Product Data Sheet
PS-00232, Rev. Q
February 2014

Micro Motion® Technical Overview and Specification Summary

Emerson's world-leading Micro Motion® Coriolis flow and density measurement devices have set the standard for superior measurement technology. Micro Motion truly offers the best measurement solutions for any process challenge.

Technology Leadership
Micro Motion is committed to technology innovations that deliver the highest-performing solutions for your complex measurement challenges.

Widest breadth of products
Micro Motion has the widest range of flow and density measurement devices for virtually any process, application, or fluid. A wide variety of wetted materials, line sizes, and an extensive range of output options enable optimal system integration.

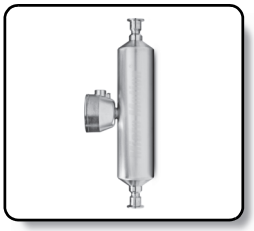
Unparalleled value
Benefit from expert field and technical application service and support made possible from more than 750,000 meters installed worldwide and over 30 years of flow and density measurement experience.

Micro Motion®

EMERSON™
Process Management

Micro Motion Coriolis flow and density meters

ELITE
Peak performance Coriolis meter
- Ultimate real world performance
- Best fit-for-application
- Superior measurement confidence



T-Series
Straight tube full-bore Coriolis meter
- Superior flow measurement in a single straight tube flow meter
- Comprehensive hygienic application coverage
- Superior reliability

F-Series
- High performance compact drainable Coriolis meter
- Best flow and density measurement in a compact, drainable flow meter
- Broadest range of application coverage
- Superior reliability and safety

R-Series
General purpose flow-only Coriolis meter
- Simple to install and easy to use Coriolis flow measurement
- Broadest range of application coverage
- Superior reliability

H-Series
Hygienic compact drainable Coriolis meter
- Best flow and density measurement in a compact hygienic flow meter
- Comprehensive hygienic application coverage
- Superior reliability

LF-Series
Extreme low-flow Coriolis meter
- Highest precision miniaturized flow meter
- Scalable platform for the most demanding low-flow applications
- Superior reliability

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Micro Motion Coriolis flow and density meters

	ELITE®	F-Series	H-Series	T-Series	R-Series	LF-Series
Application type						
Continuous control	●	●	●	●	●	●
Batching / loading / blending	●	●	●	●	●	●
Custody transfer	●	◐				
Measurement accuracy						
Liquid & slurry – Flow	±0.05%	±0.10%	±0.10%	±0.15%	±0.50%	±0.50%
Liquid & slurry – Density	±0.0002 g/cm³ (±0.2 kg/m³)	±0.001 g/cm³ (±1.0 kg/m³)	±0.001 g/cm³ (±1.0 kg/m³)	±0.002 g/cm³ (±2.0 kg/m³)		±0.005 g/cm³ (±5.0 kg/m³)
Liquid – Viscosity						
Gas – Flow	±0.25%*/±0.35%	±0.50%	±0.50%	±0.50%	±0.75%	±0.50%
Capabilities						
Self-draining	◐	●	●	●	●	
Sanitary / hygienic	◐		●	●		
Two-phase flow / Entrained gas	●	◐	◐			
Smart Meter Verification	●	●	●			
High temperature	◐	◐				
High pressure	◐	◐				
Cryogenic	◐	◐				
Wetted materials						
300-series stainless steel	●	●	●		●	●
Super Duplex	◐					
Nickel Alloy C22	●	●				
Titanium				●		
Fits nominal line sizes						
Inches	1/14–16	1/4–4	1/4–4	1/4–2	1/4–2	1/32–1/4
Millimeters	1–400	6–100	6–100	6–50	6–75	0.8–6

* CMFS models only

● Supported on all models

◐ Supported on some models

Micro Motion transmitters and controllers

1500/2500
Compact control-room transmitter
- DIN rail mount with flexible installation options
- Wide variety of I/O and application capabilities to fit your needs

2200S
2-wire compact integral sensor
- Loop powered for simple installation
- Available with 12–20 mA or 4–20 mA connection

1700/2700
Versatile field-mount transmitter
- Integral and remote mount options
- Wide variety of I/O and application capabilities to fit your needs
- Available with a full stainless steel housing for harsh environments

2400S
Compact integral transmitter
- Simple I/O options
- Offers powerful diagnostics like Smart Meter Verification in a condensed form factor

