

Rosemount Clarity II T56 Turbidimeter



Essential instructions

Read this page before proceeding!

Your instrument purchase from Emerson is one of the finest available for your particular application. These instruments have been designed and tested to meet many national and international standards. Experience indicates that its performance is directly related to the quality of the installation and knowledge of the user in operating and maintaining the instrument. To ensure continued operation to the design specifications, read this Manual thoroughly before proceeding with installation, commissioning, operation, and maintenance of this instrument. If this equipment is used in a manner not specified by the manufacturer, the protection provided by it against hazards may be impaired.

- Failure to follow the proper instructions may cause any one of the following situations to occur: loss of life, personal injury, property damage, damage to this instrument, and warranty invalidation.
- Ensure that you have received the correct model and options from your purchase order. Verify that this Manual covers your model and options. If not, call 1-800-854-8257 or 949-757-8500 to request the correct Manual.
- For clarification of instructions, contact your Rosemount representative.
- Follow all warnings, cautions, and instructions marked on and supplied with the product.
- Use only qualified personnel to install, operate, program, and maintain the product.
- Inform and educate your personnel in the proper installation, operation, and maintenance of the product.
- Install equipment as specified in the installation section of this Manual. Follow appropriate local and national codes. Only connect the product to electrical and pressure sources specified in this Manual.
- Use only factory documented components for repair. Tampering or unauthorized substitution of parts can affect product performance and cause unsafe operation of your process.
- All equipment doors must be closed, and protective covers must be in place unless qualified personnel are performing maintenance.

WARNING

Risk of electrical shock

Installation and servicing of this product may expose personnel to dangerous voltages.

Equipment protected throughout by double insulation.

Disconnect main power wired to separate power source before servicing.

Do not operate or energize instrument with case open.

Signal wiring within this box must be rated at least 240 V.

Non-metallic cable strain reliefs do not provide grounding between conduit connections. Use grounding type bushings and jumper wires.

Unused cable conduit entries must be securely sealed by non-flammable closures to provide exposure integrity in compliance with personal safety and environmental protection requirements. Unused conduit openings must be sealed with Type 4X or IP66 conduit plugs to maintain the ingress protection rating (Type 4X).

Electrical installation must be in accordance with the National Electrical Code (ANSI/NFPA-70) and/or any other national or local codes.

Operate only with front panel fastened and in place.

Proper use and configuration is the operator's responsibility.

⚠ CAUTION**Radio interference**

This product generates, uses, and can radiate radio frequency energy and thus can cause radio communication interference. Improper installation or operation may increase such interference. As temporarily permitted by regulation, this unit has not been tested for compliance within the limits of Class A computing devices, pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference.

Operation of this equipment in a residential area may cause interference, in which case the operator, at his own expense, will be required to take whatever measures may be required to correct the interference.

⚠ CAUTION**Industrial environments**

This product is not intended for use in the light industrial, residential, or commercial environments per the instrument's certification to EN50081-2.

⚠ WARNING**Physical access**

Unauthorized personnel may potentially cause significant damage to and/or misconfiguration of end users' equipment. This could be intentional or unintentional and needs to be protected against.

Physical security is an important part of any security program and fundamental to protecting your system. Restrict physical access by unauthorized personnel to protect end users' assets. This is true for all systems used within the facility.

Warranty

1. **LIMITED WARRANTY:** Subject to the limitations contained in Section 2 herein and except as otherwise expressly provided herein, Emerson ("Seller") warrants that the firmware will execute the programming instructions provided by Seller and that the Goods manufactured or Services provided by Seller will be free from defects in materials or workmanship under normal use and care until the expiration of the applicable warranty period. Goods are warranted for twelve (12) months from the date of initial installation or eighteen (18) months from the date of shipment by Seller, whichever period expires first. Consumables and Services are warranted for a period of 90 days from the date of shipment or completion of the Services. Products purchased by Seller from a third party for resale to Buyer ("Resale Products") shall carry only the warranty extended by the original manufacturer. Buyer agrees that Seller has no liability for Resale Products beyond making a reasonable commercial effort to arrange for procurement and shipping of the Resale Products. If Buyer discovers any warranty defects and notifies Seller thereof in writing during the applicable warranty period, Seller shall, at its option, promptly correct any errors that are found by Seller in the firmware or Services, or repair or replace F.O.B. point of manufacture that portion of the Goods or firmware found by Seller to be defective, or refund the purchase price of the defective portion of the Goods/Services. All replacements or repairs necessitated by inadequate maintenance, normal wear and usage, unsuitable power sources, unsuitable environmental conditions, accident, misuse, improper installation, modification, repair, storage or handling, or any other cause not the fault of Seller are not covered by this limited warranty, and shall be at Buyer's expense. Seller shall not be obligated to pay any costs or charges incurred by Buyer or any other party except as may be agreed upon in writing in advance by an authorized Seller representative. All costs of dismantling, reinstallation and freight, and the time and expenses of Seller's personnel for site travel and diagnosis under this warranty clause shall be borne by Buyer unless accepted in writing by Seller. Goods repaired and parts replaced during the warranty period shall be in warranty for the remainder of the original warranty period or

ninety (90) days, whichever is longer. This limited warranty is the only warranty made by Seller and can be amended only in a writing signed by an authorized representative of Seller. Except as otherwise expressly provided in the Agreement, THERE ARE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, OR ANY OTHER MATTER WITH RESPECT TO ANY OF THE GOODS OR SERVICES. It is understood that corrosion or erosion of materials is not covered by our guarantee.

