



MB MO-SE-1[©]

MOISTURE PROBE



- Moisture probe with integrated electronics 0 - 500 ppm
- 0 - 10 V analog output
- Ultra high sensitivity

MB MO-SE-1[®]

General Information

The Moisture probe **MB MO-SE-1[®]** serves to monitor the amount of residual Moisture in Nitrogen, Argon or Helium in inert gas systems.

The probe can be operated with PLC-systems, which are integrated in **MBRAUN** systems as standard equipment, or with **MB SSD-DIS[®]** monitors, which are available separately.

Description

The Moisture probe **MB MO-SE-1[®]** comprises a sensor along with the electronics. The sensor-head is protected from external mechanical effects by means of a sturdy screw cap and consists of 2 parallel Platinum windings which are coated with Phosphoric Acid, and a PT 1000 temperature sensor. The sensor leads pass through a vacuum-sealed feedthrough to the measuring electronics which are directly attached to a DN 40 KF assembling flange in a leak tight and screw-fitted housing. The electronics are supplied with 24 VDC and deliver a 0 - 10 V signal in proportion to the concentration of H₂O. The entire probe is calibrated with NIST traceable gases.

Electrical Connection

Supply voltage: 24 V DC \pm 10 %

Dimension / Weight

Full dimension: length 205 mm, width 80 mm, depth 60 mm

Sensor part: length 64 mm, diameter 22 mm

Flange: DN 40 KF

Weight: 0.7 kg

Technical Data

Measuring Signal Connection

Plug: RJ45, 8 pins (ethernet-like plug)

Ambient Conditions

Operating temperature: + 15°C to + 27°C (ambient)

Pressure: 800 - 1.200 hPa (absolute pressure)

Diff. pressure: max. \pm 100 hPa (between sensor and electronic)

Indicated Values

Effective range: 0 to 500 ppm(v) Moisture

Sensitivity: 20 mV/ppm(v)

Response time: approx. 120 sec. (0-90 %)

Accuracy: high precision range (0-10 ppm): \pm 1 ppm, wide range (10-100 ppm): better than 20 % of value

Drift (10 ppm(v)): < 10 %/year

Sensor life time: up to 5 years



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