

Rosemount™ 398/398VP/398R/398RVP

TUpH® pH/ORP Sensors



TUpH sensors for your tough pH/ORP applications

Rosemount TUpH pH/ORP sensors are robust sensors designed to meet a number of difficult application requirements. Sensors feature a variety of options suited to meet a number of installation requirements and are ideal for use in dirty, abrasive, coating, and high solid applications.

Overview



A TUpH® sensor design

- Coating and fouling resistant with large surface area TUpH reference junction.
- Titanium and Tefzel sensor construction for superior chemical resistance to aggressive chemicals, such as chlorine dioxide in pulp bleaching towers and most organic solvents.
- Selectable O-ring options of either EPDM, Viton®, or Kalrez®.
- Optional flat pH glass electrode for abrasive and coating applications.
- Operates in process pressures up to 250 psig.

Versatile installation options

- Suitable for insertion/submersion type installations (Rosemount 398/398VP).
- Retractable design allows sensors to be removed for calibration and maintenance without process shutdown (Rosemount 398R/398RVP).
- Variopol (VP8) cable connection option, for quick cable-to-sensor release, eliminates cable twisting.



Contents

Overview.....	2
Ordering information.....	3
Specifications.....	6
Dimensional and installation drawings.....	8
Accessories.....	26

Ordering information



Rosemount 398/398VP sensors are housed in a titanium tube and constructed with a Tefzel reference junction. Sensors can be used with a 1-in. MNPT process connector (sold separately). Rosemount 398 sensors come standard with 15-ft. (4.6 m) of integral cable. Rosemount 398VP sensors are used with quick disconnect VP8 interconnecting cables (sold separately).

Table 1: Rosemount 398 Ordering Information

Option	Description
398	pH/ORP sensor: TUpH®
Measuring electrode	
10	GPHT hemi pH glass, 0 to 14 pH
12	ORP
13	GPLR flat pH glass
O-ring material	
30	EPDM
31	Viton®
32	Kalrez®
Transmitter/thermocouple compatibility	
54	Pt-100, for use with Rosemount 56, 1056, 1057, 1066, and 5081
Options	
–	No selection, without preamplifier, 15-ft. (4.6 m) cable
62	Cable without BNC, wires directly to Rosemount 56, 1056, 1057, 1066, and 5081
07	Without preamplifier, 4-ft. (1.2 m) cable
08	Without preamplifier, 10-ft. (3 m) cable
Calibration and conformance certificates - optional level	
CC	Certificate of Calibration (no test data given)
LC	Loop Calibration Certificate (sensor and transmitter calibrated together, with test data)
EC	Electronic Calibration Certificate (sensor calibrated against factory instrument, with test data)

Table 2: Rosemount 398VP Ordering Information

Option	Description
398VP	pH/ORP sensor: TUpH with Variopol connector

Table 2: Rosemount 398VP Ordering Information (continued)

Option	Description
Measuring electrode	
10	GPHT hemi pH glass, 0 to 14 pH
12	ORP
13	GPLR flat pH glass
O-ring material	
30	EPDM
31	Viton
32	Kalrez
Transmitter/thermocouple compatibility	
54	Pt-100, for use with Rosemount 56, 1056, 1057, 1066, and 5081
Calibration and conformance certificates - optional level	
CC	Certificate of Calibration (no test data given)
LC	Loop Calibration Certificate (sensor and transmitter calibrated together, with test data)
EC	Electronic Calibration Certificate (sensor calibrated against factory instrument, with test data)

Note

The standard Rosemount 398VP sensor is available with an integral Variopol (VP 6.0) connector. A mating VP 6.0 connector cable is required for use with these sensors. VP8 cable assembly works with both VP6 and VP8 sensor connectors.



Rosemount 398R/398RVP sensors are offered in 21-in. (533.4 mm) and 36-in. (914.4 mm) titanium tube sensor lengths. You can use the sensors with a ball valve (sold separately) for hot tap applications. Rosemount 398R sensors come standard with 15-ft. (4.6 m) of integral or 9.5-in. (241.3 mm) for use with a sensor head junction box (sold separately). Rosemount 398RVP sensors are SMART preamplifier optional, and you can use them with quick disconnect VP8 interconnecting cables (sold separately).

Table 3: Rosemount 398R Ordering Information

Option	Description
398R	pH/ORP sensor: TUpH retractable
Measuring electrode	
10	GPHT hemi pH glass, 0 to 14 pH
12	ORP
13	GPLR flat bulb, 0 to 14 pH
Sensor length	
21	21-in. (533.4 mm) titanium tube

Table 3: Rosemount 398R Ordering Information (continued)

Option	Description
25	36-in. (914.4 mm) titanium tube
O-ring material	
30	EPDM
31	Viton
32	Kalrez
Transmitter/thermocouple compatibility	
54	Pt-100, for use with Rosemount 56, 1056, 1057, 1066, and 5081
Options	
–	No selection, without preamplifier, 15-ft. (4.6 m) cable
60	9.5-in. (241.3 mm) cable with BNC
61	9.5-in. (241.3 mm) cable without BNC
62	Cable without BNC, wires directly to Rosemount 56, 1056, 1057, 1066, and 5081
07	Without preamplifier, 4-ft. (1.2 m) cable
08	Without preamplifier, 10-ft. (3 m) cable
Calibration and conformance certificates - optional level	
CC	Certificate of Calibration (no test data given)
LC	Loop Calibration Certificate (sensor and transmitter calibrated together, with test data)
EC	Electronic Calibration Certificate (sensor calibrated against factory instrument, with test data)

Note

You can mount the sensor with a ball valve or a process connector, both ordered separately.

Table 4: Rosemount 398RVP Ordering Information

Option	Description
398RVP	pH/ORP sensor: TUpH retractable with Variopol connector
Measuring electrode	
10	GPHT hemi pH glass, 0 to 14 pH
12	ORP
13	GPLR flat pH glass
Sensor length	
21	21-in. (533.4 mm) titanium tube
25	36-in. (914.4 mm) titanium tube
O-ring material	
30	EPDM
31	Viton
32	Kalrez

Table 4: Rosemount 398RVP Ordering Information (*continued*)

Option	Description
Transmitter/thermocouple compatibility	
54	Pt-100, for use with Rosemount 56, 1056, 1057, 1066, and 5081
55	For use with Rosemount 56, 1056, 1057, 1066, and 5081
Preamplifier option	
–	No preamplifier
70	SMART preamplifier (for use with -10, -13, and -55 only)
Calibration and conformance certificates - optional level	
CC	Certificate of Calibration (no test data given)
LC	Loop Calibration Certificate (sensor and transmitter calibrated together, with test data)
EC	Electronic Calibration Certificate (sensor calibrated against factory instrument, with test data)

Specifications

Table 5: Percent Linearity over pH Ranges

pH range	Hemi bulb	Flat bulb
0 to 2 pH	94%	93%
2 to 12 pH	99%	98%
12 to 13 pH	97%	95%
13 to 14 pH	92%	–

