## **Liquid Filled Type Thermometer**

## Model No. SS-4010 Series



#### **Summary**

The scale interval of this instrument is divided equally. Therefore, it is easy to read the scale when measuring the temperature. As the driving power is strong, the indicator indicates certainly and it is widely used for industrial use because the temperature transmission speed is very fast

#### Safety Management

- If possible, install a well.
- Do not give impact during transportation, installation and usage.
- Be sure to install the thermometer to be horizontal and vertical,
- Avoid the places where steam and poisonous gas exist a lot,

#### Purpose of Use

- Various boilers
- Dyeing machines
- Petrochemistry plant
- Measurement of inner temperature of a tank
- Ships, etc.
- LPG, LNG gas line

#### **Production Specification**

- Diameter
  - · 100 mm
- Accuracy
  - · ±2.0% of Full Scale
- Scale Range
- $\cdot$  -30°C  $\sim$  650°C
- ➤ Common Temperature
  · 75% of Full Scale

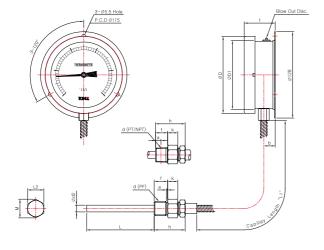
- + Case
  - · STS 304
- + Cover
  - · STS 304 · Slip-on-Fit
- + Connection
  - · STS 316
  - · PF, PT, NPT ↔ 1/2
- + Window
  - · General glass
  - · Tempered safety glass
  - · Laminated safety glass

- + Type
- · B-Type(Surface type)
- · BD-Type(Panel attachment type)
- + Panel attachment type
  - · Aluminum
  - · Color of white
  - · Black gradation and characters
- + Pointer
  - · Aluminum
  - · Black coating
- + Capillary Tube
  - · Standard 2 M (Maximum 10 M)

- + Sten
- · STS 304, STS 316
- + Stem O.D
  - · Ø 8, Ø 10, Ø 12
- + Well
  - · STS 304
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining

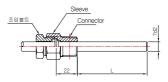
## Model No. | SS-4011 (100mm)

B-Type(Surface type)

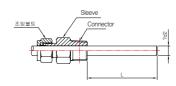


#### Form of the part of detecting temperature

1) Union type (Standard)

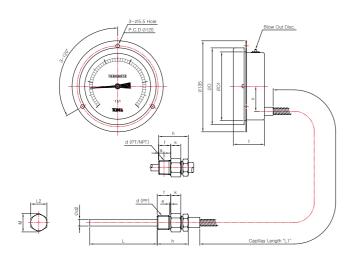


2) Adjustable type



## Model No. | SS-4012 (100mm)

BD-Type(Panel attachment type)



Standard manufacturing temperature and minimal length for the part of detecting the temperature

	KINZ	S	tem Dia (mm	1)
	1/11/2	Ø8	Ø10	Ø12
	−20 ~ 80	50	60	50
<u>e</u>	$-20 \sim 100$	50	60	50
Temperature	0 ~ 50	83	60	50
npe	0 ~ 80	50	60	50
Ter	0 ~ 100	50	60	50
Standard Manufacturing	0 ~ 120	50	60	50
ctur	0 ~ 150	50	60	50
ufa	0 ~ 200	50	60	50
Mar	0 ~ 250	50	60	50
ard	0 ~ 300	50	60	50
nda	0 ~ 350	75	53	50
	0 ~ 400	70	53	48
(℃)	0 ~ 500	62	48	44
	0 ~ 650	55	45	42

Model No.	Conn'n (d)	ØD	ØD1	b	n	t	L2	М	k	Ød2	h	f	е	а
SS-4011	PF 1/2	114	100	17	_	(46)	24	(27.7)	17	8 10	(50)	20	2	_
33-4011	NPT & PT 1/2	114	100	17		(40)		(21.1)	17	12	(48)	18	_	8.16
CC 4010	PF 1/2	11.1	100		27	(46)	24	(07.7)	17	8 10	(50)	20	2	_
SS-4012	NPT & PT 1/2	114	100	_	37	(46)	24	(27.7)	17	12	(48)	18	_	8.16

 $<sup>^{\</sup>ast}\!($  )The measurement in the blanket is approximate.

## **Liquid Filled Type Thermometer**

## Model No. SS-4010 Series



#### **Summary**

The scale interval of this instrument is divided equally. Therefore, it is easy to read the scale when measuring the temperature. As the driving power is strong, the indicator indicates certainly and it is widely used for industrial use because the temperature transmission speed is very

#### Safety Management

- If possible, install a well.
- Do not give impact during transportation, installation and usage,
- Be sure to install the thermometer to be horizontal and vertical,
- Avoid the places where steam and poisonous gas exist a lot,

#### Purpose of Use

- Various boilers
- Dyeing machines
- Petrochemistry plant
- Measurement of inner temperature of a tank
- Ships, etc.
- -LPG, LNG gas line

#### **Production Specification**

- Diameter
  - 150 mm
- Accuracy
  - ±2.0% of Full Scale
- ► Scale Range
  - -30°C  $\sim 650$ °C
- ▶ Common Temperature 75% of Full Scale

- + Case
- · STS 304
- + Cover
  - · STS 304
  - · Slip-on-Fit
- + Connection
  - · STS 304, 316
  - · PF, PT, NPT ↔ 1/2
- + Window
  - · General glass
  - · Tempered safety glass
  - · Laminated safety glass

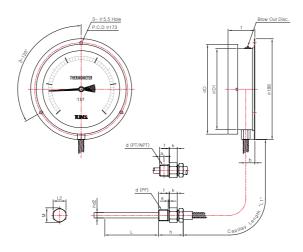
- - · B-Type(Surface type)
  - · BD-Type(Panel attachment type)
- + Dial
  - · Aluminum
  - · Color of white
  - · Black gradation and characters
- + Pointer
  - Aluminum

- + Capillary Tube
  - Standard 2 M (Maximum 10 M)
- + Stem
  - · STS 304, 316
- + Stem O.D Ø 8, Ø 10, Ø 12
- + Well
  - · STS 304, 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining



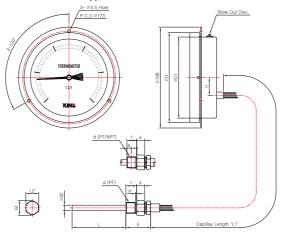
## Model No. | SS-4011 (150mm)

B-Type(Surface type)



## Model No. | SS-4012 (150mm)

BD-Type(Panel attachment type)



<sup>\*</sup> Other details are the same as SS-4010 100mm Series

Model No.	Conn'n (d)	ØD	ØD1	b	n	t	L2	М	k	Ød2	h	f	е	а
SS-4011	PF 1/2	170	156	17	_	(50)	24	(27.7)	17	8 10	(50)	20	2	_
33-4011	NPT & PT 1/2	170	150	17	_	(30)	_ 24	(21.1)	17	12	(48)	18	_	8.16
SS-4012	PF 1/2	170	156	_	33	(50)	24	(27.7)	17	8 10	(50)	20	2	_
33-4012	NPT & PT 1/2	170	136	_	33	(30)	_	(21.1)	17	12	(48)	18	_	8.16

 $<sup>^{\</sup>ast}\!($  )The measurement in the blanket is approximate.

# Liquid Filled Type Thermometer (with Contact)

## Model No. SS-4020 Series



#### **Summary**

The principle and structure of this temperature measurement instrument is the same as the filled thermometer but it produces a contact signal when there is an increase or decrease of temperature by installing the indicator for high and low set—up.

#### Safety Management

- If possible, install a well.
- Do not give impact during transportation, installation and usage.
- Be sure to install the thermometer to be horizontal and vertical.
- Avoid the places where steam and poisonous gas exist a lot,

#### Purpose of Use

- Various temperature control, information system
- Various boilers
- Petrochemistry plant
- Transformer, etc

#### **Production Specification**

- Diameter · 100 mm
- Accuracy
- · ±2,0% of Full Scale
- ► Scale Range · -30°C ~ 650°C
- ➤ Common Temperature
  · 75% of Full Scale

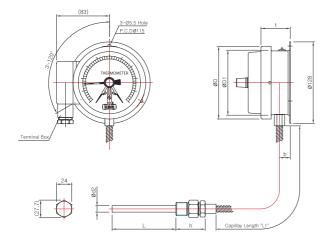
- + Case
- · STS 304
- + Cover
  - · STS 304 · Slip-on-Fit
- + Connection
  - · STS 304, 316
  - · PF, PT, NPT ↔ 1/2
- + Window
  - · Poly Carbonate

- + Type
  - · B-Type(Surface type)
  - · BD-Type(Panel attachment type)
- + Dial
  - · Aluminum
  - · Color of white
  - · Black gradation and characters
- + Pointer
  - · Phosphor bronze
  - · Black coating
- + Capillary Tube
  - · Standard 2 M (Maximum 10 M)

- + Contact rating
- · AC 125V 0.5A / 250V 0.25A
- · DC 24V 0,25A
- + Contact type
  - · High and Low 2 contact (High or Low, High & High High & Low, Low & Low)
- + Well
  - · STS 304, 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining

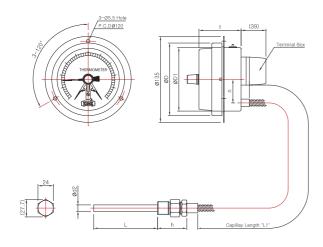
## Model No. | SS-4021 100mm

B-Type(Surface type)



## Model No. | SS-4022 100mm

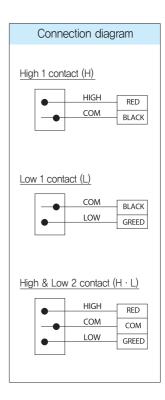
BD-Type(Panel attachment type)



 $^{*}$  Other details are the same as SS-4010 100mm Series

2	•1													
Model No.	Conn'n (d)	ØD	ØD1	b	n	t	L2	М	k	Ød2	h	f	е	а
SS-4021	PF 1/2	114	100	17	_	(56)	24	(27.7)	17	8 10	(50)	20	2	_
33-4021	NPT & PT 1/2	114	100	''	_	(30)	24	(27.7)	17	12	(48)	18	_	8.16
SS-4022	PF 1/2	114	100		37	(56)	24	(27.7)	17	8 10	(50)	20	2	_
33-4022	NPT & PT 1/2	114	100	_	37	(30)	24	(27.7)	17	12	(48)	18	_	8.16

<sup>\*( )</sup>The measurement in the blanket is approximate.



