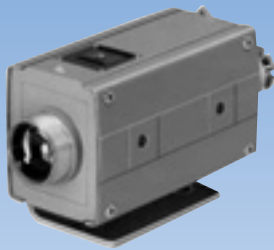


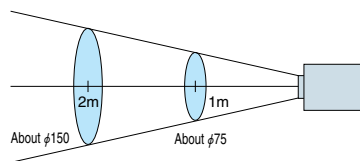
Lowest detectable temperature: 150°C



Model KD150C

KD150C is extremely compact and low-cost for amplifier-integrated water-cooled sensors. KD150C directly detects infrared radiation and outputs ON-OFF signals, which is useful for applications such as detection of passage or position of red-hot steel materials including ingots, slabs, steel plates and mold steel.

- Detection field of view
Model: KD150C



- Without hood
- Detection object larger than detection field

Features

- Water-cooled
KD150C is the smallest of water-cooled sensors with built-in amplifiers and enclosed in robust case that withstands severe operating conditions.
- Reasonable cost
High performance allows detection of low-temperature (150°C min.) steel material. Streamlined design offers even more reasonable price.
- Performance comparable to full-size HMDs
Long detecting distance, sensitivity adjustment feature and high sensitivity offer excellent stability.
- Attachable airless dust hood or air purge hood
For the prevention of dirt deposits on lens, dust hoods that do not require air (F38S, F38N) and air purge hoods (302NC-305NC) are available.

KD150C

Rating/Performance/ Specification/ Environmental Specification

Model	KD150C
Detection method	Radiation detection
Power Supply	12-24VDC $\pm 10\%$
Current consumption	20 mA max
Output mode	<ul style="list-style-type: none"> Open collector output Rating: 100 mA (30 VDC) max. Hysteresis: about 2 °C Analog output Op-amp voltage output 0-3 V (3 V at 300 °C)
Detection object temperature	150 °C min. (iron oxide)
Effective lens diameter	$\phi 28\text{mm}$
Response time	0.5s
Indicator	Operation indicator (red LED)
Sensitivity adjustment	Adjustable with volume
Ambient temperature	10 +55°C (Non-freezing)/ 180 °C max. with water-cooling
Ambient humidity	35 - 85%RH max. (Non-condensing)
Storage temperature	-20 +65°C. (Non-condensing)
Protective structure	IP66
Vibration	10-55 Hz / 1.5 mm amplitude / 2 hours each in 3 direction
Dielectric withstanding	AC 500V for 1 minute
Shock	500 m/s ² / 3 times each in 3 directions
Insulation resistance	250 VDC, 20 M Ω or higher
Case material	Aluminum die-cast (cord opening ground hub)
Connection	Terminal block
Mass	About 2kg

• Cooling water specification

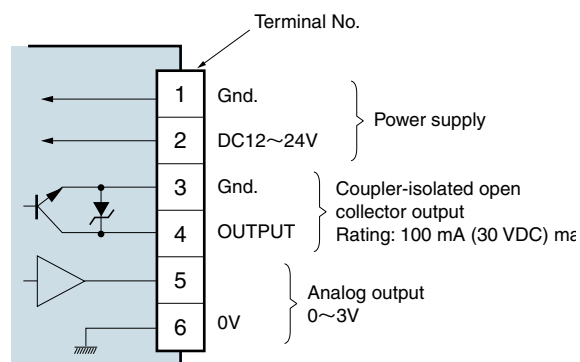
Flow rate	2 l/minute min.
Temperature	+10~+35°C
Withstand voltage	0.29MPa

• Air purge specification (with optional part)

Flow rate	200 l/minute min.
Withstand voltage	0.98MPa

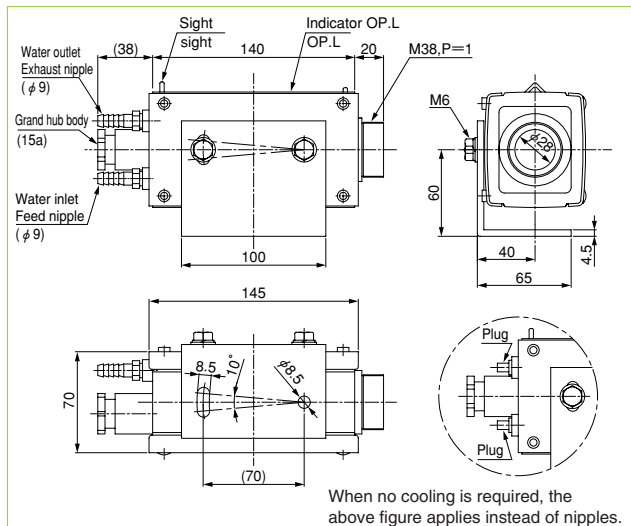
Air not required for use of airless dust hood.

Connection

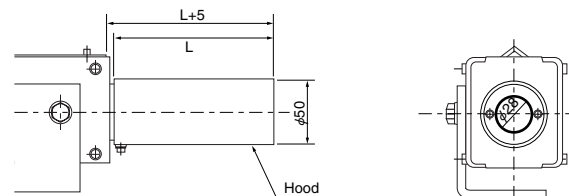


Note) The open collector output is isolated from power supply. The analog output "0" and "0" of power supply have different potentials.

Dimensions(in mm)

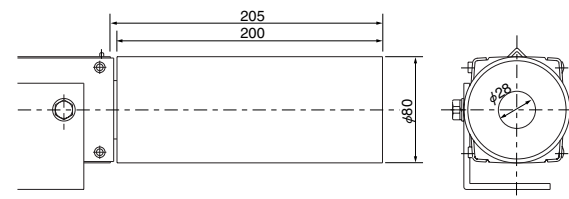


• With Airless hood F38S Series attached

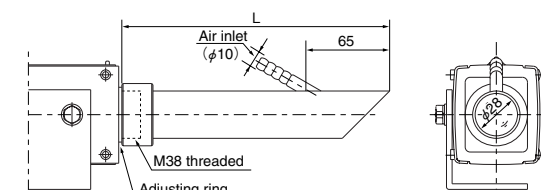


Model	Length (L)
F38S	120mm
F38S-03	300mm
F38S-04	400mm
F38S-05	500mm

• With Airless hood F38N Series attached



• With air purge hood attached



Model	Length (L)
302NC	215mm
303NC	315mm
304NC	415mm
305NC	515mm