# Micro Motion® Model D and DL Coriolis Flow and Density Meters

Micro Motion® Model D and DL sensors provide flow and density measurement for liquids, gases, and slurries — simply and directly.



#### **Features and benefits**

- Dual-tube design for ease of installation and use
- Fits a wide range of line sizes for high flow rate capacity
- Special models available for high-pressure fluid containment or to meet 3-A Sanitary Standards





# **Model D and DL feature comparison**

Sensor model	Typical line size	Corrosion resistant materials	High pressure	High temperature	Purge fittings available	Rupture disk available	Sanitary Standards
Standard sensors							
DS150Z	1 to 2 inch (25 to 50 mm)	$\checkmark$			$\checkmark$	$\checkmark$	
DS300 (all)	2 to 4 inch (50 to 100 mm)	$\checkmark$			$\checkmark$	$\checkmark$	
High pressure sense	ors						
DH100S	<sup>1</sup> / <sub>2</sub> to 1 inch (15 to 25 mm)		$\checkmark$				
DH150S	1 to 1 <sup>1</sup> / <sub>2</sub> inch (25 to 40 mm)		$\checkmark$				
DH300S	1 <sup>1</sup> / <sub>2</sub> to 3 inch (40 to 80 mm)		$\checkmark$				
Sanitary sensors							
DL200S	2 inch (50 mm)				$\checkmark$		V

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## Liquid flow performance

		Mass		Volume	
		lb/min	kg/h	gal/min	l/h
Nominal flow range <sup>(1)</sup>					
Standard sensors	DS150Z	0 to 1400	0 to 38,136	0 to 168	0 to 38,136
	DS300 (all)	0 to 7000	0 to 190,680	0 to 839	0 to 190,680
High-pressure sensors	DH100S	0 to 400	0 to 10,896	0 to 48	0 to 10,896
	DH150S	0 to 1400	0 to 38,136	0 to 168	0 to 38,136
	DH300S	0 to 7000	0 to 190,680	0 to 839	0 to 190,680
Sanitary sensors	DL200S	0 to 2500	0 to 68,100	0 to 300	0 to 68,100
Maximum flow rate <sup>(2)(3)</sup>					
Standard sensors	DS150Z	2800	76,272	336	76,272
	DS300 (all)	7000	190,680	839	190,680
High-pressure sensors	DH100S	800	21,792	96	21,792
	DH150S	2800	76,272	336	76,272
	DH300S	7000	190,680	839	190,680
Sanitary sensors	DL200S	0 to 3500	95,340	420	95,340
Mass flow accuracy <sup>(4)</sup>	Transmitter with MVD Technology	±0.15% <sup>(5)</sup>			
	All other transmitters	±0.15% ±[(zer	o stability / flow rate)	× 100]% of rate	
Repeatability <sup>(4)</sup>	Transmitter with MVD Technology	±0.05% <sup>(5)</sup>			
	All other transmitters	±0.05% ±[½(z	ero stability / flow rate	e) × 100]% of rate	)
Zero stability		lb/min	kg/h	gal/min	l/h
Standard sensors	DS150Z	0.30	9.0	0.036	9.0
	DS300 (all)	0.70	19.2	0.084	19.2
High-pressure sensors	DH100S	0.30	9.0	0.036	9.0
	DH150S	1.2	32.6	0.144	32.6
	DH300S	4.0	108.0	0.480	108.0
Sanitary sensors	DL200S	0.35	9.5	0.042	9.5

<sup>(1)</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 psid (1 bar) of pressure drop.

<sup>(2)</sup> Maximum flow rate for volume measurement is based on a process-fluid density of 1 g/cm³. For fluids with density other than 1 g/cm³, the maximum volume flow rate equals the maximum mass flow rate divided by the fluid's density.

<sup>(3)</sup> Maximum flow rate calculated at a pressure drop of 29 psi (2 bar). Higher flow rates are possible with higher pressure drop.

<sup>(4)</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.

<sup>(5)</sup> When flow rate < zero stability / 0.0015, accuracy =  $\pm [(zero stability / flow rate) \times 100]\%$  of rate and repeatability =  $\pm [\%(zero stability / flow rate) \times 100]\%$  of rate.

