

# 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 economic 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
- 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 ... 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				
<b>Measuring range</b> <sup>1)</sup>	<b>Pressure measurement range [bar]</b>	<b>Over pressure [bar]</b>	<b>Burst pressure [bar]</b>		<b>Pressure measurement range [psi]</b>	<b>Over pressure [psi]</b>	<b>Burst pressure [psi]</b>	
	0 ... 1.0	3.2	4.8	<b>71</b>	0 ... 15	45	70	<b>G1</b>
	0 ... 1.6	3.2	4.8	<b>73</b>	0 ... 20	45	70	<b>G3</b>
	0 ... 2.5	5	7.5	<b>75</b>	0 ... 30	60	90	<b>G5</b>
	0 ... 4	8	12	<b>76</b>	0 ... 50	100	150	<b>G6</b>
	0 ... 6	12	15	<b>77</b>	0 ... 100	200	250	<b>G7</b>
	0 ... 10	20	25	<b>78</b>	0 ... 150	300	375	<b>G8</b>
	0 ... 16	32	40	<b>79</b>	0 ... 250	500	625	<b>G9</b>
	0 ... 25	50	75	<b>80</b>	0 ... 400	800	1200	<b>H0</b>
	0 ... 40	80	100	<b>81</b>	0 ... 500	1000	1250	<b>H1</b>
	0 ... 60	120	180	<b>82</b>	0 ... 1000	2000	3000	<b>H2</b>
	0 ... 100	200	300	<b>83</b>	0 ... 1500	3000	4500	<b>H3</b>
	0 ... 160	320	480	<b>85</b>	0 ... 2000	4000	6000	<b>H5</b>
	0 ... 250	500	750	<b>74</b>	0 ... 3000	6000	9000	<b>G4</b>
	0 ... 400 <sup>2)</sup>	800	1000	<b>84</b>	0 ... 5000 <sup>2)</sup>	10000	12500	<b>H4</b>
	<b>Sensor</b>	Relative pressure, 1.4305			<b>57</b>	Absolute pressure, 1.4305 <sup>3)</sup>		
Relative pressure, 1.4404/1.4435 <sup>4)</sup>			<b>59</b>	Absolute pressure, 1.4404/1.4435 <sup>3) 4)</sup>			<b>89</b>	
Relative pressure, 1.4462			<b>52</b>	Absolute pressure, 1.4462 <sup>3)</sup>			<b>82</b>	
Relative pressure, Titanium Grade 5			<b>53</b>	Absolute pressure, Titanium Grade 5 <sup>3)</sup>			<b>83</b>	
<b>Pressure connection</b>	G1/4" female							<b>10</b>
	G1/4" male							<b>17</b>
	G1/2" male <sup>4)</sup>							<b>21</b>
	1/4"NPT male <sup>4)</sup>							<b>30</b>
	G3/4" male, frontal membrane <sup>4) 5)</sup>							<b>52</b>
<b>Electrical connection</b>	Male electrical plug EN 175301-803-A, Mat. PA							<b>05</b>
	Male electrical plug M12x1, 5-pole, Mat. PA							<b>35</b>
	Male electrical plug Packard Metri Pack							<b>51</b>
	Male electrical plug industrial standard (contact distance 9.4mm) Mat.: PBT							<b>01</b>
	Cable IP67, Mat.: PVC (cable gland PA6-3) <sup>6)</sup>							<b>22</b>
	Cable IP68 max. 3m, Medium +10°C...+35°C, max. 1 bar rel./abs.							<b>68</b>
<b>Output</b>	<b>Output</b>	<b>Load resistance</b>	<b>I (supply)</b>		<b>U (supply)</b>			
	4 ... 20 mA	(U <sub>supply</sub> -9V) / 20mA			9 ... 30 VDC		<b>19</b>	
	0 ... 5 VDC	> 2.5 kΩ	< 10 mA		10 ... 30 VDC		<b>14</b>	
	1 ... 6 VDC	> 5.0 kΩ	< 10 mA		10 ... 30 VDC		<b>16</b>	
	0 ... 10 VDC	> 5.0 kΩ	< 10 mA		15 ... 30 VDC		<b>17</b>	
	0.5 ... 4.5 VDC	> 5.0 kΩ	< 10 mA		5 VDC ± 0.25 VDC ratiometric		<b>23</b>	

