



## PRODUCT DATASHEET

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# Rosemount™ 396/396VP/396P/396PVP/ 396R/396RVP

## 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



Rosemount 396/396VP



Rosemount 396P/396PVP



Rosemount 396R/396RVP

### Robust Sensor Design

- TUpH reference technology minimizes sensor maintenance and ensures a steady pH/ORP signal even when sensor is coated.
- Maximize sensor life with poisoning resistant helical reference pathway design.
- Optional flat pH glass electrode for abrasive and coating applications.
- Maximum process pressure 150 psig.
- Maximum process temperature 100 °C.

### Versatile Mounting Options to Meet Your Installation Requirements

- Rosemount 396P/396PVP sensors feature 1 in. MNPT front and rear facing process threads.
- Rosemount 396R/396RVP offered in 21 in. and 36 in. lengths suitable for use with retraction assemblies – easily remove sensors for maintenance and calibration without having to shutdown your process.
- Variopol(VP8) cable connection option, for quick cable-to-sensor release, eliminates cable twisting.

## Contents

|                            |   |                                             |    |
|----------------------------|---|---------------------------------------------|----|
| Overview .....             | 2 | Product Certifications .....                | 9  |
| Ordering Information ..... | 3 | Dimensional and Installation Drawings ..... | 10 |
| Specifications .....       | 8 | Accessories .....                           | 14 |

## Ordering Information



Rosemount 396 and 396VP<sub>pH</sub> sensors feature a stainless steel body for use with optional 1 inch threaded process connectors suitable for insertion, submersion, or flow through installation. Sensors are available with either a standard pH hemi glass bulb or optional pH flat glass bulb. Rosemount 396 sensors feature a standard 15 ft. integral cable and Rosemount 396VP sensors feature a Variopol cable connection for use with VP8 quick disconnect interconnecting cables (sold separately; see Accessories [Table 9](#)).

**Table 1. Rosemount 396 pH/ORP Sensor ordering information**

| Model                                  | Sensor type                             |
|----------------------------------------|-----------------------------------------|
| 396                                    | pH Sensor                               |
| <b>Temperature element</b>             |                                         |
| 50                                     | 3k Balco <sup>(1)</sup>                 |
| 54                                     | Pt-100                                  |
| <b>Cable options</b>                   |                                         |
| –                                      | 15ft. cable with BNC                    |
| 62                                     | 15 ft. cable without BNC <sup>(2)</sup> |
| <b>Glass options</b>                   |                                         |
| –                                      | No selection –pH –GPHT hemi glass bulb  |
| 71                                     | pH–GPHT flat glass bulb                 |
| <b>Typical model number: 396-54-62</b> |                                         |

1. For use with legacy transmitter models 1181pH, 1050, and 1003.

2. For use with existing transmitter models Rosemount 56, 1056, 1057, 1066, and 5081. Also compatible with legacy transmitter models 6081, 81, 1181, 2081, 3081, 4081, 54, 1055, and XMT.

**Table 2. Rosemount 396VP pH/ORP Sensor ordering information**

| Model                      | Sensor type                            |
|----------------------------|----------------------------------------|
| 396VP                      | pH Sensor                              |
| <b>Temperature element</b> |                                        |
| 50                         | 3k Balco <sup>(1)</sup>                |
| 54                         | Pt-100 <sup>(2)</sup>                  |
| 55                         | Pt-100 <sup>(3)</sup>                  |
| <b>Glass Options</b>       |                                        |
| –                          | No selection –pH –GPHT hemi glass bulb |
| 71                         | pH –GPHT flat glass bulb               |

**Table 2. Rosemount 396VP pH/ORP Sensor ordering information**

| Preamplifier Option                    |                                   |
|----------------------------------------|-----------------------------------|
| –                                      | No preamplifier                   |
| 70                                     | SMART preamplifier <sup>(4)</sup> |
| <b>Typical Model Number: 396-54-62</b> |                                   |

- For use with legacy transmitter models 1181pH, 1050, and 1003.
- For use with existing transmitter models Rosemount 56, 1056, 1057, 1066, and 5081. Also compatible with legacy transmitter models 6081, 81, 1181, 2081, 3081, 4081, 54, 1055, and XMT.
- For use with existing transmitter models Rosemount 56, 1056, 1057, 1066, and 5081. Only available with option -70.
- Only available with option -55.



Rosemount 396P and 396PVP pH/ORP sensors feature a molded reinforced polypropylene body with forward and rear facing 1 in. MPT threads suitable for insertion, submersion, and flow through type installations. The Rosemount 396P sensor has an integral cable connection and the Rosemount 396PVP sensor has a Variopol cable connection for use with VP8 interconnecting cables (sold separately; see Accessories [Table 9](#)).

