

## Low Maintenance pH Combination Electrode

- OPTIONAL FREE-SPINNING VP 6.0 CONNECTOR for use with integral Pt 100 or Pt 1000 temperature compensation
- PATENTED, INDUSTRY-PROVEN TUpH™ reference technology<sup>1</sup> provides maximum coating resistance to semi-solid process media
- PATENTED HELICAL REFERENCE PATHWAY<sup>2</sup> provides a 310 mm diffusion path to deter contamination from poisoning ions such as sulfides and mercury
- **AccuGLASS™** pH membrane glass for enhanced sensor performance and increased life, in both acid and alkaline media
- DESIGNED FROM RUGGED, HIGH-QUALITY MATERIALS to provide superior chemical resistance and durability
- OPTIONAL PG 13.5 SCREW PLUG THREAD with single pole connector for simple and easy installation without cable twisting

1. U.S. Patent No. 5,152,882, Foreign Patent Pending

2. U.S. Patent No. 6,054,031, Foreign Patent Pending

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Model 370  
Eurocap

Model 371-70  
Eurocap

Model 371-72  
Variopol VP 6.0

### FEATURES AND APPLICATIONS

The Model 371 is a low maintenance, disposable combination electrode that is designed to deliver improved life in harsh, dirty applications such as waste water treatment, coagulation and flocculation processes, pigment/dye applications, and other media where large quantities of suspended solids are present.

The industry-proven TUpH technology provides a large surface area diaphragm (reference junction), approximately 400 times larger than a typical reference frit, to ensure continuous contact between the reference element and process media for reliable pH measurement.

The Model 371 features rugged polypropylene, single-body construction to resist breakage commonly associ-

ated with handling. The electrode is sealed with EPDM and features a PG 13.5 threaded connection with optional free-spinning VP 6.0 (for integral TC) or single pole, Eurocap plughead.

The Model 370 is a simple combination pH sensor with a ceramic diaphragm and glass construction. It is available in a wide variety of lengths and features a single pole connection plug to retrofit industry standard PG 13.5 installations.

