

Industrial Pressure Transmitter



Product description

The economic pressure transmitter ECT 8473 is based on the tried and true ECT line of transmitters with the wide media temperature range from -25 to 125°C. The enhanced accuracy and the low pressure ranges down to 100 mbar in combination with a comprehensive set of features, materials and options makes the ECT 8473 pressure transmitter an ideal and versatile solution suitable for a wide variety of applications.

Applications

- Machine tools
- Hydraulics
- Water treatment

Features

- Measuring ranges from 100 mbar
- Excellent media compatibility
- Relative or absolute pressure measurement
- Titanium version optional
- Frontal membrane optional

 EMC: 2014/30/EU

 S.I. 2016 No. 1091

 RoHS/Reach compliant

 UL-listed version

Technical Data

Measuring principle	Thick-film-on-ceramic
Measuring range	0 ... 0.1 to 0 ... 40 bar 0 ... 1.5 to 0 ... 500 psi
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiometric
Media temperature	-25°C ... +125°C
Ambient temperature	-25°C ... +125°C Cable PVC 22: -5°C ... +60°C Cable PUR 24: -20°C ... +70°C Cable Raychem 08: -20°C ... +100°C

Additional information

Data sheet www.trafag.com/H72326
 Instructions www.trafag.com/H73324
 Accessories www.trafag.com/H72258
 Video <https://youtu.be/wFR-nAp8bso>

Ordering information/Type code

				8473	XX	XX	XX	XX	XX	XX
Measuring range ¹⁾	Pressure measurement range [bar]	Over pressure [bar]	Burst pressure [bar]	Pressure-measurement-range [psi]	Over pressure [psi]	Burst pressure [psi]				
	0 ... 0.1	1.2	2	66	0 ... 1.5	15	30	F6		
	0 ... 0.16	1.2	2	67	0 ... 2	15	30	F7		
	0 ... 0.2	1.2	2	68	0 ... 2.5	15	30	F8		
	0 ... 0.4	1.2	2	69	0 ... 5	15	30	F9		
	0 ... 0.6	1.2	2	70	0 ... 10	20	30	G0		
	0 ... 1.0	2	3	71	0 ... 15	30	45	G1		
	0 ... 1.6	3.2	4.8	73	0 ... 20	40	60	G3		
	0 ... 2.5	5	7.5	75	0 ... 30	60	90	G5		
	0 ... 4	8	12	76	0 ... 50	100	150	G6		
	0 ... 6	12	15	77	0 ... 100	200	250	G7		
	0 ... 10	20	25	78	0 ... 150	300	375	G8		
	0 ... 16	32	40	79	0 ... 200	400	600	GA		
	0 ... 25	50	75	80	0 ... 250	500	625	G9		
	0 ... 40	80	100	81	0 ... 400	800	1200	H0		
	Option 5P: Fivefold overpressure				0 ... 500	1000	1250	H1		
	0 ... 2.5	12.5	18	55						
	0 ... 4	20	30	56						
	0 ... 6	30	48	57						
	0 ... 10	50	75	58						
	0 ... 16	80	120	59						
Sensor	Relative pressure, Material pressure connection and housing: 1.4305 (AISI303)							54		
	Relative pressure, Material pressure connection and housing: 1.4404/1.4435 (AISI316L) ²⁾							56		
	Relative pressure, Material pressure connection and housing: 1.4462 (AISI318LN) ²⁾							50		
	Relative pressure, titanium grade 5 ²⁾							51		
	Absolute pressure, Material pressure connection and housing: 1.4305 (AISI303) ^{2) 3)}							84		
	Absolute pressure, Material pressure connection and housing: 1.4404/1.4435 (AISI316L) ^{2) 3)}							86		
	Absolute pressure, Material pressure connection and housing: 1.4462 (AISI318LN) ^{2) 3)}							80		
	Absolute pressure, titanium grade 5 ^{2) 3)}							81		

	8473	XX	XX	XX	XX	XX	XX
Pressure connection	G1/4" female ²⁾			10			
	G1/4" male			17			
	G1/2" male DIN 3852-A ²⁾			21			
	G1/2" male DIN 3852-E ²⁾			41			
	G1/2" male DIN 3852-E, with inner cone ²⁾⁴⁾⁵⁾			59			
	1/4" NPT male, ANSI B1.20.1 ²⁾			30			
	1/8" NPT male, ANSI B1.20.1 ²⁾⁶⁾			43			
	7/16"-20UNF male, SAE4 (J1926) ²⁾			42			
	7/16"-20UNF male, DIN3866 ³⁾			18			
	7/16"-20UNF female, SAE J512 with valve opener ³⁾			24			
	7/16"-20UNF female, SAE J512 without valve opener ³⁾			44			
	9/16"-18UNF male, SAE6 (J1926) ²⁾⁷⁾			61			
	R1/4" male, DIN 3858 ²⁾			19			
	G3/4" frontal membrane ²⁾⁸⁾			52			
Electrical connection	Male electrical connector EN 175301-803-A (DIN 43650-A), Material PA			05			
	Male electrical connector M12x1, 5-pole, Material PBT			35			
	Cable PUR (Screwed cable gland PA 6-3), -20°C ... +70°C ⁹⁾¹⁰⁾			24			
	Cable PVC (Screwed cable gland PA 6-3), -5°C ... +60°C ⁹⁾¹⁰⁾¹¹⁾			22			
	Cable Raychem (Screwed cable gland PA 6-3), -20°C ... +100°C ⁹⁾¹⁰⁾¹¹⁾			08			
	3 Way male Delphi MetriPack 1.5 sealed connector, Material PA66			51			
Output signal	Output signal	Load resistance	I (supply)	U (supply)			
	4 ... 20 mA	(U _s - 9 V) / 20 mA	(= signal output)	9 ... 30 VDC			19
	0 ... 5 VDC	≥ 2.5 kΩ	≤ 20 mA	10 ... 30 VDC			14
	1 ... 6 VDC	≥ 5.0 kΩ	≤ 20 mA	10 ... 30 VDC			16
	0 ... 10 VDC	≥ 5.0 kΩ	≤ 20 mA	15 ... 30 VDC			17
	0.5 ... 4.5 VDC	≥ 5.0 kΩ	≤ 20 mA	5 VDC ± 0.25 VDC ratiom.			23

