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PRESSURE TRANSDUCER Model CL1

Description:

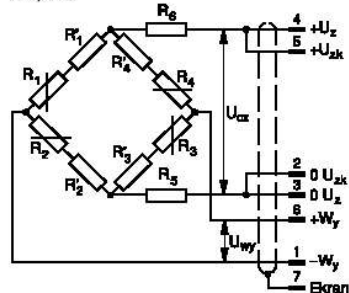
The pressure transducer CL1 incorporates a flat metal diaphragm with a strain gauge full bridge circuit. The full bridge is resistance balanced and temperature compensated in the temperature range specified below. Two different sensitivities are currently available: 1 mV/V and 2 mV/V. In addition to the straight forward strain gauge bridge configuration, the transducer is also available with an appropriate amplifier. In this configuration the transducer features either an output voltage signal (0 to 1 V, 0 to 5 V, or 0 to 10 V), or an output current signal (4 to 20 mA, or 0 to 20 mA). The amplifier comes as an external instrument (Type CL10) in a splash water-proof cabinet.



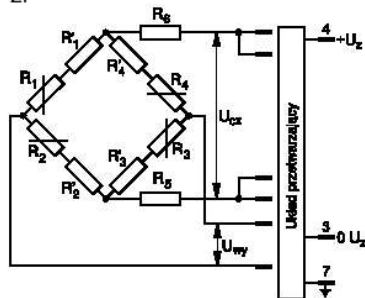
Technical Specifications:

Range in bar:	1 bar; 2,4 bar; 6,4 bar; 10 bar; 24 bar; 64 bar; 100 bar; 240 bar; 640 bar
Configuration:	Strain gauge bridge Circuit R1 or R2; current output 2I4, 3I0, 3I4, 4I0 or 4I4; voltage output 3U1, 3U5, 3U10, 4U1, 4U5 or 4U10
Output Signal:	1 mV/V or 2 mV/V; 0-20 mA or 4-20 mA; 0-1 V, 0-5 V or 0-10 V
Accuracy Class:	0,2 or 0,5
Linearity:	0,1 – 0, 2 % (depending on range and sensitivity)
Hysteresis:	0,05 – 0,15 % (depending on range and sensitivity)
Overload Range:	50 % for 2 mV/V output signal; 100 % for 1 mV/V output signal
Strain Gauge Resistance:	350 Ω
Bridge Impedance:	350 Ω
Bridge Excitation Voltage:	10 V for R1 and R2; 12 VDC or 24 VDC for 3I, 3U, 4I and 4U; 12 to 36 VDC for 2I4
Operating Temperature Range:	5 °C to 50 °C
Temp. Range of Pressure Medium:	5 °C to 50 °C
Connector:	Lumberger (Z1) or O-ring-gland sealing (O1)
Cable Length:	0,5 m (Standard)
Protection Standard:	IP40 or IP68
Spring Element Material	Steel or aluminium (depending on range)

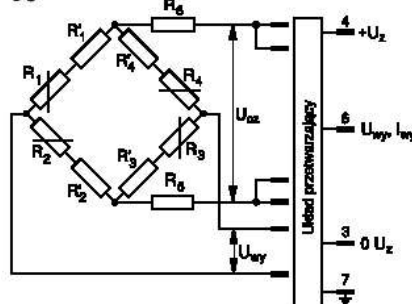
R1, R2

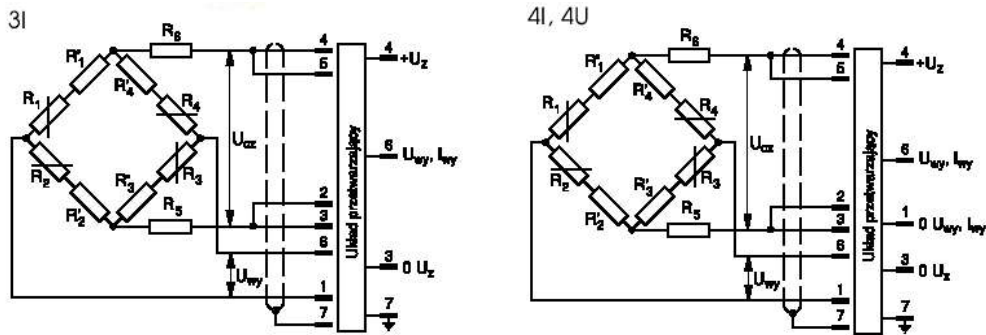


2I



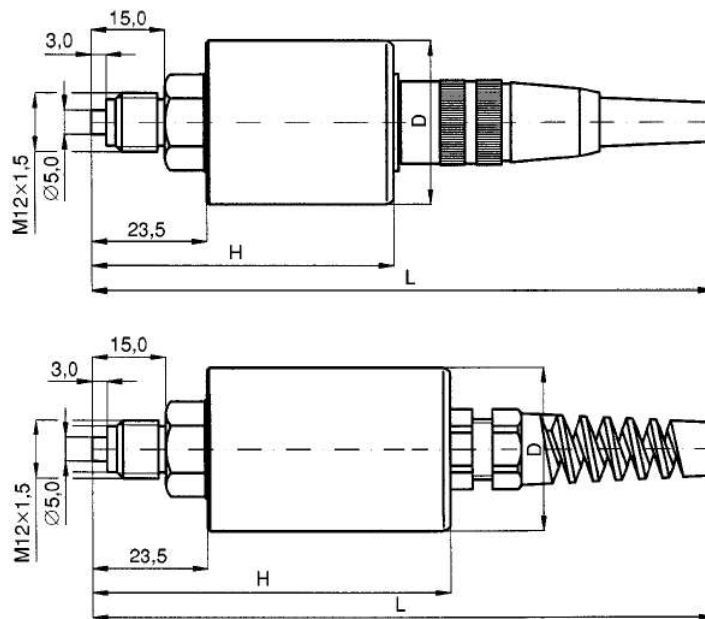
3U





Circuit schematics of pressure transducer configurations

Dimensions:

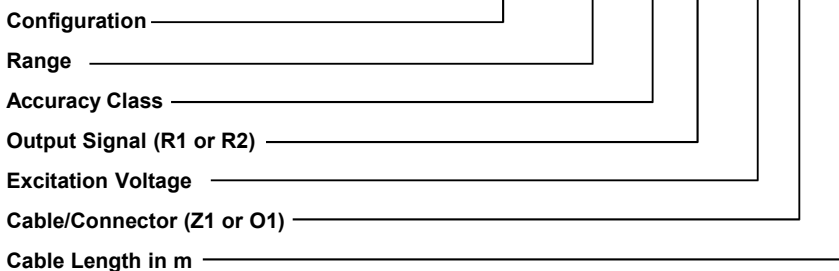


Dimensions:

Configurations	a			b		
	D	H	L	D	H	L
Configuration R1, R2	52 mm	92 mm	165 mm	31 mm	62 mm	127 mm
Configuration 2I, 3U	52 mm	92 mm	165 mm	31 mm	74 mm	127 mm

Ordering Designation:

CL1a-100 bar-0,2-R1-10-Z1-1



This ordering example covers a transducer in configuration a with 100 bar range, accuracy class 0,2, output signal 1 mV/V, excitation voltage 10 V, Lumberger connector, and cable length 1 m (in the order of the above designation).