

INFRARED THERMOMETER

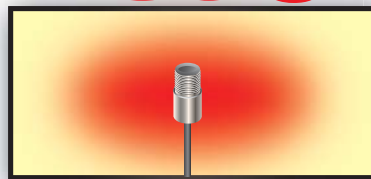
BTM-30/40

Non-contact Thermometer
(High performance in harsh environment)



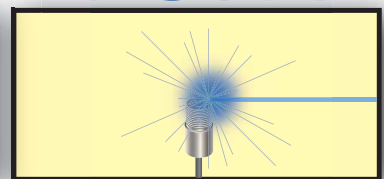
Ambient Temperature

180°C



Waterproof

IP69K



CE

High performance in harsh environment



- Standard Type
(Low and medium temperature model)

BTM-30TAC
BTM-40TAC

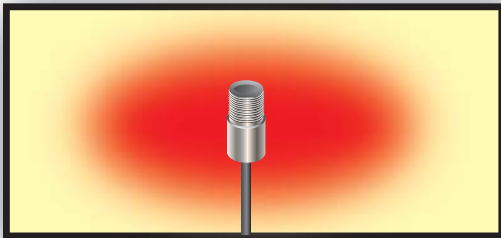
-40 to +500°C

- High Temperature Type
BTM-30TAC-HT
BTM-40TAC-HT

0 to 1000°C

Ambient Temperature

180°C

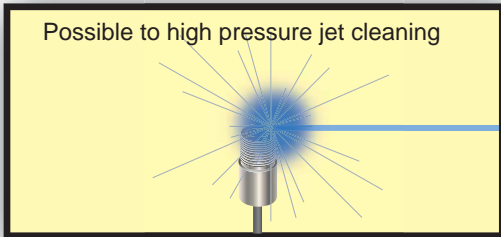


- Usable up to 180°C ambient temperature

Sensor head works properly even at high temperatures of 180°C.
Water cooling is not needed even under high temperature environment.
(Standard type : 100°C)

Waterproof

IP69K



Possible to high pressure jet cleaning

- Highest waterproof rating IP69K

At harsh environment in the production line, water and dust can cause failure to the sensors.
Sensor has passed IP69K that is degree of protection specified in German standard DIN40050-9.

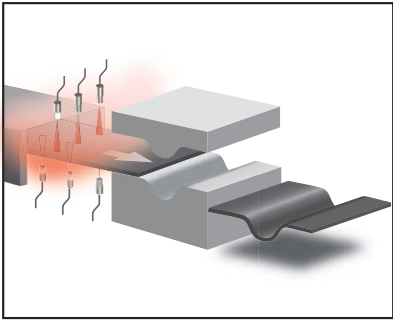


- Small sensor head, installable in a limited space

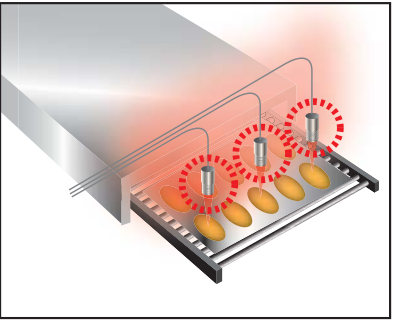
Realized 12M (ø14) × 34mm; Ultra Small head size
Good use for equipping various machinery and manufacturing line.

Application

For checking temperature before resin molding



For checking products temperature in tunnel furnace exit



Compact amplifier with large digital display and setting key

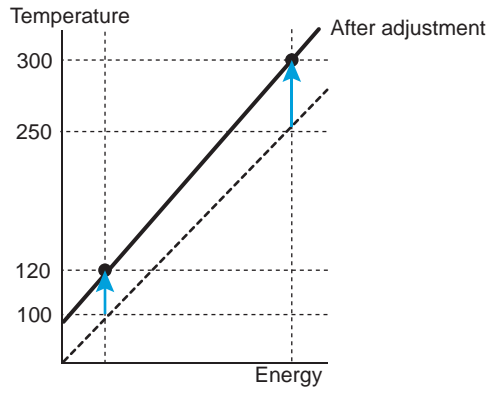


- ← Power supply (12 to 24V DC)
- Analog output (4 to 20mA DC)
- ← Digital input (3 points)
- Alarm output (2 points)

