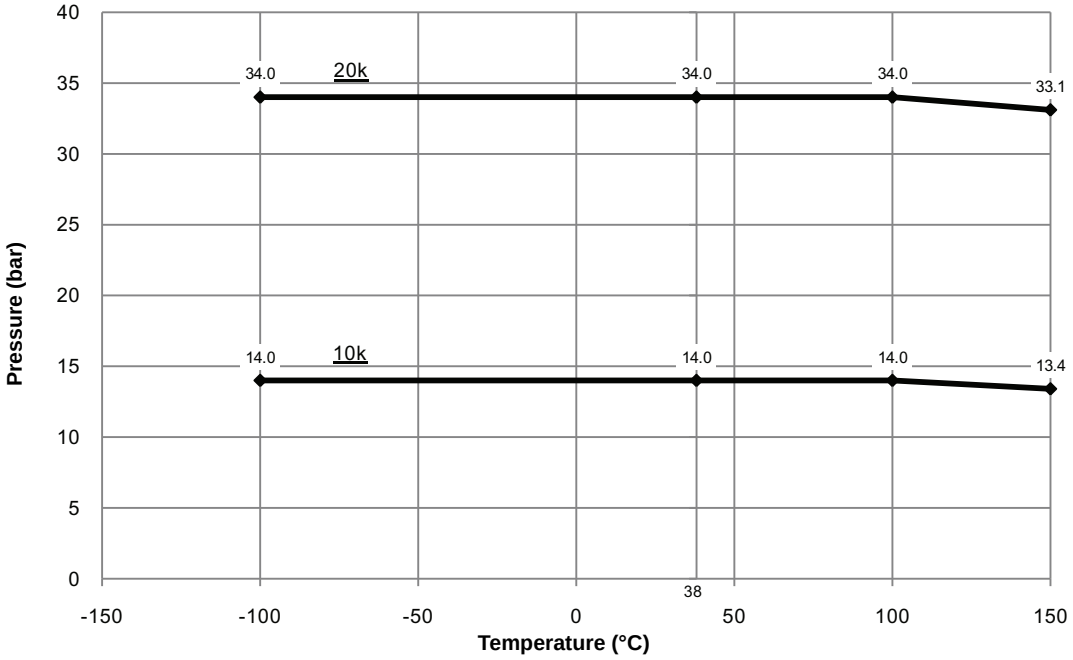
Models R025S and R050S



Pressure ratings *continued*

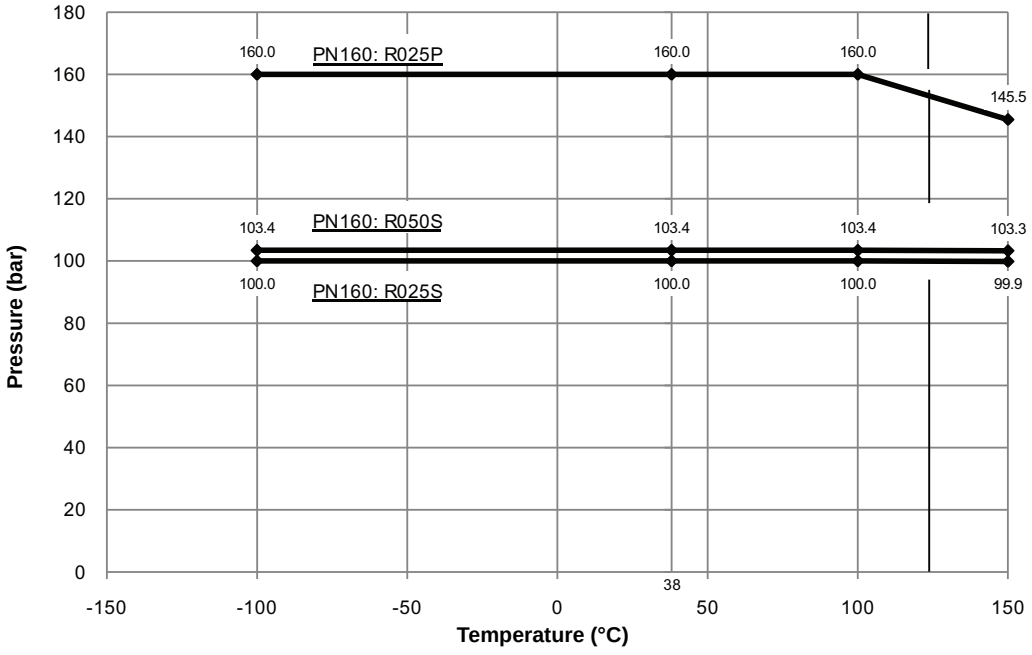
Sensor pressure/temperature rating with JIS 2220 F316/316L weldneck flanges

