



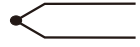
## Thermocouple



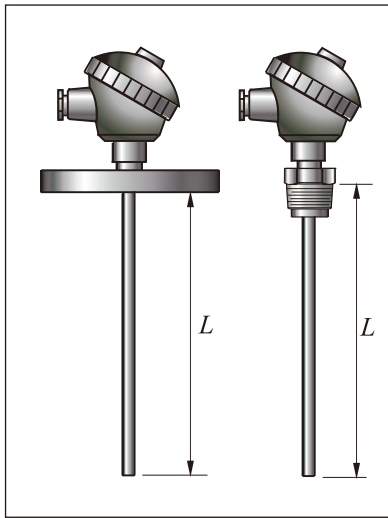
[www.fine-tek.com](http://www.fine-tek.com)



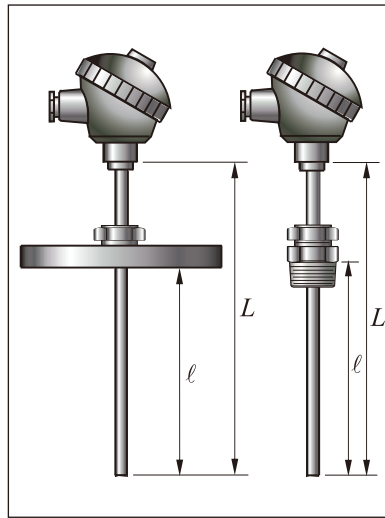
# THERMOCOUPLE



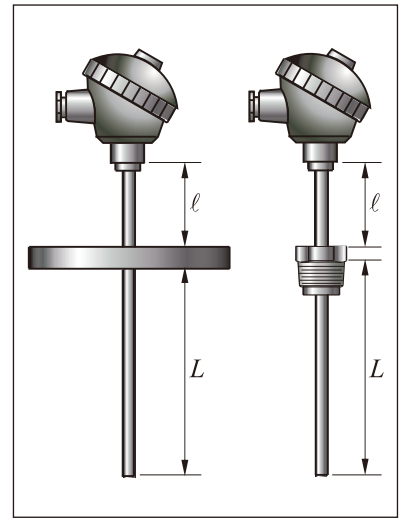
# RESISTANCE BULB



**STANDARD TYPE**



**ADJUSTABLE TYPE**



**EXTENSION TYPE**

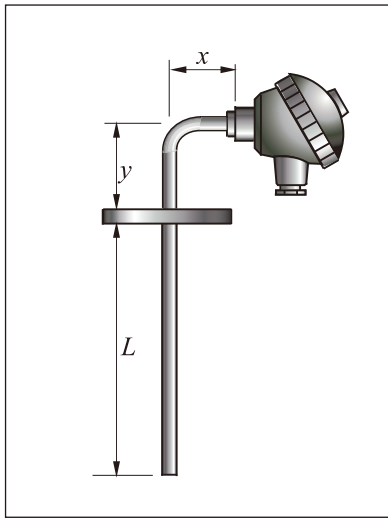
Type	STANDARD TYPE		ADJUSTABLE TYPE		EXTENSION TYPE	
	GKEA	GPEA	GKEB/GKKB	GPEB/GPKB	GKEC/GKKB	GPEC/GPKC
Operating Temp.	0~1200°C	-50~500°C	0~1200°C	-50~500°C	0~1200°C	-50~500°C
Class Tolerance	JIS 0.75 grade $\pm 0.0075 \times  t $	IEC 751 CLASS B $0.3 \pm 0.005 \times  t $	JIS 0.75 grade $\pm 0.0075 \times  t $	IEC 751 CLASS B $0.3 \pm 0.005 \times  t $	JIS 0.75 grade $\pm 0.0075 \times  t $	IEC 751 CLASS B $0.3 \pm 0.005 \times  t $
Protective Grade	IP65	IP65	IP65/IP44	IP65/IP44	IP65/IP44	IP65/IP44
Connection	1", 1 1/2" × 5kg/cm <sup>2</sup> 1/2"PT, 3/4"PT	1", 1 1/2" × 5kg/cm <sup>2</sup> 1/2"PT, 3/4"PT	1", 1 1/2" × 5kg/cm <sup>2</sup> 1/2"PT, 3/4"PT	1", 1 1/2" × 5kg/cm <sup>2</sup> 1/2"PT, 3/4"PT	1", 1 1/2" × 5kg/cm <sup>2</sup> 1/2"PT, 3/4"PT	1", 1 1/2" × 5kg/cm <sup>2</sup> 1/2"PT, 3/4"PT
Tube diameter	φ5, φ6 φ8, φ9.5	φ8, φ12.7 φ17.2	φ5, φ6 φ8, φ9.5	φ8, φ12.7 φ17.2	φ5, φ6 φ8, φ9.5	φ8, φ12.7 φ17.2
Material	SUS304/316 Titanium	SUS304/316 Titanium	SUS304/316 Titanium	SUS304/316 Titanium	SUS304/316 Titanium	SUS304/316 Titanium
Isolation resistance	> 1000MΩ / 500V	> 1000MΩ / 500V	> 1000MΩ / 500V	> 1000MΩ / 500V	> 1000MΩ / 500V	> 1000MΩ / 500V
Wire	Nickel-Aluminum Nickel-Chromium	---	Nickel-Aluminum Nickel-Chromium	---	Nickel-Aluminum Nickel-Chromium	---

