

Micro Motion[®] H-Series Hygienic Coriolis Flow and Density Meters



MICRO MOTION™



Detailed specifications

H-Series flow and density accuracy options

	Liquid mass flow accuracy		Gas mass flow accuracy	Density accuracy (g/cc)		
	0.15%	0.10%	0.5%	0.002	0.001	0.0005
H025	•	•	•	•	•	
H050	•	•	•	•	•	•
H100	•	•	•	•	•	•
H200	•	•	•	•	•	•
H300	•	•	•	•	•	•

Flow tube information

Model	Number of tubes	Tube inside diameter inches	Tube inside diameter mm	Tube length inches	Tube length mm
H025	2	0.21	5.3	14.6	370
H050	2	0.35	8.8	18.8	478
H100	2	0.65	16	25.1	637
H200	2	1.1	27	23.5	598
H300	2	1.6	40	34.4	874

Tri-Clamp compatible process fittings

Model	1/2"	3/4"	1"	2"	3"
H025	•				
H050		•			
H100			•		
H200				•	
H300					•

DIN specification process fittings

Model	DN15	DN25	DN50	DN80
H025	<ul style="list-style-type: none"> ■ DIN11851 ■ DIN11864-1A ■ DIN11864-2A ■ DIN11864-3A 			

Model	DN15	DN25	DN50	DN80
H050	<ul style="list-style-type: none"> ■ DIN11851 ■ DIN11864-1A ■ DIN11864-2A ■ DIN11864-3A 			
H100		<ul style="list-style-type: none"> ■ DIN11851 ■ DIN11864-1A ■ DIN11864-2A ■ DIN11864-3A 		
H200			<ul style="list-style-type: none"> ■ DIN11851 ■ DIN11864-1A ■ DIN11864-2A ■ DIN11864-3A 	
H300				<ul style="list-style-type: none"> ■ DIN11851 ■ DIN11864-1A ■ DIN11864-2A ■ DIN11864-3A







IDF process fittings

Model	8A	15A	1s	2s	3s
H025	•				
H050		•			
H100			•		
H200				•	
H300					•

ISO 2853 (IDF) and SMS 1145 process fittings

Model	DN76.1	DN76
H300	ISO 2853 (IDF)	SMS 1145

Transmitter compatibility

Sensor model	Transmitter model or series					
	1500/2500	1700/2700	2400S	3000 series	FMT	5700
						

Sensor model	Transmitter model or series					
	1500/2500	1700/2700	2400S	3000 series	FMT	5700
All H-Series models	•	•	•	•	H025, H050, H100	•

Process pressure ratings

Sensor maximum working pressure reflects the highest possible pressure rating for a given sensor. Process connection type and environmental and process fluid temperatures may reduce the maximum rating. Refer to *Micro Motion H-Series Hygienic Coriolis Flow and Density Meters Technical Data Sheet* for common sensor and fitting combinations.

All sensors comply with Council Directive 2014/68/EU on pressure equipment.