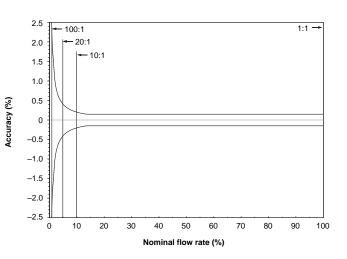
# Liquid flow performance continued

### Typical accuracy, turndown, and pressure drop

To determine accuracy, turndown, and pressure drop using your process variables, use Micro Motion's product selector at <a href="https://www.micromotion.com">www.micromotion.com</a>.

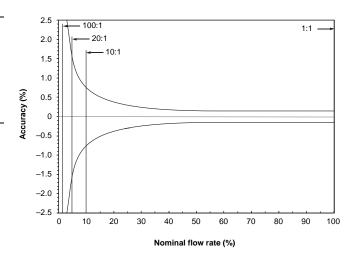
#### Standard sensors with transmitter with MVD Technology

Accuracy (± %)					
Turndown		100:1	20:1	10:1	1:1
DS150Z		2.14	0.43	0.21	0.15
DS300 (all)		1.0	0.2	0.15	0.15
Pressure drop					
Turndown		100:1	20:1	10:1	1:1
DS150Z	psi	~0	0.1	0.2	15.8
	bar	~0	0.01	0.01	1.09
DS300 (all)	psi	~0	0.1	0.2	15.1
	bar	~0	0.01	0.01	1.04



#### High-pressure sensors with transmitter with MVD Technology

Accuracy (± %)					
Turndown		100:1	20:1	10:1	1:1
DH100S		7.5	1.5	0.75	0.15
DH150S		8.57	1.71	0.86	0.15
DH300S		5.71	1.14	0.57	0.15
Pressure drop					
Turndown		100:1	20:1	10:1	1:1
DH100S	psi	~0	0.1	0.2	12.4
	bar	~0	0.01	0.01	0.84
DH150S	psi	~0	0.1	0.2	15.0
	bar	~0	0.01	0.01	1.0
DH300S	psi	~0	0.1	0.3	21.0
	bar	~0	0.01	0.02	1.4



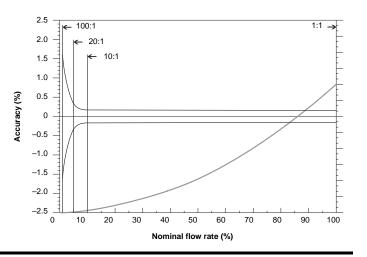
# Liquid flow performance continued

### Typical accuracy, turndown, and pressure drop

To determine accuracy, turndown, and pressure drop using your process variables, use Micro Motion's product selector at <a href="https://www.micromotion.com">www.micromotion.com</a>.

#### Sanitary sensors with transmitter with MVD Technology

Accuracy (± %)					
Turndown		100:1	20:1	10:1	1:1
DL200S		1.4	0.28	0.15	0.15
Pressure drop					
Turndown		100:1	20:1	10:1	1:1
DL200S	psi	~0	0.1	0.2	11.9
	bar	~0	0.01	0.01	0.82



## **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 <a href="https://www.micromotion.com">www.micromotion.com</a>.

		lb/min	kg/h
Nominal flow range <sup>(1)</sup>			
Standard sensors	DS150Z	0 to 1400	0 to 38,136
	DS300 (S, H, and Z)	_	_
High-pressure sensors	DH100S	0 to 400	0 to 10,896
	DH150S	0 to 1400	0 to 38,136
	DH300S	_	_
Sanitary sensors	DL200S	0 to 2500	0 to 68,100
Maximum flow rate	B04507		<b>70.070</b>
Standard sensors	DS150Z	2800	76,272
	DS300 (S, H, and Z)	_	_
High-pressure sensors	DH100S	800	21,792
	DH150S	2800	76,272
	DH300S	_	_
Sanitary sensors	DL200S	3500	95,340
Accuracy <sup>(2)</sup>			
All models except DS300 and	Transmitter with	±0.65% <sup>(3)</sup>	
DH300S	MVD Technology		
	All other transmitters	±0.65% ±[(zero stal	oility / flow rate) × 100]% of rate
Repeatability <sup>(2)</sup>			
All models except DS300	Transmitter with	±0.30% <sup>(3)</sup>	
and DH300S	MVD Technology		
	All other transmitters	±0.30% ±[(zero stal	oility / flow rate) x 100]% of rate
Zero stability		lb/min	kg/h
Standard sensors	DS150Z	0.30	9.0
	DS300 (S, H, and Z)	_	_
High-pressure sensors	DH100S	0.30	9.0
<b>.</b>	DH150S	1.2	32.6
	DH300S	_	_
Sanitary sensors	DL200S	0.35	9.5
Caritary Scrisors	DL2000	0.00	0.0

<sup>(1)</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 psid (1 bar) of pressure drop.

