

# Rosemount 8750W Magnetic Flowmeter System

## for Utility, Water, and Wastewater Applications



- Best in class value with performance, reliability, and diagnostics suited for monitoring applications
- Reliable all welded coil housing and lightweight sensor design rated to IP68
- Process Diagnostics and Smart Meter Verification to provide better insight into the process and the meter's health
- Available with drinking water certifications



# Product Selection Guide

The Rosemount 8750W Magnetic Flowmeter Platform is available in flanged and wafer styles, as well as remote and integral transmitter configurations to ensure compatibility with utility, water, and wastewater applications.



- For transmitter details see [Table 1](#) and [Table 9](#).
- For sensor styles and details see [Table 2](#) and [Table 10](#).
- For available lining materials see [Table 11](#).
- For available electrode materials and electrode types see [Table 12](#).
- For process reference (grounding) options see [Table 13](#) and [Table 14](#).

For guidance on selecting materials, refer to the Magnetic Flowmeter Material Selection Guide located on [Rosemount.com](http://Rosemount.com) (Technical Data Sheet Number 00816-0100-3033). For more information regarding the available product offering see the ordering information, [Table 6](#) through [Table 12](#).

**Table 1. Transmitter Selections**

Transmitter	General characteristics
Field Mount 	• Integral and remote mount configurations available
	• HART®/Analog and Pulse outputs available
	• Advanced Diagnostics available
	• Optical switch local operator interface (optional)
Wall Mount 	• Remote mount configuration
	• HART/Analog and Pulse outputs available
	• Advanced Diagnostics available
	• Easy to use local operator interface with dedicated configuration buttons (optional)

**Table 2. Sensor Selection**

Sensor	General characteristics
Flanged 	• Flanged process connections
	• Welded coil housing
	• 1/2-in. (15mm) to 48-in. (1200mm)
	• Standard, reference, and bullet-nose electrodes available
Wafer 	• Wafer (flangeless) design
	• Welded coil housing
	• 1 1/2-in. (40mm) to 8-in. (200mm)
	• Standard, reference, and bullet-nose electrodes available

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# Magmeter Diagnostics

## Rosemount diagnostics reduce cost & improve output by enabling new practices

Rosemount Magnetic Flowmeters provide device diagnostics that detect and warn of abnormal situations throughout the life of the meter - from installation to maintenance and meter verification. With Rosemount Magnetic Flowmeter diagnostics enabled, plant availability and throughput can be improved, and costs through simplified installation, maintenance and troubleshooting can be reduced.

Diagnostic name	Diagnostic category	Product capability
Basic Diagnostics		
Tunable Empty Pipe	Process	Standard
Electronics Temperature	Maintenance	Standard
Coil Fault	Maintenance	Standard
Transmitter Fault	Maintenance	Standard
Reverse Flow	Process	Standard
Coil Current <sup>(1)</sup>	Maintenance	Standard
Electrode Saturation <sup>(1)</sup>	Process/Maintenance	Standard
Advanced Diagnostics		
High Process Noise	Process	Suite 1 (DA1)
Grounding and Wiring Fault	Installation	Suite 1 (DA1)
Coated Electrode Detection <sup>(1)</sup>	Process	Suite 1 (DA1)
Commanded SMART™ Meter Verification	Meter Health	Suite 2 (DA2)
Continuous SMART Meter Verification <sup>(1)</sup>	Meter Health	Suite 2 (DA2)
4-20 mA1 Loop Verification	Installation	Suite 2 (DA2)

(1) Only available with field mount transmitter.

## Options for accessing diagnostics

Rosemount Magmeter Diagnostics can be accessed through the Local Operator Interface (LOI), a Field Communicator, AMS® Suite: Intelligent Device Manager, and ProLink®. Contact your local Emerson Process Management representative to activate diagnostics or for diagnostic availability on existing transmitters.

## Access diagnostics through the LOI for quicker installation, maintenance, and meter verification

Rosemount Magnetic Flowmeter Diagnostics are available through the LOI to simplify maintenance.

## Access diagnostics through ProLink III v. 3.0

Simplify maintenance and troubleshooting practices by utilizing ProLink III v3.0 to access diagnostics and troubleshooting information, log variable data, run SMART Meter Verification, and print verification reports.

## Access diagnostics through AMS Intelligent Device Manager for the ultimate value

The value of the diagnostics increases significantly when AMS Intelligent Device Manager is used. AMS Intelligent Device Manager provides a simplified screen flow and procedures for how to respond to the diagnostic messages.

# Magnetic Flowmeter Sizing

Selecting the appropriate sensor size is an important step when considering a magnetic flowmeter. The physical properties of the process fluid, as well as the fluid velocity should be considered. It may be necessary to select a flow sensor that is larger or smaller than the adjacent piping to ensure the fluid velocity is in the recommended flow range for the application.

- Application guidelines and velocity ranges are provided in [Table 3](#).
- A table to convert from volumetric flow to velocity is shown in [Table 4](#). Two examples of these calculations are show below.
- Minimum and maximum flow rates based on line size are shown in [Table 5](#).
- Operation outside these guidelines may also give acceptable performance.

**Table 3. Sizing Guidelines**

Application	Velocity range (ft/s)	Velocity range (m/s)
Normal Service	0–39	0–12
Preferred Service	2–20	0.6–6.1

To convert flow rate to velocity, use the appropriate factor listed in [Table 4](#) and the following equation:

$$\text{Velocity} = \frac{\text{Flow Rate}}{\text{Factor}}$$

Example: English units
Magmeter Size: 4 in. (factor from <a href="#">Table 4</a> = 39.679) Normal Flow Rate: 300 GPM
Velocity = $\frac{300 \text{ (gpm)}}{39.679}$
<b>Velocity = 7.56 ft/s</b>

Example: SI units
Magmeter Size: 100 mm (factor from <a href="#">Table 4</a> = 492.78) Normal Flow Rate: 800 L/min
Velocity = $\frac{800 \text{ (L/min)}}{492.78}$
<b>Velocity = 1.62 m/s</b>

**Table 4. Line Size vs. Conversion Factor**

Nominal line size Inches (mm)	Gallons per minute factor	Liters per minute factor
½ (15)	0.947	11.762
1 (25)	2.694	33.455
1½ (40)	6.345	78.806
2 (50)	10.459	129.89
2½ (65)	14.923	185.33
3 (80)	23.042	286.17
4 (100)	39.679	492.78
5 (125)	62.356	774.42
6 (150)	90.048	1,118.3
8 (200)	155.93	1,936.5
10 (250)	245.78	3,052.4
12 (300)	352.51	4,378.0
14 (350)	421.70	5,237.3
16 (400)	550.80	6,840.6
18 (450)	697.19	8,658.6
20 (500)	866.51	10,761
24 (600)	1,253.2	15,564
30 (750)	2006.0	24,913
36 (900)	2,935.0	36,451
40 (1000)	3,652.1	45,357
42 (1050)	4,115.1	51,107
48 (1200)	5,407.6	67,159

**Table 5. Line Size vs. Velocity/Rate**

Nominal line size in Inches (mm)	Minimum/maximum flow rate							
	Gallons per minute				Liters per minute			
	at 0.04 ft/s (low-flow cutoff)	at 1 ft/s (min range setting)	at 3 ft/s	at 39.37 ft/s (max range setting)	at 0.012 m/s (low-flow cutoff)	at 0.3 m/s (min range setting)	at 1 m/s	at 12 m/s (max range setting)
1/2 (15)	0.038	0.947	2.841	37.287	0.141	3.529	11.76	141.15
1 (25)	0.108	2.694	8.081	106.05	0.401	10.04	33.45	401.46
1 1/2 (40)	0.254	6.345	19.04	249.82	0.946	23.64	78.81	945.67
2 (50)	0.418	10.459	31.38	411.77	1.559	38.97	129.89	1,558.7
2 1/2 (65)	0.597	14.923	44.77	587.51	2.224	55.60	185.33	2,224.0
3 (80)	0.922	23.042	69.13	907.17	3.434	85.85	286.17	3,434.0
4 (100)	1.587	39.679	119.04	1,562.2	5.913	147.84	492.78	5,913.4
5 (125)	2.494	62.356	187.07	2,454.9	9.293	232.33	774.42	9,293.0
6 (150)	3.602	90.048	270.14	3,545.2	13.42	335.50	1,118.3	13,420
8 (200)	6.237	155.93	467.79	6,138.9	23.24	580.96	1,936.5	23,238
10 (250)	9.831	245.78	737.34	9,676.3	36.63	915.73	3,052.4	36,629
12 (300)	14.10	352.51	1,057.5	13,878	52.54	1,313.4	4,378.0	52,535
14 (350)	16.87	421.71	1,265.1	16,603	62.85	1,571.2	5,237.3	62,848
16 (400)	22.03	550.80	1,652.4	21,685	82.09	2,052.2	6,840.6	82,087
18 (450)	27.89	697.19	2,091.6	27,448	103.90	2,597.6	8,658.6	103,903
20 (500)	34.66	866.51	2,599.5	34,114	129.14	3,228.4	10,761	129,137
24 (600)	50.13	1,253.2	3,759.6	49,339	186.77	4,669.2	15,564	186,769
30 (750)	80.24	2,006.0	6,018.0	78,976	298.96	7,474.0	24,913	298,959
36 (900)	117.40	2,935.0	8,805.1	115,553	437.42	10,935	36,451	437,416
40 (1000)	146.09	3,652.1	10,956	143,785	544.29	13,607	45,357	544,286
42 (1050)	164.60	4,115.1	12,345	162,011	613.28	15,332	51,107	613,278
48 (1200)	216.30	5,407.6	16,223	212,898	805.91	20,148	67,159	805,908

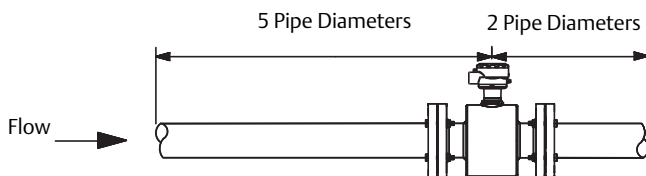
**Upstream/downstream piping length**

To ensure specification accuracy over widely varying process conditions, install the sensor with a minimum of five straight pipe diameters upstream and two straight pipe diameters downstream from the electrode plane. See [Figure 1](#).

**Sensor grounding**

A reliable ground path is required between the sensor and the process fluid. Optional grounding rings, and a process reference electrode are available with sensors to ensure proper grounding. See [Table 13](#) and [Table 14](#).

**Figure 1. Upstream and Downstream Straight Pipe Diameters**



Installations with reduced upstream and downstream straight runs are possible. In reduced straight run installations, the meter may not meet absolute accuracy specifications. Reported flow rates will still be highly repeatable.

## Ordering Information

### Rosemount 8750W Magnetic Flowmeter Platform



The Rosemount 8750W Magnetic Flowmeter is available in flanged and wafer sensor designs. The sensors are fabricated from stainless and carbon steel and welded to provide a sealed coil housing that protects against moisture or other contaminants. Sizes range from 1/2-in. (15 mm) to 48-in. (1200 mm). The field mount transmitter has a die cast aluminum housing for excellent reliability. The wall mount transmitter features an easy to use operator interface. Both transmitter styles are available with advanced diagnostics to provide the best insight into the process and the meter's health.

**Table 6. Rosemount 8750W Ordering Information**

★ The starred offerings represent the most common options, and should be selected for best delivery.

Model	Product description	
8750W	Magnetic Flowmeter System (Utility, Water, and Wastewater)	
<b>Sensor design revision</b>		
D	Revision "D"	
<b>Transmitter class</b>		
E <sup>(1)</sup>	Revision 3 Electronics	★
M	Revision 4 Electronics	★
0	Spare Sensor, No Transmitter	
<b>Transmitter mount</b>		
T	Integral Field Mount	★
R	Remote Field Mount	★
W	Remote Wall Mount	★
<b>Transmitter power</b>		
1	AC Power Supply (90-250VAC, 50-60Hz)	★
2	DC Power Supply (12- 42VDC)	★
0	Spare Sensor, No Transmitter	
<b>Transmitter outputs</b>		
A	4-20mA; Digital HART; Scalable Pulse	★
0	Spare Sensor, No Transmitter	
<b>Conduit entries</b>		
<b>Integral Mount qty (2), Remote Mount qty (4)</b>		
1	1/2-14 NPT	★
2	M20	★
<b>Integral Mount qty (3), Remote Mount qty (5)</b>		
4 <sup>(2)</sup>	1/2-14 NPT, Additional Entry	★
5 <sup>(2)</sup>	M20, Additional Entry	★
0	Spare Sensor, Integral Mount Only, No Transmitter	

**Table 6. Rosemount 8750W Ordering Information**

★ The starred offerings represent the most common options, and should be selected for best delivery.

Sensor style				
F	Flanged			★
W	Wafer			★
0	Spare Transmitter, No Sensor			
Lining material				
T <sup>(3)</sup>	PTFE			★
p <sup>(4)</sup>	Polyurethane			★
N <sup>(5)</sup>	Neoprene			★
0	Spare Transmitter, No Sensor			
Electrode material				
S	316L Stainless Steel			★
H	Nickel Alloy 276 (UNS N10276)			★
0	Spare Transmitter, No Sensor			
Electrode type				
A	2 Measurement Electrodes - Standard			★
B	2 Measurement plus 1 Reference Electrode - Standard			★
E <sup>(6)</sup>	2 Measurement Electrodes - Bulletnose			★
F <sup>(6)</sup>	2 Measurement plus 1 Reference Electrode - Bulletnose			★
0	Spare Transmitter, No Sensor			
Line size		PTFE code T	Polyurethane code P	Neoprene code N
005	1/2-in. (15mm)	★	N/A	N/A
010	1-in. (25mm)	★	★	★
015	1 1/2-in (40mm)	★	★	★
020	2-in. (50mm)	★	★	★
025	2 1/2-in. (65mm)	★	N/A	★
030	3-in. (80mm)	★	★	★
040	4-in. (100mm)	★	★	★
050	5-in. (125mm)	★	N/A	★
060	6-in. (150mm)	★	★	★
080	8-in. (200mm)	★	★	★
100	10-in. (250mm)		★	★
120	12-in. (300mm)		★	★
140	14-in. (350mm)		★	★
160	16-in. (400mm)		★	★
180	18-in. (450mm)		★	★

**Table 6. Rosemount 8750W Ordering Information**

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200	20-in. (500mm)		★	★
240	24-in. (600mm)		★	★
300	30-in. (750mm)		★	★
360	36-in. (900mm)		★	★
400	40-in. (1000mm)	N/A	N/A	
420	42-in. (1050mm)	N/A		
480	48-in. (1200mm)	N/A		
000	Spare Transmitter, No Sensor	N/A	N/A	N/A
<b>Flange type and material<sup>(7)</sup></b>				
C	Slip-On, Raised-Face, Carbon Steel			★
S	Slip-On, Raised-Face, 304/304L SST			★
F	Slip-On, Flat-Face, Carbon Steel			
G	Slip-On, Flat-Face, 304/304L SST			
0	Spare Transmitter, No Sensor			
<b>Flange rating<sup>(7)</sup></b>				
A1	ASME B16.5, Class 150			Refer to <a href="#">Table 7</a> for flange availability.
A3	ASME B16.5, Class 300			
AB	AWWA C207 Class B (Line Size 30" and above)			
AD	AWWA C207 Class D (Line Size 30" and above)			
AE	AWWA C207 Class E (Line Size 30" and above)			
DC	EN1092-1, PN6			
DD	EN1092-1, PN10			
DE	EN1092-1, PN16			
DF	EN 1092-1, PN25			
DH	EN 1092-1, PN40			
GD	GB/T9119, PN10			
GE	GB/T9119, PN16			
GH	GB/T9119, PN40			
JP	JIS B2220, 10K			
JR	JIS B2220, 20K			
KU	AS4087, PN16			
KW	AS4087, PN21			
KY	AS4087, PN35			
TK	AS2129, Table D			
TL	AS2129, Table E			
00	Spare Transmitter, No Sensor			



**Table 6. Rosemount 8750W Ordering Information**

★ The starred offerings represent the most common options, and should be selected for best delivery.