# Liquid Filled Type Thermometer (with Contact)

## Model No. SS-4020 Series



#### SS-4020 150mm

#### **Summary**

The principle and structure of this temperature measurement instrument is the same as the filled thermometer but it produces a contact signal when there is an increase or decrease of temperature by installing the indicator for high and low set—up.

#### Safety Management

- If possible, install a well.
- Do not give impact during transportation, installation and usage.
- Be sure to install the thermometer to be horizontal and vertical.
- Avoid the places where steam and poisonous gas exist a lot,

#### Purpose of Use

- Various temperature control, information system
- Various boilers
- Petrochemistry plant
- Transformer, etc

#### **Production Specification**

- Diameter · 150 mm
- Accuracy
- · ±2.0% of Full Scale
- Scale Range · −30°C ~ 650°C
- ➤ Common Temperature
  · 75% of Full Scale

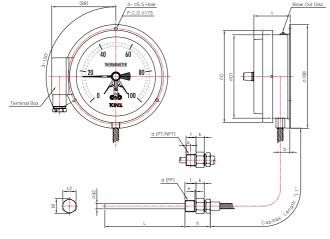
- + Case
- · STS 304
- + Cover
  - · STS 304 · Slip-on-Fit
- + Connection
  - · STS 304, 316 · PF, PT, NPT ↔ 1/2
- + Window
  - · Poly Carbonate

- + Type
- · B-Type(Surface type)
- · BD-Type(Panel attachment type)
- + Dial
  - · Aluminum
  - · Color of white
  - · Black gradation and characters
- + Pointer
  - · Phosphor bronze
  - · Black coating
- + Capillary Tube
- · Standard 2 M (Maximum 10 M)

- + Contact rating
  - · AC 125V 0.5A / 250V 0.25A
  - · DC 24V 0.25A
- + Contact type
  - High and Low 2 contact (High or Low, High & High High & Low, Low & Low)
- + Well
  - · STS 304, 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining

## Model No. | SS-4021 (150mm) B-TYPE(Surface type)

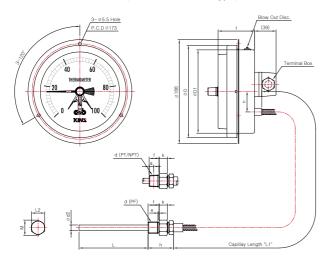




# Connection diagram Termiral Type HIGH 6 COM 6 LOW 4 Connector Type HIGH 2 COM 6 LOW 1 COM 6 COM 6

## Model No. | SS-4022 (150mm)

BD-TYPE(Panel attachment type)



<sup>\*</sup> Other details are the same as SS-4010 100mm Series

Model No.	Conn'n (d)	ØD	ØD1	b	n	t	L2	М	k	Ød2	h	f	е	а
SS-4021	PF 1/2	170	156	17	_	(66)	24	(27.7)	17	8	(50)	20	2	_
33-4021	NPT & PT 1/2	170	150	17	_	(00)	24	(27.7)	17	12	(48)	18	_	8.16
CC 4000	PF1/2	170	156		27	(66)	24	(27.7)	17	8	(50)	20	2	_
SS-4022	NPT & PT 1/2	170	156	_	37	(00)	24	(27.7)	17	12	(48)	18	_	8.16

 $<sup>^{*}\!(</sup>$  )The measurement in the blanket is approximate.

## **Liquid Filled Thermometer Transformer**

## Model No. SS-4023 Series



SS-4023 100mm

#### **Summary**

The principle and structure of this temperature measurement instrument is the same as the filled thermometer but it produces a contact signal when there is an increase or decrease of temperature by installing the set-up indicator for high and low

#### Safety Management

- If possible, install a well.
- Do not give impact during transportation, installation and usage.
- Be sure to install the thermometer to be horizontal and vertical,
- Avoid the places where steam and poisonous gas exist a lot,
- Connect under the rated voltage.

#### Purpose of Use

- Various temperature control, information system
- Various boilers
- Petrochemistry plant
- Transformer, etc

#### **Production Specification**

- Diameter · 100 mm
- Accuracy
- ±2.0% of Full Scale
- ► Scale Range · -30°C ~ 650°C
- ➤ Common Temperature
  · 75% of Full Scale

#### **Product Specification**

#### + Case

· Aluminum(Hammer tone coating)

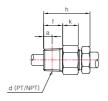
#### + Cover

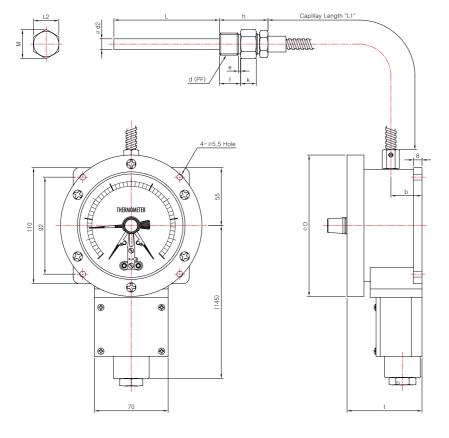
- · Aluminum(Hammer tone coating)
- + Connection
  - · STS 304, 316
  - · PF, PT, NPT ↔ 1/2
- + Window
  - · General glass
  - · Tempered safety glass
  - · Laminated safety glass

- + Type
- · B-Type(Surface type)
- + Dial
  - · Aluminum
  - · Color of white
  - · Black gradation and characters
- + Pointer
  - · Phosphor bronze
  - · Black coating
- + Capillary Tube
- · Standard 2 M (Maximum 10 M)

- + Contact rating
  - · AC 125V 0.5A / 250V 0.25A
  - · DC 24V 0,25A
- + Contact type
  - · High and Low 2 contact (High or Low, High & High High & Low, Low & Low)
- + Well
  - · STS 304, 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining

## Model No. | SS-4023 (100mm) Surface Type





Conne	ection diag	ram
High 1 cont	HIGH COM	RED BLACK
Low 1 cont	com	BLACK GREED
High & Lov	v 2 contact (	H · L)
	HIGH	RED
•		
•	COM LOW	СОМ

Model No.	Con'n (d)	ØD	t	t	L2	М	k	Ød2	h	f	е	а
SS-4023	PF 1/2	11./	27	(56)	24	(27.7)	17	8	(50)	20	2	_
55-4023	NPT & PT 1/2	114	37	(36)	24	(27.7)	17	10 12	(48)	18	_	8.16

<sup>\*( )</sup>The measurement in the blanket is approximate.

 $<sup>^{*}</sup>$  Other details are the same as SS-4010 100mm Series

## **Liquid Filled Thermometer Transformer**

## Model No. SS-4023 Series



SS-4023 150mm

#### **Summary**

This instrument has a micro switch that produces a contact signal when there is an increase or decrease of temperature by controlling the setting temperature,

#### Safety Management

- If possible, install a well.
- Do not give impact during transportation, installation and usage.
- Be sure to install the thermometer to be horizontal and vertical.
- Avoid the places where steam and poisonous gas exist a lot,
- Connect under the rated voltage

#### Purpose of Use

- Various temperature control, information system
- Various boilers
- Petrochemistry plant
- Transformer, etc

#### **Production Specification**

- ▶ Diameter
  - · 150 mm
- Accuracy
  - · ±2.0% of Full Scale
- Scale Range
  - · -30°C ∼ 650°C
- ➤ Common Temperature
  · 75% of Full Scale

#### **Product Specification**

#### + Case

· Aluminum(Hammer tone coating)

#### + Cover

· Aluminum(Hammer tone coating)

#### + Connection

- · STS 304, 316
- · PF, PT, NPT ↔ 1/2

#### + Window

- · General glass
- · Tempered safety glass
- · Laminated safety glass

#### + Type

· B-Type(Surface type)

#### + Dial

- · Aluminum
- · Color of white
- · Black gradation and characters

#### + Pointer

- · Phosphor bronze
- · Black coating

#### + Capillary Tube

· Standard 2 M (Maximum 10 M)