Sensor maximum working pressure for all models

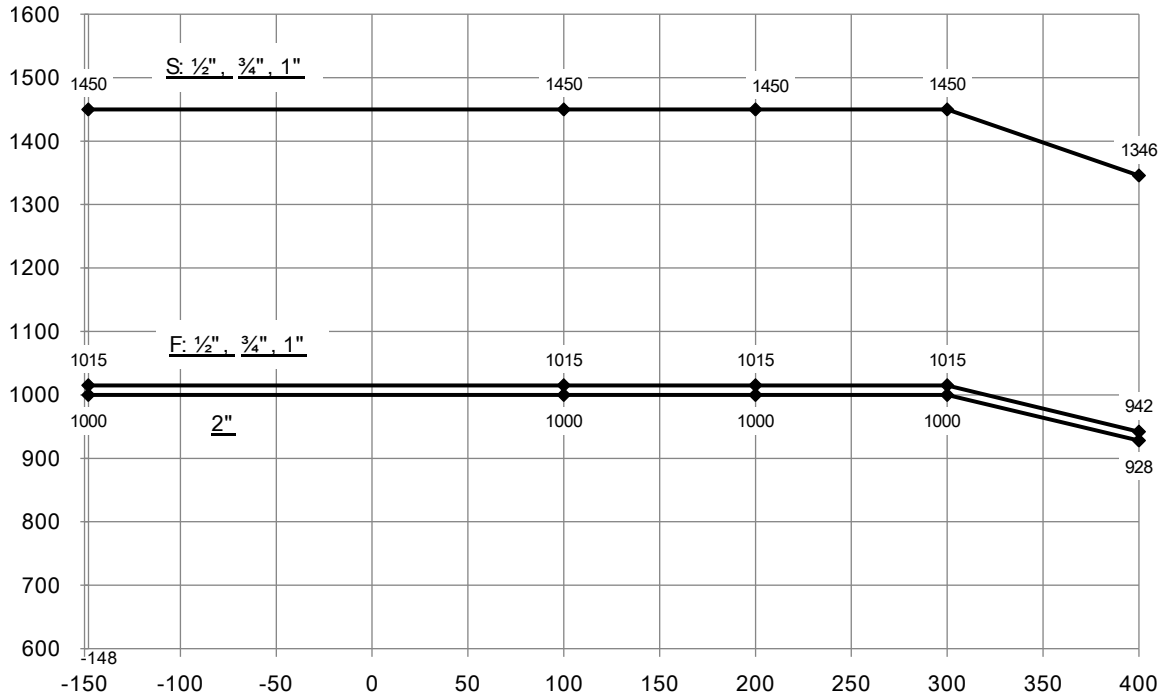
Model	Pressure
H025F, H050F, H100F, H200F, H300F	1,015 psig (69.98 barg)
H025S, H050S, H100S, H200S, H300S	1,450 psig (99.97 barg)