**Table 3. Rosemount 396P pH/ORP Sensor ordering information**

| Model                                         | Sensor type                                                         |
|-----------------------------------------------|---------------------------------------------------------------------|
| 396P                                          | pH/ORP Sensor                                                       |
| Preamplifier/cable                            |                                                                     |
| 01                                            | 25ft. Integral cable with preamplifier <sup>(1)</sup>               |
| 02                                            | 15 ft. Integral cable without preamplifier                          |
| Measuring electrode                           |                                                                     |
| 10                                            | pH –GPLR hemi Glass Bulb                                            |
| 12                                            | Platinum ORP                                                        |
| 13                                            | pH –GPLR Flat Glass Bulb                                            |
| Temperature element/Transmitter compatibility |                                                                     |
| 50                                            | 3K Balco, for use with model 1181                                   |
| 54                                            | Pt-100, for use with model 1054,2054, and 2081                      |
| 55                                            | Pt-100, for use with model 56, 1056, 1057,1066, 5081 <sup>(2)</sup> |
| Sensor tip option                             |                                                                     |
| –                                             | No selection – Standard shrouded tip                                |
| 41                                            | Slotted tip <sup>(3)</sup>                                          |
| <b>Typical model number: 396P-01-10-55</b>    |                                                                     |

- Preamplifier is SMART for pH electrodes selected with option -55.
- Also compatible with legacy transmitter models 54, 1055, 6081, 81, 3081, 4081, and XMT.
- Not available with option -13.

**Table 4. Rosemount 396PVP pH/ORP Sensor ordering information**

| Model                                                | Sensor type                                                         |
|------------------------------------------------------|---------------------------------------------------------------------|
| 396PVP                                               | pH/ORP Sensor                                                       |
| <b>Measuring electrode</b>                           |                                                                     |
| 10                                                   | pH–GPLR hemi glass bulb                                             |
| 12                                                   | Platinum ORP                                                        |
| 13                                                   | pH –GPLR flat glass bulb                                            |
| <b>Temperature element/Transmitter compatibility</b> |                                                                     |
| 50                                                   | 3K Balco, for use with model 1181                                   |
| 54                                                   | Pt-100, for use with model 1054,2054, and 2081                      |
| 55                                                   | Pt-100, for use with model 56, 1056, 1057,1066, 5081 <sup>(1)</sup> |
| <b>Sensor tip option</b>                             |                                                                     |
| –                                                    | No selection –Standard shrouded tip                                 |
| 41                                                   | Slotted tip <sup>(2)</sup>                                          |
| <b>Preamplifier option</b>                           |                                                                     |
| –                                                    | No selection -No preamplifier                                       |
| 70                                                   | SMART preamplifier <sup>(3)</sup>                                   |
| <b>Typical model number: 396PVP-10-55-41-70</b>      |                                                                     |

1. Also compatible with legacy transmitter models 54, 1055, 6081, 81, 3081, 4081, and XMT.

2. Not available with option -13.

3. Only available for pH electrodes selected with option -55.



Rosemount 396R and 396RVP pH/ORP sensors are available in 21 and 36 inch titanium tube sensor lengths for use with a ball valve (sold separately) for hot tap applications. Rosemount 396RVP sensors feature a Variopol cable connection for use with VP8 quick disconnect interconnecting cables (sold separately; see Accessories [Table 9](#)).

**Table 5. Rosemount 396R pH/ORP Sensor ordering information**

| Model                                      | Sensor type                              |
|--------------------------------------------|------------------------------------------|
| 396R                                       | pH/ORP Sensor                            |
| <b>Measuring electrode</b>                 |                                          |
| 10                                         | pH–GPLR hemi glass bulb                  |
| 12                                         | Platinum ORP                             |
| 13                                         | pH –GPLR flat glass bulb                 |
| <b>Sensor length</b>                       |                                          |
| 21                                         | 21 in. Titanium tube                     |
| 25                                         | 36 in. Titanium tube                     |
| <b>Temperature element</b>                 |                                          |
| 50                                         | 3K Balco <sup>(1)</sup>                  |
| 54                                         | Pt-100 <sup>(2)</sup>                    |
| <b>Cable options</b>                       |                                          |
| –                                          | No selection –Standard 15 ft. cable      |
| 60                                         | 9.5 in. cable with BNC <sup>(3)</sup>    |
| 61                                         | 9.5 in. cable without BNC <sup>(4)</sup> |
| <b>Typical model number: 396R-10-21-54</b> |                                          |

1. For use with legacy transmitter model 1181pH.
2. For use with existing transmitter models Rosemount 56, 1056, 1057, 1066, and 5081. Also compatible with legacy transmitter models 54, 1054, 1055, 6081, 81, 2081, 3081, 4081, 2700, and XMT.
3. For connection to 1181, 1054, and 2081 sensor head junction boxes.
4. For use with sensor head junction box 23709-00. Not available with option -50.

