

Picotrans



Product description

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

Features

- Compact design
- High vibration resistance
- Completely welded steel sensor system without additional seals

 EMC: 2014/30/EU

 S.I. 2016 No. 1091

 RoHS/Reach compliant

 ABS, BV, CCS, DNV, KR, LR, NKK

Technical Data

Measuring principle	Thin-film-on-steel
Measuring range	0 ... 2.5 to 0 ... 250 bar
Output signal	4 ... 20 mA
Media temperature	-40°C ... +100°C
Ambient temperature	-40°C ... +100°C

Additional information

Data sheet www.trafag.com/H72313
Instructions www.trafag.com/H73313
Accessories www.trafag.com/H72258

NPN 8264

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 connector EN 175301-803-A (DIN 43650-A), Material PA									04
	Cable with shield: Material FDR 25 (Raychem) 4 x 0.5 mm ² (Cable length see section: Accessories)									78
	Cable with shield: Material ETFE, 3 x 0.75 mm ² (Cable length see section: Accessories) ³⁾									89
Output signal	Output signal	Load resistance	U (supply)							
	4 ... 20 mA	≤ (U _s - 9 V) / 20 mA	24 (9 ... 32) VDC							19

Accessories		
Flange connection with O-Ring		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 plug EN 175301-803-A (DIN 43650-A)/NBR, -40°C ... +90°C For cable diameter 4 ... 9 mm, flammability standard UL94-V0		46
Female electrical plug EN 175301-803-A (DIN 43650-A)/silicone, -40°C ... +125°C For cable diameter 4 ... 9 mm, flammability standard UL94-V0		56
Female electrical plug EN 175301-803-A (DIN 43650-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 (DIN 43650-A)/NBR, -40°C ... +90°C For cable diameter 6.5 ... 9.5 mm, flammability standard UL94-V0 ⁴⁾		55
Fixing set		V3
Cable length 1.5 m		1M
Cable length 3.0 m		3M
Cable length 5.0 m		5M
Cable length 6.0 m		6M
Cable length 8.0 m		7M
Cable length 10 m		8M
Cable length 12 m		9M
Pin configuration, see table: Electrical connection		

¹⁾ Extended overpressure as well as customized pressure ranges upon request

²⁾ Only for pressure connection G1/4"

³⁾ Only with ship approval DNV, RINA

⁴⁾ Without ship approval DNV

Standard products (extra short lead time)

Product No.	Type Code	Pressure range [bar]	Overpressure max. [bar]	Pressure connection
NPN4.0A4	8264 76 2510 04 0000 0000 19 46 V3	0 ... 4	10	G1/4" female
NPN6.0A4	8264 77 2510 04 0000 0000 19 46 V3	0 ... 6	15	G1/4" female
NPN10.0A4	8264 78 2510 04 0000 0000 19 46 V3	0 ... 10	20	G1/4" female
NPN16.0A4	8264 79 2510 04 0000 0000 19 46 V3	0 ... 16	32	G1/4" female
NPN25.0A4	8264 80 2510 04 0000 0000 19 46 V3	0 ... 25	50	G1/4" female
NPN40.0A4	8264 81 2510 04 0000 0000 19 46 V3	0 ... 40	80	G1/4" female
NPN4.0AF4	8264 76 2510 04 0000 0000 19 41 46 74 V3	0 ... 4	10	Flange connection with O-Ring
NPN6.0AF4	8264 77 2510 04 0000 0000 19 41 46 74 V3	0 ... 6	15	Flange connection with O-Ring
NPN10.0AF4	8264 78 2510 04 0000 0000 19 41 46 74 V3	0 ... 10	20	Flange connection with O-Ring
NPN16.0AF4	8264 79 2510 04 0000 0000 19 41 46 74 V3	0 ... 16	32	Flange connection with O-Ring
NPN25.0AF4	8264 80 2510 04 0000 0000 19 41 46 74 V3	0 ... 25	50	Flange connection with O-Ring
NPN40.0AF4	8264 81 2510 04 0000 0000 19 41 46 74 V3	0 ... 40	80	Flange connection with O-Ring

Specifications

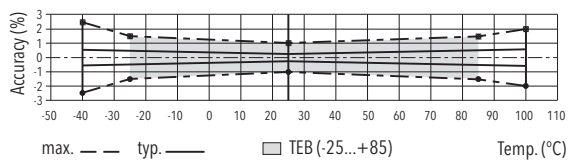
Electrical data	Output / supply voltage	4 ... 20 mA: 24 (9 ... 32) VDC
	Rise time of supply voltage	typ. 1 ms, 10 ... 90 % nominal pressure
	Resistance of insulation	> 10 MΩ, 250 VDC
	Dielectric strength	250 VAC, 50 Hz
	Current limiting output signal	appr. 24 mA (Overload)
Environmental conditions	Media temperature	-40°C ... +100°C
	Ambient temperature	-40°C ... +100°C
	Storage temperature	-20°C ... +40°C
	Protection ¹⁾	Electrical connection 04: IP65 Electrical connection 78, 89: 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, 89: 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 (AISI 630)
	Pressure connection (wetted parts)	1.4542 (AISI 630)
	Housing	1.4301 (AISI 304)
	Sealing	NBR
	Male electrical connector	See ordering information
	Mounting torque	See accessories