Accessories		
O-Ring FKM (-20°C ... +125°C)		61
O-Ring CR ≤ 100 bar (-25°C ... +100°C) <sup>8)</sup>		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

<sup>1)</sup> Extended overpressure as well as customized pressure ranges upon request

<sup>2)</sup> Media -10°C ... +125°C

<sup>3)</sup> Absolute ranges max. 40 bar

<sup>4)</sup> Please ask us

<sup>5)</sup> Not for sensors 57 and 87

<sup>6)</sup> Cable length see accessories

<sup>7)</sup> More materials and cables with venting tubes for low pressure ranges upon request

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



Identical construction for refrigeration: Data sheet No. H72323

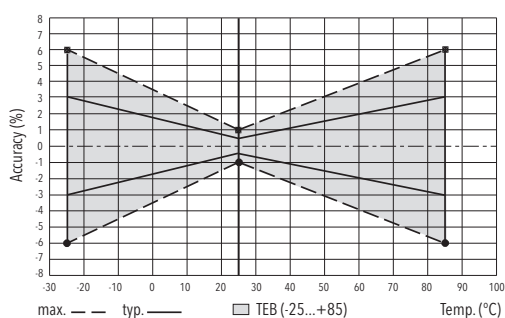
### Standard products (extra short lead time)

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

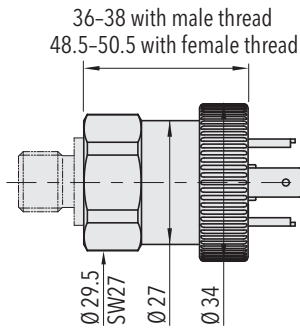
Specifications		
<b>Accuracy</b>	TEB typ. @ -25 ... +85°C	± 3.0 % FS typ.
	Accuracy @ 25°C typ.	± 0.5 % FS typ.
	NLH @ 25°C (BSL) typ.	± 0.2 % FS typ.
	TC zero point and span typ.	± 0.03 % FS/K typ.
	Long term stability 1 year typ.	± 0.3 % FS typ.
<b>Electrical Data</b>	Output / supply voltage	4 ... 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
<b>Environmental Conditions</b>	Media temperature	-25°C ... 125°C 400 bar/5000 psi: -10 ... 125°C
	Ambient temperature	-25°C ... 85°C
	Protection <sup>1)</sup>	min. IP65
	Humidity	max. 95% relative
	Vibration	4g (10...2000 Hz)
	Shock	50g/ 8 ms
<b>EMC Protection</b>	Emission	EN/IEC 61000-6-3
	Immunity	EN/IEC 61000-6-2
<b>Mechanical Data</b>	Sensor	Ceramic, Al2O3(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

