Stationary-type non-contact thermometer For installation in limited space

Measurement range -40 to 500°C (-40 to 932°F) 0 to 1000°C (32 to 1832°F) THERMO-HUNTER

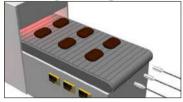
CS series

<-40 to 500°C (-40 to 932°F)> CS-30TAC/CS-40TAC

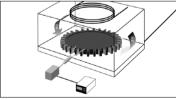




Temperature control of iron plates in hamburger cooking machines



Temperature control during sprocket molding



CE



Features

World's smallest-class sensor head ideal for installation in limited space

The ultra-compact head measures only M12 (\emptyset 14) \times 30 mm.

This allows the thermometer to be mounted to a wide variety of equipment in various manufacturing lines.

Heat-resistant sensor head capable of handling up to 180°C (356°F)

The sensor head and cable are heat resistant to $180^{\circ}C$ ($356^{\circ}F$). This eliminates the need for water cooling even in high-temperature environments. (Low- and medium-temperature models are heat resistant to $100^{\circ}C$ ($212^{\circ}F$).)

Industry's highest level of waterproof performance

In harsh manufacturing lines, water and dust can cause sensors to fail, so environmental resistance is a must. The CS series offers IP69K protection as stipulated by German standard DIN40050-9.



ENTER buttor

Selection

buttons

This allows for problem-free use even in high-pressure sterilization washing.

Compact body offering both visibility and operability

Main display

Sub displa

300

250

120

The 7-segment, large digital display is incredibly easy to read. In addition, the large, easy-to-understand buttons make operation easier even when mounted to equipment.

2-point teaching function for simple temperature adjustment

The CS series is now equipped with a 2-point teaching function. Setting the upper and lower limits for a measurement target makes adjusting in order to display the desired value easy.

Various measurement modes

Bank function

Settings can be saved independently for banks 1 through 4. Output scaling function The temperature range of the analog output (4 to 20 mA) can be set as desired

Trigger function

Output control can be set according to trigger (synchronization) input. [External trigger / Wave trigger / MAX, MIN, P-P, SAMPLE hold]

Energy amount

Laser marker for easy alignment (optional)

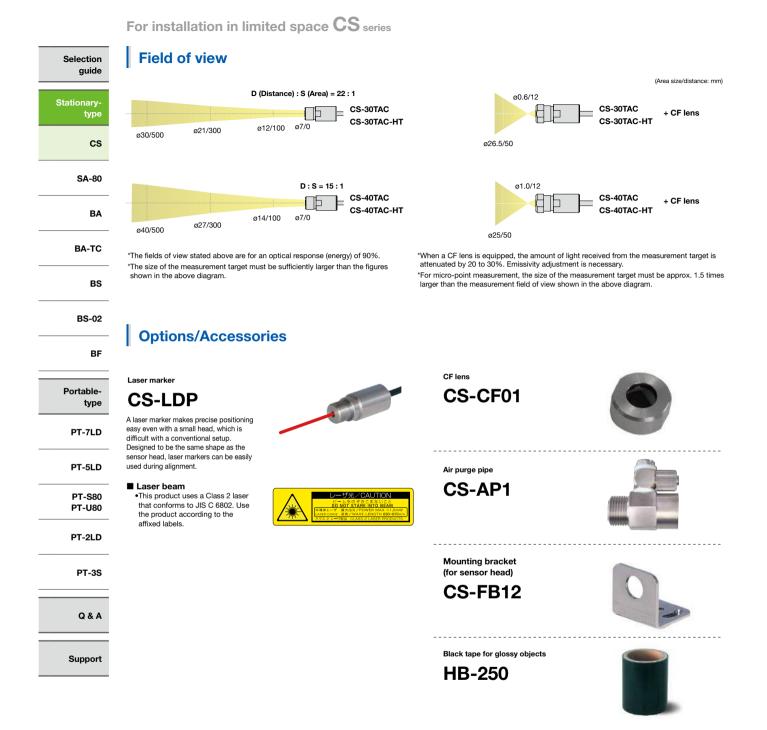
A laser marker makes precise positioning easy even with a small head, which is difficult with a conventional setup. Designed to be the same shape as the sensor head, laser markers can be easily used during alignment.



