

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.



1/4" BSP standard

(5470)

1/2" BSP with adapter



Applications

- Machine tools
- Hydraulics
- Water treatment

Features

- Excellent media compatibility
- Relative or absolute pressure measurement
- Titanium version optional
- Frontal membrane 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 ... +125°C Cable PVC 22: -5°C ... +60°C Cable PUR 24: -20°C ... +70°C Cable Raychem 08: -20°C ... +100°C
NLH @ 25°C (BSL) typ.	± 0.2 % FS typ.		

Ordering information/type code

Measuring range ¹⁾	Pressure measurement range [bar]	Over pressure [bar]	Burst pressure [bar]		Pressure measurement range [psi]	Over pressure [psi]	Burst pressure [psi]		8472 .	XX	XX	XX	XX	XX
	0 ... 1.0	2	3	71	0 ... 15	30	40	G1						
	0 ... 1.6	3.2	4.8	73	0 ... 20	40	60	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 ... 200	400	600	GA						
	0 ... 25	50	75	80	0 ... 250	500	625	G9						
	0 ... 40	80	100	81	0 ... 400	800	1200	H0						
	0 ... 60	120	180	82	0 ... 500	1000	1250	H1						
	0 ... 100 ⁴⁾	200	300	83	0 ... 1000	2000	3000	H2						
	0 ... 160 ⁴⁾	320	480	85	0 ... 1500 ⁴⁾	3000	4500	H3						
	0 ... 250 ⁴⁾	500	750	74	0 ... 2000 ⁴⁾	4000	6000	H5						
	0 ... 400 ^{2) 4)}	800	1000	84	0 ... 3000 ⁴⁾	6000	9000	G4						
					0 ... 5000 ^{2) 4)}	10000	12500	H4						
	Option 5P: Fivefold overpressure													
	0 ... 2.5	12.5	18	55										
	0 ... 4	20	30	56										
	0 ... 6	30	48	57										
	0 ... 10	50	75	58										
	0 ... 16	80	120	59										
	0 ... 25	125	180	60										
	0 ... 40	200	300	61										
	0 ... 60	300	480	62										
Sensor	Relative pressure, Material pressure connection and housing: 1.4305 (AISI303)			57	Absolute pressure, Material pressure connection and housing: 1.4305 (AISI303) ³⁾			87						
	Relative pressure, Material pressure connection and housing: 1.4404/1.4435 (AISI316L) ⁴⁾			59	Absolute pressure, Material pressure connection and housing: 1.4404/1.4435 (AISI316L) ^{3) 4)}			89						
	Relative pressure, Material pressure connection and housing: 1.4462 (AISI318LN) ⁴⁾			52	Absolute pressure, Material pressure connection and housing: 1.4462 (AISI318LN) ^{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 DIN3852-A ⁴⁾													21
	G1/2" male DIN3852-E ⁴⁾													41
	G1/2" male DIN3852-E, with inner cone ^{4) 13) 15)}													59
	1/4" NPT male, ANSI B1.20.1 ⁴⁾													30
	1/8" NPT male, ANSI B1.20.1 ¹¹⁾													43
	7/16"-20UNF male, SAE4 (J1926) ⁴⁾													42
	7/16"-20UNF male, DIN3866 ³⁾													18
	7/16"-20UNF female, SAE J512 with valve opener ³⁾													24
	7/16"-20UNF female, SAE J512 without valve opener ³⁾													44
	9/16"-18UNF male, SAE6 (J1926), seal: accessory 61 ^{4) 14)}													61
	R1/4" male, DIN3858													19
Electrical connection	Male electrical connector EN 175301-803-A (DIN 43650-A), Mat. PA													05
	Male electrical connector M12x1, 5-pole, Mat. PBT													35
	Male electrical connector Packard Metri Pack, Mat. PBT													51
	Cable PUR (Screwed cable gland PA 6-3), -20°C ... +70°C ^{5) 6)}													24
	Cable PVC (Screwed cable gland PA 6-3), -5°C ... +60°C ^{5) 6) 9)}													22
	Cable Raychem (Screwed cable gland PA 6-3), -20°C ... +100°C ^{5) 6) 9)}													08

