



WWW.FLUTECH.CO.TH

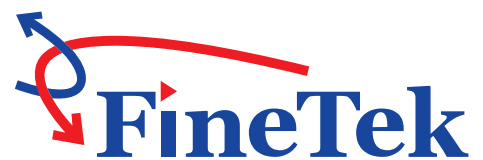


ADD FRIEND
@flutech.co.th



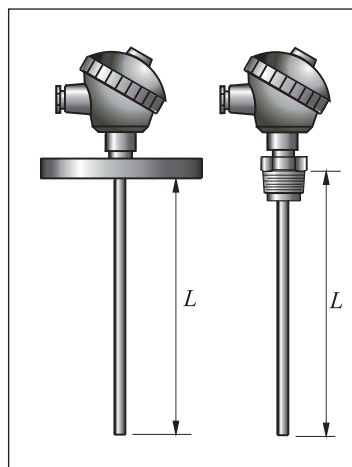
บริษัท ฟลูเทค จำกัด
Flu-tech co.,ltd
Authorized Distributor

Thermocouple

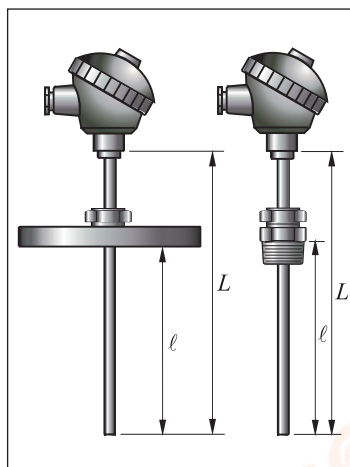


Innovation · Quality · Sharing

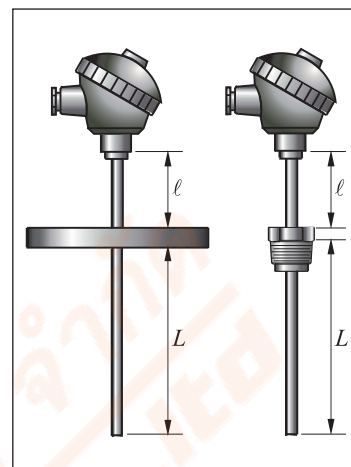
THERMOCOUPLE / RESISTANCE BULB









STANDARD TYPE



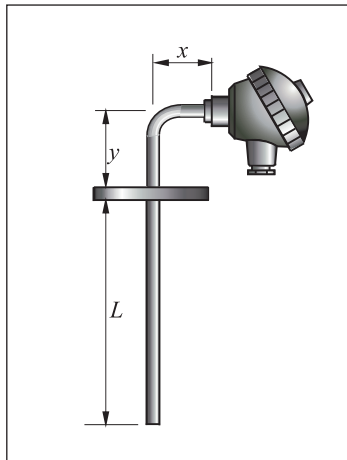
ADJUSTABLE TYPE



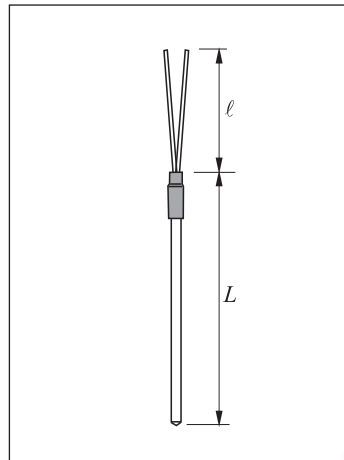
EXTENSION TYPE

Type	 GKEA	 GPEA	 GKEB/GKKB	 GP EB/GPKB	 GK EC/GK KC	 GP EC/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" x 5kg/cm ² 1/2"PT, 3/4"PT	1", 1 1/2" x 5kg/cm ² 1/2"PT, 3/4"PT	1", 1 1/2" x 5kg/cm ² 1/2"PT, 3/4"PT	1", 1 1/2" x 5kg/cm ² 1/2"PT, 3/4"PT	1", 1 1/2" x 5kg/cm ² 1/2"PT, 3/4"PT	1", 1 1/2" x 5kg/cm ² 1/2"PT, 3/4"PT
Tube diameter	$\phi 5, \phi 6$ $\phi 8, \phi 9.5$	$\phi 8, \phi 12.7$ $\phi 17.2$	$\phi 5, \phi 6$ $\phi 8, \phi 9.5$	$\phi 8, \phi 12.7$ $\phi 17.2$	$\phi 5, \phi 6$ $\phi 8, \phi 9.5$	$\phi 8, \phi 12.7$ $\phi 17.2$
Material	SUS304/316 Titanium	SUS304/316 Titanium	SUS304/316 Titanium	SUS304/316 Titanium	SUS304/316 Titanium	SUS304/316 Titanium
Isolation resistance	>1000M Ω /500V	>1000M Ω /500V	>1000M Ω /500V	>1000M Ω /500V	>1000M Ω /500V	>1000M Ω /500V
Wire	Nickel-Aluminum Nickel-Chromium	---	Nickel-Aluminum Nickel-Chromium	---	Nickel-Aluminum Nickel-Chromium	---