	8473	XX	XX	XX	XX	XX	XX
Accessories	Seal FKM (-20°C ... +125°C), inner and outer						61
	Seal CR ≤ 100 bar (-25°C ... +100°C), inner						62
	Seal EPDM (-25°C ... +125°C), inner and outer						63
	Pressure peak damping element ø 1.0 mm, Material 1.4305						40
	Pressure peak damping element ø 0.4 mm, Material 1.4305 (sensors 54, 84) resp. 1.4404 (sensors 50, 51, 56, 80, 81, 86)						44
	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						58
	Female electrical plug M12x1, 5-pole						33
	Cable length 1.5 m						1M
	Cable length 3.0 m						3M
	Cable length 5.0 m						5M
	Housing nut for electrical connection EN 175301-803-A (DIN 43650-A) secured with Loctite (max. 85°C)						L9
	Multiple packaging ¹²⁾						VM
	UL-listed version						UL
	Pin configuration, see table: Electrical connection						

⁰¹⁾ Extended overpressure as well as customized pressure ranges upon request, see table „Customised measuring ranges“

⁰²⁾ Upon request, whereas minimum order quantities may apply

⁰³⁾ Only for ranges: ≥ 400 mbar or 5 psi

⁰⁴⁾ Only for sensors 50 and 80

⁰⁵⁾ max. 16 bar / overpressure 32 bar

⁰⁶⁾ Only for sensors 56 and 86 and electrical connections 35 (others on request)

⁰⁷⁾ Only for sensors 56 and 86

⁰⁸⁾ Only with sensors 56, 50, 51, 86, 80, 81 and for pressure ranges ≤ 25 bar or 400 psi

⁰⁹⁾ Cable length see accessories (max. length 50 m, in 5-meter sections)

¹⁰⁾ IP68-rated protection: Immersion depth max. 3 m, Media +10°C ... +35°C

¹¹⁾ Pressure ranges > 16 bar (Pressure ranges ≤ 16 bar upon request)

¹²⁾ The order quantity must be a multiple of 50, only for electrical connections 05 and 35

i Vacuum measuring ranges: Measuring ranges below 0 bar (e.g. -1 bar ... 0 bar) are available as special pressure ranges

i Reversed calibration: A reversed calibration is also possible for measuring ranges below 0 bar, with the signals 4 ... 20 mA (code 19), 1 ... 6 VDC (code 16) and 0 ... 10 VDC (code 17). The signal zero point is at 0 bar, the signal end point at -1 bar, additional configurations on request

Compatibility matrix pressure connection and accessories

Code	Pressure connection	Damping		Seal		
		Ø 0.4 mm (Code 44)	Ø 1.0 mm (Code 44)	FKM ¹⁾ (Code 61)	CR ²⁾ (Code 62)	EPDM ¹⁾ (Code 63)
10	G1/4" female				✓	
17	G1/4" male	✓	✓	✓		✓
21	G1/2" male DIN 3852-A	✓	✓	✓		✓
41	G1/2" male DIN 3852-E	✓	✓	✓		✓
59	G1/2" male DIN 3852-E, with inner cone	✓	✓	✓		✓
30	1/4" NPT male, ANSI B1.20.1	✓	✓		✓	
43	1/8" NPT male, ANSI B1.20.1	✓	✓		✓	
42	7/16"-20UNF male, SAE4 (J1926)	✓	✓	✓		
18	7/16"-20UNF male, DIN 3866				✓	
24	7/16"-20UNF female, SAE J512 with valve opener				✓	
44	7/16"-20UNF female, SAE J512 without valve opener				✓	
61	9/16"-18UNF male, SAE6 (J1926)	✓	✓	✓		
19	R1/4" male, DIN 3858	✓	✓		✓	
52	G3/4" frontal membrane			✓		✓

¹⁾ Seal: inner and outer

²⁾ Seal: inner

Ordering-no. for process connections

	Combination with UL
Measuring range	All ranges on datasheet
Sensor	All codes on datasheet
Pressure connection	All codes on datasheet
Electrical connection	All codes on datasheet
Output signal	All codes except PS and T1
Accessories	All codes except GA, GS and GU

Signal processing

Code	Cut-off frequency f_c	Rise time (10 ... 90 % nominal pressure)	Output signal			
			4 ... 20 mA	0.5 ... 4.5 VDC ratiometric	0 ... 6 VDC	0 ... 10 VDC
GA ¹⁾	11 Hz	32 ms	x	x	-	-
Standard specification	350 Hz	1 ms	x	x	x	x

¹⁾ Upon request, whereas minimum order quantities may apply

Customised measuring ranges

min. pressure [bar] ¹⁾	max. pressure [bar] ²⁾	min. span [bar]	max. span [bar]	Overpressure [bar]	Accuracy	Code
-0.4	0.6	≥ 0.1	< 0.2	1.2	1.0 %	21
-0.4	0.6	≥ 0.2	< 0.5	1.2	0.5 %	21
-1	1	≥ 0.5	≤ 1.2	2	0.3 %	21
-1	2	≥ 1.2	< 2	3.2	0.3 %	22
-1	4	≥ 2	≤ 4.5	8	0.3 %	24
-1	6	> 4.5	≤ 7	12	0.3 %	25
-1	10	> 7	≤ 11	20	0.3 %	26
-1	16	> 11	≤ 17	32	0.3 %	27
-1	25	> 17	≤ 26	50	0.3 %	28
-1	40	> 26	≤ 41	80	0.3 %	29

¹⁾ Minimum pressure = Lowest zero point, start of measuring range (relative)

²⁾ Maximum pressure = Highest pressure, end of measuring range (relative)

 For absolute pressure sensors, the measuring range must include the point 1000 mbar (absolute)

 For relative pressure sensors, measuring range must include the point 0 bar (relative)

