

https://www.phoenixcontact.com/us/products/1029564



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Signal light, 24 V DC, IALA white, optimum, emission angle (vertical/Horizontal): 10.5 °/4.5 °, diameter: 174 mm, degree of protection: IP65/IP67, Communication interface, safe diagnostics

Product description

The signal light is designed for use in light signal systems (e.g., lock systems, movable bridges on inland waterways, etc.). The use of safety-related autonomous monitoring functions ensures high availability. Only components that conform to the industry standard are used for the monitoring functions. The signal light is available in various standardized light colors. The communication interface provides you with a large amount of diagnostic and status information. Due to safe 2-channel diagnostics, light signal systems up to performance level e and SIL 3 can be implemented.

Your advantages

- Developed in accordance with EN 12966-1, IALA recommendation E200-1
- Safe 2-channel diagnostics in conjunction with safety modules up to Cat. 4/PL e in accordance with EN ISO 13849-1, SIL 3 in accordance with EN 62061 and IEC 61508
- Fieldbus communication (possible distance from controller: 400 m)
- · Fixed state in the event of interrupted communication
- · High light and color intensity
- · Can be dimmed in 256 steps
- · Particularly economical thanks to energy-efficient LED technology and an LED service life of at least 50 000 h

Commercial data

Item number	1029564
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	DRL121
Catalog page	Page 510 (C-6-2019)
GTIN	4055626530376
Weight per piece (including packing)	2,020 g
Weight per piece (excluding packing)	1,680 g
Country of origin	DE



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Technical data

Product properties

Product type	Signaling light
Mounting position	vertical
Application	Inland navigation
	Transportation infrastructure
	Safe diagnostics in accordance with IEC 61508
Design	Operating hours counter
Special properties	Communication interface
	safe diagnostics
Diagnostics messages	LEDs; temperature, current, voltage, etc. yes
	Mains failure, communication failure yes
	Safe diagnostics (up to SIL 2/PL d) in conjunction with safe modules (safety technology) yes
Light color	IALA white, optimum
nes	
Typical response time	max. 400 ms
Typ. starting time with U _s	typ. 100 ms
Recovery time	max. 800 ms

Electrical properties

General

Inrush current	max. 12 A (μ-sec-pulse)
Supply: Module electronics	
Connection method	M12 connector
Number of positions	8
Supply voltage	24 V DC
Supply voltage range	19.2 V DC 30 V DC
Current consumption	max. 590 mA (white LEDs)
Power consumption	typ. 12 W (white LEDs)

Output data

Digital

- 3	
Output name	Safe digital outputs
Number of outputs	2
Output current	max. 100 mA (per channel)
Maximum output current per channel	100 mA
Output voltage range	17 V DC 31 V DC (DC)
Output name	Safe digital outputs
Number of outputs	2
Output current	max. 100 mA (per channel)



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Maximum output current per channel	100 mA
Output voltage range	17 V DC 31 V DC (DC)
nnection data	
Connection method	M12 connector
Note on the connection method	Hybrid 8-pos. Y-coded for power and data, and 4-pos. A-coded for safe diagnostics
naling	
ght properties	
Source of light type	LED
Number of LEDs	8 (in accordance with IALA recommendation E200-1 and CIE 1931)
Service life, lighting appliance	50000 h
Light color	IALA white, optimum
Color temperature	5000 K ±1000 K
Color class	C2 (EN 12966)
Luminance	R3 (EN 12966)
Luminous intensity	max. 7300 Cd
Can be dimmed	Yes, in 256 steps
Emission angle	10.5 °
	4.5 °
Luminance ratio	R3 (EN 12966)
Phantom light class	5 (EN 12368)
agnostic messages	
Diagnostics	LEDs; temperature, current, voltage, etc.
Message	yes
agnostic messages	
Diagnostics	Mains failure, communication failure
Message	yes
agnostic messages	
Diagnostics	Safe diagnostics (up to SIL 2/PL d) in conjunction with safe modules (safety technology)
Message	yes
ensions	
Depth	66 mm
Diameter	174 mm
erial specifications	
Color	jet black RAL 9005
Material	Aluminum die-cast in accordance with DIN EN 1706
	Glass



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Characteristics

Safety data: EN ISO 13849

Category	4 (two-channel)
Performance level (PL)	e (two-channel)

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C 55 °C
Degree of protection	IP65/IP67 (When installed)
Air pressure (operation)	70 hPa 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 hPa 106 kPa (up to 3000 m above sea level)
Ambient temperature (storage/transport)	-25 °C 85 °C
Permissible humidity (storage/transport)	5 % 95 % (according to DIN EN 61131-2, non-condensing, no ice formation)

Standards and regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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Mounting

Mounting type	Screw mounting
Mounting position	vertical



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Classifications

UNSPSC 21.0

ECLASS

ECLASS-11.0	27110201
ECLASS-13.0	27110201
ECLASS-12.0	27110201
ETIM	
ETIM 9.0	EC002750
UNSPSC	

39111800



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Environmental product compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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