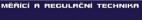
# **INSTRUCTION MANUAL**

Pressure transducers









### Safety instructions

Pressure transducers can be used for pressure measurement of environment they are designed for and have labels for. If the pressure environment is not determined, the transducer can be used for such enviroments, that do not form crystals and does not have a corrosive effect on parts. Pressure transducers designed for oxygen measurement must not come in contact with oil or fat.

kPa

### Mechanical connection

Copper sealings of matching thread is used for attachement of pressure gauge connectors. The sealing surface of the part must have a impeccable surface. The sensor must be screwed to the thread by hand. Screw by wrench in the place designed for its fitting. While attaching with the front mambrane check, if the "O" ring is settled in the groove. The sealing surface of the welded-on piece must be without scratches and must be perpendicular to the axis of the thread.

Electric connection of the pressure transducer must be done by a qualified person only, which guarantees conformity with regulations and standards.

### Installation requirements

Fitting should be done by square wrench or allen on soldering pin only. never by the case of the pressure transducer itself. The pressure transducer must be easily accessible, must not be subjected to influence of radiating heat, vibration, pressure shocks and major pressure variations. Must be installed in position marked on the tag. While measuring the pressure in hydraulic systems, the pressure sensor must be orientated in the way, that the pressure connector is pointing upwards – bleeding. If applied in steam piping it is neccessary to determine the means of cooling prior the operation. The pressure transducer must be protected by a condensation loop or other cooling element if used with boiling or over-heated liquids or steam. The pressure transducer must be placed in the same height as the pressure offtake. If it is impossible to meet this requirement, ex. with low pressure values due to height difference, pressure gauge cock (max working pressure 2,5MPa) or valve (60MPa) should be inserted in between soldering pipes and the pressure transducer as a bleeding and blow-through element.

### MPa mbar Pa kp/mm<sup>2</sup> kp/cm<sup>2</sup> atm mmHa mWS psi 10000 100 0,01019716 1,019716 0,986923 10,19716 14,50377 bar 0.0000101972 0.01019716 0.01452377 0.001 1 100 0.1 0.001 0.001019716 0.000986923 0.750062 mbar 0,01 0,001 0,000001 0,00000102 0,000010197 0,000009869 0,00750062 0,00001019716 0,000145038 Pa 0,1450377 10 1000 0.001 0.0001019716 0.01019716 0.00986923 7.50062 0.1019716 kPa 10 10000 1000000 1000 1 0,1019716 10.19716 9,86923 101.9716 7500,62 145.0377 MPa 1422,3344 kp/mm 98.0665 98066.5 9806650 9806.65 9.80665 100 96.7841 73555.9 1000 14,223344 98066.5 10 0.980665 980.665 98.0665 0.0980665 0.01 1 0.967841 735.559 kp/cm<sup>2</sup> 1.01325 1013.25 101325 101.325 0.10325 0.01033227 1.033227 760 10.33227 14 6959 atm 0,00133324 1,333224 133,3224 0,1333224 0,000133322 0,000013951 0,00135951 0,001315789 0,01360 0,019336 1 mmHa 0.00980665 73.556 1.422327 0.0980665 98 0665 9806.65 9.80665 0.001 0.1 0.0967841 mWS 0,06894757 68,94757 6894,757 6,894757 0,006894757 0,0070307 0,70307 0.070307 0.068046 51.715217

### Working conditions

Pressure transducers can be used in basic, hot and cold environments as well as in closed areas in dry and wet climate. Pressure transducers may not be used in environments with increased of extreme corrosivity. IP 65

## Storing

Pressure transducers should be transfered of stored in original packings up to the point of installation. Pressure transducers must be protected from outer damage. Storing temperature: -40°C+70°C. Pressure transducers removed from the operation should be protected from dust and humidity.

### > Maintanance and use

The device requires no maintanance. In case of sensor impurities it is neccessary to regularly clean the pressure connector independently from the medium. Do not use corrosive cleaning solvents. It is forbidden to touch the membranes of the sensors with stainless steel separating membranes

Particular caution is required for front membrane type sensors and sensors in process design with front membrane.

