

SUCO PRESSURE TRANSMITTER FOR LOW PRESSURES, VACUUM APPLICATION



SW 22

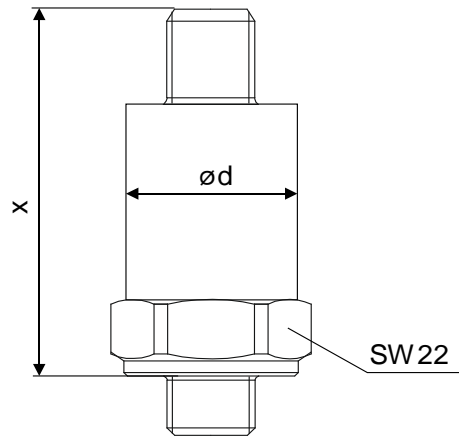
piezo-resistive sensor in the measuring
cell filled with oil

Long life time even under high pressure change rates
High overpressure protection (up to 3x)
suitable for hydrogen and oxygen applications
high level of accuracy, repeatability and long-term



Type	0645			0650			0660	
Output signal	0,5-4,5 V ratiometric			0-10 V (3-wire)			4-20 mA (2-wire)	
Supply voltage U_B	5 VDC \pm 10% max.6,5 VDC			12-32 VDC			10-32 VDC	
Permissible loadapparatus ohmic resistance	$\geq 4,7\Omega$			$\geq 4,7\Omega$			$\leq (U_b - 10V) / 20 \text{ mA}$	
Idle power consumption	approx. 5 mA			approx. 5 mA			-	
Standard pressure ranges	-1-0 bar	0-1 bar	0-4 bar	0-6 bar	0-10 bar	0-16 bar	0-40 bar	0-100 bar
Overpressure protection	3 bar	3 bar	8 bar	12 bar	20 bar	32 bar	80 bar	200 bar
Burst pressure	10 bar	10 bar	20 bar	30 bar	35 bar	40 bar	100 bar	250 bar
	Static pressure, dynamic pressure 30 to 50 % lower. Values refer to the hydraulic or pneumatic part of the pressure transmitter.							
Mechanical life expectancy	10 Mio pulsations at rise rates to 1 bar/ms at standard pressure ranges							
Pressure rise	$\leq 1 \text{ bar} / \text{ms}$							
Accuracy	$\pm 0,5 \%$ full scale (FS) at room temperature, $\pm 0,25\%$ BFSL							
Long term stability	$< \pm 0,2\%$ full scale (FS) p.a.							
Repeatability	$\pm 0,1\%$ full scale (FS) (within the compensated temperature range)							
Temperature error	$\pm 0,02\%$ Endwert (FS) / °C, -1...1 bar 0,03% (within the compensated temperature range)							
Comp. temperature range	-10°C...+70°C (14°F...+158°F)							
Temperature range ambient	-40°C...+100°C (-40°F...+212°F)							
Temperature range media	with NBR-seal: -40°C...+100°C (-40°F...+212°F) with FKM-seal: -20°C...+125°C (-4°F...+257°F)							
Case material	Stainless steel 1.4305 / AISI 303							
Thread	G ¼ DIN 3852							
Measuring cell material	Stainless steel 1.4404 / AISI 316L							
Seal material	NBR or FKM							
Standard sensor oil	Fluorine oil (not suitable for food applications)							
Insulation resistance	$> 100 \text{ M}\Omega$ (500 VDC, $R_i > 42 \Omega$)							
Response time 10-90 %	$\leq 2 \text{ ms}$							
Vibration resistance	20 g; at 4...2000 Hz sine wave; DIN EN 60068-2-6							
Shock resistance	Halfe sine wave 500 m/s ² , 11 ms; DIN EN 60068-2-27							
Protection class	refer to the electrical connetions							
Electromagnetic compatibility	EMV 2014/30/EU, EN 61000-6-2:2005, EN 61000-6-3:2007							
Max. length of connect. cable	30 m							
Protection	Protection against reverse polarity, short-circuit and overvoltage built-in							
Weight	approx. 80 g (DIN EN 175301 approx. 110 g, cable output approx. 135 g)							

Dimensions and electrical connectors



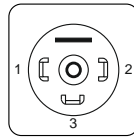
Coupler socket DIN EN 175301-803-A

IP65

x ~ 60 mm without coupler socket

x ~ 76 mm with coupler socket

d ~ 30 mm



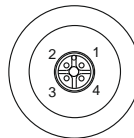
PIN	0645+0650	0660
1	U _{v+}	U _{v+}
2	Gnd	I _{out}
3	U _{out}	nc

M12-DIN EN 61076-2-101 A

IP67

x ~ 54 mm

d ~ 22 mm



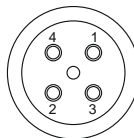
PIN	0645+0650	0660
1	U _{v+}	U _{v+}
2	U _{out}	nc
3	Gnd	I _{out}
4	nc	nc

Bayonet ISO 15170-A1-4.1

IP67, IP6K9K

x ~ 65 mm

d ~ 27 mm



PIN	0645+0650	0660
1	U _{v+}	U _{v+}
2	Gnd	nc
3	U _{out}	I _{out}
4	nc	nc

Cable connection

IP67

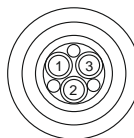
x ~ 44 mm

+20 mm Bend relief

Cable length ~ 2m

d ~ 22 mm

- 1 red
- 2 white
- 3 black



PIN	0645+0650	0660
1	U _{v+}	U _{v+}
2	U _{out}	nc
3	Gnd	I _{out}