

HDA 4000 Series CAN Bus



About HDA 4000 - CAN Bus Pressure Transducers

HYDAC has developed the HDA 4000 CAN-bus sensor to meet the needs of the marketplace for a field-bus sensor. There are several field-bus systems on the market designed for specific industries. One of the most known in the hydraulic industry is the CAN-bus. The purpose of CAN-bus is to eliminate the need for heavy cabling trees, particularly in the automotive and process industries. The HDA 4000 CAN-Bus sensors are interfaced by a pair of twisted wires which enables a CAN system to receive, dispatch and monitor information from hydraulic systems. CAN-bus is a relatively simple and uncomplicated system. In the hydraulic field there are applications for many mobile machine manufacturers such as excavators and tractors. Each CAN-bus sensor is custom designed for every OEM to meet their individual system needs.

Technical Details

Input Data	
Measuring range	500, 1000, 1500, 3000, 5000, 6000, 9000 psi 40, 100, 250, 400, 600 bar
Overload range	200% FS max. 13000 psi (900 bar)
Burst pressure	300% FS
Thread connection	G 1/4 A DIN 3852 SAE 6 9/16-18 UNF 2A
Mounting torque	20 Nm
Parts in contact with media	Stainless-steel, FPM seal
Output Data	
Accuracy (B.F.S.L) including linearity, hysteresis, and repeatability	≤ ±0.25% B.F.S.L.
Temperature compensation zero point	≤ ±0.0045% FS/°F ≤ ±0.0085% FS/°F
Temperature compensation over range	≤ ±0.0045% FS/°F ≤ ±0.0085% FS/°F
Rise time	≤ 2 ms
Long-term drift	≤ ±0.1%FS typ. / year
Ambient Conditions	
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)
Fluid temperature range	-40° to 212°F (-40° to 100°C)
CE mark	EN 61000-6-1, EN 61000-6-2 EN 61000-6-3, EN 61000-6-4
Vibration resistance acc. IEC 68-2-6 at 10..500 Hz	≤ 20 g (196.2 m/s ²)
Type of protection acc. DIN 40050	IP 67 (ZBE 06 molded cable)
Other Data	
Supply voltage	10 to 35 VDC
Residual ripple supply voltage	≤ 5 %
Current consumption	25 mA
Reverse polarity protection of supply voltage, excess voltage, override and short circuit protection	standard
Type of electric connection M12x1 acc. CIA-DR-303-1	Pin 1: PE, shield Pin 2: +Vb Pin 3: 0 V Pin 4: CANH Pin 5: CANL
Life expectancy	10 Mio. cycles (0 to 100 % FS)
Weight	ca. 150 g

Applications



Agricultural



Construction



Industrial



Steel / Heavy Industry

Approvals



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