FMT
Compact filling and dosing transmitter
- Easy-to-clean, hygienic design that enables SIP/CIP
- Highest accuracy and fast response time

EtherNet I/P Module
- Access all process variables and Intelligence
- Simple EtherNet integration and retrofit

3300
Rack/panel mount discrete controller

3500
Rack/panel mount transmitter with discrete controller

3350
Field mount discrete controller

3700
Field mount transmitter with discrete controller

Micro Motion transmitters and controllers

	1500	1700	2200S	2400S	2500	2700	FMT	3300	3350	3500	3700	7950 7951
Output variables												
Mass / volume flow	●	●	●	●	●	●	●	●	●	●	●	
Net product content / flow‡				●	●	●				●	●	
Temperature			●	●	●	●	●			●	●	●
Density			●	●	●	●	●			●	●	●
Concentration				●	●	●				●	●	●
Viscosity / referred viscosity												●
Local display												
2-line		●	●	●		●						
Multi-line								●	●	●	●	●
Power												
AC		●		●		●		●	●	●	●	●
DC	●	●		●	●	●	●	●	●	●	●	●
Loop powered (2-wire)			●									
Outputs												
4–20 mA	●	●	●	●	●	●	●	●	●	●	●	●
10 kHz pulse	●	●		●	●	●	●	●	●	●	●	
Discrete	●	●		●	●	●	●	●	●	●	●	●
HART® / WirelessHART®	●	●	●	●	●	●		●	●	●	●	
Modbus®	●	●			●	●	●	●	●	●	●	●
FOUNDATION™ fieldbus						●						
PROFIBUS-PA						●						
PROFIBUS-DP				●			●					
DeviceNet™				●								
Inputs												
10 kHz pulse								●	●			
Discrete				●	●	●	●	●	●	●	●	
4–20 mA												●
HART										●	●	
2-wire density sensor												●
3-wire density sensor												●
4-wire Coriolis sensor	●	●			●	●				●	●	
9-wire Coriolis sensor	●	●			●	●				●	●	
Mounting												
Integral – Field		●	●	●		●	●					
Remote – Field		●				●			●		●	●
Remote – Control room	●				●			●		●		●
Remote – Rack / panel mount								●		●		
Special application types												
Batch controller								●	●	●	●	
Custody transfer						●		●	●	●	●	
Two-phase flow / entrained gas	●	●		●	●	●				●	●	
Filling & dosing	●						●					
Smart Meter Verification	●	●		●	●	●				●	●	
SIS Certified		●				●						
Hazardous approvals												
C1D1		●	●			●						
C1D2		●	●	●		●	●		●		●	
Zone 1		●	●			●			●		●	
Zone 2		●	●	●		●			●		●	

‡ Flow rate of product based on concentration. For example, in a dissolved sugar solution, the measurement is the flow rate of the sugar alone and in a net oil application the measurement is water alone or oil alone.

Micro Motion density meters

CDM
Peak performance precision density meter
- Accredited, traceable density measurement
- Superior multi-variable I/O, meter health, and application capabilities
- Installation flexibility and compatibility

GDM
Fiscal gas density meter
- Accredited, traceable density measurement
- Superior multi-variable I/O, meter health, and application capabilities
- Installation flexibility and compatibility

FDM
Direct insertion density meter
- Rugged, accurate density and concentration measurement
- Superior multi-variable I/O, meter health, and application capabilities
- Installation flexibility and compatibility

FVM
High performance multi-variable viscosity meter
- Rugged, accurate multi-variable measurement
- Superior multi-variable I/O, meter health, and application capabilities
- Installation flexibility and compatibility

SGM
Gas specific gravity and gas energy meter
- Precision gas specific gravity measurement
- Superior multi-variable I/O, meter health, and application capabilities
- installation flexibility and compatibility

7835
Peak performance density meter
- Best precision density measurement
- Industry standard for fiscal hydrocarbon measurement
- Superior reliability

7826 / 7828
Direct insertion density meter
- High accuracy density measurement
- Greatest installation flexibility
- Superior reliability and safety

7845 / 7847
High performance density meter
- Superior precision density measurement
- Broadest range of density measurement
- Superior reliability

7827 / 7829
Direct insertion viscosity meter
- Multivariable measurement of viscosity, density, and temperature
- Unique direct insertion design
- Superior reliability and safety