#### + Contact rating

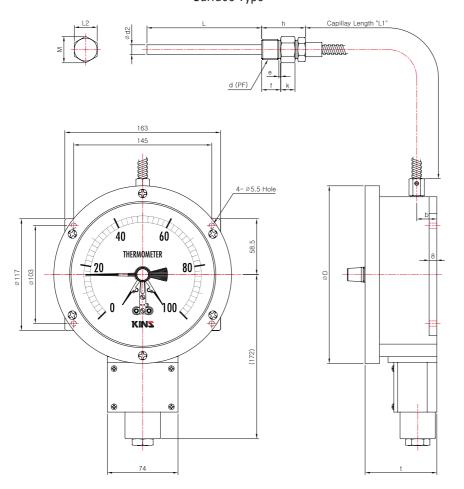
- · AC 125V 0.5A / 250V 0.25A
- · DC 24V 0,25A

#### + Contact type

- · High and Low 2 contact (High or Low, High & High High & Low, Low & Low)
- + Well
  - · STS 304, 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining



## Model No. | SS-4023 (150mm) Surface Type



(	Connec	tion diag	gram
High	1 contac	ct (H) HIGH COM	RED BLACK
Low	1 contac	com LOW	BLACK GREED
High	& Low i	2 contact	( <u>H · L)</u>
	•	HIGH	RED
	•	LOW	СОМ
			GREED

Model No.	Conn'n (d)	ØD	t	t	L2	М	k	Ød2	h	f	е	а
	PF 1/2	100	04	/75\	0.4	(07.7)	17	8	(50)	20	2	_
SS-4023	NPT & PT 1/2	186	21	(75)	24	(27.7)	17	10 12	(48)	18	_	8.16

 $<sup>\</sup>ensuremath{^{*}\!(}$  )The measurement in the blanket is approximate.

<sup>\*</sup> Other details are the same as SS-4010 100mm Series

# Liquid Filled Thermometer (with Micro Contact)

## Model No. SS-4025/6 Series



SS-4025/6

#### **Summary**

This instrument has a micro switch that produces a contact signal when there is an increase or decrease of temperature by controlling the setting temperature.

#### Safety Management

- If possible, install a well.
- Do not give impact during transportation, installation and usage.
- Be sure to install the thermometer to be horizontal and vertical.
- Avoid the places where steam and poisonous gas exist a lot,

#### Purpose of Use

- Various temperature control, information system
- Various boilers
- Petrochemistry plant
- Transformer, etc

#### **Production Specification**

- Diameter
  - · 100, 150 mm
- Accuracy
  - · Grade: ±2,0% of Full Scale · Repeatibility: ±1,0 of Adj Range
  - $\cdot$  Dead Band :  $\pm 4.0\%$
- ▶ Scale Range
  - · -30°C ∼ 650°C
- ▶ Common Temperature
  - · 75% of Full Scale

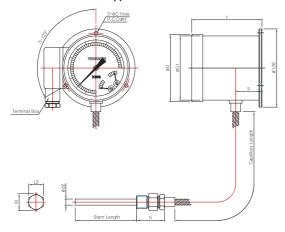
- + Case
- · Aluminum(Hammer tone coating)
- + Cover
  - · Aluminum(Hammer tone coating)
- + Connection
  - · STS 304, 316
  - · PF, PT, NPT ↔ 1/2
- + Window
  - · General glass
  - · Tempered safety glass
  - $\cdot$  Laminated safety glass

- + Type
  - · B-Type(Surface type)
  - · BD-Type(Panel attachment type)
- + Dial
  - · Aluminum
  - · Color of white
  - · Black gradation and characters
- + Pointe
- · Aluminum
- · Black coating
- + Capillary Tube
  - · Standard 2 M (Maximum 10 M)

- + Contact rating
  - · AC 125V 5A / 250V 3A
  - · DC 30V 4A / 125V 0.4A / 250V 0.2A
- + Contact type
  - · High and Low 2 contact (High or Low, High & High High & Low, Low & Low)
- + \//حا
  - · STS 304, 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining

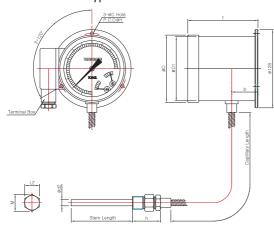
## Model No. | SS-4025

B-Type(Surface type)



## Model No. | SS-4026

BD-Type(Panel attachment type)



<sup>\*</sup> Other details are the same as SS-4010 100mm Series

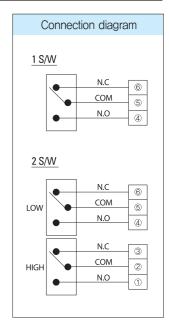
#### Dimensions (mm)

	Model No.	Conn'n (d)	ØD	ØD1	b	n	t	L2	М	k	Ød2	h	f	е	а
	SS-4025	PF 1/2	110	105	43	_	(115)	24	(27.7)	17	8	(50)	20	2	_
100mm	00 4020	NPT & PT 1/2	110	103	40		(113)	24	(21.1)	17	12	(48)	18	_	8.16
10011111	SS-4026	PF 1/2	110	105	_	33	(115)	24	(27,7)	17	8 10	(50)	20	2	_
	33-4020	NPT & PT 1/2	110	103	_	33	(113)	24	(21.1)	17	12	(48)	18	_	8.16
	SS-4025	PF 1/2	170	156	43	_	(115)	24	(27.7)	17	8 10	(50)	20	2	_
150mm	33-4023	NPT & PT 1/2	170	130	43		(113)	_ 24	(21.1)	17	12	(48)	18	_	8.16
10011111	CC 4026	PF 1/2	170	156		33	(115)	24	(27.7)	17	8 10	(50)	20	2	_
	SS-4026	NPT & PT 1/2	170	156	_	33	(115)	24	(27.7)	17	12	(48)	18	_	8.16

 $<sup>^{*}\!(</sup>$  )The measurement in the blanket is approximate.

## Standard production temperature and minimal length in the part of detecting temperature

	KINZ	S	Stem Dia (mm	۱)
	1/11/2	Ø8	Ø10	Ø12
	−20 ~ 80	50	60	50
<u>e</u>	−20 ~ 100	50	60	50
Temperature	0 ~ 50	83	60	50
npe	0 ~ 80	50	60	50
<u>F</u>	0 ~ 100	50	60	50
ing.	0 ~ 120	50	60	50
Standard Manufacturing	0 ~ 150	50	60	50
Jufa	0 ~ 200	50	60	50
Mar	0 ~ 250	50	60	50
g	0 ~ 300	50	60	50
ndg	0 ~ 350	75	53	50
	0 ~ 400	70	53	48
(℃)	0 ~ 500	62	48	44
	0 ~ 650	55	45	42



## Liqid Filled Type Thermometer (Direct)

## Model No. SS-4030 Series





SS-4032

#### **Summary**

The scale interval of this instrument is divided equally. Therefore, it is easy to read the scale when measuring the temperature. As the driving power is strong, the indicator indicates certainly and depending on the special condition of the installation place, it can be ordered in various form of bend and can be made by many other ordering ways.

#### Safety Management

- If possible, install a well.
- Do not give impact during transportation, installation and usage,
- Be sure to install the thermometer to be horizontal and vertical,
- Avoid the places where steam and poisonous gas exist a lot,

#### Purpose of Use

- Various boilers
- dyeing machines
- Petrochemistry plant
- Measuring the inner part temperature of a tank
- Ships
- LPG, LNG gas lines

#### **Production Specification**

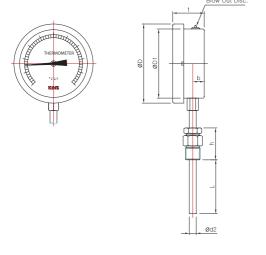
- Diameter
  - · 100, 150 mm
- Accuracy
  - Grade: ±2.0% of Full Scale
- ► Scale Range
  - · -30°C ~ 650°C
- Common Temperature
  - · 75% of Full Scale
- ▶ Degree Of Protecrtion

- + Case
  - · STS 304
- + Cover
  - · STS 304 · Slip-on-Fit
- + Connection
  - · STS 304, 316
  - · PF, PT, NPT ↔ 1/2

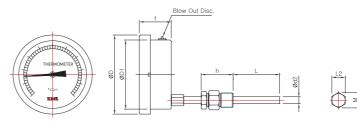
- + Window
  - · General glass
  - · Tempered safety glass
  - · Laminated safety glass
- + Type
  - · I Type
  - · T Type
- + Dial
  - · Aluminum
  - · Color of white
  - · Black gradation and characters

- + Pointer
- · Aluminum
- · Black coating
- + Stem
  - · STS 304, STS 316
  - $\cdot$  Type : Union Type Standard type
- + Well
  - · STS 304, STS 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining

Model No. | SS-4031



## Model No. | SS-4032 T-Type



	Model No.	Conn'n (d)	ØD	ØD1	b	n	t	L2	М	k	Ød2	h	f	е	а
	SS-4031	PF 1/2	114	100	17	_	(46)	24	(27.7)	17	8 10	(50)	20	2	_
100mm	33 4031	NPT & PT 1/2	114	100	17		(40)	24	(21.1)	17	12	(48)	18	-	8.16
100111111	SS-4032	PF 1/2	114	100	_	37	(46)	24	(27.7)	17	8 10	(50)	20	2	_
	33-4032	NPT & PT 1/2	114	100		31	(40)	24	(21.1)	17	12	(48)	18	-	8.16
	SS-4031	PF 1/2	170	156	17	_	(50)	24	(27.7)	17	8 10	(50)	20	2	_
150mm	33-4031	NPT & PT 1/2	170	130	17	_	(50)	24	(21.1)	17	12	(48)	18	-	8.16
13011111	SS-4032	PF 1/2	170	156		37	(50)	24	(27.7)	17	8 10	(50)	20	2	_
	33-4032	NPT & PT 1/2	170	130	_	31	(50)	24	(21.1)	17	12	(48)	18	_	8.16

 $<sup>\</sup>ensuremath{^{*\!}}\xspace($  )The measurement in the blanket is approximate.

