Product Data Sheet
PS–00363
February 2002

Micro Motion R-Series General Purpose Mass and Volume Flowmeter

Now available with MVD™ Technology

MVD™ technology PlantWeb® FOUNDATION™ CE CERTIFIED EHEDG TYPE EL

Micro Motion

www.micromotion.com

EMERSON™ Process Management

Micro Motion R-Series Flowmeters

Welcome to a new era in measurement technology! Now you can afford to replace your old volumetric technology with the new Micro Motion R-Series flowmeters. The R-Series flowmeters are competitive in both price and accuracy specifications with positive displacement, differential pressure, magnetic, and vortex flowmeters, yet they have many advantages that the other technologies do not.

Like all our flowmeters, Micro Motion R-Series meters offer highly accurate flow measurement for virtually any process fluid—be it clean or not. The same meter can provide direct mass and volume flow for liquids, gasses, and slurries without having to be recalibrated. The R-Series' immunity to flow profile means that you can mount it anywhere in your process without having to worry about expensive straight runs or flow straightening devices. This translates to real savings in installation and engineering costs.

For general purpose applications, Micro Motion R-Series meters provide an ideal alternative to other flowmetering technologies. Micro Motion meters have no moving parts—saving you money over the course of their lifetime by helping you make the best use of your time, people, and material.

Micro Motion R-Series meters feature integral sensors and transmitters, making them easy to install. With the new Series 1000 transmitter with MVD™ Technology, you can also remotely mount your transmitter up to 1000 feet using 4-wire cable, giving you the flexibility you need to mount the sensor anywhere in your process piping and saving installation costs. Other features include a variety of standard process connections, milliampere and pulse outputs, a standard display, and a built-in totalizer that is resettable from the display. R-Series meters can be installed as part of a Bell 202 multidrop network, and feature the HART® communications protocol. Meters with FOUNDATION™ fieldbus and Profibus PA are also available.

Micro Motion R-Series meters are designed to perform in harsh operating environments and carry hazardous area approvals for the U.S.A., Canada, Europe, Japan, and other areas around the world.

Micro Motion is well known for increasing plant efficiency, product quality, and profitability. Now, the R-Series flowmeters offer all this and more:

Easy to use
No moving parts, no need for periodic recalibration, non-intrusive, no regular maintenance requirements.

Reliable and Rugged
Nothing to wear out or break down – more than 300,000 Micro Motion meters are installed and working in processes just like yours. The accumulated knowledge of Micro Motion is built into each flowmeter.

Direct mass or volume measurement
With direct mass measurement, the R-Series is immune to variations in pressure, temperature or process fluids. The same meter can measure liquid, gasses or slurries.

Greater accuracy
Accuracy to 0.5% on liquids and 0.75% on gasses means better product quality and less waste.

Easy to install
No special mounting, no straight run requirements and no flow conditioning elements.

Sanitary options
An improved surface finish option, which is both 3-A authorized and EHEDG approved, is available in all sizes. All R-Series sensors can be installed to be self-draining, with or without this option.

PlantWeb

Micro Motion R-Series flowmeters support PlantWeb® field-based architecture, a scalable way to use open and interoperable devices and systems to build process solutions of the future.

Performance specifications

Liquid flow specifications		Mass		Volume	
Nominal flow range[1]		***lb/min***	***kg/h***	***gal/min***	***l/h***
standard sensors	R025	0 to 50	0 to 1360	0 to 6	0 to 1360
	R050	0 to 150	0 to 4080	0 to 18	0 to 4080
	R100	0 to 600	0 to 16,325	0 to 72	0 to 16,325
	R200	0 to 1600	0 to 43,550	0 to 192	0 to 43,550
sanitary option	R025F	0 to 38	0 to 1034	0 to 4.5	0 to 1034
	R050F	0 to 90	0 to 2450	0 to 11	0 to 2450
	R100F	0 to 410	0 to 11,160	0 to 49	0 to 11,160
	R200F	0 to 1175	0 to 31,980	0 to 141	0 to 31,980
Maximum flow rate[2]		***lb/min***	***kg/h***	***gal/min***	***l/h***
standard sensors	R025	100	2720	12	2720
	R050	300	8160	36	8160
	R100	1200	32,650	144	32,650
	R200	3200	87,100	384	87,100
sanitary option	R025F	76	2068	9	2068
	R050F	180	4900	22	4900
	R100F	820	22,320	98	22,320
	R200F	2350	63,960	282	63,960
Accuracy[3]	Series 1000/2000 transmitter	±0.5% of rate[4]			
	All other transmitters	±0.5% of rate ± [(zero stability / flow rate) x 100]% of rate			
Repeatability[3]	Series 1000/2000 transmitter	±0.25% of rate[4]			
	All other transmitters	±0.25% of rate ± [½(zero stability / flow rate) x 100]% of rate			
Zero stability		***lb/min***	***kg/h***	***gal/min***	***l/h***
	R025	0.01	0.27	0.0018	0.41
	R050	0.03	0.82	0.0054	1.22
	R100	0.12	3.27	0.0216	4.90
	R200	0.32	8.71	0.0576	13.07

[1] Micro Motion has adopted the terminology "nominal flow range." The upper limit of this range is the flow rate at which water at reference conditions causes approximately 15 psi (1 bar) of pressure drop for Micro Motion R-Series flowmeters.

[2] The maximum flow rate for volume measurement is based on a process-fluid density of 1 g/cc. For fluids with density other than 1 g/cc, the maximum volume flow rate equals the maximum mass flow rate divided by the fluid's density.

