

JUMO GmbH & Co. KG

Delivery address: Mackenrodtstraße 14,
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
E-mail: mail@jumo.net
Internet: www.jumo.net

JUMO Instrument Co. Ltd.

JUMO House
Temple Bank, Riverway
Harlow - Essex CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 63 52 62
E-mail: sales@jumo.co.uk
Internet: www.jumo.co.uk

JUMO Process Control, Inc.

8 Technology Boulevard
Canastota, NY 13032, USA
Phone: 315-697-JUMO
1-800-554-JUMO
Fax: 315-697-5867
E-mail: info@jumo.us
Internet: www.jumo.us



Push-in resistance thermometers with connecting cable

- for temperatures from -50 to +400°C
- as single or twin resistance thermometer
- in 2-wire, 3-wire or 4-wire circuit
- connecting cable in PVC, silicone, PTFE, or with metal braiding

Push-in resistance thermometers are preferred for measuring temperatures in liquids and gases. Applications include HVAC and refrigeration, heating installations, ovens, plant engineering, and laboratories.

Depending on the version, the connecting cables are suitable for dry or humid areas within the range -50 to +350°C. The connection of the cable to the protection tube incorporates strain relief. A cable protector can be supplied as an option.

The measuring insert is normally fitted with a Pt100 temperature sensor to EN 60 751, Class B in 2-wire circuit. Versions with Pt500 or Pt1000 are also available. Furthermore, there is a choice of 3-wire and 4-wire circuit connections.



Technical data

Connection**Connecting cable**

cable ends available as: bare wires, with ferrules, receptacles or multipole connectors

PVC, ambient temperature -5 to +80°C (+100/+105°C)

silicone, ambient temperature -50 to +180°C

PTFE, ambient temperature -190 to +260°C

metal braiding, ambient temperature -50 to +350°C

a shielded connecting cable can be supplied as an option

stainless steel 1.4571, 5mm, 5.2mm, 6mm and 8mm dia.

Protection tube**Measuring insert**

Pt100 temperature sensor, EN 60 751, Cl. B, 2-wire circuit

Response times

$t_{0.9}$ approx. 10sec, in water 0.2 m/sec, 6mm dia.

Accessories

pocket, see Data Sheet 90.9721 and 90.2440

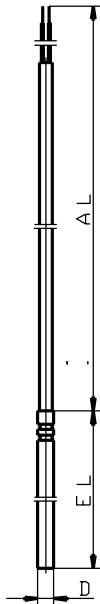
JUMO GmbH & Co. KG
Delivery address: Mackenrodtstraße 14,
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
E-mail: mail@jumo.net
Internet: www.jumo.net

JUMO Instrument Co. Ltd.
JUMO House
Temple Bank, Riverway
Harlow - Essex CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 63 52 62
E-mail: sales@jumo.co.uk
Internet: www.jumo.co.uk

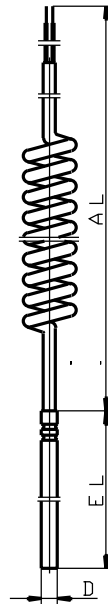
JUMO Process Control, Inc.
8 Technology Boulevard
Canastota, NY 13032, USA
Phone: 315-697-JUMO
1-800-554-JUMO
Fax: 315-697-5867
E-mail: info@jumo.us
Internet: www.jumo.us



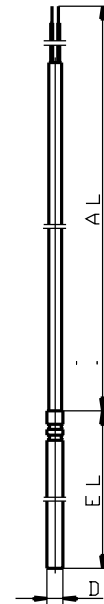
Dimensions



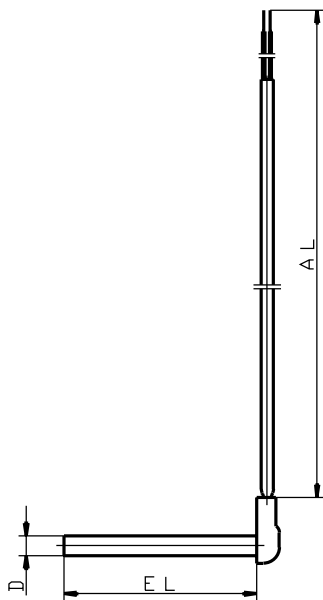
Type 902150/10



Type 902150/20



Type 902150/30



Type 902150/40

JUMO GmbH & Co. KG
 Delivery address: Mackenrodtstraße 14,
 36039 Fulda, Germany
 Postal address: 36035 Fulda, Germany
 Phone: +49 661 6003-0
 Fax: +49 661 6003-607
 E-mail: mail@jumo.net
 Internet: www.jumo.net

