

Rosemount 3155K Nuclear Qualified Pressure Transmitter

INDUSTRY LEADING PERFORMANCE

- Qualified per:
 - IEEE Std 323™ – 1974/1983/2003
 - IEEE Std 344™ – 1975/1987/2004
- 1.517 MGy (151.7 Mrad) TID Gamma Radiation
- Vibration to 8.5g ZPA seismic and 7g Airplane Crash (APC)
- 164°C (327°F) Severe Accident LOCA
- 24 Hour Submergence at 70°C (158°F)
- 160°C (320°F) Total Loss of Coolant Chain (TLOCC)
- 0.2% Reference Accuracy
- For use in PWR inside containment and fuel building



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Results Driven by Proven Measurement

Introduction

Rosemount 3155K Nuclear Pressure Transmitters are designed for precision pressure measurements in nuclear applications which require reliable performance and safety over an extended service life. The 3155K is qualified per IEEE Std 323™ - 1974/1983/2003 and IEEE Std 344™ - 1975/1987/2004 with radiation exposure to 1.517 MGy TID gamma, vibration levels up to 8.5g ZPA seismic and 7g Airplane Crash (APC), and for steam pressure/temperature performance. Stringent quality control during the manufacturing process includes traceability of pressure-retaining parts, special nuclear cleaning, and hydrostatic testing.

Applications

Intended areas of installation in Pressurized Water Reactors (PWR) are inside containment and the fuel building.

Transmitter Description

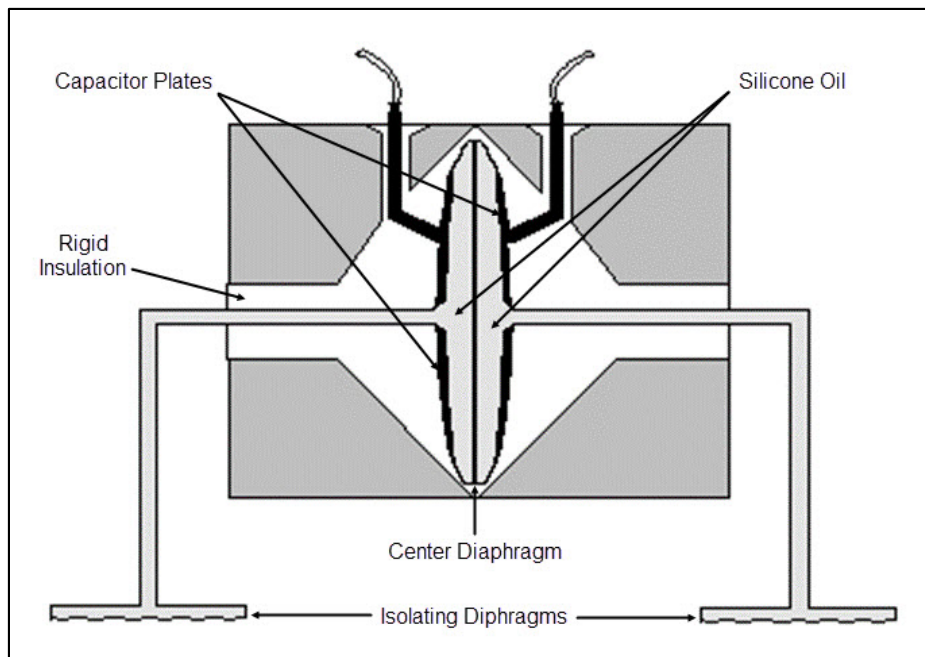
Rosemount 3155K transmitters are similar in construction and performance to the proven

Rosemount 3150 Series transmitters. Units are available in gage (GP), and differential (DP) configurations, with six pressure range options. Direct electronic sensing with the completely sealed coplanar capacitance sensing element (see Figure 1) minimizes mechanical force transfer and problems associated with shock and vibration. Installation and commissioning are simplified by compact design, 2-wire system compatibility, and non-interacting external span and zero adjustments for standard calibrations. The 3155K's dual compartment housing, a robust design which isolates the electronics from the wiring terminations, is also hermetically sealed and welded for added protection from severe environments including submergence.

Operation

Process pressure is transmitted through an isolating diaphragm and silicone oil fill fluid to a sensing diaphragm in the center of the sensor cell. Process or reference pressure is transmitted in a like manner to the other side of the sensing diaphragm. The capacitor plates on both sides of the sensing diaphragm detect the position of the sensing diaphragm.

Figure 1 – The Sensor Cell



Dimensional Drawings

Figure 2a – Transmitter Dimensional Drawings Shown with Mirion Connector (Device Side Only) ⁽¹⁾

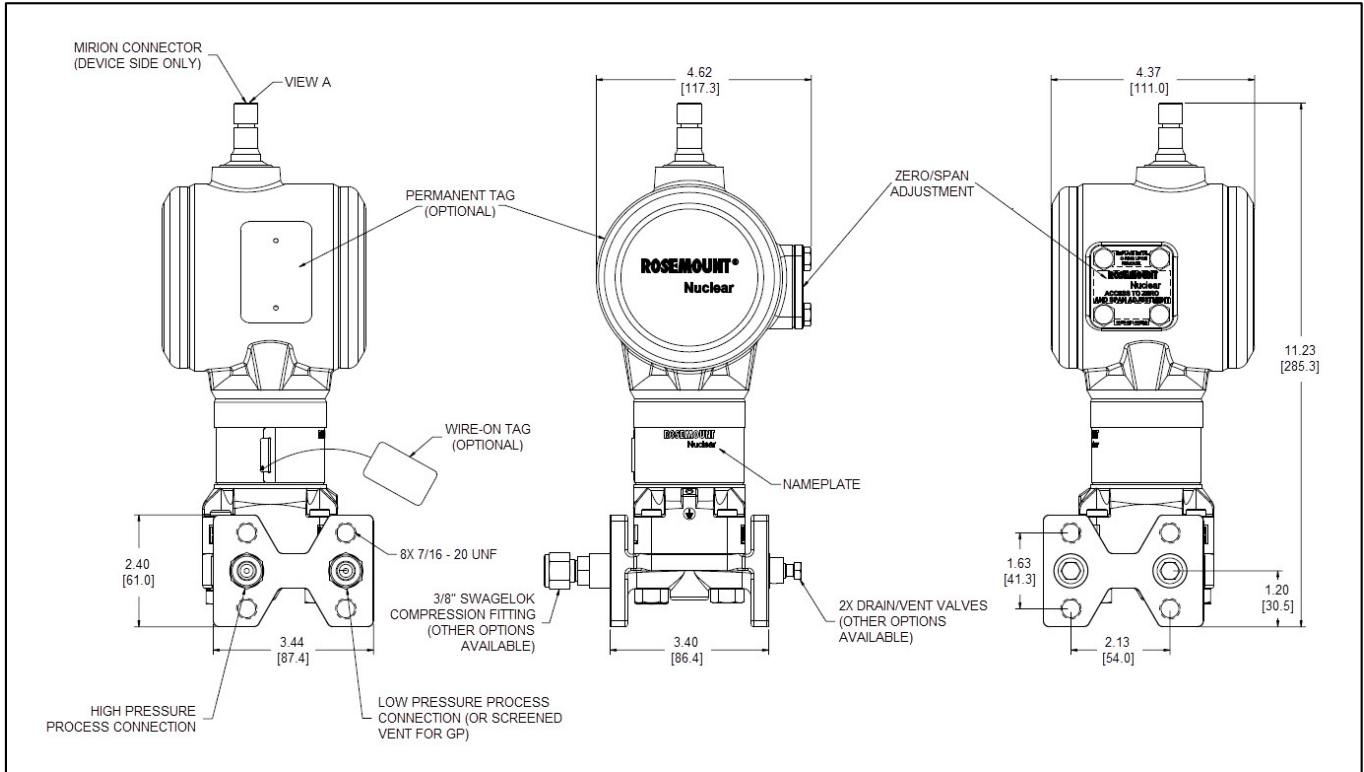
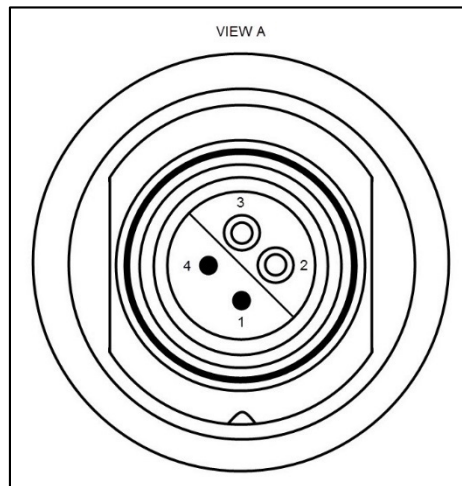


