# Micro Motion® T-Series Straight-Tube Mass Flow and Density Meters

With MVD<sup>™</sup> Technology







## Micro Motion® T-Series straight-tube meters

Micro Motion is proud to offer you the first single-straight-tube flowmeter with Micro Motion excellence built in.

Micro Motion T-Series meters offer the best performance of any straight-tube Coriolis meter available today. If you have plugging concerns with your application, or if you need your meter to be compact, self-draining, and sanitary, with standard secondary containment, then Micro Motion T-Series meters are the straight-tube meters you want.

Five sizes of Micro Motion T-Series meters offer direct mass flow, volume flow, density, and temperature measurement of liquids and slurries — without the need for additional equipment, manual calculations, or estimations. Micro Motion T-Series meters have no moving parts, and no special mounting or flow conditioning requirements. They feature titanium wetted parts for excellent corrosion resistance, and are available with a variety of process connections. And, like all Micro Motion meters, these straight-tube meters are easy to install and require no maintenance — saving you money over the course of their lifetime.

### Sanitary applications

Our straight-tube meter design is based on the ASME Bioprocessing Equipment Standard. With optional sanitary fittings, Micro Motion T-Series meters meet 3-A Sanitary Standards for Milk and Milk Products, are EHEDG clean-in-place approved, and feature a standard surface finish of 32 μ-inch Ra (0.8 μ-meter) — and 20 μ-inch Ra (0.5 µ-meter) or better is an available option.

The Micro Motion T-Series single straight-tube design makes these meters self-draining, and allows them to be cleaned or sterilized in place (CIP/SIP). The straight flow path also resists plugging, and can be pigged.

### **MVD**<sup>™</sup> Technology

Micro Motion T-Series meters are available with MVD Technology — an innovative, multivariable, digital signal processing capability. A core processor, integrally mounted on the sensor, works with our 4-wire transmitters to improve ease of use, reduce downtime, and lower your flow metering costs. Meters with MVD Technology provide cleaner, noise-free digital signals, have faster response times, and feature enhanced diagnostic capabilities.

Series 1000, 2000, and 3000 transmitters offer integral and remote mounting options with standard 4-wire connections, significantly reducing installation costs. A wide array of options is available, suitable for everything from basic to enhanced measurement applications.

#### Series 3000 electronics

You can pair Micro Motion T-Series sensors with Series 3000 electronics for a variety of measurement and control options, such as milliampere and frequency/pulse outputs, batch processing capability, and advanced density measurement.

Series 3000 devices can be installed in an instrument rack or panel, or can be housed in a NEMA 4X (IP65) enclosure.

Micro Motion is known worldwide for increasing plant efficiency, production, and profitability. More than 400,000 Micro Motion meters are installed and working in processes just like yours. Contact us, and discover the best precision straight-tube meters available today — Micro Motion T-Series flowmeters.











## Liquid flow performance

		Mass		Volume <sup>(1)</sup>	
		lb/min	kg/hr	gal/min	l/h
Nominal flow range <sup>(2)</sup>	T025	0 to 25	0 to 680	0 to 3	0 to 680
	T050	0 to 140	0 to 3800	0 to 17	0 to 3800
	T075	0 to 500	0 to 14,000	0 to 62	0 to 14,000
	T100	0 to 1100	0 to 30,000	0 to 132	0 to 30,000
	T150	0 to 3200	0 to 87,000	0 to 383	0 to 87,000
Maximum flow rate	T025	25	680	3	680
	T050	140	3800	17	3800
	T075	500	14,000	62	14,000
	T100	1100	30,000	132	30,000
	T150	3200	87,000	383	87,000
Mass flow accuracy <sup>(3)</sup>	All models	±0.15% of ra	te <sup>(4)</sup>		
Mass flow repeatability	All models	±0.05% of ra	te <sup>(4)</sup>		
		lb/min	kg/hr		
Zero stability	T025	0.004	0.11		
	T050	0.022	0.61		
	T075	0.080	2.24		
	T100	0.176	4.80		
	T150	0.512	13.92		

<sup>(1)</sup> Specifications for volume measurement are based on a process-fluid density of 1 g/cc (1000 kg/m³). For fluids with density other than 1 g/cc (1000 kg/m³), the volumetric flow rate equals the maximum mass flow rate divided by the fluid's density.