7812
Fiscal gas density meter
- Best precision gas density measurement
- Industry standard for fiscal hydrocarbon measurement
- Superior reliability and safety

3098
Gas specific gravity meter
- Direct measurement of gas specific gravity
- Continuous online measurement
- Fast speed of response

Micro Motion density meters

	Liquid			Gas		Liquid		Gas
	CDM	FDM	FVM	GDM	SGM	7835, 7845, 7847	7826, 7827, 7828, 7829	7812, 3098
Application type								
Continuous control	●	●	●	●	●	●	●	●
Batching / loading / blending	●	●	●	●	●	●	●	●
Custody transfer	●			●	●	●		●
High consistency slurry		●					●	
Viscosity control			●				●	
Combustion control			●	●	●		●	●
Measurement accuracy								
Liquid & slurry density[1]	±0.1 kg/m³ (±0.0001 g/cm³)	±1.0 kg/m³ (±0.001 g/cm³)	±1.0 kg/m³ (±0.001 g/cm³)			±0.0001 g/cm³ (±0.1 kg/m³)	±0.001 g/cm³ (±1.0 kg/m³)	
Liquid & slurry velocity	±5%							
Liquid viscosity			±0.2 cP for 0.5–10 cP range ±1% full scale above 10 cP				±0.2 cP for 0.5–10 cP range ±1% full scale above 10 cP	
Gas density				±0.1% or ±0.15% of reading				Up to ±0.1% of reading
Gas specific gravity					Up to ±0.1% of reading			Up to ±0.1% of reading
Capabilities								
Self-draining	●	●	●			●	●	
Velocity indication	●							
Known density verification	●	●	●	●	●			
High pressure[2]	◐	●	●	●		◐	●	◐
Wetted materials								
300 series stainless steel	●	●	●	●	●	●	●	●
Nickel alloy C22	●	●					●	
Nickel alloy B3		●					●	
Ni-span-C						●		●
Aluminium					◐			◐
Titanium		●					●	
Alloy 400		●					●	
Zirconium		●					◐	
Outputs								
Time period signal	●	●		●	●	●	●	●
Analog	●	●	●	●	●	●	●	
HART/wireless HART	●	●	●	●	●	◐		
RS-485 Modbus	●	●	●	●	●	◐	◐	◐
two-line display	●	●	●	●	●			
Foundation fieldbus	●	●	●					

● Supported on all models; ◐ Supported on some models

Micro Motion density meters

	Liquid			Gas		Liquid		Gas
	CDM	FDM	FVM	GDM	SGM	7835, 7845, 7847	7826, 7827, 7828, 7829	7812, 3098
Output variables								
Density	●	●	●	●		●	●	●
Temperature	●	●	●	●	●	●	●	
Concentration	●	●	●		●	●	●	
Velocity	●							
Specific gravity/BTU/Wobbe index					●	◐		●
Viscosity/referred viscosity			●				●	
Mass/net product flow		● (3)	●	●	●			
Mounting								
Integral - field	●	●	●	●	●	●	●	●
Remote - field	●	●	●			●		
Hazardous area approvals								
ATEX/IECEx IIC Zone 1	●	●	●	●	●	●	●	●
ATEX/IECEx IIC Zone 2	●	●	●					
CSA-CUS C1D1	●	●	●	●	●	●	●	●
CSA-CUS C1D2	●	●	●					
Fits nominal line sizes								
Inches	1	1 or larger	1 or larger	1/4 or larger	1/4 or larger	1	1 or larger	1/4 or larger
Millimeters	23	25 or larger	25 or larger	6 or larger	6 or larger	23	25 or larger	6 or larger

● Supported on all models; ◐ Supported on some models

(1) Accuracy specifications shown are best possible. Specific models, options, or process/operating conditions may result in a less accurate specifications
(2) Above 1494 psi (103 bar)
(3) When connected to a volumetric flow meter

Note:
Micro Motion offers an easy to use, online program for finding the best products to fit your application. The product sizing and selection tool allows you to specify the parameters and conditions that matter to you, such as accuracy, flow capacity, pressure drop, turndown, and more. To use the product sizing and selection tool, visit our web site at www.micromotion.com/onlinestore.

