

Diffuse reflective sensor, Sn=150mm, 4L, 10-30VDC, dark, NPN, PNP, M30, metal, M12



Part no. E58-30DP150-HDP

Article no. 135677

Catalog No. E58-30DP150-HDP

Delivery program

Basic function			Optical sensors
Product range			E58 Harsh Duty Series
For connection of:			Plug-in connection M12 x 1
Design (outer dimensions)		mm	M30 x 1.5
Rated operational voltage	U _e		10 - 30 V DC
Rated switching distance	S_n	mm	150
Description			with background suppression (Perfect Prox)
Connection			4-wire
Function			Reflected-light beam
Type of light			Visible red
Material			Stainless steel
Switching type			NPN PNP
Switching principle			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. E166051

UL Category Control No. NRKH, NRKH7

 $\ensuremath{\mathsf{CSA}}$ File No. UL report applies to both Canada and US

CSA Class No. -

North America Certification UL listed, certified by UL for use in Canada

Max. Voltage Rating 30 V DC

Degree of Protection IEC: IP68, IP69K; UL/CSA Type: 1, 2, 3, 3R, 3S, 4, 4x, 6, 6P, 12, 12K, 13

Technical data

General

Standards		IEC/EN 60947-5-2
Ambient temperature		-40 - +55
Mechanical shock resistance	g	100 Shock duration 3 ms
Degree of Protection		IP69K
Observatorista		

Degree of Protection			IP69K	
Characteristics				
Rated switching distance				
Rated switching distance	S_{n}	mm	150	
Range		mm	0.15	
Rated operational voltage	U _e		10 - 30 V DC	
Maximum load current	l _e	mA	< 100	
Response time		ms	1.6	
Switching state display		LED	Red	
Protective functions			Short-circuit protective device Protection against polarity reversal Protection against wire breakage	
Connection			4-wire	
Style				
Design (outer dimensions)		mm	M30 x 1.5	
For connection of:			Plug-in connection M12 x 1	
Material			Stainless steel	

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	°C	55

Technical data ETIM 6.0

Sensors (EG000026)	/ Light scannor with	hackground	macking (FC002710)
36112012 (E0000020)	/ Liuiii Scannei wiin	Dackurounu	IIIaskiilu (ECOOZ/ 19)

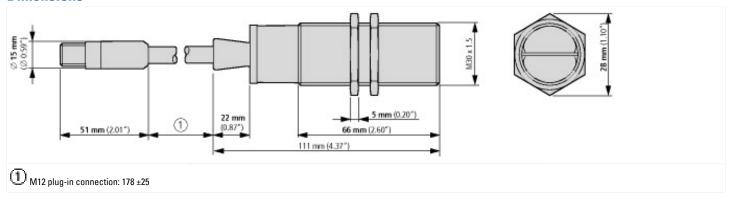
Sensors (EGUUUU2b) / Light scanner with background masking (ECUU2/19)				
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Optoelectronic sensor / Light scanner w. background masking (ecl@ss8.1-27-27-09-04 [AKP253010])				
Adjustment range	mm	0 - 150		
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	165		
Max. output current	mA	100		
Reflector included		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		No		
With communication interface CANOpen		No		
With communication interface DeviceNet		No		
With communication interface Ethernet		No		
With communication interface INTERBUS		No		
With communication interface PROFIBUS		No		
With communication interface RS-232		No		
With communication interface RS-422		No		
With communication interface RS-485		No		
With communication interface SSD		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		Connector M12		
Type of switching output		PNP/NPN		
Type of switch function				
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	30		
Height of sensor	mm	0		
Length of sensor	mm	111		
Switch function		Dark switching		
Material of optical surface		Glass		
Material housing		Metal		
Max. output current at protected output	mA	0		

