



产品说明

经济型压力变送器 ECT 8473 的基础是久经考验的、介质温度范围扩大至 -25 至 +125°C 的 ECT 压力变送器系列产品。ECT 8473 精度更高,低压力范围高达 100 mbar, 包含多种规格、材料和选件的套件,使其能够在不同工业应用中被用作理想的多功能解决方案。

应用

- 机械制造
- 液压系统
- 水处理

主要特点

- 测量范围超过100毫巴
- 出色的介质兼容性
- 相对或者绝对压力测量
- 钛规格选配
- 前隔膜可选

 EMC: 2014/30/EU

 S.I. 2016 No. 1091

 符合 RoHS/Reach 标准

 UL 认证版本

技术数据

测量原理	陶瓷厚膜
测量范围	0 ... 0.1 至 0 ... 40 bar, 0 ... 1.5 至 0 ... 500 psi
输出信号	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC 比率
介质温度	-25°C ... +125°C
环境温度	-25°C ... +125°C 电缆 PVC 22 : -5°C ... +60°C 电缆 PUR 24 : -20°C ... +70°C 电缆 Raychem 08 : -20°C ... +100°C

更多信息

数据表 www.trafag.com/H72326
 操作说明 www.trafag.com/H73324
 配件 www.trafag.com/H72258
 视频 <https://youtu.be/wFR-nAp8bso>

订购信息/类型代码

				8473	XX	XX	XX	XX	XX	XX
测量范围 ¹⁾	范围 [bar]	过压 [bar]	爆破压力 [bar]	范围 [psi]	过压 [psi]	爆破压力 [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		
	选配 5P: 五倍过压				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						
传感器										
相对压力, 材料 压力接口 / 外壳: 1.4305 (AISI303)				54						
相对压力, 材料 压力接口 / 外壳: 1.4404/1.4435 (AISI316L) ²⁾				56						
相对压力, 材料 压力接口 / 外壳: 1.4462 (AISI318LN) ²⁾				50						
相对压力, 等级 5 钛合金 ²⁾				51						
绝对压力, 材料 压力接口 / 外壳: 1.4305 (AISI303) ²⁾³⁾				84						
绝对压力, 材料 压力接口 / 外壳: 1.4404/1.4435 (AISI316L) ²⁾³⁾				86						
绝对压力, 材料 压力接口 / 外壳: 1.4462 (AISI318LN) ²⁾³⁾				80						
绝对压力, 等级 5 钛合金 ²⁾³⁾				81						
压力接口										
G1/4"内螺纹 ²⁾				10						
G1/4"外螺纹				17						
G1/2" 外螺纹 DIN 3852-A ²⁾				21						
G1/2" 外螺纹 DIN 3852-E ²⁾				41						
G1/2" 外螺纹 DIN 3852-E, 带内锥 ²⁾⁴⁾⁵⁾				59						
1/4" NPT 外螺纹, ANSI B1.20.1 ²⁾				30						
1/8" NPT 外螺纹, ANSI B1.20.1 ²⁾⁶⁾				43						
7/16"-20UNF 外螺纹, SAE4 (J1926) ²⁾				42						
7/16"-20UNF 外螺纹, DIN 3866 ³⁾				18						
7/16"-20UNF 内螺纹, SAE J512 带阀门常闭触点 ³⁾				24						
7/16"-20UNF 内螺纹, SAE J512 无阀门常闭触点 ³⁾				44						
9/16"-18UNF 外螺纹, SAE4 (J1926) ²⁾⁷⁾				61						
R1/4" 外螺纹, DIN 3858 ²⁾				19						
G3/4" 前隔膜 ²⁾⁸⁾				52						