<sup>(2)</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.

<sup>(3)</sup> When flow rate < zero stability / 0.0065, accuracy =  $\pm [(\text{zero stability / flow rate}) \times 100]\%$  of rate and repeatability =  $\pm [\frac{1}{2}(\text{zero stability / flow rate}) \times 100]\%$  of rate.

# **Density specifications (liquid only)**

		g/cm <sup>3</sup>	kg/m³	
Accuracy				
Standard sensors	DS150Z <sup>(1)</sup>	±0.002	±2.0	
	DS300S or DS300H	±0.0005	±0.5	
	DS300Z <sup>(1)</sup>	±0.001	±1.0	
High-pressure sensors	DH100S	±0.002	±2.0	
	DH150S	±0.002	±2.0	
	DH300S	±0.001	±1.0	
Sanitary sensors	DL200S	±0.0005	±0.5	
Repeatability				
Standard sensors	DS150Z	±0.001	±1.0	
	DS300S or DS300H	±0.0002	±0.2	
	DS300Z	±0.0005	±0.5	
High-pressure sensors	DH100S	±0.001	±1.0	
	DH150S	±0.001	±1.0	
	DH300S	±0.0005	±0.5	
Sanitary sensors	DL200S	±0.0002	±0.2	
Range	All models	0 to 5	0 to 5000	

<sup>(1)</sup> Flow tubes are 316L stainless steel with Tefzel lining.

# **Temperature specifications**

Accuracy			±1 °C ± 0.5% of reading	ng in °C
Repeatability			±0.2 °C	
Process fluid limits Standard sensors	DS150Z <sup>(1)</sup> DS300S or DS300H DS300Z <sup>(1)</sup>	With remote booster amplifier <sup>(2)</sup>	°F +32 to +250 -400 to +400 +32 to +250 -400 to +400	°C 0 to +121 -240 to +204 0 to +121 -240 to +204
High-pressure sensors	DH100S, DH150S, DH300S		-400 to +400	-240 to +204
Sanitary sensors	DL200S		-400 to +400	-240 to +204
Ambient limits UL CSA ATEX	All models All models		°F +104 maximum -40 to +140 Refer to graphs on page	°C +40 maximum -40 to +60 ges 10-11.

<sup>(1)</sup> Flow tubes are 316L stainless steel with Tefzel lining. Maximum allowable rate of sensor temperature change for Tefzel meters is 30 °F/hr (17 °C/h).

# **Pressure ratings**

1			
		psi	bar
Flow tube rating <sup>(1)</sup>	DS150Z <sup>(2)</sup>	1000	69
	DS300S or DS300H	740	51
	DS300Z <sup>(2)</sup>	740	51
	DH100S	4937	340
	DH150S	4790	330
	DH300S	3110	214
	DL200S	740	51
PED compliance	Sensors comply to council	directive 97/23/EC	of 29 May 1997 on Pressure Equipment.
Housing	All models	Housing is r	not rated for pressure containment.

(1)	Flow tube pressure rating at 77 °F (25 °C)	, according to ASME B31.3. For higher operating tempera	tures, tube pressure needs to be
	derated as follows:		

Stainless steel sensors Up to 300  $^{\circ}$ F (up to 148  $^{\circ}$ C) None

At 400 °F (204 °C) 7.2% derating

Up to 200 °F (up to 93 °C) None

At 400 °F (204 °C) 9.2% derating

Nickel alloy sensors

<sup>(2)</sup> The remote booster amplifier has ambient temperature limits of -40 to +140 °F (-40 to +60 °C).

<sup>(2)</sup> Flow tubes are 316L stainless steel with Tefzel lining.