<sup>1)</sup> Provided female connector is mounted according to instructions

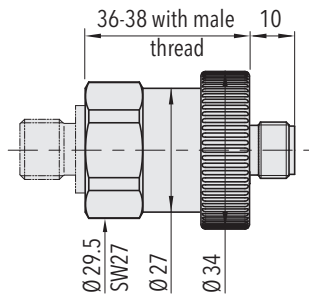
## Measuring accuracy 0.5%



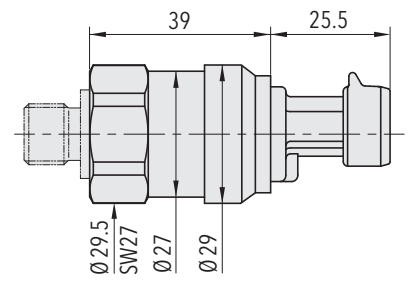
## Dimensions



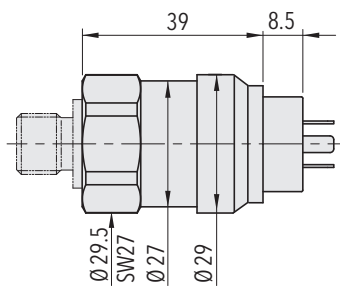
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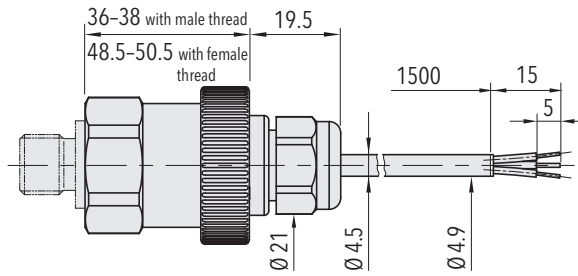
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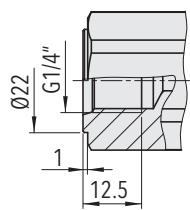
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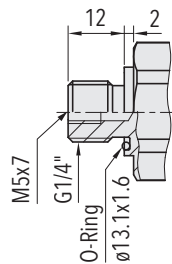
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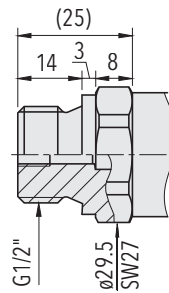
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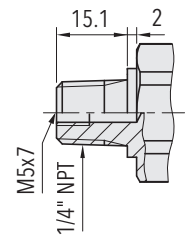
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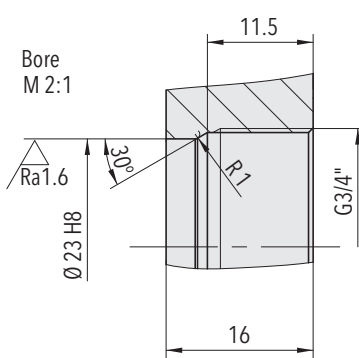
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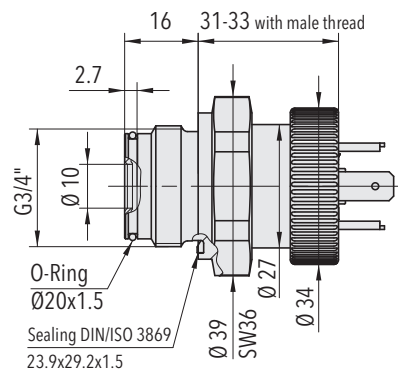
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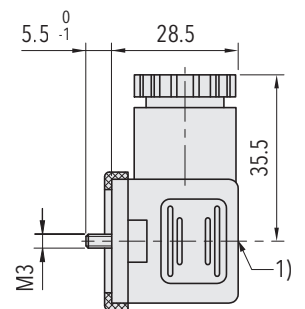
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8472.XX.XX52.XX.XX.XX

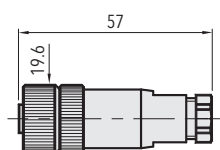


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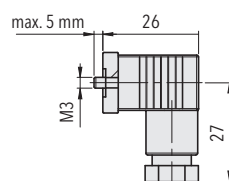


1) Tightening torque 50...60Ncm

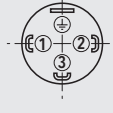
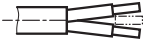
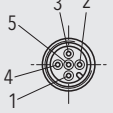
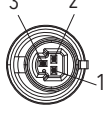
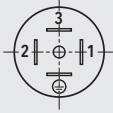
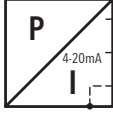
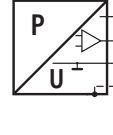
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8472.XX.XXXX.XX.XX.33



## Electrical Connection

		Protection / electrical connection					
		IP65*)	IP67/IP68 max. 3m	IP67*)	IP67*)	IP65	
		Industrial standard EN175301-803A **)	Cable**) <b>22/68</b>	M12x1 **) 5-pole <b>35</b>	Packet Metri Pak **) 3-pole <b>51</b>	Industrial standard EN175301-803A **)	
		<b>05</b> 				<b>01</b> 	
Output signal	 <b>8472.xx.xxxx.xx.19</b>	Standard	<b>92</b>			<b>99</b>	
		2 1 ⊕	1 2 ⊕	white brown ⊕	4 1 5	1 2 3	2 1 ⊕
	 <b>8472.xx.xxxx.xx.14/16/17/23</b>	Standard	<b>98</b>	<b>97</b>		<b>99</b>	
	for DC Supply ⊕ Output ⊕ Common ⊖ Earth (housing) ⊕ Shield ***)	2 3 1 ⊕	3 1 2 ⊕	1 3 2 ⊕	white green brown ⊕	2 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	<a href="http://www.trafag.com/H72324">www.trafag.com/H72324</a>
Instructions	<a href="http://www.trafag.com/H73324">www.trafag.com/H73324</a>
Flyer	<a href="http://www.trafag.com/H70662">www.trafag.com/H70662</a>