


## SPECIFICATIONS

Outer shape	Model	Sensing distance(m/m)	Output	Response frequency	Power source
12Ø 	SA-12MS	2	NO	20 Hz	AC 100~240V 50/60Hz

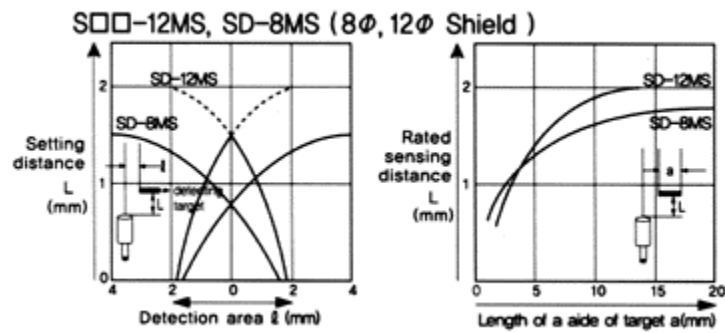
Model	SA-12MS	
Shape	Shield	
Setting distance(Rated)	2 mm ± 10%	
Setting distance(Actual)	0~1.4 mm	
Standard target	Iron 12×12×t1 mm	
Hysteresis	Less than 10% of the rated sensing distance	
Power source	AC 100~240V (AC 90~250V) 50/60Hz	
Current consumption	Less than 2.5 mA	
Output	Load current	5~200 mA
	Residual voltage	Less than 10V
Protection circuit	Surge protection circuit	
Max. response frequency	20Hz	
Environmental Resistance	Ambient temperature	-25 to +70°C, storage:-25~*80°C(Non-freezing condition)
	Protection	IP67(IEC Specification)
Cable	*Oil,heat and cold resistant cable *Cable type:cable with 2m *Connector type:cable SA-2I5, SA-2L5	
Accessories	Nut:2pc Washer:2pc	

## OUTLINE DIMENSIONS

Model	Shield type
SA-12MS	

## Sensing Fields(Typical)

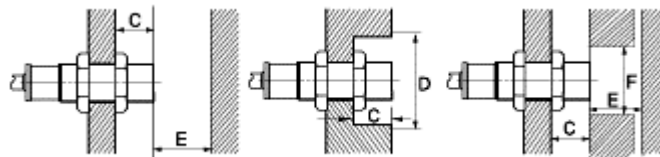
If detecting target with a smaller size than the standard target, the sensing distance will become shorter.



[top](#)

## Sensors Embeded in Metal

If the sensor is completely embeded in metal, its sensing distance may decrease thus it shall be established with the following values as shown at Table1.



(Table 1.)

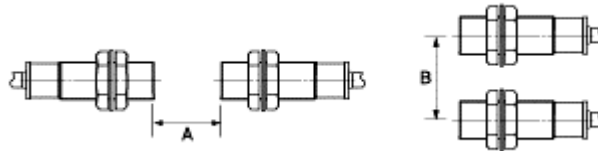
(Unit mm)

	Non-Shield			Shield		
	S□□-12M□ (8M)	S□□-18M□	S□□-30M□	S□□-12MS □ (8MS)	S□□-18MS□	S□□-30MS□
C	15(8)	22	30	0	0	0
D	36(24)	54	90	12(8)	18	30

E	20(6)	40	70	8(4.5)	20	40
F	40(24)	70	90	18(12)	27	45

### Mutual Interference

When mounting plural proximity switches in parallel or face to face, allow the clearance listed in the table2. below to avoid mutual interference.



(Table 2.)

(Unit mm)

	Non-Shield			Shield		
	S□□-12M□ (8M)	S□□-18M□	S□□-30M□	S□□-12MS □ (8MS)	S□□-18MS□	S□□-30MS□
A	24(16)	48	90	12(9)	30	60
B	36(24)	54	90	24(16)	36	60

### Sensing distance, Correction coefficient

The sensing distance listed in this specifications is for the standard target. For non-ferrous object detection, the sensing distance will be obtained by multiplying the correction coefficient.

Target	Iron	SUS 304	Brass	Aluminum
All models	1.0	Approx. 0.7	Approx. 0.4	Approx. 0.35