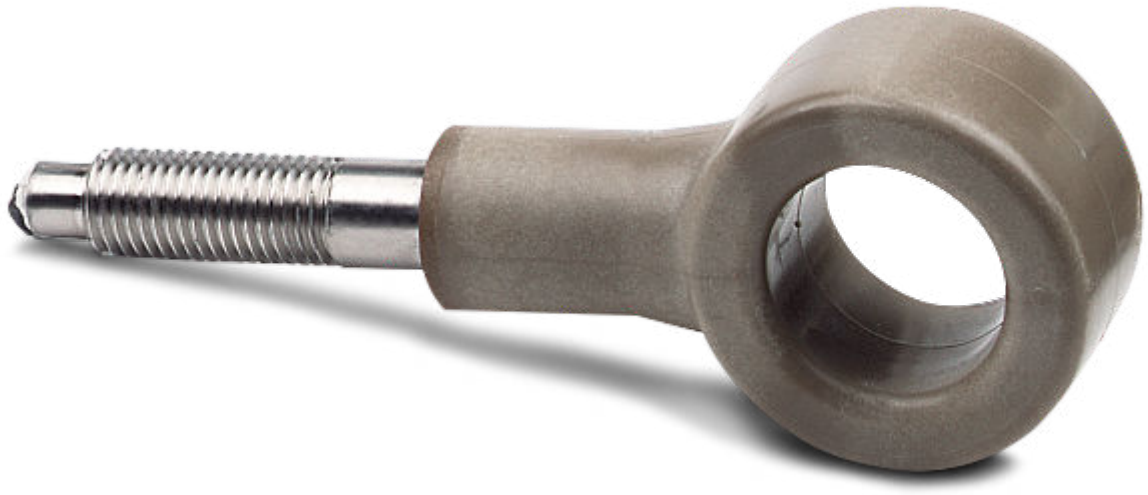
Product Data Sheet
00813-0100-3226, Rev AB
October 2019

Rosemount™ 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 1 S/cm (2,000,000 µS/cm). This toroidal/inductive sensor has a robust fouling-resistant design which makes it ideal for measureing conductivity in harsh, corrosive, and fibrous liquid applications.

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. male national pipe thread (MNPT) process connection mounting adapter for submersion type installations.
- Can be inserted through any user-supplied flange by using optional process connection mounting adapter.

Contents

Overview 2
Ordering information 3
Specifications 3
Dimensional drawings 4
Accessories 6
Engineering specifications 6

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 resistance temperature device (RTD) for temperature compensation and a 20 ft. (6.1 m) integral cable. With a large bore hole opening, the Rosemount 226 greatly resists plugging when used in liquids containing high amounts of suspended solids.

Table 1: Rosemount 226 Ordering Information

Option	Description
226	Conductivity sensor - toroidal submersion/insertion
Sensor construction	
02	PEEK, standard temperature to 248 °F (120 °C)
Transmitter compatibility	
54	For use with Rosemount series 1054 and 2054
56	For use with Rosemount 56, 5081T, 1056, 1057, and 1066-T
Mounting kit	
80	Submersion (includes 1-in. male national pipe thread [MNPT] PEEK adapter)
81	Insertion through user-supplied flange (includes spacer and nut)
82	No kit required (replacement only)

Note
The large bore makes the sensor particularly suitable for use in liquids containing high levels of suspended solids. For improved EMI/RFI shielding, choose cable option 56 (not for use with the Rosemount 1181T, 1054, or 2054).
The sensor is supplied with an EPDM gasket.

