

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 to the process and meter's health
- Available with drinking water certifications

Product selection guide

The Rosemount 8750W Magnetic Flowmeter sensor is available in a flanged style and transmitter is available in remote and integral transmitter configurations to ensure compatibility with all utility, water, and wastewater applications.

- For transmitter details, see [Table 1](#) and [Table 11](#).
- For sensor styles and details, see [Table 2](#) and [Table 12](#).
- For available lining materials, see [Table 12](#).
- For available electrode materials and electrode types, see [Table 14](#).
- For process reference (grounding) options, see [Table 15](#) and [Table 16](#).

For guidance on selecting materials, refer to the Magnetic Flowmeter Material Selection Guide located on Rosemount.com (document number 00816-0100-3033). For more information regarding the available product offering see the ordering information, [Table 7](#) through [Table 14](#).

Table 1. Transmitter Selections




Transmitter	General characteristics
Field mount 	<ul style="list-style-type: none"> • Integral and remote mount configurations available • HART®/analog and pulse outputs available • Advanced Diagnostics available • Optical switch local operator interface (optional) • Two discrete channels (optional)
Wall mount 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Flanged process connections • Welded coil housing • 1/2-in. (15 mm) to 48-in. (1200 mm) • Standard, reference, and bullet-nose electrodes available

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Magmeter Diagnostics

Rosemount diagnostics reduce cost and 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.

Table 3. Magnetic Flowmeter Diagnostics

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 ⁽¹⁾	Maintenance	Standard
Electrode saturation ⁽¹⁾	Process/Maintenance	Standard
Advanced diagnostics		
High process noise	Process	Suite 1 (DA1)
Grounding and wiring fault	Installation	Suite 1 (DA1)
Coated electrode detection ⁽¹⁾	Process	Suite 1 (DA1)
Commanded SMART Meter Verification	Meter Health	Suite 2 (DA2)
Continuous SMART Meter Verification ⁽¹⁾	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⁽¹⁾

Simplify maintenance and troubleshooting practices by utilizing ProLink III 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.

1. Available with ProLink III v3.0 or later.

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 4](#).
- A table to convert from volumetric flow to velocity is shown in [Table 5](#). Two examples of these calculations are show below.
- Minimum and maximum flow rates based on line size are shown in [Table 6](#).
- Operation outside these guidelines may also give acceptable performance.

Table 4. 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 5](#) and the following equation:

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

Example:

English units

Magmeter Size: 4-in. (factor from [Table 5](#) = 39.679)

Normal Flow Rate: 300 GPM

$$\text{Velocity} = \frac{300 \text{ (gpm)}}{39.679}$$

Velocity = 7.56 ft/s

SI units

Magmeter Size: 100 mm (factor from [Table 5](#) = 492.78)

Normal Flow Rate: 800 L/min

$$\text{Velocity} = \frac{800 \text{ (L/min)}}{492.78}$$

Velocity = 1.62 m/s

Table 5. Line Size vs. Conversion Factor

Nominal line size Inches (mm)	Gallons per minute factor	Liters per minute factor
1/2 (15)	0.947	11.762
1 (25)	2.694	33.455
1 1/2 (40)	6.345	78.806
2 (50)	10.459	129.89
2 1/2 (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 6. 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

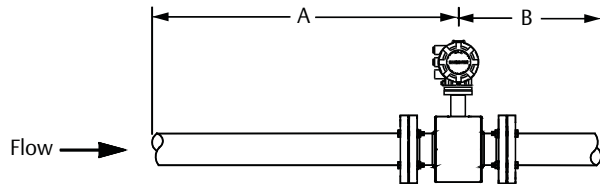
Upstream/downstream piping length

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 15](#) and [Table 16](#).

Figure 1. Upstream and Downstream Straight Pipe Diameters



- A. Five pipe diameters
- B. Two 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 a flanged sensor design. 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 7. 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)	
Sensor design revision		
D	Revision "D"	
Transmitter class		
E ⁽¹⁾	Revision 3 electronics	★
M	Revision 4 electronics	★
0	Spare sensor, no transmitter	
Transmitter mount		
T	Integral field mount	★
R	Remote field mount	★
W	Remote wall mount	★
Transmitter power		
1	AC power supply (90–250 VAC, 50–60 Hz)	★
2	DC power supply (12–42 VDC)	★
0	Spare sensor, no transmitter	
Transmitter outputs		
A	4–20mA; Digital HART; Scalable Pulse	★
0	Spare sensor, no transmitter	
Conduit entries		
Integral mount qty (2), remote mount qty (4)		
1	1/2–14 NPT	★
2	M20	★
Integral mount qty (3), remote mount qty (5)		
4	1/2–14 NPT, additional entry	★
5 ⁽²⁾	M20, additional entry	★
0	Spare sensor, integral mount only, no transmitter	

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Sensor style		
F	Flanged	★
0	Spare transmitter, no sensor	
Lining material		
T ⁽³⁾	PTFE	★
P ⁽⁴⁾	Polyurethane	★
N ⁽⁵⁾	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 electrodes- bulletnose	★
E ⁽⁶⁾	2 Measurement plus 1 reference electrode - standard	★
F ⁽⁶⁾	2 Measurement plus 1 reference electrode - bulletnose	★
0	Spare transmitter, no sensor	

Table 7. Rosemount 8750W Ordering Information

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

• = Available
 – = Unavailable

Line size		PTFE code T	Polyurethane code P	Neoprene code N
005	1/2-in. (15 mm)	•	–	–
010	1-in. (25 mm)	•	•	•
015	1 1/2-in (40 mm)	•	•	•
020	2-in. (50 mm)	•	•	•
025	2 1/2-in. (65 mm)	•	–	•
030	3-in. (80 mm)	•	•	•
040	4-in. (100 mm)	•	•	•
050	5-in. (125 mm)	•	–	•
060	6-in. (150 mm)	•	•	•
080	8-in. (200 mm)	•	•	•
100	10-in. (250 mm)	•	•	•
120	12-in. (300 mm)	•	•	•
140	14-in. (350 mm)	•	•	•
160	16-in. (400 mm)	•	•	•
180	18-in. (450 mm)	•	•	•
200	20-in. (500 mm)	•	•	•
240	24-in. (600 mm)	•	•	•
300	30-in. (750 mm)	•	•	•
360	36-in. (900 mm)	•	•	•
400	40-in. (1000 mm)	–	–	•
420	42-in. (1050 mm)	–	•	•
480	48-in. (1200 mm)	–	–	•
000	Spare transmitter, no sensor	–	–	–
Flange type and material⁽⁷⁾				
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			

Table 7. Rosemount 8750W Ordering Information

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

Flange rating⁽⁷⁾		
A1	ASME B16.5, Class 150	Refer to Table 8 for flange availability.
A3	ASME B16.5, Class 300	
AD	AWWA C207 Class D (line size 30-in. and above)	
AE	AWWA C207 Class E (line size 30-in. and above)	
AF	AWWA C207 Class F (line size 30-in. and above)	
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	

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

Safety approvals		
Ordinary Location ⁽⁸⁾	No code required	★
Factory Mutual (FM)		
Z5	FM Non-Incendive, Class I Div 2 for Non-Flammable Fluids; DIP	★
CSA		
Z6	CSA, Class I Div 2 for Non-Flammable Fluids; DIP	★
ATEX		
Z1	ATEX Non-Sparking and Dust for Non-Flammable Fluids	★
ND	ATEX Dust	★
IECEX		
Z7	IECEX Non-Sparking and Dust for Non-Flammable Fluids	★
NF	IECEX Dust	★
NEPSI		
Z3	NEPSI Non-Sparking and Dust for Non-Flammable Fluids	★

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

Advanced Diagnostics Suite		
DA1	Process diagnostics HPN, grounding/wiring, electrode coating	★
DA2	SMART Meter verification	★
Discrete input/output		
AX ⁽⁹⁾	Two discrete channels (DI/DO 1, DO 2)	★
Display options		
M4	Local operator interface	★
M5	LCD display only	★
Optional ground rings		
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)	
Certifications		
PD	European Pressure Equipment Directive Certification (PED, per 97/23/EC)	
CR	Canadian Registration Number (CRN) Certification	
BD	ASME B31.3 Process Piping Standard	
DW ⁽¹⁰⁾	NSF Drinking Water Certification	
Other options		
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 ⁽¹¹⁾	5-Point verification	
P10 ⁽¹²⁾	10-Point verification	
Submergence protection		
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	
Special paint		
V1	Coal tar paint (submersible/direct burial)	

Table 7. Rosemount 8750W Ordering Information

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

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	Bulgarian	★
YF	French	★
YG	German	★
YH	Finnish	★
YI	Italian	★
YJ	Japanese	★
YL	Polish	★
YM	Chinese (Mandarin)	★
YN	Norwegian	★
YP	Portuguese	★
YR	Russian	★
YS	Spanish	★
YW	Swedish	★
Typical model number: 8750WDMT1A1FPSA010CA1DA2		

1. Wall mount transmitter only.
2. Not available with the wall mount transmitter.
3. Available in 1/2- to 36-in. (15 mm to 900 mm) line sizes.
4. Available in line sizes 1- to 36-, and 42-in. (25 mm to 900 mm, and 1050 mm) line sizes.
5. Available in line sizes 1- to 48-in. (25 mm to 1200 mm) line sizes.
6. Not available in 1/2-in. (15mm).
7. Refer to [Table 8](#) for flange offering.
8. FM marked, CSA marked, CE marked, EAC marked and C-tick marked.
9. Requires Conduit Entry code 4 or 5 with field mount transmitter.
10. NSF drinking water certification is available with the PTFE liner in line sizes 0.5- to 36-in (15 mm to 900 mm) and the polyurethane liner in line sizes 3- to 36-, and 42-in. (80 mm to 900 mm, and 1050 mm).
11. Available for 1/2- 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- to 48-in. (1000 mm to 1200 mm).
12. Available for 1/2- to 24-in. (15 mm to 600 mm) at velocities 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 ft/s; 30- to 48-in. (700 mm to 1200 mm) not available.

Table 8. Flowmeter Availability – Line Size vs. Flange Type and Rating

• = Available
 – = Not applicable

Flange rating	Flange type	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	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	–	–	–	–	–
A3	ASME 300	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	–	–	–	–	–
AD	AWWA Class D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	•	•	•	•	•
AE	AWWA Class E	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	•	•	•	•	•
AF	AWWA Class F	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	•	•	–	–	–
DD	EN 1092-1 PN10	–	–	–	–	–	–	–	–	–	•	•	•	•	•	•	•	•	–	•	•	–	•
DE	EN 1092-1 PN16	–	–	–	•	•	•	•	•	•	•	•	•	•	•	•	•	•	–	•	•	–	–
DF	EN 1092-1 PN 25	–	–	–	–	–	–	–	–	–	•	•	•	•	•	•	•	•	–	–	–	–	–
DH	EN 1092-1 PN 40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	–	–	–	–	–
GD	GB/T PN10	–	–	–	–	–	–	–	–	–	•	•	•	•	•	•	•	•	–	•	•	–	–
GE	GB/T PN16	–	–	–	–	–	–	•	•	•	•	•	•	•	•	•	•	•	–	•	•	–	–
GH	GB/T 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	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	–	•

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
4 mA	0
20 mA	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. 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).

