

Datasheet

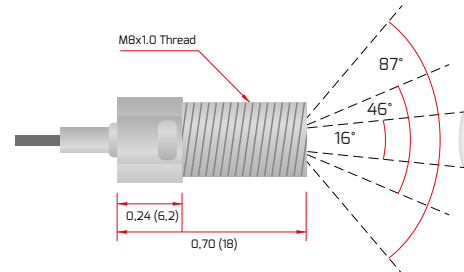
ACE sensor



Product Overview

The ACE features:

- Non-contact temperature sensor
- Small size sensor head (18 mm)
- Output 0-5V, 0-10V, 4-20mA, UART/RS232
- Repeatability error < 0,1°C (0.18°F)
- Interchangeability error ± 0,3°C (0.54°F)
- Resolution 0,005°C (0.01°F)
- Air purge jacket as accessory



Technical Data

Target temperature	Standard options: 0-100°C (32-212°F) 0-250°C (32-482°F) Customized temperature ranges available upon request
Ambient temperature	0-100°C (32-212°F)
Accuracy²⁾	Factory default calibration: 0-100°C (32-212°F): ± 0,5°C (0.9°F) 0-250°C (32-482°F): ± 1°C (1.8°F) Optimized accuracy available in customized calibration
Field of view¹⁾	16°, 46° or 87°
Output signal	Standard options: 0-10V, 0-5V, 4-20mA or UART/RS232 Analog outputs are scalable upon request
Resolution	0,005°C (0.01°F)
Repeatability error	< 0,1°C (0.18°F)
Interchangeability error²⁾	0-100°C (32-212°F): ± 0,3°C (0.54°F) 0-250°C (32-482°F): ± 0,7°C (1.26°F)

Time constant	70ms for digital output signal 100ms for analogue output signal
Spectral range	5,5-16µm
Sample rate	Max 60Hz (software adjustable)
Dimensions	Sensor head: 9mm diameter (M8 thread) x 18mm length Electronics: 12mm (M12 thread) x 80mm length
Water resistance	IP65
Minimum spot size	3mm
Emissivity	Factory default 0,95 (adjustable 0,1-1 upon request)
Input power	12-30VDC
Power consumption	< 300mW at 24VDC and 0-10V output
Current compliance	330ohm at 20mA output
Output impedance V-out	Approx. 100Ω

Specifications subject to change

¹⁾ Field of view 50% energy ²⁾ For ambient temperature range 18-70°C (64.4-158°F)

Ordering Information

ACE - - -	Field of view¹⁾ 16 = 16° 46 = 46° 87 = 87°
Temperature range 100 = 0-100°C (32-212°F) 250 = 0-250°C (32-482°F)	Output: 005 = 0-5V 010 = 0-10V 420 = 4-20mA DIG = UART/RS232

For inquiries or customized products,
please contact office@cleverir.com

Dimensions

