

NEW-FLOW

**ISO 9001
REGISTERED**

NEW-FLOW

Instruction Manual

BI-METAL THERMOMETERS

雙金屬溫度計使用說明書



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INSTALLATION

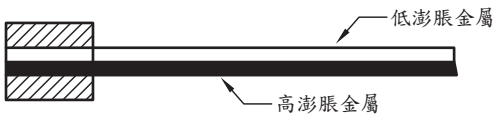
摘要 General

此種雙金屬溫度計為一堅固耐用且安裝方便，適用於各種角度使用。

Its BI-Metal Temperatures are strong, durable, accurate and easy to read. Products are more useful for various kind of angles. It is easy to read and less.

動作原理 Principle

1. 雙金屬片(兩種不同材質的金屬組合)



2. 受溫後的金屬片膨脹情況



3. 螺旋狀的雙金屬片

雙溫後旋轉角度的變化，雙金屬溫度計是利用此種原理製作而成。



溫度條件 Temperature Resistance

Influence of Ambient Temperature: No Influence

雙金屬溫度計不受環境溫度的影響

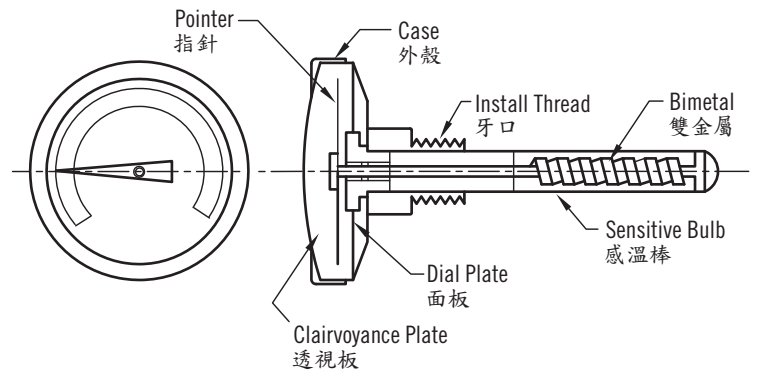
Ambient Temperature (we recommended):

建議的環境溫度

Unfilled (Dry) Version 不充油 -40°C to +60°C

Filled Version 充油 -20°C to +60°C

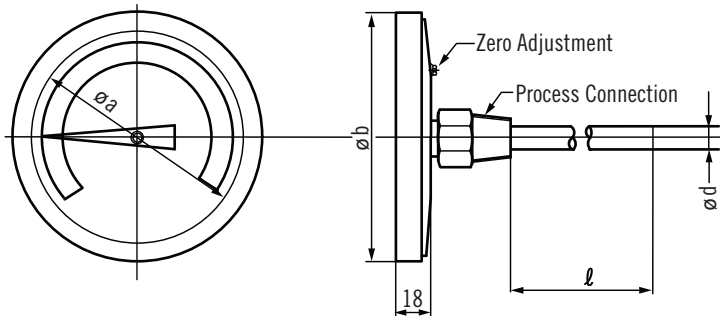
4. 溫度計構造圖



型式及尺寸 Type & Dimensions

AY3 (ø75) AY4 (ø100) AY5 (ø125)

Back Connection



	a	b
AY3	70	83
AY4	94	112
AY5	108	130

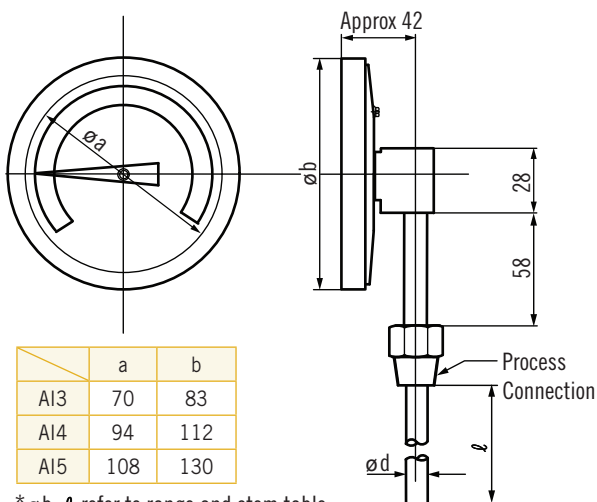
*øb, l refer to range and stem table

AI3 (ø75) AI4 (ø100) AI5 (ø125)