Models R025S through R200S



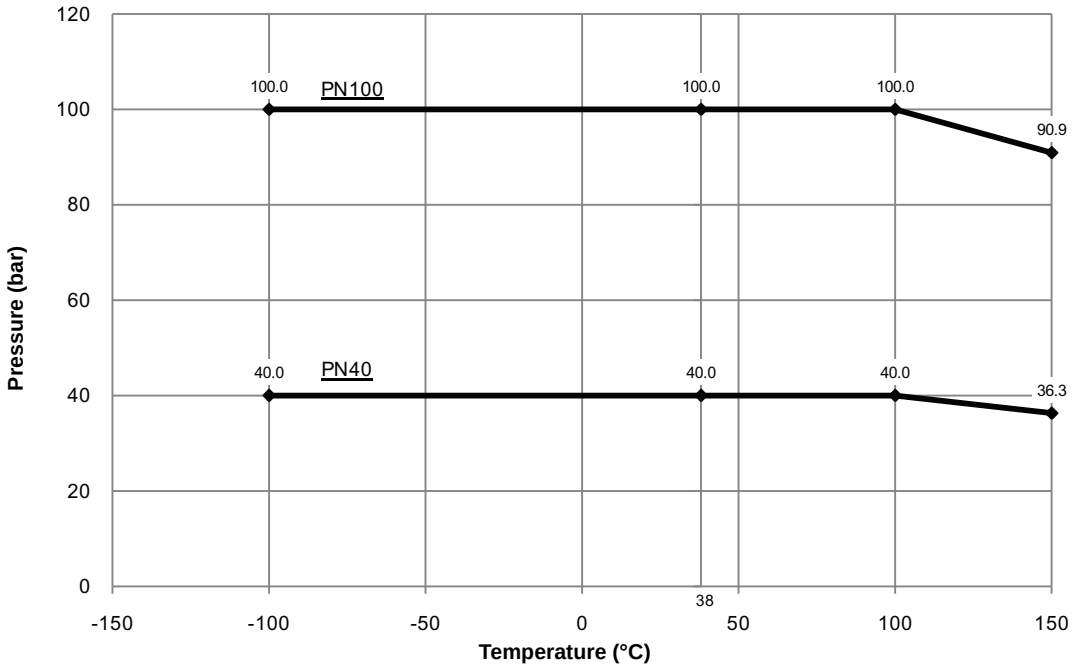
Sensor pressure/temperature rating with EN1092-1 and DIN F316/316L weldneck flanges

Models R025S and R050S; Model R025P



Pressure ratings *continued*

Models R025S and R050S; Model R025P



Hazardous area classifications

CSA and CSA-US

Sensor with integrally mounted Model 1700/2700 transmitter or with core processor	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

NEPSI and IECEx[(1)]

Sensor with integrally mounted Model 1700/2700 transmitter or with core processor	Ex ib IIC T1–T5 Gb
Sensor with Model 1700/2700 with THUM adapter	Ex ib IIC T1–T4

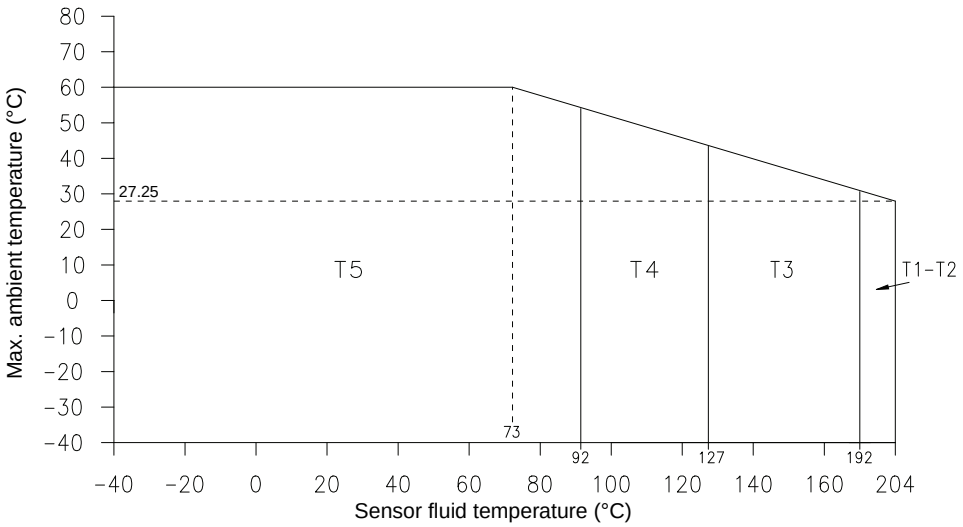
(1) For NEPSI and IECEx approvals, refer to the ATEX temperature graphs on the following pages for ambient and process temperature limits.

