

Opto Proximity Switches

SIMATIC PXO400

K30 form

Overview

Cubic molded plastic enclosure, IP67, connection using cable or M8 connector

Diffuse sensor; energetic sensor

- Sensing range 1.2 m (adjustable using potentiometer)

Retroreflective sensor

- Sensing range 4 m (adjustable using potentiometer)
- Supplied without reflector

Thru-beam sensor

- Sensing range 12 m (adjustable using potentiometer)

Sensor for plastic optical fibers





- Sensing range depending on type of optical fiber

Rated operating voltage 24 V DC


Electronics output pnp or npn

Supplied without mounting material

Technical specifications

Operating mode		Diffuse sensor	Retroreflective sensor with polarization filter
			
Sensing range	cm	120 (adjustable)	400 (adjustable)
Standard target	mm	200 × 200 (white)	Reflector type D 84
Operating voltage range (DC)	V	10 ... 36 (max. 20 % residual ripple)	
No-load current I_0 , max.	mA	15	15
Rated operational current I_e	mA	200	
Switching frequency	Hz	1000	
Switching time	ms	0.5	
Wavelength (illuminant)	nm	880 (IR)	660 (red, polarized)
Indicators		<ul style="list-style-type: none"> • Switching status • Surplus light 	
Enclosure material		Molded plastic (PBTP, Crastin)	
Degree of protection		IP67	
Ambient temperature	°C	-25 ... +55	
Temperature coefficient	%/K	0.3	
Type		3RG70 10-...00	3RG70 11-...00
Operating mode		Thru-beam sensor	Sensor for plastic optical fibers
			
Sensing range	cm	1200 (adjustable)	Depending on type of optical fiber
Standard target	mm	-	100 × 100 (white)
Operating voltage range (DC)	V	10 ... 36 (max. 20 % residual ripple)	
No-load current I_0 , max.	mA	15	
Rated operational current I_e	mA	200	
Switching frequency	Hz	1000	
Switching time	ms	0.5	
Wavelength (illuminant)	nm	880 (IR)	660 (red)
Indicators		<ul style="list-style-type: none"> • Switching status • Surplus light 	
Enclosure material		Molded plastic (PBTP, Crastin)	
Degree of protection		IP67	
Ambient temperature	°C	-25 ... +55	
Temperature coefficient	%/K	0.3	
Type		3RG70 12-...00	3RG70 13-...00

Selection and Ordering data

Operating mode	Sensing range	Illuminant	Wiring	Switching output	Ckt. diag. No.	Order No.	
							cm
 Diffuse sensor	120 (adjustable via potentiometer)	880 (IR)	3 m cable, PUR, 4 0.14 mm ²	Light-ON and dark-ON (antivalent)	pnp 3	3RG70 10-0CC00	
				Light-ON and dark-ON (antivalent)	npn 3	3RG70 10-0HC00	
			Light-ON and surplus light function	pnp 4	3RG70 10-0CD00		
			Light-ON and surplus light function	npn 4	3RG70 10-0HD00		
			M8 plug, 4-pole, type B	Light-ON and dark-ON (antivalent)	pnp 3	3RG70 10-7CC00	
				Light-ON and dark-ON (antivalent)	npn 3	3RG70 10-7HC00	
	Retrereflective sensor	400 (adjustable via potentiometer)	660 (red, polarized)	3 m cable, PUR, 4 0.14 mm ²	Light-ON and dark-ON (antivalent)	pnp 3	3RG70 11-0CC00
					Light-ON and dark-ON (antivalent)	npn 3	3RG70 11-0HC00
				Light-ON and surplus light function	pnp 4	3RG70 11-0CD00	
				Light-ON and surplus light function	npn 4	3RG70 11-0HD00	
				M8 plug, 4-pole, type B	Light-ON and dark-ON (antivalent)	pnp 3	3RG70 11-7CC00
					Light-ON and dark-ON (antivalent)	npn 3	3RG70 11-7HC00
Thru-beam sensor	1200 (adjustable via potentiometer)	880 (IR)	3 m cable, PUR, 4 0.14 mm ²	Light-ON and dark-ON (antivalent)	pnp 3	3RG70 12-0CC00	
				Light-ON and dark-ON (antivalent)	npn 3	3RG70 12-0HC00	
			Light-ON and surplus light function	pnp 4	3RG70 12-0CD00		
			Light-ON and surplus light function	npn 4	3RG70 12-0HD00		
			3 0.14 mm ² Emitter		2	3RG70 12-0BE00	
			M8 plug, 4-pole, type B	Light-ON and dark-ON (antivalent)	pnp 3	3RG70 12-7CC00	
	Light-ON and dark-ON (antivalent)	npn 3		3RG70 12-7HC00			
	Sensor for plastic optical fibers	Depends on FO conductor	660 (red)	3 m cable, PUR, 4 0.14 mm ²	Light-ON and dark-ON (antivalent)	pnp 3	3RG70 13-0CC00
					Light-ON and dark-ON (antivalent)	npn 3	3RG70 13-0HC00
				Light-ON and surplus light function	pnp 4	3RG70 13-0CD00	
				Light-ON and surplus light function	npn 4	3RG70 13-0HD00	
				M8 plug, 4-pole, type B	Light-ON and dark-ON (antivalent)	pnp 3	3RG70 13-7CC00
Light-ON and dark-ON (antivalent)					npn 3	3RG70 13-7HC00	
Light-ON and surplus light function	pnp 4	3RG70 13-7CD00					
	npn 4	3RG70 13-7HD00					

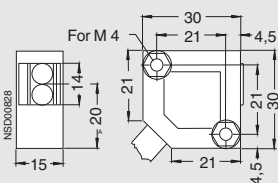
Accessories

Mounting bracket for forms K30, K31

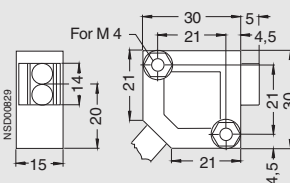
3RX7 910

Dimensions

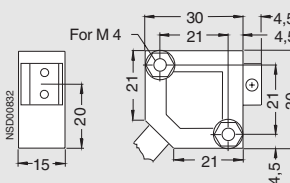
3RG70 10-0..00, 3RG70 12-0..00



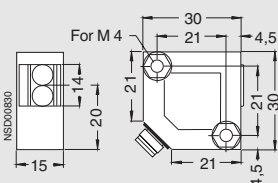
3RG70 11-0..00



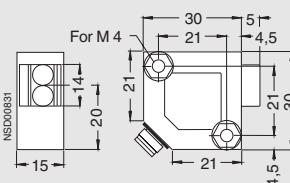
3RG70 13-0..00



3RG70 10-7..00, 3RG70 12-7..00



3RG70 11-7..00



3RG70 13-7..00

