- German
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- Czech
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Worldwide English

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E58-18DP50-HLP - Diffuse reflective sensor, Sn=50mm, 4L, 10-30VDC, light, NPN, PNP, M18, metal, M12

135673 E58-18DP50-HLP

Overview Specifications Resources

135673 E58-18DP50-HLP

Diffuse reflective sensor, Sn=50mm, 4L, 10-30VDC, light, NPN, PNP, M18, metal, M12

Alternate Catalog No.	E58-18DP50-HLP
EL-Nummer (Norway)	0004315344

E58 series, product features: sensors with a diameter of 18 mm or 30 mm. Highly refined optics for long sensing ranges and to see through high levels of contamination – unmatched optical performance. Perfect Prox® technology provides exceptional background rejection and extremely high excess gain. Resistant to many chemicals used in the automotive, food processing and forest products industries. Suitable for high temperature, high pressure washdown (82 bar). mechanical Viton gaskets are resistant to extreme temperature variations. Visible sensing beam on all models lets you see where the beam is aimed for quick flush mounting and alignment. The function display is the brightest available and is visible from any angle and in any lighting condition

- Delivery program
- Technical data
- Design verification as per IEC/EN 61439
- Technical data ETIM 7.0
- Approvals
- Dimensions

Delivery program

Basic function
Optical sensors
Product range
E58 Harsh Duty Series
For connection of:
Plug-in connection M12 x 1
Design (outer dimensions)
M18 x 1 mm
Rated operational voltage [U_e]
10 - 30 V DC
Rated switching distance [S_n]
50 mm
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
Light 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

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
100
Shock duration 3 ms g
Degree of Protection
IP69
Characteristics
Rated switching distanceRated switching distance [S_n]
50 mm
Range
0.05 mm
Rated operational voltage [U_e]
10 - 30 V DC
Maximum load current [I_e]
< PNP: 100
NPN: 250 mA
Response time
1 ms
Switching state display
Red LED
Protective functions
Short-circuit protective device
Protection against polarity reversal
Protection against wire breakage
Connection
4-wire
StyleDesign (outer dimensions)
M18 x 1 mm
For connection of:
Plug-in connection M12 x 1
Material
Stainless steel

Design verification as per IEC/EN 61439

Operating ambient temperature min.
-40 °C
Operating ambient temperature max.
+55 °C

Technical data ETIM 7.0

Sensors (EG000026) / Light scanner with background masking (EC002719)
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Optoelectronic sensor / Light scanner w. background masking (ecl@ss10.0.1-27-27-09-04 [AKP253013])
Adjustment range
0 - 50 mm
Operating distance
0 - 0 mm
Triangulation
Background fade-out
Pre failure notice
No
With time function
No
Rated switching distance
50 mm
Max. switching distance
57 mm
Max. output current
250 mA
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 analogue output
No
Setting procedure
Other
With communication interface analogue
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
Other
Type of electric connection
Connector M12
Type of switching output
PNP/NPN
Type of switch function
Other
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
0 mm
Diameter sensor
18 mm
Height of sensor
0 mm
Length of sensor
80 mm
Sensing mode
Light switching
Material of optical surface
Glass
Material housing
Metal
Max. output current at protected output
0 mA
Min. reflector distance
0 mm
Ambient temperature
-40 - 55 °C
Time of reaction
1 ms
Transmission range of the safety field
0 m
Switching frequency
500 Hz
Type of safety acc. IEC 61496-1
"Switching voltage of OSSD at state ""high"""
30 V
Rated control supply voltage Us at AC 50HZ
0 - 0 V
Rated control supply voltage Us at AC 60HZ
0 - 0 V
Rated control supply voltage Us at DC
10 - 30 V
Voltage type
DC
With monitoring function downstream switching devices
No
Laser protection class
None
Wavelength of the sensor
660 nm
Type of light
Other
Light dot
0 mm²
AWG-number
0
Material of cable sheath
Other

With restart blockage
No
Suitable for safety functions
No
Degree of protection (IP)
IP67

Approvals

Product Standards
UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
UL File No.
E166051
UL Category Control No.
NRKH, NRKH7
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

Dimensions

☐ M12 plug-in connection: 178 ±25

Product photo

Photo
Product photo
Photo

3D drawing

1360DRW-25
3D drawing
Line drawing

Dimensions single product

1360DIM-314
Dimensions single product
Line drawing
☐ M12 plug-in connection: 178 ±25, Connection cable: 2m

Instruction Leaflet

- Optical sensors: E58 Series (IL05305003Z)
  Instruction Leaflet
  (PDF, International)

Declaration of Conformity

- DA-DC-00002425
  Declaration of Conformity
  (PDF)

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