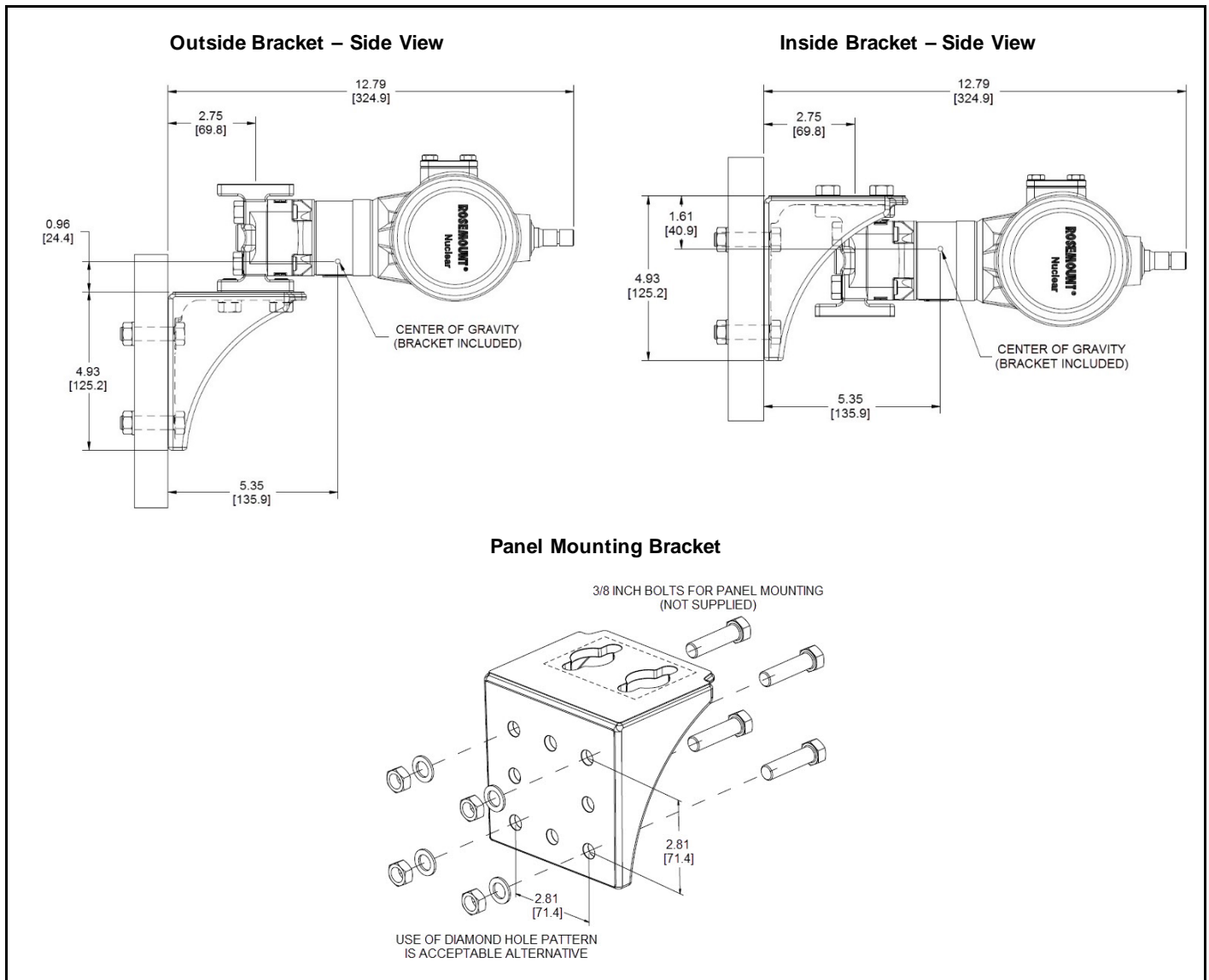
Figure 2b – Mirion Connector Wiring Scheme ⁽²⁾



Notes:

- (1) All dimensions are nominal in inches [millimeters].
- (2) The Mirion connector is factory installed to the 3155K pressure transmitter with pin 1 connected to the positive terminal, pin 2 connected to the negative terminal, and pin 3 connected to the case ground.

Figure 2c – Typical Transmitter Mounting Configurations and Dimensions with Traditional Process Flange Panel Mounting Bracket (1) (2) (3) (4)



Notes:

- (1) All dimensions are nominal in inches [millimeters].
- (2) Transmitter and bracket orientation with respect to gravity will not impact qualification.
- (3) Transmitter orientation with respect to bracket will affect center of gravity.
- (4) Transmitter can alternatively be mounted with the process connection positioned adjacent to the bracket (not shown).

SPECIFICATIONS

Nuclear Specifications

Qualified according to:
IEEE Std 323™ – 1974/1983/2003
IEEE Std 344™ – 1975/1987/2004
As documented in Rosemount Report D2016004

Seismic

IEEE Std 344™
When exposed to a disturbance defined by a Required Response Spectrum with a ZPA of 8.5g (see Figure 3), accuracies are as shown in the following table:

Range Code	Triaxial Random Multifrequency 8.5g ZPA	
	During ⁽¹⁾	After ⁽²⁾
1	±1.75% URL	Within Reference Accuracy
2	±0.5% URL	Within Reference Accuracy
3, 4	±0.3% URL	Within Reference Accuracy
5, 6	±0.2% URL	Within Reference Accuracy

Airplane Crash (APC) ⁽³⁾

When exposed to sinusoidal sweep between 1-100 Hz at 7g input acceleration (at 10 octaves/minute) (see Figure 4), accuracies are as shown in the following table:

Range Code	Sinusoidal Sweep 1-100 Hz at 7g (APC)	
	During ⁽¹⁾	After ⁽²⁾
1-2	±1.5% URL	Within ±0.30% Span
3-6	±0.7% URL	Within ±0.30% Span

Radiation

Exposed to a Total Integrated Dose (TID) of 1.517 MGy (151.7 Mrad), consisting of 70 kGy (7 Mrad) of normal radiation followed by 1.447 MGy (144.7 Mrad) of accident radiation.

During and after initial exposure to a Total Integrated Dose (TID) of 70 kGy (7 Mrad) at a dose rate of 0.5 kGy/hr (50 krad/hr), accuracies are as shown in the following table:

Total Integrated Dose (TID)	Range Code	Normal Radiation Effect
≤ 70 kGy	All	±(0.5% URL + 1.0% Span)

During and after exposure to an additional Total Integrated Dose (TID) of 1.447 MGy (144.7 Mrad), consisting of an 8 kGy/hr (0.8 Mrad/hr) dose rate for 100 hours, followed by a dose rate of 5 kGy/hr (0.5 Mrad/hr) until a TID of 1.447 MGy (144.7 Mrad) is achieved, accuracies are as shown in the following table:

Total Integrated Dose (TID)	Range Code	Accident Radiation Effect ⁽⁴⁾
≤ 800 kGy	All	±(0.75% URL + 1.0% Span)
≤ 1.447 MGy	All	±(0.75% URL + 2.0% Span)

Steam Pressure/Temperature

During and after exposure to steam at the temperatures and pressures shown in Figures 5 and 6, concurrent with chemical spray, accuracies are as shown in the following tables:

Severe Accident LOCA and TLOCC ⁽⁵⁾:

Range Code	Steam Pressure/Temperature Effect
2-6	±6.0% Span

Mild LOCA:

Range Code	Steam Pressure/Temperature Effect
1-6	Standard Temperature Effect specification on page 10 applies

Functional during and after a 24-hour submergence at 70°C (158°F) in a chemical solution consisting of 2500 ppm boron water pressurized to 276 kPa (40 psig).

Notes:

- (1) This error indicates the “deviation” seen in transmitter performance during the seismic event.
- (2) This error indicates the “shift” seen in transmitter performance after the seismic event.
- (3) 3155K Range Code 1 is not qualified for APC if assembled to 3159 Remote Seal.
- (4) Specification values for performance during accident radiation should not be linearly interpolated between radiation values.
- (5) Range Code 1 is not qualified to the Severe Accident LOCA or TLOCC profiles but is qualified to the mild LOCA profile shown in Figure 7.

