



Pressure Transmitter HDA 7400 for series applications

Relative pressure

Accuracy 0.5 %

Customised designs thanks to diverse electrical and mechanical connections and a large number of output signals



Description:

The pressure transmitter series HDA 7400 combines excellent technical data with highly compact design.

The HDA 7400 was specifically developed for OEM applications e.g. in mobile applications. A sensor cell with a thin-film strain gauge on a stainless steel membrane is the basis for a robust, long-life pressure transmitter.

Various pressure ranges between 0 .. 40 bar and 0 .. 1000 bar provide versatility when adapting to particular applications.

For integration into modern controls (e.g. with PLC), standard analogue output signals are available.

Technical data:

Input data

Measuring ranges	bar	40	60	100	160	250	400	600	1000
Overload pressures	bar	80	120	200	320	500	800	1000	1600
Burst pressure	bar	200	300	500	800	1250	2000	2000	3000

Mechanical connection G1/4 A ISO 1179-2

Tightening torque, recommended 20 Nm

Parts in contact with fluid Mech. connection: Stainless steel
Seal: FKM

Output data

Output signal ¹⁾	e.g.: 4 .. 20 mA, 0 .. 5 V, 0.5 .. 4.5 V, 1 .. 6 V, 0 .. 10 V
Accuracy acc. to DIN 16086, terminal based	≤ ± 0.5 % FS typ. ≤ ± 1 % FS max.
Accuracy, B.F.S.L.	≤ ± 0.25 % FS typ. ≤ ± 0.5 % FS max.
Temperature compensation	≤ ± 0.015 % FS / °C typ.
Zero point / span	≤ ± 0.025 % FS / °C max.
Non-linearity acc. to DIN 16086, terminal based	≤ ± 0.3 % FS max.
Hysteresis	≤ ± 0.4 % FS max.
Repeatability	≤ ± 0.1 % FS
Rise time	≤ 2 ms
Long-term drift	≤ ± 0.3 % FS typ. / year

Environmental conditions

Compensated temperature range ¹⁾	-25 .. +85 °C
Operating temperature range ²⁾	-40 .. +85 °C / -25 .. +85 °C
Storage temperature range	-40 .. +100 °C
Medium temperature range ²⁾	-40 .. +100 °C / -25 .. +100 °C

CE mark

us mark³⁾

Certificate no.: E318391

Vibration resistance acc. to

DIN EN 60068-2-6 at 10 .. 500 Hz

Shock resistance acc. to DIN EN 60068-2-27 ≤ 100 g / 6 ms

Protection class acc. to DIN EN 60529

IP 65 / IP 67
(depending on electrical connection)

Other data

Electrical connection ¹⁾	e.g. M12x1 (4 pole); jacketed cable
Supply voltage	8 .. 30 V DC 2-conductor 12 .. 30 V DC 3-conductor
when applied acc. to UL specifications	- limited energy - acc. to 9.3 UL 61010; Class 2; UL 1310/1585; LPS UL 60950
Residual ripple of supply voltage	≤ 5 %
Current consumption	≤ 25 mA total
Life expectancy ⁴⁾	> 10 million cycles, 0 .. 100 % FS
Weight	~ 60 g

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

FS (Full Scale) = relative to complete measuring range

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

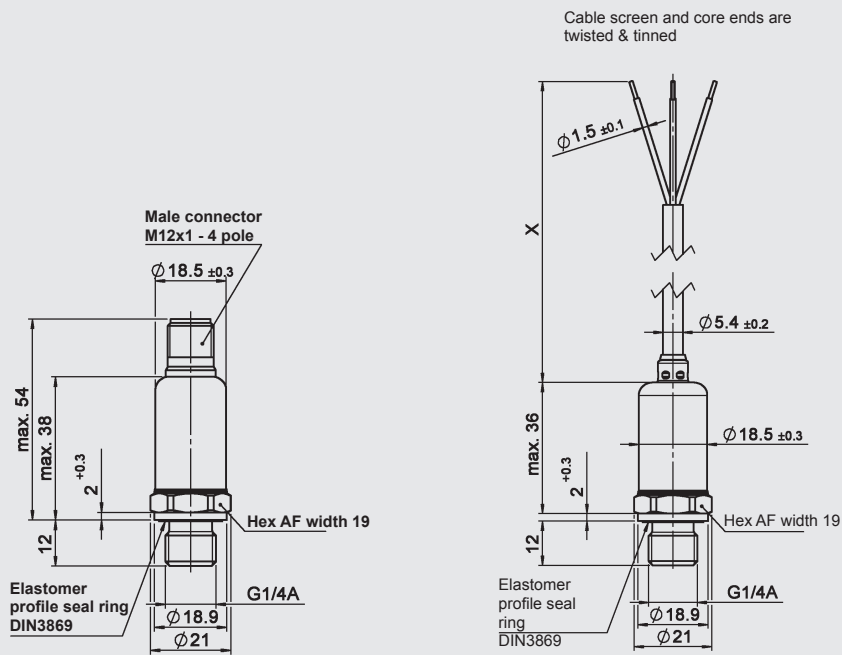
¹⁾ Other versions available on request

²⁾ -25 °C with FKM seal, -40 °C on request

³⁾ Environmental conditions acc. to 1.4.2 UL 61010-1; C22.2 No 61010-1

⁴⁾ Measuring range 1000 bar: ≥ 1 million cycles (0 .. 100 % FS)

Dimensions (examples):



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.

Ordering Details:

The electronic pressure transmitter HDA 7400 has been specially developed for OEM customers and is available for minimum order quantities of 100 units per type.

For precise specifications, please contact the Sales Department of HYDAC ELECTRONIC.

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