



Electronic Pressure Transmitter HDA 9300

(Minimum order quantity 1000 units)

Description:

The pressure transmitter series HDA 9000 has been specially developed for low pressure applications in the industrial and mobile sectors.

The transmitters are available in various pressure ranges from 0 .. 1 bar to 0 .. 100 bar.

For integration into modern controls, standard analogue output signals are available, e.g. 4 .. 20 mA, 0 .. 5 V, 1 .. 6 V or 0 .. 10 V.

Ratiometric output signals are also available.

For the electrical connection, different types of integrated connections are available.

A basic accuracy of $\leq \pm 0.5\%$ FS typ., combined with a small temperature drift, ensures a broad range of applications for the HDA 9300, e.g. in pump and compressor controls, refrigerating plants and air conditioning, or for pilot controls in the mobile sector.

Special features:

- Accuracy $\leq \pm 0.5\%$ FS typ.
- Outstanding performance in terms of temperature effect and EMC
- Very compact design

Technical data:

Input data	
Measuring ranges	1; 1.6; 2.5; 4; 6; 10; 16; 25; 40; 60; 100 bar -1 .. 1; -1 .. 4 bar
Overload pressures	2; 5; 8; 12; 20; 32; 50; 80; 120; 200; 200 bar 3.2; 12 bar
Burst pressures	3; 7.5; 12; 18; 30; 48; 75; 120; 180; 300; 300 bar 4.8; 18 bar
Mechanical connection ¹⁾ (Torque value)	G1/4 A DIN 3852 (20 Nm) 1/4-18 NPT, external thread (40 Nm) 7/16-20 UNF 2A (15 Nm) 9/16-18 UNF 2A (20 Nm)
Parts in contact with medium	Connector: Stainless steel Measuring cell: Ceramics Seal: FPM, EPDM
Output data	
Output signal	e.g.: 4 .. 20 mA, 0 .. 5 V, 1 .. 6 V, 0 .. 10 V, ratiometric: 0.5 .. 4.5 V for $U_a = 5$ V DC
Accuracy to DIN 16086, max. setting	$\leq \pm 0.5\%$ FS typ. $\leq \pm 1\%$ FS max.
Accuracy at minimum setting (B.F.S.L.)	$\leq \pm 0.25\%$ FS typ. $\leq \pm 0.5\%$ FS max.
Temperature compensation zero point	$\leq \pm 0.02\%$ FS / °C typ. $\leq \pm 0.04\%$ FS / °C max.
Temperature compensation over range	$\leq \pm 0.02\%$ FS / °C type $\leq \pm 0.04\%$ FS / °C max.
Non-linearity at max. setting to DIN 16086	$\leq \pm 0.5\%$ FS max.
Hysteresis	$\leq \pm 0.25\%$ FS max.
Repeatability	$\leq \pm 0.1\%$ FS max.
Rise time	≤ 4 ms
Long term drift	$\leq \pm 0.3\%$ FS / year typ.
Environmental conditions	
Compensated temperature range	-25 .. 85 °C
Operating temperature range ²⁾	-40 .. 100 °C / -25 .. 100 °C
Storage temperature range	-40 .. +100 °C
Fluid temperature range ²⁾	-40 .. 125 °C / -25 .. 125 °C
CE - mark	EN 61000-6-1 / 2 / 3 / 4
cULus - mark ³⁾	Certificate No.: E318391
Vibration resistance according to DIN EN 60068-2-6 at 5 .. 2000 Hz	≤ 25 g
Shock resistance to DIN EN 60068-2-27	100 g / 6 ms / half-sine 500 g / 1 ms / half-sinus
Protection class to IEC 60529 to ISO 20653	IP 65, IP 67 (depending on electrical connection) IP 69K (depending on electrical connection)
Other data	
Electrical connection	M12x1, 4 pol. Packard Metri Pack Series 150, 3 pole. Deutsch DT 04, 3 pole EN 175301-803 (DIN 43650), 3 pole + PE
Supply voltage	8 .. 36 V DC 12 .. 36 V DC for 0 .. 10 V, 5 V DC $\pm 5\%$ (ratiometric)
Residual ripple of supply voltage	$\leq 5\%$
Service life	> 10 million cycles, 0 .. 100 % FS
Weight	~ 100 g

