

Portable Data Recorder HMG 500

Description:

The HMG 500 is a portable measuring instrument for simple measuring tasks in fluid technology such as hydraulics, pneumatics, lubrication, process, refrigeration and air conditioning.

Up to two sensors with HYDAC Sensor Interface (HSI) can be connected to the HMG 500 to measure pressure, temperature or flow rate (except for SMART sensors). The HMG 500 automatically recognises these sensors and takes all the necessary basic settings from each sensor.

The measurement values and the corresponding physical unit are displayed on an easy-to-read LCD display.

In addition, the HMG 500 offers a wealth of other advantages, for example, over mechanical pressure gauges for measuring pressure on machines and systems. The user benefits from a technologically high level of measuring accuracy and dynamics.

The HMG 500 measures values at a high sampling rate. It can therefore record, for example, pressure surges in the maximum value memory or fast pressure discharges in the minimum value memory and display them. Furthermore differential measurements can be carried out using two sensors of a similar type, to calculate pressure drops or temperature differentials.

To further extend the applications range, HMG 500 has a function for setting mechanical pressure and temperature switches precisely and reliably.

Compact, simple and versatile - the HMG 500 is an invaluable tool for all those involved in maintenance, commissioning and service.



Special features:

- Portable 2-channel data recorder
- Simple and user-friendly key operation
- Large LCD display including battery status indication
- 2 sensor inputs, automatic sensor recognition
- Measuring range and unit of measurement of the sensors connected to it are recognised automatically
- Zeroing (taring) of the individual measurement channels
- Display of the actual measured values
- Display of the differential (channel A minus channel B)
- Minimum or maximum value indication, with reset function
- Setting device for mechanical pressure and temperature switches

Technical specifications:

Measurement inputs	2 analogue inputs for HYDAC measurement transmitters with HSI interface (except for SMART sensors**)
Accuracy	$\leq \pm 0.1$ % FS max. *
Functions	<ul style="list-style-type: none">● Automatic recognition of measuring range and unit of measurement● Taring of the measuring channels● Display of the actual measurement value● Min./Max. indication● Reset of the min./max. values● Measured values differential channel A - channel B● Display of units, selectable● Setting device for mechanical pressure and temperature switches
Display	4-digit 7 segment LCD display with battery status indication; 2 measured values incl. unit displayed simultaneously
Measurement unit (depending on the sensors connected to HMG)	selectable pressure: bar, psi, MPa temperature: °C, K, °F flow rate: l/min, gallon/min (1 US gallon = 3.7853 l)
Sampling rate	0.1 ms
Resolution	12 bit
CE mark	EN 61000-6-1 / 2 / 3 / 4
Safety	EN 61010
Protection class	IP 54
Voltage supply	<ul style="list-style-type: none">● 9 V batteryOperating time: approx. 10 h (with 2 sensors)● Euro plug mains power lead supply (230 V AC) (available as an accessory)
Ambient conditions	Operating temp.: +5 .. +60 °C Storage temp.: -40 .. +70 °C Rel. humidity 0 .. 70 %
Weight	410 g

Note:

- * **FS (Full Scale)** = relative to the full measuring range
** SMART sensors (Condition Monitoring Sensoren) are a generation of sensors from HYDAC which can provide a variety of different measurement values.

Dimensions:



Note:

The information in this brochure relates to the operating conditions and applications described. For applications or operating conditions not described, please contact the relevant technical department. Subject to technical modifications.

Ordering Details:

HMG 500 - 000

Items supplied

- HMG 500
- Operating manual D/E/F
- 9 V battery

HMG 500-Set 01

Items supplied

- HMG 500
- Operating manual D/E/F
- 9 V battery
- HDA 4748-H-0600-000
- ZBE 30-02, sensor cable M12x1, 2 m
- Connection adapter G1/4 female to Minimes 16X2
- Case for HMG 500 / 510

HMG 500-Set 02

Items supplied

- HMG 500
- Operating manual D/E/F
- 9 V battery
- 2 off HDA 4748-H-0600-000
- 2 off ZBE 30-02, sensor cable M12x1, 2 m
- 2 off connection adapter G1/4 female to Minimes 16X2
- Case for HMG 500 / 510

Accessories:

Appropriate accessories, such as electrical and mechanical connection adapters, power supply, etc. can be found in the Accessories section.

Examples of main accessories:

- **Pressure transmitter**
HDA 4000 with HSI interface
Pressure ranges: -1 .. 9 bar, 0 .. 16 bar, 0 .. 60 bar, 0 .. 100 bar, 0 .. 250 bar, 0 .. 400 bar, 0 .. 600 bar
- **Temperature transmitter**
ETS 4000 with HSI interface
Measurement range: -25 .. 100 °C
- **Flow rate transmitter**
EVS 3000 with HSI interface
Measurement ranges: 1.2 .. 20 l/min, 6 .. 60 l/min, 15 .. 300 l/min, 40 .. 600 l/min
- **Sensor simulator**
SSH 1000, ideal for training purposes
- **Electrical connection adapter**
UVM 3000, for mechanical pressure and temperature switches
- **Hydraulic adapters**

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