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

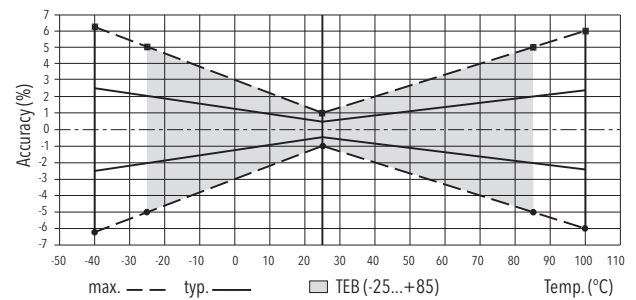
Accuracy

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

Accuracy class 0.3 %

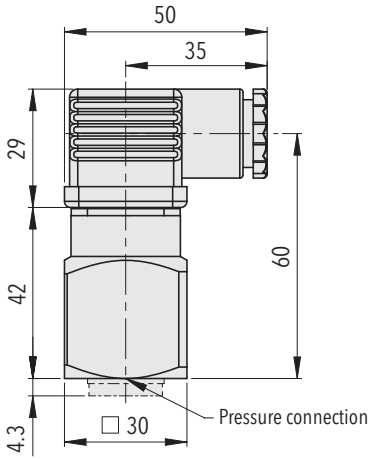


Accuracy class 0.5 %

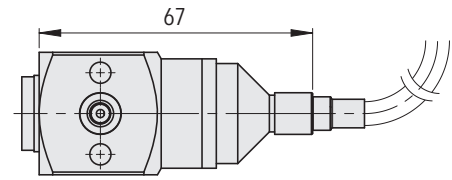
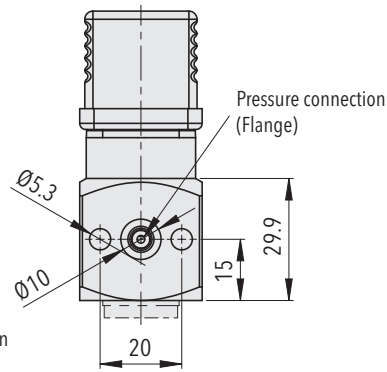


NPN 8264

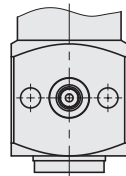
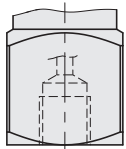
Dimensions



8264.XX.XXXX.04.XX.XX

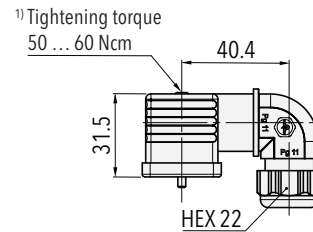


8264.XX.XXXX.78/89.XX.XX

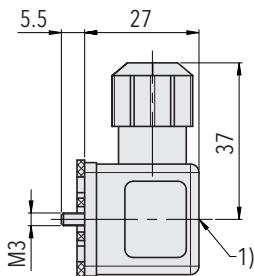


G1/4"x12: **8264.XX.XX10.XX.XX.XX**
G1/8"x10: **8264.XX.XX18.XX.XX.XX**
M10x1x10: **8264.XX.XX17.XX.XX.XX**

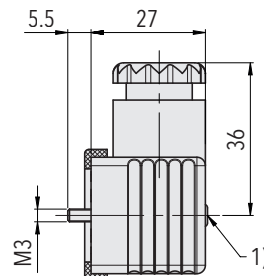
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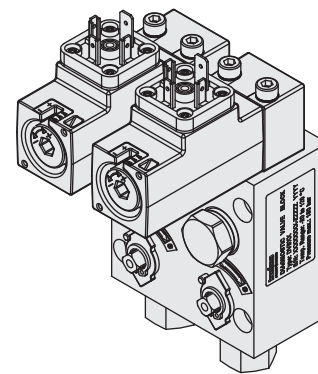
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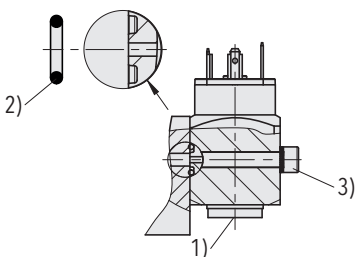
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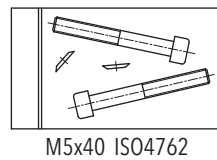
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Diagnostic Valve Bloc (DVB)
See specification sheet www.trafag.com/H72361