Table 6: Rosemount 398/398VP/398R/398RVP Sensor Specifications

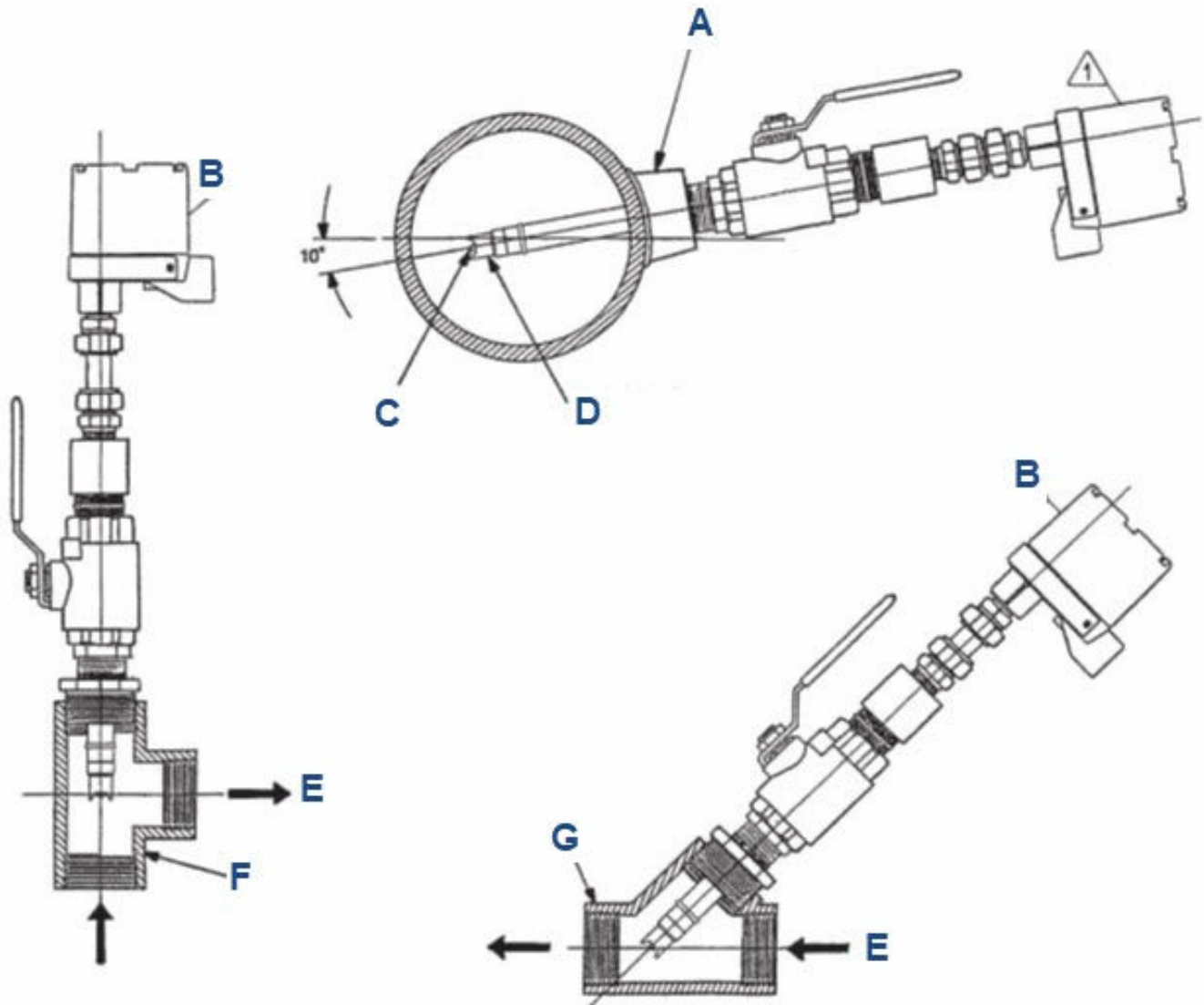
	398	398VP	398R	398RVP
Measurements and ranges	pH: 0 to 14 ORP: -1500 to +1500 mV			
Wetted materials	Titanium, Tefzel™, glass, and a choice of Kalrez®, Viton®, or EPDM; platinum for ORP only			
Process connection	None; must use 1-in. NPT process connector PN 23166-00 or 23166-01 (sold separately)		None; must use 1-in. NPT process connector or ball valve kit (1½-in. or 1¼-in.) (sold separately)	
Temperature range	32 to 212 °F (0 to 100 °C)			
Pressure range: hemi bulb	0 to 250 psig (100 to 1825 kPa [abs])			
Pressure range: flat bulb	0 to 100 psig (100 to 790 kPa [abs])			
Maximum pressure at retraction or insertion	N/A	N/A	Option 21: 64 psig (542 kPa [abs]) Option 25: 35 psig (343 kPa [abs])	
Minimum conductivity	75 µS/cm, nominal 100 µS/cm			

Table 6: Rosemount 398/398VP/398R/398RVP Sensor Specifications (continued)

	398	398VP	398R	398RVP
Weight/shipping weight	1 lb./2 lb. (0.45 kg/0.9 kg)		Option 21 sensors: 2 lb./3 lb. (0.9 kg/1.4 kg) Option 25 sensors: 3 lb/4 lb. (1.4 kg/1.8 kg) Ball valve kits: 5 lb./7 lb. (2.25 kg/3.2 kg)	

Dimensional and installation drawings

Figure 1: Typical Mounting Details: Rosemount 398R Retraction Version



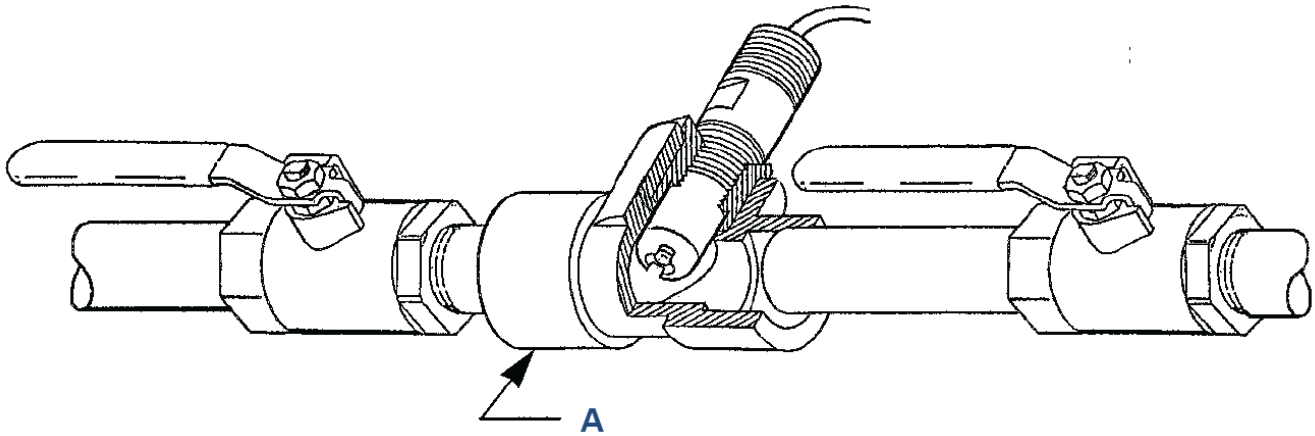
- A. Weldalet (1½-in. FPT).
- B. Junction box is optional.
- C. Electrode housing tip.
- D. Electrode.
- E. Flow.
- F. Pipe tee.
- G. Pipe "Y".

Note

Sensor must be mounted at an angle between 10 ° and 90 ° above the horizontal. Pipe tees and weldalets provided by customer.

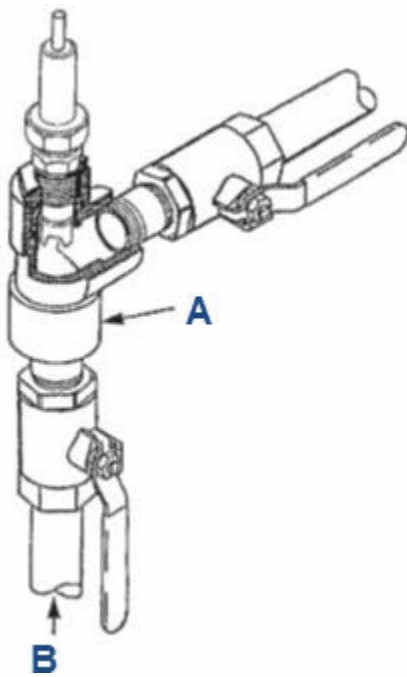
Recommended flow-through and insertion installation for Rosemount 398

