

SUBMERSIBLE PRESSURE TRANSMITTER

Swiss based Trafag is a leading international supplier of high quality sensors and monitoring instruments for measurement of pressure and temperature. The new Submersible Pressure Transmitter ECL is based on Trafag's own thick-film-on-ceramic technology. Together with the inhouse developed high performance ASIC chip electronics it ensures a high level of accuracy over a wide temperature range.



OEM-version

Applications

- Process technology
- Water treatment (wastewater, grey-water, drinking water)
- Seawater
- Level of oils and fuels

Features

- Suitable for thick and viscous media
- Different materials for optimum media compatibility
- Lightning protection integrated

Technical Data

Measuring principle	Thick film on ceramic	Accuracy @ 25°C typ.	± 0.3 % FS typ. Range 0 ... 0.1 to 0 ... 0.2 bar: ± 0.5 % FS typ.
Measuring range	0 ... 0.1 to 0 ... 2.0 bar 0 ... 1.5 to 0 ... 30 psi	Media temperature	-10°C ... +70°C
Output signal	4 ... 20 mA	Ambient temperature	-10°C ... +70°C

01/2016

Data sheet H72336a

Subject to change

Ordering information/type code

				8439 . XX				XX	XX	XX	XX	XX	
Measuring range ¹⁾	Pressure measurement range [bar]	Over pressure [bar]	Burst pressure [bar]		Pressure measurement range [psi]	Over pressure [psi]	Burst pressure [psi]						
	0 ... 0.1	1.2	3	66	0 ... 1.5	15	45	F6					
	0 ... 0.16	1.2	3	67	0 ... 2	15	45	F7					
	0 ... 0.2	1.2	3	68	0 ... 2.5	15	45	F8					
	0 ... 0.4	1.2	3	69	0 ... 5	15	45	F9					
	0 ... 0.5	1.2	3	64	0 ... 6.5	15	45	F4					
	0 ... 0.6	1.2	3	70	0 ... 7.5	15	45	G0					
	0 ... 1.0	2	4	71	0 ... 15	30	55	G1					
	0 ... 1.6	3.2	5	73	0 ... 20	45	70	G3					
	0 ... 2.0	3.2	5	72	0 ... 30	45	70	G2					
Sensor	Relative pressure							23					
Housing	Housing AISI316L, standard version ²⁾							58					
	Housing 1.4462, standard version ^{2) 3)}							55					
	Housing AISI316L, OEM-version ²⁾							56					
	Housing 1.4462, OEM-version ^{2) 3)}							50					
Electrical connection	Cable PUR, Ø 6 mm, L = 5 m			21	Cable Radox, Ø 6 mm, L = 20 m			34					
	Cable PUR, Ø 6 mm, L = 10 m			22	Cable Radox, Ø 6 mm, customized (L = max. 50m)			30					
	Cable PUR, Ø 6 mm, L = 15 m			23	Cable PE, Ø 6 mm, L = 5 m			41					
	Cable PUR, Ø 6 mm, L = 20 m			24	Cable PE, Ø 6 mm, L = 10 m			42					
	Cable PUR, Ø 6 mm, customized (L = max. 50m)			20	Cable PE, Ø 6 mm, L = 15 m			43					
	Cable Radox, Ø 6 mm, L = 5 m			31	Cable PE, Ø 6 mm, L = 20 m			44					
	Cable Radox, Ø 6 mm, L = 10 m			32	Cable PE, Ø 6 mm, customized (L = max. 50m)			40					
	Cable Radox, Ø 6 mm, L = 15 m			33									
	Output	4 ... 20 mA							19				
	Accessories	Seal FKM / FPM / Viton							61				
Seal EPDM / TPE							63						

¹⁾ Extended overpressure as well as customized pressure ranges upon request

²⁾ See "Dimensions"

³⁾ Upon request

Type	Type code	Housing	Cable material	Seal	Typical applications
Standard ¹⁾ OEM ¹⁾	8439.XX.23.58.2X.19.61.XX 8439.XX.23.56.2X.19.61.XX	AISI316L	PUR	FKM / Viton	General applications
Standard OEM	8439.XX.23.58.3X.19.61.XX 8439.XX.23.56.3X.19.61.XX	AISI316L	Radox	FKM / Viton	Oils and fuels
Standard OEM	8439.XX.23.58.4X.19.63.XX 8439.XX.23.56.4X.19.63.XX	AISI316L	PE	EPDM / TPE	Wastewater, grey-water, drinking water
Standard OEM	8439.XX.23.55.4X.19.63.XX 8439.XX.23.50.4X.19.63.XX	1.4462	PE	EPDM / TPE	Seawater, Saline water
Standard OEM	8439.XX.23.55.3X.19.63.XX 8439.XX.23.50.3X.19.63.XX	1.4462	Radox	EPDM / TPE	Marine applications

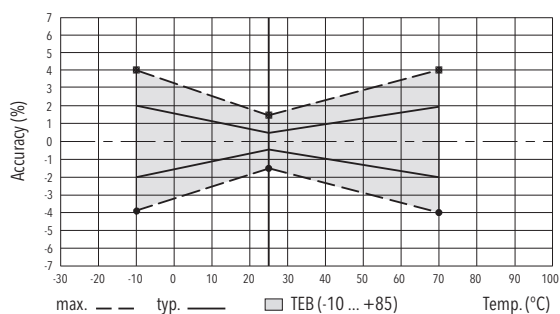
Non-standard build-up combinations may be selected, whereas minimum order quantities may apply

