

PRESSURE TRANSMITTER

Swiss based Trafag is a leading international supplier of high quality sensors and monitoring instruments for measurement of pressure and temperature.



Applications

- Test benches
- Railways
- Machine tools
- Hydraulics
- Process technology

Features

- Smallest design
- Accuracy classes 0.1 %, 0.15 %, 0.3 %
- Excellent temperature resistance
- Relative and absolute pressure measurement
- Optional: Dielectrical strength 500 VAC, meets EN 50155 (Railways)

06/2020

Data sheet H72300u

Technical Data

Measuring principle	Thin-film-on-steel	Accuracy @ 25°C typ.	± 0.3 % FS typ. ± 0.15 % FS typ. ± 0.1 % FS typ.
Measuring range	0 ... 2.5 to 0 ... 600 bar 0 ... 30 to 0 ... 7500 psi	Media temperature	-40°C ... +125°C
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiometric	Ambient temperature	-40°C ... +125°C
NLH @ 25°C (BSL) typ.	± 0.2 % FS typ. ± 0.1 % FS typ.		

Subject to change

Accessories	Female electrical plug M12x1, 5-pole, for electrical connections 32 and 35	33
	Female electrical plug industrial standard	34
	Meets EN 50155 (railways) dielectrical strength: 500 VAC, 50 Hz ⁵⁾	11
	Pressure peak damping element ø 1.0 mm ⁶⁾	40
	Pressure peak damping element ø 0.3 mm ⁶⁾	43
	Pressure peak damping element ø 0.5 mm ⁶⁾	45
	Special electrical connection: Pin 1 + , Pin 2 Ground, Pin 3 -, Pin 4 Out (only for output signals 14, 16, 17, 23 and male electrical connector 32, M12x1, 4-pole)	96
	Special electrical connection: Pin A +, Pin C Out, Pin B/D -, Pin E Ground (Pin B and D are connected) (only for output signals 14, 16, 17, 23 and male electrical connector MIL-C 26482)	F3
	Cable length 0.5 m	EM
	Cable length 1.0 m	1M
	Cable length 2.0 m	2M

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

²⁾ Measuring accuracy 0.3 %

³⁾ Only for relative pressure

⁴⁾ Max. allowable pressure range 40 bar

⁵⁾ Only with output 19

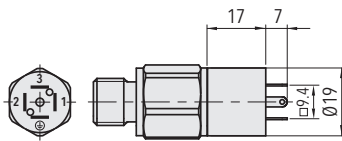
⁶⁾ Only for pressure connections 17, 20, 30, 31, 42 and 61

⁷⁾ Upon request

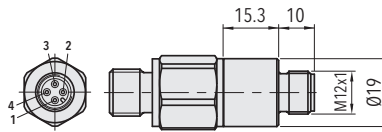


Identical construction with higher/lower specifications: Data sheet No. H72250, H72301

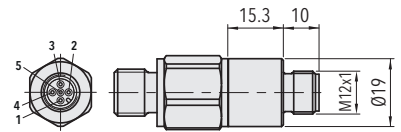
Dimensions



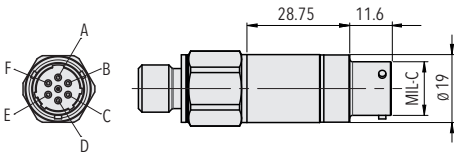
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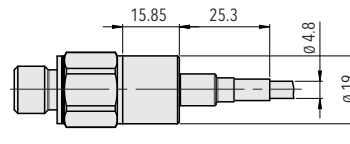
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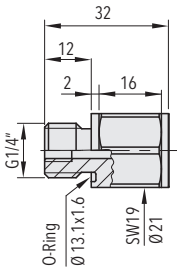
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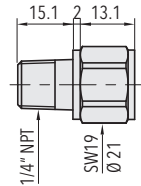


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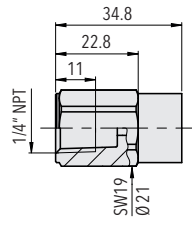
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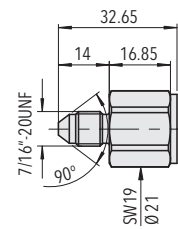
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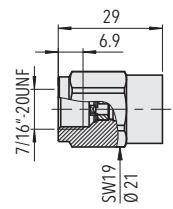
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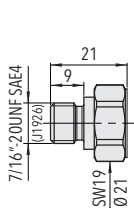
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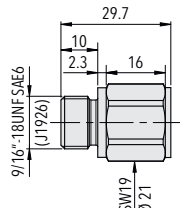


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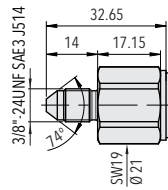


