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 restistance
- Good temperature resistance
- Completely welded steel sensor system without additional seals

05/2014
Data sheet H72313k
Subject to change

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	ABS, BV, CCS, DNV, GL, KRS, LRS, NKK, RINA, RMRS
Accuracy @ 25°C typ.	± 0.5 % FS typ ± 0.3 % FS typ		

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sensors controls

Ordering information/type code

					8264 . XX	. XX	. XX	. XX	. XX	. XX
Measuring range [1]	**Pressure measurement range [bar]**	**Over pressure [bar]**	**Burst pressure [bar]**							
	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 [2]	320	1000	**85**						
	0 ... 250 [2]	500	1000	**74**						
Sensor	Relative pressure, accuracy: 0.3% [3]					**23**				
	Relative pressure, accuracy: 0.5%					**25**				
Pressure connection	G1/4" female						**10**			
	M10x1.0 female						**17**			
	G1/8" female						**18**			
Electrical connection	Male electrical plug: EN 175301-803-A (DIN43650-A), Mat.: PA							**04**		
	Cable with shield: Material: FDR 25 (Raychem) 4 x 0.5mm² (Cable length see "Accessories")							**78**		
Output	**Output**	**Load resistance**	**I (supply)**	**U (supply)**						
	4 ... 20mA	(Usupply-9V) / 20mA		24 (9 ... 32) VDC					**19**	
Accessories	Flange with O-Ring [4]									**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 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**

[1] Extended overpressure as well as customized pressure ranges upon request
[2] Only for pressure connection G1/4"
[3] Flange (accessory 41) ≤ 40 bar only
[4] Only for pressure connection G1/8" or G1/4"

Standard products (extra short lead time)					
Product No.	**Type Code**	**Pressure range [bar]**	**Over pressure max. [bar]**	**Supply [VDC]**	**NLH @ 25°C (BSL) FS typ. [%]**
NPN4.0A4	8264 76 2510 04 0000 0000 19 58 V3	0...4	10	24 (9 ... 32)	±0.2
NPN6.0A4	8264 77 2510 04 0000 0000 19 58 V3	0...6	15	24 (9 ... 32)	±0.2
NPN10.0A4	8264 78 2510 04 0000 0000 19 58 V3	0...10	20	24 (9 ... 32)	±0.2
NPN16.0A4	8264 79 2510 04 0000 0000 19 58 V3	0...16	32	24 (9 ... 32)	±0.2
NPN25.0A4	8264 80 2510 04 0000 0000 19 58 V3	0...25	50	24 (9 ... 32)	±0.2
NPN40.0A4	8264 81 2510 04 0000 0000 19 58 V3	0...40	80	24 (9 ... 32)	±0.2
NPN4.0AF4	8264 76 2510 04 0000 0000 19 41 58 74 V3	0...4	10	24 (9 ... 32)	±0.2
NPN6.0AF4	8264 77 2510 04 0000 0000 19 41 58 74 V3	0...6	15	24 (9 ... 32)	±0.2
NPN10.0AF4	8264 78 2510 04 0000 0000 19 41 58 74 V3	0...10	20	24 (9 ... 32)	±0.2
NPN16.0AF4	8264 79 2510 04 0000 0000 19 41 58 74 V3	0...16	32	24 (9 ... 32)	±0.2
NPN25.0AF4	8264 80 2510 04 0000 0000 19 41 58 74 V3	0...25	50	24 (9 ... 32)	±0.2
NPN40.0AF4	8264 81 2510 04 0000 0000 19 41 58 74 V3	0...40	80	24 (9 ... 32)	±0.2

Specifications

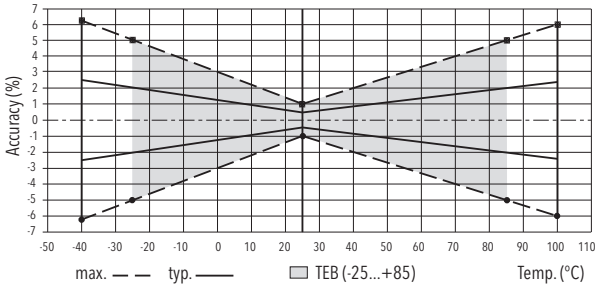
Electrical Data	Output / supply voltage	4...20 mA: 24 (9...32) VDC
	Rise time	typ. 1 ms/10...90% nominal pressure
Environmental Conditions	Media temperature	-40°C ... 100°C
	Ambient temperature	-40°C ... 100°C
	Protection [1)]	Electrical connection 04: IP65 Electrical connection 78: IP69K
	Humidity	Max. 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
EMC Protection	Emission	EN/IEC 61000-6-4
	Immunity	EN/IEC 61000-6-2
Mechanical Data	Sensor	1.4542 (AISI630)
	Housing / Pressure connection	1.4542 (AISI630) /1.4301 (AISI304)
	Sealing	NBR
	Male electrical plug	See ordering information
	Weight	~ 190...220 g
	Mounting torque	See accessories

[1)] Electrical connection 04: Provided female connector is mounted according to instructions