Hazardous area classifications *continued*

ATEX[(1)]

Models R025 and R050 (CIC A2) with core processor or Model 1700/2700 transmitter

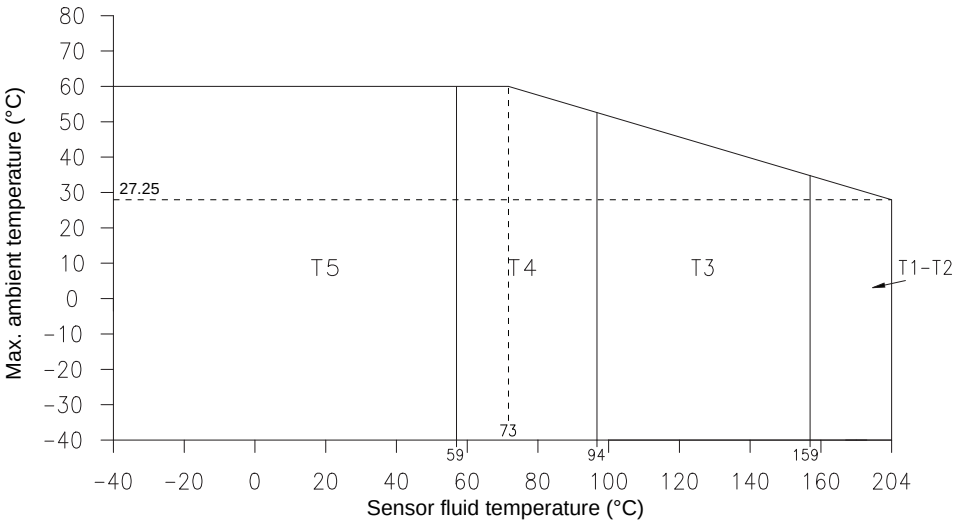
CE 0575 Ex
II 2G Ex ib IIC T1–T5 Gb
II 2D Ex ib IIIC T[(1)]°C Db IP65



Note 1: 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.
Note 2: When installed with the THUM adapter, the T4 rating spans –40 to +127°C.

Model R100 (CIC A2) with core processor or Model 1700/2700 transmitter

CE 0575 Ex
II 2G Ex ib IIC T1–T5 Gb
II 2D Ex ib IIIC T[(1)]°C Db IP65



Note 1: 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.
Note 2: When installed with the THUM adapter, the T4 rating spans –40 to +94°C.

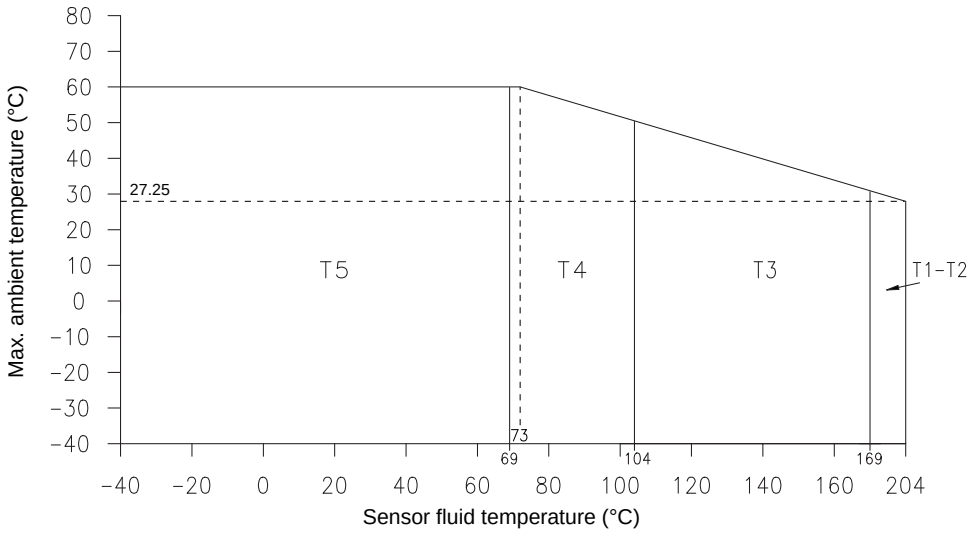
(1) ATEX "T" rating depends on the maximum temperature shown in the graphs above.