Cables kits are available as individual component cables or as a combination coil/electrode. Remote cables can be ordered direct from Emerson Process Management using the kit numbers shown in Table 9 and Table 10. Equivalent Alpha cable part numbers are also provided as an alternative. To order cable, specify length as quantity desired. Equal length of component cable is required.

Example:

25 feet = Qty (25) 08732-0065-0001

Table 9. Component Cable Kits

Cable kit number	Description	Individual cable	Alpha p/n
Standard temperature (-20 °C to 75 °C)			
08732-0065-0001 (feet)	Kit, component cables, std temp. (includes coil + electrode)	Coil Electrode	518243 518245
08732-0065-0002 (meters)	Kit, component cables, std temp. (includes coil + electrode)	Coil Electrode	518243 518245
08732-0065-0003 (feet)	Kit, component cables, std temp. (includes coil + I. S. electrode)	Coil Intrinsically safe blue electrode	518243 518245
08732-0065-0004 (meters)	Kit, component cables, std temp. (includes coil + I. S. electrode)	Coil Intrinsically safe blue electrode	518243 518245
Extended temperature (-50 °C to 125 °C)			
08732-0065-1001 (feet)	Kit, component cables, ext temp. (includes coil + electrode)	Coil Electrode	840310 518189
08732-0065-1002 (meters)	Kit, component cables, ext temp. (includes coil + electrode)	Coil Electrode	840310 518189
08732-0065-1003 (feet)	Kit, component cables, ext temp. (includes coil + I. S. electrode)	Coil Intrinsically safe blue electrode	840310 518189
08732-0065-1004 (meters)	Kit, component cables, ext temp. (includes coil + I. S. electrode)	Coil Intrinsically safe blue electrode	840310 518189



Table 10. Combination Cable Kits

Coil and electrode cable (-20 °C to 80 °C)	
Cable kit number	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)(33-ft. continuous)
08732-0065-3002 (meters)	

Specifications

The tables below outline some of the basic performance, physical, and functional specifications of the Rosemount 8750W Magnetic Flowmeter. [Table 11](#) provides an overview of the Rosemount 8750W Transmitters available. [Table 12](#) provides an overview of the Rosemount 8750W Sensors available.

Table 11. Transmitter Specifications

Transmitter	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	Page 17	Page 7
	Wall mount ⁽¹⁾⁽²⁾	Remote	0.5% Standard 0.25% High Accuracy Option	Global AC or DC	Dedicated 15-Button LOI	HART	Basic, DA1, DA2	Page 21	Page 7

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 12. Sensor Specifications


Sensor	Style	Base accuracy	Line sizes	Design features	Detailed specifications	Ordering information
	Flanged	0.5% Standard 0.25% High Accuracy Option	¹ / ₂ - to 48-in. (15 mm to 1200 mm)	Standard design	Page 25	Page 7

Table 13. Lining Material Selection


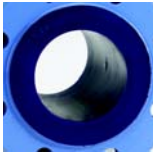
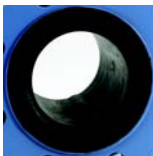
Liner material	General characteristics
PTFE 	<ul style="list-style-type: none"> • Chemical resistance • Excellent high temperature capabilities • -20 to 248 °F (-29 to 120 °C)
Polyurethane 	<ul style="list-style-type: none"> • Limited chemical resistance • Excellent abrasion resistance for slurries with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

Table 14. Electrode Material Selection

Electrode material	General characteristics
316L Stainless Steel	<ul style="list-style-type: none"> • Good corrosion resistance • Good abrasion resistance • Not recommended for sulfuric or hydrochloric acids
Nickel Alloy 276 (UNS N10276)	<ul style="list-style-type: none"> • Better corrosion resistance • High strength • Good in slurry applications • Effective in oxidizing fluids
Electrode type	General characteristics
Standard Measurement	<ul style="list-style-type: none"> • Lowest cost • Good for most applications
Measurement + Reference Electrode (Also see Table 15 and Table 16 for grounding options and installation)	<ul style="list-style-type: none"> • Low cost grounding option especially for large line sizes • Minimum conductivity of 100 microSiemens/cm • Not recommended for electrolytic or galvanic corrosion applications
Bulletnose	<ul style="list-style-type: none"> • Extended head protrudes into the flow stream for self-cleaning • Best option for coating processes

Table 15. Process Reference Option

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

Table 16. 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

500 mA

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

Line power fuses

90-250 VAC systems

1A, 250V, I²t ≥ 1.5 A²s Rating, Fast Acting

Bussman AGC-1, Littelfuse 31201.5HXP

12-42 VDC systems

3 Amp, 250V, I²t ≥ 14 A²s Rating, Fast Acting

Bel Fuse 3AG 3-R, Littelfuse 312003P, Schurter 0034.5135

Power consumption

15 W maximum - DC

40 VA maximum - AC

Switch-on current

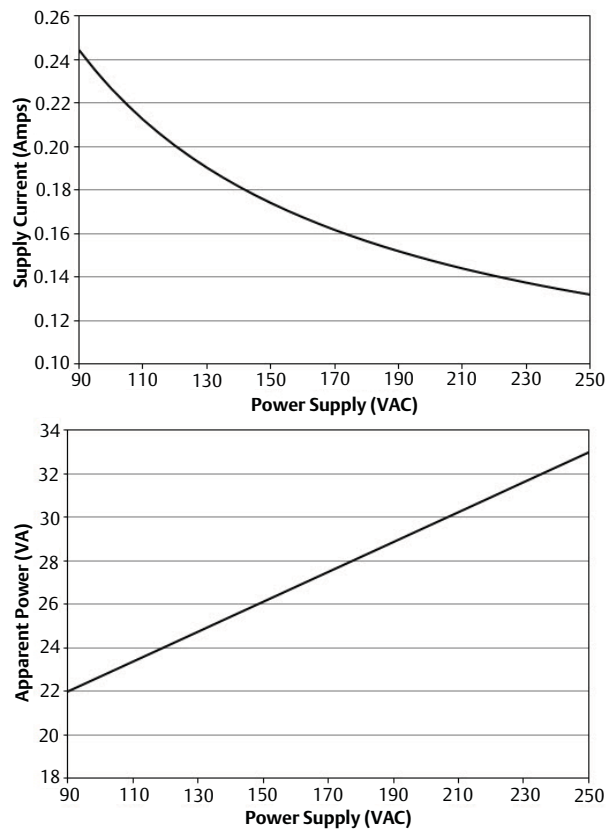
AC: Maximum 35.7 A (< 5 ms) at 250 VAC

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

AC power supply requirements

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

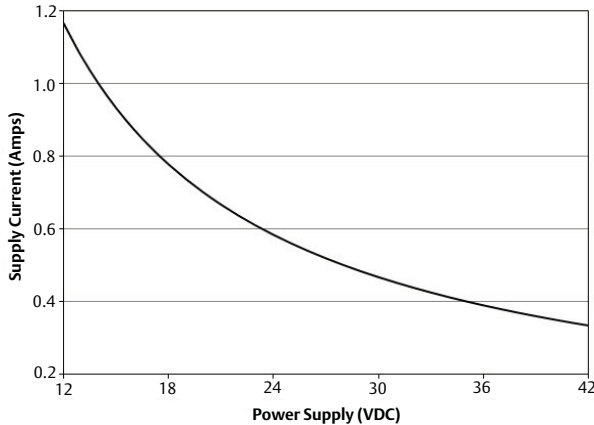
Figure 2. Field Mount Transmitter AC Power Requirements



DC supply current requirements

Units powered by 12 VDC power supply may draw up to 1.2 A 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

Five minutes to rated accuracy from power up

Five seconds from power interruption

Start-up time

50 ms 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
- 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)
- 4-20 mA loop verification

Output signals

Analog output adjustment

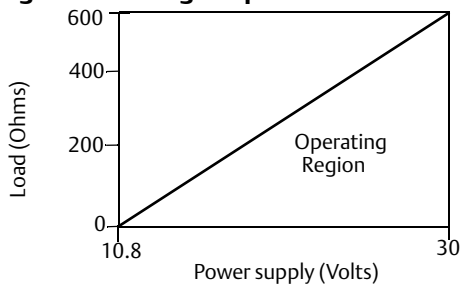
4-20 mA, switch-selectable as internally or externally powered.

Analog loop load limitations

Internally powered 24 VDC max, 500 Ω max loop resistance.
Externally powered 10.8-30 VDC 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} = Power supply voltage (Volts)
 R_{\max} = Maximum loop resistance (Ohms)

The analog output is automatically scaled to provide 4 mA at lower range value and 20 mA 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 4–20 mA signal and is available for the control system interface. A minimum of 250 Ω loop resistance is required for HART Communications.

Scalable pulse frequency adjustment

0-10,000 Hz, 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 12 VDC

Externally powered: Input 5 - 28 VDC

Output testing

Analog output test

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

Pulse output test

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

Optional discrete output function (AX option)

Externally powered at 5 - 28 VDC, 240 mA 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 5–28 VDC, 1.4–20 mA 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 three 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

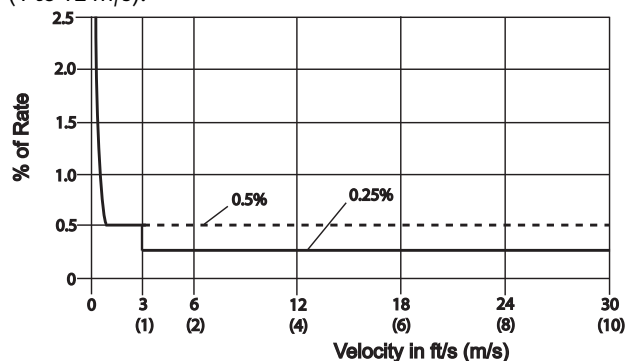
System specifications are given using the frequency output and with the unit at reference conditions.

Accuracy

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

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



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

2G per IEC 61298

Dimensions

See [Figure 9](#).

Weight

Approximately seven lbs. (3.2 kg).