## **Recording Thermometer**

## Model No. SS-4041 Series



SS-4041 250mm

#### **Summary**

This instrument is designed to record change of pressure with a pen on a record paper by a recording device according to the flow of the time

#### Safety Management

- If possible, install a well,
- Do not give impact during transportation, installation and usage,
- Be sure to install the thermometer to be horizontal and vertical,
- Avoid the places where steam and poisonous gas exist a lot.

#### Purpose of Use

- Various boilers
- Checking, observing, recording, etc. for various usage

#### **Production Specification**

- Diameter
  - · 250 mm
- Accuracy
  - · Grade: ±2.0% of Full Scale
- ▶ Scale Range
  - · -30°C ~ 650°C
- ➤ Common Temperature
  · 75% of Full Scale

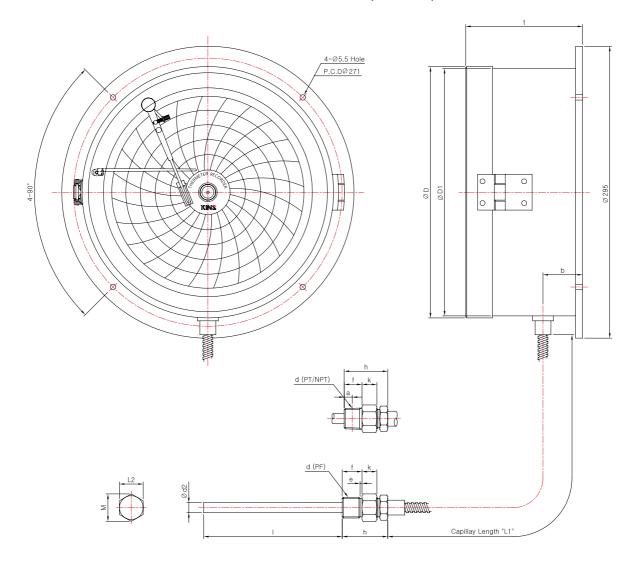
- + Case
- · Aluminum(Black coating)
- + Cover
  - · Aluminum(Black coating)
- + Connection
  - · STS 304, 316
  - · PF, PT, NPT ↔ 1/2
- + Window
  - · General glass
  - · Tempered safety glass

- + Type
  - · Surface Type
- + Chart Paper
- · 30Papers
- + Recorder Pen
  - · Aluminum
  - 1 pen (Temperature)2 pen (Temperature & Pressure)
- + Revolution Time
  - $\cdot$  Controlling type  $\sim$  30 min (Battery type) 1, 3, 4, 12, 24 hr 2, 4, 7, 8, 16 Day

- + Capillary Tube
  - Standard 2 M (Maximum 10 M)
    (Minimum strength for the part of detecting temperature is two times of the general part)
- + Element
  - · STS 304, STS 316
- + Well
  - · STS 304, STS 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining



## Model No. | SS-4041 (250mm)



\*\* The formation of detecting temperature, the standard manufacturing temperature and the minimum strength of the detecting temperature part is the same as SS-4010 and the contact type is the same as SS-4025

Model No.	Conn'n (d)	ØD	ØD1	b	t	L2	М	k	Ød2	h	f	е	а
SS-4041 -	PF 1/2	254	250	40	(118)	24	(27.7)	17	8 10	(50)	20	2	_
33-4041	NPT & PT 1/2	204	250	40	(110)	24	(21.1)	17	12	(48)	18	_	8.16

<sup>\*( )</sup>The measurement in the blanket is approximate.

## **Temperature Switch**

## Model No. SS-4050 Series



SS-4050 Series

#### **Summary**

This instrument has a micro switch that produces a contact signal when there is an increase or decrease of temperature by controlling the setting temperature,

#### Safety Management

- Be sure to install a protecting device where exist abrupt change of pressure, vibration and pulsation.
- Do not give impact during transportation, installation and usage,
- Be sure to install the thermometer to be horizontal and vertical.
- Avoid the places where steam and poisonous gas exist a lot,
- Connect under the rated voltage

#### Purpose of Use

- Various temperature control, information system
- Various boilers
- Petrochemistry plant
- Transformer, etc.

#### **Production Specification**

- Diameter (1P)
  - $\cdot$  170mm x 135mm x 61mm (W x H x D)
- Accuracy
  - · ±2.0% of Full Scale
- ▶ Scale Range
- . −30°C ~ 650°C
- ➤ Common Temperature
  · 75% of Full Scale

#### **Product Specification**

- + Case
- · Aluminum(Hammer tone coating)
- + Case Structure
  - · Weather Proof
- + Cover
  - · Aluminum(Hammer tone coating)
- + Connection
  - · STS 304, 316
  - · PF, PT, NPT ↔ 1/2
- + Type
  - · Surface Type

- + Dial
  - · Aluminum
  - · Color of white
  - · Black gradation and characters
- + Pointer
  - · Aluminum
  - · Black coating
- + Capillary Tube
  - · Standard 2 M (Maximum 10 M)
- + Contact rating
  - · AC 125V 5A / 250V 3A
  - · DC 30V 4A / 125V 0.4A / 250V 0.2A

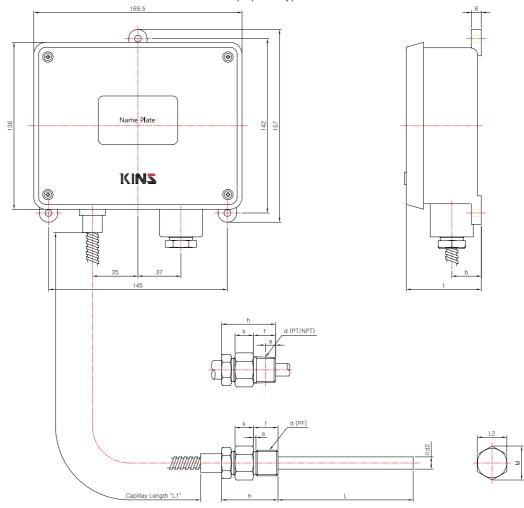
#### + Contact type

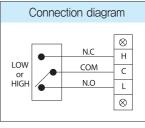
- · Micro Contact Type
- · High and Low 2 contact (high or Low, High & High High & Low, Low & Low)
- + Well
  - · STS 304, STS 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining



## Model No. | SS-4050







\*\* The formation of detecting temperature, the standard manufacturing temperature and the minimum strength of the detecting temperature part is the same as SS-4010 and the contact type is the same as SS-4025

•	•										
Model No.	Conn'n (d)	b	t	L2	М	k	Ød2	h	f	е	а
SS-4050 -	PF 1/2	24	1P (61)	24	(27.7)	17	8 10	(50)	20	2	_
33-4030	NPT & PT 1/2	24	2P (110)		(21.1)	17	12	(48)	18	_	8.16

<sup>\*( )</sup>The measurement in the blanket is approximate.

## **Bimetal Thermometer**

## Model No. SS-4061



SS-4061

#### **Summary**

This instrument is joined by two different metal plates which have a different coefficient of expansion. The structure is simple and it is easy to use. Therefore, it is easy to read the scale when measuring and as the price of it is inexpensive, it can be used widely.

#### Safety Management

- Install a thermowell when there exist high voltage, slurry or when measuring the temperature of fluid with high corrosiveness.
- Do not give impact during transportation, installation and usage.
- Be sure to install the thermometer to be horizontal and vertical,
- Avoid the place where exist a lot of vibration.

#### Purpose of Use

- The measurement of temperature in various boilers, pipes, etc
- The measurement of temperature in petrochemistry, ships and various plants,
- Measurement of lines for sanitation such as food processor, etc.

