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ООО «КОМТЕК», г. Санкт-Петербург
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Push-in RTD temperature probe

With connection line

Areas of application

- Apparatus engineering
- Heating, ventilation, and air-conditioning
- Climatic chambers
- Laboratory technology
- Solar units

Special features

- Single and double RTD temperature probes
- Straight and angled variants
- Flexible connection lines
- Strain-relieved
- SIL and PL-qualified
- Optional bend protection

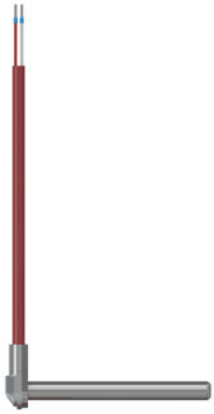
Description

The push-in RTD temperature probe measures temperatures in liquids and gases.

The device is suitable for use in dry and humid rooms.



Type 902150/10



Type 902150/40



Type 902150/41

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Approvals and qualifications

Certificates for approved device versions are available for download on the manufacturer's website.

Technical data

Electrical data

Electrical connection	
Connection element	Connection line with a stripped line end
	Connection line with tin-plated connection wires
	Connection line with ferrules
	Connection line with M12 plug connector
	Connection line with multi-pole plug connection

Environmental influences

Admissible ambient temperature of the connection line	
PVC	-5 to +80 °C
Silicone	-50 to +180 °C
PTFE	-50 to +260 °C
Metal braiding	-50 to +260 °C
Glass fiber	-50 to +400 °C

Mechanical features

Materials	
Connection line insulation material	PVC
	Silicone
	PTFE
	Metal braiding
	Glass fiber
Protection tube	Stainless steel
Connection line	Strain-relieved
Protection tube	Ø 3 mm
	Ø 4 mm
	Ø 5 mm
	Ø 6 mm
Response times	
In water 0.4 m/s	$t_{0.5}$ ≈ 4 s, $t_{0.9}$ ≈ 10 s, Ø 6 mm
In air 3.0 m/s	$t_{0.5}$ ≈ 32 s, $t_{0.9}$ ≈ 98 s, Ø 6 mm

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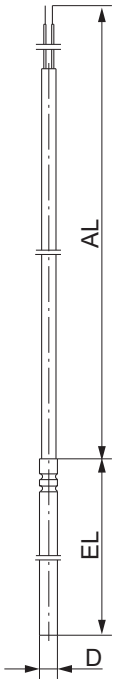
Measuring insert	DIN EN IEC 60751 1× Pt100 in 2-wire circuit 1× Pt100 in 3-wire circuit 1× Pt100 in 4-wire circuit 1× Pt1000 in 2-wire circuit 2× Pt100 in 2-wire circuit 2× Pt100 in 3-wire circuit 2× Pt1000 in 2-wire circuit
Tolerance class	Class B (standard) Class A Class AA

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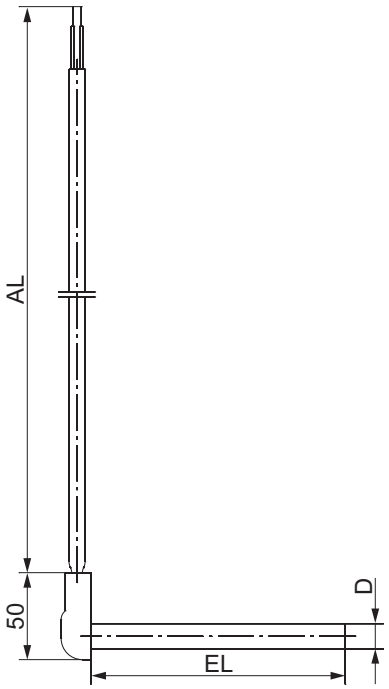
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Dimensions

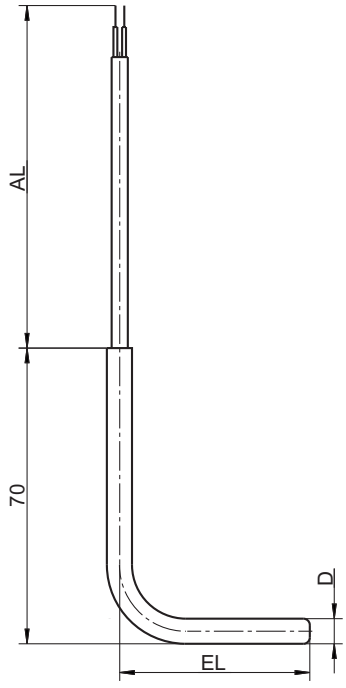
Type 902150/10
with connection line and protection tube