Figure 3 – Seismic Required Response Spectrum (RRS)

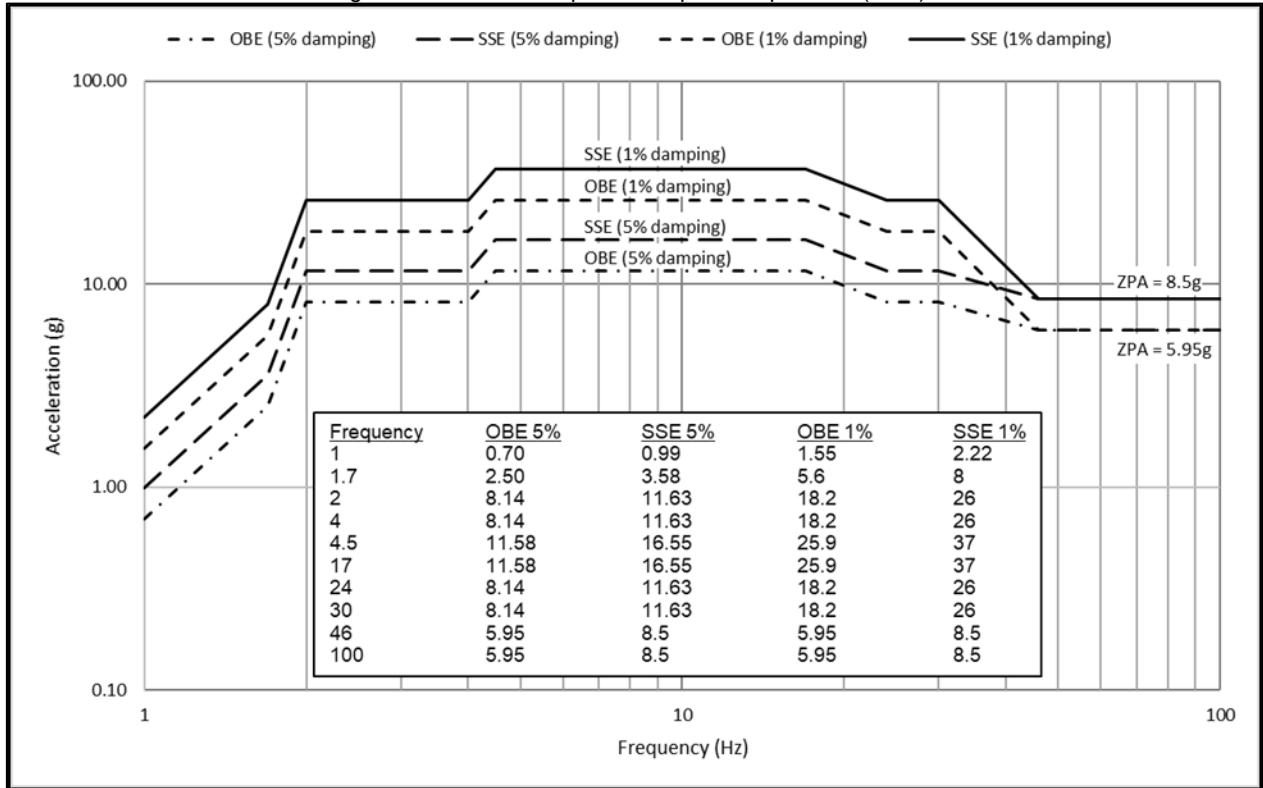


Figure 4 – Airplane Crash (APC)

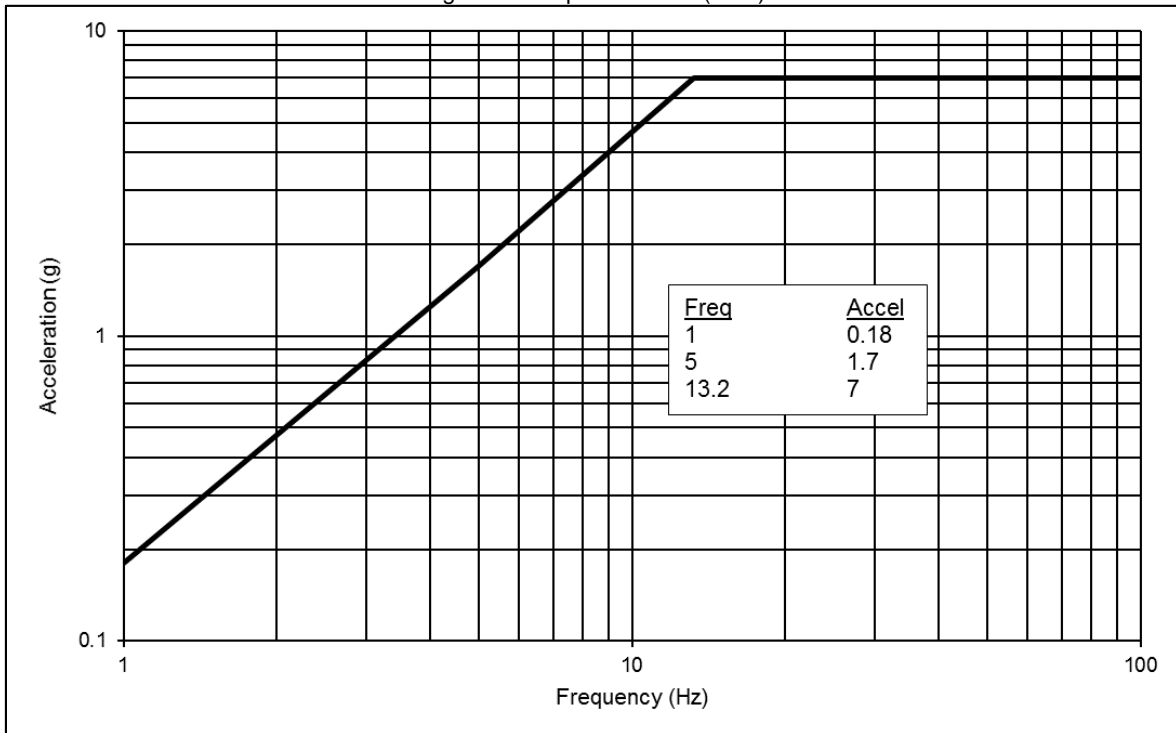
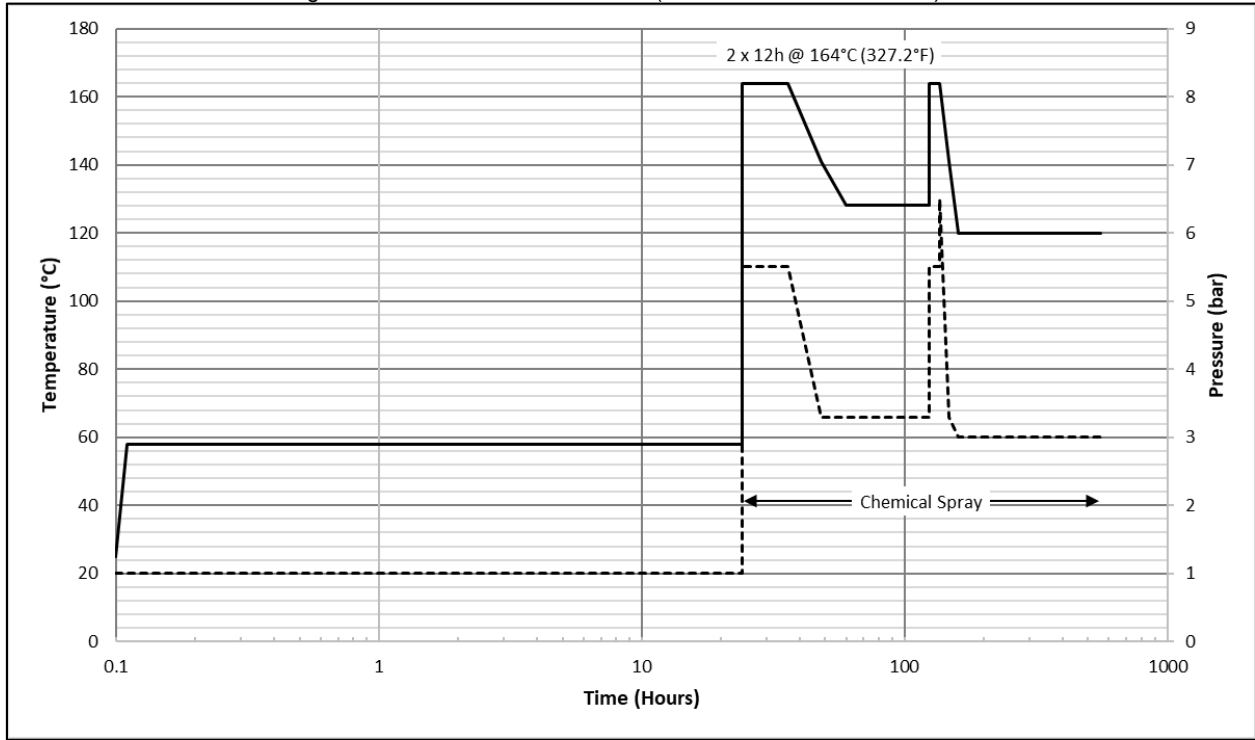


