



# **MACHINE ILLUMINATION AND SIGNAL LIGHTS**

MAXIMUM EFFICIENCY

 **di-soric**

# MACHINE ILLUMINATION AND SIGNAL LIGHTS

## THE MB-N, MB-NP AND MB-RGBW MACHINE LIGHTINGS – THE RIGHT LIGHT FOR ANY USE

Our extremely luminous, long-lasting and reliable machine lightings are designed for industrial use. Highly efficient power LEDs and industrial encapsulation guarantee outstanding performance data. The lights feature an input through which it can be switched on and off and dimmed.

The MB-RGBWs combine the high-quality, white light of our machine lighting (with the best color reproduction) with a high-performance RGB signal light element to display machine status.



### OUR MACHINE LIGHTINGS

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## SB-RGB, SBP-RGB AND SBE-RGB SIGNAL LIGHTINGS MAKE A STATUS VISIBLE ACROSS LONG DISTANCES

Our signal lightings are available as attachment and installation versions and impress with their brightness and the highest color brilliance. With IO-Link, intelligent signal lightings are available with customizable requirements which display machine status even at great distances. The robust, multi-functional SBP-RGB offers 360° visibility.

Signal lightings can be configured by means of IO-Link – light functions such as color, brightness and the flashing of individual colors can be freely adjusted. Even without IO-Link configuration, the SBE-RGB and SBP-RGB can be used immediately out-of-the-box thanks to three triggerable color presets (red - yellow - green).



### OUR SIGNAL LIGHTINGS

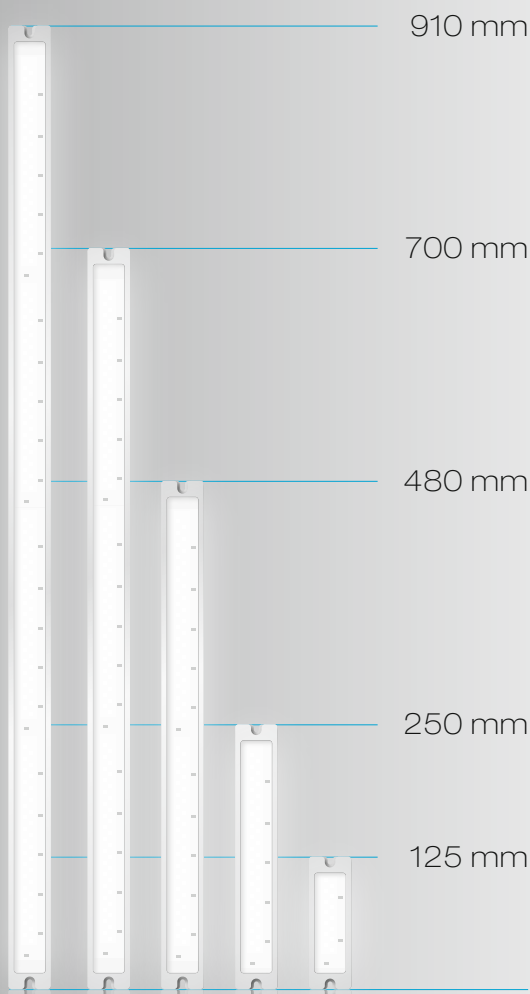
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# MACHINE ILLUMINATION

## MB-N

### MAXIMUM EFFICIENCY IN MACHINES.

The extremely powerful and quick-to-integrate MB-N LED machine lighting allows ongoing processes in machines to be observed with accuracy as well as rapid retooling and maintenance – guaranteeing maximum efficiency.



### Efficient, extreme light intensity and easy installation

- Comprehensive range of lengths: 125 / 250 / 480 / 700 / 910 mm often means that the lighting does not have to be cascaded
- Compact design with a width of just 40 mm allows lighting to be used anywhere
- Mounted using a magnetic holder set rather than time-consuming drilling and screwing
- Swivel-mounted retaining bracket for non-glaring installation
- Aluminum, natural anodized housing

### Very long life thanks to tested quality

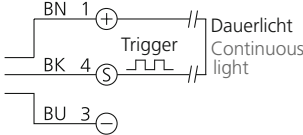
- Extremely long life – up to 50000 hrs – thanks to intelligent thermal management and trigger input
- Outstanding energy efficiency
- Maximum robustness thanks to shock-resistant and vibration-resistant housing with protection class IP67
- Made-in-Germany quality


### Maximum safety thanks to extremely good color reproduction

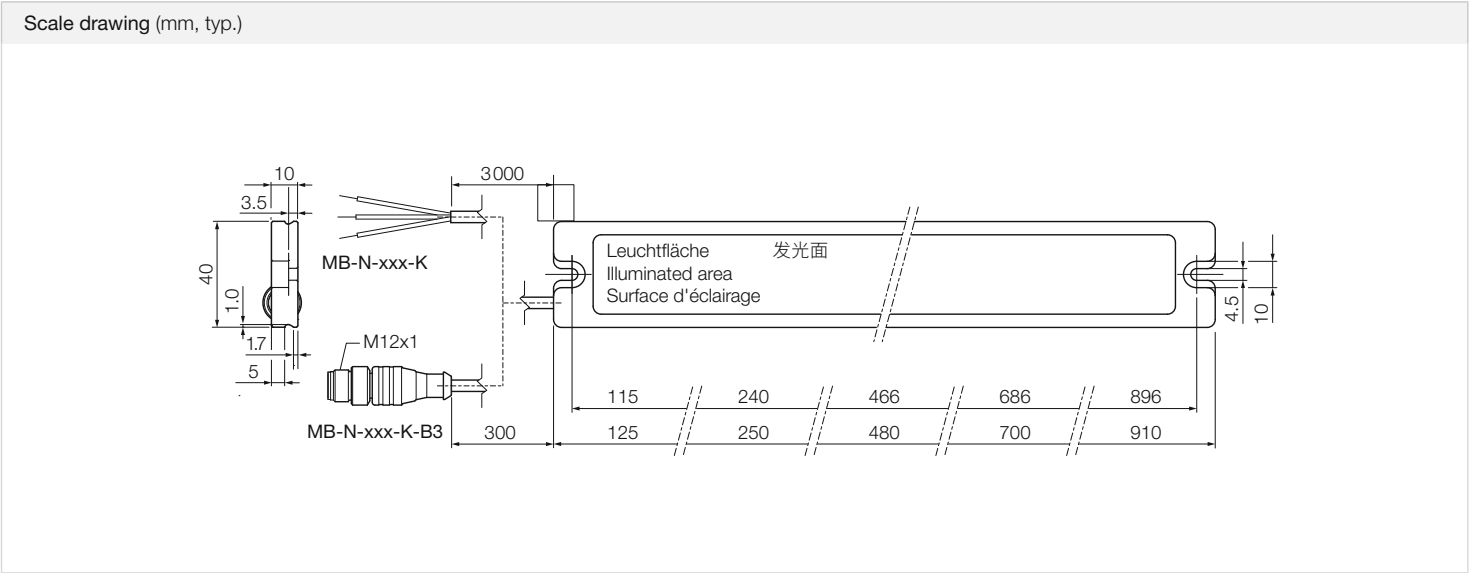
- Very good color reproduction guarantees safety at the workplace (color rendering index 85)
- New high-performance LEDs with very high light intensity ensure reliable and even illumination
- Energy-saving system light yield of >100 lumens per watt
- Very homogeneous wide-angle illumination of 120°
- Suitable as workstation lighting