Standard configurations

Product No.	Type Code	Pressure range [bar]	Overpressure max. [bar]	Accuracy @ 25°C typ. [%]	Signal output	Pressure connection
ECT0.1A	8473 66 5417 05 0000 0000 19 58 61	0 ... 0.1	1.2	1.0	4 ... 20 mA	G1/4" male
ECT0.16A	8473 67 5417 05 0000 0000 19 58 61	0 ... 0.16	1.2	1.0	4 ... 20 mA	G1/4" male
ECT0.2A	8473 66 5417 05 0000 0000 19 58 61	0 ... 0.2	1.2	0.5	4 ... 20 mA	G1/4" male
ECT0.4A	8473 69 5417 05 0000 0000 19 58 61	0 ... 0.4	1.2	0.3	4 ... 20 mA	G1/4" male
ECT0.6A	8473 70 5417 05 0000 0000 19 58 61	0 ... 0.6	1.2	0.3	4 ... 20 mA	G1/4" male
ECT0.1V	8473 66 5417 05 0000 0000 17 58 61	0 ... 0.1	1.2	1.0	0 ... 10 VDC	G1/4" male
ECT0.16V	8473 67 5417 05 0000 0000 17 58 61	0 ... 0.16	1.2	1.0	0 ... 10 VDC	G1/4" male
ECT0.2V	8473 68 5417 05 0000 0000 17 58 61	0 ... 0.2	1.2	0.5	0 ... 10 VDC	G1/4" male
ECT0.4V	8473 69 5417 05 0000 0000 17 58 61	0 ... 0.4	1.2	0.3	0 ... 10 VDC	G1/4" male
ECT0.6V	8473 70 5417 05 0000 0000 17 58 61	0 ... 0.6	1.2	0.3	0 ... 10 VDC	G1/4" male
ECTF0.1A	8473 66 5652 05 0000 0000 19 58 61	0 ... 0.1	1.2	1.0	4 ... 20 mA	G3/4" frontal membrane
ECTF0.16A	8473 67 5652 05 0000 0000 19 58 61	0 ... 0.16	1.2	1.0	4 ... 20 mA	G3/4" frontal membrane
ECTF0.2A	8473 68 5652 05 0000 0000 19 58 61	0 ... 0.2	1.2	0.5	4 ... 20 mA	G3/4" frontal membrane
ECTF0.4A	8473 69 5652 05 0000 0000 19 58 61	0 ... 0.4	1.2	0.3	4 ... 20 mA	G3/4" frontal membrane
ECTF0.6A	8473 70 5652 05 0000 0000 19 58 61	0 ... 0.6	1.2	0.3	4 ... 20 mA	G3/4" frontal membrane
ECTF1.0A	8473 71 5652 05 0000 0000 19 58 61	0 ... 1	2	0.3	4 ... 20 mA	G3/4" frontal membrane
ECTF1.6A	8473 68 5417 05 0000 0000 19 58 61	0 ... 1.6	3.2	0.3	4 ... 20 mA	G3/4" frontal membrane
ECTF2.5A	8473 75 5652 05 0000 0000 19 58 61	0 ... 2.5	5	0.3	4 ... 20 mA	G3/4" frontal membrane
ECTF4.0A	8473 76 5652 05 0000 0000 19 58 61	0 ... 4	8	0.3	4 ... 20 mA	G3/4" frontal membrane
ECTF6.0A	8473 77 5652 05 0000 0000 19 58 61	0 ... 6	12	0.3	4 ... 20 mA	G3/4" frontal membrane
ECTF10.0A	8473 78 5652 05 0000 0000 19 58 61	0 ... 10	20	0.3	4 ... 20 mA	G3/4" frontal membrane

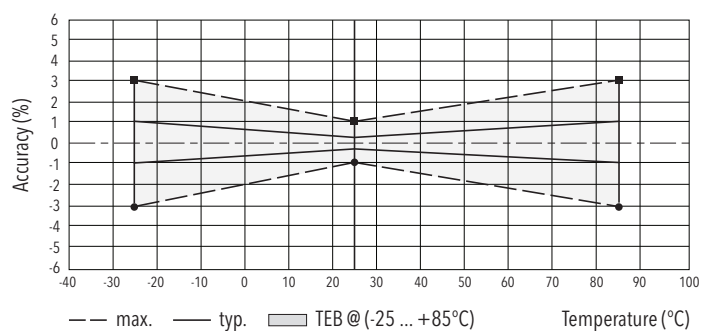
Specifications

Electrical data	Output / supply voltage	4 ... 20 mA: 24 (9 ... 30) VDC 0 ... 5 VDC: 24 (10 ... 30) VDC 1 ... 6 VDC: 24 (10 ... 30) VDC 0 ... 10 VDC: 24 (15 ... 30) VDC 0.5 ... 4.5 VDC: 5 VDC ratiometric
	Power-on delay time	max. 1.5 s
	Rise time of supply voltage	typ. 1 ms, 10 ... 90 % nominal pressure
	Inverse-polarity protection, short-circuit strength @ 25°C during 5 min.	4 ... 20 mA: to $U_s = 30$ VDC 0 ... 10 VDC, 0 ... 5 VDC, 1 ... 6 VDC: to $U_s = 30$ VDC 0.5 ... 4.5 VDC ratiometric: to $U_s = 5.25$ VDC
	Resistance of insulation	Type 14/16/17/23: > 10 M Ω , 100 VDC Type 19: > 10 M Ω , 250 VDC
	Dielectric strength	Type 14/16/17/23: 100 VAC, 50 Hz Type 19: 250 VAC, 50 Hz
	Current limiting output signal	4 ... 20 mA: appr. 25 mA max.
Environmental conditions	Media temperature	-25°C ... +125°C
	Ambient temperature	-25°C ... +125°C Cable PVC 22: -5°C ... +60°C Cable PUR 24: -20°C ... +70°C Cable Raychem 08: -20°C ... +100°C
	Storage temperature	-20°C ... +40°C
	Protection	IP65, IP67, IP68
	Humidity	max. 95 % relative
	Vibration	15 g RMS (20 ... 2000 Hz) (EN60068-2-64) 15 g Sinus (10 ... 2000 Hz) (EN60068-2-6)
	Shock	50 g/11 ms (EN60068-2-27)
EMC protection	Emission	EN/IEC 61000-6-3
	Immunity	EN/IEC 61000-6-2
Mechanical data	Sensor (wetted parts)	Ceramic, Al ₂ O ₃ (96 %)
	Pressure connection (wetted parts)	54/84: 1.4305 (AISI303) 56/86: 1.4404/1.4435 (AISI316L) 50/80: 1.4462 (AISI318LN) 51/81: Titanium Grade 5
	Housing	54/84: 1.4305 (AISI303) 56/86: 1.4404/1.4435 (AISI316L) 50/80: 1.4462 (AISI318LN) 51/81: Titanium Grade 5
	Sealing	FKM 70 Sh, CR, EPDM
	Male electrical connector	See ordering information
	Mounting torque	15 ... 20 Nm

