

Diffuse reflective sensor, Sn=150mm, 4L, 10-30VDC, NPN, PNP, M18, insulated material, line 2m



Part no. 13108A6517 Article no. 135635 Catalog No. 13108A6517

Delivery program

Basic function			Optical sensors
Product range			Comet Series
For connection of:			2 m connection cable
Design (outer dimensions)		mm	M18 x 1
Rated operational voltage	U _e		10 - 30 V DC
Rated switching distance	S_n	mm	150
Description			Beam: straight with background suppression (Perfect Prox)
Connection			4-wire
Function			Reflected-light beam
Type of light			Infra-red
Material			Insulated material
Switching type			NPN PNP
Switching principle			Adjustable bright/dark switching

Information relevant for export to North America

Product Standards UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking

UL File No. E117028

UL Category Control No. NRKH, NRKH7

CSA File No. 50513

CSA Class No. 3211-07

North America Certification UL listed, CSA certified

Max. Voltage Rating 30 V DC

Degree of Protection IEC: IP68, IP69K; UL/CSA Type: 1, 4, 6

Technical data

General

Standards		IEC/EN 60947-5-2
Ambient temperature		-40 - +70
Mechanical shock resistance	g	100 Shock duration 3 ms
Degree of Protection		IP67
Characteristics		

Characteristics			
Rated switching distance			
Rated switching distance	S_n	mm	150
Range		mm	0.15
Rated operational voltage	U _e		10 - 30 V DC
Operating current in the switched state at 24 V DC	I _b	mA	30
Maximum load current	l _e	mA	< PNP: 100 NPN: 250 (120 > 55 °C)
Response time		ms	1
Switching state display		LED	Red
Protective functions			Short-circuit protective device Protection against polarity reversal
Connection			4-wire
Style			
Design (outer dimensions)		mm	M18 x 1
For connection of:			2 m connection cable
Material			Insulated material

Design verification as per IEC/EN 61439

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Technical data for design verification		
Operating ambient temperature min.	°C	-40
Operating ambient temperature max.	°C	70

Technical data ETIM 6.0

S	Sensors (EG000026) / Light scanner with background masking (EC002719)
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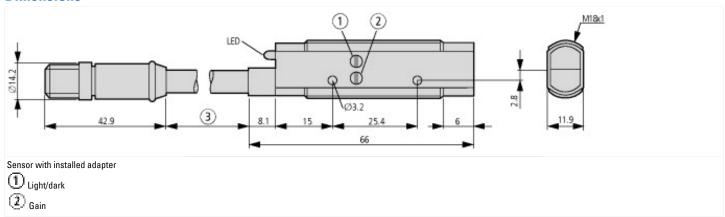
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Optoelectronic sensor / Light scanner w. background masking (ecl@ss8.1-27-27-09-04 [AKP253010])			
Adjustment range	mm	0 - 0	
Operating distance	mm	0 - 0	
Triangulation		Background fade-out	
Pre failure notice		No	
With time function		No	
Rated switching distance	mm	150	
Max. switching distance	mm	150	
Max. output current	mA	250	
Reflector included	IIIA	No	
Analogue output 0 V 10 V		No	
Analogue output 0 mA 20 mA		No	
Analogue output 4 mA 20 mA		No	
Analogue output -10 V +10 V		No	
With other analog output		No	
Setting procedure With communication interface analog		- No	
With communication interface AS-Interface			
With communication interface CANOpen		No No	
With communication interface DeviceNet		No	
With communication interface Ethernet With communication interface INTERBUS		No	
With communication interface PROFIBUS		No	
		No No	
With communication interface RS-232		No	
With communication interface RS-422		No	
With communication interface RS-485		No No	
With communication interface SSD		No No	
With communication interface SSI		No	
Number of semiconductor outputs with signalling function		2	
Number of contact energized outputs with signalling function		0	
Number of protected semiconductor outputs		0	
Number of protected contact energized outputs		0	
Type of interface for safety communication		-	
Type of electric connection		Cable	
Type of switching output		PNP/NPN	
Type of switch function		Programmable/configurable	
Operation agent-safety class		Safety class 2	
Explosion safety category for gas		None	
Explosion safety category for dust		None	
Construction type housing		Cylinder, screw-thread	
Width sensor	mm	0	
Diameter sensor	mm	18	
Height of sensor	mm	0	
Length of sensor	mm	66	
Switch function		Light-/dark switching	
Material of optical surface		Plastic	
Material housing		Plastic	
Max. output current at protected output	mA	0	

Min. reflector distance	m	nm	0
Ambient temperature	٥	C	-40 - 70
Time of reaction	m	ns	1
Transmission range of the safety field	m	n	0
Switching frequency	Н	łz	500
Type of safety acc. IEC 61496-1			-
Switching voltage of OSSD at state "high"	V	/	30
Rated control supply voltage Us at AC 50HZ	V	/	0 - 0
Rated control supply voltage Us at AC 60HZ	V	/	0 - 0
Rated control supply voltage Us at DC	V	/	10 - 30
Voltage type			DC
With monitoring function downstream switching devices			No
Laser protection class			None
Wavelength of the sensor	n	nm	0
Type of light			Infrared light
Light dot	m	nm²	0
AWG-number			22
Material of cable sheath			PVC
With restart blockage			No
Suitable for safety functions			No
Degree of protection (IP)			IP67

Approvals

Approvais	
Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
UL File No.	E117028
UL Category Control No.	NRKH, NRKH7
CSA File No.	50513
CSA Class No.	3211-07
North America Certification	UL listed, CSA certified
Max. Voltage Rating	30 V DC
Degree of Protection	IEC: IP68, IP69K; UL/CSA Type: 1, 4, 6

Dimensions



Additional product information (links)

IL05305002Z Comet Series Optical Sensors

IL05305002Z Comet Series Optical Sensors ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05305002Z2016_07.pdf