

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 industrial pressure transmitter EPI 8287 features the extremely robust and stable thin-film-on-steel sensor element from its well-proven predecessor EPI 8297. In combination with the new inhouse developed ASIC TX it offers a wide temperature range up to 125°C and triple overpressure safety which makes it the perfect solution for a wide range of demanding applications.



Applications

- Machine tools
- Hydraulics
- Industrial applications

Features

- Excellent long-term stability
- High resistance to over pressure
- Completely welded steel sensor system without additional seals
- Compact design

Technical Data

Measuring principle	Thin film on steel	Accuracy @ 25°C typ.	± 0.5 % 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	Ambient temperature	-40°C ... +125°C

08/2016

Data sheet H72317d

Subject to change

Ordering information/type code

				8287 . XX	XX	XX	XX	XX	XX	
Measuring range ¹⁾	Pressure measurement range [bar]	Over pressure [bar]	Burst pressure [bar]	Pressure measurement range [psi]	Over pressure [psi]	Burst pressure [psi]				
	0 ... 2.5	7.5	50	0 ... 30	90	700	G5			
	0 ... 4	12	60	0 ... 50	150	850	G6			
	0 ... 6	18	100	0 ... 100	300	1450	G7			
	0 ... 10	30	200	0 ... 150	450	2500	G8			
	0 ... 16	48	200	0 ... 200	600	2500	GA			
	0 ... 25	75	300	0 ... 250	750	2500	G9			
	0 ... 40	120	300	0 ... 300	900	4000	HA			
	0 ... 60	180	400	0 ... 400	1200	4000	H0			
	0 ... 100	300	500	0 ... 500	1500	4000	H1			
	0 ... 160	480	750	0 ... 1000	3000	5000	H2			
	0 ... 250	750	1000	0 ... 1500	4500	7000	H3			
	0 ... 400	1000	2000	0 ... 2000	6000	10000	H5			
	0 ... 600	1500	2500	0 ... 3000	9000	14500	G4			
				0 ... 5000	12500	21750	H4			
				0 ... 7500	18750	29000	H6			
	Option 5P:	Fivefold overpressure								
	0 ... 2.5	12.5	60	0 ... 30	90	700				
	0 ... 4	20	100	0 ... 50	150	850				
	0 ... 6	30	200	0 ... 100	300	1450				
	0 ... 10	50	200	0 ... 150	450	2500				
	0 ... 16	80	300	0 ... 200	600	2500				
	0 ... 25	125	300	0 ... 250	750	2500				
	0 ... 40	200	400	0 ... 300	900	4000				
	0 ... 60	300	500	0 ... 400	1200	4000				
	0 ... 100	500	750	0 ... 500	1500	4000				
	0 ... 160	800	1000	0 ... 1000	3000	5000				
Sensor	Relative pressure, accuracy: 0.5 %							25		
Pressure connection	G1/4" male (Seal)								17	
Electrical connection	Male electrical plug EN 175301-803-A, Mat. PA									05
Output signal	Signal output	Load resistance	I (supply)	U (supply)						
	4 ... 20 mA	(U _{supply} -9 V) / 20 mA		9 ... 32 VDC					19	
	0 ... 5 VDC	> 2.5 kΩ	< 10 mA	9 ... 32 VDC					14	
	1 ... 6 VDC	> 5.0 kΩ	< 10 mA	9 ... 32 VDC					16	
	0 ... 10 VDC	> 5.0 kΩ	< 10 mA	15 ... 32 VDC					17	
Accessories	Seal FPM, -18°C ... +125°C									61
	Seal EPDM, -40°C ... +125°C									63
	Seal NBR, -25°C ... +100°C									83
	Pressure peak damping element ø 1.0 mm (for pressure connections 17 and 30)									40
	Pressure peak damping element ø 0.4 mm (for pressure connections 17 and 30)									44
	Female electrical connector EN 175301-803-A (DIN43650-A)									58
	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 + , Pin 2 - , Pin 3 out (only for output 0...5 VDC, 1...6 VDC, 0...10 VDC, 0.5...4.5 VDC and male electrical plug EN175301-803-A / DIN43650-A)									98
	Special electrical connection: Pin 1 + , Pin 2 - , Pin 3 out (only for output 0...5 VDC, 1...6 VDC, 0...10 VDC, 0.5...4.5 VDC and male electrical plug EN175301-803-A / DIN43650-A)									97

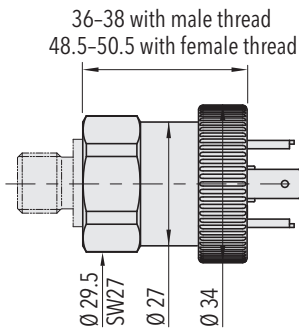
¹⁾ Customized pressure ranges upon request

²⁾ Upon request

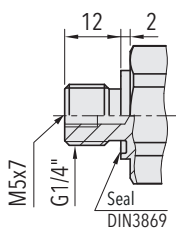
Standard products (extra short lead time)