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



Rosemount 8750W Wall Mount Transmitter Specifications

Functional specifications

Transmitter coil drive current

500 mA

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

Line power fuses

90-250 VAC systems

2 Amp, Fast Acting, Bussman AGC-2

12-42VDC systems

3 Amp, Fast Acting, Bussman AGC-3

Power consumption

15 W maximum - DC

40 VA maximum - AC

Switch-on current

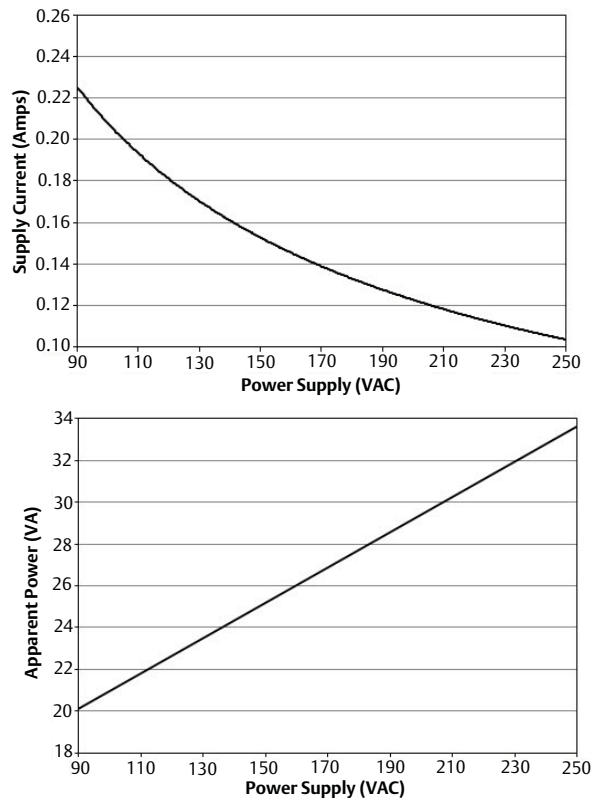
AC: Maximum 35.7 A (< 5 ms) at 250 VAC

DC: Maximum 42 A (< 5 ms) at 4 2VDC

AC power supply requirements

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

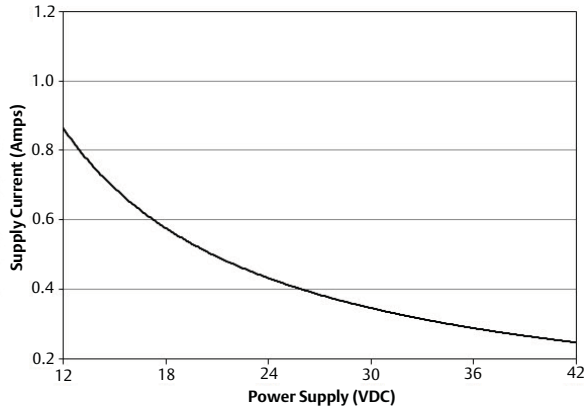
Figure 5. Wall Mount Transmitter AC Power Requirements



DC supply current requirements

Units powered by 12V DC 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

- Five minutes to rated accuracy from power up.
- Five seconds from power interruption.

Start-up time

50 ms 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.

Ovrange 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 zero 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)
- 4-20 mA loop verification

Output signals

Analog output adjustment

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

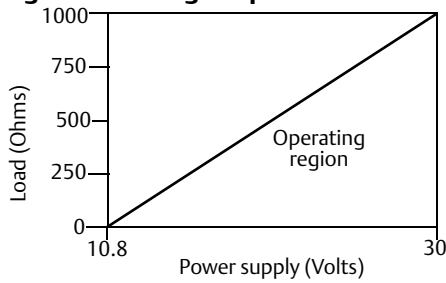
Analog loop load limitations

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

Externally powered 10.8-30 VDC max.

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

Figure 7. Analog Loop Load Limitations



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

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

$$R_{\max} = \text{Maximum loop resistance (Ohms)}$$

The analog output is automatically scaled to provide 4mA at lower range value and 20 mA 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 Ω loop resistance is required for HART communications.

Scalable pulse frequency adjustment

0-10,000 Hz
 Pulse value can be set to equal desired volume in selected engineering units. Pulse width adjustable from 1.5 to 500 ms. Below 1.5 msec pulse width automatically switches to 50% duty cycle.

Externally powered: Input 5 – 24 VDC

Output testing

Analog output test

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

Pulse output test

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

Optional discrete output function (AX option)

Externally powered at 5–28 VDC, 240 mA 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– 28 VDC, 1.4–20 mA 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.

Rosemount 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

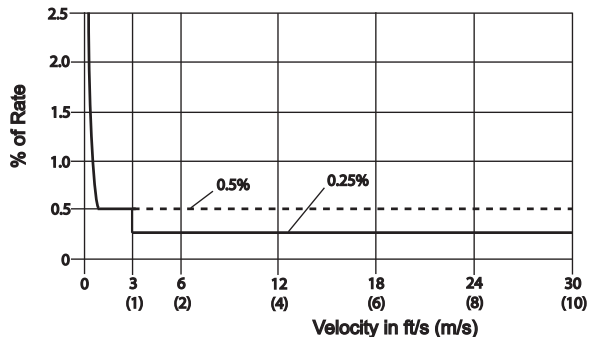
System specifications are given using the frequency output and with the unit at reference conditions.

Accuracy

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

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



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

2G per IEC 770 (1984)

Dimensions

See [Figure 11](#).

Weight

Approximately nine lbs. (4.0 kg).

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



Rosemount 8750W Sensor Specifications

Functional specifications

Service

Utility, water, and wastewater fluids

Line sizes

1/2- to 48-in. (15 mm to 1200 mm)

Sensor coil resistance

9 - 17 Ω

Interchangeability

Rosemount 8750W Sensors are interchangeable with Rosemount 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 17](#), [Table 18](#) and [Table 19](#)

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-in. (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 Rosemount 8750W Sensor is rated IP68. IP68 rating requires the transmitter 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 EmersonProcess.com/Rosemount.

Conductivity limits

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

Table 17. Sensor Temperature vs. Pressure Limits for ASME B16.5 Class Flanges (1/2- to 24-in. Line Sizes)⁽¹⁾

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 18. Sensor Temperature vs. Pressure Limits for AS2129 Table D and E Flanges (4- to 24-in. Line Sizes)⁽¹⁾

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 psi	203.1 psi

1. Liner temperature limits must also be considered.

Table 19. Sensor Temperature Vs. Pressure Limits for EN 1092-1 Flanges (15 mm to 600 mm Line Sizes)⁽¹⁾

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 20. Temperature vs. Pressure Limits for GB/T 9119 Flanges⁽¹⁾

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 21. Temperature vs. Pressure Limits for JIS B2220 Flanges⁽¹⁾

Flange material	Flange rating	Pressure (Mpa)	
		≤ 50 °C (122 °F)	@ 120 °C (248 °F)
Carbon steel	10K	1.4	1.4
304 stainless steel (15 mm to 65 mm)	10K	1.4	1.4
304 stainless steel (≤ 80 mm)	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- to 24-in. (15 mm to 600 mm)

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

AWWA C207

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

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

Class F: 30- and 36-in. (750 mm to 900 mm)

EN 1092-1

PN10: 8- to 24-, 36-, 40-, 48-in. (200 mm to 600 mm, 900 mm, 1000 mm, 1200 mm)

PN16: 2- to 24-, 36-, 40- (50 mm to 600 mm, 900 mm, 1000 mm)

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

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

AS2129

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

AS4087

PN16, PN21: 2- to 40-, 48-in. (8-in. excluded) (50 mm to 1000 mm, 1200 mm)

PN35: 2- in 36-in. (8-in. excluded)(50 mm to 900 mm)

GB/T9119

PN10: 8- and 24-, 36-, 40-, 48-in. (200 mm to 600 mm, 900 mm, 1000 mm, 1200 mm)

PN16: 4- and 24-, 36-, 40-in. (100 mm to 600 mm, 900 mm, 1000 mm)

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

JIS B2220

10K, 20K: 1/2- to 24-in. (15 mm to 600 mm)

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 [Figure 16](#).

Dimensions

See [Figure 16](#).

Weight

See [Table 31](#).










Product Certifications

Table 22. Rosemount 8750W Magnetic Flowmeter Platform

Option code	8750W Magnetic Flowmeter platform rating	Region	Agency	Certification number
-	Ordinary Locations ⁽¹⁾	USA, Canada EU, CU ⁽²⁾	FM or CSA and EAC	3030548(FM) or 70030489(CSA)
Z1	ATEX Non-Sparking and Dust for Non-Flammable Fluids	EU	DEKRA	15ATEX0003 X
ND	ATEX Dust	EU	DEKRA	15ATEX0003 X
Z2	InMetro Non-Sparking and Dust for Non-Flammable Fluids	Brazil	PENDING ⁽³⁾	PENDING
Z3	NEPSI Non-Sparking and Dust for Non-Flammable Fluids	China	NEPSI	GYJ15.1228X
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, NI	USA and Canada	CSA	70030489
Z7	IECEX Non-Sparking and Dust for Non-Flammable Fluids	Global	DEKRA	IECEX DEK 15.0001X
NF	IECEX Dust	Global	DEKRA	IECEX DEK 15.0001X
Z9	KTL Non-Sparking and Dust for Non-Flammable Fluids	Korea	KTL ⁽³⁾	PENDING

1. 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.
2. Customs union (Russia, Belarus and Kazakhstan).
3. Planned submittal or in process with agency.

Table 23. Approval Markings and Logos

Symbol ⁽¹⁾	Marking or symbol name	Region	Meaning of marking or symbol
	CE	European Union	Compliance with all applicable European Union Directives.
	ATEX	European Union	Compliance with equipment and protective systems intended for use in potentially explosive atmospheres directive (ATEX) (94/9/EC).
	C-tick	Australia	Compliance with Australian applicable electromagnetic compatibility standards.
	FM Approved	United States	Compliance with the applicable ANSI standards.
	CSA	US = United States C = Canada	Indicates that the product was tested and has met the applicable certification requirements for the noted countries.
	Eurasian Conformity (EAC)	Eurasian Customs Union (Russia, Belarus and Kazakhstan)	Compliance with all of the applicable technical regulations of the EAC customs union.
	INMETRO	Brazil	Compliance with all of the applicable technical regulations of Brazil.
	NEPSI	China	Compliance with all of the applicable technical regulations of China.
	KTL	Korea	Compliance with all of the applicable technical regulations of Korea.

1. 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 EmersonProcess.com/Rosemount.

Electro Magnetic Compatibility (EMC) (2004/108/EC) and (2014/30/EU)

EN 61326-1: 2013

Low Voltage Directive (LVD) (2006/95/EC) and (2014/35/EU)

EN 61010-1: 2010

Ingress protection rating for dust and water;

Degree of protection, per EN-IEC 60079-0 and EN-IEC 60529: IP66⁽¹⁾

Degree of protection, per EN-IEC 60079-0 and EN-IEC 60529: IP66, IP68 (10m, 48h)⁽²⁾

Degree of protection, per EN-IEC 60079-0 and ISO 20653: IP69K⁽³⁾

1. The Transmitter is rated IP66 when integral or remote mounted, it is not IP68 nor IP69K rated.
2. The IP68 rating only applies to the flowtube and the remote junction box when the transmitter is remotely mounted. The IP68 rating is only valid at a depth of 10 meters for 48 hours.
3. The IP69K rating only applies to the flowtube and the remote junction box when the transmitter is remotely mounted. The temperature K = 80 °C.

European Pressure Equipment Directive (PED) (97/23/EC) and (2014/68/EU)

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 and 2014/68/EU)”

Mandatory CE-marking with notified body number 0575 or 2460, 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

Rosemount 8750W Flanged Flowtubes

Line size 40 mm to 600 mm (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 Flanged Flowtubes - line sizes of 25 mm (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).

Rosemount 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:
 $T5 -29^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$
Enclosure Type 4X, IP66/68 (IP68 flowtube only with Remote mount transmitter)
Install per drawing 8750W-1052.

Special Condition for Safe Use (X):

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

Rosemount 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:
 $T4 -29^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$
Enclosure Type 4X, IP66/68 (IP68 flowtube only)
Install per drawing 8750W-1052.

Special Condition for Safe Use (X):

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

CSA

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).