**Options (must be included in the model number if selected - not required)**

<b>Safety approvals</b>		
Ordinary Location	No code required <sup>(8)</sup>	★
<b>Advanced Diagnostics Suite</b>		
DA1	Process Diagnostics HPN, Grounding/Wiring, Electrode Coating	★
DA2	SMART Meter Verification	★
<b>Discrete input/output</b>		
AX <sup>(9)</sup>	Two Discrete Channels (DI/DO 1, DO 2)	★
<b>Display options</b>		
M4	Local Operator Interface	★
M5	LCD Display Only	★
<b>Optional ground rings</b>		
G1	316L Stainless Steel (Qty 2)	★
G2	Nickel Alloy C-276; UNS N10276 (Qty 2)	
G5	316L Stainless Steel (Qty 1)	★
G6	Nickel Alloy C-276; UNS N10276 (Qty 1)	
<b>Certifications</b>		
PD	European Pressure Equipment Directive Certification (PED, per 97/23/EC)	
BD	ASME B31.3 Process Piping Standard	
DW	NSF Drinking Water Certification	
<b>Other options</b>		
C1	Custom Configuration (CDS Required)	
D1	High Accuracy Calibration (Base Ref Accuracy 0.25% of rate)	
B6	316 SST 4-Bolt Kit for 2 Inch Pipe Mount	
P05 <sup>(10)</sup>	5-Point Verification	
P10 <sup>(11)</sup>	10-Point Verification	
<b>Submergence protection</b>		
R05	Potted Junction Box with 50 feet of Combo Cable/Cable Gland	
R10	Potted Junction Box with 100 feet of Combo Cable/Cable Gland	
R15	Potted Junction Box with 150 feet of Combo Cable/Cable Gland	
R20	Potted Junction Box with 200 feet of Combo Cable/Cable Gland	
R25	Potted Junction Box with 250 feet of Combo Cable/Cable Gland	
R30	Potted Junction Box with 300 feet of Combo Cable/Cable Gland	

**Table 6. Rosemount 8750W Ordering Information**

★ The starred offerings represent the most common options, and should be selected for best delivery.

Special paint		
V1	Coal Tar Paint (Submersible/Direct Burial)	
Quality certificates		
Q4	Calibration Certificate per ISO 10474 3.1B / EN 10204 3.1	
Q8	Material Traceability per ISO 10474 3.1B / EN 10204 3.1	
Quick Start Guide (QSG) language options (default is English)		
YA	Danish	★
YB	Hungarian	★
YC	Czech	★
YD	Dutch	★
YE	French	★
YF	German	★
YG	Finnish	★
YH	Italian	★
YI	Japanese	★
YJ	Chinese (Mandarin)	★
YL	Norwegian	★
YM	Polish	★
YN	Portuguese	★
YP	Russian	★
YR	Spanish	★
YW	Swedish	★
<b>Typical model number: 8750WDMT1A1FPSA010CA1DA2</b>		

- (1) Wall mount transmitter only. No CE marking.
- (2) Not available with the wall mount transmitter.
- (3) Available in 1/2-in. to 36-in. (15 mm to 900 mm) line sizes.
- (4) Available in line sizes 1-in. to 36-in., 42-in. and 48-in. (25 mm to 900 mm, 1050 mm, 1200 mm) line sizes.
- (5) Available in line sizes 1-in. to 48-in. (25 mm to 1200 mm) line sizes.
- (6) Not available in 1/2-in.
- (7) Refer to [Table 7](#) for flange offering.
- (8) FM marked, CSA marked, CE marked, C-tick marked.
- (9) Requires Conduit Entry code 4 or 5 with field mount transmitter.
- (10) Available for 1/2-in. to 24-in. (15 mm to 600 mm) at velocities 1, 3, 5, 7, 10 ft/s; 30-in. (700 mm) at velocities 1, 3, 5, 7, 9.5 ft/s; 36-in. (900 mm) at velocities 1, 2, 3, 5, 6.5 ft/s; 40-in. to 48-in. (1000 mm to 1200 mm).
- (11) Available for 1/2-in. to 24-in. (15 mm to 600 mm) at velocities 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 ft/s; 30-in. to 48-in. (700 mm to 1200 mm) not available.

**Table 7. Flowmeter Availability – Line Size vs. Flange Type and Rating**

Flange rating		005	010	015	020	025	030	040	050	060	080	100	120	140	160	180	200	240	300	360	400	420	480
A1	ASME 150	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	N/A	N/A	N/A	N/A	N/A
A3	ASME 300	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	N/A	N/A	N/A	N/A	N/A
AB	AWWA Class B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	•	•	N/A	•	•
AD	AWWA Class D	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	•	•	•	•	•
AE	AWWA Class E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	•	•	N/A	•	•
DD	EN 1092-1 PN10	•	•	•	•	N/A	•	•	N/A	•	•	•	•	•	•	•	•	•	N/A	N/A	•	N/A	•
DE	EN 1092-1 PN16	•	•	•	•	N/A	•	•	•	•	•	•	•	•	•	•	•	•	N/A	N/A	•	N/A	N/A
DF	EN 1092-1 PN 25	•	•	•	•	N/A	•	•	N/A	•	•	•	•	•	•	•	•	•	N/A	N/A	N/A	N/A	N/A
DH	EN 1092-1 PN 40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	N/A	N/A	N/A	N/A	N/A
GD	GB/T PN10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	•	•	•	•	•	•	•	•	N/A	N/A	•	N/A	N/A
GE	GB/T PN16	N/A	N/A	N/A	N/A	N/A	N/A	•	•	•	•	•	•	•	•	•	•	•	N/A	N/A	•	N/A	N/A
GH	GB/T PN40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	N/A	N/A	N/A	N/A	N/A
JP	JIS B2220 10k	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	N/A	N/A	N/A	N/A	N/A
JR	JIS B2220 20k	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	N/A	N/A	N/A	N/A	N/A
KU	AS4087 PN16	N/A	N/A	N/A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	N/A	•
KW	AS4087 PN21	N/A	N/A	N/A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	N/A	•
KY	AS4087 PN35	N/A	N/A	N/A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	N/A	N/A
TK	AS2129 TABLE D	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	N/A	•
TL	AS2129 TABLE E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	N/A	•

N/A = Not applicable  
 • = Available

**Ordering procedure**

To order, select the desired sensor and/or transmitter by specifying model codes from the ordering table.

For remote transmitter applications, note the cable specification requirements.

**Standard configuration**

Unless the Configuration Data Sheet is completed, the transmitter will be shipped as follows:

Engineering Units:	ft/sec
4mA:	0
20mA:	30
Sensor Size:	3-in.
Empty Pipe:	On
Sensor Calibration Number:	1000005010000000

Integrally Mounted Rosemount 8750W Transmitters are factory configured with the paired sensor size and appropriate calibration number.

**Custom configuration (Option Code C1)**

If Option Code C1 is ordered, the Configuration Data Sheet (CDS) must be submitted at the time of order.

**Standard tagging**

Instrument tags for the transmitter and sensors are as follows:

- 316SST laser etched label, permanently attached
- Main label - Tag name:  
1 line 21 characters
- Additional 316SST 'wire-on' tag available:  
5 lines, 17 characters per line (6mm height)

**Cable requirements for remote transmitters**

Remote mount transmitter installations will require equal lengths of interconnecting cables for the coil drive (1, 2, 3) and the electrode cable (17, 18, 19).

The interconnecting cables can be either individual component cables or a combination coil drive and electrode cable. Review hazardous area approval requirements.

When ordering remote cables be sure to review the installation requirements for proper cable selection. Cables can be ordered as part of the transmitter model number (see option codes on Table 6). Integrally mounted transmitters are factory wired and do not require additional interconnecting cables.

Component cable lengths should be limited to less than 500 feet (150 m). Consult factory for length between 500-1000 feet (150-300 m).

For installations using the combination coil drive and electrode cable, lengths should be limited to less than 330 feet (100 m).

**Table 8. Cable Kits**

**Component cable kits**

Standard temperature (-20°C to 75°C)			
Cable kit #	Description	Individual cable	Alpha p/n
08732-0065-0001 (feet)	Kit, Component Cables, Std Temp. Coil + Electrode	Coil	518243
		Electrode	518245
08732-0065-0002 (meters)	Kit, Component Cables, Std Temp. Coil + Electrode	Coil	518243
		Electrode	518245

Extended temperature (-50°C to 125°C)			
Cable kit #	Description	Individual cable	Alpha p/n
08732-0065-1001 (feet)	Kit, Component Cables, Ext Temp. Coil + Electrode	Coil	840310
		Electrode	518189
08732-0065-1002 (meters)	Kit, Component Cables, Ext Temp. Coil + Electrode	Coil	840310
		Electrode	518189



**Combination cable kits**

Coil and electrode cable (-20°C to 80°C)	
Cable kit #	Description
08732-0065-2001 (feet)	Kit, Combination Cable, Standard
08732-0065-2002 (meters)	
08732-0065-3001 (feet)	Kit, Combination Cable, Submersible (80 °C dry/60 °C Wet) (33ft Continuous)
08732-0065-3002 (meters)	

# Product Specifications



The tables below outline some of the basic performance, physical, and functional specifications of the Rosemount 8750W Magnetic Flowmeter. [Table 9](#) provides an overview of the Rosemount 8750W Transmitters available. [Table 10](#) provides an overview of the Rosemount 8750W Sensors available.

**Table 9. Rosemount 8750W Transmitter Specifications**


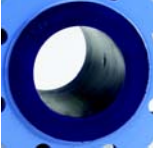

	Style	Mount	Base accuracy	Power supply	User interface	Communication protocol	Diagnostics	Detailed specifications	Ordering information
	Field Mount	Integral or Remote	0.5% Standard 0.25% High Accuracy Option	Global AC or DC	4 Optical Switch LOI Display Only	HART	Basic, DA1, DA2	<a href="#">Page 15</a>	<a href="#">Page 6</a>
	Wall Mount	Remote	0.5% Standard 0.25% High Accuracy Option	Global AC or DC	Dedicated 15-Button LOI	HART	Basic, DA1 <sup>(1)</sup> , DA2 <sup>(2)</sup>	<a href="#">Page 19</a>	<a href="#">Page 6</a>

- (1) Electrode Coating Diagnostic is not available with the Wall Mount Transmitter.
- (2) Continuous Smart Meter Verification is not available with the Wall Mount Transmitter.

**Table 10. Rosemount 8750W Sensor Specifications**

	Style	Base accuracy	Line sizes	Design features	Detailed specifications	Ordering information
	Flanged	0.5% Standard 0.25% High Accuracy Option	1/2-in. to 48-in. (15 mm to 1200 mm)	Standard Design	<a href="#">Page 23</a>	<a href="#">Page 6</a>
	Wafer	0.5% Standard 0.25% High Accuracy Option	1 1/2-in. to 8-in. (40 mm to 200 mm)	Compact	<a href="#">Page 26</a>	<a href="#">Page 6</a>

**Table 11. Lining Material Selection**

Liner material	General characteristics
PTFE 	<ul style="list-style-type: none"> <li>• Chemical resistance</li> <li>• Excellent high temperature capabilities</li> <li>• -20 to 248 °F (-29 to 120 °C)</li> </ul>
Polyurethane 	<ul style="list-style-type: none"> <li>• Limited chemical resistance</li> <li>• Excellent abrasion resistance for slurries with small and medium particles</li> <li>• 0 to 140 °F (-18 to 60 °C)</li> <li>• Typically applied in clean water</li> </ul>
Neoprene 	<ul style="list-style-type: none"> <li>• Very good abrasion resistance for small and medium particles</li> <li>• Better chemical resistance than polyurethane</li> <li>• Typically applied in water with chemicals, and sea water</li> <li>• 0 to 176 °F (-18 to 80 °C)</li> </ul>

**Table 13. Process Reference Options**

Grounding options	General characteristics
No Grounding Options (grounding straps)	<ul style="list-style-type: none"> <li>• Acceptable for conductive unlined pipe</li> <li>• Grounding straps provided at no cost</li> </ul>
Reference Electrode	<ul style="list-style-type: none"> <li>• Same material as measurement electrodes</li> <li>• Sufficient grounding option when process fluid conductivity is greater than 100 microSiemens/cm</li> <li>• Not recommended in electrolysis applications, galvanic corrosion applications, or applications where the electrodes may coat.</li> </ul>
Grounding Rings	<ul style="list-style-type: none"> <li>• Low conductivity process fluids</li> <li>• Cathodic or electrolysis applications that may have stray currents in or around the process</li> <li>• Variety of materials for process fluid compatibility</li> </ul>

**Table 12. Electrode Selection**

Electrode material	General characteristics
316L Stainless Steel	<ul style="list-style-type: none"> <li>• Good corrosion resistance</li> <li>• Good abrasion resistance</li> <li>• Not recommended for sulfuric or hydrochloric acids</li> </ul>
Nickel Alloy 276 (UNS N10276)	<ul style="list-style-type: none"> <li>• Better corrosion resistance</li> <li>• High strength</li> <li>• Good in slurry applications</li> <li>• Effective in oxidizing fluids</li> </ul>
Electrode type	General characteristics
Standard Measurement	<ul style="list-style-type: none"> <li>• Lowest cost</li> <li>• Good for most applications</li> </ul>
Measurement + Reference Electrode (Also see <a href="#">Table 13</a> and <a href="#">Table 14</a> for grounding options and installation)	<ul style="list-style-type: none"> <li>• Low cost grounding option especially for large line sizes</li> <li>• Minimum conductivity of 100 microSiemens/cm</li> <li>• Not recommended for electrolytic or galvanic corrosion applications</li> </ul>
Bulletnose	<ul style="list-style-type: none"> <li>• Extended head protrudes into the flow stream for self-cleaning</li> <li>• Best option for coating processes</li> </ul>

**Table 14. Process Reference Installation**

Type of pipe	Grounding straps	Grounding rings	Reference electrode	Lining protectors
Conductive unlined pipe	Acceptable	Not Required	Not Required	Not Required
Conductive lined pipe	Not Acceptable	Acceptable	Acceptable	Acceptable
Non-conductive pipe	Not Acceptable	Acceptable	Not Acceptable	Acceptable

# Rosemount 8750W Field Mount Transmitter Specifications



## Functional specifications

### Transmitter coil drive current

500mA

### Flow rate range

Capable of processing signals from fluids that are traveling between 0.04 and 39 ft/s (0.01 to 12 m/s) for both forward and reverse flow in all sensor sizes. Full scale continuously adjustable between -39 and 39 ft/s (-12 to 12 m/s).

### Conductivity limits

Process liquid must have a conductivity of 5 microSiemens/cm (5 micromhos/cm) or greater.

