

INDUSTRIAL PRESSURE TRANSMITTER

Swiss based Trafag is a leading international supplier of high quality sensors and monitoring instruments for measurement of pressure and temperature. The economical pressure transmitter ECT 8472 is based on the tried and true ECT line of transmitters. The wide media temperature range from -25 to 125°C in combination with a comprehensive set of features and options makes the ECT 8472 pressure transmitter a versatile solution suitable for most industrial applications.



Applications

- Machine tools
- Hydraulics
- Water treatment

Features

- Economical
- Good media compatibility
- Relative or absolute pressure measurement
- Titanium version optional

Technical Data

Measuring principle	Thick film on ceramic	Accuracy @ 25°C typ.	± 0.5 % FS typ.
Measuring range	0 ... 1 to 0 ... 400 bar 0 ... 15 to 0 ... 5000 psi	Media temperature	-25°C ... +125°C 400 bar/5000 psi: -10°C ... +125°C
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiom.	Ambient temperature	-25°C ... +85°C (Cable PVC 22: -5°C ... +60°C)

04/2016

Data sheet H72324u

Subject to change

Ordering information/type code

				8472 . XX	XX	XX	XX	XX	XX
Measuring range ¹⁾	Pressure measurement range [bar]	Over pressure [bar]	Burst pressure [bar]						
	0 ... 1.0	2	3	71	0 ... 15	30	40	G1	
	0 ... 1.6	3.2	4.8	73	0 ... 20	45	70	G3	
	0 ... 2.5	5	7.5	75	0 ... 30	60	90	G5	
	0 ... 4	8	12	76	0 ... 50	100	150	G6	
	0 ... 6	12	15	77	0 ... 100	200	250	G7	
	0 ... 10	20	25	78	0 ... 150	300	375	G8	
	0 ... 16	32	40	79	0 ... 250	500	625	G9	
	0 ... 25	50	75	80	0 ... 400	800	1200	H0	
	0 ... 40	80	100	81	0 ... 500	1000	1250	H1	
	0 ... 60	120	180	82	0 ... 1000	2000	3000	H2	
	0 ... 100	200	300	83	0 ... 1500	3000	4500	H3	
	0 ... 160	320	480	85	0 ... 2000	4000	6000	H5	
	0 ... 250	500	750	74	0 ... 3000	6000	9000	G4	
	0 ... 400 ²⁾	800	1000	84	0 ... 5000 ²⁾	10000	12500	H4	
	Sensor	Relative pressure, 1.4305			57	Absolute pressure, 1.4305 ³⁾			87
Relative pressure, 1.4404/1.4435 ⁴⁾			59	Absolute pressure, 1.4404/1.4435 ^{3) 4)}			89		
Relative pressure, 1.4462 ⁴⁾			52	Absolute pressure, 1.4462 ^{3) 4)}			82		
Relative pressure, Titanium Grade 5 ⁴⁾			53	Absolute pressure, Titanium Grade 5 ^{3) 4)}			83		
Pressure connection	G1/4" female								10
	G1/4" male								17
	G1/2" male ⁴⁾								21
	1/4"NPT male ⁴⁾								30
	G3/4" frontal membrane, max. nominal pressure 60 bar ^{4) 7)}								52
Electrical connection	Male electrical plug EN 175301-803-A, Mat. PA								05
	Male electrical plug M12x1, 5-pole, Mat. PA								35
	Male electrical plug Packard Metri Pack								51
	Male electrical plug industrial standard (contact distance 9.4mm) Mat. PBT								01
	Cable IP67, Mat. PVC (cable gland PA6-3), -5°C ... +60°C ^{5) 6)}								22
	Cable IP68, max. 3m, medium +10°C...+35°C, Pmax. 1 bar rel./abs.								68
Output	Signal output	Load resistance	I (supply)	U (supply)					
	4 ... 20 mA	(U _{supply} -9V) / 20mA		9 ... 30 VDC					
	0 ... 5 VDC	> 2.5 kΩ	< 10 mA	10 ... 30 VDC					
	1 ... 6 VDC	> 5.0 kΩ	< 10 mA	10 ... 30 VDC					
	0 ... 10 VDC	> 5.0 kΩ	< 10 mA	15 ... 30 VDC					
	0.5 ... 4.5 VDC ratiometric	> 5.0 kΩ	< 10 mA	5 VDC ± 0.25 VDC					