For installation in limited space **CS** series

Measurement range (Hit High-temperature model, 10 1007 C(24 to 1822*)); Heat-resistant (10 100 C(24 to 182*)); (Fype) (Site 30 mm/S00 mm (Field of view) (Site 30 mm/S00 mm (Field of view) (Site 30 mm/S00 m	Туре кеу							
[Feld of view] 4/0: e40 mm/500 mm SA-80 [Fype] CS: Cylindrical sensor head and ampifier SA-80 BA BA BA Specifications BA BA Model Low-medium-temperature models (standard) High-temperature models (heat-resistant head) BA Measurement range -40 to 500°C (-40 to 92°F) 0 to 1000°C (32 to 1832°F) BS Pelod of view 630/500 mm (22:1) 040/500 mm (15:1) 030/500 mm (22:1) 040/500 mm (15:1) Optics Sensing element/ segentral response Silicone lens BF Response time 100 mt/900% response 150 mt/900% response BF Response time 100 mt/900% response 150 mt/900% response Pr-100 Response time 100 mt/900% response 150 mt/900% response Pr-100 Model 0.10 nt 2 Pr-100 Pr-100 Display resolution 0.10 nt 2 Pr-100 Model 0.01 nt 2 Pr-100 Model 0.01 nt 2 Pr-100 Display resolution 0.15 nt 2 0.15 nt 2	HT: High-temperature model, 0 to 1000°C (32 to 1832°F);						Stationary- type	
Fight BA Model Low-medium-temperature models (standard) High-temperature models (heal-resistant head) BS Model CS-307AC CS-407AC CS-307AC-HT CS-407AC-HT BS Resourcement range -01 to 500°C (-10 to 332°F) 0 to 1000°C (32 to 1382°F) BS BS Field of view s20/500 mm (22.1) e40/500 mm (15.1) e30/500 mm (22.1) e40/500 mm (15.1) BS-02 Sensing element/ spectral response Themople/8 to 14 µm BF BF Response times 150 ms/00% response Do 200°C (32 to 382°F): ±2°C (3.6°F), 14% of reading Portable: Currery -40 to 0°C (-40 to 32°F): ±3°C (5.4°F), 110 200°C (32.8 to 382°F); ±1% of reading PT-100 PT-100 Prospective load 100 to 200°C (32°F): ±1°C (1.6°F), 201°C (33.8°F) pr more: ±0.6% of reading PT-100 Prospective load 0.5°C (1.6°F), 0.100°C (32.8 to 32°F); ±1% of reading PT-100 Prospective load 0.5°C (1.6°F), 0.100°C (32.8 to 32°F); ±1% of reading PT-100 Prospective load 0.5°C (1.6°F), 100 20°C (32.8 to 32°F); ±1% of reading PT-100 Prospective load 0.5°C (1.6°F), 100 20°C (32.8 to 32°F); ±1% of reading PT-100 Prospective l								
Specifications Ba-ro Model Low-medum-temperature models (standard) High-temperature models (standard) High-temperature models (standard) BS Model CS-30TAC CS-40TAC CS-40TAC-HT CS-40TAC-HT BS Measurement range -40 to 500°C (-40 to 593°C f) 0 to 100°C (32 to 158°C f) BS BS-02 Optics Solono m (2:1) e40/500 mm (15:1) e30/500 mm (2:1) e40/500 mm (15:1) BS-02 Sensing stemant/ spectral response 150 ms/00% response 150 ms/00% response BF BF Response time 150 ms/00% response 0 to 200°C (32 to 393°C f): 22°C (36°F), 20 to 100°C (393 to 1393°C f): 22°C (36°F), 20 to 100°C (30°C f): 20 to 10°C (18°F) PT-100 P1-5L0 Display resolution 0.5°C incements PT-5L0 P1-5L0 To 10°C f): 10		[Type]						
Mode Low-medium-temperature models (standard) High-temperature models (heat-resistant head) BA-TC Mode CS-30TAC CS-40TAC CS-30TAC-HT CS-40TAC-HT Standard BS Measurement range 40 to 500°C (-40 to 952°F) 0 to 1000°C (21 to 1832°F) 940/500 mm (2:1) 940/500 mm (2:1) 940/500 mm (2:1) 940/500 mm (15:1) 930/500 mm (2:1) 940/500 mm (15:1) 950/500 mm (2:1) 940/500 mm (15:1) 950/500 mm (2:1) 940/500 mm (15:1) 950/500 mm (2:1) 940/500 mm (2:1) 940/500 mm (15:1) 950/500 mm (2:1) 940/500 mm (2								
