

# PICOTRANS

Swiss based Trafag is a leading international supplier of high quality sensors and monitoring instruments for measurement of pressure and temperature. The NPN pressure transmitter offers reliable and accurate pressure measurement over a wide temperature range. Its excellent long-term stability is based on the leading thin-film-on-steel sensor technology from Trafag. Its robust design and the block design with its optional flange connection makes the NPN the perfect choice for demanding applications such as marine and rail industries.



## Applications

- Shipbuilding
- Engine manufacturing
- Railways
- Machine tools
- Hydraulics



## Features

- Compact design
- Flange connection (PICO family)
- High vibration resistance
- Good temperature resistance
- Completely welded steel sensor system without additional seals

## Technical Data

Measuring principle	Thin film on steel	Media temperature	-40°C ... +100°C
Measuring range	0 ... 2.5 to 0 ... 250 bar	Ambient temperature	-40°C ... +100°C
Output signal	4 ... 20 mA	Approval / conformity	ABS, BV, CCS, DNV, GL, KRS, LRS, NKK, RINA, RMRS
Accuracy @ 25°C typ.	± 0.5 % FS typ. ± 0.3 % FS typ.		

02/2017

Data sheet H72313n

Subject to change

## Ordering information/type code

				8264 . 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>						
	0 ... 2.5	5	100	75					
	0 ... 4	8	100	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	500	82					
	0 ... 100	200	500	83					
	0 ... 160 <sup>2)</sup>	320	1000	85					
	0 ... 250 <sup>2)</sup>	500	1000	74					
<b>Sensor</b>	Relative pressure, accuracy: 0.3 %				23				
	Relative pressure, accuracy: 0.5 %				25				
<b>Pressure connection</b>	G1/4" female					10			
	M10x1 female					17			
	G1/8" female					18			
<b>Electrical connection</b>	Male electrical plug: EN 175301-803-A (DIN43650-A), Mat.: PA						04		
	Cable with shield: Material: FDR 25 (Raychem) 4 x 0.5 mm <sup>2</sup> (cable length see "Accessories")						78		
<b>Output signal</b>	<b>Signal output</b>	<b>Load resistance</b>	<b>I (supply)</b>	<b>U (supply)</b>					
	4 ... 20mA	(U <sub>supply</sub> -9 V) / 20 mA		24 (9 ... 32) VDC				19	
<b>Accessories</b>	Flange connection with O-Ring <sup>3)</sup>								41
	Pressure peak damping element ø 1.0 mm								40
	Pressure peak damping element ø 0.3 mm								43
	Pressure peak damping element ø 0.5 mm								45
	Welsh plug G1/8"								57
	Welsh plug G1/4"								74
	Female electrical connector EN 175301-803-A (DIN43650-A)/NBR, -40...90°C								58
	Elbow connector female: 90° EN 175301-803-A (DIN43650-A)/NBR, -40...90°C								55
	Fixing set								V3
	Special electrical connection: Pin 1 + , Pin 2 - (only for output signal 4...20mA and male electrical plug EN175301-803-A / DIN43650-A)								92
	Cable length 1.5 m								1M
	Cable length 3.0 m								3M
	Cable length 5.0 m								5M

<sup>1)</sup> Extended overpressure as well as customized pressure ranges upon request

<sup>2)</sup> Only for pressure connection G1/4"

