



More Precision.

thermoMETER
Non-contact IR temperature sensors





thermoMETER CS

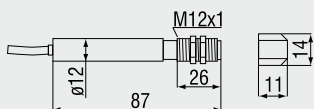
This self contained, non contact infrared temperature sensor requires no external signal condition controller, which makes it an ideal product for OEM applications. It is fully programmable via the digital interface and provides an accurate temperature reading via the analogue or digital interface.

- Measuring range from -40 to 400°C
- Robust precision silicon optics with AR coating
- Integrated controller with LED alarm indicator and smart electronic sighting support
- Up to 80°C ambient temperature without cooling
- Short circuit and reverse polarity protection
- Field programmable
- Adjustable emissivity
- Fast response time: 25ms
- Analogue outputs with digital interfaces option
- Wide input range: 5 - 30V DC

Optical specifications thermoMETER CS

□ = smallest spot size (mm)

Standard Focus optics										
SF15	15:1	7	8	13	20	27	33	40	47	53
Distance-in-mm	0	100	200	300	400	500	600	700	800	
Close Focus optics (CF lense optional available)										
CF15	15:1	7	5	0.8	5	11	16	21	27	32
Distance-in-mm	0	5	10	15	20	25	30	35	40	



Product identification

CS - SF15 - C3
 Cable length [1 m (standard) / 3 m / 8 m / 15 m]
 Focus [SF]
 thermoMETER CS

Model	CS-SF15-C1	
Optical resolution	15:1	
Temperature range ¹	-40 to 400°C	
Spectral range	8 to 14µm	
System accuracy ²	±1.5% or ±1.5°C	
Repeatability ²	±0.75% or ±0.75°C	
Temperature resolution ³	±0.1°C	
Response time	25ms to 999s (90%), adjustable	
Emissivity/gain	0.100 to 1.100 (adjustable via 0 to 5V DC input or software)	
Transmissivity/gain ¹	0.100 to 1.100	
Signal processing ¹	peak hold, valley hold, average; extended hold function with threshold and hysteresis	
Certificate of calibration	optional	
Outputs/analogue	0 to 5V or 0 to 10V 1/10/100 mV/ °C	
Outputs/digital	optional	USB or Alarm 0-30V / 500mA (open collector)
Inputs	programmable functional input for external emissivity/ambient temperature adjustment (0 to 5VDC), hold function or RS232 / USB (optional) communication	
Cable length	1m (standard), 3m, 8m, 15m	
Power supply	4mA (without LED), 10mA (5 to 30VDC)	
Environmental rating	IP 63 (NEMA-4)	
Ambient temperature	-20°C to 80°C	
Storage temperature	-20°C to 85°C	
Relative humidity	10 to 95%, non condensing	
Vibration	IEC 68-2-6: 3 G, 11 to 200Hz, any axis	
Shock	IEC 68-2-27: 50 G, 11ms, any axis	
Weight	58g	

¹ adjustable via software

² ± ambient temperature: 23 ±5°C; whichever is greater; object temperature 0°C

³ temperature of the object <100°C and time constant >0.2s

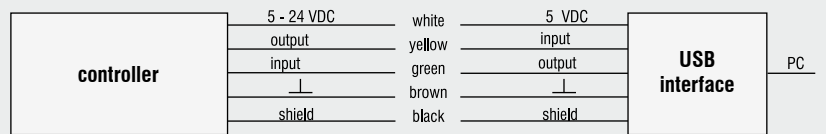
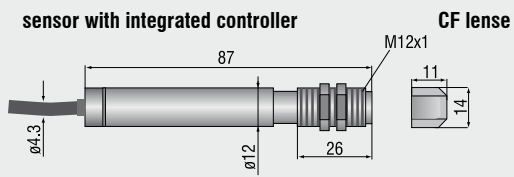
Accessories

- ▶ CF lense
- ▶ Protective window
- ▶ Mounting bracket / Mounting bolt
- ▶ Air purge collar
- ▶ Right angle mirror
- ▶ Software CompactConnect
- ▶ USB Kit

Dimensions and software thermoMETER CS

8
30

CS



Accessories thermoMETER CS

Mechanical accessories CS

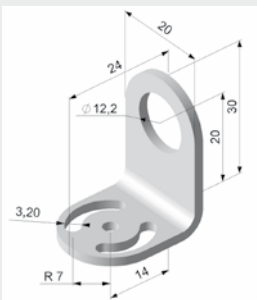
Art. No.	Model	
2970279	TM-FB-CS	Mounting bracket, fixed
2970280	TM-AB-CS	Mounting bracket, adjustable
2970281	TM-MB-CS	Mounting bolt with M12x1 thread
2970282	TM-MG-CS	Mounting fork, adjustable in 2 axes, with thread M12x1
2970283	TM-AP-CS	Air purge collar for 10:1 sensors
2970284	TM-APL-CS	Air purge collar, laminar
2970285	TM-APLCF-CS	Air purge collar, laminar, integrated CF-lens
2970286	TM-RAM-CS	Right angle mirror for 90°C measurements
2970287	TM-USBK-CS	USB interface kit incl. software Compact-Connect

Optical accessories CS

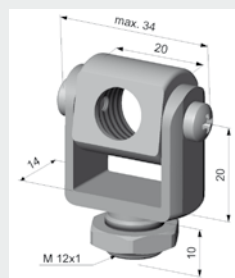
2970277	TM-CF-CS	CF-Lens for CS series
2970278	TM-PW-CS	Protective window for CS series

Calibration CS

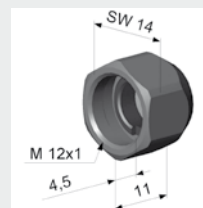
2970288	TM-CERT-CS	Certificate of calibration
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TM-FB-CS Mounting bracket, fixed



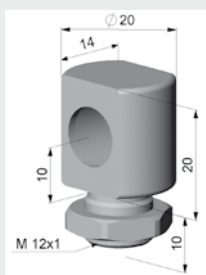
TM-MG-CS Mounting fork with M 12x1 thread adjustable in two axes



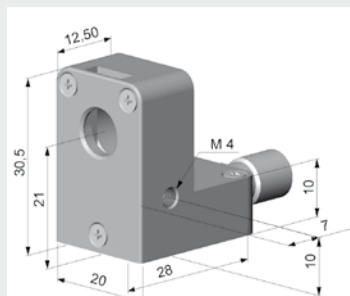
TM-CF-CS Close Focus Lens (LT sensors only)



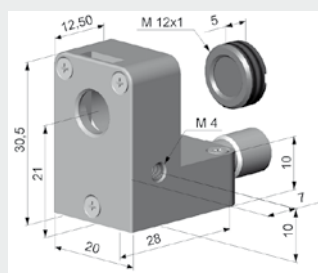
TM-RAM-CS Right angle mirror



TM-MB-CS Mounting bolt with M12x1 thread adjustable



TM-APL-CS Air purge collar



TM-APLCF-CS Air purge collar, laminar, integrated CF-lens



TM-APL-CS Laminar air purge collar and TM-MG-CS Mounting fork