**Table 6. Rosemount 396RVP pH/ORP Sensor Ordering Information**

| Model                                                | Sensor type                                  |
|------------------------------------------------------|----------------------------------------------|
| 396RVP                                               | pH/ORP Sensor                                |
| <b>Measuring electrode</b>                           |                                              |
| 10                                                   | pH–GPLR hemi glass bulb                      |
| 12                                                   | Platinum ORP                                 |
| 13                                                   | pH –GPLR flat glass bulb                     |
| <b>Sensor length</b>                                 |                                              |
| 21                                                   | 21 in. Titanium tube                         |
| 25                                                   | 36 in. Titanium tube                         |
| <b>Temperature element/Transmitter compatibility</b> |                                              |
| 50                                                   | 3K Balco <sup>(1)</sup>                      |
| 54                                                   | Pt-100 <sup>(2)</sup>                        |
| 55                                                   | Pt-100 for SMART Preamplifier <sup>(3)</sup> |
| <b>Preamplifier option</b>                           |                                              |
| –                                                    | No Selection –No Preamplifier                |
| 70                                                   | SMART Preamplifier <sup>(4)</sup>            |
| <b>Typical model number: 396RVP-10-25-55-70</b>      |                                              |

1. For use with legacy transmitter model 1181pH.
2. For use with existing transmitter models Rosemount 56, 1056, 1057, 1066, and 5081. Also compatible with legacy transmitter models 54, 1054, 1055, 6081, 81, 2081, 3081, 4081, 2700, and XMT.
3. Recommended for use with existing transmitter models Rosemount 56, 1056, 1057, 1066, and 5081. Only available with pH electrodes selected with option -70
4. Only available with pH electrodes selected with option -55

## Specifications

**Table 7. Rosemount 396/396VP/396P/396PVP/396R/396RVP Sensors Specifications**

| Specifications                              | 396/396VP                                                                            | 396P/396PVP                                                                        | 396R/396RVP                                                                                                                                                                                         |
|---------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                             |     |  |                                                                                                                  |
| Measurements and ranges                     | pH: 0-14                                                                             | pH: 0-14<br>ORP: -1500 to 1500 mv                                                  | pH: 0-14<br>ORP: -1500 to 1500 mv                                                                                                                                                                   |
| Available pH ACCUGLASS types                | GPHT hemi bulb or GPHT flat bulb                                                     | GPLR hemi bulb or GPLR flat bulb                                                   | GPLR hemi bulb or GPLR flat bulb                                                                                                                                                                    |
| Wetted materials                            | 316 SST, Polypropylene, EPDM, glass                                                  | Titanium, Polypropylene, EPDM, glass; platinum (ORP only)                          | Titanium, Polypropylene, EPDM, glass; platinum (ORP only)                                                                                                                                           |
| Process connection                          | None, use 1 in. NPT process connector, PN 23166-00 or 23166-01 (sold separately)     | 1 in. MNPT front and rear facing threads                                           | None, use 1-in. process connector or ball valve kit (1-1/2 or 1-1/4 in.) (sold separately)                                                                                                          |
| Temperature range                           | 0-100 °C (32-212 °F)                                                                 |                                                                                    |                                                                                                                                                                                                     |
| Pressure range-hemi bulb                    | 100-1135 kPa (abs) (0-150 psig)                                                      |                                                                                    |                                                                                                                                                                                                     |
| Pressure range-flat bulb                    | 100-790 kPa (0-100 psig)                                                             |                                                                                    |                                                                                                                                                                                                     |
| Maximum pressure at Retraction or insertion | Not Applicable                                                                       | Not Applicable                                                                     | Code 21: 542 kPa (abs) (64 psig)<br>Code 25: 343 kPa (abs) (35 psig)                                                                                                                                |
| Minimum conductivity                        | 100 µS/cm                                                                            |                                                                                    |                                                                                                                                                                                                     |
| Integral cable                              | 15 ft coaxial with BNC                                                               | Code 01: 25 ft 11 conductor<br>Code 02: 15 ft coaxial                              | Standard 15 ft coaxial<br>Code 60: 9.5 in. coaxial w/BNC<br>Code 61: 9.5 in. coaxial                                                                                                                |
| Preamplifier options                        | Remote or Integral SMART                                                             |                                                                                    |                                                                                                                                                                                                     |
| Weight/Shipping weight                      | 0.45 kg/0.9 kg (1 lb/2 lb)                                                           | 0.45 kg/0.9 kg (1 lb/2 lb)                                                         | Sensor: Code 21: 0.9 kg/1.40 kg (2.0 lb/3.0 lb)<br>Code 25: 1.40 kg/1.80 kg (3.0 lb/4.0 lb)<br>Ball Valve PN 23240-00: 2.25 kg/3.20 kg (5.0 lb/7.0 lb)<br>Junction box; 1.40 kg/1.80 kg (3 lb/4 lb) |
| VP Cable                                    | Use cable PN 24281-XX (where XX = -01 thru -08 and designates various cable lengths) |                                                                                    |                                                                                                                                                                                                     |