[3] 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.

[4] When flow rate is less than (zero stability/.005), accuracy equals ±[(zero stability/flow rate) x 100]% of rate and repeatability equals ±[½(zero stability/flow rate x 100)]% of rate.

Performance specifications *continued*

Gas flow specifications		Standard volume[1]	
Nominal flow range[2]		***scfm[3]***	***Nm³/h[4]***
standard sensors	R025	0 to 215	0 to 375
	R050	0 to 650	0 to 1140
	R100	0 to 2490	0 to 4350
	R200	*not rated for gas*	
sanitary option	R025F	0 to 165	0 to 288
	R050F	0 to 390	0 to 681
	R100F	0 to 1777	0 to 5100
	R200F	*not rated for gas*	
Maximum flow rate		***scfm***	***Nm³/h***
standard sensors	R025	390	663
	R050	1000	1699
	R100	4400	7476
	R200	*not rated for gas*	
sanitary option	R025F	300	510
	R050F	600	1020
	R100F	3000	5100
	R200F	*not rated for gas*	
Accuracy[5]	Series 1000/2000 transmitter	±0.75% of rate[6]	
	All other transmitters	±1.0% of rate ± [(zero stability/flow rate) x 100]% of rate	
Repeatability[5]	Series 1000/2000 transmitter	±0.5% of rate[7]	
	All other transmitters	±0.5% of rate ± [(zero stability/flow rate) x 100]% of rate	
Zero stability		***scfm***	***Nm³/h***
	R025	0.1330	0.2681
	R050	0.3989	0.8143
	R100	1.5957	3.2473
	R200	*not rated for gas*	

[1] Air density at standard conditions, 14.73 psia (1.016 bara), 60°F (15.5°C), equals 0.077 lb/ft³ (1.200 kg/m³).

[2] Micro Motion has adopted the terminology "nominal flow range." The upper limit of this range is the flow rate at which air at 60°F (15.5°C) and 1000 psig (70 bar) causes approximately 15 psid (1 bar) of pressure drop for Micro Motion R-Series flowmeters.

[3] Air at 60°F and 1000 psi causes approximately 14.7 psi pressure drop.

[4] Air at 0°C and 70 bar causes approximately 1 bar pressure drop.

[5] Flow accuracy includes the combined effects of repeatability, linearity, and hysteresis. All specifications for gas are based on air at 60°F (15.5°C) and 1000 psig (70 bar), unless otherwise noted.

[6] When flow rate is less than (zero stability/.0075), accuracy equals ±[(zero stability/flow rate) x 100]% of rate and repeatability equals ±[(zero stability/flow rate) x 100]% of rate.

[7] When flow rate is less than (zero stability/.005), accuracy equals ±[(zero stability/flow rate) x 100]% of rate and repeatability equals ±[(zero stability/flow rate) x 100]% of rate.

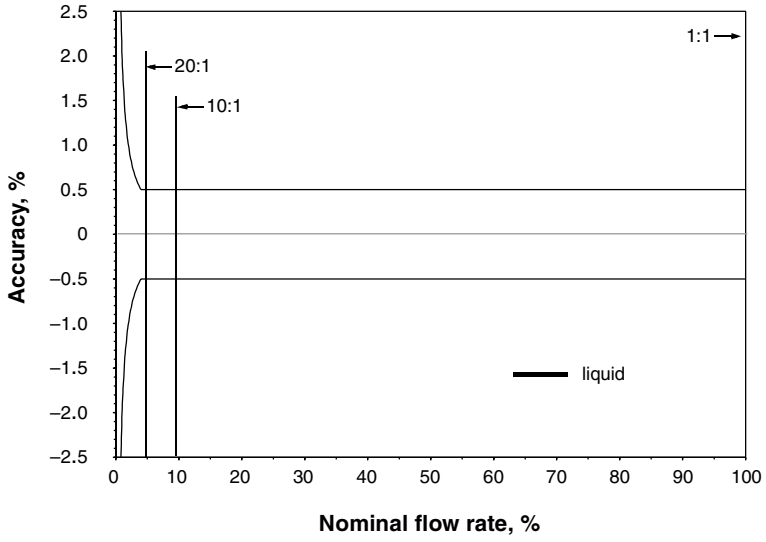
Performance specifications *continued*

Pressure specifications

Flow tube rating[1]	All models	1450 psi	100 bar
Housing rating	All models	*Housing is not rated for pressure containment.*	

Typical accuracy, turndown, and pressure drop with Model 1700/2700 transmitters

To determine accuracy, turndown, and pressure drop using your process variables, contact your local Micro Motion representative.



standard sensors

Turndown	20:1	10:1	1:1
Accuracy, ±%			
liquid	0.50	0.50	0.50
gas	1.30	0.75	0.75
Pressure drop,			
liquid (psi)	0.1	0.3	14.2
liquid (bar)	0.01	0.02	0.98
gas (psi)	<0.1	0.2	14.7
gas (bar)	<0.01	0.01	1.01

sensors with sanitary option

Turndown	20:1	10:1	1:1
Accuracy, ±%			
liquid	0.60	0.50	0.50
gas	1.80	0.90	0.75
Pressure drop,			
liquid (psi)	0.1	0.3	14.2
liquid (bar)	0.01	0.02	0.98
gas (psi)	<0.1	0.2	14.7
gas (bar)	<0.01	0.01	1.01