JUMO Instrument Co. Ltd.
 JUMO House
 Temple Bank, Riverway
 Harlow - Essex CM20 2DY, UK
 Phone: +44 1279 63 55 33
 Fax: +44 1279 63 52 62
 E-mail: sales@jumo.co.uk
 Internet: www.jumo.co.uk

JUMO Process Control, Inc.
 8 Technology Boulevard
 Canastota, NY 13032, USA
 Phone: 315-697-JUMO
 1-800-554-JUMO
 Fax: 315-697-5867
 E-mail: info@jumo.us
 Internet: www.jumo.us



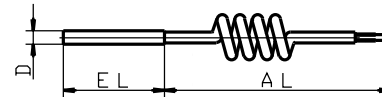
Order details: Push-in resistance thermometers with connecting cable

(1) Basic version

902150/10	Push-in resistance thermometer with connecting cable, one-piece protection tube in stainless steel
-----------	--



902150/20	Push-in resistance thermometer with coiled connecting cable, one-piece protection tube in stainless steel
-----------	---



(2) Operating temperature in °C / connecting cable	
x	378 -50 to +180°C / silicone
x	386 -50 to +260°C / PTFE
x	388 -50 to +260°C / metal braiding
x	724 -5 to +80°C / PVC
x	730 -5 to +105°C / PUR
x	912 -5 to +105°C / PUR (for 1 x 2-wire circuit only)

(3) Measuring insert	
x	1001 1 x Pt100 in 3-wire circuit
x x	1003 1 x Pt100 in 2-wire circuit
x	1011 1 x Pt100 in 4-wire circuit
x	2001 2 x Pt100 in 3-wire circuit
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

(5) Protection tube diameter D in mm	
x	5 5mm
x	5.2 5.2mm
x x	6 6mm

(6) Fitting length EL in mm	
x	45 45mm (standard with D 5mm and D 5.2mm)
x x	50 50mm (with D 6mm only)
x	60 60mm (with D 6mm only)

(7) Connecting cable end	
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)

(8) Connecting cable length AL in mm (500 ≤ AL ≤ 500000 for type 902150/10)	
x	1100 1100mm (stretched)
x	2500 2500mm
x	... please specify in plain text (500mm steps)

(9) Extra codes	
x x	000 no extra code
x	315 cable protector: coil
x	316 cable protector: tube
x x	317 shielded connecting cable

Order code (1) - (2) - (3) - (4) - (5) - (6) - (7) - (8) - (9) / ...
Order example 902150/10 - 378 - 1001 - 1 - 6 - 50 - 11 - 2500 / 000¹

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

JUMO GmbH & Co. KG
 Delivery address: Mackenrodtstraße 14,
 36039 Fulda, Germany
 Postal address: 36035 Fulda, Germany
 Phone: +49 661 6003-0
 Fax: +49 661 6003-607
 E-mail: mail@jumo.net
 Internet: www.jumo.net

JUMO Instrument Co. Ltd.
 JUMO House
 Temple Bank, Riverway
 Harlow - Essex CM20 2DY, UK
 Phone: +44 1279 63 55 33
 Fax: +44 1279 63 52 62
 E-mail: sales@jumo.co.uk
 Internet: www.jumo.co.uk

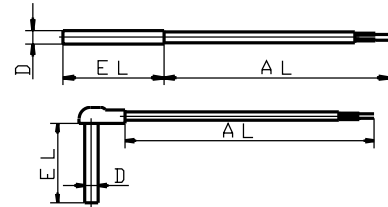
JUMO Process Control, Inc.
 8 Technology Boulevard
 Canastota, NY 13032, USA
 Phone: 315-697-JUMO
 1-800-554-JUMO
 Fax: 315-697-5867
 E-mail: info@jumo.us
 Internet: www.jumo.us



