Product Data Sheet
00813-0100-4890, Rev AB
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Rosemount™ 6888 In Situ Oxygen Analyzer

The new standard for combustion flue gas analysis

The Rosemount 6888 In Situ Oxygen Analyzer provides a continuous, accurate measurement of the oxygen remaining in flue gases coming from any combustion process. Accurate measurements of furnace exhaust excess oxygen are critical for combustion optimization, resulting in reduced energy costs, increased safety, and lower emissions. The analyzer's robust oxygen sensor and autocalibration capabilities can reduce overall downtime and maintenance.

Overview

Proven performance and reliability

- Robust zirconia oxygen-sensing cell with catalytic platinized beads increases cell lifetime in presence of sulfur and other poisoning agents.
- Outstanding accuracy: ±0.75% of reading or ±0.05% O_2.
- Rugged explosion-proof design for hazardous area approvals satisfies ATEX/IECEX Ex d and CSA Class 1, Division 1/Zone 1.

Advanced sensor diagnostic

- Calibration recommended diagnostics.
- Plugged diffuser/filter diagnostics.
- Low oxygen diagnostics and O_2 readings during reducing conditions.

Adaptability

- Completely field repairable and adaptable to nearly any existing O_2 probe installation (Westinghouse World Class, Rosemount Oxymitter, and most competitive O_2 probe installations).
- Variable probe insertion options.

Contents

Rosemount 6888A In Situ Oxygen Analyzer for general purpose locations

The Rosemount 6888A In Situ Oxygen Analyzer is a solution for optimizing any industrial or large commercial boiler, fired heater, or kiln. The Rosemount 6888A, as part of an oxygen trim system, improves plant energy efficiency, and lowers energy costs. It not only meets application requirements but also is simple to install, commission, and operate. The sensor, diffusers, and accessories for the Rosemount 6888A were developed to provide the greatest performance and longevity even in the harshest of process conditions.

- World-class performance and outstanding accuracy: ±0.75% of reading or ±0.05% O_2
- Digital communications: HART® 5 and FOUNDATION™ Fieldbus
- Resilient sensing cells provide protection to sulfur and other poisoning agents present in flue gas

Specification and selection of product materials, options, or components must be made by the purchaser of the equipment.

Table 1: Rosemount 6888A In Situ Oxygen Analyzer for General Purpose Locations

Model	Sensor type
6888A	In Situ Oxygen Analyzer
Measurement	
1OXY(1)	Oxygen - standard sensing cell
2OXY(2)	Oxygen - acid resistant sensing cell
Probe length and type/shield	
1	18-in. (457 mm) standard probe tube
2(3)	18-in. (457 mm) probe with abrasive shield accessory package (mounting hardware included)
3	18-in. (457 mm) abrasion-resistant probe tube
4	3 ft (0.91 m) standard probe tube
5(3)	3 ft (0.91 m) probe with abrasive shield accessory package (mounting hardware included)
6	3 ft (0.91 m) abrasion-resistant probe tube
7	6 ft (1.83 m) standard tube
8(3)	6 ft (1.83 m) probe with abrasive shield accessory package (mounting hardware included)
9	6 ft (1.83 m) abrasion-resistant probe tube
A(3)	9 ft (2.74 m) probe with abrasion-resistant probe body
AA	9 ft (2.74 m) probe with abrasive shield accessory package (mounting hardware included)
B(3)	12 ft (3.66 m) probe with abrasion-resistant probe body
BA	12 ft (3.66 m) probe with abrasive shield accessory package (mounting hardware included)
Diffuser	
1	Snubber diffuser for service to 400 °C (750 °F)
1A	Snubber diffuser for service to 400 °C (750 °F) with dust seal for use with abrasive shield
1F	Snubber diffuser for service to 400 °C (750 °F) with flashback arrestor

Table 1: Rosemount 6888A In Situ Oxygen Analyzer for General Purpose Locations *(continued)*

Model	Sensor type
2	Ceramic diffuser for service to 825 °C (1517 °F)
2A	Ceramic diffuser for service to 825 °C (1517 °F) with dust seal for use with abrasive shield
2F	Ceramic diffuser for service to 825 °C (1517 °F) with flashback arrestor
3	Hastelloy diffuser for service to 705 °C (1300 °F)
3A	Hastelloy diffuser for service to 705 °C (1300 °F) with dust seal for use with abrasive shield
Housing & electronics	
1HT	Standard housing, digital probe, HART protocol
2HT	Integral autocalibration housing, digital probe, HART protocol
4FF	Integral autocalibration housing, digital probe, FOUNDATION Fieldbus protocol
5DR	Standard housing, direct replacement probe, traditional architecture
6DRY	Standard housing, direct replacement probe, with cold junction for YEW electronics
Mounting plate	
00	No additional mounting hardware
04	New installation - square weld plate, ANSI: 6 x 6 in. (152.4 x 152.4 mm), 2.5 in. (63.5 mm) clearance hole, 4.75 in. (120.65 mm) bolt circle, 5/8-11 studs
05	New installation - square weld plate, DIN 6 x 6 in. (152.4 x 152.4 mm), 2.5 in. (63.5 mm) clearance hole, 4.75 in. (120.65 mm) bolt circle, 5/8-11 studs
06	New installation - variable insertion mount, abrasion-resistant probe only
07	New installation - variable insertion mount, mounted to existing OXT/WC abrasive shield mount; abrasion resistant probe only
08	Adapter plate for existing ANSI 3 in. (76.2 mm) 150# flange
09	Adapter plate for existing ANSI 4 in. (101.6 mm) 150# flange
10	Adapter plate for existing ANSI 6 in. (152.4 mm) 150# flange
11	Adapter plate for existing ANSI 3 in. (76.2 mm) 300# flange
12	Adapter plate for existing ANSI 4 in. (101.6 mm) 300# flange
99	Special adapter -provide existing flange dimensions, including thru-hole diameter
Manual calibration accessories	
00	None
01	Calibration and reference gas flow meters and reference air filter regulator, provided loose
02	Calibration and reference gas flow meters and reference air filter regulator, mounted in a panel
Enable: Stochiometer indicator for reducing conditions[(4)]	
0	No
1	Yes
Enable: Programmable reference function[(4)]	
0	No
1	Yes
Enable: Extended temperature function[(4)]	
0	No