Model CS-30TAC CS-40TAC CS-30TAC-HT CS-40TAC-HT BS Measurement range 40 to 500°C (-40 to 932°F) 0 to 100°C (32 to 1832°F) BS BS Field of view 630/500 mm (22:1) 640/500 mm (22:1) 640/500 mm (52:1) 640/500 mm (52:1) BS BS Sensing element/ spectral response 150 ms/90% response 150 ms/90% response BF Response time 150 ms/90% response 150 ms/90% response BF Response time 150 ms/90% response 150 ms/90% response BF Response time 150 ms/90% response 150 ms/90% response BF Response time 150 ms/90% response 150 ms/90% response BF Response time 0.10 0.2°C (38.16 392°F): 13.0° (38.8 16 392°F) 0 to 20°C (28.0 16 38°F): 13.0°C (38.7 16 30°F) Portable Upbids 40 to 0°C (-40 to 32°F): 30°C (38.10 392°F): 13.0°C (38.8 16 392°F) 0 to 20°C (28.0 16 38°F): 13.0°C (38.10 138°F) PT Resolution 0.1 to 1.2 Dipta/secolution 0.1 to 1.2 PT PT Dipta/secolution 0.5°C increments 0.5°C increments <td< td=""><td>3</td><td>pecification</td><td>5</td><td></td><td></td><td></td><td>BA-TC</td></td<>	3	pecification	5				BA-TC	
C5-30TAC C5-30TAC C5-30TAC C5-30TAC-HT C5-30TAC-HT <thc< th=""><th colspan="2" rowspan="2">Model</th><th colspan="4">Low-medium-temperature models (standard) High-temperature models (heat-resistant head)</th><th></th></thc<>	Model		Low-medium-temperature models (standard) High-temperature models (heat-resistant head)					
Field of view s30/500 mm (22:1) e40/500 mm (15:1) s30/500 mm (22:1) e40/500 mm (15:1) s30/500 mm (15:1) s30/50 mm			CS-30TAC	CS-40TAC	CS-30TAC-HT	CS-40TAC-HT	BS	
Optics Silicone lens Determine Sensing element/ spectral response 150 ms/90% response BF Response time 150 ms/90% response 150 ms/90% response Accuracy -40 to 0°C (40 to 32°F): 3°C (6.4°F), 1to 200°C (38.8 to 392°F): 2°C (3.8°F), 201 to 1000°C (39.8 to 132°F): 410° to 1000°C (39.3 to 132°F): 410° to 100°C (39.3 to 100°C (39.3 to 132°F): 410° to 100°C (39.3 to 100°C (39.3 to 132°F): 410° to 100°C (39.3 to 100	Measurement range		–40 to 500°C	(-40 to 932°F)	0 to 1000°C	(32 to 1832°F)		
Sensing element/ spectral response Thermopile/8 to 14 µm BF Response time 150 ms/90% response 150 ms/90% response Portable 120 ms/90% response Accuracy -40 to 0°C (-40 to 32°F) ±3°°C (5.4°F), 11 to 20°C (33.8 to 1382°F): 1% of reading ±2°C (3.6°F), 201 to 1000°C (393.8 to 1382°F): 201 to 1000°C (393.8 to 1382°F): 1% of reading Portable 120 to 1000°C (393.8 to 1382°F): 1% of reading Portable type Repeatability Up to 200°C (322°F): ±1.0°C (1.8°F), 201°C (39.8°F) or more: ±0.5% of reading PT-7LD Display resolution 1°C increments PT-7LD Moretable 0.1 to 1.2 PT-7LD Notput 4 to 20 mA PT-7LD Accuracy ±0.5% or ±1.0°C (1.8°F) PT-5LD Notput 0.5% increments PT-5LD Moretable load 2650 Ω PT-2LD Impedance 47 Ω PT-2LD Control output Photo MOS FET × 2 (transfer contact × 2) PT-3S Control output Photo MOS FET × 2 (transfer contact × 2) PT-3S Control output Teaching function: 2 points, Response time selection (DELAY function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output seling function PT-3S Ga & A	Field of view		ø30/500 mm (22:1)	ø40/500 mm (15:1)	ø30/500 mm (22:1)	ø40/500 mm (15:1)	BS-02	
spectral response Intermoprie/or to 14 μm BF Response time 150 ms/90% response 150 ms/90% response Protable- 201 to 00°C (32 to 362°F): ±2°C (3.6°F), ±2°C (3.6°F), 201 to 1000°C (393.8 to 1832°F): ±2°C (3.6°F), 201 to 1000°C (393.8 to 1832°F): ±1% of reading Portable- 201 to 1000°C (393.8 to 1832°F): ±1% of reading Repeatability Up to 200°C (392°F): ±1.0°C (1.8°F), 201°C (393.8°F) or more: ±0.5% of reading Pr-7LD Displar Control 1°C increments Pr-7LD Resolution 0.5°C increments Pr-5LD Accuracy ±0.5% or ±1.0°C (1.8°F) Pr-5LD Valuate time 10 ms Pr-2LD Independence 10 ms Pr-2LD Ortrol output Photo MOS FET × 2 (Transfer contact × 2) Pr-2LD Control output Photo MOS FET × 2 (Transfer contact × 2) Pr-3S Control output Photo MOS FET × 2 (Transfer contact × 2) Pr-3S Dipal output Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output scaling function Pr-3S Repere of protection Sensor head: 1P69K, Amplifer: 1P40 Q&A Ogene of protection Sensor head: 10 to 100°C (32 to 122°F), A	Optics		Silicone lens					