- 2. **LIMITATION OF REMEDY AND LIABILITY:** SELLER SHALL NOT BE LIABLE FOR DAMAGES CAUSED BY DELAY IN PERFORMANCE. THE SOLE AND EXCLUSIVE REMEDY FOR BREACH OF WARRANTY HEREUNDER SHALL BE LIMITED TO REPAIR, CORRECTION, REPLACEMENT, OR REFUND OF PURCHASE PRICE UNDER THE LIMITED WARRANTY CLAUSE IN SECTION 1 HEREIN. IN NO EVENT, REGARDLESS OF THE FORM OF THE CLAIM OR CAUSE OF ACTION (WHETHER BASED IN CONTRACT, INFRINGEMENT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT, OR OTHERWISE), SHALL SELLER'S LIABILITY TO BUYER AND/OR ITS CUSTOMERS EXCEED THE PRICE TO BUYER OF THE SPECIFIC GOODS MANUFACTURED OR SERVICES PROVIDED BY SELLER GIVING RISE TO THE CLAIM OR CAUSE OF ACTION. BUYER AGREES THAT IN NO EVENT SHALL SELLER'S LIABILITY TO BUYER AND/OR ITS CUSTOMERS EXTEND TO INCLUDE INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES. THE TERM "CONSEQUENTIAL DAMAGES" SHALL INCLUDE, BUT NOT BE LIMITED TO, LOSS OF ANTICIPATED PROFITS, LOSS OF USE, LOSS OF REVENUE, AND COST OF CAPITAL.

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1 Install

1.1 Unpack and inspect

Consult the table to verify that you have received the parts for the option you ordered.

Table 1-1: Rosemount Clarity II Turbidimeter Parts

Item	Model/part number
Single input turbidity transmitter with HART®	56-03-27-38-HT
Dual input turbidity transmitter with HART	56-03-27-37-HT
Sensor - EPA standards	8-0108-0002-EPA
Sensor - ISO standard	8-0108-0003-ISO
Cable - 3 ft. (0.9 m)	2413800
Cable - 20 ft. (6.1 m)	2409700
Cable - 50 ft. (15.2 m)	2409800
Calibration cup	2410100
Molded chamber/debubbler	24170-00

1.2 General installation information

1. Although the transmitter is suitable for outdoor use, do not install it in direct sunlight or in areas of extreme temperatures.
2. Install the transmitter in an area where vibration and electromagnetic and radio frequency interference are minimized or absent.
3. Keep the transmitter and sensor wiring at least one foot (0.3 m) from high voltage conductors. Be sure there is easy access to the transmitter.
4. The transmitter is suitable for panel, pipe, or surface mounting. Refer to the figures below.

⚠ WARNING

Electrical shock

Electrical installation must be in accordance with the National Electrical Code (ANSI/NFPA-70) and/or any other applicable national or local codes.

Do not operate or energize instrument with case open.

Figure 1-1: Panel Mount Front View

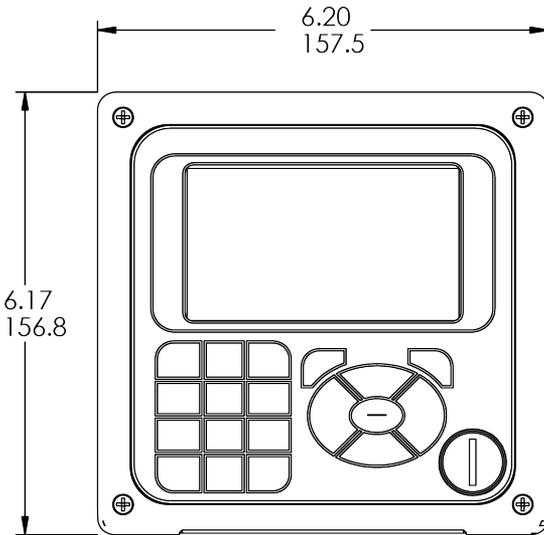
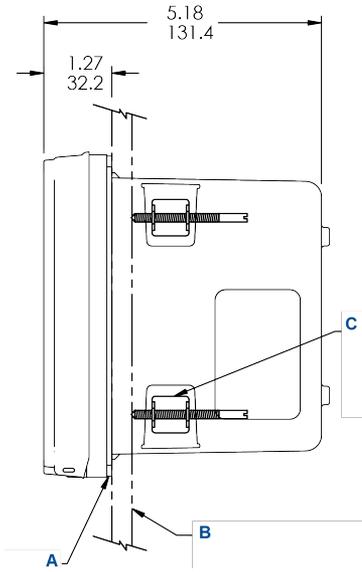
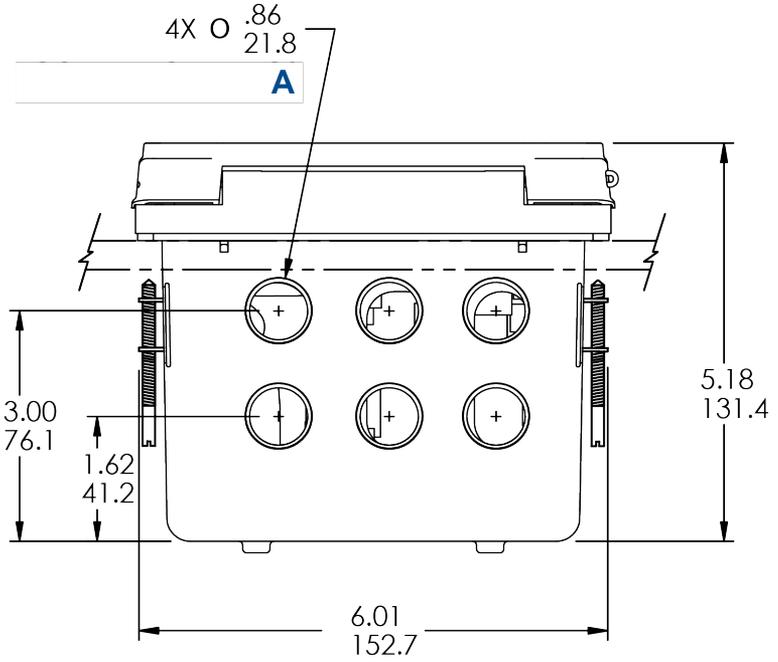


