

# Opto Proximity Switches

## SIMATIC PXO100

### D4 form

#### Overview

Cylindrical metal enclosure, IP67,  
connection using cable or M8 connector

Diffuse sensor (energetic sensor)

- Sensing range 5 cm (not adjustable)



Thru-beam sensor

- Sensing range 25 cm (not adjustable)


Rated operating voltage 24 V DC

Electronics output pnp or npn

#### Technical specifications

Operating mode		Diffuse sensor	Thru-beam sensor
			
Sensing range	cm	5 (not adjustable)	25 (not adjustable)
Standard target	mm	100 × 100 (white)	-
Operating voltage range (DC)	V	10 ... 30 (max. 20 % residual ripple)	
No-load current $I_0$ (typ.)	mA	10	5 / 5 (emitter / receiver)
Rated operational current $I_e$	mA	100	
Switching frequency	Hz	250	250
Switching time	ms	2.5	2.5
Wavelength (illuminant)	nm	880 (IR)	880 (IR)
Indicators		<ul style="list-style-type: none"> <li>• Reliable detection</li> <li>• Surplus light underrange</li> </ul>	
		Yellow LED Yellow LED flashing	
Enclosure material		Stainless steel	
Degree of protection		IP67	
Ambient temperature	°C	0 ... +55	
Temperature coefficient	%/K	0.3	
Type		3RG70 40-...00	3RG70 42-...00

#### Selection and Ordering data

	Operating mode	Sensing range	Illuminant	Wiring	Switching output	Ckt. diag. No.	Order No.
	Diffuse sensor	5	880 (IR)	2 m cable, PUR, 3 × 0.14 mm <sup>2</sup>	pnp, light-ON	1	<b>3RG70 40-0AB00</b>
					nnp, light-ON	1	<b>3RG70 40-0GB00</b>
					M8 connector, 3-pole, type A	pnp, light-ON	1
				nnp, light-ON	1	<b>3RG70 40-7GB00</b>	
	Thru-beam sensor	25	880 (IR)	2 m cable, PUR, 3 × 0.14 mm <sup>2</sup>	pnp, light-ON	1	<b>3RG70 42-0AB00</b>
					nnp, light-ON	1	<b>3RG70 42-0GB00</b>
Emitter					2	<b>3RG70 42-0BG00</b>	
			M8 connector, 3-pole, type A	pnp, light-ON	1	<b>3RG70 42-7AB00</b>	
				nnp, light-ON	1	<b>3RG70 42-7GB00</b>	
				Emitter	2	<b>3RG70 42-7BG00</b>	

#### Dimensions

