

HDA 4700-H Series

Pressure Transducer with HSI Sensor Recognition



Applications



Description

The pressure transmitter HDA 4748-H with HSI sensor recognition has been specially developed for use in conjunction with HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 and CMU 1000.

For data transmission, the HDA 4748-H has an HSI interface (HYDAC Sensor Interface).

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

Like all pressure transmitters of the HDA 4700 series, the HDA 4748-H also has a very accurate and robust sensor cell with a thin-film strain gauge on a stainless steel membrane. It features excellent technical specifications and is very compact.

Special Features

- Automatic recognition by and voltage supply from HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000
- Automatic transfer of measuring range, measured value and measurement unit
- Accuracy $\leq \pm 0.25\%$ BFSL
- Highly robust sensor cell
- Very small temperature error
- Excellent EMC characteristics
- Excellent long term stability
- Very compact design

Approvals



CE mark is a mandatory conformity mark on many products placed on the single market in the European Economic Area

Technical Details

Sensor Specifications	
Measuring ranges -bar (psi upon request)	-1 to 9, 16, 60, 100, 250, 400, 600
Overload pressure -bar (psi upon request)	20, 32, 120, 200, 500, 800, 900
Burst pressure -bar (psi upon request)	100, 200, 300, 500, 1000, 2000, 2000
Mechanical connection	G1/4A DIN 3852 male (standard for bar ranges only) SAE 6 9/16-18 UNF 2A (psi ranges only) other connections upon request
Tightening torque	15 lb-ft (20 Nm)
Parts in contact with media	Stainless Steel, FPM Seal
Accuracy (B.F.S.L.) including linearity, hysteresis, and repeatability	$\leq \pm 0.25\%$ BFSL
Temperature compensation zero point	$\leq \pm 0.0045\%$ FS / °F typ $\leq \pm 0.0085\%$ FS / °F max
Temperature compensation over range	$\leq \pm 0.0045\%$ FS / °F typ $\leq \pm 0.0085\%$ FS / °F max
Rise time	≤ 0.5 ms
Long-term drift	$\leq \pm 0.1\%$ FS typ. / year
Life expectancy	10 million load cycles (0 to 100% FS)
Weight	Approximately 150 g
Output signal	HSI
Environmental Condition	
Compensated temperature range	-13° to 185°F (-25° to 85°C)
Operating temperature range	-40° to 185°F (-40° to 85°C)
Storage temperature range	-40° to 212°F (-40° to 100°C)
Media temperature range	-40° to 212°F (-40° to 100°C)
CE mark	EN 61000-6-1 / 2 / 3 / 4
Vibration resistance to DIN EN 60068-2-6 at 10 to 500 Hz	≤ 20 g
Environmental protection	IP 67
Electrical Specifications	
Supply voltage	from HMGs 3000, 510 or 500
Reverse polarity protection of the supply voltage, excess voltage, override and short circuit protection	Standard
Electrical connection	ZBE 30-02 sensor cable M12x1 (2m) ZBE 30-05 sensor cable M12x1 (5m)

Model Code**HDA 4 7 X 8 - H - XXXX - 000 (PSI)****Accuracy**

7 = High Pressure Thin-film 0.25% BFSL accuracy

Mechanical Connection4 = G1/4A DIN 3852 male (*bar ranges only*)7 = SAE 6 9/6-18 UNF 2A (*psi ranges only*)**Electrical Connection**8 = M12x1 plug, 5 pole (*connector not included*)**Signal Technology**

H = Sensor Identification HSI

Pressure RangeFor HDA 4748 only (*G1/4A DIN 3852*)

0009 (-1 to 9 bar), 006, 016, 060, 100, 250, 400, 600 bar

(*psi ranges upon request*)**Modification Number**

000 Standard

(psi)psi version (*Leave blank for bar version*)**Dimensions**