Table 1: Rosemount 6888A In Situ Oxygen Analyzer for General Purpose Locations *(continued)*

Model	Sensor type
1	Yes
Enable: Diffuser warning(4)	
0	No
1	Yes

(1) *Standard sensing cell includes catalytic protection beads which protect the sensor from sulfur and other poisoning agents.*
(2) *Acid-resistant sensing cell includes additional catalytic protection beads compared to standard sensing to protect the sensor from sulfur and other poisoning agents.*
(3) *Abrasive shield tube ordered separately*
(4) *FOUNDATION Fieldbus versions only (for HART versions, order this feature with Rosemount Xi Electronics).*

Rosemount 6888C In Situ Oxygen Analyzer for hazardous locations

The Rosemount 6888C In Situ Oxygen Analyzer is a solution for optimizing boilers or fired heaters located in areas with hazardous requirements. The Rosemount 6888C's calibration equipment is simplified in hazardous areas with the approved integrated automatic calibration housing option. Maintenance costs are reduced with the redesigned modular diffuser and process flame arrestor assembly.

- Rugged explosion-proof design satisfies ATEX/IECEx Ex d and CSA Class 1, Division/Zone 1 approval requirements.
- Digital communications: HART 5 standard, FOUNDATION™ Fieldbus, and AMS/Plantweb.
- Resilient sensing cells provide protection to sulfur and other poisoning agents present in flue gas.

Additional information

Specifications can be found in Specifications. Drawings are provided in Dimensions.

Specification and selection of product materials, options, or components must be made by the purchaser of the equipment. See Specifications for more information on material selection.

Table 2: Rosemount 6888C In Situ Oxygen Analyzer for Hazardous Locations

Option	Description
Model	
Rosemount 6888C	In Situ Oxygen Analyzer for hazardous locations
Measurement[1]	
1OXY	Oxygen - standard sensing cell
2OXY	Oxygen - acid resistant sensing cell
Probe length and mounting flange	
1A	18 in. (457 mm) probe with ANSI flange: 7.5 in (190.5 mm). O.D., 6.00 in. (152.4 mm) bolt hole pattern diameter, 0.75 in. (19.05 mm) bolt hole diameter
1D	18 in. (457 mm) probe with DIN flange: 8.25 in. (209.55 mm) O.D., 6.69 in. (170 mm) bolt hole pattern diameter, .71 in. (18 mm) bolt hole diameter
2A	3 ft (0.91 m) probe with ANSI flange: 7.5 in (190.5 mm). O.D., 6.00 in. (152.4 mm) bolt hole pattern diameter, 0.75 in. (19.05 mm) bolt hole diameter
2D	3 ft (0.91 m) probe with DIN flange: 8.25 in. (209.55 mm) O.D., 6.69 in. (170 mm) bolt hole pattern diameter, .71 in. (18 mm) bolt hole diameter
3A	6 ft (1.83 m) probe with ANSI flange: 7.5 in (190.5 mm). O.D., 6.00 in. (152.4 mm) bolt hole pattern diameter, 0.75 in. (19.05 mm) bolt hole diameter
3D	6 ft (1.83 m) probe with DIN flange: 8.25 in. (209.55 mm) O.D., 6.69 in. (170 mm) bolt hole pattern diameter, .71 in. (18 mm) bolt hole diameter
Diffuser	
1	Snubber diffuser for service to 400 °C (750 °F)
2	Ceramic diffuser for service to 825 °C (1517 °F)

Table 2: Rosemount 6888C In Situ Oxygen Analyzer for Hazardous Locations *(continued)*