<sup>3)</sup> Flange (accessory 41) only for pressure ranges ≤ 40 bar

## Standard products (extra short lead time)

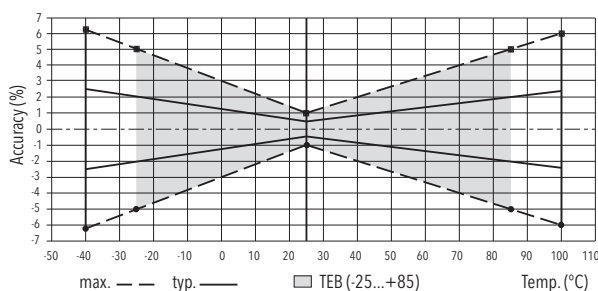
Product No.	Type Code	Pressure range [bar]	Over pressure max. [bar]	Signal output	Supply [VDC]
NPN4.0A4	8264 76 2510 04 0000 0000 19 58 V3	0...4	10	4...20 mA	24 (9 ... 32)
NPN6.0A4	8264 77 2510 04 0000 0000 19 58 V3	0...6	15	4...20 mA	24 (9 ... 32)
NPN10.0A4	8264 78 2510 04 0000 0000 19 58 V3	0...10	20	4...20 mA	24 (9 ... 32)
NPN16.0A4	8264 79 2510 04 0000 0000 19 58 V3	0...16	32	4...20 mA	24 (9 ... 32)
NPN25.0A4	8264 80 2510 04 0000 0000 19 58 V3	0...25	50	4...20 mA	24 (9 ... 32)
NPN40.0A4	8264 81 2510 04 0000 0000 19 58 V3	0...40	80	4...20 mA	24 (9 ... 32)
NPN4.0AF4	8264 76 2510 04 0000 0000 19 41 58 74 V3	0...4	10	4...20 mA	24 (9 ... 32)
NPN6.0AF4	8264 77 2510 04 0000 0000 19 41 58 74 V3	0...6	15	4...20 mA	24 (9 ... 32)
NPN10.0AF4	8264 78 2510 04 0000 0000 19 41 58 74 V3	0...10	20	4...20 mA	24 (9 ... 32)
NPN16.0AF4	8264 79 2510 04 0000 0000 19 41 58 74 V3	0...16	32	4...20 mA	24 (9 ... 32)
NPN25.0AF4	8264 80 2510 04 0000 0000 19 41 58 74 V3	0...25	50	4...20 mA	24 (9 ... 32)
NPN40.0AF4	8264 81 2510 04 0000 0000 19 41 58 74 V3	0...40	80	4...20 mA	24 (9 ... 32)

Specifications		
<b>Electrical Data</b>	Output / supply voltage	4...20 mA: 24 (9...32) VDC
	Rise time	typ. 1 ms/10...90 % nominal pressure
<b>Environmental conditions</b>	Media temperature	-40°C ... +100°C
	Ambient temperature	-40°C ... +100°C
	Protection <sup>1)</sup>	Electrical connection 04: IP65 Electrical connection 78: IP69K
	Humidity	Max. 95 % relative
	Vibration	Electrical connection 04/accessory 55: 10g (50...2000 Hz) Electrical connection 04: 15g (50...2000 Hz) Electrical connection 78: 15g rms
	Shock	50g/ 3 ms
<b>EMC Protection</b>	Emission	EN/IEC 61000-6-4
	Immunity	EN/IEC 61000-6-2
<b>Mechanical Data</b>	Sensor (wetted parts)	1.4542 (AISI630)
	Pressure connection (wetted parts)	1.4542 (AISI630)
	Housing	1.4301 (AISI304)
	Sealing	NBR
	Male electrical plug	See ordering information
	Weight	~ 190...220 g
	Mounting torque	See accessories

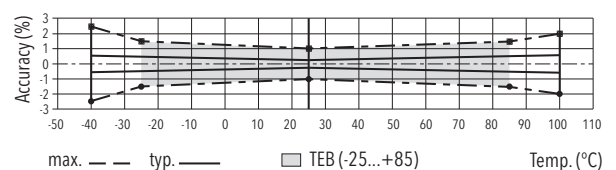
<sup>1)</sup> Electrical connection 04: Provided female connector is mounted according to instructions

Accuracy		Measuring accuracy 0.5%	Measuring accuracy 0.3%
		Ordering No. 25	Ordering No. 23
TEB @ -25...+85°C	[% FS typ.]	± 2.0	± 0.5
Accuracy @ +25°C	[% FS typ.]	± 0.5	± 0.3
NLH @ +25°C (BSL)	[% FS typ.]	± 0.2	± 0.1
TC zero point and span	[% FS/K typ.]	± 0.03	± 0.005
Long term stability 1 year @ +25°C	[% FS typ.]	± 0.2	± 0.2