**Table 8. Percent Linearity**

| pH Range | 396 / 396VP |           | 396P / 396PVP |           | 396R / 396RVP |           |
|----------|-------------|-----------|---------------|-----------|---------------|-----------|
| 396RVP   | GPHT Hemi   | GPHT Flat | GPHT Hemi     | GPHT Flat | GPHT Hemi     | GPHT Flat |
| 0-2 pH   | 94%         | 95%       | 94%           | -         | 94%           | 93%       |
| 2-12 pH  | 99%         | 99%       | 97%           | 98%       | 97%           | 98%       |
| 12-13 pH | 97%         | 96%       | 98%           | 95%       | 98%           | 95%       |
| 13-14 pH | 92%         | -         | 98%           | -         | 98%           | -         |

## Product Certifications

See online certificates for more details.

### IECEX



Sensors without preamp (pH and ORP) – Ex ia IIC T4 Ga (-20 °C ≤ Ta ≤ +60 °C)

Sensors with SMART preamp (pH only) – Ex ia IIC T4 Ga (-20 °C ≤ Ta ≤ +60 °C)

Sensors with standard preamp (396P only) – Ex ia IIC T4 Ga (-20 °C ≤ Ta ≤ +80 °C) or Ex ia IIC T5 Ga (-20 °C ≤ Ta ≤ +40 °C)

Per standards IEC60079-0: 2011, IEC 60079-11: 2011

### ATEX

Sensors without preamp (pH and ORP) – Ex II 1 G Ex ia IIC T4 Ga (-20 °C ≤ Ta ≤ +60 °C)

Sensors with SMART preamp (pH only) – Ex II 1 G Ex ia IIC T4 Ga (-20 °C ≤ Ta ≤ +60 °C)

Sensors with standard preamp (396P only) – Ex II 1 G Ex ia IIC T4 Ga (-20 °C ≤ Ta ≤ +80 °C) or Ex II 1 G Ex ia IIC T4 Ga (-20 °C ≤ Ta ≤ +40 °C)

Per standards EN 60079-0: 2012+A11:2013, EN 60079-11:2012

### FM



See online FM Certificate of Compliance for applicable sensor options.

Intrinsically Safe for use in Class I, II, and III, Division 1, Groups A, B, C, D, E, F, and G; Temperature Class T6 Ta = -20 °C to +60 °C

Intrinsically Safe for use in Class I, Zone 0, AEx ia IIC T6 Ta = -20 °C to +60 °C

Nonincendive for use in Class I, Division 2, Groups A, B, C, and D; Temperature Class T6 Ta = -20 °C to +60 °C

Suitable for use in Class II and III, Division 2, Groups E, F, and G; Temperature Class T6 Ta = -20 °C to +60 °C Hazardous (Classified) Locations

IS/I,II,III/1/ABCDEFG/T6 Ta = 60 °C - 1400332; Entity; I/O/AEx ia IIC/T6 Ta = 60 °C - 1400332; Entity; NI/I/2/ABCD/T6 Ta = 60 °C; S/II,III/2/EFG/T6 Ta = 60 °C

Per standards 3600:1998, 3610:2010, 3611:2004, 3810:2005

### CSA



See online CSA Certificate of Compliance for applicable sensor options.

Sensors with preamp – Intrinsically Safe:

Class I, Division 1, Groups ABCD; Class II, Division 1, Groups EFG; Class III; Class I, Division 2, Groups ABCD; Ambient temperature rating -20 °C to +60 °C; Ex ia IIC; T6

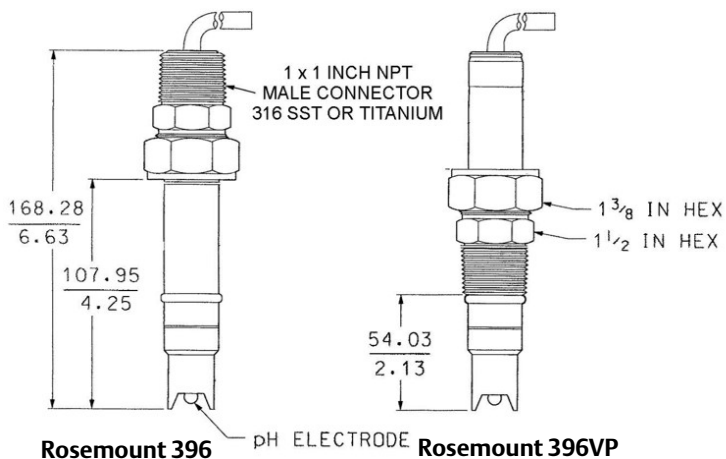
Sensors without preamp – Intrinsically Safe and Non-Incendive:

Class I, Division 1, Groups ABCD; Class II, Division 1, Groups EFG; Class III; Class I, Division 2, Groups ABCD; Ex ia IIC; T6; Ambient temperature rating -20 °C to +60 °C: (Simple Apparatus)