Figure 5 – Severe Accident LOCA (Loss of Coolant Accident) ⁽¹⁾

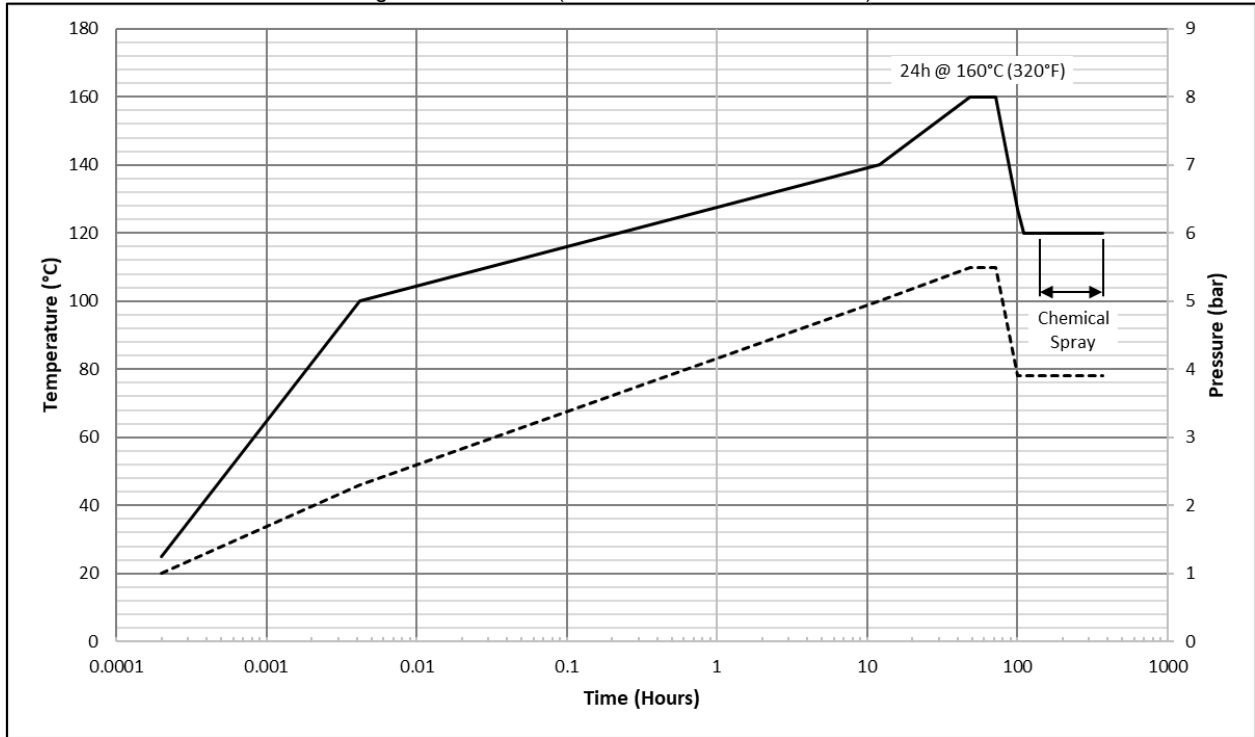


Time		Temperature (°C)	Pressure (bar-a)
sec	hr		
0.1	0.1	25	1
400	0.11	58	1
86796	24.11	58	1
86832	24.12	164	5.5
87012	24.17	164	5.5
87552	24.32	164	5.5
130032	36.12	164	5.5
173232	48.12	141	3.3
216432	60.12	128	3.3
446832	124.12	128	3.3
446832	124.12	164	5.5
446868	124.13	164	5.5
447552	124.32	164	5.5
490068	136.13	164	5.5
490098	136.18	164	6.5
490248	136.22	164	6.5
533736	148.26	141	3.3
576252	160.07	120	3
2001852	556.07	120	3

Notes:

- (1) Range Code 1 is not qualified to the Severe Accident LOCA or TLOCC profiles but is qualified to the mild LOCA profile shown in Figure 7.

Figure 6 – TLOCC (Total Loss of Coolant Chain) ⁽¹⁾

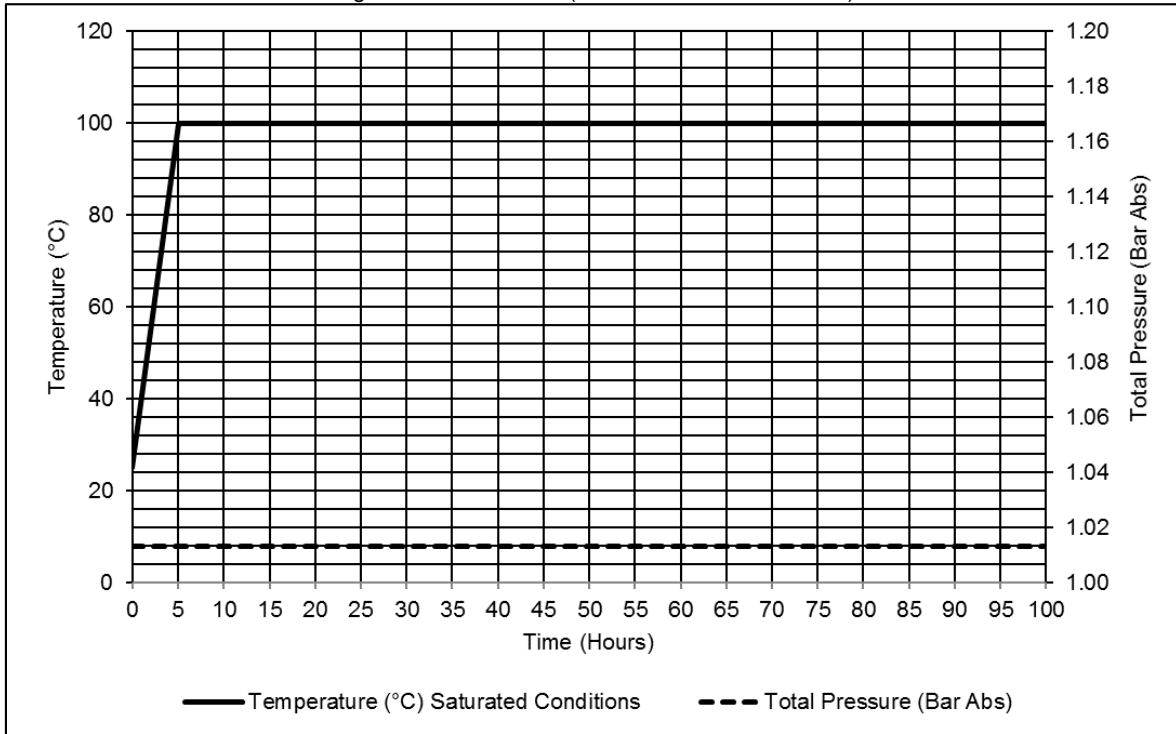


Time		Temperature (°C)	Pressure (bar-a)
sec	hr		
0.6	0.0002	25	1
15	0.0042	100	2.3
43200	12	140	5
172800	48	160	5.5
259200	72	160	5.5
360000	100	127	3.91
396000	110	120	3.9
518400	144	120	3.9
1335600	371	120	3.9

Notes:

(1) Range Code 1 is not qualified to the Severe Accident LOCA or TLOCC profiles but is qualified to the mild LOCA profile shown in Figure 7.

Figure 7 – Mild LOCA (Loss of Coolant Accident)



Nuclear Cleaning

Process wetted surfaces cleaned to < 1 ppm chloride content.