### Power supply

90 - 250VAC, 50/60Hz or 12 - 42VDC

### Line power fuses

#### 90-250VAC systems

1A, 250V,  $I^2t \geq 1.5 A^2s$  Rating, Fast Acting  
Bussman AGC-1, Littelfuse 31201.5HXP

#### 12-42VDC systems

3 Amp, 250V,  $I^2t \geq 14 A^2s$  Rating, Fast Acting  
Bel Fuse 3AG 3-R, Littelfuse 312003P, Schurter 0034.5135

### Power consumption

15W maximum - DC

40VA maximum - AC

### Switch-on current

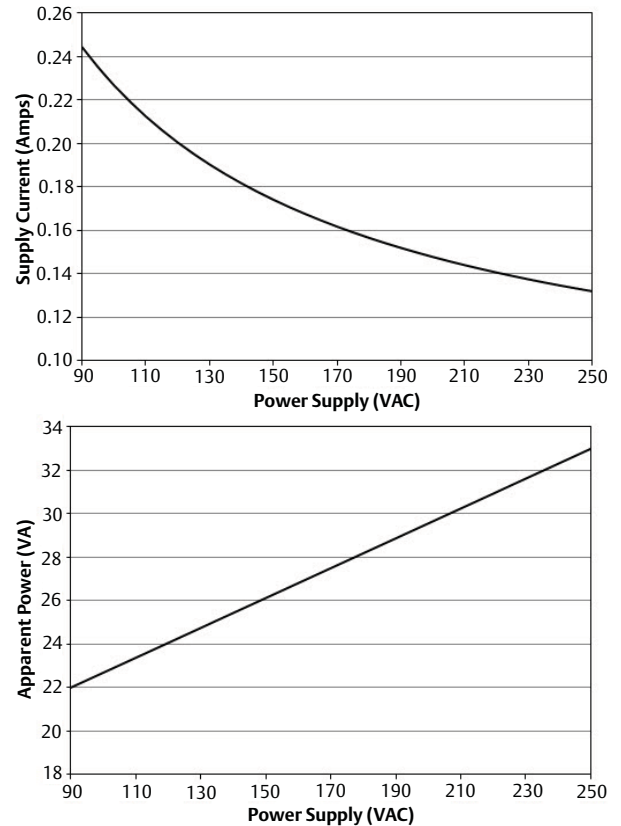
AC: Maximum 35.7A (< 5ms) at 250VAC

DC: Maximum 42A (< 5ms) at 42VDC

### AC power supply requirements

Units powered by 90 - 250VAC have the following power requirements.

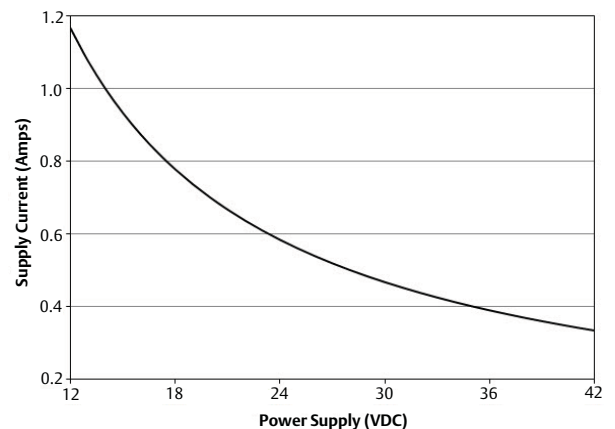
Figure 2. Field Mount Transmitter AC Power Requirements



### DC supply current requirements

Units powered by 12VDC power supply may draw up to 1.2A of current steady state.

Figure 3. Field Mount Transmitter DC Power Requirements



**Ambient temperature limits****Operating**

–40 to 140 °F (–40 to 60 °C) without local operator interface

–4 to 140 °F (–20 to 60 °C) with local operator interface

The Local Operator Interface (LOI) will not display at temperatures below -20°C

**Storage**

–40 to 185 °F (–40 to 85 °C) without local operator interface

–22 to 176 °F (–30 to 80 °C) with local operator interface

**Humidity limits**

0–95% RH to 140 °F (60 °C)

**Altitude**

2000 meters maximum

**Enclosure rating**

Type 4X, IEC 60529, IP66 (transmitter)

**Transient protection rating**

Built in transient protection that conforms to:

IEC 61000-4-4 for burst currents

IEC 61000-4-5 for surge currents

**Turn-on time**

5 minutes to rated accuracy from power up

5 seconds from power interruption

**Start-up time**

50ms from zero flow

**Low Flow cut-off**

Adjustable between 0.01 and 38.37 ft/s (0.003 and 11.7 m/s). Below selected value, output is driven to the zero flow rate signal level.

**Ovrerange capability**

Signal output will remain linear until 110% of upper range value or 44 ft/s (13 m/s). The signal output will remain constant above these values. Out of range message displayed on LOI and the Field Communicator.

**Damping**

Adjustable between 0 and 256 seconds

**Advanced diagnostics capabilities****Basic**

Self test

Transmitter faults

Analog output test

Pulse output test

Tunable empty pipe

Reverse flow

Coil circuit fault

Electronics temperature

Coil current

Electrode saturation

**Process diagnostics (DA1)**

Ground/wiring fault

High process noise

Electrode coating diagnostic

**SMART Meter Verification (DA2)**

SMART Meter Verification (continuous or on-demand)

4-20mA loop verification

**Output signals****Analog output adjustment**

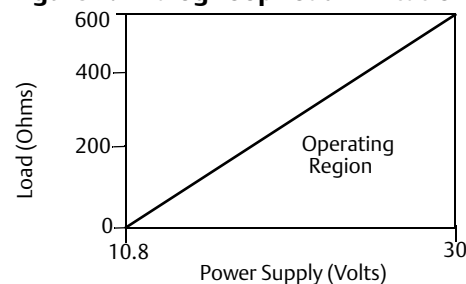
4–20mA, switch-selectable as internally or externally powered.

**Analog loop load limitations**

Internally powered 24VDC max, 500 Ω max loop resistance.

Externally powered 10.8–30VDC max.

Loop resistance is determined by the voltage level of the external power supply at the transmitter terminals:

**Figure 4. Analog Loop Load Limitations**

$$R_{\max} = 31.25 (V_{ps} - 10.8)$$

$$V_{ps} = \text{Power Supply Voltage (Volts)}$$

$$R_{\max} = \text{Maximum Loop Resistance (Ohms)}$$

The analog output is automatically scaled to provide 4mA at lower range value and 20mA at upper range value. Full scale continuously adjustable between -39 and 39 ft/s (-12 to 12 m/sec), 1 ft/s (0.3 m/s) minimum span.



HART Communications is a digital flow signal. The digital signal is superimposed on the 4–20mA signal and is available for the control system interface. A minimum of 250  $\Omega$  loop resistance is required for HART Communications.

### Scalable pulse frequency adjustment

0-10,000Hz, switch-selectable as internally or externally powered. Pulse value can be set to equal desired volume in selected engineering units. Pulse width adjustable from 0.1 to 650 ms.

Internally powered: Outputs up to 12VDC

Externally powered: Input 5 - 28VDC

### Output testing

#### Analog output test

Transmitter may be commanded to supply a specified current between 3.5 and 23mA.

#### Pulse output test

Transmitter may be commanded to supply a specified frequency between 1 and 10,000Hz.

### Optional discrete output function (AX option)

Externally powered at 5 - 28VDC, 240mA max, solid state switch closure to indicate either:

#### Reverse flow

Activates switch closure output when reverse flow is detected.

#### Zero flow

Activates switch closure output when flow goes to 0 ft/s or below low flow cutoff.

#### Empty pipe

Activates switch closure output when an empty pipe condition is detected.

#### Transmitter faults

Activates switch closure output when a transmitter fault is detected.

#### Flow limit 1, Flow limit 2

Activates switch closure output when the transmitter measures a flow rate that meets the conditions established for this alert. There are two independent flow limit alerts that can be configured as discrete outputs.

#### Totalizer limit

Activates switch closure output when the transmitter measures a total flow that meets the conditions established for this alert.

### Diagnostic status

Activates switch closure output when the transmitter detects a condition that meets the configured criteria of this output.

### Optional discrete input function (AX option)

Externally powered at 5 - 28VDC, 1.4 - 20mA to activate switch closure to indicate either:

#### Net total reset

Resets the net totalizer value to zero.

#### Positive zero return (PZR)

Forces outputs of the transmitter to zero flow.

### Security lockout

Security lockout switch on the electronics board can be set to deactivate all LOI and HART-based communicator functions to protect configuration variables from unwanted or accidental change.

### LOI lockout

The display can be manually locked to prevent unintentional configuration changes. The display lock can be activated through a HART communication device, or by holding the UP arrow for 3 seconds and then following the on-screen instructions. When the display lock is activated, a lock symbol will appear in the lower right hand corner of the display. To deactivate the display lock, hold the UP arrow for 3 seconds and follow the on-screen instructions.

Display auto lock can be configured from the LOI with the following settings: OFF, 1 Minute, or 10 Minutes

### Sensor compensation

Rosemount sensors are calibrated in a flow lab at the factory and are assigned a calibration number. The calibration number must be entered into the transmitter, enabling interchangeability of sensors without calculations or a compromise in standard accuracy.

8750W Transmitters and other manufacturers' sensors can be calibrated at known process conditions or at the Rosemount NIST-Traceable Flow Facility. Transmitters calibrated on site require a two-step procedure to match a known flow rate. This procedure can be found in the operations manual.

## Performance specifications

System specifications are given using the frequency output and with the unit at reference conditions.

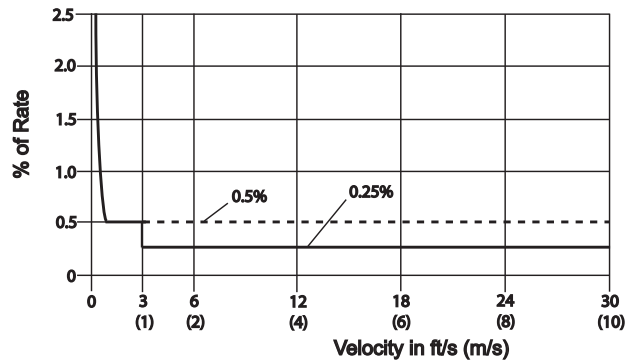
### Accuracy

Includes the combined effects of linearity, hysteresis, repeatability, and calibration uncertainty.

#### Flanged sensor

Standard system accuracy is  $\pm 0.5\%$  of rate from 1 to 39 ft/s (0.3 to 12 m/s). Accuracy is  $\pm 0.005$  ft/s (0.0015 m/s) from the low flow cutoff to 1 ft/s (0.3 m/s).

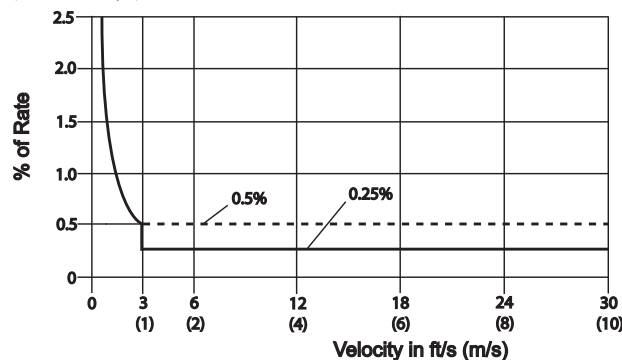
Optional high accuracy is  $\pm 0.25\%$  of rate from 3 to 39 ft/s (1 to 12 m/s).



#### Wafer sensor

Standard system accuracy is  $\pm 0.5\%$  of rate from 1 to 39 ft/s (0.3 to 12 m/s). Accuracy is  $\pm 0.015$  ft/s (0.005 m/s) from 0.04 to 3 ft/s (0.01 to 0.3 m/s).

Optional high accuracy is  $\pm 0.25\%$  of rate from 3 to 39 ft/s (1 to 12 m/s).



### Analog output effects

Analog output has the same accuracy as frequency output plus an additional  $\pm 4\mu\text{A}$  at room temperature.

### Repeatability

$\pm 0.1\%$  of reading

### Response time (analog output)

20 ms max response time to step change in input

### Stability

$\pm 0.25\%$  of rate over six months

### Ambient temperature effect

$\pm 0.25\%$  change over operating temperature range

## Physical specifications

### Materials of construction

#### Standard housing

Low copper aluminum  
Type 4X and IEC 60529 IP66

#### Paint

Polyurethane coat (1.3 to 5 mils thick)

#### Cover gasket

Buna-N

### Electrical connections

Conduit entries:  $1/2$ -in. NPT standard. (Optional third connection available).

Terminal block screws: 6-32 (No. 6) suitable for up to 14 AWG wire.

Safety grounding screws: external stainless assembly, M5; internal 8-32 (No. 8)

### Vibration rating

3G per IEC 61298

### Dimensions

See Figure 9.

### Weight

Approximately 7 lbs. (3.2 kg).

Add 1 pound (0.5 kg) for display option code M4 or M5.

# Rosemount 8750W Wall Mount Transmitter Specifications



## Functional specifications

### Transmitter coil drive current

500mA

### Flow rate range

Capable of processing signals from fluids that are traveling between 0.04 and 39 ft/s (0.01 to 12 m/s) for both forward and reverse flow in all sensor sizes. Full scale continuously adjustable between -39 and 39 ft/s (-12 to 12 m/s).

### Conductivity limits

Process liquid must have a conductivity of 5 microSiemens/cm (5 micromhos/cm) or greater.

### Power supply

90 - 250VAC, 50/60Hz or 12 - 42VDC

### Line power fuses

#### 90-250VAC systems

2 Amp, Fast Acting, Bussman AGC-2

#### 12-42VDC systems

3 Amp, Fast Acting, Bussman AGC-3

### Power consumption

15W maximum - DC

40VA maximum - AC

### Switch-on current

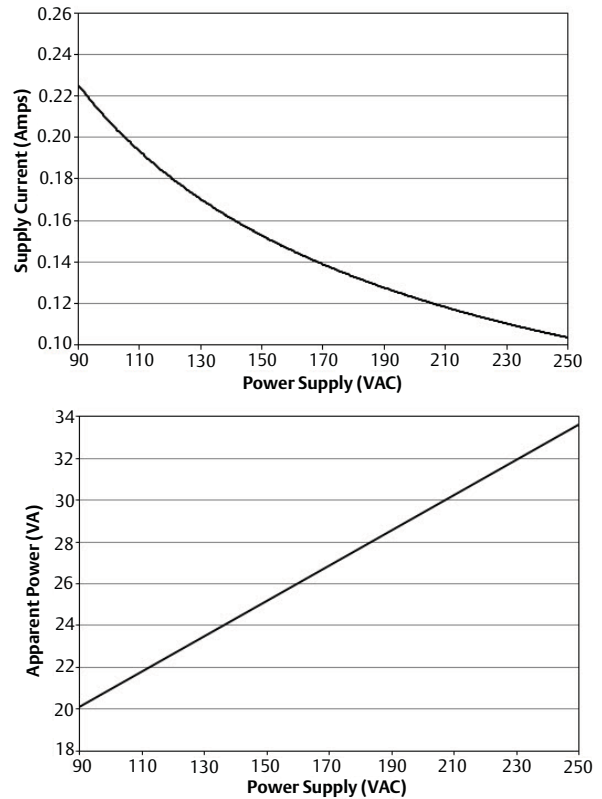
AC: Maximum 35.7A (< 5ms) at 250VAC

DC: Maximum 42A (< 5ms) at 42VDC

### AC power supply requirements

Units powered by 90 - 250VAC have the following power requirements.

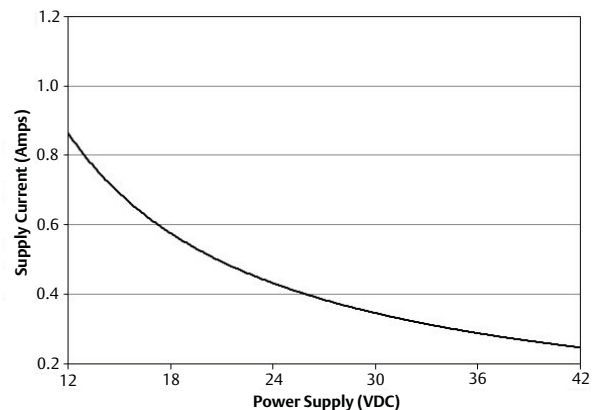
Figure 5. Wall Mount Transmitter AC Power Requirements



### DC supply current requirements

Units powered by 12VDC power supply may draw up to 1.2A of current steady state.

Figure 6. Wall Mount Transmitter DC Power Requirements



**Ambient temperature limits**

**Operating**

-40 to 165 °F (-40 to 74 °C) without local operator interface  
 -20 to 140 °F (-29 to 60 °C) with local operator interface

The Local Operator Interface (LOI) will not display at temperatures below -20°C

**Storage**

-40 to 176 °F (-40 to 80 °C) with and without local operator interface

**Humidity limits**

0-95% RH to 120 °F (49 °C), decrease linearly to 10% RH at 130 °F (54 °C)

**Altitude**

2000 meters maximum

**Enclosure rating**

Type 4X, IEC 60529, IP66 (transmitter)

**Transient protection rating**

Built in transient protection that conforms to:  
 IEC 61000-4-4 for burst currents  
 IEC 61000-4-5 for surge currents

**Turn-on time**

5 minutes to rated accuracy from power up  
 5 seconds from power interruption

**Start-up time**

50ms from zero flow

**Low Flow cut-off**

Adjustable between 0.01 and 38.37 ft/s (0.003 and 11.7 m/s). Below selected value, output is driven to the zero flow rate signal level.