Option	Description
3	Hastelloy diffuser for service to 705 °C (1300 °F)
Housing and electronics	
1HT	Standard housing, digital probe, HART protocol
2HT	Integral autocalibration housing, digital probe, HART protocol
4FF	Integral autocalibration housing, digital probe, Foundation Fieldbus protocol
5DR	Standard housing, direct replacement probe, traditional architecture
6DRY	Standard housing, direct replacement probe, with cold junction for YEW electronics
Certifications	
A	ATEX/IECEx
C	CSA
Mounting plate	
00	No additional mounting hardware
04	New installation plate - 7.75 in. (196.85 mm) square diameter, 3.25 in. (82.55 mm) clearance hole, 6.00 in. (152.4 mm) bolt circle, 5/8-11 UNC studs
05	New installation plate - 8.46 in. (215 mm) square diameter, 3.25 in. (82.5) mm clearance hole, 6.7 in. (170 mm) bolt circle, M16 x 2 studs
09	Adapter plate for existing ANSI 4 in. (101.6 mm),150# flange
10	Adapter plate for existing ANSI 6 in. (152.4 mm), 150# flange
11	Adapter plate for exisiting ANSI 3 in. (76.2 mm), 300# flange
12	Adapter plate for existing ANSI 4 in. (101.6 mm), 300# flange
99	Special adapter - provide existing flange dimensions, including thru-hole diameters
Manual calibration accessories	
00	None
01	Calibration and reference gas flowmeters and reference air filter regulator, provided loose
02	Calibration and reference gas flowmeters and reference air filter regulator, mounted in a panel
Enable: Stoichiometer indicator for reducing conditions[(1)]	
0	No
1	Yes
Enable: Programmable reference function[(1)]	
0	No
1	Yes
Enable: Extended temperature function[(1)]	
0	No
1	Yes
Enable: Diffuser warning[(1)]	
0	No
1	Yes

(1) *FOUNDATION Fieldbus versions only (for HART versions, order this feature with Rosemount Xi Electronics).*

Rosemount 6888 Xi Remote Analyzer for general purpose locations

The Rosemount 6888 Xi provides an instant view of pertinent information on a user-friendly display and interface, which effortlessly connects with a PLC or DCS via HART®/4-20 mA. It creates a centralized infrastructure for remote autocalibration devices, diagnostic tools, alarm relay(s), and advanced application features. The Rosemount 6888Xi can be configured to receive up to two channels for digital inputs or one channel for supporting traditional architectures.

Table 3:

- Easy-to-use operator interface and design
- Plugged diffuser diagnostic measures response time and detects a plugged diffuser or empty gas bottle
- Stochiometer provides an oxygen reading during reducing conditions, indicating extent of O_2 deficiency

Additional information

Specifications can be found on Specifications. Drawings are provided on Dimensions.

Specification and selection of product materials, options, or components must be made by the purchaser or the equipment.

Table 4: Rosemount 6888 Xi Remote Analyzer for General Purpose Locations

Model	Product description
6888 Xi	Remote analyzer
Measurement(1)	
1OXY	Single digital input (HART)
2OXY	Single digital input (HART) and flame safety interlock for heater
3OXY	Two digital inputs (HART)
4OXY	Single traditional architecture input
Mounting	
00	No hardware
01	Panel mount kit with gasket
02	2 in. pipe/wall mount kit
Cable(2)	
00	No cable
10	20 ft (6 m) cable, use with traditional architecture probe only
11	40 ft (12 m) cable, use with traditional architecture probe only
12	60 ft (18 m) cable, use with traditional architecture probe only
13	80 ft (24 m) cable, use with traditional architecture probe only
14	100 ft (30 m) cable, use with traditional architecture probe only
15	150 ft (45 m) cable, use with traditional architecture probe only
Enable: Stochiometer indicator for reducing conditions	
00	No

Table 4: Rosemount 6888 Xi Remote Analyzer for General Purpose Locations *(continued)*

01	Single channel
02	Dual channel
Enable: Programmable reference function	
00	No
01	Single channel
02	Dual channel
Enable: Extended temperature function	
00	No
01	Single channel
02	Dual channel
Enable: Plugged diffuser diagnostics	
00	No
01	Single channel
02	Dual channel

(1) *Compatible with oxygen probes utilizing a 120 V heater only.*
(2) *Cables are not rated for use in hazardous locations and must be installed in accordance with local and national codes.*

Rosemount SPS 4001B Autocalibration Device for general purpose locations

The Rosemount SPS 4001B is a cost-effective calibration systems which conveniently sequences calibration gases without any labor from an operator or maintenance technician. Calibration flow meter(s) and reference air flow meter(s)/regulator(s) are included with the autocalibration manifold. The calibration can be initiated by a contact relay or timer or automatically via calibration recommended diagnostic. The Rosemount SPS 4001B is designed to automatically calibrate one oxygen analysis system and requires a Rosemount 6888 Xi Remote Analyzer or Oxymitter electronics.

- Complete autocalibration assembly: includes calibration flow meter and reference air flow meter/regulator and solenoids mounted on a single manifold
- Automatic calibrations reduce operator time to ensure continuously accurate readings

Specification and selection of product materials, options, or components must be made by the purchaser of the equipment.

Table 5: Rosemount SPS 4001B Autocalibration Device for general purpose locations

Model	Product description
Rosemount XSO2CAL	Autocalibration accessories
Single probe autocalibration options	
00	None
01	SPS 4001B single probe sequencer
Multiprobe autocalibration options	
00	None

How to order: Complete Oxygen Analysis system

The Rosemount In-Situ Oxygen Analysis system can be configured as two types of architectures.

Digital: A digital output of a 4-20 mA with digital signal based on either HART® or FOUNDATION™ Fieldbus is transmitted directly from the probe.

Traditional: Raw sensor and thermocouple voltages are output from the probe to a remote analyzer. The remote analyzer outputs the 4-20 mA with digital signal based on HART.

