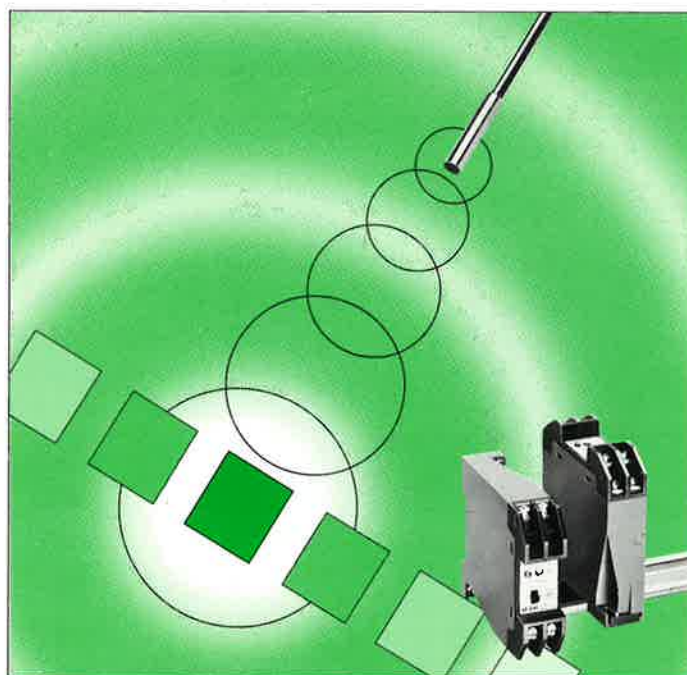


## GS Series...

*Amplifier separated type  
featuring wide selection,  
sharp detection and small  
size.*

- Multi-revolution sensitivity adjuster is equipped on all models, which facilitates to make the fine adjustment of the sensing distance.
- Highly resistive construction against ambient conditions conforming to IP 67. No oil, water and dust influence the excellent sensing performance.



## ■ PRODUCT LINE-UP

Model No.	Appearance (mm)	Metallic material	Sensing distance* (mm)	Control unit to be combined
GS-3S		Stainless	(2) Optimum 0.8	
GS-5S			(3) 1	
GS-8S			(4) 2	
GS-8M		Brass (Nickel plated)	(3.5) 1.5	<ul style="list-style-type: none"> <li>● GA-2R RELAY OUTPUT Power source: 90 to 260V AC Output: Relay contact</li> <li>● GA-2 NON-CONTACT OUTPUT Power source: 90 to 260V AC Output: TRIAC</li> <li>● GA-2D Power source: 10 to 28V DC Output: Open collector</li> </ul>
GS-10M			(4) 2	
GS-12M			(6) 3	
GS-14M			(8) 5	
GS-14T		Stainless	(8) 5	

\* The sensing distance is the one obtained by using iron as an object. The correction coef. in table in the right have to be multiplied to know what are the sensing distance if materials other than iron are detected.  
(Reference object: 18X18X1mm)

Stainless (SUS 304)	Approx. 0.8
Brass	Approx. 0.6
Aluminum	Approx. 0.4
Copper	Approx. 0.4

## SPECIFICATIONS

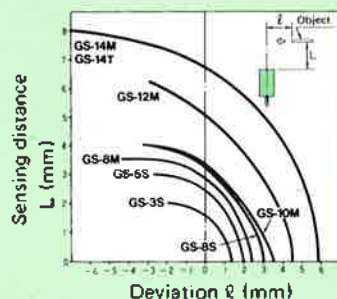
### Sensing probe

Items	Models	Cylindrical			Threaded probe				Flat
		GS-3S	GS-5S	GS-8S	GS-8M	GS-10M	GS-12M	GS-14M	GS-14T
Sensing distance		max. 2 mm	3 mm	4 mm	3.5 mm	4 mm	6 mm	8 mm	
Response time		Depending on Amp. Unit							
Accuracy of repeated detection		2 μm	2.5 μm	5 μm	3 μm	5 μm			
Hyslerisis		Less than 50 μm					Less than 60 μm	Less than 70 μm	
Enclosure		Stainless			Brass (Nickel-plated)				Stainless
		Conforming to IP-67 (IEC-144, JIS C0920)							
Cable		3 meters of high frequency coaxial cable (impedance 50 ohms)							
Ambient temperature/humidity		-10°C to +60°C / Less than 85% RH							
Accessories		Two nuts & one washer							

