

HE-EXLIGHT-LED MACHINE LIGHTING

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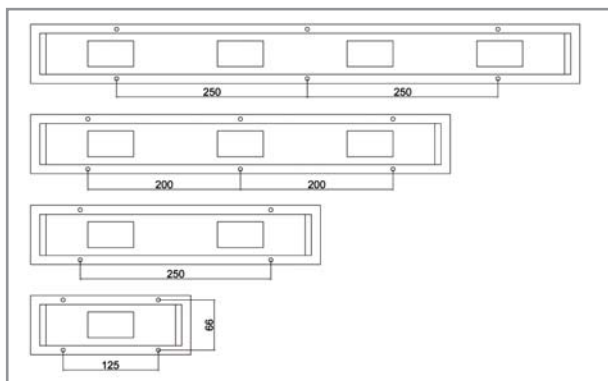
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INTEGRATED
LIGHTING

HE-EXLIGHT-E, external version with 6 LED



HE-EXLIGHT-I, integrated version with 12 LED



The compact measurements and the flat, robust housing of the HE-EXLIGHT-LED machine lamps make them the ideal solution in small and mid sized machines.

The HE-EXLIGHT-LED machine lamp is available in two versions for the best possible configuration in the machine, also as a retrofit. The housings of both versions are of robust, anodised aluminium with a safety pane 4 mm thick.

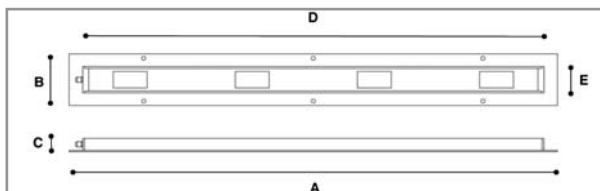
The lamps are impact resistant, impervious to vibrations, and can also operate in environments with coolants and lubricants. The HE-EXLIGHT-LED machine lamps are extremely low maintenance. This LED technology exhibits a long service life of 50,000 operating hours, so the lamp is virtually replacement free, eliminating the cost for new parts and repairs.

The lamps are fitted with a direct 24 V connector that does not require any additional components.



Light cone Ø (mm)	lux
100	1280
1000	880
2000	320

Example for light cone HE-EXLIGHT-E 24, height 1000 mm



Version	A	B	C	D	E
HE-EXLIGHT, 6 LED	210	78	25	186	54
HE-EXLIGHT, 12 LED	380	78	25	356	54
HE-EXLIGHT, 18 LED	550	78	25	526	54
HE-EXLIGHT, 24 LED	720	78	25	696	54

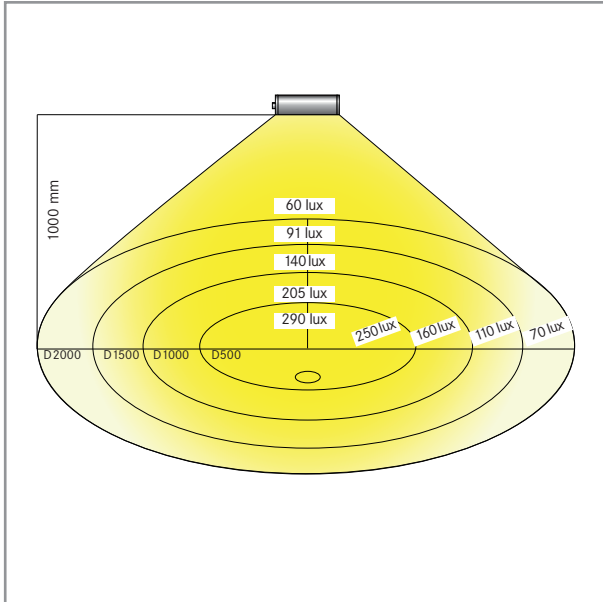
Dimensions for integrated and external versions

Version	Power supply	No of LEDs	Operating voltage	Light temperature	Lens	Mounting
HE-EXLIGHT-E 6	24 VDC	1	6 W	5000K	120°	external version
HE-EXLIGHT-E 12	24 VDC	2	12 W	5000K	120°	external version
HE-EXLIGHT-E 18	24 VDC	3	18 W	5000K	120°	external version
HE-EXLIGHT-E 24	24 VDC	4	24 W	5000K	120°	external version
HE-EXLIGHT-I 6	24 VDC	1	6 W	5000K	120°	integrated version
HE-EXLIGHT-I 12	24 VDC	2	12 W	5000K	120°	integrated version
HE-EXLIGHT-I 18	24 VDC	3	18 W	5000K	120°	integrated version
HE-EXLIGHT-I 24	24 VDC	4	24 W	5000K	120°	integrated version

Delivered with cable lengths from 1.5 to 6 m. 230 Vac and 12-24 Vdc cable ends of bare wires. Accessory equipment for connection to mains voltage sources.