Accuracy -40 to 0°C (-40 to 32°F): ±3°C (5.4°F), 1 to 200°C (33.8 to 392°F); ±2°C (3.6°F), 201 to 1000°C (393.8 to 1832°F): ±1% of reading 0 to 200°C (32 to 392°F): ±1% of reading Portable- type Repeatability Up to 200°C (392°F): ±1.0°C (1.8°F), 201°C (393.8 to 1832°F): ±1% of reading 0.1 to 1.2 PT-7LD Display resolution 1°C increments PT-7LD PT-7LD Mesolution 0.5°C increments PT-5LD Voltput 4 to 20 mA PT-5LD Accuracy ±0.5% or ±10°C (1.8°F) PT-5LD Voltput 0.1 to 1.2 PT-5LD Moreable load 250 Ω PT-5LD Moreable load 250 Ω PT-2LD Control output Photo MOS FET × 2 (Transfer contact × 2) PT-2LD Capacitive load 300 mA/30 VDC or less PT-3S Interface Digital output PT-3S Functions Teaching function: 2 points, Response time selection (DELAY) function: 10.15 sec.) to 200 (approx. 10 sec.), Output scialing function: 2 points, Response time selection (DELAY) function Q & A Supply voltage 12 to 24 VDC ±10% Q & A Capacitive load 10 to 55 H2; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Supply voltage	-		Thermopile/8 to 14 μm				BF	
Accuracy ±2°C (3.6°F), 201 to 1000°C (393.8 to 1832°F): ±1% of reading 201 to 1000°C (393.8 to 1832°F): ±1% of reading PT-7LD Repeatability Up to 200°C (392°F): ±1.0°C (1.8°F), 201°C (393.8 °F) or more: ±0.5% of reading PT-7LD Display resolution 1°C increments PT-7LD Output 4 to 20 mA PT-7SLD Negative ±0.5% or ±1.0°C (1.8°F) PT-7LD Update time 10 ms PT-7LD Negative ±0.5% or ±1.0°C (1.8°F) PT-7LD Update time 10 ms PT-7LD Negative 250 Ω PT-880 Morable load 250 Ω PT-2LD Truedom 00 mA/30 VDC or less PT-2LD PT-3LD Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output scaling function: PT-3S Repeative load Sensor head: IP69K, Amplifier: IP40 Q & A Supply voitation 12 to 24 VDC ±10% Sensor head: 0 to 180°C (32 to 356°F), Amplifier: 20 to 65°C (32 to 149°F) Support Ambient temperature Sensor head: M12 (014) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Support Sensor head: M12 (014) × 34 mm, Amplifier: 55 × 52 × 38.5 mm Sensor head: SUS, Amplifier	Response time		150 ms/90% response 150 ms/90% response					
Enissivity adjustment 0.1 to 1.2 PT-7LD Display resolution 1°C increments PT-7LD Display resolution 0.5°C increments PT-5LD Resolution 0.5°C increments PT-5LD Accuracy ±0.5% or ±1.0°C (1.8°F) PT Update time 10 ms PT-5LD Allowable load 250 Ω PT-880 Impedance 47 Ω PT-2LD Control output Photo MOS FET × 2 (Transfer contact × 2) PT-2LD Capacitive load 300 mA/30 VDC or less PT-2LD Interface Digital output PT-3S Functions Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), OLitput scaling function PT-3S External input Bank function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), OLitput scaling function Q & A Degree of protection Sensor head: IP69K, Amplifier: IP40 Support Vibration resistance 10 to 55 Hz; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Support Ambient temperature Sensor head: 0 to 100°C (32 to 12*F), Amplifier: 0 to 65°C (32 to 149*F) Amplifier: 0 to 65°C (32 to 149*F) <	Accuracy							
Display resolution 1°C increments Output 4 to 20 mA Resolution 0.5°C increments Accuracy ±0.5% or ±1.0°C (1.8°F) Update time 10 ms Allowable load 250 Ω Impedance 47 Ω Control output Photo MOS FET × 2 (franker contact × 2) Capacitive load 300 mA/30 VDC or less Interface Digital output Percetions Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output scaling function PT-3S Degree of protection Sensor head: IP69K, Amplifier: IP40 Support Vibration resistance 10 to 55 Hz; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Support Ambient temperature Sensor head: 0 to 100°C (32 to 21°F), Amplifier: 10 to 65°C (32 to 14°F) Sensor head: 0 to 180°C (32 to 356°F), Amplifier: 0 to 65°C (32 to 14°F) Support Storage temperature 0 to 70°C (32 to 158°F) Sensor head: 0 to 180°C (32 to 14°F) Sensor head: N12 (e14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: Approx. 100 g (including 3 m cable), Amplifier: Approx. 200 g (including 2 m cable) Mediendim-temperature models /	Repeatability		Up to 200°C (392°F): ±1.0°C (1.8°F), 201°C (393.8°F) or more: ±0.5% of reading					
