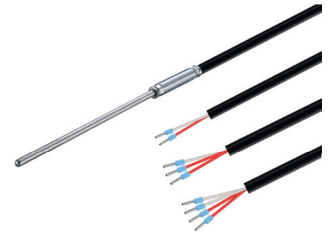


# Cable probe stepped with PVC cable

Article no.: 803552 1011

A protection sleeve with a diameter of 3 mm is used for the cable probe with stepped measuring tip. Different lengths are available. The transition sleeve has a diameter of 6 mm. To configure your cable temperature sensor perfectly and individually for your measuring task, simply select the required configuration features and send us the order code.



General Information	
Measuring range	-30 °C to +105 °C depending on sensor Type and connection cable
Perm. °C range cable	-30 °C to +105 °C
Accuracy	depending on sensor Type
Response time	on request
Supply and output	
Max. meas. current	max. 1 mA
Supply voltage	approx. 5 V depending on measurement current
Measurement signal	passive (resistance value)
Ambient conditions	
Protection class	IP42 according DIN 60529
Humidity and moisture condensation resistance	according to application-specific qualification
Certificates and Standards	
Standards	DIN EN 61326-1:2013   DIN EN IEC 63000:2019-05
Directive	RoHS 2011/65/EU   2014/30/EU
Certificates	Certificate of suitability (on request)



### Customizable options

- A - Measuring element
- B - Connection Type
- C - Length protection sleeve
- E - Material connection cable
- F - Length connection cable
- G - Connector
- H - Bend protection

A - Measuring element				
Code	Sensor	Accuracy / Tolerance resistance	From (°C) <sup>1)</sup>	To (°C) <sup>1)</sup>
A011	Pt100	Cl. A dT = ±(0,15 °C + 0,002 t ) <sup>1)</sup>	-50 °C	+300 °C
A012	Pt100	Cl. B dT = ±(0,30 °C + 0,005 t ) <sup>1)</sup>	-50 °C	+400 °C
A013	Pt100	1/3 Cl. B dT = ±(1/3 · (0,30 °C + 0,005 t )) <sup>1)</sup>	-50 °C	+200 °C
A014	Pt100	1/10 Cl. B dT = ±(1/10 · (0,30 °C + 0,005 t )) <sup>1)</sup>	±0 °C	+100 °C
A022	Pt500	Cl. B dT = ±(0,30 °C + 0,005 t ) <sup>1)</sup>	-70 °C	+500 °C
A031	Pt1000	Cl. A dT = ±(0,15 °C + 0,002 t ) <sup>1)</sup>	-50 °C	+300 °C
A032	Pt1000	Cl. B dT = ±(0,30 °C + 0,005 t ) <sup>1)</sup>	-50 °C	+400 °C
A106	NTC 5 kOhm	R25 = 5 KOhm ±1 %	-40 °C	+150 °C

<sup>1)</sup>according to IEC 751 / EN 60751 | <sup>2)</sup> Perm. range °C | Please note that the measuring range depends on the measuring element and the connecting cable. | Detailed information and the characteristics can be found in our download area.

B - Connection Type	
Code	Conn. Type
B2	2-Wire (2W)
B3	3-Wire (3W)
B4	4-Wire (4W)

Possible connections			
Sensor	2W	3W	4W
Pt	✓	✓	✓
NTC	✓		



Protection sleeve						Connection sleeve	
Material	Stainless steel 1.4571   316TI	<b>C - Length prot. sleeve</b>				Length (mm)	40 mm
Length (mm)	please choose	Code	Length (mm)	Code	Length (mm)	Ø (mm)	6
Ø (mm)	3 <sup>1)</sup>	C0040	40 <sup>1)</sup>	C0060	60 <sup>1)</sup>		
		C0050	50 <sup>1)</sup>	C0100	100 <sup>1)</sup>		

other protective sleeve lengths and Ø available on request | <sup>1)</sup> Tolerance ± 0,1 mm

E - Cable material and configuration connection cable												
Picture	Code	IP	Connection Type	Color	From (°C) <sup>1)</sup>	To (°C) <sup>1)</sup>	Outside material	Material strand	Color strand	Ø (mm) <sup>2)</sup>	Q (mm <sup>2</sup> ) <sup>3)</sup>	Ω / m <sup>4)</sup>
	E0000	IP67	2-Wire	black	-30	+105	PVC	PVC	rd, wt	4,8	0,22	0,07
	E0001	IP67	3-Wire	black	-30	+105	PVC	PVC	rd, wt, rd	4,8	0,22	0,07
	E0002	IP67	4-Wire	black	-30	+105	PVC	PVC	rd, wt, rd, wt	4,8	0,22	0,07

