

Model SHEATH series

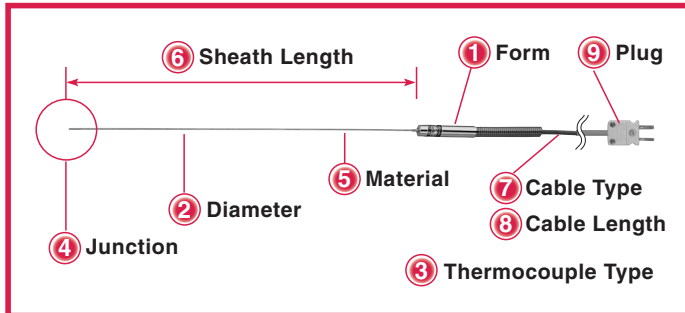
Bendable Wiry Probes

Model SHEATH series probes are internal temperature sensors designed to measure the temperature of liquids, air, and gases.

The sheathed section can be bent to a radius five times the outer diameter of the sheath. Specific components may be combined to customize products for the needs of a customer's specific application.

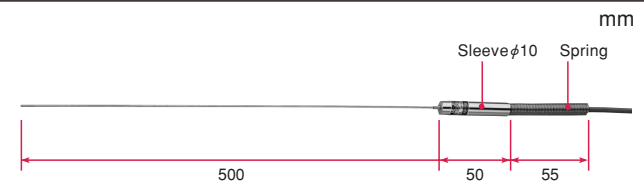


How to order of SHEATH series



Typical Probes of SHEATH series

Type K Model **B3.2-K-J1-M1-L500-TC1-ANP**
Type E Model **B3.2-E-J1-M1-L500-TC1-ANP**



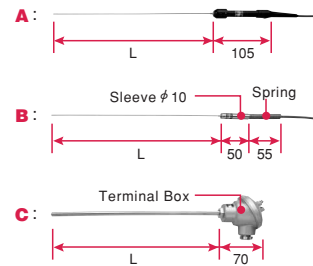
Temp. Range	Accuracy	Response time	Durability
-40~750°C	±2.5°C (at 100°C)	5.0 s	S

B3.2-K-J1-M1-L500-TC1-ANP

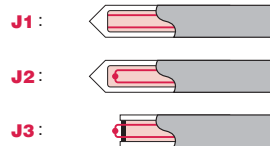
① Form	A : Grip type B : Sleeve type C : Terminal box type
② Diameter	0.25 : φ 0.25mm 0.5 : φ 0.5mm 1.0 : φ 1.0mm 1.6 : φ 1.6mm 3.2 : φ 3.2mm 4.8 : φ 4.8mm 6.4 : φ 6.4mm 8.0 : φ 8.0mm
③ Thermocouple Type	K : Chromel-Alumel E : Chromel-Constantan
④ Junction	J1 : Grounded junction J2 : Ungrounded junction J3 : Exposed junction
⑤ Material	M1 : SUS 316 M2 : SUS 310S (Only type K) M3 : Inconel (Only type K)
⑥ Sheath Length	L100 : 100mm L200 : 200mm
⑦ Cable Type (See page 5)	TC :
⑧ Cable Length	1 : 1m 1.5 : 1.5m 2 : 2m
⑨ Plug (See page 4)	ANP : P plug ASP : S plug W : Without plug

① Form

You can choose Form as below.



④ Junction



[Supplementary information]

The sheath tube can be coated with Teflon.

A Teflon coating will improve resistance against chemicals and enable the use of the probe for measuring the temperatures of acids, alkalis, food, etc.

Applicable sheath diameter : φ 1.0, φ 1.6, φ 3.2

Maximum length : 1m

Operating temperature limit : 200°C

Minimum bending radius : Approx. 10mm

Specifications

Outside diameter (mm)		0.25	0.5	1.0	1.6	3.2	4.8	6.4	8.0
Type : K (Max.temp.)	SUS 316 (M1)	—	—	650°C	650°C	750°C	800°C	800°C	900°C
	SUS 310S (M2)	—	—	650°C	650°C	750°C	800°C	800°C	900°C
	Inconel (M3)	500°C	500°C	650°C	650°C	750°C	900°C	1000°C	1050°C
Type : E (Max.temp.)	SUS 316 (M1)	—	—	650°C	650°C	750°C	800°C	800°C	800°C
Response time		0.4s	0.9s	2s	3s	5s	10s	15s	20s
Standard resistance (Ω/m)	Type K	570	124	32	13	4	2.2	1.0	0.7
	Type E	—	—	38	15	5	2.6	1.2	0.9
Max. Length (m)	J1, J3	5	10	50	50	50	50	30	20
	J2	2	2	2	5	15	30	30	20
Accuracy	Type K	-40~333°C : ±2.5°C, 333~1200°C : ± (measuring × 0.75%) °C							
	Type E	-40~333°C : ±2.5°C, 333~ 900°C : ± (measuring × 0.75%) °C							

*Avoid immersing these probes in molten aluminum. Doing so may result in corrosion of the sheathed sensor.