(4) When flow rate 
$$<\frac{\text{zero stability}}{0.0015}$$
, then  $\text{accuracy} = \pm \left[\left(\frac{\text{zero stability}}{\text{flow rate}}\right) \times 100\right] \%$  of rate and  $\text{repeatability} = \pm \left[\frac{\text{zero stability}}{\text{flow rate}}\right) \times 100\right] \%$  of rate.

<sup>(2)</sup> 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 T-Series sensors.

<sup>(3)</sup> 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.

## Liquid flow performance continued

#### Density — all models

Accuracy <sup>(1)</sup>	±0.002 g/cc	±2.0 kg/m3
Repeatability	±0.0005 g/cc	±0.5 kg/m3

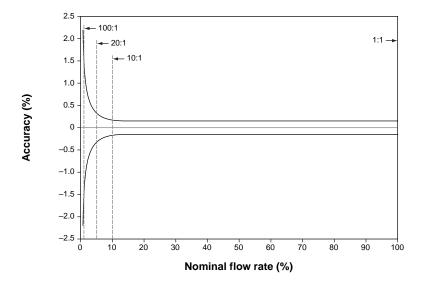
#### Temperature — all models

Accuracy ±1.0 °C ±0.5% of reading in °C

Repeatability ±0.2 °C

#### Typical accuracy, turndown, and pressure drop

To determine accuracy, turndown, and pressure drop using your process variables, use Micro Motion's product selector, available at **www.micromotion.com**.



Turndown		100:1	20:1	10:1	1:1
Accuracy, ±%		1.60	0.31	0.16	0.15
Pressure drop	psi	~0	0.06	0.22	14.3
	bar	~0	0.02	0.05	0.99

<sup>(1)</sup> Density 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.

# **Temperature limits**

		°F	°C
Process fluid temperature	Sensor with junction box	-60 to +300	-50 to +150
	Sensor with core processor or transmitter	-60 to +257	-50 to +125
	Sensor with extended junction box or extended core processor	-60 to +300	-50 to +150
Ambient temperature			
UL	Sensor with junction box	+104 maximum	+40 maximum
	Sensor with core processor or transmitter	-40 to +140	-40 to +60
CSA	Sensor with junction box	+140 maximum	+60 maximum
	Sensor with core processor or transmitter	-40 to +140	-40 to +60
MMI standard (no approval)	Sensor with core processor or transmitter	-40 to +140	-40 to +60
ATEX		Refer to graphs or	n page 7.

## **Pressure ratings**

		psi	bar		
Flow tube rating <sup>(1)</sup>	All models	1450	100		
		ASME B31.3 secondary containment rating <sup>(2)</sup>		Burst pressure used to determine ASME B31.3 secondary containment rating	
		psi	bar	psi	bar
Housing rating <sup>(3)</sup>	All models	960	66	3014	208
PED compliance	Sensors compl	y with council d	irective 97/23/EC of	29 May 1997 on	Pressure Equipment.

<sup>(1)</sup> Pressure ratings at 77 °F (25 °C), according to ASME B31.3.

<sup>(2) 10-</sup>hour pressure ratings at 77 °F (25 °C), according to ASME B31.3. For ratings between 10 hours and 50 hours, multiply rating by 0.90; for ratings over 50 hours, multiply rating by 0.75.

<sup>(3)</sup> Housing is not rated for pressure containment below –20 °F (–29 °C).

### **Environmental effects**

Process temperature effect Process temperature effect is defined as the worst-case zero offset due to process fluid

temperature change away from the zeroing temperature.

All models 0.002% of nominal flow rate<sup>(1)</sup> per °C

Pressure effect Pressure effect is defined as the change in sensor flow sensitivity due to process

pressure change away from the calibration pressure. Pressure effect can be corrected.

All models None

## Sanitary standards

For sanitary applications, Micro Motion T-Series sensors with sanitary fittings feature a standard 32  $\mu$ -inch Ra (0.8  $\mu$ -meter) tube surface finish, with 20  $\mu$ -inch Ra (0.5  $\mu$ -meter) or better surface finish available as an option.

