

# Opto Proximity Switches

## SIMATIC PXO200

### M18 S form

#### Overview

Cylindrical metal enclosure, IP67, connection using cable or M12 connector

Diffuse sensor (energetic sensor)

- Sensing range 60 or 80 cm (adjustable with potentiometer)

Retroreflective sensor

- Scanning angle 3 m
- Supplied without reflector

Thru-beam sensor

- Scanning angle 6 m

Rated operating voltage 24 V DC

Electronics output pnp

#### Technical specifications

Operating mode

##### Diffuse sensor



##### Retroreflective sensor with polarization filter



##### Thru-beam sensor




Sensing range	cm	80 (adjustable)	60 (adjustable)	300	600
Standard target	mm	200 × 200 (white)		Reflector type D84	–
Operating voltage range (DC)	V	10 ... 30 (max. 20 % residual ripple)			
Rated operational current $I_e$	mA	150			
Switching frequency	Hz	700			
Switching time	ms	0.5			
Wavelength (illuminant)	nm	660 (red)		660 (red, polarized)	660 (red)
LEDs		Yellow LED Green LED			
Enclosure material		Brass, nickel-plated			
Degree of protection		IP67			
Ambient temperature	°C	–25 ... +55			
Temperature coefficient	%/K	0.3			
Type		3RG76 40–...00	3RG76 50–...00	3RG76 41–...00, 3RG76 51–...00	3RG76 42–...00, 3RG76 52–...00

#### Selection and Ordering data

	Operating mode	Sensing range	Illuminant	Wiring	Switching output	Ckt. diag. No.	Order No.
		cm	nm				
	Diffuse sensor	80 (adjustable via potentiometer)	660 (red)	2 m cable, PUR, 3 0.34 mm <sup>2</sup>	pnp, light-ON	12	<b>3RG76 40–0AB00</b>
					pnp, dark-ON	12	<b>3RG76 40–0AA00</b>
				4 0.34 mm <sup>2</sup>	pnp, light-ON and dark-ON	5	<b>3RG76 40–0CC00</b>
					pnp, light-ON and surplus light function	6	<b>3RG76 40–0CD00</b>
				M12 plug, 4-pole, type F	pnp, light-ON	12	<b>3RG76 40–3AB00</b>
					pnp, dark-ON	13	<b>3RG76 40–3AA00</b>
	pnp, light-ON and dark-ON	5	<b>3RG76 40–3CC00</b>				
	pnp, light-ON and surplus light function	6	<b>3RG76 40–3CD00</b>				
	Retroreflective sensor	300	660 (red, polarized)	2 m cable, PUR, 3 0.34 mm <sup>2</sup>	pnp, light-ON	12	<b>3RG76 41–0AB00</b>
					pnp, dark-ON	12	<b>3RG76 41–0AA00</b>
				4 0.34 mm <sup>2</sup>	pnp, light-ON and dark-ON	5	<b>3RG76 41–0CC00</b>
					pnp, light-ON and surplus light function	6	<b>3RG76 41–0CD00</b>
				M12 plug, 4-pole, type F	pnp, light-ON	12	<b>3RG76 41–3AB00</b>
					pnp, dark-ON	13	<b>3RG76 41–3AA00</b>
pnp, light-ON and dark-ON					5	<b>3RG76 41–3CC00</b>	
pnp, light-ON and surplus light function					6	<b>3RG76 41–3CD00</b>	

# Opto Proximity Switches SIMATIC PXO200

M18 S form

Operating mode	Sensing range cm	Illuminant nm	Wiring	Switching output	Ckt. diag. No.	Order No.				
<b>Straight sensor</b>										
	Thru-beam sensor	600	660 (red)	2 m cable, PUR, 3 0.34 mm <sup>2</sup>	pnp, light-ON	12	<b>3RG76 42-0AB00</b>			
					pnp, dark-ON	12	<b>3RG76 42-0AA00</b>			
				4 0.34 mm <sup>2</sup>	pnp, light-ON and dark-ON	5	<b>3RG76 42-0CC00</b>			
					pnp, light-ON and surplus light function	6	<b>3RG76 42-0CD00</b>			
				2 0.34 mm <sup>2</sup>	Emitter	9	<b>3RG76 42-0BG00</b>			
					M12 plug, 4-pole, type F	pnp, light-ON	12	<b>3RG76 42-3AB00</b>		
				pnp, dark-ON		13	<b>3RG76 42-3AA00</b>			
				pnp, light-ON and dark-ON		5	<b>3RG76 42-3CC00</b>			
				pnp, light-ON and surplus light function		6	<b>3RG76 42-3CD00</b>			
				Emitter	9	<b>3RG76 42-3BG00</b>				
<b>Angled sensor</b>										
	Diffuse sensor	60 (adjustable via potentiometer)	660 (red)	2 m cable, PUR, 3 0.34 mm <sup>2</sup>	pnp, light-ON	12	<b>3RG76 50-0AB00</b>			
					pnp, dark-ON	12	<b>3RG76 50-0AA00</b>			
				4 0.34 mm <sup>2</sup>	pnp, light-ON and dark-ON	5	<b>3RG76 50-0CC00</b>			
					pnp, light-ON and surplus light function	6	<b>3RG76 50-0CD00</b>			
				M12 plug, 4-pole, type F	pnp, light-ON	12	<b>3RG76 50-3AB00</b>			
					pnp, dark-ON	13	<b>3RG76 50-3AA00</b>			
					pnp, light-ON and dark-ON	5	<b>3RG76 50-3CC00</b>			
					pnp, light-ON and surplus light function	6	<b>3RG76 50-3CD00</b>			
				Retroreflective sensor	300	660 (red, polarized)	2 m cable, PUR, 3 0.34 mm <sup>2</sup>	pnp, light-ON	12	<b>3RG76 51-0AB00</b>
								pnp, dark-ON	12	<b>3RG76 51-0AA00</b>
4 0.34 mm <sup>2</sup>	pnp, light-ON and dark-ON	5	<b>3RG76 51-0CC00</b>							
	pnp, light-ON and surplus light function	6	<b>3RG76 51-0CD00</b>							
M12 plug, 4-pole, type F	pnp, light-ON	12	<b>3RG76 51-3AB00</b>							
	pnp, dark-ON	13	<b>3RG76 51-3AA00</b>							
	pnp, light-ON and dark-ON	5	<b>3RG76 51-3CC00</b>							
	pnp, light-ON and surplus light function	6	<b>3RG76 51-3CD00</b>							
Thru-beam sensor	600	660 (red)	2 m cable, PUR, 3 0.34 mm <sup>2</sup>				pnp, light-ON	12	<b>3RG76 52-0AB00</b>	
							pnp, dark-ON	12	<b>3RG76 52-0AA00</b>	
			4 0.34 mm <sup>2</sup>	pnp, light-ON and dark-ON	5	<b>3RG76 52-0CC00</b>				
				pnp, light-ON and surplus light function	6	<b>3RG76 52-0CD00</b>				
			2 0.34 mm <sup>2</sup>	Emitter	9	<b>3RG76 52-0BG00</b>				
				M12 plug, 4-pole, type F	pnp, light-ON	12	<b>3RG76 52-3AB00</b>			
			pnp, dark-ON		13	<b>3RG76 52-3AA00</b>				
			pnp, light-ON and dark-ON		5	<b>3RG76 52-3CC00</b>				
			pnp, light-ON and surplus light function		6	<b>3RG76 52-3CD00</b>				
			Emitter	9	<b>3RG76 52-3BG00</b>					

Dimensional drawings see M18.

2