Output 4 to 20 mA Resolution 0.5°C increments Accuracy ±0.5% or ±1.0°C (1.8°F) Update time 10 ms Allowable load 250 Ω Impedance 47 Ω Control output Photo MOS FET × 2 (Transfer contact × 2) Capacitive load 300 mA/30 VDC or less Interface Digital output Functions Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output scaling function. Degree of protection Sensor head: 10 to 55 Hz; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Supply voltage 12 to 24 VDC ±10% Current consumption 120 mA (at max. load) / 80 mA (in Eco mode) Ambient humidity 35 to 85% RH (no condensation) Storage temperature 0 to 70°C (32 to 158°F). Amplifier: 0 to 65°C (32 to 149°F) Mmbient humidity Sensor head: M12 (e14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: M12 (e14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: Approx. 100 g (including 3 m cable), Amplifier: Approx. 200 g (including 2 m cable) Material Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /	Emissivity adjustment		0.1 to 1.2				PT-7LD	
Resolution 0.5°C increments PT-5LD Accuracy ±0.5% or ±1.0°C (1.8°F) PT-580 Update time 10 ms PT-580 Allowable load 250 Ω PT-1080 Impedance 47 Ω PT-2LD Control output Photo MOS FET × 2 (Transfer contact × 2) PT-2LD Capacitive load 300 mA/30 VDC or less PT-3S Interface Digital output PT-3S Functions Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output scaling function Q & A Degree of protection Sensor head: IP69K, Amplifier: IP40 Sensor head: 0 to 100°C (32 to 212°F), Amplifier: IP40 Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 55°C (32 to 149°F) Ambient temperature Sensor head: 10 to 70°C (32 to 158°F) Amplifier: 0 to 55°C (32 to 149°F) Motion temperature Sensor head: M12 (014) x34 mm, Amplifier: 35 x 52 x 38.5 mm Weight Sensor head: M12 (014) x34 mm, Amplifier: Approx. 2	Display resolution		1°C increments					
Resolution 0.5°C increments Accuracy ±0.5% or ±1.0°C (1.8°F) Update time 10 ms Allowable load 250 Ω Impedance 47 Ω Control output Photo MOS FET × 2 (Transfer contact × 2) Capacitive load 300 mA/30 VDC or less Interface Digital output Functions Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output scaling function External input Bank function: 4 banks, Synchronous input trigger function, External trigger function, Wave trigger function Degree of protection Sensor head: IP69K, Amplifier: IP40 Vibration resistance 10 to 55 Hz; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Supply voltage 12 to 24 VDC ± 10% Current consumption 120 mA (at max. load) / 80 mA (in Eco mode) Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 150°C (32 to 149°F) Marbiert temperature Sensor head: 102 or 10% C (20 to 158°F) Dimensions Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 35 x 52 x 38.5 mm Sensor head: M12 (014) x 34 mm, Amplifier: 35 x 52 x 38.5 mm Weight Sensor head: M12 (014) x 34 mm, Amplifie		Output	4 to 20 mA				PT-5LD	
Boy or PT-USO PT-USO PT-USO PT-USO Allowable load 250 Ω PT-USO PT-USO Impedance 47 Ω PT-USO PT-USO Control output Photo MOS FET × 2 (Transfer contact × 2) PT-USO PT-USO Capacitive load 300 mA/30 VDC or less PT-SS PT-3S Interface Digital output PT-3S PT-3S Functions Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output scaling function Q & A Degree of protection Sensor head: IP69K, Amplifier: IP40 Q & A Vibration resistance 10 to 55 Hz; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Support Current consumption 120 mA (at max. load) / 80 mA (in Eco mode) Support Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 70°C (32 to 158°F). Dimensions Sensor head: (of to 70°C (32 to 158°F) Sensor head: 0 to 70°C (32 to 158°F). Dimensions Sensor head: Approx. 100 g (including 3 m cable), Amplifier: 35 x 52 x 38.5 mm Weight Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /	t bri	Resolution	0.5°C increments					
0 module time 10 ms PT-U80 Allowable load 250 Ω Impedance 47 Ω Control output Photo MOS FET × 2 (Transfer contact × 2) Control output Photo MOS FET × 2 (Transfer contact × 2) Control output PT-38 Interface Digital output Functions Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output scaling function External input Bank function: 4 banks, Synchronous input trigger function, External trigger function, Wave trigger function Degree of protection Sensor head: IP69K, Amplifier: IP40 Vibration resistance 10 to 55 Hz; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Supply voltage 12 to 24 VDC ± 10% Current consumption 120 mA (at max. load) / 80 mA (in Eco mode) Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Storage temperature 0 to 70°C (32 to 158°F) Dimensions Sensor head: M12 (at 14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /	0	Accuracy	±0.5% or ±1.0°C (1.8°F)				PT-S80	
Impedance 47 Ω PT-2LD Control output Photo MOS FET × 2 (Transfer contact × 2) PT-38 Capacitive load 300 mA/30 VDC or less PT-33 Interface Digital output PT-35 Functions Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output scaling function PT-38 External input Bank function: 4 banks, Synchronous input trigger function, External trigger function, Wave trigger function Q & A Degree of protection Sensor head: IP69K, Amplifier: IP40 Sensor head: 10 to 55 Hz; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Supply voltage Current consumption 12 to 24 VDC ±10% Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Amplifier: 0 to 65°C (32 to 149°F) Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 70°C (32 to 158°F) Dimensions Sensor head: M12 (ø14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Sensor head: Approx. 100 g (including 3 m cable), Amplifier: Approx. 200 g (including 2 m cable) Weight Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /	alog	Update time	10 ms					
Control output Photo MOS FET × 2 (Transfer contact × 2) Capacitive load 300 mA/30 VDC or less Interface Digital output Functions Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output scaling function PT-3S External input Bank function: 4 banks, Synchronous input trigger function, External trigger function, Wave trigger function Q & A Degree of protection Sensor head: IP69K, Amplifier: IP40 Q & A Vibration resistance 10 to 55 Hz; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Support Support 20 to 25 VDC ±10% Sensor head: 0 to 100°C (32 to 212°F), Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Ambient tumidity Sensor head: 0 to 100°C (32 to 149°F) Sensor head: 0 to 180°C (32 to 149°F) Storage temperature 0 to 70°C (32 to 149°F) Amplifier: 0 to 65°C (32 to 149°F) Sensor head: M12 (ø14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: Approx. 100 g (including 3 m cable), Amplifier: Approx. 200 g (including 2 m cable) Material	Å Å	Allowable load	250 Ω					
Capacitive load 300 mA/30 VDC or less PT-3S Interface Digital output Functions Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output scaling function PT-3S External input Bank function: 4 banks, Synchronous input trigger function, External trigger function, Wave trigger function Q & A Degree of protection Sensor head: IP69K, Amplifier: IP40 Q & A Vibration resistance 10 to 55 Hz; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Supply voltage Current consumption 120 mA (at max. load) / 80 mA (in Eco mode) Support Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Ambient numidity Sensor head: 0 to 100°C (32 to 121°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 180°C (32 to 149°F) Storage temperature 0 to 70°C (32 to 158°F) Dimensions Sensor head: M12 (ø14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: M12 (ø14) × 34 mm, Amplifier: Approx. 200 g (including 2 m cable) Material		Impedance	47 Ω				PT-2LD	
