

# 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

- Relative or absolute pressure measurement
- Titanium version optional
- Excellent media compatibility
- Wide selection of designs and options

## 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)

03/2017

Data sheet H72324y

Subject to change

## Ordering information/type code

				8472 . XX				XX	XX	XX	XX	XX
<b>Measuring range <sup>1)</sup></b>	<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	2	3	<b>71</b>	0 ... 15	30	40	<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 <sup>4)</sup>	200	300	<b>83</b>	0 ... 1500 <sup>4)</sup>	3000	4500	<b>H3</b>				
	0 ... 160 <sup>4)</sup>	320	480	<b>85</b>	0 ... 2000 <sup>4)</sup>	4000	6000	<b>H5</b>				
	0 ... 250 <sup>4)</sup>	500	750	<b>74</b>	0 ... 3000 <sup>4)</sup>	6000	9000	<b>G4</b>				
	0 ... 400 <sup>2) 4)</sup>	800	1000	<b>84</b>	0 ... 5000 <sup>2) 4)</sup>	10000	12500	<b>H4</b>				
<b>Sensor</b>	Relative pressure, 1.4305			<b>57</b>	Absolute pressure, 1.4305 <sup>3)</sup>			<b>87</b>				
	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 <sup>4)</sup>			<b>52</b>	Absolute pressure, 1.4462 <sup>3) 4)</sup>			<b>82</b>				
	Relative pressure, titanium grade 5 <sup>4)</sup>			<b>53</b>	Absolute pressure, titanium grade 5 <sup>3) 4)</sup>			<b>83</b>				
<b>Pressure connection</b>	G1/4" female											<b>10</b>
	G1/4" male											<b>17</b>
	G1/2" male DIN3852-A <sup>4)</sup>											<b>21</b>
	G1/2" male DIN3852-E <sup>4)</sup>											<b>41</b>
	1/4" NPT male, ANSI B1.20.1 <sup>4)</sup>											<b>30</b>
	7/16" -20UNF male SAE4 <sup>4) 10)</sup>											<b>42</b>
	R1/4" male, DIN3858											<b>19</b>
	G3/4" frontal membrane <sup>4) 7)</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 (Old shape), Mat. PBT (New shape)											<b>35</b>
	Male electrical plug Packard Metri Pack, Mat. PBT <sup>9)</sup>											<b>51</b>
	Male electrical plug industrial standard (contact distance 9.4 mm) Mat. PBT											<b>01</b>
	Cable IP67, Mat. PVC (cable gland PA6-3), -5°C ... +60°C <sup>5) 6)</sup>											<b>22</b>
	Cable IP68, max. 3m, medium +10°C...+35°C, Pmax. 1 bar rel./abs.											<b>68</b>
<b>Output signal</b>	<b>Signal output</b>	<b>Load resistance</b>	<b>I (supply)</b>	<b>U (supply)</b>								
	4 ... 20 mA	(U <sub>supply</sub> -9 V) / 20 mA		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 ratiom.								

<b>Accessories</b>	Seal FKM (-20°C ... +125°C)	61
	Seal CR ≤ 100 bar (-25°C ... +100°C) <sup>8)</sup>	62
	Seal 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 (DIN43650-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 signal 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 14, 16, 17, 23 and male electrical plug 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 plug EN175301-803-A / DIN43650-A)	97
	Special electrical connection: Pin 1 + , Pin 3 - (only for output 4...20 mA and male electrical plug 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 plug Packard Metri Pack 3-poles)	99
	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

<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> Cable length see accessories

<sup>6)</sup> More materials and cables with venting tubes for low pressure ranges upon request

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

<sup>8)</sup> Only for pressure connections 10 and 30

<sup>9)</sup> Pressure ranges > 16 bar (Pressure ranges ≤ 16 bar upon request)