ASME The Micro Motion T-Series sensor design is based on the ASME Bioprocessing

Equipment Standard - 1997. With sanitary fittings, these sensors meet the ASME

Bioprocessing Equipment Standard.

3-A Micro Motion T-Series sensors with sanitary fittings meet 3-A Sanitary Standards for Milk

and Dairy Products.

**USDA**Micro Motion T-Series sensors with sanitary fittings are acceptable for use in dairy plants

and are approved for USDA grading service.

**EHEDG** Micro Motion T-Series sensors with sanitary fittings are approved by the European

Hygienic Equipment Design Group. Sensors comply with the hygienic criteria of Machinery Directive 98/37/EC, annex 1 (additional essential health and safety requirements for certain categories of machinery), section 2.1 (agri-foodstuffs machinery). Test results show that Micro Motion T-Series sensors can be cleaned in

place at least as well as the reference pipe.

<sup>(1)</sup> Nominal flow rate is the upper limit of the nominal flow range.

### Hazardous area classifications

UL is a U.S.A. approvals agency. CSA is a Canadian approvals agency that provides approvals accepted both in the U.S.A. and in Canada. ATEX is a European directive.

#### **UL and CSA**

All models

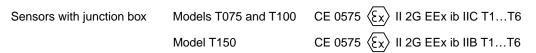
Class I, Div. 1, Groups C and D

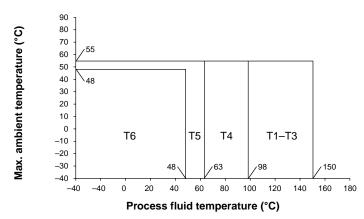
Class I, Div. 2, Groups A, B, C, and D

Class II, Div.1, Groups E, F, and G

#### ATEX(1)

CE 0575  $\langle \xi_{x} \rangle$  II 2G EEx ib IIC T1...T5 Sensors with integral core Models T025, T050, T075, and T100 processor or transmitter CE 0575  $\langle \xi_x \rangle$  II 2G EEx ib IIB T1...T5 Model T150 De-rate at slope =  $\frac{0.40 \text{ °C ambient}}{1.00 \text{ c}}$ 90 80 1 °C fluid ambient temperature (°C) 70 60 50 40 30 20 10 0 T5 T4 T1-T3 -10 -20 -30 63 150 -40 -40 -20 0 20 60 80 100 120 140 160 180 Process fluid temperature (°C)





<sup>(1)</sup> The ATEX "T" rating is defined as the maximum surface temperature of the flowmeter. The "T" rating and the ambient temperature restrict the maximum allowable temperature of the process fluid (shown in the graphs above).

### **Materials of construction**

Wetted parts <sup>(1)</sup>	Flow tubes	Titanium ASTM Grade 9
	Sanitary fittings (2)	304L stainless steel and titanium ASTM Grade 1
	Socket-weld flanges (2)	F316/316L stainless steel and titanium ASTM Grade 5 (6AL-4V)
Sensor housing	All models	304L stainless steel
Core processor housing		316L stainless steel or epoxy-coated aluminum; NEMA 4X (IP65)
Junction box housing		Epoxy-coated aluminum; NEMA 4X (IP65)

<sup>(1)</sup> 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 sensor. Please refer to Micro Motion's corrosion guide for material compatibility information.

## Weight

#### Approximate weight with ANSI 150 lb socket weld raised face flange

	T025	5	T050	0	T075	5	T100	)	T150	)
	lb	kg	<u>lb</u>	kg	<u>lb</u>	kg	<u>lb</u>	kg	lb	kg
Sensor with core processor <sup>(1)</sup>	14	7	16	7	33	15	58	27	137	63
Sensor with extended core processor <sup>(1)</sup>	15	7	17	8	34	16	59	27	138	63
Sensor with integrally mounted Model 1700/2700 transmitter	20	9	22	10	39	18	64	29	143	65
Sensor with junction box	_	_	_	_	32	15	57	26	136	62
Sensor with extended junction box	_	_ :44::: /7	_ : Class	_	33	15	58	27	137	63
Approximate weight with 1/2-inch or 1-inch	– sanitary fi 12	– itting (T 6	- ri-Clam	- np com			58  55	27  25	137	
Approximate weight with 1/2-inch or 1-inch Sensor with core processor <sup>(1)</sup>					patible)					60
Approximate weight with 1/2-inch or 1-inch Sensor with core processor <sup>(1)</sup> Sensor with extended core processor <sup>(1)</sup> Sensor with integrally mounted Model 1700/2700 transmitter	12	6	14	7	patible) 33	15	55	25	131	60
Approximate weight with 1/2-inch or 1-inch Sensor with core processor <sup>(1)</sup> Sensor with extended core processor <sup>(1)</sup> Sensor with integrally mounted	12 13	6	14 15	7	933 34	15 16	55 56	25 25	131 132	60 60 62 59