Hazardous area classifications *continued*

ATEX[(1)]

Model R200 (C.I.C. A1) with core processor or Model 1700/2700 transmitter

CE 0575 ⟨Ex⟩
II 2G Ex ib IIC T1–T5 Gb
II 2D Ex ib IIIC T[(1)]°C Db IP65



Note 1: 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.
Note 2: When installed with the THUM adapter, the T4 rating spans –40 to +104°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
Housing	Sensor	304L stainless steel
	Core processor	CF-3M stainless steel or polyurethane-painted aluminum; NEMA 4X (IP66)
	Integrally mounted transmitter	Polyurethane-painted aluminum; NEMA 4X (IP66)

(1) General corrosion guides 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.

Weight

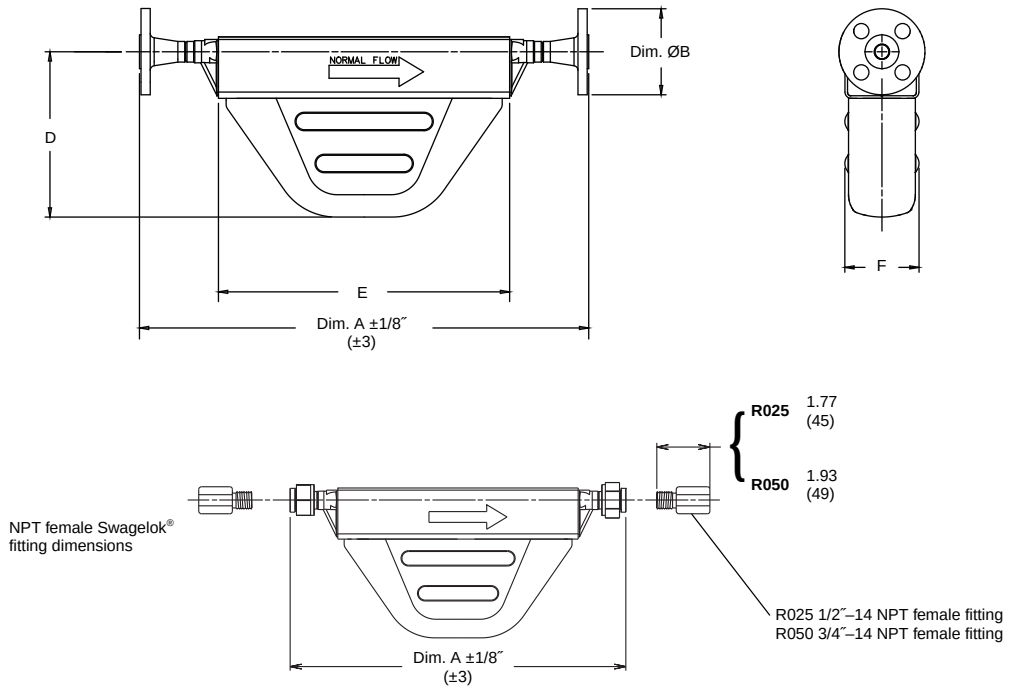
Weights provided are the weight of the meter with ANSI CL150 weld neck raised face flanges.

		lb	kg
Sensor with integrally mounted Model 1700/2700 transmitter	R025	17	8
	R050	18	9
	R100	27	13
	R200	49	23
Sensor with core processor	R025	11	5
	R050	12	6
	R100	22	10
	R200	43	20
Sensor with extended core processor	R025	12	6
	R050	13	6
	R100	23	11
	R200	44	20

Dimensions

Sensor

Dimensions in mm (inches)



