Rosemount[™] Hx338+

Steam Sterilizable and Autoclavable Pre-Pressurized pH Sensor



A pre-pressurized sensor for high performance sanitary pH applications

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



Overview



A robust sensor design

- Able to withstand autoclaving, steam-in-place, and clean-inplace procedures.
- Maximum operating temperature up to 284 °F (140 °C).
- Maximum pressure up to six bar.
- Available in 4.7-in. (120 mm) insertion length.
- Pre-pressurized reference electrode prevents clogging of diaphragm junction.

Ease of installation

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

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Ordering information



The Rosemount Hx338+ pH sensor features a pre-pressurized electrolyte and integral Pt-100 Resistance Temperature Device (RTD) for temperature compensation. These sensors come with a VP6 cable connection and are compatible with VP8 mating cables. Variopol cables sold separately (see Accessories).

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Typical model number: Hx338+-01-72

Model

Code	Description
Hx338	pH sensor

Sensor length

Code	Description
01	4.7 in. (120 mm)

Cable connection

Code	Description	
72	Pt-100 resistance temperature device (RTD) with Variopol (VP6) connector (requires accessory mating cable)	

Specifications

Rosemount Hx338+ pH sensor

Measuring method	Combination electrode; pH potential measured against reference electrode
Range	0 to 14 pH
Sensitivity	57 to 59 mV/pH at 77 °F (25 °C)
Wetted materials	Glass, EPDM (FDA approved)
Operating temperature range	32 to 284 °F (0 to 140 °C)
Pressure range	0 to 6 bar
Minimum conductivity of sample	100 μS/cm
Temperature sensor	PT-100
Diameter	12 mm (0.5 in.)
Process connection	PG 13.5 threads

Cable connection	Single-pole S7 connector plug or VP6 cable connection	
Compatible transmitters	All Rosemount pH transmitters	
Shelf life	Standard is 1 year from manufacturing date. Follow refresh procedure in Rosemount Hx338+ Quick Start Guide at 1 year and 18 months to extend shelf life to a maximum of 2 years.	

Insertion mounting assembly (PN 9160478)

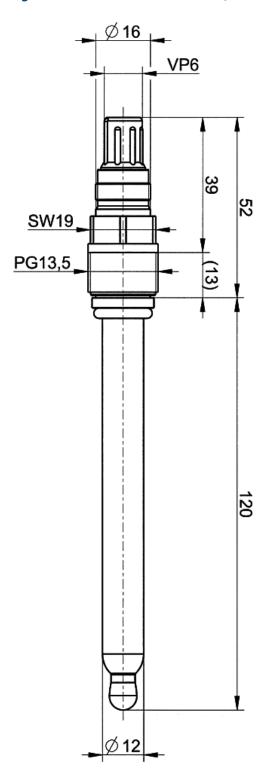
Mechanical connection	G 1¼-in.
Total length	5.23 in. (133 mm)
Maximum diameter	1.96 in. (50 mm)
Materials of construction	316L stainless steel/DIN 1.4435 and Food and Drug Administration (FDA)-EPDM (O-ring)
Surface finish	< 16 micro inch Ra
Temperature range	32 to 275 °F (0 to 135 °C)
Maximum pressure	87 psig (6 bar)
Insertion length	1.89 in. (48 mm)
Compatible sensors	Rosemount Hx338+-01, all electrodes with PG 13.5 threads and 4.7-in. (120 mm) length
Mounting accessory needed for installation	PN 9160483 weld-in socket or other G 1¼-in. threaded socket

Figure 1: Rosemount Insertion Mounting Assembly PN 9160478



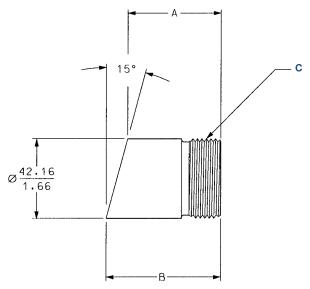
Dimensional drawings

Figure 2: Rosemount Hx338+ 4.7 in. (120 mm)



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Figure 3: Weld-in Socket PN 9160483



Wetted materials: 316 stainless steel

- A. Dimension (1)
- B. Dimension⁽¹⁾
- C. G 11/4-in. threads

Note

Dimensions are in inches (mm).

Table 1: Dimensions

	Dimension				
number	A		В		
9160483	1.74 in.	44 mm	2.17 in.	55 mm	

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⁽¹⁾ See <u>Table 1</u>.

Accessories

Part number	rt 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. (0.8 m) cable with mating VP8 connector	
24281-05	4-ft. (1.3 m) cable with mating VP8 connector	
24281-06	10-ft. (3 m) cable with mating VP8 connector	
24281-07	20-ft. (6.1 m) cable with mating VP8 connector	
24281-08	30-ft. (9.1 m) cable with mating VP8 connector	
9160478	Insertion assembly, 1.9-in. (44 mm) insertion, for 4.7-in. (120 mm) sensor, G 1¼ in.	
9160483	15 degree weld-in socket, G 1¼ in. thread, 1.7 in. (44 mm)	
9260484	Service kit for insertion mounting assembly	
9210012	D12 Buffer solution, pH 4.01, 16 oz. (473.2 ml)	
9210013	Buffer solution, pH 6.86, 16 oz. (473.2 ml)	
9210014	Buffer solution, pH 9.18, 16 oz. (473.2 ml)	

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