★ Special specification are acceptable

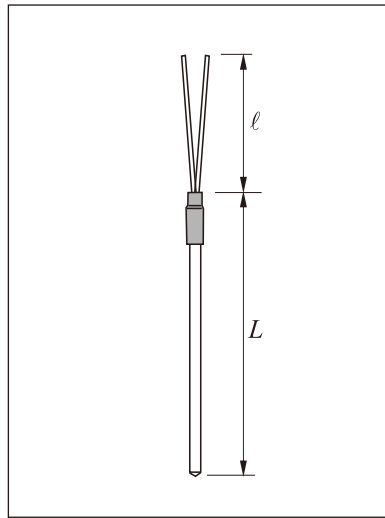
# THERMOCOUPLE



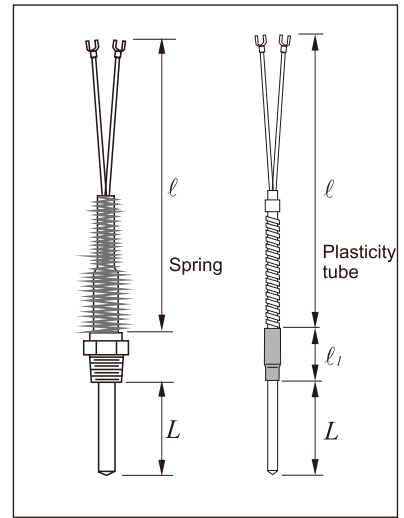
# RESISTANCE BULB







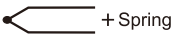

**L SHAPE TYPE**



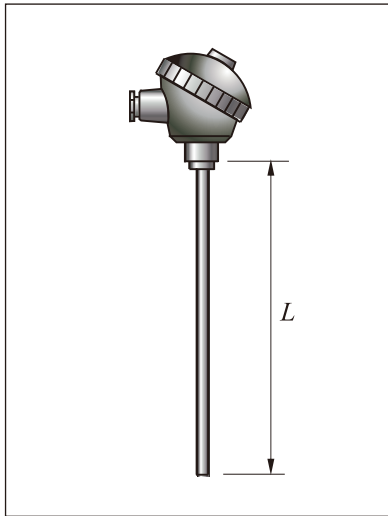
**ECONOMICAL TYPE**



**ECONOMICAL TYPE**

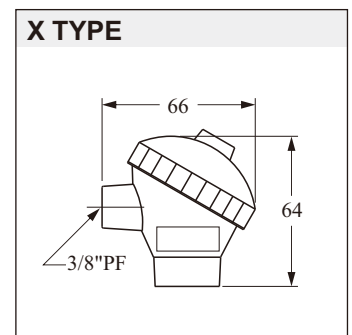
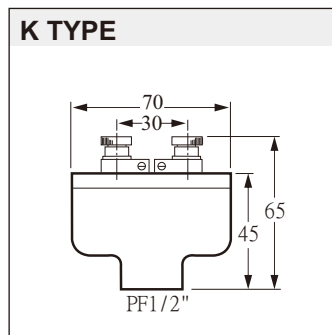
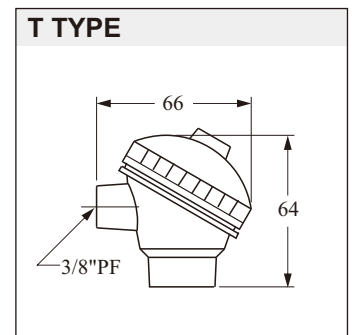
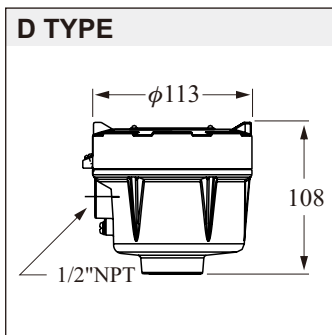
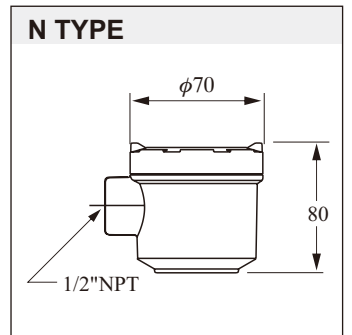
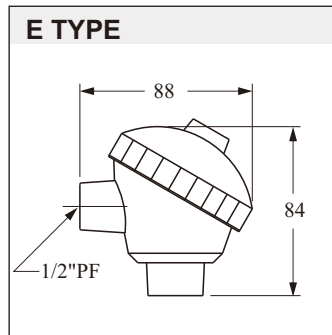
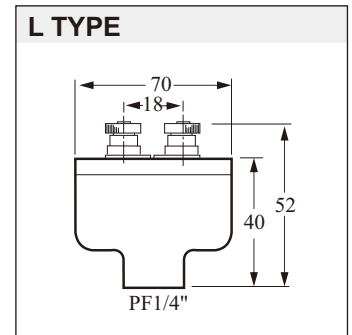
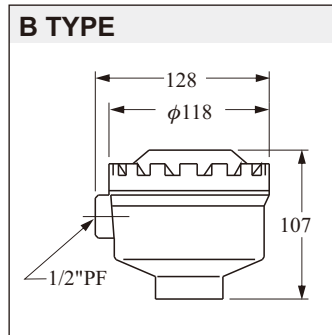
						
Type	<b>GKED/TKKD</b>	<b>GPED/GDKD</b>	<b>GK-E</b>	<b>GP-E</b>	<b>GK-F</b>	<b>GP-G</b>
Operating Temp.	0~1200°C	-50~500°C	0~480°C	-50~250°C	0~480°C	-50~250°C
Class Tolerance	JIS 0.75 grade $\pm 0.0075 \times  t $	IEC 751 CLASS B $0.3 \pm 0.005 \times  t $	JIS 0.75 grade $\pm 0.0075 \times  t $	IEC 751 CLASS B $0.3 \pm 0.005 \times  t $	JIS 0.75 grade $\pm 0.0075 \times  t $	IEC 751 CLASS B $0.3 \pm 0.005 \times  t $