#### **Production Specification**

- Diameter
  - · 75mm
- Accuracy
  - · ±2,0% of Full Scale
- ▶ Scale Range
  - -30°C  $\sim 650$ °C
- ▶ Common Temperature 75% of Full Scale

- · STS 304
- + Cover
  - · STS 304 · Slip-on-Fit
- + Connection
  - · STS 304
  - · PF, PT, NPT ↔ 1/2, 1/4, 3/8
- + Window
  - · General glass
  - · Tempered safety glass
  - · Laminated safety glass

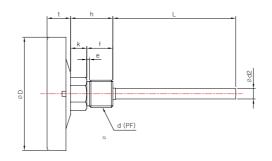
- + Type
  - · T-Type
- + Dial
  - · Aluminum
  - · Color of white
  - · Black gradation and characters
- + Pointer
- · Aluminum
- · Black coating
- + Stem
- · STS 304, 316

- + Stem O.D
- · Ø 6.4, Ø 8, Ø 10, Ø 12
- + Well
  - · STS 304, 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining

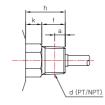


## Model No. | SS-4061 (75mm) T-Type (Direct Type)









#### Form of the part of detecting temperature

en	Temperature	Length (mm)	Temperature	Length (mm)
nperat	−20 ~ 80	50	0 ~ 200	40
Sandard manufacturing temperature	−20 ~ 100	50	0 ~ 250	35
ilacturi	0 ~ 50	75	0 ~ 300	75
mau	0 ~ 80	50	0 ~ 350	65
andarc	0 ~ 100	50	0 ~ 400	60
(℃)	0 ~ 120	50	0 ~ 500	60
(0)	0 ~ 150	45	0 ~ 650	60

Model No.	Conn'n (d)	ØD	t	L2	М	k	Ød2	h	f	е	а
	PF 1/4			17	(19.6)	8	6.4	(24)	16	2	
	NPT & PT 1/4			17	(19.0)	0	8	(22)	14	ı	6.01
SS-4061 -	PF 3/8	- 87	(18)	19	(21.9)	10	6.4 8	(28)	18	2	_
	NPT & PT 3/8					10	10	(26)	16	_	6.35
	PF 1/2					12	6.4 8	(32)	20	2	_
	NPT & PT 1/2			22	(25.4)	12	10 12	(30)	18	_	8.16
	PF 3/4			27	(31.1)	14	6.4 8	(36)	22	2	_
	NPT & PT 3/4			21		14	10 12	(34)	20	_	9.53

<sup>\*( )</sup>The measurement in the blanket is approximate.

## **Bimetal Thermometer**

## Model No. SS-4062



SS-4062

#### **Summary**

This instrument is joined by two different metal plates which have a different coefficient of expansion. The structure is simple and it is easy to use. Therefore, it is easy to read the scale when measuring and as the price of it is inexpensive, it can be used widely.

#### Safety Management

- Install a thermowell when there exist high voltage, slurry or when measuring the temperature of fluid with high corrosiveness.
- Do not give impact during transportation, installation and usage.
- Be sure to install the thermometer to be horizontal and vertical,
- Avoid the place where exist a lot of vibration.

#### Purpose of Use

- -The measurement of temperature in various boilers, pipes, etc
- -The measurement of temperature in petrochemistry, ships and various plants.
- -Measurement of lines for sanitation such as food processor, etc.

#### **Production Specification**

- Diameter
  - · 100mm
- Accuracy · ±2,0% of Full Scale
- ▶ Scale Range -30℃ ~ 600℃
- ▶ Common Temperature 75% of Full Scale

#### **Product Specification**

- + Case
- · STS 304
- + Cover
  - · STS 304 · Slip-on-Fit
- + Connection
  - · STS 304 · PF, PT, NPT ↔ 1/2, 1/4, 3/8, 1
- + Window
  - · General glass
  - · Tempered safety glass
  - · Laminated safety glass

- + Type
  - · T-Type
- + Dial
  - · Aluminum · Color of white

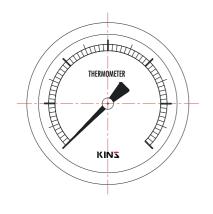
  - · Black gradation and characters
- + Pointer
  - · Aluminum
  - · Black coating
- - · STS 304, STS 316

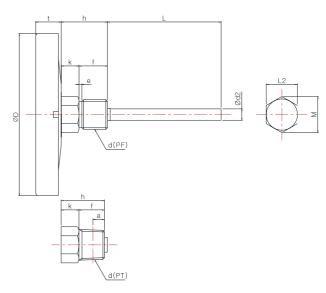
#### + Stem O.D

- · Ø 6.4, Ø 8, Ø 10, Ø 12
- + Well
  - · STS 304, STS 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining

# Model No. | SS-4062 (100mm)

T-Type (Direct Type)





\* Standard manufacturing temperature and the minimum strength of the detecting temperature part is the same as SS-4061 Series

Model No.	Conn'n (d)	ØD	t	L2	М	k	Ød2	h	f	е	а
	PF 1/4			17	(19.6)	8	6.4	(24)	16	2	_
	NPT & PT 1/4			17	(19.0)	0	8	(22)	14	_	6.01
	PF 3/8			19	(21.9)	10	6.4 8	(28)	18	2	_
SS-4062	NPT & PT 3/8	114		19	(21.9)	10	10	(26)	16	_	6.35
	PF 1/2		(10)	22	22 (25.4)	10	6.4 8	(32)	20	2	_
	NPT & PT 1/2		(18)			12	10 12	(30)	18	_	8.16
	PF 3/4			07		1.4	6.4 8	(36)	22	2	_
	NPT & PT 3/4			27	(31.1)	14	10 12	(34)	20	_	9.53
	PF 1			00	(41.5)	16	6.4 8	(40)	24	2	_
	NPT & PT 1			36	(41.3)	16	10 12	(38)	22	_	10.39

<sup>\*( )</sup>The measurement in the blanket is approximate.

## Model No. SS-4063



#### **Summary**

This instrument is joined by two different metal plates which have different coefficient of expansion. The structure is simple and it is easy to use. Therefore, it is easy to read the scale when measuring and as the price of it is inexpensive, it can be used widely.

#### Safety Management

- Install a thermo well when there exist high voltage, slurry or when measuring the temperature of fluid with high corrosiveness.
- Do not give impact during transportation, installation and usage,
- Be sure to install the thermometer to be horizontal and vertical,
- Avoid the place where exist a lot of vibration.

#### Purpose of Use

- The measurement of temperature in various boilers, pipes, etc
- The measurement of temperature in petrochemistry, ships and various plants.
- Measurement of lines for sanitation such as food processor, etc.

#### **Production Specification**

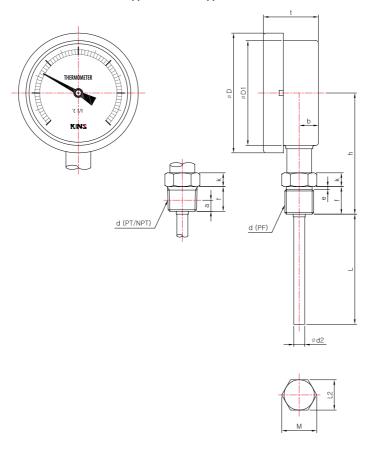
- Diameter
  - · 75mm
- Accuracy
  - · ±2.0% of Full Scale
- Scale Range
  - . −30°C ~ 600°C
- ➤ Common Temperature
  · 75% of Full Scale

- + Case
- · STS 304
- + Cover
  - · STS 304 · Slip-on-Fit
- + Connection
  - · STS 304 · PF, PT, NPT ↔ 1/2, 1/4, 3/8
- + Window
  - · General glass
  - $\cdot$  Tempered safety glass
  - · Laminated safety glass

- + Type
  - · L-Type
- + Dial
  - · Aluminum
  - · Color of white
  - · Black gradation and characters
- + Pointer
- · Aluminum
- · Black coating
- + Stem
  - · STS 304, STS 316

- + Stem O.D
- Ø 6.4, Ø 8, Ø 10, Ø 12
- + Well
  - · STS 304, STS 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining

## Model No. | SS-4063 (75mm) L-Type (Direct Type)



\* Standard manufacturing temperature and the minimum strength of the detecting temperature part is the same as SS-4061 Series

Model No.	Conn'n (d)	ØD	ØD1	b	t	L2	М	k	Ød2	h	f	е	а
	PF 1/4					17	(10.6)	0	6.4	(24)	16	2	_
	NPT & PT 1/4					17	(19.6)	8	8	(22)	14	_	6.01
SS-4063	PF 3/8	- 87				10	(21.0)	10	6.4 8	(28)	18	2	_
	NPT & PT 3/8		77	14	(40)	(40)	10	(26)	16	_	6.35		
	PF 1/2		''	14	(40)	22	(25.4)	12	6.4 8	(32)	20	2	
	NPT & PT 1/2					22	(23.4)	12	10 12	(30)	18	_	8.16
	PF 3/4					27	(31.1)	14	6.4 8	(36)	22	2	_
	NPT & PT 3/4					21	(31.1)	14	10 12	(34)	20	_	9.53

<sup>\*( )</sup>The measurement in the blanket is approximate.

Model No. SS-4064



#### **Summary**

This instrument is joined by two different metal plates which have different coefficient of expansion. The structure is simple and it is easy to use. Therefore, it is easy to read the scale when measuring and as the price of it is inexpensive, it can be used widely.

#### Safety Management

- Install a thermo well when there exist high voltage, slurry or when measuring the temperature of fluid with high corrosiveness.
- Do not give impact during transportation, installation and usage.
- Be sure to install the thermometer to be horizontal and vertical,
- Avoid the place where exist a lot of vibration.

#### Purpose of Use

- The measurement of temperature in various boilers, pipes, etc
- The measurement of temperature in petrochemistry, ships and various plants.
- Measurement of lines for sanitation such as food processor, etc.