Temperature and pressure de-ratings

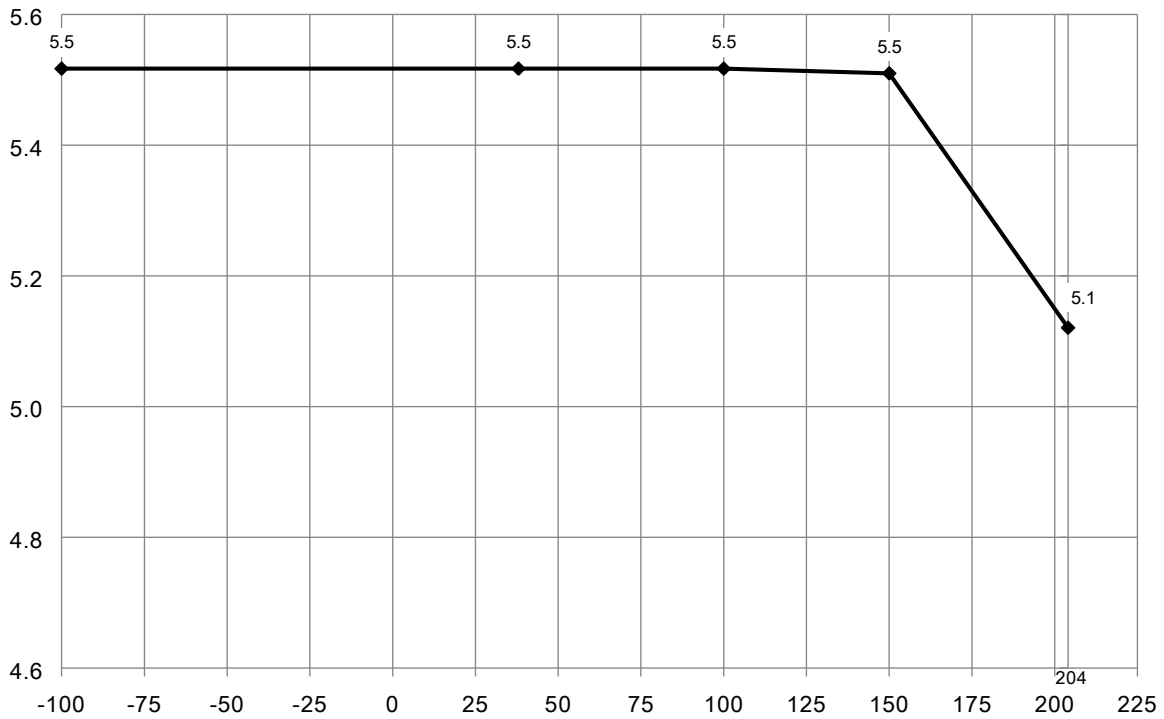
Note

- The ratings in this section apply to the combined sensor and process connection to ensure that the meter does not exceed the limits of either component.
- The temperature and pressure de-ratings graphs do not represent all possible model and fitting combinations. For combinations not listed here, contact a sales representative or the factory.

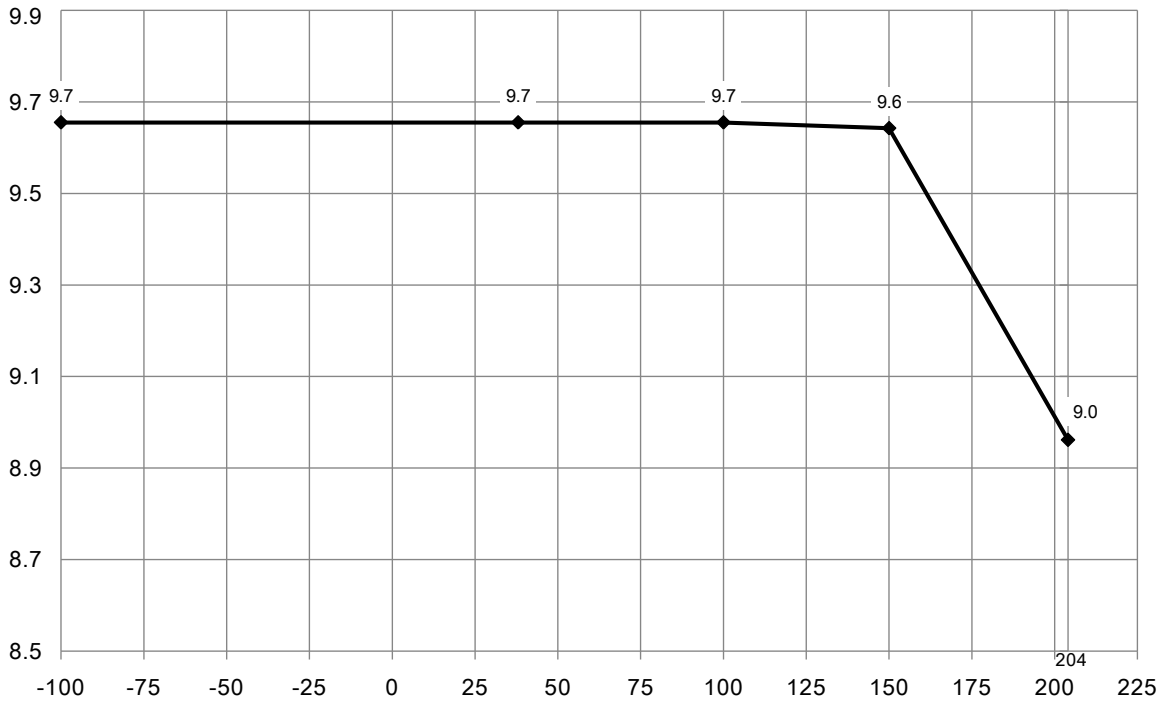
Tri-Clamp compatible 316L hygienic fittings for Models H025S through H050S; Models H025F through H300F