¹⁾ Extra short lead time

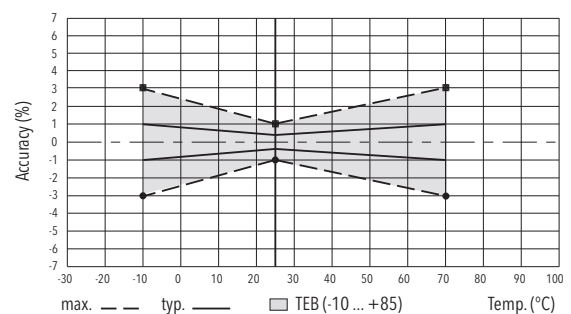
Specifications		
Electrical Data	Output / supply voltage	4...20 mA: 24 (9...32) VDC
	Rise time	Typ. 1 ms/10...90 % nominal pressure
	Switch-on-delay	100 ms
Environmental conditions	Media temperature	-10°C ... +70°C
	Ambient temperature	-10°C ... +70°C
	Protection	IP68 (2.0 bar; 20m)
	Vibration	6g (25...2000 Hz)
	Shock	50g/ 8 ms
EMC Protection	Emission	EN/IEC 61000-6-3 / GL 2012, IV, Part 7
	Immunity	EN/IEC 61000-6-2 / GL 2012, IV, Part 7
Mechanical Data	Sensor	Ceramic, Al ₂ O ₃ (96%)
	Housing / pressure connection	1.4404/1.4435 (AISI316L); 1.4462
	Sealing	FKM / FPM / Viton / EPDM / TPE
	Weight	~ 200 g (without cable) / OEM ~ 150 g

Accuracy			
		Measuring accuracy 0.3 % Measuring ranges ≥ 0.3 bar	Measuring accuracy 0.5 % Measuring ranges < 0.3 bar
TEB @ -10...+70°C	[% FS typ.]	± 1.0	± 2.0
Accuracy @ +25°C	[% FS typ.]	± 0.3	± 0.5
NLH @ +25°C (BSL)	[% FS typ.]	± 0.2	± 0.3
TC zero point and span	[% FS/K typ.]	± 0.02	± 0.02
Long term stability 1 year @ +25°C	[% FS typ.]	± 0.2	± 0.2

Measuring accuracy 0.5 %

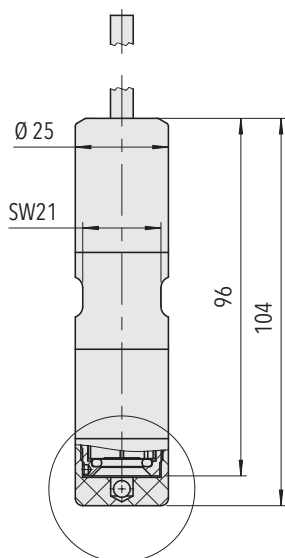


Measuring accuracy 0.3 %

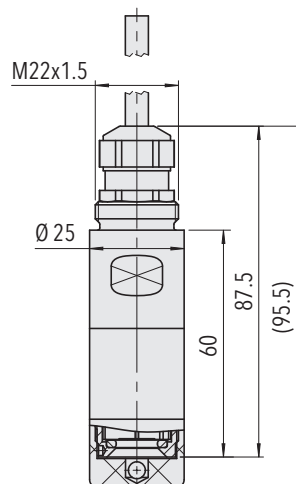


Additional information		
Documents	Data sheet	www.trafag.com/H72336
	Instructions	www.trafag.com/H73336
	Flyer	www.trafag.com/H70690

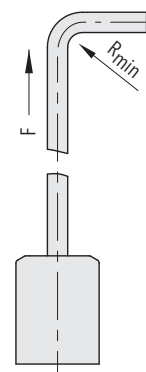
Dimensions



8439.XX.XX58/55.XX.XX.XX
Standard version

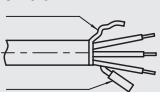
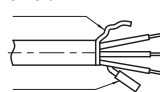
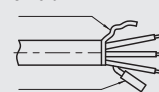
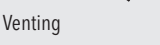
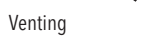
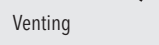
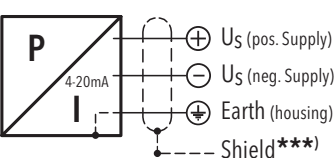


8439.XX.XX56/50.XX.XX.XX
OEM-version



F = max. 12 kg (120 N)

Electrical connection

				Protection / electrical connection		
				IP68 (25 bar; 250m)	IP68 (25 bar; 250m)	IP68 (25 bar; 250m)
				Cable PUR Ø 6 mm (5x0.22mm ²) 2X	Cable Radox Ø 6 mm (5x0.22mm ²) 3X	Cable PE Ø 6 mm (5x0.22mm ²) 4X
				Shield 	Shield 	Shield 
				Venting 	Venting 	Venting 
Output signal				white brown yellow (green = not connected) (red = not connected)	white brown yellow (green = not connected) (red = not connected)	white brown yellow (green = not connected) (red = not connected)
		8439.XX.XXXX.XX.19				
Minimum cable bending radius R _{min}				40 mm	60 mm	30 mm

Any manipulation on the ventilation tube will result in warranty loss

***) For all cable versions