#### **Production Specification**

- Diameter · 100mm
- Accuracy
- · ±2,0% of Full Scale
- ▶ Scale Range -30℃ ~ 600℃
- ▶ Common Temperature 75% of Full Scale

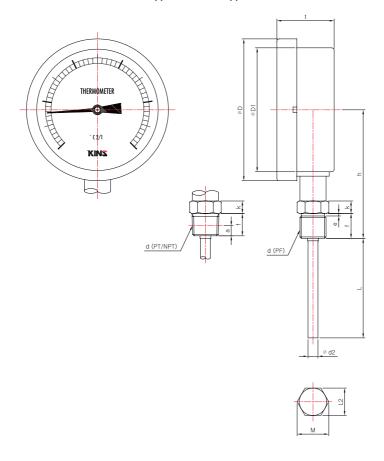
- + Case
- · STS 304
- + Cover
  - · STS 304 · Slip-on-Fit
- + Connection
  - · STS 304
  - · PF, PT, NPT ↔ 1/2, 1/4, 3/8, 1
- + Window
  - · General glass
  - · Tempered safety glass

- + Type
  - · L-Type
- + Dial
  - · Aluminum · Color of white
  - · Black gradation and characters
- + Pointer
  - · Aluminum
  - · Black coating

- + Stem O.D
- · Ø 6.4, Ø 8, Ø 10, Ø 12
- + Well
  - · STS 304, STS 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining



## Model No. | SS-4064 (100mm) L-Type (Direct Type)



\*\* Standard manufacturing temperature and the minimum strength of the detecting temperature part is the same as SS-4061 Series

Model No.	Conn'n (d)	ØD	ØD1	b	t	L2	М	k	Ød2	h	f	е	а
	PF 1/4					17	(19.6)	8	6.4	(24)	16	2	_
	NPT & PT 1/4					17	(19.6)	8	8	(22)	14	_	6.01
	PF 3/8					19	(21.9)	10	6.4 8	(28)	18	2	_
SS-4064	NPT & PT 3/8	- 114				19	(21.9)	10	10	(26)	16	ı	6.35
	PF 1/2		100	17	(40)	22	(25.4)	12	6.4 8	(32)	20	2	_
	NPT & PT 1/2		100	17	(40)	22	(23.4)	12	10 12	(30)	18	_	8.16
	PF 3/4					27	(31,1)	14	6.4 8	(36)	22	2	_
	NPT & PT 3/4					21	(31.1)	14	10 12	(34)	20	_	9.53
	PF 1					26	(41 5)	16	6.4 8	(40)	24	2	_
	NPT & PT 1					36	(41.5)	16	10 12	(38)	22	_	10.39

 $<sup>^{*}\!(</sup>$  )The measurement in the blanket is approximate.

## **Bimetal Thermometer**

## Model No. SS-4065



#### SS-4065

#### **Summary**

This instrument is joined by two different metal plates which have different coefficient of expansion. The structure is simple and it is easy to use. Therefore, it is easy to read the scale when measuring and as the price of it is inexpensive, it can be used widely.

#### Safety Management

- Install a thermo well when there exist high voltage, slurry or when measuring the temperature of fluid with high corrosiveness.
- Do not give impact during transportation, installation and usage.
- Be sure to install the thermometer to be horizontal and vertical,
- Avoid the place where exist a lot of vibration.

#### Purpose of Use

- The measurement of temperature in various boilers, pipes, etc
- The measurement of temperature in petrochemistry, ships and various plants,
- Measurement of lines for sanitation such as food processor, etc.

#### **Production Specification**

- Diameter
  - · 125mm
- Accuracy
  - · ±2,0% of Full Scale
- ▶ Scale Range -30℃ ~ 600℃
- ▶ Common Temperature 75% of Full Scale

#### **Product Specification**

- · STS 304
- + Cover
  - · STS 304 · Slip-on-Fit
- + Connection
  - · STS 304
  - · PF, PT, NPT ↔ 1/2, 1/4, 3/8, 1
- + Window
  - · General glass
  - · Laminated safety glass

- + Type
  - · L-Type
- + Dial
  - · Aluminum · Color of white
  - · Black gradation and characters
- + Pointer
  - · Aluminum
  - · Black coating

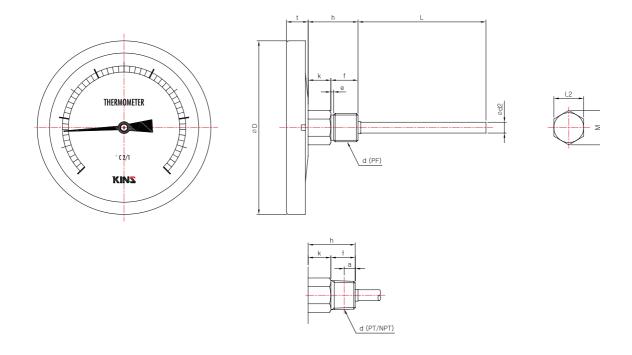
- + Stem O.D
- · Ø 6.4, Ø 8, Ø 10, Ø 12
- + Well
  - · STS 304, STS 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining

- · Tempered safety glass

· STS 304, STS 316

## Model No. | SS-4065 (125mm)

T-Type (Direct Type)



\* Standard manufacturing temperature and the minimum strength of the detecting temperature part is the same as SS-4061 Series

Model No.	Conn'n (d)	ØD	t	L2	М	k	Ød2	h	f	е	а
	PF 1/4			17	(10.6)	10	6.4	(34)	16	2	_
	NPT & PT 1/4			17	(19.6)	18	8	(32)	14	_	6.01
	PF 3/8			10	(21.9)	20	6.4 8	(38)	18	2	_
SS-4065	NPT & PT 3/8	128		19	(21.9)	20	10	(36)	16	I	6.35
	PF 1/2		(16)	22	(25.4)	22	6.4 8	(42)	20	2	_
	NPT & PT 3/8		(16)				10 12	(40)	18	_	8.16
	PF 3/4			27	(31.1)	24	6.4 8	(46)	22	2	_
	NPT & PT 3/8			21	(31.1)		10 12	(44)	20	_	9.53
	PF 1			26	(44.5)	26	6.4 8	(50)	24	2	_
	NPT & PT 1			36	(41.5)	26	10 12	(48)	22	_	10.39

 $<sup>^{\</sup>ast}\!($  )The measurement in the blanket is approximate.

## **Bimetal Thermometer**

## Model No. SS-4066



#### SS-4066

#### **Summary**

This instrument is joined by two different metal plates which have different coefficient of expansion. The structure is simple and it is easy to use. Therefore, it is easy to read the scale when measuring and as the price of it is inexpensive, it can be used widely.

#### Safety Management

- Install a thermo well when there exist high voltage, slurry or when measuring the temperature of fluid with high corrosiveness.
- Do not give impact during transportation, installation and usage.
- Be sure to install the thermometer to be horizontal and vertical,
- Avoid the place where exist a lot of vibration.

#### Purpose of Use

- The measurement of temperature in various boilers, pipes, etc
- The measurement of temperature in petrochemistry, ships and various plants,
- Measurement of lines for sanitation such as food processor, etc.

#### **Production Specification**

- Diameter
  - · 150mm
- Accuracy · ±2,0% of Full Scale
- ▶ Scale Range -30℃ ~ 600℃
- ▶ Common Temperature 75% of Full Scale

#### **Product Specification**

- · STS 304
- + Cover
  - · STS 304 · Slip-on-Fit
- + Connection
  - · STS 304
  - · PF, PT, NPT ↔ 1/2, 1/4, 3/8, 1
- + Window
  - · General glass
  - · Tempered safety glass
  - · Laminated safety glass

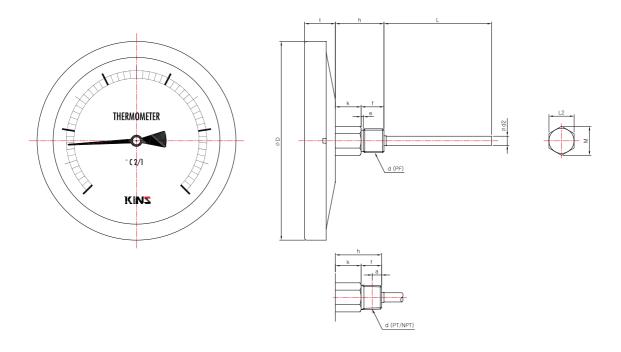
- + Type
  - · T-Type
- + Dial
  - · Aluminum · Color of white

  - · Black gradation and characters
- + Pointer
  - · Aluminum
  - · Black coating
- - · STS 304, STS 316

#### + Stem O.D

- · Ø 6.4, Ø 8, Ø 10, Ø 12
- + Well
  - · STS 304, STS 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining

## Model No. | SS-4066 (150mm) T-Type (Direct Type)



\* Standard manufacturing temperature and the minimum strength of the detecting temperature part is the same as SS-4061 Series

Model No.	Conn'n (d)	ØD	t	L2	М	k	Ød2	h	f	е	а
	PF 1/4			17	(19.6)	18	6.4	(34)	16	2	
	NPT & PT 1/4			17	(19.0)	10	8	(32)	14	ı	6.01
	PF 3/8			19	(21.9)	20	6.4 8	(38)	18	2	_
SS-4066	NPT & PT 3/8	174		19	(21.9)	20	10	(36)	16	ı	6.35
	PF 1/2		(27)	22	22 (25.4)	22	6.4 8	(42)	20	2	_
	NPT & PT 3/8		(27)				10 12	(40)	18	_	8.16
	PF 3/4			27		24	6.4 8	(46)	22	2	_
	NPT & PT 3/4			27	(31.1)	24	10 12	(44)	20	_	9.53
	PF 1			00	(41.5)	26	6.4 8	(50)	24	2	_
	NPT & PT 1			36	(41,3)	20	10 12	(48)	22	_	10.39

 $<sup>^{\</sup>ast}\!($  )The measurement in the blanket is approximate.