8264.XX.XXXX.XX.XX.41


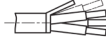
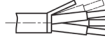
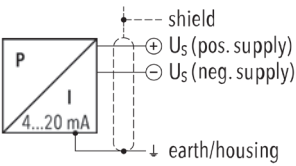


8264.XX.XXXX.XX.XX.V3

¹⁾ Torque: G1/4": $M_A = 32 \dots 40 \text{ Nm}$
²⁾ O-Ring: $\varnothing 6.75 \times 1.78 \text{ NBR 90 Sh}$
³⁾ Fixing screw: M5; Property class: 8.8; Torque: $4.5 \dots 6 \text{ Nm}$

NPN 8264

Electrical connection

	Industrial standard EN175301-803A	Cable ²⁾	Cable ²⁾
			
Electrical connection type code	04	78	89
IP protection	IP65 ¹⁾	IP69K	IP69K
Ambient temperature		-20°C ... +40°C	-20°C ... +40°C
Pin assignment type code		With accessory 92	
Output signal 8264.xx.xxxx.xx.19 	2 1 Earth	1 2 Earth	Brown Black Yellow/Green Black Blue Shield

¹⁾ Provided female electrical plug is mounted according to instructions

²⁾ Ventilation via cable end

 Empty 'Pin Assignment Type Code' field: Default pinout

Reliable quality

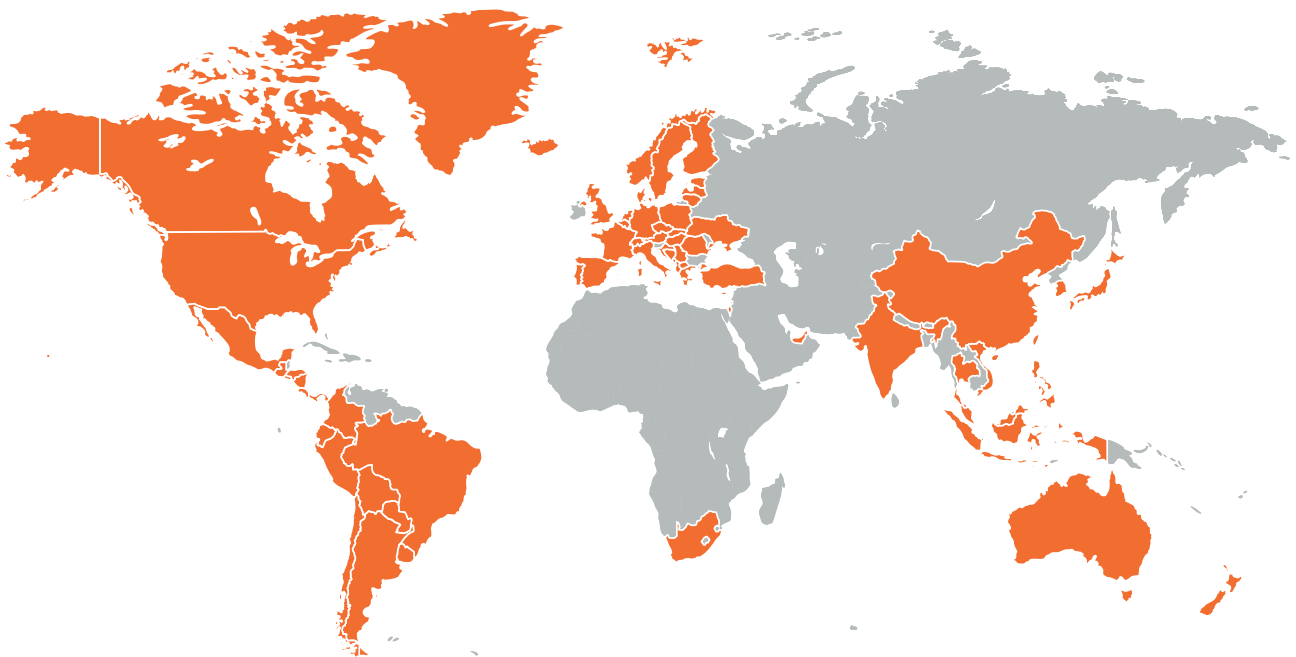
Worldwide represented, globally trusted, Swiss based

Trafag develops, produces and distributes robust, reliable and precise instruments for monitoring pressure, temperature and gas density.

The broad portfolio of pressure and temperature measuring instruments is tailored for use in test benches through to applications in harsh environments. The research and development departments in Switzerland and Germany develop all important components from the sensor to the application-specific microchip, which are

then manufactured in the production facilities in Switzerland, Germany, the Czech Republic, and India. Strict quality management according to ISO 9001 and ISO 14001 ensures that Trafag products meet the required quality and sustainability standards.

Trafag is headquartered in Switzerland, was founded in 1942 and has an extensive sales and service network in more than 40 countries worldwide.



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Pressure transmitters



Electronic pressure switches



Mechanical pressure switches



Pressure gauge



Thermostats



Temperature transmitters



Gas density