Bottom Connection

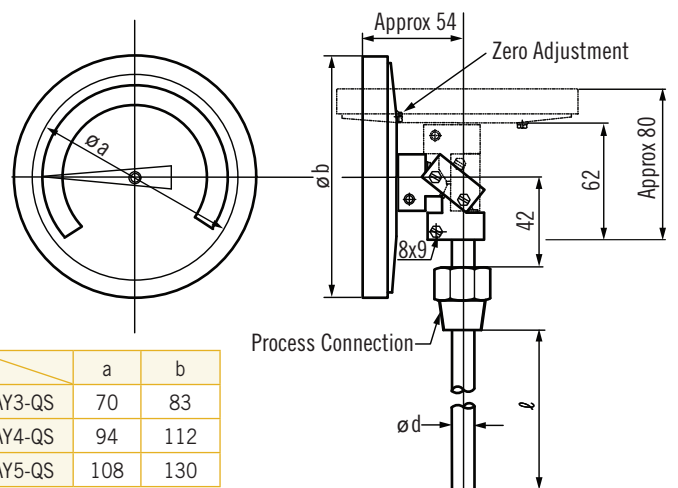
AY3-QS (ø75) AY4-QS (ø100) AY5-QS (ø125)

Every Angle Connection



	a	b
AI3	70	83
AI4	94	112
AI5	108	130

*øb, l refer to range and stem table



	a	b
AY3-QS	70	83
AY4-QS	94	112
AY5-QS	108	130

*øb, l refer to range and stem table

INSTALLATION

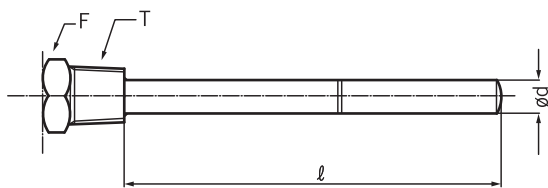
感溫部型式 *Sensor Connection Type*

溫度範圍及 *Stem* 最短長度對照表

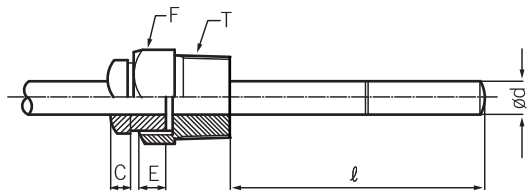
Table For Range And Stem

Standard Scale Range (°C)	Minor Division (°C)			Minimum Stem Length (mm)			
	Ø75	Ø100	Ø125	Outer Diameter of Stem			
				Ø4	Ø6	Ø8	Ø10
-50~50	2	1	1	80	65	60	55
-30~50	1	1	1	80	65	60	55
-20~60	1	1	1	80	65	60	55
-10~50	1	0.5	0.5	95	80	75	70
-10~110	2	1	1	80	65	60	55
0~50(60)	1	0.5	0.5	105	90	85	80
0~80	1	1	1	80	65	60	55
0~100	2	1	1	80	65	60	55
0~120	2	2	2	80	65	60	55
0~150	2	2	2	80	65	60	55
0~200	5	2	2	80	65	60	55
0~250	5	2	2	95	80	75	70
0~300	5	2.5	2.5	85	70	65	60
0~400	10	2.5	2.5	-	65	60	55
0~500	10	5	5	-	65	60	55
0~600	10	5	5	-	65	60	55

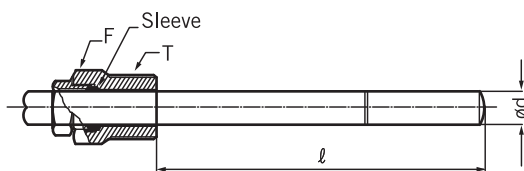
* Dual scale available upon request



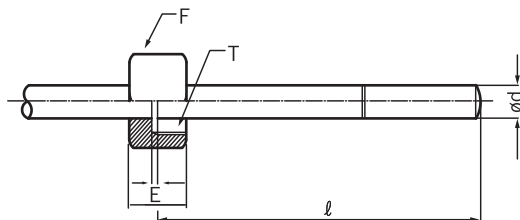
(A) Fixed Thread Type



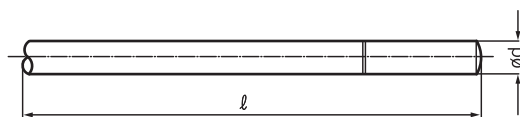
(B) Rotary Thread Type



(C) Slide Thread Type
(Length "l" changed available.)