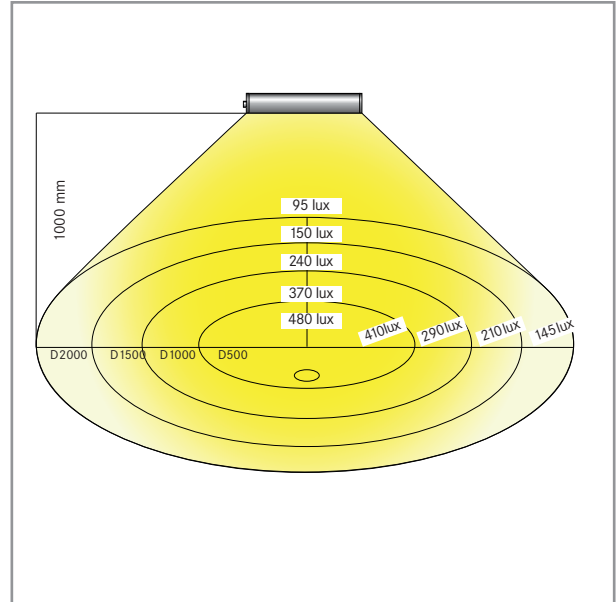
ILLUMINATION DISTRIBUTION CHARTS

HE-EXLIGHT-LED 24.6



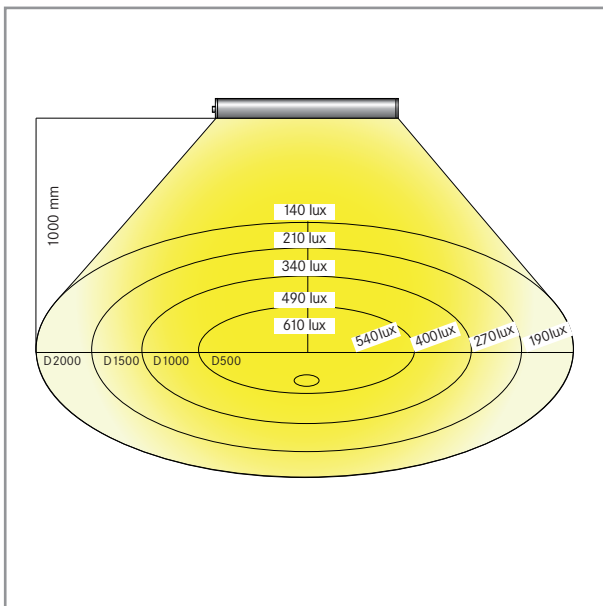
Technical details	Page 10
Lens	120°
Current	700 mA
Lighting systems	HE-EXLIGHT-LED24.6

HE-EXLIGHT-LED 24.12



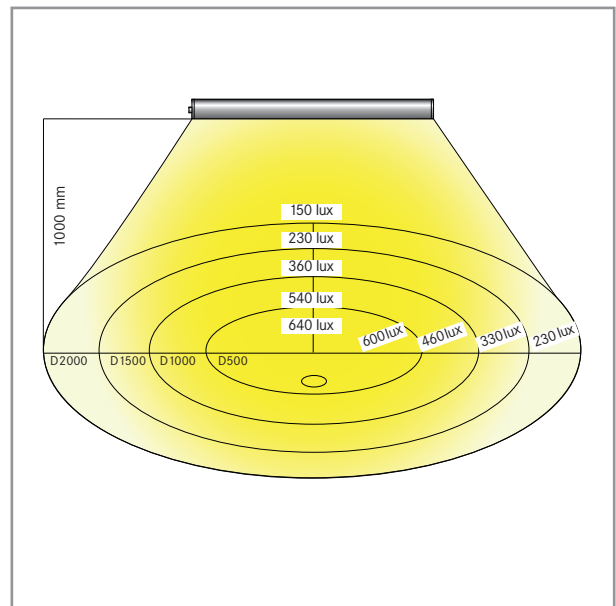
Technical details	Page 10
Lens	120°
Current	7000 mA
Lighting systems	HE-EXLIGHT-LED24.12

HE-EXLIGHT-LED 24.18



Technical details	Page 10
Lens	120°
Current	2100 mA
Lighting systems	HE-EXLIGHT-LED24.18

HE-EXLIGHT-LED 24.24



Technical details	Page 10
Lens	120°
Current	1400 mA
Lighting systems	HE-EXLIGHT-LED24.24

