

# Protecting tubes

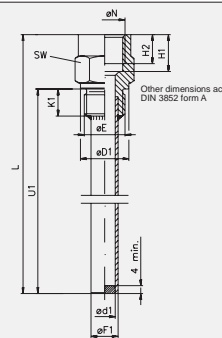
## Protecting tubes DIN 43772, form 4, 5 and 6

for SIKA-Thermometers

immersion tube type "B", "DN", "AK"

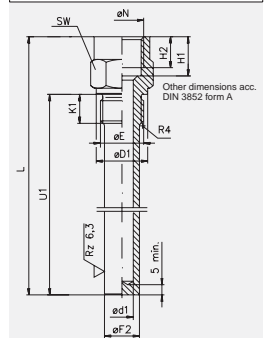
Ordering no. (example):	179.1	082	2	0
Protective tube type				
DIN form 5 = SIKA Type Ei	179.1			
DIN form 6 = SIKA Type Gi	179.3			
DIN form 4 = SIKA Type BS	180.5			
Immersion length $l_1$ in mm of the matching immersion tube		immersion tube length dimension U1/U in mm		
100 Type Ei (Fig. 1)		82 =	082	
160 two-part, threaded connection		142 =	142	
250 brazed to pipe (non-ferrous metal)		232 =	232	
400 (PN 16) or welded (steel) (PN 35), for screwing in		382 =	382	
100 Type Gi (Fig. 2)		82 =	082	
160 turned from solid stock		142 =	142	
250 for screwing in (PN 100)		232 =	232	
400		382 =	382 <sup>1)</sup>	
100 Type BS (Fig. 3)		73	073	
160 turned from solid stock		133	133	
250 for welding in for high		223	223 <sup>1)</sup>	
400 pressure		373	373 <sup>1)</sup>	
Threaded connection	G ½ A			2
	M 20 x 1,5			7
d1:	G ¾ A			3
	M 27 x 2			9
Materials for types	Ei: Precision steel or 2.0401 - Cu Zn39Pb3 (MS 58) or 2.0402 - Cu Zn40Pb2			0
	Gi: Tube SoMs 76 or Ms 63 brazed			1
	2.0401 - CuZn39Pb3 (MS 58) or 2.0402 - CuZn40Pb2			1
	Gi: 1.0718 - MSUnPb30+C			2
	Ei, Gi or BS: 1.4571 - X6CrNiMoTi 17122			3
	Ei: Hex.nut 2.0540 - CuZn35Ni2 (SoMs 59)			4
	Tube 2.0460 - CuZn20Al2 (SoMs 76)			4
	Gi: 2.0540 - CuZn35Ni2 (SoMs 59)			15
	2.0882 - CuNi30Fe			5
	1.7335 - 13CrMo44			7
	1.7380 - 10CrMo910			8
	1.5415 - 15Mo3			9
	BS: 1.0460 - C 22.8			6

Type Ei = DIN form 5



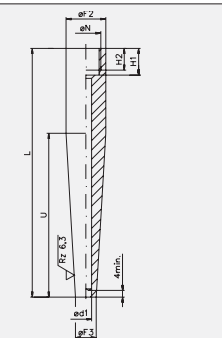
Code no. 179.1

Type Gi = DIN form 6



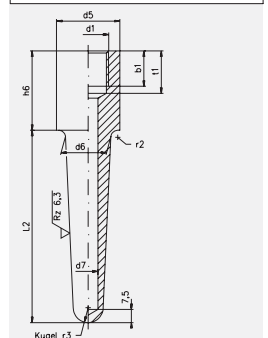
Code no. 179.1

Type BS = DIN form 4



Code no. 180.5

DIN 16179 form BS



Code no. 180.5

Dimension table, form 4, 5, 6

Thread E/N	Code no.	D1	H2	F2 *	F2 **	d1	F1	F3	K1	H1	SW4
G ½	2	26	15	26 h7	17	11	14	17	14	19	27
M 20 x 1,5	7										
G ¾	3	32	17	32 h11	19	11	14	17	16	22	32
M 27 x 2	9										

\* for form 4

\*\* for form 6

Dimension table DIN 16179, form BS (Fig. 4)

Thread d1	Code no.	d5 h11	d6	d7	b1 h11	h6	r2	r3
M 20 x 1,5	7	30	25	11	16	39	2,5	8,5
G ½	2							
G ¾	3	36	26	11	20	45	4	8,5
M 27 x 2	9							

<sup>1)</sup> acc. DIN 16179 BS (old version)

<sup>2)</sup> Alloy material with inspection test certificate possible

We reserve the right for technical modifications.

