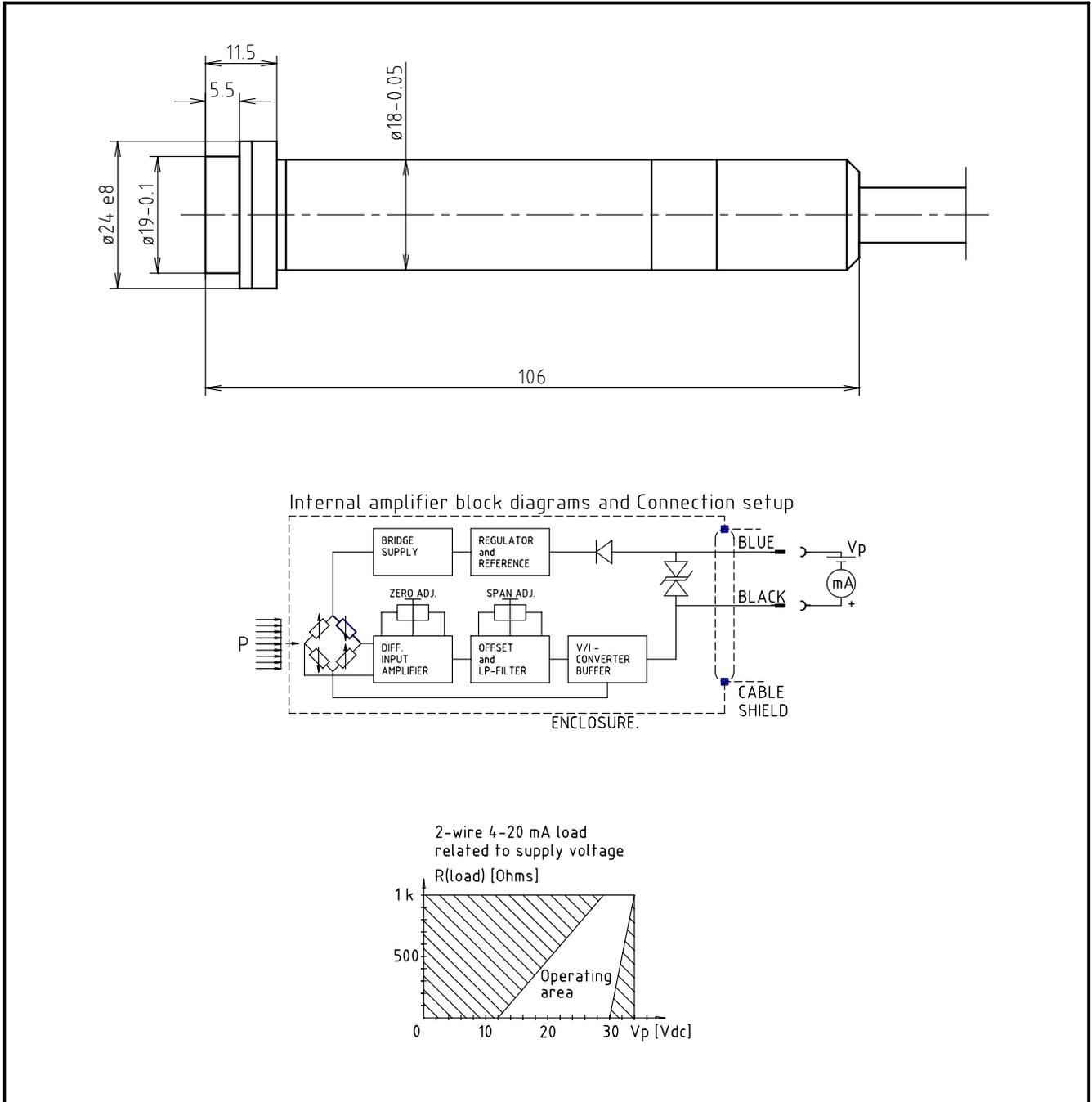


PRESSURE TRANSMITTER PTIP (submersible)



DESCRIPTION

The sensing element of the pressure transmitter is a diaphragm machined out of Titanium Grade 5. On the inside of the diaphragm is mounted a strain gauge, which converts the pressure generated deformation to a change in resistance. Titanium Grade 5 is characterized by excellent corrosion data, very high 0.1 % proof stress of 85 kp/mm², very little hysteresis and excellent longterm stability. The built-in amplifier supplies the bridge, amplifies the output voltage and converts it into a current. The circuit is protected against transients at the supply voltage line and the output signal line. The amplifier is mounted in a titanium tube which is laserwelded in both ends to respectively the diaphragm part and the cable part.

SPECIFICATIONS

Pressure range	10, 20, 50, 100, 200, 300, 400, 500 or 1000 bar, sealed reference
Pressure limits	4 times rated pressure without damage
Material	In contact with pressure media: Titanium grade 5 Housing: Titanium grade 2
Power requirement	12-30 V _{DC} , 4 mA _{DC} + output signal current
Supply voltage effect	< 0.03 %/V
Output signals and load	4-20 mA _{DC} , 2-wire, (R _L see diagram)
Non-linearity incl. hysteresis	< 0.5 % of FSO from best fit straight line
Response time	6 ms within 2 % of final value
Temperature range	-25 °C to +85 °C
Temperature coefficient of zeropoint	< 0.02 %/°C of FSO
Temperature coefficient of span	< 0.02 %/°C of signal output
Environmental conditions	
- vibration	According to IEC 68-2-6 (10-150 Hz, 0.35 mm/5g)
- shock	According to IEC 68-2-27 (1000 g half sine, 1 ms)
- electromagnetic immunity	According to EN 50082-2 (generic industrial standard)
- electromagnetic emission	According to EN 50081-2 (generic industrial standard)
Cable	Outer insulation: PUR (black), ø10 mm. Wires: 5 * 0.5 mm ² with common shield (only 2 used). 1 pc. ø2.5 mm polyamid capillary tube (for helium test) 2 pcs. supporting wires.
Transducer weight	100 g without cable
Protection class	IP68 Submersible to 50 bar (500 mWC)

ORDERING INFORMATION

PTIP x L/x

— Cable length in meters

— Pressure range in bars