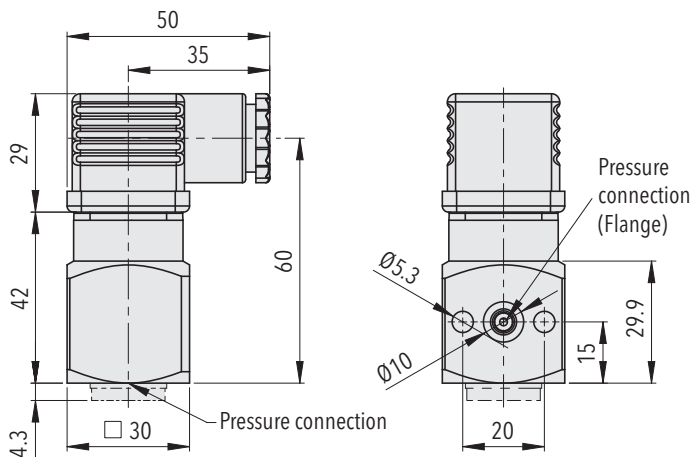
## Measuring accuracy 0.5%



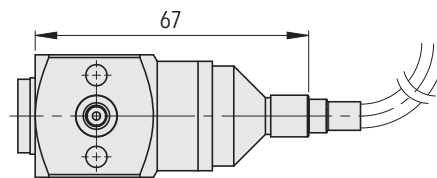
## Measuring accuracy 0.3%



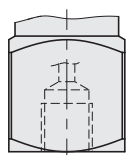
## Dimensions



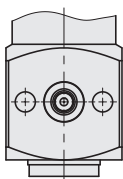
8264.XX.XXXX.04.XX.XX



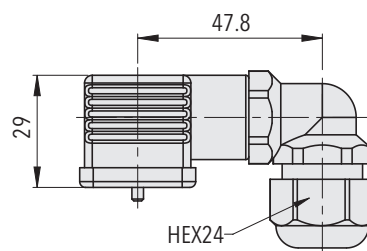
8264.XX.XXXX.78.XX.XX



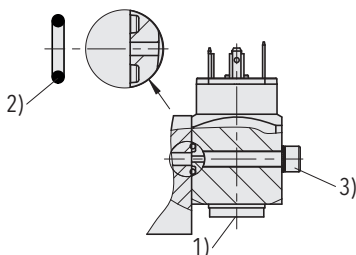
G 1/4"x12: 8264.XX.XX10.XX.XX.XX  
 G 1/8"x10: 8264.XX.XX18.XX.XX.XX  
 M10x1x10: 8264.XX.XX17.XX.XX.XX



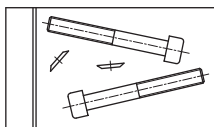
Flange: 8264.XX.XXXX.XX.XX.41



8264.XX.XXXX.XX.XX.55

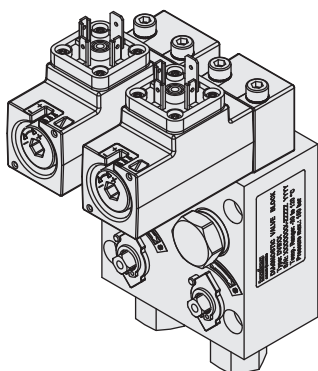


8264.XX.XXXX.XX.XX.41



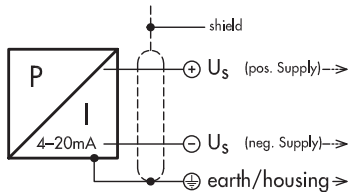
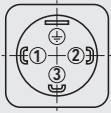
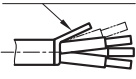
8264.XX.XXXX.XX.XX.V3

- 1) Torque: G 1/4":  $M_A = 32 \dots 40 \text{ Nm}$
  - 2) O-Ring:  $\varnothing 6.75 \times 1.78$  NBR 90 Sh
  - 3) Fixing screw: M5; property class: 8.8; torque:  $4.5 \dots 6 \text{ Nm}$
- Electrical connector center screw: max. torque 0.4 Nm



Diagnostic Valve Bloc (DVB)  
 see specification sheet H72361

## Electrical Connection

		Protection / electrical connection	
		IP65	IP69K
<b>Output signal</b>  <p><b>8264.xx.XXXX.xx.19</b></p>		Industrial standard EN175301-803A <b>04</b> 	Cable <b>**)</b> <b>78</b> Shield 
		Standard 2 1 ⊕	with accessory <b>92</b> 1 2 ⊕

\*\*\*) Ventilation via cable end

### Additional information

Documents		
	Data sheet	<a href="http://www.trafag.com/H72313">www.trafag.com/H72313</a>
	Instructions	<a href="http://www.trafag.com/H73313">www.trafag.com/H73313</a>
	Flyer	<a href="http://www.trafag.com/H70673">www.trafag.com/H70673</a>