# **Environmental effects**

Process temperature effect	Process temperature effect is temperature change away fro		e zero offset due to process fluid e.
		% of nominal flow rate	e per °C <sup>(1)</sup>
Standard sensors	DS150Z <sup>(2)</sup>	±0.002	
	DS300S or DS300H, DS300Z <sup>(1)</sup>	±0.004	
High-pressure sensors	DH100S, DH150S, DH300S	±0.01	
Sanitary sensors	DL200S	±0.004	
Pressure effect	Pressure effect is defined as	the change in sensor flow	and density sensitivity due to
Pressure effect		ay from the calibration presisted below are affected.	and density sensitivity due to essure. Pressure effect can be effect on flow accuracy
Pressure effect	process pressure change awa	ay from the calibration presisted below are affected.	essure. Pressure effect can be
Pressure effect	process pressure change awa	ay from the calibration presisted below are affected.  Pressure of	essure. Pressure effect can be effect on flow accuracy
Pressure effect	process pressure change awa corrected. Only the sensors li	ay from the calibration presisted below are affected.  Pressure 6 % of rate per psi	effect on flow accuracy % of rate per bar
Pressure effect	process pressure change awa corrected. Only the sensors li DS300S or DS300H	ay from the calibration presisted below are affected.  Pressure of the second s	effect on flow accuracy % of rate per bar -0.131
Pressure effect	process pressure change awa corrected. Only the sensors li DS300S or DS300H DS300Z <sup>(1)</sup>	ay from the calibration presisted below are affected.  Pressure of the calibration presisted below are affected.  Output  Outp	effect on flow accuracy % of rate per bar -0.131 -0.131
Pressure effect	process pressure change awa corrected. Only the sensors li DS300S or DS300H DS300Z <sup>(1)</sup>	ay from the calibration presisted below are affected.  Pressure of the calibration presisted below are affected.  Output  Outp	effect on flow accuracy % of rate per bar -0.131 -0.131 -0.131
Pressure effect	process pressure change awa corrected. Only the sensors li DS300S or DS300H DS300Z <sup>(1)</sup>	ay from the calibration presisted below are affected.  Pressure of the calibration presisted below are affected.  Pressure of the calibration presisted below are affected.  Pressure of the calibration presisted by the c	essure. Pressure effect can be  effect on flow accuracy % of rate per bar -0.131 -0.131 -0.131 fect on density accuracy
Pressure effect	process pressure change awa corrected. Only the sensors li DS300S or DS300H DS300Z <sup>(1)</sup> DL200S	ay from the calibration presisted below are affected.  Pressure of the calibration presisted below are affected.  Pressure of the calibration presisted below are affected.  Pressure of the calibration presisted by the calibration pressure of the calibration pressure of the calibration pressure of the calibration presisted by the calibration pressure of the calibra	essure. Pressure effect can be  effect on flow accuracy  % of rate per bar  -0.131  -0.131  -0.131  fect on density accuracy  kg/m³ per bar

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

<sup>(2)</sup> Flow tubes are 316L stainless steel with Tefzel lining.

### Hazardous area classifications

**UL** D sensors, DH sensors, and

DL200S sensors

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

CSA D sensors, DH sensors, and

DL200S sensors

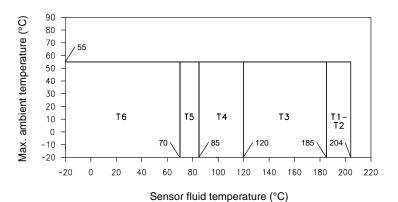
Class I, Div. 1, Groups C and D Class I, Div. 2, Groups A, B, C, and D