Model	No. of flow tubes	Dimensions[1] in inches (mm)			
		Tube ID	D	E	F
R025	2	0.21 (5.3)	5.12 (130)	9.75 (248)	2.81 (71)
R050	2	0.35 (8.8)	6.75 (171)	11.88 (302)	2.94 (75)
R100	2	0.65 (16)	9.12 (232)	14.88 (378)	4.13 (105)
R200	2	1.1 (27)	12.56 (319)	17.88 (454)	5.62 (143)

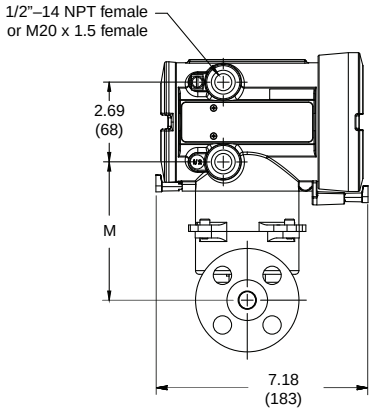
(1) For dimensions A and B, see process fitting tables on pages 18–20. For electronics dimensions, see page 17.

Dimensions *continued*

Electronics

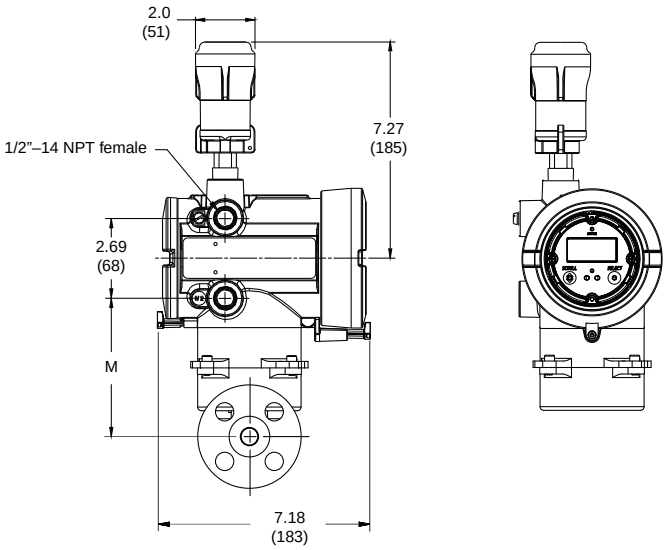
Model 1700/2700

Model	Dimensions in inches (mm)
	M
R025	4.66 (118)
R050	4.66 (118)
R100	4.91 (125)
R200	5.85 (148)



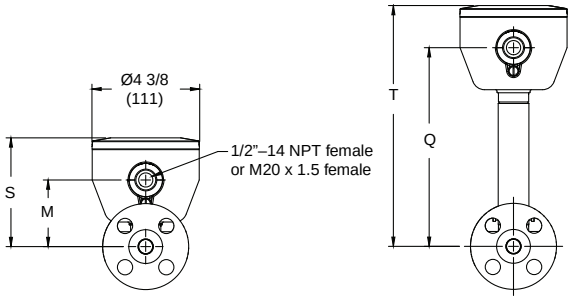
Model 2700 with THUM adapter

Model	Dimensions in inches (mm)
	M
R025	4.66 (118)
R050	4.66 (118)
R100	4.91 (125)
R200	5.85 (148)



Core processor

Model	Dimensions in inches (mm)			
	M	Q	S	T
R025	2.69 (68)	8.06 (205)	4.45 (113)	9.83 (250)
R050	2.69 (68)	8.06 (205)	4.45 (113)	9.83 (250)
R100	2.94 (75)	8.31 (211)	4.7 (119)	10.08 (256)
R200	3.87 (98)	9.25 (235)	5.64 (143)	11.01 (280)



Fitting options

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.

