

Temperature Sensors for Packaging Machines

E52

Accurately Measure Seal Temperature. Temperature Sensors for Packaging Machines.

- Heat resistance (up to 375°C) and direct installation to heat bars.
- Protective tubing diameter of 1 mm for high-speed response.
- Usage together with the automatic filter adjustment function of E5□D Digital Temperature Controllers is recommended.



Ordering information

Sensor type	Sensing tube		Temperature sensor range	Cable length	Order code
	Diameter	Length			
Thermocouple J	1mm	120mm	-80...600°C	2000 mm	E52-ETJ1-120-2-P-A
		100mm	0...760°C		E52-ETJ1-100-2-P-B

Specifications

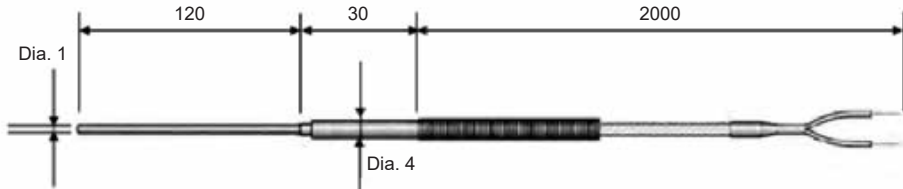
	E52-ETJ1-120-2-P-A	E52-ETJ1-100-2-P-B
Calibration/accuracy	EN 60584 class 2	
Operating temperature range	-80...600°C - Sensors head	0...760°C - Sensors head
	-80...350°C - Transition sleeve	-20...375°C - Transition sleeve
	0...400°C - Cable	-50...260°C - Cable
Measuring point	Isolated (ungrounded)	
Minimum bending radius	3 times the diameter	2 times the diameter
Sheath material	AISI 316	
Cable material	Fiberglass	Kapton ¹

¹: This material has no Volatile Compounds, water nor organic, when exposed to 105°C; this material is classified as 0% VOC.

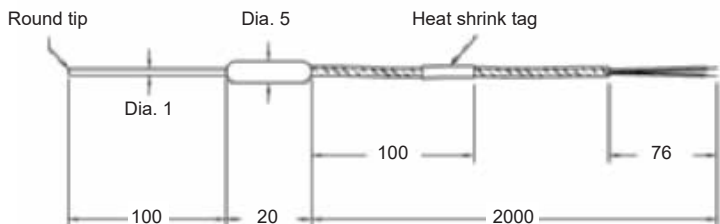
Dimensions

(Unit: mm)

E52-ETJ1-120-2-P-A



E52-ETJ1-100-2-P-B



Installation Method

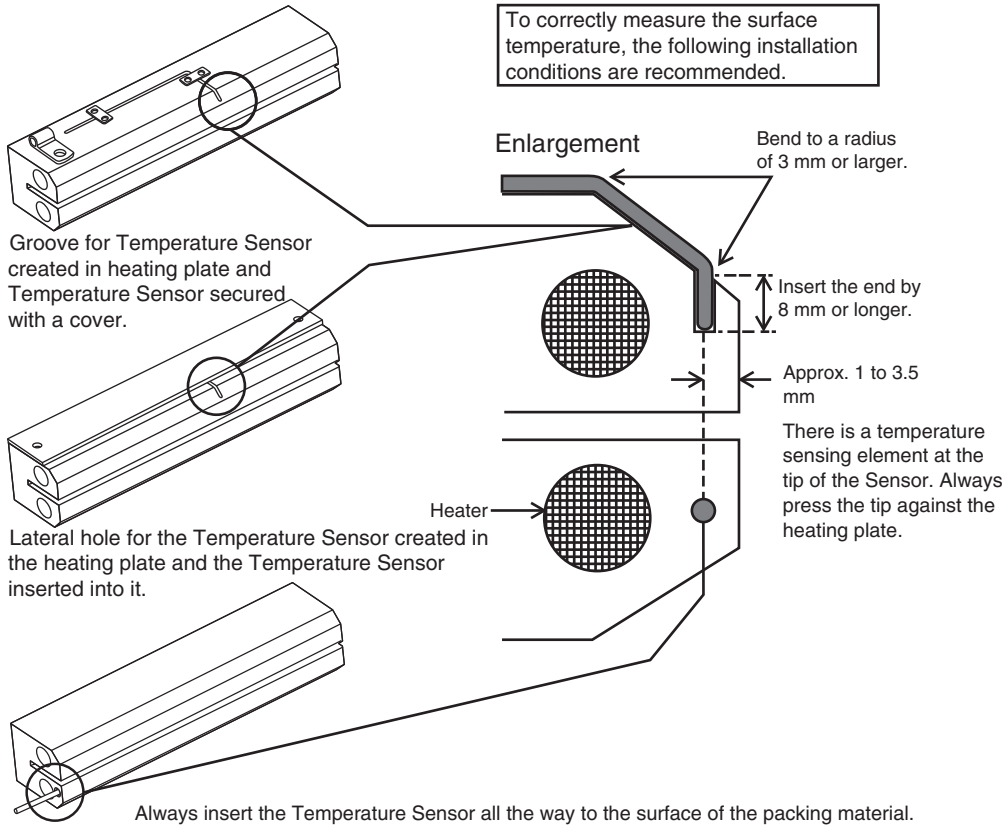
A Temperature Sensor for Packing Machines has a diameter of 1.0 mm.
To measure the temperature close to the seal surface, mount the Sensor as close as possible to the surface.

The following installation methods are assumed.

Example 1: Groove for Temperature Sensor created in heating plate and Temperature Sensor secured with mounting brackets.

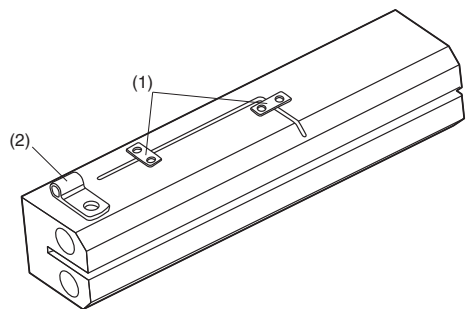
Example 2: Groove for Temperature Sensor created in heating plate and Temperature Sensor secured with a cover.

Example 3: Lateral hole for the Temperature Sensor created in the heating plate and the Temperature Sensor inserted into it.



Use the following brackets or the equivalent to mount a Temperature Sensor for Packaging Machines to a hot plate.

Mounting bracket	Application	Manufacturer	Model number
(1)	1-mm-dia. protective tube bracket	Misumi Corporation	Square Shims ASFCS-series
(2)	Sleeve bracket (S1)	Misumi Corporation	Cable Clips COPU3-20P
		Digi-Key	Cable Clamp RPC1156-ND
	Sleeve bracket (S2)	Misumi Corporation	Cable Clips COPU4-20P
		Digi-Key	Cable Clamp RPC1474-ND



Note: All of the above mounting brackets are SUS304.

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