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

ATEX<sup>(1)</sup> DS150Z

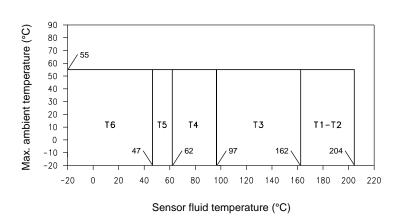
DH100, DH150

II 2 G EEx ib IIB T1–T6
II 2 D IP65 T °C



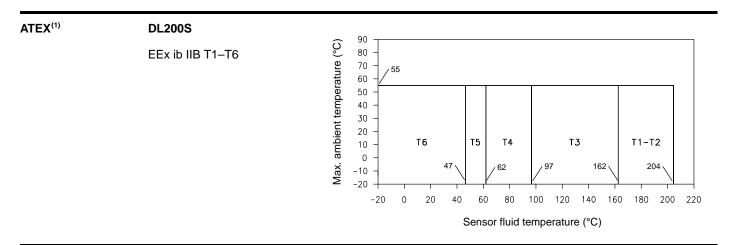
DS300 (all) DH300

II 2 G EEx ib IIB T1-T6 II 2 D IP65 T °C



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

### Hazardous area classifications continued



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

### **Materials of construction**

Sensors are available with the materials shown in the table below. For specific sensor material options, refer to the ordering information on pages 16–18. For wetted parts, material codes are:

SS 316L stainless steel flow tubes and flanges, CF-3M SS manifolds

Ni Hastelloy® C-22 nickel alloy flow tubes and glands with Hastelloy CW-2M nickel alloy manifolds

Lined 316L stainless steel flow tubes with Tefzel lining, CF-3M SS manifolds

Wetted parts <sup>(1)</sup>		SS	Ni	Lined
Standard sensors	DS150Z			•
	DS300 (all)	•	•	•
High-pressure sensors	DH100S	•		
	DH150S	•		
	DH300S	•		
Sanitary sensors	DL200S	•		
Housing	304 stainless steel			
Core processor	Polyurethane-painted a	aluminum or 316L stainle	ss steel; NEMA 4X	(IP 65)
Junction box	Polyurethane-coated a	luminum; NEMA 4X (IP 6	55)	
Booster amplifier	Polyurethane-coated a	luminum; NEMA 4X (IP6	6/67)	

<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.

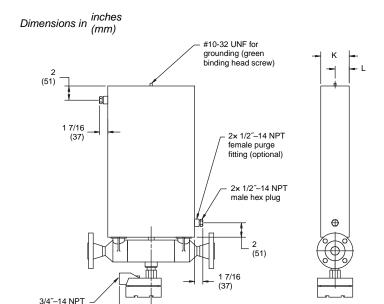
# Weight

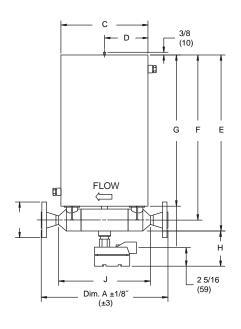
		Process connection	lb	kg
Standard sensors	DS150Z	1 1/2" ANSI CL150 WNRF flanges	46	20.9
	DS300 (all)	3" ANSI CL150 WNRF flanges	113	60.4
High-pressure sensors	DH100S	1 1/2" high-pressure, clamp-type flanges	80	36.4
	DH150S	1 1/2" high-pressure, clamp-type flanges	80	36.4
	DH300S	4" high-pressure, clamp-type flanges	218	99.1
Sanitary sensors	DL200S	Sanitary fittings	90	41
		150 lb lap joint	100	45
		300 lb lap joint	104	47

# **Dimensions**

female conduit opening

### Models DS150Z and DH150S





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

3 15/16

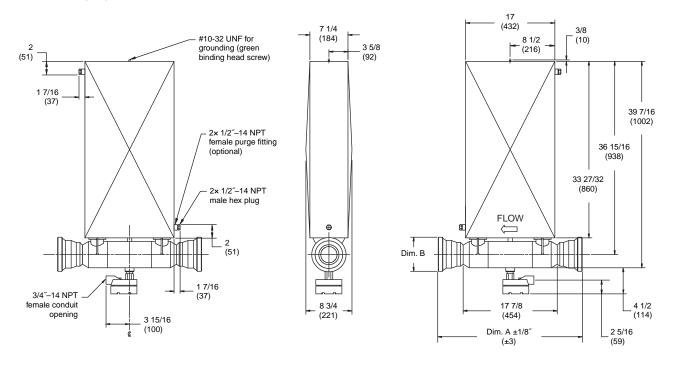
		С	D	E	F	G	Н	J	K	L
DS150Z	inches	12 1/4	6 1/8	24 3/4	23 5/16	21 9/32	4	12 7/8	4	2
	(mm)	(311)	(156)	(629)	(592)	(541)	(102)	(327)	(102)	(51)
DH100	inches	12 1/4	6 1/8	24 27/32	23 13/32	21 3/8	4	12 7/8	4	2
	(mm)	(311)	(156)	(631)	(595)	(543)	(102)	(327)	(102)	(51)
DH150	inches	12 3/4	6 3/8	28 11/32	26 29/32	24 29/32	4	12 7/8	4 1/2	2 1/4
	(mm)	(324)	(162)	(720)	(683)	(633)	(102)	(327)	(114)	(57)

<sup>(1)</sup> For dimensions A and B, see the process fitting options on pages 16–18.