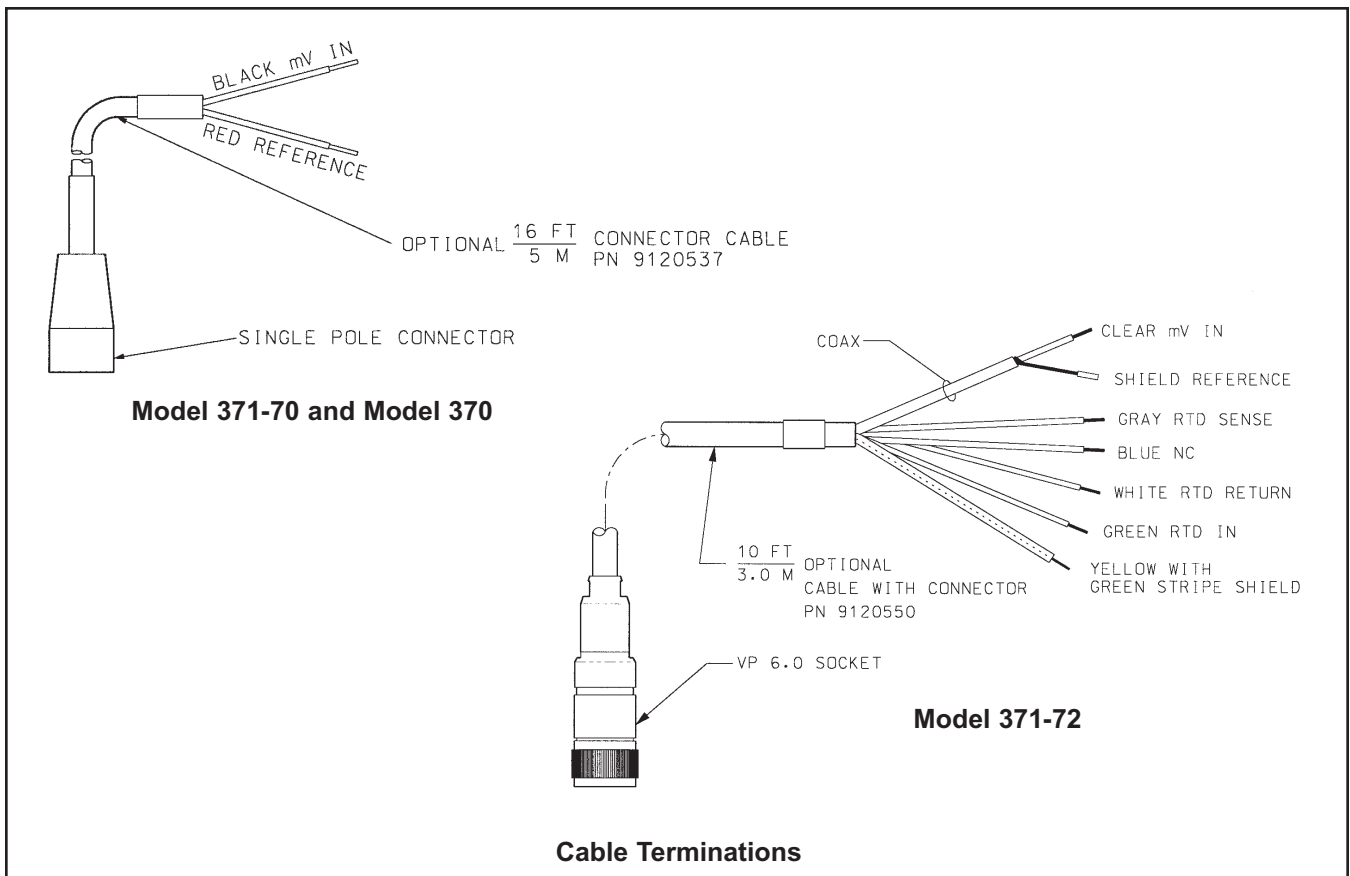
The AccuGLASS pH membrane, available in all models, minimizes glass cracking for increased life. This electrode has been designed with simplified construction and user convenience in mind; it does not require electrolyte replenishment or component replacement.

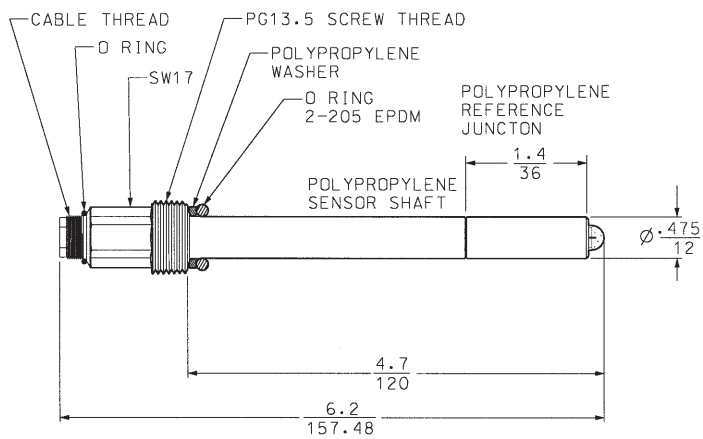
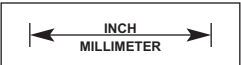
## PERFORMANCE AND PHYSICAL SPECIFICATIONS

