

## HYDAC INTERNATIONAL

### Portable Data Recorder HMG 500

14

#### 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 the 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 recognizes these sensors and takes all of 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 over mechanical pressure gauges, for example, 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 very high sampling rate. It can therefore record and display pressure peaks in the maximum value memory or rapid pressure discharges in the minimum value memory, for example.

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 application 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 recognized 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

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## Technical data:

<b>Measurement inputs</b>	2 analog inputs for HYDAC measurement transmitters with HSI interface (except for SMART sensors**)
<b>Accuracy*</b>	$\leq \pm 0.1\%$ FS max.
<b>Functions</b>	<ul style="list-style-type: none"> <li>Automatic recognition of measuring range and unit of measurement</li> <li>Taring of the measuring channels</li> <li>Display of the actual meas. value</li> <li>Min./max. indication</li> <li>Reset of the min./max. values</li> <li>Measured values differential channel A - channel B</li> <li>Display of units, selectable</li> <li>Setting device for mechanical pressure and temperature switches</li> </ul>
<b>Display</b>	4-digit 7 segment LCD display with battery status indication; 2 measurement values incl. unit displayed simultaneously
<b>Measurement unit</b> (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)
<b>Sampling rate</b>	0.1 ms
<b>Resolution</b>	12 bit
<b>CE mark</b>	EN 61000-6-1 / 2 / 3 / 4
<b>Safety</b>	EN 61010
<b>Protection class</b>	IP 54
<b>Voltage supply</b>	<ul style="list-style-type: none"> <li>9 V battery</li> <li>Oper. time: approx. 10 h (with 2 sensors)</li> <li>Euro plug power supply (230 V AC) (available as an accessory)</li> </ul>
<b>Environmental conditions</b>	Operating temp.: +41 .. +140 °F Storage temp.: -40 .. +158 °F Rel. humidity: 0 .. 70 %
<b>Weight</b>	410 g

### Note:

\* FS (Full Scale) = relative to complete measuring range

\*\* SMART sensors (Condition Monitoring Sensors) 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 and 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 brochure.

Examples of main accessories:

- **Pressure transmitter**  
HDA 4000 with HSI interface  
Pressure ranges: -14 .. 135.5 psi, 0 .. 1500 psi, 0 .. 3000 psi, 0 .. 6000 psi, 0 .. 9000 psi
- **Temperature transmitter**  
ETS 4000 with HSI interface  
Measuring range: -25 .. 100 °C (-13 .. 212 °F)
- **Flow rate transmitter**  
EVS 3000 with HSI interface  
Measuring ranges: 1.2 .. 20 l/min (0.26 .. 5.28 gpm), 6 .. 60 l/min (1.59 .. 15.9 gpm), 15 .. 300 l/min (3.96 .. 79.3 gpm), 40 .. 600 l/min (10.6 .. 159 gpm)
- **Sensor simulator**  
SSH 1000, ideal for training purposes
- **Electrical connection adapter**  
UVM 3000, for mechanical pressure and temperature switches
- **Hydraulic adapters**