

pH/ORP Sensors

The following ranges of pH/ORP Sensors are covered by the certificate: -

pH/ORP Sensors with no Pre-amplifier Fitted

Certification Marking:

Ex ia IIC T4 Ga (-20°C ≤ T_a ≤ +60°C)

Input Parameters:

U_i = 13.1V
 I_i = 500mA
 P_i = 0.7W

The following tables define the model range and associated C_i and L_i parameters with up to 500 feet of integral cable (where applicable): -

Model	C_i	L_i
Model 328A Steam Sterilizable pH Sensor with integral cable	0.021μF	52.9μH
Model 385 Retractable pH/ORP Sensor with integral cable	0	0
Model 385+ -04 pH/ORP Sensor with integral cable	0.713μF	84.9μH
Model 389-02 pH/ORP Sensor with integral cable	0.134μF	80.4μH
Model 389VP pH/ORP Sensor with Variopol connector	0	0
Model 396 TUpH pH Sensor with integral cable	0.713μF	84.9μH
Model 396VP TUpH pH Sensor with Variopol connector	0	0
Model 396R TUpH Retractable pH/ORP Sensor with integral cable	0.713μF	84.9μH
Model 396RVP TUpH Retractable pH/ORP Sensor with Variopol connector	0	0
Model 396P-02 TUpH Polypropylene pH/ORP Sensor with integral cable	0.545μF	81.5μH
Model 396PVP TUpH Polypropylene pH/ORP Sensor with Variopol connector	0	0
Model 397 TUpH pH Sensor with integral cable	0.713μF	84.9μH
Model 398 TUpH pH/ORP Sensor with integral cable	0.713μF	84.9μH
Model 398VP TUpH pH/ORP Sensor with Variopol connector	0	0
Model 398R TUpH Retractable pH/ORP Sensor with integral cable	0.713μF	84.9μH
Model 398RVP TUpH Retractable pH/ORP Sensor with Variopol connector	0	0
Model 3200HP Flowing Junction pH Sensor with Variopol connector	0	0
Model 3300HT Insertion / Submersion pH Sensor with integral cable	0.713μF	84.9μH
Model 3300HTVP Insertion / Submersion pH Sensor with Variopol connector	0	0
Model 3400HT Retractable pH Sensor with integral cable	0.713μF	84.9μH
Model 3400HTVP Retractable pH Sensor with Variopol connector	0	0
Model 3500P-02 High Performance pH Sensor with integral cable	0.713μF	84.9μH
Model 3500VP-02 High Performance pH Sensor with Variopol connector	0	0
Model 3800 Steam Sterilizable pH Sensor with Single Pole Eurocap Connector	0	0
Model 3800VP Steam Sterilizable pH Sensor with Variopol connector	0	0
Model 3900-02 pH/ORP Sensor with integral cable	0.713μF	84.9μH
Model 3900VP-02 pH/ORP Sensor with Variopol connector	0	0

pH Sensors with integral Smart Pre-amplifier Fitted

Certification Marking:

Ex ia IIC T4 Ga (-20°C ≤ T_a ≤ +60°C)

Input Parameters:

U_i = 13.1V
 I_i = 500mA
 P_i = 0.7W

The following tables define the model range and associated C_i and L_i parameters with up to 500 feet of integral cable (where applicable): -

Model	C_i	L_i
Model 385+ - 02/03 pH Sensor with integral cable	0.969µF	84.9µH
Model 389-01 pH Sensor with integral cable	0.394µF	73.3µH
Model 389VP-70 pH Sensor with Variopol connector	0.256µF	0
Model 396VP-70 TUpH pH Sensor with Variopol connector	0.256µF	0
Model 396RVP-70 TUpH Retractable pH Sensor with Variopol connector	0.256µF	0
Model 396PVP-70 TUpH Polypropylene pH Sensor with Variopol connector	0.256µF	0
Model 398RVP-70 TUpH Retractable pH Sensor with Variopol connector	0.256µF	0
Model 3300HTVP-70 Insertion / Submersion pH Sensor with Variopol connector	0.256µF	0
Model 3400HTVP-70 Retractable pH Sensor with Variopol connector	0.256µF	0
Model 3500P-01 High Performance pH Sensor with integral cable	0.969µF	84.9µH
Model 3500VP-01 High Performance pH Sensor with Variopol connector	0.256µF	0
Model 3900-01 pH Sensor with integral cable	0.969µF	84.9µH
Model 3900VP-01 pH Sensor with Variopol connector	0.256µF	0
Model 396P-01-55 pH Sensor with integral cable	0.969µF	84.9µH

