

Pressure Transmitter ZS - 30 (0,5 - 4,5 V, SV = 5 V)

Parameter

ZS-30

Special

- Output signal: 0,5 ..4,5 V
- Supply voltage: 5 V
- Poly - Si -on SiO₂ thin film resistance
- Mixed signal ASIC

Advantage

- Transmitter contain only a small number of active components
- Measuring range 0.... 4000 bar
- Optional mechanic and electrical connectors
- Elektromagnetic compatibility EMV and ESD
- The special steel membran is completely vacuum -tight, burst-proof an can be used for all standard media in hydraulik, pneumatic, and water applications
- Resistant to pressure peaks
- Protection mode IP 65
- The ASIC is a precision CMOS with EEPROM data storage and analog signal path

Pressure type

- Relativpressure again environpressure
- Relativpressure again intern atmosphäre

Measurement Princip

- Piezoresistiv cell on steel membran / thin-film
- Shook-proof : IEC 68-2-27
- Vibration resistant: IEC 68-2-06 and IEC 68-2-36



Application

- Process Control
- Mobilhydraulicsystems
- Hydraulic, Pneumatic
- Heating and Airconditioning
- Automotiv application
- Testing Technologie
- Industrial Roboter
- Water technologie

INFORMATION

Operating conditions and Pressure range

Sensor

Measurement princip Thin film piezoresistiv on steel membran

Temperature range

Ambient temperature - 40°C...+125°C

Storage temperature - 40°C...+140°C

Pressure range

Measuring range: standard pressure (bar)
1.6, 2.5, 4, 6, 10, 16, 25, 40, 100, 160, 250, 400, 600, 1000, 1600, 2000, 4000 bar

Overload range : 2 * FS

Bursting pressure : 3 * FS

Materials of parts with contact to measuring:

to 500 bar X 5 CrNi1810 SUS 304-50 Mpa
500-2000 bar X 5 CrNiCuNb 174 SUS 630-100Mpa
no O-Ring, no silikon - oil

Electrical parameter

Span	4,0 V
Endvalue	4,5 V
Offset	0,5 V
Linearity error on RT	±0,5% FS
Total error at -40...-125°C 2% typ.	<±1,5% FS

Isolation resistance at 50 V	100 MΩ
Operating voltage	5 VDC
Recommended max.load resistor	4 KOhm
Response time (10..90%)	< 0,5 ms

* Total error:
Integral total error includes non-linearity, hysteresis, repeatability and temperature influence

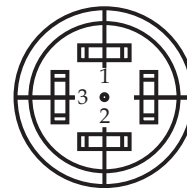
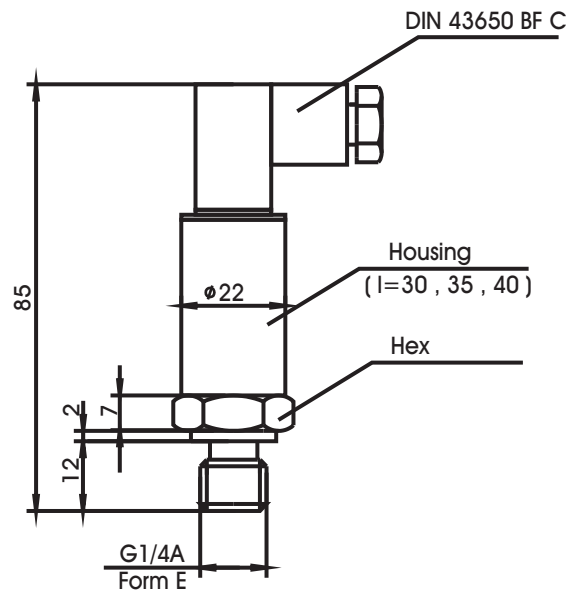
** Customer specific special design with optional better exactness on request

Order information

Example:

ZS-30-xxxxbar-G1/4-DIN43650 BF C

Please, speak with our application engineers, when you have special detail questions.



1 - Signal

2 - Ground

3 - Vs