**Overrange capability**

Signal output will remain linear until 110% of upper range value or 44 ft/s (13 m/s). The signal output will remain constant above these values. Out of range message displayed on LOI and the Field Communicator.

**Damping**

Adjustable between 0 and 256 seconds

**Advanced diagnostics capabilities**

**Basic**

- Self test
- Transmitter faults
- Analog output test
- Pulse output test
- Tunable empty pipe
- Reverse flow
- Coil circuit fault
- Electronics temperature

**Process diagnostics (DA1)**

- Ground/wiring fault
- High process noise

**SMART Meter Verification (DA2)**

- SMART Meter Verification (on-demand)
- 4-20mA loop verification

**Output signals**

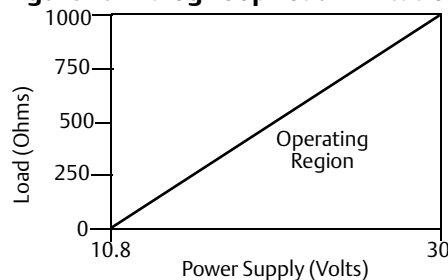
**Analog output adjustment**

4-20mA, switch-selectable as internally or externally powered.

**Analog loop load limitations**

Internally powered 24VDC max, 500 Ω max loop resistance  
 Externally powered 10.8 - 30VDC max.  
 Loop resistance is determined by the voltage level of the external power supply at the transmitter terminals:

**Figure 7. Analog Loop Load Limitations**



$$R_{max} = 52.08 (V_{ps} - 10.8)$$

$V_{ps}$  = Power Supply Voltage (Volts)  
 $R_{max}$  = Maximum Loop Resistance (Ohms)

The analog output is automatically scaled to provide 4mA at lower range value and 20mA at upper range value. Full scale continuously adjustable between -39 and 39 ft/s (-12 to 12 m/sec), 1 ft/s (0.3 m/s) minimum span.

HART Communications is a digital flow signal. The digital

signal is superimposed on the 4–20mA signal and is available for the control system interface. A minimum of 250  $\Omega$  loop resistance is required for HART communications.

### Scalable pulse frequency adjustment

0-10,000Hz

Pulse value can be set to equal desired volume in selected engineering units. Pulse width adjustable from 1.5 to 500 ms. Below 1.5msec pulse width automatically switches to 50% duty cycle.

Externally powered: Input 5 - 24VDC

### Output testing

#### Analog output test

Transmitter may be commanded to supply a specified current between 3.5 and 23mA.

#### Pulse output test

Transmitter may be commanded to supply a specified frequency between 1 and 10,000Hz.

### Optional discrete output function (AX option)

Externally powered at 5 - 28VDC, 240mA max, solid state switch closure to indicate either:

#### Reverse flow

Activates switch closure output when reverse flow is detected.

#### Zero flow

Activates switch closure output when flow goes to 0 ft/s or below low flow cutoff.

#### Empty pipe

Activates switch closure output when an empty pipe condition is detected.

#### Transmitter faults

Activates switch closure output when a transmitter fault is detected.

#### Flow limit 1, Flow limit 2

Activates switch closure output when the transmitter measures a flow rate that meets the conditions established for this alert. There are two independent flow limit alerts that can be configured as discrete outputs.

#### Totalizer limit

Activates switch closure output when the transmitter measures a total flow that meets the conditions established for this alert.

### Diagnostic status

Activates switch closure output when the transmitter detects a condition that meets the configured criteria of this output.

### Optional discrete input function (AX option)

Externally powered at 5 - 28VDC, 1.4 - 20mA to activate switch closure to indicate either:

#### Net total reset

Resets the net totalizer value to zero.

#### Positive zero return (PZR)

Forces outputs of the transmitter to zero flow.

### Security lockout

Security lockout switch on the electronics board can be set to protect configuration variables from unwanted or accidental changes.

### Sensor compensation

Rosemount sensors are calibrated in a flow lab at the factory and are assigned a calibration number. The calibration number must be entered into the transmitter, enabling interchangeability of sensors without calculations or a compromise in standard accuracy.

8750W Transmitters and other manufacturers' sensors can be calibrated at known process conditions or at the Rosemount NIST-Traceable Flow Facility. Transmitters calibrated on site require a two-step procedure to match a known flow rate. This procedure can be found in the operations manual.

## Performance specifications

System specifications are given using the frequency output and with the unit at reference conditions.

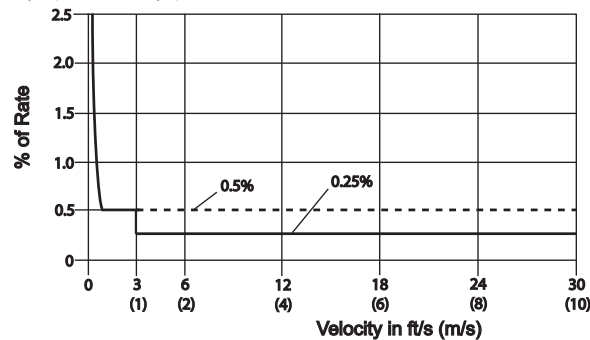
### Accuracy

Includes the combined effects of linearity, hysteresis, repeatability, and calibration uncertainty.

#### Flanged sensor

Standard system accuracy is  $\pm 0.5\%$  of rate from 1 to 39 ft/s (0.3 to 12 m/s). Accuracy is  $\pm 0.005$  ft/s (0.0015 m/s) from the low flow cutoff to 1 ft/s (0.3 m/s).

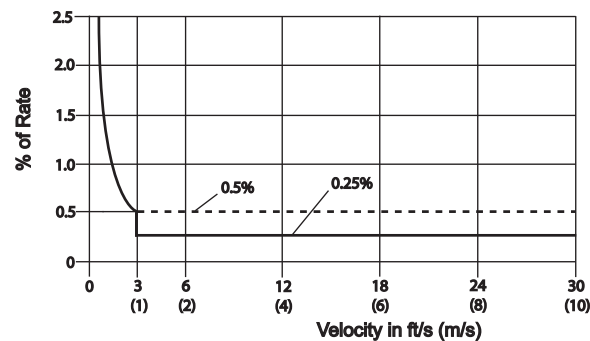
Optional high accuracy is  $\pm 0.25\%$  of rate from 3 to 39 ft/s (1 to 12 m/s).



#### Wafer sensor

Standard system accuracy is  $\pm 0.5\%$  of rate from 1 to 39 ft/s (0.3 to 12 m/s). Accuracy is  $\pm 0.015$  ft/s (0.005 m/s) from 0.04 to 3 ft/s (0.01 to 0.3 m/s).

Optional high accuracy is  $\pm 0.25\%$  of rate from 3 to 39 ft/s (1 to 12 m/s).



## Analog output effects

Analog output has the same accuracy as frequency output plus an additional 0.05% of span.

### Repeatability

$\pm 0.1\%$  of reading

### Response time (analog output)

50 ms max response time to step change in input

### Stability

$\pm 0.25\%$  of rate over six months

### Ambient temperature effect

$\pm 0.25\%$  change over operating temperature range

## Physical specifications

### Materials of construction

#### Standard housing

Low copper aluminum  
Type 4X and IEC 60529 IP66

#### Paint

Polyurethane coat (1.3 to 5 mils thick)

#### Cover gasket

Silicone rubber

### Electrical connections

Four 1/2-in. NPT standard

Terminal block screws: 6-32 (No. 6) suitable for up to 14 AWG wire.

### Vibration rating

3G per IEC 770 (1984)

### Dimensions

See Figure 10.

### Weight

Approximately 9 lbs. (4.0 kg).

Add 1 pound (0.5 kg) for display option code M4 or M5.



# Rosemount 8750W Flanged Sensor Specifications

## Functional specifications

### Service

Utility, water, and wastewater fluids

### Line sizes

$\frac{1}{2}$ -in. to 48-in. (15 mm to 1200 mm)

### Sensor coil resistance

9 - 17  $\Omega$

### Interchangeability

Rosemount 8750W Sensors are interchangeable with 8750W Transmitters. System accuracy is maintained regardless of line size or optional features. Each sensor nameplate has a sixteen-digit calibration number that can be entered into a transmitter through the Local Operator Interface (LOI) or the Field Communicator.

### Upper range limit

39.37 ft/s (12 m/s)

### Process temperature limits

#### PTFE lining

-20 to 248 °F (-29 to 120 °C)

#### Polyurethane lining

0 to 140 °F (-18 to 60 °C)

#### Neoprene lining

0 to 176 °F (-18 to 80 °C)

### Ambient temperature limits

-20 to 140 °F (-29 to 60 °C)

### Pressure limits

See [Table 15](#), [Table 16](#) and [Table 17](#)

### Vacuum limits

#### PTFE lining

Full vacuum to 248 °F (120 °C) through 4-in. (100 mm) line sizes. Consult factory for vacuum applications with line sizes of 6 inches (150 mm) or larger.

### All other standard sensor lining materials

Full vacuum to maximum material temperature limits for all available line sizes.

### Submergence protection IP68

The remote mount 8750W Sensor is rated IP68 for submergence to a depth of 33 ft (10 m) for a period of 48 hours. IP68 rating requires that the transmitter must be remote mount. Installer must use IP68 approved cable glands, conduit connections, and/or conduit plugs.

For more details on proper installation techniques for IP68, reference Rosemount Technical Note 00840-0100-4750 available on [www.rosemount.com](http://www.rosemount.com).

### Conductivity limits

Process liquid must have a minimum conductivity of 5 microSiemens/cm (5 micromhos/cm) or greater.

**Table 15. Temperature vs. Pressure Limits for ASME B16.5 Class Flanges<sup>(1)</sup>**

Sensor temperature vs. pressure limits for ASME B16.5 Class Flanges ( <sup>1</sup> / <sub>2</sub> -in. to 24-in. line sizes)				
Flange material	Flange rating	Pressure		
		@ -20 to 100 °F (-29 to 38 °C)	@ 200 °F (93 °C)	@ 300 °F (149 °C)
Carbon Steel	Class 150	285 psi	260 psi	230 psi
	Class 300	740 psi	675 psi	655 psi
304 Stainless Steel	Class 150	275 psi	235 psi	205 psi
	Class 300	720 psi	600 psi	530 psi

(1) Liner temperature limits must also be considered.

**Table 16. Temperature vs. Pressure Limits for AS2129 Flanges<sup>(1)</sup>**

Sensor temperature vs. pressure limits for AS2129 Table D and E Flanges (4-in. to 24-in. line sizes)				
Flange material	Flange rating	Pressure		
		@ -29 to 50 °C (-20 to 122 °F)	@ 100 °C (212 °F)	@ 150 °C (302 °F)
Carbon Steel	D	101.6 psi	101.6 psi	101.6 psi
	E	203.1 psi	203.1 ps.i	203.1 psi

(1) Liner temperature limits must also be considered.

**Table 17. Temperature vs. Pressure Limits for EN 1092-1 Flanges<sup>(1)</sup>**

Sensor temperature vs. pressure limits for EN 1092-1 Flanges (15 mm to 600 mm line sizes)				
Flange material	Flange rating	Pressure		
		@ -29 to 50 °C (-20 to 122 °F)	@ 100 °C (212 °F)	@ 150 °C (302 °F)
Carbon Steel	PN 10	10 bar	10 bar	9.7 bar
	PN 16	16 bar	16 bar	15.6 bar
	PN 25	25 bar	25 bar	24.4 bar
	PN 40	40 bar	40 bar	39.1 bar
304 Stainless Steel	PN 10	9.1 bar	7.5 bar	6.8 bar
	PN 16	14.7 bar	12.1 bar	11.0 bar
	PN 25	23 bar	18.9 bar	17.2 bar
	PN 40	36.8 bar	30.3 bar	27.5 bar

(1) Liner temperature limits must also be considered.

**Table 18. Temperature vs. Pressure Limits for GB/T 9119 Flanges<sup>(1)</sup>**

Flange material	Flange rating	Pressure (Mpa)		
		≤ 20 °C	@ 100 °C (212 °F)	@ 150 °C (302 °F)
Carbon Steel Group3E0	PN 10	1.00	0.92	0.88
	PN 16	1.60	1.48	1.40
	PN 40	4.00	3.71	3.52
304 SST Group11E0	PN 10	1.00	0.90	0.81
	PN 16	1.60	1.45	1.31
	PN 40	4.00	3.63	3.27

(1) Liner temperature limits must also be considered.



**Table 19. Temperature vs. Pressure Limits for JIS B2220 Flanges<sup>(1)</sup>**

Flange material	Flange rating	Pressure (Mpa)	
		≤ 50 °C (122 °F)	@ 120 °C (248 °F)
Carbon Steel	10K	1.4	1.4
304 Stainless Steel (15mm to 65mm)	10K	1.4	1.4
304 Stainless Steel (≤ 80mm)	10K	1.4	1.0

(1) Liner temperature limits must also be considered.

## Physical specifications

### Non-wetted materials

#### Sensor pipe

Type 304/304L SST

#### Flanges

Carbon steel, Type 304/304L SST

#### Coil housing

Rolled carbon steel

#### Paint

Polyurethane coat (1.3 to 5 mils thick)

### Process wetted materials

#### Lining

PTFE, Polyurethane, Neoprene

#### Electrodes

316L SST, Nickel Alloy 276 (UNS N10276)

### Flat-faced flanges

Flat-faced flanges are manufactured with full-face liners.

Available in Neoprene only.

### Process connections

#### ASME B16.5

Class 150: 1/2-in. to 24-in. (15mm to 600mm)

Class 300: 1/2-in. to 24-in. (15mm to 600mm)

#### AWWA C207

Class D: 30-in. and 48-in. (750mm to 1200mm)

Class E: 40-in. and 48-in. (1000mm to 1200mm)

#### EN 1092-1

PN10: 8-in. to 24-in., 40-in., 48-in. (200 mm to 600mm, 1000mm, 1200mm)

PN16: 4-in. to 24-in., 40-in. (100 mm to 600mm, 1000mm)

PN 25: 8-in. to 24-in. (200 mm to 600mm)

PN40: 1/2-in. to 24-in. (15 mm to 600mm)

#### AS2129

Table D and E: 1/2-in. to 40-in., 48-in. (15 mm to 1000mm, 1200mm)

#### AS4087

PN16, PN21, PN35: 2-in. to 40-in., 48-in. (5-in. excluded) (50mm to 1000mm, 1200mm)

#### GB/T9119

PN10: 8-in. and 24-in., 40-in., 48-in. (200mm to 600mm, 1000mm, 1200mm)

PN16: 4-in. and 24-in., 40-in. (100mm to 600mm, 1000mm)

PN40: 1/2-in. to 24-in. (15mm to 600mm)

#### JIS B2220

10K: 1/2-in. to 24-in. (15mm to 600mm)

20K, 40K: 1/2-in. to 8-in. (15mm to 200mm)

### Electrical connections

Conduit entries: 1/2-in. NPT standard.

Terminal block screws: 6-32 (No. 6) suitable for up to 14 AWG wire.

Safety grounding screws: external stainless assembly, M5; internal 8-32 (No. 8)

### Process reference electrode - (optional)

A process reference electrode can be installed similarly to the measurement electrodes through the sensor lining on 8750W sensors. It will be made of the same material as the measurement electrodes.

### Grounding rings - (optional)

Grounding rings can be installed between the flange and the sensor face on both ends of the sensor. Single ground rings can be installed on either end of the sensor. They have an I.D. slightly larger than the sensor I.D. and an external tab to attach ground wiring. Grounding rings are available in 316L SST and Nickel Alloy 276 (UNS N10276). See [Figure 14](#).