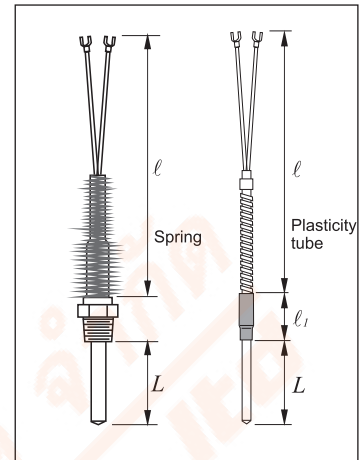
* Special specification are acceptable







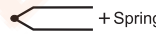

L SHAPE TYPE



ECONOMICAL TYPE

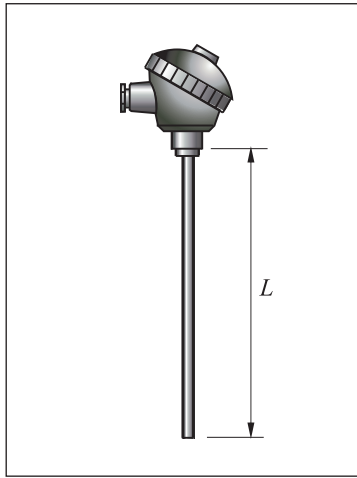


ECONOMICAL TYPE

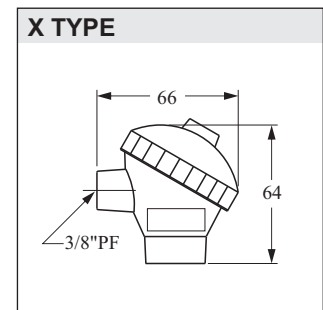
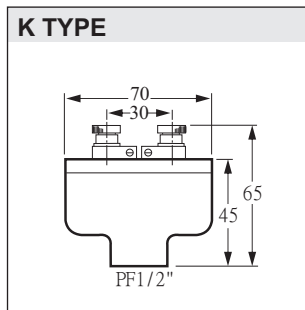
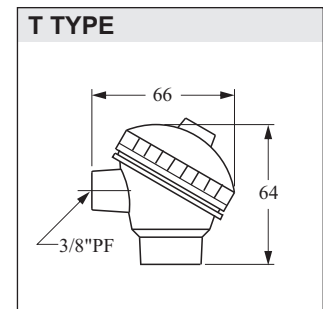
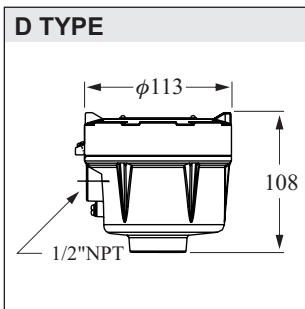
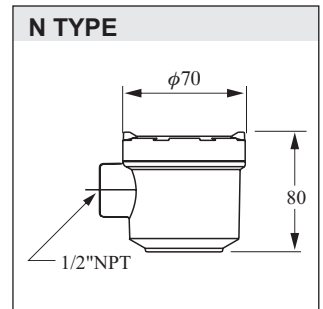
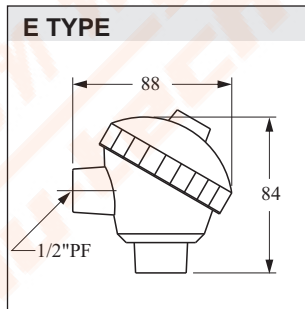
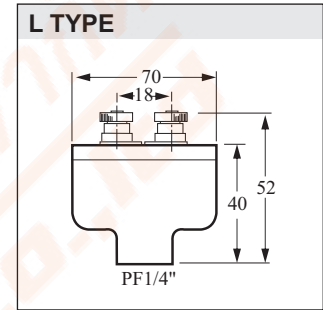
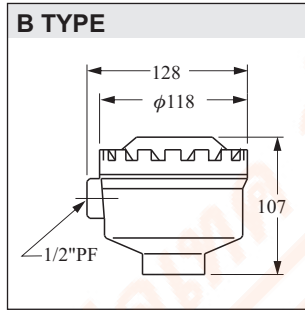
Type	 GKED/TKKD	 GPED/GDKD	 GK-E	 GP-E	 + Spring GK-F	 + Plasticity tube GP-G
Operating Temp.	0~1200°C	-50~500°C	0~480°C	-50~250°C	0~480°C	-50~250°C
Class Tolerance	JIS 0.75 grade $\pm 0.0075 \times t $	IEC 751 CLASS B $0.3 \pm 0.005 \times t $	JIS 0.75 grade $\pm 0.0075 \times t $	IEC 751 CLASS B $0.3 \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 ²	1", 1 1/2" x 5kg/cm ²	---	---	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 Titanium, PTFE	SUS304/316 PP, PTFE	SUS304/316 Titanium, PTFE	SUS304/316 PP, PTFE
Isolation resistance	>1000M Ω /500V	>1000M Ω /500V	>1000M Ω /500V	>1000M Ω /500V	>1000M Ω /500V	>1000M Ω /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

