The economic pressure transmitter ECT-8473 is based on the tried and true ECT line of transmitter 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 comprehnsive set of features, materials and options makes the ECT 8473 pressure transmitter an ideal and versatile solution suitable for a wide variety of applications.

ECT-8473

Applications

- Machine tools
- Hydraulics
- Water treatment

ECTF-8473

Features

- Economical
- Good media compatibility
- Relative or absolute pressure measurement
- Titanium version optional
- Frontal membrane optional

Technical Data			
Measuring principle	Thick film on ceramic	Accuracy @ 25°C typ.	± 0.3 % FS typ. (± 0.5 % FS typ., ± 1 % FS typ.)
Measuring range	0 ... 0.1 to 0 ... 40 bar 0 ... 1.5 to 0 ... 500 psi	Media temperature	-25°C ... +125°C
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiom.	Ambient temperature	-25°C ... +85°C Cable PVC 22: -5°C ... +60°C Cable PUR 24: -20°C ... +70°C Cable Raychem 08: -20°C ... +100°C

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	2	3	70	0 ... 7.5	30	45	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 ... 250	500	625	G9
0 ... 25	50	75	80	0 ... 400	800	1200	H0
0 ... 40	80	100	81	0 ... 500	1000	1250	H1

Sensor

Relative pressure, Material pressure connection and housing: 1.4305 (AISI303)	54	Absolute pressure, Material pressure connection and housing: 1.4305 (AISI303) [2) 3)]	84
Relative pressure, Material pressure connection and housing: 1.4404/1.4435 (AISI316L) [2)]	56	Absolute pressure, Material pressure connection and housing: 1.4404/1.4435 (AISI316L) [2) 3)]	86
Relative pressure, Material pressure connection and housing: 1.4462 (AISI318LN) [2)]	50	Absolute pressure, Material pressure connection and housing: 1.4462 (AISI318LN) [2) 3)]	80
Relative pressure, titanium grade 5 [2)]	51	Absolute pressure, titanium grade 5 [2) 3)]	81

Pressure connection

G1/4" female	10
G1/4" male	17
G1/2" male DIN3852-A [2)]	21
G1/2" male DIN3852-E [2)]	41
1/4" NPT male, ANSI B1.20.1 [2)]	30
1/8" NPT male, ANSI B1.20.1 [10)]	43
7/16" -20UNF male SAE4 [2) 8)]	42
R1/4" male, DIN3858	19
G3/4" frontal membrane [2) 4)]	52

Electrical connection

Male electrical plug EN 175301-803-A, Mat. PA	05
Male electrical plug M12x1, 5-pole, Mat. PA (Old shape), Mat. PBT (New shape)	35
Male electrical plug industrial standard (contact distance 9.4 mm) Mat. PBT	01
Male electrical plug Packard Metri Pack, Mat. PBT [9)]	51
Cable PUR, cable gland PA 6-3, -20°C ... +70°C [5) 6)]	24
Cable PVC, cable gland PA 6-3, -5°C ... +60°C [5) 6) 9)]	22
Cable Raychem, cable gland PA 6-3, -20°C ... +100°C [5) 6) 9)]	08
Cable IP68, Mat. PVC, max. 3m, Medium +10°C … +35°C, Pmax. 1 bar rel./abs. (old version)	68

Output signal

Signal output	Load resistance	I (supply)	U (supply)	
4 ... 20 mA	(Usupply-9 V) / 20 mA		9 ... 30 VDC	19
0 ... 5 VDC	≥ 2.5 kΩ	≤ 10 mA	10 ... 30 VDC	14
1 ... 6 VDC	≥ 5.0 kΩ	≤ 10 mA	10 ... 30 VDC	16
0 ... 10 VDC	≥ 5.0 kΩ	≤ 10 mA	15 ... 30 VDC	17
0.5 ... 4.5 VDC	≥ 5.0 kΩ	≤ 10 mA	5 VDC ± 0.25 VDC ratiom.	23

