# Miniature Sensors - S100

# **DATALOGIC**

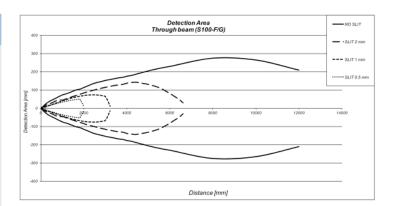
## **THROUGH BEAM**





In this model the light emission is infrared and the signal is robust over long ranges.

The emitter (S100...G00) and the receiver are provided in the same package and with a unique order number.



	max. operating distance
NO SLIT	12 m
2 mm SLIT	6,7 m
1 mm SLIT	3,2 m
0,5 mm SLIT	2 m

#### SLIT EFFICIENCY

The use of the rectangular SLIT (0,5/1/2 mm x 19 mm), available as accessory, allows to reduce the power and the openess of the light beam, in order to avoid optical interference between adiacent sensors and to narrow the light beam facilitating the detection of smaller objects.



## **RETROREFLECTIVE (infrared)**







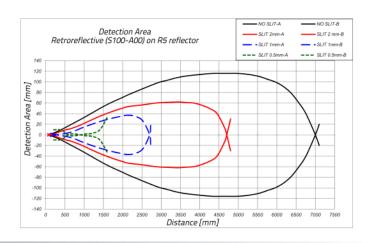
The model is not equipped with a polarization filter and thanks to the Infrared light emission is able to pass through a trasparent protective screen without detect it.

The reflector is not included with the product.

Retr	Detection Area Retroreflective (S100-A00) on R2 reflector				SLIT 2		SLIT - SLIT			
120						Ŀ	SLIT O	1.5mm-A -	SLIT	0.5m
100										
80										
60										
40							\			
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-40		_				-	/			_
-60										
-80										
-100										
-120		1500 2000	2500 3	000 3500	4000 4	1500 5000	5500	6000 6500	7000	7500

	max. operating distance			
	with R5 reflector	with R2 reflector		
NO SLIT	7 m	6 m		
2 mm SLIT	4,7 m	3,4 m		
1 mm SLIT	2,7 m	2,3 m		
0,5 mm SLIT	1,5 m	1 m		

REFLECTOR	TYPE	(S100A00)
R1	circular (23 mm)	0.033 m
R2	circular (48 mm)	0.016 m
R3	rectangular (18x54 mm)	0.013.5 m
R4	rectangular (47x47 mm)	0.015 m
R5	circular (75 mm)	0.017 m
R6	rectangular (36x55 mm)	0.016 m
RT3970	self-adhesive tape (60x40 mm)	0,052 m



# Miniature Sensors - S100

## **STALLOGIC**

### **POLARIZED RETROREFLECTIVE**







The model is equipped with a polarization filter to avoid false switching due to reflective objects. The absence of the trimmer is compensated by the availability of two different models:

- -a short range model, suggested for the conveyor belts and applications with small detection area, especially in the detection of *critical materials* (shiny packages, reflective surfaces, metallic parts, glossy plastic objects, ceramic tiles)
- -a long range model, usable in generic applications and for long distance object detections

The SLIT accessory is available with three different aperture dimensions to further reduce the emission power and to narrow the light beam.

The reflector is not included with the product.

REFLECTOR	TYPE	SHORT RANGE (S100B00)	LONG RANGE (S100B10)
R1	circular (23 mm)	0,20,8 m	0,022 m
R2	circular (48 mm)	0,032 m	0,014,5 m
R3	rectangular (18x54 mm)	0,031,5 m	0,013 m
R4	rectangular (47x47 mm)	0,032,5 m	0,014,5 m
R5	circular (75 mm)	0,013 m	0,015,5 m
R6	rectangular (36x55 mm)	0,031,8 m	0,014 m
RT3970	self-adhesive tape (60x40 mm)	0,20,8 m	0,051,8 m

#### SLIT EFFICIENCY

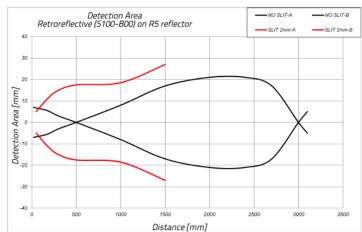
The use of the rectangular SLIT (0,5/1/2 mm x 19 mm), available as accessory, allows to reduce the power and the openess of the light beam, in order to avoid optical interference between adjacent sensors and to narrow the light beam facilitating the detection of smaller objects.



	max. operating distance					
	SHORT RANGE	(S100B00)	LONG RANGE (S100B10)			
	with R5 reflector	with R2 reflector	with R5 reflector	with R2 reflector		
NO SLIT	0,02 3 m	0,02 2 m	0,15,5 m	0,014,5 m		
2 mm SLIT	0,05 1,5 m	0,05 0,8 m	0,24 m	0,033 m		
1 mm SLIT	-	-	0,32,5 m	0,051,5 m		
0,5 mm SLIT	-	-	0,51,2 m	0,070,7 m		

### POLARIZED RETROREFLECTIVE (SHORT RANGE: S100-B00)





### POLARIZED RETROREFLECTIVE (LONG RANGE: S100-B10)