8473 XX XX XX XX XX XX

电气接口	插针接头 EN 175301-803-A (DIN 43650-A), 材料 PA				05	
	插针接头 M12x1, 5 针, PBT 材料				35	
	电缆PUR (螺纹电缆接头 PA 6-3), -20°C ... +70°C ⁹⁾¹⁰⁾				24	
	电缆PVC (螺纹电缆接头 PA 6-3), -5°C ... +60°C ⁹⁾¹⁰⁾¹¹⁾				22	
	电缆Raychem (螺纹电缆接头 PA 6-3), -20°C ... +100°C ⁹⁾¹⁰⁾¹¹⁾				08	
	3 Way M MetriPack 1.5 密封连接器, 材料 PA66				51	
输出信号	输出信号	负载电阻	I (供电)	U (供电)		
	4 ... 20 mA	(U _s - 9 V) / 20 mA	(= 输出信号)	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 比率		23
配件	密封 FKM (-20°C ... +125°C), 内经 以及 外径					61
	密封 CR ≤ 100 bar (-25°C ... +100°C), 内经					62
	密封 EPDM (-25°C ... +125°C), 内经 以及 外径					63
	压力峰值阻尼元件 ø 1.0 mm, 材料1.4305 8)					40
	压力峰值阻尼元件 ø 0.4 mm, 材料1.4305(传感器54, 84) 或1.4404 (传感器 50, 51, 56, 80, 81, 86)					44
	插孔接头 EN 175301-803-A (DIN 43650-A)/NBR, -40°C ... +90°C 对于电缆直径 4 ... 9 mm, 防火分类 UL94-V0					46
	插孔接头 EN 175301-803-A (DIN 43650-A)/硅树脂, -40°C ... +125°C 对于电缆直径 4 ... 9 mm, 防火分类 UL94-V0					56
	插孔接头 EN 175301-803-A (DIN 43650-A)/NBR, -40°C ... +90°C 对于电缆直径 4 ... 9.5 mm, 防火分类 UL94-V2					58
	插孔接头 M12x1, 5 针					33
	电缆长度 1.5 m					1M
	电缆长度 3.0 m					3M
	电缆长度 5.0 m					5M
	电气接口的外壳螺母 EN 175301-803-A (DIN 43650-A), 用乐泰固定 (最大 85°C)					L9
	多件包装 ¹²⁾					VM
	UL 认证版本					UL
	引脚配置见表: 电气连接					

⁰¹⁾ 客户定制压力范围和多重过压, 参见图表 „定制量程“

⁰²⁾ 可供询问, 可能需要设置最小订购量

⁰³⁾ 仅用于压力范围 ≥ 400 mbar 或 5 psi

⁰⁴⁾ 仅用于带传感器50和80

⁰⁵⁾ 最大 16 bar / 超压 32 bar

⁰⁶⁾ 仅用于带传感器56和86和用于电气接口 35 (其它请询问)

⁰⁷⁾ 仅用于带传感器56和86

⁰⁸⁾ 仅用于传感器 56, 50, 51, 86, 80, 81 和压力范围 ≤ 25 bar 或 400 psi

⁰⁹⁾ 电缆长度详见附件 (最大长 50 米, 5 米为一段)

¹⁰⁾ 防护等级 IP68: 浸没深度 最大 3m, 介质 +10°C ... +35°C

¹¹⁾ 压力范围 > 16 bar (压力范围 ≤ 16 bar 可供询问)

¹²⁾ 订单数量必须是 50 的倍数, 用于电气接口 05 和 35

i 真空测量范围: 特殊压力范围可能低于 0 bar (例如 -1 bar - 0 bar)

i 反向校准: 对于 0 bar 以下的测量范围, 信号 4 ... 20 mA (代码 19), 1 ... 6 VDC (代码 16) 和 0 ... 10 VDC (代码 17), 也可以进行反向校准. 信号零点为 0 bar, 信号终点为 -1 bar. 可应要求提供其它配置

压力连接与配件兼容性矩阵

代码	压力接口	阻尼		密封		
		Ø 0.4 mm (代码 44)	Ø 1.0 mm (代码 44)	FKM ¹⁾ (代码 61)	CR ²⁾ (代码 62)	EPDM ¹⁾ (代码 63)
10	G1/4“内螺纹				✓	
17	G1/4“外螺纹	✓	✓	✓		✓
21	G1/2“外螺纹 DIN 3852-A	✓	✓	✓		✓
41	G1/2“外螺纹 DIN 3852-E	✓	✓	✓		✓
59	G1/2“外螺纹 DIN 3852-E, 带内锥	✓	✓	✓		✓
30	1/4“NPT 外螺纹, ANSI B1.20.1	✓	✓		✓	
43	1/8“NPT 外螺纹, ANSI B1.20.1	✓	✓		✓	
42	7/16“-20UNF 外螺纹, SAE4 (J1926)	✓	✓	✓		
18	7/16“-20UNF 外螺纹, DIN 3866				✓	
24	7/16“-20UNF 内螺纹, SAE J512 带阀门 常闭触点				✓	
44	7/16“-20UNF 内螺纹, SAE J512 无阀门 常闭触点				✓	
61	9/16“-18UNF 外螺纹, SAE6 (J1926)	✓	✓	✓		
19	R1/4“外螺纹, DIN 3858	✓	✓		✓	
52	G3/4“前隔膜			✓		✓

¹⁾ 密封: 内经 以及 外径²⁾ 密封: 内经

订购号 过程接口

	與UL結合
测量范围	所有范围数据表上
传感器	数据表上的所有代码
压力接口	数据表上的所有代码
电气接口	的所有代码数据表上
输出信号	除 PS 和 T1 外的所有代码
配件	除 GA, GS 和 GU 外的所有代码

