

## Non-contact thermometer

Separate Sensor for Flexible Installation

**THERMO-HUNTER®**

# BS series

0 to 500°C



## Features

### ■ Separate sensing head and electronics housing

The BS Series are non-contact thermometer with separate sensor and electronics unit.

### ■ With using an air purge/water cooling jacket, it improves sensor's ability to operate in various environment

### ■ Amplifire unit with display

The first non-contact thermometer of its class incorporating a digital display, setting panel, and output function. High noise resistance and accurate temperature measurement with stable operation due to Stainless Steel Housing and silicon lens.

### ■ Three-type optics

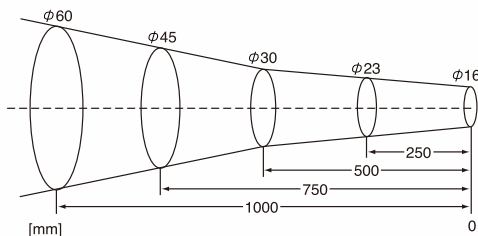
Long focus type, narrow focus type and mocoscopic type is available.

### ■ Two-type analog outputs

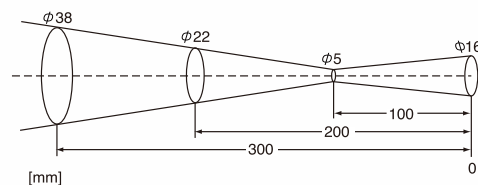
4-20mA type is suitable for long-distance transmission, and 1mV type is suitable for the connection with a panel meter.

## Optical Specifications

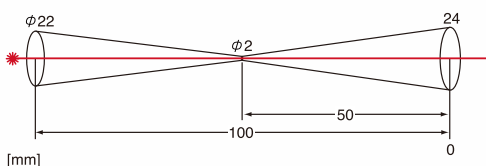
### BS-30T



### BS-05T



### BS-02T



※ The optical resolution values stated above are at 90% energy.

※ The size of the measuring object should be sufficiently larger than the spot size.

※ The BS-02T requires the measuring object should be approx. 1.5 times larger than the spot size.

# Specifications

## ■ Sensor Specifications

Model	BS-30T	BS-05T	BS-02T
Optical resolution	φ30/500mm	φ5/100mm	φ2/50mm
Sensing element/Spectral response	Thermopile/8 to 14μm		
Sighting	Laser (ClassII)		
Ambient temperature	0 to 65°C (0 to 150°C: with optional cooling jacket)		
Relative humidity	35 to 85%Rh (non-condensing)		
Storage temperature	-20 to 70°C		
Protection class	IP67		
Vibration resistance	3G (20 to 50HZ, according to JIS C0911)		
Weight	300g		400g

## ■ Electrical & Measurement Specifications

Model	BS-V	BS-A
Temperature range	0 to 500°C (Display -20 to 520°C)	
Response time	500ms/90%	
System accuracy	±1% of reading or ±2°C ±1 digit, whichever is greater (ε≠1.0)	
Repeatability	±1°C of reading	
Temperature resolution	1°C	
Emissivity adjustment (ε)	0.10 to 1.20	
Analog output	1mV/°C	4-20mA
Output resolution	0.2°C	
Delay setting	1 (0.5sec) to 200(approx. 10sec) adjustable	
Power supply	12-24VDC ±10%/Max 150mA	
Ambient temperature	0 to 50°C	
Relative humidity	35 to 85%Rh (non-condensing)	
Storage temperature	-20 to 60°C	
Protection class	IP65	
Vibration resistance	3G (20 to 50HZ, according to JIS C0911)	
Weight	320g	
Standard accessories	Fixture x1, M4 screw x2	

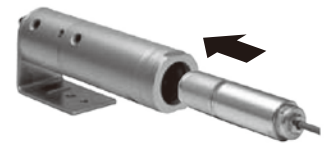
\*Specifications subject to change without notice.

## Optional Accessories

### 8m Extension Cable BS-EC8



### Air Purge/ Water Cooling Jacket BS-WP1 (BS-30T/BS-05T)



### Sensor Mounting Bracket

NB-SH30A  
(BS-30T/BS-05T)  
NB-SH40A  
(BS-02T)

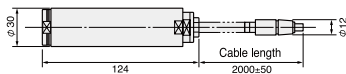


### Optional Accessory Table

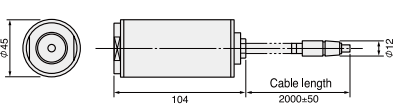
Sensor Option	BS-30T	BS-05T	BS-02T
BS-EC8	●	●	●
BS-WP1	●	●	N/A
NB-SH30A	●	●	N/A
NB-SH40A	N/A	N/A	●

## Dimensions

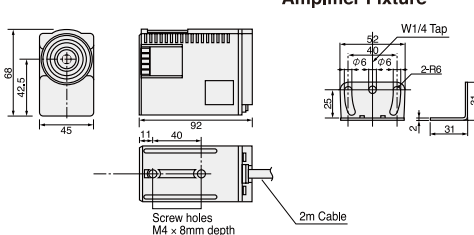
### • Sensor Head BS-30T/BS-05T



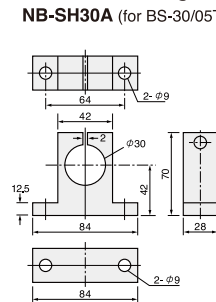
### BS-02T



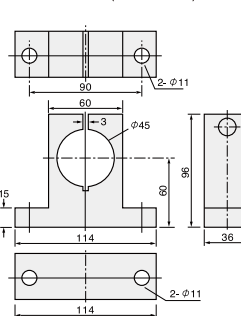
### • Amplifier BS-A/BS-V



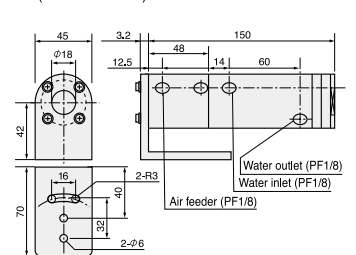
### • Sensor Mounting Bracket NB-SH30A (for BS-30/05T)



### NB-SH40A (for BS-02T)



### • Air/Water Cooling Jacket BS-WP1 (for BS-30/05T)



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