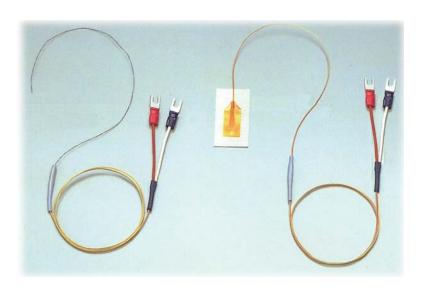
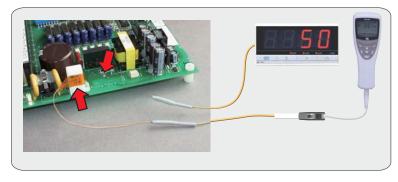


ST-55/56

Temperature Sensor for Extremely Small Surface







Type K thermocouple to measure the temperature of a fine surface

Features

Measuring temperature in a small surface area

A fine thermocouple enables measurement of a fine surface or a surface with small thermal capacity such as SMT parts.

Maximum temperature measurement

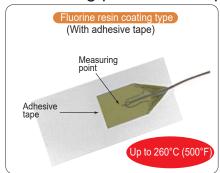
Ceramic coating type sensor is rated to 500°C (932°F) and fluorine resin coating type sensor is rated to 260°C (500°F).

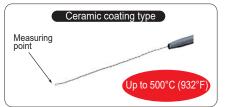
Optional adhesive tape on the tip

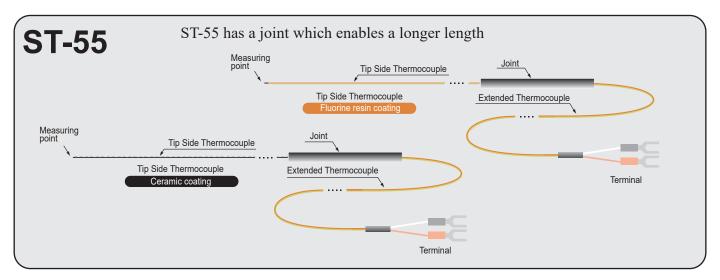
Optional adhesive tape on the fluorine resin coating type allows the tip to stick to an exact spot for measurement.