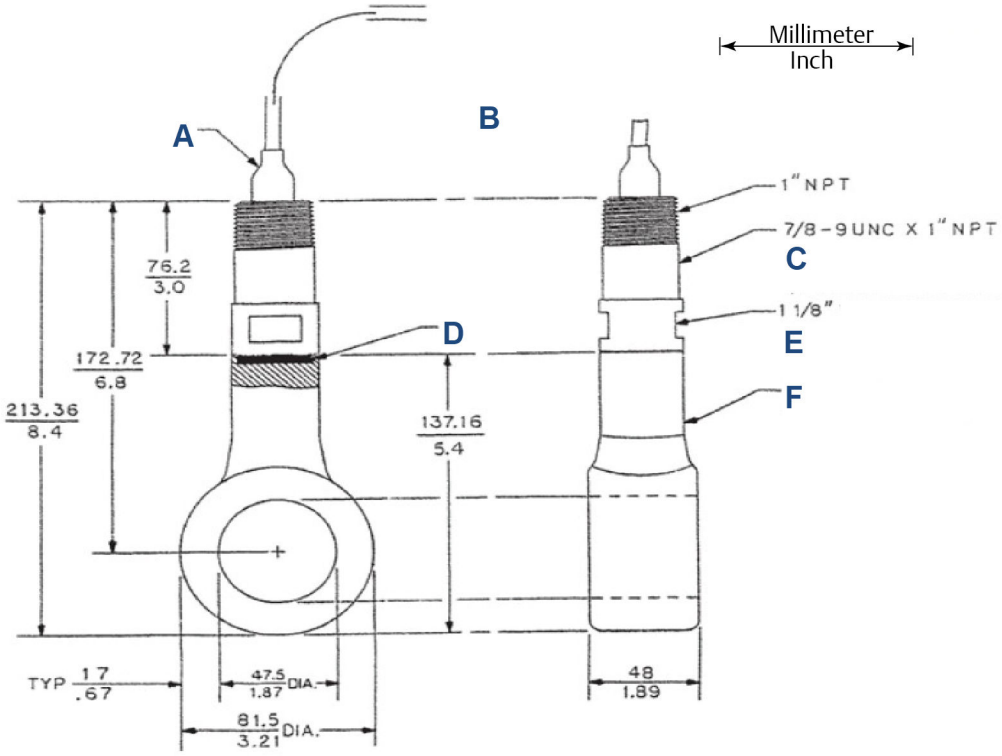
Specifications

Table 2: Rosemount 226 Toroidal Conductivity Sensor Specifications

Description	Material and units
Conductivity range	Refer to transmitter Product Data Sheet.
Wetted materials	Glass-filled PEEK, EPDM Gasket
Operating temperature	32 to 248 °F (0 to 120 °C)
Maximum pressure	295 psig (2135 kPa [abs])
Standard cable length	20 ft. (6.1 m)
Maximum cable length	200 ft. (61 m)
Process connections	⅞-in. 9 UNC threads for flange mounting and 1 in. MNPT (with -80 option); see Dimensional drawings for more details.
Weight/shipping weight	2 lb./3 lb. (1.0 kg/1.5 kg)