[1] *Over entire temperature range, according to ASME B31.3.*

Functional specifications

Temperature limits

Process fluid	Sensors with j-box	–400 to 300°F (–40 to 150°C)
	All other models	–40 to 257°F (–40 to 125°C)
Ambient temperature	Storage[1]	–40 to 185°F (–40 to 85°C) with IFT9703 –4 to 158°F (–20 to 70°C) with optional display for IFT9703 –40 to 158°F (–40 to 70°C) with Model 1700 or Model 2700
	Operation[1]	–22 to 131°F (–30 to 55°C) with IFT9703 32 to 131°F (0 to 55°C) with optional display for IFT9703 –40 to 140°F (–40 to 60°C) with Model 1700 or Model 2700
Process fluid vs. ambient temperature		At their upper limits, process fluid temperature and ambient temperature restrict each other. For CENELEC-compliant sensors, the minimum process fluid and ambient temperature is –40°C. The CENELEC "T" rating and hazardous area classification depend on the maximum process fluid and ambient temperature. See page 7.

Hazardous area classifications

UL is a U.S.A. approvals agency, CSA is a Canadian approvals agency, CENELEC is a European standards organization.

UL[2] and CSA

When properly mounted integrally to an IFT9703 transmitter, the sensor can be installed in the following hazardous areas:

Class I, Div. 2, Groups A, B, C, and D
Class II, Div. 2, Groups F and G

When properly connected to a core processor or integrally mounted Model 1700 or 2700 transmitter, the sensor can be installed in the following hazardous areas:

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

When properly connected remotely to a Micro Motion transmitter via the junction box supplied with the sensor, the sensor can be installed in the following hazardous areas:

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] *For the Model 1700 and Model 2700 display responsiveness decreases and display may become difficult to read below* –4°F (–20°C). *Above 131°F (55°C), some darkening of display may occur.*

[2] *At time of printing, UL approval for Micro Motion R-Series meters with Model 1700 and 2700 transmitters is pending.*

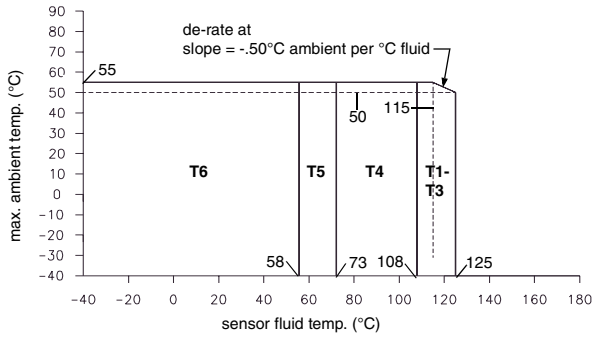
Functional specifications *continued*

Hazardous area classifications *continued*

CENELEC

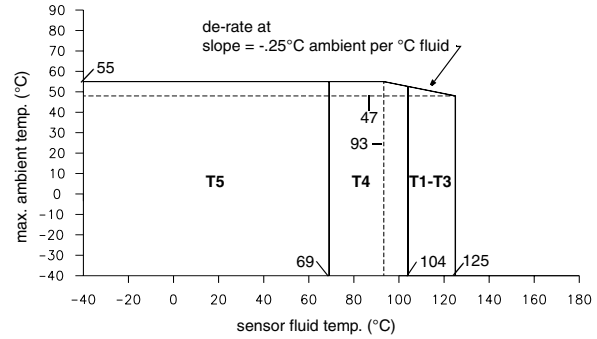
flowmeters with integrally mounted IFT9703 transmitter
R025, R050, R100, R200

EEx ib IIC T1-T6



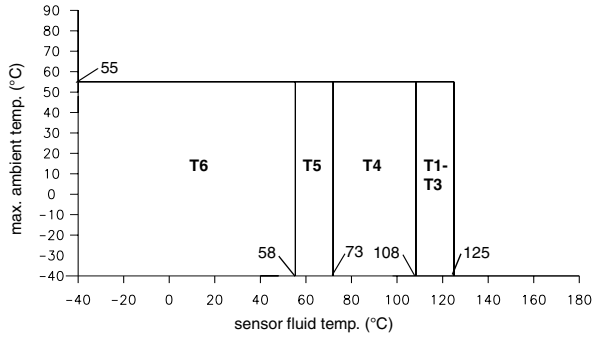
flowmeters with core processor
R025, R050, R100, R200

EEx ib IIC T1-T5



flowmeters with j-box
R025, R050, R100, R200

EEx ib IIC T1-T6



Physical specifications

Material of construction

Wetted parts[1]		316L stainless steel
Housings	Sensor	304L stainless steel
	Core processor	CF-3M stainless steel
	Integrally mounted transmitter or j-box	epoxy polyester painted cast aluminum

Weight[2]

		lb	***kg***
Sensor with j-box	R025/R025F	11	5
	R050/R025F	13	6
	R100/R100F	22	10
	R200	42	19
	R200F	48	22
Sensor with local core processor	R025/R025F	14	7
	R050/R050F	15	7
	R100/R100F	24	11
	R200	44	20
	R200F	50	23
Sensor with local core processor on temperature extender	R025/R025F	15	7
	R050/R050F	16	7
	R100/R100F	25	12
	R200	45	21
	R200F	51	24
Sensor with integrated IFT9703	R025/R025F	15	7
	R050/R050F	16	8
	R100/R100F	26	12
	R200	46	21
	R200F	52	24
Sensor with integrated Model 1700/2700 transmitter	R025/R025F	17	8
	R050/R050F	18	8
	R100/R100F	27	12
	R200	48	22
	R200F	54	25