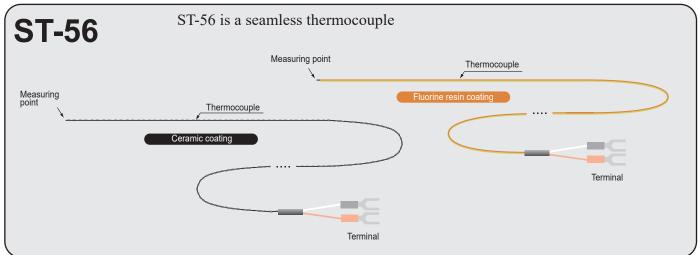
Fast response with fine thermocouple

Measuring point on the tip

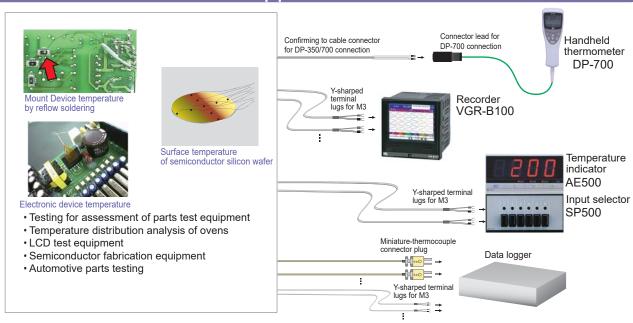








Application



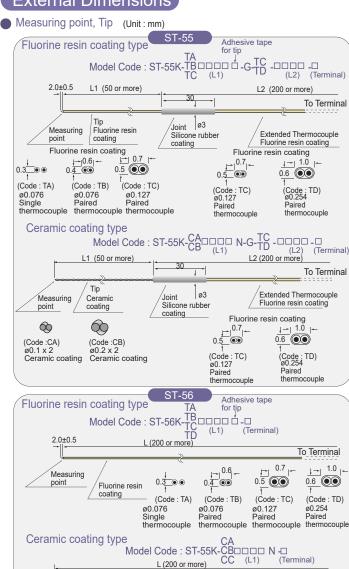
External Dimensions

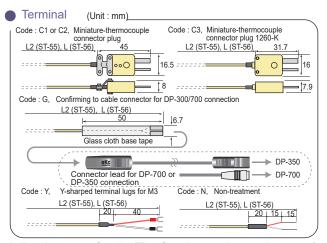
Measuring

Ceramic

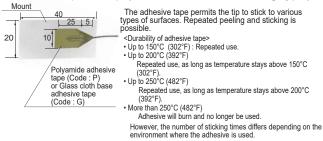
coating

00





Adhesive tape for tip (For fluorine resin coating type)



- Remove oil, stain, or dust from the temperature measured surface. The dirty measured surface may cause retrieve on, stain, or use from the temperature measured surface. The dirty measured surface may cause a measurement error, and make sticking or bonding of the tip difficult.

 When using the ceramic coating type of thermocouple, stick the tip to the measured surface using adhesive
- which satisfies the environment of its usage.

Specifications

Thermocouple Maximum operating temperature Type K (Grounding type) Based on JIS C 1602-1995 Class Equal to JIS class 2 (Only for fluorine resin coating type)

±0.5%±1°C

To Terminal

(Code :CC)

Ø0.32 x 2 Ceramic coating

0

(Code :CA) (Code :CB) Ø0.1 x 2 Ø0.2 x 2 Ceramic coating Ceramic coating

• Accuracy when temperature 100°C on metal surface (copper) is measured. (Prior to to factory)

Response time

- 0.2 to 1 sec (Response of 63.2%)
- 1.8 to 4 sec (Response of 95.0%)
 Accuracy when temperature on metal surface is measured.

I) Measuring point
Fluorine resin coating: 300°C
(Coating section 260°C)
Ceramic coating: 500°C
2) Adhesive tape: 300°C
3) ST-55 joint section: 170°C (ST-55)
4) ST-55 extended section: 260°C (ST-55)

Element wire diameter

ST-55

1) Measuring point
Fluorine resin coating: ø0.076/0.127mm
Ceramic coating: ø0.1/ø0.2mm
2) Joint section: ø0.127/0.254mm

Fluorine resin coating: ø0.076/0.127/0.254mm Ceramic coating: ø0.1/ø0.2/0.32mm

Model and Suffix Code

5T-55

Specifications	Contents	Suffix Code							
Model	ST-55	K-0 000 0-G-0 000							
Thermocouple	Type K	K							
	ø0.076 Fluorine resin coating (Single thermocouple type)		TA						
Shape of Thermocouple	ø0.076 Fluorine resin coating (Paired thermocouple type)	- 1	TB						
(Element wire diameter/Coating)	ø0.127 Fluorine resin coating (Paired thermocouple type)		TC						
	ø0.1 x 2 Ceramic coating		CA						
	ø0.2 x 2 Ceramic coating		ĊВ						
Thermocouple length *1	Unit : mm (Min.50mm) Specify every 50mm unit								
Adhesive tape for tip	Polymide tape * Fluorine resin coating type only				Р				
	Glass cloth base tape * Fluorine resin coating type only				G				
	None				N				
Joint specifications	Silicone rubber coating (Max. temperature : 170°C)					G			
Shape of Extended Thermocouple	ø0.127 Fluorine resin coating (Paired thermocouple type)						TC		
(Element wire diameter/Coating)	ø0.254 Fluorine resin coating (Paired thermocouple type)						TD		
Extended thermocouple length *1	Unit: mm (Min.200mm) Specify every 50mm unit								
Miniature-thermocouple connector plug	CMP01-K (RKC product) Material : Polyamide (Max. temperature : 140°C (284°F))								C1
	CMR01-K (RKC product) Material : PPS resin (Max. temperature : 220°C (428°F))								C2
	1260-K (MARINE product) (Max. temperature : 205°C (401°F))								C3
	Y-sharped terminal lugs for M3 *2								Υ
	Confirming to cable connector for DP-350/700 connection								G
	Non-treatment								N

^{*1} Please select length so that a total resistance of thermocouple become 100Ω or less.