# TECHNICAL DATA

## MB-N

Technical data (typ.)	+20 °C, 24 VDC	Connection diagram
Light color/color temperature	5000 K white (LED)	 <p>BN = Brown BK = Black BU = Blue</p>
Dispersion angle for each LED	Typ. 120°	
Color rendering index R <sub>a</sub>	85	
Service voltage	24 VDC ± 5 %	
Shock/vibration load	30 g / 10 – 55 Hz, 1 mm	
Trigger/PWM input low level	0 to < 5.0 V	
Trigger/PWM input high level	≥ 8.0 to 25.2 V	
Trigger PWM signal: T <sub>on</sub> / T <sub>off</sub>	< 50 / < 50 μs	
Inverse polarity protection	Yes	
Ambient temperature	0 to +40 °C	
Degree of protection	IP67	
Protection class	III, operation on protective low voltage	
Risk group (DIN EN 62471)	Open	
Housing material	Aluminum, natural anodized	
Illuminated area	PU, crystal clear	

	Illuminated area (mm)	Intrinsic current consumption at 24 V	Power consumption at 24 V	Light intensity at 0.5 m	Light intensity at 1.0 m	Luminous flux	Cable 0.3 m, M12, 3-pin	Cable 3.0 m, flying leads	Weight (excluding packaging)	Maximum overall length of all power supply lines min. 24 V DC	Product ID
Machine lighting MB-N ...											
	30 x 95	190 mA	4.6 W	720 lx	220 lx	440 lm	■	■	115 g	70 m	MB-N-126-K-B3
									175 g	67 m	MB-N-126-K
	30 x 220	450 mA	10.8 W	1800 lx	530 lx	1100 lm	■	■	210 g	25 m	MB-N-251-K-B3
									260 g	22 m	MB-N-251-K
	30 x 440	900 mA	21.6 W	3200 lx	1000 lx	2200 lm	■	■	390 g	13 m	MB-N-481-K-B3
									440 g	10 m	MB-N-481-K
	30 x 660	1350 mA	32.4 W	3900 lx	1300 lx	3300 lm	■	■	550 g	8 m	MB-N-701-K-B3
									600 g	5 m	MB-N-701-K
	30 x 870	1800 mA	43.2 W	4400 lx	1600 lx	4400 lm	■	■	700 g	6 m	MB-N-911-K-B3
									750 g	3 m	MB-N-911-K



# MACHINE ILLUMINATION

## MB-NP

### MAXIMUM EFFICIENCY UNDER HARSH AMBIENT CONDITIONS

Thanks to their robust housing technologies and high degree of protection, Protected MB-NP machine lighting can be operated under mechanical loads and while being hit by hot shavings. It is also chemically resistant to a large number of media.



### Excellent reliability, even under the toughest application conditions

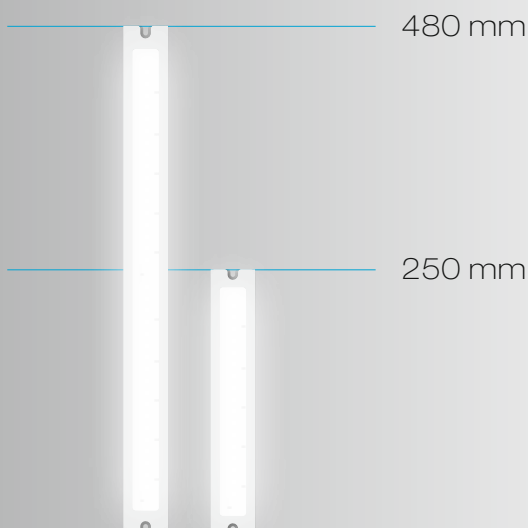
- Resistant to being hit by hot shavings, i.e. from milling machines
- Resistant to materials such as bases, saline solutions, oils and greases
- Maximum robustness thanks to shock-resistant and vibration-resistant housing
- Leak test in accordance with DIN EN 60529, IP67

### Very long life thanks to tested quality

- Extremely durable – up to 50 000 hrs – thanks to intelligent thermal management and trigger input
- Outstanding energy efficiency
- Made-in-Germany quality

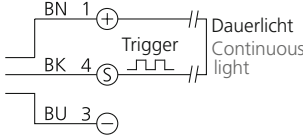
### Maximum safety thanks to extremely good color reproduction

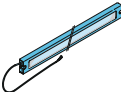
- Very good color reproduction guarantees safety at the workplace (color rendering index 85)
- New high-performance LEDs with very high light intensity ensure reliable and even illumination
- Energy-saving system light yield of >100 lumens per watt
- Very homogeneous wide-angle illumination of 120°