# Protecting tubes DIN 43772 form 8, 9 and DIN 16179 CS (old version)

for SIKA-Thermometers with immersion tube type "Da"

Ordering no. (example):	179.2	071	2	0
Protective tube version	Type Ea Type Ga Type CS	179.2 179.4 180.6		
Immersion length $l_1$ in mm of the matching immersion tube type "Da"		immersion tube length dimension $l_2$ in mm		
89		73 =	073	
126 G 1/2 Type Ea (Fig. 1)		110 =	110	
186 three-part, threaded connection		170 =	170	
93 brazed to pipe (non-ferrous metal)		73 =	073	
130 (PN 16) or welded (steel) (PN 35),		110 =	110	
190 G 3/4 for screwing in		170 =	170	
280		260 =	260	
430		410 =	410	
89		73 =	073	
126		110 =	110	
186 Type Ga (Fig. 2)		170 =	170	
93 turned from solid stock,		73 =	073	
130 for screwing in (PN 100)		110 =	110	
190		170 =	170	
280		260 =	260	
430		410 =	410	
89		63 =	063	
126		100 =	100	
186 Type "CS" (Fig. 3)		160 =	160	
93 turned from solid stock,		63 =	063	
130 for welding in for		100 =	100	
190 high pressure		160 =	160	
280		250 =	250	
430		400 =	400	
Threaded connection $d_1$ :	G 1/2 M 20 x 1,5 G 3/4 M 27 x 2		2 7 3 9	
Materials <sup>2)</sup> Ea <sup>1)</sup> : for type	Precision steel		0	
	2.0401 - Cu Zn39Pb3 (MS 58) or 2.0402 - Cu Zn40Pb2		1	
Ga:	tube SoMs 76 or Ms 63 brazed		1	
	2.0401 - CuZn39Pb3 (MS 58) or 2.0402 - CuZn40Pb2		2	
Ga:	1.0718 - 11SMnPb30+C		3	
Ea, Ga, CS:	1.4571 - X6CrNiMoTi 17122		4	
Ea:	Hex nut 2.0540 - CuZn35Ni2 (SoMs 59)		15	
	tube 2.0460 - CuZn20Al2 (SoMs 76)		5	
Ga:	2.0540 - CuZn35Ni2 (SoMs 59)		7	
	2.0882 - CuNi30Fe		6	
CS:	1.7335 - 13CrMo44		8	
CS:	1.0460 - C 22.8		7	
CS:	1.7380 - 10CrMo910		8	
CS:	1.5415 - 15Mo3		9	

<sup>1)</sup> Hex nut 2.0401-CuZn39Pb3 or 2.0402-CuZn40Pb2, tube SoMs 76 or Ms 63 brazed

<sup>2)</sup> Alloy material with inspection test certificate possible

## Dimension table form 8 = type Ea, form 9 = type Ga | form CS

Thread	Code no.	$d_1$	$D_1$	$F_1$	$F_2$	$K_1$	$K_2$	SW	$d_1$	$d_7$	$d_9$ $h_{11}$	$h_2$	$h_6$
G 1/2	2	11	26	14	17	14	12	27	G 1/2	11	24	12	39
M20x1,5	7								M20x1,5				
G 3/4	3	11	32	14	19	16	14	32	G 3/4	11	30	14	45
M27x2	9								M27x2				

