HYDAC INTERNATIONAL

Pressure Transmitter
HDA 4700-H

Relative pressure | **Accuracy 0.25 %**

With HSI sensor recognition

Description:

The pressure transmitter HDA 4700-H with HSI sensor recognition was specially developed for use in conjunction with the HYDAC measuring instruments HMG 5X0, HMG 2500, HMG 4000 and CMU 1000.

For data transmission, the HDA 4700-H has an HSI interface (**H**YDAC **S**ensor **I**nterface).

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

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

Technical data:

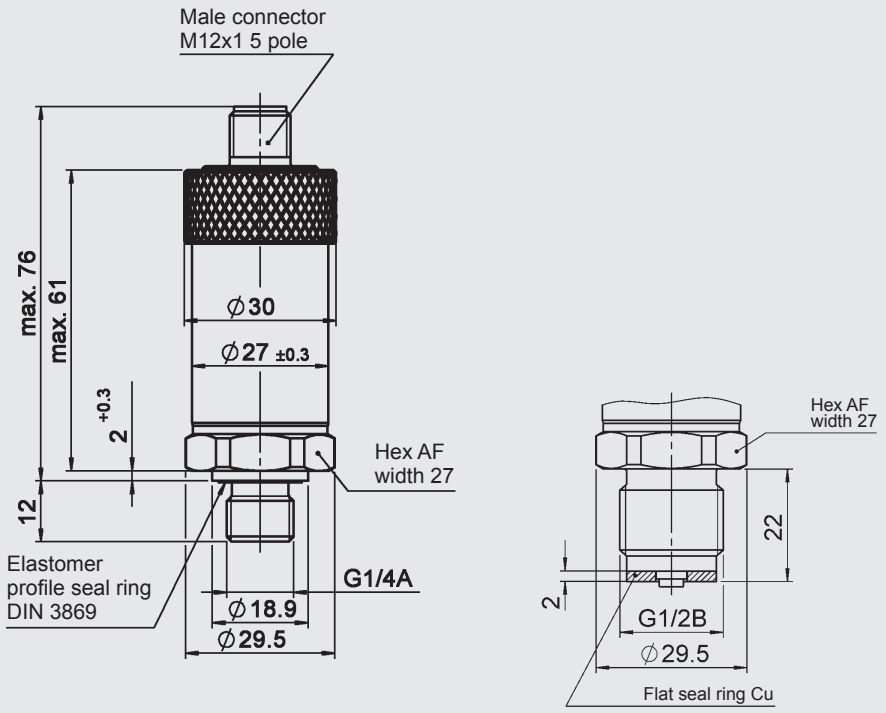
Input data											
Measuring ranges[1)]	bar	-1 .. 9	16	60	100	250	400	600	1000	1600	2000
Overload pressures	bar	20	32	120	200	500	800	1000	1600	2400	3000
Burst pressure	bar	100	200	300	500	1000	2000	2000	3000	3000	4000
Mechanical connection		G1/4 A ISO 1179-2 G1/2 B DIN EN 837									
Tightening 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		**HSI** (**H**YDAC **S**ensor **I**nterface) 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 Zero point		≤ ± 0.008 % FS / °C typ. ≤ ± 0.015 % FS / °C max.									
Temperature compensation Span		≤ ± 0.008 % FS / °C typ. ≤ ± 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		≤ ± 0.05 % FS									
Rise time		≤ 1 ms									
Long-term drift		≤ ± 0.1 % FS typ. / year									
Environmental conditions											
Compensated temperature range		-25 .. +85 °C									
Operating temperature range [1)]		-40 .. +85 °C / -25 .. +85 °C									
Storage temperature range		-40 .. +100 °C									
Fluid temperature range [1)]		-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 [2)]		IP 67									
Other data											
Voltage supply		Via HYDAC measuring instruments HMG 5X0, HMG 2500, HMG 4000 or CMU 1000									
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 (**F**ull **S**cale) = relative to complete measuring range
B.F.S.L. = **B**est **F**it **S**traight **L**ine

[1)] -25 °C with FKM seal, -40 °C on request
[2)] With mounted mating connector in corresponding protection class

EN 18.332.3/02.18

Dimensions:



Model code:

HDA 4 7 X 8 – H – 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
H = HSI (automatic sensor recognition)

Measuring ranges in bar
0009; 0016; 0060; 0100; 0250; 0400; 0600, 1000
1600, 2000 (only in conjunction with mech. connection "1")

Modification number
000 = standard

Accessories:
Appropriate accessories, such as mating connectors, can be found in the Accessories brochure.

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.

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