信号处理

代码	限制频率 f_G	上升时间 (10 ... 90 %标称压力)	输出信号			
			4 ... 20 mA	0.5 ... 4.5 VDC 比率	0 ... 6 VDC	0 ... 10 VDC
GA ¹⁾	11 Hz	32 ms	x	x	-	-
标准 规范	350 Hz	1 ms	x	x	x	x

¹⁾ 可供询问, 可能需要设置最小订购量

定制量程

最小压力 [bar] ¹⁾	最大压力 [bar] ²⁾	最小 量程范围 [bar]	最大 量程范围 [bar]	过压 [bar]	精度	代码
-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⁾ 最小压力 = 最低零点, 量程的起点 (相对值)

²⁾ 最大压力 = 量程末端的最高压力 (相对值)

 对于绝压传感器, 量程必须包含1000mbar (绝对值)

 对于表压压力传感器, 测量范围必须包括0bar (表压) 这个点

标准产品 (交货期限极短)

产品号	类型代码	压力范围 [bar]	过压 最大 [bar]	精度 @ +25°C 典 型值 [%]	输出信号	压力接口
ECT0.1A	8473 66 5417 05 0000 0000 19 58 61	0 ... 0.1	1.2	1.0	4 ... 20 mA	G1/4“外螺纹
ECT0.16A	8473 67 5417 05 0000 0000 19 58 61	0 ... 0.16	1.2	1.0	4 ... 20 mA	G1/4“外螺纹
ECT0.2A	8473 66 5417 05 0000 0000 19 58 61	0 ... 0.2	1.2	0.5	4 ... 20 mA	G1/4“外螺纹
ECT0.4A	8473 69 5417 05 0000 0000 19 58 61	0 ... 0.4	1.2	0.3	4 ... 20 mA	G1/4“外螺纹
ECT0.6A	8473 70 5417 05 0000 0000 19 58 61	0 ... 0.6	1.2	0.3	4 ... 20 mA	G1/4“外螺纹
ECT0.1V	8473 66 5417 05 0000 0000 17 58 61	0 ... 0.1	1.2	1.0	0 ... 10 VDC	G1/4“外螺纹
ECT0.16V	8473 67 5417 05 0000 0000 17 58 61	0 ... 0.16	1.2	1.0	0 ... 10 VDC	G1/4“外螺纹
ECT0.2V	8473 68 5417 05 0000 0000 17 58 61	0 ... 0.2	1.2	0.5	0 ... 10 VDC	G1/4“外螺纹
ECT0.4V	8473 69 5417 05 0000 0000 17 58 61	0 ... 0.4	1.2	0.3	0 ... 10 VDC	G1/4“外螺纹
ECT0.6V	8473 70 5417 05 0000 0000 17 58 61	0 ... 0.6	1.2	0.3	0 ... 10 VDC	G1/4“外螺纹
ECTF0.1A	8473 66 5652 05 0000 0000 19 58 61	0 ... 0.1	1.2	1.0	4 ... 20 mA	G3/4“前隔膜
ECTF0.16A	8473 67 5652 05 0000 0000 19 58 61	0 ... 0.16	1.2	1.0	4 ... 20 mA	G3/4“前隔膜
ECTF0.2A	8473 68 5652 05 0000 0000 19 58 61	0 ... 0.2	1.2	0.5	4 ... 20 mA	G3/4“前隔膜
ECTF0.4A	8473 69 5652 05 0000 0000 19 58 61	0 ... 0.4	1.2	0.3	4 ... 20 mA	G3/4“前隔膜
ECTF0.6A	8473 70 5652 05 0000 0000 19 58 61	0 ... 0.6	1.2	0.3	4 ... 20 mA	G3/4“前隔膜
ECTF1.0A	8473 71 5652 05 0000 0000 19 58 61	0 ... 1	2	0.3	4 ... 20 mA	G3/4“前隔膜
ECTF1.6A	8473 68 5417 05 0000 0000 19 58 61	0 ... 1.6	3.2	0.3	4 ... 20 mA	G3/4“前隔膜
ECTF2.5A	8473 75 5652 05 0000 0000 19 58 61	0 ... 2.5	5	0.3	4 ... 20 mA	G3/4“前隔膜
ECTF4.0A	8473 76 5652 05 0000 0000 19 58 61	0 ... 4	8	0.3	4 ... 20 mA	G3/4“前隔膜
ECTF6.0A	8473 77 5652 05 0000 0000 19 58 61	0 ... 6	12	0.3	4 ... 20 mA	G3/4“前隔膜