		8473 . XX XX XX XX XX XX
Accessories	Seal FKM (-20°C ... +125°C)	61
	Seal CR ≤ 100 bar (-25°C ... +100°C) [7]	62
	Seal EPDM (-25°C ... +125°C)	63
	Pressure peak damping element ø 1.0 mm (for pressure connections 17 and 30)	40
	Pressure peak damping element ø 0.3 mm (for pressure connections 17 and 30)	43
	Pressure peak damping element ø 0.5 mm (for pressure connections 17 and 30)	45
	Female electrical connector EN 175301-803-A (DIN43650-A)	58
	Female electrical plug M12x1, 5-pole	33
	Female electrical connector industrial standard	34
	Special electrical connection: Pin 1 + , Pin 2 - (only for output signal 4 ... 20 mA and male electrical plug EN175301-803-A / DIN43650-A)	92
	Special electrical connection: Pin 1 Out , Pin 2 -, Pin 3 + (only for output 14, 16, 17, 23 and male electrical plug EN175301-803-A / DIN43650-A)	98
	Special electrical connection: Pin 1 + , Pin 2 -, Pin 3 Out (only for output signals 14, 16, 17, 23 and male electrical plug EN 175301-803-A / DIN 43650-A)	97
	Special electrical connection: Pin 1 + , Pin 3 - (only for output 4 ... 20 mA and male electrical plug Packard Metri Pack 3-poles)	E4
	Special electrical connection: Pin 1 + , Pin 2 Out Pin 3 - (only for output signals 14, 16, 17, 23 and male electrical plug Packard Metri Pack 3-poles)	99
	Cable length 1.5 m	1M
	Cable length 3.0 m	3M
	Cable length 5.0 m	5M
	Housing nut for electrical connection EN175301-803-A (DIN43650-A) secured with Loctite (max. 85°C)	L9

[1] Extended overpressure as well as customized pressure ranges upon request
[2] Please ask us
[3] Only for ranges: ≥ 400 mbar or 5 psi
[4] Not for sensors 54 and 84, only for pressure ranges ≤ 10 bar or 150 psi
[5] Cable length see accessories (max. length 50 m, in 5-meter sections)
[6] Protection IP68: Immersion depth max. 3 m, Media +10°C … +35°C
[7] Only for pressure connections 10 and 30
[8] According to norm J1926, max. 35 MPa
[9] Pressure ranges > 16 bar (Pressure ranges ≤ 16 bar upon request)
[10] Only for sensors 56 and 86 and electrical connections 01, 35, 51 (others on request)

Identical construction for refrigeration:
Data sheet No. H72323

Standard products (extra short lead time)

Product No.	Type Code	Pressure range [bar]	Over pressure max. [bar]	Pressure connection	Signal output	Accuracy @ 25°C typ. [%]
ECT0.1A	8473 66 5417 05 0000 0000 19 58 61	0 ... 0.1	2	G1/4" male	4 ... 20 mA	1.0
ECT0.2A	8473 68 5417 05 0000 0000 19 58 61	0 ... 0.2	2	G1/4" male	4 ... 20 mA	0.5
ECT0.4A	8473 69 5417 05 0000 0000 19 58 61	0 ... 0.4	2	G1/4" male	4 ... 20 mA	0.5
ECT0.6A	8473 70 5417 05 0000 0000 19 58 61	0 ... 0.6	2	G1/4" male	4 ... 20 mA	0.3
ECT0.1V	8473 66 5417 05 0000 0000 17 58 61	0 ... 0.1	2	G1/4" male	0 ... 10 VDC	1.0
ECT0.2V	8473 68 5417 05 0000 0000 17 58 61	0 ... 0.2	2	G1/4" male	0 ... 10 VDC	0.5
ECT0.4V	8473 69 5417 05 0000 0000 17 58 61	0 ... 0.4	2	G1/4" male	0 ... 10 VDC	0.5
ECT0.6V	8473 70 5417 05 0000 0000 17 58 61	0 ... 0.6	2	G1/4" male	0 ... 10 VDC	0.3
ECTF0.1A	8473 66 5652 05 0000 0000 19 58 61	0 ... 0.1	2	G3/4" frontal membrane	4 ... 20 mA	1.0
ECTF0.2A	8473 68 5652 05 0000 0000 19 58 61	0 ... 0.2	2	G3/4" frontal membrane	4 ... 20 mA	0.5
ECTF0.4A	8473 69 5652 05 0000 0000 19 58 61	0 ... 0.4	2	G3/4" frontal membrane	4 ... 20 mA	0.5
ECTF0.6A	8473 70 5652 05 0000 0000 19 58 61	0 ... 0.6	2	G3/4" frontal membrane	4 ... 20 mA	0.3
ECTF1.0A	8473 71 5652 05 0000 0000 19 58 61	0 ... 1	2	G3/4" frontal membrane	4 ... 20 mA	0.3
ECTF1.6A	8473 73 5652 05 0000 0000 19 58 61	0 ... 1.6	3.2	G3/4" frontal membrane	4 ... 20 mA	0.3
ECTF2.5A	8473 75 5652 05 0000 0000 19 58 61	0 ... 2.5	5	G3/4" frontal membrane	4 ... 20 mA	0.3
ECTF4.0A	8473 76 5652 05 0000 0000 19 58 61	0 ... 4	8	G3/4" frontal membrane	4 ... 20 mA	0.3
ECTF6.0A	8473 77 5652 05 0000 0000 19 58 61	0 ... 6	12	G3/4" frontal membrane	4 ... 20 mA	0.3
ECTF10.0A	8473 78 5652 05 0000 0000 19 58 61	0 ... 10	20	G3/4" frontal membrane	4 ... 20 mA	0.3