Rosemount 8750W Magnetic Flowtube and Transmitter

- Z6** Non-Incendive for Class I, Division 2, Groups ABCD: T4
Dust-Ignition Proof for Class II/III, Division 1, Groups EFG:
 $T4 -29^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$ (Transmitter mount codes T or R)
 $-29^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$ (Transmitter mount code W)
Enclosure Type 4X, IP66/68/69K⁽¹⁾
Install per drawing 8750W-1052.

Special Condition for Safe Use (X):

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

1. *The Transmitter is rated IP66 when integral or remote mounted, it is not IP68 nor IP69K rated. The IP68 rating only applies to the flowtube and the remote junction box when the transmitter is remotely mounted. The IP68 rating is only valid at a depth of 10 meters for 48 hours. The IP69K rating only applies to the flowtube and the remote junction box when the transmitter is remotely mounted. The temperature K = 80 °C.*

Figure 8. Rosemount 8750W Declaration of Conformity

		
<h2>EC Declaration of Conformity</h2>		
<p>No: RFD 1098 Rev. G</p>		
<p>We,</p>		
<p>Emerson Process Management Rosemount Flow 12001 Technology Drive Eden Prairie, MN 55344 USA</p>		
<p>declare under our sole responsibility that the product(s),</p>		
<p>Rosemount Model 8750W Magnetic Flowmeters</p>		
<p>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.</p>		
<p>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.</p>		
 <hr/> <p>(signature)</p>		<p>22 February 2016</p> <hr/> <p>(date of issue)</p>
<p>Mark Fleigle</p> <hr/> <p>(name - printed)</p>		<p>Vice President Technology and New Products</p> <hr/> <p>(function name - printed)</p>
<p>F FILE ID: 8750W CE Marking</p>	<p>Page 1 of 3</p>	<p>RFD1098.docx</p>

**ROSEMOUNT**

Schedule

EC Declaration of Conformity RFD 1098 Rev. G

LVD Directive (2006/95/EC) and (2014/35/EU) as of 20 April 2016

All Models: EN 61010-1: 2010

EMC Directive (2004/108/EC) and (2014/30/EU) as of 20 April 2016

All Models: EN 61326-1: 2013

PED Directive (97/23/EC) and (2014/68/EU) as of 19 July 2016

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

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) or (2014/68/EU)

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

Model 8750W in Line Sizes 0.5" – 1.0"

Sound Engineering Practice
ASME B31.3: 2010



Schedule

EC Declaration of Conformity RFD 1098 Rev. G

ATEX Directive (94/9/EC) and (2014/34/EU) as of 20 April 2016

Model 8750W Magnetic Flow Transmitter and Flow Tubes

CERTIFICATE: DEKRA 15ATEX0003 X

Equipment Marking Summary:



II 3 G	Ex nA [ic] IIC T4 Gc
II 3 G	Ex nA ic IIC T5...T4 Gc
II 3 D	Ex tc IIIC T 80°C...T 130°C Dc

EN 60079-0: 2012 +A11:2013
 EN 60079-15: 2010

EN 60079-11: 2012
 EN 60079-31: 2014

PED Notified Body

DNV GL [Notified Body Number: 0575]
 Veritasveien 1, N-1322
 Hovik, Norway

Or

DNV Nemko Presafe AS [Notified Body number: 2460]
 P.O. Box 73, Blindern
 0314 Oslo, Norway

IEC EC and ATEX Approval Information

Equipment markings⁽¹⁾

Type Examination Certificate

(ATEX)DEKRA 15ATEX0003 X

Certificate of Conformity (IECEX)

IECEX DEK 15.0001X

Required documentation

8750W-2052 Installation Drawing Model 8750W ATEX/IECEX Hazardous (Ex) Locations

Referenced documentation

- 00825-0300-4750.pdf, Quick Start Guide
- 00809-0300-4750.pdf, Reference Manual
- 8750W-AP01, Approvals Document
- 8750W-1504 Installation Drawing, Rosemount 8750W Transmitter Wiring

The Required and Referenced Documents listed above address the following items:

- a. Instructions for safety i.e.
 - Putting into service
 - Use
 - Assembling and dismantling
 - Maintenance, overhaul and repair
 - Installation
 - Adjustment
- b. Where necessary, training instructions
- c. Details which allow a decision to be made as to whether the equipment can be used safely in the intended area under the expected operating conditions.

- d. Electrical parameters, maximum surface temperatures and other limit values.
 - Electrical - See document 8750W-2052

Rosemount 8750W Flow Transmitter	
Power input	90–250 VAC, 0.45 A, 40 VA 12–42 VDC, 1.2 A, 15 W
Pulsed circuit	Internally powered (Active): outputs up to 12 VDC, 12.1 mA, 73 mW Externally powered (Passive): input up to 28 VDC, 100 mA, 1 W
4–20 mA output circuit	Internally Powered (Active): outputs up to 25 mA, 24 VDC, 600 mW Externally Powered (Passive): input up to 25 mA, 30 VDC, 750 mW
Modbus®	Internally Powered (Active): outputs up to 100 mA, 3.3 VDC, 100 mW
Um	250 V
Coil excitation output	500 mA, 40 V _{max} , 9 W _{max}
Rosemount 8750W Flowtube ⁽¹⁾	
Coil excitation input	500 mA, 40 V _{max} , 20 W _{max}
Electrode	5 V, 200 µA, 1 mW

1. Provided by the transmitter.

Special Conditions for Safe Use (X):

1. When “Special Paint Systems” are applied, instructions for safe use regarding potential electrostatic charging hazard have to be followed.
 2. Terminals 1,2,3,4, for data communication, cannot withstand the 500 V isolation test between signal and ground, due to integral transient protection. This must be taken into account upon installation.
 3. Conduit entries must be installed to maintain the enclosure ingress rating of IP66 (Transmitter and Flow Tube), IP68 or IP69K (Flow Tube) as applicable.
 4. The flow tube and transmitter are not allowed to be thermally insulated.
- e. Where necessary, the essential characteristics of tools which may be fitted to the equipment
 - No proprietary tools required.

1. See section VI in the tables on the following pages.

- f. List of the standards, including the issue date, with which the equipment is declared to comply:
 - ATEX - EN 60079-0:2012 + A11:2013,
EN 60079-11:2012,
EN 60079-15:2010,
EN 60079-31:2014
 - IECEx - IEC 60079-0:2011,
IEC 60079-11:2011,
IEC 60079-15:2010,
IEC 60079-31: 2013
- g. Supply wire requirements;
 - Use 10 - 18 AWG wire rated for the proper temperature of the application. For wire 10 - 14 AWG use lugs or other appropriate connectors. For connections in ambient temperatures above 122 °F (50 °C), use a wire rated for 194 °F (90 °C).
- h. Contact address:
Rosemount Inc.
12001 Technology Drive
Eden Prairie,
MN 55344
United States of America

Table 24. Nomenclature Magnetic Flow Meter System Model 8750W and Electrical Data

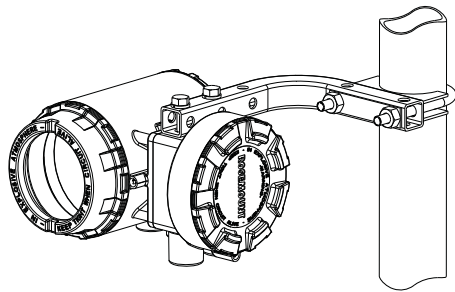
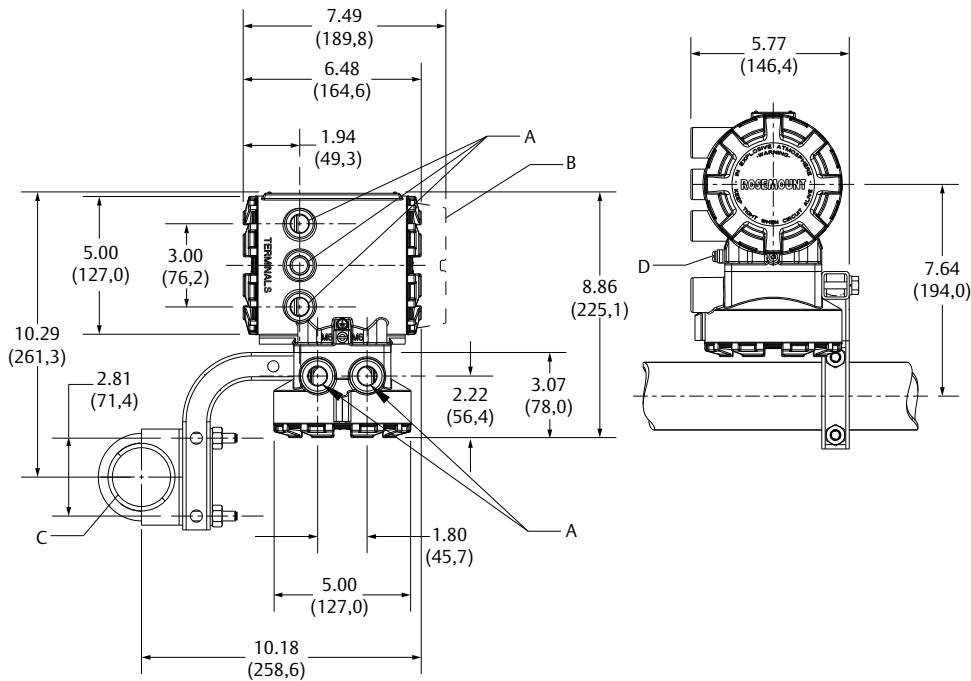
8750W ... R 1 A 2 ... F 005 ... Z1 ... M4 ... AX ... V1 ... RH50
 I II III IV V VI VII VIII IX X XI IX

Designation	Explanation	Value	Explanation
I	Model	8750W	Flow Meter System Model 8750W
II	Transmitter mount	R T	Remote mount Integral mount
III	Transmitter power supply	1 2	AC (90–250 Vac, 50/60 Hz), not for Ex nA DC (12–42 Vdc)
IV	Transmitter outputs	A M 0	4–20 mA with digital HART Protocol & scalable pulse output Modbus RS-485 Spare flow tube, no transmitter
V	Conduit entries	1 or 4 2 or 5	½–14 NPT female CM20, M20 female
VI	Electrode type	A, B, E, F 0	Seal of electrodes comply with IEC 61010-1. Spare transmitter, no flow tube
VII	Line size	005 to 480 000	½-in. NPS (15 mm) to 48-in. NPS (1200 mm) Spare transmitter, no flow tube
VIII	Safety approvals	Z1 ATEX	⊕ II 3 GEx nA [ic] IIC T4 Gc ⁽¹⁾ ⊕ II 3 GEx nA ic IIC T5...T4 Gc ⁽²⁾ ⊕ II 3 DEx tc IIIC T80 °C...T130 °C Dc ⁽³⁾
		Z7 IECEx	Ex nA [ic] IIC T4 Gc ⁽¹⁾ Ex nA ic IIC T5...T4 Gc ⁽²⁾ Ex tc IIIC T80 °C...T130 °C Dc ⁽³⁾
		ND ATEX	⊕ II 3 DEx tc IIIC T80 °C...T130 °C Dc ⁽³⁾
		NF IECEx	Ex tc IIIC T80 °C...T130 °C Dc ⁽³⁾
IX	Transmitter display	M4 M5	LOI Display
X	Transmitter discrete input/output	AX	Two discrete channels (DI/DO 1, DO 2)
XI	Specials paint	Vx	Special paint systems ⁽⁴⁾
XII	Remote cable option	RTxx ⁽⁵⁾	Standard temperature component
		RHxx ⁽⁵⁾	Extended temperature component

1. Model Rosemount 8750W Transmitter DC Power Supply only.
2. Model Rosemount 8750W Flow Tube only.
3. Model Rosemount 8750W Transmitter AC and DC Power Supply and Model Rosemount 8750W Flow Tube.
4. Subject to special conditions for safe use.
5. Length = xx*10-ft, max. 500-ft.