Figure 1-2: Panel Mount Side View



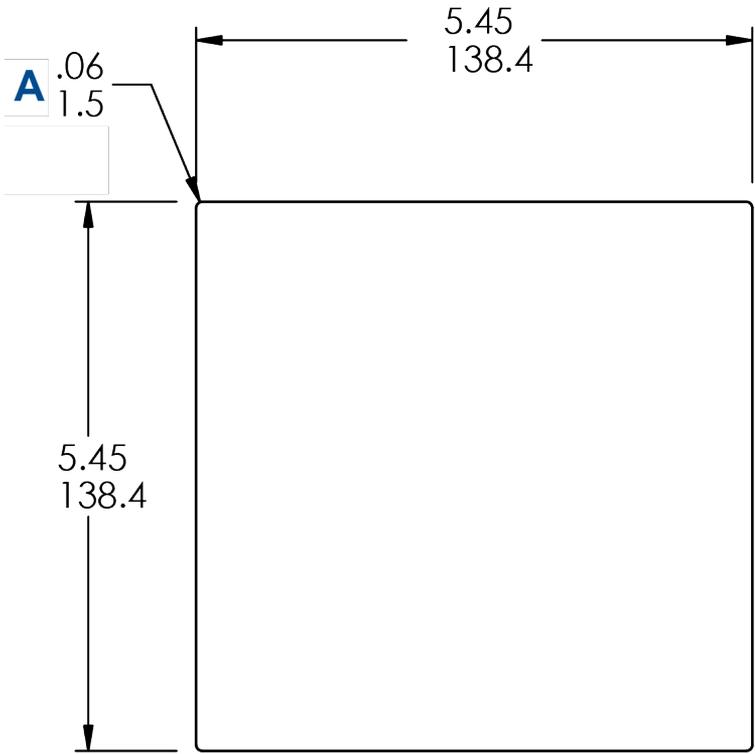
- A. Panel mount gasket
- B. Panel supplied by others. Maximum thickness: 0.375 in. (9.52 mm)
- C. 4X mounting brackets and screws provided with instruments

Figure 1-3: Panel Mount Bottom View



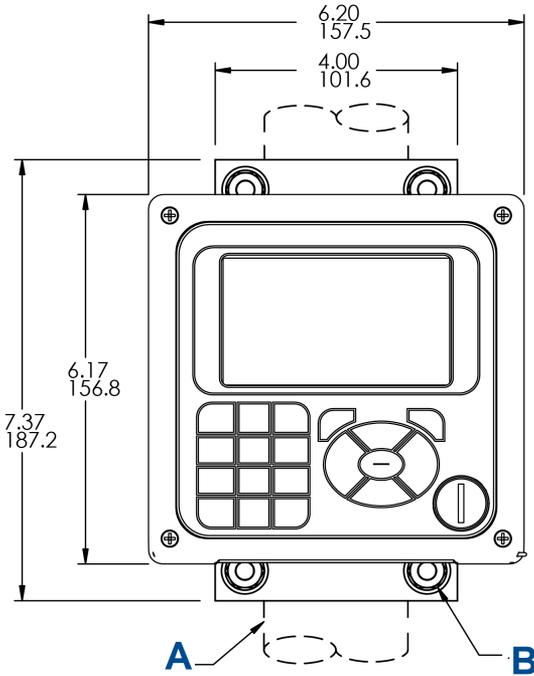
A. Conduit openings

Figure 1-4: Panel Cut-Out



A. Maximum

Figure 1-5: Wall/Surface Mount Front View



- A. 2-in. pipe supplied by customer.
Vertical pipe mounting shown. For horizontal pipe, rotate brackets and U-bolts 90°.

Note
Unless otherwise specified.

