

Instruction manual

Pressure Sensor DPS 16



1 Safety Instructions



Warning!

Before installation, commissioning and operation, ensure that the appropriate pressure sensor has been selected in terms of measuring range, design and specific measuring conditions.
Non-observance can result in serious injury and/or damage to the equipment.



Warning!

- Open the connections only after the system has been depressurised.
- Observe the working conditions in accordance with chapter 3 "Technical Data".
- Always operate the pressure sensor within the overpressure limit.



Warning!

Risk of injury if qualification is insufficient!

Improper handling can result in considerable injury and damage to equipment. The activities described in these operating instructions may only be carried out by skilled personnel who have the qualifications described below.

Special operating conditions require further appropriate knowledge, e. g. of aggressive media.



Warning!

For hazardous media such as oxygen, acetylene, flammable or toxic gases or liquids, and refrigeration plants, compressors, etc., in addition to all standard regulations, the appropriate existing codes or regulations must also be followed.



Warning!

Residual media in dismantled pressure sensors can result in a risk to persons, the environment and equipment. Take sufficient precautionary measures.

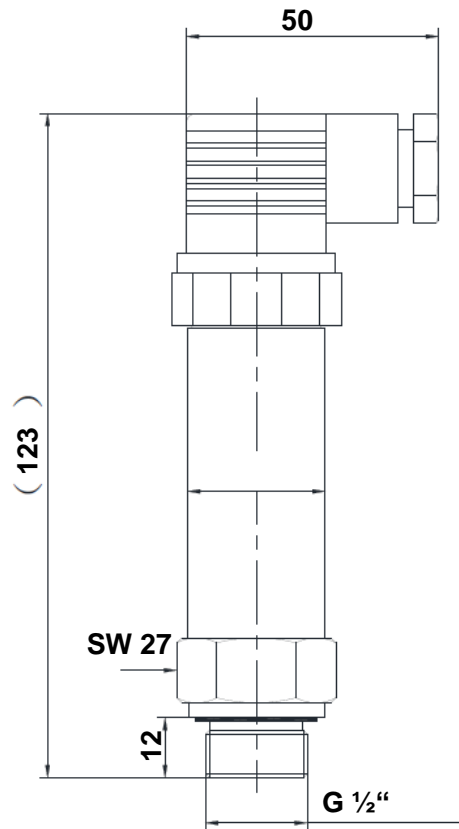
2 Application

- Machine building
- Machine tools
- Measurement and control technology
- Hydraulics and pneumatics
- Pumps and compressors

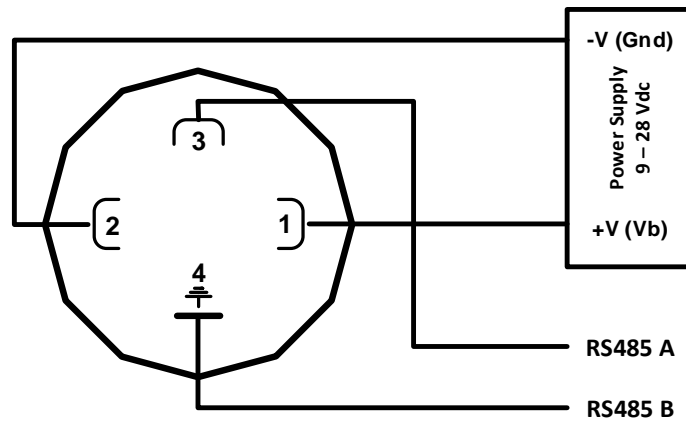
3 Technical data:

Wetted parts:	316L
Housing:	316L
parameter:	bar
Pressure type:	relative
Measuring range:	0...16 bar, 25 bar overpressure limit
Process connections:	G 1/2"
Sealing:	Viton
Permissible temperature:	-30...+80 °C
Output signal:	Modbus RS485
Power supply:	9...28 VDC
Accuracy at room temperature:	±0.5 % or ±1 %
Electrical connection::	Winkelstecker DIN EN 175301-803 A, Schutzart IP 65, Aderquerschnitt bis max. 1,5 mm ² , Kabeldurchmesser: 6...8 mm