Dimensional Drawings

Figure 9. Rosemount 8750W Field Mount Transmitter



- A. 1/2-in.-14 NPT or M20 conduit entry
- B. LOI cover

- C. 2-in. pipe bracket
- D. Ground lug

Figure 10. Rosemount 8750W Integral Field Mount Transmitter

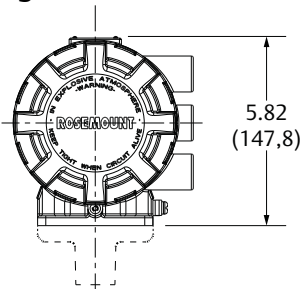
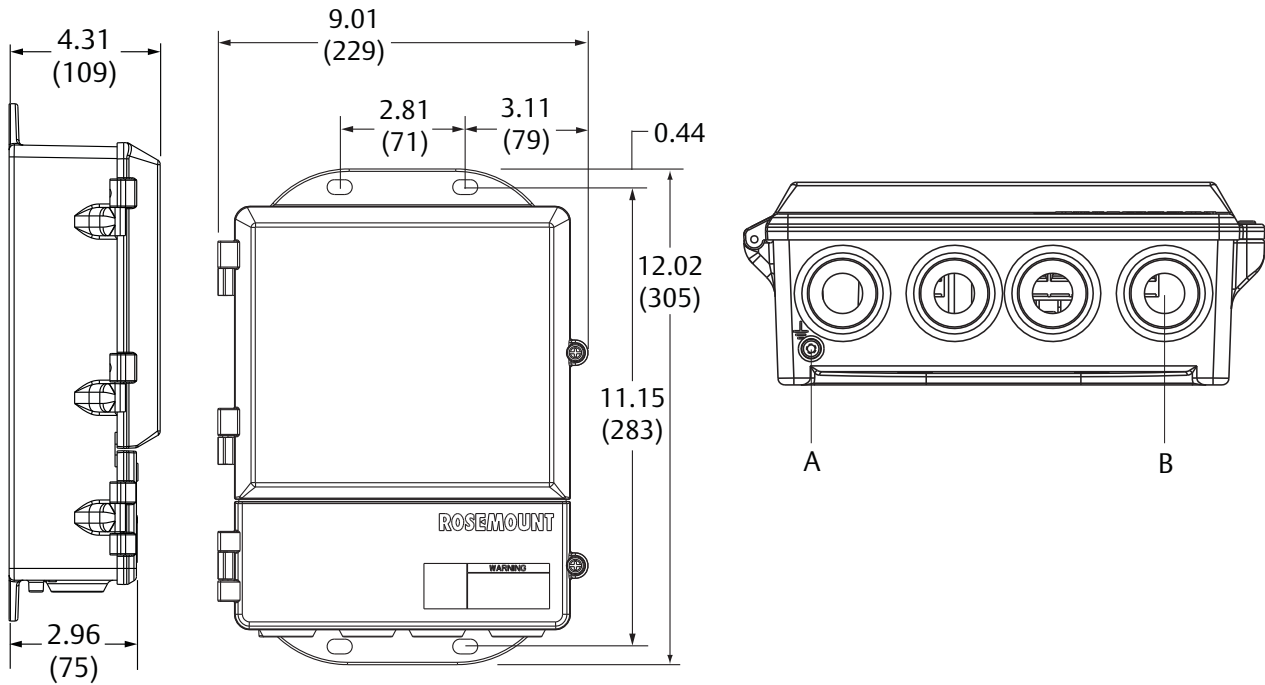


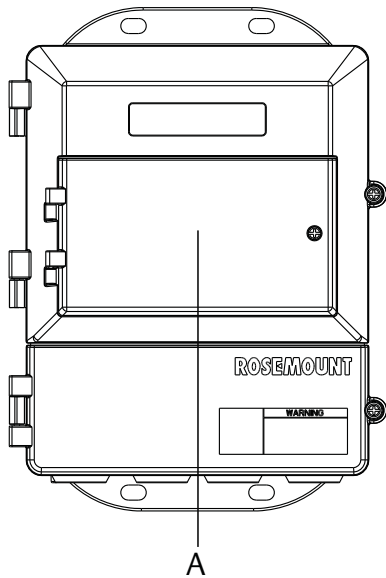
Figure 11. Rosemount 8750W Wall Mount Transmitter with Standard Cover



- A. Ground lug
- B. 1/2-in.-14 NPT conduit connection (four places)

Dimensions in inches (millimeters).

Figure 12. Rosemount 8750W Wall Mount Transmitter with LOI Cover



- A. LOI keypad cover

Figure 13. Rosemount 8750W Raised Face Flanged Sensor 1/2-in to 2.5-in. (15 mm to 65 mm)

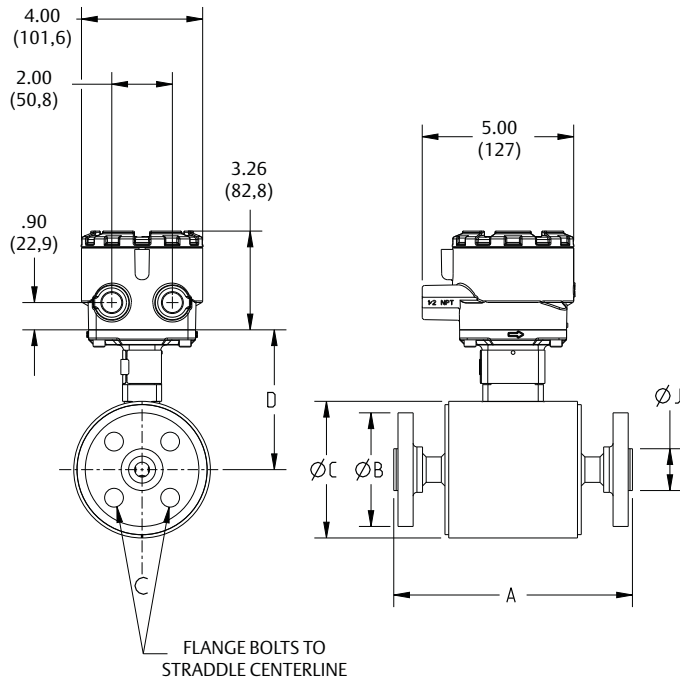


Table 24. Rosemount 8750W Raised Face Flanged Sensor 1/2- to 2 1/2-in. (15 mm to 65 mm) Dimensions

Size, description	Overall length			FLANGE Ø DIM "B"	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					
0.5-in. (15 mm) ASME - 150, SO/RF	7.88 (200)	7.88 (200)	7.88 (200)	3.50 (89)	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)	3.74 (95)	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)	3.74 (95)	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)	3.74 (95)	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)	3.74 (95)	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)	3.74 (95)	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)	3.74 (95)	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)	3.74 (95)	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)	4.25 (108)	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)	4.88 (124)	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)	4.53 (115)	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)	4.53 (115)	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)	4.53 (115)	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)	4.92 (125)	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)	4.92 (125)	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)	4.53 (115)	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)	5.00 (127)	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)	6.12 (155)	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)	5.91 (150)	5.21 (132)	4.82 (122)	3.46 (88)	19 (9)

Table 24. Rosemount 8750W Raised Face Flanged Sensor 1/2- to 2 1/2-in. (15 mm to 65 mm) Dimensions

Size, Description	Overall length			FLANGE Ø DIM "B"	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					
1.5-in. (40 mm) AS 2129 Table D, SO/RF	7.87 (200)	7.80 (198)	7.87 (200)	5.31 (135)	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)	5.31 (135)	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)	5.51 (140)	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)	5.51 (140)	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)	5.91 (150)	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)	6.00 (152)	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)	6.50 (165)	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)	6.50 (165)	5.21 (132)	4.82 (122)	4.02 (102)	24 (11)
2-in. (50 mm) AS 2129 Table D, SO/RF	7.87 (200)	7.80 (198)	7.87 (200)	5.91 (150)	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)	5.91 (150)	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)	6.10 (155)	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)	6.10 (155)	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)	5.91 (150)	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)	6.50 (165)	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)	6.50 (165)	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)	6.50 (165)	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	7.00 (178)	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	7.50 (191)	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	7.28 (185)	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	7.28 (185)	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	6.50 (165)	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	6.50 (165)	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	6.89 (175)	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	6.89 (175)	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	6.50 (165)	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	7.28 (185)	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	7.28 (185)	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	7.28 (185)	6.31 (160)	5.37 (136)	4.80 (122)	31 (14)

Figure 14. Rosemount 8750W Raised Face Flanged Sensor 3-in to 48-in. (75 mm to 1200 mm)

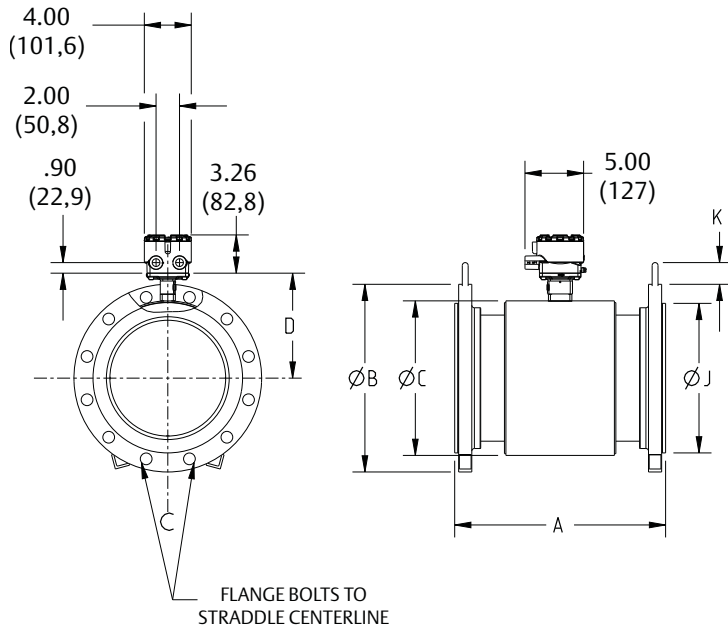


Table 25. Rosemount 8750W Raised Face Flanged Sensor 3- to 6-in. (75 mm to 150 mm) Dimensions