Per standards C22.2 No. 0-10, C22.2 No. 0.4-M2004, C22.2 No. 94-M1991, C22.2 No. 142 – M198, C22.2 No 157 – M1992, CAN/CSA E60079-0:0, CAN/CSA E60079-11:02, UL50 11th Ed, UL508 17th Ed, UL913 7th Ed, UL 60079-0: 2005, UL 60079-11: 2002

## Dimensional and Installation Drawings

Figure 1. Rosemount 396/396VP with optional connector dimensional drawings

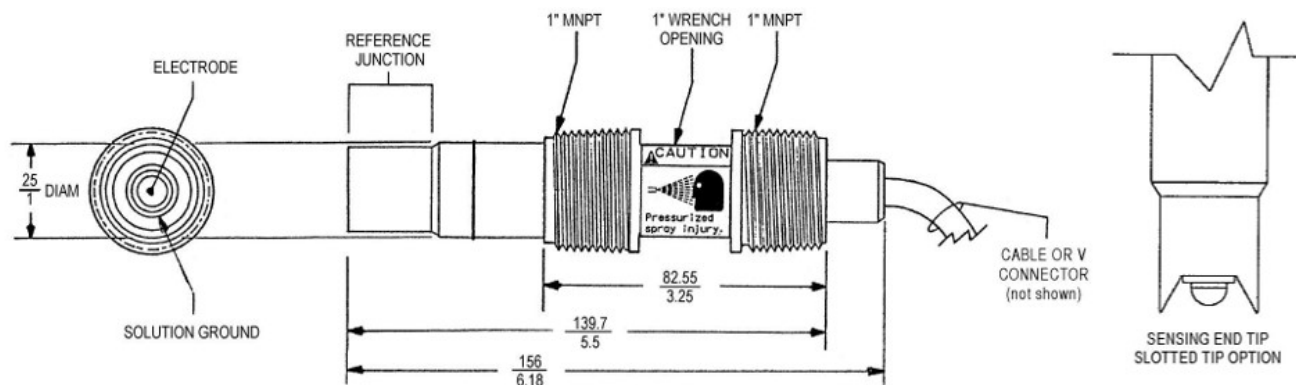


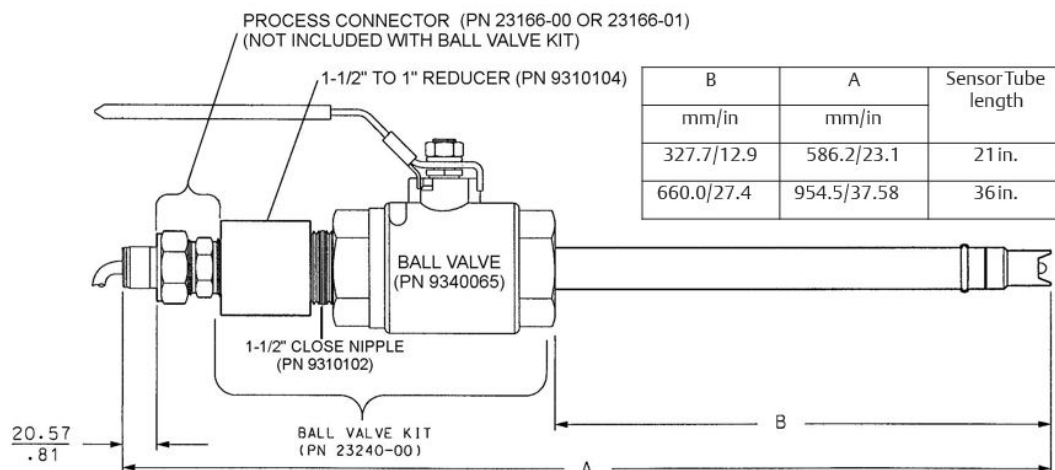
Metal Process Connector PN 23166-xx (xx = 00 for 316 SST and xx = 01 for titanium) can be used for insertion or submersion Model 396 sensor connection to 1-inch tee fittings. It also must be used to connect Model 396R to ball valve PN 23240-00 or directly to the process.

The metal process connector gives the sensor various insertions depths, depending on where the user locates the compression fitting. Also the threads can be switched to face the cable end of the sensor for connection to submersion pipes.

