

Rosemount™ Hx338

pH Sensor



A pH sensor for high performance sanitary pH measurements

The maintenance-free Rosemount Hx338 sensor is ideal for pharmaceutical, chemical, and biotechnology industry applications where autoclavations and steam-in-place (SIP) procedures occur frequently.



A Robust Sensor Design

- Able to withstand auto-claving and steam sterilization procedures
- Maximum operating temperature up to 266 °F (130 °C)
- Available in a 120 mm (4.7 in.) length

Versatile Installation Options

- The sensor body features a PG 13.5 process connection suitable for use with insertion mounting assemblies.
- Easily installs into insertion mounting assembly for mounting into G 1-1/4 inch sockets.

Ease of Installation

- Eliminate cable twisting with Variopol (VP6) cable connection for quick cable-to-sensor release.

Contents

Ordering Information	3
Specifications	3
Dimensional Drawings.....	5
Accessories.....	7

Ordering Information



The Rosemount Hx338 pH sensor works well in biotechnology and pharmaceutical processes. The sensor utilizes a unique tri-triple reference technology which is made up of three separate peripheral liquid junctions that make contact with the solution and two inner junctions that protect the reference. The three overall reference junctions work together to help maintain a drift-free pH signal and fight poisoning ions (i.e., sulfides, proteins, or sugars) even after numerous sterilization cycles. This sensor features a PG 13.5 thread for simple process connection.

Table 1 -Rosemount Hx338 pH Sensor Ordering Information

Model	Sensor Type
Hx338	pH Sensor
Sensor Length	
01	120 mm (4.7 in.)
Cable Connection	
-	No Selection (S7 connector plug)
72	Pt-100 RTD with Variopol (VP6) Connector (Requires Accessory Mating Cable)
Typical model number: Hx338-01-72	

Specifications

Rosemount Hx338 pH Sensor

Range: 2 to 12 pH (0 to 14 pH for short periods)

Wetted Materials: Glass, EPDM (FDA Approved), Ceramic (Diaphragm)

Operating Temperature Range: 32 to 266 °F (0 to 130 °C)

Maximum Pressure: 43 psig (600 kPa abs, 4 bar)

Minimum Conductivity of Sample: 50 μS/cm

Process Connection: PG 13.5 Threads

Cable Connector: Single-Pole S7 Connector Plug or VP6 Cable Connection

Insertion Mounting Assembly (PN 9160478)

Mechanical Connection: G 1-1/4 in.

Total Length: 215 mm (8.5 in.)

Maximum Diameter: 57 mm (2.2 in.)

Materials of Construction: 316L stainless steel/DIN 1.4435, FDA-EPDM (O-ring)

Surface Finish: < 16 micro inch Ra

Temperature Range: 14 to 284 °F (-10 to 140 °C)

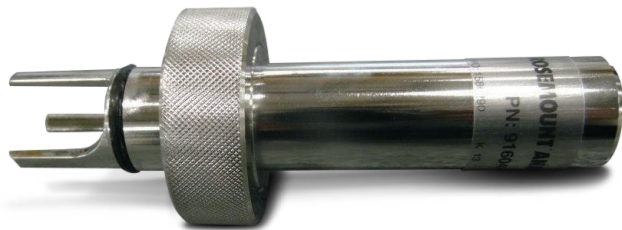
Maximum Pressure: 6 bar (87 psi)

Insertion Length: 70 mm (2.8 in.)

