# PRESSURE TRANSMITTER "Mobile Hydraulics"



#### Pressure range: -1..+1 bar and 0..4,000 bar Output: 0,5...4,5 V @ 5 V; 4...20 mA; 0...10 V; 1...5 V Ambient temperature: -40 °C up to +110 °C; max. +140 °C Media temperature: to +125 °C

- Resistant to pressure peaks
- Shockproof- and vibration-proof
- Protection class: DIN EN 60 529 IP 65 to IP 69k
- Case and parts in contact with measuring material of CrNi steel

#### CONSTRUCTION

- Hermetically welded
- Piezo-resistive, vacuum-proof, Stainless steel diaphragm with Pressure range resistor (Poly-Si-on SiO<sub>2</sub>)
- Case: Stainless steel
- Pressure Connection: G 1/4 " Form E
- Electrical connection: cable or variable plugsystem
- Total error typical 0.5 % F. S. within RT
  - typical -20° C to  $+100^{\circ}$  C; < 1.5 % F. S.
- Mixed signal ASIC
- Case diameter 22 mm / SW 22 Length: 27, 35 and 40 mm
- Weight ca. 90 g

### **APPLICATION**

- Motor vehicle Technique
- Gearboxes
- Oil -pressure

- Gas oil- and Gas-Engines
- Brake-Systems
- Hydraulics

## DESCRIPTION

Pressure transmitters of the dimensions: fitting length of 40 mm and a diameter of 22 mm are especially applied in mobile hydraulics and automotive technology. A pressure supply of the standard thread (e.g. M12 x1.5; M14 x 1.5) with HEX 22 guarantees versatile application modes (others on request). The standard delivery package includes, among other things, and 0.5 m cable with a Deutsch-plug.

The pressure transmitters SML-MO1 offer high operational safety

- EMV to 300
- Vibration 50 g
- Pressure cycles > 10 million,
- Reaction time < 5 ms,

- Shock resistance 1000 g,
- Load Dump 150 V,
- Short-circuit-proof and reverse-pole protected

Calibration takes place electronically, so that the Pressure transmitters display a comparably small total error and are stable in the long term. The hermetically welded thin film-measuring cell Ensures a high degree of long-term resistance to leakage and stability. The ASIC is a programmable precision MPCC-ASIC with variable PWM and Frequency output, which is suitable for an extended operating temperature range up to +110° C. The special steel membrane is completely vacuum-tight, extremely burst-proof and can be used with all standard media in hydraulics, pneumatics, process technology and automotive engineering, in as far as they are compatible with special steel. This thereby covers use in standard applications in mobile hydraulics and in other areas of application. The great exactness and the robust, compact structure guarantee a broad range of possible uses in industry. On the basis of the combinability of different mechanical and electronic connections, a variety of different pressure transmitters is offered. Upon request, a test certificate according DIN ISO 9001:2000 is supplied.



