

ENGINE PRESSURE TRANSMITTER

New generation available - refer to www.trafag.com/H72305

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



Applications

- Shipbuilding
- Engine manufacturing
- Test benches

Features

- Smallest design
- Different accuracy classes
- Excellent temperature resistance
- Improved vibration resistance
- Completely welded steel sensor system without additional seals

Technical Data			
Measuring principle	Thin film on steel	Media temperature	-40°C ... 125°C
Measuring range	0 ... 2.5 to 0 ... 600 bar	Ambient temperature	-40°C ... 125°C
Output signal	4 ... 20 mA, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiometric	Approval / conformity	ABS, BV, DNV, GL, KRS, LRS, NKK, RINA
Accuracy @ 25°C typ.	± 0.3 % FS typ ± 0.15 % FS typ		

02/2017

Data sheet H723011

Subject to change

Ordering information/type code

				8255 . XX . XX . XX . XX . XX
Measuring range ¹⁾	Pressure measurement range [bar]	Over pressure [bar]	Burst pressure [bar]	
	0 ... 2.5 ²⁾	5	50	75
	0 ... 4	8	60	76
	0 ... 6	12	100	77
	0 ... 10	20	200	78
	0 ... 16	32	200	79
	0 ... 25	50	300	80
	0 ... 40	80	300	81
	0 ... 60	120	400	82
	0 ... 100	200	500	83
	0 ... 160	320	750	85
	0 ... 250	500	1000	74
	0 ... 400	800	1500	84
0 ... 600	1000	2000	86	
Sensor	Relative pressure, accuracy: 0.3%			23
	Relative pressure, accuracy: 0.15%			21
Pressure connection	G1/4" male (O-Ring)			17
	7/16"-20UNF male ³⁾			18
	1/4"NPT male			30
Electrical connection	Male electrical plug , Industrial standard (contact distance 9.4mm), Mat. PBT			01
	Male electrical plug M12x1, 4-pole, Mat. PBT			32
	Male electrical plug M12x1, 5-pole, Mat. PBT			35
Output	Output	Load resistance	I (supply)	U (supply)
	4 ... 20 mA	(U _{supply} -9V) / 20mA		24 (9 ... 32)VDC
	0 ... 10 VDC ⁴⁾	≥ 5.0 kΩ	≤ 10 mA	24 (15 ... 32)VDC
0.5 ... 4.5 VDC ⁴⁾	≥ 2.0 kΩ	≤ 10 mA	5 (4.5 ... 5.5)VDC ratiom.	
Accessories	Female electrical plug M12x1, 5-pole, for execution 32 and 35			33
	Female electrical plug industrial standard			34
	Pressure peak damping element ø 1.0 mm ⁵⁾			40
	Pressure peak damping element ø 0.3 mm ⁵⁾			43
	Pressure peak damping element ø 0.5 mm ⁵⁾			45

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

²⁾ Accuracy: 0.3%

³⁾ Only for relative pressure measurement, max. allowable pressure range: 40 bar

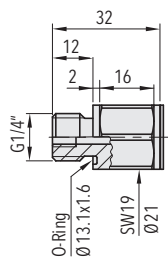
⁴⁾ No ship approval

⁵⁾ Only for pressure connections 17 and 30

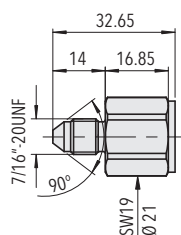


Identical construction with lower specifications: Data sheet No H72250, H72300

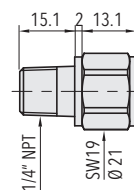
Dimensions



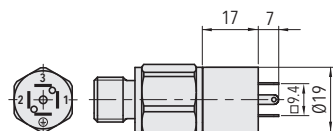
8255.XX.XX17.XX.XX.XX



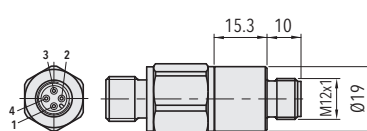
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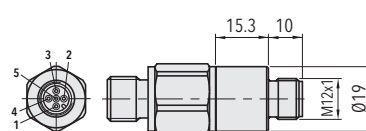
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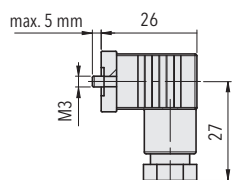
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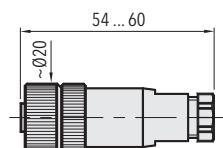
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8255.XX.XXXX.35.XX.XX



8255.XX.XXXX.XX.XX.34



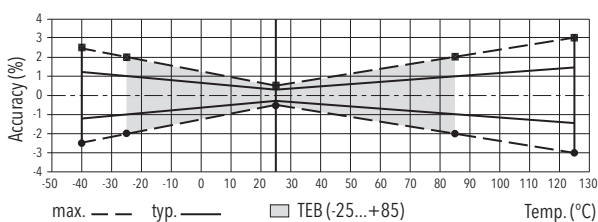
8255.XX.XXXX.XX.XX.33

Specifications		
Electrical Data	Output / supply voltage	4 ... 20 mA: 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
	Switch-on-delay	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	40g (20...2000 Hz)
	Shock	100g/11ms
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 plug	See ordering information
	Weight	~ 50 g
	Mounting torque	25 Nm

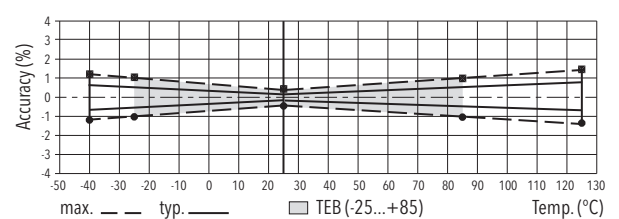
¹⁾ See electrical connection

Accuracy			
		Measuring accuracy 0.3%	Measuring accuracy 0.15%
		Ordering No. 23	Ordering No. 21
TEB @ -25...+85°C	[% FS typ.]	± 1.0	± 0.5
Accuracy @ +25°C	[% FS typ.]	± 0.3	± 0.15
NLH @ +25°C (BSL through 0)	[% FS typ.]	± 0.2	± 0.1
TC zero point and span	[% FS/K typ.]	± 0.01	± 0.002
Long term stability 1 year @ +25°C	[% FS typ.]	< ± 0.1	< ± 0.1

Measuring accuracy 0.3%



Measuring accuracy 0.15%



Electrical Connection

		Protection / electrical connection		
		IP65*)	IP67*)	
		Industrial standard EN175301-803A	M12x1	
		01	4-pole 32	5-pole 35
Output signal	<p>8255.XX.XXXX.XX.19</p>	2 1 ⊕	1 3 4	4 1 5
	<p>8255.XX.XXXX.XX.17/23</p>	1 2 3 ⊕	1 2 3 4	2 4 3 5

*) Provided female connector is mounted according to instructions

Additional information		
Documents	Data sheet	www.trafag.com/H72301
	Instructions	www.trafag.com/H73250
	Flyer	www.trafag.com/H70675