ECT 8472

工业压力变送器

应用

- 机械制造
- 液压系统
- 水处理

主要特点

- 出色的介质兼容性
- 相对或者绝对压力测量
- 钛规格选配
- 较大的温度范围

EMC: 2014/30/EU

S.I. 2016 No. 1091

符合 RoHS/Reach 标准

UL 认证版本

产品说明

经济型压力变送器 ECT 8472 的基础是久经考验的 ECT 压力变送器系列产品。ECT 8472 较大的介质温度范围（-25 至 +125°C ）以及包含多种规格和选件的套件使其能够在大多数工业应用中被用作多功能解决方案。

技术数据

测量原理	陶瓷厚膜
测量范围	0 ... 1 至 0 ... 400 bar, 0 ... 15 至 0 ... 5000 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 400 bar/5000 psi : -10°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/H72324
操作说明	www.trafag.com/H73324
配件	www.trafag.com/H72258
视频	https://youtu.be/GLq3yOjGUas

ECT 8472

订购信息/类型代码

订购信息/类型代码									8472	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 ... 1.0	2	3	**71**	0 ... 15	30	40	**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**							
	0 ... 60	120	180	**82**	0 ... 500	1000	1250	**H1**							
	0 ... 100 2)	200	300	**83**	0 ... 1000	2000	3000	**H2**							
	0 ... 160 2)	320	480	**85**	0 ... 1500 2)	3000	4500	**H3**							
	0 ... 250 2)	500	750	**74**	0 ... 2000 2)	4000	6000	**H5**							
	0 ... 400 2) 3)	800	1000	**84**	0 ... 3000 2)	6000	9000	**G4**							
	选配 5P :	五倍过压			0 ... 5000 2) 3)	10000	12500	**H4**							
	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**											
	0 ... 25	125	180	**60**											
	0 ... 40	200	300	**61**											
	0 ... 60	300	480	**62**											
传感器	相对压力，材料 压力接口 / 外壳 : 1.4305 (AISI303)										**57**				
	相对压力，材料 压力接口 / 外壳 : 1.4404/1.4435 (AISI316L) 2)										**59**				
	相对压力，材料 压力接口 / 外壳 : 1.4462 (AISI318LN) 2)										**52**				
	相对压力，等级 5 钛合金 2)										**53**				
	绝对压力，材料 压力接口 / 外壳 : 1.4305 (AISI303) 4)										**87**				
	绝对压力，材料 压力接口 / 外壳 : 1.4404/1.4435 (AISI316L) 2) 4)										**89**				
	绝对压力，材料 压力接口 / 外壳 : 1.4462 (AISI318LN) 2) 4)										**82**				
	绝对压力，等级 5 钛合金 2) 4)										**83**				

ECT 8472

		8472	XX	XX	XX	XX	XX	XX
压力接口	G1/4" 内螺纹				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) 5) 6)]				59			
	1/4" NPT 外螺纹, ANSI B1.20.1 [2]				30			
	1/8" NPT 外螺纹, ANSI B1.20.1 [7]				43			
	7/16"-20UNF-2A 外螺纹, SAE J1926-3 (轻型) [2) 8)]				42			
	7/16"-20UNF 外螺纹, DIN 3866 [4]				18			
	7/16"-20UNF 内螺纹, SAE J512 带阀门常闭触点 [4]				24			
	7/16"-20UNF 内螺纹, SAE J512 无阀门常闭触点 [4]				44			
	9/16"-18UNF-2A 外螺纹, SAE J1926-3 (轻型), 密封 : 附件 61 [2) 8) 9)]				61			
	R1/4" 外螺纹, DIN 3858				19			
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 [10) 11)]					24		
	电缆PVC (螺纹电缆接头 PA 6-3), -5°C ... +60°C [10) 11) 12)]					22		
	电缆Raychem (螺纹电缆接头 PA 6-3), -20°C ... +100°C [10) 11) 12)]					08		
	3 Way M MetriPack 1.5 密封連接器, 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 比率	≥ 5.0 kΩ	≤ 20 mA	5 VDC ± 0.25 VDC 比率		23

配件	密封 FKM (-20°C ... +125°C)	61
	密封 CR ≤ 100 bar (-25°C ... +100°C) [13]	62
	密封 EPDM (-25°C ... +125°C)	63
	压力峰值阻尼元件 ø 1.0 mm, 材料1.4305 [14]	40
	压力峰值阻尼元件 ø 0.4 mm, 材料1.4305(传感器57, 87) 或1.4404 (传感器 52, 53, 59, 82, 83, 89) [14]	44
	插孔接头EN175301-803-A (DIN43650-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EN175301-803-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EN175301-803-A (DIN43650-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 EN175301-803-A (DIN43650-A), 用乐泰固定 (最大 85°C)	L9
	多件包装 [15]	VM
	UL 认证版本	UL

