# Resistivity Metre BAMOPHOX 319 ML-DB



Water Demineralised Water DLM1 DLM2

- 2 independent sensors
  - Input 1: range 0...20 M $\Omega$  .cm Input 2: scalable range 0...20 M $\Omega$ , 0...2 M $\Omega$  .cm
- Dedicated probes and sensors With Factor probe C = 0.01, 0.1, 1 and 10
- 2 adjustable analog output 0/4-20 mA
- 3 relay outputs (NO contact)
- Wall mounting IP 65

### DESCRIPTION

BAMO Mesures SAS designed the resistivity metre 319 ML / DB for process control and survey of demineralised water through two bottles of resins.

Input 1: controls the first bottle, as a blind instrument (without display) As soon as the fluid resistivity is less than the preset value the relay 1 switches a signal alarm to inform the operator.

Input 2: controls the second bottle with its own alarm parameters. The measurement of resistivity is permanently displayed.

3 relay outputs are to be used either for the input 1 or input 2; adjustments are done by the operator.

The 4-20 mA outputs allow the report of process operations, in order to have a true image of water quality.

#### CODE NUMBER AND REFERENCE

319 200 Resistivity metre BAMOPHOX 319 ML/DB

#### Example with dedicated probes:







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RES 319-02/1

319 11 02

#### **TECHNICAL FEATURES**

Displayed parameters:	Measurement values - Configuration Menu				
Display:	Back lighted - 1 line of 16 alphanumerical characters : 9.2 mm high				
Indication:	LED alarms status				
Configuration:	8 push buttons keyboard on front face - Keyword protected				
Scales:	200 Ω to 200 MΩ .cm				
Accuracy:	± 0,3%				
Probe input:	Coaxial connector BNC type				
	Input 1: 20 MΩ .cm				
	Input 2: adjustable				
Temperature compensation:	On range 20 M $\Omega$ .cm, automatic with an input for a 3 wires Pt 100 $\Omega$ /0°				
	Manually from 0 to 100°C				
	CAUTION: with 0.1 sensor Factor there is no automatic compensation (manual only)				
Relay outputs:	3 closing contacts (Silver alloy), voltage free				
Thresholds:	3 programmable independent thresholds				
	- with adjustable hysteresis 0100%				
	- and adjustable timer from 0 to 9999 sec				
Output relay (S4):	Not available				
Contact:	Initial resistance 100 m $\Omega$ as a maximum (voltage drop 6 V DC 1 A)				
	Rated at 831 V AC / 3 A / 277 V AC ; 90 W / 3 A / 30 V DC				
	Switching capacity (minimum) 100 mA, 5 V DC (depending of switching frequency, ambient conditions, accuracy)				
	Mechanical life time (minimum) 5 x10 <sup>6</sup> operations (180 commutation/min)				
	Electrical life time (minimum) 2 x105 (20 comm./min) [3 A, 125 V AC], [3 A, 30 V DC]				
	and 10 <sup>5</sup> (evaluated charge) for 3 A, 125 V AC				
Calibration sequence:	Relay outputs inhibited, analogical outputs stand on last values				
Measurement output:	0/4-20 mA (maxi 600 $\Omega$ ) proportional to measurement, galvanic insulated				
Program Testing:	Simulation through the menu on measurement and relays outputs				
Main power supply:	230 V AC / 50-60 Hz [other on request] - Consumption 10 VA				
Models:	Wall mounting, IP65, cable glands, connections on screw terminal				

## OPTION

Cycle average measurement record, with a programmable period, 150000 records maxi on MMC (multi media card) / External driver necessary

#### DIMENSIONS

Extension model has the same dimensions.



#### RANGES

With temperature compensation										
Factor	0,01		0,1		1		1	10		
Scale 1	20,00	MOhm	2,000	MOhm	200,0	KOhm	20,00	KOhm		
Scale 2	2,000	MOhm	200,0	KOhm	20,00	KOhm	2,000	KOhm		
Without temperature compensation										
Factor	0,01		0,1		1		1	10		
Scale 1	200,0	MOhm	20,00	MOhm	2,000	MOhm	200,0	KOhm		
Scale 2	20,00	MOhm	2,000	MOhm	200,0	KOhm	20,00	KOhm		
Scale 3	2,00	MOhm	200,0	KOhm	20,00	KOhm	2,000	KOhm		
Scale 4	200,0	KOhm	20,00	KOhm	2,000	KOhm	200,0	Ohm		

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Data Logger: