



## Push-in thermocouples with bayonet lock

- for temperatures from 0 to 400°C
- as single or twin thermocouple
- good heat transfer through adjustable spring pressure
- insulated assembly, or joined to protection tube
- insertion and removal without tools

Push-in thermocouples with bayonet lock are preferred for measuring temperatures in solids, bearings and molding tools, for example in the plastics industry. The special form of the measuring tips makes these temperature probes suitable for use in flat-bottom or cone-shaped bores.

The rugged pressure spring, which also functions as a cable protector, is made from rust and acid resistant stainless steel 1.4310 and ensures a steady pressure between the measuring tip and the bottom of the hole. The fitting length can be altered by rotating the bayonet lock. Bayonet locks and suitable sockets are available in the diameters 12, 14.5, 15 and 16mm.

The measuring insert is normally fitted with thermocouples to EN 60 584 or DIN 43 710. Versions with two thermocouples are also available.



## Technical data

### Connection

available with cable ends as: bare wires, with ferrules, receptacles or multipole connector (e.g. connectors that are free from thermal emf)

### Compensating cable

silicone, ambient temperature -50 to +180°C  
PTFE, ambient temperature -190 to +260°C  
metal braiding, ambient temperature -20 to +350°C

### Process connection

bayonet lock, nickel-plated brass, 12mm, 14.5mm, 15mm or 16mm dia.

### Protection tube

stainless steel 1.4571, 6mm and 8mm dia.

### Measuring insert

insulated assembly:  
1 x Fe-Con J, EN 60 584, Cl. 2, operating temperature 0 to 400°C  
1 x Fe-Con L, DIN 43 710, Cl. 2, operating temperature 0 to 400°C  
1 x NiCr-Ni K, EN 60 584, Cl. 2, operating temperature 0 to 400°C  
2 x Fe-Con L, DIN 43 710, Cl. 2, operating temperature 0 to 400°C  
2 x NiCr-Ni K, EN 60 584, Cl. 2, operating temperature 0 to 400°C

### Accessories

bayonet sockets, Data Sheet 90.9725

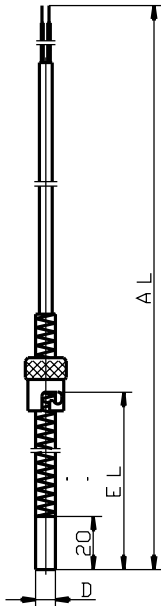
Delivery address: Mackenrodtstraße 14,  
36039 Fulda, Germany  
Postal address: 36035 Fulda, Germany  
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Fax: +49 661 6003-607  
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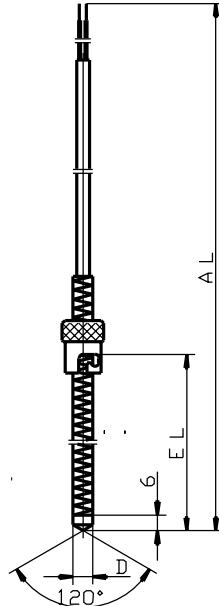
885 Fox Chase, Suite 103  
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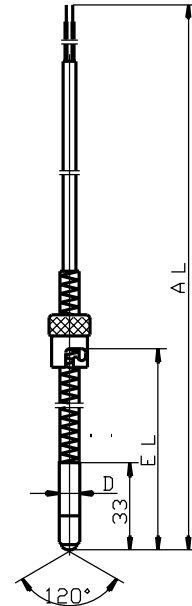
### Dimensions



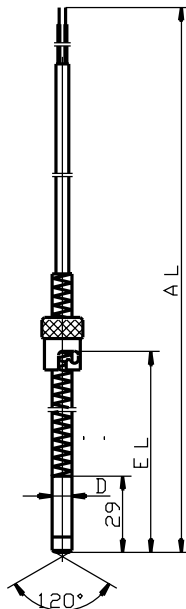
Type 901109/10



Type 901109/20



Type 901109/30



Type 901109/40

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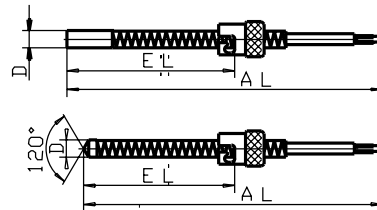
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**Order details: Push-in thermocouples with bayonet lock**