<sup>(1)</sup> Add 4 lbs (2 kg) for stainless steel core processor housing option (electronics interface codes A, B, D, and E).

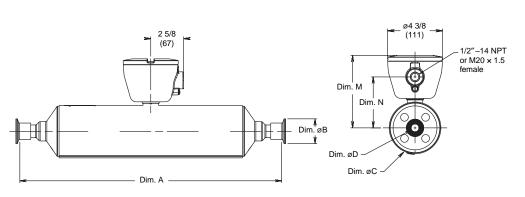
<sup>(2)</sup> Flanges are stainless steel; wetted parts are titanium. Only titanium is in contact with process flow.

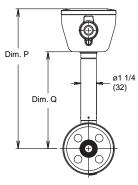
## **Dimensions** continued

### Sensor with core processor

Dimensions in inches (mm)

### Temperature extender option





#### Dimensions<sup>(1)</sup>

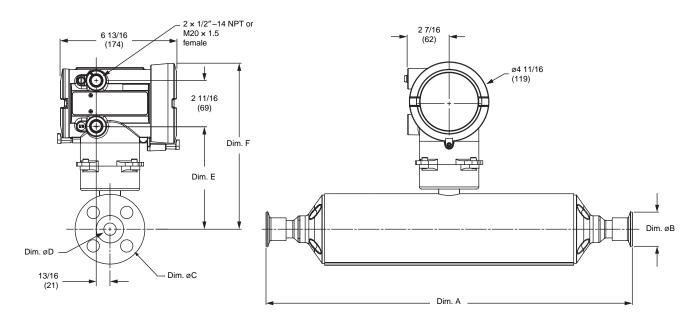
Sensor model		øC (case diameter)	øD (tube inside dia.)	М	N	P	Q
T025	inches	3 1/8	3/16	5 1/4	3 1/2	10 5/8	8 7/8
	mm	79	5	133	89	269	226
T050	inches	3 1/8	3/8	5 1/4	3 1/2	10 5/8	8 7/8
	mm	79	9	133	89	269	226
T075	inches	4 1/8	5/8	5 3/4	4 1/16	11 1/8	9 7/16
	mm	105	16	147	103	283	240
T100	inches	5 1/8	7/8	6 1/4	4 9/16	11 5/8	9 15/16
	mm	130	22	159	116	296	252
T150	inches	7 1/8	1 3/8	7 1/4	5 9/16	12 5/8	10 15/16
	mm	181	35	185	141	321	278
	mm	181	35	185		141	141 321

<sup>(1)</sup> For dimensions A and øB, see process fittings tables, pages 12–15.

## **Dimensions** continued

### Sensor with integrally mounted Model 1700/2700 transmitter

Dimensions in inches (mm)



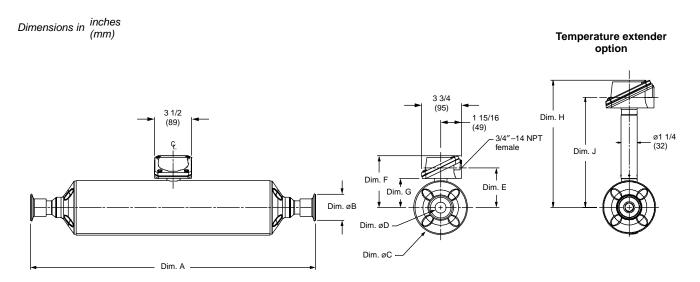
#### Dimensions(1)

Sensor model		øC (case diameter)	øD (tube inside dia.)	E	F
T025	inches	3 1/8	3/16	5 1/2	9 3/16
	mm	79	5	139	233
T050	inches	3 1/8	3/8	5 1/2	9 3/16
	mm	79	9	139	233
T075	inches	4 1/8	5/8	6	9 3/4
	mm	105	16	153	247
T100	inches	5 1/8	7/8	6 1/2	10 1/4
	mm	130	22	166	260
T150	inches	7 1/8	1 3/8	7 1/2	11 1/4
	mm	181	35	191	285

<sup>(1)</sup> For dimensions A and øB, see process fittings tables, pages 12–15.

