

## CAN-Bus pressure sensor DS-CAN-01

### Criteria

### DS-CAN-01

#### Basis

- Sensor cell based on a high-grade steel membrane (without interlayer-medium) piezoresistive bridge-connection consisting Polysilizium
- sensor signal processing integrated CMOS-Technology
- medium compatible with hydraulic-oil, brake-fluid, gasoline, diesel, compressed air, etc.
- pressure ranges 2 to 4000 bar (Si of high grade steel)  
-1 to 2 bar (Si)

#### Measurement types

- relative pressure against ambient pressure or against internal atmosphere

#### Measuring parameters

- measuring resolution: 10 Bit
- total error band: < 1,5 % full scale between -10...+80 °C
- measuring step: as of 5 ms

#### Electrical port

- CAN-protocol: CANopen 2.0 A
- physical layer: acc. DIN 11898
- Option: EDS file available

#### Operating conditions

- operating temperature: -10 °C to +80 °C
- storage temperature -20 °C to +120 °C
- shock proof 30 g duration 14 ms at RT
- vibration stability 10g / 20-1000 Hz
- CE- conformity in accordance with: EN 50082-1 and EN 50082-2



### Applications

- Hydraulic
- Pneumatic
- Environmental technology
- Process control
- Climatic systems
- Semiconductor industry
- Automotiv
- Agricultural devices
- Heating systems
- Robot systems

1 Standard ranges in kPa (other ranges on inquiry)

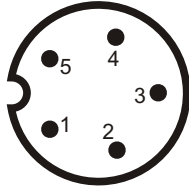
0 - 500	0 - 5.000	0 - 50.000	0 - 400.000
0 - 1.000	0 - 10.000	0 - 70.000	
0 - 2.000	0 - 35.000	0 - 200.000	

2 All parts that get in contact with the media are made of following materials  
to 500 bar X 5 CrNi1810 SUS 304 - 50 Mpa

to 2000 bar X 5 CrNiCuNb 174 SUS 630 - 100 Mpa  
no O-rings and silicon oil pattern

# Technical data

## Terminal and wiring diagram



auf die Stifte gesehen

- 1 *program-pin, not connect please!*
- 2 operating voltage 12...27 V
- 3 GND/CAN\_GND
- 4 CAN\_H
- 5 CAN\_L

### Specification

The CAN-Bus-pressure-sensor DS-CAN-01 contains only few active components, a high-grade steel membrane, the sensor element, a CMOS-ASIC to the calibration and storage of the calibrating values. For the signal processing and CAN bus operation he contains one micro controller as well as some standard components.

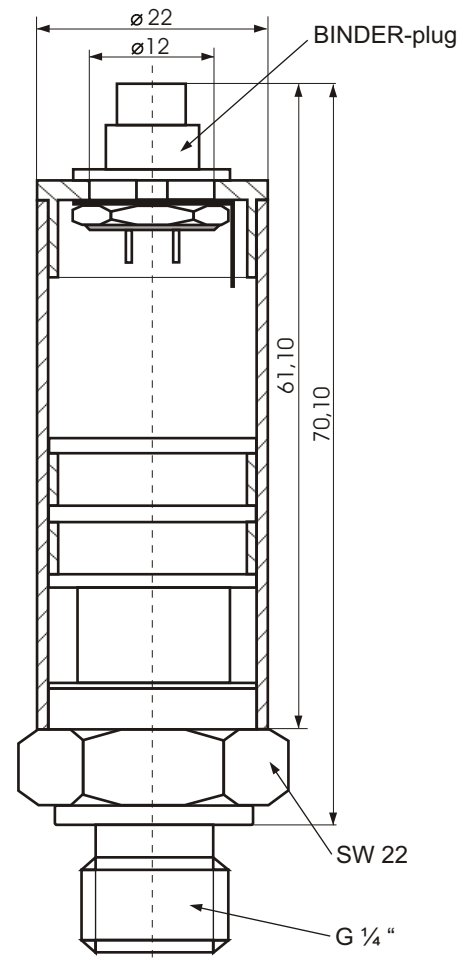
The sensor is coordinated electronically and the data are saved digitally. Through this a good long time stability and precision is safeguarded.

### User tips

The pneumatic or hydraulic sealing is done by a standard flatseal or O-ring.

The admissible torque during fastening is 25 Nm.

### Mechanics



We reserve the right to make technical modifications