Order details: Push-in resistance thermometers with connecting cable

(1) Basic version

902150/30	Push-in resistance thermometer with connecting cable, multi-piece protection tube (welded) in stainless steel
902150/40	Push-in resistance thermometer with connecting cable, protection tube angled 90° (welded) in stainless steel



(2) Operating temperature in °C / connecting cable

x	378	-50 to +180°C / silicone
x	386	-50 to +260°C / PTFE
x	388	-50 to +260°C / metal braiding
x	397	-50 to +350°C / metal braiding
x	402	-50 to +400°C / metal braiding
x	724	-5 to +80°C / PVC
x	912	5 to 105°C / PUR (for 1 x 2-wire circuit only)

(3) Measuring insert

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

(4) Tolerance class to EN 60 751

x	1	Class B (standard)
x	2	Class A

(5) Protection tube diameter D in mm

x	6	6mm
x	8	8mm

(6) Fitting length EL in mm (50 ≤ EL ≤ 500)

x	50	50mm
x	60	60mm
x	100	100mm
x	150	150mm
x	200	200mm
x	...	please specify in plain text (50mm steps)

(7) Connecting cable end

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

(8) Connecting cable length AL in mm (500 ≤ AL ≤ 500000)

x	2500	2500mm
x	...	please specify in plain text (500mm steps)

(9) Extra codes

x	000	no extra code
x	310	stepped protection tube
x	315	cable protector: coil
x	316	cable protector: tube
x	317	shielded connecting cable

Order code (1) - (2) - (3) - (4) - (5) - (6) - (7) - (8) - (9) / ...
 Order example 902150/30 - 378 - 1001 - 1 - 6 - 50 - 11 - 2500 / 000¹

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

JUMO GmbH & Co. KG
 Delivery address: Mackenrodtstraße 14,
 36039 Fulda, Germany
 Postal address: 36035 Fulda, Germany
 Phone: +49 661 6003-0
 Fax: +49 661 6003-607
 E-mail: mail@jumo.net
 Internet: www.jumo.net

JUMO Instrument Co. Ltd.
 JUMO House
 Temple Bank, Riverway
 Harlow - Essex CM20 2DY, UK
 Phone: +44 1279 63 55 33
 Fax: +44 1279 63 52 62
 E-mail: sales@jumo.co.uk
 Internet: www.jumo.co.uk

JUMO Process Control, Inc.
 8 Technology Boulevard
 Canastota, NY 13032, USA
 Phone: 315-697-JUMO
 1-800-554-JUMO
 Fax: 315-697-5867
 E-mail: info@jumo.us
 Internet: www.jumo.us



Stock versions

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Sales No.
902150/10	- 378	- 1003	- 1	- 5.2	- 45	- 11	- 2500	/ 000	90/00326037
902150/10	- 378	- 1003	- 1	- 6	- 50	- 11	- 2500	/ 000	90/00389771
902150/10	- 378	- 1001	- 1	- 6	- 50	- 11	- 2500	/ 000	90/00392513
902150/10	- 724	- 1003	- 1	- 6	- 50	- 11	- 2500	/ 000	90/00059085
902150/20	- 730	- 1003	- 1	- 6	- 50	- 11	- 1100	/ 000	90/00065495
902150/30	- 388	- 1003	- 1	- 6	- 50	- 11	- 2500	/ 315,317	90/00055718
902150/30	- 388	- 1003	- 1	- 6	- 100	- 11	- 2500	/ 315,317	90/00055719
902150/30	- 388	- 1001	- 1	- 6	- 50	- 11	- 2500	/ 315,317	90/00065451
902150/30	- 388	- 1001	- 1	- 6	- 100	- 11	- 2500	/ 315,317	90/00065453
902150/40	- 397	- 1003	- 1	- 6	- 60	- 11	- 2500	/ 317	90/00055715