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

08/2019
Data sheet H723130
Subject to change

Technical Data			
Measuring principle	Thin-film-on-steel	Accuracy @ 25°C typ.	± 0.5 % FS typ. ± 0.3 % FS typ.
Measuring range	0 ... 2.5 to 0 ... 250 bar	Media temperature	-40°C ... +100°C
Output signal	4 ... 20 mA	Ambient temperature	-40°C ... +100°C
NLH @ 25°C (BSL) typ.	± 0.2 % FS typ. ± 0.1 % FS typ.	Approval / conformity	ABS, BV, CCS, DNV-GL, KRS, LRS, NKK, RINA, RMRS

Trafag sensors & controls
Switzerland

Industriestrasse 11
8608 Bubikon

Tel. +41 44 922 32 32
Fax +41 44 922 32 33

www.trafag.com
trafag@trafag.com

trafag
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 %				**23**					
	Relative pressure, accuracy: 0.5 %				**25**					
Pressure connection	G1/4" female					**10**				
	M10x1 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 0.5 mm² (cable length see "Accessories")							**78**		
Output signal	**Signal output**	**Load resistance**	**I (supply)**	**U (supply)**						
	4 ... 20 mA	(Usupply-9 V) / 20 mA		24 (9 ... 32) VDC					**19**	
Accessories	Flange connection with O-Ring [3]									**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°C ... +90°C, for cable diameter 4 … 9 mm, flammability standard UL94-V0									**46**
	Female electrical connector EN 175301-803-A (DIN43650-A)/Silicone, -40°C ... +125°C, for cable diameter 4 … 9 mm, flammability standard UL94-V0									**56**
	Female electrical connector EN 175301-803-A (DIN43650-A)/NBR, -40°C ... +90°C, for cable diameter 4 … 9.5 mm, flammability standard UL94-V2 [4]									**58**
	Elbow connector female: 90° EN 175301-803-A (DIN43650-A)/NBR, -40°C ... +90°C, for cable diameter 6.5 … 9.5 mm, flammability standard UL94-V2 [4]									**55**
	Fixing set									**V3**
	Special electrical connection: Pin 1 +, Pin 2 - (only for output signal 4 ... 20 mA 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) only for pressure ranges ≤ 40 bar
[4] Without ship approval DNV-GL

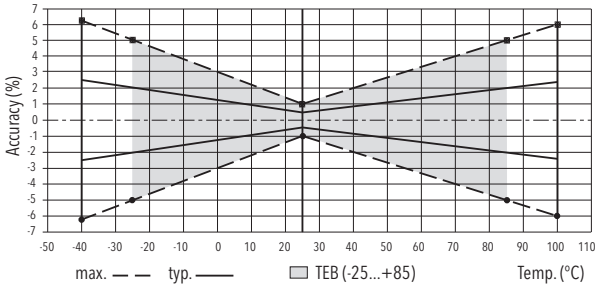
Standard products (extra short lead time)					
Product No.	**Type Code**	**Pressure range [bar]**	**Over pressure max. [bar]**	**Signal output**	**Supply [VDC]**
NPN4.0A4	8264 76 2510 04 0000 0000 19 46 V3	0 ... 4	10	4 ... 20 mA	24 (9 ... 32)
NPN6.0A4	8264 77 2510 04 0000 0000 19 46 V3	0 ... 6	15	4 ... 20 mA	24 (9 ... 32)
NPN10.0A4	8264 78 2510 04 0000 0000 19 46 V3	0 ... 10	20	4 ... 20 mA	24 (9 ... 32)
NPN16.0A4	8264 79 2510 04 0000 0000 19 46 V3	0 ... 16	32	4 ... 20 mA	24 (9 ... 32)
NPN25.0A4	8264 80 2510 04 0000 0000 19 46 V3	0 ... 25	50	4 ... 20 mA	24 (9 ... 32)
NPN40.0A4	8264 81 2510 04 0000 0000 19 46 V3	0 ... 40	80	4 ... 20 mA	24 (9 ... 32)
NPN4.0AF4	8264 76 2510 04 0000 0000 19 41 46 74 V3	0 ... 4	10	4 ... 20 mA	24 (9 ... 32)
NPN6.0AF4	8264 77 2510 04 0000 0000 19 41 46 74 V3	0 ... 6	15	4 ... 20 mA	24 (9 ... 32)
NPN10.0AF4	8264 78 2510 04 0000 0000 19 41 46 74 V3	0 ... 10	20	4 ... 20 mA	24 (9 ... 32)
NPN16.0AF4	8264 79 2510 04 0000 0000 19 41 46 74 V3	0 ... 16	32	4 ... 20 mA	24 (9 ... 32)
NPN25.0AF4	8264 80 2510 04 0000 0000 19 41 46 74 V3	0 ... 25	50	4 ... 20 mA	24 (9 ... 32)
NPN40.0AF4	8264 81 2510 04 0000 0000 19 41 46 74 V3	0 ... 40	80	4 ... 20 mA	24 (9 ... 32)

