熱電偶

A

熱電偶
Thermocouple (K、J、E、T、R、S、B)

熱電偶T/C：把兩種不同材質之金屬，以電氣焊接，使其產生密閉迴路，在焊接端加熱，產生溫差，即是熱電偶的生成。Two metals of different material are welded and let them to produce airtight circuit. Heat the welding end to produce temperature difference to generate thermocouple.

電阻式測溫體 (PT100、PT1000、PT50、PT200)
Resistance Temperature Detector

電阻式測溫體 RTD：一般金屬導體，其電阻均隨溫度之變化而改變，運用此溫度係數之特性，可由電阻之變化，而求得溫度，藉此原理來測量溫度之計測器，稱之電阻式測溫體。The resistance of general metal conductor changes according to the temperature changes. By using the characteristic of temperature coefficient, one can obtain the temperature from resistance changes and The instrument that uses this theory to measure temperature is called Resistance Temperature Detector.

可彎曲極細熱電偶(K、E、J、T-TYPE)
Sheathed Thermocouple

極細熱電偶 Sheath T / C：極細金屬管(Sheath)與熱電偶素線間以高純度氧化鎂粉末慎密堅實充填，使其成為氣密狀態，並具有超絕緣性與耐高壓性之熱電偶。Magnesium oxide powder of high purity is filled in between sheath and thermocouple wire to let it become airtight state, and the thermocouple is provided with excellent isolation and high-voltage proof.

保護管 (Screwed、Flange、Welded/Drilled TYPE)
Thermo well

保 護 管 ThermoWell：採用實心圓棒或六角實心棒，以特別機械設備，依指定規格、條件，挖鑿開孔，以保護並裝置，容納熱電偶素線、極細熱電偶，或電阻式測溫體之金屬保護管。Use special machine or equipment to excavate hole in solid round cylinder or hexagonal solid cylinder according to appointed specifications and conditions. The thermo-will is used to protect and install, contain thermocouple wires, sheath thermocouple, or resistance temperature detector.

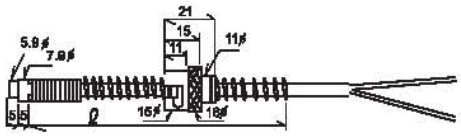
※上述各項商品，歡迎依其所需條件訂製。For the abover-mentioned products, customer may order according to the request.

※以下為常用型熱電偶，如有特殊規格歡迎另外訂購。SPECIAL REQUIREMENT AVAILABLE.

