



Diffuse reflection sensors with background suppression

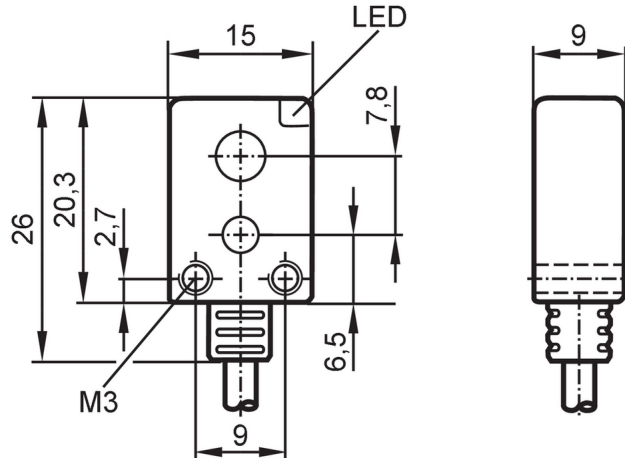
O7H-DNKG/0,20M/AS

Article to be discontinued

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

Electrical data

Operating voltage	[V]	10...30 DC; (UL - Class 2 source required)
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
Type of short-circuit protection		yes (non-latching)

O7H207



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Monitoring range		
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
Material		housing: PA
Lens material		front lens:PMMA
Lens alignment		Side sensing
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; Locking: snap-fit



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Connection