## **Dimensions** continued

### **Model DS300**

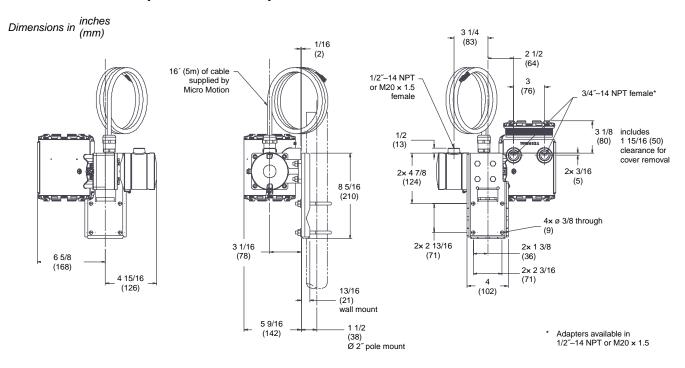
Dimensions in inches (mm)



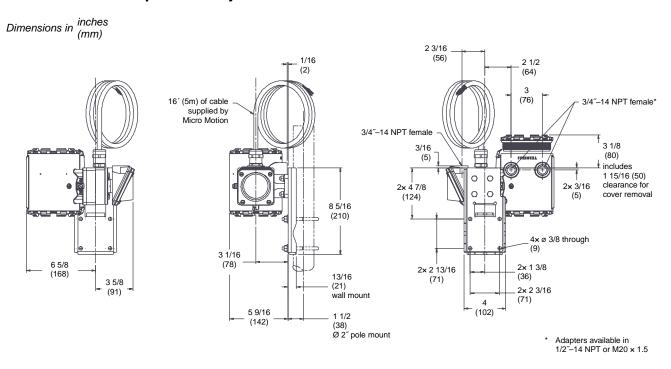
For dimensions A and B, see process fitting options on pages 16–18.

## **Dimensions** continued

### Remote booster amplifier with core processor

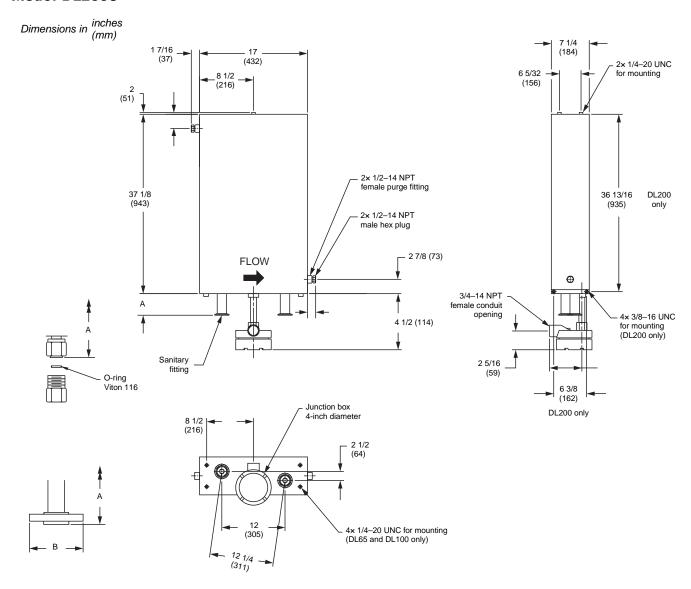


### Remote booster amplifier with junction box



# **Dimensions** continued

### **Model DL200S**



Variable dimensions and process fittings are provided on pages 16–18.