Figure 2: Straight Flow



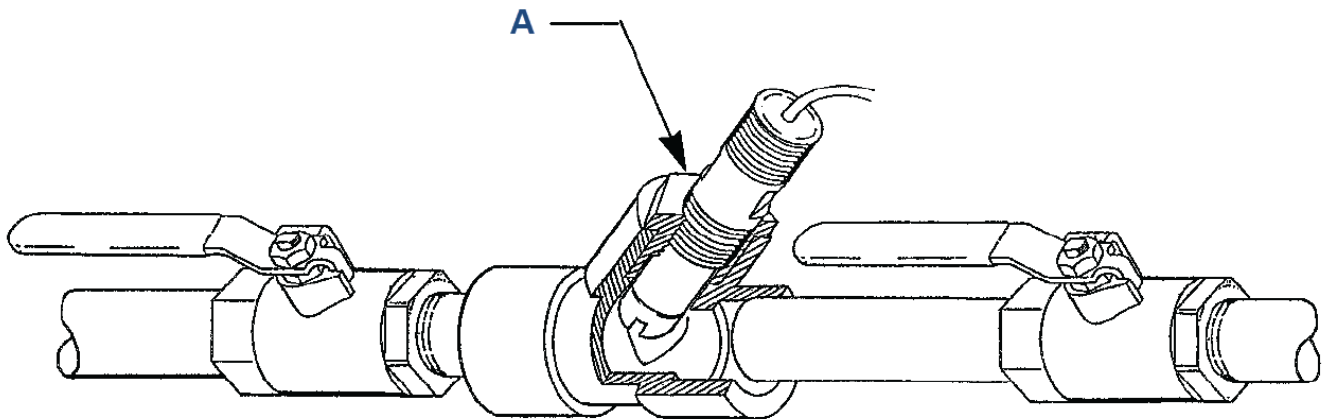
A. 1½-in. pipe tee with 1-in. threaded connections PN 2002011

Figure 3: Angle Flow



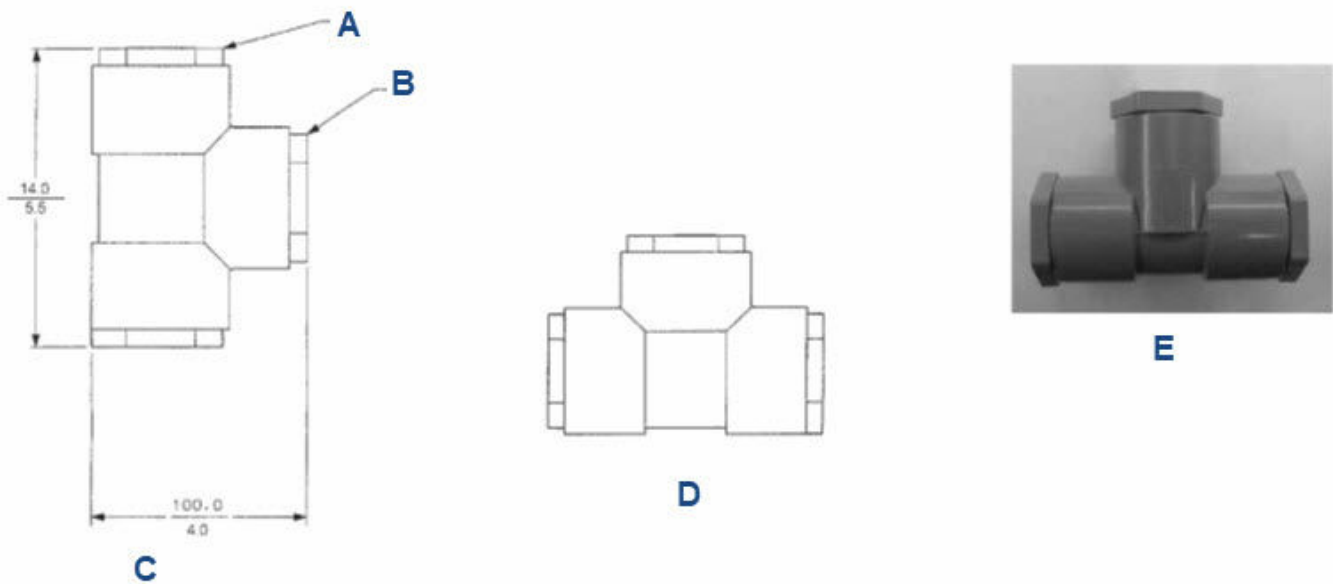
A. 1½-in. pipe tee with 1-in. threaded connections PN 2002011
B. Flow

Figure 4: Pipe "Y" Installation



A. 1½-in. x 1-in. reducing bushing

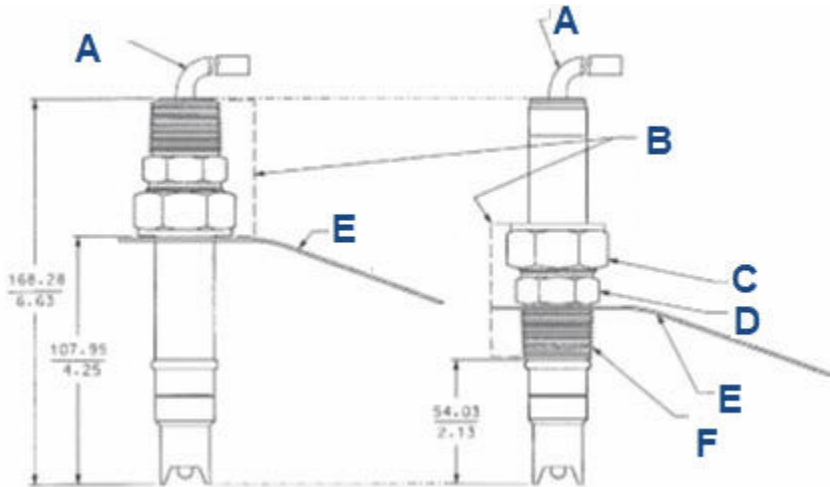
Figure 5: Insertion Installations for Rosemount 398



You can insert the Rosemount 398 into a tee, such as the one shown here (PN 2002011, 1 ½-in. tee with 1-in. threaded process connection), for angle or straight process flow. Other tees are available; see [Accessories](#) for part numbers.

- A. 1½-in. socket x 1-in. FNPT reducer. CPVC schedule 80 three places.
- B. 1½-in. tee CPVC schedule 80.
- C. Angle flow.
- D. Straight flow.
- E. PN 2002011.

Figure 6: Rosemount 398 Insertion/Submersion Sensor Dimensional Drawing

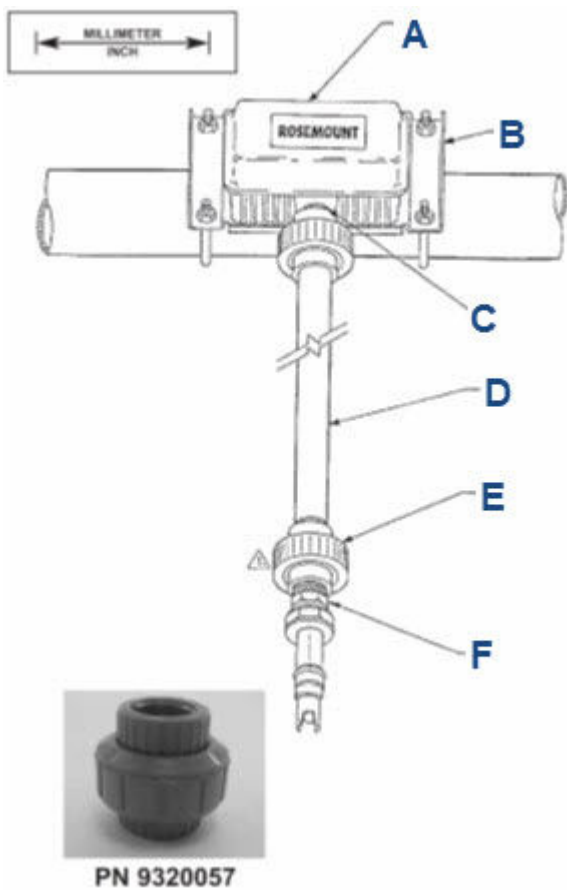


You can place the process connector onto the Rosemount 398 with the threads facing down for insertion mounting into a tee or the threads facing up for a submersion pipe mount connection.