Model No. SS-4067



#### **Summary**

This instrument is joined by two different metal plates which have different coefficient of expansion. The structure is simple and it is easy to use. Therefore, it is easy to read the scale when measuring and as the price of it is inexpensive, it can be used widely.

#### Safety Management

- Install a thermo well when there exist high voltage, slurry or when measuring the temperature of fluid with high corrosiveness,
- Do not give impact during transportation, installation and usage,
- Be sure to install the thermometer to be horizontal and vertical.
- Avoid the place where exist a lot of vibration.

#### Purpose of Use

- The measurement of temperature in various boilers, pipes, etc
- The measurement of temperature in petrochemistry, ships and various plants.
- Measurement of lines for sanitation such as food processor, etc.

#### **Production Specification**

- Diameter
  · 125mm
- . 12011111
- ► Accuracy • ±2.0% of Full Scale
- Scale Range · −30°C ~ 600°C
- ➤ Common Temperature
  · 75% of Full Scale

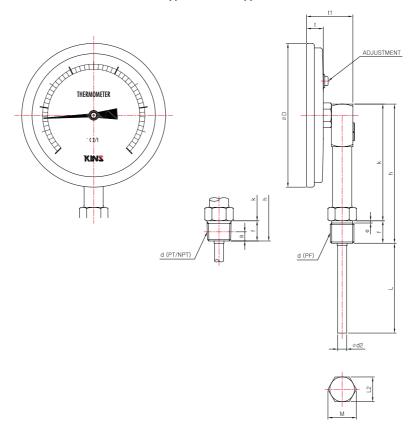
- + Case
- · STS 304
- + Cover
  · STS 304
  - · Slip-on-Fit
- + Connection
  - · STS 304
  - · PF, PT, NPT ↔ 1/2, 1/4, 3/8, 1
- + Window
  - · General glass
  - $\cdot$  Tempered safety glass
  - · Laminated safety glass

- + Type
  - · L-Type
- + Dial
  - · Aluminum
  - · Color of white
  - · Black gradation and characters
- + Pointer
  - · Aluminum
  - · Black coating
- + Stem
- · STS 304, STS 316

- + Stem O.D
- · Ø 6.4, Ø 8, Ø 10, Ø 12
- + Well
  - · STS 304, STS 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining



## Model No. | SS-4067 (125mm) T-Type (Direct Type)



\* Standard manufacturing temperature and the minimum strength of the detecting temperature part is the same as SS-4061 Series

Model No.	Conn'n (d)	ØD	t	t1	L2	М	k	Ød2	h	f	е	а
	PF 1/4				17	(19.6)	78	6.4	(94)	16	2	_
	NPT & PT 1/4				17	(19.0)	10	8	(92)	14	_	6.01
	PF 3/8				19	(21.9)	80	6.4 8	(98)	18	2	_
SS-4067	NPT & PT 3/8	128			19	(21.9)	00	10	(96)	16	_	6.35
	PF 1/2		(10)	(41)	22	(25.4)	92	6.4 8	(102)	20	2	_
	NPT & PT 3/8		(18) (41)	(41)		(23.4)	92	10 12	(100)	18	_	8.16
	PF 3/4					(31.1)	84	6.4 8	(106)	22	2	_
	NPT & PT 3/4				21	(31.1)	04	10 12	(104)	20	_	9.53
	PF 1			-	36	(41.5)	286	6.4 8	(100)	24	2	_
	NPT & PT 1					(41.5)	200	10 12	(108)	22	_	10.39

 $<sup>^{*}\!(</sup>$  )The measurement in the blanket is approximate.

## Model No. SS-4068



SS-4068

#### **Summary**

This instrument is joined by two different metal plates which have different coefficient of expansion. The structure is simple and it is easy to use. Therefore, it is easy to read the scale when measuring and as the price of it is inexpensive, it can be used widely.

#### Safety Management

- Install a thermo well when there exist high voltage, slurry or when measuring the temperature of fluid with high corrosiveness.
- Do not give impact during transportation, installation and usage,
- Be sure to install the thermometer to be horizontal and vertical,
- Avoid the place where exist a lot of vibration.

#### Purpose of Use

- The measurement of temperature in various boilers, pipes, etc
- Petrochemistry, ships, temperature measurement of various plants,
- Measurement of lines for sanitation such as food processor, etc.

#### **Production Specification**

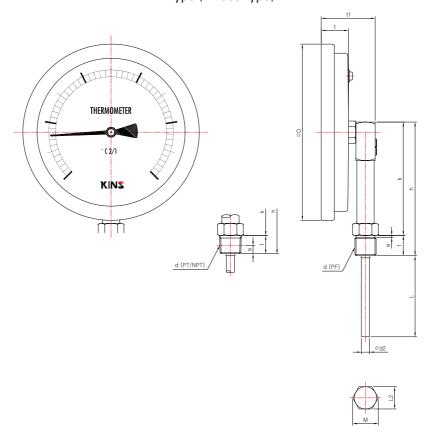
- ▶ Diameter
  - · 150mm
- ➤ Accuracy · ±2,0% of Full Scale
- ► Scale Range · -30°C ~ 600°C
- ➤ Common Temperature
  · 75% of Full Scale

- + Case
- · STS 304
- + Cover
  - · STS 304 · Slip-on-Fit
- + Connection
  - · STS 304
  - · PF, PT, NPT ↔ 1/2, 1/4, 3/8, 1
- + Window
  - · General glass
  - $\cdot$  Tempered safety glass
  - · Laminated safety glass

- + Type
  - · L-Type
- + Dial
  - · Aluminum
  - · Color of white
  - · Black gradation and characters
- + Pointer
- · Aluminum
- · Black coating
- + Stem
  - · STS 304, STS 316

- + Stem O.D
- · Ø 6.4, Ø 8, Ø 10, Ø 12
- + Well
  - · STS 304, STS 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining

## Model No. | SS-4068 (150mm) L-Type (Direct Type)



\*\* Standard manufacturing temperature and the minimum strength of the detecting temperature part is the same as SS-4061 Series

Model No.	Conn'n (d)	ØD	t	t1	L2	М	k	Ød2	h	f	е	а
	PF 1/4				17	(10.6)	100	6.4	(124)	16	2	_
	NPT & PT 1/4				17	(19.6)	108	8	(122)	14	_	6.01
	PF 3/8				19	(21,9)	110	6.4 8	(128)	18	2	_
SS-4068	NPT & PT 3/8	174			19	(21.9)	110	10	(126)	16	-	6.35
	PF 1/2		(27)	(53.2)	22	(25.4)	112	6.4 8	(132)	20	2	_
	NPT & PT 3/8		(27)	(33,2)	22	(23,4)	112	6.4 8 10 12	(130)	18	_	8.16
	PF 3/4				27	(31.1)	114	6.4 8 10 12	(136)	22	2	-
	NPT & PT 3/4				21	(31.1)	114	10 12	(134)	20	_	9.53
	PF 1				36	(A1 E)	116	6.4 8	(130)	24	2	_
	NPT & PT 1					(41.5)	116	10 12	(138)	22	_	10.39

<sup>\*( )</sup>The measurement in the blanket is approximate.

## Angle Type Special Thermometer

## Model No. SS-4071~3 Series



#### **Summary**

This instrument is designed to adjust the measuring angle as you want to . Therefore, you can change the location as your own discretion and measure it.

#### Safety Management

- Do not give impact during transportation, installation, and usage.
- Be sure to install a protecting device where exist vibration.
- Avoid places where exist a lot of steam and poisonous gas,

#### Purpose of Use

- A place where decoding direction of indication requires changes by own discretion.
- Various boilers
- Petrochemistry plant, food processing, etc

#### **Production Specification**

- Diameter
  - · 100mm, 125mm, 150mm
- Accuracy
  - · ±1.0% of Full Scale
  - · ±2.0% of Full Scale
- ▶ Scale Range
- - · 75% of Full Scale

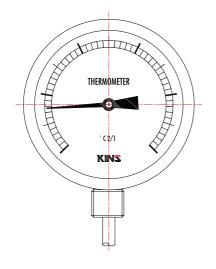
- + Case
  - · STS 304
- + Cover
  - · STS 304
  - · Slip-on-Fit
- + Connection
  - · STS 304 · PF, PT, NPT ↔ 1/2, 1/4, 1

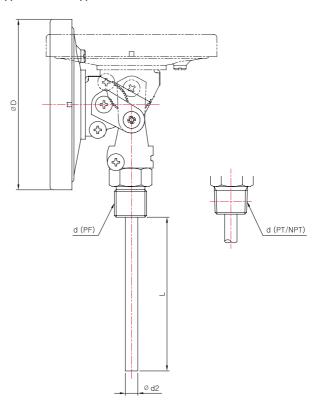
- + Window
- · General glass
- · Tempered safety glass
- · Laminated safety glass
- + Type
  - · T-Type
- + Dial
  - · Aluminum
  - · Color of white
  - · Black gradation and characters

- + Pointer
  - · Aluminum
  - · Black coating
- + Stem
  - · STS 304, STS 316
  - · Out Dia. : Ø 6.4, Ø 8, Ø 10, Ø 12
- + Well
  - · STS 304, STS 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining



## Model No. | SS-4071~3 Angle Type (Direct Type)





Marial Nia	αn	O = (-1)	Ø -10	Danasa	Minimum		th Of Bulb "L"	tl-
Model No.	ØD	Con'n (d)	Ød2	Range	Graduation		m Insertion L	
						$\emptyset$ d2 = 6.4	Ød2 = 8.0	Max.
				−20 ~ 80	2	50	50	
00 4074	SS-4071 110.5	PF 1/2		−20 ~ 100	2	45	45	
SS-4071		NPT & PT 1/2		0 ~ 50	1	75	75	
			6.4	0 ~ 80	2	60	60	
				0 ~ 100	2	50	50	
SS-4072	127.5	PF 3/4		$0\sim$ 120	2	45	45	
33 4072	5-40/2   12/.5	NPT & PT 3/4		$0\sim$ 150	2	50	50	1000
	5-4072   127.5			0 ~ 200	5	30	30	
			8.0	0 ~ 250	5	75	75	
		PF 1		0 ~ 300	5	60	60	
SS-4073	173.0			0 ~ 350	5	50	50	
33-40/3		NPT & PT 1		$0 \sim 400$	10	45	45	
				0 ~ 500	10	40	40	

 $<sup>^{\</sup>ast}\!($  )The measurement in the blanket is approximate.