Protective Grade	IP65/IP44	IP65/IP44	IP44	IP44	IP44	IP44
Connection	1", 1 1/2" x 5kg/cm <sup>2</sup>	1", 1 1/2" x 5kg/cm <sup>2</sup>	---	---	1/4"PT	1/4"PT
Tube diameter	$\phi 5, \phi 17.2$	$\phi 8, \phi 12.7$ $\phi 17.2$	$\phi 6, \phi 17.2$	$\phi 6, \phi 17.3$	$\phi 6, \phi 17.2$	$\phi 6, \phi 17.3$
Material	SUS304/316 Titanium	SUS304/316 Titanium	SUS304/316 Titaniu, PTFE	SUS304/316 PP, PTFE	SUS304/316 Titaniu, PTFE	SUS304/316 PP, PTFE
Isolation resistance	>1000M $\Omega$ /500V	>1000M $\Omega$ /500V	>1000M $\Omega$ /500V	>1000M $\Omega$ /500V	>1000M $\Omega$ /500V	>1000M $\Omega$ /500V
Wire	Nickel-Aluminum Nickel-Chromium	---	Nickel-Aluminum Nickel-Chromium	---	Nickel-Aluminum Nickel-Chromium	---
Compensating Lead Wire	---	---	Isolated Cable PVC Cable	PTFE Silver Wire PTFE Copper Wire PVC Cable	Isolated Cable PVC Cable	PTFE Silver Wire PTFE Copper Wire PVC Cable