Procedure

1. Choose a Rosemount 6888A or Rosemount 6888C model and decide which type of architecture is desired.
   The architecture type is specified in the Housing and electronics code in the model number.

2. Choose a corresponding Rosemount 6888Xi model(1) to match the architecture type of the model selected in Step 1. The architecture type is specified by the Remote Type code in the model number.

3. Based on the architecture type, choose the appropriate interconnect cable.

4. Rosemount SPS 4001B Autocalibration Device is optional to include with an oxygen analysis system.

(1) For digital architecture, Rosemount 6888 Xi, Rosemount Field Communicator, or PLC/DCS required to interface with Rosemount 6888A or 6888C models.

Architecture	Rosemount 6888A/ Rosemount 6888C Housing and electronics code	Rosemount 6888 Xi Remote type code	Interconnect cable
Digital	1HT, 2HT, 4FF	1OXY, 2OXY, 3OXY	18 AWG two wire shielded cable, customer-supplied
Traditional	5DR	4OXY	7 conductor cable, available through Rosemount(1)

(1) *7 conductor cable orderable through Rosemount 6888Xi model matrix or by part number.*

Specifications

Table 6: Performance Specifications

Specification	Rosemount 6888A, Rosemount 6888C	Rosemount 6888 Xi
Factory calibrated O_2 range	0-10%	
User configurable O_2 range	Lower (LRL) O2: 0 - 10% Upper (URL) O2: 0 - 50%	
Repeatability	±0.75% of reading or 0.05% of O_2, whichever is greater	
Process temperature effect on repeatability	0.05% O_2 for 100 to 700 °C (212 to 1292 °F) temperature range	N/A
Lowest detection limit	0.02% O_2	N/A
Calibration gas repeatability	±0.02% O_2	N/A
System speed of response to calibration gas(1)	$T_{initial}$ < 3 seconds T90 < 8 seconds	N/A
Accuracy of stochiometer reducing condition indicator	±0.1% of reading or 0.1% O2, whichever is greater	
Reducing conditions: system response	From oxidizing to reducing - T90 in 120 sec From reducing to oxidizing - T90 in 30 sec	
Calibration gases	Low: 0.4 to 2% O2, balance nitrogen High: 8 to 21% O2, balance nitrogen Regulate to 20 psi (137.9 kPa), 5 schf (2.36 L/min)	
Reference air (recommended)	Instrument air (clean, dry) Regulate to 5 psi (34 kPa), 2 scfh (0.94 L/min)	N/A

(1) *Response to process gas changes may vary depending on process conditions and product lifetime.*

Table 7: Calibration Modes

Standard housing: Rosemount 6888A, Rosemount 6888C		
Additional devices	**Initiation**	**Gas sequencing**
None	DCS or field communicator	Manually
Rosemount 6888Xi	Manually	Manually
Rosemount 6888Xi, Rosemount SP4001B	Manually, timer, or contact relay	Automated
Integral autocalibration housing: Rosemount 6888A, Rosemount 6888C		
Additional devices	**Initiation**	**Gas sequencing**
None	Manually or timer	Automated

Table 7: Calibration Modes *(continued)*

Standard housing: Rosemount 6888A, Rosemount 6888C		
Rosemount 6888Xi	Manually, timer, or contact relay	Automated

Functional specifications

Temperature limits

Table 8: Process temperature limits

	Process	Process mounting
With snubber diffuser	0 to 400 °C (32 to 750 °F)	200 °C (392 °F) maximum(1)
With ceramic diffuser	0 to 705 °C (32 to 1301 °F)	200 °C (392 °F) maximum(1)
With Hastelloy diffuser	0 to 705 °C (32 to 1301 °F)	200 °C (392 °F) maximum(1)
Bypass accessory	0 to 1050 °C (32 to 1922 °F)	200 °C (392 °F) maximum
Abrasive shield accessory	0 to 705 °C (32 to 1301 °F)	200 °C (392 °F) maximum

(1) *190 °C (374 °F) for hazardous locations (only applies to the Rosemount 6888C)*

Table 9: Ambient temperature limits

Rosemount 6888A	Rosemount 6888C	Rosemount 6888 Xi	Rosemount SPS 4001B
-40 to 70 °C (-40 to 158 °F)	-40 to 70 °C (-40 to 158 °F)	-20 to 50 °C (4 to 122 °F)	-40 to 65 °C (-40 to 149 °F)

Storage temperature limits

-40 to 70 °C (-40 to 158 °F)