<sup>10)</sup> According to norm J1926, max. 35 MPa



Identical construction for refrigeration:  
Data sheet No. H72323

### Standard products (extra short lead time)

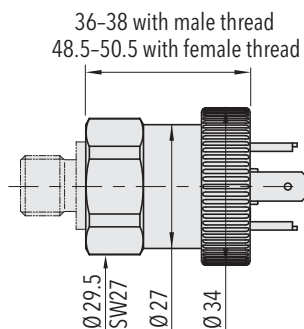
Product No.	Type Code	Pressure range [bar]	Over pressure max. [bar]	Signal output	Supply [VDC]
ECT1.0A	8472 71 5717 05 0000 0000 19 58 61	0 ... 1	3.2	4 ... 20 mA	9 ... 30
ECT2.5A	8472 75 5717 05 0000 0000 19 58 61	0 ... 2.5	5	4 ... 20 mA	9 ... 30
ECT6.0A	8472 77 5717 05 0000 0000 19 58 61	0 ... 6	12	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
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

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
	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
<b>Environmental conditions</b>	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 <sup>1)</sup>	IP65, IP67, IP68
	Humidity	Max. 95 % relative
	Vibration	4 g (10...2000 Hz)
	Shock	50 g / 8 ms
<b>EMC Protection</b>	Emission	EN/IEC 61000-6-3
	Immunity	EN/IEC 61000-6-2
<b>Mechanical Data</b>	Sensor (wetted parts)	Ceramic, Al <sub>2</sub> O <sub>3</sub> (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 plug	See ordering information
	Weight	~ 110 g
	Mounting torque	15 ... 20 Nm

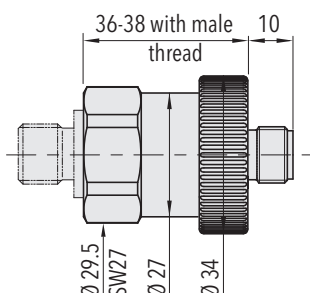
<sup>1)</sup> See electrical connection



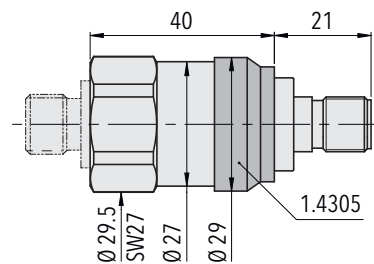
## Dimensions



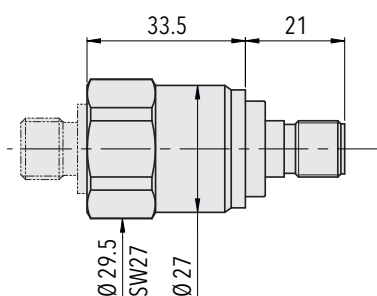
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8472.XX.XXXX.35.XX.XX Old shape

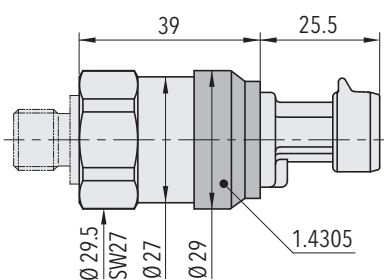


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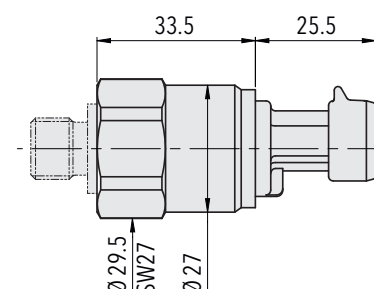


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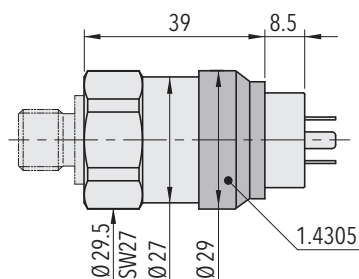


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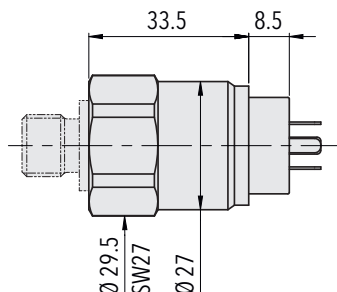