Model R025S

Code	Description						Dim. A	Dim. B
113	1/2-inch	CL150	ASME B16.5	F316/F316L	Weld neck flange	Raised face	16 (406)	3 1/2 (89)
114	1/2-inch	CL300	ASME B16.5	F316/F316L	Weld neck flange	Raised face	16 3/8 (416)	3 3/4 (95)
115	1/2-inch	CL600	ASME B16.5	F316/F316L	Weld neck flange	Raised face	16 7/8 (428)	3 3/4 (95)
116	DN15	PN40	DIN 2635	F316/F316L	Weld neck flange	Type C face	15 1/4 (387)	3 3/4 (95)
120	DN15	PN100/160	DIN 2638	F316/F316L	Weld neck flange	Type E face	15 13/16 (401)	4 1/8 (105)
121	1/2-inch		Tri-Clamp compatible	316L	Hygienic fitting		14 (355)	1 (25)
122	15 mm	20K	JIS B 2220	F316/F316L	Weld neck flange	Raised face	15 7/16 (393)	3 3/4 (95)
170	DN15	PN100/160	EN 1092-1	F316/F316L	Weld neck flange	Form B2	15 13/16 (401)	4 1/8 (105)
172	DN25	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form B1	15 3/8 (400)	4 1/2 (115)
176	DN15	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form B1	15 1/4 (387)	3 3/4 (95)
178	DN15	PN100	EN 1092-1	F316/F316L	Weld neck flange	Form D	15 13/16 (401)	4 1/8 (105)
183	DN25	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form D	15 3/8 (400)	4 1/2 (115)
222	DN15		DIN11851	316/316L	Hygienic coupling		13 15/16 (353)	Rd 34 × 1/8
310	DN15	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form D	15 1/4 (387)	3 3/4 (95)
319	#8		VCO	316/316L	Swagelok compatible fitting	1/2-inch NPT female adapter	14 (356)(1)	—

(1) Dimension specified in table does NOT include fitting length. For installation, modify Dim. A value to include fitting. See page 16.

High-pressure model R025P

Code	Description						Dim. A	Dim. B
120	DN15	PN100/160	DIN 2638	F316/F316L	Weld neck flange	Type E face	15 13/16 (401)	4 1/8 (105)
170	DN15	PN100/160	EN 1092-1	F316/F316L	Weld neck flange	Form B2	15 13/16 (401)	4 1/8 (105)
178	DN15	PN100	EN 1092-1	F316/F316L	Weld neck flange	Form D	15 13/16 (401)	4 1/8 (105)
180	DN25	PN100	EN 1092-1	F316/F316L	Weld neck flange	Form B2	16 13/16 (427)	5 7/8 (150)
319	#8		VCO	316/316L	Swagelok compatible fitting	1/2-inch NPT female adapter	14 (356)(1)	—

(1) Dimension specified in table does NOT include fitting length. For installation, modify Dim. A value to include fitting. See page 16.

Fitting options *continued*

Model R050S

Code	Description						Dim. A	Dim. B
113	1/2-inch	CL150	ASME B16.5	F316/F316L	Weld neck flange	Raised face	18 1/8 (460)	3 1/2 (89)
114	1/2-inch	CL300	ASME B16.5	F316/F316L	Weld neck flange	Raised face	18 1/2 (469)	3 3/4 (95)
115	1/2-inch	CL600	ASME B16.5	F316/F316L	Weld neck flange	Raised face	19 (482)	3 3/4 (95)
116	DN15	PN40	DIN 2635	F316/F316L	Weld neck flange	Type C face	17 3/8 (441)	3 3/4 (95)
120	DN15	PN100/ 160	DIN 2638	F316/F316L	Weld neck flange	Type E face	17 7/8 (455)	4 1/8 (105)
122	15 mm	20K	JIS B 2220	F316/F316L	Weld neck flange	Raised face	17 9/16 (446)	3 3/4 (95)
131	DN25	PN40	DIN 2635	F316/F316L	Weld neck flange	Type C face	17 1/2 (444)	4 1/2 (115)
170	DN15	PN100/ 160	EN 1092-1	F316/F316L	Weld neck flange	Form B2	17 7/8 (455)	4 1/8 (105)
172	DN25	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form B1	17 1/2 (444)	4 1/2 (115)
176	DN15	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form B1	17 3/8 (441)	3 3/4 (95)
178	DN15	PN100	EN 1092-1	F316/F316L	Weld neck flange	Form D	17 7/8 (455)	4 1/8 (105)
183	DN25	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form D	17 1/2 (444)	4 1/2 (115)
222	DN15		DIN11851	316/316L	Hygienic coupling		16 (407)	Rd 34 × 1/8
239	#12		VCO	316/316L	Swagelok compatible fitting	3/4-inch NPT female adapter	16 3/8 (415)(1)	—
310	DN15	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form D	17 3/8 (441)	3 3/4 (95)
322	3/4-inch		Tri-Clamp compatible	316L	Hygienic fitting		15 7/8 (403)	1 (25)

(1) Dimension specified in table does NOT include fitting length. For installation, modify Dim. A value to include fitting. See page 16.