## **Dimensions** continued

### Sensor with junction box



#### Dimensions<sup>(1)</sup>

Sensor model		øC (case diameter)	øD (tube inside dia.)	E	F	G	н	J
T075	inches	4 1/8	5/8	3 3/16	4 1/2	2 3/8	9 7/8	8 9/16
	mm	105	16	81	114	60	251	217
T100	inches	5 1/8	7/8	3 3/4	5	2 7/8	10 3/8	9 1/16
	mm	130	22	94	127	73	264	230
T150	inches	7 1/8	1 3/8	4 11/16	6	3 7/8	11 3/8	10 1/16
	mm	181	35	119	152	98	289	256

<sup>(1)</sup> For dimensions A and øB, see process fittings tables, pages 12–15.

# Fitting options

	Fitting code	Dim. A face-to-face inches (mm)	Dim. B outside diam. inches (mm)
T025 fitting options <sup>(1)</sup>			
1/2-inch ANSI 150 lb socket weld raised face flange	613	13 5/16 (338)	3 1/2 (89)
1/2-inch ANSI 300 lb socket weld raised face flange	614	13 13/16 (351)	3 3/4 (95)
1/2-inch ANSI 600 lb socket weld raised face flange	615	13 15/16 (351)	3 3/4 (95)
DN15 PN40 socket weld flange; DIN2526 type C face	616	13 5/8 (347)	3 3/4 (95)
DN15 PN100 socket weld flange; DIN2526 type E face	617	14 (355)	4 1/8 (105)
DN15 PN40 socket weld flange; DIN2512 type N face	650	13 5/8 (347)	3 3/4 (95)
1/2-inch NPT female adapter; CAJON compatible size 8 VCO union fitting	636	15 1/8 (385)	3 1/8 (79)
CAJON compatible size 8 VCO union fitting	637	15 1/8 (385)	3 1/8 (79)
1/2-inch sanitary fitting (Tri-Clamp compatible)	621	13 15/16 (354)	1 (25)
DN10 DIN 11851 aseptic coupling	670	13 15/16 (354)	Rd 28 × 1/8
DN15 DIN 11851 aseptic coupling	671	13 15/16 (354)	Rd 34 × 1/8
DN15 DIN 11864-1A aseptic coupling	676	13 7/8 (353)	Rd 34 × 1/8
15 mm JIS 10K/20K socket weld flange	781	13 5/8 (346)	3 3/4 (95)
T050 fitting options <sup>(1)</sup>			
1/2-inch ANSI 150 lb socket weld raised face flange	613	15 3/4 (400)	3 1/2 (89)
1/2-inch ANSI 300 lb socket weld raised face flange	614	16 1/4 (413)	3 3/4 (95)
1/2-inch ANSI 600 lb socket weld raised face flange	615	16 3/8 (417)	3 3/4 (95)
DN15 PN40 socket weld flange; DIN2526 type C face	616	16 1/8 (409)	3 3/4 (95)
DN15 PN100 socket weld flange; DIN2526 type E face	617	16 7/16 (417)	4 1/8 (105)
DN15 PN40 socket weld flange; DIN2512 type N face	650	16 1/8 (409)	3 3/4 (95)
3/4-inch NPT female adapter; CAJON compatible size 12 VCO union fitting	638	17 3/4 (451)	3 1/8 (79)
CAJON compatible size 12 VCO union fitting	639	17 3/4 (451)	3 1/8 (79)
1/2-inch sanitary fitting (Tri-Clamp compatible)	621	16 3/8 (416)	1 (25)
DN15 DIN 11851 aseptic coupling	671	16 3/8 (416)	Rd 34 × 1/8
DN15 DIN 11864-1A aseptic coupling	676	16 3/8 (416)	Rd 34 × 1/8
15 mm JIS 10K/20K socket weld flange	781	16 1/16 (409)	3 3/4 (95)

<sup>(1)</sup> Fittings listed here are standard options. Other types of fittings are available. Contact your local Micro Motion representative.