Type 902150/40
with right-angled connection line and protection tube



Type 902150/41
with connection line and right-angled protection tube



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Order details

	(1)	**Basic type**
902150/10		Push-in RTD temperature probe with connection line, stainless steel protection tube 
	(2)	**Operating temperature**
724		-5 to +80 °C
378		-50 to +180 °C
386		-50 to +260 °C (PTFE)
388		-50 to +260 °C (metal braiding)
402		-50 to +400 °C
	(3)	**Measuring insert**
1003		1× Pt100 in 2-wire circuit
1001		1× Pt100 in 3-wire circuit
1011		1× Pt100 in 4-wire circuit
1005		1× Pt1000 in 2-wire circuit
2003		2× Pt100 in 2-wire circuit
2001		2× Pt100 in 3-wire circuit
2005		2× Pt1000 in 2-wire circuit
	(4)	**Tolerance class according to DIN EN IEC 60751**
1		Class B (standard)
2		Class A
3		Class AA
	(5)	**Protection tube diameter D**
3		Ø 3 mm
4		Ø 4 mm
5		Ø 5 mm
6		Ø 6 mm
	(6)	**Insertion length EL**
30		30 mm
40		40 mm
50		50 mm
60		60 mm
100		100 mm
150		150 mm
200		200 mm
	(7)	**Connection line end**
03		Bare connection wires
04		Tin-plated connection wires
11		Ferrules (standard)
56		M12 plug connector
80		Multi-pole plug connection (specify type in plain text)
	(8)	**Connection line length AL**
2500		2500 mm
....		Specification in plain text (500 mm increments)
	(9)	**Extra codes**
000		None
061		UL approval (not in connection with operating temperature 388 or 402)
880		DNV approval (only in connection with protection tube diameter 6 to insertion length 150)
310		Protection tube, reduced
315		Bend protection spring

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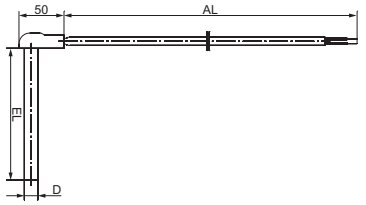
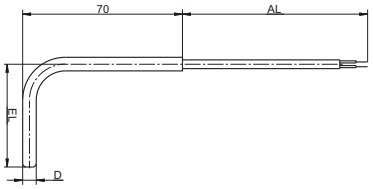
316	Bend protection tubing
317	Shielded connection line
093	Shielding connected with protection tube (only in connection with extra code 317)
094	Shielding fed out on the connection side with grounding wire (only in connection with extra code 317)
366	Inspection certificate 3.1 DIN EN 10204 tolerance/calibration
775	DAkkS calibration according to ISO/IEC 17025
1150	AMS 2750 (only in connection with tolerance class A or AA)
1151	CQI-9 (only in connection with tolerance class A or AA)
1152	ISO 20431 (only in connection with tolerance class A or AA)
658	SIL and PL-compatible (only in connection with safetyM safety temperature limiter/monitor according to data sheet 701150; not in connection with transmitters)
659	SIL and PL-compatible (only in connection with dTRANS T06 cable transmitter according to data sheet 707071; not in connection with other transmitters)
665	SIL and PL-compatible (only in connection with programmable dTRANS T07 T SIL two-channel transmitter with HART® communication and SIL according to data sheet 707080; not in connection with other transmitters)

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)	
Order code		-		-		-		-		-		-		-		/		, ...[a]
Order example	902150/10	-	378	-	1001	-	1	-	6	-	50	-	11	-	2500	/	000	

[a] List extra codes in sequence and separate using commas.