Performance specifications

Reference operating conditions

For determining the performance capabilities of our meters, the following conditions were observed/utilized:

- Water at 68 to 77°F and 14.5 to 29 psig (20 to 25 °C and 1 to 2 barg)
- Accuracy based on industry leading accredited calibration stands according to ISO 17025

Accuracy and repeatability on liquids and slurries

	Accuracy(1)		Mass/volume flow repeatability
	Mass flow	Volume flow	
ELITE	±0.05%(2)	±0.05%(2)	±0.025%
F-Series	±0.10%	±0.15%	±0.05%
H-Series	±0.10%	±0.15%	±0.05%
T-Series	±0.15%	±0.25%	±0.05%
R-Series	±0.50%	±0.50%	±0.25%
LF-Series	±0.50%	±0.50%	±0.05%

(1) Flow rate accuracies are base percentages. For total accuracy see the box on page 10. Stated accuracy includes the combined effects of repeatability, linearity, and hysteresis. Specifications for ELITE ±0.0002 g/cm^3 (±0.2 kg/m^3) density accuracy are based on reference conditions of water at 68 to 140 °F (20 to 60 °C) and 15 to 30 psig (1 to 2 bar). All other specifications 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).
(2) Sensor accuracies may vary with calibration option selected. Consult the sensor Product Data Sheet for details.

Accuracy and repeatability on gases

	Accuracy(1)	Repeatability
ELITE	±0.25(2)/±0.35% of rate	±0.20% of rate
F-Series	±0.50% of rate	±0.25% of rate
H-Series	±0.50% of rate	±0.25% of rate
T-Series	±0.50% of rate	±0.05% of rate
R-Series	±0.75% of rate	±0.5% of rate
LF-Series	±0.50% of rate	± 0.05% of rate(3)

(1) Flow accuracies are base percentages. For total accuracy see the box on page 10. Stated accuracy includes the combined effects of repeatability, linearity, and hysteresis.
(2) CMFS models only
(3) ±0.05% of rate or 1/2[(zero stability/flow rate) x 100]% of flow rate, whichever is greater.

Liquid flow rates

Family	Model	Nominal Line size		Maximum flow rate			
		inch	mm	lb/min	gal/min	kg/h	l/h
ELITE	CMFS007	1/12	DN1	1.50	0.180	40.9	40.9
	CMFS010	1/10	DN2	4.03	0.484	110	110
	CMFS015	1/6	DN3	12.1	1.45	330	330
	CMFS025	1/4	DN6	77.0	9.23	2,100	2,100
	CMFS040	3/8	DN10	170	20.4	4,640	4,640
	CMFS050	1/2	DN15	250	30.0	6,820	6,820
	CMFS075	3/4	DN20	460	55.2	12,500	12,500
	CMFS100	1	DN25	950	114	25,900	25,900
	CMFS150	1 1/2	DN40	1,980	237	54,000	54,000
	CMF010	1/10	DN2	3.96	0.475	108	108
	CMF025	1/4	DN6	79.9	9.58	2,180	2,180
	CMF050	1/2	DN15	249	29.9	6,800	6,800
	CMF100	1	DN25	997	120	27,200	27,200
	CMF200	2	DN50	3,190	383	87,100	87,100
	CMF300	3	DN80	9,970	1,200	272,000	272,000
	CMF400	6	DN150	20,000	2,400	545,000	545,000
	CMFHC2	8	DN200	54,000	6,440	1,470,000	1,470,000
	CMFHC3	10	DN250	94,000	11,227	2,550,000	2,550,000
	CMFHC4	12	DN300	120,000	14,350	3,266,000	3,266,000
F-Series	F025	1/4	DN6	100	12	2,720	2,720
	F050	1/2	DN15	300	36	8,160	8,160
	F100	1	DN25	1,200	144	32,650	32,650
	F200	2	DN50	3,200	384	87,100	87,100
	F300	3	DN80	10,000	1200	272,000	272,000
H-Series	H025	1/4	DN6	76	9	2,068	2,068
	H050	1/2	DN15	180	22	4,900	4,900
	H100	1	DN25	820	98	22,320	22,320
	H200	2	DN50	2,350	282	63,960	63,960
	H300	3	DN80	10,000	1,200	272,000	272,000

