



คุณสมบัติ

- **M18 Cylindrical Thermometers : SA-80 Series** เป็นอุปกรณ์วัดอุณหภูมิแบบไม่สัมผัส โดยอาศัยหลักการตรวจจับ รังสีอินฟราเรด (รังสีความร้อน) ที่ปล่อยออกมาจากวัตถุ
- **Field of view : Ø80/500 mm.**
- สามารถวัดอุณหภูมิวัตถุได้ **0-200°C/0-400°C**
- **Emissivity adjustment : 0.95 (SA-80T-2A, SA-80T-4), 0.1 to 1.2 (SA-80T-4IO)**
- **Response time : 100 ms/90% response**
- Analog output : 4-20 mA (SA-80T-2A, SA-80T-4)
- Output IO-Link (SA-80T-4IO)
- Cable type สายสัญญาณมีความยาวถึง 2 เมตร
- Connector type ขั้วขนาด M12 4pin 300 mm. pigtail cable

ข้อมูลทางเทคนิค

Model		SA-80T-2A	SA-80T-4A	SA-80T-4IO
Measurement range		0 to +200°C (32 to 392°F)	0 to +400°C (32 to 752°F)	0 to +400°C (32 to 752°F)
Field of view		ø80/500 mm		
Optics		Silicon lens		
Sensing element/spectral response		Thermopile/8 to 14 μm		
Response time		100 ms/90% response		
Accuracy*		0 to 200°C (32 to 392°F): ±2°C (±3.6°F), 201 to 400°C (393.8 to 752°F): ±1% of reading value * Measurement conditions: ε = 1.0, ambient temperature of 23 ± 5°C (73.4 ± 9°F), measurement distance of 250 mm, measurement target: ø100 mm		
Repeatability		±1°C (±1.8°F)		
Emissivity adjustment		0.95 (fixed)		0.1 to 1.2
Supply voltage		12 to 24 VDC ± 10%		18 to 30 VDC ± 10%
Current consumption		Max. 70 mA		Max. 50 mA
Communication interface		Not supported		IO-Link
IO-Link specifications	Minimum cycle time	-	-	3 ms
	Communication speed			COM2 (38.4 kbps)
	IO-Link version			1.1
	Communication function operation power supply			IO-Link power supply (supplied from IO-Link Master)
	Process input data byte count			4 bytes
	Process output data byte count			0 byte
Output		Analog output, 4 to 20 mA		Via IO-Link
Total cable extension		-		20 m
Connection		2 m cable		M12 4-pin 300 mm pigtail cable
Environmental resistance	Degree of protection	IP67		
	Ambient temperature	0 to +70°C (32 to 158°F)		
	Ambient humidity	35 to 85%RH (no condensation)		
	Storage temperature	−20 to +70°C (−4 to +158°F)		
	Vibration resistance	10 to 55 Hz, 1.5 mm amplitude, 2 hours each for XYZ directions		
Applicable regulations	EMC	EMC Directive (2014/30/EU)		
	Environment	RoHS Directive (2011/65/EU), China RoHS (MIIT Order No.32)		
Applicable standard		EN 61326-1:2013		
Materials		SUS/AL		
Weight		Approx. 180 g		
Standard included accessories		Mounting nut × 2		Mounting nut × 2, Mounting bracket

Options

M12 4-pin Connector cables



YF2A14-020VB3XLEAX

Straight, 2 m

YF2A14-050VB3XLEAX

Straight, 5 m

YF2A14-100VB3XLEAX

Straight, 10 m

Mounting bracket

SA-FB18

1 piece



Black tape for glossy objects



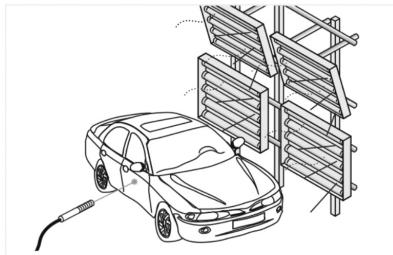
HB-250

When attached to the surface of an object with unknown emissivity or a glossy object, this tape provides an emissivity of 0.95, enabling accurate non-contact temperature measurement.