Compatible Sensors: Hx338 -01, all electrodes with PG 13.5 threads and 120 mm length

Mounting Accessory Needed for Installation: PN 9160483 weld-in socket or other G 1 - 1/4 in. threaded socket

Figure 1. Rosemount Insertion Mounting Assembly PN 9160478



Dimensional Drawings

Figure 2. Rosemount Hx338 dimensional drawing

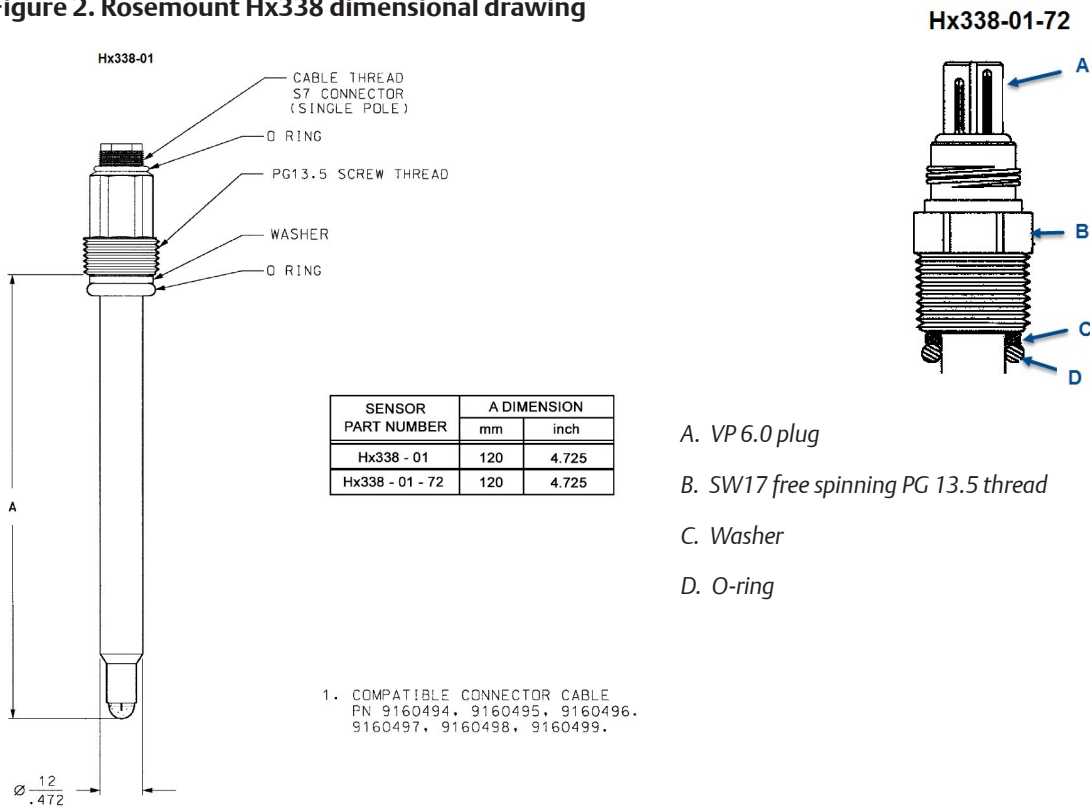
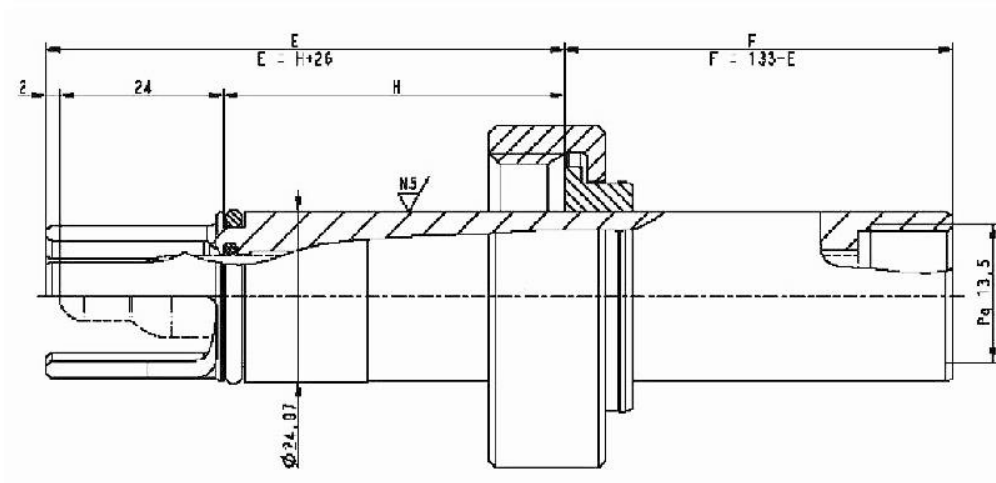
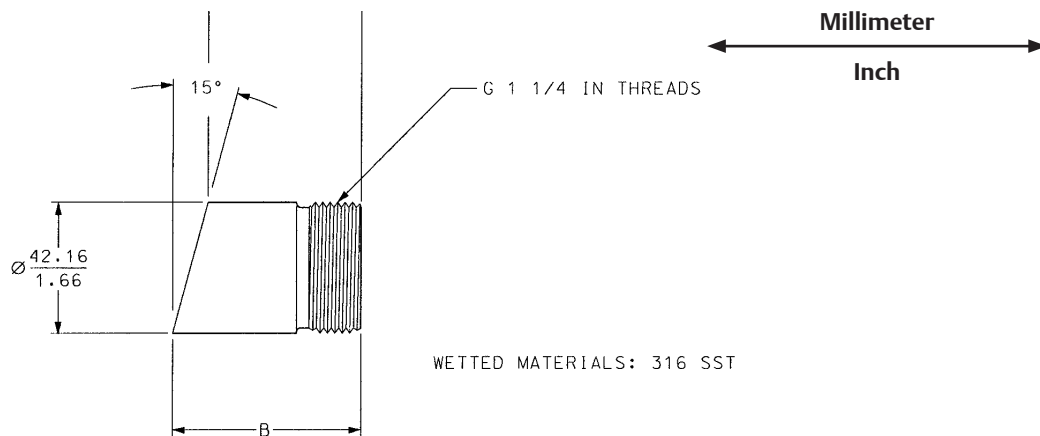