Model R100S

Code	Description						Dim. A	Dim. B
128	1-inch	CL150	ASME B16.5	F316/F316L	Weld neck flange	Raised face	22 11/16 (576)	4 1/4 (108)
129	1-inch	CL300	ASME B16.5	F316/F316L	Weld neck flange	Raised face	23 3/16 (588)	4 7/8 (124)
130	1-inch	CL600	ASME B16.5	F316/F316L	Weld neck flange	Raised face	23 11/16 (601)	4 7/8 (124)
131	DN25	PN40	DIN 2635	F316/F316L	Weld neck flange	Type C face	21 7/16 (544)	4 1/2 (115)
137	DN25	PN100/ 160	DIN 2638	F316/F316L	Weld neck flange	Type E face	22 13/16 (580)	5 1/2 (140)
138	1-inch		Tri-Clamp compatible	316L	Hygienic fitting		21 1/4 (540)	2 (50)
139	25 mm	20K	JIS B 2220	F316/F316L	Weld neck flange	Raised face	21 11/16 (550)	4 15/16 (125)
179	DN25	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form B1	21 7/16 (545)	4 1/2 (115)
180	DN25	PN100	EN 1092-1	F316/F316L	Weld neck flange	Form B2	22 7/8 (581)	5 1/2 (140)
181	DN25	PN100	EN 1092-1	F316/F316L	Weld neck flange	Form D	22 7/8 (581)	5 1/2 (140)
230	DN25		DIN11851	316/316L	Hygienic coupling		20 9/16 (522)	Rd 52 × 1/6
311	DN25	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form D	21 7/16 (545)	4 1/2 (115)

Fitting options *continued*

Model R200S

Code	Description						Dim. A	Dim. B
312	DN40	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form D	23 1/4 (594)	5 15/16 (150)
316	DN50	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form D	23 5/8 (600)	6 1/2 (165)
341	1-1/2”	CL150	ASME B16.5	F316/F316L	Weld neck flange	Raised face	24 3/4 (629)	5 (127)
342	1-1/2”	CL300	ASME B16.5	F316/F316L	Weld neck flange	Raised face	25 1/4 (642)	6 1/8 (155)
343	1-1/2”	CL600	ASME B16.5	F316/F316L	Weld neck flange	Raised face	25 3/4 (654)	6 1/8 (155)
351	1-1/2”		Tri-Clamp compatible	316L	Hygienic fitting		23 1/4 (591)	2 (50)
352	2-inch		Tri-Clamp compatible	316L	Hygienic fitting		22 7/8 (581)	2 1/2 (64)
353	DN40		DIN11851	316/316L	Hygienic coupling		23 3/16 (589)	Rd 65 × 1/6
354	DN50		DIN11851	316/316L	Hygienic coupling		23 1/4 (591)	Rd 78 × 1/6
363	DN40	PN100	EN 1092-1	F316/F316L	Weld neck flange	Form B2	24 3/4 (628)	6 11/16 (170)
365	DN50	PN100	EN 1092-1	F316/F316L	Weld neck flange	Form B2	25 1/4 (641)	7 11/16 (195)
366	DN40	PN100	EN 1092-1	F316/F316L	Weld neck flange	Form D	24 3/4 (628)	6 11/16 (170)
367	DN50	PN100	EN 1092-1	F316/F316L	Weld neck flange	Form D	25 1/4 (641)	7 11/16 (195)
368	DN40	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form B1	23 1/4 (594)	5 15/16 (150)
369	DN50	PN40	EN 1092-1	F316/F316L	Weld neck flange	Form B1	23 5/8 (600)	6 1/2 (165)
376	DN50	PN160	DIN 2638	F316/F316L	Weld neck flange	Type E face	25 1/4 (641)	7 11/16 (195)
378	DN50	PN100	DIN 2637	F316/F316L	Weld neck flange	Type E face	23 9/16 (598)	5 15/16 (150)
381	DN40	PN40	DIN 2635	F316/F316L	Weld neck flange	Type C face	23 5/8 (600)	6 1/2 (165)
382	DN50	PN40	DIN 2635	F316/F316L	Weld neck flange	Type C face	23 7/16 (595)	5 1/2 (140)
385	40 mm	10K	JIS B 2220	F316/F316L	Weld neck flange	Raised face	23 7/16 (595)	6 1/8 (155)
387	40 mm	20K	JIS B 2220	F316/F316L	Weld neck flange	Raised face	23 7/16 (595)	5 1/2 (140)
418	2-inch	CL150	ASME B16.5	F316/F316L	Weld neck flange	Raised face	23 5/8 (600)	6 1/8 (155)
419	2-inch	CL300	ASME B16.5	F316/F316L	Weld neck flange	Raised face	25 7/16 (646)	6 1/2 (165)
420	2-inch	CL600	ASME B16.5	F316/F316L	Weld neck flange	Raised face	24 7/8 (632)	6 (152)
B85[(1)]	50 mm	10K	JIS B 2220	A105 Carbon Steel	Lap joint flange	316/316L stub	23 11/16 (602)	6 1/8 (155)
B86[(1)]	50 mm	20K	JIS B 2220	A105 Carbon Steel	Lap joint flange	316/316L stub	23 11/16 (602)	6 1/8 (155)