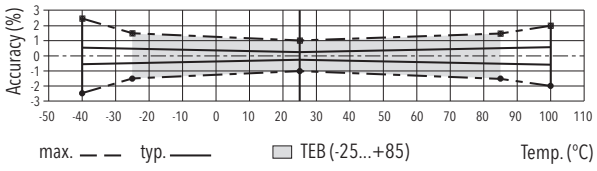
Accuracy

		Measuring accuracy 0.5% Ordering No. 25	**Measuring accuracy 0.3%** 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

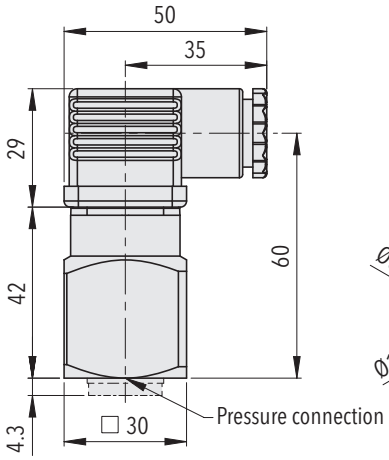
Measuring accuracy 0.5%

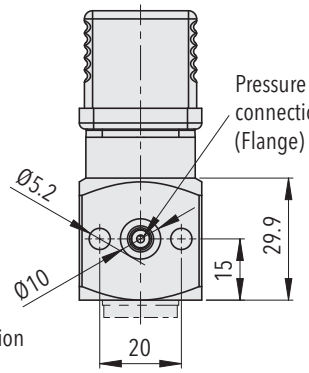


Measuring accuracy 0.3%

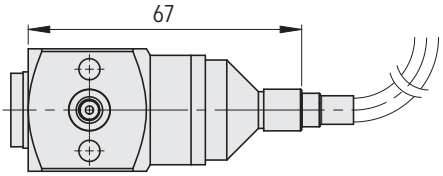


Dimensions

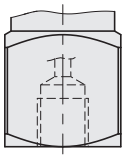




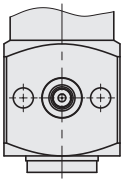
8264.XX.XXXX.**04**.XX.XX



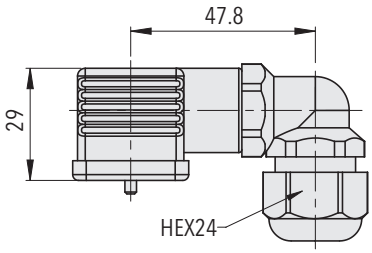
8264.XX.XXXX.**78**.XX.XX



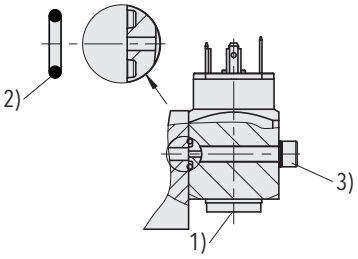
G 1/4"x12: **8264**.XX.XX**10**.XX.XX.XX
G 1/8"x10: **8264**.XX.XX**18**.XX.XX.XX
M10x1x10: **8264**.XX.XX**17**.XX.XX.XX



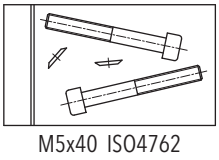
Flange: 8264.XX.XXXX.XX.XX.**41**



8264.XX.XXXX.XX.XX.**55**

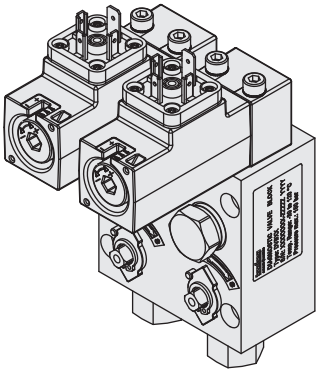


8264.XX.XXXX.XX.XX.**41**



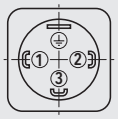
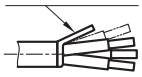
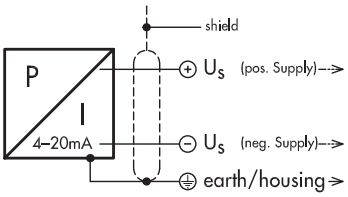
8264.XX.XXXX.XX.XX.**V3**

1) Torque: G 1/4": M_A = 32 ... 40 Nm
2) O–Ring: ø 6.75x1.78 NBR 90 Sh
3) Fixing screw: M5; property class: 8.8; torque: 4.5...6 Nm
4) Torque connector center screw: max. 0.4 Nm



Diagnostic Valve Bloc (DVB)
see specification sheet H72361

Electrical Connection

	Protection / electrical connection		
	IP65		IP69K
	Industrial standard EN175301-803A **04** 		Cable **) **78** Shield 
Output signal  **8264**.xx.xxxx.xx.**19**	Standard	with accessory **92**	
	2	1	brown
	1 ⏚	2 ⏚	black yellow / green

**) Ventilation via cable end

Additional information

Documents	Data sheet	www.trafag.com/H72313
	Instructions	www.trafag.com/H73313
	Flyer	www.trafag.com/H70673