- B. 4X cover screw

Figure 1-6: Wall/Surface Mount Side View

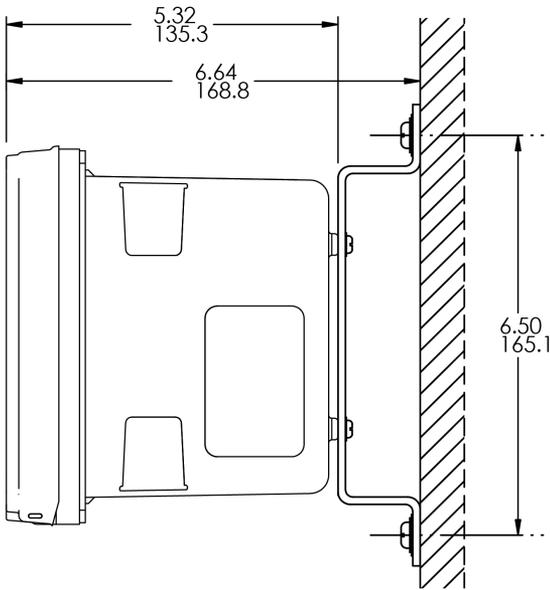
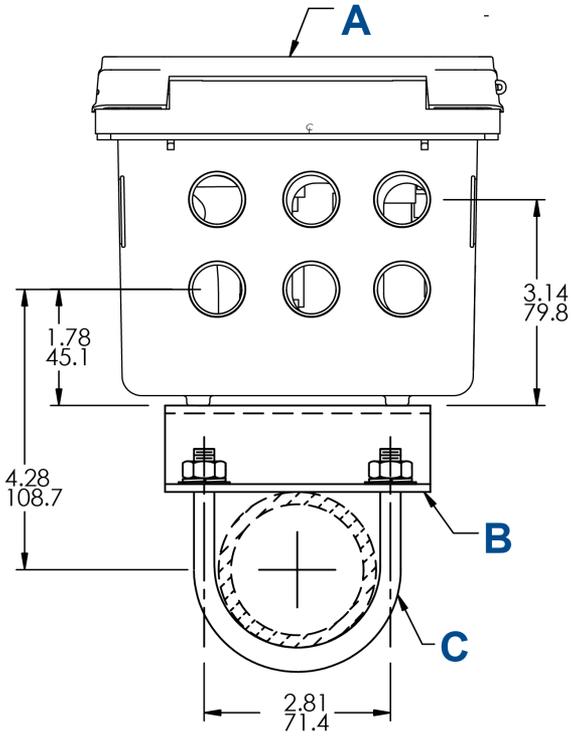
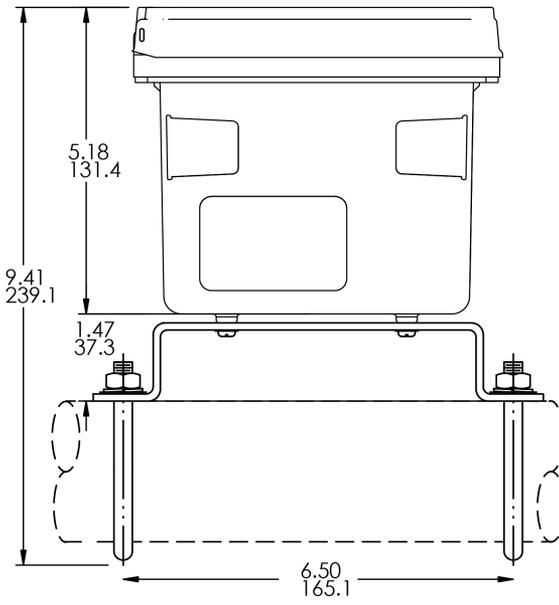


Figure 1-7: Pipe Mount Bottom View



- A. Front panel
- B. 2-in. pipe mount bracket
- C. 2X set U-bolts for 2-in. pipe in kit PN 23820

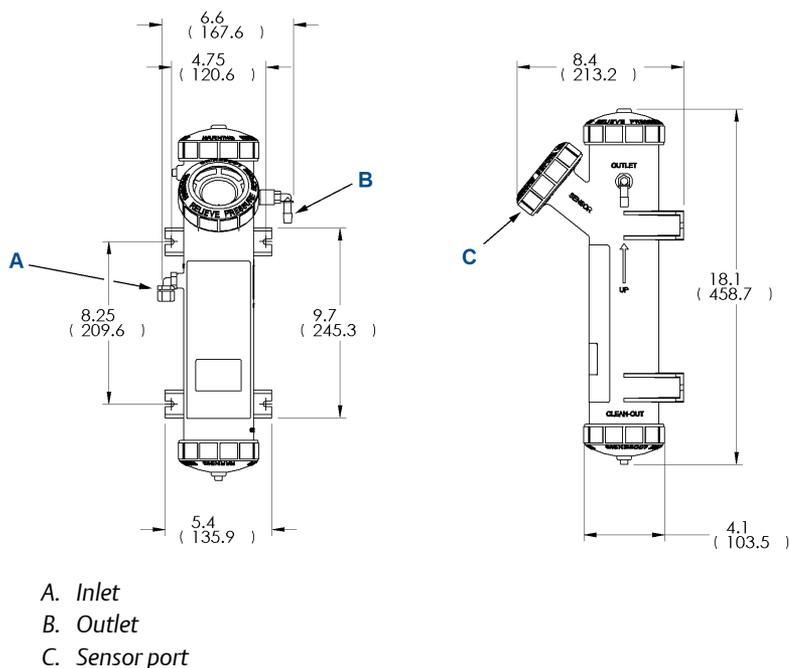
Figure 1-8: Pipe Mount Side View



1.3 Install debubbler assembly

See Figure 1-9 for installation.

Figure 1-9: Debubbler and Flow Chamber



Procedure

1. Connect the sample line to the inlet fitting.
The fitting accepts ¼-in. OD tubing.
2. Attach a piece of ⅜-in. ID soft tubing to the drain fitting.
The debubbler must drain to atmosphere.

⚠ WARNING

High pressure and temperature

Before removing the sensor, be absolutely certain that the process pressure is reduced to 0 psig and the process temperature is lowered to a safe level!

⚠ CAUTION

Reading errors

During operation, the debubbler is under pressure. A 0.040 in. (1 mm) orifice in the outlet provides the pressure. Back pressure helps prevent outgassing, which can lead to bubbles accumulating on the sensor face, resulting in erroneous readings.

Do not exceed 30 psig (308 kPa abs) inlet pressure.

The amount of pressure in the debubbler can be estimated from the flow rate. See [Table 1-2](#).

