



Pressure measuring transducers  
with active output

The pressure measuring transducer PREMAGARD® SHD-LC measures relative pressures in the bar range. It converts the measured pressure into standard signals of 0-10 V or 4...20mA. Process connection is G 1/2" straight external pipe thread. PREMAGARD® SHD-LC is used for pressure measurement in gaseous and liquid media. Applications of this pressure transmitter are in hydraulics, pneumatics, process technology, in mechanical and plant engineering. **Not applicable for ammonia and Freon!**

TECHNICAL DATA:

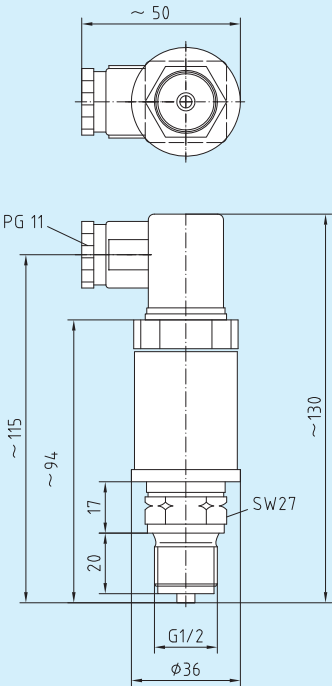
- Power supply:..... 15-33V DC for output 0-10V  
10-33V DC for output 4...20mA,  
R<sub>L</sub> depending on working resistance
- Measuring ranges:..... see table
- Output signal:..... 0-10 V 3-wire, working resistance R<sub>A</sub> ≥ 10kΩ or  
4...20mA 2-wire, working resistance  
R<sub>A</sub>(Ohm) ≤ (UB [V]-10V)/0.02 A
- Electrical connection:..... 0.14-1.5mm<sup>2</sup>, via terminal screws inside  
right angle plug connector DIN EN 175301-803-A
- Pressure connection:..... G 1/2" A, straight external pipe thread  
sealing at the back, manometer connection  
(other connections on request)
- Type of pressure:..... relative
- Measuring principle:..... thin-film, piezo-resistive on ceramic measuring cell
- Temperature of medium:..... -15...+80°C
- Mounting:..... directly on pressure line
- Pressure connection:..... stainless steel 1.4305
- Connecting head:..... plastic, ca. 130x50x36 mm
- Medium contacting parts:..... stainless steel 1.4305,  
ceramics, sealing material (Viton)
- Load changes:..... < 50Hz
- Response time:..... < 5ms
- Class:..... ± 0.5%
- Total error:..... < 3%
- Overload range:..... 2 times measuring range, final value (FS)
- Bursting pressure:..... 3 times measuring range, final value (FS)
- Insulating resistance:..... ≥ 100 MOhm, at 20°C (500V DC)
- Protection class:..... III (according to EN 60730)
- Protection type:..... IP 65 (according to EN 60529) with receptacle mounted
- Standards:..... CE conformity,  
electromagnetic compatibility  
according to EN 55022, EN 50081-1/-2, EN 50082-2,  
EMC directive 2004/108/EC

SHD-LC



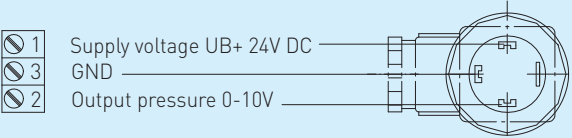
Dimensional drawing

SHD-LC



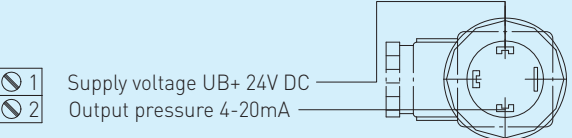
Connecting diagram

SHD-LC-U



Connecting diagram

SHD-LC-I



PREMAGARD® SHD-LC-U, including DIN plug connector

Type/WG1	Measuring Range	Output
SHD-LC-U 6	0...6 bar	0-10V
SHD-LC-U 10	0...10 bar	0-10V
SHD-LC-U 16	0...16 bar	0-10V

PREMAGARD® SHD-LC-I, including DIN plug connector

Type/WG1	Measuring Range	Output
SHD-LC-I 6	0...6.0 bar	4...20mA
SHD-LC-I 10	0...10 bar	4...20mA
SHD-LC-I 16	0...16 bar	4...20mA