Electrical

Rosemount 6888A/Rosemount 6888C power requirements and consumption

Digital: 120/240 Vac, 50/60 Hz, 260/1020 VA max

Traditional: 120/240 Vac, 50/60 Hz, 260/1020 VA max

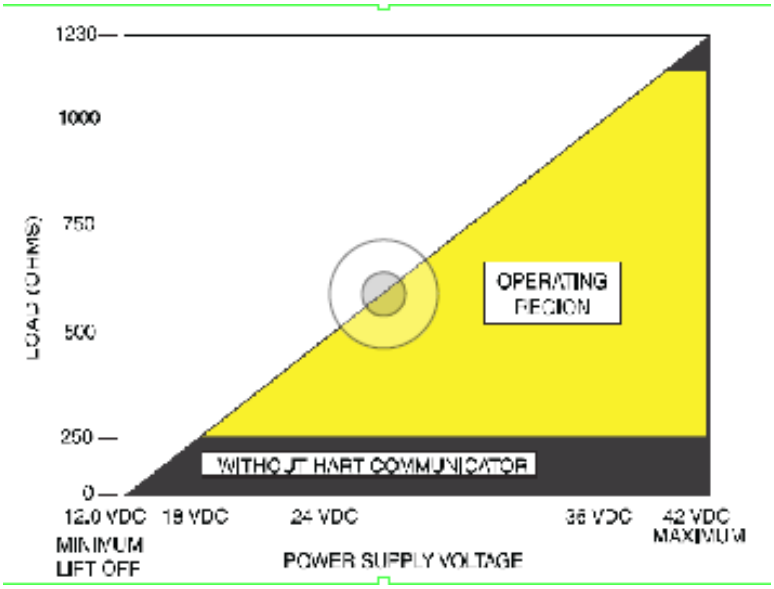
Rosemount 6888Xi power requirements

Digital, single/dual inputs: 120/240 Vac, 50/60 Hz, 12 VA max

Digital, single input with flame safety interlock: 120/240 Vac, 50/60 Hz, 260/1020 VA max(2)

(2) Power consumption is primarily driven by the oxygen probe.

Figure 1: Rosemount 6888A/Rosemount 6888C Analyzer Electronics and Rosemount 6888 Xi Maximum Loop Resistance is Determined by the Voltage Level of the External Power Supply, as Described by:



Load limitations

The Field Communicator requires a minimum loop resistance of 250 Ω for communication.

Rosemount SPS 4001B

100 to 240 Vac, 50/60 Hz, 15 VA

Physical specifications

Process wetted parts: 316L or 304 stainless steel

Process connections: 2 in. 150# (4.75 in. (121 mm) bolt circle) DIN (5.71 in. (145 mm) bolt circle)

Orientation: Vertical or horizontal mount

Table 10: Mounting Hardware and Adapter Plates

	O.D.	Bolt circle	Studs
Square weld plate, ANSI studs	7.75 x 7.75 in. (196.85 x 196.85 mm)	6.00 in. (152.4 mm)	5/8-11 UNC
Square weld plate, DIN studs	8.46 x 8.46 in. (215 x 215 mm)	6.69 in. (170 mm)	M16 x 2
Adapter to existing ANSI 4 in., 150# flange	9.00 in. (228.6 mm)	7.50 in. (190.5 mm)	5/8-11 UNC
Adapter to existing ANSI 6 in., 150# flange	11.00 in. (297.4 mm)	8.50 in. (215.9 mm)	3/4 - 10 UNC
Adapter to existing ANSI 3 in., 300# flange	8.25 in. (209.55 mm)	6.62 in. (166.15 mm)	
Adapter to existing ANSI 4 in., 300# flange	10.00 in. (254 mm)	7.88 in. (200.15 mm)	

Spool piece P/N is available to offset probe electronics housing from hot duct work.

	ANSI	DIN
A	6.00 (153)	7.50 (1.91)
B thread	0.625 (11)	M-16 x 2
C diameter	4.75 (121)	5.71 (145)

Table 11: Electrical Conduit Size

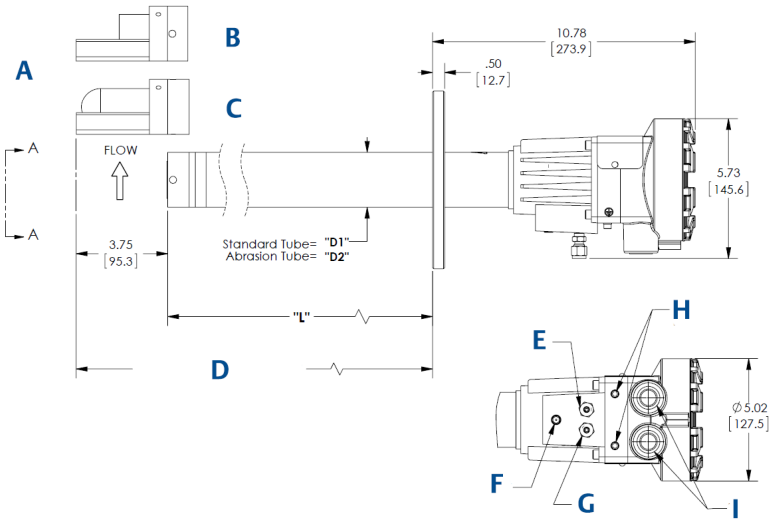
Conduit fitting	1/2 - 14 NPT	1/2 - 14 NPT	1/2 - 14 NPT	1/2 - 14 NPT	1/2 - 14 NPT
Number of fittings	2	2	6	2	2

Table 12: Shipping Weights

	6888A	
18 in. (457 mm) standard probe tube	16 lb (7.3 kg)	21 lb (9.5 kg)
3 ft (0.91 m) standard probe tube	21 lb (9.5 kg)	26 lb (11.8 kg)
6 ft (1.83 m) standard probe tube	27 lb (12.2 kg)	32 lb (14.5 kg)
9 ft (2.74 m) standard probe tube	33 lb (15.0 kg)	N/A
12 ft (3.66 m) standard probe tube	39 lb (17.7 kg)	N/A