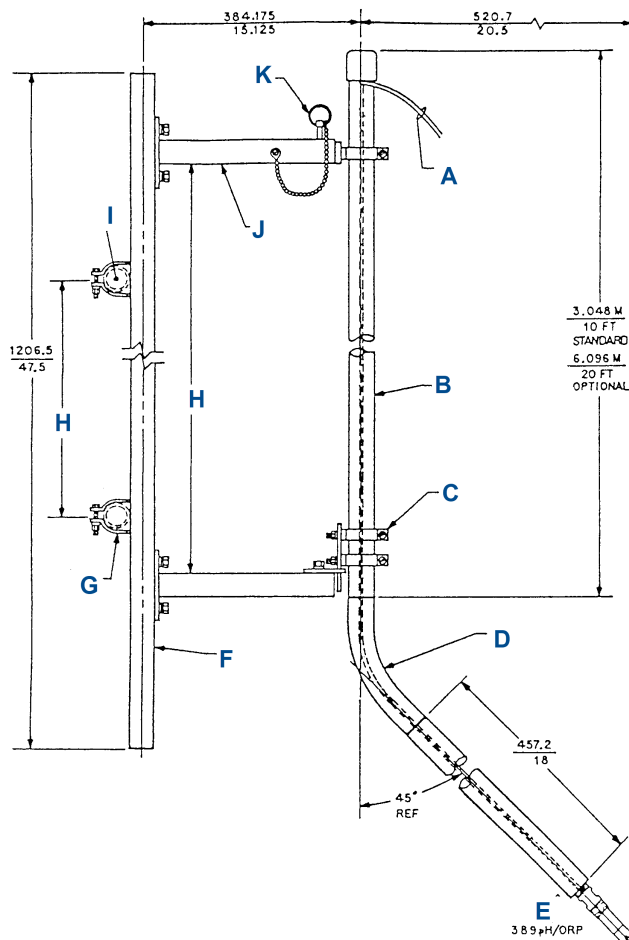
- A. Cable.
- B. Kit: 1-in. swage fitting PN 23166-00 316 stainless steel or PN 23166-01 titanium with Teflon ferrule and EPDM O-ring. Order as separate line items.
- C. 1 $\frac{3}{8}$ -in. hex.
- D. 1 $\frac{1}{2}$ -in. hex.
- E. Caution label. Install caution label as shown on insertion fitting for all insertion applications. Label must be visible at all times. For submersion applications, note limits and remove label.
- F. 1-in. x 1-in. NPT male connector typical.

Submersion installations for Rosemount 398

Figure 7: Submersion Installation



- A. Type 4X junction box
 PN 22715-02 (without preamp)
 PN 23309-03 for use with preamp (3K)
 PN 23309-04 for use with preamp (Pt100)
- B. 2-in. pipe mounting bracket PN 2002565
- C. Flexible conduit if required
- D. 1-in. pipe by others
- E. 1-in. FNPT CPVC union PN 9320057
- F. 1-in. MNPT connector PN 23166-00

Figure 8: Submersion Installation: Handrail Mounting Accessory (PN 11275-01)

- A. Sensor cable.
- B. 1/2-in. PVC pipe schedule 80.
- C. 1/2-in. pipe clamp, three places.
- D. 45 degree sweep ell extension pipe.
- E. Regularly check to make sure connections are water tight.
- F. Unistrut 1 5/8-in. x 1 5/8-in. aluminum.
- G. 1/2-in. pipe clamp, two places.
- H. Can be any convenient dimension.
- I. Customer handrail, two places.
- J. Mounting channel aluminum, two places.
- K. Locking pin with bead chain.

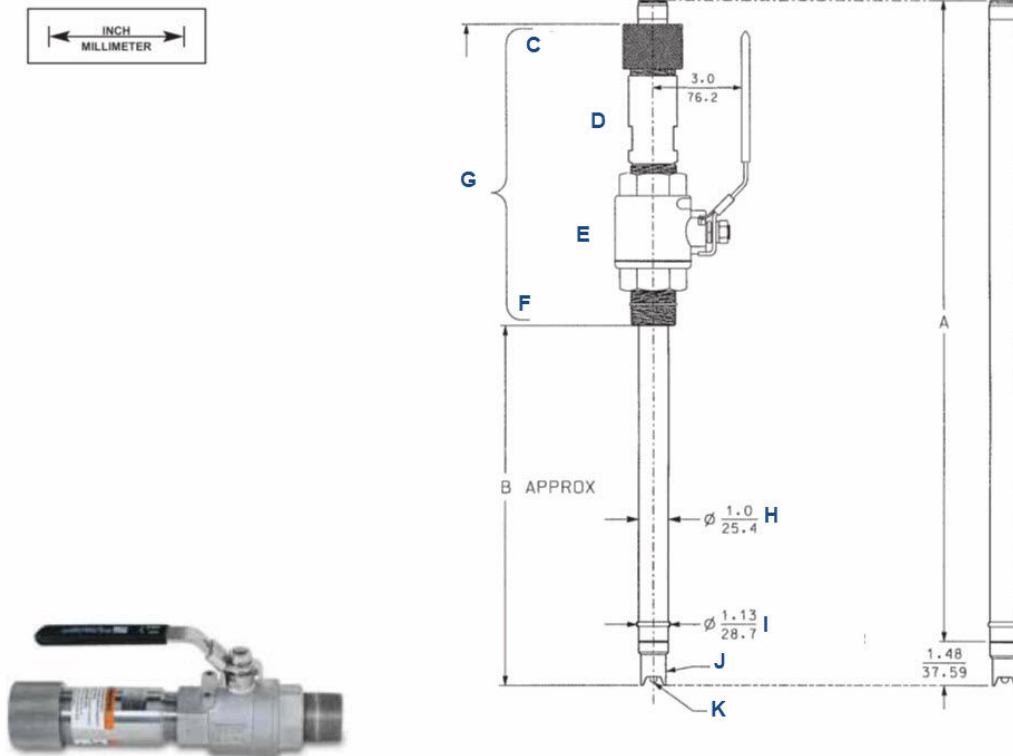
Note

Unless otherwise specified.

Note

You can submerge the Rosemount 398 in ponds or tanks in various ways, including a customer-supplied pipe mount setup using PN 9330022 pipe mount union. You can also use the handrail mounting assembly (PN 11275-01), which includes all necessary parts to mount the sensor at the end of a pipe using a process connector (PN 23166-00 or 23166-01).

Figure 9: Rosemount 398R with and without Optional Ball Valve PN 23765-00 Dimensional Drawing



- A. Dimension (see Table 7)
- B. Dimension (see Table 7)
- C. Knurl retainer
- D. Packing adapter
- E. Ball valve
- F. 1/4-in. MPT close nipple
- G. Ball valve kit PN 23765-00
- H. Housing titanium
- I. Retraction stop collar
- J. Electrode housing
- K. pH/ORP electrode