Size, description	Overall length			FLANGE Ø DIM "B"	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)	7.50 (191)	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)	8.25 (210)	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)	7.87 (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)	7.28 (185)	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)	7.28 (185)	7.21 (183)	5.82 (148)	4.80 (122)	1.70 (43)	25 (11)
3-in. (80 mm) JIS - 10K, SO/RF	7.87 (200)	7.75 (197)	7.87 (200)	7.28 (185)	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)	7.87 (200)	7.21 (183)	5.82 (148)	5.20 (132)	1.70 (43)	34 (16)
3-in. (80 mm) AS 4087 PN16, SO/RF	7.87 (200)	7.75 (197)	7.87 (200)	7.28 (185)	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)	8.07 (205)	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)	8.07 (205)	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)	7.87 (200)	7.21 (183)	5.82 (148)	5.43 (138)	1.70 (43)	37 (17)
4-in. (100 mm) ASME - 150, SO/RF	9.84 (250)	9.69 (246)	9.84 (250)	9.00 (229)	7.91 (201)	6.17 (157)	6.19 (157)	1.70 (43)	45 (20)
4-in. (100 mm) ASME - 300, SO/RF	10.88 (276)	10.73 (273)	10.88 (276)	10.00 (254)	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)	8.66 (220)	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)	9.25 (235)	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)	8.46 (215)	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)	8.46 (215)	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)	8.27 (210)	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)	8.86 (225)	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)	8.46 (215)	7.91 (201)	6.17 (157)	6.06 (154)	1.70 (43)	28 (13)

Table 25. Rosemount 8750W Raised Face Flanged Sensor 3- to 6-in. (75 mm to 150 mm) Dimensions

Size, description	Overall length			FLANGE Ø DIM "B"	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						
4-in. (100 mm) AS 4087 PN21, SO/RF	9.84 (250)	9.69 (246)	9.84 (250)	9.05 (230)	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)	9.05 (230)	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)	8.66 (220)	7.91 (201)	6.17 (157)	6.22 (158)	1.70 (43)	41 (19)
4-in. (100 mm) GB/T9119 PN40, SO/RF	9.84 (250)	9.69 (246)	9.84 (250)	9.25 (235)	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	10.00 (254)	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	11.00 (279)	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	9.84 (250)	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	10.63 (270)	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	10.04 (255)	9.61 (244)	7.02 (178)	7.32 (186)	1.70 (43)	43 (20)
5-in. (125 mm) AS 2129 Table E, SO/RF	9.79 (249)	9.71 (247)	N/A	10.04 (255)	9.61 (244)	7.02 (178)	7.31 (186)	1.70 (43)	44 (20)
5-in. (125 mm) JIS - 10K, SO/RF	9.79 (249)	9.71 (247)	N/A	9.84 (250)	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	10.63 (270)	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	9.84 (250)	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	10.63 (270)	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)	11.00 (279)	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)	12.50 (318)	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)	11.22 (285)	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 (332)	12.88 (327)	13.00 (330)	11.81 (300)	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)	11.02 (280)	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)	11.02 (280)	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)	11.02 (280)	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)	12.01 (305)	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)	11.02 (280)	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)	12.01 (305)	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)	12.01 (305)	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)	11.22 (285)	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 (332)	12.88 (327)	13.00 (330)	11.81 (300)	9.98 (253)	7.30 (185)	8.58 (218)	1.70 (43)	94 (43)

Table 26. Rosemount 8750W Raised Face Flanged Sensor 8- to 12-in. (200 mm to 300 mm) Dimensions

Size, description	Overall length			FLANGE Ø DIM "B"	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)	13.50 (343)	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)	15.00 (381)	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)	13.39 (340)	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)	13.39 (340)	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)	14.17 (360)	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)	14.76 (375)	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)	13.19 (335)	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)	13.19 (335)	11.92 (303)	8.27 (210)	10.39 (264)	1.70 (43)	86 (39)

Table 26. Rosemount 8750W Raised Face Flanged Sensor 8- to 12-in. (200 mm to 300 mm) Dimensions

Size, description	Overall length			FLANGE Ø DIM "B"	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) JIS - 10K, SO/RF	13.78 (350)	13.53 (344)	13.65 (347)	12.99 (330)	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)	13.78 (350)	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)	13.19 (335)	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)	14.57 (370)	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)	14.57 (370)	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)	13.39 (340)	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)	13.39 (340)	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)	14.76 (375)	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)	16.00 (406)	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)	17.50 (445)	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)	15.55 (395)	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)	15.94 (405)	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)	16.73 (425)	13.12 (333)	8.91 (226)	13.19 (335)	2.00 (51)	158 (72)
10-in. (250 mm) EN 1092-1 - PN40, SO/RF	17.98 (457)	17.61 (447)	17.73 (450)	17.72 (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)	15.94 (405)	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)	15.94 (405)	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)	15.75 (430)	13.12 (333)	8.91 (226)	12.76 (324)	2.00 (51)	118 (53)
10-in. (250 mm) AS 4087 PN16, SO/RF	17.98 (457)	17.61 (447)	17.73 (450)	15.94 (405)	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)	16.93 (395)	13.12 (333)	8.91 (226)	13.74 (349)	2.00 (51)	258 (117)
10-in. (250) AS 4087 PN35, SO/RF	17.88 (454)	17.61 (447)	17.73 (450)	16.93 (395)	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)	15.55 (395)	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)	15.94 (405)	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)	17.72 (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)	19.00 (483)	15.12 (384)	9.91 (252)	15.00 (381)	2.00 (51)	238 (108)
12-in. (300 mm) ASME - 300,SO/RF	19.92 (506)	19.58 (497)	19.70 (500)	20.50 (521)	15.12 (384)	9.91 (252)	15.00 (381)	2.00 (51)	346 (157)
12-in. (300 mm) EN 1092-1 - PN10, SO/RF	19.91 (506)	19.58 (497)	19.70 (500)	17.52 (445)	15.12 (384)	9.91 (252)	14.57 (370)	2.00 (51)	187 (85)
12-in. (300 mm) EN 1092-1 - PN16, SO/RF	19.91 (506)	19.58 (497)	19.70 (500)	18.11 (460)	15.12 (384)	9.91 (252)	14.88 (378)	2.00 (51)	198 (90)
12-in. (300 mm) EN 1092-1 - PN25, SO/RF	19.91 (506)	19.58 (497)	19.70 (500)	19.09 (485)	15.12 (384)	9.91 (252)	15.55 (395)	2.00 (51)	243 (110)
12-in. (300 mm) EN 1092-1 - PN40, SO/RF	19.92 (506)	19.58 (497)	19.70 (500)	20.28 (515)	15.12 (384)	9.91 (252)	16.14 (410)	2.00 (51)	340 (154)
12-in. (300 mm) AS 2129 Table D, SO/RF	19.91 (506)	19.58 (497)	19.70 (500)	17.91 (455)	15.12 (384)	9.91 (252)	14.88 (378)	2.00 (51)	185 (84)
12-in. (300 mm) AS 2129 Table E, SO/RF	19.91 (506)	19.58 (497)	19.70 (500)	17.91 (455)	15.12 (384)	9.91 (252)	14.72 (374)	2.00 (51)	197 (89)
12-in. (300 mm) JIS B2220 - 10K, SO/RF	19.91 (506)	19.58 (497)	19.70 (500)	17.52 (445)	15.12 (384)	9.91 (252)	14.49 (368)	2.00 (51)	178 (81)
12-in. (300 mm) AS 4087 PN16, SO/RF	19.91 (506)	19.58 (497)	19.70 (500)	17.91 (455)	15.12 (384)	9.91 (252)	14.88 (378)	2.00 (51)	264 (120)
12-in. (300 mm) AS 4087 PN21, SO/RF	19.91 (506)	19.58 (497)	19.70 (500)	19.29 (490)	15.12 (384)	9.91 (252)	15.98 (406)	2.00 (51)	361 (164)
12-in. (300 mm) AS 4087 PN35, SO/RF	19.92 (506)	19.58 (497)	19.70 (500)	19.29 (490)	15.12 (384)	9.91 (252)	14.25 (362)	2.00 (51)	452 (205)
12-in. (300 mm) GB/T 9119 PN10, SO/RF	19.91 (506)	19.58 (497)	19.70 (500)	17.52 (445)	15.12 (384)	9.91 (252)	14.57 (370)	2.00 (51)	185 (84)
12-in. (300 mm) GB/T 9119 PN16, SO/RF	19.91 (506)	19.58 (497)	19.70 (500)	18.11 (460)	15.12 (384)	9.91 (252)	14.88 (378)	2.00 (51)	204 (92)
12-in. (300 mm) GB/T 9119 PN40, SO/RF	19.92 (506)	19.58 (497)	19.70 (500)	20.28 (515)	15.12 (384)	9.91 (252)	16.14 (410)	2.00 (51)	343 (156)

Table 27. Rosemount 8750W Raised Face Flanged Sensor 14- to 18-in. (350 mm to 450 mm) Dimensions