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: 10 g (50...2000 Hz) Electrical connection 04: 15 g (50...2000 Hz) Electrical connection 78: 15 g RMS
	Shock	50 g / 3 ms
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)	1.4542 (AISI630)
	Housing	1.4301 (AISI304)
	Sealing	NBR
	Male electrical plug	See ordering information
	Weight	~ 190...220 g
	Mounting torque	See accessories

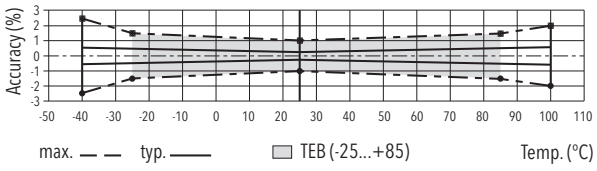
[1)] Electrical connection 04: Provided female connector is mounted according to instructions

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

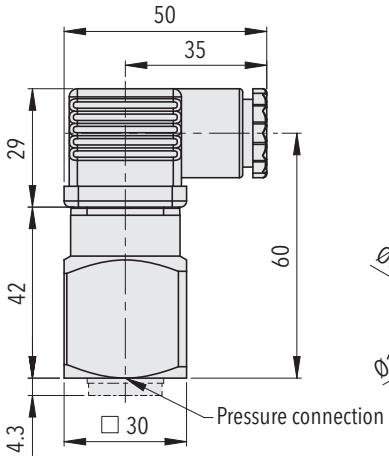
Measuring accuracy 0.5%

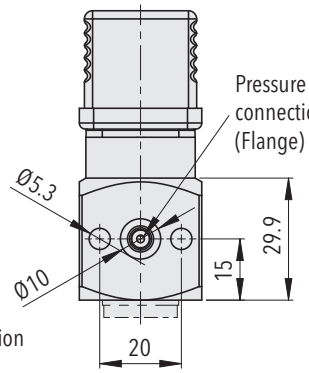


Measuring accuracy 0.3%

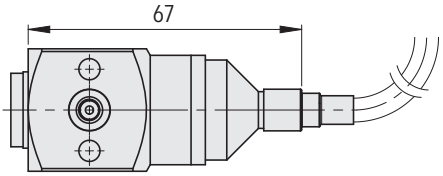


Dimensions

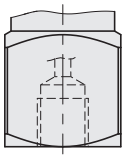




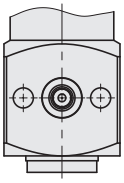
8264.XX.XXXX.**04**.XX.XX



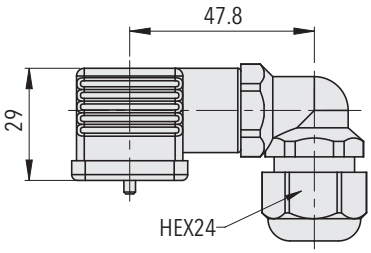
8264.XX.XXXX.**78**.XX.XX



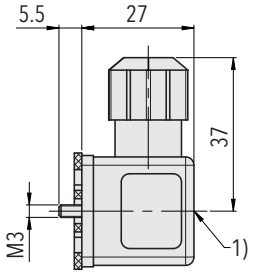
G1/4"x12: **8264**.XX.XX**10**.XX.XX.XX
G1/8"x10: **8264**.XX.XX**18**.XX.XX.XX
M10x1x10: **8264**.XX.XX**17**.XX.XX.XX



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

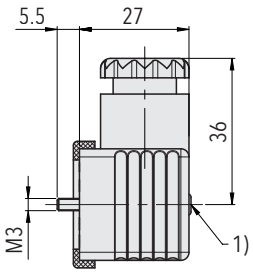


8264.XX.XXXX.XX.XX.**55**



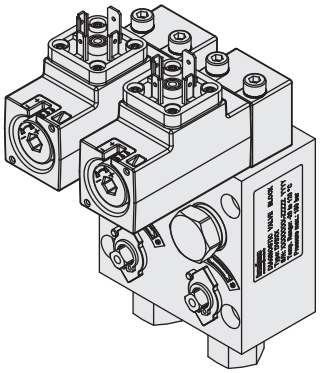
1) Tightening torque 50...60 Ncm

8264.XX.XXXX.XX.XX.**46/56**

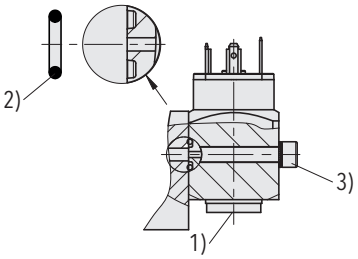


1) Tightening torque 50...60 Ncm

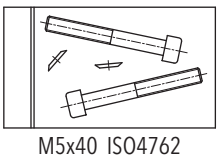
8264.XX.XXXX.XX.XX.**58**



Diagnostic Valve Bloc (DVB)
see specification sheet H72361



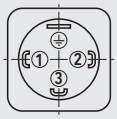
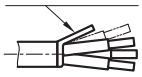
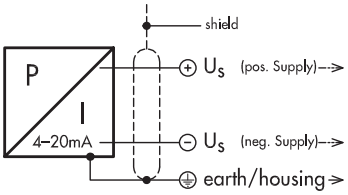
8264.XX.XXXX.XX.XX.**41**



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
Electrical connector center screw: max. torque 0.4 Nm

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