Hydrostatic Testing

Differential pressure transmitters are hydrostatically tested at 150% of the maximum working pressure.

Gage pressure transmitters are hydrostatically tested at the overpressure limit.

All range code 1 transmitters are hydrostatically tested at 13.79 MPa (2000 psi).

Traceability

Per 10CFR50 Appendix B, NQA-1, KTA 1401/3507, RCC-E, and ISO 9001; chemical and physical certification of pressure retaining parts.

Qualified Life per Arrhenius Methodology *(as endorsed by IEEE Std 323™)*

10 years at 48.9°C (120°F) under typical operating conditions. Qualified Life is a function of Power Supply Voltage, Loop Load Resistance, and Operating Temperature. See Rosemount Qualification Report D2016004 for application specific formulas.

Performance Specifications

Based on zero-based calibration spans under reference conditions.

Accuracy⁽¹⁾

Range Code	Reference Accuracy
1-6	±0.2% Calibrated Span

Drift

Range Code	Drift Effect per 30 Months
1	±0.2% URL
2-6	±(0.1% URL + 0.1% Span)

Temperature Effect⁽²⁾

Range Code	Temperature Effect (per 55.6°C (100°F) Temperature Shift)
1	±(0.55% URL + 1.0% Span)
2-6	±(0.15% URL + 0.6% Span)

Overpressure Effect

Based on full overpressure limits:

- Range 1: 13.79 MPa (2000 psig)
- Range 2-5: 25.00 MPa (3626 psig)
- Range 6: 41.37 MPa (6000 psig)

3155KD:

Range Code	Overpressure Effect	
	One-Sided	Two-Sided Sequential
1-3	±0.25% URL	±0.5% URL
4-5	±0.30% URL	±2.0% URL

3155KG:

Range Code	One-Sided Overpressure Effect
1-3	±0.25% URL
4-6	±0.30% URL

High Static Line Pressure Zero Effect (3155KD Only)⁽³⁾

The High Static Line Pressure Zero Effect can typically be calibrated out by the customer (see 3155 Reference Manual 00809-0100-4855 for additional information). If it is not calibrated out, the error associated with the High Static Line Pressure Zero Effect is as follows:

For high static line pressure (P_s) less than or equal to 13.79 MPa (2000 psi):

Range Code	High Static Line Pressure Zero Effect $P_s \leq 13.79$ MPa (2000 psi)
1	±0.25% URL per 6.89 MPa (1000 psi)
2-5	±0.1% URL per 6.89 MPa (1000 psi)

For high static line pressure (P_s) greater than 13.79 MPa (2000 psi):

Range Code	High Static Line Pressure Zero Effect $P_s > 13.79$ MPa (2000 psi)
2-5	±(0.2 + (0.2(P_s - 13.79)/6.98))% URL

High Static Line Pressure Span Effect (3155KD Only)

3155KD Ranges 1-3:

Range Code	High Static Line Pressure Span Effect per 6.89 MPa (1000 psi)
1	±(0.4% URL + 0.4% Span)
2, 3	±(0.1% URL + 0.1% Span)

3155KD Ranges 4 and 5:

Rosemount 3155K ranges 4 and 5 experience a span shift when operated at high static line pressure. It is linear and typically correctable during calibration.

If no correction for the systematic High Static Line Pressure Span Effect is performed, the error is as follows:

Range Code	High Static Line Pressure Span Effect per 6.89 MPa (1000 psi)
4	-1.00% ± 0.2% Input Reading
5	-1.25% ± 0.2% Input Reading

If the correction procedure as outlined in the 3155 Reference Manual 00809-0100-4855 is applied, the remaining correction uncertainty for the High Static Line Pressure Span Effect for ranges 4 and 5 is as follows:

Range Code	High Static Line Pressure Span Effect Correction Uncertainty per 6.89 MPa (1000 psi)
4, 5	±0.2% Input Reading

It is possible to improve the accuracy of the 3155K at high static line pressure for applications requiring enhanced performance. Please contact Rosemount Nuclear. for additional information.

Notes:

- (1) Includes the effects of linearity, hysteresis, and repeatability.
- (2) This specification may be linearly interpolated down to a 27.8°C (50°F) temperature interval.
- (3) This Specification may be linearly interpolated in 6.89 MPa (1000 psi) increments.

Power Supply Effect

Less than 0.005% of span per volt

Load Effect

No load effect other than the change in voltage supplied to the transmitter.

Electromagnetic Compatibility

Satisfies requirements defined in:

- EN 61326-1 and EN 61326-2-3

Mounting Position Effect

No span effect; zero shift of up to 0.37 kPa (1.5 inH₂O) which can be calibrated out.

Functional Specifications

Service

Liquid, gas, vapor

Output

4 – 20 mA

Power Supply / Load Limits

See Figure 8; 3155K qualification testing was performed with a power supply voltage of 30 VDC. Operation at power supply voltages above 30 VDC is within the design limits of the transmitter but may affect qualification parameters including qualified life.

Maximum allowable supply voltage ripple:
Less than 1 volt peak-to-peak ripple for ripple frequency less than or equal to 120 Hz.

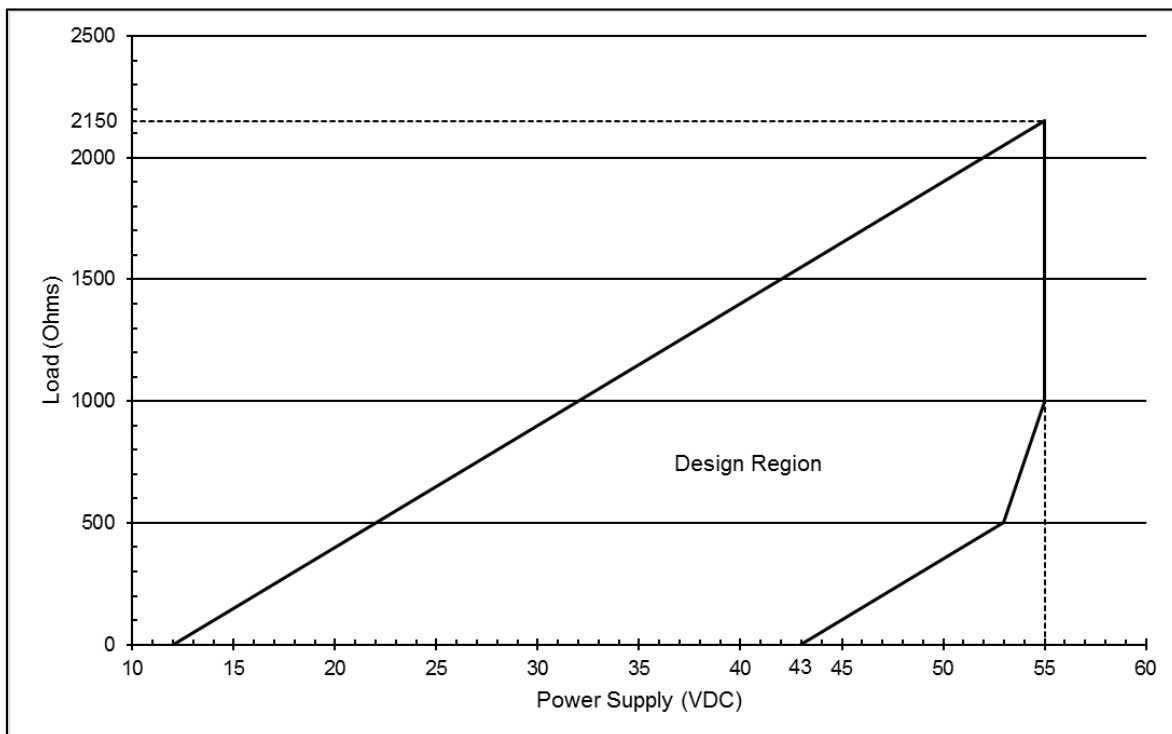
Dielectric Withstand Test

707 VDC, 60 seconds, leakage less than 1 mA

Insulation Resistance Test

500 VDC, 60 seconds, IR greater than 100 MOhm

Figure 8 – Transmitter Load Limits vs. Power Supply Voltage



Span and Zero Adjustments

External adjust; non-interacting for standard adjustments

Zero Elevation and Zero Suppression

Maximum Zero Elevation

Zero is adjustable to the Lower Range Limit (LRL) ⁽¹⁾ ⁽²⁾

Maximum Zero Suppression

Zero is adjustable to 90% of the Upper Range Limit (URL) ⁽²⁾ ⁽³⁾

Range Down

10:1 (5:1 for Range 1)