Table 1-2: Approximate Debubbler Pressure as a Function of Flow (0.040 Inch Outlet Orifice)

gph	psig	ml/min	kPa abs
2	1	100	110
4	3	200	120
6	8	300	140
8	14	400	160
10	21	500	190
11	26	600	240
12	31	700	280
--	--	800	340

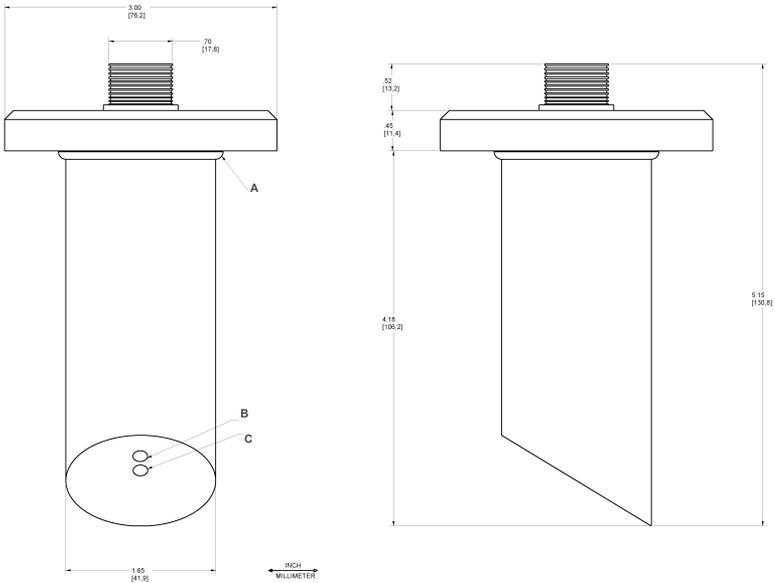
To control and monitor sample flow, a valved rotameter with fittings is available (PN 24103-00).

3. Attach the rotameter to the debubbler outlet.

You can also use the rotameter to increase back pressure on the debubbler if additional pressure is needed to prevent outgassing.

1.4 Install sensor

Figure 1-10: Sensor



- A. O-ring PN 9550145
- B. Light source
- C. Detector

Procedure

1. Unscrew the nut on the side of the debubbler.
2. Insert the sensor in the mouth of the measuring chamber.
Be sure the pin on the debubbler lines up with the hole in the sensor.
3. Replace the nut.
4. Remove the protective cap from the sensor.
5. Screw the cable onto the receptacle.
The plug and receptacle are keyed for proper alignment.

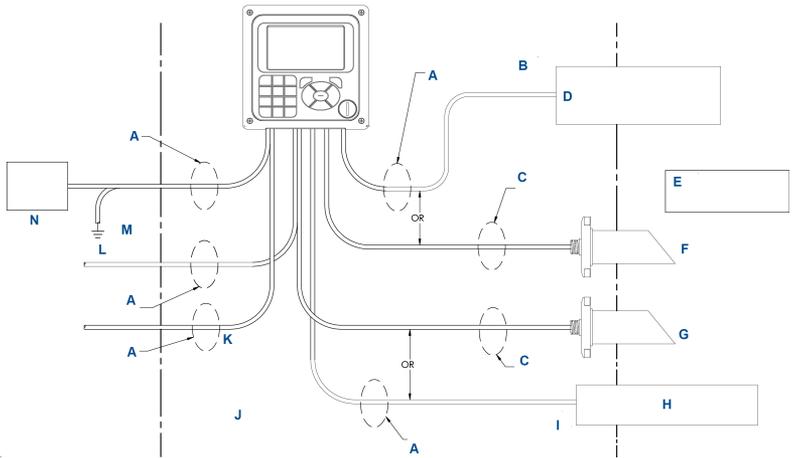
The sensor is rated to IP65 when properly connected to the cable.

Postrequisites

To prevent possible water damage to the connector contacts, be sure the cable receptacle and the connector on the back of the sensor are dry when connecting or disconnecting the cable.

1.5 Install Rosemount 56 transmitter

Figure 1-11: Non-Incendive Field Wiring Installation for the Rosemount 56-27-37 Transmitter



- A. Metal conduit
- B. If sensor is equipped with a VP connector, the VP connector must be in the unclassified area.
- C. Sensor cable is shielded.
 During installation, leave maximum amount of jacket insulation possible on N.I. field wiring within instrument enclosure. After termination, wrap N.I. field wiring within enclosure with mylar tape to ensure adequate double insulation remains.
 Max cable length is 50 ft. (15.2 m).
- D. Recommended sensor attached. See drawing 1700703 for sensors recommended for use with options: -30, -31, -32, -33, -34, -35, and -36. (No sensor if blank or -38).

E. **⚠ WARNING**

Use with non-flammable process media only.

- F. Rosemount Clarity II turbidity sensor #2 (optional): Option-37
- G. Rosemount Clarity II turbidity sensor #1: Option-27
- H. Sensor 1. See Drawing 1700703 for sensors recommended for use with options: -20, -21, -22, -24, -25, and -26.
- I. If sensor is equipped with a VP connector, the VP connector must be in the unclassified area.
- J. Rosemount 56 hazardous area

Class I, Division 2, Groups A-D, 0° to 50 °C

Class II, III, Division 2, Groups E-G

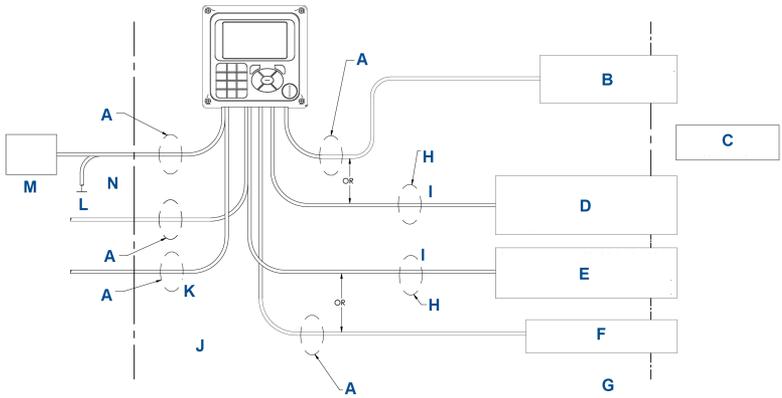
K. Alarm wiring (Vac) (optional)

L. Analog output (optional)

M. Ground connection may be made in a hazardous area.

N. Power supply

Figure 1-12: CSA Non-Incendive Field Wiring Installation



- A. Metal conduit
- B. Recommended sensor attached. See Drawing 1700704 for sensors recommended for use with option -31. (No sensor if blank or -38).
- C. **⚠ WARNING**

Use with non-flammable process media only.