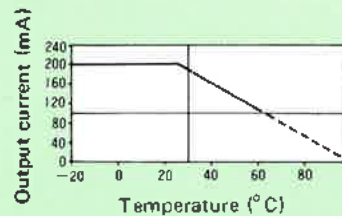
### Control unit

Items	Types & Models	AC Power source		DC Power source
		GA-2R	GA-2	GA-2D
Power source		90 to 260V AC, 50/60 Hz		10 to 28V DC
Power consumption		Approx. 7 VA	Approx. 2.5 VA	Approx. 20 mA
Output circuit (Output relay)		Relay contact 1A	Alternating current (TRIAC)	NPN open collector & PNP open collector
Response time		Less than 10 ms		Less than 1 ms
Power capacity		Resistive at 2A, 250V AC	2 to 200 mA, 260V AC	Less than 200 mA, 30V DC
Operation mode		Near-on (NORM.) / Leave-on (INV.) selectable		
Operation indicator		Red LED glows when output on		
Excessive current protection		No		Yes
Sensitivity adjuster		Multi-revolution potentiometer		
Ambient temperature / humidity		-10°C to +60°C / Less than 85% RH		
Enclosure		Enclosure: ABS resin, Terminal base: PBT resin		
Net weight (excl. Accessories)		150 g	130 g	75 g
Accessories		Screw-driver for sensitivity adjustment		

## TYPICAL SENSING PERFORMANCE



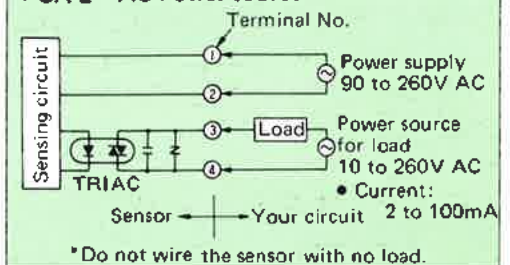
Performance when sensitivity is set at the maximum sensing distance.



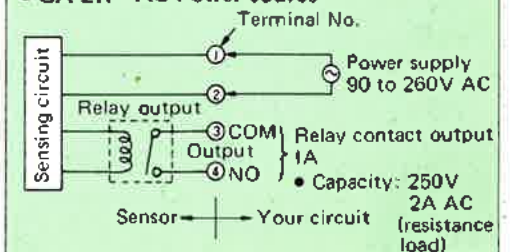
At the maximum temperature, output current has to be smaller than the value shown.

## OUTPUT CIRCUIT

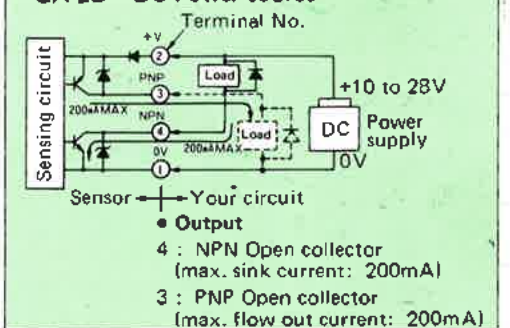
### GA-2 AC Power source



### GA-2R AC Power source

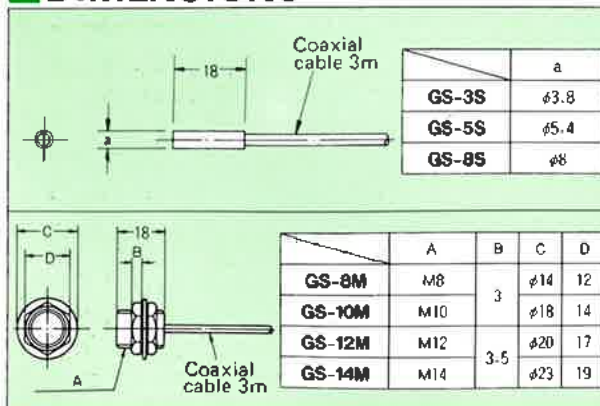


### GA-2D DC Power source

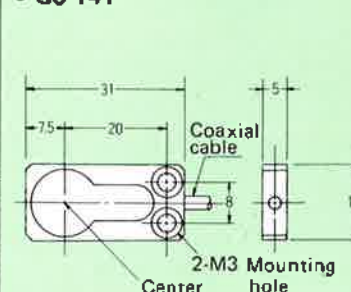


## DIMENSIONS

Unit: mm



### GS-14T



### GA-2R

### GA-2

### GA-2D

