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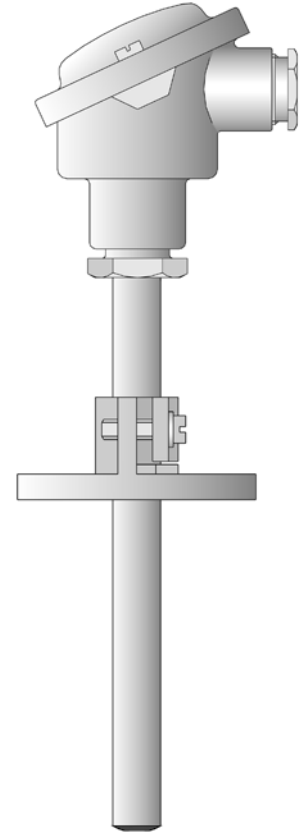
Push-in RTD temperature probes with terminal head form B

- For temperatures from -50 to +600 °C
- with replaceable measuring insert
- As single or double RTD temperature probes
- Connection head form B, BUZ, BUZH, BBK
- Available with transmitter

Push-in RTD temperature probes are preferentially used for measuring temperatures in liquids and gasses. Application areas encompass, among others, the air conditioning technology and refrigeration engineering, as well as the heating system, kiln and apparatus engineering sector, and in process technology.

The connection head is suitable for ambient temperatures up to +100 °C. The versions BUZ, BUZH and BBK are also available in addition to the standard connection head, form B.

The measuring insert is normally fitted with a Pt100 temperature probe as per DIN EN 60751, class B in 2-wire circuit, versions with Pt500 or Pt1000 are also possible. Connection is available in 3-wire or 4-wire-circuitry as an option. A transmitter can be optionally integrated into the connection head.



Technical data

Terminal head

Form B DIN 43729, die-cast aluminum, M 20x1.5; IP65, ambient temperature -40 to +100 °C
Form BUZ, die-cast aluminum, M 20x1.5; IP65, ambient temperature -40 to +100 °C
Form BUZH, die-cast aluminum, M 20x1.5; IP65, ambient temperature -40 to +100 °C
Form BBK, plastic, M 20x1.5; IP54, ambient temperature -30 to +130 °C
Caution: reduced ambient temperature range when using transmitters, data sheets 70.7010, 70.7030 and 70.7060

Process connection

Sheet steel flange Ø 9 mm, Ø 11 mm, galvanized steel
Stop flange Ø 15 mm, DIN 43734, gray cast iron
Pipe screw-connection Ø 12 mm, Ø 15 mm, stainless steel

Sheath

Stainless steel 1.4571, Ø 9 mm, Ø 11 mm, Ø 15 mm

Measuring insert

Replaceable, Pt100 temperature probe, DIN EN 60751, class B, 2-wire circuit

Transmitter

analog transmitter, 4 to 20 mA output, data sheet 70.7030
analog transmitter, 0 to 10 V output, data sheet 70.7030
programmable transmitter, 4 to 20 mA/20 to 4 mA output, data sheet 70.7010
Wtrans B programmable head transducer with radio transmission, data sheet 70.7060 (suitable Wtrans receivers, data sheet 90.2931)

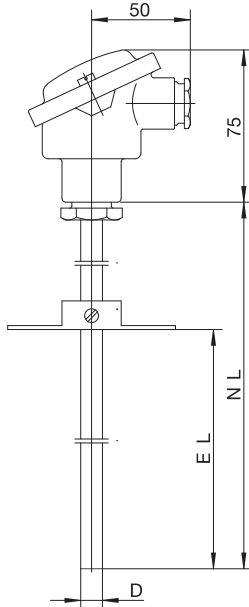
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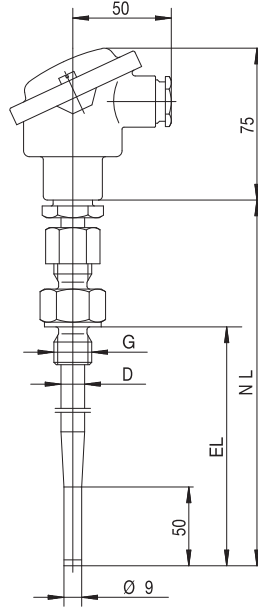
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Dimensions



Basic type 902120/10



Basic type 902120/11

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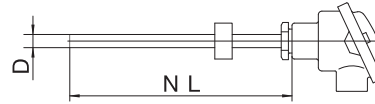
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Order specifications: Push-in RTD temperature probe with connection head form B

(1) Basic type

902120/10 Push-in RTD temperature probes
 with continuous sheath



(2) Operating temperature in °C

- x 150 -200 to +600 °C
- x 402 -50 to +400 °C (standard)
- x 415 -50 to +600 °C

(3) Measuring insert

- x 1001 1x Pt100 in 3-wire-circuit
- x 1003 1x Pt100 in 2-wire circuit
- x 1011 1x Pt100 in 4-wire circuit
- x 2001 2x Pt100 in 3-wire circuit
- x 2003 2x Pt100 in 2-wire circuit

(4) Tolerance class as per DIN EN 60751

- x 1 Class B (standard)
- x 2 Class A

(5) Sheath diameter D in mm

- x 9 Ø 9 mm
- x 11 Ø 11 mm
- x 15 Ø 15 mm

(6) Nominal length NL in mm (100 ≤ NL ≤ 1000)

- x 180 180 mm, fitting length (EL) 100 to 140 mm
- x 270 270 mm, fitting length (EL) 100 to 230 mm
- x 290 290 mm, fitting length (EL) 100 to 250 mm
- x 350 350 mm, fitting length (EL) 100 to 310 mm
- x 410 410 mm, fitting length (EL) 100 to 370 mm
- x 420 420 mm, fitting length (EL) 100 to 400 mm
- x 500 500 mm, fitting length (EL) 100 to 460 mm
- x 710 710 mm, fitting length (EL) 100 to 670 mm
- x 1000 1000 mm, fitting length (EL) 100 to 960 mm
- x ... Specification in plain text (50 mm steps)

(7) Process connection

- x 000 without process connection
- x 254 Sheath screw connection G 1/2 (for a 15 mm diameter only)
- x 663 Sheet steel flange Ø 9 mm
- x 665 Sheet steel flange Ø 11 mm
- x 668 Stop flange Ø 15 mm, DIN 43734

(8) Extra codes

- x 000 no extra code
- x 320 terminal head Form BUZ
- x 321 terminal head Form BUZH
- x 322 Connection head form BBK
- x 330 1x analog transmitter, 4 to 20 mA² output, data sheet 70.7030
- x 331 1x transmitter programmable output 4 to 20 mA/20 to 4 mA³, data sheet 70.7010
- x 333 1x analog transmitter, 0 to 10 V² output, data sheet 70.7030
- x 334 2x analog transmitters, 4 to 20 mA² output, data sheet 70.7030
- x 335 2x transmitter programmable output 4 to 20 mA/20 to 4 mA³, data sheet 70.7010
- x 337 2x analog transmitters, 0 to 10 V² output, data sheet 70.7030
- x 859 1x Wtrans B programmable head transducer with radio transmission, data sheet 70.7060

Order code (1) (2) (3) (4) (5) (6) (7) (8) , ...¹
Order example 902120/10 - 402 - 1001 - 1 - 9 - 410 - 663 / 000

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

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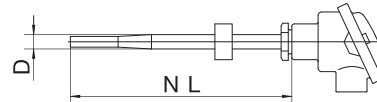
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Order specifications: Push-in RTD temperature probe with connection head form B

(1) Basic type

902120/11 Push-in RTD temperature probes
 with stepped sheath



(2) Operating temperature in °C

- x 150 -200 to +600 °C
- x 402 -50 to +400 °C (standard)
- x 415 -50 to +600 °C

(3) Measuring insert

- x 1001 1x Pt100 in 3-wire-circuit
- x 1003 1x Pt100 in 2-wire circuit
- x 1011 1x Pt100 in 4-wire circuit
- x 2001 2x Pt100 in 3-wire circuit
- x 2003 2x Pt100 in 2-wire circuit

(4) Tolerance class as per DIN EN 60751

- x 1 Class B (standard)
- x 2 Class A

(5) Sheath diameter D in mm

- x 12 Ø 12 mm stepped down to 9 mm

(6) Nominal length NL in mm (100 ≤ NL ≤ 700)

- x 180 180 mm, fitting length (EL) 100 to 140 mm
- x 270 270 mm, fitting length (EL) 100 to 230 mm
- x 290 290 mm, fitting length (EL) 100 to 250 mm
- x 350 350 mm, fitting length (EL) 100 to 310 mm
- x 410 410 mm, fitting length (EL) 100 to 370 mm
- x 500 500 mm, fitting length (EL) 100 to 460 mm
- x ... Specification in plain text (50 mm steps)

(7) Process connection

- x 000 without process connection
- x 254 Sheath screw-connection G 1/2

(8) Extra codes

- x 000 no extra code
- x 320 terminal head Form BUZ
- x 321 terminal head Form BUZH
- x 322 Connection head form BBK
- x 330 1x analog transmitter, 4 to 20 mA² output, data sheet 70.7030
- x 331 1x transmitter programmable output 4 to 20 mA/20 to 4 mA³, data sheet 70.7010
- x 333 1x analog transmitter, 0 to 10 V² output, data sheet 70.7030
- x 334 2x analog transmitters, 4 to 20 mA² output, data sheet 70.7030
- x 335 2x transmitter programmable output 4 to 20 mA/20 to 4 mA³, data sheet 70.7010
- x 337 2x analog transmitters, 0 to 10 V² output, data sheet 70.7030
- x 859 1x Wtrans B programmable head transducer with radio transmission, data sheet 70.7060

Order code



Order example

902120/11 - 402 - 1001 - 1 - 12 - 410 - 000 / 000

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

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Stock versions

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Sales No.:
902120/10	- 415	- 1003	- 1	- 15	- 500	- 668	/ 000	90/00055514
902120/10	- 402	- 1003	- 1	- 11	- 180	- 665	/ 000	90/00055681

Accessories for programmable 2-wire transmitter type 707010 in the accessories data sheet 70.9770

Part	Sales No.:
PC interface with TTL/RS232 converter and adapter (socket connector)	70/00350260
PC interface with USB/TTL converter, adapter (socket connector) and adapter (pins)	70/00456352
Special programming (standard measuring range 0 to 100 °C)	-
Setup program on CD-ROM, multilingual	70/00378733

Accessories for Wtrans B, programmable head transmitter with radio transmission Type 707060

Part	Sales No.:
Lithium battery 3.6 V, 2.2 Ah (size AA)	70/00547559
PC interface with USB/TTL converter, adapter (socket) and adapter (pins)	70/00456352
PC interface with TTL/RS232 converter and adapter (socket connector)	70/00350260
Setup program on CD-ROM, multilingual	70/00488887
Setup program including OnlineChart on CD-ROM, multilingual	70/00549067
OnlineChart activation	70/00549188

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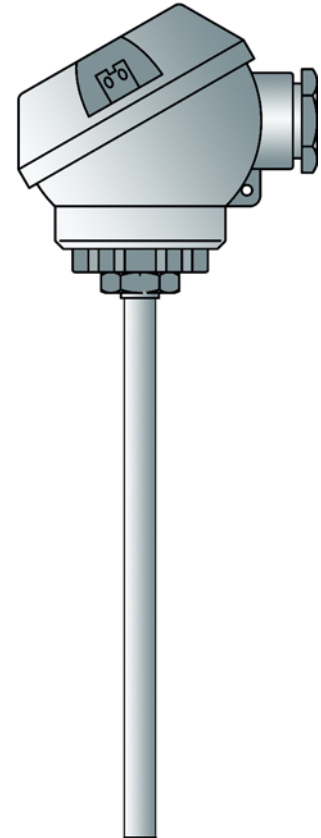


Push-in RTD temperature probe with terminal head form J

- for temperatures from -50 ... +400°C
- As single or double RTD temperature probes
- Available with transmitter
- Protection class IP65

Push-in RTD temperature probes are preferentially used for measuring temperatures in liquids and gases. A decisive selection criterion is the reliable sealing feature of this installation type with vacuum and with overpressure. The application areas are, among others, in the air conditioning technology and refrigeration engineering as well as the HVAC, kiln and apparatus engineering sector.

The measuring insert is normally fitted with a Pt 100 temperature sensor according to DIN EN 60 751, Class B in 2-wire circuit; versions with Pt 500 or Pt 1000 temperature sensors can also be supplied, as well as 3- and 4-wire circuit connections. A transmitter can be optionally integrated into the connection head.



Technical Data

Terminal head

Form J, die-cast aluminum, M 16x1.5; IP65, ambient temperature -40 ... +100°C
Caution: reduced ambient temperature range when using transmitters,
Data Sheet 70.7030

Process connection

Metal flange Ø 6mm, Ø 8mm, galvanized steel
Thermowell screw-connection Ø 6mm, Ø 8mm, stainless steel
Thermowell screw-connection, spring loaded Ø 8mm, spring deflection 12mm, stainless steel