Dimensions

Figure 2: Rosemount 6888A with Standard Housing



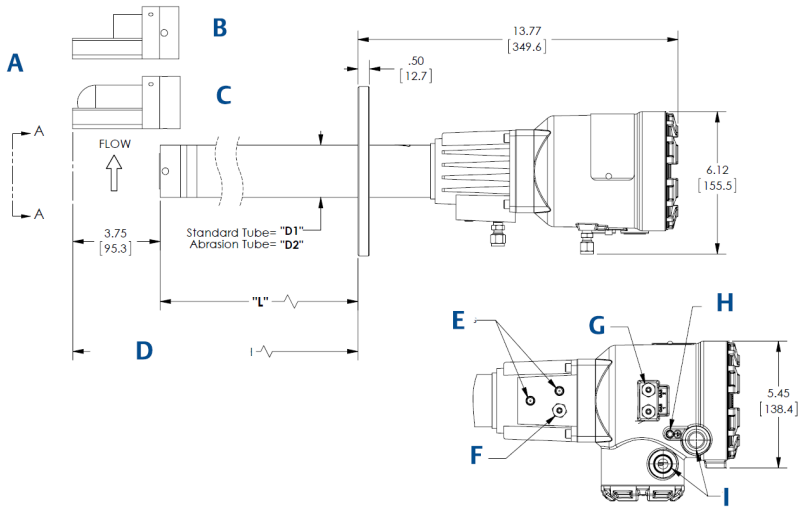
A. During assembly align deflector to face flow as shown
B. METAL DIFFUSER
C. CERAMIC DIFFUSER
D. MINIMUM REMOVAL LENGTH
E. Calibration gas ¼ tube fitting 5.0 SCFH (2.4 l/min) 20 PSI (138 kPa)
F. Reference air vent
G. Reference gas ¼ tube fitting 2.0 SCFH (1.0 l/min) 20 PSI (138 kPa)
H. #10 Soc Hd Cap Scr (EXTERNAL GROUND)
I. ½ npt conduit connection (POWER,SIGNAL)

Dimensions are in inches [millimeters].

Table 13: Rosemount 6888A with Standard Housing - Removal/Installation

Probe length	Insertion depth (L)	Minimum removal length	Standard Tube (D1)	Abrasion Tube (D2
18-in. (457 mm)	16.10-in. (409 mm)	27-in. (686 mm)	2.25-in. (57.15 mm)	2.38-in. (60.45 mm)
3 ft (0.91 m)	32.52-in. (826 mm)	46.6-in. (1182 mm)	2.25-in. (57.15 mm)	2.38-in. (60.45 mm)
6 ft (1.83 m)	68.52-in. (1740 mm)	82.6-in. (2097 mm)	2.25-in. (57.15 mm)	2.38-in. (60.45 mm)
9 ft (2.74 m)	104.52-in. (2655 mm)	118.6-in. (3011 mm)	N/A	2.38-in. (60.45 mm)
12 ft (3.66 m)	140.52-in. (3569 mm)	154.6-in. (3926 mm)	N/A	2.38-in. (60.45 mm)

Figure 3: Rosemount 6888A with Autocalibration Housing



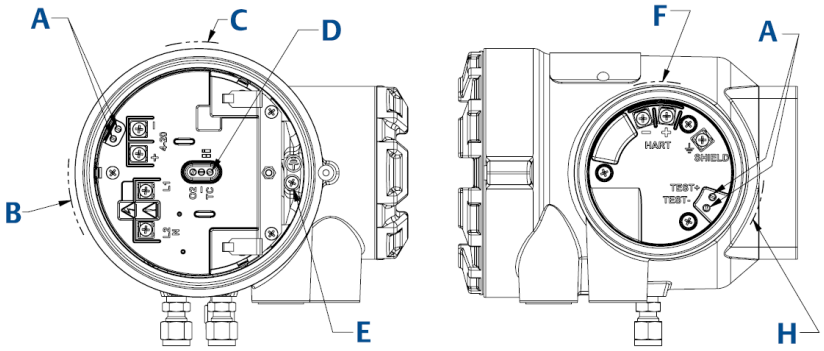
A. During assembly align deflector to face flow as shown
B. METAL DIFFUSER
C. CERAMIC DIFFUSER
D. MINIMUM REMOVAL LENGTH
E. Reference air vents
F. Reference gas ¼ tube fitting 2.0 SCFH (1.0 l/min) 20 PSI (138 kPa)
G. Calibration gas ¼ tube fitting 5.0 SCFH (2.4 l/min) 20 PSI (138 kPa)
H. #10 Soc Hd Cap Scr (EXTERNAL GROUND)
I. ½ npt conduit connection (POWER,SIGNAL)

Dimensions are in inches [millimeters].