TERMINAL BOX



INTERCALARY TYPE

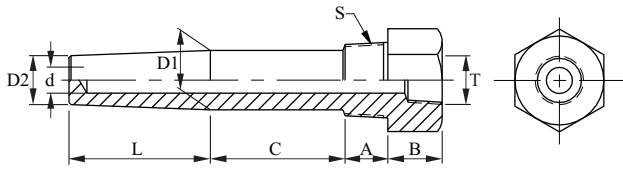


Type	GKEH	GPEH
Operating Temp.	0~480°C	-50~250°C
Class Tolerance	JIS 0.75 grade ±0.0075 × t	IEC 751 CLASS B 0.3 ± 0.005 × t
Protective Grade	IP65	IP65
Connection	---	---
Tube diameter	φ6, φ17.2	φ6, φ17.3
Material	SUS304/316 Titanium, PTFE	SUS304/316 Titanium
Isolation resistance	>1000MΩ/500V	>1000MΩ/500V
Wire	Nickel-Aluminum Nickel-Chromium	---

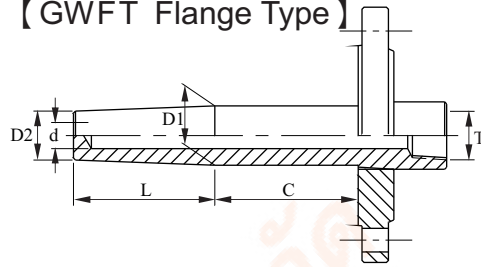
★ Special specification are acceptable

METAL PROTECTION TUBE

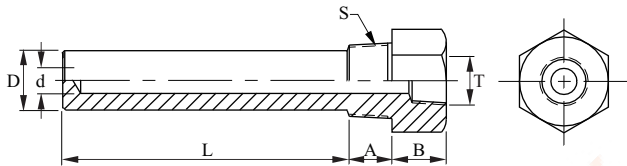
【 GWTT Screw Type 】



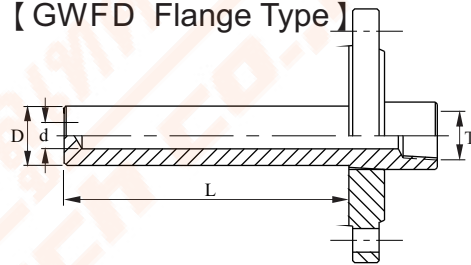
【 GWFT Flange Type 】



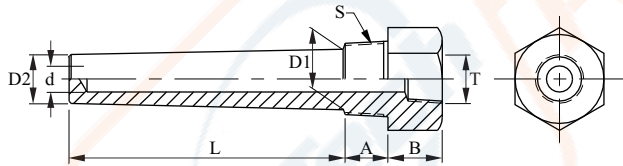
【 GWTD Type 】



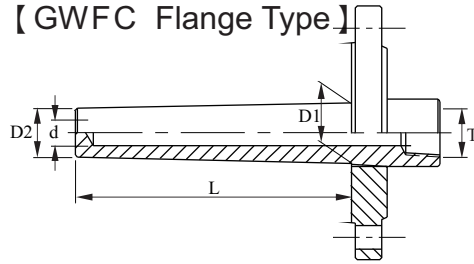
【 GWFD Flange Type 】



【 GWTC Screw Type 】



【 GWFC Flange Type 】



※Please specify the size and material of each part when ordering.

