CSM_E52_DS_E_22_3

A Wide Variety of High-precision Temperature Sensors

- Previous models with M3 screw connections have been joined by new models with ferrules to help reduce wiring work.
- A Temperature Sensor for Packaging Machines that accurately measures seal temperature has been added.
- The type, shape, length, and terminal shape can be selected to match the temperature to be measured, location, and environment.



Refer to Safety Precautions for All Temperature Controllers.



Ordering Information

■ List of Models (Temperature Sensors)

| Classifi- cation | Description | Model and ap | ppearance | Tempera- ture range (See note 3.) | Ele- ment type | Conduc- tor type | Class | Protective tubing material | Terminal type | Page |
|-------------------------------|--|--|-----------|---|----------------------|----------------------------------|----------|---------------------------------------|--------------------|-------------|
| General- purpose Models | Sheathed platinum re- sistance thermome- ter | E52-P□AY | 52-P□AY | | | 3-conductor system | | SUS316 | Exposed lead wires | 5 |
| | | E52-P□C-N | | –196°C to 450°C | | | | ASTM316L | Enclosed terminals | 7 |
| | | E52-P□B-N | —— | | | | | | Exposed terminals | |
| | Standard platinum re- sistance thermometer | E52-P□C-N | | 0°C to 450°C | | | | SUS316 | Enclosed terminals | 8 |
| | Sheathed thermocou- ple | E52-CA□AY E52-IC□AY | | 0°C to 900°C | K (CA) J (IC) | Non- grounded type | 2 (0.75) | ASTM316L | Exposed lead wires | 11 to 12 |
| | | E52-CA□B-N E52-IC□B-N | —— | | | | | | Exposed terminals | 16 |
| | | E52-CA□C-N E52-IC□C-N | | | | | | | Enclosed terminals | |
| | Standard thermocou- ple | E52-CA B-N E52-IC B-N | —— | | | | | SUS316 | Exposed terminals | 17 |
| | | E52-CA□C-N E52-IC□C-N | | | | | | | Enclosed terminals | 18 |
| | | E52-PR□C-N | | 0°C to 1,400°C | R (PR) | | 2 (0.25) | JIS ceramic JIS special ceramic | Enclosed terminals | 19 |
| Low-cost | Low-cost platinum re- sistance thermometer | E52-P10AEY | | 0°C to 250°C | Pt100 | 3-conductor system | В | SUS316 | Exposed lead wires | 20 |
| Models | | E52-P6DY | | –50°C to 250°C | | | | SUS304 | | |
| | | E52-P6FY |) | 250 C | | | | | | |
| | Low-cost thermocou- ple | E52-CA□ASY E52-IC□ASY | | 0°C to 400°C | K (CA) J (IC) | Non-grounded type Grounded type | 2 (0.75) | | | 21 |
| | | E52-CA1DY E52-IC1DY | | | | | | | | 22 |
| | | E52-CA6F-N E52-CA6F-N-25 E52-IC6F-N E52-CA6D-N E52-CA6D-N-25 E52-IC6D-N | | | | Non-ground- | | | | 23 |
| | | E52-IC10AE-N | | | | ed type | | | | |

Note: 1. Exclusive models are provided on the following page.

- 2. These tables provide general specifications only. Be sure to read the detailed specifications and precautions before use.
- 3. The temperature range varies with the material, thickness, construction, and element type of the protective tubing.

Exclusive Models

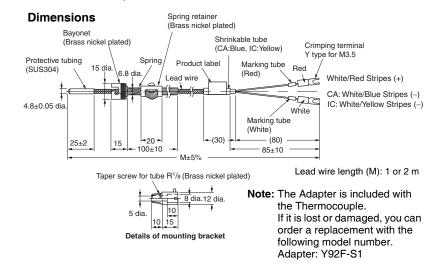
■ Thermocouples

Thermocouples for Molding Machines

Specifications

| Element type | K (CA), J (IC) |
|----------------------------|---|
| Element diameter | 1.0 mm (single wire) |
| Class | Class 2 (0.75) |
| Protective tubing material | SUS304 |
| Thermal contact | Grounded type |
| Temperature range | 0°C to 350°C |
| Lead wire | Glass-covered stainless steel shielded thermocouple wire with 4 dia. 1/1.0 0°C to 180°C |

E52-CA2GVY, E52-IC2GVY



| Lead wire | Element type: K (CA) | Element type: J (IC) | | | |
|------------|----------------------|----------------------|--|--|--|
| length (m) | Model | | | | |
| 1 | E52-CA2GVY 1M | E52-IC2GVY 1M | | | |
| 2 | E52-CA2GVY 2M | E52-IC2GVY 2M | | | |
| 4 | E52-CA2GVY 4M | E52-IC2GVY 4M | | | |
| 8 | E52-CA2GVY 8M | E52-IC2GVY 8M | | | |

Thermocouples with Crimp Terminal

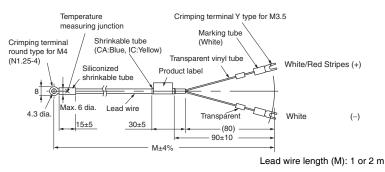
Specifications

| Element type | K (CA), J (IC) |
|-----------------|--|
| Element | 0.65 mm (single wire) |
| diameter | |
| Class | Class 2 (0.75) |
| Thermal contact | Grounded type |
| Temperature | 0°C to 300°C |
| range | |
| Lead wire | Glass-covered stainless steel shielded thermocouple wire with 4 dia. |
| | 1/1.0 |
| | 0°C to 150°C |
| Terminal shape | Y-type crimp terminal for M3.5 |

Note: The E52-CA1GTY is also available with double elements. Refer to page 34 for details.

E52-CA1GTY, E52-IC1GTY

Dimensions



Lead wire Element type: K (CA) Element type: J (IC) length (m) Model E52-CA1GTY 1M E52-IC1GTY 1M 2 E52-CA1GTY 2M E52-IC1GTY 2M E52-IC1GTY 4M 4 E52-CA1GTY 4M 8 E52-CA1GTY 8M E52-IC1GTY 8M