★ Special specification are acceptable



**INTERCALARY TYPE**

**TERMINAL BOX**



Type	 <b>GKEH</b>	 <b>GPEH</b>
Operating Temp.	0~480°C	-50~250°C
Class Tolerance	JIS 0.75 grade $\pm 0.0075 \times  t $	IEC 751 CLASS B $0.3 \pm 0.005 \times  t $
Protective Grade	IP65	IP65
Connection	---	---
Tube diameter	$\phi 6, \phi 17.2$	$\phi 6, \phi 17.3$
Material	SUS304/316 Titanium, PTFE	SUS304/316 Titanium
Isolation resistance	$> 1000\text{M}\Omega / 500\text{V}$	$> 1000\text{M}\Omega / 500\text{V}$
Wire	Nickel-Aluminum Nickel-Chromium	---

★ Special specification are acceptable

# ORDER INFORMATION

**G P E A S 2 E M 0 1 0 0**

**TYPE**

C: C Type Thermocouple    R: R Type Thermocouple  
 J: J Type Thermocouple    P: P Type Resistance Bulb  
 K: K Type Thermocouple    S: Others

**TERMINAL BOX**

B: Aluminum (Big space)  
 E: Thermocouple head (Aluminum)  
 J: Explosion-proof (Exd IIB T4)  
 K: T Type terminal (Big size)  
 L: T Type terminal (small size)  
 P: Thermocouple head (plastic)  
 S: Others  
 T: Small Thermocouple head (plastic)  
 X: Small Thermocouple head (Aluminum)  
 -: Without terminal box

**CONNECTING TYPE**

A: Standard Type                      F: Economical Type (Spring)  
 B: Adjustable Type                    G: Economical Type (plasticity tube)  
 C: Extension Type                      H: Intercalary Type  
 D: L shape Type                        J : Simple Type  
 E: Economical Type                    S : Others

**ROD MATERIAL & DIAMETER**

S1: SUS304 φ 5	S9: SUS304 φ 12.7	P1: P.P. φ 5	T1: Titanium φ 5
S2: SUS316 φ 5	SA: SUS316 φ 12.7	P2: P.P. φ 6	T2: Titanium φ 12.7
S3: SUS304 φ 6	SB: SUS304 φ 17.2	P3: P.P. φ 9.5	TS: Others size
S4: SUS316 φ 6	SC: SUS316 φ 17.2	P4: P.P. φ 17.6	F1: Teflon φ 5
S6: SUS316 φ 8	SD: SUS304 φ 21.7	PS: Others size	F2: Teflon φ 6
S7: SUS304 φ 9.5	SE: SUS316 φ 21.7		F3: Teflon φ 8
S8: SUS316 φ 9.5	SS: Others size		FS: Others size

**CONNECTING CODE**

1: 1/8"	F: 2" (50A)	M: 5 kg/cm <sup>2</sup>	W: PN10 (10Bar)
2: 1/4"	G: 2-1/2" (65A)	N: 10 kg/cm <sup>2</sup>	X: PN16 (16Bar)
3: 1-1/4" (32A)	H: 3" (80A)	O: 150 Lbs	Y: PN25 (25Bar)
A: 3/8" (12A)	I: 4" (100A)	P: 300 Lbs	Z: PN40 (40Bar)
B: 1/2" (15A)	J: 5" (125A)	Q: PT	S: Others
C: 3/4" (20A)	K: 6" (150A)	R: PF	
D: 1" (25A)		T: BSP	
E: 1-1/2" (40A)			

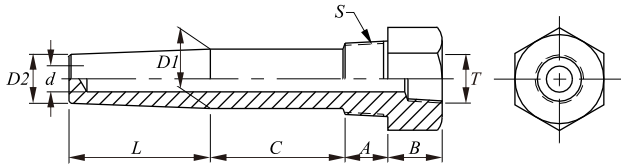
**LENGTH (UNIT: mm)**

Please confirm below request information before you order it.

- \* Operating temperature range.
- \* Lead wire: material, length, quantity
- \* Rod length: ℓ,ℓ,X,Y
- \* Quantities of sensor