Response Time

Time constant (63.2%) at 37.8°C (100°F)

Range Code	Fixed Time Response (Max)
1	2.00 sec
2	0.50 sec
3-6	0.20 sec

Temperature Limits

Normal Operating Limits: 4.4°C to 93.3°C (40°F to 200°F)

Qualified Storage Limits: -40.0°C to 60°C (-40°F to 140°F)

Humidity Limits

0 to 100% relative humidity

Volumetric Displacement

Less than 0.082 cm³ (less than 0.005 in³)

Turn-On Time

2 seconds maximum

Maximum Working Pressure

Larger of Static Line Pressure Limit or Upper Range Limit (URL)

Pressure Ranges

Adjustable within the range shown ⁽²⁾; Upper Range Limit (URL) is the highest pressure shown

3155KD and 3155KG

Range Code	Pressure Range
1	0-1.25 to 0-6.23 kPa (0-5 to 0-25 inH ₂ O)
2	0-6.23 to 0-62.3 kPa (0-25 to 0-250 inH ₂ O)
3	0-24.9 to 0-249 kPa (0-100 to 0-1000 inH ₂ O)
4	0-206.8 to 0-2068 kPa (0-30 to 0-300 psig)
5	0-1379 kPa to 0-13.79 MPa (0-200 to 0-2000 psig)
6 ⁽⁴⁾	0-2758 kPa to 0-27.58 MPa (0-400 to 0-4000 psig)

Static Pressure Limits (3155KD Only)

Range Code	Static Pressure Limit
1	3.45 kPa to 13.79 MPa (0.5 psia to 2000 psig)
2-5	3.45 kPa to 25.00 MPa (0.5 psia to 3636 psig)

Overpressure Limits

Range Code	Overpressure Limit
1	13.79 MPa (2000 psig)
2-5	25.00 MPa (3626 psig)
6	41.37 MPa (6000 psig)

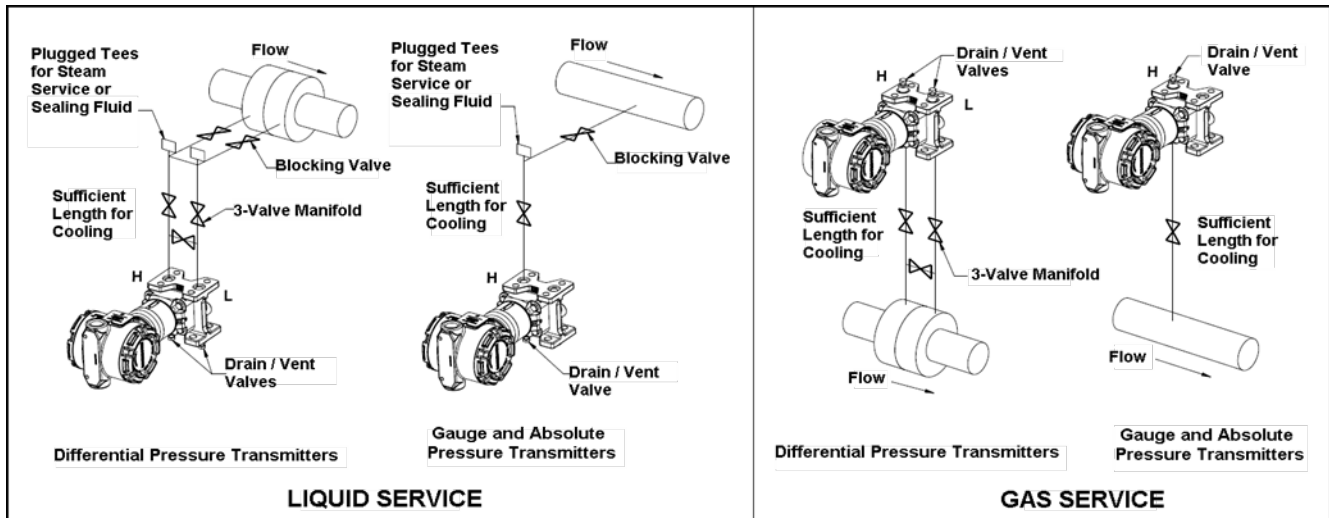
Burst Pressure

Minimum burst pressure is 68.95 MPa (10,000 psig)

Notes:

- (1) Lower Range Limit (LRL) values are listed in the Ordering Information section on page 16.
- (2) Rosemount 3155K calibration values must be set at the factory during manufacturing. The all-welded design does not allow for major zero elevation or suppression adjustments to the transmitter calibration after manufacturing.
- (3) Zero is adjustable to 80% of the URL for Range 1 transmitters.
- (4) Range 6 is not available on 3155KD.

Figure 9 – Transmitter Installation Examples (Liquid, Gas, or Steam)



Transmitters depicted in Figure 9 are intended for reference only.

Physical Specifications

Materials of Construction

Number in parentheses indicates where the part is located in Figure 10.

Isolating Diaphragms (10)
316L SST

Drain/Vent Valves (12)
316L SST

Process Flange (12)
CF3M (cast version of 316L SST)

Process Seal (C-rings) (11)
Silver-plated Inconel™ X-750

Zero/Span Cover (8)
316 SST

Zero/Span Bolts (7)
316 SST

Zero/Span Cover Seal (9)
Silver Jacket, Alloy 90 Spring

Fill Fluid (10)
Silicone Oil

Sensor Module Housing (10)

CF3M (cast version of 316L SST)

Flange Bolts (13)

316 SST

Electronics Housing & Covers (4)

CF3M (cast version of 316L SST)

Mounting Bracket (14)

CF8M (cast version of 316 SST)

Mounting Bolts & Washers (bracket to transmitter) (15) (16)

Stainless Steel

Process Connections (12)

1/4 – 18 NPT (per EN 61518 / IEC 61518); 1/4 Swagelok® or 3/8 Swagelok®

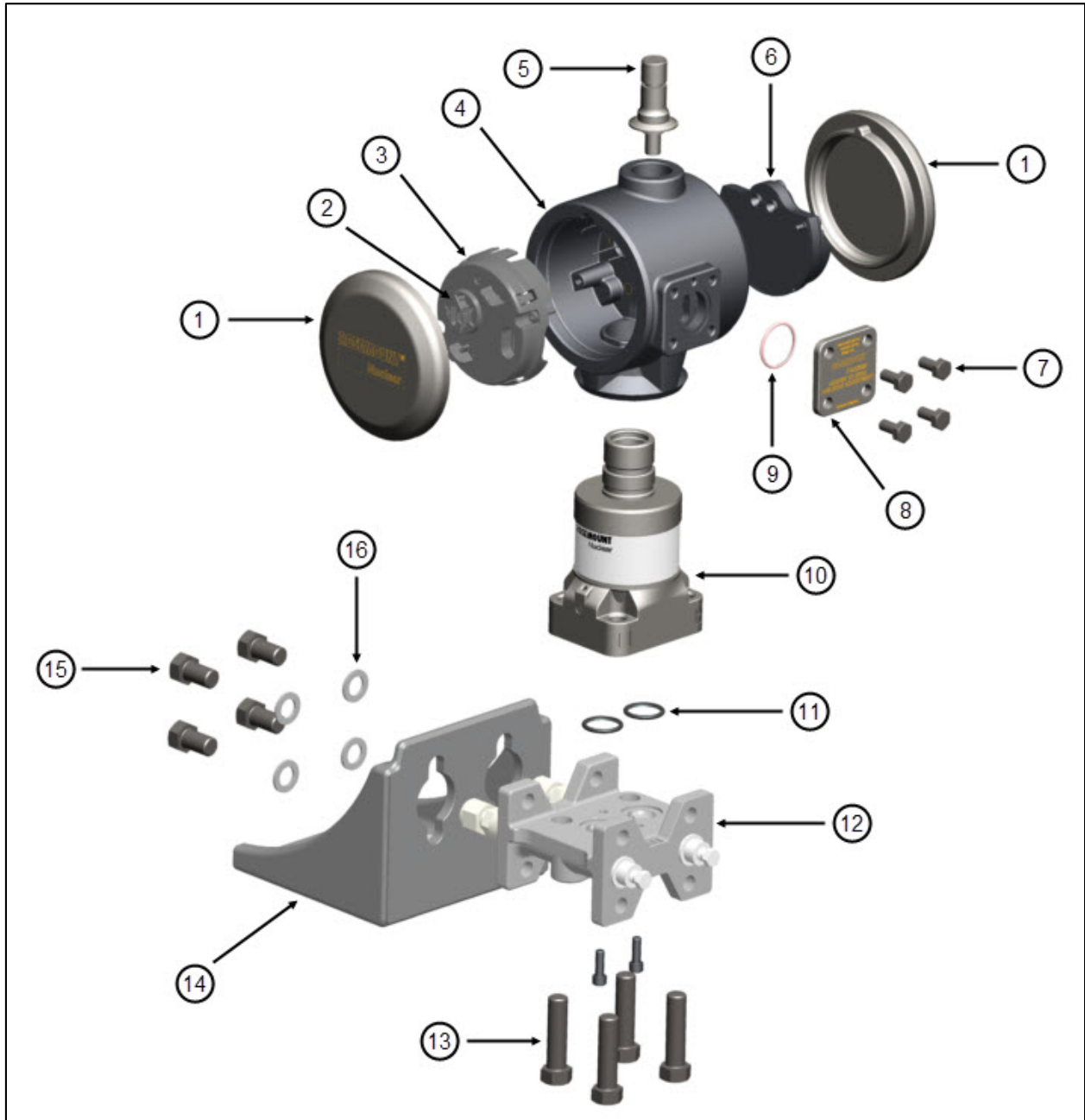
Electrical Connections (5)