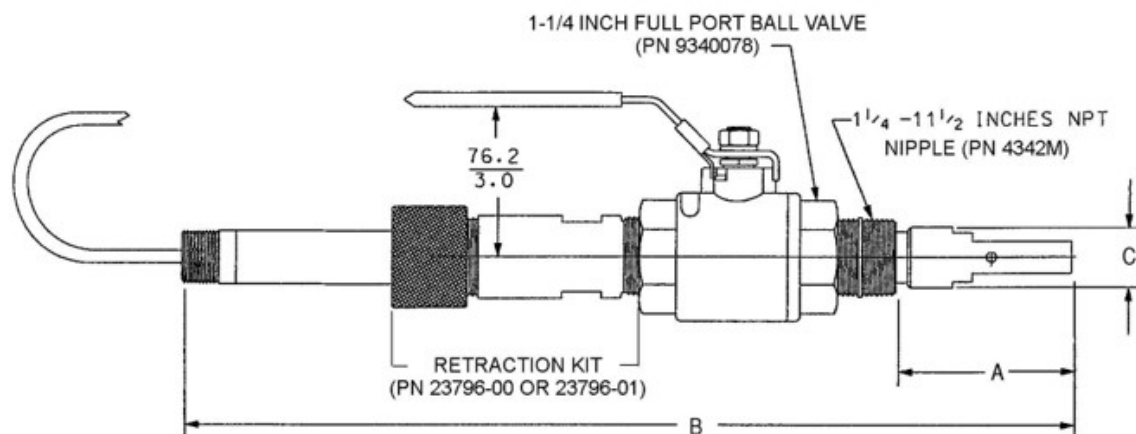


Figure 2. Rosemount 396P/396PVP dimensional drawing



**Figure 3. Rosemount 396R pH sensor and 1½ in. FNPT Ball Valve Kit (PN 23240-00) with process connector**

1½ in. FNPT Ball Valve Kit (PN 23240-00) shown with process connector (sold separately) and Rosemount 396R pH sensor. Ball valve kit includes a 1½ in. full port ball valve, a 1½ in. FTP to 1 in. FTP reducer (which serves as the retraction chamber) and a 1½ in. close nipple that connects the reducer to the ball valve. A connector (PN 23166-00 or 23166-01) is required to connect sensor to the reducer.

**Figure 4. MNPT Ball Valve Kit 1¼ in. (PN 23765-00 or 23765-01) with retraction kit**

1¼ in. MNPT Ball Valve Kit (PN 23765-00 or 23765-01) shown with retraction kit. Ball valve kit includes a 1¼ in. full port ball valve, a 1¼ in. nipple, and a retraction chamber.

The ball valve kit (PN 23765-00 or -01) has all parts needed to install the sensor. The retraction chamber (PN 23796-00) can be purchased separately.



Figure 5. Typical flow through installation (sensor must be installed at least 10 ° above the horizon)

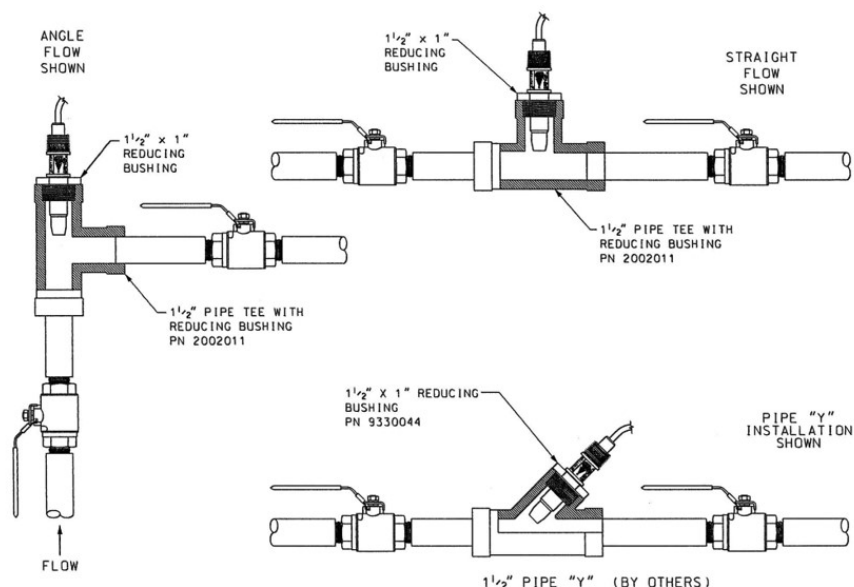


Figure 6. Rosemount 396P and 396PVP pH sensor with Spray Cleaner (PN 12707-00)