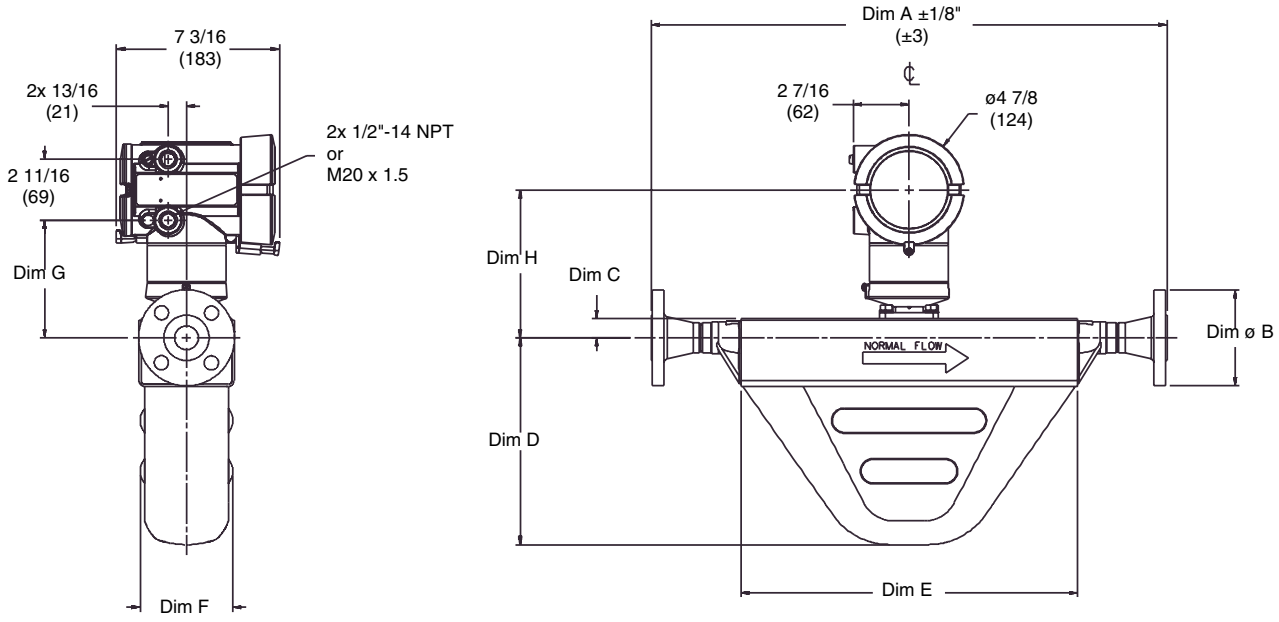
[1] General corrosion guides do not account for cyclical stress, and therefore should not be relied upon when choosing a wetted material for your Micro Motion flowmeter. Please refer to Micro Motion's corrosion guide for material compatibility information.

[2] Weight of flowmeter with 150 lb weld neck raised face flanges.

Physical specifications *continued*

Dimensions — R-Series sensors with Model 1700/2700 transmitter

Dimensions in inches (mm)



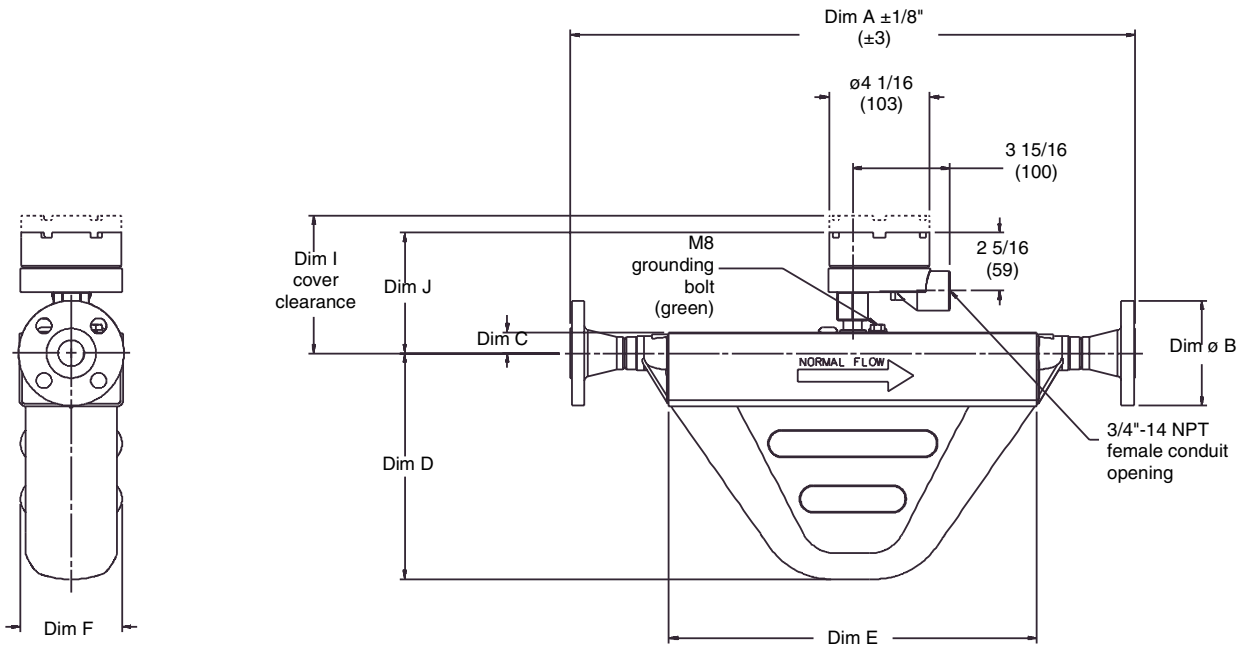
Model		Dimensions[1]					
		C	D	E	F	G	H
R025	*inches*	5/8	5 1/8	9 3/4	2 13/16	6 3/8	7 3/4
	(mm)	(15)	(130)	(247)	(72)	(162)	(196)
R050	*inches*	5/8	6 3/4	11 7/8	2 15/16	5	6 5/16
	(mm)	(15)	(171)	(301)	(74)	(126)	(161)
R100	*inches*	7/8	9 1/8	14 7/8	4 1/8	5 1/4	6 9/16
	(mm)	(22)	(232)	(378)	(104)	(133)	(167)
R200	*inches*	1 3/4	12 9/16	17 7/8	5 5/8	6 1/8	7 1/2
	(mm)	(44)	(319)	(454)	(144)	(155)	(190)

