

INDUSTRIAL PRESSURE TRANSMITTER



Applications

- Machine tools
- Hydraulics
- Water treatment
- 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 ... 125°C
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiom.		

06/2014

Data sheet H72324n

Subject to change

Ordering information/type code

				8472 . 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 ... 1.0	3.2	4.8	71	0 ... 15	45	70	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			52	Absolute pressure, 1.4462 ³⁾			82	
	Relative pressure, Titanium Grade 5			53	Absolute pressure, Titanium Grade 5 ³⁾			83	
Pressure connection	G1/4" female								10
	G1/4" male								17
	G1/2" male ⁴⁾								21
	1/4"NPT male ⁴⁾								30
	G3/4" male, frontal membrane ^{4) 5)}								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) ⁶⁾								22
	Cable IP68 max. 3m, Medium +10°C...+35°C, max. 1 bar rel./abs.								68
Output	Output	Load resistance	I (supply)	U (supply)					
	4 ... 20 mA	(U _{supply} -9V) / 20mA		9 ... 30 VDC					19
	0 ... 5 VDC	> 2.5 kΩ	< 10 mA	10 ... 30 VDC					14
	1 ... 6 VDC	> 5.0 kΩ	< 10 mA	10 ... 30 VDC					16
	0 ... 10 VDC	> 5.0 kΩ	< 10 mA	15 ... 30 VDC					17
	0.5 ... 4.5 VDC	> 5.0 kΩ	< 10 mA	5 VDC ± 0.25 VDC ratiometric					23



Accessories	O-Ring FKM (-20°C ... +125°C)	61
	O-Ring CR ≤ 100 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 0.5 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...5VDC, 1...6VDC, 0...10VDC, 0.5...4.5VDC and male electrical plug EN175301-803-A / DIN43650-A)	98
	Special electrical connection: Pin 1 + , Pin 2 -, Pin 3 out (Only for output 0...5VDC, 1...6VDC, 0...10VDC, 0.5...4.5VDC 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⁾ Not for sensors 57 and 87

⁶⁾ Cable length see accessories

⁷⁾ More materials and cables with venting tubes for low pressure ranges upon request

⁸⁾ Not for pressure connection G3/4" frontal membrane



Identical construction for refrigeration: Data sheet No. H72323

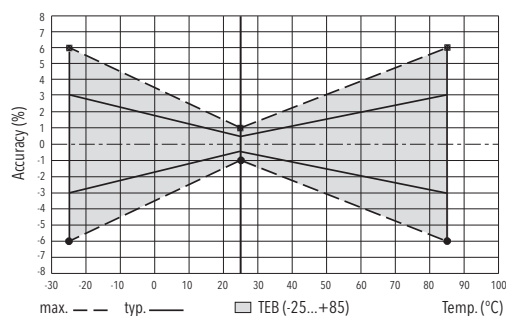
Standard products (extra short lead time)

Product No.	Type Code	Pressure range [bar]	Over pressure max. [bar]	Supply [VDC]	Accuracy @ 25°C typ. [%]
ECT1.0A	8472 71 5717 05 0000 0000 19 58 61	0...1.0	3.2	9...30	±0.5
ECT2.5A	8472 75 5717 05 0000 0000 19 58 61	0...2.5	5	9...30	±0.5
ECT6.0A	8472 77 5717 05 0000 0000 19 58 61	0...6	12	9...30	±0.5
ECT10.0A	8472 78 5717 05 0000 0000 19 58 61	0...10	20	9...30	±0.5
ECT16.0A	8472 79 5717 05 0000 0000 19 58 61	0...16	32	9...30	±0.5
ECT25.0A	8472 80 5717 05 0000 0000 19 58 61	0...25	50	9...30	±0.5
ECT40.0A	8472 81 5717 05 0000 0000 19 58 61	0...40	80	9...30	±0.5
ECT100.0A	8472 83 5717 05 0000 0000 19 58 61	0...100	200	9...30	±0.5
ECT250.0A	8472 74 5717 05 0000 0000 19 58 61	0...250	500	9...30	±0.5
ECT1.0V	8472 71 5717 05 0000 0000 17 58 61	0...1	3.2	15...30	±0.5
ECT2.5V	8472 75 5717 05 0000 0000 17 58 61	0...2.5	5	15...30	±0.5
ECT6.0V	8472 77 5717 05 0000 0000 17 58 61	0...6	12	15...30	±0.5
ECT10.0V	8472 78 5717 05 0000 0000 17 58 61	0...10	20	15...30	±0.5
ECT16.0V	8472 79 5717 05 0000 0000 17 58 61	0...16	32	15...30	±0.5
ECT25.0V	8472 80 5717 05 0000 0000 17 58 61	0...25	50	15...30	±0.5
ECT40.0V	8472 81 5717 05 0000 0000 17 58 61	0...40	80	15...30	±0.5
ECT100.0V	8472 83 5717 05 0000 0000 17 58 61	0...100	200	15...30	±0.5
ECT250.0V	8472 74 5717 05 0000 0000 17 58 61	0...250	500	15...30	±0.5

