

IO-Link
SensorsPhotoelectric
SensorsFiber-optic
Sensors

Standard Fibers

Fiber Sensors
Communication
Units

Mark Sensors

Laser Sensors

Safety Sensors

Pressure &
Flow SensorsInductive
Proximity
SensorsMeasurement
SensorsIonizers/
Electrostatic
Sensors

Accessories

CY-100



CY-100

Simple mounting with M18 thread

Features

■ Wide product range

The availability of a wide range of models within the series means the **CY-100** sensors can solve relatively complex tasks. Types with integrated polarization filters can even recognize reflective objects. The side view type makes applications possible in cramped spaces.

■ M18 Thread

All models have an M18 male thread for easy and quick mounting. Furthermore the models are also available for the M12 connector type. You can easily replace and add these standard models. The nuts are included in delivery.

■ Long sensing range

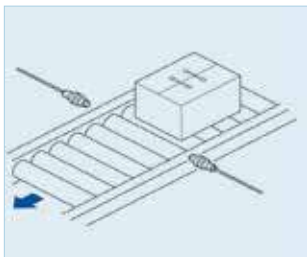
The thru-beam and retroreflective types of the CY-100 have a large sensing range of up to 15m.

■ Environmentally robust

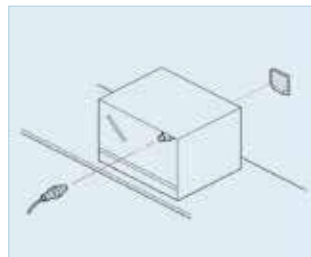
Thanks to the IP67 (IEC) casing, the sensor is suitable for installation in humid and dusty environments. Integrated status LEDs allow the operator to check the function of the sensor at a glance.

Typical applications

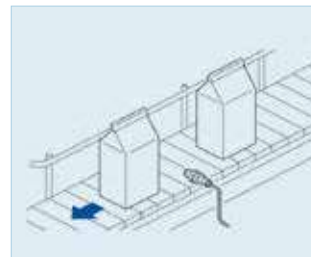
Object detection



Detecting specular objects



Object counting



Technical specifications

Standard type

Type		Thru-beam		Retroreflective type (note 3)				Diffuse			
		-		-		With polarizing filter		-		With sensitivity adjuster	
		Light-ON	Dark-ON	Light-ON	Dark-ON	Light-ON	Dark-ON	Light-ON	Dark-ON	Light-ON	Dark-ON
Model no.	NPN output	CY-111A (-Z) (note 1)	CY-111B (-Z)	CY-192A (-Z)	CY-192B (-Z)	CY-191A (-Z)	CY-191B (-Z)	CY-121A (-Z)	CY-121B (-Z)	CY-122A (-Z)	CY-122B (-Z)
	PNP output	CY-111A-P (-Z)	CY-111B-P (-Z)	CY-192A-P (-Z)	CY-192B-P (-Z)	CY-191A-P (-Z)	CY-191B-P (-Z)	CY-121A-P (-Z)	CY-121B-P (-Z)	CY-122A-P (-Z)	CY-122B-P (-Z)
Sensing range		15m		4m		2m		100mm (note 2)		600mm (note 2)	
Object to be sensed		Min. Ø 18mm (opaque)		Min. Ø 50mm (opaque, transparent) (note 1)		Min. Ø 50mm (opaque, transparent or specular) (note 1)		Opaque, transparent			
Supply voltage		12 to 24VDC ±10%									
Output		PNP / NPN open-collector transistor, max. 100mA									
Response time		Max. 1ms									
Emitting element		Infrared LED				Red LED		Infrared LED			
Protection		IP67 (IEC)									
Ambient temperature		-25 to +55°C									
Material		Enclosure: PBT, Lens: PMMA									
Connection method		2m cable, Suffix - Z: M12 connector (note 4)									
Dimensions (HxWxD)		M18x46mm, -Z connector type: M18x60mm				M18 x 48mm, -Z connector type: M18x62mm		M18x46mm, -Z connector type: M18x60mm		M18x62mm, -Z connector type: M18x76mm	
Accessories		Nuts 4 pcs.		Nuts 2 pcs.				Nuts 2 pcs. Screwdriver 1pc.			

Side sensing type

Type		Thru-beam		Retroreflective type (note 3)				Diffuse				
		-		-		With polarizing filter		-		With sensitivity adjuster		
		Light-ON	Dark-ON	Light-ON	Dark-ON	Light-ON	Dark-ON	Light-ON	Dark-ON	Light-ON	Dark-ON	
Model no.	NPN output	CY-111VA(-Z) (note 1)	CY-111VB(-Z)	CY-192VA(-Z)	CY-192VB(-Z)	CY-191VA(-Z)	CY-191VB(-Z)	CY-121VA(-Z)	CY-121VB(-Z)	CY-122VA(-Z)	CY-122VB(-Z)	
	PNP output	CY-111VA-P(-Z)	CY-111VB-P(-Z)	CY-192VA-P(-Z)	CY-192VB-P(-Z)	CY-191VA-P(-Z)	CY-191VB-P(-Z)	CY-121VA-P(-Z)	CY-121VB-P(-Z)	CY-122VA-P(-Z)	CY-122VB-P(-Z)	
Sensing range		15m		4m		2m		100mm (note 2)		600mm (note 2)		
Object to be sensed		Min. Ø 18mm (opaque)		Min. Ø 50mm (opaque, transparent) (note 1)		Min. Ø 50mm (opaque, transparent or specular) (note 1)		Opaque, transparent				
Supply voltage		12 to 24V DC ±10%										
Output		PNP / NPN open-collector transistor, max. 100mA										
Response time		1ms										
Emitting element		Infrared LED				Red LED		Infrared LED				
Protection		IP67 (IEC)										
Ambient temperature		-25 to +55°C										
Material		Enclosure: PBT, Lens: PMMA										
Connection method		2m cable, Suffix - Z: M12 connector (note 4)										
Dimensions (ØxD)		M18x62mm, -Z connector type: M18x76mm						M18x46mm, -Z connector type: M18x60mm	-	M18x78mm, -Z connector type: M18x92mm		
Accessories		Nuts 4 pcs.		Nuts 2 pcs.				Nuts 2 pcs. Screwdriver 1 pc.				

Notes:

Suffix -Z = M12 connector type

- 1.) The sensing range and object to be sensed of the retroreflective type are specified for the reflector **RF-420** (accessories page 122)
- 2.) The sensing range is specified for white, matt paper
- 3.) The reflector is not included in delivery; please order separately (accessories page 122)
- 4.) Cable not included in delivery; please order separately (accessories page 121)

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