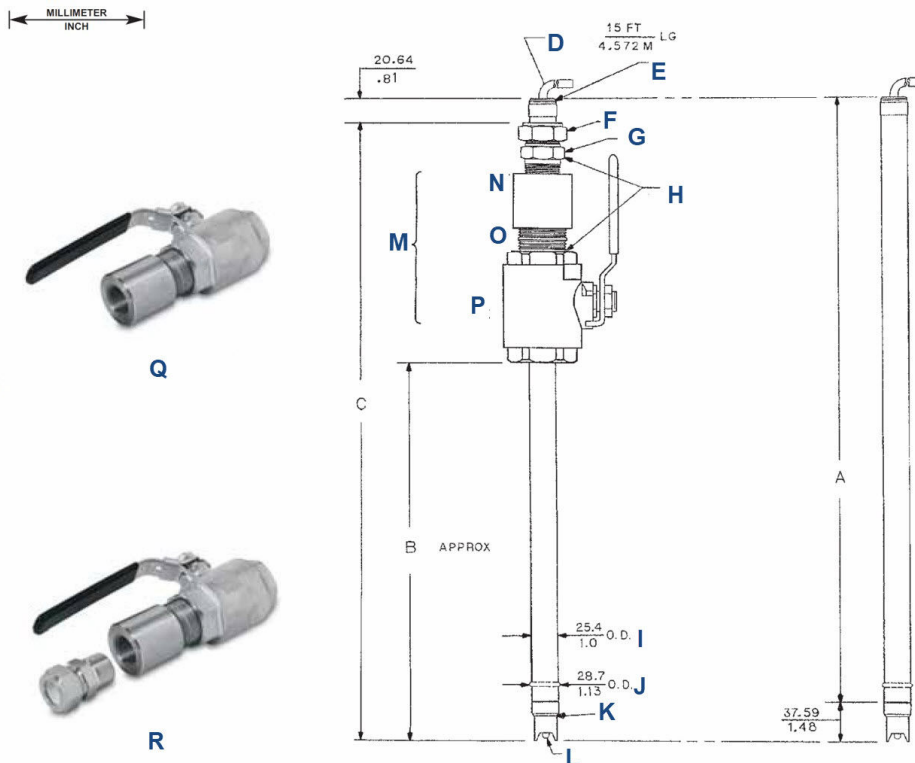
Table 7: Rosemount 398R A and B Dimensions

Option	A (in./mm)	B (in./mm)
21	21.60/548.64	12.12/307.85
25	36.10/916.94	26.62/676.15

Note

Add five inches to dimension A if mounting a sensor head junction box onto the sensor.

Figure 10: Rosemount 398R with and without 1½-in. Ball Valve PN 23240-00 Dimensional Drawing



- A. Dimension (see [Table 8](#)).
- B. Dimension (see [Table 8](#)).
- C. Dimension (see [Table 8](#)).
- D. Cable.
- E. Cable bushing polypropylene.
- F. Hex nut.
- G. 1-in. x 1-in. male connector.
- H. **⚠ WARNING**

Residual pressure and process may remain trapped between ball valve and male connector.

Pressure/temperature rating: 150 psig at 100 °C (100 psig at 100 °C for flat glass)

Maximum pressure at retraction: 64 psig (option 21), 35 psig (option 25)

- I. Housing titanium.
- J. Retraction stop collar.
- K. Electrode housing.
- L. pH/ORP electrode.
- M. Ball valve kit (PN 23240-00) optional.
- N. 1½-in. x 1-in. FPT reducing coupling.
- O. 1½-in. MPT close nipple.
- P. 1½ FPT ball valve.
- Q. Ball valve kit (PN 23240-00) used with Rosemount 398R retractable sensor.
- R. You must use a process connector (PN 23166-00 or -01) to connect the sensor to ball valve kit 23240-00. You can purchase the process connector separately.

Table 8: Rosemount 398R A, B, and C Dimensions

Option	A (in./mm)	B (in./mm)	C (in./mm)
21	21.60/548.64	12.90/327.66	22.27/565.66
25	36.10/916.94	27.40/699.96	36.77/933.96

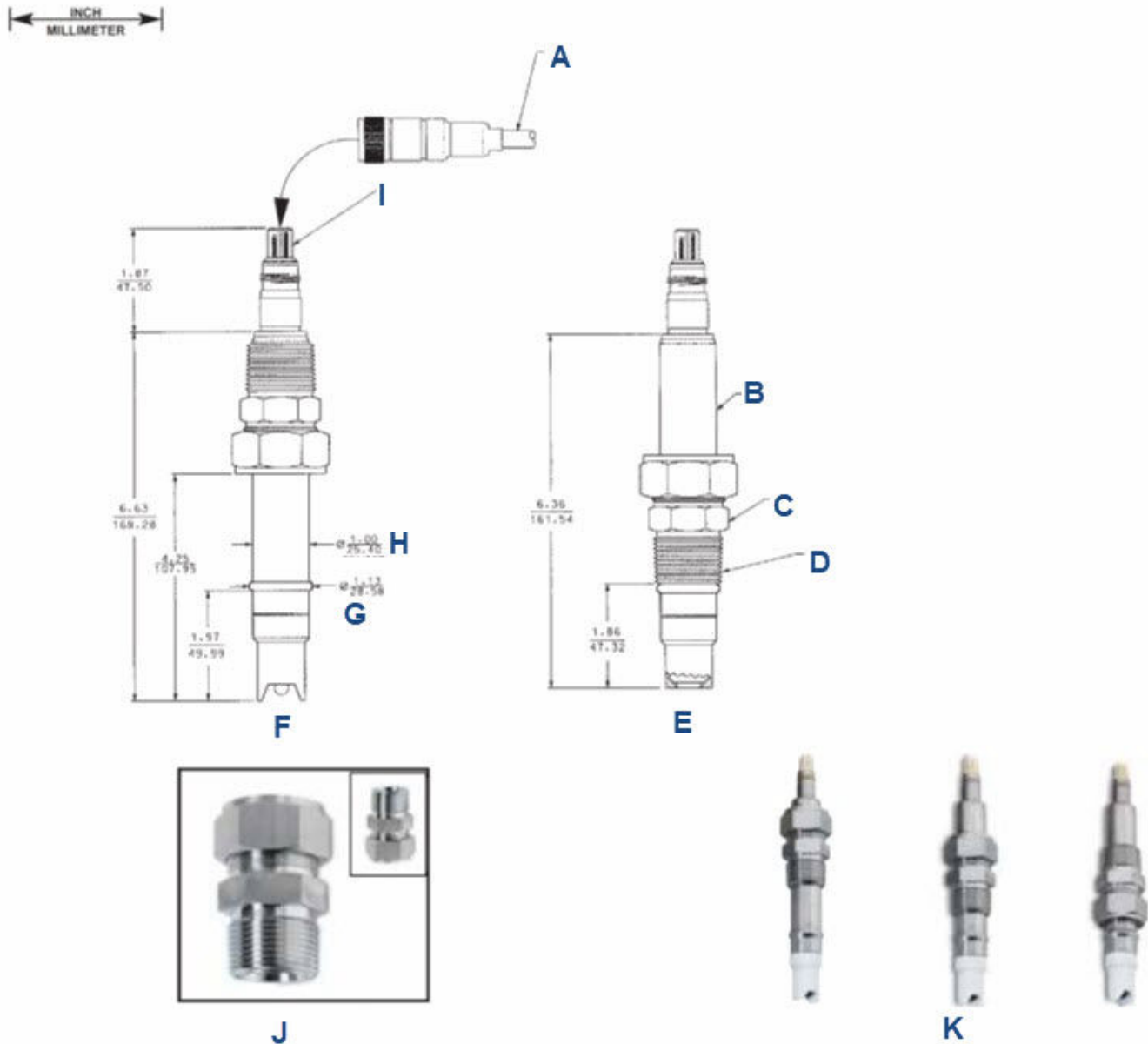
Note

For the ball valve installation shown, you must purchase the ball valve kit (PN 23240-00) and 1-in. x 1-in. process connector (PN 23166-00 or 23166-01) separately.

Note

Add five inches to dimension A if mounting a sensor head junction box onto the sensor.