Interface Digital output PT-3S Functions Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output scaling function Q & A Degree of protection Bank function: 4 banks, Synchronous input trigger function, External trigger function, Wave trigger function Q & A Vibration resistance 10 to 55 Hz; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Supply voltage Current consumption 12 to 24 VDC ±10% Supply rol (at max. load) / 80 mA (in Eco mode) Support Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 180°C (32 to 356°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 180°C (32 to 149°F) Storage temperature 0 to 70°C (32 to 158°F) Dimensions Sensor head: M12 (o14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: Approx. 100 g (including 3 m cable), Amplifier: Approx. 200 g (including 2 m cable) Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /	Control output							
Interface Digital output Functions Teaching function: 2 points, Response time selection (DELAY) function: 1 (0.15 sec.) to 200 (approx. 10 sec.), Output scaling function Q & A External input Bank function: 4 banks, Synchronous input trigger function, External trigger function, Wave trigger function Q & A Degree of protection Sensor head: IP69K, Amplifier: IP40 Supply voltage Supply voltage Supply voltage Supply voltage Supply voltage Sensor head: 0 to 100°C (32 to 212°F), Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Ambient temperature Sensor head: 0 to 100°C (32 to 149°F) Sensor head: 0 to 70°C (32 to 149°F) Storage temperature Sensor head: M12 (ø14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Sensor head: M12 (ø14) × 34 mm, Amplifier: Approx. 200 g (including 2 m cable) Weight Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /	Capacitive load						PT-35	
Functions Output scaling function Output scaling function Output scaling function External input Bank function: 4 banks, Synchronous input trigger function, External trigger function, Wave trigger function Q & A Degree of protection Sensor head: IP69K, Amplifier: IP40 Sensor head: IP69K, Amplifier: IP40 Supply voltage Sensor head: 10 to 55 Hz; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Supply voltage Supply voltage Supply voltage Supply voltage Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 150°C), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 100°C (32 to 149°F) Sensor head: 0 to 165°C (32 to 149°F) Sensor head: 0 to 165°C (32 to 149°F) Ambient humidity Sensor head: M12 (014) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Sensor head: Approx. 100 g (including 3 m cable), Amplifier: Approx. 200 g (including 2 m cable) Weight Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /	Interface						11-00	
Degree of protection Sensor head: IP69K, Amplifier: IP40 Vibration resistance 10 to 55 Hz; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Supply voltage 12 to 24 VDC ±10% Current consumption 120 mA (at max. load) / 80 mA (in Eco mode) Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 180°C (32 to 356°F), Amplifier: 0 to 65°C (32 to 149°F) Storage temperature 0 to 70°C (32 to 158°F) Dimensions Sensor head: M12 (o14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: M12 (o14) × 34 mm, Amplifier: Approx. 200 g (including 2 m cable)			Output scaling function				0 * 4	