Integral welded device side electrical connector: Mirion Mineral Insulated Cable (MIC)

Weight

- 7.3 kg (16.2 lb) excluding bracket
- 10.1 kg (22.3 lb) including SST panel mounting bracket

Figure 10 – Parts Drawing and Table, Exploded View



Item No.	Description	Item No.	Description
1	Electronics Cover	9	Zero/Span C-ring
2	Coarse Zero Select Jumper	10	Sensor Module
3	Electronics Assembly	11	Process Flange C-rings
4	Electronics Housing Assembly	12	Process Flange
5	Mirion Connector (Device Side Only)	13	Process Flange Bolts
6	Terminal Block	14	Mounting Bracket
7	Zero/Span Bolts	15	Transmitter-to-Bracket Mounting Bolts
8	Zero/Span Cover	16	Washers

Figure 11 – Electrical Block Diagram

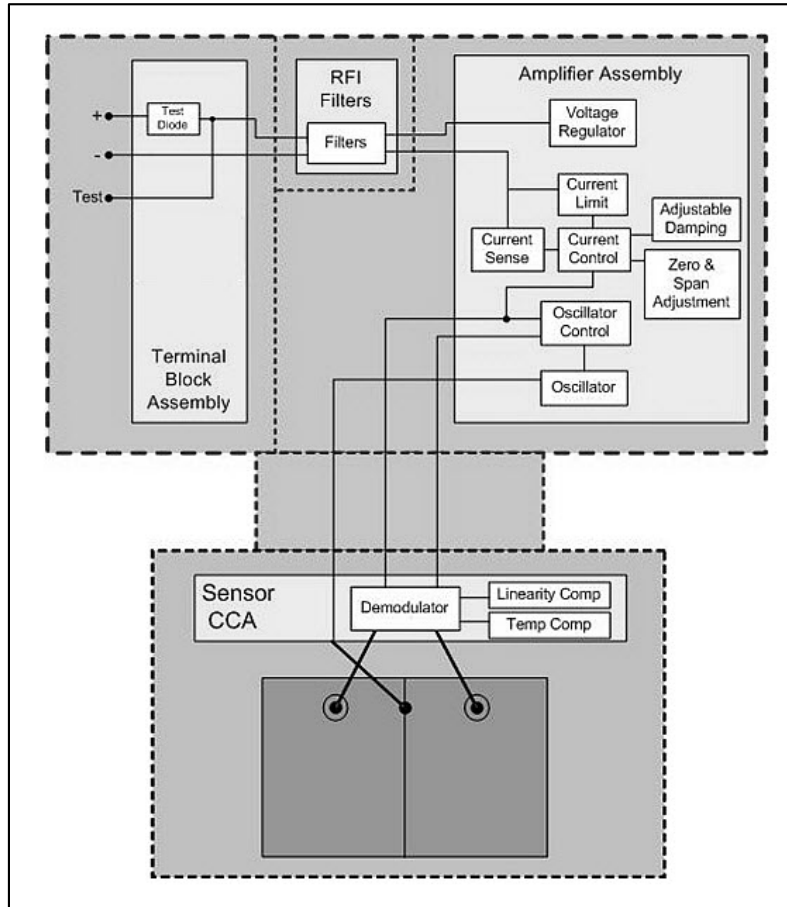
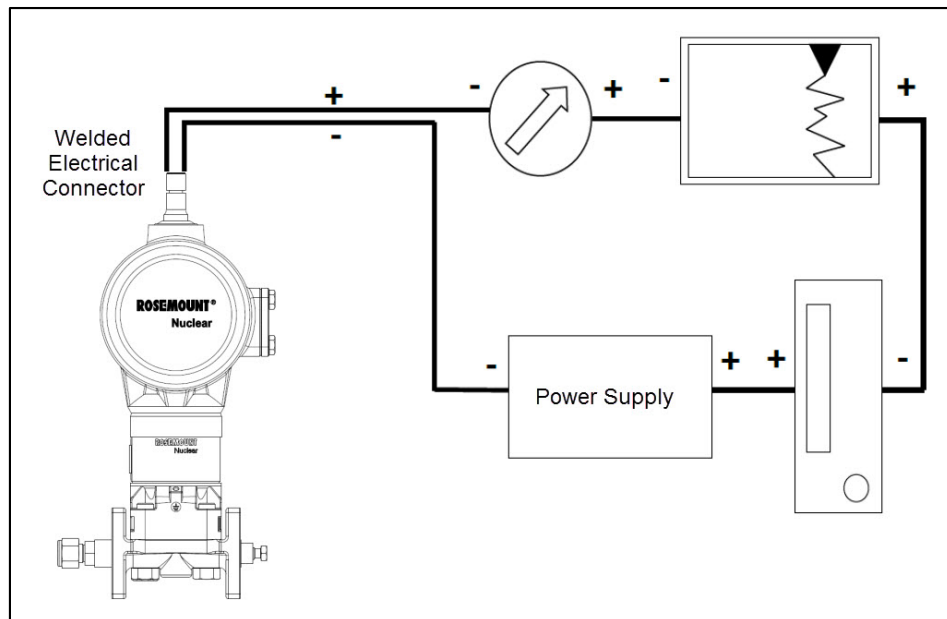
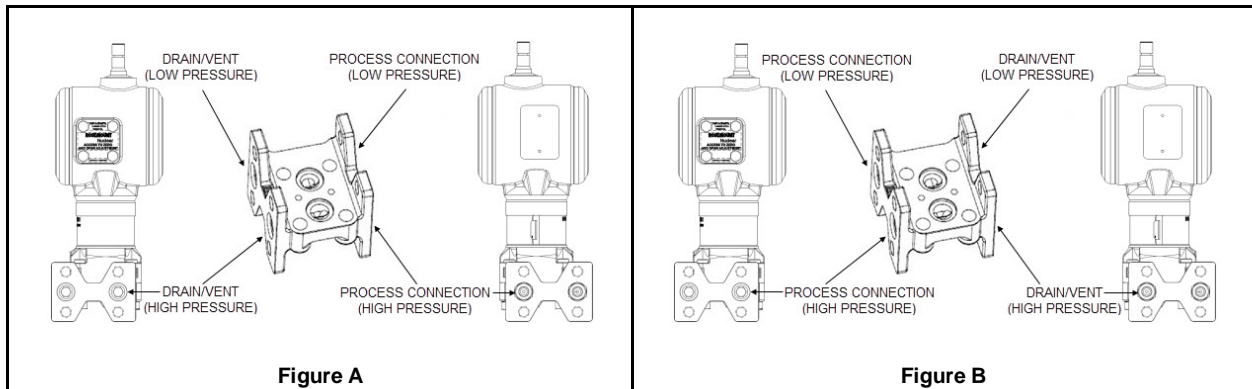