脚注 : 见下页

订购信息/型号代码

[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] 介质 -10°C ... +125°C
[04] 最大 40 bar
[05] 仅用于带传感器52和82
[06] 最大 60 bar / 超壓 120 bar
[07] 仅用于带传感器59和89和用于电气接口35 (其它请询问)
[08] 根据SAE J1926-3 (轻型) 标准, 测量范围最大为350bar
[09] 仅用于带传感器59和89
[10] 电缆长度参见附件 (最大 长 50 米, 5 米为一段)
[11] 防护等级IP68 : 浸没深度 最大3m, 介质 +10°C … +35°C
[12] 压力范围 > 16 bar (压力范围 ⩽ 16 bar 可供询问)
[13] 仅用于压力接口 10, 30, 43, 18, 24, 44, 19
[14] 不适用于压力接口 10, 18, 24, 44
[15] 订单数量必须是 50 的倍数, 用于电气接口 05 和 35

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

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

		阻尼		密封		
代码	**压力接口**	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	✓	✓		✓	

[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

壓力測量精度

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]	代码
-1	1	⩾ 0.5	⩽ 1.2	2	**21**
-1	2	⩾ 0.8	< 2	3.2	**22**
-1	4	⩾ 2	⩽ 4.5	8	**24**
-1	6	> 4.5	⩽ 7	12	**25**
-1	10	> 7	⩽ 11	20	**26**
-1	16	> 11	⩽ 17	32	**27**
-1	25	> 17	⩽ 26	50	**28**
-1	40	> 26	⩽ 41	80	**29**
-1	60	> 41	⩽ 61	120	**30**
-1	100	> 61	⩽ 101	200	**31**
-1	160	> 101	⩽ 161	320	**35**
-1	250	> 161	⩽ 251	500	**32**
-1	400	> 251	⩽ 401	800	**34**

[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

ECT 8472

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]	电源 [VDC]	输出信号
ECT1.0A	8472 71 5717 05 0000 0000 19 58 61	0 ... 1	3.2	9 ... 30	4 ... 20 mA
ECT1.6A	8472 73 5717 05 0000 0000 19 58 61	0 ... 1.6	3.2	9 ... 30	4 ... 20 mA
ECT2.5A	8472 75 5717 05 0000 0000 19 58 61	0 ... 2.5	5	9 ... 30	4 ... 20 mA
ECT4.0A	8472 76 5717 05 0000 0000 19 58 61	0 ... 4	8	9 ... 30	4 ... 20 mA
ECT6.0A	8472 77 5717 05 0000 0000 19 58 61	0 ... 6	12	9 ... 30	4 ... 20 mA
ECT10.0A	8472 78 5717 05 0000 0000 19 58 61	0 ... 10	20	9 ... 30	4 ... 20 mA
ECT16.0A	8472 79 5717 05 0000 0000 19 58 61	0 ... 16	32	9 ... 30	4 ... 20 mA
ECT25.0A	8472 80 5717 05 0000 0000 19 58 61	0 ... 25	50	9 ... 30	4 ... 20 mA
ECT40.0A	8472 81 5717 05 0000 0000 19 58 61	0 ... 40	80	9 ... 30	4 ... 20 mA
ECT60.0A	8472 82 5717 05 0000 0000 19 58 61	0 ... 60	120	9 ... 30	4 ... 20 mA
ECT1.0V	8472 71 5717 05 0000 0000 17 58 61	0 ... 1	3.2	15 ... 30	0 ... 10 VDC
ECT1.6V	8472 73 5717 05 0000 0000 17 58 61	0 ... 1.6	3.2	15 ... 30	0 ... 10 VDC
ECT2.5V	8472 75 5717 05 0000 0000 17 58 61	0 ... 2.5	5	15 ... 30	0 ... 10 VDC
ECT4.0V	8472 76 5717 05 0000 0000 17 58 61	0 ... 4	8	15 ... 30	0 ... 10 VDC
ECT6.0V	8472 77 5717 05 0000 0000 17 58 61	0 ... 6	12	15 ... 30	0 ... 10 VDC
ECT10.0V	8472 78 5717 05 0000 0000 17 58 61	0 ... 10	20	15 ... 30	0 ... 10 VDC
ECT16.0V	8472 79 5717 05 0000 0000 17 58 61	0 ... 16	32	15 ... 30	0 ... 10 VDC
ECT25.0V	8472 80 5717 05 0000 0000 17 58 61	0 ... 25	50	15 ... 30	0 ... 10 VDC
ECT40.0V	8472 81 5717 05 0000 0000 17 58 61	0 ... 40	80	15 ... 30	0 ... 10 VDC
ECT60.0V	8472 82 5717 05 0000 0000 17 58 61	0 ... 60	120	15 ... 30	0 ... 10 VDC