# **Fitting options**

	Fitting code <sup>(1)</sup>	Dim. A face-to-face inches (mm)	Dim. B outside diameter inches (mm)
DH100S fitting options			
1 1/2-inch high-pressure clamp-type flange; size 11 seal ring <sup>(2)</sup>	140	17 1/2 (445)	3 1/8 (79)
1-inch ANSI CL900/1500 weld neck raised face flange	925	19 1/16 (484)	5 7/8 (149)
1-inch ANSI CL2500 weld neck raised face flange	927	20 9/32 (515)	6 1/4 (159)
DN25 PN250 weld face flange; DIN 2628 type E face	922	17 29/32 (455)	5 29/32 (150)
DN25 PN320 weld face flange; DIN 2629 type E face	923	18 15/16 (481)	6 15/16 (160)
DN25 PN400 weld face flange; DIN 2627 type E face	924	19 7/8 (505)	7 1/16 (179)
DH150S fitting options			
1 1/2-inch high-pressure clamp-type flange; size 14 seal ring <sup>(3)</sup>	154	17 1/2 (445)	3 1/8 (79)
1 1/2-inch ANSI CL900/1500 weld neck raised face flange	936	19 25/32 (502)	7 (178)
1 1/2-inch ANSI CL2500 weld neck raised face flange	938	22 1/32 (560)	8 (203)
DN40 PN160 weld neck flange; DIN 2638 type E face	932	17 13/16 (452)	6 11/16 (170)
DN40 PN250 weld neck raised face flange; DIN 2628 type E face	933	19 1/16 (484)	7 9/32 (185)
DN40 PN320 weld neck raised face flange; DIN 2629 type E face	934	19 23/32 (501)	7 11/16 (195)
DN40 PN400 weld neck raised face flange; DIN 2627 type E face	935	21 7/16 (545)	8 21/32 (220)
DS150Z Tefzel fitting options			
1 1/2-inch ANSI CL150 weld neck raised face flange	141	17 5/8 (448)	5 (127)
1 1/2-inch ANSI CL300 weld neck raised face flange	142	18 1/8 (460)	6 1/8 (156)
1 1/2-inch ANSI CL600 weld neck raised face flange	143	18 3/4 (476)	6 1/8 (156)
2-inch ANSI CL150 weld neck raised face flange	218	17 25/32 (452)	6 (152)
DN40 PN40 weld neck flange; DIN 2635 type C face	144	16 5/16 (414)	5 29/32 (150)

<sup>(1)</sup> 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.

<sup>(2)</sup> Oteco hub size: 1½ OC11. Mating connectors (not included): Grayloc hub size 1½ GR11, seal ring size 11; clamp size 1½, stainless steel.

<sup>(3)</sup> Oteco hub size: 1½ OC14. Mating connectors (not included): Grayloc hub size 1½ GR14, seal ring size 14; clamp size 1½, stainless steel.

# Fitting options continued

	Fitting code <sup>(1)</sup>	Dim. A face-to-face inches (mm)	Dim. B outside diameter inches (mm)
DS300S stainless steel fitting options			
3-inch ANSI CL150 weld neck raised face flange	155	23 1/4 (591)	7 1/2 (191)
3-inch ANSI CL300 weld neck raised face flange	156	24 (610)	8 1/4 (210)
3-inch ANSI CL600 weld neck raised face flange	157	24 3/4 (629)	8 1/4 (210)
3-inch sanitary fitting (Tri-Clamp compatible)	161	21 3/8 (543)	3 19/32 (91)
DN80 PN40 weld neck flange; DIN 2635 type C face	158	22 5/16 (567)	7 7/8 (200)
DN80 PN64 weld neck flange; DIN 2636 type E face	941	23 17/32 (598)	8 15/32 (215)
JIS 80mm 10K weld neck raised face flange	159	21 11/16 (551)	7 9/32 (185)
JIS 80 mm 20K weld neck raised face flange	160	22 5/16 (567)	7 7/8 (200)
DS300Z Tefzel fitting options			
3-inch ANSI CL150 weld neck raised face flange	155	23 1/4 (591)	7 1/2 (191)
3-inch ANSI CL300 weld neck raised face flange	156	24 (610)	8 1/4 (210)
DN80 PN40 weld neck flange; DIN 2635 type C face	158	22 5/16 (567)	7 7/8 (200)
DS300H Hastelloy fitting options			
3-inch ANSI CL150 lap joint flange	203	25 5/8 (651)	7 1/2 (191)
3-inch ANSI CL300 lap joint flange	204	25 5/8 (651)	8 1/4 (210)
3-inch ANSI CL600 lap joint flange	949	25 5/8 (651)	8 1/4(210)
DN80 PN40 lap joint flange; DIN 2656 type C face	211	25 5/8 (651)	7 7/8 (200)
JIS 80 mm 10K lap joint flange	210	25 5/8 (651)	7 9/32 (185)
DH300S fitting options			
4-inch high-pressure clamp-type flange; size 27 seal ring <sup>(2)</sup>	164	25 1/16 (637)	6 (151)
3-inch ANSI CL300 weld neck raised face flange	156	24 (610)	8 1/4 (210)
3-inch ANSI CL600 weld neck raised face flange	157	24 3/4 (629)	8 1/4 (210)
3-inch ANSI CL900 weld neck raised face flange	246	26 5/16 (668)	9 1/2 (241)
3-inch ANSI CL1500 weld neck raised face flange	946	27 5/8 (702)	10 1/2 (267)
3-inch ANSI CL2500 weld neck raised face flange	947	31 5/8 (803)	12 (305)
DN80 PN100 weld neck flange; DIN 2637 type E face	942	24 1/32 (610)	9 1/16 (230)
DN80 PN160 weld neck flange; DIN 2638 type E face	943	24 21/32 (626)	9 1/16 (230)
DN80 PN250 weld neck raised face flange; DIN 2628 type E face	944	25 29/32 (658)	10 1/32 (255)