[1]For dimensions A and B, see process fittings table, pages 13 and 14.

Physical specifications *continued*

Dimensions — R-Series sensors with j-box

Dimensions in *inches* (mm)



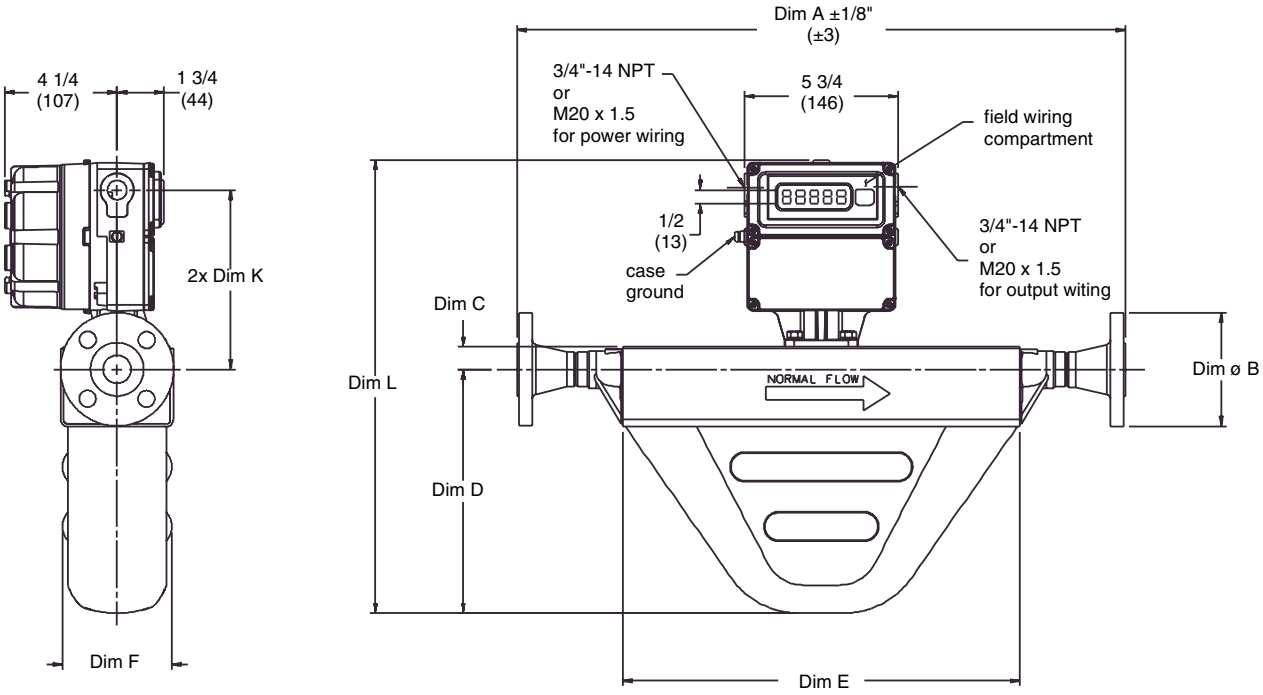
Model		Dimensions[1] C	D	E	F	I	J
R025	*inches*	5/8	5 1/8	9 3/4	2 13/16	5 5/16	4 5/8
	(mm)	(15)	(130)	(247)	(72)	(135)	(118)
R050	*inches*	5/8	6 3/4	11 7/8	2 15/16	5 5/16	4 5/8
	(mm)	(15)	(171)	(301)	(74)	(135)	(118)
R100	*inches*	7/8	9 1/8	14 7/8	4 1/8	5 9/16	4 7/8
	(mm)	(22)	(232)	(378)	(104)	(141)	(124)
R200	*inches*	1 3/4	12 9/16	17 7/8	5 5/8	6 7/16	5 13/16
	(mm)	(44)	(319)	(454)	(144)	(164)	(147)

[1] *For dimensions A and B, see process fittings table, pages 13 and 14.*

Physical specifications *continued*

Dimensions — R-Series sensors with IFT9703 transmitter

Dimensions in *inches* (mm)



