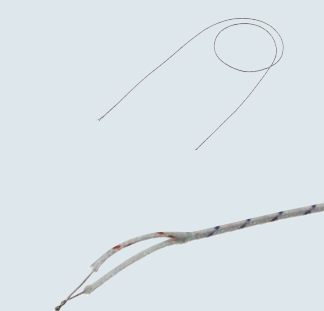


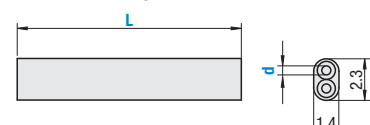
Sheathed Thermocouples / Compensation Lead Wires

Sheathed Thermocouples



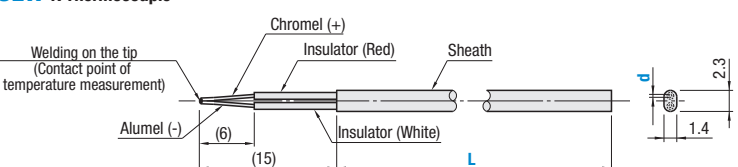
RoHS10

MSEN K Thermocouple



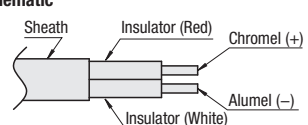
ⓘ In the cut state at the time of shipment.

MSEW K Thermocouple



The tip of sheathed thermocouples MSEN is welded. **Operating Temperature Range:** 20~200°C **Material:** Sheath / Insulator: Glass Wool

Schematic



Part Number		L 1 mm Increment
Type	Dia. of Element Wire d	
MSEN MSEW	0.32	200-3000

Part Number Example

Part Number	-	L
MSEN0.32	-	500
MSEW0.32	-	300

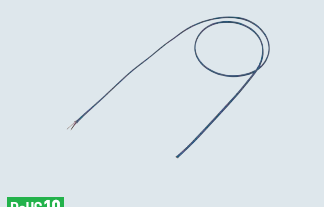
Features

- Since the temperature measuring point is exposed, the reaction speed is faster than that of the sheathed type.
- Temperature measurement can be conducted on the tested object.

Temperature Measuring Point

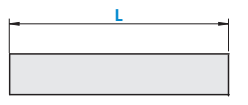
For MSEN, prepare the temperature measuring point by twisting or welding, with alumel and chromel exposed.

Compensation Lead Wires



RoHS10

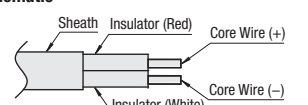
DSEN



Operating Temp. Range: 0~150°C
ⓘ In the cut state at the time of shipment.

Material:
Sheath / Insulator: Glass Wool
+Side Element Wire: Iron
-Side Element Wire: Alloy containing copper and nickel as main components

Schematic



Part Number		L 0.1 m Increment
Type	Dia. of Element Wire d	
DSEN	0.32	1.0-10.0

Part Number Example

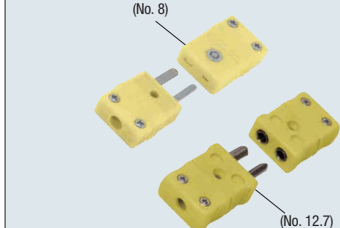
Part Number	-	L
DSEN0.32	-	2.5

Features of Compensation Lead Wire

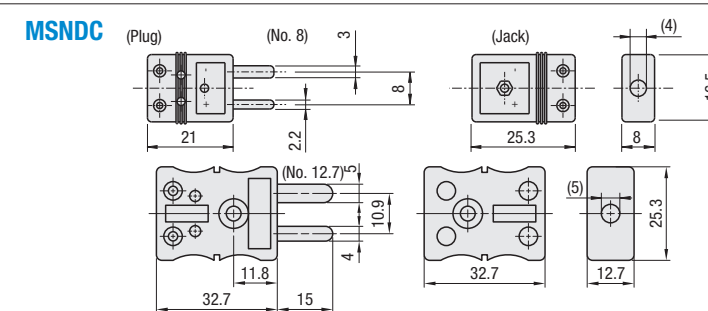
- It can be used as a lead wire of sheathed thermocouples. Also can be used to extend temperature sensor (K thermocouple) on P.3757-3765.

K Thermocouple Connectors / Bimetal Thermostats

K Thermocouple Connectors



MSNDC



ⓘ Operating Temperature Range: 0~130°C
Material: PP (Polypropylene)

Part Number	
Type	No.
MSNDC	8
	12.7

Features

The compensation lead wires can easily be attached and detached by connecting them with plug and jack of the connector respectively.

* No.8 and No.12.7 are same other than size.


Part Number Example

Part Number	MSNDC12.7
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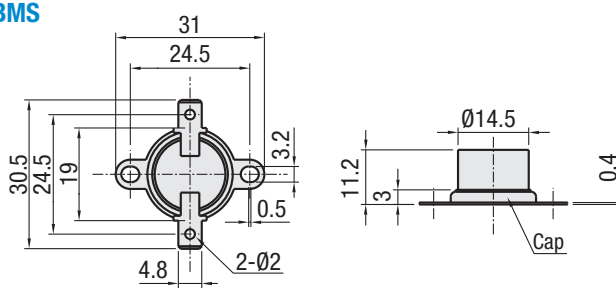
How to Use

- (1) Peel off the sheath of compensation lead wires. (Approx. 7 mm)
- (2) Loosen the screw on connector by the screwdriver, and remove the cover.
- (3) Loosen the screw in the connector and connect the + (Red) and - (White) of compensation lead wires respectively.
- (4) Confirm the screws are securely tightened, then install the cover.

Bimetal Thermostats



MBMS



Material: Heater: Ceramic (Steatite Type)
Cap: Aluminum Alloy
Bimetal: Disk Bimetal

Part Number	Type	Rated Operating Temperature (°C)	
		OFF	ON
MBMS	80	80±5	65±8
	100	100±5	80±8
	120	120±6	100±10
	140	140±6	120±15
	180	180±8	140±15
	200	200±10	160±20

Features

- Bimetal of automatic return type.
- Energizes (NC) when power is turned on and contact point shuts off when it reaches the operation temperature rate (OFF) and electricity is turned off. Automatically recovers when below the rated operating temperature.

Part Number Example

Part Number	MBMS080
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Structure

Principle of Operation: Bimetal Non-energizing Type Single Pole Single Throw Operating Temperature One Point Fixed Type

Operating Method: OFF when temperature rises, and ON when temperature drops

Electric Rating: Resistance Load AC125V/10A AC250V/5.0A (Minimum Current: 0.1 A)

Contact Resistance: 50 mΩ or less according to minute current ohmmeter (DC6V/0.1A) (Initial Value)

Insulation Resistance: 100 MΩ or more in DC500 V mega in the charge part and non-charge part

Insulation Resistance: AC1500 V/min or AC1800 V/sec in the charge part and non-charge part (Leakage current: 10mA)

ON/OFF Life Span Test: The thermal ON/OFF operation is done 10,000 times at the load of rated current and voltage. Insulation Resistance: 50 MΩ; Contact resistance: 100 mΩ or less