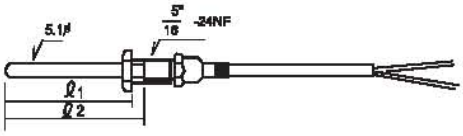
A

熱電偶 THERMOCOUPLE

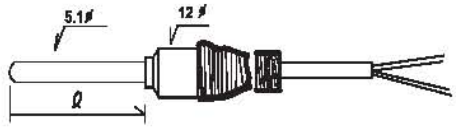
MT-101
K & J Type
Under350℃ 以下



MT-101-8
K & J Type
Under350℃ 以下

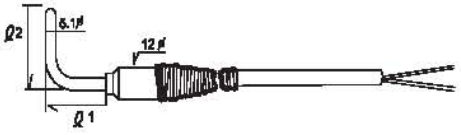


MT-102
K & J Type
Under600℃ 以下

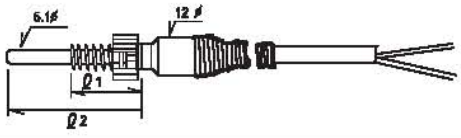


MT-103
K & J Type
Under600℃ 以下

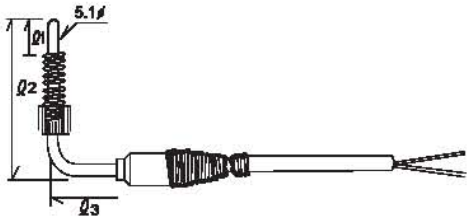
MT-103-9
K & J Type
Under600℃ 以下



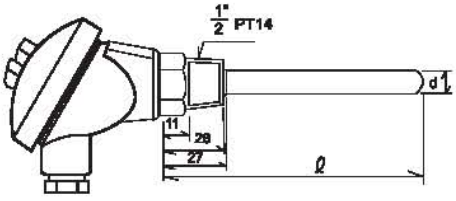
MT-104
K & J Type
Under600℃ 以下



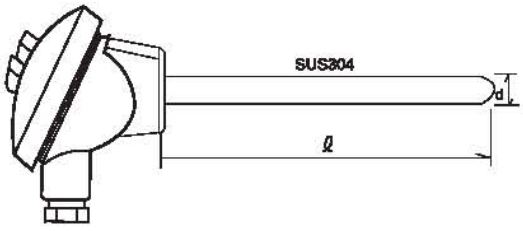
MT-105
K & J Type
Under600℃ 以下



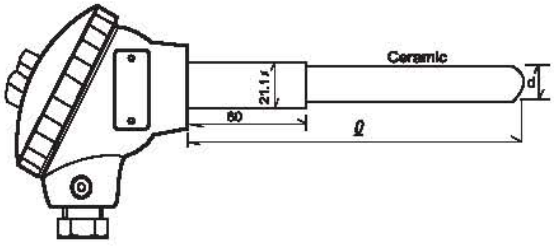
MT-105-2
K & J Type
Under600℃ 以下



MT-106
K & J Type
5φ Under 600℃ 以下
~
21.7φ Under1000℃ 以下

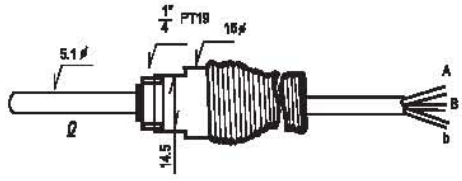


MT-107
K & J Type
5φ Under 600℃ 以下
~
21.7φ Under1000℃ 以下

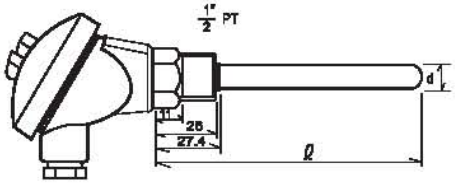


MT-109
S & R Type
Under 1600℃ 以下

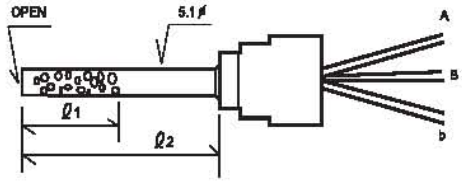
電阻式測溫體 RTD



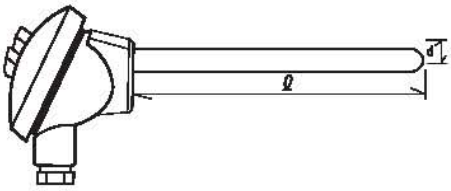
MT-201
PT 100Ω
RTD(3Wire System)
Under500℃ 以下



MT-206
PT 100Ω
RTD(3Wire System)
Under500℃ 以下



MT-201-6
PT 100Ω
RTD(3Wire System)
Under500℃ 以下



MT-207
PT 100Ω
RTD(3Wire System)
Under 500℃ 以下

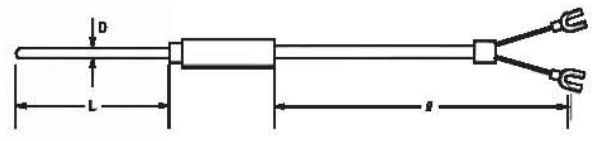
Sheath Thermocouple

極細熱電偶

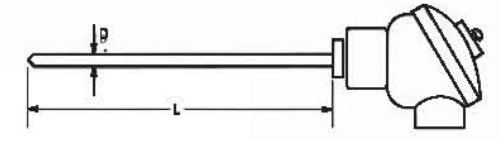
※以下為常用型熱電偶，如有特殊規格歡迎另外訂購。SPECIAL REQUIREMENT AVAILABLE.

極細熱電偶Sheathed Thermocouple (直徑小且可彎曲)

ST-20 With Thread Connection
ST-30 Without Thread Connection



ST-60 With Thread Connection
ST-70 Without Thread Connection



THERMOCOUPLE WIRE 熱電偶材質	SHEATH OUTER DIA 外徑 / SHEATH MATERIAL 保護管材質	1.0φ	1.6φ	3.2φ	4.8φ	6.4φ	8.0φ
K-TYPE	INCONEL600	500℃	700℃	900℃	1000℃	1050℃	1100℃
K-TYPE	SUS316	450	600	700	800	850	900
J-TYPE	SUS316	250	350	450	500	MAX. WORKING TEMP.	