Liquid flow rates *(Continued)*

Family	Model	Nominal Line size		Maximum flow rate			
		inch	mm	lb/min	gal/min	kg/h	l/h
T-Series	T025	1/4	DN6	25	3	680	680
	T050	1/2	DN15	140	17	3,800	3,800
	T075	3/4	DN20	500	60	14,000	14,000
	T100	1	DN25	1,100	132	30,000	30,000
	T150	1 1/2	DN40	3,200	384	87,000	87,000
R-Series	R025	1/4	DN6	100	12	2,720	2,720
	R050	1/2	DN15	300	36	8,160	8,160
	R100	1	DN25	1,200	144	32,650	32,650
	R200	2	DN50	3,200	384	87,100	87,100
LF-Series	LF2M	1/32	DN1	0.014	0.0017	0.38	0.38
	LF3M	1/16	DN2	0.037	0.0043	1.00	1.00
	LF4M	1/8	DN3	0.992	0.119	27.00	27.00
CDM	CDM100	1	DN25	475	57	13,000	13,000
7835		1	DN25	551	66	15,000	15,000
7845/7847		1	DN25	551	66	15,000	15,000
FDM, FVM, 7826, 7827, 7828, 7829		Line sizes and flow rates are installation-dependent. Contact your sales representative.					

Gas flow rates

When selecting sensors for gas applications, 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 the Online Store Sizing and Selection Tool at the Micro Motion web site (*www.micromotion.com/onlinestore*) for detailed information regarding performance and sizing of the meters.

The below table indicates flow rates that produce approximately 25psig (1.7bar) pressure drop on gulf coast natural gas.

Gas flow rates

Family	Model	Mass flow		Volume flow	
		lb/min	kg/h	SCFM[1]	Nm^3/h
ELITE	CMFS007	0.5	15	12	20
	CMFS010	2	45	37	63
	CMFS015	4	112	93	158
	CMFS025	13	364	301	511
	CMFS040	29	796	659	1,120
	CMFS050	42	1,144	947	1,609
	CMFS075	80	2,185	1,808	3,072
	CMFS100	159	4,342	3,593	6,105
	CMFS150	330	8,990	7,440	12,642
	CMF010	1	34	28	48
	CMF025	17	469	388	659
	CMF050	44	1,202	995	1,691
	CMF100	196	5,337	4,417	7,506
	CMF200	592	16,108	13,330	22,651
	CMF300	1,965	53,501	44,275	75,234
	CMF400	4,976	135,507	112,140	190,553
	CMFHC2	9,212	250,858	207,600	352,763
	CMFHC3	16,204	441,248	365,160	620,496
	CMFHC4	24,555	668,664	553,360	940,294
F-Series	F025	17	468	388	659
	F050	52	1,429	1,183	2,010
	F100	200	5,452	4,514	7,670
	F200	666	18,137	15,018	25,515
	F300	1,745	47,505	39,334	66,829

Gas flow rates *(Continued)*

Family	Model	Mass flow		Volume flow		
		lb/min	kg/h	SCFM[1]	Nm^3/h	
H-Series	H025	17	468	388	659	
	H050	52	1,427	1,181	2,007	
	H100	186	5,070	4,198	7,132	
	H200	666	18,137	15,018	25,515	
	H300	1,745	47,505	39,334	66,829	
T-Series	T025	7	179	148	251	
	T050	47	1,290	1,068	1,815	
	T075	175	4,770	3,950	6,711	
	T100	385	10,472	8,666	14,726	
	T150	1,091	27,713	24,589	41,783	
R-Series	R025	17	471	390	662	
	R050	53	1,432	1,185	2,014	
	R100	201	5,459	4,520	7,680	
	R200	668	18,168	15,043	25,559	
				SCFM[1]	Nm^3/h	l/h
GDM, 7812				0.0059	0.01	10
SGM, 3098				0.0412	0.07	70

(1) Standard (SCFM) reference conditions are 14.7 psia and 60 °F. Normal (Nm^3/hr) reference conditions are 1.013 bar and 0 °C.

Notes

- Standard (SCFM) reference conditions are 14.7 psig and 60°F. Normal reference conditions are 1.013 barg and 0°C.
- Natural gas with molecular weight of 16.799 at 60°F (16°C) and 1014.7 psia (70 barg).

