



## Measuring inserts for screw-in thermocouples and resistance thermometers with terminal head Form B

- for temperatures from -200 to +1150 °C
- as single or twin insert
- available with transmitter

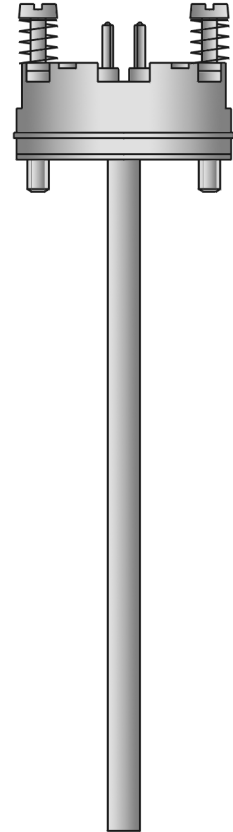
The inserts are suitable for screw-in thermocouples according to Data Sheet 90.1002, as well as for screw-in resistance thermometers to Data Sheets 90.2002 and 90.2820. A mineral-insulated insert has to be used for insert lengths from 800mm.

For the versions according to Data Sheets 90.1002 and 90.2002, the insert lengths are calculated as follows:

- Push-in resistance thermometer with extension tube:  
NL + 25mm or EL + extension tube length + 25mm
- Push-in resistance thermometer without extension tube:  
NL + 25mm or EL + 25mm
- Screw-in resistance thermometer with extension tube:  
NL + 25mm or EL + extension tube length + 25mm
- Screw-in resistance thermometer without extension tube:  
NL + 25mm or EL + 25mm

The measuring inserts for screw-in resistance thermometers are normally fitted with a Pt100 temperature sensor to EN 60 751, Class B in 2-wire circuit. Versions with Pt500 or Pt1000 can also be supplied. There is a choice of 3- or 4-wire circuit connections.

A transmitter can optionally be used instead of the terminal block.



## Technical data

### Terminal block

suitable for terminal heads Form B, BBK and BUZ.

Caution: reduced ambient temperatures when using a transmitter instead of the terminal block, Data Sheets 70.7030 (95.6530) and 70.7010 (95.6550)

### Protection tube

- stainless steel 1.4571 (for 909727/10... and 909727/30...)
- stainless steel 1.4571 (rigid part)  
sheath st. steel 1.4541 (flexible part) (for 909727/20...)
- sheath Inox 1.4541 (for 909727/40-...-.042...)
- sheath Inconel 2.4816 (for 909727/40-...-.043...)

### Transmitter

analog transmitter, output 4 – 20mA, for resistance thermometers, Data Sheet 70.7030 (95.6530)

analog transmitter, output 0 – 10V, for resistance thermometers, Data Sheet 70.7030 (95.6530)

programmable transmitter, output 4 – 20mA/20 – 4mA, for thermocouples or resistance thermometers, Data Sheet 70.7010 (95.6550)

### Application

insert for screw-in thermocouples / resistance thermometers according to Data Sheets 90.1002, 90.2002 and 90.2820

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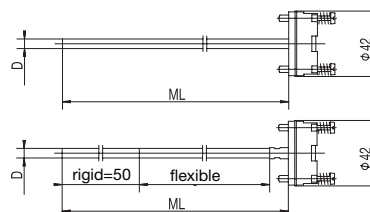
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**Order details: Measuring inserts for screw-in resistance thermometers with terminal head Form B**