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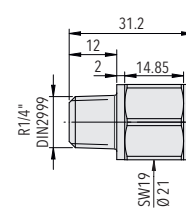
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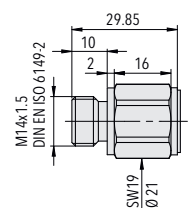
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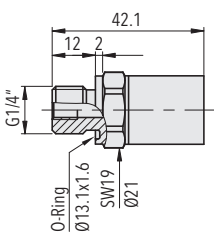
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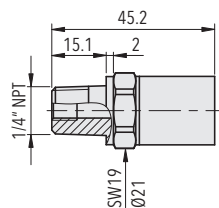
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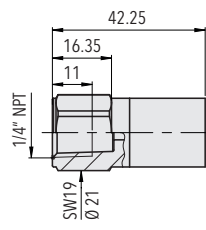
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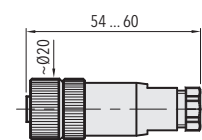
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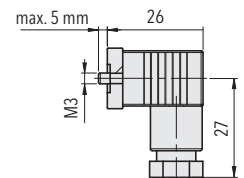


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8253.XX.XXXX.XX.XX.33



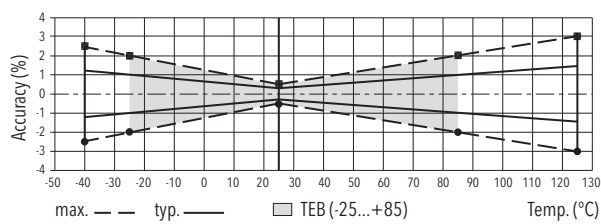
8253.XX.XXXX.XX.XX.34

Specifications		
Electrical Data	Output / supply voltage	4 ... 20 mA: 24 (9 ... 32) VDC 0 ... 5 VDC: 24 (9 ... 32) VDC 1 ... 6 VDC: 24 (9 ... 32) VDC 0 ... 10 VDC: 24 (15 ... 32) VDC 0.5 ... 4.5 VDC: 5 VDC ratiom.
	Rise time	Typ. 1 ms / 10 ... 90 % nominal pressure
	Power-on delay time	1 s
Environmental conditions	Media temperature	-40°C ... +125°C
	Ambient temperature	-40°C ... +125°C
	Protection ¹⁾	Min. IP65
	Humidity	Max. 95 % relative
	Vibration	40 g (20...2000 Hz)
	Shock	100 g / 11 ms
EMC Protection	Emission	EN/IEC 61000-6-4
	Immunity	EN/IEC 61000-6-2
Mechanical Data	Sensor (wetted parts)	1.4542 (AISI630)
	Pressure connection (wetted parts)	Pressure ranges ≤ 250 bar: 1.4542 (AISI630) Pressure ranges > 250 bar: 1.4301 (AISI304)
	Housing	1.4301 (AISI304)
	Sealing	FKM 70 Sh
	Male electrical connector	See ordering information
	Weight	~ 50 g
	Mounting torque	25 Nm

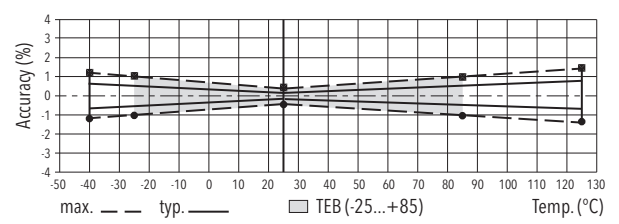
¹⁾ See electrical connection

Accuracy				
		Measuring accuracy 0.3 % Ordering No. 23/43	Measuring accuracy 0.15 % Ordering No. 21/41	Measuring accuracy 0.1 % Ordering No. 24/44
TEB @ -25...+85°C	[% FS typ.]	± 1.0	± 0.5	± 0.4 (0 ... 65°C)
TEB @ -25...+85°C; 0...4 to 0...100 bar	[% FS typ.]	-	-	± 0.4
TEB @ 0...+65°C; 0...4 to 0...100 bar	[% FS typ.]	-	-	± 0.25
Accuracy @ +25°C	[% FS typ.]	± 0.3	± 0.15	± 0.1
NLH @ +25°C (BSL)	[% FS typ.]	± 0.2	± 0.1	± 0.1
TC zero point and span	[% FS/K typ.]	± 0.01	± 0.002	± 0.002
Long term stability 1 year @ +25°C	[% FS typ.]	< ± 0.1	< ± 0.1	< ± 0.1

Measuring accuracy 0.3 %



Measuring accuracy 0.15 %



Electrical connection

		Protection / electrical connection				
		IP65 *)	IP67 *)		IP67 *) **)	IP67 **)
		Industrial standard EN175301-803A	M12x1		MIL-C 26482	Cable
		01	4-pole	5-pole	02	08
Output signal	 8253.XX.XXXX.XX.19	2	1	4		red
	 8253.XX.XXXX.XX.14/16/17/23	1 ⊕	3 4	1 5		black -
		1 2 3 ⊕	1 2 3 4	96 1 4 3 2	A B C/D E	F3 A C B/D E
						red green black -

*) Provided female electric plug is mounted according to instructions

**) Ventilation via male electric plug/cable end

Additional information

Documents

Data sheet	www.trafag.com/H72300
Instructions	www.trafag.com/H73250
Flyer	www.trafag.com/H70670