	MODEL 370	MODEL 371-70	MODEL 371-72
<b>Electrode Types:</b>	pH	pH or ORP (Redox)	pH or ORP (Redox)
<b>pH Range:</b>	0-14 pH*	0-14 pH*	0-14 pH*
<b>Membrane Type:</b>	GPHT*	GPLR*	GPLR*
<b>Percent Linearity:</b>	97% @ 0-4 pH, 99% @ 4-12 pH, 96% @ 12-13 pH, 92% @ 13-14 pH	96% @ 0-4 pH, 99% @ 4-12 pH, 97% @ 12-13 pH, 92% @ 13-14 pH	96% @ 0-4 pH, 99% @ 4-12 pH, 97% @ 12-13 pH, 92% @ 13-14 pH
<b>ORP (Redox) Range:</b>	N/A	-1500 to 1500 mV	-1500 to 1500 mV
<b>Wetted Materials:</b>	Polypropylene, Glass, or EPDM	Polypropylene, Glass, EPDM or Platinum (ORP)	Polypropylene, Glass, EPDM or Platinum (ORP)
<b>Process Connection</b>	Fixed PG 13.5 thread	Fixed PG 13.5 thread	Free spinning PG 13.5 thread
<b>Electrical Connection</b>	Single Pole Eurocap connector	Single Pole Eurocap connector	Variopol (VP 6.0) for TC
<b>Temperature Range</b>	0 - 100°C (32 - 212°F)	0 - 85°C (32 - 185°F)	0 - 95°C (32-203°F)
<b>Pressure Range</b>	100-790 kPa (abs) (0-100 psig)	100-790 kPa (abs) (0-100 psig)	100-790 kPa (abs) (0-100 psig)
<b>Thermocompensation</b>	None available	None available	Pt 100 or Pt 1000
<b>Interconnect Cable</b>	9120537 (5 m)	9120537 (5 m)	9120550 (3 m)
<b>Weight/Shipping Weight</b>	28.3g/453g	28.3g/453g	28.3g/453g
<b>Reference (diaphragm)</b>	Ceramic	Polypropylene with 310 mm diffusion path**	Polypropylene with 180 mm diffusion path**

\* For greater accuracy above 12 pH, high pH glass is available upon request.

\*\* Minimum conductivity 100 µS/cm, nominal; 150 µS/cm.

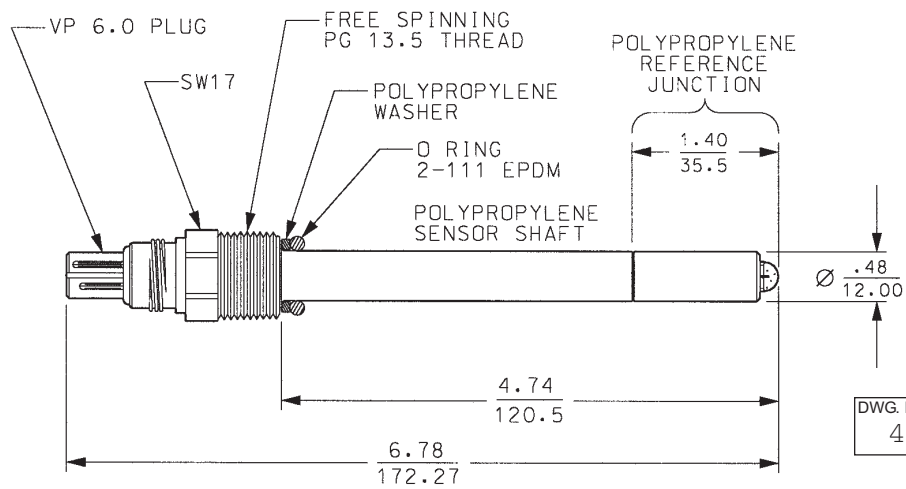




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- NOTES:
- ① REMOVE PROTECTIVE SCREW CAP (NOT SHOWN) FROM CONNECTION END BEFORE CONNECTION TO SINGLE POLE CONNECTOR CABLE.
  - ② REMOVE PROTECTIVE BOOT (NOT SHOWN) FROM SENSING END OF SENSOR BEFORE USING
  - ③ ENTIRE REFERENCE JUNCTION AREA MUST BE EXPOSED TO PROCESS FOR MAXIMUM RESULTS