ECT 8472

技术规范

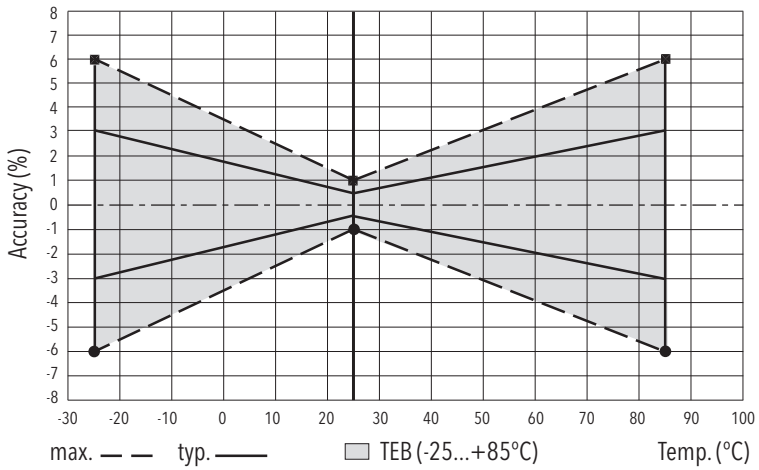
电气数据	输出信号 / 供电电压	4 ... 20 mA : 24 (9 ... 30) VDC 0 ... 5 VDC : 24 (10 ... 30) VDC 1 ... 6 VDC : 24 (10 ... 30) VDC 0 ... 10 VDC : 24 (15 ... 30) VDC 0.5 ... 4.5 VDC 比率
	接通延迟	最大 1.5 s
	电源电压上升时间	典型值 1 ms, 10 ... 90 %标称压力
	反向极性保护，短路强度 @ 25°C，5 分钟内	4 ... 20 mA : 最大 U_s = 30 VDC 0 ... 10 VDC, 0 ... 5 VDC, 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 MΩ, 100 VDC 19 类型 : > 10 MΩ, 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 400 bar/5000 psi : -10°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) (EN 60068-2-64) 15 g Sinus (10 ... 2000 Hz) (EN 60068-2-6)
	冲击	50 g/11 ms (EN 60068-2-27)
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_2O_3 (96 %)
	压力接口 (接触介质)	57/87 : 1.4305 (AISI303) 59/89 : 1.4404/1.4435 (AISI316L) 52/82 : 1.4462 (AISI318LN) 53/83 : 等级 5 钛合金
	外壳	57/87 : 1.4305 (AISI303) 59/89 : 1.4404/1.4435 (AISI316L) 52/82 : 1.4462 (AISI318LN) 53/83 : 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

ECT 8472

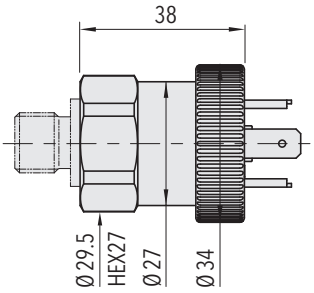
温度测量

	⩾ 0 bar ⩽ 1000 bar
TEB 典型值 @ -25 ... +85°C	± 3.0 % FS 典型值
精度 @ +25°C 典型值	± 0.5 % FS 典型值
NLH @ 25°C (BSL) 典型值	± 0.2 % FS 典型值
典型 TC 零点偏移和量程范围	± 0.03 % FS/K 典型值
长期稳定性 1 年, 典型值	± 0.3 % FS 典型值

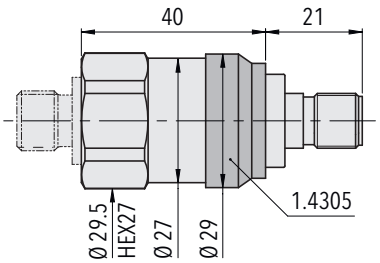
测量精度



尺寸



8472.XX.XXXX.**05**.XX.XX



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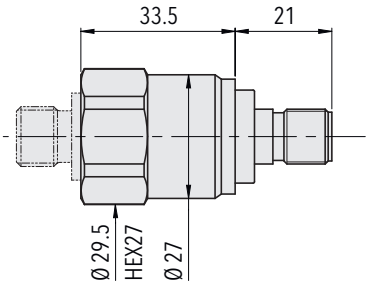

