

DOSASens Bromine sensor BR1

Membrane-covered, amperometric potentiostatic 3-electrode system. Detects free bromine as hypobromous acid and BCDMH, also in sea water.



Product description:

- Measurand(s): free bromine, 1-bromo-3-chloro-5,5-dimethyl-hydantoin BCDMH), hypobromous acid HOBr
- Calibration:
 - at the controller
 - by means of analytic bromine determination
 - depending on the brominating agent
 - free bromine: DPD1 method
 - BCDMH: DPD4 method
- Interferences: Cl₂, ClO₂, O₃, are measured as well
- pH range: 6.5–9.5, greatly reduced pH dependence
- 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
- Integrated automatic temperature compensation
- Response time: T₉₀ approx. 2 min
- Absence of the disinfectant: max. 24 h
- Flow rate: approx. 15–30 l/h
- 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
- Material: PVC, Peek, stainless steel 1.4571, microporous hydrophilic membrane

Areas of application:

- Drinking-, pool-, industrial-, process- and sea water.

Scope of supply:

- DOSASens BR1 sensor, membrane cap, electrolyte, instruction manual

Ordering data:

Type:	Measuring range: ppm	Resolution: ppm	Output signal:	Power supply:	Item number:
BR1H-M12	0.005–2.000	0.001	0 to -2000 mV	±5 to +15 VDC 10 mA	3626220
BR1N-M12	0.05–20.00	0.01	1 kΩ		3626221
BR1H-An-M12	0.005–2.000	0.001	0 to -2000 mV (max. 2.500 mV), 1 kΩ	9–30 VDC, approx. 20–56 mA	3626230
BR1N-An-M12	0.005–2.000	0.001			3626231
BR1H-M0c	0.005–2.000	0.001	Modbus RTU		3326531
BR1N-M0c	0.05–20.00	0.01			3326530
BR1MA-2	0.05–2.00	0.1	4–20 mA	12–30 VDC R _L = 50 Ω (12 V) to 900 Ω (30 V)	3326505
BR1MA-5	0.05–5.00				3326515
BR1MA-10	0.05–10.00				3326520
BR1MA-2-M12	0.05–2.00	0.1		12–30 VDC R _L = 50–900 Ω	3326540
BR1MA-5-M12	0.05–5.00				3326541
BR1MA-10-M12	0.05–10.00				3326542

Additional technical data:

Type:	Slope:	Cable Connection:	Special characteristics:
BR1H-M12	-1000 mV/ppm	4-pole plug	Connection only to a controller with galvanically separated power supply.
BR1N-M12	-100 mV/ppm		
BR1H-An-M12	-1000 mV/ppm		
BR1N-An-M12	-100 mV/ppm		
BR1H-M0c	Modbus RTU	M12 male	-
BR1N-M0c			
BR1MA-2	8.0 mA/ppm	2-pole terminal	Connection only to a controller with galvanically separated power supply.
BR1MA-5	3.2 mA/ppm		
BR1MA-10	1.6 mA/ppm		
BR1MA-2-M12	8.0 mA/ppm	M12 male	
BR1MA-5-M12	3.2 mA/ppm		
BR1MA-10-M12	1.6 mA/ppm		

Spare parts:

Spare parts:	for sensor type:	Item number:
Membrane cap M48.2	BR1 all types	9026020
Electrolyte ECP1.4 Gel	BR1 for measurement with / without salts <1 g/l in the water (all types)	9026074

Accessories:

Type:	for sensor type:	Item number:
Sensor simulator pH, Redox, Cl	all sensors with mV signal	21131100
Sensor simulator SIM11.1n	0 mV, -100 mV, -1000mV	9026205
Sensor simulator 4 – 20 mA, current sensor	all sensors with mA signal	90249000
mV Simulator and mA Tester	all sensors with mV signal or mA signal	21131105
Photometer for calibration	chlorine, total chlorine, isocyanuric, pH, bromine	90231020