

HYDRAULIC MEASUREMENT AND CONTROL

HPM110

Digital pressure gauge

The HPM110 digital pressure gauge is designed for continuous monitoring of oil, water, hydraulic and other pressure media in mobile equipment, industrial hydraulics, and process control equipment.

The HPM110 offers an economical solution to monitoring pressure and peak pressure with a simple visual display. The hand-held unit can be installed when required using a standard test point or left permanently connected in a system. Since the HPM110 is battery powered it requires no external wiring. The HPM110 now comes with an optional data logger version with real time clock records both current measured values and the min and max values. Stored data is transferred to a computer or laptop via USB interface in a CSV file format.

The HPM110 simultaneously displays actual pressure, peak pressure, battery level and the engineering units selected. The back light can be switched on at the press of a button. Using the buttons on the front panel the user can clear the peak value, display min, max and actual pressure, reset the zero point and change the engineering units. The unit is available in four models for each version plus one kit for the data logger version, please see reverse for details.

Specifications

Maximum Rated Pressure: Up to 600 bar, 8700 psi Ambient Temperature Range: -10 to 50 °C, 14 to 144 °F Fluid Temperature Range: -20 to 80 °C, 4 to 176 °F

Compatible Fluids: oil, water, other fluids consult sales office

Accuracy/ Tolerances: ±0.5% Full Scale BSPP, SAE

Materials: Body Materials: Zinc die casting with TPE rubber protection cover

Internal Materials: Stainless Steel

Seals: NBR 0.5 kg, 1.1 lb

Weight: Electrical

IP Rating: HPM110: IP67 standard version, IP65 data logger version



Features

- Accuracy of ±0.5% Full Scale
- Rugged design
- Simple operation
- Digital display with bar graph
- Stainless steel wetted parts
- Peak pressure 100 ms scan rate
- Back lit display
- Optional data logger version with real time clock records both current measured values min and max values
- Measurements of up to 24 hours
- Stored measurement data is transferred to a computer or laptop via USB interface to a CSV file format





Sales Order Code

Please contact our technical sales to team to discuss any special order requirements.

Model Number Table - HPM 110

MODEL NUMBER	MAIN PORT	MAX PRESSURE	OVERLOAD PRESSURE	BURST PRESSURE
SR-HPM-110-MT-100*	1/4" BSPP	100 bar	200 bar	800 bar
SR-HPM-110-MT-600*	1/4" BSPP	600 bar	1000 bar	2000 bar
SR-HPM-110-UN-1500	7/16" -20UN #4 SAE ORB Male	1450 psi	2900 psi	11600 psi
SR-HPM-110-UN-8700	7/16" -20UN #4 SAE ORB Male	8700 psi	14500 psi	29000 psi

Ordering Codes - HPM 110 with Data Logger

MODEL NUMBER	MAIN PORT	MAX PRESSURE	OVERLOAD PRESSURE	BURST PRESSURE
SR-HPM-110-DL-MT-100*	1/4" BSPP	100 bar	200 bar	800 bar
SR-HPM-110-DL-MT-600*	1/4" BSPP	600 bar	1000 bar	2000 bar
SR-HPM-110-DL-UN-1500	7/16" -20UN #4 SAE ORB Male	1450 psi	2900 psi	11600 psi
SR-HPM-110-DL-UN-8700	7/16" -20UN #4 SAE ORB Male	8700 psi	14500 psi	29000 psi
SR-HPM-110-DLKIT-MT-600**	1/4" BSPP	600 bar	1000 bar	2000 bar

*M16 x 2 female adaptor fitted

**HPM110 with Data Logger Kit

Kit includes: Equipment case

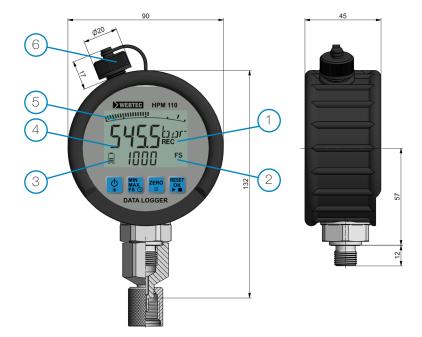
SR-HPM-110-DL-MT-600 inc. Adaptor 1/4" BSPP female - M16 x 2 female

Adaptor M16 x 2 Male- M16 x 2 Male Test hose 1500 mm, 59.0" (M16x2)

Mini-USB cable

Unit is factory calibrated - certificate is available on request (chargable option) Note: Must be requested at time of order & cannot be retrospectively requested.

Layout Function and Dimensions (mm)



- REC display, flashes when data recording is active *
- 2. MIN/MAX or FullScale display, depending on the setting
- 3. Battery level indicator
- 4. Actual display value
- 5. Bar graph with peak and hold functions
- 6. Mini-USB port*
- *-Data logger version only

Operation

A "plug and play" product with a large clear back lit illuminated display. Separate bar graph with peak and hold function. Unit has 4 keys with embossed edges. Units can be set to psi, bar, kPa, MPa or mbar. Other functions include Min/Max display with reset, battery level display, auto power off and zero point equalisation.



Data Storage and Automatic Data Compression

The device can store up to 10 recorded tests, each with a duration of up to 24 hours and up to 18000 data points. Using data compression and smart sampling rates the DataLogger automatically adjusts the resolution of the data to optimize use of internal storage, giving the best results for both small and long time frames.

Data Compression Time Log

STORAGE INTERVAL	LOG TIME (SEC)	
0-30min	0.1	
30min-1h	0.2	
1-2h	0.4	
2-4h	0.8	
4-8h	1.6	
8-16h	3.2	
16-24h	6.4	

Installation

Unit can be installed in any orientation and left in service if required. All connections should be made by suitably qualified personel. Main diameter is 90 mm, 3.54", thickness is 45mm, 1.77".

Electrical

The Unit includes 2 x 1.5 V batteries (AA), no electrical connections needed and has a battery life of 1500h (600h with DataLogger). For the DataLogger version, the IP65 rating is only valid when the mini-USB port's protective cap is fully screwed in.

Webtec reserve the right to make improvements and changes to the specification without notice