

# 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
- Different accuracy classes
- 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

07/2016

Data sheet H72317c

Subject to change

## Ordering information/type code

				8287 . 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 ... 2.5	7.5	50	0 ... 30	90	700	<b>G5</b>			
	0 ... 4	12	60	0 ... 50	150	850	<b>G6</b>			
	0 ... 6	18	100	0 ... 100	300	1450	<b>G7</b>			
	0 ... 10	30	200	0 ... 150	450	2500	<b>G8</b>			
	0 ... 16	48	200	0 ... 200	600	2500	<b>GA</b>			
	0 ... 25	75	300	0 ... 250	750	2500	<b>G9</b>			
	0 ... 40	120	300	0 ... 300	900	4000	<b>HA</b>			
	0 ... 60	180	400	0 ... 400	1200	4000	<b>H0</b>			
	0 ... 100	300	500	0 ... 500	1500	4000	<b>H1</b>			
	0 ... 160	480	750	0 ... 1000	3000	5000	<b>H2</b>			
	0 ... 250	750	1000	0 ... 1500	4500	7000	<b>H3</b>			
	0 ... 400	1000	2000	0 ... 2000	6000	10000	<b>H5</b>			
	0 ... 600	1500	2500	0 ... 3000	9000	14500	<b>G4</b>			
				0 ... 5000	12500	21750	<b>H4</b>			
				0 ... 7500	18750	29000	<b>H6</b>			
	<b>Option 5P:</b>	<b>Fivefold overpressure</b>								
	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				
<b>Sensor</b>	Relative pressure, accuracy: 0.5 %								25	
<b>Pressure connection</b>	G1/4" male								17	
<b>Electrical connection</b>	Male electrical plug EN 175301-803-A, Mat. PA								05	
<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 ... 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	
<b>Accessories</b>	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	

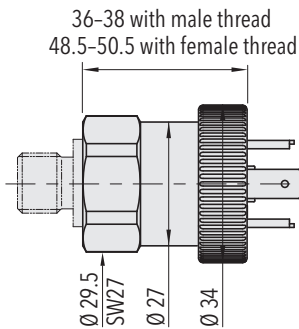
<sup>1)</sup> Customized pressure ranges upon request

<sup>2)</sup> Upon request

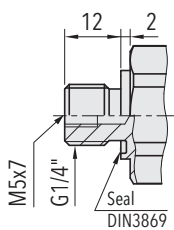
## Standard products (extra short lead time)

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

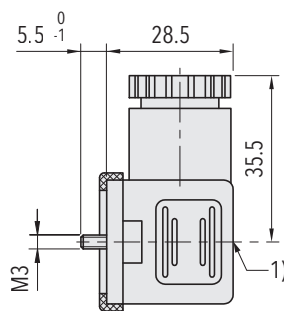
## Dimensions



8287.XX.XXXX.05.XX.XX



8287.XX.XX17.XX.XX.XX



1) Tightening torque 50...60Ncm

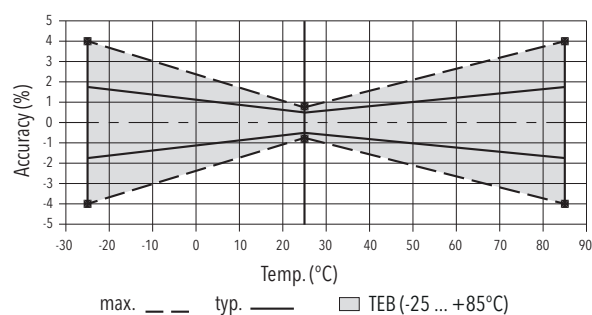
8287.XX.XXXX.XX.XX.58

Specifications		
<b>Electrical Data</b>	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
	<b>Environmental conditions</b>	Media temperature
	Ambient temperature	-40°C ... +125°C
	Protection <sup>1)</sup>	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
<b>EMC Protection</b>	Emission	EN/IEC 61000-6-3
	Immunity	EN/IEC 61000-6-2
<b>Mechanical Data</b>	Sensor	1.4542 (AISI630)
	Housing / pressure connection	1.4542 (AISI630)
	Sealing	FPM/EPDM/NBR
	Male electrical plug	see ordering information
	Weight	appr. 80 ... 110 g
	Mounting torque	25 Nm

<sup>1)</sup> 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 **)		
		<b>05</b> 		
Output signal	<p><b>8287.XX.XXXX.XX.19</b></p>	Standard	<b>92</b>	
		2 1 ⊕	1 2 ⊕	
Output signal	<p>for DC</p> <p><b>8287.XX.XXXX.XX.14/16/17</b></p>	Standard	<b>98</b>	<b>97</b>
		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	<a href="http://www.trafag.com/H72317">www.trafag.com/H72317</a>
Instructions	<a href="http://www.trafag.com/H73317">www.trafag.com/H73317</a>
Flyer	<a href="http://www.trafag.com/H70692">www.trafag.com/H70692</a>