# Explosion-Protected Thermometer Indicating Switch

## Model No. KTD-21 Series



#### KTD-21

#### [Explosion-Protected of Protection] Ex d IIC T4

## Purpose of Use

- Indication, warning and controlling of the usage of pipe in the region of explosion.
- Indication, warning and controlling of the temperature at LNG, LPG plant
- Indication, warning and controlling of the explosive chemical plant,
- Instructing, warning, controlling, etc. of the temperature of pressure vessel

#### **Summary**

As the driving power is strong, the indicator indicates certainly and it is widely used for industrial use because its transmission speed of temperature is very fast

This instrument has a micro switch which produces a contact signal when there is an increase or decrease of temperature by controlling the setting temperature outside.

#### Safety Management

- Install a thermowell when there exist high voltage, slurry or when measuring the temperature of fluid with high corrosiveness.
- Do not give impact during transportation, installation and usage.
- Be sure to install the thermometer to be horizontal and vertical.
- Avoid the place where exist a lot of vibration
- Do not use over the switch capacity (Under AC220V 5A)
- Use the interior and exterior of earth terminal

#### **Production Specification**

- Accuracy
  - ±2.0% of Full Scale
- ▶ Dead Band: ±4%
- ► Repeatability: ±1%
- Scale Range
- ·-30°C ∼ 650°C
- Common Temperature
  - · 75% of Full Scale
- Explosion—Protected of Protection

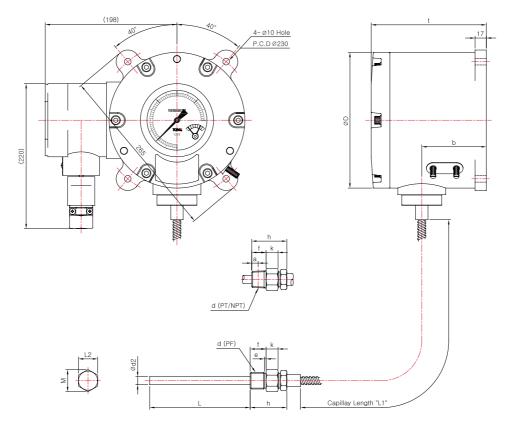
- + Case
- · Aluminum(Hammer tone coating)
- $\cdot$  Explosion-protected type(Ex d IIC T4)
- + Cover
  - · Aluminum(Hammer tone coating)
- + Connection
  - · STS 304
  - · PF, PT, NPT ↔ 1/2(Standard)
- + Window
  - · Tempered safety glass
  - · Laminated safety glass

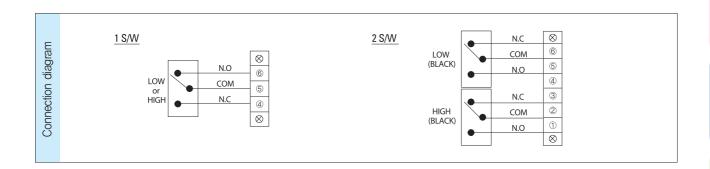
- + Stem
- · STS 304, STS 316
- · Out Dia. : Ø 8, Ø 10, Ø 12mm
- + Dial
  - · Aluminum
  - · Color of white
  - $\cdot$  Black gradation and characters
- + Pointer
- · Aluminum
- · Black coating
- + Well
  - · STS 304, 316
  - · Titanium, Monel, Hastelloy Teflon Lining, Glass Lining 가능

- + Bourdon Tube
  - · STS 316
- + Contact rating
  - · AC 125V 5A / 250V 3A
  - DC 30V 4A / 125V 0.4A / 250V 0.2A
- + Contact Form
  - · Micro Contact Type SPDT \* 1, SPDT \* 2, DPDT \* 1
  - (High, Low, High & High High & Low, Low & Low)
- + Option
  - · Cable Grand



## Model No. | KTD-21





Model No.	Conn'n (d)	ØD	b	t	L2	М	k	Ød2	h	f	е	а
KTD-21	PF 1/2	204	97	(170)	24	(27.7)	17	8 10 12	(50)	20	2	_
	NPT & PT 1/2								(48)	18	_	8.16

 $<sup>\</sup>ensuremath{^{*}\!(}$  )The measurement in the blanket is approximate.

# Explosion-Protected Thermometer Indicating Switch

## Model No. KTD-22 Series



KTD-22

#### [Explosion—Protected of Protection]

Ex d IIC T4

#### Safety Management

- Install a thermowell when there exist high voltage, slurry or when measuring the temperature of fluid with high corrosiveness,
- Do not give impact during transportation, installation and usage,
- Be sure to install the thermometer to be horizontal and vertical.
- Avoid the place where exist a lot of vibration
- Do not use over the switch capacity (Under AC220V 5A)
- Use the interior and exterior of earth terminal

#### Purpose of Use

- Indication, warning and controlling of the usage of pipe in the region of explosion.
- Indication, warning and controlling of the temperature at LNG, LPG plant
- Indication, warning and controlling of the explosive chemical plant,
- Instructing, warning, controlling, etc. of the temperature of pressure vessel

#### **Summary**

As the driving power is strong, the indicator indicates certainly and it is widely used for industrial use because its transmission speed of temperature is very fast,

This instrument has a micro switch that produces a contact signal when there is an increase or decrease of temperature by controlling the setting temperature outside.

#### **Production Specification**

- Accuracy
  - · ±2.0% of Full Scale
- ► Scale Range
  - ·-30°C ~ 650°C
- Common Temperature
  - · 75% of Full Scale
- Explosion—Protected of Protection
   Ex d IIC T4

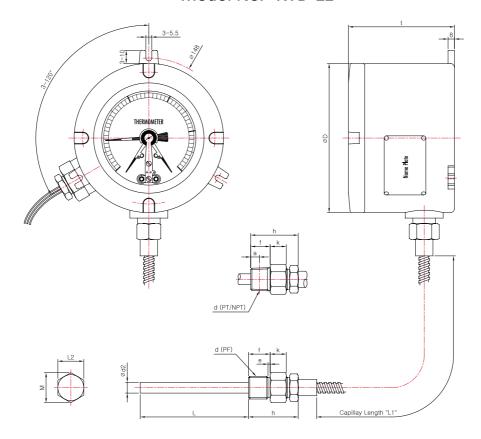
- + Case
- · Aluminum(Hammer tone coating)
- · Explosion-protected type(Ex d IIC T4)
- + Cover
  - · Aluminum(Hammer tone coating)
- + Connection
  - · STS 304, 316
  - $\cdot$  PF, PT, NPT  $\leftrightarrow$  1/2(Standard)
- + Window
  - · Tempered safety glass
  - · Laminated safety glass
- + Sterr
  - · STS 304, STS 316
  - $\cdot$  Out Dia. : Ø 8, Ø 10, Ø 12mm

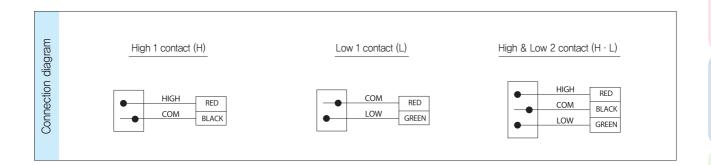
- + Dial
  - · Aluminum
  - · Color of white
  - · Black gradation and characters
- + Pointer
- · Phosphor bronze
- · Black coating
- + Well
  - · STS 304, 316
  - Titanium, Monel, Hastelloy Teflon Lining, Glass Lining
- + Bourdon Tube
  - · STS 304

- + Contact rating
- · AC 125V 0.5A / 250V 0.25A
- · DC 24V 0.25A
- + Contact Form
  - · Micro Contact Type SPDT \* 1, SPDT \* 2, DPDT \* 1
  - (High, Low, High & High High & Low, Low & Low)
- + Option
  - · Cable Grand



## Model No. | KTD-22





Model No.	Conn'n (d)	ØD	b	t	L2	М	k	Ød2	h	f	е	а
KTD-22	PF 1/2	- 138	30	(100)	24	(27.7)	17	8 10 12	(50)	20	2	_
	NPT & PT 1/2								(48)	18	_	8.16

 $<sup>\</sup>ensuremath{^{*}\!(}$  )The measurement in the blanket is approximate.