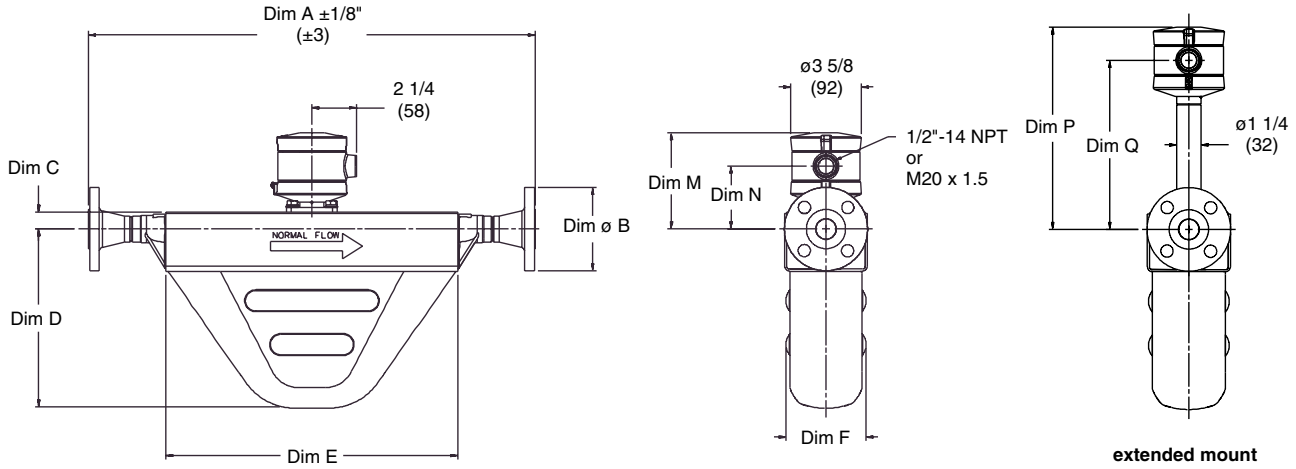
Model		Dimensions[1] C	D	E	F	K	L
R025	*inches*	5/8	5 1/8	9 3/4	2 13/16	6 1/2	12 3/4
	(mm)	(15)	(130)	(247)	(72)	(165)	(324)
R050	*inches*	5/8	6 3/4	11 7/8	2 15/16	6 1/2	14 5/16
	(mm)	(15)	(171)	(301)	(74)	(165)	(364)
R100	*inches*	7/8	9 1/8	14 7/8	4 1/8	6 3/4	17
	(mm)	(22)	(232)	(378)	(104)	(171)	(432)
R200	*inches*	1 3/4	12 9/16	17 7/8	5 5/8	7 5/8	21 5/16
	(mm)	(44)	(319)	(454)	(144)	(194)	(541)

[1] For dimensions A and B, see process fittings table, pages 13 and 14.

Physical specifications *continued*

Dimensions — R-Series sensors with local core processor

Dimensions in *inches* (mm)



Model		Dimensions[1] C	D	E	F	M	N	P	Q
R025	*inches*	5/8	5 1/8	9 3/4	2 13/16	6 1/16	4 3/8	11 7/16	9 3/4
	(mm)	(15)	(130)	(247)	(72)	(155)	(112)	(291)	(248)
R050	*inches*	5/8	6 3/4	11 7/8	2 15/16	4 11/16	3	10 1/16	8 3/8
	(mm)	(15)	(171)	(301)	(74)	(119)	(76)	(256)	(213)
R100	*inches*	7/8	9 1/8	14 7/8	4 1/8	4 15/16	3 1/4	10 5/16	8 5/8
	(mm)	(22)	(232)	(378)	(104)	(125)	(82)	(262)	(219)
R200	*inches*	1 3/4	12 9/16	17 7/8	5 5/8	5 13/16	4 1/8	11 3/16	9 1/2
	(mm)	(44)	(319)	(454)	(144)	(148)	(105)	(284)	(242)

[1] For dimensions A and B, see process fittings table, pages 13 and 14.

Physical specifications *continued*

Fittings for R-Series standard meters

R025 fitting options[1]	Fitting code	Dim. A, face-to-face *inches (mm)*	Dim. B, outside diam. *inches (mm)*
1/2" ANSI 150 lb weld neck raised face flange	113	16 (406)	3 1/2 (89)
1/2" ANSI 300 lb weld neck raised face flange	114	16 3/8 (416)	3 3/4 (95)
1/2" ANSI 600 lb weld neck raised face flange	115	16 7/8 (429)	3 3/4 (95)
1/2" NPT female CAJON size 8 VCO fitting	319	14 (356)	---
1/2" sanitary fitting (Tri-Clamp compatible)	121	14 (356)	1 (25)
15 mm DIN PN40 weld neck, DIN 2635, type C face	116	15 1/4 (387)	3 3/4 (95)
15 mm DIN PN100/160 weld neck, DIN 2637, type E face	120	15 13/16 (401)	4 1/8 (105)
15 mm DIN 11851 coupling	222	13 15/16 (353)	Rd 34 × 1/8
15 mm JIS 10K/20K weld neck raised face flange	122	15 7/16 (393)	3 3/4 (95)
15 mm JIS 40K weld neck raised face flange	221	16 1/2 (420)	4 1/2 (115)
R050 fitting options[1]			
1/2" ANSI 150 lb weld neck raised face flange	113	18 1/8 (460)	3 1/2 (89)
1/2" ANSI 300 lb weld neck raised face flange	114	18 1/2 (469)	3 3/4 (95)
1/2" ANSI 600 lb weld neck raised face flange	115	19 (482)	3 3/4 (95)
3/4" NPT female CAJON size 12 VCO fitting	239	16 3/8 (415)	---
3/4" sanitary fitting (Tri-Clamp compatible)	322	15 7/8 (403)	1 (25)
15 mm DIN PN40 weld neck, DIN 2635, type C face	116	17 3/8 (441)	3 3/4 (95)
15 mm DIN PN100/160 weld neck, DIN 2637, type E face	120	17 7/8 (455)	4 1/8 (105)
25 mm DIN PN40 weld neck, DIN 2635, type C face	131	17 1/2 (444)	4 1/2 (115)
15 mm DIN 11851 coupling	222	16 (407)	Rd 34 × 1/8
15 mm JIS 10K/20K weld neck raised face flange	122	17 9/16 (446)	3 3/4 (95)
15 mm JIS 40K weld neck raised face flange	221	18 5/8 (473)	4 1/2 (115)
R100 fitting options[1]			
1" ANSI 150 lb weld neck raised face flange	128	22 11/16 (576)	4 1/4 (108)
1" ANSI 300 lb weld neck raised face flange	129	23 3/16 (588)	4 7/8 (124)
1" ANSI 600 lb weld neck raised face flange	130	23 11/16 (601)	4 7/8 (124)
1" sanitary fitting (Tri-Clamp compatible)	138	21 1/4 (540)	2 (50)
25 mm DIN PN40 weld neck, DIN 2635, type C face	131	21 7/16 (544)	4 1/2 (115)
25 mm DIN PN100/160 weld neck, DIN 2637, type E face	137	22 13/16 (580)	5 1/2 (140)
25 mm DIN 11851 coupling	230	20 9/16 (522)	Rd 52 × 1/6
25 mm JIS 10K/20K weld neck raised face flange	139	21 11/16 (550)	4 15/16 (125)
25 mm JIS 40K weld neck raised face flange	229	22 15/16 (582)	5 1/8 (130)