ORP Sensors with integral Standard Pre-amplifier Fitted

Certification Markings:

Ex ia IIC T4 Ga (-20°C ≤ T_a ≤ +80°C) or Ex ia IIC T5 Ga (-20°C ≤ T_a ≤ +40°C)

Input Parameters (-55 variants):

U_i = 13.1V
 I_i = 250mA
 P_i = 0.6W

The following tables define the model range and associated C_i and L_i parameters with up to 485 feet of integral cable (where applicable): -

Model	C_i	L_i
Model 3500P-01-12 PerpH-X ORP Sensor with integral cable	0.966µF	82.4µH
Model 3500VP-01-12 PerpH-X ORP Sensor with Variopol connector	0.275µF	0
Model 396P-01-12-55 TUpH ORP Sensor with integral cable	0.409µF	71.1µH
Model 389-01-12-55 TUpH ORP Sensor with integral cable	0.409µF	71.1µH
Model 385+-03-12 ORP Sensor with integral cable	0.409µF	71.1µH

Input Parameters (-54 variants):

$$\begin{aligned} U_i &= 20V \\ I_i &= 300mA \\ P_i &= 0.9W \end{aligned}$$

The following tables define the model range and associated C_i and L_i parameters with up to 500 feet of integral cable: -

Model	C_i	L_i
Model 396P-01-12-54 TUpH ORP Sensor with integral cable	0.289 μ F	73.3 μ H
Model 389-01-12-54 ORP Sensor with integral cable	0.251 μ F	68.5 μ H

Input Parameters (-50: 1181 variants):

$$\begin{aligned} U_i &= 12V \\ I_i &= 230mA \\ P_i &= 1.1W \end{aligned}$$

The following tables define the model range and associated C_i and L_i parameters with up to 500 feet of integral cable: -

Model	C_i	L_i
Model 396P-01-12-50 TUpH ORP Sensor with integral cable	0.677 μ F	72.2 μ H
Model 389-01-12-50 ORP Sensor with integral cable	0.639 μ F	68.5 μ H

pH Sensors with integral Standard Pre-amplifier Fitted

Certification Markings:

Ex ia IIC T4 Ga (-20°C ≤ T_a ≤ +80°C) or Ex ia IIC T5 Ga (-20°C ≤ T_a ≤ +40°C)

Input Parameters (-54 variants):

$$\begin{aligned} U_i &= 20V \\ I_i &= 300mA \\ P_i &= 0.9W \end{aligned}$$

The following tables define the model range and associated C_i and L_i parameters with up to 500 feet of integral cable: -

Model	C_i	L_i
Model 396P-01-10/13-54 TUpH polypropylene pH Sensor with integral cable	0.289 μ F	73.3 μ H
Model 389-01-10/11-54 pH Sensor with integral cable	0.251 μ F	68.5 μ H

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Input Parameters (-50: 1181 variants):

$U_i = 12V$
 $I_i = 230mA$
 $P_i = 1.1W$

The following tables define the model range and associated C_i and L_i parameters with up to 500 feet of integral cable: -

Model	C_i	L_i
Model 396P-01-10/13-50 TUpH polypropylene pH Sensor with integral cable	0.677 μ F	72.2 μ H
Model 389-01-10/11-50 pH Sensor with integral cable	0.639 μ F	68.5 μ H