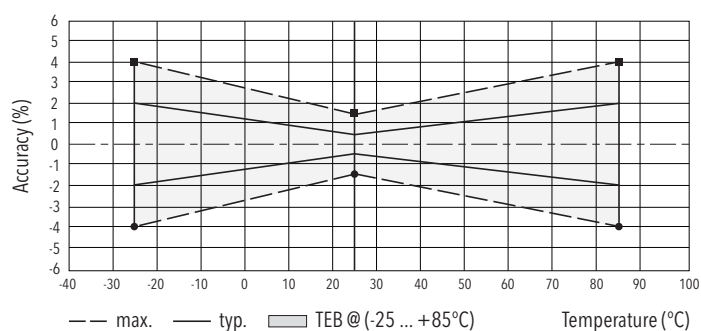
Accuracy

		Sensors 54/56/50/51/84/86/80/81		
Pressure measuring range	[bar]	$\geq 0 \dots 0.3$	$\geq 0 \dots 0.2$ $< 0 \dots 0.3$	$\geq 0 \dots 0.1$ $< 0 \dots 0.2$
	[psi]	$\geq 0 \dots 5$	$\geq 0 \dots 2.5$ $< 0 \dots 5$	$\geq 0 \dots 1.5$ $< 0 \dots 2.5$
			Option 5P	
TEB @ -25 ... +85°C	[% FS typ.]	± 1.0	± 2.0	± 3.0
Accuracy @ +25°C	[% FS typ.]	± 0.3	± 0.5	± 1.0
NLH @ +25°C (BSL)	[% FS typ.]	± 0.2	± 0.3	± 0.3
TC zero point and span	[% FS/K typ.]	± 0.02	± 0.02	± 0.02
Long term stability 1 year @ +25°C	[% FS typ.]	± 0.2	± 0.2	± 0.2

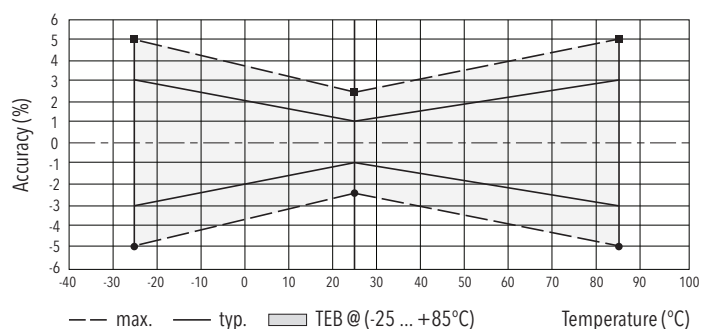
Accuracy class 0.3 %



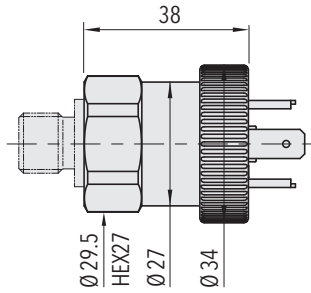
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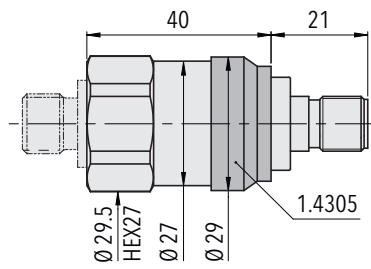
Accuracy class 1.0 %



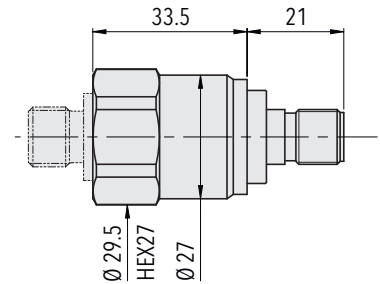
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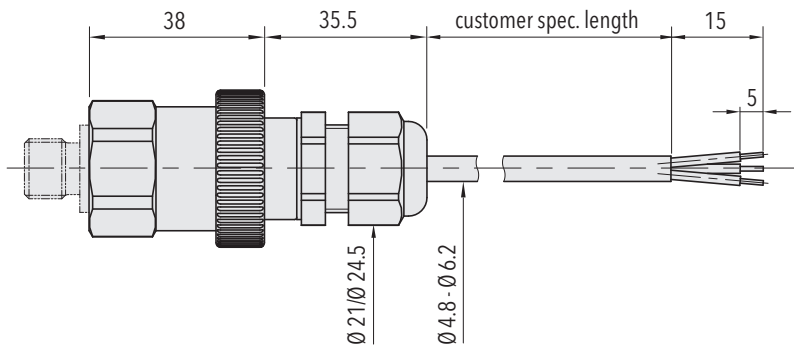
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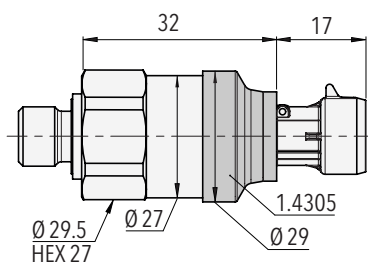
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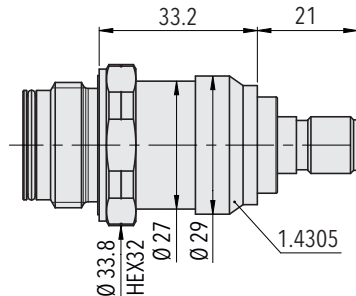
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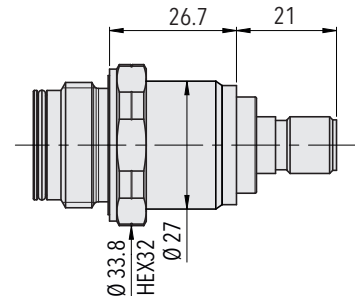
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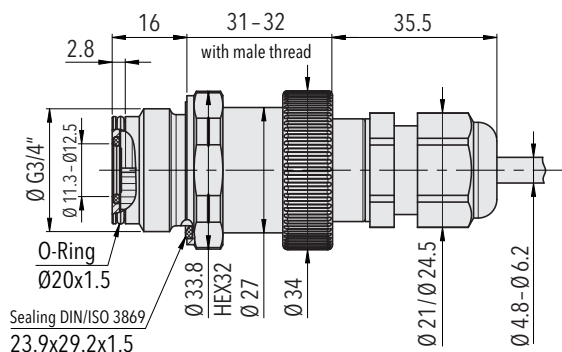
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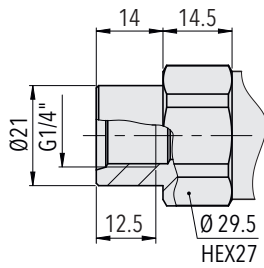