<sup>(1)</sup> 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.

<sup>(2)</sup> Oteco hub size: 4 OC27. Mating connectors (not included): Grayloc hub size 4 GR27, seal ring size 27; clamp size 4, stainless steel.

# Fitting options continued

DL200S fitting options	Fitting code <sup>(1)</sup>	Dim. A face-to-face inches (mm)	Dim. B outside diameter inches (mm)
2-inch sanitary fitting (Tri-clamp compatible)	226	2 7/8 (73)	2 1/2 (64)
2-inch 150 lb lap joint flange	227	2 7/8 (73)	6 (152)
2-inch 300 lb lap joint flange	228	2 7/8 (73)	6 1/2 (165)
DN50 DIN 11851 aseptic coupling	954	2 7/8 (73)	3 1/16 (78)
DN50 PN40 lap joint flange; DIN 2656 type C face	955	2 7/8 (73)	6 1/2 (165)

<sup>(1)</sup> 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.

# Ordering information — all models

Model	Product description
	Standard sensors
DS150Z	Micro Motion Coriolis D-Series sensor; 1 1/2-inch (38 mm); standard pressure; Tefzel lining
DS300S	Micro Motion Coriolis D-Series sensor; 3-inch (75 mm); standard pressure; 316L stainless steel
DS300H	Micro Motion Coriolis D-Series sensor; 3-inch (75 mm); standard pressure; Hastelloy C-22
DS300Z	Micro Motion Coriolis D-Series sensor; 3-inch (75 mm); standard pressure; Tefzel lining
	High-pressure sensors
DH100S	Micro Motion Coriolis D-Series sensor; 1-inch (25 mm); high pressure; 316L stainless steel
DH150S	Micro Motion Coriolis D-Series sensor; 1 1/2-inch (38 mm); high pressure; 316L stainless steel
DH300S	Micro Motion Coriolis D-Series sensor; 3-inch (75 mm); high pressure; 316L stainless steel
	Sanitary sensors
DL200S	Micro Motion Coriolis DL-Series sensor; 2-inch; 316L stainless steel
Code	Process connections
###	See fitting options on pages 16–18.
Code	Case options
	Models DS150Z, DS300Z, DL200S
S	Standard case
Р	Purge fitting (two 1/2-inch NPT female)
	Models DH100S, DH150S, and DH300S
S	Standard case
	Models DS300S and DS300H
S	Standard case
Р	Purge fitting (two 1/2-inch NPT female)
D	Metal rupture disk
R	Purge fittings and rupture disk
Code	Approvals
М	Micro Motion Standard (no approval)
N	Micro Motion Standard / PED compliant
U	UL
С	CSA
В	ATEX / PED compliant
P <sup>(1)</sup>	NEPSI
S	SAA
Typical mo	del number: DH150S 154 S U

<sup>(1)</sup> Available only with language code M (Chinese).

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