					8472 . XX	XX	XX	XX	XX	XX	
Output signal	Signal output	Load resistance	I (supply)	U (supply)							
		4 ... 20 mA	(U _{supply} -9 V) / 20 mA		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 ratiometric	≥ 5.0 kΩ	≤ 10 mA	5 VDC ± 0.25 VDC ratiom.	23						
Accessories											
	Seal FKM (-20°C ... +125°C)										61
	Seal CR ≤ 100 bar (-25°C ... +100°C) ⁸⁾										62
	Seal EPDM (-25°C ... +125°C)										63
	Pressure peak damping element ø 1.0 mm, material 1.4305 ¹⁰⁾										40
	Pressure peak damping element ø 0.4 mm, material 1.4305 (sensors 57, 87) resp. 1.4404 (sensors 52, 53, 59, 82, 83, 89) ¹⁰⁾										44
	Female electrical plug EN 175301-803-A (DIN43650-A)/NBR, -40°C ... +90°C, for cable diameter 4 ... 9 mm, flammability standard UL94-V0										46
	Female electrical plug EN 175301-803-A (DIN 43650-A)/silicone, -40°C ... +125°C, for cable diameter 4 ... 9 mm, flammability standard UL94-V0										56
	Female electrical plug EN 175301-803-A (DIN43650-A)/NBR, -40°C ... +90°C, for cable diameter 4 ... 9.5 mm, flammability standard UL94-V2										58
	Female electrical plug M12x1, 5-pole										33
	Special electrical connection: Pin 1 +, Pin 2 - (only for output signal 4 ... 20 mA and male electrical connector EN175301-803-A / DIN43650-A)										92
	Special electrical connection: Pin 1 Out, Pin 2 -, Pin 3 + (only for output 14, 16, 17, 23 and male electrical connector EN175301-803-A / DIN43650-A)										98
	Special electrical connection: Pin 1 +, Pin 2 -, Pin 3 Out (only for output signals 14, 16, 17, 23 and male electrical connector EN 175301-803-A / DIN 43650-A)										97
	Special electrical connection: Pin 1 +, Pin 3 - (only for output 4 ... 20 mA and male electrical connector Packard Metri Pack 3-poles)										E4
	Special electrical connection: Pin 1 +, Pin 2 Out, Pin 3 - (only for output signals 14, 16, 17, 23 and male electrical connector Packard Metri Pack 3-poles)										99
	Special electrical connection: Pin 1 +, Pin 3 -, Pin 5 Ground (only for output signal 4 ... 20 mA and male electrical connector 35, M12x1, 5-pole)										94
	Special electrical connection: Pin 1 Out, Pin 2 -, Pin 3 +, Pin 4 Ground (only for output signals 14, 16, 17, 23 and male electrical connector 01, industrial standard)										E3
	Cable length 1.5 m										1M
	Cable length 3.0 m										3M
	Cable length 5.0 m										5M
	Housing nut for electrical connection EN175301-803-A (DIN43650-A) secured with Loctite (max. 85°C)										L9
	Multiple packaging ¹²⁾										VM

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

²⁾ Media -10°C ... +125°C

³⁾ max. 40 bar

⁴⁾ Upon request

⁵⁾ Cable length see accessories (max. length 50 m, in 5-meter sections)

⁶⁾ Protection IP68: Immersion depth max. 3 m, Media +10°C ... +35°C

⁸⁾ Only for pressure connections 10, 30, 43, 18, 24, 44, 19

⁹⁾ Pressure ranges > 16 bar (Pressure ranges ≤ 16 bar upon request)

¹⁰⁾ Not for pressure connections 10, 18, 24, 44

¹¹⁾ Only for sensors 59 and 89 and electrical connections 35, 51 (others on request)

¹²⁾ The order quantity must be a multiple of 50, only for electrical connections 05 and 35

¹³⁾ Only for sensors 52 and 82

¹⁴⁾ Only for sensors 59 and 89

¹⁵⁾ max. 60 bar / overpressure 120 bar



Vacuum measuring ranges: Measuring ranges below 0 bar (e.g. -1 bar ... 0 bar) are available as special pressure ranges.

Reversed calibration: A reversed calibration is also possible for measuring ranges below 0 bar, with the signals 4 ... 20 mA (code 19), 1 ... 6 VDC (code 16) and 0 ... 10 VDC (code 17). The signal zero point is at 0 bar, the signal end point at -1 bar. Additional configurations on request.

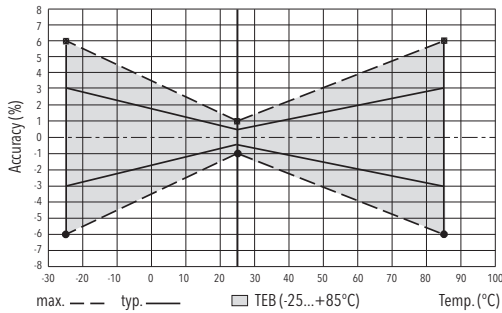
Standard products (extra short lead time)

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
ECT1.6A	8472 73 5717 05 0000 0000 19 58 61	0 ... 1.6	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
ECT4.0A	8472 76 5717 05 0000 0000 19 58 61	0 ... 4	8	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
ECT60.0A	8472 82 5717 05 0000 0000 19 58 61	0 ... 60	120	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
ECT1.6V	8472 73 5717 05 0000 0000 17 58 61	0 ... 1.6	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
ECT4.0V	8472 76 5717 05 0000 0000 17 58 61	0 ... 4	8	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
ECT60.0V	8472 82 5717 05 0000 0000 17 58 61	0 ... 60	120	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 ratiom.
	Rise time	Typ. 1 ms / 10 ... 90 % nominal pressure
	Power-on delay time	Max. 1.5 s
	Inverse-polarity protection, short-circuit strength @ 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 ... +125°C Cable PVC 22: -5°C ... +60°C Cable PUR 24: -20°C ... +70°C Cable Raychem 08: -20°C ... +100°C
	Protection ¹⁾	IP65, IP67, IP68
	Humidity	Max. 95 % relative
	Vibration	15 g RMS (20...2000 Hz) (EN 60068-2-64) 15 g Sinus (10...2000 Hz) (EN 60068-2-6)
	Shock	50 g / 11 ms (EN 60068-2-27)
EMC Protection	Emission	EN/IEC 61000-6-3
	Immunity	EN/IEC 61000-6-2
Mechanical Data	Sensor (wetted parts)	Ceramic, Al ₂ O ₃ (96 %)
	Pressure connection (wetted parts)	57/87: 1.4305 (AISI303) 59/89: 1.4404/1.4435 (AISI316L) 52/82: 1.4462 (AISI318LN) 53/83: Titanium Grade 5
	Housing	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 connector	See ordering information
	Weight	~ 110 g
	Mounting torque	15 ... 20 Nm