Specifications

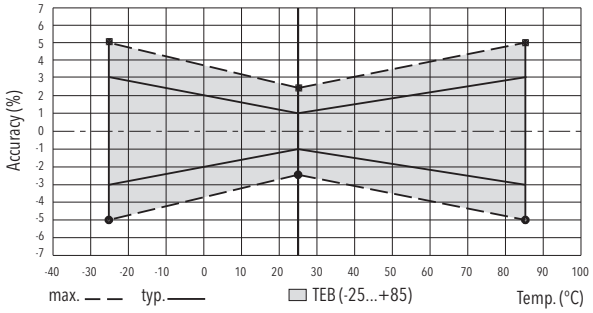
Electrical Data	Output / supply voltage	4 ... 20 mA: 24 (9 ... 30) VDC 0 ... 5 VDC: 24 (10 ... 30) VDC 1 ... 6 VDC: 24 (10 ... 30) VDC 0 ... 10 VDC: 24 (15 ... 30) VDC 0.5 ... 4.5 VDC: 5 VDC ratiom.
	Rise time	Typ. 1 ms / 10 ... 90 % nominal pressure
	Switch-on-delay	Max. 1.5 s
	Inverse-polarity protection, short-circuit strenght @ 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
Environmental conditions	Media temperature	-25°C ... +125°C
	Ambient temperature	-25°C ... +85°C Cable PVC 22: -5°C ... +60°C Cable PUR 24: -20°C ... +70°C Cable Raychem 08: -20°C ... +100°C
	Protection [1)]	IP65, IP67, IP68
	Humidity	Max. 95 % relative
	Vibration	4 g (10...2000 Hz)
	Shock	50 g / 8 ms
EMC Protection	Emission	EN/IEC 61000-6-3
	Immunity	EN/IEC 61000-6-2
Mechanical Data	Sensor (wetted parts)	Ceramic, Al_2O_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 plug	See ordering information
	Weight	~ 110 g
	Mounting torque	15 ... 20 Nm

[1)] See electrical connection

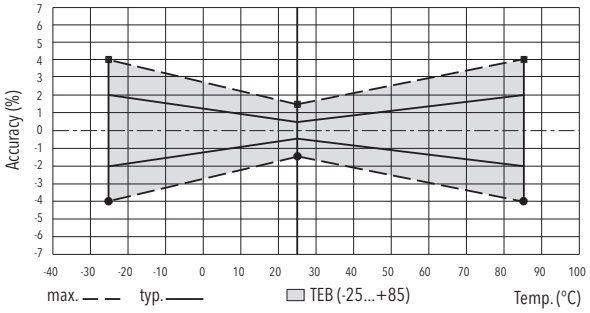
Accuracy

Pressure measuring range	**[bar]** **[psi]**	> 0 ... 0.4 > 0 ... 5	0 ... 0.2 0 ... 0.4 0 ... 2.5 0 ... 5	0 ... 0.1 0 ... 0.16 0 ... 1.5 0 ... 2
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

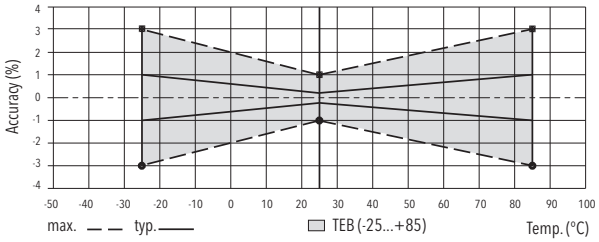
Measuring accuracy 1.0 %



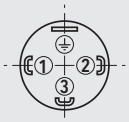
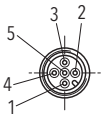
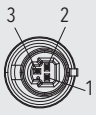
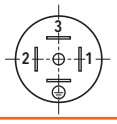
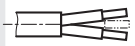
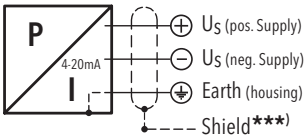
Measuring accuracy 0.5 %