**(1) Basic version**

	909727/10	Inserts to DIN 43 762 for screw-in resistance thermometers to DIN 43 765/66, Form B und C
	909727/20	Insert similar to DIN 43 762 as mineral-insulated resistance thermometer
	<b>(2) Operating temperature in °C</b>	
x	x	150 -200 to +600 °C
x	x	402 - 50 to +400 °C (standard with 909727/10)
x	x	415 - 50 to +600 °C (standard with 909727/20)
	<b>(3) Measuring insert</b>	
x	x	1001 1 x Pt100 in 3-wire circuit
x	x	1003 1 x Pt100 in 2-wire circuit
x	x	1011 1 x Pt100 in 4-wire circuit
x	x	2001 2 x Pt100 in 3-wire circuit (only in conjunction with D 6mm)
x	x	2003 2 x Pt100 in 2-wire circuit
	<b>(4) Tolerance class to EN 60 751</b>	
x	x	1 Class B (standard)
x	x	2 Class A
x	x	3 Class 1/3 DIN
	<b>(5) Measuring insert diameter D in mm</b>	
x	x	3 3mm
x	x	6 6mm
	<b>(6) Measuring insert length ML in mm (with 909727/10 ML max. = 800mm)</b>	
x	x	315 315 mm (for resistance thermometer 902002/10-...-...-...-160-.../...)
x	x	405 405 mm (for resistance thermometer 902002/10-...-...-...-250-.../...)
x	x	555 555 mm (for resistance thermometer 902002/10-...-...-...-400-.../...)
x	x	... please specify in plain text
	<b>(7) Extra codes</b>	
x	x	000 no extra code
x	x	330 1 x analog transmitter, output 4 – 20mA <sup>2</sup> , Data Sheet 70.7030 (95.6530)
x	x	331 1 x programmable transmitter, output 4 – 20mA/20 – 4mA <sup>3</sup> , Data Sheet 70.7010 (95.6550)
x	x	333 1 x analog transmitter, output 0 – 10V <sup>2</sup> , Data Sheet 70.7030 (95.6530)
x	x	337 2 x analog transmitter, output 0 – 10V <sup>2</sup> , Data Sheet 70.7030 (95.6530)



Order code  -  -  -  -  -  /  , ...  
 Order example 909727/10 - 402 - 1003 - 1 - 6 - 315 / 000<sup>1</sup>

- List extra codes in sequence, separated by commas.
- Please specify range in plain text.
- Please specify range and output signal in plain text.

**Stock versions**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	Sales No.
909727/10	- 402	- 1003	- 1	- 6	- 315	/ 000	90/00039286
909727/10	- 402	- 1003	- 1	- 6	- 405	/ 000	90/00039287
909727/10	- 402	- 1003	- 1	- 6	- 555	/ 000	90/00039288

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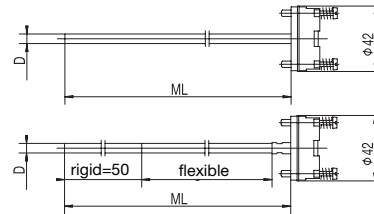
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e-mail: info@JumoUSA.com  
Internet: www.JumoUSA.com



**Order details: Measuring inserts for screw-in thermocouples with terminal head Form B**

**(1) Basic version**

	909727/30	Inserts for screw-in thermocouples
	909727/40	Mineral-insulated inserts for screw-in thermocouples
	<b>(2) Operating temperature in °C</b>	
x	150	-200 to + 600°C
x	165	-200 to + 800°C
x	182	-200 to +1150°C (only in conjunction with NiCr-Ni K)
	<b>(3) Measuring insert</b>	
x	x	1042 1 x Fe-Con L
x	x	1043 1 x NiCr-Ni K
x	x	2042 2 x Fe-Con L
x	x	2043 2 x NiCr-Ni K
	<b>(4) Measuring insert diameter D in mm</b>	
x	x	3 3mm
x	x	6 6mm
	<b>(5) Measuring insert length ML in mm (with 909727/30 ML max. = 800mm)</b>	
x	x	315 315 mm (for thermocouple 901002/10-...-...-...-160-.../...)
x	x	405 405 mm (for thermocouple 901002/10-...-...-...-250-.../...)
x	x	555 555 mm (for thermocouple 901002/10-...-...-...-400-.../...)
x	x	... please specify in plain text
	<b>(6) Extra codes</b>	
x	x	000 no extra code
x	x	331 1 x programmable transmitter, output 4 – 20mA/20 – 4mA <sup>3</sup> , Data Sheet 70.7010 (95.6550)



**Order code**                    (1)                    (2)                    (3)                    (4)                    (5)                    (6)  
 -  -  -  -  /   
**Order example**            909727/30 - 150 - 1042 - 6 - 405 / 331

3. Please specify range and output signal in plain text.