[1] *Fittings listed here are standard options. Other types of fittings are available. Contact your local Micro Motion representative.*

Physical specifications *continued*

Fittings for R-Series standard meters *continued*

R200 fitting options[1]	Fitting code	Dim. A, face-to-face *inches (mm)*	Dim. B, outside diam. *inches (mm)*
1 1/2" ANSI 150 lb weld neck raised face flange	341	24 3/4 (629)	5 (127)
1 1/2" ANSI 300 lb weld neck raised face flange	342	25 1/4 (642)	6 1/8 (155)
1 1/2" ANSI 600 lb weld neck raised face flange	343	25 3/4 (654)	6 1/8 (155)
2" ANSI 150 lb weld neck raised face flange	418	24 7/8 (632)	6 (152)
2" ANSI 300 lb weld neck raised face flange	419	25 3/8 (645)	6 1/2 (165)
2" ANSI 600 lb weld neck raised face flange	420	26 1/8 (664)	6 1/2 (165)
1 1/2" sanitary fitting (Tri-Clamp compatible)	351	23 1/4 (591)	2 (50)
2" sanitary fitting (Tri-Clamp compatible)	352	22 7/8 (581)	2 1/2 (64)
40 mm DIN PN40 weld neck, DIN 2635, type C face	381	23 9/16 (598)	5 15/16 (150)
50 mm DIN PN40 weld neck, DIN 2635, type C face	382	23 5/8 (600)	6 1/2 (165)
50 mm DIN PN100 weld neck, DIN 2637, type E face	378	25 1/4 (641)	7 11/16 (195)
50 mm DIN PN160 weld neck, DIN 2638, type E face	376	25 13/16 (655)	7 11/16 (195)
40 mm DIN 11851 coupling	353	23 3/16 (589)	Rd 65 × 1/6
50 mm DIN 11851 coupling	354	23 1/4 (591)	Rd 78 × 1/6
40 mm JIS 10K weld neck raised face flange	385	23 7/16 (595)	5 1/2 (140)
40 mm JIS 20K weld neck raised face flange	387	23 7/16 (595)	5 1/2 (140)
50 mm JIS 10K weld neck raised face flange	386	23 7/16 (595)	6 1/8 (155)
50 mm JIS 20K weld neck raised face flange	388	23 5/8 (600)	6 1/8 (155)
50 mm JIS 40K weld neck raised face flange	389	25 7/16 (646)	6 1/2 (165)

[1] *Fittings listed here are standard options. Other types of fittings are available. Contact your local Micro Motion representative.*

Physical specifications *continued*

Fittings for R-Series meters with sanitary option

R025F fitting options[1]	Fitting code	Dim. A, face-to-face *inches (mm)*	Dim. B, outside diam. *inches (mm)*
1/2-inch sanitary fitting (Tri-Clamp compatible)	121	15 15/16 (404)	1 (25)
15 mm DIN 11851 coupling	222	16 5/8 (423)	Rd 34 x 1/8
15 mm DIN 11864-1A aseptic coupling	676	16 5/8 (423)	Rd 34 x 1/8
R050F fitting options[1]			
3/4-inch sanitary fitting (Tri-Clamp compatible)	322	17 3/8 (441)	1 (25)
15 mm DIN 11851 coupling	222	17 13/16 (452)	Rd 34 x 1/8
15 mm DIN 11864-1A aseptic coupling	676	17 13/16 (452)	Rd 34 x 1/8
R100F fitting options[1]			
1-inch sanitary fitting (Tri-Clamp compatible)	138	21 (533)	2 (50)
25 mm DIN 11851 coupling	230	21 15/16 (558)	Rd 52 x 1/6
25 mm DIN 11864-1A aseptic coupling	677	21 15/16 (558)	Rd 52 x 1/6
R200F fitting options[1]			
2-inch sanitary fitting (Tri-Clamp compatible)	352	21 5/16 (541)	2 1/2 (64)
50 mm DIN 11851 coupling	354	22 7/16 (569)	Rd 78 x 1/6
50 mm DIN 11864-1A aseptic coupling	678	22 7/16 (569)	Rd 78 x 1/6

[1] Fittings listed here are standard options. Other types of fittings are available. Contact your local Micro Motion representative.

