

Portable Measuring Instrument HMG 500

Two-line LCD display
Two sensors can be connected
Automatic sensor recognition

Description:

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

Up to two sensors with HYDAC Sensor Interface (HSI), for example for measuring pressure, temperature or flow rate, can be connected (exception: SMART sensors). The HMG 500 automatically recognises 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 multitude of additional advantages, e.g. in comparison with pressure measurements on machines and plants using mechanical pressure gauges. The user profits from a technology-related high level of measuring accuracy and dynamics. The HMG 500 determines the measured values with a very high sampling rate and can therefore, for example, monitor and display pressure peaks in the maximum value memory or rapid pressure discharge in the minimum value memory. Furthermore, differential measurements can be carried out with using two sensors of a similar type, for example, to evaluate pressure drops or temperature differentials.

To further extend the application range, the 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:

- Hand-held 2-channel portable measuring instrument
- Simple and user-friendly key operation
- Large LCD display including battery status indication
- 2 sensor inputs, automatic sensor recognition

Technical data:

Measurement inputs	2 analogue inputs for HYDAC measurement transmitters with HSI interface – except for SMART sensors ²⁾
Accuracy¹⁾	≤ ± 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 current measured value● Min/max value display● Reset of min/max values● Measured values differential channel A-B● Unit display, 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 (dependent on connected sensors)	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
Supply voltage	9 V battery, operating life: approx. 10 h (with 2 sensors) Power supply unit 230 V AC (available as accessory)
Environmental conditions	Operating temperature: +5 .. +60 °C Storage temperature: -40 .. +70 °C Rel. humidity: 0 .. 70 %
Weight	410 g

Note: ¹⁾ **FS (Full Scale)** = relative to complete measuring range
²⁾ SMART sensors (Condition Monitoring Sensors) are a generation of sensors from HYDAC which can provide a variety of different measured variables.

Dimensions:



Ordering Details:

HMG 500 - 000

Scope of delivery

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

HMG 500-Set 01

Scope of delivery

- 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

Scope of delivery

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

Accessories:

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

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, 0 .. 1000 bar
- **Temperature transmitter**
ETS 4000 with HSI interface
Measuring range: -25 .. 100 °C
- **Flow rate transmitter**
EVS 3000 with HSI interface
Measuring 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**

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.

HYDAC ELECTRONIC GMBH

Hauptstraße 27, 66128 Saarbrücken

Germany

Telephone +49 (0)6897 509-01

Fax +49 (0)6897 509-1726

E-mail: electronic@hydac.com

Internet: www.hydac.com