Size, description	Overall length			FLANGE Ø DIM "B"	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						
14-in. (350 mm) ASME - 150,SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	21.00 (533)	16.38 (416)	10.54 (268)	16.25 (413)	2.00 (51)	251 (114)
14-in. (350 mm) ASME - 300, SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	23.00 (584)	16.38 (416)	10.54 (268)	16.25 (413)	2.00 (51)	453 (205)
14-in. (350 mm) EN 1092-1 - PN10, SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	19.88 (505)	16.38 (416)	10.54 (268)	16.93 (430)	2.00 (51)	198 (90)
14-in. (350 mm) EN 1092-1 - PN16, SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	20.47 (520)	16.38 (416)	10.54 (268)	17.24 (438)	2.00 (51)	221 (100)
14-in. (350 mm) EN 1092-1 - PN25, SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	21.85 (555)	16.38 (416)	10.54 (268)	17.72 (450)	2.00 (51)	297 (135)
14-in. (350 mm) EN 1092-1 - PN40, SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	22.83 (580)	16.38 (416)	10.54 (268)	18.31 (465)	2.00 (51)	404 (183)
14-in. (350 mm) AS 2129 Table D, SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	20.67 (525)	16.38 (416)	10.54 (268)	17.24 (438)	2.00 (51)	181 (82)
14-in. (350 mm) AS 2129 Table E, SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	20.67 (525)	16.38 (416)	10.54 (268)	17.24 (438)	2.00 (51)	207 (94)
14-in. (350 mm) JIS B2220 - 10K, SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	19.29 (490)	16.38 (416)	10.54 (268)	16.26 (413)	2.00 (51)	170 (77)
14-in. (350 mm) AS 4087 PN16,SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	20.67 (525)	16.38 (416)	10.54 (268)	17.24 (438)	2.00 (51)	367 (167)
14-in. (350 mm) AS 4087 PN21, SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	21.65 (550)	16.38 (416)	10.54 (268)	18.07 (459)	2.00 (51)	409 (186)
14-in. (350 mm) AS 4087 PN35, SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	21.65 (550)	16.38 (416)	10.54 (268)	16.50 (419)	2.00 (51)	622 (282)
14-in. (350 mm) GB/T 9119 PN10, SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	19.88 (505)	16.38 (416)	10.54 (268)	16.93 (430)	2.00 (51)	192 (87)
14-in. (350 mm) GB/T 9119 PN16, SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	20.47 (520)	16.38 (416)	10.54 (268)	17.24 (438)	2.00 (51)	219 (99)
14-in. (350 mm) GB/T 9119 PN40, SO/RF	21.75 (553)	21.55 (547)	21.67 (550)	22.83 (580)	16.38 (416)	10.54 (268)	18.31 (465)	2.00 (51)	421 (191)
16-in. (400 mm) ASME - 150, SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	23.50 (597)	18.40 (467)	11.55 (293)	18.50 (470)	3.13 (80)	346 (157)
16-in. (400 mm) ASME - 300,SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	25.50 (648)	18.40 (467)	11.55 (293)	18.50 (470)	3.13 (80)	632 (287)
16-in. (400 mm) EN 1092-1 - PN10, SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	22.24 (565)	18.40 (467)	11.55 (293)	18.98 (482)	3.13 (80)	272 (123)
16-in. (400 mm) EN 1092-1 - PN16, SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	22.83 (580)	18.40 (467)	11.55 (293)	19.28 (490)	3.13 (80)	306 (139)
16-in. (400 mm) EN 1092-1 - PN25, SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	24.41 (620)	18.40 (467)	11.55 (293)	19.88 (505)	3.13 (80)	498 (226)
16-in. (400 mm) EN 1092-1 - PN40, SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	25.98 (660)	18.40 (467)	11.55 (293)	21.06 (535)	3.13 (80)	606 (275)
16-in. (400 mm) AS 2129 Table D, SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	22.83 (580)	18.40 (467)	11.55 (293)	19.25 (489)	3.13 (80)	243 (110)
16-in. (400 mm) AS 2129 Table E, SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	22.83 (580)	18.40 (467)	11.55 (293)	19.25 (489)	3.13 (80)	287 (130)
16-in. (400 mm) JIS B2220 - 10K, SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	22.05 (560)	18.40 (467)	11.55 (293)	18.70 (475)	3.13 (80)	250 (114)
16-in. (400 mm) AS 4087 PN16, SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	22.83 (580)	18.40 (467)	11.55 (293)	19.25 (489)	3.13 (80)	458 (208)
16-in. (400 mm) AS 4087 PN21,SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	24.02 (610)	18.40 (467)	11.55 (293)	20.31 (516)	3.13 (80)	603 (273)
16-in. (400 mm) AS 4087 PN35, SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	24.02 (610)	18.40 (467)	11.55 (293)	19.02 (483)	3.13 (80)	804 (364)
16-in. (400 mm) GB/T 9119 PN10, SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	22.24 (565)	18.40 (467)	11.55 (293)	18.98 (482)	3.13 (80)	241 (109)
16-in. (400 mm) GB/T 9119 PN16, SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	22.83 (580)	18.40 (467)	11.55 (293)	19.28 (490)	3.13 (80)	303 (137)
16-in. (400 mm) GB/T 9119 PN40, SO/RF	23.71 (602)	23.51 (597)	23.63 (600)	25.98 (660)	18.40 (467)	11.55 (293)	21.06 (535)	3.13 (80)	636 (289)
18-in. (450) ASME - 150, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	25.00 (635)	20.42 (519)	12.57 (319)	21.00 (533)	3.13 (80)	440 (200)
18-in. (450 mm) ASME - 300, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	28.00 (711)	20.42 (519)	12.57 (319)	21.00 (533)	3.13 (80)	849 (385)
18-in. (450 mm) EN 1092-1 - PN10, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	24.21 (615)	20.42 (519)	12.57 (319)	20.94 (532)	3.13 (80)	370 (168)
18-in. (450 mm) EN 1092-1 - PN16, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	25.20 (640)	20.42 (519)	12.57 (319)	21.65 (550)	3.13 (80)	423 (192)
18-in. (450 mm) EN 1092-1 - PN25, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	26.38 (670)	20.42 (519)	12.57 (319)	21.85 (555)	3.13 (80)	686 (312)
18-in. (450 mm) EN 1092-1 - PN40, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	26.97 (685)	20.42 (519)	12.57 (319)	22.05 (560)	3.13 (80)	759 (345)
18-in. (450 mm) AS 2129 Table D, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	25.20 (640)	20.42 (519)	12.57 (319)	20.94 (532)	3.13 (80)	345(156)
18-in. (450 mm) AS 2129 Table E, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	25.20 (640)	20.42 (519)	12.57 (319)	21.73 (552)	3.13 (80)	403 (183)
18-in. (450 mm) JIS B2220 - 10K, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	24.41 (620)	20.42 (519)	12.57 (319)	20.87 (530)	3.13 (80)	362 (164)
18-in. (450 mm) JIS B2220 - 20K, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	26.58 (675)	20.42 (519)	12.57 (319)	22.05 (560)	3.13 (80)	693 (314)

Table 27. Rosemount 8750W Raised Face Flanged Sensor 14- to 18-in. (350 mm to 450 mm) Dimensions

Size, description	Overall length			FLANGE Ø DIM "B"	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						
18-in. (450 mm) AS 4087 PN16, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	25.20 (640)	20.42 (519)	12.57 (319)	21.73 (552)	3.13 (80)	312 (141)
18-in. (450 mm) AS 4087 PN21, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	26.58 (675)	20.42 (519)	12.57 (319)	22.48 (571)	3.13 (80)	442 (200)
18-in. (450 mm) AS 4087 PN35, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	26.58 (675)	20.42 (519)	12.57 (319)	20.98 (533)	3.13 (80)	859 (390)
18-in. (450 mm) GB/T9119 PN10, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	24.41 (620)	20.42 (519)	12.57 (319)	20.94 (532)	3.13 (80)	370 (168)
18-in. (450 mm) GB/T9119 PN16, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	25.20 (640)	20.42 (519)	12.57 (319)	21.65 (550)	3.13 (80)	423 (192)
18-in. (450 mm) GB/T9119 PN40, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	26.97 (685)	20.42 (519)	12.57 (319)	22.05 (560)	3.13 (80)	782 (355)

Table 28. Rosemount 8750W Raised Face Flanged Sensor 20- to 36-in. (500 mm to 900 mm) Dimensions

Size, description	Overall length			FLANGE Ø DIM "B"	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						
20-in. (500 mm) ASME - 150, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	27.50 (699)	22.44 (570)	13.58 (345)	23.00 (584)	3.13 (80)	544 (247)
20-in. (500 mm) ASME - 300, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	30.50 (775)	22.44 (570)	13.58 (345)	23.00 (584)	3.13 (80)	1027 (466)
20-in. (500 mm) EN 1092-1 - PN10, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	26.38 (670)	22.44 (570)	13.58 (345)	23.03 (585)	3.13 (80)	448 (204)
20-in. (500 mm) EN 1092-1 - PN16, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	28.15 (715)	22.44 (570)	13.58 (345)	24.02 (610)	3.13 (80)	542 (212)
20-in. (500 mm) EN 1092-1 - PN25, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	28.74 (730)	22.44 (570)	13.58 (345)	24.21 (615)	3.13 (80)	832 (378)
20-in. (500 mm) EN 1092-1 - PN40, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	29.72 (755)	22.44 (570)	13.58 (345)	24.21 (615)	3.13 (80)	913 (414)
20-in. (500 mm) AS 2129 Table D, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	27.76 (705)	22.44 (570)	13.58 (345)	23.98 (609)	3.13 (80)	446 (203)
20-in. (500 mm) AS 2129 Table E, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	27.76 (705)	22.44 (570)	13.58 (345)	23.98 (609)	3.13 (80)	503 (228)
20-in. (500 mm) JIS B2220 - 10K, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	26.58 (675)	22.44 (570)	13.58 (345)	23.03 (585)	3.13 (80)	428 (195)
20-in. (500 mm) JIS B2220 - 20K, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	28.74 (730)	22.44 (570)	13.58 (345)	24.21 (615)	3.13 (80)	819 (372)
20-in. (500 mm) AS 4087 PN16, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	27.76 (705)	22.44 (570)	13.58 (345)	23.98 (609)	3.13 (80)	428 (195)
20-in. (500 mm) AS 4087 PN21, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	28.94 (735)	22.44 (570)	13.58 (345)	24.96 (634)	3.13 (80)	602 (274)
20-in. (500 mm) AS 4087 PN35, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	28.94 (735)	22.44 (570)	13.58 (345)	23.50 (587)	3.13 (80)	974 (442)
20-in. (500 mm) GB/T9119 PN10, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	26.38 (670)	22.44 (570)	13.58 (345)	23.03 (585)	3.13 (80)	445 (202)
20-in. (500 mm) GB/T9119 PN16, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	28.15 (715)	22.44 (570)	13.58 (345)	24.02 (610)	3.13 (80)	555 (252)
20-in. (500 mm) GB/T9119 PN40, SO/RF	23.46 (596)	23.51 (597)	23.38 (594)	29.72 (755)	22.44 (570)	13.58 (345)	24.21 (615)	3.13 (80)	978 (444)
24-in. (600 mm) ASME - 150, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	32.00 (813)	26.50 (673)	15.61 (396)	27.25 (692)	3.13 (80)	634 (287)
24-in. (600 mm) ASME - 300, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	36.00 (914)	26.50 (673)	15.61 (396)	27.25 (692)	3.13 (80)	1335 (606)
24-in. (600 mm) EN 1092-1 - PN10, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	30.71 (780)	26.50 (673)	15.61 (396)	26.97 (685)	3.13 (80)	466 (211)
24-in. (600 mm) EN 1092-1 - PN16, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	33.07 (840)	26.50 (673)	15.61 (396)	28.54 (725)	3.13 (80)	665 (302)
24-in. (600 mm) EN 1092-1 - PN25, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	33.27 (845)	26.50 (673)	15.61 (396)	28.35 (720)	3.13 (80)	938 (426)
24-in. (600 mm) EN 1092-1 - PN40, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	35.04 (890)	26.50 (673)	15.61 (396)	28.94 (735)	3.13 (80)	1207 (528)
24-in. (600 mm) AS 2129 Table D, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	32.48 (825)	26.50 (673)	15.61 (396)	28.35 (720)	3.13 (80)	501 (227)
24-in. (600 mm) AS 2129 Table E, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	32.48 (825)	26.50 (673)	15.61 (396)	28.23 (717)	3.13 (80)	625 (283)
24-in. (600 mm) JIS B2220 - 10K, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	31.30 (795)	26.50 (673)	15.61 (396)	27.17 (690)	3.13 (80)	451 (204)
24-in. (600 mm) AS 4087 PN16, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	32.48 (825)	26.50 (673)	15.61 (396)	28.35 (720)	3.13 (80)	1133 (514)
24-in. (600 mm) AS 4087 PN21, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	33.47 (850)	26.50 (673)	15.61 (396)	29.09 (739)	3.13 (80)	1605 (728)
24-in. (600 mm) AS 4087 PN35, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	33.47 (850)	26.50 (673)	15.61 (396)	27.52 (699)	3.13 (80)	1777 (806)
24-in. (600 mm) GB/T 9119 PN10, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	30.71 (780)	26.50 (673)	15.61 (396)	26.97 (685)	3.13 (80)	486 (221)

Table 28. Rosemount 8750W Raised Face Flanged Sensor 20- to 36-in. (500 mm to 900 mm) Dimensions