Liquid density accuracy and repeatability

	Accuracy		Repeatability	
ELITE	±0.0002 g/cm³	±0.2 kg/m³	±0.0001 g/cm³	±0.1 kg/m³
F-Series	±0.001 g/cm³	±1.0 kg/m³	±0.0005 g/cm³	±0.5 kg/m³
H-Series	±0.001 g/cm³	±1.0 kg/m³	±0.0005 g/cm³	±0.5 kg/m³
T-Series	±0.002 g/cm³	±2.0 kg/m³	±0.0005 g/cm³	±0.5 kg/m³
LF-Series	±0.005 g/cm³	±5.0 kg/m³	±0.002 g/cm³	±2.0 kg/m³
CDM	±0.0001 g/cm³	±0.1 kg/m³	±0.00002 g/cm³	±0.02 kg/m³
FDM	±0.001 g/cm³	±1.0 kg/m³	±0.0001 g/cm³	±0.1 kg/m³
FVM	±0.001 g/cm³	±1.0 kg/m³	±0.0001 g/cm³	±0.1 kg/m³
7835	±0.0001 g/cm³	±0.1 kg/m³	±0.00002 g/cm³	±0.02 kg/m³
7845/7847	±0.0001 g/cm³	±0.1 kg/m³	±0.00005 g/cm³	±0.05 kg/m³
7826/7827/7828/7829	±0.001 g/cm³	±1.0 kg/m³	±0.0001 g/cm³	±0.1 kg/m³

Note
Meters not listed in the liquid density table are not designed to measure liquid density.

Gas density/specific gravity accuracy and repeatability

	Accuracy	Repeatability
GDM	±0.1% of reading	±0.02% of reading
SGM	Up to ±0.1%	±0.02% of reading
7812	±0.1%	—
3098	Up to ±0.1%	±0.02% of reading

Note
Meters not listed in the gas density/specific gravity table are not designed to measure gas density/specific gravity.

Temperature accuracy

	Temperature accuracy
ELITE	±1 °C ±0.5% of reading
F-Series	±1 °C ±0.5% of reading
H-Series	±1 °C ±0.5% of reading
T-Series	±1 °C ±0.5% of reading
R-Series	±1 °C ±0.5% of reading
LF-Series	±0.5 °C
CDM	BS1904 Class, DIN 43760 Class A (±0.15 +0.002 x Temp °C)
GDM	Class A RTD
FDM	BS1904 Class, DIN 43760 Class B
FVM	BS1904 Class, DIN 43760 Class B
SGM	Class A RTD
7835	Class A RTD
7845/7847	Class A RTD
7826/7827/7828/7829	Class B RTD
7812	Class A RTD
3098	–

Viscosity accuracy and repeatability

	Viscosity calibrated range	Maximum viscosity operating range	Accuracy	Repeatability
7827/7829	0.5 to 12,500 cP	0.5 to 20,000 cP (using up to four calibrated ranges)	±0.2 cP over the 0.5–10 cP range, and then ±1% full scale of the operating calibrated range	±0.5% of reading
FVM	0.5 to 12,500 cP	0.5 to 20,000 cP (using up to six calibrated ranges)	±0.2 cP over the 0.5–10 cP range, and then ±1% full scale of the operating calibrated range	±0.5% of reading

Zero stability

Family	Model	lb/min	kg/h
ELITE	CMFS007M	0.00004	0.001
	CMFS010M	0.000075	0.002
	CMFS010H, P	0.00015	0.004
	CMFS015M	0.00037	0.010
	CMFS015H, P	0.00073	0.020
	CMFS025M	0.00070	0.019
	CMFS025H, P	0.00180	0.049
	CMFS040M	0.00260	0.071
	CMFS050M	0.00370	0.101
	CMFS050H, P	0.00920	0.251
	CMFS075M	0.01100	0.300
	CMFS100M	0.01690	0.461
	CMFS100H, P	0.01830	0.499
	CMFS150M, H, P	0.03670	1.00
	CMF010M, H	0.000075	0.002
	CMF010P	0.00015	0.004
	CMF025	0.001	0.027
	CMF050	0.006	0.164
	CMF100	0.025	0.682
	CMF200	0.08	2.18
	CMF300	0.25	6.82
	CMF400	1.50	40.9
	CMFHC2	2.50	68.2
	CMFHC3	5.00	136
	CMFHC4	7.50	205
F-Series	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