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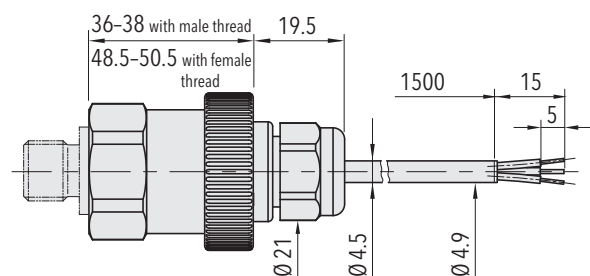


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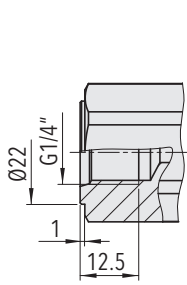
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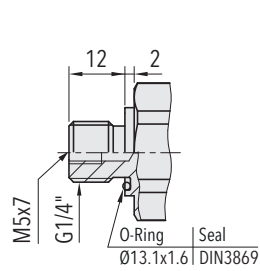


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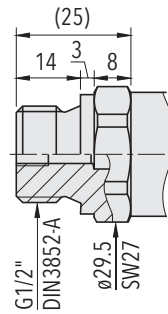
## Dimensions



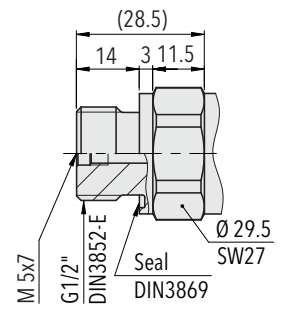
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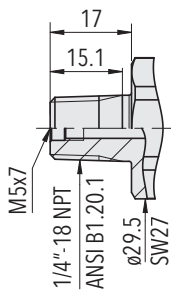
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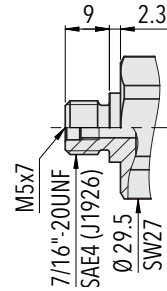
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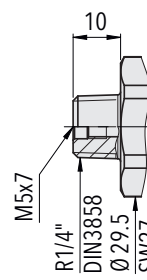
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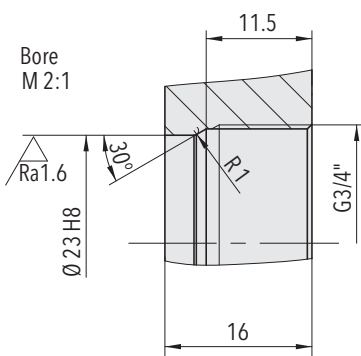
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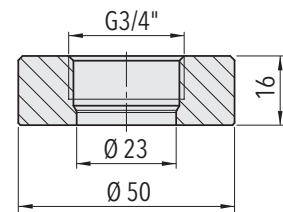
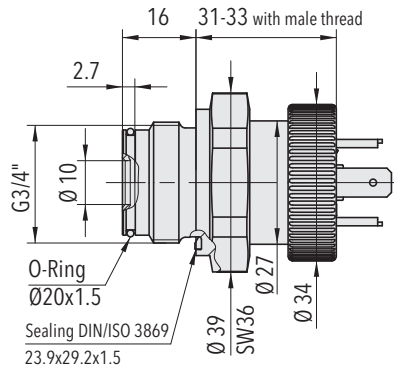
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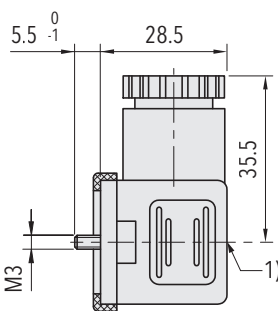
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8472.XX.XX52.XX.XX.XX

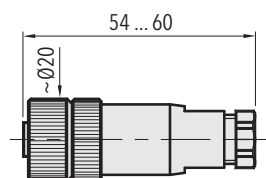


Welding flange for G3/4" frontal membrane (1.4301)  
Ordering No. C27805

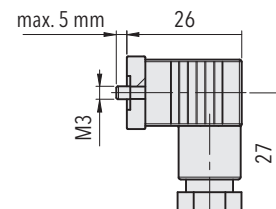


1) Tightening torque 50...60Ncm

8472.XX.XXXX.XX.XX.58



8472.XX.XXXX.XX.XX.33



8472.XX.XXXX.XX.XX.34