- D. Rosemount Clarity II turbidity sensor (to option -37), pH sensor (to option -32), amperometric sensor (to option -34, -35, or -36), contacting conductivity sensor (to option -30), or any simple apparatus to the same connections. No sensor if option is blank or -38.
- E. Rosemount Clarity II turbidity sensor (to option -27), pH sensor (to option -22), amperometric sensor (to option -24, 25, or -26), contacting conductivity sensor (to option -30), or any simple apparatus to the same connections.
- F. Sensor 1. See Drawing 1700704 for sensors recommended for use with option -21.
- G. Unclassified area
- H. Sensor cable is shielded.
- I. During installation, leave maximum amount of jacket insulation possible on N.I. field wiring within instrument enclosure. After termination, wrap N.I. field wiring within enclosure with mylar tape to ensure adequate double insulation remains.

Max. cable length is 50 ft. (15.2 m).

You may use non-incendive field wiring methods to connect sensor to the turbidity, amperometric, pH, and contacting conductivity sensor boards. Attached pH, contacting conductivity, or amperometric sensor boards must be CSA approved as non-incendive for Class I, Division 2, Groups ABCD with entity input values of V_{max} and $I_{max} \geq V_{oc}$ and I_{sc} listed in

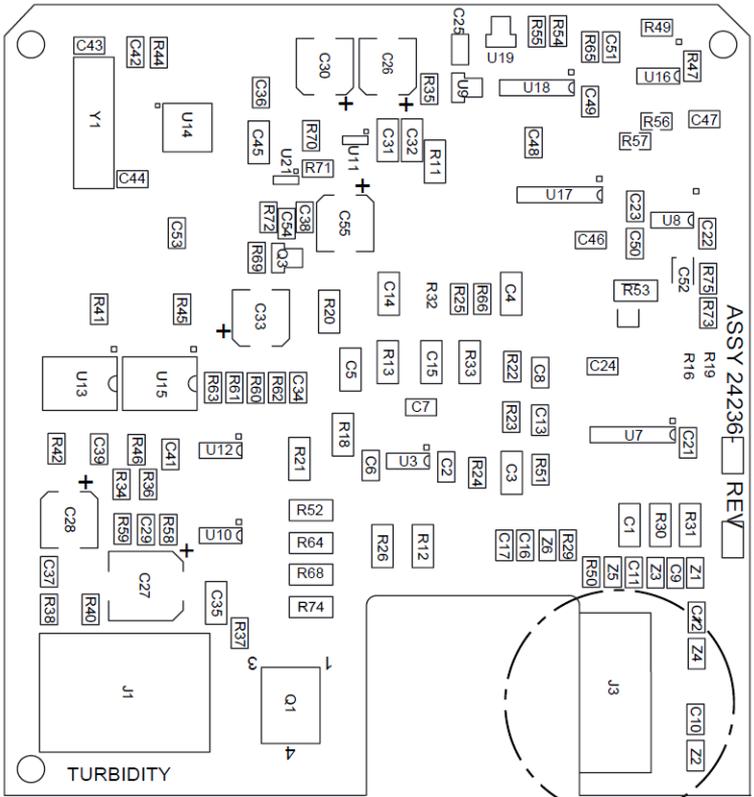
Tables 1A to 1C, and the Ci and Li of the sensor and interconnected wiring must be \leq Ca and La listed in tables 1A to 1C or be classified as "simple apparatus." Simple apparatus are devices which are incapable of generating or storing more than 1.2 V, 0.1 A, 25 mW, or 20 μ J (pH/ORP/ISE and amperometric sensors without preamps and contacting conductivity sensors qualify as simple apparatus).

- J. Rosemount 56 hazardous area
 - Class I, Division 2, Groups A-D, 0° to 50°C
 - Class II, III, Division 2, Groups E-G
- K. Alarm wiring (Vac) (optional)
- L. Analog output (optional)
- M. Power supply
- N. You may make a ground connection in a hazardous area.

Note

- A. Installation must conform to the CEC.
 - B. Seal required at each conduit entrance.
 - C. Unless otherwise specified.
-
-

Figure 1-13: Non-Incendive Field Wiring Connection for Class 1, Division 1, Group D



Turbidity sensor board

Option -27/-37: turbidity

May only be used with a Rosemount Clarity II Turbidity Sensor.

2 Wire

2.1 General wiring information

The transmitter is easy to wire.

The front panel is hinged at the bottom. The panel swings down for easy access to the wiring locations.

2.1.1 Removable connectors and signal input boards

The transmitter uses removable signal input boards and communication boards for ease of wiring and installation.

You can remove each of the signal boards either partially or completely from the enclosure for wiring. The transmitter has three slots for placement of up to two signal input boards and one communication board.

Slot 1 - left	Slot 2 - center	Slot 3 - right
Profibus® board	Signal board 1	Signal board 2

2.1.2 Signal input boards

Slots 2 and 3 are for signal input measurement boards.

Procedure

1. Wire the sensor leads to the measurement board following the lead locations marked on the board.
2. Carefully slide the wired board fully into the enclosure slot and take up the excess sensor cable through the cable gland.
3. Tighten the cable gland nut to secure the cable and ensure a sealed enclosure.

Note

For the purpose of replacing factory-installed signal input boards, Rosemount is the sole supplier.