¹⁾ See electrical connection

Measuring accuracy 0.5 %

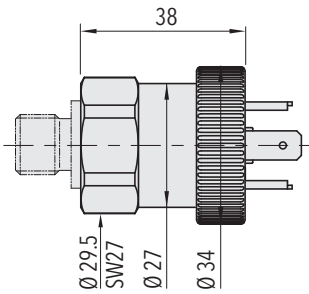


Electrical connection

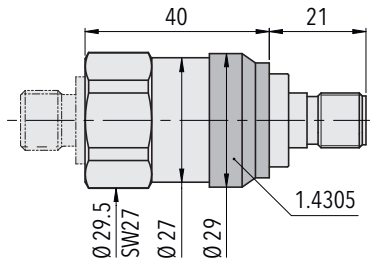
		Protection / electrical connection						
		IP65*)	IP67*)	IP67*)	IP68 max. 3m	IP68 max. 3 m		
		Industrial standard EN175301-803A **)	M12x1 **) 5-pole	Packard Metri Pack **) 3-pole	Cable**)	Cable **)		
		05	35	51	24/22	08		
Output signal	<p>8472.XX.XXXX.XX.19</p>	Standard	92	Standard	94	E4	white	red
	<p>8472.XX.XXXX.XX.14/16/17/23</p>	Standard	98	97		99	white	red
		2	1	4	1	1	brown	black
		1	2	1	3	2	yellow	green
		⊕	⊕	5	5			
		2	3	2	1	1	white	red
		3	1	4	3	2	green	white
		1	2	3	2	3	brown	black
		⊕	⊕	5			yellow	green

*) Provided female electrical plug is mounted according to instructions
 **) Ventilation via male electric plug/cable end
 ***) Only cable versions or female electrical plug with shield connection

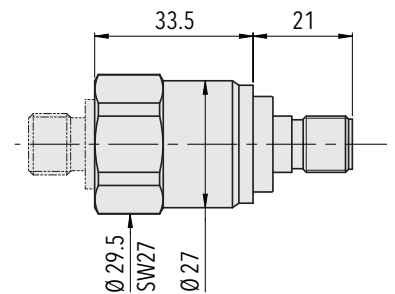
Dimensions



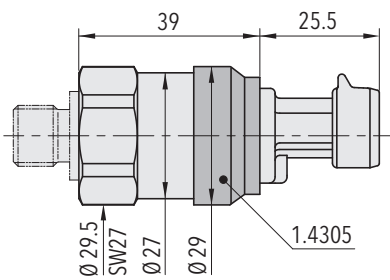
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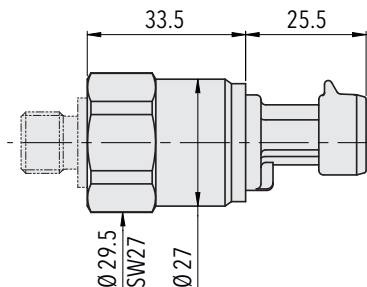
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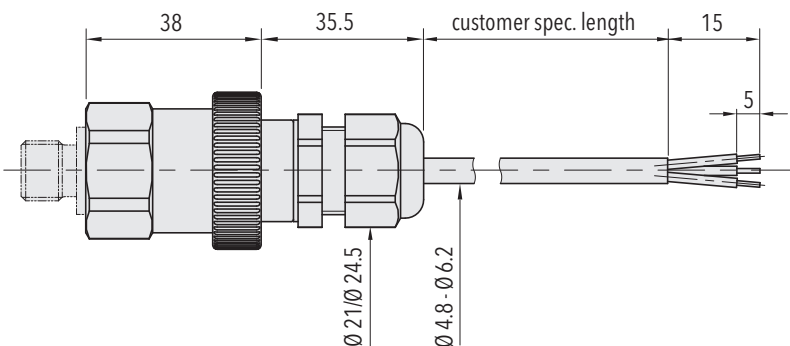
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8472.XX.X952.35.XX.XX



8472.XX.XXXX.51.XX.XX



8472.XX.X717.51.XX.XX
8472.XX.X917.51.XX.XX
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8472.XX.XXXX.22/24/08.XX.XX