※以下為各式熱電偶頭、磁座及快速接頭訂購規格 Thermocouple Heads and Accessories

各式快速接頭

※以下為常用型補償導線，如有特殊規格歡迎另外訂購。SPECIAL REQUIREMENT AVAILABLE

各式補償導線訂購規格表－I　Thermocouple Compensating Lead Wire－I

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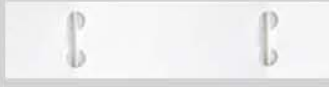
代號 WIRE CODE	規格 SPECIFICATION	說明 DESCRIPTION	環境溫度範圍 TEMP. RANGE	外觀尺寸 OVERAL SIZE(mm)	樣品 SAMPLE
TC-CA-H	0.32＊2	玻璃纖維 GLASS FIBER 素線級 T/C GRADE	0 ~ 200℃	1.6x2.6	
TC-CA-H	0.65＊2	玻璃纖維 GLASS FIBER 素線級 T/C GRADE	0 ~ 200℃	2.0x3.2	
TC-CA-H(OS)	0.65＊2	玻璃纖維 GLASS FIBER 銅網外隔離 T/C Outer : Cu wire over braided	0 ~ 200℃	1.9x3.0	
TC-CA-H(SOS)	0.65＊2	玻璃纖維 GLASS FIBER 不鏽鋼外隔離 T/C Outer : Sus wire over braided	0 ~ 200℃	1.9x3.0	
TC-CA-H(SOS)	4/0.32*2	玻璃纖維 GLASS FIBER 不鏽鋼外隔離 T/C Outer : Sus wire over braided	0 ~ 200℃	2.0x3.2	
TC-IC-H(OS)	0.65＊2	玻璃纖維 GLASS FIBER 不銹鋼外隔離 T/C Outer : Sus wire over braided	0 ~ 200℃	1.9*3.0	
TC-CC-H(OS)	0.65＊2	玻璃纖維 GLASS FIBER 不銹鋼外隔離 T/C Outer : Sus wire over braided	0 ~ 200℃	1.9*3.0	
TC-PT-H(SOS)	0.65＊3	玻璃纖維 GLASS FIBER 不鏽鋼外隔離 T/C Outer : Sus wire over braided	0 ~ 200℃	1.9*4.6	
WCA-H	4/0.32＊2	玻璃纖維 GLASS FIBER	0 ~ 200℃	2.0*3.0	
WCA-H	7/0.32＊2	玻璃纖維 GLASS FIBER	0 ~ 200℃	2.2*3.2	
WCA-H	4/0.65＊2	玻璃纖維 GLASS FIBER	0 ~ 200℃	3.0*5.0	
WCA-H	7/0.65＊2	玻璃纖維 GLASS FIBER	0 ~ 200℃	3.3*5.6	
WCA-H(SOS)	4/0.65＊2	玻璃纖維 GLASS FIBER 不鏽鋼外隔離 Outer : Sus wire over braided	0 ~ 200℃	3.6*5.5	
WCA-H(SOS)	7/0.65＊2	玻璃纖維 GLASS FIBER 不鏽鋼外隔離 Outer : Sus wire over braided	0 ~ 200℃	3.9*6.2	
					

熱電偶補償導線

※以下為常用型補償導線，如有特殊規格歡迎另外訂購。SPECIAL REQUIREMENT AVAILABLE

各式補償導線訂購規格表－II Thermocouple Compensating Lead Wire－II

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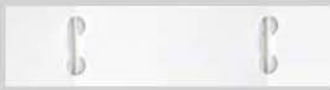
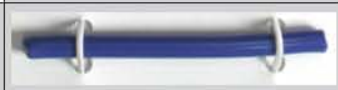
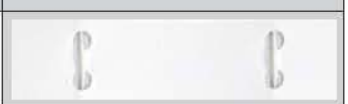
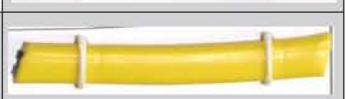
代號 WIRE CODE	規格 SPECIFICATION	說明 DESCRIPTION	環境溫度範圍 TEMP. RANGE	外觀尺寸 OVERAL SIZE(mm)	樣品 SAMPLE
WIC-H	4/0.65＊2	玻璃纖維 GLASS FIBER	0 ~ 200℃	3.0*5.0	
WIC-H	7/0.65＊2	玻璃纖維 GLASS FIBER	0 ~ 200℃	3.3*5.6	
					
