

Barometer

FEATURES

- With stainless steel pressure sensor
- Peak value detection (1000 measurements / s)
- Large double display with background illumination
- Waterproof (IP65/IP67)
- Durable with long battery life
- Modern compact housing.
- Calibrated and fully interchangeable pressure probes

RS MH 5130 + RS MSD 10 BAE

RS Stock No.: 205-0968



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Barometer

Product Description

This handheld instrument is a valuable tool for demanding pressure measurements. Extremely robust plug connections, the silicone protection cover, backlight and a waterproof design allow its usage in harsh industrial and field environments.

The supplied absolute stainless pressure steel sensor is suitable for: air, aggressive media, water, etc.

Application:

- Industry and craft, HVAC: heating, ventilation, air-conditioning
- Leakage test / pressure test
- Measurements of gas and oil firings
- Hydraulic analysis (peak pressure)
- Atmospheric pressure measurement with sea level correction

General Specifications

| | |
|---|---|
| Model Name | RS MH 5130 + RS MSD 10 BAE |
| Display Range Measuring Instrument | Max. -19999 ... 19999 digit, depends on used sensor |
| Number of channels | 1 |
| Sensor Pressure Range | 0...10,00 bar abs. |
| Sensor Pressure Port Type | Absolute |
| Number of Pressure Ports | 1 |
| Selectable Units | mbar / bar / kPa / MPa / inHg / mmHg / psi / mH₂O |
| Resolution | 10 mbar |
| Maximum Overpressure | max 35 bar abs. |
| Response Time | < 1 ms (at measuring rate = peak detection) |
| Over Range Indicator | Yes |
| Under Range Indicator | Yes |
| Zero Pressure Correction | Yes |
| Accuracy Device | ±0.1 % FS |
| Accuracy Sensor (typ. values) | ±0.2 % FS (hysteresis and linearity) ±0.02 % FS/K (TC for zero or slope @ 0..70 °C) |
| Display Type | 4 ½ digit 7-segment, illuminated (white) |
| Alarm | No |
| Data Logging | No |
| Leak Testing | Yes |
| Low Battery Indicator | Yes |
| Minimum / Maximum Recordings | Yes |
| Intrinsically Safe | No |
| Interface | Yes |
| Calibration Available | Factory calibration protocol for device, Calibration certificate for sensor optionally available |

Barometer

Electrical Specifications

| | |
|-----------------------|---------------------------------------|
| Battery Type | 2 x AAA |
| Battery Life | 500 h |
| Auto Power Off time | 1 ... 120 minutes, can be deactivated |
| Low Battery Indicator | Yes |

Mechanical Specifications

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|-------------------------------------|--|
| Housing Material Device | Break-proof ABS housing |
| Connection Pressure Sensor | 1 x 7-pole bayonet connector |
| Connection Output / external supply | 4-pole bayonet connector for serial interface, supply (with accessories: USB adapter USB 5100) |
| Device Dimensions | 160 x 86 x 37 mm (H x W x D) incl. silicone protection cover (red) |
| Length | 160 mm |
| Width | 86 mm |
| Height | 37 mm |
| Housing Material Sensor | Stainless steel |
| Connection Device | M12-plug (for connection cable RS MSD-K51) |
| Pressure connection | Connection thread G1/4", key width: 27 mm |
| Sensor Dimensions | approx. Ø 30 x 89 mm |
| Weight | approx. 480 g (device, protection cover, sensor and connection cable) |
| Vibration Resistance | Not specified |
| Shock Resistance | Not specified |

Operation Environment Specifications

| | |
|-------------------------------|----------------------------|
| Relative Humidity | 0..95 %RH (non condensing) |
| Minimum Operating Temperature | -20 °C |
| Maximum Operating Temperature | +50 °C |
| Storage Temperature Range | -25 to +70 °C |

Protection Category

| | |
|---------------|--|
| IP Protection | IP 65 / IP 67 (device), IP 67 (sensor), IP 54 (sensor plug) |
|---------------|--|

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Additional Information

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|----------------------|----------|
| Custom Tariff Number | 90262020 |
|----------------------|----------|

Approvals

| | |
|---------------------------|-------------------------|
| Compliance/Certifications | CE |
| Declarations | Manufacturer Conformity |

Accessories Includes

| Stock # | Item Name | Item Description | Qty |
|---------|---------------|--|-----|
| | RS MSD 10 BAE | pressure sensor 0 – 10.00 bar abs. | 1 |
| | RS MSD-K51 | Connecting cable for RS MSD Sensor to RS MH 5130 | 1 |

Similar Products

| Parameters | Stock# 205-0966 | Stock# 205-0967 | Stock# 205-0969 |
|----------------------------------|---|--|---|
| Model Name | RS MH 5130 + RS MSD 2.5 BAE | RS MH 5130 + RS MSD 350 MR | RS MH 5130 + RS MSD 10 BRE |
| Sensor Pressure Port Type | Absolute | Difference, Relative | Relative |
| Number of Pressure Ports | 1 | 2 | 1 |
| Pressure Range | 0...2,500 bar abs. | 0...350,0 mbar rel. | 0...10,00 bar rel. |
| Selectable Units | mbar / bar / kPa / MPa / inHg / mmHg / psi / mH ₂ O | mbar / bar / kPa / inHg / mmHg / psi / mH ₂ O | mbar / bar / kPa / MPa / inHg / mmHg / psi / mH ₂ O |
| Resolution | 1 mbar | 0,1 mbar | 10 mbar |
| Response Time | < 1 ms | < 1 ms | < 1 ms |
| Maximum Overpressure | max 10 bar abs. | max 1 bar rel. | max 35 bar rel. |
| Accuracy Device | ±0.1 % FS | | |
| Accuracy Sensor (typ. values) | ±0.2 % FS (hyst. and lin.) ±0.02 % FS/K (TC for zero or slope @ 0..70 °C) | ±0.2 % FS (hyst. and lin.) ±0.4 % FS (TC for zero or slope @ 0..50 °C) | ±0.2 % FS (hyst. and lin.) ±0.02 % FS/K (TC for zero or slope @ 0..70 °C) |
| Display Type | 4 ½ digit 7-segment, illuminated (white) | | |
| Alarm | No | | |
| Data Logging | No | | |
| Leak Testing | Yes | | |
| Low Battery Indicator | Yes | | |
| Min./ Max. Recordings | Yes | | |
| Intrinsically Safe | No | | |
| Interface | Yes | | |