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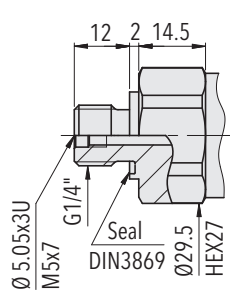


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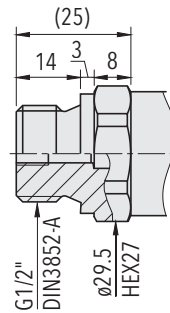
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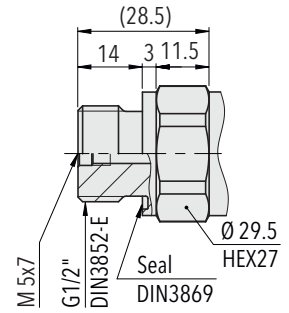
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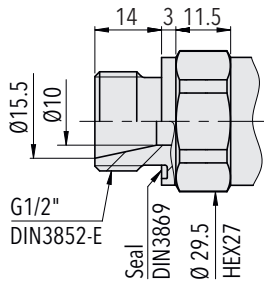
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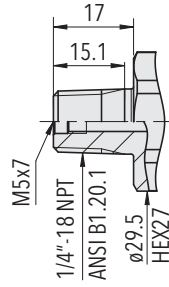
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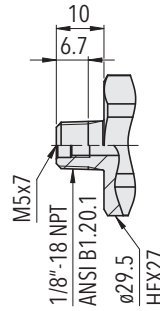
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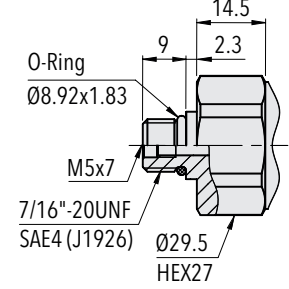
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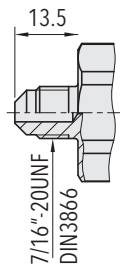
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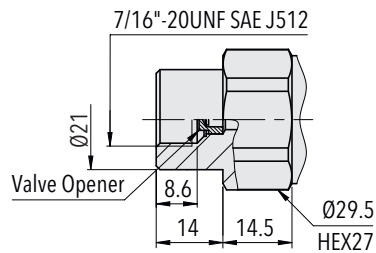
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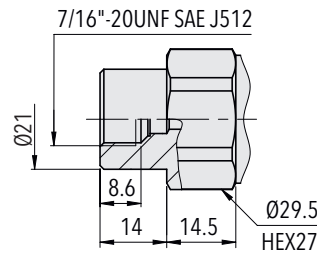
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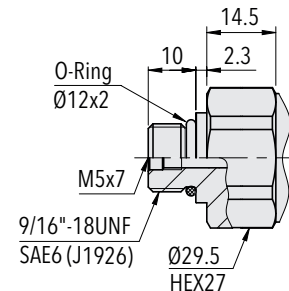
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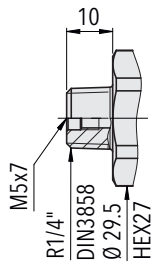
8473.XX.XX24.XX.XX.XX



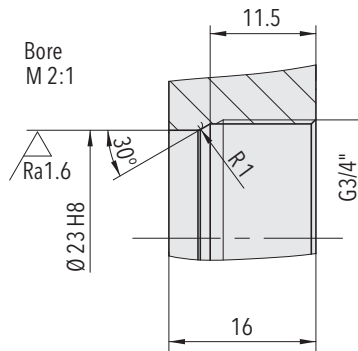
8473.XX.XX44.XX.XX.XX



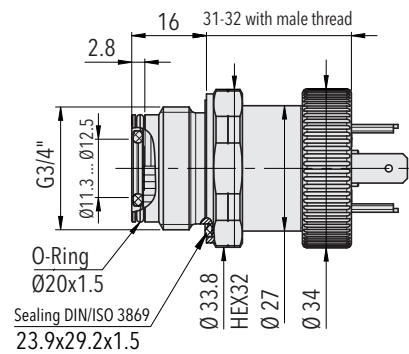
8473.XX.XX61.XX.XX.XX



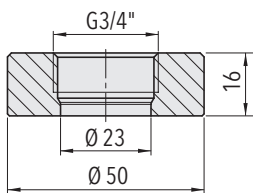
8473.XX.XX19.XX.XX.XX



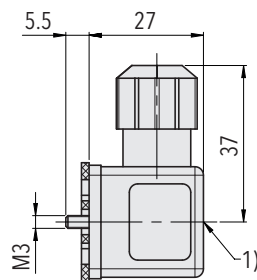
8473.XX.XX52.05.XX.XX



8473.XX.XXXX.XX.XX.58

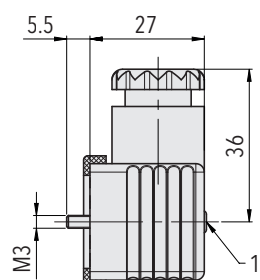


Welding flange (AISI 316L)
for G3/4" frontal membrane
Ordering No. C27805

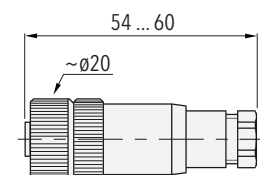


¹⁾ Tightening torque 50 ... 60 Ncm

8473.XX.XXXX.XX.XX.46/56

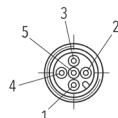
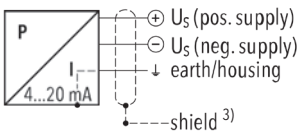
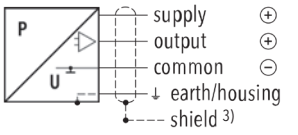


