

SHD-U

Pressure sensor for liquids and gases

SHD-I



Summary

The SHD pressure sensor is suitable for liquid and gas media. A stainless diaphragm provides vacuum seal between the media and the sensor.

Applications

- HVAC systems and industry – gas and liquid pressure measuring and logging

Version SHD-U - voltage output (0 ... 10 V)

Version SHD-I - current output (4 ... 20 mA)

Functions

A piezoresistive element converts distance changes caused by pressure to voltage (0...10 V) or current (4...20 mA), which is available at the output terminals. Temperature range is -40 to +135 °C.

The sensors are intended for operating in any environment. They do not need any servicing nor maintenance. Mounting should follow preferably at the side of the pipe at liquids and on the top of the pipe with gases. Avoid mounting at the pipe bottom so that no condensate reaches the sensor.

Technical data

Measuring range	see table
Temperature range	-40 ÷ +135 °C
Media interface	G1/2" sealing at the back, and manometer with profile gasket FPM, special WW G1/4" DIN 3852

Protection class	IP65 according to DIN EN 60 529
Parts in contact with media	stainless steel 1.4305
Supply voltage	24 V AC / DC for 0 ... 10 V output 7 - 33 V DC for 4 ... 20 mA output
Output	0...10 V, load > 10 kOhm 4...20 mA, load < (UB (V)-7 V)/0,02 A
Terminals	terminal DIN EN 175301-803-A, included
Overpressure	<6 bar 5x range, burst 10x range >6 bar 3x range (max. 1500 bar), burst 6x range (max. 2500 bar)
Dimensions	see below

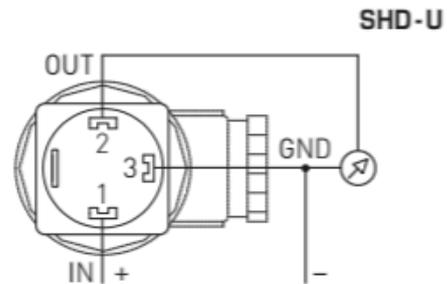
Pressure ranges

SHD-U/I 1	0... 1 bar
SHD-U/I 2,5	0... 2,5 bar
SHD-U/I 6	0... 6 bar
SHD-U/I 10	0... 10 bar
SHD-U/I 16	0... 16 bar
SHD-U/I 25	0... 25 bar
SHD-U/I 40	0... 40 bar

Terminals

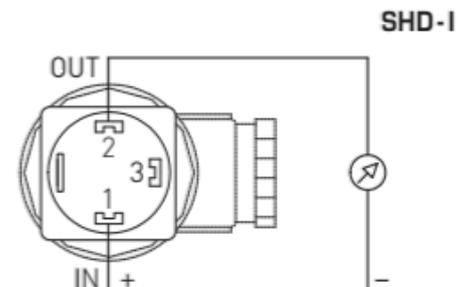
Connecting diagram

-  2 Output pressure 0-10V
-  3 GND
-  1 Supply voltage UB+ 24V AC/DC



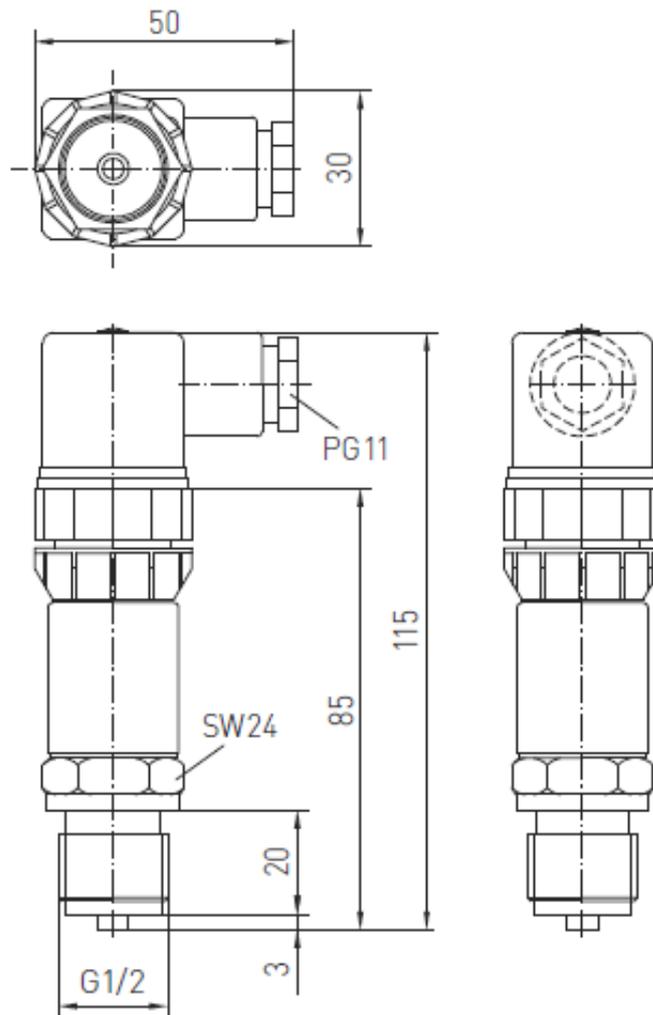
Connecting diagram

-  2 Output pressure 4...20mA
-  3 Free
-  1 Supply voltage UB+ 24V DC



Please note that sensors manufactured before 7/2013 may have different terminal assignment. Please check label on the sensor.

Dimensions



10/2017 Subject to technical changes.