Insulation resistance: ≥ 100 MOhm at min. 100 VDC | <sup>1)</sup>Perm. range °C | <sup>2)</sup>Tolerance ± 0,2 mm | <sup>3)</sup> Tolerance ± 0,03 mm<sup>2</sup> | <sup>4)</sup> per single strand | IP67

G - Connector		
Code	Feature	
G01	Insulated end ferrules (50 mm)	

H - Bend protection				
Picture	Length (mm)	Material	Code	Feature
	50	Stainless steel spring 1.4310   SUS 302	H0	Without (Standard)
			H1	Metal bend protection

Delivery and Assembly	
Assembly instructions	by using an immersion sleeve or a compression fitting.
Delivery and Packaging	Probe, separately packaged in PE bag

Important assembly advices		
	<p>Installation by means of compression fitting: Please tighten the union nut of the compression fitting by hand as far as it will go (clearly noticeable). For compression fittings with PTFE pressure ring, use a wrench that matches the wrench size and make a 1/4 turn. These compression fittings can be used several times in this way. In the case of compression fittings with a stainless steel cutting ring, the compression fitting connects to the protective tube. This connection is pressure-resistant up to 40 bar. However, the compression fitting can only be used once. It must also be tightened more firmly. Please tighten it with 1 3/4 turns.</p>	

Mounting by using an immersion sleeve (4): Please note that the diameter and length of the immersion sleeve must be selected to suit the installation situation so that the minimum immersion depth can be achieved. Since the probe is not inserted directly into the medium, but via the immersion sleeve, the response times are somewhat slower. The probe should be selected so that the protection sleeve touches the bottom of the immersion sleeve and the air cushion around the protection tube is as small as possible. The use of thermal conduction paste can improve the response times. Please lay the cable with a reserve loop (4) and in such a way that no water can penetrate the sensor head. This will allow you to extend the probe without disconnecting the electrical connection.



**Technical drawing**

**Customizable options**

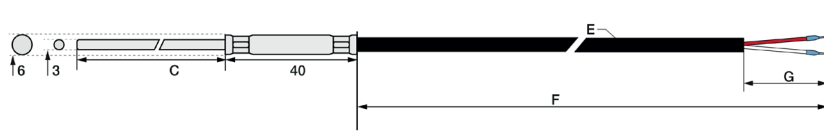
A - Measuring element  
B - Connection Type

C - Length protection sleeve  
E - Material connection cable

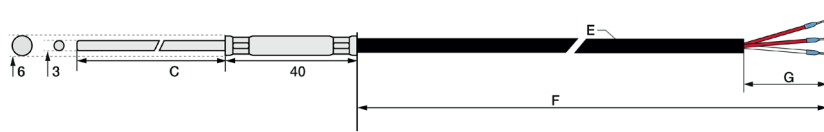
F - Length connection cable  
G - Connector

H - Bend protection  
All dimensions in mm

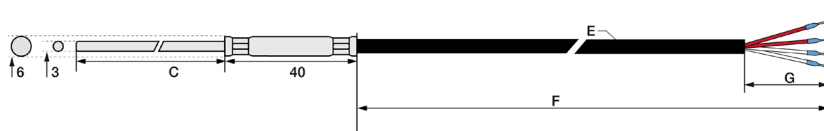
**2-Wire version**



**3-Wire version**



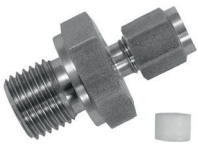
**4-Wire version**



# Matching accessories: Compression fittings

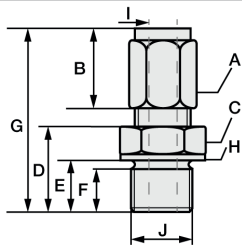
## Compression fitting with PTFE clamping ring

Compression fittings with PTFE clamping ring can be used several times. They are only pressure-tight up to 10 bar. For assembly, please tighten the connecting nut of the compression fitting by hand as far as it will go (clearly noticeable) by hand. With a wrench suitable for the width across flats, please make a 1/4 turn for compression fittings with PTFE pressure ring.