Figure 11: Rosemount 396VP and 398VP with Process Connector Dimensional Drawing



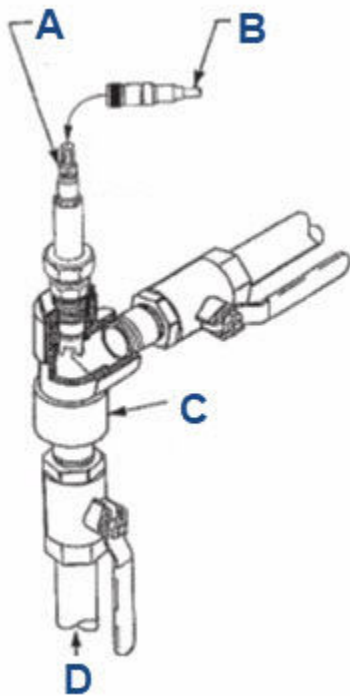
- A. Cable with Variopol receptacle (female) connector PN 24281-00.
- B. Sensor body.
- C. 1-in. swage fitting process connector assembly PN 23166-00/01.
- D. 1-in. NPT.
- E. Optional flat bulb sensor.
- F. Standard hemi bulb sensor.
- G. Retraction stop collar.
- H. Sensor body.
- I. Variopol plug (male) connector.
- J. Metal process connector PN 23166-xx (x = 00 for 316 stainless steel and xx = 01 for titanium) can be used for insertion or submersion mounting of Rosemount 396VP or 398VP sensors in 1-in. fittings.
- K. The metal process connector gives the sensor various insertion depths, depending on where you locate the compression fitting. You can also switch the threads to face the cable end of the sensor for connection to submersion pipes.

Wetted materials

1. Rosemount 396VP:
 Sensor body: 316 stainless steel
 Reference junction: polypropylene O-ring EPDM
2. Rosemount 398VP:
 Sensor body: titanium
 Reference junction: Tefzel.
 O-ring: Kalrez®, EPDM, or Viton®

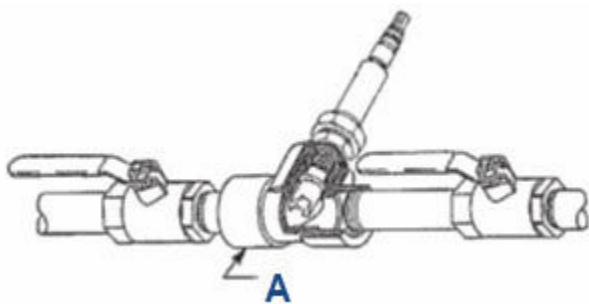
Typical flow-through and insertion mounting configuration for Rosemount 396VP and 398VP

Figure 12: Angle Flow



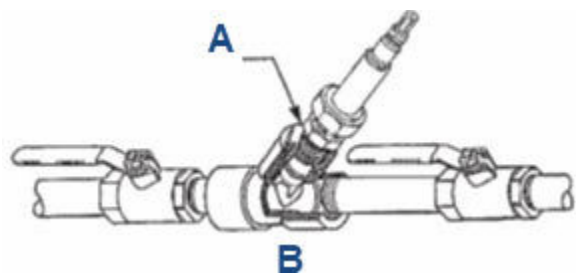
- A. Variopol plug (male) connector
- B. Cable with Variopol receptacle (female) connector
- C. 1½-in. pipe tee with 1-in. threaded connections PN 2002011
- D. Flow

Figure 13: Straight Flow



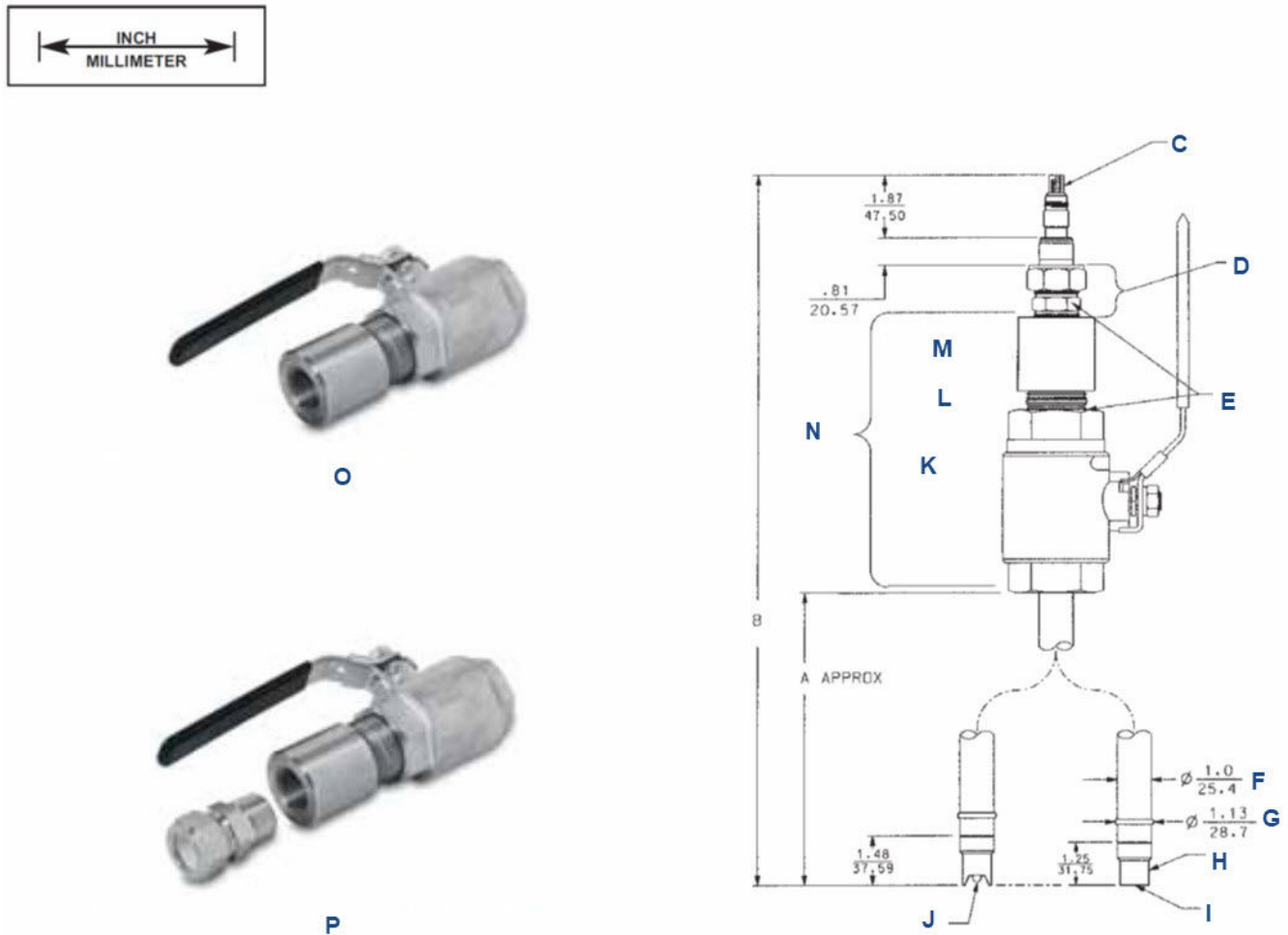
- A. 1½-in. pipe tee with 1-in. threaded connections PN 2002011

Figure 14: Pipe "Y" Installation



- A. 1½-in. x 1-in. reducing bushing
- B. 1½-in. pipe "Y"

Figure 15: Rosemount 396RVP and 398RVP with Optional 1½-in. Ball Valve PN 23240-00 Dimensional Drawing



- A. Dimension (see Table 9 and Table 10).
- B. Dimension (see Table 9 and Table 10).
- C. Variopol plug (male) connector.
- D. 1-in. x 1-in. swage fitting kit (PN 23166-00 or 23166-01) required to connect sensor directly to process or to ball valve.
- E. **⚠ WARNING**

Residual pressure and process may remain trapped between ball valve and male connector.

Pressure/temperature rating:
 Hemi bulb: 150 psig at 100 °C
 Flat bulb: 100 psig at 100 °C
 Maximum pressure of retraction:
 64 psig (option 21)
 35 psig (option 25)

- F. Titanium housing.
- G. Retraction stop collar.