8472.XX.X**717.35**.XX.XX
8472.XX.X**917.35**.XX.XX
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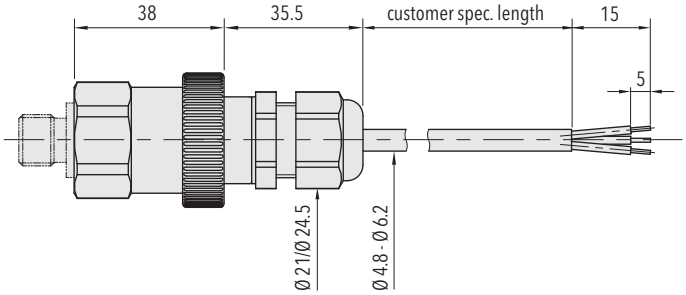
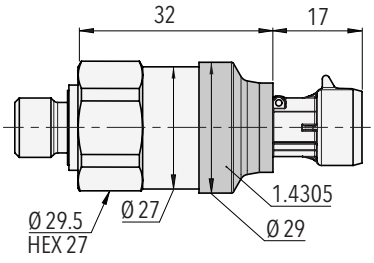
8472.XX.X**943.35**.XX.XX
8472.XX.X**952.35**.XX.XX



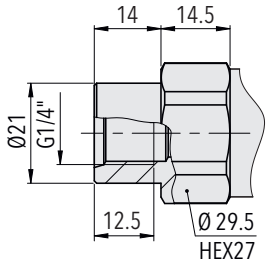
8472.XX.XXXX.**22**/**24**/**08**.XX.XX



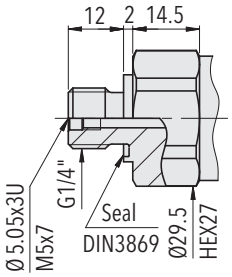
8472.XX.XXXX.**51**.XX.XX

ECT 8472

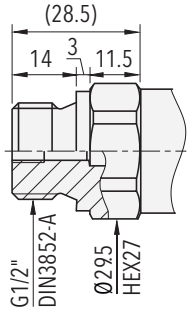
Dimensions



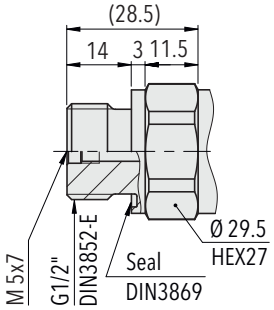
8472.XX.XX**10**.XX.XX.XX



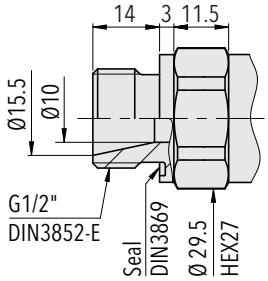
8472.XX.XX**17**.XX.XX.XX



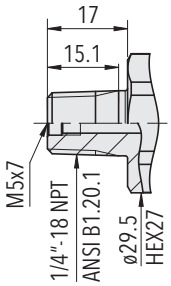
8472.XX.XX**21**.XX.XX.XX



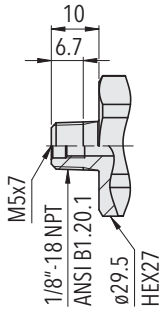
8472.XX.XX**41**.XX.XX.XX



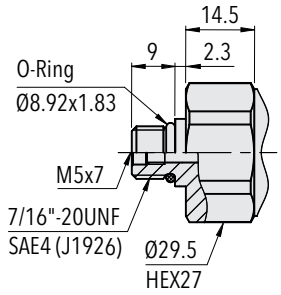
8472.XX.XX**59**.XX.XX.XX



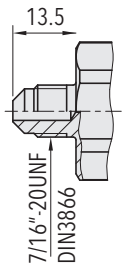
8472.XX.XX**30**.XX.XX.XX



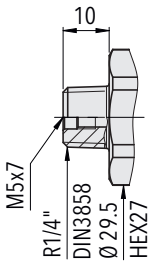
8472.XX.X**943**.XX.XX.XX



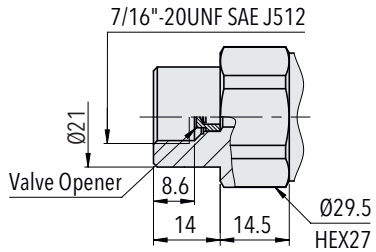
8472.XX.XX**42**.XX.XX.XX



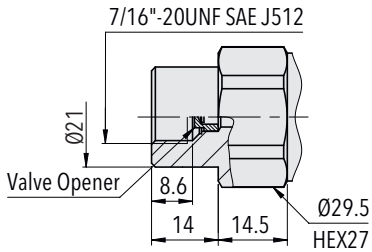
8472.XX.XX**18**.XX.XX.XX



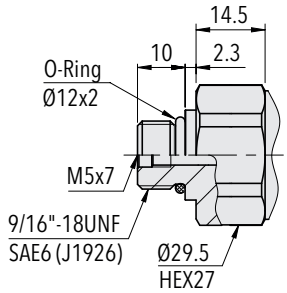
8472.XX.XX**19**.XX.XX.XX



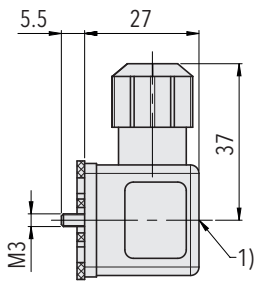
8472.XX.XX**24**.XX.XX.XX



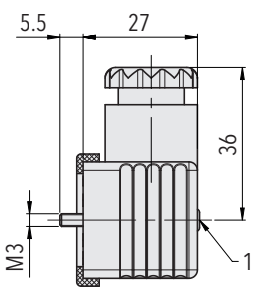
8472.XX.XX**44**.XX.XX.XX



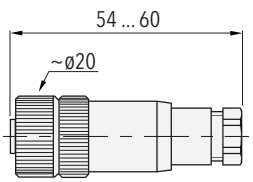
8472.XX.XX**61**.XX.XX.XX



8472.XX.XXXX.XX.XX.**46/56**