Product No.	Type code	Pressure range [bar]	Overpressure max. [bar]	Signal output	Supply [VDC]
EPI4.0A	8287 76 2517 05 0000 0000 19 44 58 61	0 ... 4	12	4 ... 20 mA	9 ... 32
EPI6.0A	8287 77 2517 05 0000 0000 19 44 58 61	0 ... 6	18	4 ... 20 mA	9 ... 32
EPI10.0A	8287 78 2517 05 0000 0000 19 44 58 61	0 ... 10	30	4 ... 20 mA	9 ... 32
EPI16.0A	8287 79 2517 05 0000 0000 19 44 58 61	0 ... 16	48	4 ... 20 mA	9 ... 32
EPI25.0A	8287 80 2517 05 0000 0000 19 44 58 61	0 ... 25	75	4 ... 20 mA	9 ... 32
EPI40.0A	8287 81 2517 05 0000 0000 19 44 58 61	0 ... 40	120	4 ... 20 mA	9 ... 32
EPI60.0A	8287 82 2517 05 0000 0000 19 44 58 61	0 ... 60	180	4 ... 20 mA	9 ... 32
EPI100.0A	8287 83 2517 05 0000 0000 19 44 58 61	0 ... 100	300	4 ... 20 mA	9 ... 32
EPI250.0A	8287 74 2517 05 0000 0000 19 44 58 61	0 ... 250	750	4 ... 20 mA	9 ... 32
EPI400.0A	8287 84 2517 05 0000 0000 19 44 58 61	0 ... 400	1000	4 ... 20 mA	9 ... 32
EPI600.0A	8287 86 2517 05 0000 0000 19 44 58 61	0 ... 600	1500	4 ... 20 mA	9 ... 32

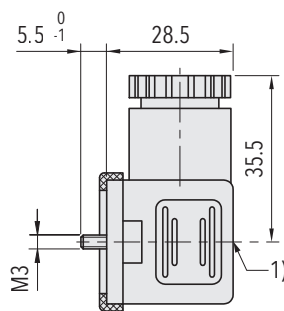
Dimensions



8287.XX.XXXX.05.XX.XX



8287.XX.XX17.XX.XX.XX



1) Tightening torque 50...60Ncm

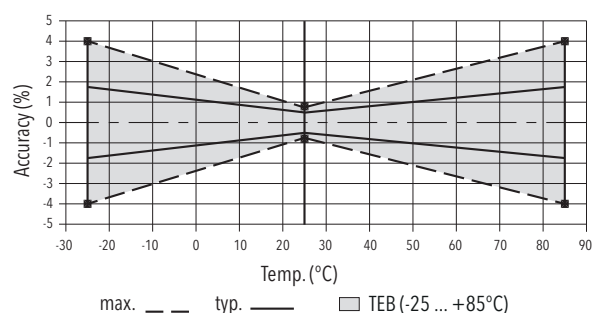
8287.XX.XXXX.XX.XX.58

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
	Rise time	typ. 1 ms/10...90 % nominal pressure
	Switch-on-delay	100 ms
	Inverse-polarity protection, short-circuit strength @ 25°C during 5 min.	4...20 mA: to $U_s = 32$ VDC 0...10 VDC, 0...5 VDC, 1...6 VDC: to $U_s = 28$ VDC
	Environmental conditions	
	Media temperature	-40°C ... +125°C
	Ambient temperature	-40°C ... +125°C
	Protection ¹⁾	IP65
	Humidity	Max. 95 % relative
	Vibration	15 g RMS (20...2000 Hz) acc.to EN 60068-2-64 25 g sin (80...2000 Hz), 1 oct./min, (1x @ 25°C) acc.to EN 60068-2-6
	Shock	500 g / 1 ms acc.to EN 60068-2-27
EMC Protection	Emission	EN/IEC 61000-6-3
	Immunity	EN/IEC 61000-6-2
Mechanical Data	Sensor (wetted parts)	1.4542 (AISI630)
	Pressure connection (wetted parts)	1.4542 (AISI630)
	Housing	1.4542 (AISI630)
	Sealing	FPM/EPDM/NBR
	Male electrical plug	See ordering information
	Weight	appr. 80 ... 110 g
	Mounting torque	25 Nm

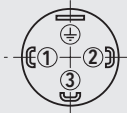
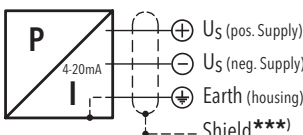
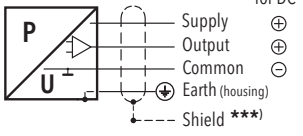
¹⁾ See electrical connection

Accuracy		
		Measuring accuracy 0.5% Ordering No. 25
TEB @ -25...+85°C	[% FS typ.]	± 1.75
Accuracy @ +25°C	[% FS typ.]	± 0.5
NLH @ +25°C (BSL)	[% FS typ.]	± 0.2
TC zero point and span	[% FS/K typ.]	± 0.03
Long term stability 1 year @ +25°C	[% FS typ.]	± 0.1

Measuring accuracy 0.5 %



Electrical connection

		Protection / electrical connection		
		IP65*)		
		Industrial standard EN175301-803A **)		
		05 		
Output signal	 <p>8287.XX.XXXX.XX.19</p>	Standard	92	
		2 1 ⊕	1 2 ⊕	
Output signal	 <p>8287.XX.XXXX.XX.14/16/17</p>	Standard	98	97
		2 3 1 ⊕	3 1 2 ⊕	1 3 2 ⊕

*) Provided female connector is mounted according to instructions

**) Ventilation via male electric plug

***) Only cable versions or female plug with shield connection

Additional information

Documents

Data sheet	www.trafag.com/H72317
Instructions	www.trafag.com/H73317
Flyer	www.trafag.com/H70692