# Fitting options continued

	Fitting code	Dim. A face-to-face inches (mm)	Dim. B outside diam. inches (mm)
T075 fitting options <sup>(1)</sup>			
1/2-inch ANSI 150 lb socket weld raised face flange	613	20 13/16 (529)	3 1/2 (89)
1/2-inch ANSI 300 lb socket weld raised face flange	614	21 3/8 (542)	3 3/4 (95)
1/2-inch ANSI 600 lb socket weld raised face flange	615	21 7/16 (545)	3 3/4 (95)
1-inch ANSI 150 lb socket weld raised face flange	628	20 13/16 (529)	4 1/4 (108)
1-inch ANSI 300 lb socket weld raised face flange	629	21 9/16 (548)	4 7/8 (124)
1-inch ANSI 600 lb socket weld raised face flange	630	21 9/16 (548)	4 7/8 (124)
DN15 PN40 socket weld flange; DIN2526 type C face	616	21 1/8 (537)	3 3/4 (95)
DN15 PN100 socket weld flange; DIN2526 type E face	617	21 1/2 (545)	4 1/8 (105)
DN15 PN40 socket weld flange; DIN2512 type N face	650	21 1/8 (537)	3 3/4 (95)
DN25 PN40 socket weld flange; DIN2526 type C face	618	21 3/4 (552)	4 1/2 (115)
DN25 PN100 socket weld flange; DIN2526 type E face	619	21 7/8 (556)	4 15/16 (125)
DN25 PN40 socket weld flange; DIN2512 type N face	651	21 3/4 (552)	4 1/2 (115)
1-inch sanitary fitting (Tri-clamp compatible)	623	21 7/16 (544)	2 (50)
DN25 DIN 11851 aseptic coupling	672	21 1/2 (545)	Rd 52 × 1/6
DN25 SMS-1145 aseptic coupling	692	21 7/16 (545)	Rd 40 × 1/6
DN25 DIN 11864-1A aseptic coupling	677	21 7/16 (545)	Rd 52 × 1/6
DN25 IDF (ISO-2853) aseptic coupling	662	21 7/16 (545)	DN25
15 mm JIS 10K/20K socket weld flange	781	21 5/16 (542)	3 3/4 (95)
25 mm JIS 10K/20K socket weld flange	782	21 7/16 (545)	4 15/16 (125)

<sup>(1)</sup> Fittings listed here are standard options. Other types of fittings are available. Contact your local Micro Motion representative.

# Fitting options continued

	Fitting code	Dim. A face-to-face inches (mm)	Dim. B outside diam. inches (mm)
T100 fitting options <sup>(1)</sup>			
1-inch ANSI 150 lb socket weld raised face flange	628	25 1/2 (648)	4 1/4 (108)
1-inch ANSI 300 lb socket weld raised face flange	629	26 1/4 (667)	4 7/8 (124)
1-inch ANSI 600 lb socket weld raised face flange	630	26 3/8 (670)	4 7/8 (124)
1 1/2-inch ANSI 150 lb socket weld raised face flange	641	25 3/4 (655)	5 (127)
1 1/2-inch ANSI 300 lb socket weld raised face flange	642	26 3/8 (670)	6 1/8 (155)
1 1/2-inch ANSI 600 lb socket weld raised face flange	643	26 1/2 (673)	6 1/8 (155)
DN25 PN40 socket weld flange; DIN2526 type C face	618	26 3/16 (665)	4 1/2 (115)
DN25 PN100 socket weld flange; DIN2526 type E face	619	26 9/16 (674)	5 1/2 (140)
DN25 PN40 socket weld flange; DIN2512 type N face	651	26 3/16 (665)	4 1/2 (115)
DN40 PN40 socket weld flange; DIN2526 type C face	681	26 5/16 (668)	5 15/16 (150)
DN40 PN100 socket weld flange; DIN2526 type E face	682	26 11/16 (678)	6 11/16 (170)
DN40 PN40 socket weld flange; DIN2512 type N face	652	26 5/16 (668)	5 15/16 (150)
1-inch sanitary fitting (Tri-clamp compatible)	623	26 1/4 (668)	2 (50)
1 1/2-inch sanitary fitting (Tri-clamp compatible)	624	26 1/4 (666)	2 (50)
DN25 DIN 11851 aseptic coupling	672	26 1/4 (666)	Rd 52 × 1/6
DN25 DIN 11864-1A aseptic coupling	677	26 1/4 (667)	Rd 52 × 1/6
25 mm JIS 10K/20K socket weld flange	782	26 1/8 (664)	4 15/16 (125)
40 mm JIS 10K/20K socket weld flange	783	26 3/16 (665)	5 1/2 (140)