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			(1)	**Basic type**
		902150/40		Push-in RTD temperature probe with right-angled connection line, stainless steel protection tube 
		902150/41		Push-in RTD temperature probe with connection line, right-angled stainless steel protection tube 
			(2)	**Operating temperature**
x	x	724		-5 to +80 °C
x	x	378		-50 to +180 °C
x	x	386		-50 to +260 °C (PTFE)
x	x	388		-50 to +260 °C (metal braiding)
x	x	402		-50 to +400 °C
			(3)	**Measuring insert**
x	x	1003		1× Pt100 in 2-wire circuit
x	x	1001		1× Pt100 in 3-wire circuit
x	x	1011		1× Pt100 in 4-wire circuit
x	x	1005		1× Pt1000 in 2-wire circuit
x	x	2003		2× Pt100 in 2-wire circuit
x	x	2001		2× Pt100 in 3-wire circuit
x	x	2005		2× Pt1000 in 2-wire circuit
			(4)	**Tolerance class according to DIN EN IEC 60751**
x	x	1		Class B (standard)
x	x	2		Class A
x	x	3		Class AA
			(5)	**Protection tube diameter D**
	x	4		Ø 4 mm
x	x	5		Ø 5 mm
x	x	6		Ø 6 mm
x		9		Ø 9 mm
			(6)	**Insertion length EL**
x	x	50		50 mm
x	x	60		60 mm
x	x	100		100 mm
x	x	150		150 mm
x	x	200		200 mm
			(7)	**Connection line end**
x	x	03		Bare connection wires
x	x	04		Tin-plated connection wires
x	x	11		Ferrules (standard)
x	x	56		M12 plug connector
x	x	80		Multi-pole plug connection (specify type in plain text)
			(8)	**Connection line length AL**
x	x	2500		2500 mm
x	x	....		Specification in plain text (500 mm increments)

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			(9)	Extra codes
x	x	000		None
x	x	061		UL approval (not in connection with operating temperature 388 or 402)
x	x	880		DNV approval (only in connection with protection tube diameter 6 to insertion length 150)
x	x	310		Protection tube, reduced
x	x	315		Bend protection spring
x	x	316		Bend protection tubing
x	x	317		Shielded connection line
x	x	093		Shielding connected with protection tube (only in connection with extra code 317)
x	x	094		Shielding fed out on the connection side with grounding wire (only in connection with extra code 317)
x	x	366		Inspection certificate 3.1 DIN EN 10204 tolerance/calibration
x	x	775		DAkkS calibration according to ISO/IEC 17025
x	x	1150		AMS 2750 (only in connection with tolerance class A or AA)
x	x	1151		CQI-9 (only in connection with tolerance class A or AA)
x	x	1152		ISO 20431 (only in connection with tolerance class A or AA)
x	x	658		SIL and PL-compatible (only in connection with safetyM safety temperature limiter/monitor according to data sheet 701150; not in connection with transmitters)
x	x	659		SIL and PL-compatible (only in connection with dTRANS T06 cable transmitter according to data sheet 707071; not in connection with other transmitters)
x	x	665		SIL and PL-compatible (only in connection with programmable dTRANS T07 T SIL two-channel transmitter with HART® communication and SIL according to data sheet 707080; not in connection with other transmitters)

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)	
Order code		-		-		-		-		-		-		-		/		, ...[a]
Order example	902150/40	-	378	-	1001	-	1	-	6	-	50	-	11	-	2500	/	000	

[a] List extra codes in sequence and separate using commas.

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Stock versions

Order code	Part no.
902150/10-724-1003-1-6-50-11-2500/000	30056168
902150/10-724-1005-1-6-50-11-2500/000	30056169
902150/10-378-1003-1-5-150-11-2500/000	30056170
902150/10-378-1003-1-6-50-11-2500/000	30056171
902150/10-378-1003-2-6-50-11-2500/000	30056172
902150/10-378-1003-1-6-100-11-2500/000	30056173
902150/10-378-1001-1-6-50-11-2500/000	30056174
902150/10-378-1001-1-6-50-11-5000/000	30056175
902150/10-378-1001-2-6-200-11-2500/000	30056176
902150/10-378-2003-1-6-50-11-2500/000	30056178
902150/10-386-1001-1-3-50-11-2500/000	30056179
902150/10-386-1001-1-6-50-11-2500/000	30056180
902150/10-388-1003-1-6-50-11-2500/317	30048624
902150/10-388-1001-1-6-50-11-2500/315,317	30056183
902150/10-402-1003-1-6-50-11-2500/317	30056184

Accessories

Designation	Part no.
Steel sheet flange for protection tube diameter 6 mm	00065062
Designation	**Data sheet**
Cable transmitter dTRANS T09	707090
Compression fittings	909750

Trademark information

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