8473.XX.XXXX.XX.XX.58



8473.XX.XXXX.XX.XX.33

Electrical connection

	Industrial standard EN175301-803A ²⁾		M12x1, 5-pole				
 							
Electrical connection type code	05		35				
IP protection	IP65 ¹⁾		IP67 ¹⁾				
Ambient temperature	-25°C ... +125°C		-25°C ... +125°C				
UL-rated ambient temperature	-20°C ... +80°C		-20°C ... +80°C				
Pin assignment type code		92	94	G9	H1		
Output signal 8473.xx.xxxx.xx.19		2 1 Earth	1 2 Earth	4 1 3 5	1 3 3 4	1 2 5	
Pin assignment type code		98	97		E8		
Output signal 8473.xx.xxxx.xx.14/16/17/23		2 3 1 Earth	3 1 2 Earth	2 4 3 5		1 3 2 5	

¹⁾ Provided female electrical plug is mounted according to instructions

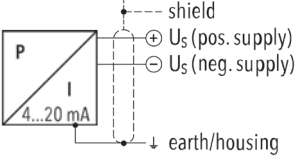
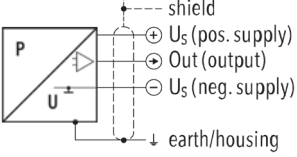
²⁾ Ventilation via male electric plug/cable end

³⁾ Only cable versions or female electrical plug with shield connection

 Empty 'Pin Assignment Type Code' field: Default pinout

Electrical connection

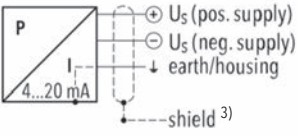
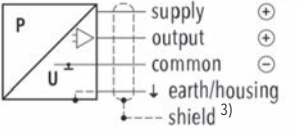
 3 Way M MetriPack 1.5 sealed
connector


Electrical connection type code	51	
IP protection	IP67 ¹⁾	
Ambient temperature	-40°C ... +125°C	
UL-rated ambient temperature	-20°C ... +80°C	
Pin assignment type code	E4	
Output signal 8473.XX.XXXX.XX.19 	1 2	1 3
Pin assignment type code	99	
Output signal 8473.XX.XXXX.XX.14/16/17/23 	1 3 2	1 2 3

¹⁾ Provided female electrical plug is mounted according to instructions

 Empty 'Pin Assignment Type Code' field: Default pinout

Electrical connection

	Cable ²⁾	Cable ²⁾	Cable ²⁾
			
Electrical connection type code	22	24	08
IP protection	IP68, max. 3m	IP68, max. 3m	IP68, max. 3m
Ambient temperature	-5°C ... +60°C	-20°C ... +70°C	-25°C ... +125°C
UL-rated ambient temperature	-5°C ... +60°C	-20°C ... +70°C	-20°C ... +80°C
Pin assignment type code			
Output signal 8473.xx.xxxx.xx.19 	White Brown Yellow	White Brown Yellow	Red Black Green
Pin assignment type code			
Output signal 8473.xx.xxxx.xx.14/16/17/23 for DC 	White Green Brown Yellow	White Green Brown Yellow	Red White Black Green

¹⁾ Provided female electrical plug is mounted according to instructions

²⁾ Ventilation via male electric plug/cable end

³⁾ Only cable versions or female electrical plug with shield connection

 Empty 'Pin Assignment Type Code' field: Default pinout

Reliable quality

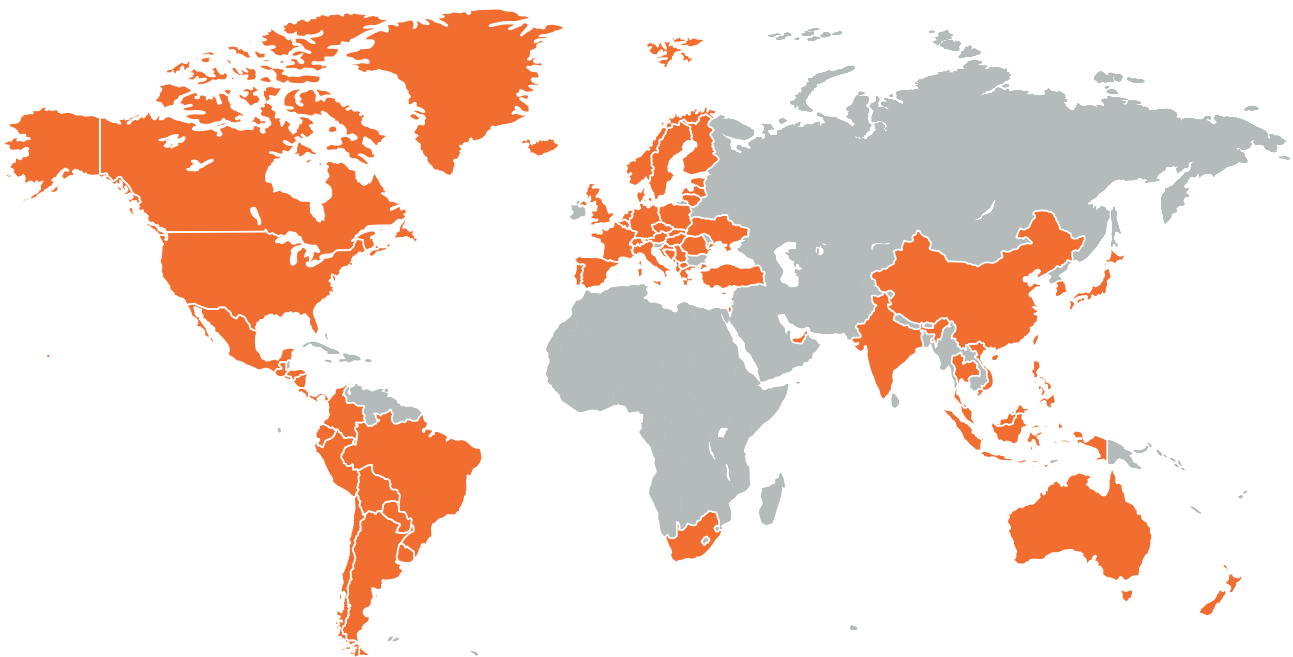
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Pressure transmitters