	<b>Article no.</b>	<b>809610 2XXX</b>	<b>Code</b>	<b>I - Ø Inside (mm)</b>	<b>Code</b>	<b>J - Process connection</b>
	Temp. max	+260 °C	0	1	27	M6x1 <sup>1)</sup>
	Pressure proof up to	10 bar	1	1,5	28	M8x1 <sup>1)</sup>
	Quick-release strap	Stainless steel 1.4571   316TI	3	3	22	M10x1
	Material clamping ring	PTFE	6	6	14	G1/8 "
	Scope of delivery	Compression fitting, packed in PE bag			12	G1/4 "
					11	G1/2 "
Your order code	809610 2	-	-	-	-	-

Append the code for Ø Inside & process connection to the article no. | <sup>1)</sup> not available for Ø Inside (I) 6 mm

## Dimensions for technical drawing

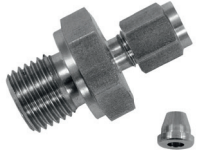


I	J	A	B	C	D	E	F	G	H
1	M6x1 <sup>1)</sup>	SW10	13	SW12	13	9	8	31	Ø10
1,5	M8x1 <sup>1)</sup>	SW10	13	SW12	13,5	9,5	8	31	Ø11,8
3	M10x1	Ø 1,5 & 3: SW10   Ø 6: SW12	13	SW14	13,5	9,5	8	32	Ø13,8
6	G1/8 "	Ø 1,5 & 3: SW10   Ø 6: SW12	13	SW14	13,5	9,5	8	32	Ø13,8
	G1/4 "	Ø 1,5 & 3: SW10   Ø 6: SW12	13	SW19	20	14	12	38,5	Ø18
	G1/2 "	Ø 1,5 & 3: SW10   Ø 6: SW12	13	SW27	23	17	14	38,5	Ø26

All dimensions in mm | <sup>1)</sup> not available for Ø Inner (I) 6 mm

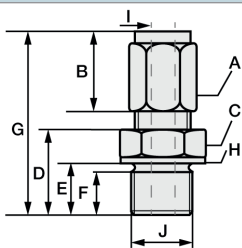
## Compression fitting with stainless steel cutting ring

In compression fittings with stainless steel cutting ring, the compression fitting connects with the protective sleeve. This connection is pressure-resistant up to 40 bar. Therefore, these compression fittings can also only be used once and must be tightened more firmly. For assembly, please tighten the union nut of the compression fitting by hand as far as it will go (clearly noticeable). With a wrench suitable for the wrench size, please make 1 3/4 turns for compression fittings with stainless steel cutting ring.

	<b>Article no.</b>	<b>809610 1XXX</b>	<b>Code</b>	<b>I - Ø Inside (mm)</b>	<b>Code</b>	<b>J - Process connection</b>
	Temp. max	+800 °C	1	1,5	27	M6x1 <sup>1)</sup>
	Pressure proof up to	40 bar	3	3	28	M8x1 <sup>1)</sup>
	Quick-release strap	Stainless steel 1.4571   316TI	6	6	22	M10x1
	Material clamping ring	Stainless steel 1.4571   316TI			14	G1/8 "
	Scope of delivery	Cutting ring screw fitting, packed in PE bag			12	G1/4 "
					11	G1/2 "
Your order code	809610 1	-	-	-	-	-

Append the code for Ø Inside & process connection to the article no. | <sup>1)</sup> not available for Ø Inside (I) 6 mm

## Dimensions for technical drawing



I	J	A	B	C	D	E	F	G	H
1	M6x1 <sup>1)</sup>	SW10	13	SW12	13	9	8	31	Ø10
3	M8x1 <sup>1)</sup>	SW10	13	SW12	13,5	9,5	8	31	Ø11,8
6	M10x1	Ø 1,5 & 3: SW10   Ø 6: SW12	13	SW14	13,5	9,5	8	32	Ø13,8
	G1/8 "	Ø 1,5 & 3: SW10   Ø 6: SW12	13	SW14	14	9,5	8	32	Ø13,8
	G1/8 "	Ø 1,5 & 3: SW10   Ø 6: SW12	13	SW19	20	14	12	38,5	Ø18
	G1/4 "	Ø 1,5 & 3: SW10   Ø 6: SW12	13	SW27	23	17	14	38,5	Ø26

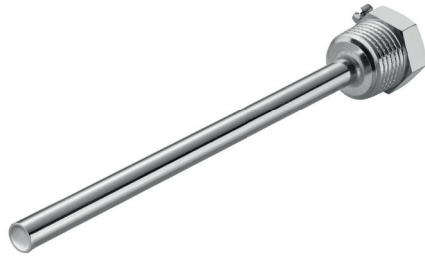
All dimensions in mm | <sup>1)</sup> not available for Ø Inner (I) 6 mm