Figure 3. Dimensional drawing for Insertion Mounting Assembly PN 9160478



Note: H = O-ring position = 22 mm (0.866 in.)

Figure 4. Dimensional drawing for Weld-in Socket PN 9160483



Weld-in Socket part number	Dimension			
	A		B	
9160483	44	1.74	55	2.17
9160504	61	2.4	72	2.83

Accessories

Part Number	Description
24281-00	15 ft (4.6 m) cable with mating VP8 connector
24281-01	25 ft (7.6 m) cable with mating VP8 connector
24281-02	2.5 ft (.8 m) cable with mating VP8 connector
24281-05	4 ft (1.2 m) cable with mating VP8 connector
24281-06	10 ft (3 m) cable with mating VP8 connector
24281-07	20 ft (6 m) cable with mating VP8 connector
24281-08	30 ft (9.1 m) cable with mating VP8 connector
23645-06	15 ft (4.6 m) cable with mating VP connector with BNC on transmitter end
23645-07	15 ft (4.6 m) cable with mating VP connector with bare wires on transmitter end
9160494	3.3 ft (1 m) cable with AS7 connector, bare wire on analyzer end
9160495	16.4 ft (5 m) cable with AS7 connector, bare wire on analyzer end
9160496	32.8 ft (10 m) cable with AS7 connector, bare wire on analyzer end
9160498	16.4 ft (5 m) cable with AS7 connector, BNC on analyzer end
9160478	Insertion assembly, 70 mm insertion for 120 mm sensor, G 1-1/4 in.
9160483	15 degree weld-in socket, G 1-1/4 in. thread, 44 mm
9160484	Service kit for insertion mounting assembly
9210012	Buffer solution, pH 4.01, 16 oz
9210013	Buffer solution, pH 6.86, 16 oz
9210014	Buffer solution, pH 9.18, 16 oz

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