(Actual size) (DIN rail mounting)

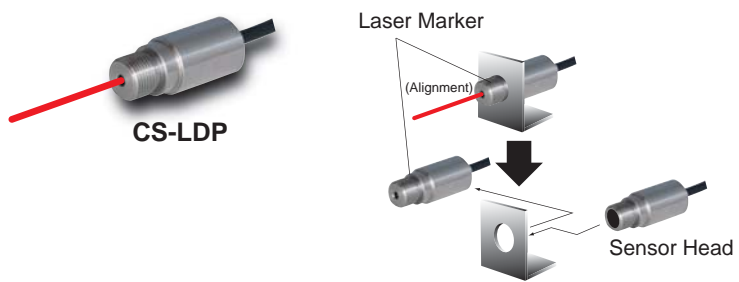
Easy temperature adjustment 2 points teaching function

With 2 points teaching, more stable measurement is realized.



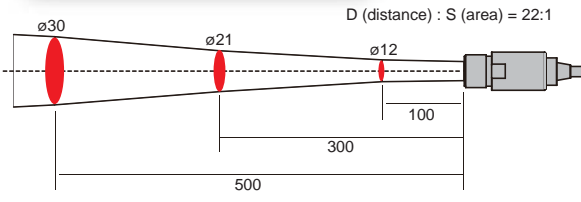
At-a-glance check of measuring point with laser beam.

(Optional)

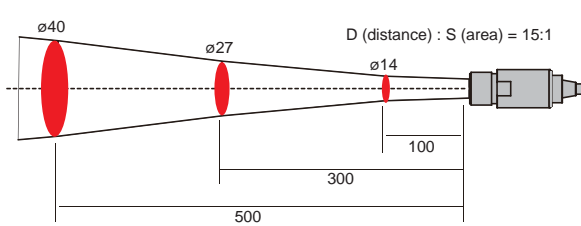


Optical Specifications

• Displays average temperature in a red circle. (Unit:mm)



- BTM-30TAC**
(Standard type)
- BTM-30TAC-HT**
(High temperature type)



- BTM-40TAC**
(Standard type)
- BTM-40TAC-HT**
(High temperature type)

- The size of measuring object should be sufficiently larger the spot size.
- The optical resolution values stated above are at minimum 90% energy.

BTM-30TAC + CF lens
BTM-30TAC-HT + CF lens

CF lens (Optional)
CS-CF01

BTM-40TAC + CF lens
BTM-40TAC-HT + CF lens

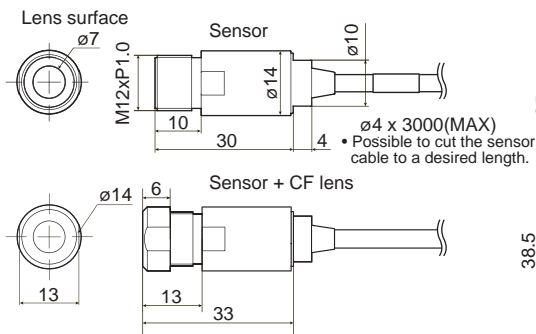
- When the CF lens is attached, correction is necessary because light intensity received from the target decreases by 20 to 30%.
- When measuring a minute spot, the recommended target size is approximately 1.5 times of the field of view shown above.