8472.XX.XXXX.XX.XX.**58**

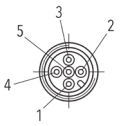
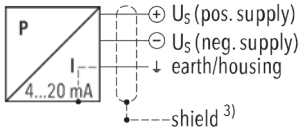


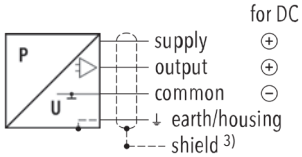
8472.XX.XXXX.XX.XX.**33**

[1] 拧紧力矩 50 … 60 Ncm

ECT 8472

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]		
環境溫度	-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**		**G9**	**94**	**H1**
输出信号 **8472.xx.xxxx.xx.19**  	2 1 接地	1 2 接地	4 1 5	1 3 4	1 3 5	1 2 5

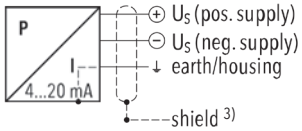
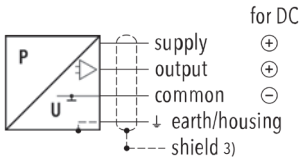
针脚分配 类型代码		**98**	**97**		**E8**
输出信号 **8472.xx.xxxx.xx.14/16/17/23**  	2 3 1 接地	3 1 2 接地	1 3 2 接地	2 4 3 5	1 3 2 5

[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

ECT 8472

电气接口

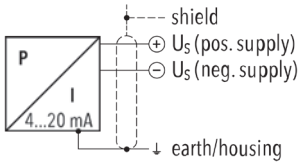
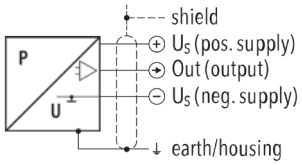
	电缆 [2]	电缆 [2]	电缆 [2]
			
电气连接类型代码	22	24	08
IP 防护等级	IP68, 最大 3m	IP68, 最大 3m	IP68, 最大 3m
環境溫度	-5°C ... +60°C	-20°C ... +70°C	-25°C ... +125°C
UL 额定 环境温度	-5°C ... +60°C	-20°C ... +70°C	-20°C ... +80°C
针脚分配 类型代码			
输出信号 **8472.xx.xxxx.xx.19** 	白色 棕色 黄色	白色 棕色 黄色	红色 黑色 绿色
针脚分配 类型代码			
输出信号 **8472.xx.xxxx.xx.14/16/17/23** 	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

ECT 8472

电气接口

	3 Way M MetriPack 1.5 密封連接器	
		
电气连接类型代码	51	
IP 防护等级	IP67 [1]	
環境溫度	-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 8472.XX.XXXX.XX.19 	1 2	1 3
针脚分配 类型代码		**99**
输出信号 8472.XX.XXXX.XX.14/16/17/23 	1 3 2	1 2 3