Electronic pressure switches



Mechanical pressure switches



Pressure gauge



Thermostats



Temperature transmitters



Gas density

Accuracy - Additional information

EMC protection	ESD	EN/IEC 61000-4-2 4 kV contact/8 kV air: no malfunction
	RFI	EN/IEC 61000-4-3 10V/m: 0.01 ... 2700 MHz (Output 4 ... 20 mA, at 600 ... 900 MHz, increased error < 3 %)
	Burst	EN/IEC 61000-4-4 Burst ± 2 kV: no interference
	Surge	EN/IEC 61000-4-5 Surge 1.2/50 μ ± 1 kV: no interference
	Conducted immunity	EN/IEC 61000-4-6 Radio-frequency: no interference

Accuracy - Additional information

		Sensors 54/56/50/51/84/86/80/81		
Pressure measuring range	[bar]	$\geq 0 \dots 0.3$	$\geq 0 \dots 0.2$ < 0 ... 0.3	$\geq 0 \dots 0.1$ < 0 ... 0.2
	[psi]	$\geq 0 \dots 5$	$\geq 0 \dots 2.5$ < 0 ... 5	$\geq 0 \dots 1.5$ < 0 ... 2.5
			Option 5P	
TEB @ -25 ... +85°C	[% FS max.]	± 3.0	± 4.0	± 5.0
Accuracy @ +25°C	[% FS max.]	± 1.0	± 1.5	± 2.5
NLH @ +25°C (BSL)	[% FS max.]	± 0.3	± 0.5	± 0.5
NLH @ +25°C (BSL through 0)	[% FS typ.]	± 0.2	± 0.3	± 0.3
	[% FS max.]	± 0.3	± 0.5	± 0.5
Repeatability	[% FS typ.]	± 0.05	± 0.05	± 0.05
TC zero point and span	[% FS/K max.]	± 0.05	± 0.05	± 0.05
Long term stability 1000h @ 85°C	[% FS typ.]	± 0.3	± 0.3	± 0.3
	[% FS max.]	± 0.6	± 0.6	± 0.6
Temperature hysteresis	[% FS typ.]	± 0.2	± 0.4	± 0.6
	[% FS max.]	± 0.6	± 1.0	± 1.2
Position sensitivity	[% FS max.]	< 0.05	< 0.05	< 0.05

Modifications

Index	Data	Description
r	06/2016	Frontpage: Measuring range correct again to 0 ... 0.1 to 0 ... 40 resp. 1...1.5 to 0...500 psi bar (was mistakenly changed) Page 2: Sensors 50, 51, 80, 81: with footnote „please ask us“ Page 2: Codes 66, 67, 68, 69: Overpressure changed to 1.2 bar, burst pressure changed to 2 bar; codes F6, F7, F8, F9: Overpressure changed to 15 psi, burst pressure changed to 30 bar
s	07/2016	Page 3: New accessory code E4: Special electrical connection: Pin 1 + , Pin 3 - (only for output 4...20mA and male electrical plug Packard Metri Pack 3-poles) Page 3: Code 99: information for electrical connection specified: only for output 0...5 VDC, 1...6 VDC, 0...10 VDC, 0.5...4.5 VDC and male electrical plug Packard Metri Pack 3-poles
t	09/2016	Page 4: Attributes Sensor, Pressure connection and housing separated: Sensor (wetted parts): Ceramic, Al2O3 (96 %); Pressure connection (wetted parts): 54/84: 1.4305 (AISI303), 56/86: 1.4404/1.4435 (AISI316L), 50/80: 1.4462 (AISI318LN), 51/81: Titanium Grade 5; (housing not changed)
u	11/2016	Page 4: Environmental conditions: Protection IP67 and IP68 added Page 5: Electrical connection: IP65/IP68 max. 3m correctet to IP67/IP68 max. 3m Page 6: Dimensions Nr. 8473.XX.XX17... changed, 8473.XX.XXXX.22... changed to 8473.XX.XXXX.22/68...
v	01/2017	Page 2: Pressure connection: Typecode 41, 42 and 19 added. Code 51 Mat. PBT and footnote 9) added, Electrical connection: Code 35 (Old shape) and Mat. PBT (New shape) added; Accessories: New Code L9 Page 2/3: footnote 8 added (Code 42) Page 6/7: New Dimensions Nr. XX19, XX41, XX42, XX.35 New, X717. and X942. 35, 51 and 01
w	03/2017	Page 2, 6: Pressure connection code 30, 1/4" NPT (typecode and dimensions): standard designation ANSI B1.20.1 added
x	09/2017	Page 2, 7: Addition of pressure connections: 1/8" NPT male, code 43 and footnote 10 Page 1, 2, 4, 5: Launch of electrical connections code 24 (PUR) and code 08 (Raychem), modification of cable connection code 22; all cable connections with new dimension on page 6 Page 2: Relative sensor typecodes with new text „pressure connection and housing material“ and with AISI designation
y	02/2018	Page 3: Footnote 7 corrected, only for pressure connections 10, 30, 43, 42, 18, 24, 19 Page 2: Male electrical plug Packard Metri Pack, code 51 = footnote 9 removed
z	03/2018	Page 3: Special electrical connection: Pin 1 + , Pin 3 -, Pin 5 Ground (for male electrical plug 35, M12x1, 5-pole), code 94 added Page 3: Special electrical connection: Pin 1 out , Pin 2 -, Pin 3 + (only for output signals 14, 16, 17, 23 and male electrical plug 01 industrial standard), code E3 added
aa	01/2019	Frontpage: Features no. 1 changed to „Measuring ranges from 100 mbar“, feature no. 2 changed from good to excellent media compatibility; Page 2: Measuring range 0.6 bar, code 70, = overpressure corrected from 2 to 1.2 bar and burst pressure from 3 to 2 bar, 7.5 psi, code G0, = overpressure 30 to 15 psi and burst pressure from 45 to 30 psi; Page 2: Pressure connections 10, 43, 19: footnote 2 = on request; Page 2: Electrical connection 68 removed; page 3: Pressure peak damping elements ø 0.3 mm, code 43 and ø 0.5 mm, code 45 removed; Page 2: Pressure connection code 42: Limit max. 35 MPa removed and standard J1926 integrated in typecode = footnote 8 removed;

