



## Electronic Pressure Transmitter with HSI Sensor Recognition

### HDA 4748-H

#### Description:

The pressure transmitter HDA 4748-H with HSI sensor recognition has been specially developed for use in conjunction with HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 and CMU 1000.

For data transmission, the HDA 4748-H has an HSI interface (HYDAC Sensor Interface).

The HSI sensors are automatically recognized via the HSI interface by the above-mentioned HYDAC measuring instruments and all the necessary basic settings are taken from each sensor.

Like all pressure transmitters of the HDA 4700 series, the HDA 4748-H also has a very accurate and robust sensor cell with a thin-film strain gauge on a stainless steel membrane. It features excellent technical specifications and is very compact.

#### Special features:

- Automatic recognition by and voltage supply from HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000
- Automatic transfer of measuring range, measured value and measurement unit
- Accuracy  $\leq \pm 0.25\% \text{ FS typ.}$
- Highly robust sensor cell
- Very small temperature error
- Excellent EMC characteristics
- Excellent long term stability
- Very compact design

#### Technical specifications:

##### Input data

Measuring ranges	-1 .. 9; 16; 60; 100; 250; 400; 600 bar
Overload pressures	20; 32; 120; 200; 500; 800; 1000 bar
Burst pressure	100; 200; 300; 500; 1000; 2000; 2000 bar
Mechanical connection	G1/4 A DIN 3852
Torque value	20 Nm
Parts in contact with medium	Mech. connection: Stainless steel Seal: FPM

##### Output data

Output signal	HSI (HYDAC Sensor Interface) Automatic sensor recognition
Accuracy to DIN 16086, Max. setting	$\leq \pm 0.25\% \text{ FS typ.}$ $\leq \pm 0.5\% \text{ FS max.}$
Accuracy at min. setting (B.F.S.L.)	$\leq \pm 0.15\% \text{ FS typ.}$ $\leq \pm 0.25\% \text{ FS max.}$
Temperature compensation	$\leq \pm 0.008\% \text{ FS / } ^\circ\text{C typ.}$
Zero point	$\leq \pm 0.015\% \text{ FS / } ^\circ\text{C max.}$
Temperature compensation	$\leq \pm 0.008\% \text{ FS / } ^\circ\text{C typ.}$
Over range	$\leq \pm 0.015\% \text{ FS / } ^\circ\text{C max.}$
Non-linearity at max. setting to DIN 16086	$\leq \pm 0.3\% \text{ FS max.}$
Hysteresis	$\leq \pm 0.1\% \text{ FS max.}$
Repeatability	$\leq \pm 0.05\% \text{ FS}$
Rise time	$\leq 0.5 \text{ ms}$
Long-term drift	$\leq \pm 0.1\% \text{ FS typ. / year}$

##### Ambient conditions

Compensated temperature range	-25 .. +85 °C
Operating temperature range	-40 .. +85 °C
Storage temperature range	-40 .. +100 °C
Fluid temperature range	-40 .. +100 °C
CE mark	EN 61000-6-1 / 2 / 3 / 4
Vibration resistance to DIN EN 60068-2-6 at 10 .. 500 Hz	$\leq 20 \text{ g}$
Protection class to DIN 40050	IP 67 (when an IP 67 connector is used)

##### Other data

Voltage supply	via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000
Life expectancy	> 10 million cycles 0 .. 100 % FS
Weight	approx. 150 g

Note: Reverse polarity protection of the supply voltage, excess voltage, override, short circuit protection are available.

FS (Full Scale) = relative to the complete measuring range

B.F.S.L. = Best Fit Straight Line

## Model code:

HDA 4 7 4 8 - H - XXXX - 000

### Mechanical connection

4 = G1/4 A DIN 3852 (male)

### Electrical connection

8 = M12x1, 5 pole  
(connector not supplied)

### Signal

H = HSI (automatic sensor recognition)

### Pressure ranges in bar

0009; 0016; 0060; 0100; 0250; 0400; 0600

### Modification number

000 = Standard

## 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.

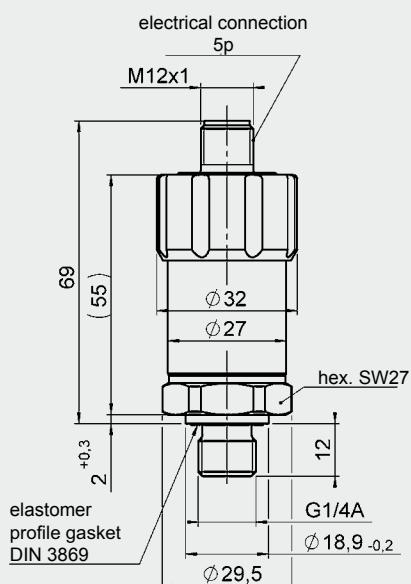
## Note:

On units with a different modification number, please read the label or the technical amendment details supplied with the instrument.

## Accessories:

Appropriate accessories, such as, for example, electrical connectors can be found in the Accessories brochure.

## Dimensions:



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