(D) Female Thread Type
(Rotation Style)



(E) Non Thread Type

T: Process connection
E: Stop plate for (rotary & rotation style)
F: Hexagonal head
l: Sensor length
d: Sensor dimension

INSTALLATION

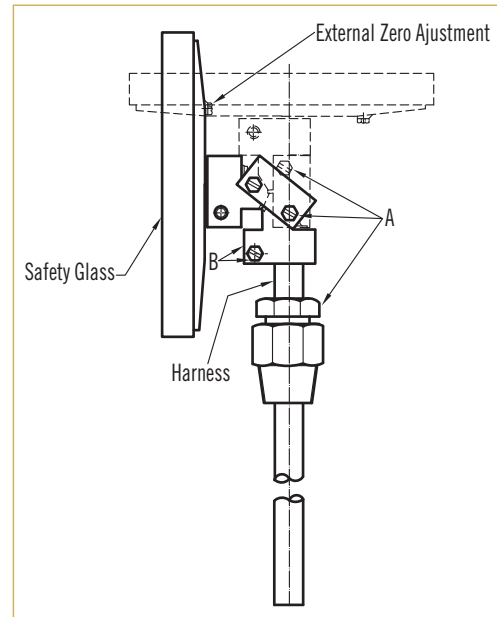
AY-QS 之安裝方法 *Install Method*

a. 如圖所示將 A 之兩支螺絲及止動外六角螺絲帽放鬆，即可伸縮支架 Harness 旋轉至所需之角度後固定之。

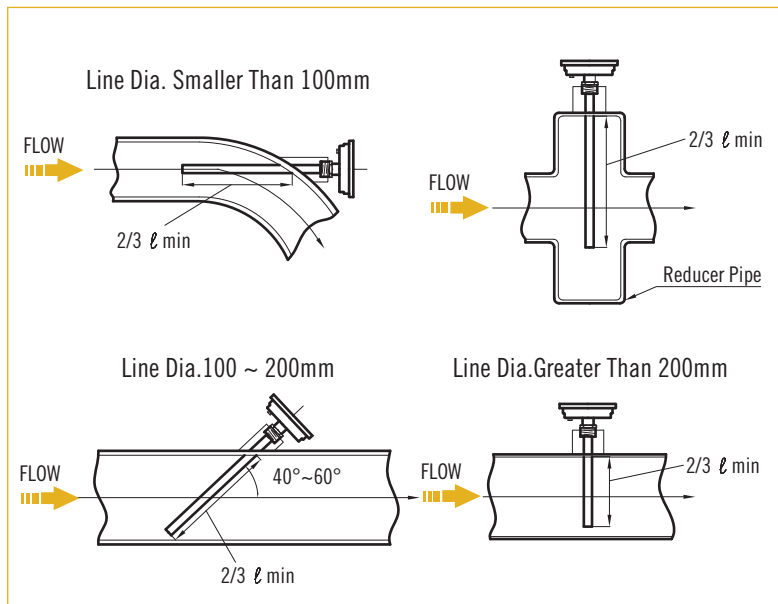
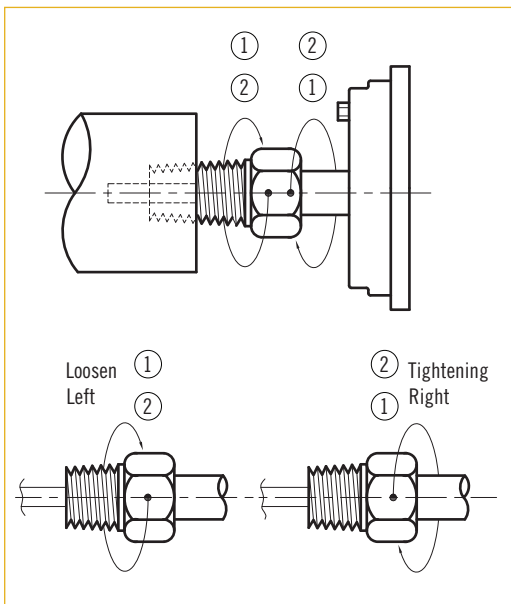
As indicate on the picture, loosen the two screws net of the "A", then the harness can be adjusted to the requested angle. After this step, fasten the screws.

b. 將 B 之兩支螺絲放鬆，即可將面板彎至所需角度後固定之。

Loosen the two screws of the "B", then the face plate can be adjusted to the requested angle. Then fasten the screws, last.



安裝說明 *Installation Illustration*



注意事項 *Note*

安裝使用前先與標準溫度計做周圍溫度比對，如有誤差時，以一字起子由外部零調鈕 (External Zero Adjustable) 修正之。

Before install, compare with the ambient temperature with the standard thermo meter. If there is any error, please adjust the outside external zero with screw driver.