WPR-H	7/0.32＊2	玻璃纖維 GLASS FIBER	0 ~ 200℃	3.0*5.0	
WPR-H	4/0.65＊2	玻璃纖維 GLASS FIBER	0 ~ 200℃	3.3*5.6	
TC-CA-G	4/0.32＊2	PVC 素線級 T/C GRADE	0 ~ 105℃	3.8ø	
W-CA-G	4/0.32＊2	PVC	0 ~ 105℃	3.8ø	
W-CA-G	7/0.32＊2	PVC	0 ~ 105℃	3.5*5.5	
W-CA-G	4/0.65＊2	PVC	0 ~ 105℃	4.4*7.0	
W-CA-G-IS	4/0.65＊2	PVC 鍍錫銅網內隔離 Inner : Cu wire over braided	0 ~ 105℃	5.0*7.6	
W-CA-G	7/0.65＊2	PVC	0 ~ 105℃	4.8*7.9	
					
W-IC-G	7/0.32＊2	PVC	0 ~ 105℃	3.5*5.5	
W-IC-G	4/0.65＊2	PVC	0 ~ 105℃	4.4*7.0	
W-CRC-G-IS	4/0.65＊2	PVC 鍍錫銅網內隔離 Inner : Cu wire over braided	0 ~ 105℃	4.8*7.9	

THERMOWELL 保護管訂購規格參考圖示

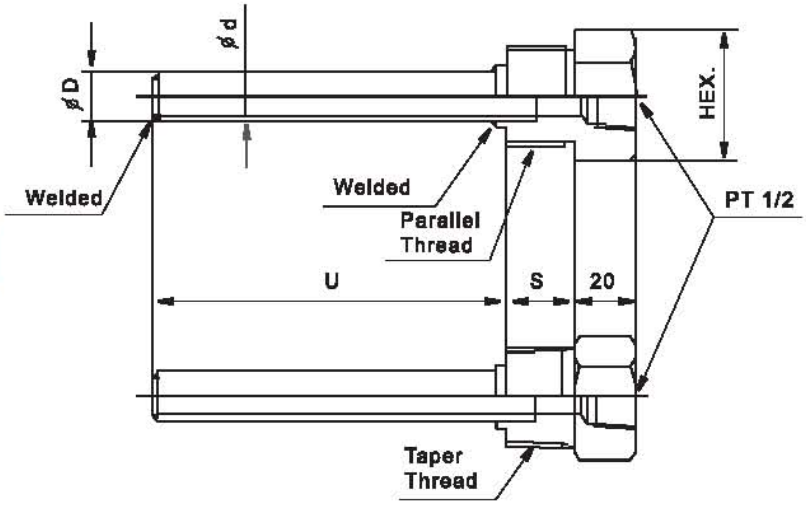
訂購方法：請簡略描述(內徑)(外徑)(長度)(規格)請參考下圖。Ordering method: Please briefly describe (inner diameter) (outer diameter) (length) (specifications). Please refer as follows：

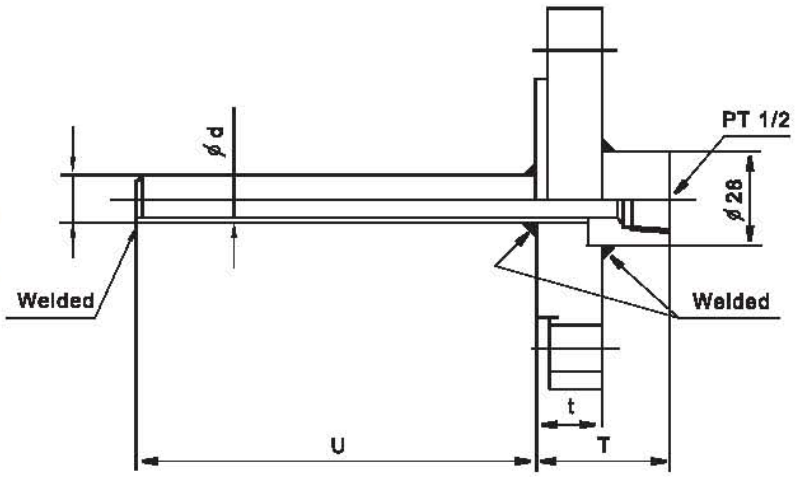
Drilled Thermowell
(1)Screwed Type
(2)Flange Type
(3)Welded Type
Pipe Type Protection tube
(1)Screwed Type
(2)Flange Type

實際圖像如右 Actual Picture

Screwed Type

參考圖示一 Reference Picture 1



Flange Type

參考圖示二 Reference Picture 2