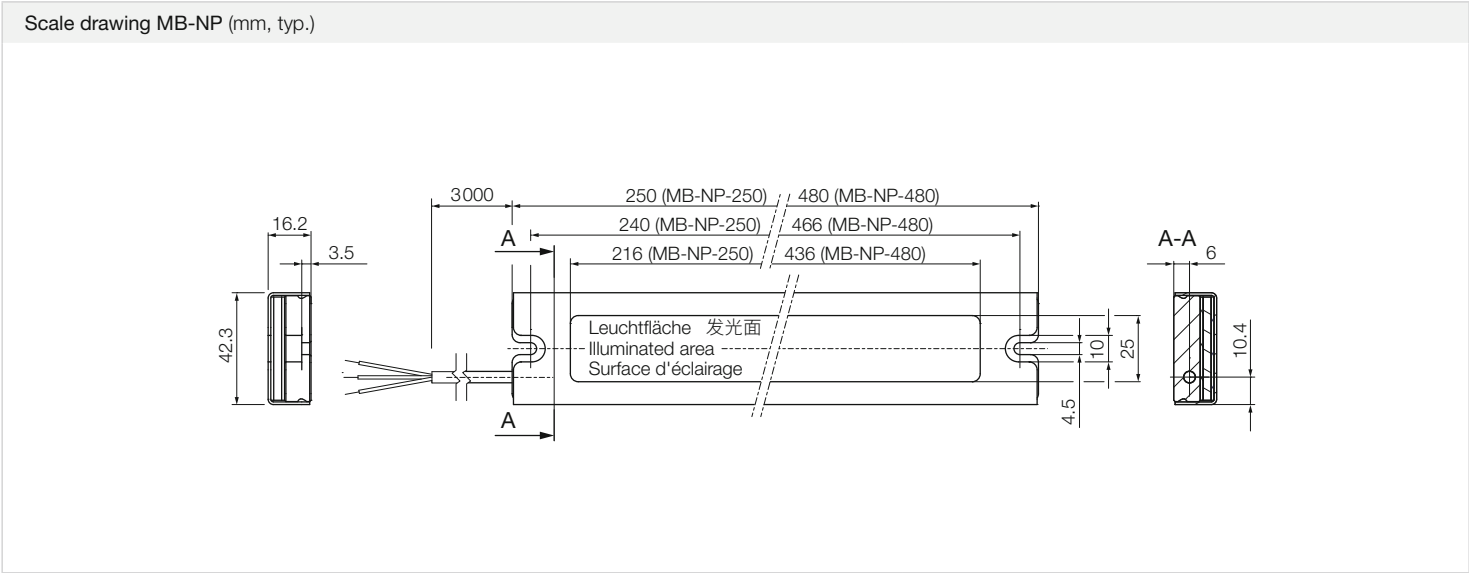


# TECHNICAL DATA

## MB-NP

Technical data (typ.)	+20 °C, 24 VDC	Connection diagram
Light color/color temperature	5000 K white (LED)	 <p>BN = Brown BK = Black BU = Blue</p>
Dispersion angle for each LED	Typ. 120°	
Color rendering index R <sub>a</sub>	85	
Service voltage	24 VDC ± 5 %	
Shock/vibration load	30 g / 10 – 55 Hz, 1 mm	
Trigger/PWM input low level	0 to < 5.0 V	
Trigger/PWM input high level	≥ 8.0 to 25.2 V	
Trigger PWM signal: T <sub>on</sub> / T <sub>off</sub>	< 50 / < 50 μs	
Inverse polarity protection	Yes	
Ambient temperature	0 to +40 °C	
Degree of protection	IP67	
Protection class	III, operation on protective low voltage	
Risk group (DIN EN 62471)	Open	
Housing material	Aluminum, black anodized	
Material	V2A (front frame)	
Illuminated area	Safety glass ESG, diffuse	

	Illuminated area (mm)	Intrinsic current consumption at 24 V	Power consumption at 24 V	Light intensity at 0.5 m	Light intensity at 1.0 m	Luminous flux	Cable 3.0 m, flying leads	Weight (excluding packaging)	Maximum overall length of all power supply lines min. 24 V DC	Product ID
Protected MB-NP machine lightings										
	25 x 216	450 mA	10.8 W	1400 lx	430 lx	900 lm	■	410 g	25 m	MB-NP-250-K
	25 x 436	900 mA	21.6 W	2600 lx	800 lx	1700 lm	■	700 g	13 m	MB-NP-480-K

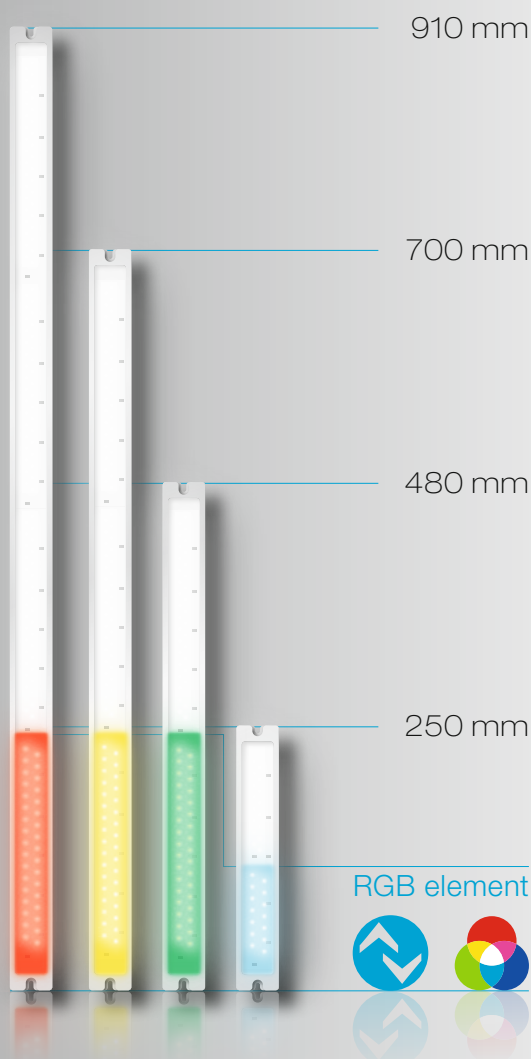
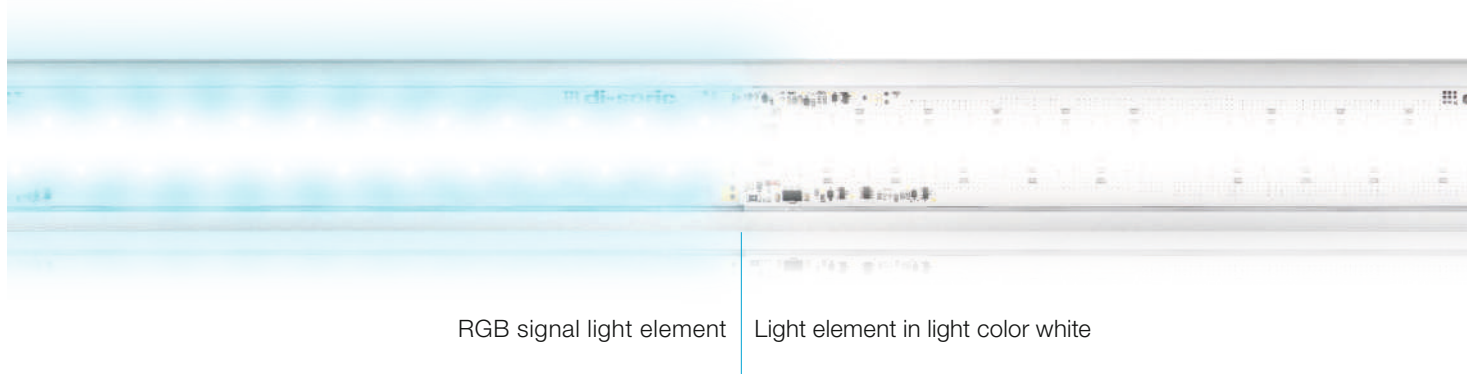




# MACHINE ILLUMINATION

## MB-RGBW WITH IO-LINK

The MB-RGBW offers a combination of the standard-compliant, high-quality white light provided by our machine lights and the display of machine status using a freely configurable RGB light element.