### DIN form 8 = Type Ea

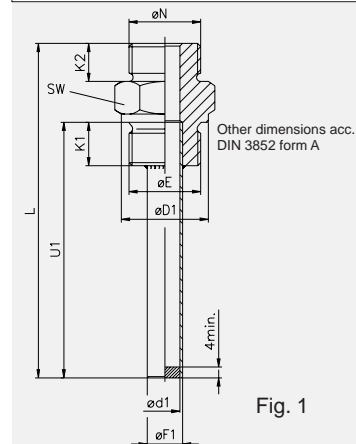


Fig. 1

Code no. 179.2

### DIN form 9 = Type Ga

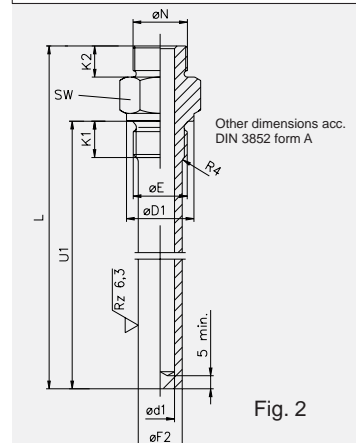


Fig. 2

Code no. 179.4

### DIN 16179 (old) = Type CS

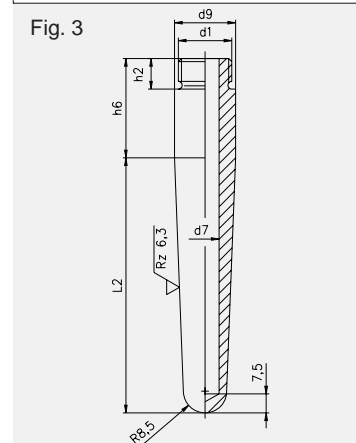


Fig. 3

Code no. 180.6

### Immersion tube length form 8,9

L ±1	$U_1$ ±1	G +1
101	73	46
138	110	133
198	170	193
288	260	283
438	410	433

## Protection tubes for welding in DIN 43772 Form 4

for SIKA-Thermometers immersion tube type "Dc"

connection with union nut M24x1,5

<b>Ordering no. (example):</b>	<b>180.9</b>	<b>001</b>	<b>0</b>	<b>3</b>
Protecting tube for welding in without screwing form 4 =	180.9			
Form	Protective tube length			
D 1	140 mm	001	0	
D 2	200 mm	002	0	
D 4	200 mm	004	0	
D 5	260 mm	005	0	
Materials	1.4571 - X6CrNiMoTi 17122			3
	1.0460 - C 22.8			6
	1.7335 - 13CrMo44			7
	1.7380 - 10CrMo910			8
	1.5415 - 15Mo3			9

Protective tube length L	Immersion length V	F <sub>2</sub>	F <sub>3</sub>	d1	N
140	65	24h7	12,5	7	M18x1,5
200	125	24h7	12,5	7	
200	65	24h7	12,5	7	
260	125	24h7	12,5	7	

### Options:

Fig. 2: with screw plug M18x1,5, MS Code-No. 000061

Fig. 3: with double-threaded nipple M18x1,5 / M24x1,5, steel, Code-No. 00076V

Fig. 4: with neck tube 165 mm, M18x1,5 / M24x1,5, steel, Code-No. 165020V

**Ordering example:** Protecting tube for welding in form 4, material 1.4571, with screw plug M18x1,5 MS = Code-No. 180.9.001.03 + 000061

See pages 8 and 14 for SIKA thermometers "Dc" suitable for these protecting tubes.

The immersed length (dimension l<sub>3</sub>) of the thermometers types "Dc" are as follows:

Form	with neck tube	with double threaded nipple
D 1	295 mm	155 mm
D 2 / D 4	355 mm	215 mm
D 5	415 mm	275 mm

We reserve the right for technical modifications.

Fig. 1

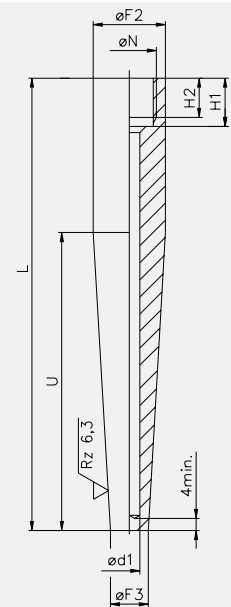


Fig. 2

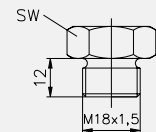


Fig. 3

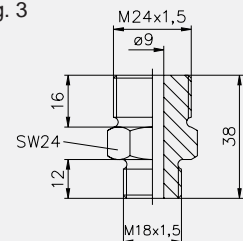


Fig. 4