(1) Low volume process connection. Consult factory for lead time.

Ordering information

Model	Product description
	Standard sensor models
R025S	R-Series sensor; 1/4-inch (6 mm); 316L stainless steel
R050S	R-Series sensor; 1/2-inch (12 mm); 316L stainless steel
R100S	R-Series sensor; 1-inch (25 mm); 316L stainless steel
R200S	R-Series sensor; 2-inch (50 mm); 316L stainless steel
	High-pressure models
R025P	R-Series sensor; 1/4-inch (6 mm); 316L stainless steel; 2300 psi (158 bar) tube rating
Code	**Process connection**
###	See fittings option tables on pages 18–20
Code	**Case options**
N	Standard case
Code	**Electronics interface**
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 (all output options) or Model 2700 (FOUNDATION fieldbus or PROFIBUS-PA) transmitter
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
A	No gland
Code	**Approvals**
M	Micro Motion standard (no approval)
N	Micro Motion standard / PED compliant (no approval)
C	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[(1)]	NEPSI

Continued on next page

(1) Available only with language code M (Chinese).

Ordering information *continued*

Code	Language
A	Danish CE requirements and English manual
C	Czech installation manual
D	Dutch CE requirements and English manual
E	English installation manual
F	French installation manual
G	German installation manual
H	Finnish CE requirements and English manual
I	Italian installation manual
J	Japanese installation manual
M	Chinese installation manual
N	Norwegian CE requirements and English manual
O	Polish installation manual
P	Portuguese installation manual
S	Spanish installation manual
W	Swedish CE requirements and English manual
B	Hungarian CE requirements and English manual
K	Slovak CE requirements and English manual
T	Estonian CE requirements and English manual
U	Greek CE requirements and English manual
L	Latvian CE requirements and English manual
V	Lithuanian CE requirements and English manual
Y	Slovenian CE requirements and English manual
Code	**Future option 1**
Z	Reserved for future use
Code	**Future option 2**
Z	Reserved for future use
Code	**Future option 3**
Z	Reserved for future use
Code	**Factory options**
Z	Standard product
X	ETO product

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Emerson Process Management
Micro Motion Americas
Worldwide Headquarters
7070 Winchester Circle
Boulder, Colorado USA 80301
T: +1 800 522 6277
T: +1 (303) 527 5200
F: +1 (303) 530 8459

Mexico	T: 52 55 5809 5300
Argentina	T: 54 11 4837 7000
Brazil	T: 55 15 3238 3527
Venezuela	T: 58 26 1792 1858

Emerson Process Management
Micro Motion Europe/Middle East

Central & Eastern Europe	T: +41 41 7686 111
Dubai	T: +971 4 811 8100
Abu Dhabi	T: +971 2 697 2000
France	T: 0800 917 901
Germany	T: 0800 182 5347
Italy	T: 8008 77334
The Netherlands	T: +31 318 495 555
Belgium	T: +32 2 716 77 11
Spain	T: +34 913 586 000
U.K.	T: 0870 240 1978
Russia/CIS	T: +7 495 981 9811

Emerson Process Management
Micro Motion Asia Pacific

Australia	T: (61) 3 9721 0200
China	T: (86) 21 2892 9000
India	T: (91) 22 6662 0566
Japan	T: (81) 3 5769 6803
South Korea	T: (82) 2 3438 4600
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