<sup>(1)</sup> Fittings listed here are standard options. Other types of fittings are available. Contact your local Micro Motion representative.

# Fitting options continued

	Fitting code	Dim. A face-to-face inches (mm)	Dim. B outside diam inches (mm)
T150 fitting options <sup>(1)</sup>			
1 1/2-inch ANSI 150 lb socket weld raised face flange	641	31 7/16 (799)	5 (127)
1 1/2-inch ANSI 300 lb socket weld raised face flange	642	32 1/16 (815)	6 1/8 (155)
1 1/2-inch ANSI 600 lb socket weld raised face flange	643	32 5/16 (821)	6 1/8 (155)
2-inch ANSI 150 lb socket weld raised face flange	644	31 11/16 (805)	6 (152)
2-inch ANSI 300 lb socket weld raised face flange	645	32 5/16 (820)	6 1/2 (165)
2-inch ANSI 600 lb socket weld raised face flange	646	32 1/2 (827)	6 1/2 (165)
DN40 PN40 socket weld flange; DIN2526 type C face	681	31 3/4 (806)	5 7/8 (150)
DN40 PN100 socket weld flange; DIN2526 type E face	682	32 3/8 (822)	6 11/16 (170)
DN40 PN40 socket weld flange; DIN2512 type N face	652	31 3/4 (806)	5 7/8 (150)
DN50 PN40 socket weld flange; DIN2526 type C face	683	32 (813)	6 1/2 (165)
DN50 PN100 socket weld flange; DIN2526 type E face	684	32 5/8 (829)	7 1/8 (181)
DN50 PN40 socket weld flange; DIN2512 type N face	653	32 (813)	6 1/2 (165)
1 1/2-inch sanitary fitting (Tri-clamp compatible)	624	32 1/16 (814)	2 (50)
2-inch sanitary fitting (Tri-clamp compatible)	625	32 1/16 (814)	2 1/2 (64)
DN40 DIN 11851 aseptic coupling	673	32 5/8 (828)	Rd 65 x 1/6
DN50 DIN 11851 aseptic coupling	674	32 1/16 (814)	Rd 78 × 1/6
DN50 DIN 11864-1A aseptic coupling	678	32 1/16 (814)	Rd 78 × 1/6
DN51 SMS-1145 aseptic coupling	693	32 1/16 (814)	Rd 70 × 1/6
DN51 IDF (ISO-2853) aseptic coupling	663	32 1/16 (814)	DN51
40 mm JIS 10K/20K socket weld flange	783	31 7/8 (810)	5 1/2 (140)
50 mm JIS 10K/20K socket weld flange	784	31 7/8 (810)	7 1/8 (181)

<sup>(1)</sup> Fittings listed here are standard options. Other types of fittings are available. Contact your local Micro Motion representative.