Measuring accuracy 0.3 %



Electrical connection

		Protection / electrical connection							
		IP65*)		IP67*)	IP67*)		IP65	IP67/IP68 max. 3m	IP68 max. 3 m
		Industrial standard EN175301-803A **)		M12x1 **) 5-pole	Packard Metri Pack **) 3-pole		Industrial standard Contact distance 9.4 mm **)	Cable**)	Cable **)
		05		**35**	**51**		**01**	**24/22/68**	**08**
									
Output signal	 **8473**.xx.xxxx.xx.**19**	Standard	**92**			**E4**			
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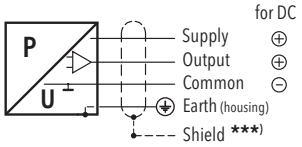
		1	2	1	2	3	1	brown	black
		⏚	⏚	5			⏚	yellow	green
	 **8473**.xx.xxxx.xx.**14/16/17/23**	Standard	**98**	**97**		**99**			
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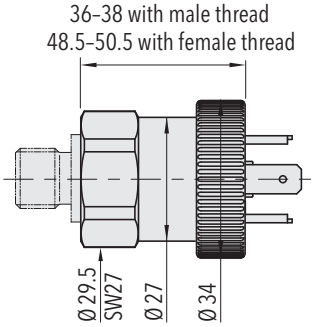
		3	1	3	4	3	2	green	white
		1	2	2	3	2	3	brown	black
		⏚	⏚	⏚	5		⏚	yellow	green

*) Provided female connector is mounted according to instructions
**) Ventilation via male electric plug/cable end
***) Only cable versions or female electrical plug with shield connection

Dimensions



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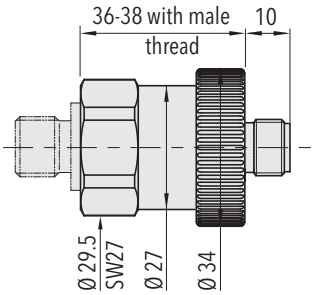

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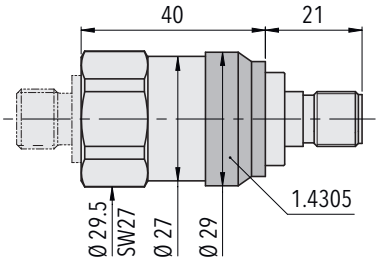

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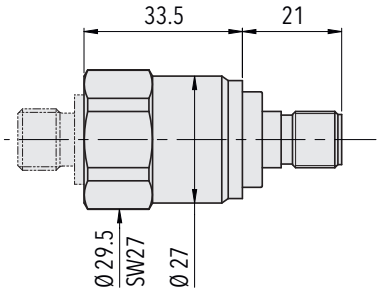

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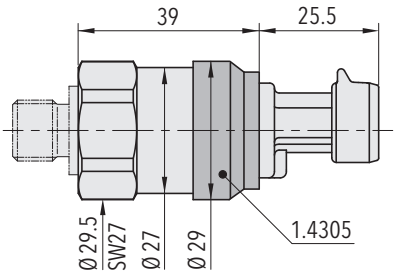
8473.XX.X**942**.**35**.XX.XX



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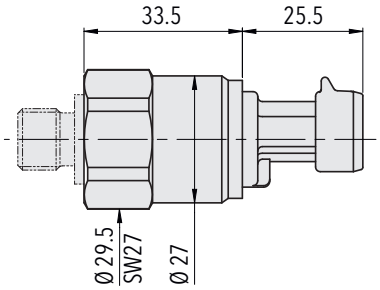

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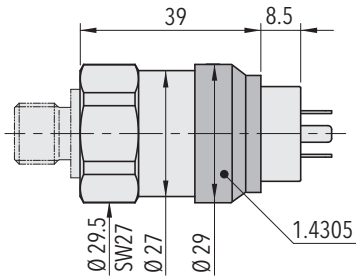

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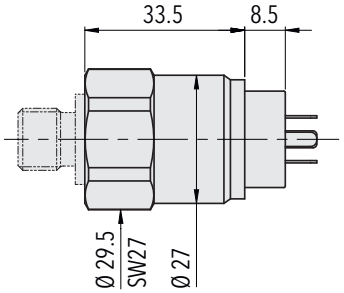

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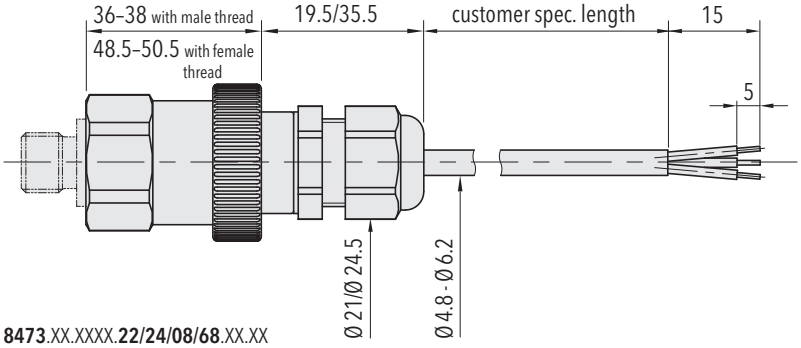