MODEL NUMBER / ORDER CODE COMPARISON TABLE

Model Number	Order Code
GKEA	GKX10000-00E
GPEA	GPX10000-00E
GKEB	GKX10000-A2E
GKKB	GKX10000-A2T
GPEB	GPX10000-A2E
GPKB	GPX10000-A2T
GKEC	GKX10000-A1E
GKKC	GKX10000-A1T
GPEC	GPX10000-A1E
GPKC	GPX10000-A1T
GKED	GKX10000-A3E
GKKD	GKX10000-A3T
GPED	GPX10000-A3E
GPKD	GPX10000-A3T
GK-E	GKX10100-A50
GP-E	GPX10100-A50
GK-F	GKX10100-A60
GP-G	GPX10100-A60
GKEH	GKX10000-A4E
GPEH	GPX10000-A4E

ORDER INFORMATION

G ⁰² X 1 ⁰⁵ ⁰⁶ 0 0 - ⁰⁹ ¹⁰ ¹¹ ¹² ¹³ ¹⁴ ¹⁵ ¹⁶ ¹⁷ ¹⁸ ¹⁹ ²⁰ ²¹ ²² ²³ ²⁴ ²⁵ ²⁶ ²⁷

02 Input signal

K: Thermocouple K type
 J: Thermocouple J type
 S: Thermocouple S type
 P: Resistance PT100

05 06 Model

00: Standard
 01: Economy (Without terminal box)

09 10 Type

00: Standard
 A1: Extension type
 A2: Adjustable type
 A3: L shape type
 A4: Intercalary type
 A5: Economical type
 A6: Economical type with spring
 A7: Economical type with tube

11 Terminal box

0: None
 E: Terminal head (Aluminum)
 T: T type Terminal(Big size)

12 Output signal

A: DC4~20mA
 B: 2-wire output
 C: 3-wire output

Connection

13 14

00: None
 Flange
 AK: JIS-FF
 AN: ANSI-RF
 AS: DIN-FF

Thread

AC: ANSI
 AA: JIS

15 16

00: None
 A1: 1/8"
 A2: 1/4"
 A4: 3/8"
 A5: 1/2"
 A7: 3/4"
 A8: 1"
 A9: 1-1/4"
 B1: 1-1/2"
 B2: 2"

17 18

00: None
 01: PT male
 03: PF male
 07: NPT male
 40: 5 kg/cm²
 42: 10 kg/cm²
 48: 150 Lbs
 49: 300 Lbs

(Next page)

②
⑤ ⑥
⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱
⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗
G **X 1** **0 0** -

⑲ ⑳ Probe diameter _____

- 1A: ϕ 4.0mm
- 1B: ϕ 5.0mm
- 1D: ϕ 6.0mm
- 1F: ϕ 8.0mm
- 1G: ϕ 9.5mm
- 2A: ϕ 12.7mm
- 2D: ϕ 17.2mm

㉑ ㉒ Probe material _____

- MA: SUS 304
- MB: SUS 316
- MC: SUS 316L

㉓ ㉔ ㉕ ㉖ Length _____

Code	Probe Length
0001~9999	0001~9999mm

㉗ Sersor amount _____

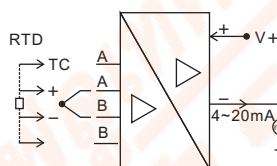
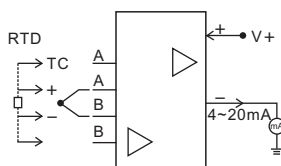
- A: 1
- B: 2
- C: 3

TR210 / 220 SPECIFICATION



TYPE	TR210 Series	TR220 Series
	Non-Isolation	Isolation

Input :
RTD · TC · Rohm



Function summary

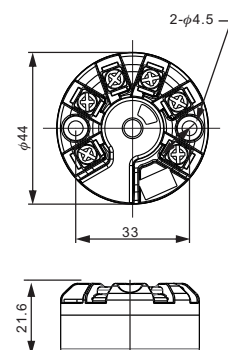
Features:

Power supply(Vdc)	12~36 Vdc (Loop Power)	24 VDC ± 20%
Ambient temp. range(°C)	-40~85	-40~85
Isolation	N/A	1500Vac
Channels	1	1
CJC Accuracy(°C)	± 1	± 1
Input:		
PT100 Span /min. span(°C)	-200~850 / 10	-200~850 / 10
PT1000 Span /min. Span(°C)	-200~850 / 10	-200~850 / 10
Rohm Span /min. Span(Ω)	0~400 or 0~4000 /10	0~400 or 0~4000 /10
TC types	B, E, J, K, N, R, S, T	B, E, J, K, N, R, S, T
Output:		
Loop power 2-wire output	4~20mA or 20~4mA	4~20mA or 20~4mA