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

FS (Full Scale) = relative to complete measuring range

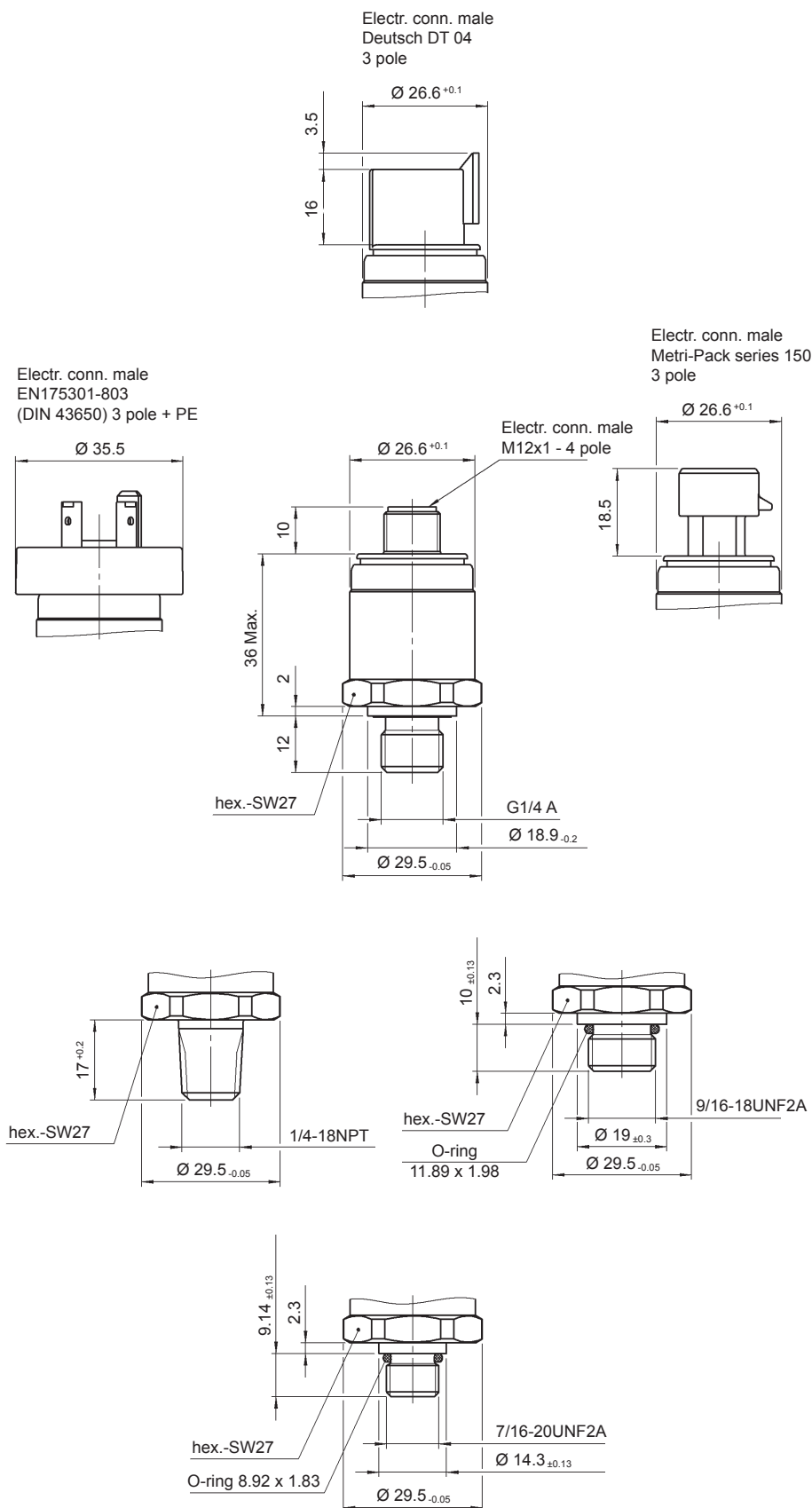
B.F.S.L. = Best Fit Straight Line

¹⁾ Other mechanical connections on request

²⁾ -25 °C with FPM or EPDM seal, -40 °C on request

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

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.

Order details:

The electronic temperature switch HDA 9300 has been specially developed for OEM customers and is available for minimum order quantities of 1000 units per type.
 For exact specification, please contact the Sales Department of HYDAC ELECTRONIC.

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