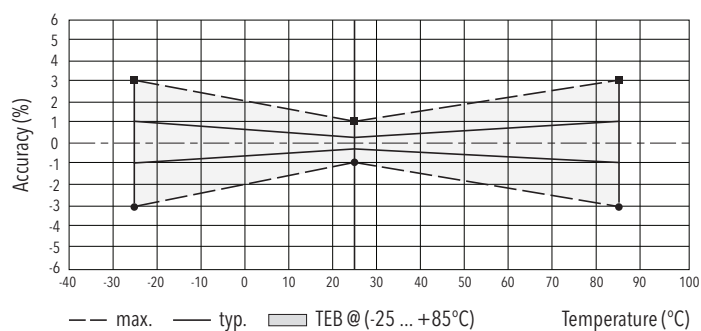
技术规范

电气数据	输出信号 / 供电电压	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 比率
	接通延迟	最大 1.5 s
	电源电压上升时间	典型值 1 ms, 10 ... 90 %标称压力
	反向极性保护, 短路强度 @ 25°C, 5 分钟内	4 ... 20 mA : 最大 $U_s = 30$ VDC 0 ... 10 VDC, 0 ... 5 VDC, 1 ... 6 VDC : 最大 $U_s = 30$ VDC 0.5 ... 4.5 VDC 比率 : 最大 $U_s = 5.25$ VDC
	绝缘电阻	14/16/17/23 类型 : > 10 M Ω , 100 VDC 19 类型 : > 10 M Ω , 250 VDC
	耐压强度	14/16/17/23 类型 : 100 VAC, 50 Hz 19 类型 : 250 VAC, 50 Hz
	电流限制输出信号	4 ... 20 mA : 约 25 mA 最大值。
环境条件	介质温度	-25°C ... +125°C
	环境温度	-25°C ... +125°C 电缆 PVC 22 : -5°C ... +60°C 电缆 PUR 24 : -20°C ... +70°C 电缆 Raychem 08 : -20°C ... +100°C
	储存温度	-20°C ... +40°C
	防护等级	IP65, IP67, IP68
	湿度	最大 95 % 相对值
	振动	15 g RMS (20 ... 2000 Hz) (EN60068-2-64) 15 g Sinus (10 ... 2000 Hz) (EN60068-2-6)
	冲击	50 g/11 ms (EN60068-2-27)
EMC电磁兼容性	辐射	EN/IEC 61000-6-3
	抗干扰性	EN/IEC 61000-6-2
机械数据	传感器 (接触介质)	陶瓷, Al ₂ O ₃ (96 %)
	压力接口 (接触介质)	54/84 : 1.4305 (AISI303) 56/86 : 1.4404/1.4435 (AISI316L) 50/80 : 1.4462 (AISI318LN) 51/81 : 等级 5 钛合金
	外壳	54/84 : 1.4305 (AISI303) 56/86 : 1.4404/1.4435 (AISI316L) 50/80 : 1.4462 (AISI318LN) 51/81 : 等级 5 钛合金
	密封	FKM 70 Sh, CR, EPDM
	插针接头	参见订购信息
	安装扭矩	15 ... 20 Nm

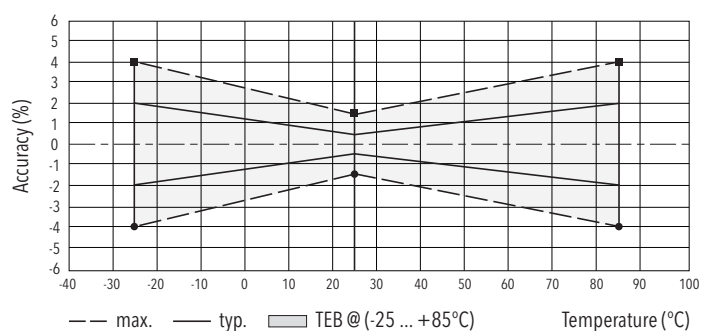
准确度

		传感器 54/56/50/51/84/86/80/81		
压力测量范围	[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]	$\geq 0 \dots 5$	$\geq 0 \dots 2.5$ $< 0 \dots 5$	$\geq 0 \dots 1.5$ $< 0 \dots 2.5$
			选配 5P	
总误差带 @ -25 ... +85°C	[% FS 典型值]	± 1.0	± 2.0	± 3.0
精度 @ +25°C	[% FS 典型值]	± 0.3	± 0.5	± 1.0
NLH @ +25°C (BSL)	[% FS 典型值]	± 0.2	± 0.3	± 0.3
TC 零点偏移和量程范围	[% FS/K 典型值]	± 0.02	± 0.02	± 0.02
1 年长期稳定 @ +25°C	[% FS 典型值]	± 0.2	± 0.2	± 0.2

