



Electronic Pressure Transmitter HDA 4400

The pressure transmitter series HDA 4400 has a pressure measurement cell with thin-film strain gauge on a stainless steel membrane.

The 4 .. 20 V or 0 .. 10 V output signals enable connection to all HYDAC ELECTRONIC GMBH measurement and control devices as well as connection to standard evaluation systems (e.g. PLC controls).

The main areas of application are in the mobile or industrial sectors of hydraulics and pneumatics, particularly in applications with restricted installation space.

- Accuracy $\leq \pm 0.5\%$ FS typ.
- Highly robust sensor cell
- Very small temperature error
- Excellent EMC characteristics
- Very compact design
- Persuasive price / performance ratio

Measuring ranges ¹⁾	16; 60; 100; 250; 400; 600; 1000 bar
Overload pressures	32; 120; 200; 500; 800; 1000; 1600 bar
Burst pressures	200; 300; 500; 1000; 2000; 2000; 3000 bar
Mechanical connection ¹⁾	G1/4 A DIN 3852; G1/2 A DIN 3852
Torque value	20 Nm (G1/4); 45 Nm (G1/2)
Parts in contact with medium	Mech. conn.: Stainless steel Seal: FPM
Output signal, permitted load resistance	4 .. 20 mA, 2 conductor $R_{L,max.} = (U_B - 8 \text{ V}) / 20 \text{ mA}$ [k Ω] 0 .. 10 V, 3 conductor $R_{L,min.} = 2 \text{ k}\Omega$
Accuracy to DIN 16086	$\leq \pm 0.5\%$ FS typ.
Max. setting	$\leq \pm 1\%$ FS max.
Accuracy at min. setting (B.F.S.L.)	$\leq \pm 0.25\%$ FS typ. $\leq \pm 0.5\%$ FS max.
Temperature compensation	$\leq \pm 0.015\%$ FS / °C typ.
Zero point	$\leq \pm 0.025\%$ FS / °C max.
Temperature compensation	$\leq \pm 0.015\%$ FS / °C typ.
Over range	$\leq \pm 0.025\%$ FS / °C max.
Non-linearity at max. setting to DIN 16086	$\leq \pm 0.3\%$ FS max.
Hysteresis	$\leq \pm 0.4\%$ FS max.
Repeatability	$\leq \pm 0.1\%$ FS
Rise time	$\leq 1 \text{ ms}$
Long-term drift	$\leq \pm 0.3\%$ FS typ. / year
Compensated temperature range	-25 .. +85 °C
Operating temperature range	-25 .. +85 °C
Storage temperature range	-40 .. +100 °C
Fluid temperature range ²⁾	-40 .. +100 °C / -25 .. +100 °C
CE mark	EN 61000-6-1 / 2 / 3 / 4
eURus mark ³⁾	Certificate No. E318391
Vibration resistance to DIN EN 60068-2-6 at 10 .. 500 Hz	$\leq 20 \text{ g}$
Protection class to IEC 60529	IP 65 (for male EN175301-803 (DIN 43650) and Binder 714 M18) IP 67 (for M12x1, when an IP 67 connector is used)
Supply voltage	8 .. 30 V DC, 2 conductor 12 .. 30 V DC, 3 conductor
for use acc. to UL spec.	- limited energy - according to 9.3 UL 61010; Class 2; UL 1310/1585; LPS UL 60950
Residual ripple of supply voltage	$\leq 5\%$
Current consumption	$\leq 25 \text{ mA}$
Life expectancy	> 10 million cycles 0 .. 100 % FS
Weight	~ 145 g

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

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¹⁾ 1000 bar only with mechanical connection G 1/2 A DIN 3852 and vice versa

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

³⁾ Environmental conditions in accordance with 1.4.2 UL 61010-1; C22.2 No 61010-1