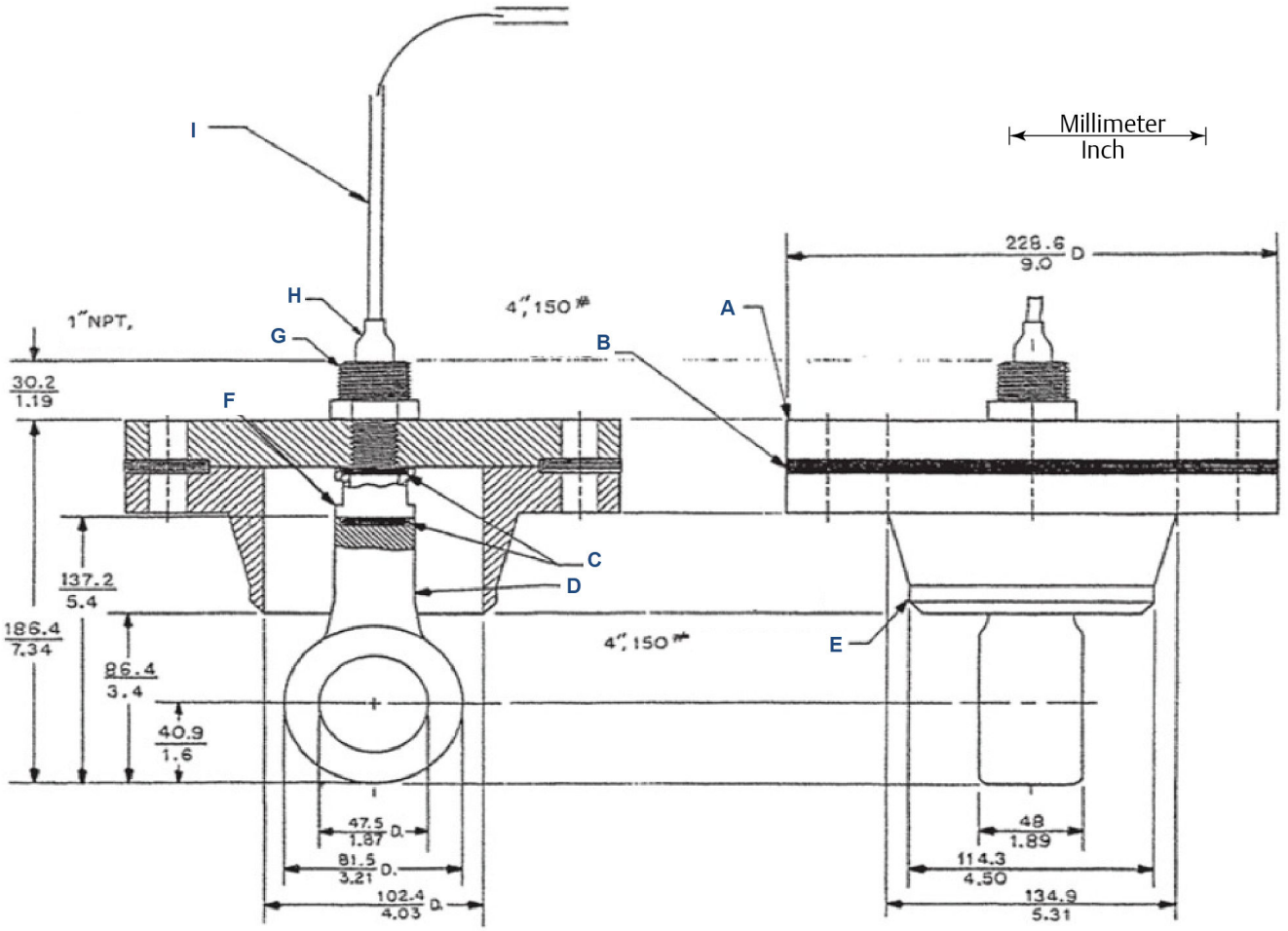
Dimensional drawings

Figure 1: Rosemount 226 with 1-in. Male National Pipe Thread (MNPT) Process Connection Mounting Adapter (-80 Option)



A. Boot
B. 20-ft. (6.1 m) cable
C. Adapter, PEEK PN 33185-01 (included with code -80)
D. EPDM gasket
E. Wrench opening
F. One piece molded housing, PEEK

Figure 2: Rosemount 226 with ⅞-in. 9 UNC Thread and Insertion through Flange Mounting Adapter (-81 Option)



A. Steel flange
B. Gasket
C. EPDM gaskets
D. One piece molded housing, PEEK
E. Welding neck steel flange
F. PEEK flange spacer, 1-in. (25,4 mm) long
G. 1-in. national pipe thread (NPT), 304 stainless steel adapter for conduit
H. Boot
I. 20-ft. (6.1 m) cable

Accessories

Part number	Description
23550-00	Remote junction box without preamplifier
23294-00	Unshielded interconnecting cable for Rosemount 1054A, 1054B, and 2054C. Can also be used with Rosemount 1056, 56, 5081, and 1066-T, but not recommended. Prepped, specify length, per ft.
23294-05	Shielded interconnecting cable with additional shield wire for -03 option. For use with Rosemount 1056, 1066-T, 56, and 5081T. Prepped, specify length, per ft.
33151-00	Gasket, EPDM (standard)
33151-01	Gasket, Viton®, Rosemount 226
33185-01	Mounting adapter, submersion, 9.8 ft. (3 m) length, 3.3 ft. (1 m) male national pipe thread (MNPT), PEEK
33185-02	Mounting adapter, insertion, 3.3 ft. (1 m) length, PEEK (with gasket)
33219-00	Mounting adapter, 304 stainless steel flange nut, 3.3 ft. (1 m) MNPT for conduit
9200276	Extension cable, unprepped (specify length) per foot

Engineering specifications

- 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 insertion mounting through a pipe flange.
- The sensor shall withstand 248 °F (120 °C) at 295 psig (2135 kPa [abs]).
- The sensor shall be Rosemount Model 226 or approved equal.

00813-0100-3226
Rev. AB
October 2019

GLOBAL HEADQUARTERS
Emerson Automation Solutions
6021 Innovation Blvd
Shakopee, MN 55379, USA
+1 800 999 9307 or +1 952 906 8888
F +1 952 949 7001
liquid.csc@emerson.com

NORTH AMERICA
Emerson Automation Solutions
8200 Market Blvd
Chanhassen, MN 55317
Toll Free +1 800 999 9307
F +1 952 949 7001
liquid.csc@emerson.com

EUROPE
Emerson Automation Solutions
Neuhofstrasse 19a P.O. Box 1046
CH-6340 Baar
Switzerland
T + 41 (0) 41 768 6111
F + 41 (0) 41 768 6300
liquid.csc@emerson.com

MIDDLE EAST AND AFRICA
Emerson Automation Solutions
Emerson FZE
Jebel Ali Free Zone
Dubai, United Arab Emirates, P.O. Box 17033
T +971 4 811 8100
F +971 4 886 5465
liquid.csc@emerson.com

ASIA-PACIFIC
Emerson Automation Solutions
1 Pandan Crescent
Singapore 128461
Singapore
T +65 777 8211
F +65 777 0947
liquid.csc@emerson.com

Linkedin.com/company/Emerson-Automation-Solutions
Twitter.com/Rosemount_News
Facebook.com/Rosemount
Youtube.com/user/RosemountMeasurement

©2019 Emerson. All rights reserved.

Emerson Terms and Conditions of Sale are available upon request. The Emerson logo is a trademark and service mark of Emerson Electric Co. Rosemount is a mark of one of the Emerson family of companies. All other marks are the property of their respective owners.

ROSEMOUNT™

EMERSON™