### Dimensions

See [Figure 11](#) through [Figure 13](#).

### Weight

See [Table 20](#) through [Table 26](#).



# Rosemount 8750W Wafer Sensor Specifications

## Functional specifications

### Service

Utility, water and wastewater fluids

### Line sizes

1<sup>1</sup>/<sub>2</sub>-in. to 8-in. (4 mm to 200 mm)

### Sensor coil resistance

10 - 18 Ω

### Interchangeability

Rosemount 8750W Wafer Sensors are interchangeable with 8750W Transmitter. System accuracy is maintained regardless of line size or optional features. Each sensor nameplate has a sixteen-digit calibration number that can be entered into a transmitter through the Local Operator Interface (LOI) or the Field Communicator.

### Upper range limit

39.37 ft/s (12 m/s)

### Process temperature limits

#### PTFE lining

-20 to 350 °F (-29 to 177 °C)

### Ambient temperature limits

-20 to 140 °F (-29 to 60 °C)

### Maximum safe working pressure at 100 °F (38 °C)

#### PTFE lining

Full vacuum through 4-in. (100 mm) line sizes. Consult factory for vacuum applications with line sizes of 6-in. (1450 mm) or larger.

### Submergence protection IP68

The remote mount 8750W Wafer Sensor is rated IP68 for submergence to a depth of 33 ft (10 m) for a period of 48 hours. IP68 rating requires that the transmitter must be remote mount. Installer must use IP68 approved cable glands, conduit connections, and/or conduit plugs. For more details on proper installation techniques for IP68, reference Rosemount Technical Document 00840-0100-4750 available on [www.rosemount.com](http://www.rosemount.com).

### Conductivity limits

Process liquid must have a minimum conductivity of 5 microSiemens/cm (5 micromhos/cm) or greater.

## Physical specifications

### Non-wetted materials

#### Sensor body

303 SST  
CF3M or CF8M  
Type 304/304L

#### Coil housing

Rolled carbon steel

#### Paint

Polyurethane coat (1.3 to 5 mils thick)

### Process-wetted materials

#### Lining

PTFE

#### Electrodes

316L SST, Nickel Alloy 276 (UNS N10276)

### Process connections

#### Mounts between these flange configurations

ASME B16.5: Class 150, 300  
EN 1092-1: PN10, PN16, PN25, PN40

JIS B2220: 10K, 20K,  
AS4087: PN16, PN21, PN35

**Studs, nuts, and washers****MK2****ASME B16.5**

Studs, full thread: CS, ASTM A193, Grade B7

Hex nuts: ASTM A194 Grade 2H

Flat washers: CS, Type A, Series N, SAE per ANSI B18.2.1

All items clear, chromate zinc-plated

**EN 1092-1**

Studs, full thread: CS, ASTM A193, Grade B7

Hex nuts: ASTM A194 Grade 2H; DIN 934 H = D

Flat washers: CS, DIN 125

All items yellow zinc-plated

**Electrical connections**

Conduit entries: 1/2-in. NPT standard.

Terminal block screws: 6-32 (No. 6) suitable for up to 14 AWG wire.

Safety grounding screws: external stainless assembly, M5; internal 8-32 (No. 8)

**Process reference electrode (optional)**

A process reference electrode can be installed similarly to the measurement electrodes through the sensor lining. It will be made of the same material as the measurement electrodes.

**Grounding rings (optional)**

Grounding rings can be installed between the flange and the sensor face on both ends of the sensor. They have an I.D. slightly smaller than the sensor I.D. and an external tab to attach ground wiring. Grounding rings are available in 316L SST and Nickel Alloy 276 (UNS N10276). See [Table 14](#).

**Dimensions**

See [Figure 15](#).







**Weight**

See [Table 27](#).

## Product Certifications

Order Code	8750W Magnetic Flowmeter Platform Rating	Region	Agency	Certification Number
-	Ordinary Locations*	USA EU	FM	3030548
Z1	ATEX Non-Sparking and Dust for Non-Flammable Fluids	EU	DEKRA	***
ND	ATEX Dust	EU	DEKRA	***
Z2	InMetro Non-Sparking and Dust for Non-Flammable Fluids	Brazil	***	***
NB	InMetro Dust	Brazil	***	***
Z3	NEPSI Non-Sparking and Dust for Non-Flammable Fluids	China	***	***
NC	NEPSI Dust	China	***	***
Z5	DIP (Dust-Ignitionproof) Class II and III, Div 1. Non-Incendive, Class I Div 2 for Non-Flammable Fluids	USA	FM	3030548
Z6	CSA, Class I Div 2 for Non-Flammable Fluids; DIP	Canada	CSA	***
Z7	IECEX Non-Sparking and Dust for Non-Flammable Fluids	Global	DEKRA	***
NF	IECEX Dust	Global	DEKRA	***
Z8	EAC Non-Sparking and Dust for Non-Flammable Fluids	Russia**	***	***
NM	EAC Dust	Russia**	***	***
Z9	KOSHA Non-Sparking and Dust for Non-Flammable Fluids	Korea	***	***
NK	KOSHA Dust	Korea	***	***
*Complies with only the local country Product safety, Electromagnetic, Pressure and other applicable regulations. Cannot be used in a classified or zoned hazardous location environment.				
** Customs Union (Russia, Belarus and Kazakhstan)				
*** Planned submittal or in process with Agency.				

### Approval Markings and Logos

Symbol*	Marking or Symbol Name	Region	Meaning of Marking or Symbol	Safety Approval Codes:
	CE	European Union	Compliance with all applicable European Union Directives.	Z1, ND
	ATEX	European Union	Compliance with Equipment and Protective systems intended for use in Potentially Explosive Atmospheres directive (ATEX) (94/9/EC)	Z1, ND
	C-tick	Australia	Compliance with Australian applicable electromagnetic compatibility standards	Z7, NF
	FM Approved	United States	Compliance with the applicable ANSI standards.	Z5
	Eurasian Conformity (EAC)	Eurasian Customs Union (Russia, Belarus and Kazakhstan)	Compliance with all of the applicable technical regulations of the EAC Customs Union	Z8, NM
	EAC Hazardous Location Protection	Eurasian Customs Union (Russia, Belarus and Kazakhstan)	Compliance with Technical regulation, (TR CU 012/2011) - The safety of equipment for use in explosive environments.	Z8, NM

\*Ordinary Location labels will be marked with CE, C-tick, FM, CSA and EAC logos.

**European Directive Information**

A copy of the EC Declaration of Conformity can be found at the end of the Quick Start Guide. The most recent revision of the EC Declaration of Conformity can be found at [www.rosemount.com](http://www.rosemount.com).

**Electro Magnetic Compatibility (EMC) (2004/108/EC)**

EN 61326-1: 2013

**Low Voltage Directive (LVD) (2006/95/EC)**

EN 61010-1: 2010

**Ingress Protection Rating** for dust and water per EN 60079-0 and EN 60529 - **IP66/68** (The IP68 rating only applies to the flowtube and the remote junction box when the transmitter is remote or wall mounted. The IP68 rating does not apply to the transmitter. The IP68 rating is only valid at a depth of 10 meters for 48 hours)

**European Pressure Equipment Directive (PED) (97/23/EC)**

PED Certification requires the "PD" option code.

CE marked models that are ordered without the "PD" option will be marked "Not Complaint to (97/23/EC)"

Mandatory CE-marking with notified body number 0575, for all flowtubes is located on the flowmeter label.

Category I assessed for conformity per module A procedures.

Categories II – III assessed for conformity per module H procedures.

QS Certificate of Assessment

EC No. 4741-2014-CE-HOU-DNV: Module H Conformity Assessment

**8750W Flowtubes**

Line size 40mm to 600mm (1½-in to 24-in)

EN 1092-1 flanges and ASME B16.5 class 150 and ASME B16.5 Class 300 flanges.

Also available in ASME B16.5 Class 600 flanges in limited line sizes.

All other Rosemount Flowtubes – line sizes of 25mm (1-in) and less: Sound Engineering Practice (SEP). Flowtubes that are SEP are outside the scope of PED and cannot be marked for compliance with PED.

## Certifications

### Factory Mutual (FM)

#### Ordinary Location Certification for FM Approvals

As standard, the transmitter and flowtube have been examined and tested to determine that the design meets basic electrical, mechanical, and fire protection requirements by FM Approvals, a nationally recognized testing laboratory (NRTL) as accredited by the Federal Occupational Safety and Health Administration (OSHA).

#### 8750W Magnetic Flowtube and Transmitter

- Z5** All Flowtubes and Integral or Remote Mount Transmitters (Transmitter mount codes T or R)  
Non-Incendive for Class I, Division 2, Groups ABCD: T4  
Dust-Ignition Proof for Class II/III, Division 1, Groups EFG: T5  
-29°C ≤ Ta ≤ 60°C  
Enclosure Type 4X, IP66/68 (IP68 flowtube only with Remote mount transmitter)  
Install per drawing 8750W-1052

Special Conditions for Safe Use (X):

1. *Flowtube to be used only in a non-flammable process.*

#### 8750W Magnetic Flowtube and Transmitter

- Z5** All Flowtubes and Wall Mount Transmitter (Transmitter mount code W)  
Non-Incendive for Class I, Division 2, Groups ABCD: T4  
Dust-Ignition Proof for Class II/III, Division 1, Groups EFG: T4  
-29°C ≤ Ta ≤ 40°C  
Enclosure Type 4X, IP66/68 (IP68 flowtube only)  
Install per drawing 8750W-1052

Special Conditions for Safe Use (X):

1. *Flowtube to be used only in a non-flammable process.*

Figure 8. Rosemount 8750W Declaration of Conformity

		
<b>EC Declaration of Conformity</b> No: RFD 1098 Rev. C		
We,		
<b>Emerson Process Management Rosemount Flow 12001 Technology Drive Eden Prairie, MN 55344 USA</b>		
declare under our sole responsibility that the product(s),		
<b>Rosemount Model 8750W Magnetic Flowmeters</b>		
to which this declaration relates, is in conformity with the provisions of the European Community Directives, including the latest amendments, as shown in the attached schedule.		
Assumption of conformity is based on the application of harmonized or applicable technical standards and, when applicable or required, a European Community notified body certification, as shown in the attached schedule.		
	 _____ (signature)	
<b>18 February 2015</b> _____ (date of issue)	<b>Mark Fleigle</b> _____ (name - printed)	
	<b>Vice President Technology and New Products</b> _____ (function name - printed)	
F FILE ID: 8750W CE Marking	Page 1 of 2	RFD1098.docx

**ROSEMOUNT**

## Schedule

### EC Declaration of Conformity RFD 1098 Rev. C

#### LVD Directive (2006/95/EC)

All Models: EN 61010-1: 2010

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#### EMC Directive (2004/108/EC)

All Models: EN 61326-1: 2013

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#### PED Directive (97/23/EC)

All Models

Equipment without the 'PD' option is NOT PED compliant and cannot be used in the EEA without further assessment unless the installation is exempt under Article 1, paragraph 3 of the PED Directive (97/23/EC)

**Model 8750W Magnetic Flowtube with Option "PD", in Line Sizes 1.5" - 24"**

QS Certificate of Assessment - EC No. 4741-2014-CE-HOU-DNV  
Module H Conformity Assessment  
ASME B31.3: 2010

**Model 8750W with Option "PD", in Line Sizes .5" - 1.0"**

Sound Engineering Practice  
ASME B31.3: 2010

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#### PED Notified Body

**Det Norske Veritas (DNV)** [Notified Body Number: 0575]  
Veritasveien 1, N-1322  
Hovik, Norway



# Dimensional Drawings

Figure 9. Rosemount 8750W Field Mount Transmitter

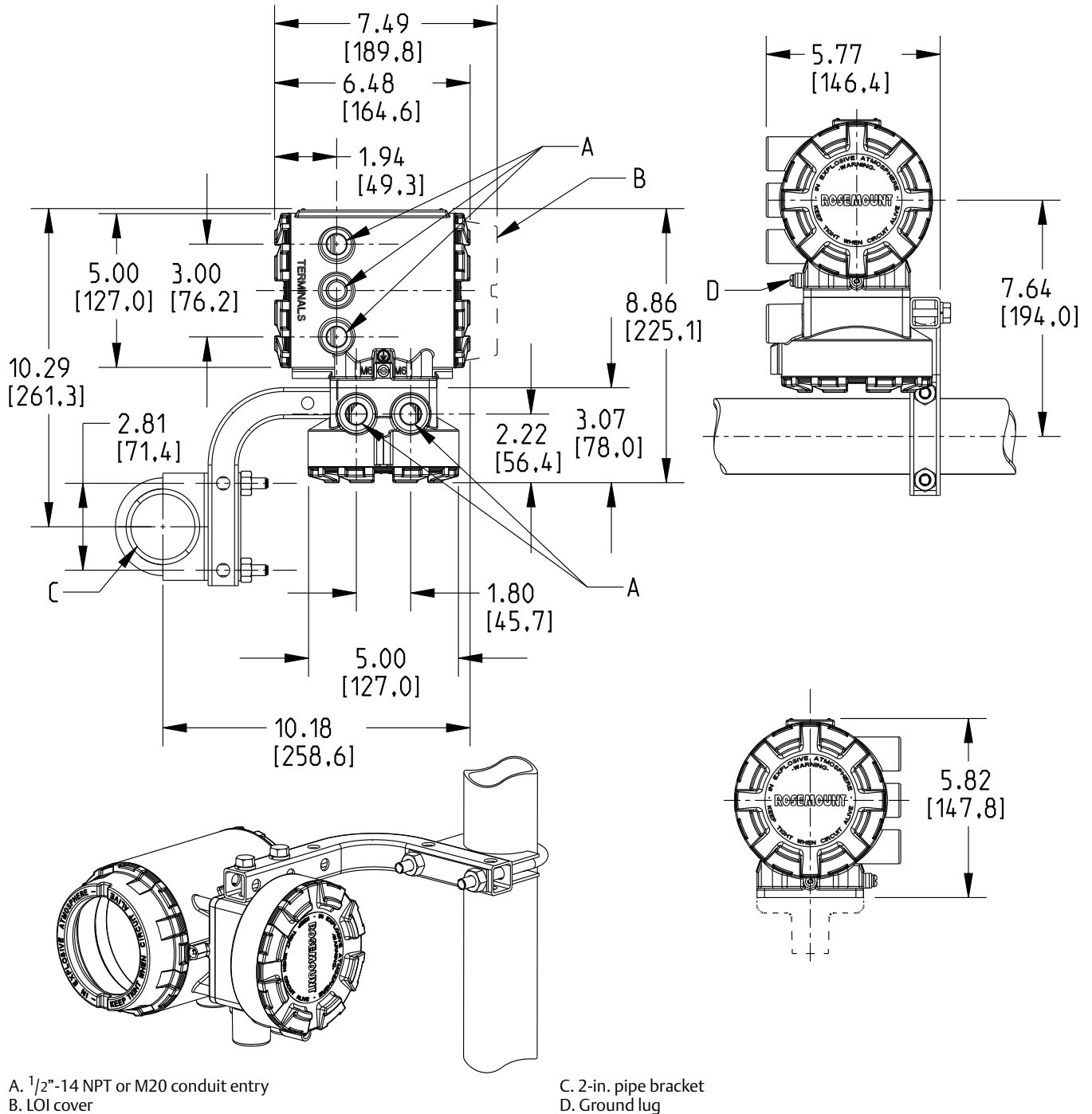
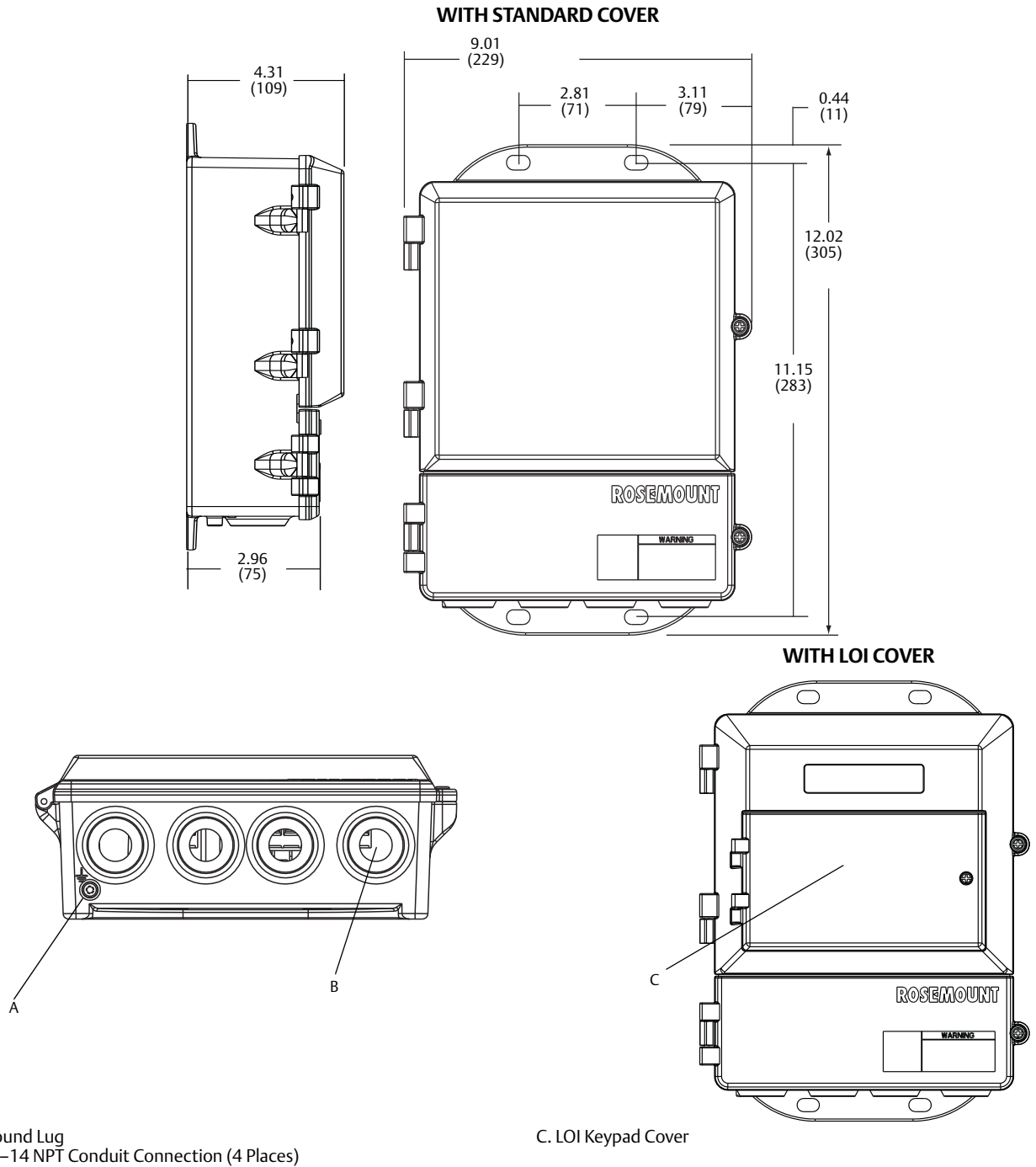