4 Dimension in mm



5 Connection diagram:



6 Modbus Settings

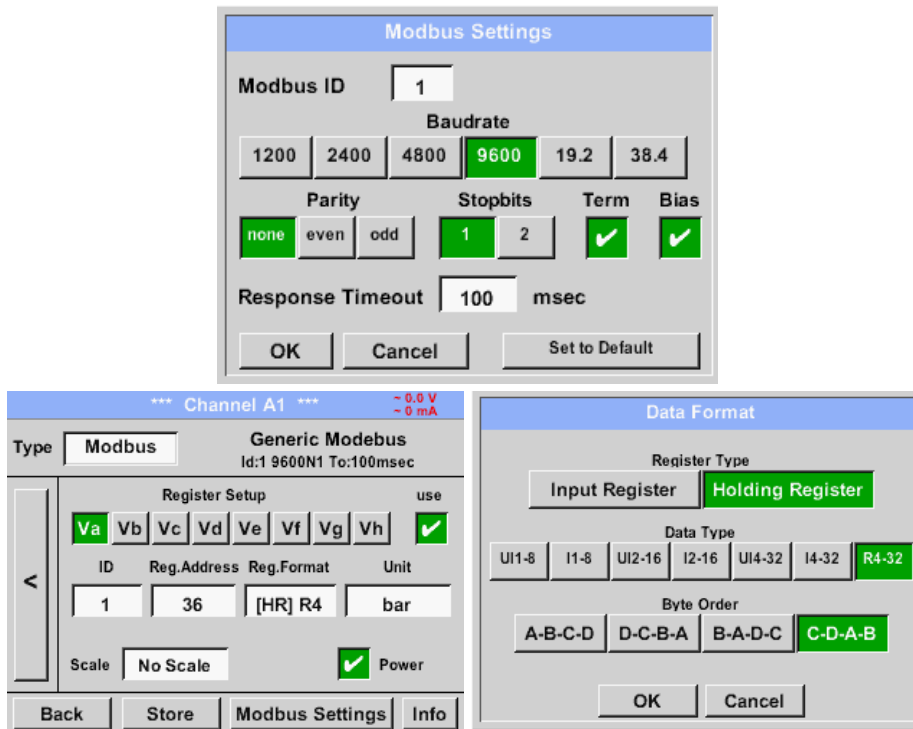
The pressure sensor is delivered with the following settings:

Modbus ID: see Label
 Baudrate: 9600
 Parity: None
 Stopbit: 1

6.1 Settings for DS400/DS500

For application in DS400/ DS500 please select the sensor type "Modbus".

Here the example for a DS400:

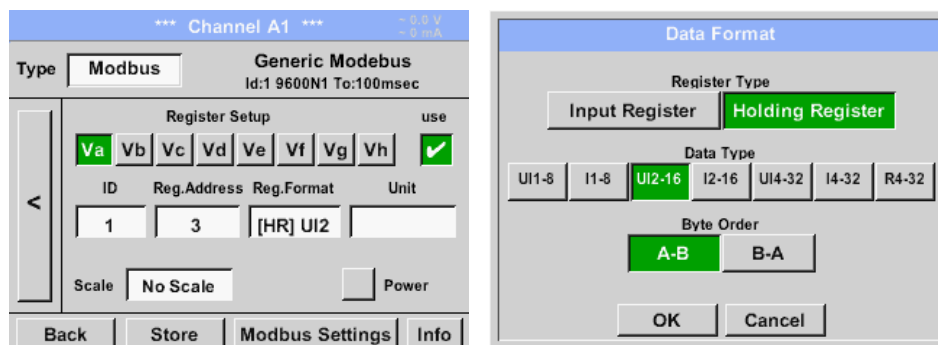


6.2 Read out of pressure value

Register Address: 36
 Datatype: Float (R4)

Unit: bar

Pressure value unit could be checked by reading register 0x03



- 0x00 - kPa
- 0x01 - Mpa
- 0x02 - mH2O
- 0x03 - bar
- 0x04 - Psi
- 0x05 - mBar
- 0x06 - kgf/cm2
- 0x07 - cmHg
- 0x08 - atm
- 0x09 - Pa
- 0x0A - inH2O
- 0x0B - inHg

7 Order Information:

Relative pressure	
Measuring range	0...16 Bar
Overpressure limit	25 bar
Order-No. 1%	0694 2886
Order-No.. 0,5%	0694 4555

8 CE Conformity:

- EMC-Directive 2014/30/EC
 - EN61000 -6-4:2007 +A1:2011
 - EN61000 – 6-2:2005
- RoHS Directive 2011/65/EU mit 2015/863

9 Contact:

Sales office South Germany:

CS Instruments GmbH & Co.KG
Zindelsteiner Straße 15
78052 Villingen-Schwenningen

Telefon: +49 7705 97899-0
Fax: +49 7705 97899-20
E-mail: info@cs-instruments.com
Internet: www.cs-instruments.com

Sales office North Germany:

CS Instruments GmbH & Co.KG
Gewerbehof 14
24955 Harrislee

Telefon: +49 461 807 150 -0
Fax: 49 461 807 150 -15
E-mail: info@cs-instruments.com
Internet: www.cs-instruments.com

Technical changes and errors excepted.