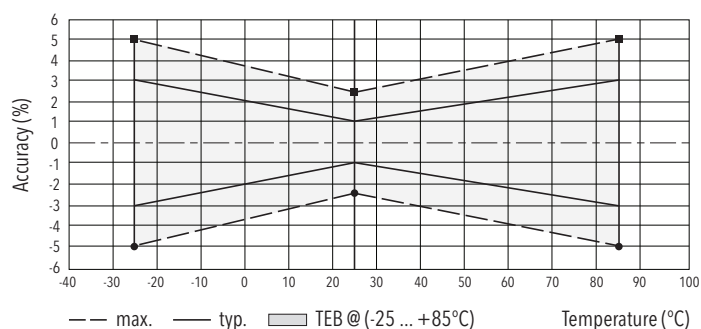
精度级别 0.3 %



精度级别 0.5 %

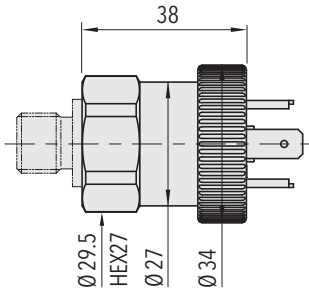


精度级别 1.0 %

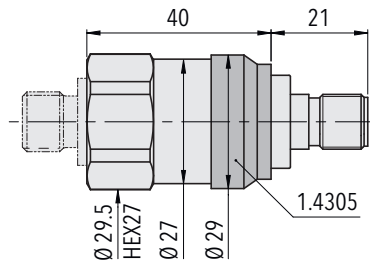


ECT 8473

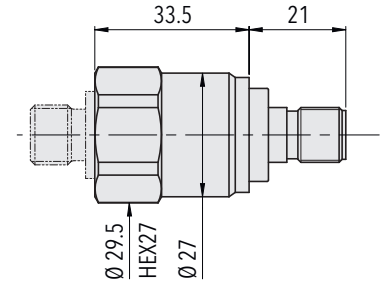
尺寸



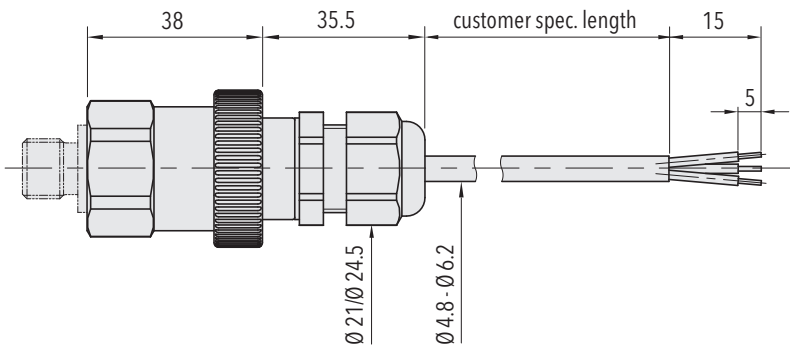
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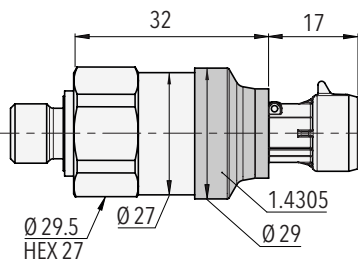
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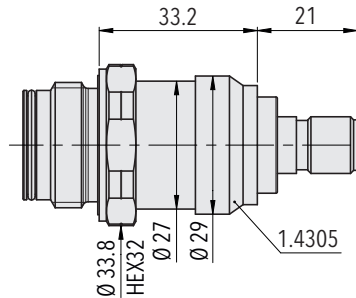
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8473.XX.X642.35.XX.XX
8473.XX.X643.35.XX.XX
8473.XX.X652.35.XX.XX



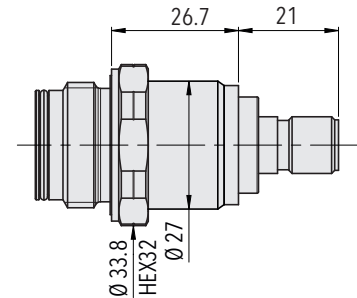
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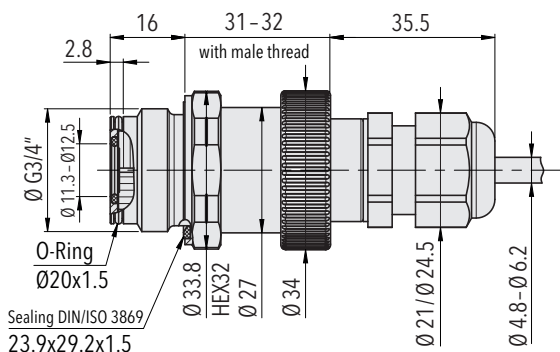
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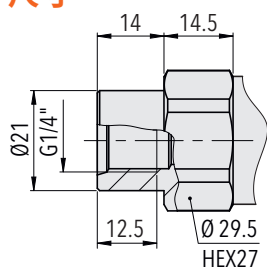


