

Push-in thermocouples with terminal head Form A

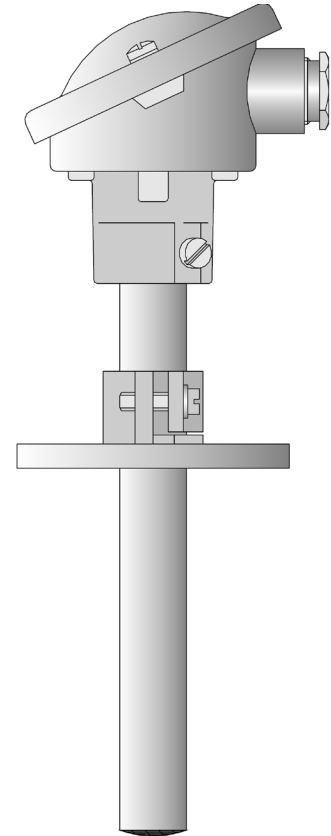
- for temperatures from -200 to +1600°C
- with protection tubes in different materials
- as single or twin thermocouple
- available with transmitter

Push-in thermocouples are preferred for measuring temperatures in liquids and gases. Applications include heating installations, ovens, furnaces and plant engineering.

Terminal head Form A is suitable for ambient temperatures up to +100°C. The support tube is made from steel. When using a backing flange (see Data Sheet 90.9725), the mounting location can be sealed against 1bar max.

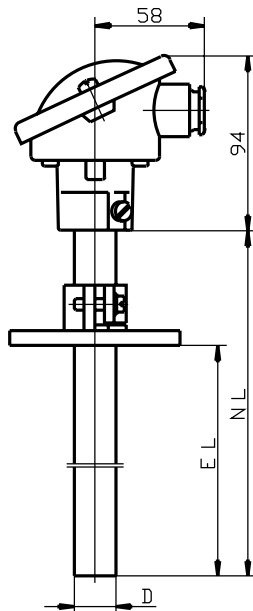
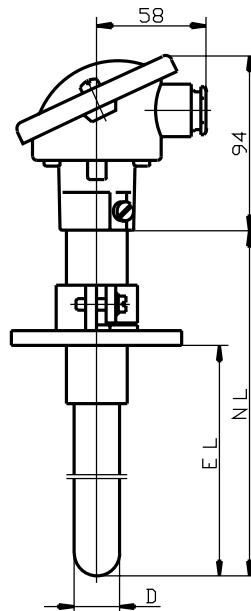
Protection tubes in different ceramic materials, as well as in heat-resistant steel, protect the measuring insert from chemical influences and mechanical damage. The choice of the appropriate protection tube material depends on the site conditions. Longitudinally-welded tubes tend to develop cracks under certain application conditions.

The measuring insert is fitted with thermocouples to EN 60 584, Class 2 and DIN 43 710. Versions with two thermocouples are also available.



Technical data

Terminal head	Form A DIN 43 729, aluminium die-casting, Pg16, IP54, ambient temperature -20 to +100°C Caution: reduced ambient temperature when using transmitters (see Data Sheet 95.6550)
Process connection	screwed pipe joint 1" stop flange 22mm dia. to DIN 43 734 stop flange 32mm dia. to DIN 43 734
Protection tube	steel 1.4762, 22mm dia., operating temperature up to +1150°C (longitudinally-welded) steel 1.4841, 22mm dia., operating temperature up to +1150°C (seamless drawn) ceramic KER 610, 15mm and 24mm dia., operating temperature up to +1300°C ceramic KER 710, 15mm and 24mm dia., operating temperature up to +1600°C
Measuring insert	insulated assembly: 1 x Fe-Con J, EN 60 584, Cl. 2, operating temperature -200 to +600°C 1 x Fe-Con L, DIN 43 710, Cl. 2, operating temperature -200 to +600°C 1 x NiCr-Ni K, EN 60 584, Cl. 2, operating temperature -200 to +1200°C 1 x Pt10Rh-Pt S, EN 60 584, Cl. 2, operating temperature 0 to 1300°C 1 x Pt30Rh-Pt6Rh B, EN 60 584, Cl. 2, operating temperature 600 to 1600°C 2 x Fe-Con J, EN 60 584, Cl. 2, operating temperature -200 to +600°C 2 x Fe-Con L, DIN 43 710, Cl. 2, operating temperature -200 to +600°C 2 x NiCr-Ni K, EN 60 584, Cl. 2, operating temperature -200 to +1200°C 2 x Pt10Rh-Pt S, EN 60 584, Cl. 2, operating temperature 0 to 1300°C 2 x Pt30Rh-Pt6Rh B, EN 60 584, Cl. 2, operating temperature 600 to 1600°C
Transmitter	Programmable transmitter Type 956550, see Data Sheet 95.6550