Thermowell

Stainless steel 1.4571, Ø 6mm and Ø 8mm

Measuring insert

Pt 100 temperature sensor according to DIN EN 60 751, Class B, two-wire circuit

Transmitter

Analog transmitter, 4 ... 20mA output, Data sheet 70.7030

Accessories

Thermowell, Data Sheet 90.2440 and 90.9721

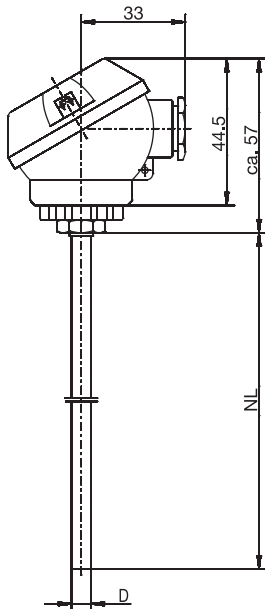
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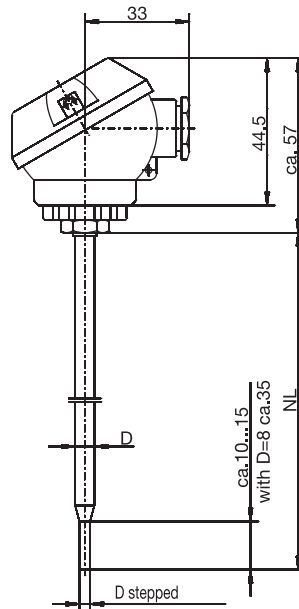
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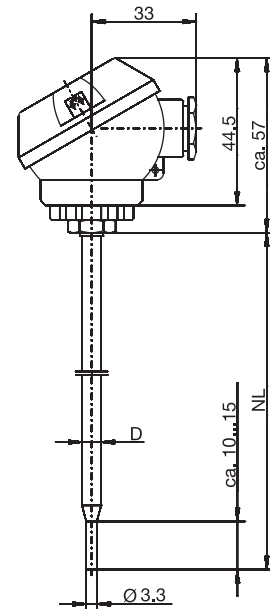
Dimensions



Type 902130/10



Type 902130/11



Type 902130/31

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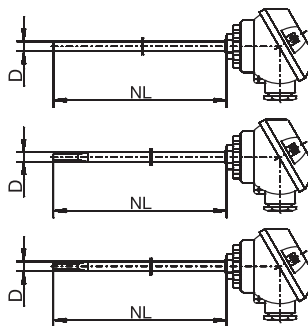
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Order details: Push-in RTD temperature probe with terminal head form J

(1) Basic type	
902130/10	Push-in RTD temperature probes with continuous thermowell
902130/11	Push-in RTD temperature probes with stepped thermowell (with Ø 6 to 3.8mm; with Ø 8 to 6mm)
902130/31	Push-in RTD temperature probes with stepped thermowell for air measurement
(2) Operating temperature in °C	
x x	647 -20 ... +150°C (only in conjunction with tolerance class B)
x x x	380 -50 ... +200°C
x x	386 -50 ... +260°C
x x	402 -50 ... +400°C
(3) Measuring insert	
x x	1001 1 x Pt 100 in 3-wire-circuit
x x x	1003 1 x Pt 100 in 2-wire circuit
x x x	1011 1 x Pt 100 in 4-wire circuit
x x x	2003 2 x Pt 100 in 2-wire circuit
(4) Tolerance class according to DIN EN 60 751	
x x x	1 Class B (standard)
x x x	2 Class A
(5) Protection tube diameter D in mm	
x x x	6 Ø 6mm
x x	8 Ø 8mm
(6) Nominal length NL in mm (50 ≤ NL ≤ 1000)	
x x x	50 50mm
x x x	100 100mm
x x x	150 150mm
x x x	250 250mm
x	290 290mm
x x x	... Specification in plain text (50mm steps)
(7) Process connection	
x x x	000 without process connection
x	245 Thermowell screw connection, spring-loaded G 1/2, spring deflection 12mm (for Ø 8mm only, Tmax. 180°C)
x x x	252 Thermowell screw connection G 1/4 (for a 6mm diameter only)
x x x	254 Thermowell screw connection G 1/2 (for a 6mm or Ø 8mm diameter only)
x x x	662 Metal flange Ø 6mm
x	667 Metal flange Ø 8mm
(8) Extra codes	
x x x	000 Without
x x x	330 1 x analog transmitter, 4 ... 20mA ¹ output, Data sheet 70.7030



Order code	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Order example	902130/10	- 402	- 1001	- 1	- 6	- 100	- 000	/ 000

Stock versions

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Part No.
902130/10	- 402	- 1003	- 1	- 6	- 50	- 000	/	000
902130/10	- 402	- 1003	- 1	- 6	- 150	- 000	/	000
902130/10	- 402	- 1003	- 1	- 6	- 250	- 000	/	000
902130/10	- 647	- 1003	- 1	- 6	- 100	- 000	/	000
902130/10	- 647	- 1003	- 1	- 6	- 150	- 000	/	000
902130/10	- 647	- 1003	- 1	- 6	- 250	- 000	/	000
902130/31	- 380	- 1003	- 1	- 6	- 290	- 000	/	000

¹ Specify measuring range in plain text.