Figure 10. Rosemount 8750W Wall Mount Transmitter



A. Ground Lug  
 B. 1/2-14 NPT Conduit Connection (4 Places)

C. LOI Keypad Cover

Figure 11. Rosemount 8750W Raised Face Flanged Sensor 1/2-in. to 2.5-in. (15mm to 65mm)

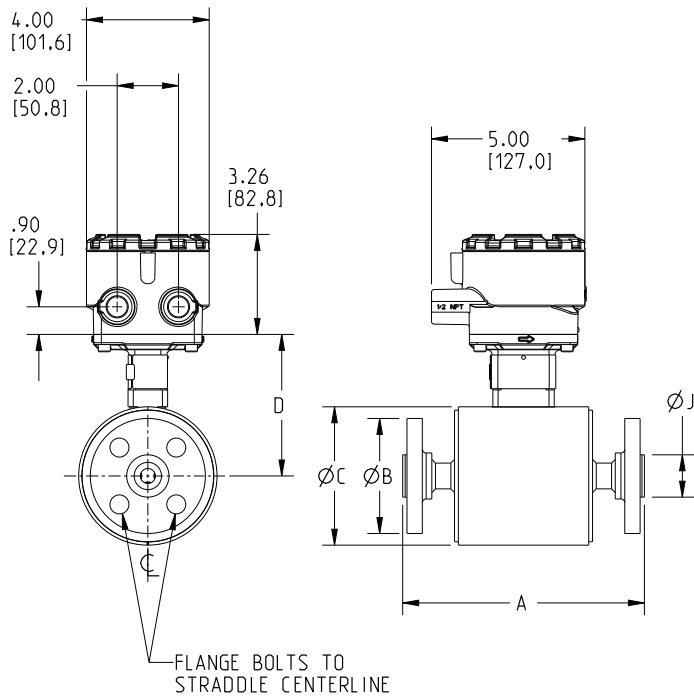


Table 20. Rosemount 8750W Raised Face Flanged Sensor 1/2-in. to 2.5-in. (15mm to 65mm) Dimensions

Size, description	Overall length			Body $\phi$ DIM "C"	DIM "D"	Liner $\phi$ on face DIM "J"	Flow tube weight (lbs./kg)
	DIM "A" PTFE	DIM "A" Neoprene	DIM "A" Poly				
0.5-in. (15 mm) ASME - 150, SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	1.38 (35)	9 (4)
0.5-in. (15 mm) ASME - 300, SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	1.38 (35)	10 (5)
0.5-in. (15 mm) EN 1092-1 - PN40, SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	1.77 (45)	10 (5)
0.5-in. (15 mm) AS 2129 Table "D", SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	1.85 (47)	8 (4)
0.5-in. (15 mm) AS 2129 Table "E", SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	1.85 (47)	8 (4)
0.5-in. (15 mm) JIS B2220 - 10K, SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	1.77 (45)	10 (5)
0.5-in. (15 mm) JIS B2220 - 20K, SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	1.77 (45)	10 (5)
0.5-in. (15 mm) GB/T9119 PN40, SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	1.77 (45)	10 (5)
1-in. (25 mm) ASME - 150, SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	2.00 (51)	11 (5)
1-in. (25 mm) ASME - 300, SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	2.00 (51)	14 (6)
1-in. (25 mm) EN 1092-1 - PN40, SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	2.68 (68)	14 (6)
1-in. (25 mm) AS 2129 Table "D", SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	2.56 (65)	10 (5)
1-in. (25 mm) AS 2129 Table "E", SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	2.48 (63)	10 (5)
1-in. (25 mm) JIS B2220 - 10K, SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	2.64 (67)	13 (6)
1-in. (25 mm) JIS B2220 - 20K, SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	2.64 (67)	14 (6)
1-in. (25 mm) GB/T9119 PN40, SO / RF	7.88 (200)	7.88 (200)	7.88 (200)	4.50 (114)	4.41 (112)	2.68 (68)	14 (6)
1.5-in. (40 mm) ASME - 150, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	2.88 (73)	15 (7)
1.5-in. (40 mm) ASME - 300, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	2.88 (73)	21 (9)
1.5-in. (40 mm) EN 1092-1 - PN40, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	3.46 (88)	19 (9)
1.5-in. (40 mm) AS 2129 Table "D", SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	3.07 (78)	12 (6)
1.5-in. (40 mm) AS 2129 Table "E", SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	3.07 (78)	13 (6)
1.5-in. (40 mm) JIS B2220 - 10K, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	3.19 (81)	16 (7)
1.5-in. (40 mm) JIS B2220 - 20K, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	3.19 (81)	17 (8)
1.5-in. (40 mm) GB/T9119 PN40, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	3.46 (88)	19 (9)
2-in. (50 mm) ASME - 150, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	3.62 (92)	20 (9)
2-in. (50 mm) ASME - 300, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	3.62 (92)	23 (11)
2-in. (50 mm) EN 1092-1 - PN40, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	4.02 (102)	23 (11)

Table 20. Rosemount 8750W Raised Face Flanged Sensor 1/2-in. to 2.5-in. (15mm to 65mm) Dimensions

Size, description	Overall length			Body Ø DIM "C"	DIM "D"	Liner Ø on face DIM "J"	Flow tube weight (lbs./kg)
	DIM "A" PTFE	DIM "A" Neoprene	DIM "A" Poly				
2-in. (50 mm) AS 2129 Table "D", SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	3.54 (90)	14 (6)
2-in. (50 mm) AS 2129 Table "E", SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	3.54 (90)	15 (7)
2-in. (50 mm) JIS B2220 - 10K, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	3.78 (96)	18 (8)
2-in. (50 mm) JIS B2220 - 20K, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	3.78 (96)	19 (9)
2-in. (50 mm) AS 4087 PN16, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	3.54 (90)	16 (7)
2-in. (50 mm) AS 4087 PN21, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	4.06 (103)	34 (16)
2-in. (50 mm) AS 4087 PN35, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	4.06 (103)	96 (44)
2-in. (50 mm) GB/T9119 PN40, SO / RF	7.87 (200)	7.80 (198)	7.87 (200)	5.21 (132)	4.82 (122)	4.02 (102)	23 (11)
2.5-in. (65 mm) ASME - 150, SO / RF	7.82 (199)	7.76 (197)	N/A	6.31 (160)	5.37 (136)	4.12 (105)	27 (12)
2.5-in. (65 mm) ASME - 300, SO / RF	7.82 (199)	7.76 (197)	N/A	6.31 (160)	5.37 (136)	4.12 (105)	32 (15)
2.5-in. (65 mm) EN 1092-1 - PN16, SO / RF	7.82 (199)	7.76 (197)	N/A	6.31 (160)	5.37 (136)	4.80 (122)	27 (12)
2.5-in. (65 mm) EN 1092-1 - PN40, SO / RF	7.82 (199)	7.76 (197)	N/A	6.31 (160)	5.37 (136)	4.80 (122)	31 (14)
2.5-in. (65 mm) AS 2129 Table "D", SO / RF	7.82 (199)	7.76 (197)	N/A	6.31 (160)	5.37 (136)	4.06 (103)	17 (8)
2.5-in. (65 mm) AS 2129 Table "E", SO / RF	7.82 (199)	7.76 (197)	N/A	6.31 (160)	5.37 (136)	4.06 (103)	19 (9)
2.5-in. (65 mm) JIS B2220 - 10K, SO / RF	7.82 (199)	7.76 (197)	N/A	6.31 (160)	5.37 (136)	4.57 (116)	25 (11)
2.5-in. (65 mm) JIS B2220 - 20K, SO / RF	7.82 (199)	7.76 (197)	N/A	6.31 (160)	5.37 (136)	4.57 (116)	26 (12)
2.5-in. (65 mm) AS 4087 PN16, SO / RF	7.82 (199)	7.76 (197)	N/A	6.31 (160)	5.37 (136)	4.06 (103)	18 (8)
2.5-in. (65 mm) AS 4087 PN21, SO / RF	7.82 (199)	7.76 (197)	N/A	6.31 (160)	5.37 (136)	4.80 (122)	24 (11)
2.5-in. (65 mm) AS 4087 PN35, SO / RF	7.82 (199)	7.76 (197)	N/A	6.31 (160)	5.37 (136)	4.80 (122)	27 (12)
2.5-in. (65 mm) GB/T9119 PN40, SO / RF	7.82 (199)	7.76 (197)	N/A	6.31 (160)	5.37 (136)	4.80 (122)	31 (14)

Figure 12. Rosemount 8750W Raised Face Flanged Sensor 3-in. to 48-in. (75mm to 1200mm)

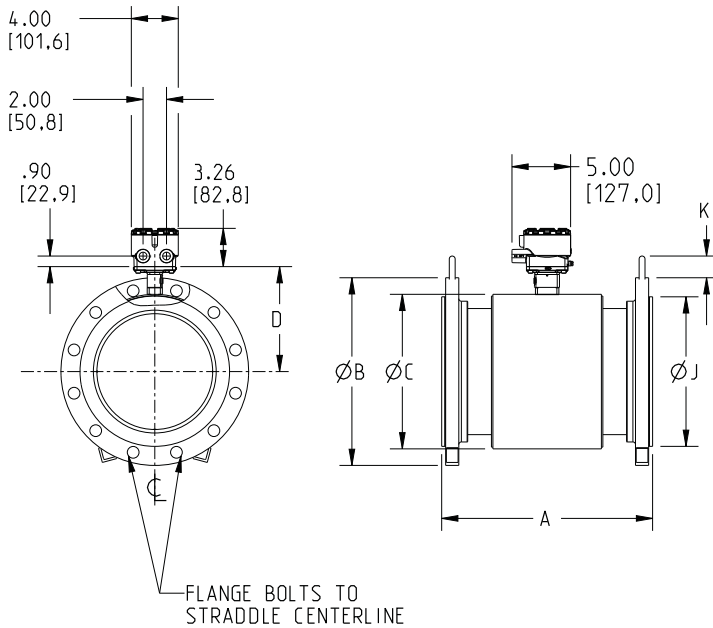


Table 21. Rosemount 8750W Raised Face Flanged Sensor 3-in. to 6-in. (75mm to 150mm) Dimensions