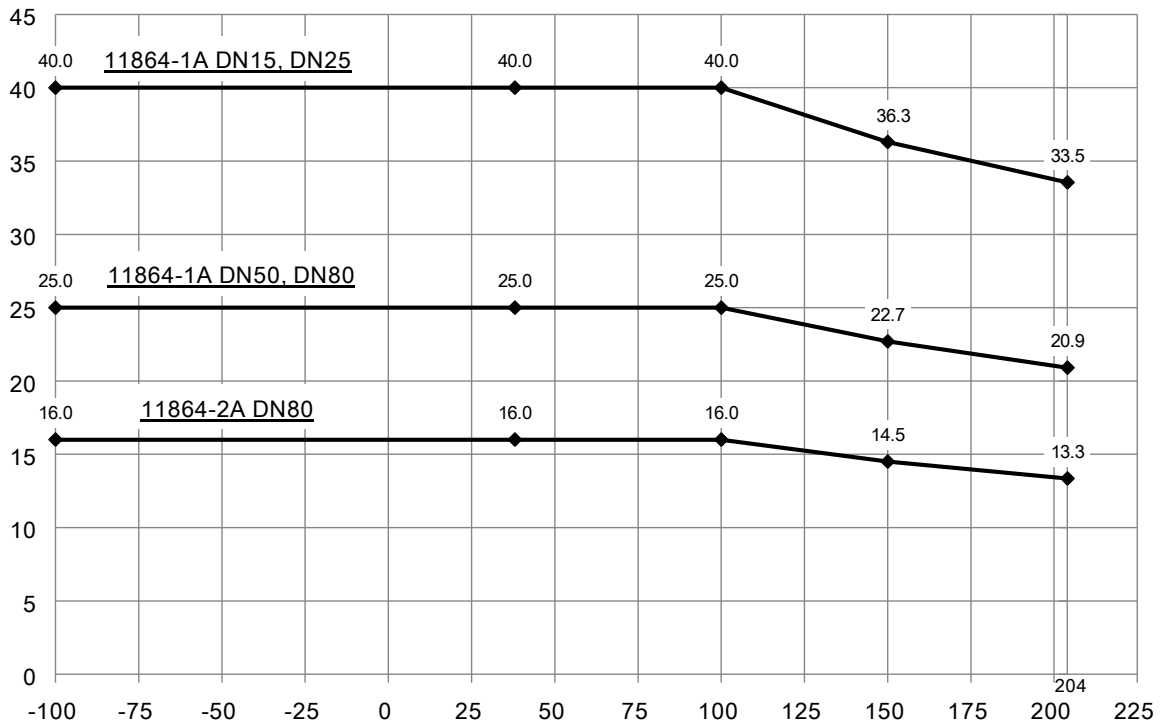
SMS 1145 316L hygienic coupling for Models H300S and H300F



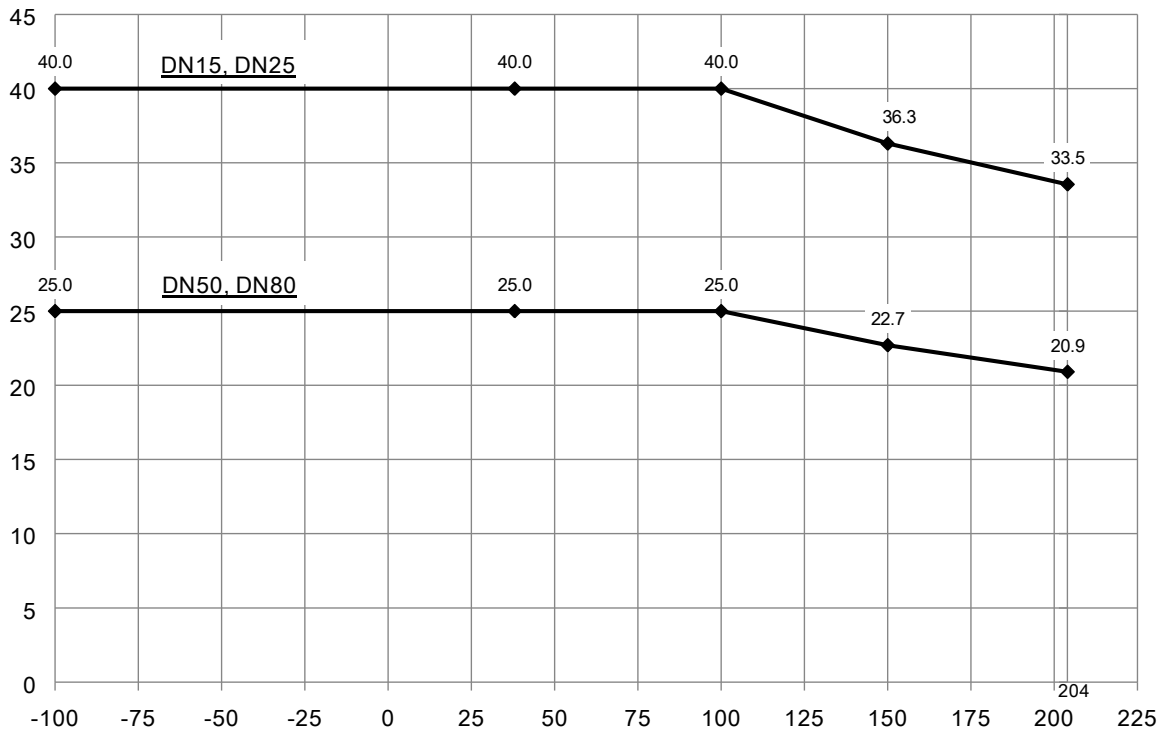
IDF 316L hygienic fittings for Models H025F through H300F