Table 14: Rosemount 6888A with Autocalibration Housing - Removal/Installation

Probe length	Insertion depth (L)	Minimum removal length	Standard Tube (D1)	Abrasion Tube (D2)
18 in. (457 mm)	16.10 in. (409 mm)	29.87 in. (759 mm)	2.25 in. (57.15 mm)	2.38 in. (60.45 mm)
3 ft (0.91 m)	32.52 in. (826 mm)	50.1 in. (1271 mm)	2.25 in. (57.15 mm)	2.38 in. (60.45 mm)
6 ft (1.83 m)	68.52 in. (1740 mm)	86.1 in. (2186 mm)	2.25 in. (57.15 mm)	2.38 in. (60.45 mm)
9 ft (2.74 m)	104.52 in. (2655 mm)	122.1 in. (3100 mm)	N/A	2.38 in. (60.45 mm)
12 ft (3.66 m)	140.52 in. (3569 mm)	158.1 in. (4015 mm)	N/A	2.38 in. (60.45 mm)

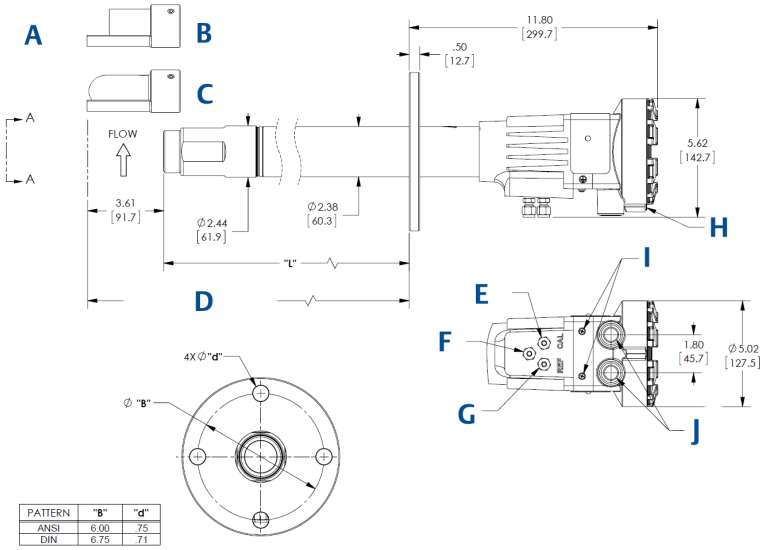
Figure 4: Rosemount 6888A with Autocalibration Housing Field Connections - HART Output



TRANSMITTER PROBE FIELD CONNECTIONS

A. Test points
B. Power
C. NOT USED
D. Test point group
E. #8 Pan Hd Scr (INTERNAL GROUND)
F. Signal
G. HART connection

Figure 5: Rosemount 6888C with Standard Housing



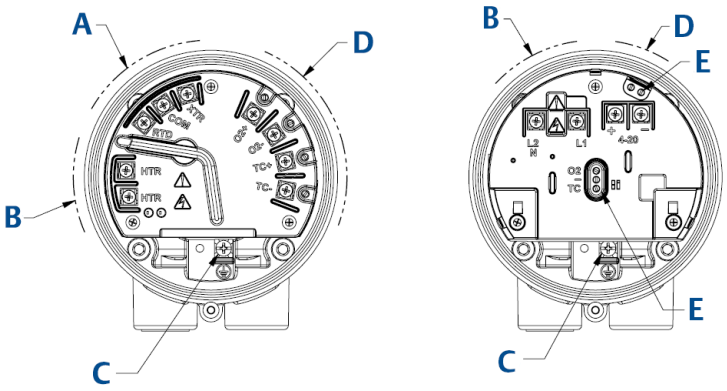
A. During assembly align deflector to face flow as shown
B. METAL DIFFUSER
C. CERAMIC DIFFUSER
D. MINIMUM REMOVAL LENGTH
E. Calibration gas ¼ tube fitting 5.0 SCFH (2.4 l/min) 20 PSI (138 kPa)
F. Reference air vent, flame arrested
G. Reference gas ¼ tube fitting 2.0 SCFH (1.0 l/min) 20 PSI (138 kPa)
H. M4 x 0.7 x 12MMFlat Hd Scr (COVER LOCK SCREW)
I. #10 Soc Hd Cap Scr (EXTERNAL GROUND)
J. ½ npt conduit connection (POWER,SIGNAL)

Dimensions are in inches [millimeters].

Table 15: Rosemount 6888C with Autocalibration Housing - Removal/Installation

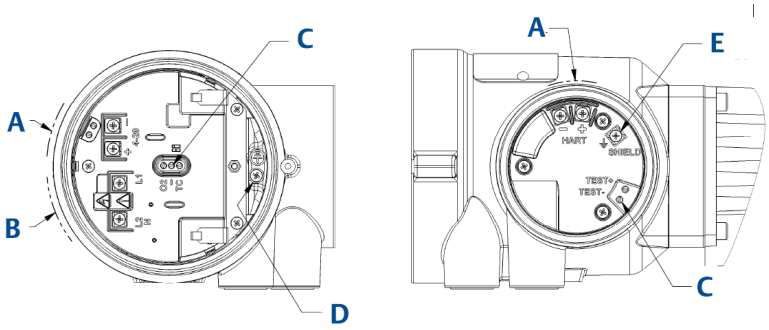
Probe length	Insertion depth (L)	Minimum removal length
18 in. (457 mm)	16.10 in. (409 mm)	29.87 in. (759 mm)
3 ft (0.91 m)	32.52 in. (826 mm)	50.1 in. (1271 mm)
6 ft (1.83 m)	68.52 in. (1740 mm)	86.1 in. (2186 mm)