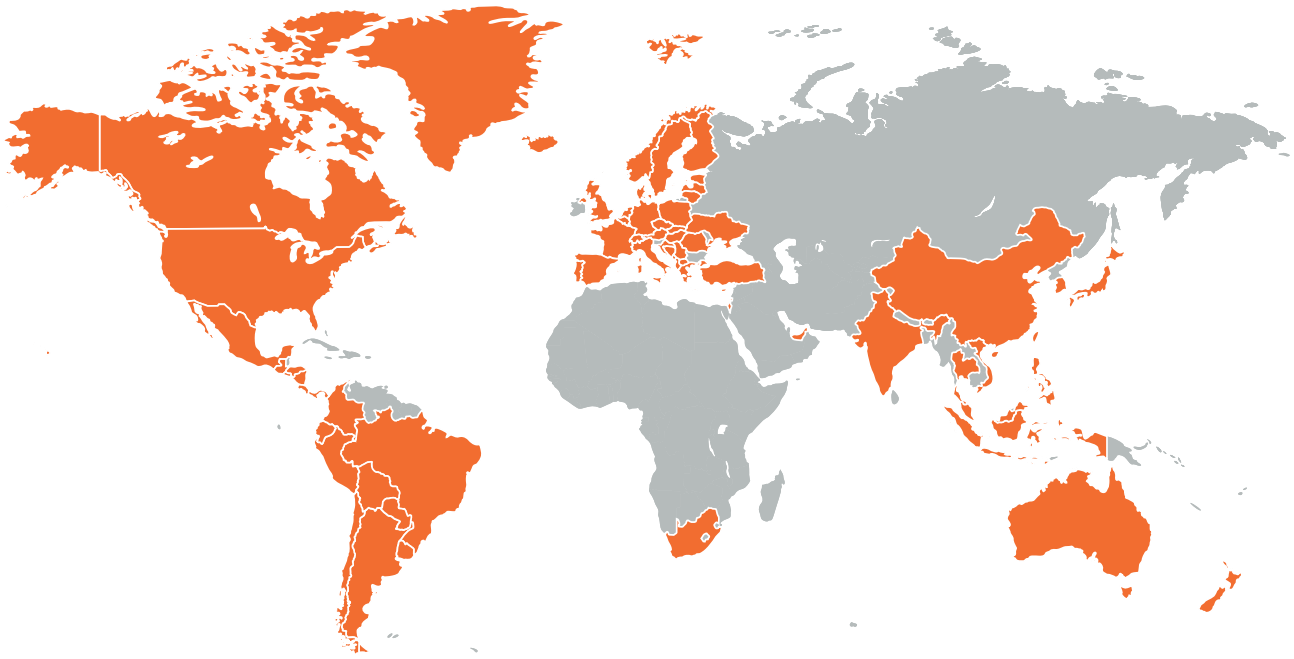
[1] 仅使用按照规定安装的插孔接头有效

i 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。



总部　瑞士

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

附加技术规范

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 4 ... 20 mA, @ 600 ... 900 MHz, 增加的错误 < 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 1.2/50µ ±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

	⩾ 0 bar ⩽ 1000 bar
TEB 最大 @ -25 ... +85°C	± 6.0 % FS 最大值
精度 @ +25°C 最大	± 1.0 % FS 最大值
NLH @ 25°C (BSL) 最大	± 0.35 % FS 最大值
NLH @ 25°C（BSL 过 0）典型值	± 0.3 % FS 典型值
NLH @ 25°C（BSL 过 0）最大	± 0.5 % FS 最大值
可重复性	± 0.05 % FS 典型值
最大 TC 零点偏移和量程范围	± 0.06 FS/K 最大值
长期稳定性 1000h @ 85°C	± 0.3 % FS 典型值 ± 0.6 % FS 最大值
温度滞后	± 0.2 % FS 典型值 ± 0.6 % FS 最大值

Modifications

Index	Data	Description
1	06/2008	New data sheet
2	09/2008	Page 1: Short term completed with ECT, Page 2 and 3: Pressure connection 1.4305 with ordering code 57 added Page 2: Overpressure & burst pressure adjusted
3	02/2009	Page 2 (1,3,4) Pressure Range: (0...60, 0...100,0...160,0...250 bar: in preparation) Pressure connections: No. 17, 30; Execution: no. 35, 22; Outputs: 14, 17, 23; Accessories: no. 98; absolut options added Page 5 additional specifications: Accuracy long term stability 1000h@85°C: 0.3% FS typ. added in addition to 0.6 % FS max.
4	09/2009	Output 16 (1...6 VDC) added Media temperature adapted: ECE - 25...+85°C and ECT -25...+125°C
5	12/2009	Page 2: Cable lenght added 1M, 3M, 5M
6	04/2010	Page 1, 2 & 3: Measuring range changed from 250 to 400 bar Page 2 & 4: Pressure connection G1/2" male, accessory 21 added Page 2 & 3: Sensor 59 (relative) and 89 (absolute) added (1.4435 ECT) Page 2: Range 0...1 bar, over pressure and burst pressure amended Page 2: Notes regarding customized ranges on request added with example for extended overpressure
a	12/2010	Index changed to „a" Page 2: Pressure connection 30 & 21 with notation 1) „please ask us" Page 2: O-Ring CR with notation ≤100 bar Page 2, 4: Accessories: Outputs 14,16,17,23: additional special electrical connection No. 97 added
b	01/2011	Spec-Sheet: Deviation of zero signal and final value @ 25°C changed to ± 0.5 % d.S. typ. ± 1.0 % d.S. max „Electrical data" Resistance of insulation modified for types 14,16,17, 23 & 19 Dielectrical strenght added for types 14,16,17,23 and 19
c	05/2012	Page 2: Measuring range in psi added Page 5: Dimension of execution 05, 35, 22 modified
d	06/2012	All pages: Phase out of all brass variants, type ECE, Sensor types 58 and 88
e	07/2012	Page 2: (IP68 max. 3m) Medium +10°C...+35°C max. 1bar rel/abs added Page 5: Electrical Connection added IP68 max. 3m
f	11/2012	Page 2,5: Integration of male electrical plug „Packard Metri Pack"
g	05/2013	Page 2, 4: New sensors added; for relative pressure measurement: Nr. 52 steel 1.4462 & Nr. 53 Titan Grade 5; for absolute pressure measurement: Nr. 82 steel 1.4462 & Nr. 83 Titan Grade 5 Page 2, 5: Pressure connection 52 added, G 3/4" Frontal membrane Page 5: Dimensions of all executions modified (05, 35, 51, 22) Page 5: Electrical connections: both diagrams modified Page 6: Spec-sheet: „Deviation of zero signal and final value" removed
h	09/2013	Page 2: Male electrical plug industrial standard added with code 01 Page 3: Accessories: Female electrical connector industrial standard code 34 added Page 3: Pressure peak damping elements 0.4 mm added and 0.3 mm deleted Page 5: Dimensions and electrical connection adapted
i	10/2013	Page 3: Pressure peak damping element 0.4 mm removed; 0.3mm & 0.5mm added with ordering code 43 & 45 (previous state)
k	02/2014	Page 2: Footnote 5): More materials and cables with venting tubes for low pressure ranges upon request
l	03/2014	Page 5: Dimensions corrected executions 05 and 22
m	05/2014	New layout NLH @ 25°C (BSL) as main specification and NLH @ 25°C (BSL through 0) as additional specification Temperature indication added to O-ring type code elements Electrical connection: remark added „ventilation via male electrical plug/cable"
n	06/2014	Correction of IP protection for cable 22 Correction of graphics „electrical connection" (shield)

