O7H207

Diffuse reflection sensor with background suppression

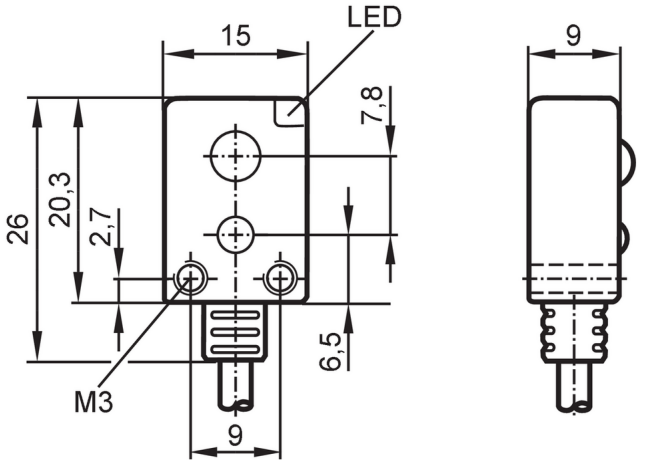
O7H-DNKG/0,20M/AS

phase-out article

Discontinuation date: 03/31/2026

Alternative articles: O7H201

When selecting an alternative article and accessories please note that technical data may differ!



receiver in upper lens
transmitter in lower lens

Product characteristics		
Type of light		red light
Housing		rectangular
Application		
Special feature		Background suppression
Function principle		Diffuse reflection sensor
Application		For applications in robotics, assembly and handling technology
Electrical data		
Operating voltage	[V]	10...30 DC; ("supply class 2" according to UL)
Current consumption	[mA]	20; ((24 V))
Protection class		III
Reverse polarity protection		yes
Type of light		red light
Wave length	[nm]	633
Outputs		
Electrical design		NPN
Output function		dark-on mode
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	750
Short-circuit protection		yes

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Type of short-circuit protection		pulsed	
Detection zone			
Range	[mm]	5...30; (white paper 200 x 200 mm)	
Range on white object (90 % remission)	[mm]	5...30	
Range on grey object (18 % remission)	[mm]	6...30	
Range on black object (6 % remission)	[mm]	7...29	
Range adjustable		no	
Max. light spot diameter	[mm]	2.5	
Light spot dimensions refer to		at maximum range	
Background suppression available		yes	
Operating conditions			
Ambient temperature	[°C]	-25...60	
Protection		IP 65	
Tests / approvals			
EMC		EN 60947-5-2	
MTTF	[years]	1610	
Mechanical data			
Weight	[g]	14.4	
Housing		rectangular	
Dimensions	[mm]	20.3 x 15 x 9	
Materials		housing: PA	
Lens material		front pane:PMMA	
Lens alignment		side lens	
Tightening torque	[Nm]	0.5	
Displays / operating elements			
Display		switching status	1 x LED, yellow
Remarks			
Pack quantity		1 pcs.	
Electrical connection			

Cable: 0.2 m, PUR; 3 x 0.14 mm²

Connector: 1 x M8; coding: A; Contacts: 3; Locking: snap-fit



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Connection