Accessories		
O-Ring FKM (-20°C ... +125°C)		61
O-Ring CR ≤ 60 bar (-25°C ... +100°C) ⁸⁾		62
O-Ring EPDM (-25°C ... +125°C)		63
Pressure peak damping element ø 1.0 mm (for pressure connections 17 and 30)		40
Pressure peak damping element ø 0.3 mm (for pressure connections 17 and 30)		43
Pressure peak damping element ø 0.4 mm (for pressure connections 17 and 30)		44
Pressure peak damping element ø 0.5 mm (for pressure connections 17 and 30)		45
Female electrical connector EN 175301-803-A (DIN 43650-A)		58
Female electrical plug M12x1, 5-pole		33
Female electrical connector industrial standard		34
Special electrical connection: Pin 1 + , Pin 2 - (Only for output 4...20mA and male electrical plug EN175301-803-A / DIN43650-A)		92
Special electrical connection: Pin 1 out , Pin 2 - , Pin 3 + (Only for output 0...5 VDC, 1...6 VDC, 0...10 VDC, 0.5...4.5 VDC and male electrical plug EN175301-803-A / DIN43650-A)		98
Special electrical connection: Pin 1 + , Pin 2 - , Pin 3 out (Only for output 0...5 VDC, 1...6 VDC, 0...10 VDC, 0.5...4.5 VDC and male electrical plug EN175301-803-A / DIN43650-A)		97
Special electrical connection: Pin 1 + , Pin 2 - (Only for male electrical plug Packard Metri Pack 3-pol.)		99
Cable length 1.5 m		1M
Cable length 3.0 m		3M
Cable length 5.0 m		5M

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

²⁾ Media -10°C ... +125°C

³⁾ Absolute ranges max. 40 bar

⁴⁾ Please ask us

⁵⁾ Cable length see accessories

⁶⁾ More materials and cables with venting tubes for low pressure ranges upon request

⁷⁾ Not for sensors 57 and 87, only for pressure ranges ≤ 10 bar or 150 psi

⁸⁾ Only for pressure connections 10 and 30



Identical construction for refrigeration: Data sheet No. H72323

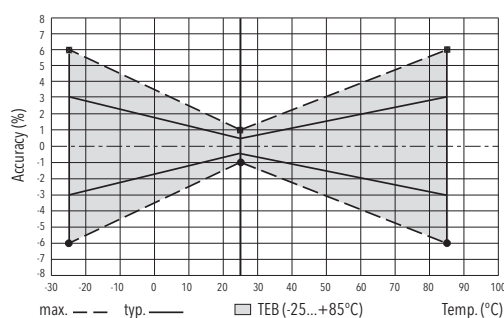
Standard products (extra short lead time)

Product No.	Type Code	Pressure range [bar]	Over pressure max. [bar]	Signal output	Supply [VDC]
ECT1.0A	8472 71 5717 05 0000 0000 19 58 61	0 ... 1	3.2	4 ... 20 mA	9 ... 30
ECT2.5A	8472 75 5717 05 0000 0000 19 58 61	0 ... 2.5	5	4 ... 20 mA	9 ... 30
ECT6.0A	8472 77 5717 05 0000 0000 19 58 61	0 ... 6	12	4 ... 20 mA	9 ... 30
ECT10.0A	8472 78 5717 05 0000 0000 19 58 61	0 ... 10	20	4 ... 20 mA	9 ... 30
ECT16.0A	8472 79 5717 05 0000 0000 19 58 61	0 ... 16	32	4 ... 20 mA	9 ... 30
ECT25.0A	8472 80 5717 05 0000 0000 19 58 61	0 ... 25	50	4 ... 20 mA	9 ... 30
ECT40.0A	8472 81 5717 05 0000 0000 19 58 61	0 ... 40	80	4 ... 20 mA	9 ... 30
ECT100.0A	8472 83 5717 05 0000 0000 19 58 61	0 ... 100	200	4 ... 20 mA	9 ... 30
ECT250.0A	8472 74 5717 05 0000 0000 19 58 61	0 ... 250	500	4 ... 20 mA	9 ... 30
ECT1.0V	8472 71 5717 05 0000 0000 17 58 61	0 ... 1	3.2	0 ... 10 VDC	15 ... 30
ECT2.5V	8472 75 5717 05 0000 0000 17 58 61	0 ... 2.5	5	0 ... 10 VDC	15 ... 30
ECT6.0V	8472 77 5717 05 0000 0000 17 58 61	0 ... 6	12	0 ... 10 VDC	15 ... 30
ECT10.0V	8472 78 5717 05 0000 0000 17 58 61	0 ... 10	20	0 ... 10 VDC	15 ... 30
ECT16.0V	8472 79 5717 05 0000 0000 17 58 61	0 ... 16	32	0 ... 10 VDC	15 ... 30
ECT25.0V	8472 80 5717 05 0000 0000 17 58 61	0 ... 25	50	0 ... 10 VDC	15 ... 30
ECT40.0V	8472 81 5717 05 0000 0000 17 58 61	0 ... 40	80	0 ... 10 VDC	15 ... 30
ECT100.0V	8472 83 5717 05 0000 0000 17 58 61	0 ... 100	200	0 ... 10 VDC	15 ... 30
ECT250.0V	8472 74 5717 05 0000 0000 17 58 61	0 ... 250	500	0 ... 10 VDC	15 ... 30