Size, description	Overall length			FLANGE Ø DIM "B"	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						
24-in. (600 mm) GB/T 9119 PN16, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	33.07 (840)	26.50 (673)	15.61 (396)	28.54 (725)	3.13 (80)	669 (304)
24-in. (600 mm) GB/T 9119 PN40, SO/RF	23.46 (596)	23.51 (597)	23.63 (600)	35.04 (890)	26.50 (673)	15.61 (396)	28.94 (735)	3.13 (80)	1282 (581)
30-in. (750 mm) AS 2129 Table D, SO/RF	29.34 (745)	29.39 (747)	29.26 (743)	39.17 (995)	33.00 (838)	16.38 (416)	34.96 (888)	3.13 (80)	929 (421)
30-in. (750 mm) AS 2129 Table E, SO/RF	29.34 (745)	29.39 (747)	29.26 (743)	39.17 (995)	33.00 (838)	16.38 (416)	33.75 (857)	3.13 (80)	1059 (480)
30-in. (750 mm) AS 4087 PN16, SO/RF	29.34 (745)	29.39 (747)	29.26 (743)	39.17 (995)	33.00 (838)	16.38 (416)	34.96 (888)	3.13 (80)	975 (442)
30-in. (750 mm) AS 4087 PN21, SO/RF	29.34 (745)	29.39 (747)	29.26 (743)	39.96 (1015)	33.00 (838)	16.38 (416)	33.35 (898)	3.13 (80)	948 (430)
30-in. (750 mm) AS 4087 PN35, SO/RF	29.34 (745)	29.39 (747)	29.26 (743)	39.96 (1015)	33.00 (838)	16.38 (416)	33.35 (898)	3.13 (80)	2096 (950)
30-in. (750 mm) JIS B2220 - 10K, SO/RF	29.34 (745)	29.39 (747)	29.26 (743)	38.19 (970)	33.00 (838)	16.38 (416)	33.66 (855)	3.13 (80)	862 (392)
36-in. (900 mm) AS 2129 Table D, SO/RF	35.25 (895)	35.30 (897)	35.17 (893)	46.26 (1175)	39.00 (991)	21.86 (555)	41.34 (1050)	3.13 (80)	1396 (633)
36-in. (900 mm) AS 2129 Table E, SO/RF	35.25 (895)	35.30 (897)	35.17 (893)	46.26 (1175)	39.00 (991)	21.86 (555)	41.34 (1050)	3.13 (80)	1648 (747)
36-in. (900 mm) AS 4087 PN16, SO/RF	35.25 (895)	35.30 (897)	35.17 (893)	46.26 (1175)	39.00 (991)	21.86 (555)	41.34 (1050)	3.13 (80)	1574 (714)
36-in. (900 mm) AS 4087 PN21, SO/RF	35.25 (895)	35.30 (897)	35.17 (893)	46.26 (1175)	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)	46.65 (1185)	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)	43.9 (1115)	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)	44.29 (1125)	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)	43.90 (1120)	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)	44.29 (1125)	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)	44.09 (1120)	39.00 (991)	21.86 (555)	39.57 (1005)	3.13 (80)	1194 (543)

Table 29. Rosemount 8750W Raised Face Flanged Sensor 40-in. and 48-in. (1000 mm and 1200 mm) Dimensions

Size, description	Length			FLANGE Ø DIM "B"	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)	NA	48.43 (1230)	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)	NA	49.41 (1255)	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)	NA	49.41 (1255)	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)	NA	49.41 (1255)	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)	NA	49.41 (1255)	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)	NA	50.20 (1275)	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)	NA	48.43 (1230)	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)	NA	49.41 (1255)	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)	NA	57.28 (1455)	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)	NA	58.66 (1490)	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)	NA	58.66 (1490)	55.27 (1404)	29.86 (758)	53.74 (1365)	3.38 86)	2680 (1216)
48-in. (1200) AS 4087 PN16, SO/RF	N/A	47.20 (1199)	NA	58.66 (1490)	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)	NA	60.24 (1530)	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)	NA	57.28 (1455)	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)	NA	58.46 (1485)	55.27 (1404)	29.86 (758)	52.36 (1330)	3.38 86)	2832 (1284)

Figure 15. Rosemount 8750W Flat Face Sensor 30- to 48-in. (750 mm to 1200 mm)

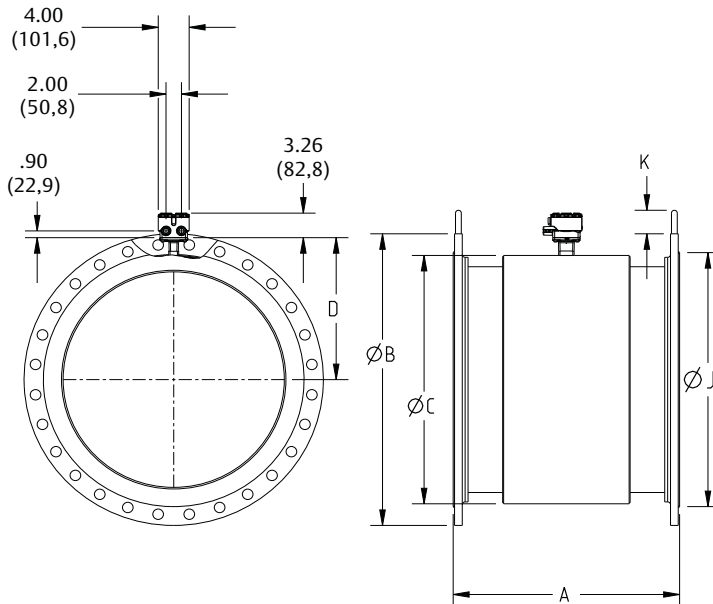
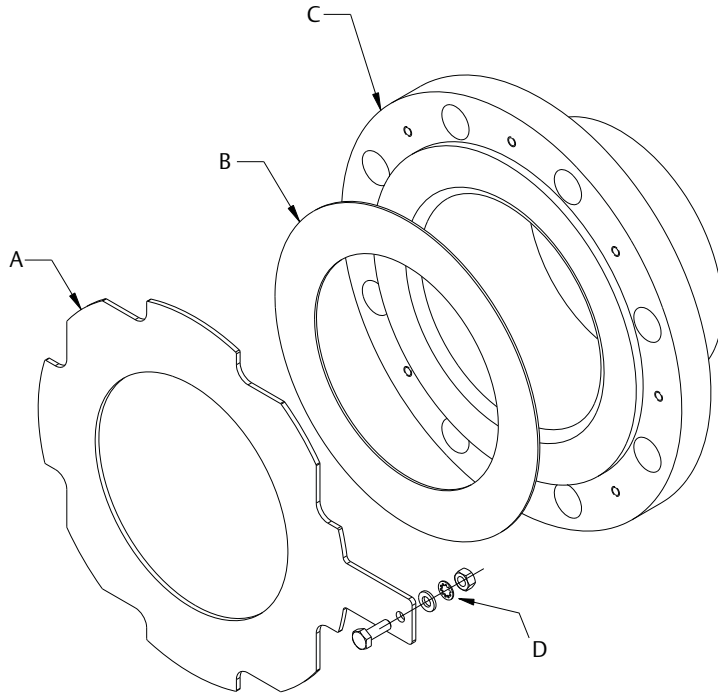


Table 30. Rosemount 8750W Flat Face Sensor 30- to 48-in. (750 mm to 1200 mm) Dimensions

Size, description	Length			FLANGE Ø DIM "B"	Body Ø DIM "C"	DIM "D"	Liner Ø on Face			Lifting 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)	38.75 (984)	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)	38.75 (984)	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)	43.00 (1092)	33.00 (838)	16.38 (416)	33.75 (857)	43.0 (1092)	33.75 (857)	3.13 (80)	1795 (816)
36-in. (900) AWWA C207 CLASS D, SO/FF	35.25 (825)	35.3 (897)	35.17 (893)	46.00 (1168)	39.00 (991)	21.86 (555)	40.25 (1022)	40.25 (1022)	40.25 (1022)	3.13 (80)	1148 (521)
36-in. (900 mm) AWWA C207 CLASS E, SO/FF	35.25 (825)	35.30 (897)	35.17 (893)	46.00 (1168)	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 (825)	35.30 (897)	35.17 (893)	50.00 (1270)	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	50.75 (1289)	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	50.75 (1289)	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	53.00 (1346)	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	53.00 (1346)	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	47.2 (1199)	N/A	59.50 (1511)	55.27 (1404)	29.86 (758)	N/A	59.50 (1511)	N/A	3.38 (86)	1892 (848)

Figure 16. Rosemount 8750W Flanged Sensor 1/2- to 48-in. (DN 15 mm to 1200 mm) Grounding Rings



A. Grounding ring
B. Customer supplied gasket

C. Flowtube
D. Grounding strap hardware

Table 31. Rosemount 8750W Flanged Sensor 1/2- to 48-in. (15 mm to 1200 mm) Grounding Ring Dimensions

Line size	Single grounding ring thickness		Double grounding ring thickness	
	MIN	MAX	MIN	MAX
0.5-in. (15 mm)	0.059 (1,5)	N/A	0.12 (3)	N/A
1-in. (25 mm)	0.059 (1,5)	N/A	0.12 (3)	N/A
1.5-in. (40 mm)	0.059 (1,5)	N/A	0.12 (3)	N/A
2-in. (50 mm)	0.059 (1,5)	N/A	0.12 (3)	N/A
2.5-in. (65 mm)	0.059 (1,5)	N/A	0.12 (3)	N/A
3-in. (80 mm)	0.059 (1,5)	N/A	0.12 (3)	N/A
4-in. (100 mm)	0.059 (1,5)	N/A	0.12 (3)	N/A
5-in. (125 mm)	0.059 (1,5)	0.12 (3)	0.12 (3)	0.24 (6,1)
6-in. (150 mm)	0.059 (1,5)	N/A	0.12 (3)	N/A
8-in. (200 mm)	0.059 (1,5)	N/A	0.12 (3)	N/A
10-in. (250 mm)	0.059 (1,5)	N/A	0.12 (3)	N/A
12-in. (300 mm)	0.059 (1,5)	0.12 (3)	0.12 (3)	0.24 (6,1)
14-in. (350 mm)	0.12 (3)	0.25 (6,4)	0.24 (6,1)	0.5 (12,7)
16-in. (400 mm)	0.12 (3)	0.25 (6,4)	0.24 (6,1)	0.5 (12,7)
18-in. (450 mm)	0.12 (3)	0.25 (6,4)	0.24 (6,1)	0.5 (12,7)
20-in. (500 mm)	0.12 (3)	0.25 (6,4)	0.24 (6,1)	0.5 (12,7)

Table 31. Rosemount 8750W Flanged Sensor 1/2- to 48-in. (15 mm to 1200 mm) Grounding Ring Dimensions

Line size	Single grounding ring thickness		Double grounding ring thickness	
24-in. (600 mm)	0.187 (4,7)	0.25 (6,4)	0.374 (9.5)	0.5 (12,7)
30-in. (750 mm)	0.187 (4,7)	0.25 (6,4)	0.374 (9.5)	0.5 (12,7)
36-in. (900 mm)	0.187 (4,7)	0.25 (6,4)	0.374 (9.5)	0.5 (12,7)
40-in. (1000 mm)	0.25 (6,4)	N/A	0.5 (12,7)	N/A
42-in. (1050 mm)	0.25 (6,4)	N/A	0.5 (12,7)	N/A
48-in. (1200 mm)	0.25 (6,4)	N/A	0.5 (12,7)	N/A

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