Modifications

Index	Data	Description
o	11/2014	Page 6: Electrical connection 01 Industrial standard: correction of indication 'contact distance 9.4' mm instead of EN175302-803A Page 2/5: Removal of pressure connection G3/4" frontal membrane
p	03/2015	Re-launch of pressure connection G3/4" frontal membrane
q	04/2015	Additional specifications: Correction of temperature hysteresis from ±0.4% to ±0.6% FS max.
r	11/2015	Page 3 Accessories: code 62: O-Ring CR ≤ 100 bar changed to ≤ 60 bar / Pressure peak damping element 0.4 mm, code 44 added Page 2, 3: Electrical connection code 22: Specification of temperature limit PVC cable -5 ... +60°C
s	01/2016	Page 2: Range 71/G1: Overpressure corrected to 2 bar/30 psi and burst pressure corrected to 3 bar/40 psi Page 5: Dimension welding flange 1.4301 for G3/4" frontal membrane (C27805) added
t	03/2016	Page 3: Footnote 8 corrected „Only for pressure connections 10 and 30 (concerning O-Ring 62) Page 4: Addition of inverse-polarity protection, short-circuit strenght @ 25°C during 5 min.: 4...20 mA: to US = 30 VDC; 0...10 VDC, 0...5 VDC, 1...6 VDC: to US = 30 VDC; 0.5...4.5 VDC ratiometric: to US = 5.25 VDC
u	04/2016	Page 2: Footnote 7 complemented with information „only for pressure ranges ≤ 10 bar or 150 psi" (concerning pressure connection 52 G3/4" frontal membrane) Page 2: Sensors 52, 53, 82, 83: Footnote 4 added „please ask us"
v	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
w	09/2016	Page 4: Attributes Sensor, Pressure connection and housing separated: Sensor (wetted parts): Ceramic, Al2O3 (96 %); Pressure connection (wetted parts) 57/87: 1.4305 (AISI303, 59/89: 1.4404/1.4435 (AISI316L), 52/82: 1.4462 (AISI318LN), 3/83: Titanium Grade 5 (housing not changed)
x	01/2017	Page 1: New Features Page 2: Electrical connection: Code 41, 42 and 19 added Page 2/3: footnote 9 and 10 added Page 3: Standardproducts ECT100.0A, ECT250.0A, ECT100.0V, ECT250.0V removed Page 6: New Dimensions Nr. XX19, XX41, XX42, XX.35 New, X717. and X942. 35, 51 and 01
	02/2017	No index change Page2: Typecode 52: (max. nominal pressure 60 bar) removed
y	03/2017	Page 2, 6: Pressure connection code 30, 1/4" NPT (typecode and dimensions): standard designation ANSI B1.20.1 added
z	09/2017	Page 2, 7: Addition of pressure connections: 1/8" NPT male, code 43 and footnote 11; 7/16"-20UNF male, code 18; 7/16"-20UNF female, code 24 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
aa	02/2018	Page 3: Footnote 8 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
ab	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
ac	01/2019	Frontpage: Features restructured and No 4 changed to frontal membrane optional Page 2: Pressure connections 18, 24: footnote 3 added (max. 40 bar) footnote 3 modified to max. 40 bar, „absolute range" removed; Page 2, 5: Electrical connection code 68 removed; page 3: Pressure peak damping elements code 43 ø 0.3 mm and 45 ø 0.5 mm removed; Page 3: Pressure peak damping element code 40: Info „for pressure connections 17 and 30" removed, description „Material 1.4305" and footnote 10: not for pressure connections 10,18,24,52;