Ordering information

Micro Motion R-Series sensor model number matrix – standard meters

Model	Product Description
R025S	Micro Motion Coriolis R-Series sensor; 1/4-inch; 316L stainless steel
R050S	Micro Motion Coriolis R-Series sensor; 1/2-inch; 316L stainless steel
R100S	Micro Motion Coriolis R-Series sensor; 1-inch; 316L stainless steel
R200S	Micro Motion Coriolis R-Series sensor; 2-inch; 316L stainless steel
Code	**Process Connections**
###	See fittings tables on pages 13-14
Code	**Case Options**
N	Standard case
Code	**Electronics Interface**
A	Local core processor for remote mount Series 1000/2000 transmitters
B	Local core processor extended mount for remote mount Series 1000/2000 transmitters
C	For integral mount Model 1700/2700 transmitter
D	MVDSolo; local core processor for direct host connection (for OEMs)
E	MVDSolo; local core processor extended mount for direct host connection (OEMs)
I	Integral IFT9703 (at time of purchase)
R	9-wire J-box
Code	**Conduit Connections**
	Electronics Interface Code 'A' and 'B' (local core processor) or 'D' and 'E' (MVDSolo)
B	1/2-inch NPT - no gland
C	1/2-inch NPT with brass nickel cable gland (cable diameter 0.335 to 0.394 inches)
D	1/2-inch NPT with stainless steel cable gland (cable diameter 0.335 to 0.394 inches)
E	M20 - no gland
F	M20 with brass nickel cable gland (cable diameter 8.5 to 10 mm)
G	M20 with stainless steel cable gland (cable diameter 8.5 to 10 mm)
	Electronics Interface Code 'C' or 'I': (integral mount Model 1700/2700 or IFT9703 — no conduit connections)
A	No gland
	Electronics Interface Code 'R' : (9-wire J-box)
A	3/4-inch NPT - no gland
H	3/4-inch NPT with brass nickel cable gland
J	3/4-inch NPT with stainless steel cable gland
Code	**Approvals**
M	Micro Motion Standard (no approval)
U	UL
C	CSA (Canada only)
A	CSA (US and Canada)
Z	CENELEC
Code	**Language**
A	Danish Quick Reference Guide and English Manual
D	Dutch Quick Reference Guide and English Manual
E	English Quick Reference Guide and English Manual
F	French Quick Reference Guide and French Manual
G	German Quick Reference Guide and German Manual
H	Finnish Quick Reference Guide and English Manual
I	Italian Quick Reference Guide and English Manual
N	Norwegian Quick Reference Guide and English Manual
P	Portuguese Quick Reference Guide and English Manual
S	Spanish Quick Reference Guide and English Manual
W	Swedish Quick Reference Guide 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	CEQ product
Typical Model Number: R025S 113 N C A U E ZZZ Z	

Ordering information

Micro Motion R-Series sensor model number matrix – sensors with sanitary option

Model	Product Description
R025F	Micro Motion Coriolis R-Series sensor; 1/4-inch; 316L stainless steel, 32 Ra finish
R050F	Micro Motion Coriolis R-Series sensor; 1/2-inch; 316L stainless steel, 32 Ra finish
R100F	Micro Motion Coriolis R-Series sensor; 1-inch; 316L stainless steel, 32 Ra finish
R200F	Micro Motion Coriolis R-Series sensor; 2-inch; 316L stainless steel, 32 Ra finish
Code	**Process Connections**
###	See fittings tables on page 15
Code	**Case Options**
N	Standard case
Code	**Electronics Interface**
A	Local core processor for remote mount Series 1000/2000 transmitters
B	Local core processor extended mount for remote mount Series 1000/2000 transmitters
C	For integral mount Model 1700/2700 transmitter
D	MVDSolo; local core processor for direct host connection (for OEMs)
E	MVDSolo; local core processor extended mount for direct host connection (OEMs)
I	Integral IFT9703 (at time of purchase)
Code	**Conduit Connections**
	Electronics Interface Code 'A' and 'B' (local core processor) or 'D' and 'E' (MVDSolo)
B	1/2-inch NPT - no gland
C	1/2-inch NPT with brass nickel cable gland (cable diameter 0.335 to 0.394 inches)
D	1/2-inch NPT with stainless steel cable gland (cable diameter 0.335 to 0.394 inches)
E	M20 - no gland
F	M20 with brass nickel cable gland (cable diameter 8.5 to 10 mm)
G	M20 with stainless steel cable gland (cable diameter 8.5 to 10 mm)
	Electronics Interface Code 'C' or 'I': (integral mount Model 1700/2700 or IFT9703 — no conduit connections)
A	No gland
Code	**Approvals**
M	Micro Motion Standard (no approval)
C	CSA (Canada only)
A	CSA (US and Canada)
Z	CENELEC
Code	**Language**
A	Danish Quick Reference Guide and English Manual
D	Dutch Quick Reference Guide and English Manual
E	English Quick Reference Guide and English Manual
F	French Quick Reference Guide and French Manual
G	German Quick Reference Guide and German Manual
H	Finnish Quick Reference Guide and English Manual
I	Italian Quick Reference Guide and English Manual
N	Norwegian Quick Reference Guide and English Manual
P	Portuguese Quick Reference Guide and English Manual
S	Spanish Quick Reference Guide and English Manual
W	Swedish Quick Reference Guide 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	CEQ product
Typical Model Number: R025F 121 N C A A E Z Z Z Z	

Notes

Notes

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