Figure 12 – Typical Transmitter Wiring Connection



ORDERING INFORMATION

Model	Transmitter Type			
3155KD	Nuclear Differential Pressure Transmitter	Range Code 1	13.79 MPa (2000 psig) Static Pressure Limit	
		Range Codes 2-5	25.00 MPa (3626 psig) Static Pressure Limit	
3155KG	Nuclear Gage Pressure Transmitter			
Pressure Ranges ⁽¹⁾				
Code	Differential		Gage ⁽²⁾	
	<i>Lower Range Limit (LRL) to Upper Range Limit (URL) / Minimum Span</i>			
1 ⁽³⁾	-6.23 to 6.23 kPa / 1.25 kPa (-25 to 25 inH ₂ O / 5 inH ₂ O)		-6.23 to 6.23 kPa / 1.25 kPa (-25 to 25 inH ₂ O / 5 inH ₂ O)	
2	-62.3 to 62.3 kPa / 6.23 kPa (-250 to 250 inH ₂ O / 25 inH ₂ O)		-62.3 to 62.3 kPa / 6.23 kPa (-250 to 250 inH ₂ O / 25 inH ₂ O)	
3	-249 to 249 kPa / 24.9 kPa (-1000 to 1000 inH ₂ O / 100 inH ₂ O)		-97.9 to 249 kPa / 24.9 kPa (-393 to 1000 inH ₂ O / 100 inH ₂ O)	
4	-2068 to 2068 kPa / 206.8 kPa (-300 to 300 psi / 30 psi)		-97.9 to 2068 kPa / 206.8 kPa (-14.2 to 300 psig / 30 psig)	
5	-13.79 to 13.79 MPa / 1379 kPa (-2000 to 2000 psi / 200 psi)		-97.9 kPa to 13.79 MPa / 1379 kPa (-14.2 to 2000 psig / 200 psig)	
6	N/A		-97.9 kPa to 27.58 MPa / 2758 kPa (-14.2 to 4000 psig / 400 psig)	
Code	Transmitter Output			
R	Harsh Environment, 4-20 mA Analog			
Code	Isolating Diaphragm			
2	316L SST			
Code	Process Flange Type/Material	Process Connection	Vent/Drain	Orientation
F0	Traditional SST (meets EN 61518 / IEC 61518)	1/4 – 18 NPT ⁽⁴⁾	1/4 – 18 NPT Drain Hole ⁽⁴⁾	See Figure A
F1	Traditional SST (meets EN 61518 / IEC 61518)	1/4 – 18 NPT ⁽⁴⁾	Welded Vent/Drain Valve	See Figure A
F2	Traditional SST	Welded 3/8 inch Swagelok [®]	1/4 – 18 NPT Drain Hole ⁽⁴⁾	See Figure A
F3	Traditional SST	Welded 3/8 inch Swagelok [®]	Welded Vent/Drain Valve	See Figure A
F4	Traditional SST	Welded 3/8 inch Swagelok [®]	Welded 3/8 inch Swagelok [®]	See Figure A
F5	Traditional SST (meets EN 61518 / IEC 61518)	1/4 – 18 NPT ⁽⁴⁾	Welded Vent/Drain Valve	See Figure B
F6	Traditional SST	Welded 1/4 inch Swagelok [®]	1/4 – 18 NPT Drain Hole ⁽⁴⁾	See Figure A
F7	Traditional SST	Welded 1/4 inch Swagelok [®]	Welded Vent/Drain Valve	See Figure A
F8	Traditional SST	Welded 1/4 inch Swagelok [®]	Welded 1/4 inch Swagelok [®]	See Figure A
S2	Two Remote Seals	See Product Data Sheet (00813-0200-4859)	See Product Data Sheet (00813-0200-4859)	N/A
<i>Continued on Next Page</i>				



Code	Housing, Conduit Connection
J	SST, Welded
Code	Mounting Bracket
0	No Bracket
2	Traditional Process Flange Bracket, SST, Panel
Code	Electrical Connector
CN	Welded Connector, Mirion MIC ⁽⁵⁾
Code	Standard Options
P4	Calibration at Static Line Pressure (Requires Configuration Data Sheet) ⁽⁶⁾
P5	Process Seal Helium Leak Test
P6	Extended Upper Range Limit ⁽⁷⁾
P8	Time Response Test (Requires Configuration Data Sheet) ⁽⁶⁾
Q8	Material Certification for Process Wetted and Pressure Retaining Parts
Q9	Special Documentation / Certification – per Customer Request
R1	180 Degree Sensor Module Rotation
W1	Additional Customer Tagging Information – Permanent Tag Attached to Electronics Housing (See Figure 2a)
W2	Additional Customer Tagging Information – Wire-on Tag Attached to Nameplate (See Figure 2a)
V4	Threaded Vent / Drain Valve(s) (1/4 – 18 NPT) – Unassembled (Provided Separately in Package) ^{(8) (9)}
V5	External Ground Screw Kit
Typical Model Number: 3155KD 2 R 2 F1 J 2 CN W1	

Notes:

- (1) Rosemount 3155K calibration values must be set at the factory during manufacturing. The all-welded design does not allow for major zero elevation or suppression adjustments to the transmitter calibration after manufacturing.
- (2) 3155KG Lower Range Limit (LRL) varies with atmospheric pressure.
- (3) Range code 1 is not qualified to the Severe Accident or TLOCC profiles but is qualified to the mild LOCA profile shown in Figure 7.
- (4) Customer assumes responsibility for qualifying interfaces of these options.
- (5) Customer is responsible to procure compatible field-side connector from the manufacturer.
- (6) Contact Rosemount Nuclear for information regarding the Configuration Data Sheet.
- (7) Extended Upper Range Limit (URL) varies by pressure range. Contact Rosemount Nuclear for details.
- (8) Customer assumes responsibility for qualifying interfaces of these options.
- (9) Quantity is two for DP type transmitters and one for GP type transmitters.

Standard Accessories

One instruction manual is included with each shipment.

Calibration

Transmitters are factory calibrated to the customer's specified range. Rosemount 3155K calibration values must be set at the factory during manufacturing. The all-welded design does not allow for major zero elevation or suppression adjustments to the transmitter calibration after manufacturing. Calibration is performed at ambient temperature and atmospheric pressure.

Additional Customer Tagging Information

Tagging is optional and will be provided when either option W1 or W2 is included in the transmitter model number. All tags are SST. The transmitter will be tagged in accordance with customer requirements (within the space limitations defined below).

	Permanent Tag (W1)	Wire-on Tag (W2)
Nominal Character Height	2.54 mm (0.10 in)	4.76 mm (0.188 in)
Maximum Number of Lines	4	4
Maximum Characters per Line	14	20

Special Options

Please Contact Rosemount Nuclear. for special transmitter needs.

Spare Parts

A spare parts list for the Rosemount 3155K pressure transmitter is located within the Rosemount 3155 Reference Manual 00809-0100-4855.

Transportation and Storage

During transportation and storage, transmitters shall be transported only in their original packaging supplied by Rosemount Nuclear.

Documentation

Certifications

Certification of compliance will be provided for each Rosemount 3155K Pressure Transmitter for nuclear qualification, accuracy, special cleaning, hydrostatic testing, and traceability. Chemical and physical reports and identification of pressure-retaining parts will be on file at Rosemount Nuclear.

Revision Control

As-built drawing and part number revisions of baseline qualification hardware are provided in Rosemount Nuclear Document EIF-3155-EPR-01.

The evolution of important drawings, part numbers, manufacturing tests and inspection procedures associated with Rosemount 3155K transmitter is documented in Reference File RF-3155-EPR-01. The reference file is maintained in accordance with Rosemount Nuclear's documented quality system and is intended to satisfy the requirements of "Reference File" as defined by RCC-E and "Document Catalogue" as defined by KTA.

REVISIONS

Changes from December 2016 (Rev AA) to October 2020 (Rev AB)


Page (Old)	Page (New)	Changes
Cover, Throughout	Cover, Throughout	Document revision changed from December 2016 to October 2020, Rev AA to Rev AB; Updated references of Rosemount Nuclear Instruments, Inc. to Rosemount Nuclear; Updated page and figure numbering
5	5	Note (1) wording changed to align with note (2)
6	6	Updated the formatting of figure 3
7	7	Updated the formatting of figures 5 and 6
7	7,8	Added LOCA data tables
9	10	Qualified life statement revised; Removed Figure 8
11	12	Modified title of Figure 6; Clarified Power Supply/Load Limits
18	19	Added Revision Control section
Back Cover	Back Cover	Changed contact information phone number

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