DIN 11864 316L hygienic couplings and flanges for Models H025S through H300S; Models H025F through H300F



DIN 11851 316L hygienic coupling for Models H025S through H300S; Models H025F through H300F







Hazardous area classifications

Detailed classifications

Note

All information and approvals may change depending on sensor/transmitter configurations and operating conditions. Please reference appropriate certificates for exact approvals.

CSA and CSA C-US	
All models with Model 2400S transmitter	Ambient temperature: -40 to +140 °F (-40 to +60 °C)
	Class I, Div. 2, Groups A, B, C, and D Class II, Div. 2, Groups F and G
Models H025, H050 and H100 with FMT transmitter	Ambient temperature: -13 to +140 °F (-25 to +60 °C)
	Class I, Div. 2, Groups A, B, C, and D Class II, Div. 2, Groups F and G
Models F300S and F300H with junction box	Ambient temperature: +140 °F max. (+60 °C max.)
	Class I, Div. 1, Groups C and D Class I, Div. 2, Groups A, B, C, and D Class II, Div. 1, Groups E, F, and G
All models with with core processor or Model 1700/2700 transmitter	Ambient temperature: -40 to +140 °F (-40 to +60 °C)
	Class I, Div. 1, Groups C and D Class I, Div. 2, Groups A, B, C, and D Class II, Div. 1, Groups E, F, and G
IECEX	
All models with Model 2400S transmitter; Models H025, H050, and H100 with FMT transmitter	Ex nA IIC T1-T5 Gc
Models H025, H050, H100, and H200 with core processor or Model 1700/2700 transmitter	Ex ib IIC T1-T5
Model H300 with core processor or Model 1700/2700 transmitter	Ex ib IIB T1-T5
ATEX	
All models with Model 2400S transmitter; Models H025, H050, and H100 with FMT transmitter	 II 3G Ex nA IIC T1-T5 Gc II 3D Ex tc IIIC T ⁽¹⁾ °C Dc IP66
Models H025, H050, H100, and H200 with core processor or Model 1700/2700 transmitter	 II 2G Ex ib IIC T1-T5 Gb II 2D Ex ib IIIC T ⁽¹⁾ °C Db IP65
Model H300 with core processor	 II 2G Ex ib IIB T1-T6 II 2D Ex tD A21 IP65 T ⁽¹⁾ °C
Model F300 with Model 2200S transmitter	 II 2G Ex ib IIB T1-T5 Gb II 2D Ex ib IIIC T ⁽¹⁾ °C Db IP65

(1) For ambient and process temperature limits, refer to the appropriate approval certificate.

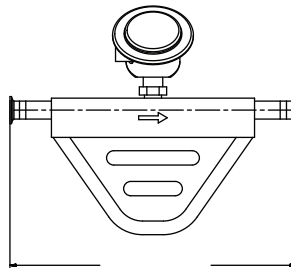
Process connections

Note

The tables in this section do not represent all possible model and flange combinations. For combinations not listed here, contact a sales representative or the factory.