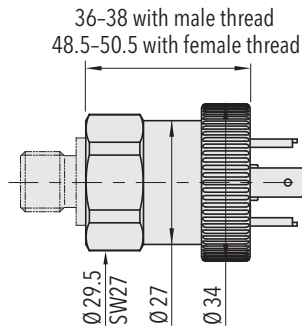
Specifications		
Accuracy	TEB typ. @ -25 ... +85°C	± 3.0 % FS typ.
	Accuracy @ 25°C typ.	± 0.5 % FS typ.
	NLH @ 25°C (BSL) typ.	± 0.2 % FS typ.
	TC zero point and span typ.	± 0.03 % FS/K typ.
	Long term stability 1 year typ.	± 0.3 % FS typ.
Electrical Data	Output / supply voltage	4 ... 20 mA: 24 (9...30) 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 ratiom.
	Rise time	typ. 1 ms/ 10...90% Nominal pressure
	Switch-on-delay	max. 1.5 s
Environmental Conditions	Media temperature	-25°C ... 125°C 400 bar/5000 psi: -10 ... 125°C
	Ambient temperature	-25°C ... 85°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⁾ Provided female connector is mounted according to instructions

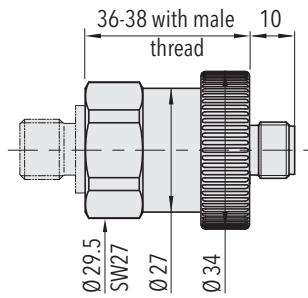
Measuring accuracy 0.5%



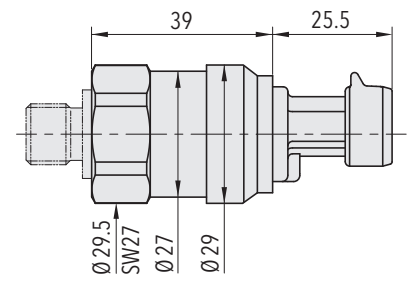
Dimensions



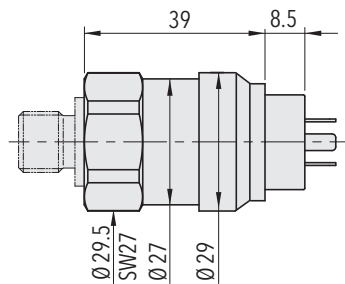
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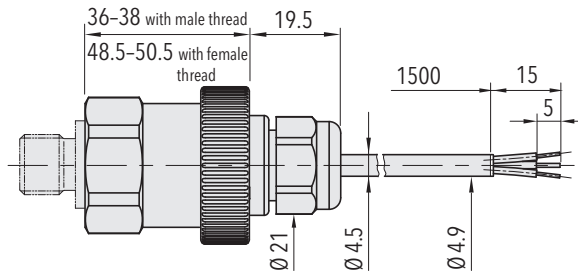
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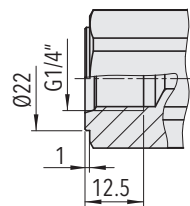
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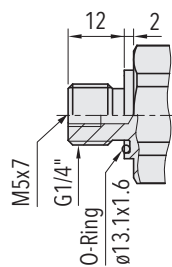
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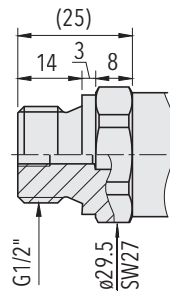
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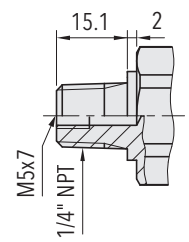
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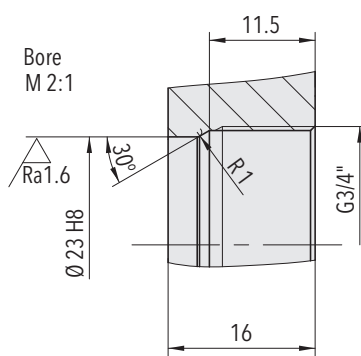
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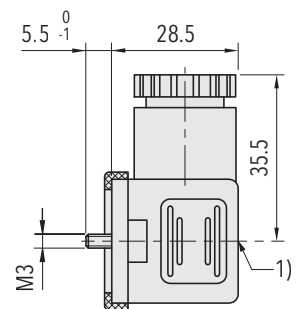
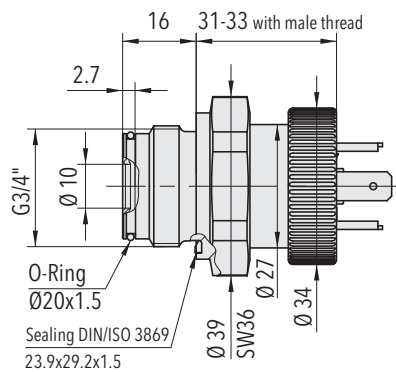
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8472.XX.XX30.XX.XX.XX

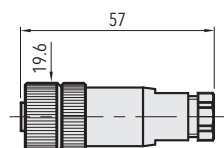


8472.XX.XX52.XX.XX.XX

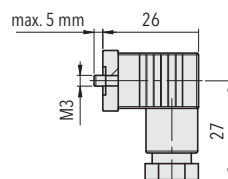


1) Tightening torque 50...60Ncm

8472.XX.XXXX.XX.XX.58



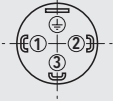
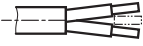
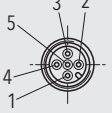
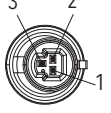
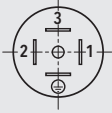
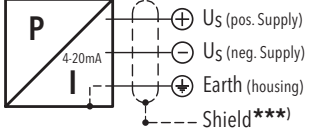
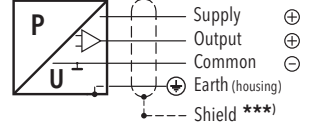
8472.XX.XXXX.XX.XX.33



8472.XX.XXXX.XX.XX.34



Electrical Connection

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

^{*)} 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