2.1.3 Digital communication boards

HART® digital communications is standard on this system. A Profibus® DP communication board is available as an option for the system's communication with a host. HART communication supports Bell 202 digital communications over an analog 4-20 mA current output. Profibus DP is an open communications protocol which operates over a dedicated digital line to the host.

2.1.4 Alarm relays

Emerson supplies four alarm relays with the switching power supply (85 to 264 Vac, 03 order code) and the 24 Vdc power supply (20 - 30 Vdc, 02 order code). You can use all relays for process measurement(s) or temperature. You can also configure any relay as a fault alarm instead of a process alarm. In addition, you may configure any relay independently and program it to activate pumps or control valves.

As process alarms, alarm logic (high or low activation or USP*) and deadband are user-programmable. Customer-defined failsafe operation is supported as a programmable menu function to allow all relays to be energized or not energized as a default condition upon powering the transmitter. You may program the USP* alarm to activate when the conductivity is within a user-selectable percentage of the limit. USP* alarming is available only when a contacting conductivity measurement board is installed.

2.2 Prepare conduit openings

The transmitter enclosure has six conduit openings. Four conduit openings are fitted with conduit plugs.

Conduit openings accept ½-in. conduit fittings or PG 13.5 cable glands. To keep the case watertight, block unused openings with NEMA® 4X or IP65 conduit plugs.

Note

Use watertight fittings and hubs that comply with your requirements. Connect the conduit hub to the conduit before attaching the fitting to the transmitter.

2.3 Prepare sensor cable

The Rosemount T56 is intended for use with all Rosemount sensors. Refer to the sensor installation instructions for details on preparing sensor cables.

2.4 Power, output, and sensor connections

2.4.1 Power wiring

Emerson offers two power supplies for the Rosemount T56

1. 24 Vdc (20-30 V) power supply (02 ordering code)
2. 85-265 Vac switching power supply (03 ordering code)

AC mains (115 or 230 V) leads and 24 Vdc leads are wired to the power supply board which is mounted vertically on the left side of the main enclosure cavity. Each lead location is marked clearly on the power supply board. Wire the power leads to the power supply board using the lead markings on the board.

The grounding plate is connected to the earth terminal of the -03 (85 to 265 Vac) power supply. The green colored screws on the grounding plate are intended for connection to some sensors to minimize radio frequency interference. The green screws are not intended to be used for safety purposes.

2.4.2 Current output wiring

Emerson ships all instruments with two 4-20 mA current outputs. Wiring locations for the outputs are on the main board which is mounted on the hinged door of the instrument.

Wire the output leads to the correct position on the main board using the lead markings (+/positive, -/negative) on the board. Emerson provides male mating connectors with each unit.

2.4.3 Alarm relay wiring

Emerson supplies four alarm relays with the switching power supply (85 to 265 Vac, 03 order code) and the 24 Vdc power supply (20-30 Vdc, 02 order code).

Wire the relay leads on each of the independent relays to the correct position on the power supply board using the printed lead markings (NO/ Normally open, NC/Normally closed, or Com/Common) on the board. .

2.4.4 Sensor wiring to signal boards

Plug the pre-terminated sensor cable connector directly into the turbidity signal board mating connector.

⚠ WARNING

Electrical shock

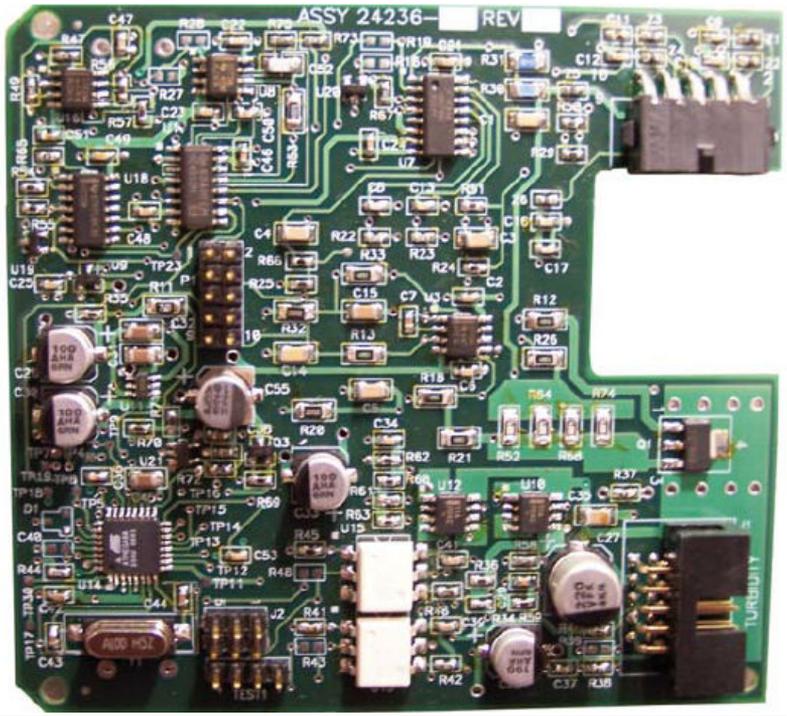
Electrical installation must be in accordance with the National Electrical Code (ANSI/NFPA-70) and/or any other applicable national or local codes.

2.4.5 Wire sensor cable

The sensor cable is pre-wired to a plug that inserts into a receiving socket on the signal board.

See [Figure 2-1](#).