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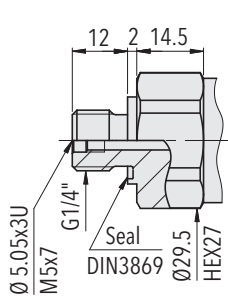


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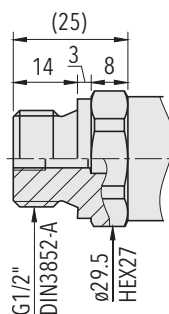
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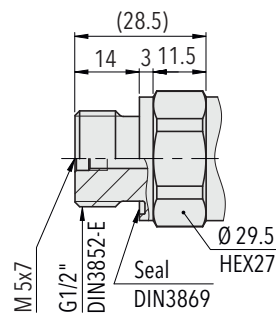
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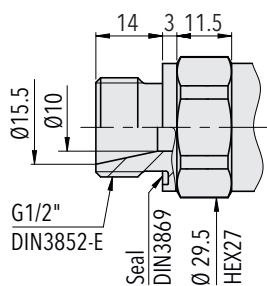
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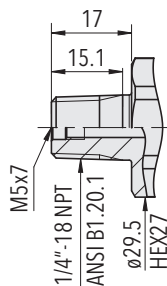
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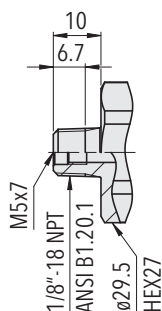
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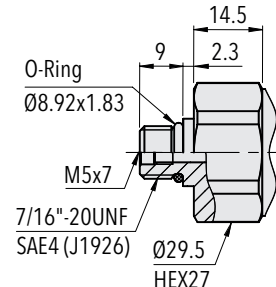
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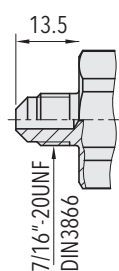
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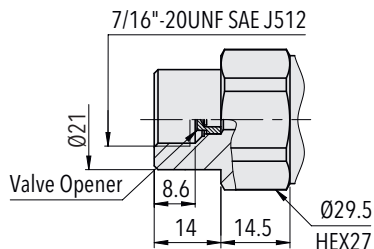
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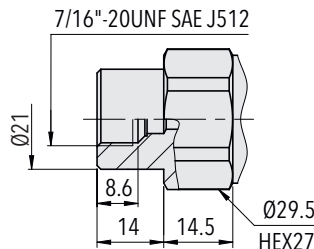
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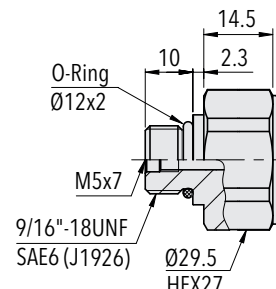
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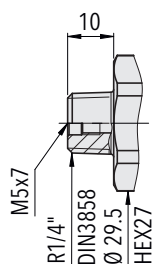
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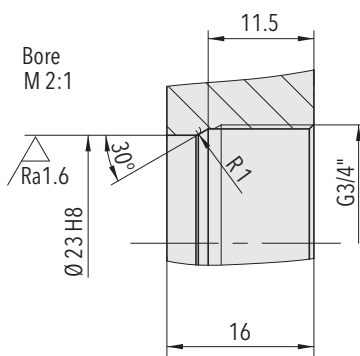
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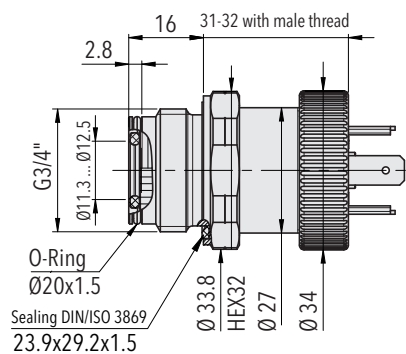
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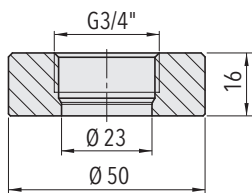
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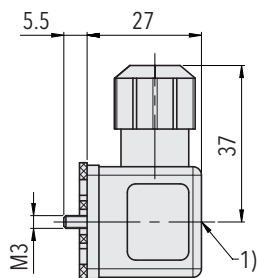
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8473.XX.XXXX.XX.XX.46/56