Modifications

Index	Data	Description
ac	01/2019	continuation Index ac: Page 3: Pressure peak damping element code 44: description „Material 1.4305 (sensors 57,87) resp. 1.4404 (sensors 52,53,59,82,83,89)" added and footnote 10: not for pressure connections 10,18,24,52; Page 3: Female electrical connector EN 175301-803-A (DIN43650-A) code 58: Info „NBR -40...+90°C" added; Page 3: New female electrical connector EN 175301-803-A (DIN43650-A) /Silicone, -40...+125°C, code 56 added; Page 2: Footnote 7 changed from …only for pressure ranges ≤ 10 bar or 150 psi to ≤ 25 bar or 400 psi; Page 2: Pressure connection code 42: Limit max. 35 MPa removed and standard J1926 integrated in typecode = footnote 10 removed;
ac	01/2019	continuation Index ac: Page 3: New ordering code for multiple packaging added, code VM with footnote 12 (the order quantity must be a multiple of 50 only for electrical connections 05 und 35); Page 7: Dimension pressure connection 52 frontal membrane: ø 10 modified to ~ ø 10.5; Page 3: Table „Standard products": new articles 1.6A, 1.6V, 4.0A, 4.0V, 60.0A, 60.0V added; Page 6: 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 1, 4: Ambient temperature changed to -25...125°C
ad	05/2019	Page 2: Measuring range Code G3 changed from 45 and 70 psi to 40 and 60 psi
ae	09/2019	Page 2: Launching of option 5P (fivefold overpressure) measuring ranges code 55, 56, 57, 58, 59, 60, 61, 62 Page 3: Additon 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 9: Dimension of pressure connection G1/4" female, code 10, changed Page 9: Dimension frontal membrane, code 52 corrected
ae	09/2019	continuation of Index ae: Page 9: New pressure connection added: G1/2" male DIN3852-E with inner cone, code 59, footnote 4 and 13 Page 3: Information about reverse calibration added Frontpage: Addition of NLH @ 25°C (BSL) typ. values in table „Technical Data"
af	01/2020	Page 2, 9: Pressure connection 9/16"-18UNF m, SAE6 (J1926) code 61 added
ag	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
ah	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)
ai	03/2021	Frontpage: Frontal membrane ortional removed, Wide temperature range added Page 2: Pressure connection Code 52 removed Page 8: all Dimensions removed with 8472.XX.XX52... and Welding flange Page 3: Footnote 7) removed; Footnote 8) 42 removed
ak	06/2021	Page 2/6: Electrical connection Code 01 removed, Pressure connection Code 44 without valve opener added Page 3: Accessories Code 34 removed; Footnote 11) Code 01 removed, Footnote 8) and 10) Code 44 added Page 7/8: Dimensions 8472.XX.X.....01.XX.XX and 8472.XX.XXXX.XX.XX.34 removed; 8472.XX.XX24.XX..., 8472.XX.XX42.XX..., and 8472.XX.XX61.XX.... changed, 8472.XX.XX44.XX... added
al	03/2022	Page 2: Measuring range: psi Code GA added
am	03/2023	Page 2: Pressure connection Code 42 and 61 new footnote 7) Measuring range max. 350 bar according to SAE J1926-3 (Light Duty)
an	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	Data	Description
ao	08/2023	Page 3/6: Electrical connection new Pin out Code G9
ap	10/2023	Page 2: Electrical connection: Code 51 new footnote 16) Do not use for new designs as this option will be phased out soon. Only limited quantities available.
aq	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 Page 6/7: Dimensions: Designation SW changed to HEX
ar	07/2024	Frontpage, 5/6: UL-rated ambient temperature added Page 3: Accessories: new Code H1 and E8 (...5-pole) and UL UL-listed version added Page 6: Electrical connection: pin assignment H1 and E8 added
as	10/2024	Page 8: Dimension 8472.XX.XX21.XX.XX.XX changed
at	05/2025	Page 2/6: Electrical connection Code 51 removed Page 3: Accessories Code E4 and 99 removed; Page 7: Dimensions all with ...XX.51... removed
au	05/2026	Page 1; New Datasheet-Layout; Page 1: Flyer removed and archived Page 2: Typecode; Standardisation of the spelling „Usupply" to 'Us' Page 3/8/12: Add 3 Way M MetriPack 1.5 sealed connector, Code 51 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 8/12: Table „Output" with column titles added (≥ 0 bar ≤ 1000 bar) Title diagramm „Measuring accuracy 0.5 %" changed to „Measuring accuracy"