

Pressure Transducer

with Hydraulic Connector and Amplifier
for 4...20 mA, 2 Leads
DGXZ-11K / 10...500 bar



Purpose

Pressure measuring, esp. remote measuring

Operating

The signal of a piezo sensor applied to the diaphragm is amplified and converted to an impressed current signal 4...20 mA.

Advantages

- Tight, non corroding, high overload
- Extreme small dead room, normally no evacuation necessary
- Simple mounting: SAE-standard flange
- Zero signal extremely independent from mounting influences
- Reproducibility and linearity very good
- Suitable for wet areas; flange receptacle waterproof with gold-plated contacts
- HF-protected by shielding and filter
- 4...20 mA-Output allows indicating and processing even at rather long distance
- K-Option has small tolerances and three years guarantee
- Simple supply by voltage 18...30 V DC, no special feeding set is necessary; a direct connection to "SPS" is possible

Application

Static and dynamic pressure measuring, remote control even in wet or electrically disturbed areas.

Electro-hydraulic control, e.g. for adjusting the gap of rolling mills.

Construction

The diaphragm part as well as the whole mechanical parts of the transducer are made from high strength stainless steel or bronze. It bears:

- Piezosensor and adjusting elements for Zero and Range, at K-Option moreover for shift
- Amplifier in shock-proof SMD-technics with HF-protection
- Front plate with flange receptacle
- Protecting tube, tightened by O-rings and fastened by screws

Delivery: within foam plastic packaging with caps, spare O-rings, cable connector, flange according SAE DN-19.

Electrical Data

Flange receptacle.....Binder Ser.723 5p,
IP67 prof. class
 Supply voltage.....8...32 V DC
 Nominal output.....4...20 mA
 Output at overload.....22,3 mA

Tolerances(20°C).....
 Zero signal^{*)}.....< 0,1 %
 " Temp.-Shift/10K.....± 0.3 %

^{*)} incl. Unbalance caused by fastening

Comb. error± 0.7 %

Nominal temp.-range.....- 40°C...+ 100°C

Total Error Band

at -10°C...+80°C.....max. ±1,5 %

at 0...+50°C.....max. ±1,0 %

Mechanical Data

Pressure connector.....SAE plug-in conn.
 with staple flange.....DN-19
 Very small dead room.....Normally no
evacuation
necessary

Working pressure.....1.5 x nom.
pressure

Limiting pressure.....2 x nom. Pressure
max. 1100 bar

Limit frequency.....2 kHz

Weight without flange.....0.35 kg

Weight with flange.....0.7 kg

Dimensions.....see drawing

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