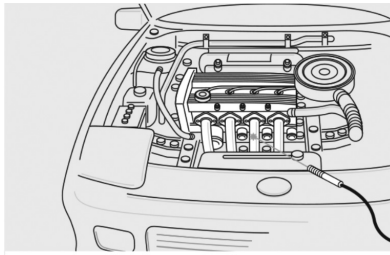
When using the tape, set the emissivity to $\epsilon = 0.95$. The tape is built with material resistant to heat up to 250°C (482°F).

Total area: 60 mm × 2000 mm

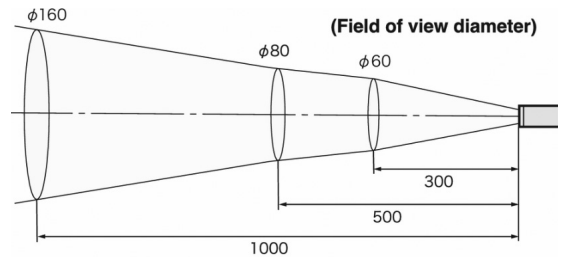
Application



Temperature control for painted surfaces of cars



Engine and drive component temperature control



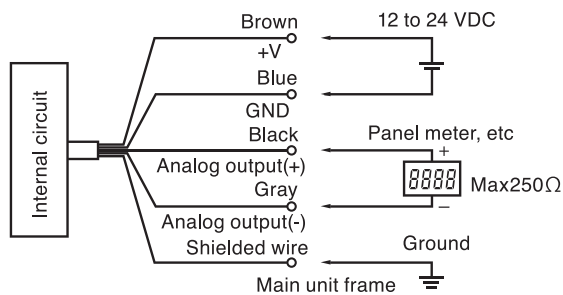
- Field of view

* The fields of view stated above are measurement diameters with an optical response of 90%.

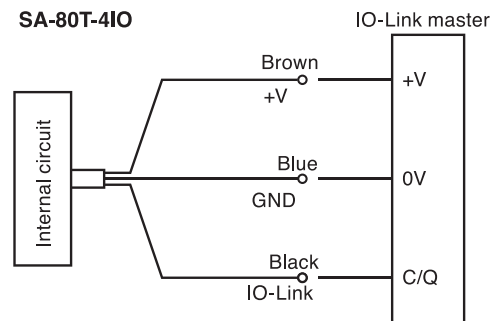
- The size of the measurement target must be sufficiently larger than the measurement diameters shown in the above diagram.

การต่อใช้งาน

SA-80T-2A / SA-80T-4A

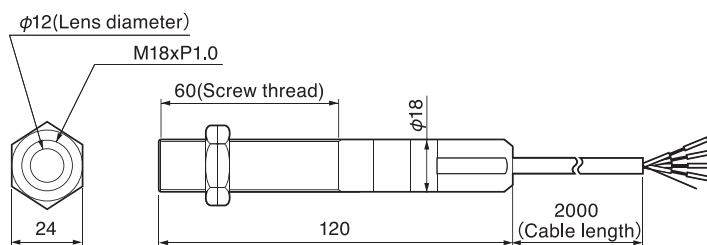


SA-80T-4IO

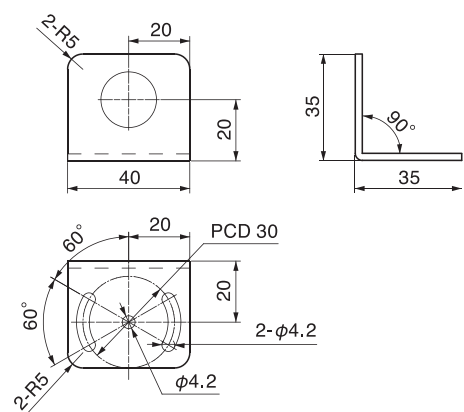


ขนาดและมิติ

SA-80T-2A / SA-80T-4A



Mounting bracket



SA-80T-4IO