Zero stability *(Continued)*

Family	Model	lb/min	kg/h
H-Series	H025	0.0065	0.1765
	H050	0.020	0.544
	H100	0.080	2.177
	H200	0.256	6.965
	H300	0.80	21.76
T-Series	T025	0.0038	0.11
	T050	0.021	0.61
	T075	0.075	2.24
	T100	0.165	4.80
	T150	0.48	13.92
R-Series	R025	0.01	0.27
	R050	0.03	0.82
	R100	0.12	3.27
	R200	0.32	8.71
LF-Series	LF2M	0.000005	0.00013
	LF3M	0.000037	0.00100
	LF4M	0.00015	0.00400

Temperature rating

Family	Model	°F[1]	°C[1]
ELITE	Standard models	–400 to +400	–240 to +204
	High-temperature models	–58 to +662	–50 to +350
	CMFS models	–58 to +400	–50 to +204
	Cryogenic models	–400 to +176	–240 to +80
	Super Duplex models[2]	–40 to +400	–40 to +204
F-Series	Standard models	–148 to +400	–100 to +204
	High-temperature models	–40 to +662	–40 to +350
H-Series	All models	–148 to +400	–100 to +204
T-Series	All	–58 to +302	–50 to +150
R-Series	All	–58 to +302	–50 to +150
LF-Series	All	+32 to +149	0 to +65
CDM/FDM/FVM	All	–58 to +392	–50 to +200
SGM		0 to +122	–18 to +50

Temperature rating *(Continued)*

Family	Model	°F[1]	°C[1]
GDM		0 to +257	–18 to +125
7835		–58 to +230	–50 to +110
7845/7847	All	–58 to +320	–50 to +160
7826/7827/7828/7829	All	–58 to +392	–50 to +200
7812		0 to +257[3]	–18 to +125[3]
3098		0 to +122	–18 to +50

(1) Temperature rating may be affected by electronics, hazardous area classification, and/or ambient temperature.
(2) Applications between +350 and +400 °F (+177 and +204 °C) must be approved by Micro Motion metallurgy.
(3) High-temperature option shown. Standard temperature range is –4 to +185 °F (–20 to +85 °C)

Process pressure ratings

Sensor maximum working pressure reflects the highest possible pressure rating for a given meter. Selection of process fitting as well as environmental and process fluid temperatures may reduce this maximum rating. Refer to the technical data sheet or contact the factory directly for detailed sensor pressure rating charts with corresponding de ratings for specific process fittings over a range of temperatures.

All sensors comply with ASME B31.3 piping code and council directive 97/23/EC of 29 May 1997 on Pressure Equipment.

Sensor maximum working pressure

Family	Model	Wetted material	psi	bar
ELITE	Standard models	Stainless steel	1,450–1,812	100–125
		Nickel alloy C22 (N06022)	2,465–3,626	170–250
	CMFS010P CMFS010H CMFS015P CMFS015H CMF010P	Nickel alloy C22 (N06022)[1]	6,000	414
	CMF400P	Nickel alloy C22 (N06022)	2,973	205
	CMFHC2Y CMFHC3Y	Super Duplex	2,320	160
F-Series	Standard models	Stainless steel	1,450	100
		Nickel alloy C22 (N06022)	2,160	148
	F025P	Stainless steel	2,300	158
	F050P	Stainless steel	5,000	345
H-Series	All	Stainless steel	1,450	100
T-Series	All	Titanium	1,450	100
R-Series	All	Stainless steel	1,450	100
LF-Series	All	Stainless steel	1,450	100
CDM	CDM100M	Stainless steel	1,450	100
	CDM100P	Nickel alloy C22 (N06022)	2,175	150

Sensor maximum working pressure *(Continued)*

Family	Model	Wetted material	psi	bar
GDM		Stainless steel	3625	250
FDM	Short stem	Stainless steel, nickel alloy C22 (N06022), titanium, zirconium	3000	207
	Long stem		1450	100
FVM	Short stem	Stainless steel	3000	207
	Long stem		1450	100
SGM		Ni-Span-C	145	10
7835		Ni-Span-C and stainless steel	2,175	150
7845		Stainless steel	1,450	100
7847		Stainless steel and nickel alloy C22 (N06022)	290	20
7826/7827/7828/7829	All	Stainless steel and nickel alloy C22 (N06022)	3,000	207
7812		Ni-Span-C	3,625	250
3098		Ni-Span-C	145	10

(1) Models CMF010P, CMFS010P, CMFS015P, and CMF400P have nickel alloy C22 (N06022) tubes and stainless steel fittings.

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