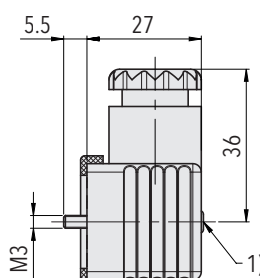


G3/4" 前隔膜 (AISI 316L)
焊法兰 订购号 C27805

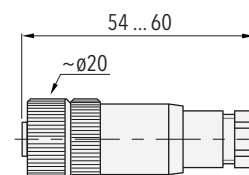


¹⁾ 拧紧力矩 50 ... 60 Ncm

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

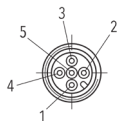
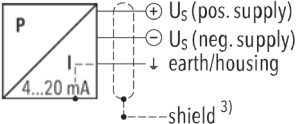
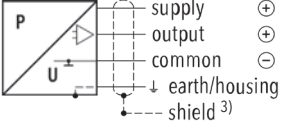


8473.XX.XXXX.XX.XX.58



8473.XX.XXXX.XX.XX.33

电气接口

	工业标准 EN175301-803A ²⁾		M12x1, 5-极			
						
电气连接类型代码	05		35			
IP 防护等级	IP65 ¹⁾		IP67 ¹⁾			
环境温度	-25°C ... +125°C		-25°C ... +125°C			
UL 额定 环境温度	-20°C ... +80°C		-20°C ... +80°C			
针脚分配 类型代码		92	94	G9	H1	
输出信号 8473.xx.xxxx.xx.19 	2 1 接地	1 2 接地	4 1 5	1 3 5	1 3 4	1 2 5
针脚分配 类型代码		98	97		E8	
输出信号 8473.xx.xxxx.xx.14/16/17/23 for DC 	2 3 1 接地	3 1 2 接地	1 3 2 接地	2 4 3 5	1 3 2 5	

¹⁾ 仅使用按照规定安装的插孔接头有效

²⁾ 通过插头/电缆排气

³⁾ 仅电缆变形产品或带屏蔽连接的插孔接头

 引脚分配类型代码, 字段为空 ' : 默认引脚输出

电气接口

3 Way M MetriPack 1.5 密封连接器

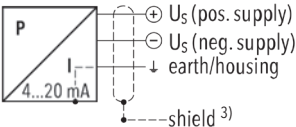
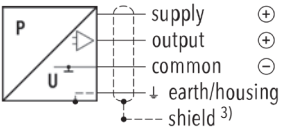


电气连接类型代码	51	
IP 防护等级	IP67 ¹⁾	
环境温度	-40°C ... +125°C	
UL 额定 环境温度	-20°C ... +80°C	
针脚分配 类型代码		E4
输出信号 8473.XX.XXXX.XX.19	1 2	1 3
针脚分配 类型代码	99	
输出信号 8473.XX.XXXX.XX.14/16/17/23	1 3 2	1 2 3

¹⁾ 仅使用按照规定安装的插孔接头有效

 引脚分配类型代码 , 字段为空 ‘ : 默认引脚输出

电气接口

	电缆 ²⁾	电缆 ²⁾	电缆 ²⁾
			
电气连接类型代码	22	24	08
IP 防护等级	IP68, 最大 3m	IP68, 最大 3m	IP68, 最大 3m
环境温度	-5°C ... +60°C	-20°C ... +70°C	-25°C ... +125°C
UL 额定 环境温度	-5°C ... +60°C	-20°C ... +70°C	-20°C ... +80°C
针脚分配 类型代码			
输出信号 8473.xx.xxxx.xx.19 	白色 棕色 黄色	白色 棕色 黄色	红色 黑色 绿色
针脚分配 类型代码			
输出信号 8473.xx.xxxx.xx.14/16/17/23 	白色 绿色 棕色 黄色	白色 绿色 棕色 黄色	红色 白色 黑色 绿色

