



135681

E58-30DPS280-HDP

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DELIVERY PROGRAM

Basic function
Optical sensors

Product range
E58 Harsh Duty Series

For connection of:
Plug-in connection M12 x 1

Design (outer dimensions)
M30 x 1.5 mm

Rated operational voltage [U_b]
10 - 30 V DC

Rated switching distance [S_n]
280 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
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

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 distance
Rated switching distance [S_n]
280 mm

Range
0.18 mm

Rated operational voltage [U_o]
10 - 30 V DC

Maximum load current [I_o]
< 100 mA

Response time

1.6 ms

Switching state display
Red LED

Protective functions
Short-circuit protective device
Protection against polarity reversal
Protection against wire breakage

Connection
4-wire

Style
Design (outer dimensions)
M30 x 1.5 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 - 280 mm

Operating distance
0 - 0 mm

Triangulation
Background fade-out

Pre failure notice
No

With time function
No

Rated switching distance
280 mm

Max. switching distance
318 mm

Max. output current
100 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
30 mm

Height of sensor
0 mm

Length of sensor
111 mm

Sensing mode
Dark switching

Material of optical surface
Glass

Material housing
Metal

Max. output current at protected output
0 mA

Mn. reflector distance
0 mm

Ambient temperature
-40 - 55 °C

Time of reaction
1.6 ms

Transmission range of the safety field
0 m

Switching frequency
312 Hz

Type of safety acc. IEC 61496-1

"Switching voltage of OSSD at state ""high""
30 V

Rated control supply voltage U_s at AC 50 Hz
0 - 0 V

Rated control supply voltage U_s at AC 60 Hz
0 - 0 V

Rated control supply voltage U_s 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

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North America Certification
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Max. Voltage Rating
30 V DC

Degree of Protection
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12, 12K, 13

DIMENSIONS



□ M12 plug-in connection: 178 ±25