### Highlights

- High light intensity thanks to state-of-the art power LEDs
- Light functions are freely configurable via IO-Link – fully functional, even without IO-Link – and can be used immediately, “out of the box”, by selecting color presets
- The best light quality, as always
- High color reproduction guarantees safety at the work-place
- Large illuminated RGB area for optimum display of machine status
- Long life – up to 50000h – thanks to intelligent thermal management and trigger input
- All accessories in the MB-N family can be used
- Casing in Aluminium, nature anodized

### IO-Link Features

- The RGB light element's individual light functions are easy to configure:
  - Virtually infinite number of possible colors
  - Individual brightness levels
  - Different flashing patterns can be assigned to individual colors
- Reduced costs
  - Just one device for every requirement so less inventory is needed

The MB-RGBW provides exceptional illumination for machines, with high-quality white light to give the best color reproduction and also a powerful RGB light element, which is fully functional even when IO-Link is not in use.



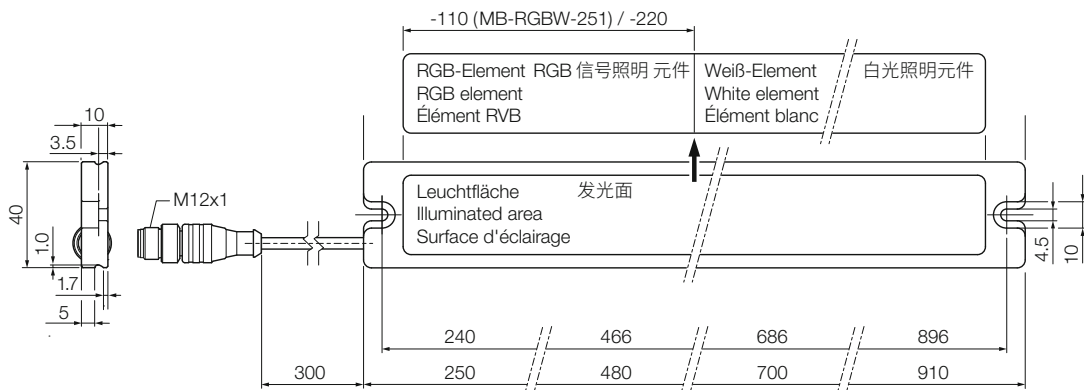
## TECHNICAL DATA

### MB-RGBW

Technical data (typ.)		+20 °C, 24 VDC		Connection diagram																															
Operating modes	RGB: constant, blink, flash		<table><tr><th colspan="4">Presets / Factory settings</th></tr><tr><th>TRIG 1</th><th>TRIG 2</th><th>TRIG 3</th><th>Farbe/Color</th></tr><tr><td>Lo</td><td>Lo</td><td></td><td>RGB: aus/off</td></tr><tr><td>Hi</td><td>Lo</td><td></td><td>RGB: rot/red</td></tr><tr><td>Lo</td><td>Hi</td><td></td><td>RGB: grün/green</td></tr><tr><td>Hi</td><td>Hi</td><td></td><td>RGB: gelb/yellow</td></tr><tr><td></td><td></td><td>Lo</td><td>WH: aus/off</td></tr><tr><td></td><td></td><td>Hi</td><td>WH: ein/on</td></tr></table>	Presets / Factory settings				TRIG 1	TRIG 2	TRIG 3	Farbe/Color	Lo	Lo		RGB: aus/off	Hi	Lo		RGB: rot/red	Lo	Hi		RGB: grün/green	Hi	Hi		RGB: gelb/yellow			Lo	WH: aus/off			Hi	WH: ein/on
Presets / Factory settings																																			
TRIG 1	TRIG 2			TRIG 3	Farbe/Color																														
Lo	Lo				RGB: aus/off																														
Hi	Lo				RGB: rot/red																														
Lo	Hi				RGB: grün/green																														
Hi	Hi		RGB: gelb/yellow																																
		Lo	WH: aus/off																																
		Hi	WH: ein/on																																
Light color	White (5000 K), RGB + custom																																		
Beam angle per LED	typ. 120°																																		
Light intensity can be adjusted	RGB, 10 ... 100 %, by IO-Link																																		
Service voltage	24 VDC ± 5 % , (Supply Class 2)																																		
Shock-/vibration load	30g / 10 – 55 Hz, 1 mm																																		
Trigger input low level	0 ... ≤ 5.0 V																																		
Trigger input high level	≥ 8.0 ... 25.2 V																																		
Trigger input	3 color presets: selectable by Trigger 1 + 2, white: selectable by Trigger 3																																		
Interface	IO-Link V1.1, COM2 (38.4kBd), 2300 µs, for parameterization	BN = Brown WH = White BK = Black	BU = Blue GY = Gray																																
Inverse polarity protection	yes																																		
Ambient temperature	0 ... +40 °C																																		
Protection class	IP67																																		
Protection degree	III, Operation on protective low voltage																																		
Risk group (DIN EN 62471)	free																																		
Casing material	Aluminium, nature anodized																																		
Material	PU, crystal clear (Window)																																		
Illuminated area	Cable 300 mm with connector M12, 5-poled																																		

	Illuminated area (mm)	Internal power consumption at 24 V	Power at 24 V	Illumination intensity at 0.5 m	Illumination intensity at 1.0 m	Luminous flux	Weight (without packaging)	Maximal cable length at cross section at 5 x 0.34 mm² (AWG 22) / min. 24 V DC	Product ID
	Machine illumination with signal light element MB-RGBW ...								
	30 x 220	max. 305 mA	max. 7.3 W	720 lx	220 lx	440 lm	210 g	25 m	MB-RGBW-251-K-B5
	30 x 440	max. 650 mA	max. 15.6 W	1800 lx	530 lx	1100 lm	390 g	10 m	MB-RGBW-481-K-B5
	30 x 660	max. 1100 mA	max. 26.4 W	3200 lx	1000 lx	2200 lm	550 g	7.5 m	MB-RGBW-701-K-B5
	30 x 870	max. 1520 mA	max. 36.5 W	3900 lx	1300 lx	3300 lm	700 g	5 m	MB-RGBW-911-K-B5

Scale drawing MB-RGBW ... (mm, typ.)

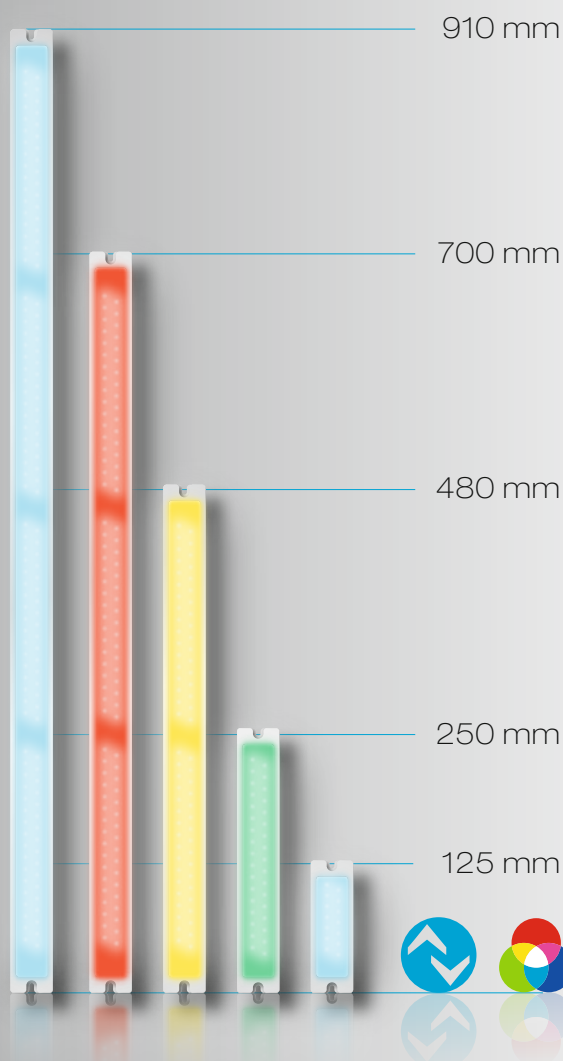


# SIGNAL LIGHTS

## SB-RGB WITH IO-LINK

With its pure color signal lights, the SB-RGB clearly displays the status of machines or machine segments in vibrant, unmistakable colors.