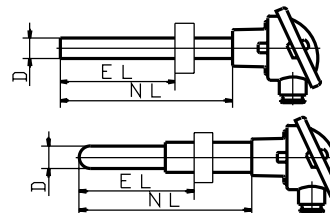
Dimensions**Type 901101/10****Type 901101/20**

Order details: Push-in thermocouples with terminal head Form A

(1) Basic version

	901101/10	Push-in thermocouple with continuous protection tube in heat-resistant steel
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	901101/20	Push-in thermocouple with stepped ceramic protection tube
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(2) Measuring insert / operating temperature in °C			
x	1040	1 x Fe-Con J, operating temperature -200 to +600°C	
x	1042	1 x Fe-Con L, operating temperature -200 to +600°C	
x	x	1043	1 x NiCr-Ni K, operating temperature -200 to +1200°C
x	x	1044	1 x Pt 10 Rh-Pt S, operating temperature 0 to 1300°C
x	x	1046	1 x Pt 30 Rh-Pt 6 Rh B, operating temperature 600 to 1600°C
x	x	2040	2 x Fe-Con J, operating temperature -200 to +600°C
x	x	2042	2 x Fe-Con L, operating temperature -200 to +600°C
x	x	2043	2 x NiCr-Ni K, operating temperature -200 to +1200°C
x	x	2044	2 x Pt 10 Rh-Pt S, operating temperature 0 to 1300°C
x	x	2046	2 x Pt 30 Rh-Pt 6 Rh B, operating temperature 600 to 1600°C

(3) Protection tube diameter D in mm		
x	15	15mm (support tube 22mm dia.)
x	22	22mm
x	24	24mm (support tube 32mm dia.)

(4) Nominal length NL in mm (180 ≤ NL ≤ 1400)			
x	x	500	500mm, fitting length (EL) 100 - 460mm
x	x	710	710mm, fitting length (EL) 100 - 670mm
x	x	1000	1000mm, fitting length (EL) 100 - 960mm
x	x	1400	1400mm, fitting length (EL) 100 - 1360mm
x	x	...	please specify in plain text (100mm steps)

(5) Process connection			
x	x	000	no process connection
x	x	256	screwed pipe joint 1" (only for 22mm dia.), steel
x	x	669	stop flange D 22mm, DIN 43 734
x	x	671	stop flange D 32mm, DIN 43 734

(6) Protection tube material			
x	x	27	steel X 10 CrAL 24 Mat. Ref. 1.4762 (operating temp. up to +1150°C)
x	x	28	steel X 15 CrNiSi 25 20 Mat. Ref. 1.4841 (operating temp. up to +1150°C)
x	x	93	ceramic KER 610 (operating temperature up to +1300°C)
x	x	94	ceramic KER 710 (operating temperature up to +1600°C)

(7) Extra codes			
x	x	000	no extra code
x	x	331	1 x programmable transmitter Type 956550 (please specify range in plain text)

Order code **(1)** **(2)** **(3)** **(4)** **(5)** **(6)** **(7)**

Order example 901101/10 - 1042 - 22 - 710 - 669 - 27 / 000¹

1. List extra codes in sequence, separated by commas.
 Note: Programmable transmitter, see Data Sheet 95.6550

Stock versions:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	Sales No.						
901101/10	-	1043	-	22	-	500	-	669	-	27	/	000	90/00054836
901101/10	-	1043	-	22	-	710	-	669	-	27	/	000	90/00054837
901101/10	-	1043	-	22	-	1000	-	669	-	27	/	000	90/00054838
901101/10	-	1043	-	22	-	1400	-	669	-	27	/	000	90/00054839
901101/10	-	2043	-	22	-	500	-	669	-	27	/	000	90/00054841
901101/10	-	2043	-	22	-	710	-	669	-	27	/	000	90/00054842
901101/10	-	2043	-	22	-	1000	-	669	-	27	/	000	90/00054843
901101/20	-	1043	-	15	-	500	-	669	-	93	/	000	90/00054846