Figure 2-1: Turbidity Signal Board with Plug-in Sensor Connection



The cable also passes through a strain relief fitting. To install the cable:

Procedure

1. Remove the wrenching nut from the strain relief fitting.
2. Insert the plug through the hole in the bottom of the enclosure nearest the sensor socket. Seat the fitting in the hole.
3. Slide the wrenching nut over the cable plug and screw it onto the fitting.
4. Loosen the cable nut so the cable slides easily.
5. Insert the plug into the appropriate receptacle. To remove the plug, squeeze the release clip and pull straight out.
6. Adjust the cable slack in the enclosure and tighten the cable nut.
Be sure to allow sufficient slack to avoid placing stress on the cable and connections.
7. Plug the cable into the back of the sensor.
The sensor is rated to IP65 when properly connected to the cable. To prevent possible water damage to the connector contacts, be sure

the cable receptacle and the connector on the back of the sensor are dry when connecting or disconnecting the cable.

8. Place the sensor in either the measuring chamber or the calibration cup.

Important

The sensor must be in a dark place when power is first applied to transmitter.

Note

If *S1 Warning* appears, check sensor cable connection and confirm sample water flow at debubbler drain outlet.

Important

When using EPA/incandescent sensors (P 8-0108-0002-EPA):

- Do not power up the instrument without the sensor connected.
- Do not disconnect and reconnect a sensor while a transmitter is powered.

If this is inconvenient or cannot be avoided:

- Cycle power to the instrument after connecting to the sensor or
- Perform a slope calibration or standard calibration routine after connecting the sensor.

Following these guidelines will extend the life of the incandescent lamp and avoid premature warnings and faults due to reduced lamp life.

A EU Declaration of Conformity

	
<h2 style="margin: 0;">EU Declaration of Conformity</h2> <p style="margin: 0;">No: RAD 1121 Rev. C</p>	
<p>We,</p> <p style="margin-left: 40px;">Rosemount Inc. 8200 Market Boulevard Chanhassen, MN 55317-9685 USA</p> <p>declare under our sole responsibility that the product,</p> <p style="margin-left: 40px;">Rosemount™ Advanced Dual Input Analyzer Model 56-AA-BB-CC-DD</p> <p>manufactured by,</p> <p style="margin-left: 40px;">Rosemount Inc. 8200 Market Boulevard Chanhassen, MN 55317-9685 USA</p> <p>to which this declaration relates, is in conformity with the provisions of the European Union Directives, including the latest amendments, as shown in the attached schedule.</p> <p>Assumption of conformity is based on the application of the harmonized standards and, when applicable or required, a European Union notified body certification, as shown in the attached schedule.</p>	
 <hr style="border: 0; border-top: 1px solid black;"/> <p style="font-size: small;">(signature)</p>	<p>Vice President of Global Quality</p> <hr style="border: 0; border-top: 1px solid black;"/> <p style="font-size: small;">(function)</p>
<p>Chris LaPoint</p> <hr style="border: 0; border-top: 1px solid black;"/> <p style="font-size: small;">(name)</p>	<p>10-Jan-19, Shakopee, MN USA</p> <hr style="border: 0; border-top: 1px solid black;"/> <p style="font-size: small;">(date of issue & place)</p>
<p style="font-size: x-small;">Page 1 of 2</p>	



EU Declaration of Conformity

No: RAD 1121 Rev. C

The product,

Rosenount™ Advanced Dual Input Analyzer Model 56-AA-BB-CC-DD

Where

AA is power:

- 02 24 VDC, 4 alarm relays
- 03 85-265VAC, 4 alarm relays

BB is Measurement 1:

- 20 Contacting Conductivity
- 21 Toroidal Conductivity
- 22 pH/ORP/ISP
- 23 Flow/4 to 20mA current
- 24 Chlorine
- 25 Dissolved Oxygen
- 26 Ozone
- 27 Turbidity

CC is Measurement 2:

- 30 Contacting Conductivity
- 31 Toroidal Conductivity
- 32 pH/ORP/ISP
- 33 Flow/4 to 20mA current
- 34 Chlorine
- 35 Dissolved Oxygen
- 36 Ozone
- 37 Turbidity
- 38 None

DD is Communication output:

- HT 4-20 mA plus HART com
- DP Profibus protocol

to which this declaration relates, is in conformity with relevant Union harmonization legislation:

EMC Directive (2014/30/EU)

Harm onized Standards:
EN 61326-1:2013

Low Voltage Directive (2014/35/EU)

Harm onized Standard:
EN 61010-1:2010

RoHS Directive (2011/65/EU)

Harm onized Standard:
EN 50581:2012

B China RoHS table

含有China RoHS管控物质超过最大浓度限值的部件型号列表 56
List of 56 Parts with China RoHS Concentration above MCVs

部件名称 Part Name	有害物质 / Hazardous Substances					
	铅 Lead (Pb)	汞 Mercury (Hg)	镉 Cadmium (Cd)	六价铬 Hexavalent Chromium (Cr +6)	多溴联苯 Polybrominated biphenyls (PBB)	多溴联苯醚 Polybrominated diphenyl ethers (PBDE)
电子组件 Electronics Assembly	X	O	O	O	O	O
传感器组件 Sensor Assembly	X	O	O	O	O	O

本表格系依据SJ/T11364的规定而制作。

This table is proposed in accordance with the provision of SJ/T11364.

O: 意为该部件的所有均质材料中该有害物质的含量均低于GB/T 26572所规定的限量要求。

O: Indicate that said hazardous substance in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572.

X: 意为在该部件所使用的的所有均质材料里，至少有一类均质材料中该有害物质的含量高于GB/T 26572所规定的限量要求。

X: Indicate that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.

部件名称 Part Name	组装备件说明 Spare Parts Descriptions for Assemblies
电子组件 Electronics Assembly	电子线路板组件 Electronic Board Assemblies 液晶显示屏或本地操作界面显示屏 LCD or LOI Display
传感器组件 Sensor Assembly	传感器模块 Sensor Module



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