Ready for use right away – and can be customized to suit every requirement.



### Highlights

- Full-area RGB lighting with state-of-the-art power LEDs
- Light functions are freely configurable via IO-Link – fully functional, even without IO-Link – and can be used immediately, “out of the box”, by selecting color presets
- Optimal display of the machine status thanks to the large light field
- Long life – up to 50000h – thanks to intelligent thermal management and trigger input
- All accessories in the MB-N family can be used
- Signal the status of machines so that it is visible from afar
- Casing in Aluminium, nature anodized

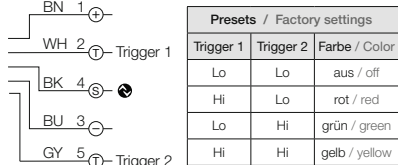
### IO-Link Features

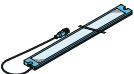
- The individual light functions are easy to configure:
  - Virtually infinite number of possible colors
  - Individual brightness levels
  - Different flashing patterns can be assigned to individual colors
- Reduced costs
  - Just one device for every requirement so less inventory is needed

The SB-RGB functions superbly as a multi-color status light system to indicate operating statuses for access control.

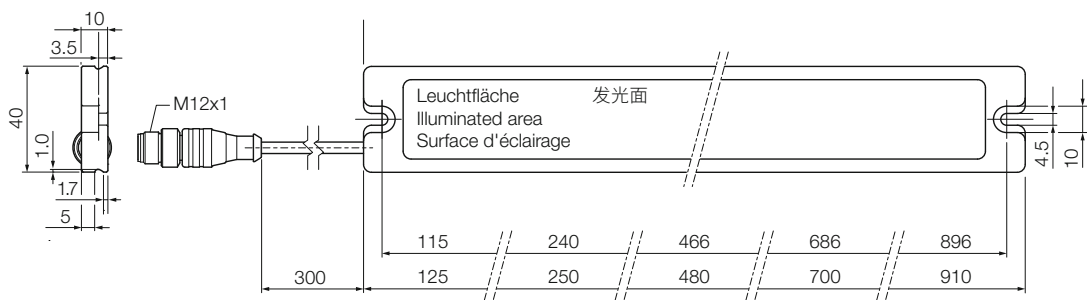
# TECHNICAL DATA

## SB-RGB

Technical data (typ.)		+20 °C, 24 VDC		Connection diagram																			
Operating modes	constant, blink, flash			 <table><tr><th colspan="3">Presets / Factory settings</th></tr><tr><th>Trigger 1</th><th>Trigger 2</th><th>Farbe / Color</th></tr><tr><td>Lo</td><td>Lo</td><td>aus / off</td></tr><tr><td>Hi</td><td>Lo</td><td>rot / red</td></tr><tr><td>Lo</td><td>Hi</td><td>grün / green</td></tr><tr><td>Hi</td><td>Hi</td><td>gelb / yellow</td></tr></table> <p>BN = Brown WH = White BK = Black BU = Blue GY = Gray</p>		Presets / Factory settings			Trigger 1	Trigger 2	Farbe / Color	Lo	Lo	aus / off	Hi	Lo	rot / red	Lo	Hi	grün / green	Hi	Hi	gelb / yellow
Presets / Factory settings																							
Trigger 1	Trigger 2	Farbe / Color																					
Lo	Lo	aus / off																					
Hi	Lo	rot / red																					
Lo	Hi	grün / green																					
Hi	Hi	gelb / yellow																					
Light color	RGB + custom																						
Beam angle per LED	typ. 120°																						
Light intensity can be adjusted	10 ... 100 %, by IO-Link																						
Service voltage	24 VDC ± 5 % , (Supply Class 2)																						
Shock-/vibration load	30g / 10 – 55 Hz, 1 mm																						
Trigger input low level	0 ... ≤ 5.0 V																						
Trigger input high level	≥ 8.0 ... 25.2 V																						
Trigger input	3 color presets: selectable by Trigger 1 + 2																						
Interface	IO-Link V1.1, COM2 (38.4 kBd), 2300 µs, for parameterization																						
Inverse polarity protection	yes																						
Ambient temperature	0 ... +40 °C																						
Protection class	IP67																						
Protection degree	III, Operation on protective low voltage																						
Risk group (DIN EN 62471)	free																						
Casing material	Aluminium natur anodized																						
Material	PU, crystal clear (Window)																						
Connection	Cable 300 mm with connector M12, 5-poled																						

	Illuminated area (mm)	Internal power consumption at 24 V	Power consumption at 24 V	Weight (without packaging)	Maximal cable length at cross section at 5 x 0.34 mm <sup>2</sup> (AWG 22) / min. 24 V DC	Product ID
	30 x 95	115 mA RMS / 150 mA Peak	2.8 W	115 g	50 m	SB-RGB-126-K-B5
	30 x 220	195 mA RMS / 390 mA Peak	4.7 W	210 g	20 m	SB-RGB-251-K-B5
	30 x 440	385 mA RMS / 750 mA Peak	9.2 W	390 g	10 m	SB-RGB-481-K-B5
	30 x 660	565 mA RMS / 1100 mA Peak	13.5 W	550 g	7.5 m	SB-RGB-701-K-B5
	30 x 870	745 mA RMS / 1400 mA Peak	17.8 W	700 g	5 m	SB-RGB-911-K-B5

Drawing SB-RGB ... (mm, typ.)



# SIGNAL LIGHTS

## SBP-RGB WITH IO-LINK



High-efficiency and multi-functional: the dome-shaped signal lighting from di-soric offers 360° visibility, a nearly endless number of colors, individual brightness and flashing behaviors – all functions can be configured through IO-Link.

The compact design and high degree of protection (IP67) enable use in harsh ambient conditions.



The SBP-RGB functions superbly as a multi-color status light to indicate operating statuses.

