



SENSORS &
CONTROLLERS



ANALYZERS
& SAMPLERS



LEVEL, FLOW
& PRESSURE



WEB APP &
DATALOGGING



ACCESSORIES

S494 DATASHEET

AMPEROMETRIC MEMBRANE SENSOR



MAIN FEATURES

- Two membrane-coated electrodes for the measurement of free inorganic chlorine at constant pH.
- Integrated temperature sensor for signal compensation

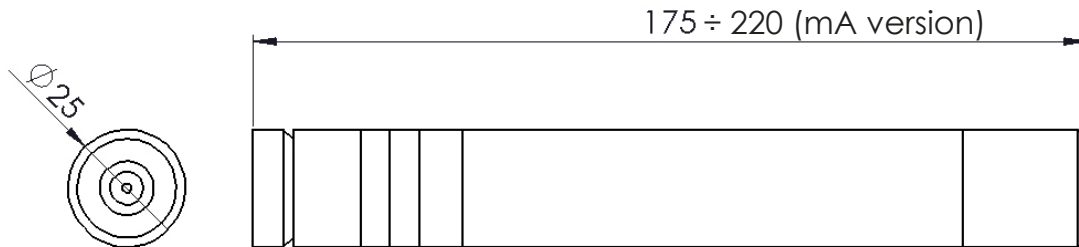
APPLICATIONS

- Swimming Pool
- Drinkable
- Service and process waters
- Tensioactives are partially tolerated

TECHNICAL DATA

Materials	• PVC-U body • Semipermeable membrane
Measurand(s)	NaClO (sodium hypochlorite), Ca(ClO) ₂ (calciumhypochlorite), Cl ₂ (chlorine gas), chlorine generated by membrane-electrolysis
Measuring ranges	0.01 – 0.50 0.01 – 2.00 0.01 – 5.00 0.01 – 10.00 0.01 – 20.00 0.1 – 100 0.1 – 200
Calibration	at the controller, via analytical chlorine determination by DPD-I method
Interferences	– ClO ₂ is being registered with factor 9 of its measured value – O ₃ is registered – with membrane-less chlorine electrolysis interferences may occur
pH range	6 - 8
Resolution	0.01 ppm for ranges from 0.01 ppm to 20.00 ppm 0.1 ppm for ranges from 0.1 ppm to 200.00 ppm
Pressure range	– Operation without circlip: 0 – 0.5 bar, no pressure surges and/or vibrations – Operation with circlip: 0 – 1.0 bar, no pressure surges and/or vibrations
Temperature range	0 – 45 °C (no ice crystals in measurement water)
Temperature compensation	Integrated automatic
Time of response	T ₉₀ : approx 30s
Absence of the disinfectant	max. 24 h
Flow rate	Approx. 15 – 30 l/h, low flow-dependence
Shaft length	Standard 175 mm, and up to 220 mm in length (mA-Version)
Connection	Standard 4-pole plug; for mA-version 2-pole terminal, M12 male or Modbus RTU with M12 male
Output signal	4 – 20 mA
Power supply	12 – 30 Vdc; R _L = 50 – 900 Ω

DIMENSIONS



ORDER CODES

602302101	S494/05/CL2 Amperometric sensor for free chlorine
6023021201	S494/2/CL2 Amperometric sensor for free chlorine
6023021202	S494/5/CL2 Amperometric sensor for free chlorine
6023021203	S494/10/CL2 Amperometric sensor for free chlorine
602302102	S494/100/CL2 Amperometric sensor for free chlorine
6023021346	S494/200/CL2 Amperometric sensor for free chlorine