Figure 6: Rosemount 6888C with Standard Housing Field Connections - HART® Output



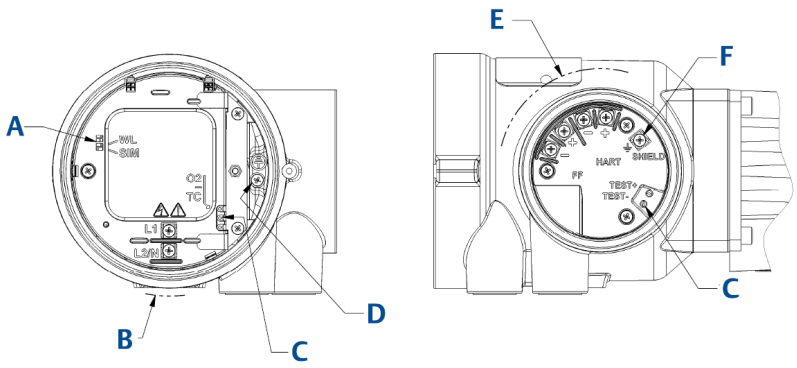
A. CJC device (optional)
B. Power
C. #8 Pan Hd Scr (INTERNAL GROUND)
D. Signal
E. Test point group

Figure 7: Rosemount 6888A/6888C with Autocalibration Housing Field Connections - HART Output



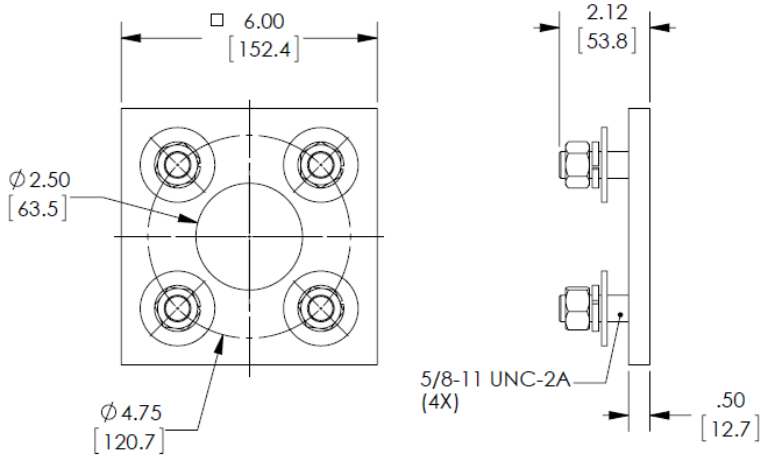
A. Signal
B. Power
C. Test point group
D. #8 Pan Hd Scr (INTERNAL GROUP)
E. #6 Pan Hd Scr (INTERNAL GROUP)

Figure 8: Rosemount 6888A/6888C with Autocalibration Housing Field Connections - FOUNDATION™ Fieldbus Output



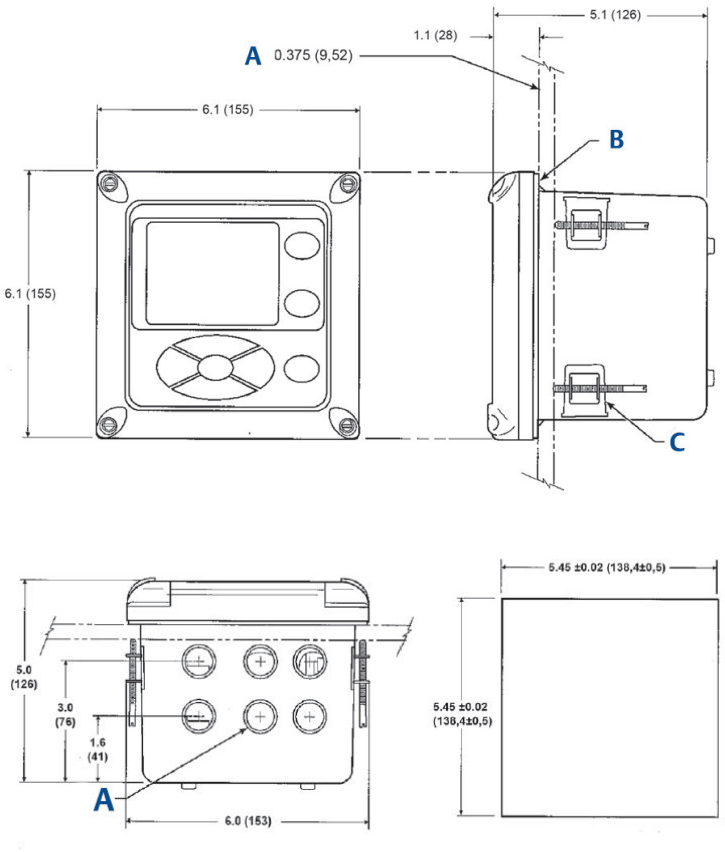
A. Write lock group
B. Power
C. Test point group
D. #8 Pan Hd Scr (INTERNAL GROUP)
E. Signal group
F. #6 Pan Hd Scr (INTERNAL GROUP)

Figure 9: Rosemount 6888A New Installation: Square Weld Plate



Dimensions are in inches [millimeters].

Figure 10: Rosemount 6888Xi with Panel Mount



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