### IO-Link features

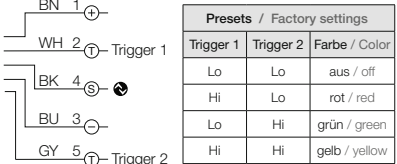
- Easy configuration of individual functions
  - Nearly endless number of possible colors
  - Adjustable brightness
  - Operating modes: Constant, blinking and flashing
- Reduced costs
  - Just one device for every requirement
  - so less inventory is needed

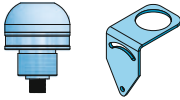
### Highlights

- 360° visibility – the most modern RGB LEDs
- Power-saving, maximum consumption 70 mA
- Can be configured by IO-Link
- Can be used immediately (out-of-the-box) via three triggerable color presets – red, yellow, green
- Optimal display of status, visible across long distances
- Diffuse, very homogeneous light field
- IP67 as a robust (impact-resistant) design
- Easy installation and commissioning

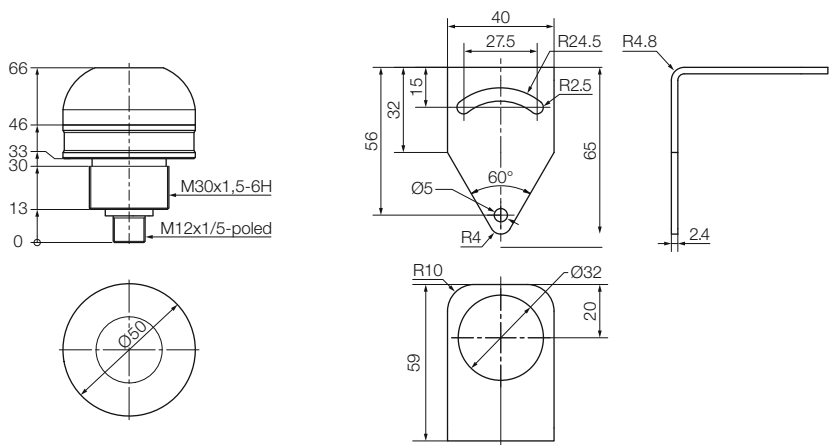
# TECHNICAL DATA

## SBP-RGB

Technical data (typ.)	+20 °C, 24 VDC	Connection diagram																	
Operation modes	Constant, blinking and flashing	 <table border="1"><caption>Presets / Factory settings</caption><thead><tr><th>Trigger 1</th><th>Trigger 2</th><th>Farbe / Color</th></tr></thead><tbody><tr><td>Lo</td><td>Lo</td><td>aus / off</td></tr><tr><td>Hi</td><td>Lo</td><td>rot / red</td></tr><tr><td>Lo</td><td>Hi</td><td>grün / green</td></tr><tr><td>Hi</td><td>Hi</td><td>gelb / yellow</td></tr></tbody></table> <p>BN = Brown WH = White BK = Black</p> <p>BU = Blue GY = gray</p>			Trigger 1	Trigger 2	Farbe / Color	Lo	Lo	aus / off	Hi	Lo	rot / red	Lo	Hi	grün / green	Hi	Hi	gelb / yellow
Trigger 1	Trigger 2				Farbe / Color														
Lo	Lo				aus / off														
Hi	Lo				rot / red														
Lo	Hi				grün / green														
Hi	Hi				gelb / yellow														
Light color	RGB + user-defined																		
Light intensity can be adjusted	10 to 100 %, via IO-Link																		
Service voltage	24 VDC ± 5% (supply class 2)																		
Shock/vibration load	30 g / 10 – 55 Hz, 1 mm																		
Trigger input low level	0 to < 5.0 V																		
Trigger input high level	≥ 8.0 to 25.2 V																		
Trigger input	3 color presets: selectable via trigger 1 + 2																		
Interface	IO-Link V1.1, COM2 (38.4kBd), 2300 µs, only for configuration																		
Inverse polarity protection	Yes																		
Ambient temperature	0to+40 °C																		
Degree of protection	IP67																		
Protection class	III, operation on protective low voltage																		
Risk group (DIN EN 62471)	Open																		
Housing material	Aluminum, natural anodized																		
Diffuser material	PC, diffuse																		
Connection	M12, 5-pin																		

	Illuminated area (mm)	Intrinsic current consumption at 24 V DC	Power consumption at 24 V DC	Weight (excluding packaging)	Maximum overall length of all power supply lines with 5 x 0.34 mm² (AWG 22) / min. 24 V DC	Fastening brackets Included in scope of delivery	Product ID
	Ø 50x20	65 mA	1.58 W	102 g	50 m	■	SBP-RGB-R50D-B5

Scale drawing SBP=RGB=R50D-B5 (mm, typ.)



# SBE-RGB

## INSTALLATION STATUS LIGHTS

With a length up to 2 m, status lighting enables the visual indication of the status of machines or access control to protected areas.

The fixture lighting can even be installed in the floor. The controller can be used to connect up to three status lights. The color options are red, yellow, green and blue.



2000 mm

1000 mm



SBE-RGB

### Status lighting

- Operation even in harsh environments thanks to a rugged aluminum housing with a high degree of protection
- Can be used as floor lighting based on the high crush-resistance
- Free of LABS-critical components
- Easy fastening using retaining brackets (available as an accessory)

### Controller

- Fast commissioning as a result of pre-configuration
- Load-free switching of up to three built-in lights
- Easy adjustment of the brightness using a potentiometer
- High degree of safety thanks to the integrated overload switch-off




SBI-RGB-Controller



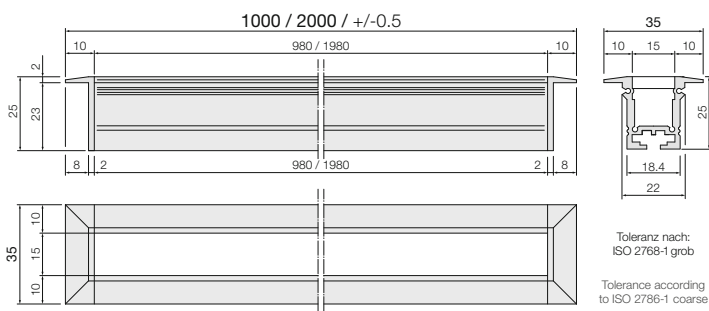
## TECHNICAL DATA

### SBE-RGB

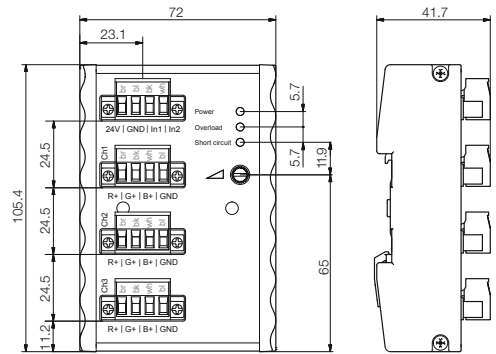
Technical data (typ.)	+20 °C, 24 VDC
Light color	Red /yellow /green /blue
Wave length	620/580/523/465nm
Service voltage	24 VDC ± 5 %
Operating mode for multiple SBE-RGB lights	Connection to the maximum of three outputs of the SBI-RGB controllers
Protection class	IP68
Risk group (DIN EN 62471)	free
Protection degree	III, operation on protective low voltage
Ambient temperature	0 ... +40 °C
Casing material	Aluminium, nature anodized
Illuminated area	PMMA, walk-on (window)
Connection	Cable 300 mm with M12 connector, 4-poled
Crush-resistance	100kg/cm <sup>2</sup> (typical crush-resistance that may result in deformation of the lighting and may deviate depending on the shape, material and surface quality of the load)
Norms	DIN EN 60598-1, 2015, Luminaires - Part 1: General requirements / DIN EN 62471, 2009, Photobiological safety

