Product Data Sheet June 2017 LIQ-PDS-226

# Rosemount<sup>™</sup> 226

## **Toroidal Conductivity Sensors**



#### A Low Maintenance Solution for High Conductivity Applications

The Rosemount 226 Toroidal Conductivity sensor measures conductivity in highly conductive liquids up to 2 S/cm (2,000,000  $\mu$ S/cm). This toroidal/inductive sensor has a robust fouling-resistant design which makes it ideal for measuring conductivity in harsh, corrosive and fibrous liquid applications.



ROSEMOUNT

## **Overview**



#### **High Performance and Minimal Maintenance**

- Plugging resistant and suitable for liquids containing high levels of suspended solids due to large bore design.
- High vibration tolerance with reinforced internal metal frame design.
- Constructed with highly corrosion-resistant glass-filled PEEK.
- Robust measurements insensitive to process flow and direction.

#### **Versatile Installation Options**

- 1 in. MNPT process connection mounting adapter for submersion type installations.
- Can be inserted through any user supplied flange by using optional process connection mounting adapter.

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## **Ordering Information**



Rosemount 226 Toroidal Conductivity sensors are molded of chemically-resistant glass-filled PEEK and are ideal for measuring concentrations of acid, base, and salt solutions. The sensors include an integral Pt-100 RTD for temperature compensation and a 20 ft. integral cable. With a large bore hole opening, the Rosemount 226 greatly resists plugging when used in liquids containing high amounts of suspended solids.

#### Additional Information

Specifications: see "Specifications" on page 4 Dimensional drawings: see "Dimensional Drawings" on page 5 Accessories: see "Accessories" on page 6 Engineering Specifications: see "Engineering Specification" on page 7

#### Table 1. Rosemount 226 Toroidal Conductivity Sensor ordering information

Model	Sensor type	
226	Toroidal Conductivity Sensor	
Sensor construction		
02	Glass-Filled PEEK (1)	
Transmitter compatibility <sup>(2)</sup>		
54	Standard Cable <sup>(3)</sup>	
56	EMI/RFI Shielded Cable <sup>(4)</sup>	
Mounting kit		
80	Submersion <sup>(5)</sup>	
81	Insertion Through User-Supplied Flange <sup>(6)</sup>	
82	No Kit Required <sup>(7)</sup>	
Typical Model Number: 226-02-56-80		

1. The sensor is supplied with an EPDM gasket (a Viton gasket PN 33151-01 is also available; see accessories).

2. Cables may be extended using the remote junction box PN 23550-00 (sold separately) and extension cables (see accessories).

3. Recommended for use with Rosemount legacy transmitter models 1054 and 2054.

4. Recommended for use with Rosemount transmitter models 54C, 54eC, 81T, 2081T, 3081T, 4081T, XMT, 56, 1056, 1066, 5081, and 56.

5. Includes a 1-inch MNPT PEEK adapter.

6. Includes spacer and nut.

7. This option does not include any mounting kit and is for replacement sensors only.

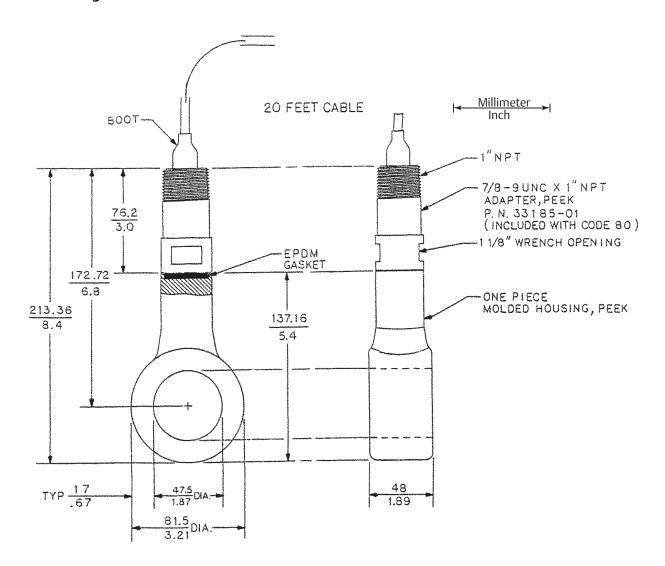
## **Specifications**

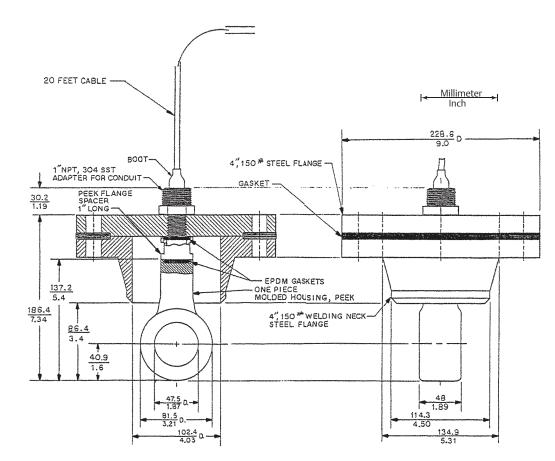
#### Table 2. Rosemount 226 Toroidal Conductivity Sensor specifications

Wetted Materials
Glass-filled PEEK
Operating Temperature
32 to 248 °F (0 to 120 °C)
Maximum Pressure
295 psig (2135 kPa [abs])
Cable Length
20 ft. (6.1 m)
Maximum Cable Length
Up to 200 ft. (61.0 m) maximum
Process Connection
7/8 in. 9 UNC threads for flange mounting and 1 in. MNPT (with -80 option); see dimensional drawings for more details
Weight/Shipping Weight
2 lbs/3 lbs (1.0 kg/1.5 kg)

## **Dimensional Drawings**

Figure 1. Rosemount 226 with 1 in. MNPT process connection mounting adapter (-80 option) dimensional drawing





## Figure 2. Rosemount 226 with 7/8 in. 9 UNC thread and insertion through flange mounting adapter (-81 option) dimensional drawing

### Accessories

#### Table 3. Rosemount 226 Toroidal Conductivity Sensor accessories information

Part number	Description
2001492	Stainless Steel Tag (Must Specify Marking)
23550-00	Remote Junction Box without Preamplifier
23294-00	Interconnecting Extension Cable, Unshielded (for use with Remote Junction Box)
23294-05	Interconnecting Extension Cable, Shielded (for use with Remote Junction Box)
33151-00	EPDM Gasket
33151-01	Viton Gasket
33185-01	Submersion Mounting Adapter, 1 in. MNPT, 3 in. Length, PEEK (spare for -80 option sensors)
33185-02	Flange Insertion Mounting Adapter, 1 in. Length, PEEK (spare for -81 option sensors)
33219-00	7/8 in. 9 UNC X 1 in. MNPT for Conduit Connection (spare for -81 option sensors)

## **Engineering Specification**

- The sensor shall measure electrolytic conductivity using the inductive or toroidal method.
- The sensor shall have a large bore to reduce fouling from fibrous materials in the process stream.
- The sensor shall be molded from glass-filled PEEK.
- The sensor shall be suitable for submersion mounting or for insertion mounting through a pipe flange.
- The sensor shall withstand 248 °F (120 °C) at 295 psig (2135 kPa).
- The sensor shall be Rosemount Model 226 or approved equal.

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