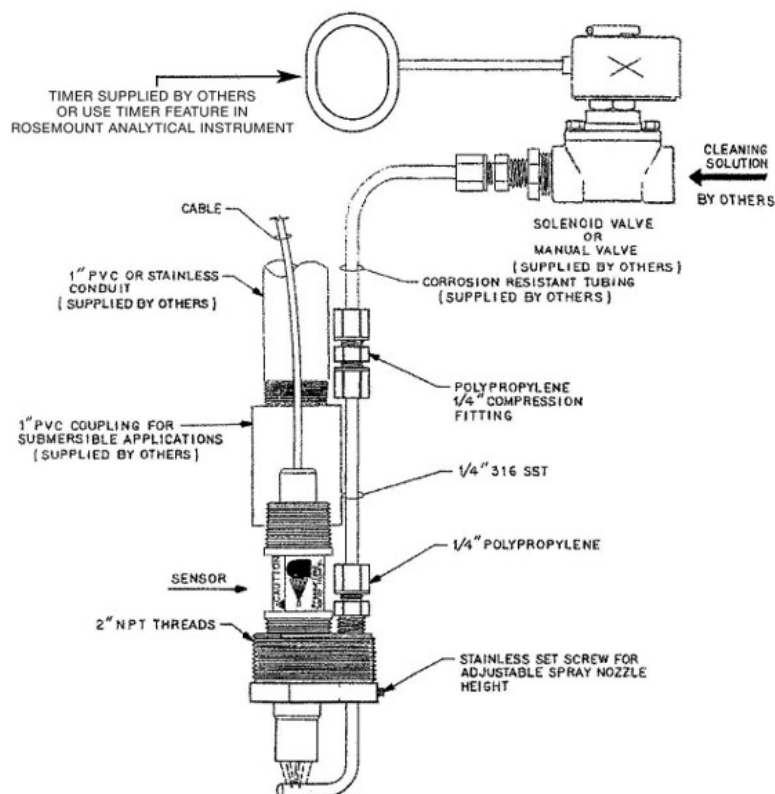
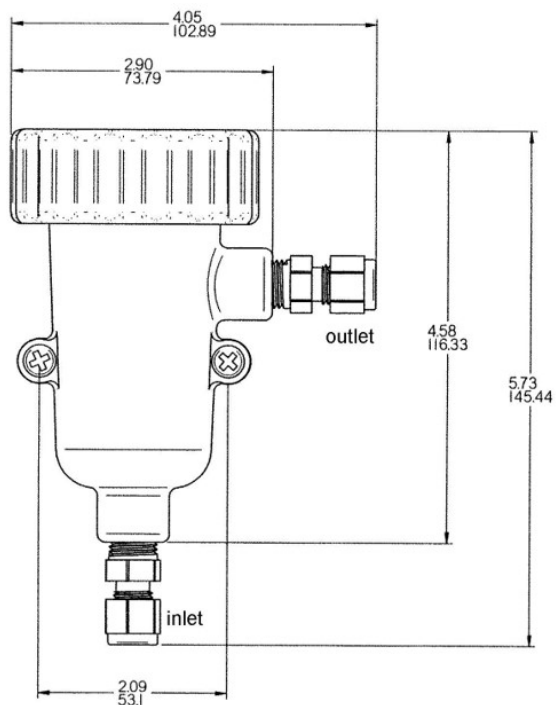


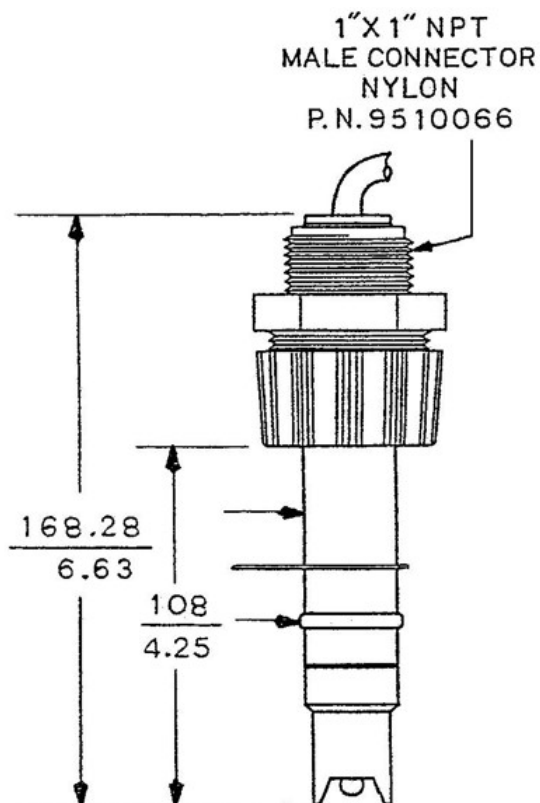
Figure 7. Low flow cell (PN 24091-00) for Rosemount 396 and 396P-41 sensor



Maximum pressure: 65 psig (549 kPa abs).

Maximum temperature: 122 °F (50 °C)