Size, description	Overall length			Body Ø DIM "C"	DIM "D"	Liner Ø on face DIM "J"	Lift ring height DIM "K"	Flow tube weight (lbs./kg)
	DIM "A" PTFE	DIM "A" Neoprene	DIM "A" Poly					
3-in. (80 mm) ASME - 150, SO / RF	7.87 (200)	7.75 (197)	7.87 (200)	7.21 (183)	5.82 (148)	5.00 (127)	1.70 (43)	34 (15)
3-in. (80 mm) ASME - 300, SO / RF	8.63 (219)	8.51 (216)	8.63 (219)	7.21 (183)	5.82 (148)	5.00 (127)	1.70 (43)	43 (19)
3-in. (80 mm) EN 1092-1 - PN40, SO / RF	7.87 (200)	7.75 (197)	7.87 (200)	7.21 (183)	5.82 (148)	5.43 (138)	1.70 (43)	38 (17)
3-in. (80 mm) AS 2129 Table "D", SO / RF	7.87 (200)	7.75 (197)	7.87 (200)	7.21 (183)	5.82 (148)	4.80 (122)	1.70 (43)	24 (11)
3-in. (80 mm) AS 2129 Table "E", SO / RF	7.87 (200)	7.75 (197)	7.87 (200)	7.21 (183)	5.82 (148)	4.80 (122)	1.70 (43)	24 (11)
3-in. (80 mm) JIS - 10K, SO / RF	7.87 (200)	7.75 (197)	7.87 (200)	7.21 (183)	5.82 (148)	4.96 (126)	1.70 (43)	28 (13)
3-in. (80 mm) JIS - 20K, SO / RF	7.87 (200)	7.75 (197)	7.87 (200)	7.21 (183)	5.82 (148)	5.20 (132)	1.70 (43)	34 (15)
3-in. (80 mm) AS 4087 PN16, SO / RF	7.87 (200)	7.75 (197)	7.87 (200)	7.21 (183)	5.82 (148)	4.80 (122)	1.70 (43)	20 (9)
3-in. (80 mm) AS 4087 PN21, SO / RF	7.87 (200)	7.75 (197)	7.87 (200)	7.21 (183)	5.82 (148)	5.55 (141)	1.70 (43)	56 (25)
3-in. (80 mm) AS 4087 PN35, SO / RF	7.87 (200)	7.75 (197)	7.87 (200)	7.21 (183)	5.82 (148)	5.55 (141)	1.70 (43)	109 (49)
3-in. (80 mm) GB/T9119 PN40, SO / RF	7.87 (200)	7.75 (197)	7.87 (200)	7.21 (183)	5.82 (148)	5.43 (138)	1.70 (43)	37 (19)
4-in. (100 mm) ASME - 150, SO / RF	9.84 (250)	9.69 (246)	9.84 (250)	7.91 (201)	6.17 (157)	6.19 (157)	1.70 (43)	45 (20)
4-in. (100 mm) ASME - 300, SO / R	10.88 (276)	10.73 (273)	10.88 (276)	7.91 (201)	6.17 (157)	6.19 (157)	1.70 (43)	65 (29)
4-in. (100 mm) EN 1092-1 - PN16, SO / RF	9.84 (250)	9.69 (246)	9.84 (250)	7.91 (201)	6.17 (157)	6.22 (159)	1.70 (43)	41 (19)
4-in. (100 mm) EN 1092-1 - PN40, SO / RF	9.84 (250)	9.69 (246)	9.84 (250)	7.91 (201)	6.17 (157)	6.38 (162)	1.70 (43)	49 (22)
4-in. (100 mm) AS 2129 Table "D", SO / RF	9.84 (250)	9.69 (246)	9.84 (250)	7.91 (201)	6.17 (157)	6.06 (154)	1.70 (43)	31 (14)
4-in. (100 mm) AS 2129 Table "E", SO / RF	9.84 (250)	9.69 (246)	9.84 (250)	7.91 (201)	6.17 (157)	6.06 (154)	1.70 (43)	33 (15)
4-in. (100 mm) JIS - 10K, SO / RF	9.84 (250)	9.69 (246)	9.84 (250)	7.91 (201)	6.17 (157)	5.95 (151)	1.70 (43)	35 (16)
4-in. (100 mm) JIS - 20K, SO / RF	9.84 (250)	9.69 (246)	9.84 (250)	7.91 (201)	6.17 (157)	6.30 (160)	1.70 (43)	44 (20)
4-in. (100 mm) AS 4087 PN16, SO / RF	9.84 (250)	9.69 (246)	9.84 (250)	7.91 (201)	6.17 (157)	6.06 (154)	1.70 (43)	28 (13)
4-in. (100 mm) AS 4087 PN21, SO / RF	9.84 (250)	9.69 (246)	9.84 (250)	7.91 (201)	6.17 (157)	6.57 (167)	1.70 (43)	68 (31)
4-in. (100 mm) AS 4087 PN35, SO / RF	9.84 (250)	9.69 (246)	9.84 (250)	7.91 (201)	6.17 (157)	6.57 (167)	1.70 (43)	119 (54)
4-in. (100 mm) GB/T9119 PN16, SO / RF	9.84 (250)	9.69 (246)	9.84 (250)	7.91 (201)	6.17 (157)	6.22 (159)	1.70 (43)	41 (19)
4-in. (100 mm) GB/T9119 PN40, SO / RF	9.84 (250)	9.69 (246)	9.84 (250)	7.91 (201)	6.17 (157)	6.38 (162)	1.70 (43)	49 (22)
5-in. (125 mm) ASME - 150, SO / RF	9.79 (249)	9.71 (247)	N/A	9.61 (244)	7.02 (178)	7.31 (186)	1.70 (43)	54 (24)
5-in. (125 mm) ASME - 300, SO / RF	10.94 (278)	10.86 (276)	N/A	9.61 (244)	7.02 (178)	7.31 (186)	1.70 (43)	89 (40)
5-in. (125 mm) EN 1092-1 - PN16, SO / RF	9.79 (249)	9.50 (241)	N/A	9.61 (244)	7.02 (178)	7.40 (188)	1.70 (43)	55 (25)
5-in. (125 mm) EN 1092-1 - PN40, SO / RF	9.79 (249)	9.71 (247)	N/A	9.61 (244)	7.02 (178)	7.40 (188)	1.70 (43)	65 (29)
5-in. (125 mm) AS 2129 Table "D", SO / RF	9.79 (249)	9.71 (247)	N/A	9.61 (244)	7.02 (178)	7.32 (186)	1.70 (43)	43 (19)

**Table 21. Rosemount 8750W Raised Face Flanged Sensor 3-in. to 6-in. (75mm to 150mm) Dimensions**

Size, description	Overall length			Body Ø DIM "C"	DIM "D"	Liner Ø on face DIM "J"	Lift ring height DIM "K"	Flow tube weight (lbs./kg)
	DIM "A" PTFE	DIM "A" Neoprene	DIM "A" Poly					
5-in. (125 mm) AS 2129 Table "E", SO / RF	9.79 (249)	9.71 (247)	N/A	9.61 (244)	7.02 (178)	7.32 (186)	1.70 (43)	44 (20)
5-in. (125 mm) JIS - 10K, SO / RF	9.79 (249)	9.71 (247)	N/A	9.61 (244)	7.02 (178)	7.17 (182)	1.70 (43)	49 (22)
5-in. (125 mm) JIS - 20K, SO / RF	9.79 (249)	9.71 (247)	N/A	9.61 (244)	7.02 (178)	7.68 (195)	1.70 (43)	64 (29)
5-in. (125 mm) GB/T9119 PN16, SO / RF	9.79 (249)	9.50 (241)	N/A	9.61 (244)	7.02 (178)	7.40 (188)	1.70 (43)	51 (23)
5-in. (125 mm) GB/T9119 PN40, SO / RF	9.79 (249)	9.71 (247)	N/A	9.61 (244)	7.02 (178)	7.40 (188)	1.70 (43)	60 (27)
6-in. (150 mm) ASME - 150, SO / RF	11.81 (300)	11.61 (295)	11.73 (298)	9.98 (253)	7.30 (185)	8.50 (216)	1.70 (43)	68 (31)
6-in. (150 mm) ASME - 300, SO / RF	13.06 (302)	12.88 (327)	13.00 (330)	9.98 (253)	7.30 (185)	8.50 (216)	1.70 (43)	117 (53)
6-in. (150 mm) EN 1092-1 - PN16, SO / RF	11.81 (300)	11.61 (295)	11.73 (298)	9.98 (253)	7.30 (185)	8.35 (212)	1.70 (43)	67 (31)
6-in. (150 mm) EN 1092-1 - PN40, SO / RF	13.06 (302)	12.88 (327)	13.00 (330)	9.98 (253)	7.30 (185)	8.58 (218)	1.70 (43)	95 (43)
6-in. (150 mm) AS 2129 Table "D", SO / RF	11.81 (300)	11.61 (295)	11.73 (298)	9.98 (253)	7.30 (185)	8.31 (211)	1.70 (43)	52 (24)
6-in. (150 mm) AS 2129 Table "E", SO / RF	11.81 (300)	11.61 (295)	11.73 (298)	9.98 (253)	7.30 (185)	8.15 (207)	1.70 (43)	57 (26)
6-in. (150 mm) JIS - 10K, SO / RF	11.81 (300)	11.61 (295)	11.73 (298)	9.98 (253)	7.30 (185)	8.35 (212)	1.70 (43)	64 (29)
6-in. (150 mm) JIS - 20K, SO / RF	11.81 (300)	11.61 (295)	11.73 (298)	9.98 (253)	7.30 (185)	9.06 (230)	1.70 (43)	82 (37)
6-in. (150 mm) AS 4087 PN16, SO / RF	11.81 (300)	11.61 (295)	11.73 (298)	9.98 (253)	7.30 (185)	8.31 (211)	1.70 (43)	46 (21)
6-in. (150 mm) AS 4087 PN21, SO / RF	11.81 (300)	11.61 (295)	11.73 (298)	9.98 (253)	7.30 (185)	9.13 (232)	1.70 (43)	98 (45)
6-in. (150 mm) AS 4087 PN35, SO / RF	11.81 (300)	11.61 (295)	11.73 (298)	9.98 (253)	7.30 (185)	9.13 (232)	1.70 (43)	186 (84)
6-in. (150 mm) GB/T9119 PN16, SO / RF	11.81 (300)	11.61 (295)	11.73 (298)	9.98 (253)	7.30 (185)	8.35 (212)	1.70 (43)	64 (29)
6-in. (150 mm) GB/T9119 PN40, SO / RF	13.06 (302)	12.88 (327)	13.00 (330)	9.98 (253)	7.30 (185)	8.58 (218)	1.70 (43)	94 (43)

**Table 22. Rosemount 8750W Raised Face Flanged Sensor 8-in. to 12-in. (200mm to 300mm) Dimensions**

Size, description	Overall length			Body Ø DIM "C"	DIM "D"	Liner Ø on face DIM "J"	Lift ring height DIM "K"	Flow tube weight (lbs./kg)
	DIM "A" PTFE	DIM "A" Neoprene	DIM "A" Poly					
8-in. (200 mm) ASME - 150, SO / RF	13.78 (350)	13.53 (344)	13.65 (347)	11.92 (303)	8.27 (210)	10.62 (270)	1.70 (43)	105 (48)
8-in. (200 mm) ASME - 300, SO / RF	15.60 (396)	15.42 (392)	15.54 (395)	11.92 (303)	8.27 (210)	10.62 (270)	1.70 (43)	183 (83)
8-in. (200 mm) EN 1092-1 - PN10, SO / RF	13.78 (350)	13.53 (344)	13.65 (347)	11.92 (303)	8.27 (210)	10.55 (268)	1.70 (43)	97 (44)
8-in. (200 mm) EN 1092-1 - PN16, SO / RF	13.78 (350)	13.53 (344)	13.65 (347)	11.92 (303)	8.27 (210)	10.55 (268)	1.70 (43)	96 (43)
8-in. (200 mm) EN 1092-1 - PN25, SO / RF	13.78 (350)	13.53 (344)	13.65 (347)	11.92 (303)	8.27 (210)	10.94 (278)	1.70 (43)	120 (54)
8-in. (200 mm) EN 1092-1 - PN40, SO / RF	15.60 (396)	15.42 (392)	15.54 (395)	11.92 (303)	8.27 (210)	11.22 (285)	1.70 (43)	158 (72)
8-in. (200 mm) AS 2129 Table "D", SO / RF	13.78 (350)	13.53 (344)	13.65 (347)	11.92 (303)	8.27 (210)	10.55 (268)	1.70 (43)	77 (35)
8-in. (200 mm) AS 2129 Table "E", SO / RF	13.78 (350)	13.53 (344)	13.65 (347)	11.92 (303)	8.27 (210)	10.39 (264)	1.70 (43)	86 (39)
8-in. (200 mm) JIS - 10K, SO / RF	13.78 (350)	13.53 (344)	13.65 (347)	11.92 (303)	8.27 (210)	10.32 (262)	1.70 (43)	81 (37)
8-in. (200 mm) JIS - 20K, SO / RF	15.60 (396)	15.42 (392)	15.54 (395)	11.92 (303)	8.27 (210)	10.83 (275)	1.70 (43)	134 (61)
8-in. (200 mm) AS 4087 PN16, SO / RF	13.78 (350)	13.53 (344)	13.65 (347)	11.92 (303)	8.27 (210)	10.55 (268)	1.70 (43)	73 (32)
8-in. (200 mm) AS 4087 PN21, SO / RF	13.78 (350)	13.53 (344)	13.65 (347)	11.92 (303)	8.27 (210)	11.65 (296)	1.70 (43)	136 (62)
8-in. (200 mm) AS 4087 PN35, SO / RF	15.60 (396)	15.42 (392)	15.54 (395)	11.92 (303)	8.27 (210)	10.24 (260)	1.70 (43)	241 (109)
8-in. (200 mm) GB/T9119 PN10, SO / RF	13.78 (350)	13.53 (344)	13.65 (347)	11.92 (303)	8.27 (210)	10.55 (268)	1.70 (43)	96 (43)
8-in. (200 mm) GB/T9119 PN16, SO / RF	13.78 (350)	13.53 (344)	13.65 (347)	11.92 (303)	8.27 (210)	10.55 (268)	1.70 (43)	95 (43)
8-in. (200 mm) GB/T9119 PN40, SO / RF	15.60 (396)	15.42 (392)	15.54 (395)	11.92 (303)	8.27 (210)	11.22 (285)	1.70 (43)	154 (70)
10-in. (250 mm) ASME - 150, SO / RF	17.98 (457)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	12.75 (324)	2.00 (51)	138 (63)
10-in. (250 mm) ASME - 300, SO / RF	17.88 (454)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	12.75 (324)	2.00 (51)	247 (112)
10-in. (250 mm) EN 1092-1 - PN10, SO / RF	17.98 (457)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	12.60 (320)	2.00 (51)	122 (55)
10-in. (250 mm) EN 1092-1 - PN16, SO / RF	17.98 (457)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	12.60 (320)	2.00 (51)	126 (57)
10-in. (250 mm) EN 1092-1 - PN25, SO / RF	17.98 (457)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	13.19 (335)	2.00 (51)	158 (72)
10-in. (250 mm) EN 1092-1 - PN40, SO / RF	17.88 (454)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	13.58 (345)	2.00 (51)	221 (100)
10-in. (250 mm) AS 2129 Table "D", SO / RF	17.98 (457)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	12.91 (328)	2.00 (51)	112 (51)
10-in. (250 mm) AS 2129 Table "E", SO / RF	17.98 (457)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	12.91 (328)	2.00 (51)	127 (57)
10-in. (250 mm) JIS B2220 - 10K, SO / RF	17.98 (457)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	12.76 (324)	1.70 (43)	118 (53)
10-in. (250 mm) AS 4087 PN16, SO / RF	17.98 (457)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	12.91 (328)	2.00 (51)	168 (76)
10-in. (250 mm) AS 4087 PN21, SO / RF	17.98 (457)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	13.74 (349)	2.00 (51)	258 (117)
10-in. (250 mm) AS 4087 PN35, SO / RF	17.88 (454)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	12.24 (311)	2.00 (51)	333 (151)
10-in. (250 mm) GB/T 9119 PN10, SO / RF	17.98 (457)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	12.60 (320)	2.00 (51)	105 (48)
10-in. (250 mm) GB/T 9119 PN16, SO / RF	17.98 (457)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	12.60 (320)	2.00 (51)	117 (53)
10-in. (250 mm) GB/T 9119 PN40, SO / RF	17.88 (454)	17.61 (447)	17.73 (450)	13.12 (333)	8.91 (226)	13.58 (345)	2.00 (51)	213 (97)
12-in. (300 mm) ASME - 150, SO / RF	19.91 (506)	19.58 (497)	19.70 (500)	15.12 (384)	9.91 (252)	15.00 (381)	2.00 (51)	238 (108)







**Table 24. Rosemount 8750W Raised Face Flanged Sensor 20-in. to 36-in. (500mm to 900mm) Dimensions**

Size, description	Overall length			Body Ø DIM "C"	DIM "D"	Liner Ø on face DIM "J"	Lift ring height DIM "K"	Flow tube weight (lbs./kg)
	DIM "A" PTFE	DIM "A" Neoprene	DIM "A" Poly					
36-in. (900 mm) AS 4087 PN21, SO / RF	35.25 (895)	35.30 (897)	35.17 (893)	39.00 (991)	21.86 (555)	41.73 (1060)	3.13 (80)	2197 (997)
36-in. (900 mm) AS 4087 PN35, SO / RF	35.25 (895)	35.30 (897)	35.17 (893)	39.00 (991)	21.86 (555)	40.55 (1030)	3.13 (80)	3133 (1421)
36-in. (900 mm) GB/T9119 PN10, SO / RF	35.25 (895)	35.30 (897)	35.17 (893)	39.00 (991)	21.86 (555)	39.57 (1005)	3.13 (80)	1209 (549)
36-in. (900 mm) GB/T9119 PN16, SO / RF	35.25 (895)	35.30 (897)	35.17 (893)	39.00 (991)	21.86 (555)	39.37 (1000)	3.13 (80)	1429 (649)
36-in. (900 mm) EN 1092-1 - PN10, SO / RF	35.25 (895)	35.30 (897)	35.17 (893)	39.00 (991)	21.86 (555)	39.57 (1005)	3.13 (80)	1364 (619)
36-in. (900 mm) EN 1092-1 - PN16, SO / RF	35.25 (895)	35.30 (897)	35.17 (893)	39.00 (991)	21.86 (555)	39.37 (1000)	3.13 (80)	1719 (780)
36-in. (900 mm) JIS B2220 - 10K, SO / RF	35.25 (895)	35.30 (897)	35.17 (893)	39.00 (991)	21.86 (555)	39.57 (1005)	3.13 (80)	1194 (543)