Min. reflector distance mm 0 Ambient temperature °C 40-55 Time of reaction ms 1.6 Transmission range of the safety field m 0 Switching frequency Hz 312 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 0 - 0 Voltage type DC No With monitoring function downstream switching devices No No Laser protection class None No Wavelength of the sensor nm 660 Type of light - - Light dod mm² 0 AWG-number No - Mith restart blockage No - With prestart blockage No - With prestart functions No -<			
Time of reaction ms 1.6 Transmission range of the safety field m 0 Switching frequency Hz 312 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 0 - 0 Voltage type DC No With monitoring function downstream switching devices No No Laser protection class No 660 Wavelength of the sensor nm 660 Type of light mm² 0 Light dot mm² 0 AWG-number mm² 0 Material of cable sheath mm² 0 With restart blockage ma² No Still ble for safety functions mm² No	Min. reflector distance	mm	0
Transmission range of the safety field memory	Ambient temperature	°C	-40 - 55
Switching frequency Hz 312 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 No With monitoring function downstream switching devices No No Laser protection class No 660 Wavelength of the sensor nm 660 Type of light - - Light dot mm² 0 AWG-number pm² 0 Material of cable sheath pm² 0 With restart blockage pm² No Suitable for safety functions pm² No	Time of reaction	ms	1.6
Type of safety acc. IEC 61496-1 Switching voltage of OSSD at state "high" Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at AC 60HZ Roted control supply voltage Us at AC 60HZ Roted control supply voltage Us at DC Voltage type Voltage type Voltage type Voltage type Voltage type Voltage type Voltage function downstream switching devices Laser protection class Voltage function downstream switching devices Laser protection class Voltage function function downstream switching devices Voltage function downstream switching devices Voltage function downstream switching devices Voltage function downstream switching d	Transmission range of the safety field	m	0
Switching voltage of OSSD at state "high" Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at AC 60HZ Roted control supply voltage Us at DC Voltage type Voltage type With monitoring function downstream switching devices Laser protection class Wavelength of the sensor Type of light Light dot AWG-number Material of cable sheath With restart blockage Suitable for safety functions No Suitable for safety functions No No No No No No No No No N	Switching frequency	Hz	312
Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at AC 60HZ Roted control supply voltage Us at DC Voltage type Voltage Voltage type Voltage	Type of safety acc. IEC 61496-1		
Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at DC Voltage type With monitoring function downstream switching devices Laser protection class Wavelength of the sensor Type of light Light dot AWG-number Material of cable sheath With restart blockage Suitable for safety functions V 0 0 - 0 0 0 0 0 0 0 0	Switching voltage of OSSD at state "high"	V	30
Rated control supply voltage Us at DC Voltage type With monitoring function downstream switching devices Laser protection class Wavelength of the sensor Type of light Light dot AWG-number Material of cable sheath With restart blockage Suitable for safety functions AWG-number Suitable for safety functions Wavelength of the sensor I DC No No No No No O O O O O O O O O O O O O	Rated control supply voltage Us at AC 50HZ	V	0 - 0
Voltage type With monitoring function downstream switching devices Laser protection class Wavelength of the sensor Type of light Light dot AWG-number Material of cable sheath With restart blockage Suitable for safety functions DC No No No 60 70 mm² 0 0 0 10 10 10 10 10 10 10	Rated control supply voltage Us at AC 60HZ	V	0 - 0
With monitoring function downstream switching devices Laser protection class Wavelength of the sensor Type of light Light dot AWG-number Material of cable sheath With restart blockage Suitable for safety functions Wood With monitoring function downstream switching devices No None None 660	Rated control supply voltage Us at DC	V	10 - 30
Laser protection class Wavelength of the sensor Type of light Light dot AWG-number Material of cable sheath With restart blockage Suitable for safety functions None None 660 - Caccanananananananananananananananananan	Voltage type		DC
Wavelength of the sensor Type of light Light dot Material of cable sheath With restart blockage Suitable for safety functions Material of the sensor Material of the sensor Material of cable sheath Mo Suitable for safety functions	With monitoring function downstream switching devices		No
Type of light Light dot MMG-number AWG-number Material of cable sheath With restart blockage Suitable for safety functions Material of light Material of cable sheath Mo Mo Mo Mo Mo Mo Mo Mo Mo M	Laser protection class		None
Light dot mm2 0 AWG-number 0 Material of cable sheath 0 With restart blockage 0 Suitable for safety functions 0 mm2 0 O O O O O O O O O O O O O	Wavelength of the sensor	nm	660
AWG-number 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Type of light		
Material of cable sheath With restart blockage No Suitable for safety functions No	Light dot	mm²	0
With restart blockage No Suitable for safety functions No No	AWG-number		0
Suitable for safety functions No	Material of cable sheath		
	With restart blockage		No
	Suitable for safety functions		No
Degree of protection (IP) IP67	Degree of protection (IP)		IP67

Approvals

UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
E166051
NRKH, NRKH7
UL report applies to both Canada and US
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UL listed, certified by UL for use in Canada
30 V DC
IEC: IP68, IP69K; UL/CSA Type: 1, 2, 3, 3R, 3S, 4, 4x, 6, 6P, 12, 12K, 13

Dimensions



Additional product information (links)

IL05305003Z E58 Series Harsh Environment Optical Sensors

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ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05305003Z2016_07.pdf