Modifications

Index	Data	Description
aa	01/2019	continuation Index aa: Page 3: Pressure peak damping element code 40: Info „for pressure connections 17 and 30“ removed, description „Material 1.4305“ added and footnote 8: not for pressure connections 10, 52; Page 3: Pressure peak damping element code 44 ø 0.4 mm added with material info: 1.4305 for sensors 54, 84 resp. 1.4404 for sensors 50, 51, 56, 80, 81, 86 and footnote 8: not for pressure connections 10, 52; Page 3: Female electrical connector EN 175301-803-A (DIN43650-A) code 58: Info „NBR -40...+90°C“ added; Page 3, 8: New female electrical connector EN 175301-803-A (DIN43650-A) /Silicone, -40...+125°C, code 56 added;
aa	01/2019	continuation Index aa: Page 3: New ordering code for multiple packaging added, code VM with footnote 11 (the order quantity must be a multiple of 50 only for electrical connections 05 und 35); Page 3: Footnote 4 changed from ...only for pressure ranges ≤ 10 bar or 150 psi to ≤ 25 bar or 400 psi; Page 4: Table „Standard products“: new articles ECT0.16A, ECT0.16V, ECTF0.16A added; Page 1, 5: Ambient temperature changed to -25...125°C; Page 7, 8: Dimension code 35 „old shape“ removed, dimension code 35 text „new shape“ removed, dimension for cables: measure 19.5 removed; dimension pressure connection code 17 changed (same like 8283); Page 8: Dimension pressure connection 52 frontal membrane: ø 10 modified to ~ ø 10.5
ab	09/2019	Page 2: Launching of option 5P (fivefold overpressure) measuring ranges code 55, 56, 57, 58, 59 Page 2, 9: New pressure connections code 18 and 24 added Page 3: Addition of new connector code 46 as well as information to flammability standard UL94-V0 for connector 46/56 and UL94-V2 for connector 58, new drawings for female electrical plugs 46/56 and 58 Page 8: New dimensions (7 pcs.) for frontal membrane G3/4" each with flare nut (Bördelmutter) and directly crimped: M12x1.5 code 35, Mini DIN, code 01, Packard, code 51 as well as cable version 22/24/08 Page 8: Dimension of pressure connection G1/4" female, code 10 changed
ab	09/2019	continuation Index ab: Page 9: New pressure connection added: G1/2" male DIN3852-E with inner cone, code 59, footnote 2 and 12 Page 9: Dimension frontal membrane, code 52 corrected Frontpage: Addition of NLH @ 25°C (BSL) typ. values in table „Technical Data“ Page 3: Information about reverse calibration added
ac	11/2019	Page 2: Mesuring range: psi type code G0: 0...7.5 over pressure 15 change to 0...10 over pressure 20
ad	01/2020	Page 2, 9: Pressure connection 9/16"-18UNF m, SAE6 (J1926) code 61 added
	05/2020	Page 5: Electrical Data: (New English Text) Switch-on-delay changed to Power-on delay time
ae	11/2020	Page 2: Pressure connection Code 59 new footnote Page 7: Dimensions ...05.XX.. and ...22/24/05.XX... 36-38 with male thread 48.5-50.5 with female thread removed Page 9: Welding flange for G3/4" frontal membrane (1.4301) changed to Welding flange (AISI 316L) for G3/4" frontal membrane Page 5/10: Accuracy: Pressure measuring range changed
af	01/2021	Page 2: Electrical connection code 35 old and new shape removed Page 5: Viobration 4g (10...2000Hz) changed to 15g RMS (20...2000Hz) and 15g Sinus (10...2000Hz) Schock 50g/8ms changed to 50g/11ms (EN60068-2-27)
ag	03/2021	Page 3: Footnote 6) changed to Only with sensors 56, 50, 51, 86, 80, 81 and for pressure ranges ≤ 25 bar or 400 psi Footnote 7) 42 removed
ah	06/2021	Page 2/6: Electrical connection Code 01 removed Page 3: Accessories Code 34 removed, Footnote 7) 44 added, Footnote 8) 18, 24 and 44 added, Footnote 10) 01 removed Page 7/8/9: Dimensions 8473.XX.X.....01.XX.XX, 8473.XX.XXXX.XX.XX.34 and 8473.XX.XX52.01.XX.XX removed; 8473.XX.XX42.XX..., 8473.XX.XX24.XX... and 8473.XX.XX61.XX... changed, 8473.XX.XX44.XX... added
ai	03/2022	Page 2: Measuring range: psi Code GA added
ak	06/2023	Page 3: Output signal: I(supply) Code 19 (=Signal output) added; Code 14, 16, 17, 23 ≤ 10 mA changed to ≤ 20 mA

Modifications

Index	Date	Description
al	08/2023	Page 3/6: Electrical connection new Pin out Code G9
am	10/2023	Page 2: Electrical connection: Code 51 new footnote 15) Do not use for new designs as this option will be phased out soon. Only limited quantities available.
an	11/2023	Page 3: Footnote 1) see table „Customised measuring ranges“ added; i: For absolute pressure sensors, the measuring range must include the point 1000 mbar (absolute). added Page 4: Table added: Customised measuring ranges; Standard products: ECT0.4A, ECT0.4V and ECTF0.4A Accuracy @ 25°C typ. changed from 0.5% to 0.3% Page 7/9: Dimensions: Designation SW changed to HEX
ao	08/2024	Frontpage, 5/7: UL-rated ambient temperature added Page 3: Accessories: new Code H1 and E8 (...5-pole) and UL UL-listed version with new footnote 16) possible type code combinations for UL-listed versions see separate table added Page 7: Electrical connection: pin assignment H1 and E8 added
ap	10/2024	Page 8: Dimension 8473.XX.XX21.XX.XX.XX changed
aq	03/2025	Page 2/8: Electrical connection Code 51 removed Page 3: Accessories Code E4 and 99 ; footnote 10) 51 removed; 15) Do not use for new designs as this option will be phased out soon. Only limited quantities available. removed Page 7: Dimensions all with ...XX.51... removed
ar	05/2026	New Datasheet-Layout; Page 1: Flyer removed and archived Page 2: Typecode; Standardisation of the spelling 'Usupply' to 'Us' Page 3/10/13: Add 3 Way M MetriPack 1.5 sealed connector, Code 51 Page 3: Typecode; Footnotes removed for Code 61 (FN2), Code 62 (FN12), Code 40/44 (FN 13), Codes 61/62/63: Additional information on "internal/external" seals Page 4/5: Add tabel „Compatibility matrix pressure connector“ and „Ordering information UL“ Page 5: New Infopoint: For relative pressure sensors, measuring range must include the point 0 bar (relative). Page 8: Title diagramm "Measuring accuracy ..." changed to "Accuracy class ..."