	Illuminated area (mm)	Number of LEDs	Total power consumption per light color	Total current per light color	Weight (excluding packaging)	Product ID
Status built-in lights SBE-RGB						
	15 x 980 mm	60 pieces	Approx. 4.8 W	Approx. 200mA	770 g	SBE-RGB-1000-K-B4
	15 x 1980 mm	120 pieces	Approx. 9.6 W	Approx. 200mA	1540 g	SBE-RGB-2000-K-B4

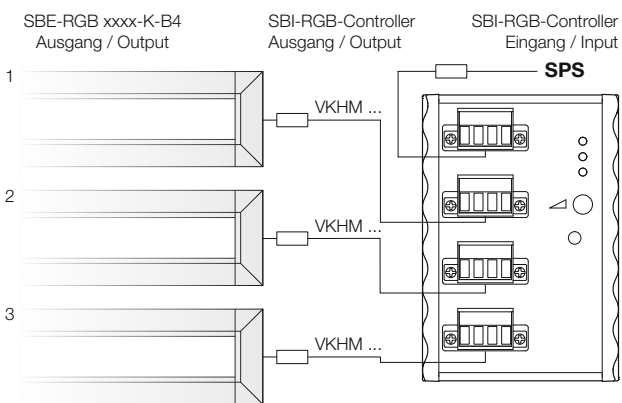
Scale drawing SBE-RGB ... (mm, typ.)



Scale drawing SBI-RGB-Controller (mm, typ.)



Connection scheme with control device SBI-RGB Controller for SBE-RGB ...



Light color via SBI-RGB Controller	Trigger input	
	IN 1	IN 2
Red	Hi	Lo
Yellow	Lo	Lo
Green	Lo	Hi
Blue	Hi	Hi

# SMART THANKS TO IO-LINK. SAVE TIME AND MONEY.

## GET STRAIGHT TO THE POINT.

The international IO-Link standard (in accordance with IEC 61131-9) is now regarded as an **“Enabler for Industry 4.0”**

Our MB-RGBW machine lightings and SB-RGB signal lightings and SBP-RGB with IO-Link are easily configured via the IOL Master.



## 4 REASONS TO CHOOSE OUR ILLUMINATION AND LIGHTS WITH IO-LINK

1

### CUSTOMIZED LIGHTING

- Above and beyond the preset colors, you can customize colors individually in IO-Link. The machine and products can be illuminated with freely selectable colors and brightness levels.

2

### CAN BE USED OUT-OF-THE-BOX

- Ready to run, thanks to 3 color presets (red, yellow, green).

3

### CONFIGURE WITH IO-LINK - WORKS AS A STAND-ALONE

- IO-Link provides simple, intuitive functionality for custom color configurations.
- After setting the new lighting functions, simply remove the IOL Master – the light works in a completely stand-alone fashion with the new configuration.
- Illumination and lights can be selected via trigger inputs.

4

### REDUCED COSTS

- Thanks to a virtually infinite number of possible combinations of colors, brightness levels and flash patterns, just one device can meet every individual requirement.
- Thus, less inventory is needed.

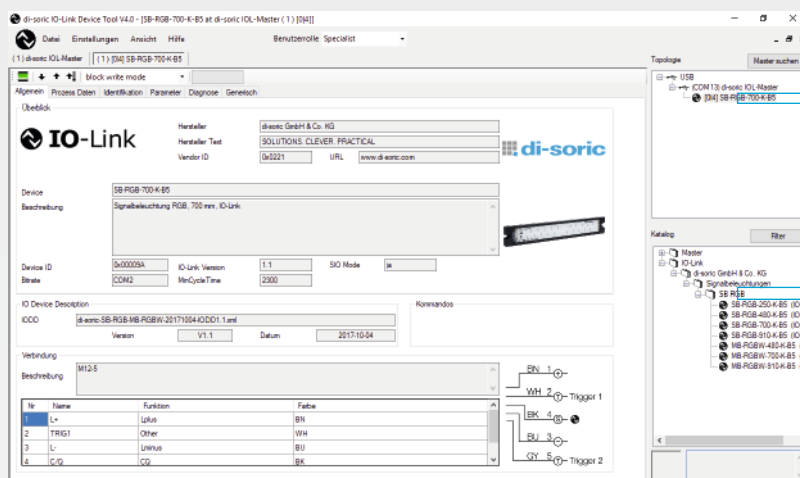
# IO-LINK

## IODD – IO DEVICE DESCRIPTION

### THE IODD

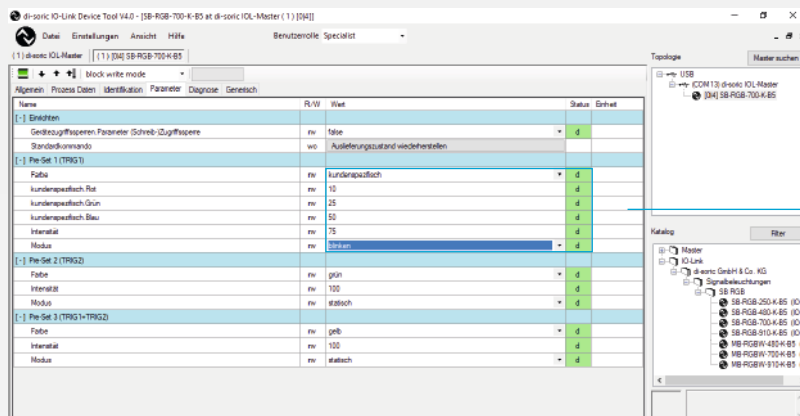
describes sensors and actuators. It holds information to identify devices, device parameters, process and diagnostics data, communications properties and the structure of user interfaces in engineering tools.

At di-soric, three user levels (operator, maintenance and specialist) are implemented. Each level contains the appropriate range of services.