Figure 8. Submersion accessory (PN 9510066) for Rosemount 396/396VP Sensors



## Accessories

**Table 9. Rosemount 396/396VP, 396P/396PVP, 396R/396RVP Sensors accessories information**

| Part number                                                                                                     | Description                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Process connectors (required for all first time installations of Rosemount 396, 396VP, 396R, and 396RVP)</b> |                                                                                                                                                                                                   |
| 23166-00                                                                                                        | Connector, 1 in. x 1 in. 316 SS, with O-ring groove                                                                                                                                               |
| 23166-01                                                                                                        | Connector, 1 in. x 1 in. Titanium, with O-ring groove                                                                                                                                             |
| <b>Connector cable, VP8 (required for all first time installations of VP sensors)</b>                           |                                                                                                                                                                                                   |
| 24281-00                                                                                                        | 15 ft. (4.6m) VP8 cable                                                                                                                                                                           |
| 24281-04                                                                                                        | 100 ft (30.5m) VP8 cable                                                                                                                                                                          |
| 24281-06                                                                                                        | 10 ft (3.0m) VP8 cable                                                                                                                                                                            |
| 24281-07                                                                                                        | 20 ft (6.1m) VP8 cable                                                                                                                                                                            |
| 24281-08                                                                                                        | 30 ft (9.1m) VP8 cable                                                                                                                                                                            |
| <b>Retraction mounting assemblies for Rosemount 396R and 396RVP</b>                                             |                                                                                                                                                                                                   |
| 23240-00                                                                                                        | 1 ½ in. Ball valve assembly, 316 Stainless steel; 1 ½ in. full port ball valve, 1 ½ x 1 ½ in. nipple, and retraction chamber. Process connector 23166-00/-01 required; sold separately            |
| 23765-00                                                                                                        | 1 ¼ inch Ball valve assembly, 316 Stainless steel; 1 ¼ in. full port ball valve, 1 ¼ to 1 ½ in. nipple, and custom retraction kit with graphite packing gland for smooth sensor insertion/removal |
| <b>Remote junction boxes and mounting brackets; for use when standard cable lengths need to be extended</b>     |                                                                                                                                                                                                   |
| 23555-00                                                                                                        | Junction box with preamplifier                                                                                                                                                                    |
| 23550-00                                                                                                        | Junction box without preamplifier                                                                                                                                                                 |
| 23709-00                                                                                                        | Sensor head junction box for Rosemount 396R and 396RVP; contains preamplifier for 54, 56, 1055, 1056, 1057, 1066, 3081, 4081, 5081, XMT                                                           |
| 2002565                                                                                                         | Mounting bracket kit with mounting plate and U-bolts; use with PN 23555-00 or 23550-00 junction boxes                                                                                             |
| <b>Extension cables (required when using a remote junction box)</b>                                             |                                                                                                                                                                                                   |
| 23646-01                                                                                                        | Extension cable for junction box, shielded, prepped                                                                                                                                               |
| 9200273                                                                                                         | Extension cable for junction box, shielded, unprepped                                                                                                                                             |
| <b>Calibration accessories</b>                                                                                  |                                                                                                                                                                                                   |
| 9210012                                                                                                         | Buffer solution, pH 4.01, 16 oz (473 ml)                                                                                                                                                          |
| 9210013                                                                                                         | Buffer solution, pH 6.86, 16 oz (473 ml)                                                                                                                                                          |
| 9210014                                                                                                         | Buffer solution, pH 9.18, 16 oz (473 ml)                                                                                                                                                          |
| R508-80Z                                                                                                        | ORP standard, 475 mV, 8oz (236 ml)                                                                                                                                                                |
| <b>Mounting assemblies</b>                                                                                      |                                                                                                                                                                                                   |
| 11275-01                                                                                                        | Handrail mounting assembly; includes a 6 ft straight pipe, pipe coupling, 6 ft long sweep pipe, unistrut, pipe clamps, and mounting channels                                                      |
| 2002011                                                                                                         | CPVC flow through Tee, 1–½ in. NPT process connections                                                                                                                                            |
| 24091-00                                                                                                        | Low Flow Cell with ¼ in. inlet and outlet                                                                                                                                                         |
| 915240-03                                                                                                       | Tee, Flow-through, 2 in. PVC tee with ¾ in. NPT process connections and mounting adapter to eliminate cable twisting                                                                              |

**Table 9. Rosemount 396/396VP, 396P/396PVP, 396R/396RVP Sensors accessories information**

|           |                                                                                                                        |
|-----------|------------------------------------------------------------------------------------------------------------------------|
| 915240-04 | Tee, Flow-through, 2 in. PVC tee with 1 in. NPT process connections and mounting adapter to eliminate cable twist      |
| 915240-05 | Tee, Flow-through, 2 in. PVC tee with 1 ½ in. NPT process connections and mounting adapter to eliminate cable twisting |
| 12707-00  | Jet Spray Cleaner; for use with water or air cleaning using interval timer from instrument                             |

# HA HIGH ACCURACY

m e a s u r e m e n t   i n s t r u m e n t s

Our offering:

|                                                                                     |                                 |                                                                                      |                         |
|-------------------------------------------------------------------------------------|---------------------------------|--------------------------------------------------------------------------------------|-------------------------|
|    | Pressure Measurement            |    | Level Measurement       |
|  | Temperature Measurement         |  | Flow Measurement        |
|  | Marine Measurement & Analytical |  | Gas Analysis            |
|  | Liquid Analysis                 |  | Flame and Gas Detection |
|  | Tank Gauging                    |  | Wireless Infrastructure |
|  | Acoustic & Discrete             |  |                         |

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