

SUBMERSIBLE PRESSURE TRANSMITTER

Swiss based Trafag is a leading international supplier of high quality sensors and monitoring instruments for measurement of pressure and temperature.



Applications

- Shipbuilding
- Process technology
- Water treatment

Features

- Pressure ranges from 100 mbar
- No media contacting O-rings
- Cable PUR or FEP
- Option: Chemical resistant material, e.g. titanium
- Option: Lightning protection (IEC 61000-4-5)

Technical Data

Measuring principle	Piezoresistive	Media temperature	-5°C ... +50°C
Measuring range	0 ... 0.1 to 0 ... 25 bar	Ambient temperature	-5°C ... +50°C
Output signal	4 ... 20 mA 0 ... 10 VDC	Approval / conformity	GL, KRS

01/2020

Data sheet H72228I

Subject to change

Ordering information/type code

			8838 .	XX	XX	XX	XX	XX	XX
Measuring range ¹⁾	Pressure measurement range [bar]	Over pressure [bar]	Burst pressure [bar]						
	0 ... 0.1	3	200	66					
	0 ... 0.16	3	200	67					
	0 ... 0.2	3	200	68					
	0 ... 0.4	3	200	69					
	0 ... 0.6	3	200	70					
	0 ... 1.0	3	200	71					
	0 ... 1.6	4.8	200	73					
	0 ... 2.5	7.5	200	75					
	0 ... 4	12	200	76					
	0 ... 6	18	200	77					
	0 ... 10	30	200	78					
	0 ... 16	48	200	79					
	0 ... 25	75	200	80					
Sensor	Type 05, accuracy NLH: $\pm 0.5\%$ FS ²⁾			P5					
	Type 02, accuracy NLH: $\pm 0.25\%$ FS ²⁾			P2					
	Type 01, accuracy NLH: $\pm 0.1\%$ FS ²⁾			P1					
Pressure connection	Open				40				
	Closed				41				
	G1/4" male				15				
Electrical Connection	Cable PUR ³⁾					22			
	Cable FEP ³⁾					32			
	Cable PE ³⁾					29			
Output	4 ... 20 mA						19		
	4 ... 20 mA with lightning protection (Surge)						09		
	0 ... 10 VDC						17		
Accessories	Detachable cable ⁴⁾							37	
	Special oil filling Aseol ⁴⁾							94	
	Special oil filling Halocarbon ⁴⁾							95	
	Electronics packed in gel ⁴⁾							96	
	Application for seawater ⁴⁾							97	

¹⁾ Customized pressure ranges upon request

²⁾ Accuracy NLH see table

³⁾ Please specify the cable length when ordering

⁴⁾ Please specify the measuring medium when ordering

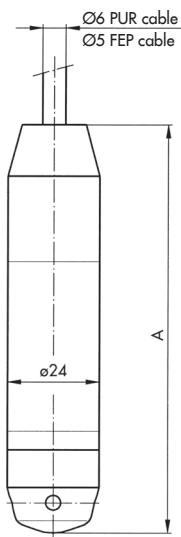
Specifications

Electrical Data	Output / supply voltage	4...20 mA: 9...33 VDC 0...10 VDC: 15...30 VDC
	Load	4 ... 20 mA: $R_L \leq (U_s - 9V)/20 \text{ mA}$ 0 ... 10 VDC: $R_L > 10 \text{ k}\Omega$
	Rise time	Typ. 1 ms / 10 ... 90 % nominal pressure
Environmental conditions	Media temperature	-5°C ... +50°C
	Ambient temperature	-5°C ... +50°C
	Protection	Min. IP68
	Humidity	Max. 95 % relative
	Vibration	6 g (25...2000 Hz)
	Shock	50 g / 11 ms
EMC Protection	Emission	EN/IEC 61000-6-3
	Immunity	EN/IEC 61000-6-2
Mechanical Data	Sensor (wetted parts)	1.4435 (AISI316L) or titanium
	Pressure connection (wetted parts)	1.4435 (AISI316L) or titanium
	Housing	1.4435 (AISI316L) or titanium
	Sealing	FKM
	Male electrical plug	See ordering information
	Weight	~ 220 g
	Mounting torque	25 Nm

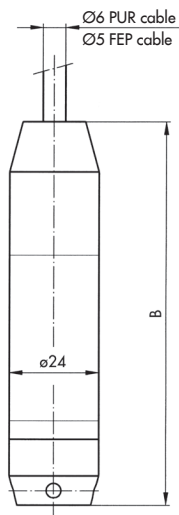
Accuracy

Range	[bar]	0.1 ... 0.5	0.5 ... 2	2 ... 25
NLH (BSL through 0)				
P5		±0.5	±0.5	±0.5
P2	[% FS]	±0.25	±0.25	±0.25
P1			±0.1	±0.1
Temperature coefficient				
Zero point -5 ... +50°C	[% FS/K]	±0.06	±0.03	±0.015
Span -5 ... +50°C		±0.015	±0.015	±0.015
Long term drift (1 year)	[mbar]	< 4	< 4	< 4

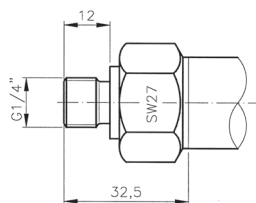
Dimensions



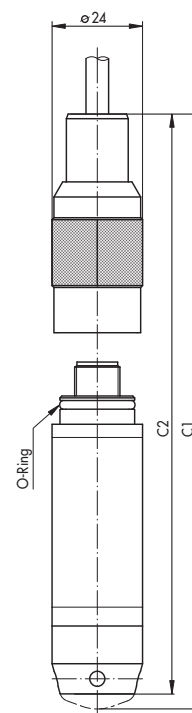
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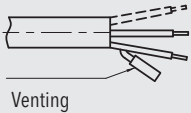
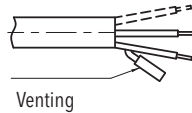
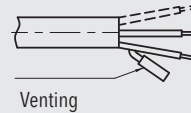
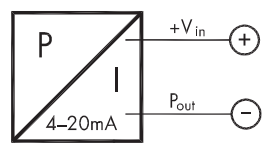
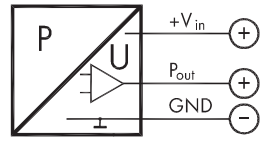
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	A [mm]	B [mm]	C1 [mm]	C2 [mm]
Standard	108	104	135	131
With lightning protection	157	153	184	180

Electrical Connection

Protection / electrical connection			
Output signal	Min. IP68	Min. IP68	Min. IP68
	Cable PUR	Cable Teflon	Cable PE
	22	32	29
			
	white yellow	white yellow	white yellow
	white brown yellow	white brown yellow	white brown yellow
8838.XX.XXXX.XX.19			
8838.XX.XXXX.XX.17			

Any manipulation on the ventilation tube will result in warranty loss

Additional information

Documents

Data sheet	www.trafag.com/H72228
Instructions	www.trafag.com/
Flyer	www.trafag.com/H70681