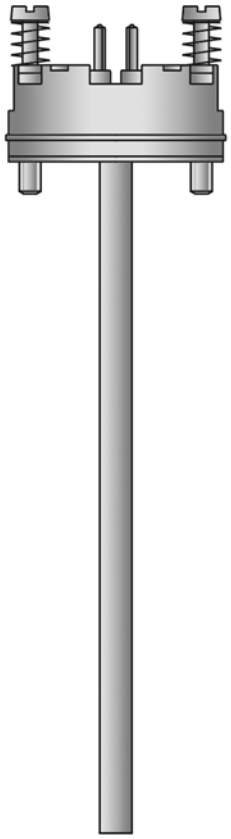
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Measuring inserts for screw-in thermocouples and resistance thermometers with terminal head Form B



- **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 90.1020, as well as for screw-in resistance thermometers to Data Sheets 90.2020 and 90.2820.

A mineral-insulated insert has to be used for insert lengths from 800 mm.

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 and 70.7010
Protection tube	- stainless steel 1.4571 (for 909740/10... and 909742/30...) - stainless steel 1.4571 (rigid part) sheath st. steel 1.4541 (flexible part) (for 909740/20...) - sheath Inox 1.4541 (for 909742/40-...-.042...) - sheath Inconel 2.4816 (for 909742/40-...-.043...)
Transmitter	analog transmitter, output 4 to 20mA, for resistance thermometers, Data Sheet 70.7030 analog transmitter, output 0 to 10V, for resistance thermometers, Data Sheet 70.7030 programmable transmitter, output 4 to 20 mA/20 to 4 mA, for thermocouples or resistance thermometers, Data Sheet 70.7010
Application	insert for screw-in thermocouples / resistance thermometers according to Data Sheets 90.1020, 90.2020 and 90.2820

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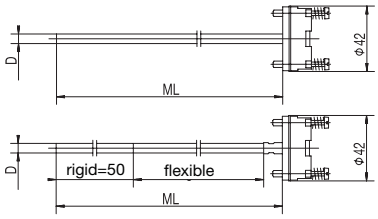
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Order details: Measuring inserts for screw-in resistance thermometers with terminal head Form B

(1) Basic version

		909740/10	Inserts to DIN 43 762 for screw-in resistance thermometers to DIN 43 765/66, Form B und C
		909740/20	Insert similar to DIN 43 762 as mineral-insulated resistance thermometer



			(2) Operating temperature in °C
	x	150	-200 to +600°C
x		402	- 50 to +400°C (standard with 909740/10)
	x	415	- 50 to +600°C (standard with 909740/20)
			(3) Measuring insert
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
			(4) Tolerance class to EN 60 751
x	x	1	Class B (standard)
x	x	2	Class A
x	x	3	Class 1/3 DIN
			(5) Measuring insert diameter D in mm
	x	3	3mm
x	x	6	6mm
			(6) Measuring insert length ML in mm (with 909740/10 ML max. = 800mm)
x	x	315	315mm (for resistance thermometer 902020/10-...-....-.-.-160-.../...)
x	x	405	405mm (for resistance thermometer 902020/10-...-....-.-.-250-.../...)
x	x	555	555mm (for resistance thermometer 902020/10-...-....-.-.-400-.../...)
x	x	...	please specify in plain text
			(7) Extra codes
x	x	000	no extra code
x	x	330	1 x analog transmitter, output 4 to 20mA[2], Data Sheet 70.7030
x	x	331	1 x programmable transmitter, output 4 to 20mA/20 to 4mA[3], Data Sheet 70.7010
x	x	333	1 x analog transmitter, output 0 to 10V[2], Data Sheet 70.7030
x	x	337	2 x analog transmitter, output 0 to10V[2], Data Sheet 70.7030

	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
Order code		-		-		-		-		-		/		,...
Order example	909740/10	-	402	-	1003	-	1	-	6	-	315	/	000[1]	

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

Stock version

(1)		(2)		(3)		(4)		(5)		(6)		(7)	Sales No.
909740/10	-	402	-	1003	-	1	-	6	-	315	/	000	90/00039286

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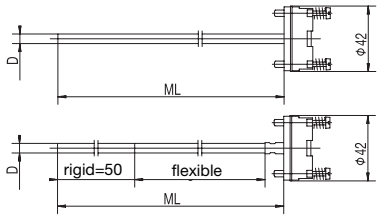
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Order details: Measuring inserts for screw-in thermocouples with terminal head Form B

(1) Basic version

		909742/30	Inserts for screw-in thermocouples
		909742/40	Mineral-insulated inserts for screw-in thermocouples



			(2) Operating temperature in °C
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)
			(3) Measuring insert
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
			(4) Measuring insert diameter D in mm
	x	3	3mm
x	x	6	6mm
			(5) Measuring insert length ML in mm (with 909742/30 ML max. = 800mm)
x	x	315	315mm (for thermocouple 901020/10-...-....-.-.-160-.../...)
x	x	405	405mm (for thermocouple 901020/10-...-....-.-.-250-.../...)
x	x	555	555mm (for thermocouple 901020/10-...-....-.-.-400-.../...)
x	x	...	please specify in plain text
			(6) Extra codes
x	x	000	no extra code
x	x	331	1 x programmable transmitter, output 4 to 20mA/20 to 4mA[3], Data Sheet 70.7010

	(1)		(2)		(3)		(4)		(5)		(6)
Order code		-		-		-		-		/	
Order example	909742/30	-	150	-	1042	-	6	-	405	/	331

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