Vibration resistance 10 to 55 Hz; amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions Supply voltage 12 to 24 VDC ±10% Current consumption 120 mA (at max. load) / 80 mA (in Eco mode) Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 180°C (32 to 356°F), Amplifier: 0 to 65°C (32 to 149°F) Ambient humidity 35 to 85% RH (no condensation) Storage temperature 0 to 70°C (32 to 158°F) Dimensions Sensor head: M12 (ø14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /	· ·						Q&A	
Supply voltage 12 to 24 VDC ±10% Support Current consumption 120 mA (at max. load) / 80 mA (in Eco mode) Sensor head: 0 to 100°C (32 to 212°F), Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 180°C (32 to 356°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 65°C (32 to 149°F) Storage temperature 0 to 70°C (32 to 158°F) Dimensions Sensor head: M12 (ø14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: Approx. 100 g (including 3 m cable), Amplifier: Approx. 200 g (including 2 m cable) Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /	• •							
Current consumption 120 mA (at max. load) / 80 mA (in Eco mode) Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 180°C (32 to 356°F), Amplifier: 0 to 65°C (32 to 149°F) Ambient humidity 35 to 85% RH (no condensation) Storage temperature 0 to 70°C (32 to 158°F) Dimensions Sensor head: M12 (ø14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: Approx. 100 g (including 3 m cable), Amplifier: Approx. 200 g (including 2 m cable) Material Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /							Support	
Ambient temperature Sensor head: 0 to 100°C (32 to 212°F), Amplifier: 0 to 65°C (32 to 149°F) Sensor head: 0 to 180°C (32 to 356°F), Amplifier: 0 to 65°C (32 to 149°F) Ambient humidity 35 to 85% RH (no condensation) Storage temperature 0 to 70°C (32 to 158°F) Dimensions Sensor head: M12 (o14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: Approx. 100 g (including 3 m cable), Amplifier: Approx. 200 g (including 2 m cable) Material Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /							oupport	
Ambient humidity 35 to 85% RH (no condensation) Storage temperature 0 to 70°C (32 to 158°F) Dimensions Sensor head: M12 (ø14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: Approx. 100 g (including 3 m cable), Amplifier: Approx. 200 g (including 2 m cable) Material Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /				Sensor head: 0 to 100°C (32 to 212°F),		Sensor head: 0 to 180°C (32 to 356°F),		
Storage temperature 0 to 70°C (32 to 158°F) Dimensions Sensor head: M12 (ø14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: Approx. 100 g (including 3 m cable), Amplifier: Approx. 200 g (including 2 m cable) Material Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /	Ambient humidity		35 to 85% RH (no condensation)					
Dimensions Sensor head: M12 (ø14) × 34 mm, Amplifier: 35 × 52 × 38.5 mm Weight Sensor head: Approx. 100 g (including 3 m cable), Amplifier: Approx. 200 g (including 2 m cable) Material Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /								
Weight Sensor head: Approx. 100 g (including 3 m cable), Amplifier: Approx. 200 g (including 2 m cable) Material Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /	•							
Material Sensor head: SUS, Amplifier: ABS, Sensor cable: PVC (low-medium-temperature models) /								
Silicone rubber (high-temperature models)	Material							

*Note that specifications are subject to change without prior notice for product improvement purposes.



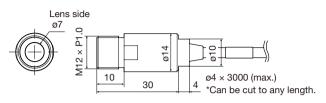
For installation in limited space CS series

Dimensions

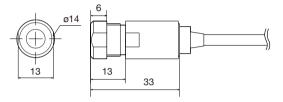
Sensor head

• Amplifier

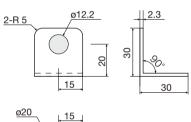
38.5

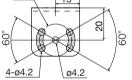


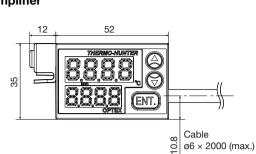
With CF lens



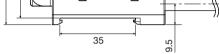
• Mounting bracket CS-FB12







36.5





Selection guide

cs

SA-80

BA

BA-TC

BS

BS-02

BF

(Unit: mm)

Support