H. Electrode housing.

I. **Table 9: Accuglass Flat pH Glass Bulb**

Option	A (in./mm)	B (in./mm)
21	12.65/321,31	23.69/606,81
25	27.15/689,15	38.39/975,11

J. **Table 10: Accuglass Hemi pH Glass Bulb**

Option	A (in./mm)	B (in./mm)
21	12.63/320.55	24.14/613.6
25	27.12/668.85	38.64/981.46

K. 1½-in. FPT ball valve PN 9340065.

L. 1½-in. MPT close nipple.

M. 1½-in. x 1-in. FPT reducing coupling.

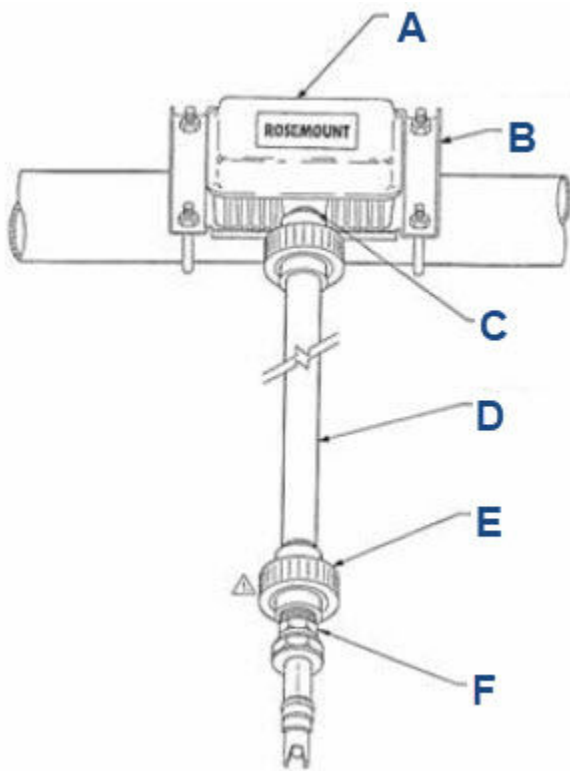
N. Ball valve kit (Pn 23240-00) optional.

O. Ball valve kit (PN 23240-00) used with Rosemount 396RVP and 398RVP retractable sensors.

P. A process connector (PN 23166-00 or -01) must be used to connect the sensor to ball valve kit 23240-00. You can purchase the process connector separately.

Typical submersion installations for Rosemount 396VP and 398VP

Figure 16: Pipe Mounting Union

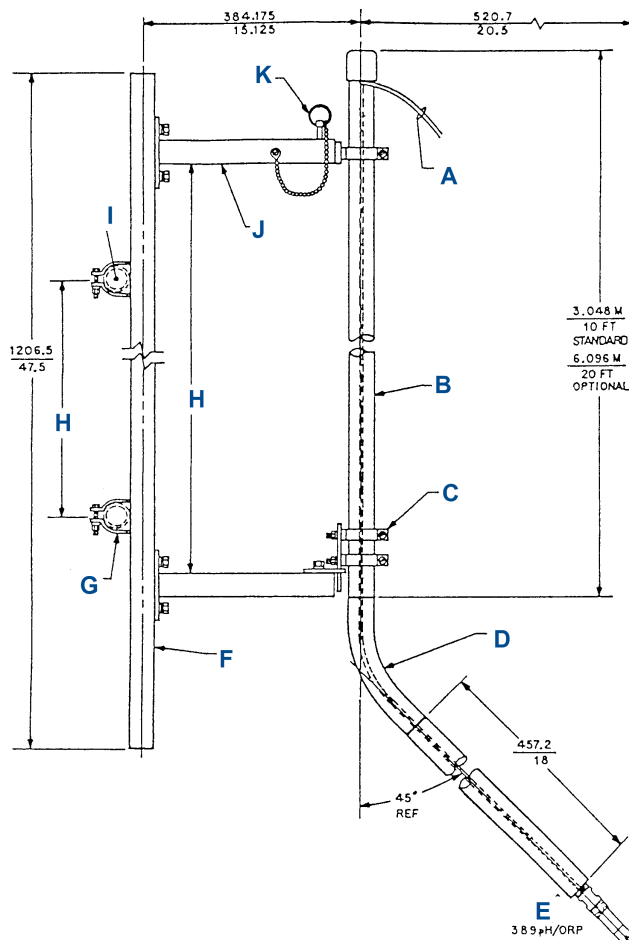


The pipe mounting union (PN 9330022) is ideal for connecting a sensor to a pipe, tank, aeration basin, or open channel.

- A. Type 4x junction box
PN 22715-02 (without preamp)
PN 23309-03 for use with preamp (3K)
PN 23309-04 for use with preamp (PT100)
- B. 2-in. pipe mounting bracket *PN 2002565*
- C. Flexible conduit if required
- D. 1-in. pipe by others
- E. 1-in. FNPT CPVC union *PN 9320057*
- F. 1-in. MNPT connector *PN 23166-00*

You can use the sensor handrail mounting assembly (PN 11275-01) to insert the sensor into tanks and ponds; the assembly mounts easily on most handrails.

Figure 17: Submersion Installation: Handrail Mounting Accessory (PN 11275-01)

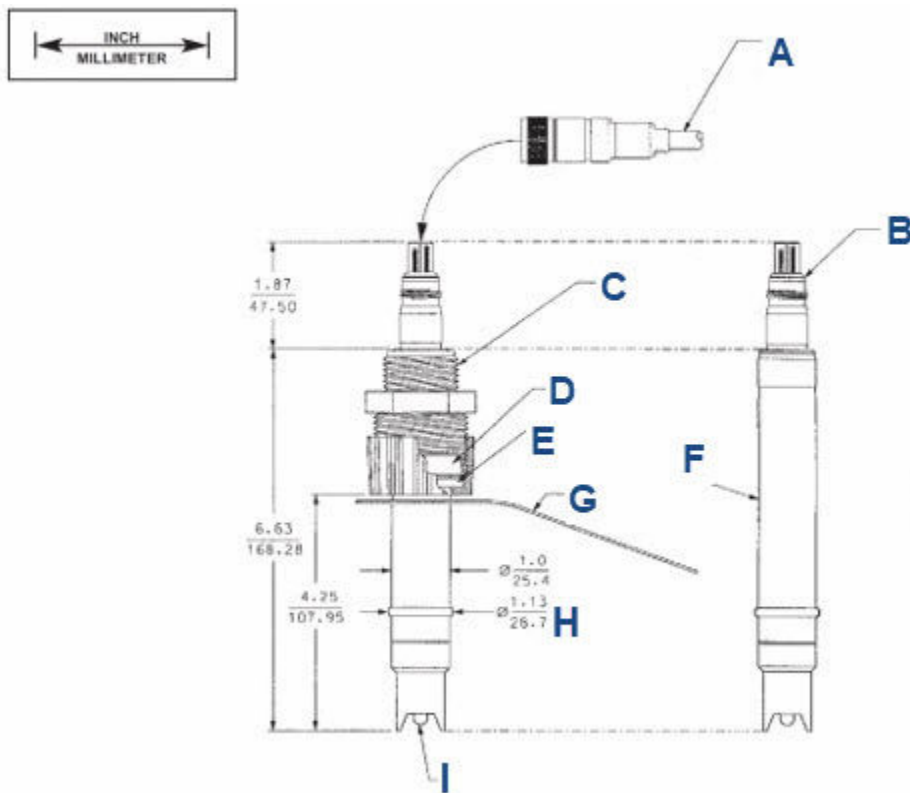


- A. Sensor cable.
- B. 1½-in. PVC pipe schedule 80.
- C. 1½-in. pipe clamp, three places.
- D. 45 degree sweep ell extension pipe.
- E. Regularly check to make sure connections are water tight.
- F. Unistrut 1⅝-in. x 1⅝-in. aluminum.
- G. 1½-in. pipe clamp, two places.
- H. Can be any convenient dimension.
- I. Customer handrail, two places.
- J. Mounting channel aluminum, two places.
- K. Locking pin with bead chain.

Note

Unless otherwise specified.

