



Diffuse reflection sensor with background suppression

O7H-DNKG/0,20M/AS



receiver in upper lens
transmitter in lower lens



Application

Function principle Diffuse reflection sensor

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
Type of short-circuit protection	pulsed



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Detection zone		
Range	[mm]	3...100; (white paper 200 x 200 mm)
Range on white object (90 % remission)	[mm]	3...100
Range on grey object (18 % remission)	[mm]	6...80
Range on black object (6 % remission)	[mm]	7...46
Range adjustable		no
Max. light spot diameter	[mm]	7
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]	14.6
Housing		rectangular
Dimensions	[mm]	20.3 x 15 x 9
Materials		PA
Lens material		PMMA
Lens alignment		side lens
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 mm ²		
Connector: 1 x M8; Locking: snap-fit		
		

O7H211



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Connection