# **Ordering information**

Model	Product description
	Standard sensor models
T025T	Micro Motion Coriolis T-Series sensor; 1/4-inch; straight tube; titanium
T050T	Micro Motion Coriolis T-Series sensor; 1/2-inch; straight tube; titanium
T075T	Micro Motion Coriolis T-Series sensor; 3/4-inch; straight tube; titanium
T100T	Micro Motion Coriolis T-Series sensor; 1-inch; straight tube; titanium
T150T	Micro Motion Coriolis T-Series sensor; 1 1/2-inch; straight tube; titanium
	Improved surface finish sensor models
T075F	Micro Motion Coriolis T-Series sensor; 3/4-inch; straight tube; titanium; improved surface finish 20 Ra
T100F	Micro Motion Coriolis T-Series sensor; 1-inch; straight tube; titanium; improved surface finish 20 Ra
T150F	Micro Motion Coriolis T-Series sensor; 1 1/2-inch; straight tube; titanium; improved surface finish 20 Ra
Code	Fitting options
###	See fittings tables on pages 12–15.
Code	Case options
S	720 psi (50 bar) containment
Code	Electronics interface
Q	4-wire epoxy-painted aluminum integral core processor for remotely mounted transmitter with MVD Technology
Α	4-wire stainless steel integral core processor for remotely mounted transmitter with MVD Technology
V	4-wire epoxy-painted aluminum integral core processor with extended mount for remotely mounted transmitter with MVD Technology
В	4-wire stainless steel integral core processor with extended mount for remotely mounted transmitter with MVD Technology
С	Integrally mounted Model 1700 or 2700 transmitter
W <sup>(1)</sup>	MVD Solo; epoxy-painted aluminum integral core processor for direct host communication
D <sup>(1)</sup>	MVD Solo; stainless steel integral core processor for direct host communication
Y <sup>(1)</sup>	MVD Solo; epoxy-painted aluminum integral core processor with extended mount for direct host communication
E <sup>(1)</sup>	MVD Solo; stainless steel integral core processor with extended mount for direct host communication
R	9-wire junction box — not available with Models T025T or T050T
Н	9-wire junction box with extended mount — not available with Models T025T or T050T
Continued	on next page

<sup>(1)</sup> When electronics interface W, D, Y, or E is ordered with approval C, A, or Z, an MVD Direct Connect I.S. barrier is supplied. No barrier is supplied when ordered with approval codes M or N.

# ${\bf Ordering} \,\, {\bf information} \,\, {\it continued} \,\,$

Code	Conduit connections	
	Electronics interface codes Q, A, V, B, W, D, Y, and E	
В	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 codes R and H (9-wire junction box)	
A H	3/4-inch NPT — no gland 3/4-inch NPT with brass/nickel cable gland	
J	3/4-inch NPT with stainless steel cable gland	
3	3/4-mon No 1 with stainless steel cable gland	
	Electronics interface code C (integrally mounted transmitter)	
Α	No gland	
Code	Approval <sup>(1)</sup>	
M	Micro Motion standard (no approval)	
N	Micro Motion standard / PED compliant	
U	UL	
С	CSA (Canada only)	
Α	CSA (U.S.A. and Canada)	
Z	ATEX — Equipment Category 2 (Zone 1) / PED compliant	
Code	Language	
Α	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	
Н	Finnish quick reference guide and English manual	
I	Italian quick reference guide and English manual	
J	Japanese quick reference guide and English manual	
M	Chinese quick reference guide and English manual	
N	Norwegian quick reference guide and English manual	
0	Polish quick reference guide and English manual	
Р	Portuguese quick reference guide and English manual	
R	Russian quick reference guide and English manual	
S	Spanish quick reference guide and Spanish manual	
W	Swedish quick reference guide and English manual	
Continued of	on next page	

<sup>(1)</sup> When electronics interface W, D, Y, or E is ordered with approval C, A, or Z, an MVD Direct Connect I.S. barrier is supplied. No barrier is supplied when ordered with approval codes M or N.

# ${\bf Ordering\,\,information}\,\,{\it continued}$

Code	Future option 1	
Z	Reserved for future use.	
Code	Future option 2	
Z	Reserved for future use.	
Code	Measurement application software	
Z	No measurement application software	
A <sup>(1)</sup>	Petroleum measurement	
Code	Factory options	
Z	Standard product	
X	CEQ product	
R	Restocked product (if available)	
Typical n	Typical model number: T025T 613 S Q B M E Z Z Z Z	

<sup>(1)</sup> Available with electronic interface codes W, D, Y, and E. For electronic interface codes Q, A, V, B, and C, select the petroleum measurement software option on a Model 2500, 2700, 3500 MVD, or 3700 MVD transmitter.

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