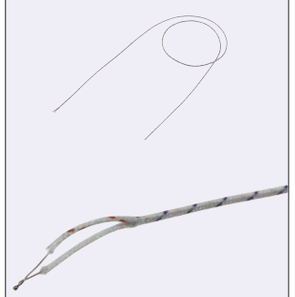
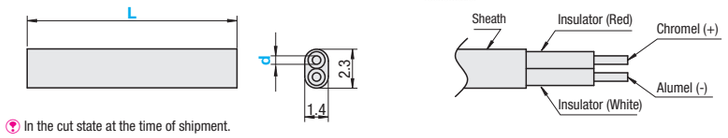
■Sheathed Thermocouples

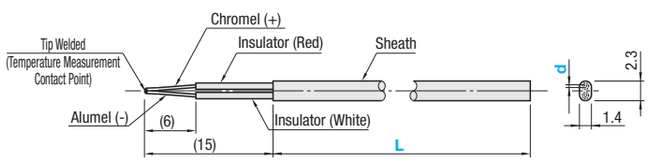


MSEN (K Thermocouple)



In the cut state at the time of shipment.

MSEW (K Thermocouple)



Operating Temperature Range: 20°C ~ 200°C
・The tip of sheathed thermocouples MSEN is welded.

Material
Sheath, Insulator: Glass Wool

Part Number		L	Unit Price					
Type	Dia. of Element Wire d	1mm Increment	MSEN			MSEW		
			L200~1000	L1001~2000	L2001~3000	L200~1000	L1001~2000	L2001~3000
MSEN MSEW	0.32	200~3000						

Ordering Example

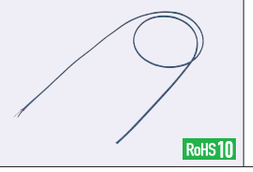
Part Number	-	L
MSEN0.32	-	500
MSEW0.32	-	300

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

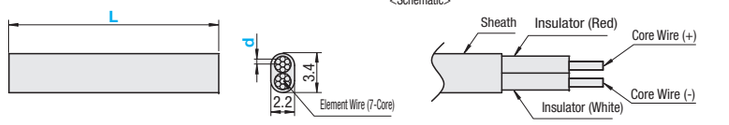
Temperature Measuring Point

Before using MSEN, expose alumel and chromel and twist/weld them to create the temperature measuring point.

■Compensation Lead Wires



DSEN



Operating Temperature. Range: 0°C ~ 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

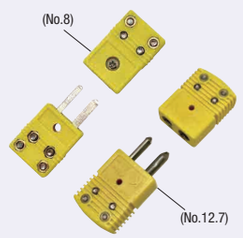
Part Number		L	Unit Price		
Type	Dia. of Element Wire d	0.1m Increment	L1.0~3.9	L4.0~6.9	L7.0~10.0
DSEN	0.32	1.0~10.0			

Ordering Example

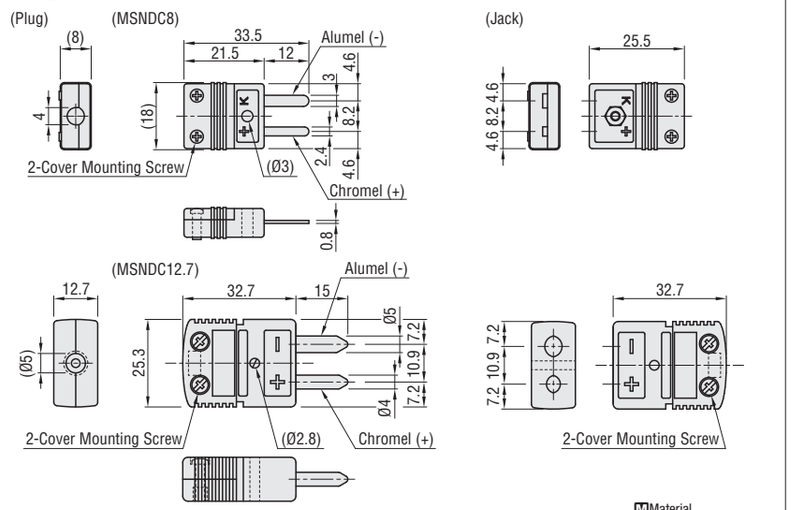
Part Number	-	L
DSEN0.32	-	2.5

■Features
• It can be used as a lead wire of sheathed thermocouples.
Also can be used to extend temperature sensor (K thermocouple) on P.1654~1663.

■K Thermocouple Connectors



MSNDC



Operating Temperature. Range: 0°C ~ 130°C

Material
Case : PP (Polypropylene)

Part Number		Unit Price
Type	No.	
MSNDC	8	
	12.7	

Ordering Example

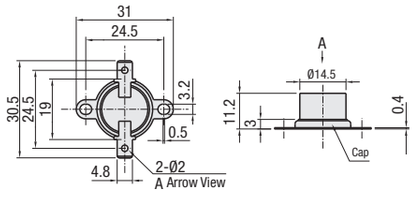
Part Number
MSNDC12.7

■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 except for the size.

■How to Use
① Peel off the sheath of compensation lead wires. (Approx. 7mm)
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 to the + and - terminals of the connector, respectively.
④ Confirm the screws are securely tightened, then install the cover.

■Bimetal Thermostats

MBMS



Material
Body : Ceramic (Steatite Type)
Cap : Aluminum
Bimetal : Disk Bimetal

Part Number		Rated Operating Temperature (°C)		Unit Price
Type	No.	OFF	ON	
MBMS	080	80±5	65±8	
	100	100±5	80±8	
	120	120±6	100±10	
	140	140±6	120±15	
	160	160±6	135±15	
	180	180±8	140±15	
	200	200±10	160±20	

(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)
Resistive Load AC125V/10A AC250V/5.0A (Minimum Current: 0.1A)
(Contact Resistance)
50mΩ or less according to minute current ohmmeter (DC6V/0.1A) (Initial Value)
(Insulation Resistance)
100MΩ or more in DC500V mega in the charge part and non-charge part
(Insulation Resistance)
AC1500V/min or AC1800V/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: 50MΩ; Contact resistance: 100mΩ or less

■Features
・Bimetal of automatic return type.
・It energizes (NC) when the power is turned on and the contact point shuts off when it reaches to the operation temperature rate (OFF) and electricity is turned off. It automatically recovers when it is below the rated operating temperature.

Ordering Example

Part Number
MBMS080