¹⁾ 仅使用按照规定安装的插孔接头有效

²⁾ 通过插头/电缆排气

³⁾ 仅电缆变形产品或带屏蔽连接的插孔接头

 引脚分配类型代码, 字段为空 ‘:’ 默认引脚输出

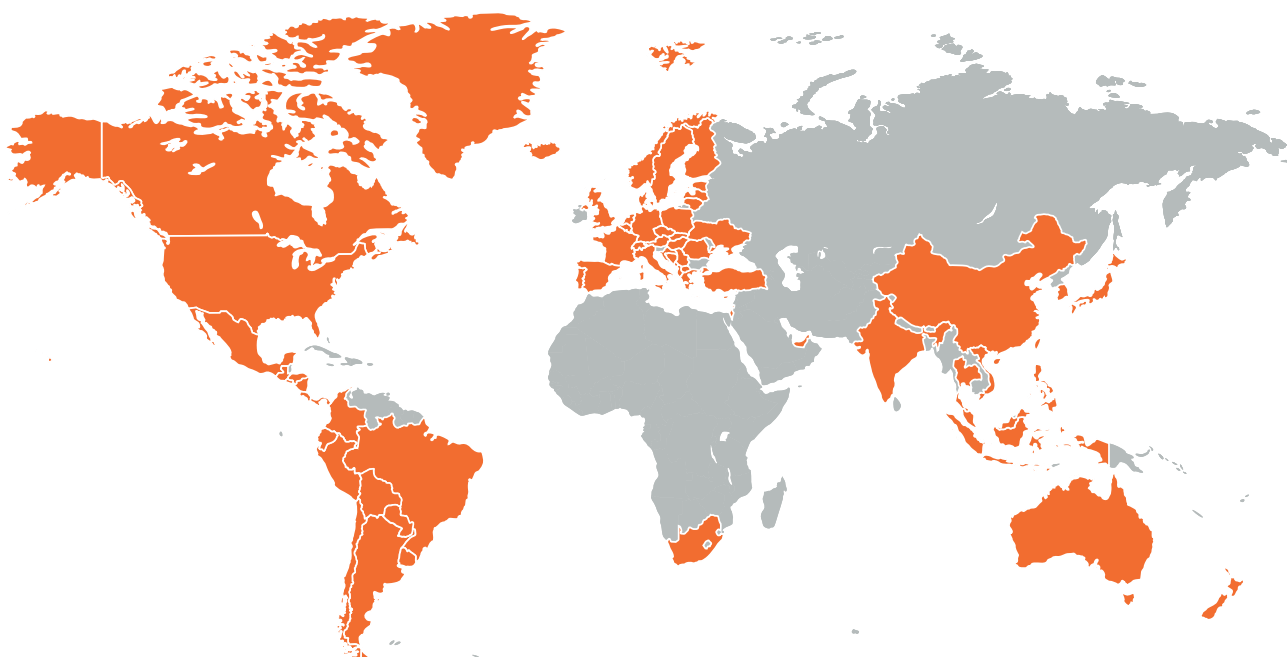
可靠质量

全球领先, 世界信任, 总部设在瑞士

Trafag 开发、生产和销售用于监测压力、温度和气体密度的坚固、可靠和精确的仪器。

压力和温度测量仪器组合广泛, 适用于从试验台到恶劣环境的各种应用。瑞士和德国的研发部门负责开发从传感器到特定应用微芯片的所有重要部件, 然后在瑞士、德国、捷克共和国和印度的生产基地进行生产。严格的质量管理符合 ISO 9001 和 ISO 14001 标准, 确保 Trafag 产品符合规定的质量和可持续发展标准。

Trafag 总部位于瑞士, 成立于 1942 年, 在全球 40 多个国家拥有广泛的销售和服务网络。



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www.trafag.com

到代表们的坐标可以在 www.trafag.com/trafag-worldwide



压力变送器



电子压力开关



机械压力开关



压力表



温度控制器



温度变送器



气体密度

准确度 - 更多信息

EMC电磁兼容性	ESD	EN/IEC 61000-4-2 4 kV 触点/8 kV 空气 : 无故障
	RFI	EN/IEC 61000-4-3 10 V/m : 0.01 ... 2700 MHz (输出信号 4 ... 20 mA, 600 ... 900 MHz 时, 增加的误差 < 3 %)
	Burst	EN/IEC 61000-4-4 快速瞬变 ± 2 kV : 无影响
	Surge	EN/IEC 61000-4-5 脉冲电压 $1.2/50\mu \pm 1$ kV : 无影响
	抗传导干扰性	EN/IEC 61000-4-6 高频振动输入 : 无影响

准确度 - 更多信息

		传感器 54/56/50/51/84/86/80/81		
压力测量范围	[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]	$\geq 0 \dots 5$	$\geq 0 \dots 2.5$ $< 0 \dots 5$	$\geq 0 \dots 1.5$ $< 0 \dots 2.5$
			选配 5P	
总误差带 @ -25 ... +85°C	[% FS 最大]	± 3.0	± 4.0	± 5.0
精度 @ +25°C	[% FS 最大]	± 1.0	± 1.5	± 2.5
NLH @ +25°C (BSL)	[% FS 最大]	± 0.3	± 0.5	± 0.5
NLH @ +25°C (BSL过零点)	[% FS 典型值]	± 0.2	± 0.3	± 0.3
	[% FS 最大]	± 0.3	± 0.5	± 0.5
可再现性	[% FS 典型值]	± 0.05	± 0.05	± 0.05
TC 零点偏移和量程范围	[% FS/K 最大]	± 0.05	± 0.05	± 0.05
长期稳定 1000h @ 85°C	[% FS 典型值]	± 0.3	± 0.3	± 0.3
	[% FS 最大]	± 0.6	± 0.6	± 0.6
滞后温度	[% FS 典型值]	± 0.2	± 0.4	± 0.6
	[% FS 最大]	± 0.6	± 1.0	± 1.2
位置灵敏性	[% 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 ..."