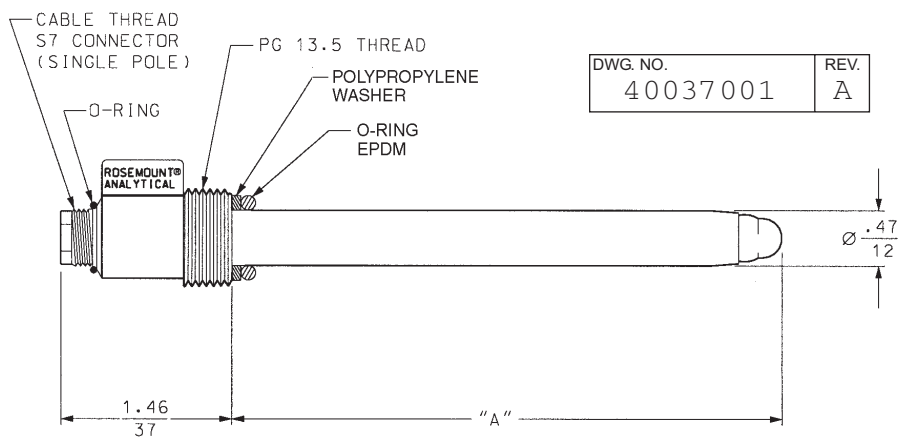
**Model 371-70**



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**Model 371-72**

MODEL	"A"	
	INCH	MM
370-120	4.72	120
370-225	8.86	225
370-300	11.81	300
370-360	14.17	360
370-425	16.73	425



DWG. NO. 40037001 REV. A

**Model 370**

**Dimensional Drawings**

## ORDERING INFORMATION

**Model 371 pH/ORP Sensor** is housed in a molded polypropylene body with 120 mm insertion depth and a choice of two standard PG 13.5 threaded screw plugs for easy connection. The sensor features the TUpH diaphragma (reference junction) and diffusion path with gel filled electrolyte.

MODEL 371 PG 13.5 INSERTION, HIGH PERFORMANCE EUROSENZ pH/ORP SENSOR	
CODE	MEASURING ELECTRODE (Required selection)
10	Combination pH Sensor, GPLR Hemi Bulb
12	Platinum ORP (Redox) Sensor
CODE	PLUG TYPE (Required Selection)
70	PG 13.5 threaded screw plug, single pole Eurocap
72	PG 13.5 threaded screw plug, VP 6.0 for TC
CODE	TEMPERATURE COMPENSATION (Valid only with Option -72 )
54	Pt 100
56	Pt 1000
<b>371</b>	<b>-10 -70 EXAMPLE</b>

**Model 370 Combination pH Sensor** is housed in a glass body, with variable insertion depths ranging from 120 to 425 mm, and features a ceramic diaphragma and S7 (single pole) connection plug.

MODEL 370 PG 13.5 INSERTION, GLASS COMBINATION EUROSENZ pH SENSOR	
CODE	INSERTION DEPTH WITH SINGLE POLE EUROCAP
120	120 mm
225	225mm
300	300 mm
360	360 mm
425	425 mm
<b>370</b>	<b>-120 EXAMPLE</b>

## ACCESSORIES

PN	DESCRIPTION
9120537	Cable with single pole connector for Eurocap (option -70 and Model 370), coaxial connection, 5 m (16.4 ft)
9120550	Cable with VP 6.0 connector (option -72), coaxial connection with TC (option -72), 3 m (9.8 ft)
9160504	Cable with VP 6.0 connector (option -72), coaxial connection with TC (option -72), 5 m (16.4 ft)
9210012	Buffer solution, 4.01 pH, 500 ml (16 oz)
9210013	Buffer solution, 6.86 pH, 500 ml (16 oz)
9210014	Buffer solution, 9.18 pH, 500 ml (16 oz)
9120342	KCl electrolyte solution, 250 ml (8 oz)
R508-1602	ORP standard solution, 460 mV, 500 ml (16 oz)



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