

Temperature Sensors

Standard Type

Be sure to refer to "Precautions for Use" in the Temperature Sensor Overview on P.1653.

Temperature Sensors

RoHS 10

MSND
(K Thermocouple)

MSNDFL (Length of Lead Wire (F) Configurable)
(K Thermocouple)

MSPT
(Temperature Measuring Resistor Pt100Ω)

MSPTFL (Length of Lead Wire (F) Configurable)
(Temperature Measuring Resistor Pt100Ω)

MSND, MSNDFL

Type of Thermocouple	K Thermocouple	
Precision	JIS Class 2	
Temperature Measurement Contact Point	Isolated Neutral Type	
Temperature Measurement Range	Ø0.5	0~600°C
	Ø1.0, 1.6	0~650°C
	Ø2.3	0~650°C
	Ø3.2	0~750°C
	Ø4.8	0~800°C
Material	Sheath	SUS316
	Sleeve	SUS304
Heat Resistance Temperature of Sleeve		80°C
Lead Wire (Operating Temp. Range)		Glass Wool Coating (0~150°C)

Terminal Selection

- N** (No Crimp Terminal)
- M** (With Round Crimp Terminal)
- Y** (With Crimp Spade)

MSPT, MSPTFL

Type of Device	Pt100Ω	
Precision	JIS Class B	
Lead Type	3-lead Type	
Temperature Measurement Range	0~300°C	
Material	Protection Tubes	SUS316
	Sleeve	SUS304
Heat Resistance Temperature of Sleeve		80°C
Lead Wire (Operating Temp. Range)		Vinyl Coating (0~60°C)

Terminal Selection

- N** (No Crimp Terminal)
- M** (With Round Crimp Terminal)
- Y** (With Crimp Spade)

Part Number		MSNDFL only		Unit Price	Sensor Body Price					Additional Terminal Price			
Type	D	L Selection	Lead Wire Length F: 0.1m Increment	Terminal	MSND	MSNDFL					N	M	Y
						F0.3~1.0	F1.1~2.0	F2.1~3.0	F3.1~4.0	F4.1~5.0			
MSND	0.5	30, 50	-										
		100, 150											
		200, 300											
MSND MSNDFL	1.0	30, 50, 100	0.3~5.0	N M Y									
		150, 200											
		300											
	1.6	30, 50, 100											
		150, 200											
		300											
	2.3	30, 50, 100											
		150, 200											
		300											
3.2	30, 50, 100												
	150, 200												
	300												
MSND	4.8	50, 100	-										
		150, 200											
		300											

Part Number		MSPTFL only		Unit Price	Sensor Body Price					Additional Terminal Price			
Type	D	L Selection	Lead Wire Length F: 0.1m Increment	Terminal	MSPT	MSPTFL					N	M	Y
						F0.3~1.0	F1.1~2.0	F2.1~3.0	F3.1~4.0	F4.1~5.0			
MSPT MSPTFL	1.6	50, 100	0.3~5.0	N M Y									
		150											
	2.3	50, 100											
		150											
3.2	50, 100												
	150												

Ordering Example

Part Number - L - F - Terminal

MSND3.2 - 100
 MSPT2.3 - 50
 MSNDFL2.3 - 300 - F2.5 - M

The upper limit of temperature measurement is at the measurement point (the tip of sheath). When measuring, keep the sleeve temperature at or below the heat resistance temperature (80°C). The wire may break due to heat expansion of the sleeve. Especially when a heated object temperature exceeds 100°C, a long type of sheath L length is recommended, which is used to put maximum distance between the sleeve and the heated object, or Temperature Sensors, Heat Resistant Type (P.1656) is recommended.