Technical summary

	Basic Accuracy	Temperature Coefficient
PT100-2Wiers/PT1000-2Wiers	± 1°C	± 0.005% / °C
PT100-3Wiers/PT1000-3Wiers	± 0.5°C	± 0.005% / °C
PT100-4Wiers/PT1000-4Wiers	± 0.5°C	± 0.005% / °C
TC type: E, J, K, N, R, S	± 1.5°C	± 0.01% / °C
TC type: B	± 2°C	± 0.04% / °C
TC type: T	± 1°C	± 0.01% / °C
Rohm	± 0.1Ω	± 0.005% / °C

Dimensions

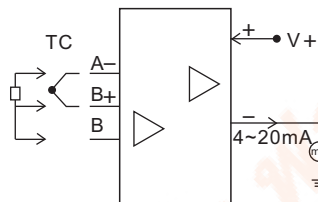


(Unit: mm)



TYPE	TR160 Series
	Economical type

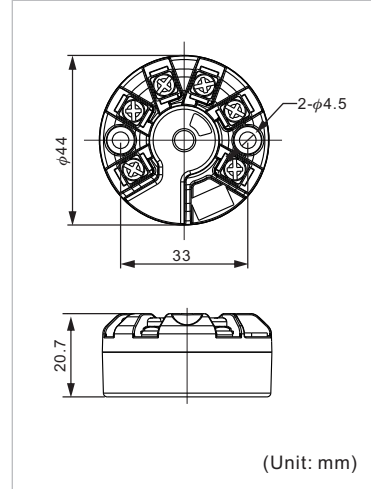
Input : RTD, TC,
Rohm, mV,
Linear Current,
Linear Voltage



Function summary

Features:	
Power supply(Vdc)	18~36V
Ambient temp. range(°C)	-40~85
Isolation	None
Channels	1
CJC accuracy(°C)	$\leq \pm 1$
Input:	
PT100 Span /min. span(°C)	-200~850 / 10
Rohm Span /min. Span(Ω)	0~400 / 5
TC types	B, E, J, K, N, R, S, T
Linear Current, signal range	0~20mA, 4~20mA
Linear Voltage, signal range	0~0.5V, 0~1V, 0~5V, 0~10V, 0~20V
Output:	
Loop Power 2-wire output	4~20mA/20~4mA

Dimensions



Technical summary

	Basic Accuracy	Temperature Coefficient
PT100	$\leq \pm 0.5^{\circ}\text{C}$	$\leq \pm 0.005^{\circ}\text{C}$
Rohm	$\leq \pm 0.4\Omega$	$\leq \pm 0.005^{\circ}\text{C}$
TC type: E, J, K, N, T	$\leq \pm 4^{\circ}\text{C}$	$\leq \pm 0.04^{\circ}\text{C}$
TC type: B	$\leq \pm 3^{\circ}\text{C}$	$\leq \pm 0.01^{\circ}\text{C}$
TC type: R, S	$\leq \pm 3^{\circ}\text{C}$	$\leq \pm 0.04^{\circ}\text{C}$
TC type: T	$\leq \pm 2^{\circ}\text{C}$	$\leq \pm 0.01^{\circ}\text{C}$
Voltage	$\leq \pm 0.1\text{mV}$	$\leq \pm 0.005^{\circ}\text{C}$

TR160 SPECIFICATION / ORDER INFORMATION

Model Number	Order Code
TR210	TRX30100-A
TR220	TRX30100-B
TR160	TRX20100-A

TRX ⁰⁴ 0 1 0 0 - ⁰⁹ ¹⁰ ¹¹ ¹² ¹³

04 Version

- 2: Second
- 3: Third

09 Isolation type

- A: None Isolation
- B: Isolation

10 11 Input range

- | | | |
|------------|--------------------------|--------------------------|
| V1: 0~0.5V | T1: ALL | T6: R Type -50°C~1760°C |
| V2: 0~1V | T2: K Type -200°C~1370°C | T7: S Type -50°C~1760°C |
| V3: 0~5V | TK: K Type -90°C~320°C | T8: B Type -250°C~1820°C |
| V4: 0~10V | T3: J Type -210°C~1200°C | T9: N Type -200°C~1300°C |
| V5: 0~20V | TJ: J Type -90°C~320°C | TA: PT 100 -200°C~850°C |
| I1: 4~20mA | T4: T Type -200°C~400°C | R1: 0~400 Ω |
| I2: 0~20mA | T5: E Type -200°C~1000°C | |

12 Analog output

- 1: 4~20mA
- 2: 20~4mA

13 Display unit

- A: °C
- B: °F