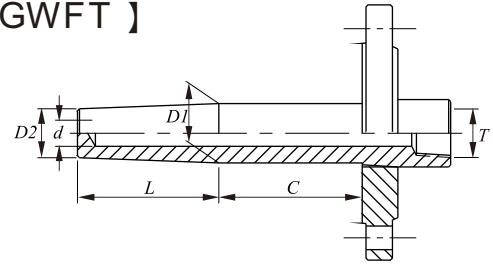
## Screw Type

【GWTT】

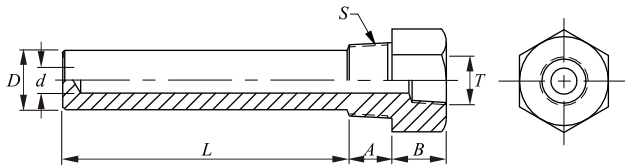


## Flange Type

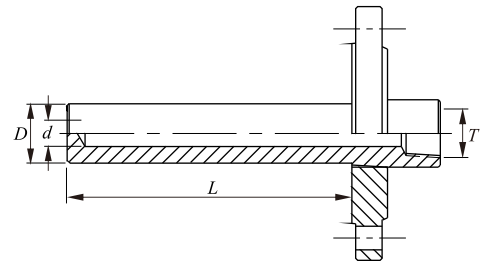
【GWFT】



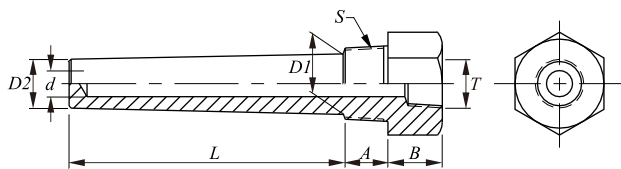
【GWTD】



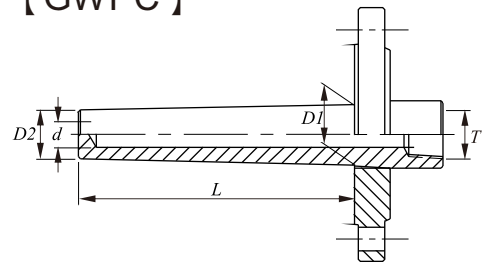
【GWFD】



【GWTC】



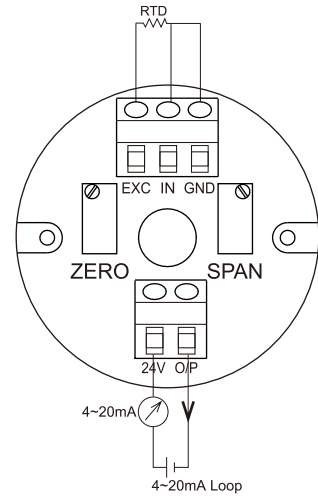
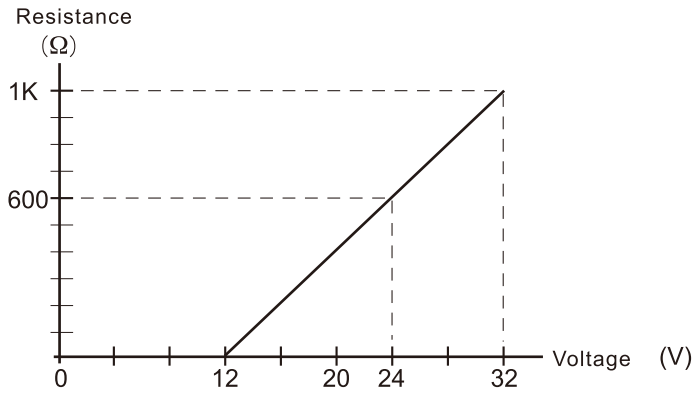
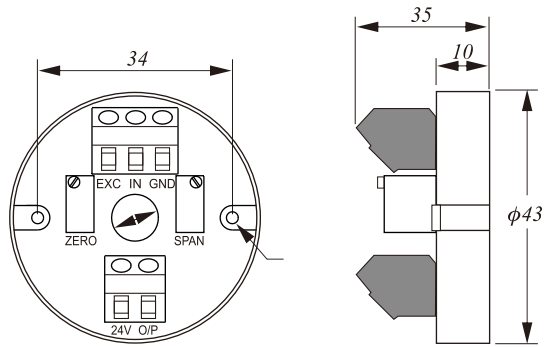
【GWFC】



# RTD TRANSDUCER

## 【TAB-1533】

Range : -50~850°C  
 Output : 4~20mA (2-wire or 3-wire)  
 Input : 12~32VDC  
 Accuracy : ± 0.1%FS (at 23°C )  
 Load Resistance :  $R_0 = (V_{supply} - 12V) / 20mA$   
 Operation Temp. : 0~70°C



## TAB-1533- **D** **2**

2: 2-wire  
 3: 3-wire

Range

- |             |            |
|-------------|------------|
| A: -50~50°C | G: 0~500°C |
| B: 0~100°C  | H: 0~600°C |
| C: 0~120°C  | I: 0~700°C |
| D: 0~200°C  | J: 0~800°C |
| E: 0~300°C  | K: 0~850°C |
| F: 0~400°C  | L: 0~150°C |