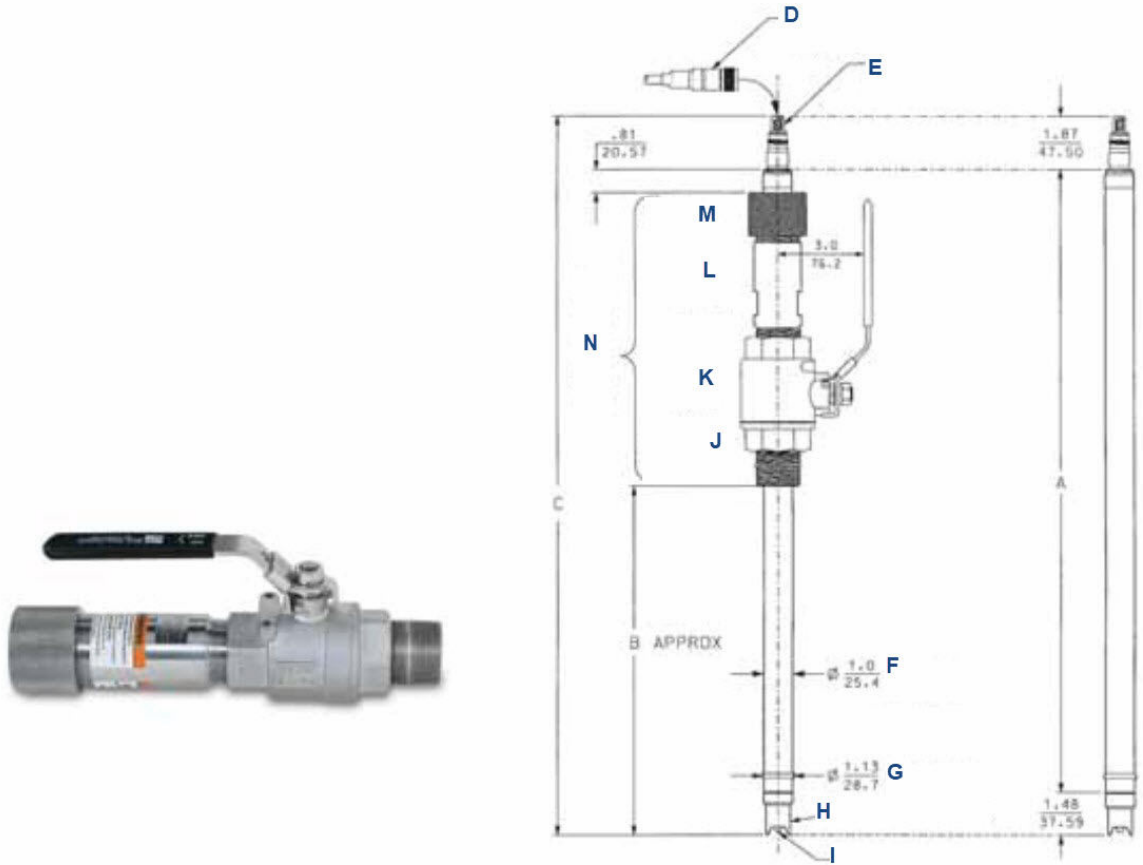
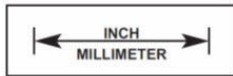
Figure 18: Nylon Process Connector



The nylon process connector has process threads that you can use for submersion pipe or in-line tee mounting.

- A. Cable with Variopol receptacle (female) connector.
- B. Variopol plug (male) connector.
- C. 1-in. x 1-in. NPT male connector nylon PN 9510066.
- D. Grommet.
- E. Compression fitting.
- F. Housing.
- G. Caution label removed for submersion service. First note limits; then remove and discard label.
- H. Retraction stop collar.
- I. pH electrode.

Figure 19: Rosemount 396RVP and 398RVP with Optional 1¼-in. Ball Valve PN 23765-00 Dimensional Drawing



- A. Dimension (see Table 11)
- B. Dimension (see Table 11)
- C. Dimension (see Table 11)
- D. Cable with Variopol receptacle (female) connector
- E. Variopol plug (male) connector
- F. Housing titanium
- G. Retraction stop collar
- H. Electrode housing
- I. pH/ORP electrode
- J. 1¼-in. MPT close nipple
- K. Ball valve
- L. Packing adapter
- M. Knurl retainer
- N. Ball valve kit PN 23765-00

Table 11: Rosemount 396RVP and 398RVP A, B, and C Dimensions

Option	A (in./mm)	B (in./mm)	C (in./mm)
21	21.60/548.64	12.12/307.85	24.95/633.73
25	36.10/916.94	26.62/676.15	39.45/1002.03

Accessories

Table 12: Ball Valve Assembly

Part number	Description
23240-00	Ball valve assembly, 316 stainless steel, 1½-in. (process connector required)
23765-00	1¼-in. ball valve assembly

Table 13: Connector Cable (Required for all First Time Installations)

Part number	Description
24281-00	15-ft. (4.6 m) VP8 cable
24281-01	25-ft. (7.6 m) VP8 cable
24281-02	2.5-ft. (0.8 m) VP8 cable
24281-03	50-ft. (15.2 m) VP8 cable
24281-04	100-ft. (30.5 m) VP8 cable
24281-05	4-ft. (1.2 m) VP8 cable
24281-06	10-ft. (3 m) VP8 cable
24281-07	20-ft. (6.1 m) VP8 cable
24281-08	30-ft. (9.1 m) VP8 cable

Table 14: Extension Cables (Requires a Remote Junction Box)

Part number	Description
23646-01	Extension cable, 11-conduit, shielded, prepped, per foot
9200254	Cable, 4 conduit, 22 AWG, 2 shielded pair, per foot
9200273	Extension cable, 11-conduit, shielded, unprepped, per foot

Table 15: Mounting Assemblies

Part number	Description
11275-01	Handrail mounting assembly
2002011	CPVC flow-through tee, 1½-in. NPT process connection
24091-00	Cell, low flow, ¼-in. inlet and outlet

Table 16: O-rings for Process Connectors (Optional)

Part number	Description
9550220	O-ring, 2-214, Kalrez, for process connector

Table 17: Process Connectors (Required for all First Time Installations)

Part number	Description
23166-00	Connector, 1-in. x 1-in. 316 stainless steel with O-ring groove
23166-01	Connector, 1-in. x 1-in. titanium with O-ring groove

Table 18: Remote Junction Boxes

Part number	Description
2002565	Mounting bracket kit
23555-00	Junction box, Rosemount 54/5081/1055/Xmt compatible preamplifier

Table 19: Sensor Head Junction Box

Part number	Description
23709-00	Junction box, sensor head with preamplifier for Rosemount 54/3081

Table 20: Other Accessories

Part number	Description
9210012	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)

Table 21: Spare Parts

Part number	Description
23472-00	Connector, junction box to tube
23557-00	Preamplifier for remote weatherproof junction box
23594-01	O-ring, 2-214, EPDM, 4 each with lube
33046-00	Ferrule, 1-in. 316 stainless steel split
33551-00	Process connector body replacement, 1-in. x 1-in., 316 stainless steel
33551-01	Process connector body replacement, 1-in. x 1-in., titanium
33561-00	Nut, swage, 1-in., titanium
9120531	BNC splitter, female BNC to 20 AWG leads
9310096	Nut, swage, 1-in., 316 stainless steel
9310100	Ferrule, 1-in. Teflon
9310102	Close nipple for 1½-in. ball valve
9310104	Reducing coupling for 1½-in. ball valve
9310117	Junction box connector body, 1-in. x ¾-in., carbon steel
9310118	Nut, swage, 1-in. carbon steel
9340065	Ball valve, full port, 1½-in. FNPT (to 248 °F [120 °C])
R508-8OZ	ORP standard, 457 mv, 8 oz. (236.6 ml)

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](https://www.linkedin.com/company/Emerson-Automation-Solutions)

 [Twitter.com/Rosemount_News](https://twitter.com/Rosemount_News)

 [Facebook.com/Rosemount](https://www.facebook.com/Rosemount)

 [Youtube.com/user/RosemountMeasurement](https://www.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.