**Table 25. Rosemount 8750W Raised Face Flanged Sensor 40-in. and 48-in. (1000mm and 1200mm) Dimensions**

Size, description	Overall length			Body Ø DIM "C"	DIM "D"	Liner Ø on face DIM "J"	Lift ring height DIM "K"	Flow tube weight (lbs./kg)
	DIM "A" PTFE	DIM "A" Neoprene	DIM "A" Poly					
40-in. (1000 mm) EN 1092-1 - PN10, SO / RF	N/A	39.40 (1001)	N/A	47.27 (1201)	25.86 (657)	43.70 (1110)	3.38 (86)	1444 (655)
40-in. (1000 mm) EN 1092-1 - PN16, SO / RF	N/A	39.40 (1001)	N/A	47.27 (1201)	25.86 (657)	43.90 (1115)	3.38 (86)	1559 (707)
40-in. (1000 mm) AS 2129 Table "D", SO / RF	N/A	39.40 (1001)	N/A	47.27 (1201)	25.86 (657)	44.61 (1133)	3.38 (86)	1494 (678)
40-in. (1000 mm) AS 2129 Table "E", SO / RF	N/A	39.40 (1001)	N/A	47.27 (1201)	25.86 (657)	44.49 (1130)	3.38 (86)	1806 (819)
40-in. (1000 mm) AS 4087 PN16, SO / RF	N/A	39.40 (1001)	N/A	47.27 (1201)	25.86 (657)	44.61 (1133)	3.38 (86)	2175 (987)
40-in. (1000 mm) AS 4087 PN21, SO / RF	N/A	39.40 (1001)	N/A	47.27 (1201)	25.86 (657)	45.24 (149)	3.38 (86)	2464 (1118)
40-in. (1000 mm) GB/T9119 PN10, SO / RF	N/A	39.40 (1001)	N/A	47.27 (1201)	25.86 (657)	43.70 (1110)	3.38 (86)	1576 (715)
40-in. (1000 mm) GB/T9119 PN16, SO / RF	N/A	39.40 (1001)	N/A	47.27 (1201)	25.86 (657)	43.90 (1115)	3.38 (86)	1735 (787)
48-in. (1200 mm) EN 1092-1 - PN10, SO / RF	N/A	47.20 (1199)	N/A	55.27 (1404)	29.86 (758)	52.36 (1330)	3.38 (86)	1949 (884)
48-in. (1200 mm) AS 2129 Table "D", SO / RF	N/A	47.20 (1199)	N/A	55.27 (1404)	29.86 (758)	53.86 (1368)	3.38 (86)	2068 (938)
48-in. (1200 mm) AS 2129 Table "E", SO / RF	N/A	47.20 (1199)	N/A	55.27 (1404)	29.86 (758)	53.74 (1365)	3.38 (86)	2680 (1216)
48-in. (1200 mm) AS 4087 PN16, SO / RF	N/A	47.20 (1199)	N/A	55.27 (1404)	29.86 (758)	53.86 (1368)	3.38 (86)	2703 (1226)
48-in. (1200 mm) AS 4087 PN21, SO / RF	N/A	47.20 (1199)	N/A	55.27 (1404)	29.86 (758)	54.53 (1385)	3.38 (86)	3152 (1430)
48-in. (1200 mm) GB/T9119 PN10, SO / RF	N/A	47.20 (1199)	N/A	55.27 (1404)	29.86 (758)	52.36 (1330)	3.38 (86)	2081 (944)
48-in. (1200 mm) GB/T9119 PN16, SO / RF	N/A	47.20 (1199)	N/A	55.27 (1404)	29.86 (758)	52.36 (1330)	3.38 (86)	2832 (1284)

Figure 13. Rosemount 8750W Flat Face Sensor 30-in. to 48-in. (750mm to 1200mm)

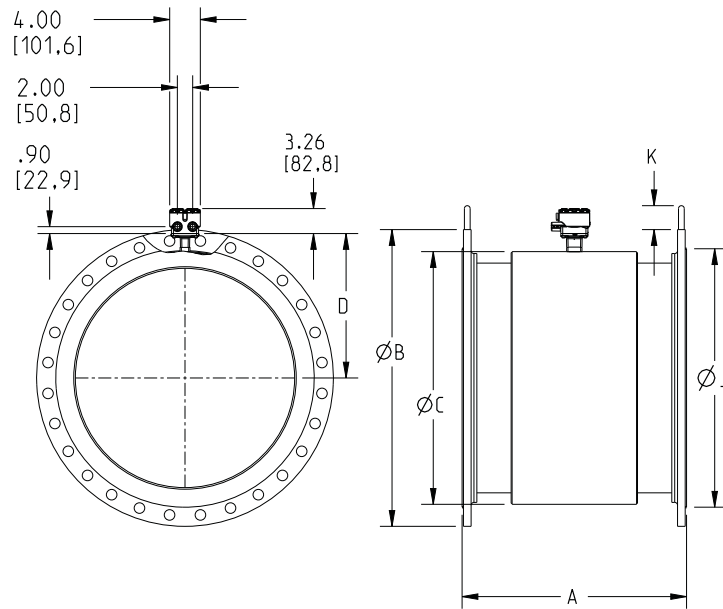
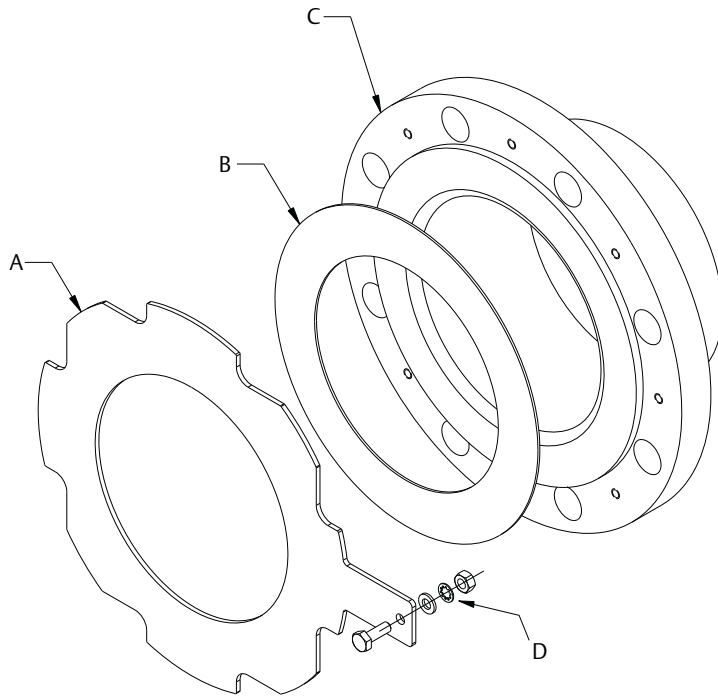


Table 26. Rosemount 8750W Flat Face Sensor 30-in. to 48-in. (750mm to 1200mm) Dimensions

Size, description	Overall length			Body Ø DIM "C"	DIM "D"	Liner Ø on face DIM "J"			Lift ring height DIM "K"	Flow tube weight (lbs./kg)
	DIM "A" PTFE	DIM "A" Neoprene	DIM "A" Poly			DIM "J" PTFE	DIM "J" Neoprene	DIM "J" Poly		
30-in. (750 mm) AWWA CLASS D, SO / FF	29.34 (745)	29.39 (747)	29.26 (743)	33.00 (838)	16.38 (416)	33.75 (857)	38.75 (984)	33.75 (857)	3.13 (80)	789 (358)
30-in. (750 mm) AWWA CLASS E, SO / FF	29.34 (745)	29.39 (747)	29.26 (743)	33.00 (838)	16.38 (416)	33.75 (857)	38.75 (984)	33.75 (857)	3.13 (80)	1205 (548)
30-in. (750 mm) AWWA CLASS F, SO / FF	29.34 (745)	29.39 (747)	29.26 (743)	33.00 (838)	16.38 (416)	33.75 (857)	43.00 (1092)	33.75 (857)	3.13 (80)	1795 (816)
36-in. (900 mm) AWWA C207 CLASS E, SO / F	35.25 (895)	35.30 (897)	35.17 (893)	39.00 (991)	21.86 (555)	40.25 (1022)	46.00 (1168)	40.25 (1022)	3.13 (80)	1911 (867)
36-in. (900 mm) AWWA C207CLASS F, SO / FF	35.25 (895)	35.30 (897)	35.17 (893)	39.00 (991)	21.86 (555)	40.25 (1022)	50.00 (1270)	40.25 (1022)	3.13 (80)	2651 (1202)
40-in. (1000 mm) AWWA CLASS D, SO/FF	N/A	39.40 (1001)	N/A	47.27 (1201)	25.86 (657)	N/A	50.75 (1289)	N/A	3.38 (86)	1435 (651)
40-in. (1000 mm) AWWA CLASS E, SO/FF	N/A	39.40 (1001)	N/A	47.27 (1201)	25.86 (657)	N/A	50.75 (1289)	N/A	3.38 (86)	2464 (1118)
42-in. (1050 mm) AWWA CLASS D, SO/FF	N/A	42.00 (1067)	N/A	49.27 (1251)	26.86 (682)	N/A	53.00 (1346)	N/A	3.38 (86)	1550 (703)
42-in. (1050 mm) AWWA CLASS E, SO/FF	N/A	42.00 (1067)	N/A	49.27 (1251)	26.86 (682)	N/A	53.00 (1346)	N/A	3.38 (86)	2400 (1089)
48-in. (1200 mm) AWWA CLASS D, SO/FF	N/A	47.20 (1199)	N/A	55.27 (1404)	29.86 (758)	N/A	59.50 (1511)	N/A	3.38 (86)	1892 (848)
48-in. (1200 mm) AWWA CLASS E, SO/FF	N/A	47.20 (1199)	N/A	55.27 (1404)	29.86 (758)	N/A	59.50 (1511)	N/A	3.38 (86)	3152 (1430)

Figure 14. Rosemount 8750W Flanged Sensor 1/2-in. to 48-in. (DN 15mm to 1200mm) Grounding Rings



- A. Grounding Ring
- B. Customer Supplied Gasket
- C. Flowtube
- D. Grounding Strap Hardware

Table 27. Rosemount 8750W Flanged Sensor 1/2-in. to 48-in. (15mm to 1200mm) Grounding Ring Dimensions

Line size	Single grounding ring thickness		Double grounding ring thickness	
	MIN	MAX	MIN	MAX
0.5-in. (15mm)	0.059 (1.5)	N/A	0.12 (3)	N/A
1-in. (25mm)	0.059 (1.5)	N/A	0.12 (3)	N/A
1.5-in. (40mm)	0.059 (1.5)	N/A	0.12 (3)	N/A
2-in. (50mm)	0.059 (1.5)	N/A	0.12 (3)	N/A
2.5-in. (65mm)	0.059 (1.5)	N/A	0.12 (3)	N/A
3-in. (80mm)	0.059 (1.5)	N/A	0.12 (3)	N/A
4-in. (100mm)	0.059 (1.5)	N/A	0.12 (3)	N/A
5-in. (125mm)	0.059 (1.5)	0.12 (3)	0.12 (3)	0.24 (6.1)
6-in. (150mm)	0.059 (1.5)	N/A	0.12 (3)	N/A
8-in. (200mm)	0.059 (1.5)	N/A	0.12 (3)	N/A
10-in. (250mm)	0.059 (1.5)	N/A	0.12 (3)	N/A
12-in. (300mm)	0.059 (1.5)	0.12 (3)	0.12 (3)	0.24 (6.1)
14-in. (350mm)	0.12 (3)	0.25 (6.4)	0.24 (6.1)	0.5 (12.7)
16-in. (400mm)	0.12 (3)	0.25 (6.4)	0.24 (6.1)	0.5 (12.7)
18-in. (450mm)	0.12 (3)	0.25 (6.4)	0.24 (6.1)	0.5 (12.7)
20-in. (500mm)	0.12 (3)	0.25 (6.4)	0.24 (6.1)	0.5 (12.7)
24-in. (600mm)	0.187 (4.7)	0.25 (6.4)	0.374 (9.5)	0.5 (12.7)
30-in. (750mm)	0.187 (4.7)	0.25 (6.4)	0.374 (9.5)	0.5 (12.7)
36-in. (900mm)	0.187 (4.7)	0.25 (6.4)	0.374 (9.5)	0.5 (12.7)
40-in. (1000mm)	0.25 (6.4)	N/A	0.5 (12.7)	N/A
42-in. (1050mm)	0.25 (6.4)	N/A	0.5 (12.7)	N/A
48-in. (1200mm)	0.25 (6.4)	N/A	0.5 (12.7)	N/A

Figure 15. Rosemount 8750W Wafer Sensor 1 1/2-in. to 8-in. (40mm to 200mm)

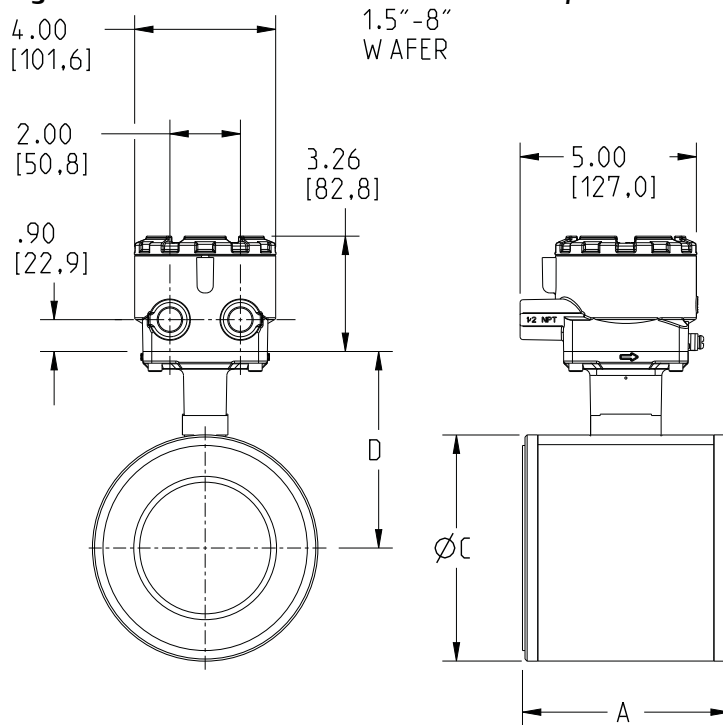


Table 28. Rosemount 8750W Wafer Sensor 1 1/2-in. to 8-in. (40mm to 200mm) Dimensions (in inches)

Size, description	Overall length	Body Ø DIM "C"	Adapter		Liner Ø on face DIM "J"	Flow tube weight (lbs./kg)
	DIM "A" PTFE		Style A	Style B		
1.5-in. (40mm) WAFER UP TO ANSI - 300# / DIN PN40	2.88 (73)	3.29 (84)	3.67 (93)	4.00 (102)	2.42 (61)	5 (2)
2-in. (50mm) WAFER UP TO ANSI - 300# / DIN PN40	3.32 (84)	3.92 (100)	3.89 (99)	4.32 (110)	3.05 (77)	7 (3)
3-in. (80mm) WAFER UP TO ANSI - 300# / DIN PN40	4.82 (122)	5.17 (131)	4.51 (115)	4.95 (126)	4.41 (112)	13 (6)
4-in. (100mm) WAFER UP TO ANSI - 300# / DIN PN40	6.03 (153)	6.39 (162)	5.12 (130)	5.56 (141)	5.80 (147)	22 (10)
6-in. (150mm) WAFER UP TO ANSI - 300# / DIN PN40	7.08 (180)	8.57 (218)	6.22 (158)	6.65 (169)	7.86 (200)	35 (16)
8-in. (200mm) WAFER UP TO ANSI - 300# / DIN PN40	9.06 (230)	10.63 (270)	7.25 (184)	7.68 (195)	9.86 (250)	60 (27)



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