Specifications

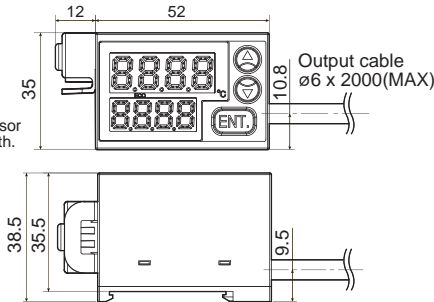
Model code	Standard Type		High Temperature Type	
	BTM-30TAC	BTM-40TAC	BTM-30TAC-HT	BTM-40TAC-HT
Measuring Range	-40 to +500°C		0 to 1000°C	
Optical Resolution	ø30/500mm (22:1)	ø40/500mm (15:1)	ø30/500mm (22:1)	ø40/500mm (15:1)
Optical System	Silicon lens			
Sensing element/ Spectral response	Thermopile/8 to 14µm			
Respose Time	150msec/90%			
Measuring Accuracy	-40 to 0°C : ±3°C, 1 to 200°C : ±2°C, 201 to 500°C : ±1% of reading		0 to 200°C: ±2°C, 201 to 1000°C: ±1% of reading	
Repeatability	Less than 200°C : ±1.0°C, More than 201°C: ±0.5% of reading			
Emissivity rate adjustment	0.1 to 1.2			
Display resolution	1°C			
Analog Output	Output signal	4 to 20mA DC		
	Resolution	0.5°C		
	Accuracy	±0.5% or ±1.0°C		
	Updating time	10msec		
	Load resistance	250Ω		
Impedance	47Ω			
Contact output	Photo MOS FET x 2 (c contact x 2)			
Contact output capacity	Less than 300mA / 30V DC			
Interface	Digital output			
Functions	Temperature adjustment (2 points teaching function), Response time select (Delay function) : 1 (0.15sec) to 200 (Approx. 10sec), Analog output scaling function			
External input	Bank switching function (4 bank), Synchronous trigger, Wave trigger			
Water-Proof	Sensing head : IP69K, Amplifier : IP40			
Vibration Resistance	10 to 55Hz, amplitude 1.5mm, 2hours each in any axis			
Power Supply	12 to 24V DC±10%			
Power Consumption	120mA (Normal) / Less than 80mA (Eco mode)			
Ambient Temperature	Sensing head : 0 to 100°C, Amplifier : 0 to 65°C		Sensing head : 0 to 180°C, Amplifier : 0 to 65°C	
Relative Humidity	35 to 85%RH (Non-condensing)			
Storage Temperature	0 to 70°C			
External dimensions	Sensing head : M12(ø14) x 34mm, Amp. 35 x 52 x 38.5mm			
Net Weight	Sensing head : Approx. 100g (With cable 3m), Amplifier : Approx. 200g (With cable 2m)			
Material	Sensing head : Stainless, Amplifier : ABS, Sensing cable : PVC (Standard type) / Silicon rubber (High temperature type)			

External Dimensions

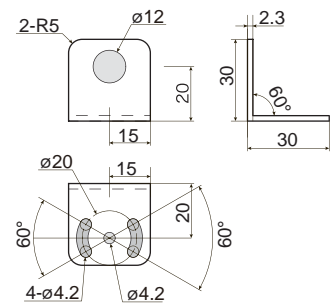
● Sensor head



● Amplifier



● Mounting bracket CS-FB12



Accessories



Sensor Mounting
Bracket
CS-FB12

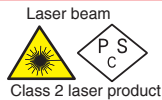


Air Purge
Collar
CS-AP1



Black body tape
HB-250

Caution for using laser beam products



Do not look in the laser beam nor point it towards a person's eyes.
(Use caution against reflection when measuring a shiny object like a mirror)
Do not allow children to operate this device.



- Before operating this product, read the instruction manual carefully to avoid incorrect operation.
- This product is intended for use with industrial machines, test and measuring equipment. It is not designed for use with medical equipment.
- If it is possible that an accident may occur as a result of the failure of the product or some other abnormality, an appropriate independent protection device must be installed.

Caution for the export trade

All transactions must comply with laws, regulations, and treaties.

Caution for imitated products

As products imitating our product now appear on the market, be careful that you don't purchase these imitated products. We will not warrant such products nor bear the responsibility for any damage and/or accident caused by their use.

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