# 104C

## PH sensor

**Measurement accuracy: ± 0.5%**
**Digital measurement method**
**Measurement range 0÷14pH**
**Integrated temperature sensor**
**Max operating temperature 100°C**
**Max pressure 11bar**
**Measurement transmission via RS485**
**Porous Teflon® septum**
**MODBUS RTU digital communication**
**Combine with MCA800 control unit**

Sensor for measuring pH and temperature in pure water, wastewater treatment plants, processes with suspended solids, processes with pollutants, galvanic processes. The 104C sensor, connected to the MCA800, is suitable for pH measurements in various applications. The porous Teflon® septum resists encrustations and chemical attack. The new capillary temperature sensor design places the NTC sensor behind the pH sensitive membrane for very accurate temperature measurement and compensation.

### Technical Feature

**Materials**
Electrode body in Glass and PPS
PPS probe holder
Viton® O-Rings
Teflon® electrode diaphragm
**Electrolyte**
Electrolyte gel
**Probe holder thread**
¾ ”NPT male
**Probe threads**
PG13.5 male
**Dimensions (LxHxP)**
27x213x27mm
**Measuring range**
0÷14pH
**Method of measurement**
Digital

**Resolution**
0,01 pH
**Accuracy**
±0,05pH
**Repeatability**
± 0.05 pH
**Response time**
pH 4..7<30s
**Temperature probe**
NTC 30K
**Temperature Resolution**
0.1°C
**Temperature Accuracy**
± 0.5°C

**Operating temperature**
0÷ +100°C
**Maximum operating pressure**
11bar
**Minimum operating conductivity**
50µS/cm
**Protocol**
MODBUS RTU
**Cable length**
10m integral with the sensor (others on request)
**Electric absorption**
<1W
**Power supply**
24Vdc

**104C** pH digital sensor

For the connection to MCA800 via MODBUS RTU
Glass electrode and PPS bodies
NTC 30K temperature sensor built-in
Measuring range: 0÷14pH
Resolution: 0,05 pH; Accuracy: ± 0.05 pH
Operating temperature: 0÷100°C (212°F)
Minimum conductivity: 50 µS/cm
Thread: PG 13.5 M
Mechanical protection: IP68 sensor+cable

| | | |
|---|---|---|
| | **Cable length** | |
| | **1** | Standard 10m |
| | **9** | Special |
| | **Probe holder** | |
| | **A** | Electrode protection in PPS - Thread 3/4" NPT M on both sides L= 213mm |
| | **B** | Immersion style in PP. Dim.: (Ø x l) 42 x 570 mm. |
| | **C** | Immersion style in PP. Dim.: (Ø x l) 42 x 1070 mm. |
| | **D** | Immersion style in PP. Dim.: (Ø x l) 42 x 1570 mm. |
| | **E** | Immersion style in PP. Dim.: (Ø x l) 42 x 2070 mm. |
| | **F** | Immersion style in PP. Dim.: (Ø x l) 42 x 2570 mm. |
| | **G** | For by-pass installation - 2 bar max. , 40 °C, transparent beaker in PMMA - Inlet-Outlet dimensions: 8x12mm |
| | **Z** | Special |
| | **Accessories** | |
| | **1** | None |
| | **2** | Kit for automatic electrode rinsing - SS body (only for immersion probe holders) |