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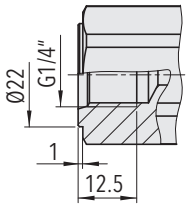
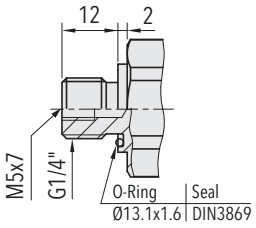
Dimensions



8473.XX.XX**10**.XX.XX.XX



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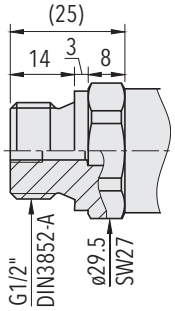

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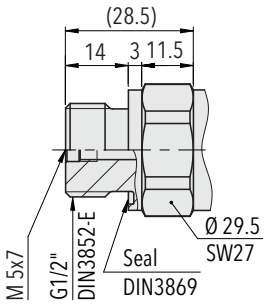
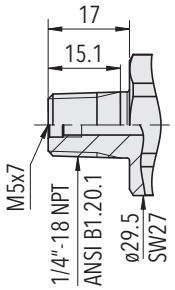
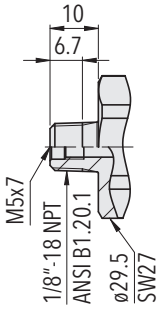


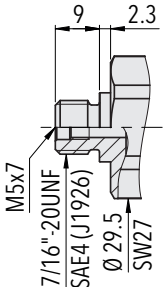
8473.XX.XX**41**.XX.XX.XX



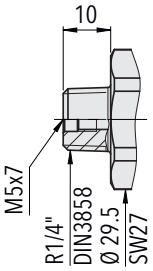
8473.XX.XX**30**.XX.XX.XX



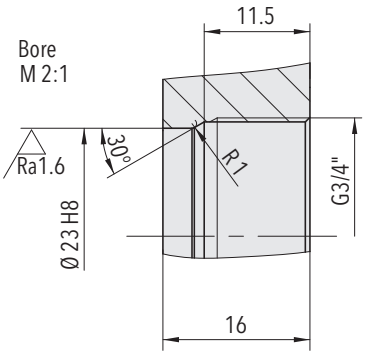
8473.XX.X643.XX.XX.XX



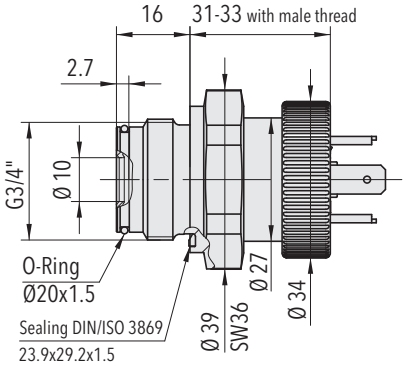
8473.XX.XX**42**.XX.XX.XX

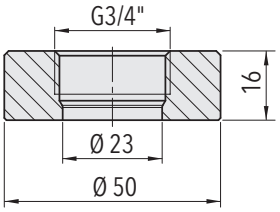


8473.XX.XX**19**.XX.XX.XX

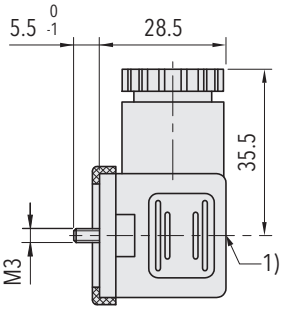


8473.XX.XX**52**.XX.XX.XX



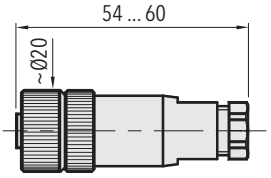


Welding flange for G3/4"
frontal membrane (1.4301)
Ordering No. C27805

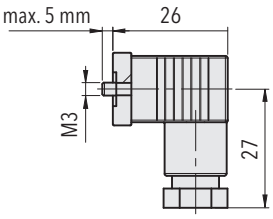


1) Tightening torque 50...60Ncm

8473.XX.XXXX.XX.XX.**58**



8473.XX.XXXX.XX.XX.**33**



8473.XX.XXXX.XX.XX.**34**