**(1) Basic version**

	901109/10	Push-in thermocouple, protection tube / measuring tip (flat-bottom) stainless steel, Mat. Ref. 1.4571, bayonet lock 12mm dia.
	901109/20	Push-in thermocouple, protection tube / measuring tip (120°) stainless steel, Mat. Ref. 1.4571, bayonet lock 12mm dia.
	<b>(2) Operating temperature in °C / compensating cable</b>	
x	x	832 0 to 200°C / silicone
x	x	835 0 to 260°C / metal braiding
x	x	836 0 to 260°C / PTFE
x	x	848 0 to 400°C / metal braiding
	<b>(3) Measuring insert</b>	
x	x	1040 1 x Fe-Con J
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) Protection tube diameter D in mm</b>	
x		6 6mm
x	x	8 8mm
	<b>(5) Fitting length EL in mm</b>	
x		175 20 - 175mm
	x	240 6 - 240mm
	<b>(6) Compensating cable end</b>	
x	x	03 bare cable ends
x	x	11 ferrules to DIN 46 228 Part 4 (standard)
x	x	13 receptacle 6.3 to DIN 46 247
x	x	80 multipole connector (please specify type in plain text)
	<b>(7) Compensating cable length AL in mm (500 ≤ AL ≤ 500000)</b>	
x	x	2500 2500mm (standard)
x	x	... please specify in plain text (500mm steps)
	<b>(8) Extra codes</b>	
x	x	000 no extra code
x	x	300 bayonet lock 14.5mm dia.
x	x	302 bayonet lock 15mm dia.
x	x	303 bayonet lock 16mm dia.
x	x	309 uninsulated assembly (thermocouple welded to tip)



Order code            **(1)** - **(2)** - **(3)** - **(4)** - **(5)** - **(6)** - **(7)** - **(8)** / ...  
 Order example        901109/10 - 848 - 1042 - 6 - 175 - 11 - 2500 / 000<sup>1</sup>

1. List extra codes in sequence, separated by commas.

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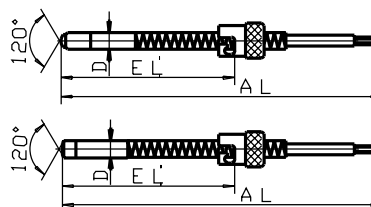


**Order details: Push-in thermocouples with bayonet lock**

**(1) Basic version**

901109/30	Push-in thermocouple, protection tube / measuring tip (120°) stainless steel, Mat. Ref. 1.4571, bayonet lock 12mm dia.
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901109/40	Push-in thermocouple, protection tube stainless steel, Mat. Ref. 1.4571, measuring tip (120°) ceramic, KER 221, bayonet lock 12mm dia.
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<b>(2) Operating temperature in °C / compensating cable</b>	
x x	832 0 to 200°C / silicone
x	835 0 to 260°C / metal braiding
x	836 0 to 260°C / PTFE
x	848 0 to 400°C / metal braiding

<b>(3) Measuring insert</b>	
x x	1040 1 x Fe-Con J
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) Protection tube diameter D in mm</b>	
x x	6 6mm

<b>(5) Fitting length EL in mm</b>	
x	175 33 - 175mm
x	175 29 - 175mm

<b>(6) Compensating cable end</b>	
x x	03 bare cable ends
x x	11 ferrules to DIN 46 228 Part 4 (standard)
x x	13 receptacle 6.3 to DIN 46 247
x x	80 multipole connector (please specify type in plain text)

<b>(7) Compensating cable length AL in mm (500 ≤ AL ≤ 500000)</b>	
x x	2500 2500mm (standard)
x x	... please specify in plain text (500mm steps)

<b>(8) Extra codes</b>	
x x	000 no extra code
x x	300 bayonet lock 14.5mm dia.
x x	302 bayonet lock 15mm dia.
x x	303 bayonet lock 16mm dia.
x x	309 uninsulated assembly (thermocouple welded to tip)

**Order code**                    (1) - (2) - (3) - (4) - (5) - (6) - (7) / (8) ,...

**Order example**            901109/30 - 836 - 1042 - 6 - 175 - 11 - 2500 / 000<sup>1</sup>

1. List extra codes in sequence, separated by commas.

Note: Bayonet sockets, Data Sheet 90.9725

**Stock versions**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Sales No.
901109/10	848	1040	6	175	11	2500	000	90/00352190
901109/10	848	1040	8	175	11	2500	000	90/00371309
901109/10	848	1042	6	175	11	2500	000	90/00055784
901109/10	848	1042	8	175	11	2500	000	90/00055785
901109/20	848	1042	8	240	11	2500	309	90/00055792
901109/30	835	1042	6	175	13	2500	309	90/00055806
901109/40	848	1042	6	175	13	2500	000	90/00055804