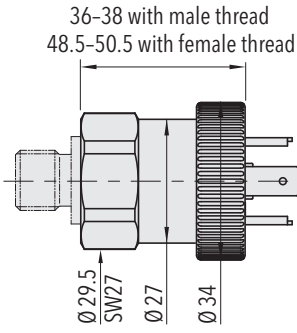
Specifications		
Accuracy	TEB typ. @ -25 ... +85°C	± 3.0 % FS typ.
	Accuracy @ 25°C typ.	± 0.5 % FS typ.
	NLH @ 25°C (BSL) typ.	± 0.2 % FS typ.
	TC zero point and span typ.	± 0.03 % FS/K typ.
	Long term stability 1 year typ.	± 0.3 % FS typ.
Electrical Data	Output / supply voltage	4 ... 20 mA: 24 (9...30) VDC 0 ... 5 VDC: 24 (10...30) VDC 1 ... 6 VDC: 24 (10...30) VDC 0 ... 10 VDC: 24 (15...30) VDC 0.5 ... 4.5 VDC ratiometric.
	Rise time	Typ. 1 ms/ 10...90 % Nominal pressure
	Switch-on-delay	Max. 1.5 s
	Inverse-polarity protection, short-circuit strenght @ 25°C during 5 min.	4...20 mA: to $U_s = 30$ VDC 0...10 VDC, 0...5 VDC, 1...6 VDC: to $U_s = 30$ VDC 0.5...4.5 VDC ratiometric: to $U_s = 5.25$ VDC
Environmental conditions	Media temperature	-25°C ... +125°C 400 bar/5000 psi: -10°C ... +125°C
	Ambient temperature	-25°C ... +85°C (Cable PVC 22: -5°C ... +60°C)
	Protection ¹⁾	Min. IP65
	Humidity	Max. 95 % relative
	Vibration	4g (10...2000 Hz)
	Shock	50g/ 8 ms
EMC Protection	Emission	EN/IEC 61000-6-3
	Immunity	EN/IEC 61000-6-2
Mechanical Data	Sensor	Ceramic, Al ₂ O ₃ (96 %)
	Housing / pressure connection	57/87: 1.4305 (AISI303) 59/89: 1.4404/1.4435 (AISI316L) 52/82: 1.4462 (AISI318LN) 53/83: Titanium Grade 5
	Sealing	FKM 70 Sh, CR, EPDM
	Male electrical plug	See ordering information
	Weight	~ 110 g
	Mounting torque	15 ... 20 Nm