Dimensions with process connections

Dimension A is provided for each process fitting type, when available. It is the finished face-to-face dimension of the sensor with the process connection $\pm 1/8$ in.



Weight with process connections

Product weights in this section include the weight of the sensor with sanitary process connection and stainless steel integral core processor. Values are rounded to ± 1 lb (± 0.5 kg). Contact the factory for product shipping weight.

Standard fitting options

Model H025

Code	Description					Dim A inch (mm)	Weight lb (kg)
121	1/2-inch	Tri-Clamp compatible	316L	Hygienic fitting		16 (406)	13 (6)
222	DN15	DIN11851	316L	Hygienic coupling		16.6 (423)	
665	8A	IDF	316L	Hygienic fitting	Type CLF W	15.9 (405)	
676	DN15	DIN11864-1A	316L	Aseptic coupling		16.6 (423)	
C70	DN15	DIN11864-2A	316L	Hygienic flange		17.8 (452)	
C80	DN15	DIN11864-3A	316L	Hygienic flange		17.6 (448)	

Model H050

Code	Description					Dim A inch (mm)	Weight lb (kg)
222	DN15	DIN11851	316L	Hygienic coupling		17.8 (452)	15 (7)

Code	Description					Dim A inch (mm)	Weight lb (kg)
322	3/4-inch	Tri-Clamp compatible	316L	Hygienic fitting		17.4 (441)	
667	15A	IDF	316L	Hygienic fitting	Type CLF W	17.4 (442)	
676	DN15	DIN11864-1A	316L	Aseptic coupling		17.8 (452)	
C70	DN15	DIN11864-2A	316L	Hygienic flange		18.9 (481)	14 (6)
C80	DN15	DIN11864-3A	316L	Hygienic flange		18.8 (478)	14 (6)

Model H100

Code	Description					Dim A inch (mm)	Weight lb (kg)
138	1-inch	Tri-Clamp compatible	316L	Hygienic fitting		21.0 (533)	23 (11)
230	DN25	DIN11851	316L	Hygienic coupling		22.0 (558)	
668	1s	IDF	316L	Hygienic fitting	Type CLF2 W	21.3 (541)	
677	DN25	DIN11864-1A	316L	Aseptic coupling		22.4 (569)	
C71	DN25	DIN11864-2A	316L	Hygienic flange		22.7 (576)	21 (10)
C81	DN25	DIN11864-3A	316L	Hygienic flange		22.6 (573)	21 (10)
C84	DN40	DIN11864-2A	316L	Hygienic flange		23.1 (587)	23 (10)
C85	DN40	DIN11864-3A	316L	Hygienic flange		23.1 (587)	21 (10)

Model H200

Code	Description					Dim A inch (mm)	Weight lb (kg)
352	2-inch	Tri-Clamp compatible	316L	Hygienic fitting		21.3 (541)	42 (19)
354	DN50	DIN11851	316L	Hygienic coupling		22.4 (569)	
669	2s	IDF	316L	Hygienic fitting	Type CLF2 W	21.3 (541)	
678	DN50	DIN11864-1A	316L	Aseptic coupling		22.4 (569)	
C68	DN50	DIN11864-3A	316L	Hygienic flange		23.4 (594)	40 (18)
C72	DN50	DIN11864-2A	316L	Hygienic flange		23.4 (595)	40 (19)

Model H300

Code	Description					Dim A inch (mm)	Weight lb (kg)
361	3-inch	Tri-Clamp compatible	316L	Hygienic fitting		33.1 (840)	81 (37)

Code	Description					Dim A inch (mm)	Weight lb (kg)
664	DN76.1	ISO 2853 (IDF)	316L	Hygienic coupling			
679	DN80	DIN11864-1A	316L	Aseptic coupling			
680	DN80	DIN11864-2A	316L	Aseptic flange			
685	DN80	DIN11851	316L	Hygienic coupling			
687	3s	IDF	316L	Hygienic fitting	Type CLF2 W		
694	DN76	SMS 1145	316L	Hygienic coupling			
C69	DN80	DIN11864-3A	316L	Hygienic flange		33.7 (857)	85 (39)