



## Pressure Transmitter HDA 4700-HC (for HMG 4000)

Relative pressure

Accuracy 0.25 %



With HCSI sensor recognition

### Description:

To extend the number of sensors on the HMG 4000, the special CAN-based HCSI sensors were developed.

The HCSI sensors, easily identified by their red type label, are automatically recognised along with all their characteristics by the HMG 4000.

Up to 28 HCSI sensors can be connected to the HMG 4000 via the Y-distributor (available as an accessory) to set up an HMG-internal bus system. The data are transmitted using CAN-based bus protocol.

Like all pressure transmitters of the HDA 4700 series, the HDA 4700-HC also has a very accurate and robust sensor cell with a thin-film strain gauge on a stainless steel membrane.

Due to their outstanding temperature and EMC characteristics, together with their compact dimensions, these instruments can be used in a wide field of applications in the mobile and industrial sectors.

### Technical data:

#### Input data

Measuring ranges <sup>1)</sup>	bar	-1 .. 9	16	60	100	250	400	600	1000	1600	2000
Overload pressures	bar	20	32	120	200	500	800	1000	1600	2400	3000
Burst pressure	bar	100	200	300	500	1000	2000	2000	3000	3000	4000
Mechanical connection		G1/4 A ISO 1179-2 G1/2 B DIN EN 837									
Tightening torque, recommended		20 Nm (G1/4); 40 Nm (G1/2)									
Parts in contact with fluid		Mech. connection: Stainless steel Seal: FKM									

#### Output data

Output signal	HCSI (HYDAC CAN Sensor Interface) Automatic sensor recognition										
Accuracy acc. to DIN 16086, terminal based	≤ ± 0.25 % FS typ. ≤ ± 0.5 % FS max.										
Accuracy, B.F.S.L.	≤ ± 0.15 % FS typ. ≤ ± 0.25 % FS max.										
Temperature compensation	≤ ± 0.008 % FS / °C typ. ≤ ± 0.015 % FS / °C max.										
Zero point	≤ ± 0.008 % FS / °C typ. ≤ ± 0.015 % FS / °C max.										
Span	≤ ± 0.015 % FS / °C max.										
Non-linearity at max. setting acc. to DIN 16086 terminal based	≤ ± 0.3 % FS max.										
Hysteresis	≤ ± 0.1 % FS max.										
Repeatability	≤ ± 0.08 % FS										
Rise time	≤ 1 ms										
Long-term drift	≤ ± 0.1 % FS typ. / year										

#### Environmental conditions

Compensated temperature range	-25 .. +85 °C										
Operating temperature range <sup>1)</sup>	-40 .. +85 °C / -25 .. +85 °C										
Storage temperature range	-40 .. +100 °C										
Fluid temperature range <sup>1)</sup>	-40 .. +100 °C / -25 .. +100 °C										
CE mark	EN 61000-6-1 / 2 / 3 / 4										
Vibration resistance acc. to DIN EN 60068-2-6 at 10 .. 500 Hz	≤ 20 g										
Shock resistance acc. to DIN EN 60068-2-27	≤ 100 g / 6 ms										
Protection class acc. to DIN EN 60529 <sup>2)</sup>	IP 67										

#### Other data

Voltage supply	Via HYDAC measuring instrument HMG 4000										
Life expectancy	> 10 million cycles (0 .. 100 % FS)										
Weight	~ 150 g										

Note: Reverse polarity protection of the supply voltage, overvoltage, override and short circuit protection are provided.

