

## 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	
Nominal 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 <sup>2</sup> )
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

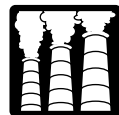
### Applications



Agricultural



Construction



Industrial

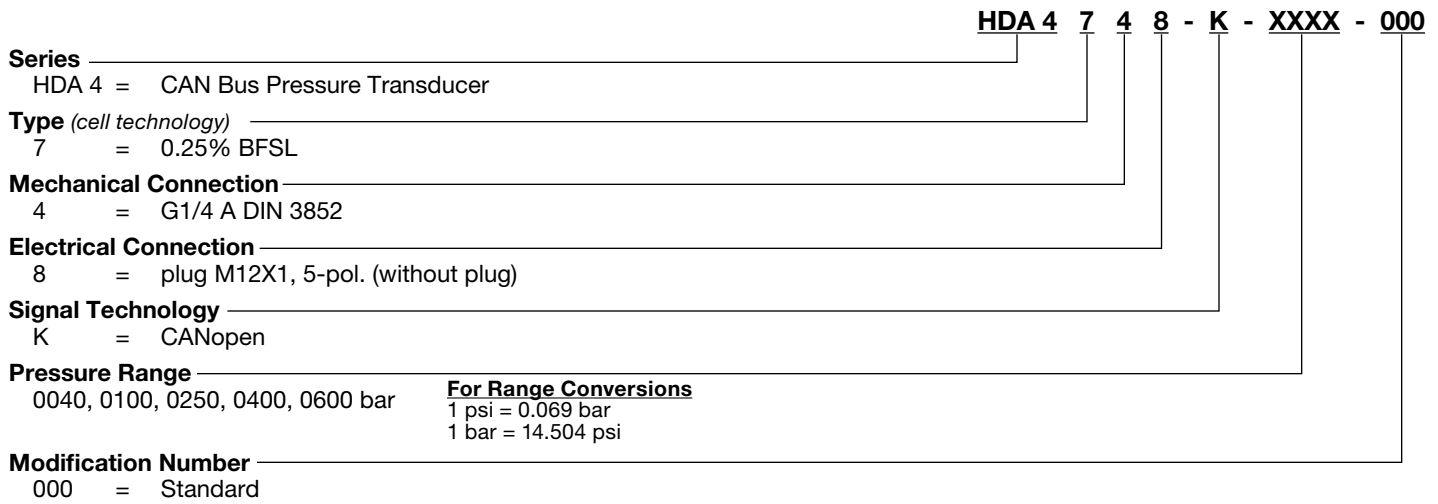


Steel / Heavy Industry

### Approvals

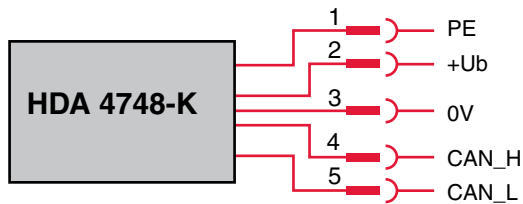


## Model Code



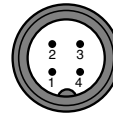
*NOTE: With modification numbers different from standard attention must be paid to type label or enclosed technical description.*

## Circuit Connection



## Plug Connection

HDA47X6 use with ZBE 06 (see page 86)



## Dimensions