Thermocouple resistance per 100mm Ø0.076mm : 20Ω ø0.10mm : 13Ω ø0.127mm : 8Ω ø0.20mm : 3.1Ω ø0.254mm : 2Ω

Ex. Thermocouple ø0.076mm type : 100mm (20 Ω x 1=20 Ω) Total 60Ω Extended thermocouple $\emptyset 0.254$ mm : 2000mm ($2\Omega x 20 = 40\Omega$)

ST-56

Specifications	Contents		Suffix Code				
Model	ST-56			l 🗆 ·	- 🗆		
Thermocouple	Type K						
	ø0.076 Fluorine resin coating (Single thermocouple type)		\				
Shape of Thermocouple	ø0.076 Fluorine resin coating (Paired thermocouple type)		3	1	1		
(Element wire diameter/Coating)	ø0.127 Fluorine resin coating (Paired thermocouple type)		;	1	1		
(Element wire diameter/Coating)	ø0.254 Fluorine resin coating (Paired thermocouple type))	1			
	ø0.1 x 2 Ceramic coating	C/	\	1			
	ø0.2 x 2 Ceramic coating	CE	3	1			
	ø0.32 x 2 Ceramic coating	CC	5	1			
Thermocouple length *1	Unit : mm (Min.200mm) Specify every 50mm unit						
-	Polymide tape * Fluorine resin coating type only			Р			
Adhesive tape for tip	Glass cloth base tape * Fluorine resin coating type only			Ğ	1		
	None			ĪÑ	1		
	CMP01-K (RKC product) Material: Polyamide (Max. temperature: 140°C (284°F))	=))			C1		
Miniature-thermocouple connector plug	CMR01-K (RKC product) Material : PPS resin (Max. temperature : 220°C (428°F))))		C2			
	1260-K (MARINE product) (Max. temperature : 205°C (401°F))				C3		
Terminal '	Y-sharped terminal lugs for M3 *2				Y		
	Confirming to cable connector for DP-350/700 connection				Ğ		
	Non-treatment				Ň		

^{*1} Please select length so that resistance of thermocouple become 100Ω or less.

Thermocouple resistance per 100mm

ø0.076mm :20Ω	ø0.10mm : 13Ω				
ø0.127mm : 8Ω	ø0.20mm : 3.1Ω				
αΩ 254mm · 2Ω	ø0 32mm · 1 2O				

Ex. Thermocouple \emptyset 0.10mm type : 500mm (13 Ω x 5=65 Ω)



- Before operating this product, read the instruction manual carefully to avoid incorrect operation.
- This product is intended for use with industrial machines, test and measuring equipment. It is not designed for use with medical equipment.

 If it is possible that an accident may occur as a result of the failure of the product or some other abnormality, an appropriate independent protection device must be installed.

Caution for the export trade

All transactions must comply with laws, regulations, and treaties

Caution for imitated products

As products imitating our product now appear on the market, be careful that you don't purchase these imitated products. We will not warrant such products nor bear the responsibility for any damage and/or accident caused by their use.



HEAD OFFICE: 16-6, KUGAHARA 5 CHOME OHTA-KU TOKYO 146-8515 JAPAN

PHONE: 03-3751-9799 (+81 3 3751 9799) Email: info@rkcinst.co.jp

https://www.rkcinst.com/

Printed in Japan : DEC.2020 All Rights Reserved. C556ST04E

^{*2} Y-sharped terminal lugs for M3 is not available if extended thermocouple was specified ø0.127 (Code: TC).

^{*2} Y-sharped terminal lugs for M3 is not available if thermocouple was specified ø0.076 or ø0.127 (Code: TA/TB).