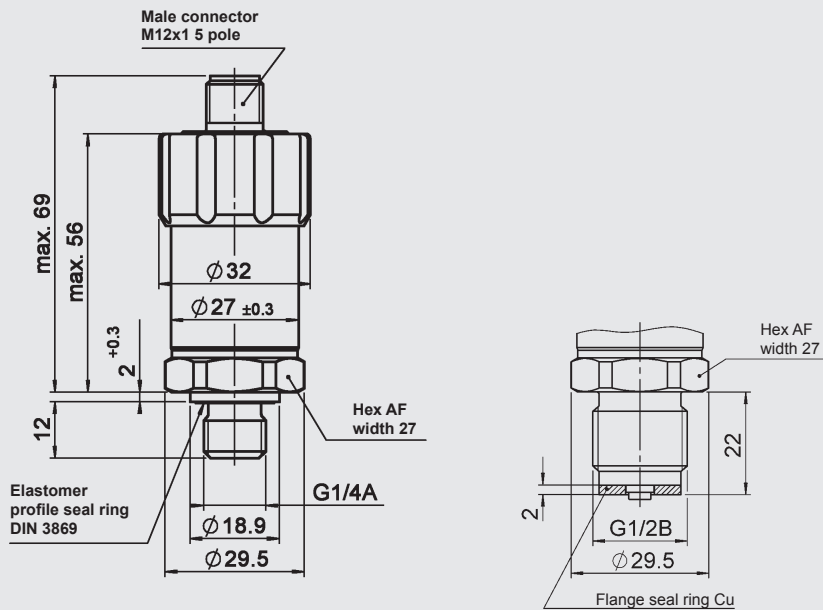
**FS** (Full Scale) = relative to complete measuring range

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

<sup>1)</sup> -25 °C with FKM seal, -40 °C on request

<sup>2)</sup> With mounted mating connector in corresponding protection class

## 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.

## Model code:

**HDA 4 7 X 8 - HC - XXXX - 000**

### Mechanical connection

- 1 = G1/2 B DIN EN 837  
(only for pressure ranges "1600, 2000 bar")
- 4 = G1/4 A ISO 1179-2

### Electrical connection

- 8 = male M12x1, 5 pole  
(mating connector not supplied)

### Output signal

HC = HCSI (HYDAC CAN Sensor Interface)

### Measuring ranges in bar

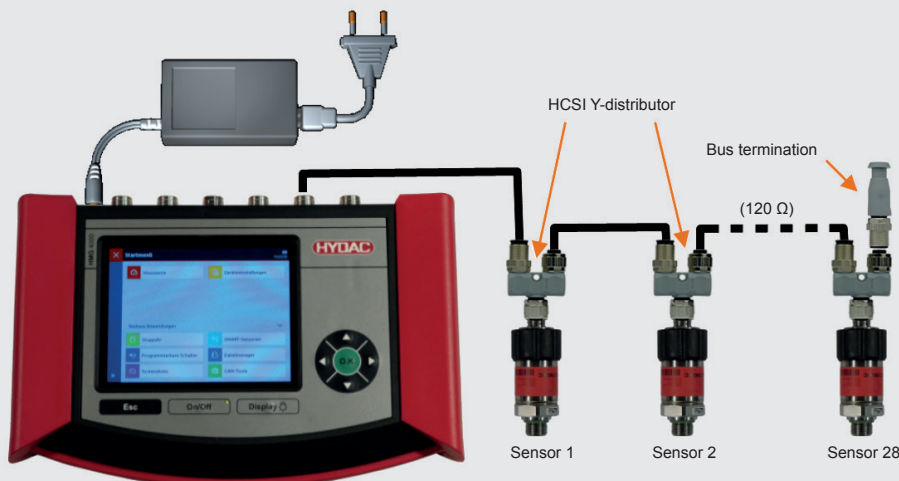
0009 (-1 .. +9); 0016; 0060; 0100; 0250; 0400; 0600; 1000  
1600, 2000 (only in conjunction with mech. connection "1")

### Modification number

000 = Standard

## Accessories:

HCSI Y-distributor Part no.: 6178196  
HCSI bus termination Part no.: 6178198



**HYDAC ELECTRONIC GMBH**  
Hauptstr. 27, 66128 Saarbrücken  
Germany  
Telephone +49 (0)6897 509-01  
Fax +49 (0)6897 509-1726  
e-mail: [electronic@hydac.com](mailto:electronic@hydac.com)  
Internet: [www.hydac.com](http://www.hydac.com)