MWA / KS / 24.10.2023



# Matching accessories: Immersion sleeves

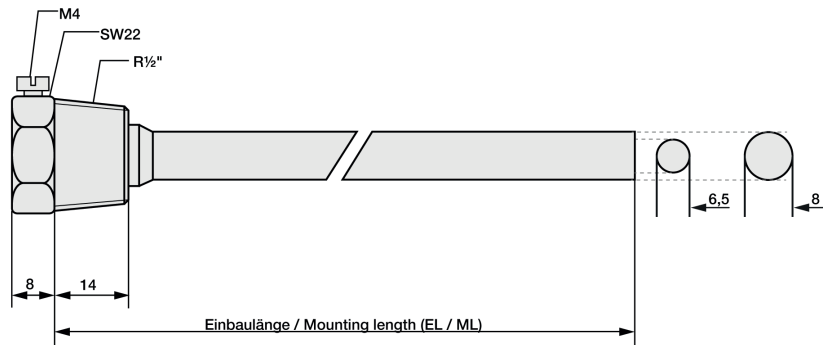
## Brass immersion sleeve R1/2 "



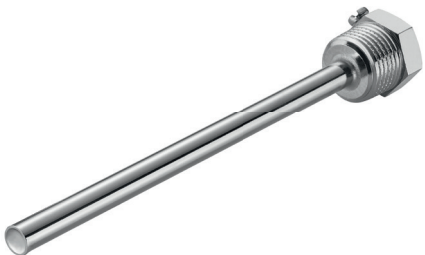
Article no.	809520 10XX	Code	ML (mm)
Temp. max	+150 °C	05	50
Pressure proof up to	10 bar	10	100
Quick-release strap	Nickel plated	15	150
Process connection	R1/2 "	20	200
Wrench size	22	25	250
Ø Inside / Outside (mm)	6,5 / 8	30	300
Scope of delivery	Immersion sleeve, packed in PE bag	40	400
Order code	809520 10	--	

Please attach the code for the mounting length.

### Technical drawing



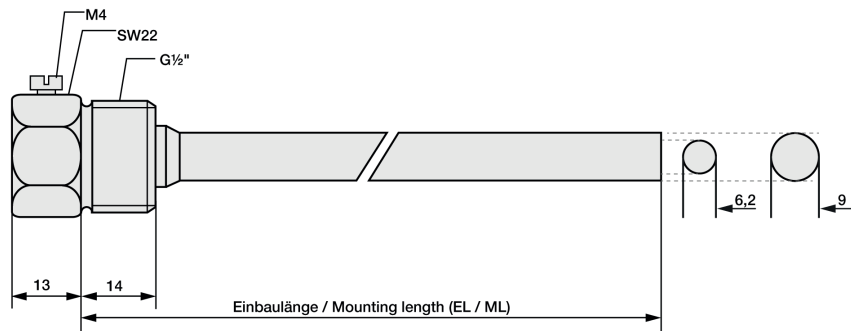
## Stainless steel immersion sleeve G1/2 "



Article no.	809520 20XX	Code	ML (mm)
Temp. max	+600 °C	05	50
Pressure proof up to	40 bar	10	100
Quick-release strap	Stainless steel 1.4571   316TI	15	150
Process connection	G1/2 "	20	200
Wrench size	22	25	250
Ø Inside / Outside (mm)	6,2 / 9	30	300
Scope of delivery	Immersion sleeve, packed in PE bag	40	300
Your order code	809520 20	--	

Please attach the code for the mounting length.

### Technical drawing



MWA / KS / 24.10.2023



# Matching accessories: Immersion sleeves

## Immersion sleeve G1/2 " with cable gland



Article no.	809520 60XX	Compression fitting		Code	ML (mm)
Temp. max	+600 °C	Temp. max	100 °C	05	50
pressure proof until	40 bar	Quick-release strap	Plastic	10	100
Quick-release strap	Stainless steel 1.4571   316TI	Screw	M12 x 1,5	15	150
Process connection	G1/2 "	Clamping range (mm)	3 to 6,5	20	200
Wrench size	22			25	250
Scope of delivery	Immersion sleeve, packed in PE bag	Cable gland	strain relief	30	300
				40	400
Your order code	809520 60			--	

Please attach the code for the mounting length.

### Technical drawing