The di-soric IO-Link master automatically detects which lighting device is connected

Just one IODD is needed to control all di-soric RGB(W) lights



The color, brightness and flashing patterns can be configured for the 3 color channels

### SIMPLE ADJUSTMENT OF LIGHT COLOR(S), BRIGHTNESS AND FLASHING PATTERNS WITH MB-RGBW, SB-RGB AND SBP-RGB:

- Load the IODD, which can be downloaded from our SB/MB product website, into our IO-Link device tool software (which can be downloaded from the IO-Link master website)
- Connect the lighting to the IO-Link master
- Open the "Parameters" menu in the IO-Link device tool
- Select/define the colors for the three available "Color slots" in the lighting memory
- Upload the data from the IO-Link device tool to the lighting memory
- Disconnect the lighting device
- All the colors you have just configured are now available

### IOL-MASTER – IO-LINK DEVICE TOOL



- Universal IO-Link Master with computer software for devices with IODD specification 1.0.1 and 1.1
- Status LED for IO-Link and SIO mode
- M12-connection for devices

# ACCESSORIES

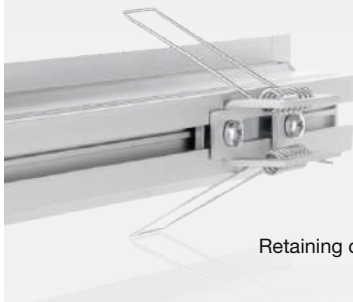
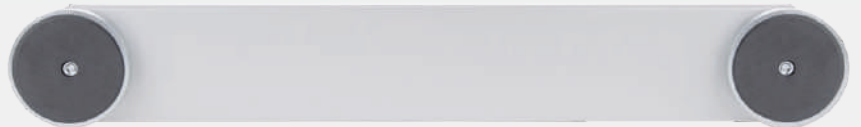
## MB/SB/SBE

### SIMPLE INSTALLATION



Fast, easy and adjustable installation  
without drilling or screws

Magnetic holder set MB-HS-2



Retaining clamps SBE-HKS

Easy installation of the SBE-RGB lights  
with retaining clamps or retaining clips



Retaining clips SBE-HKC

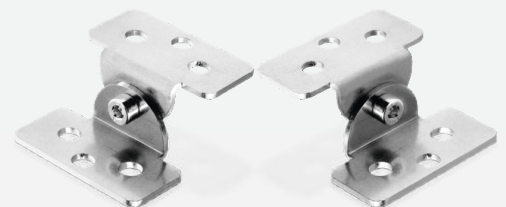
### LOW-GLARE.

Glare is prevented while the machine  
or workstation is optimally illuminated.

Diffusers MB-DIF-R... extend the existing  
dispersion angle from 120° to approx. 180°





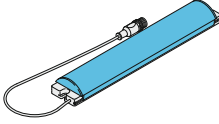
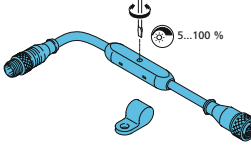
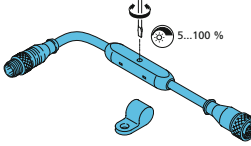


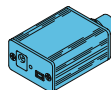
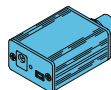


Adjustable mounting brackets  
BW-MB



PWM-Dimmer MB-DIM 2

	MB-N-126-K-B3	MB-N-126-K	MB-N-251-K-B3	MB-N-251-K	MB-N-481-K-B3	MB-N-481-K	MB-N-701-K-B3	MB-N-701-K	MB-N-911-K-B3	MB-N-911-K	MB-NP-250-K	MB-NP-480-K	MB-RGBW-251-K-B5	MB-RGBW-481-K-B5	MB-RGBW-701-K-B5	SB-RGB-126-K-B5	SB-RGB-251-K-B5	SB-RGB-481-K-B5	SB-RGB-701-K-B5	SBE-RGB-1000-K-B4	SBE-RGB-2000-K-B4	Product-ID
<b>Accessories for MB-N.../ MB-RGBW / SB-RGB / SBE-RGB</b>																						
Magnetic holding set	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			MB-MHS-2
Mounting brackets	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			BW-MB
Retaining clips for SBE																				■	■	SBE-HKC
Retaining clamps for SBE																				■	■	SBE-HKS
Diffusor	■	■														■						MB-DIF-R-125
			■	■								■					■					MB-DIF-R-250
					■	■							■					■				MB-DIF-R-480
							■	■						■					■			MB-DIF-R-700
									■	■					■					■		MB-DIF-R-910
PWM-Dimmer	■	■	■	■	■	■	■	■	■	■	■											MB-DIM 2
Connector M12		■		■		■		■		■	■											BK-Z-12
IO-Link Device Tool												■	■	■	■	■	■	■	■			IOL-MASTER

Details			Product-ID
Magnetic holder set		Set consists of 2 high power magnets with M4 thread, 2 Allen screws M4x10, 2 washers	MB-MHS-2
Mounting brackets		Set consists of short limb (2x2), long limb (2x1) and the necessary fastening material	BW-MB
Retaining clips for SBE		Set consists of 4 stainless steel retaining clips and the necessary fastening material	SBE-HKC
Retaining clamps for SBE		Set consists of 3 retaining clamps and the necessary fastening material	SBE-HKS
Diffusor For low-glare working, thanks to the expansion of the dispersion angle from 120° to 180° - fast and easy retrofitting		Length 125 mm	MB-DIF-R-125
		250 mm	MB-DIF-R-250
		480 mm	MB-DIF-R-480
		700 mm	MB-DIF-R-700
		910 mm	MB-DIF-R-910
PWM-Dimmer  <ul style="list-style-type: none"> <li>Perfect adaption of the lighting intensity to the requirements</li> <li>Simple handling and commissioning by "plug &amp; play"</li> <li>Efficient PWM dimming procedure</li> <li>For all machine illuminations with connector</li> <li>High maximum rating</li> <li>Trigger signal looped</li> </ul>		Service voltage 24 VDC ± 5 %	
		Input Trigger (Pin 4)	
		Operating principle Pulse-Width Modulation	
		Maximum rating max. 4000 mA	
		Dimming range 5... 100 %	
		Protection class IP67	
		Protection degree III	
		Shock-/vibration load 30g/10-55Hz, 1 mm	
		Ambient temperature -20... +70 °C	
		Casing material Plastics	MB-DIM 2
Connector M12  For mounting the PWM dimmer to a machine illumination in the cable version		Ø Cable 4.0... 6 mm	
		Braids 0.75 mm²	
		Protection class IP67	
		Connection / poles M12-4	BK-Z-12
IOL-Master IO-Link Device Tool  <ul style="list-style-type: none"> <li>Universal IO-Link Master with computer software</li> <li>For devices with IODD specification 1.0.1 and 1.1</li> <li>Status LED for IO-Link and SIO mode</li> <li>M12-connection for devices</li> </ul>		Power supply 5 V / 500 mA (PC USB), 24 V / 80 mA (IO-Link Device from USB), 24 V / 1 A (IO-Link device from power supply)	
		Communication IO-Link Spezifikation V 1.1, IO-Link Port Class A	
		Connection USB 2.0, (Mini USB B)	
		Protection class IP 20	
		Protection degree III, operation on protective low voltage	IOL-Master

**SOLUTIONS. CLEVER. PRACTICAL.**

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