¹⁾ See electrical connection

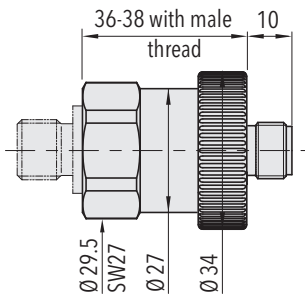
Measuring accuracy 0.5 %



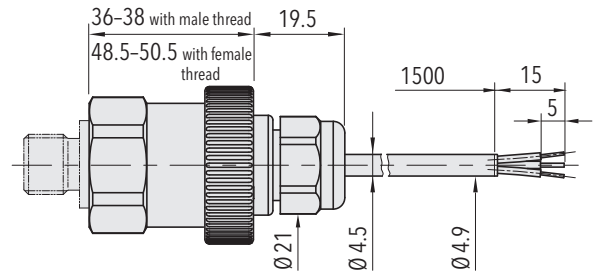
Dimensions



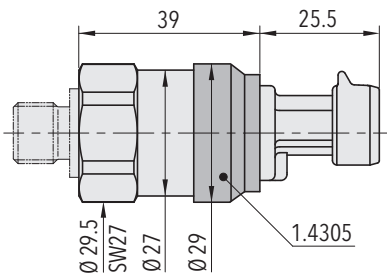
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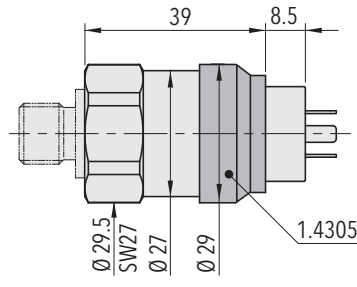
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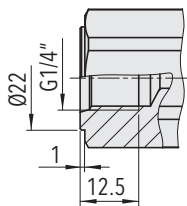
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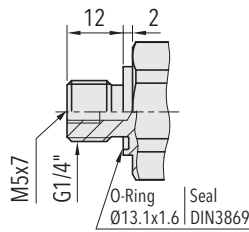
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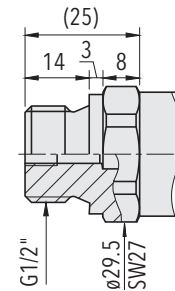
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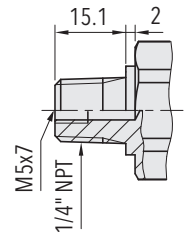
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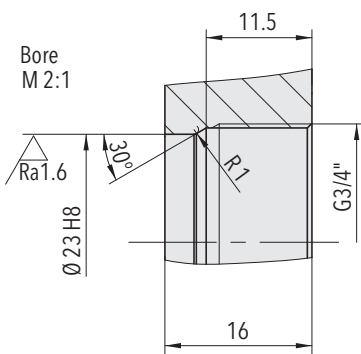
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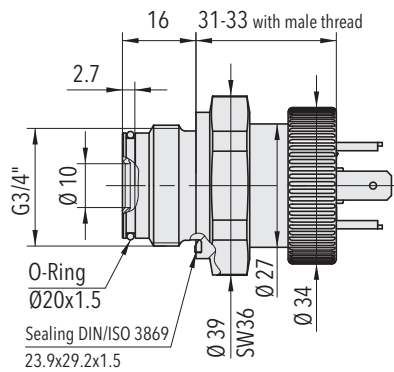
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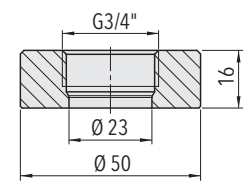
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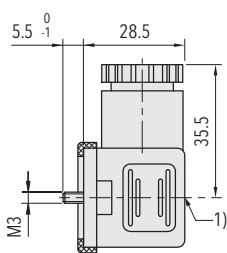
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8472.XX.XXXX.XX.XX.33

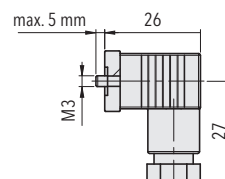
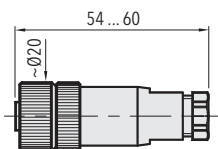


Welding flange for G3/4" frontal membrane (1.4301)
Ordering No. C27805



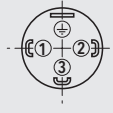
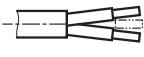
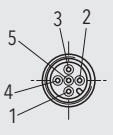
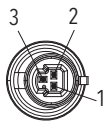
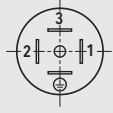
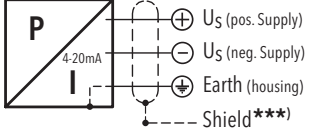
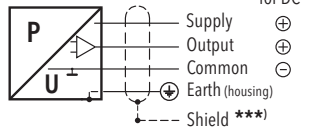
1) Tightening torque 50...60Ncm

8472.XX.XXXX.XX.XX.58



8472.XX.XXXX.XX.XX.34

Electrical Connection

		Protection / electrical connection						
		IP65 ^{*)}	IP65/IP68 max. 3m	IP67 ^{*)}	IP67 ^{*)}	IP65		
		Industrial standard EN175301-803A ^{**)}	Cable ^{**)}	M12x1 ^{**)} 5-pole	Packard Metri Pack ^{**)} 3-pole	Industrial standard Contact distance 9.4 mm ^{**)}		
		05 	22/68 	35 	51 	01 		
Output signal	 8472.XX.XXXX.XX.19	Standard	92			99		
		2 1 ⊕	1 2 ⊕	white brown ⊕	4 1 5	1 2 3	1 1 3	2 1 ⊕
	 8472.XX.XXXX.XX.14/16/17/23	Standard	98	97			99	
		2 3 1 ⊕	3 1 2 ⊕	1 3 2 ⊕	white green brown ⊕	2 4 3 5	1 3 2 3	1 2 3 ⊕

^{*)} Provided female connector is mounted according to instructions

^{**)} Ventilation via male electric plug/cable end

^{***)} Only cable versions or female plug with shield connection

Additional information

Documents

Data sheet	www.trafag.com/H72324
Instructions	www.trafag.com/H73324
Flyer	www.trafag.com/H70662