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HE-TRACK-ALPHA LED MACHINE LIGHTING

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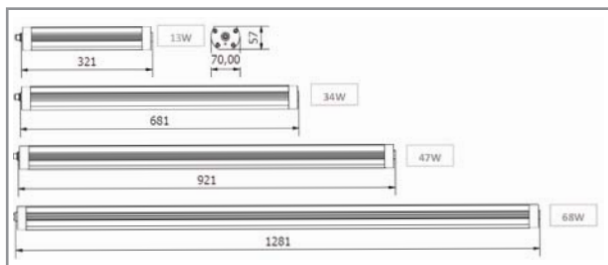
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INTEGRATED
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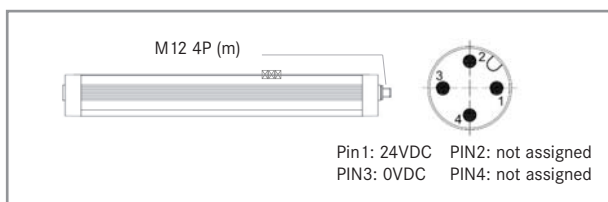
HE-TRACK-LED, diffuse lighting for glare-free working



HE-TRACK-ALPHA LED Machine light



HE-TRACK-ALPHA Dimensions



The HE-TRACK-ALPHA LED machine lamps are designed for small and mid sized machine tools.

The housing is of robust, silver anodised aluminium. The 5 mm thick, hardened safety pane presents a matt surface for diffuse, dazzle free lighting.

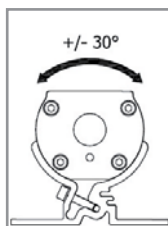
The lamps can be fitted with optional mounting plates for both horizontal and vertical installations. The lamps are impact resistant, impervious to vibrations, and can also operate in environments with coolants and lubricants.

In addition, the HE-TRACK-ALPHA LED machine lamps are extremely low maintenance. This LED technology exhibits a long service life of 50,000 operating hours, so the lamp is virtually replacement free, eliminating the cost for new parts and repairs.

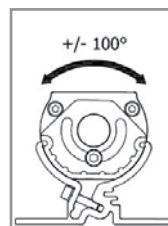
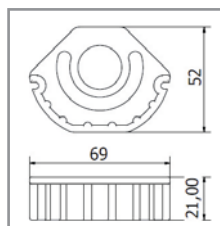
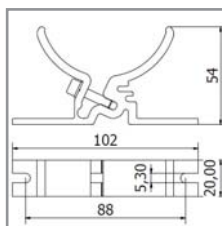
- Flexible machine lamp
- Adjustable lighting angle
- Direct 24 V connector without additional components
- Resistant to many coolants and lubricants



IP67/68



Backside mounting ALPHA.CLIP



Sidewise mounting ALPHA.CLIP and ALPHA.ADP



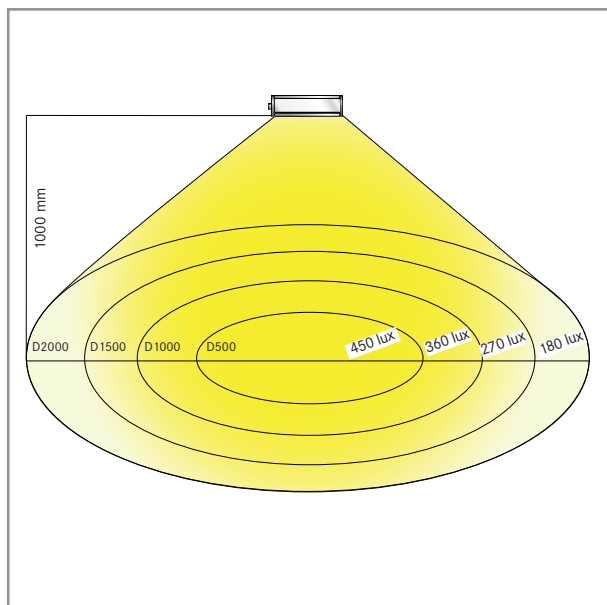
Version	Power supply	LED no	Operating voltage	Light temperature	Lens	Mounting
HE-TRACKLED 24	24 VDC	36	13 W / 0.60 A	5000K	120°	external
HE-TRACKLED 48	24 VDC	90	34 W / 1.50 A	5000K	120°	external
HE-TRACKLED 72	24 VDC	126	47 W / 2.10 A	5000K	120°	external
HE-TRACKLED 96	24 VDC	180	68 W / 3.00 A	5000K	120°	external

Delivered with cable lengths of 1.5m, cable ends of bare wires.

Order and request forms available at: www.hema-group.com

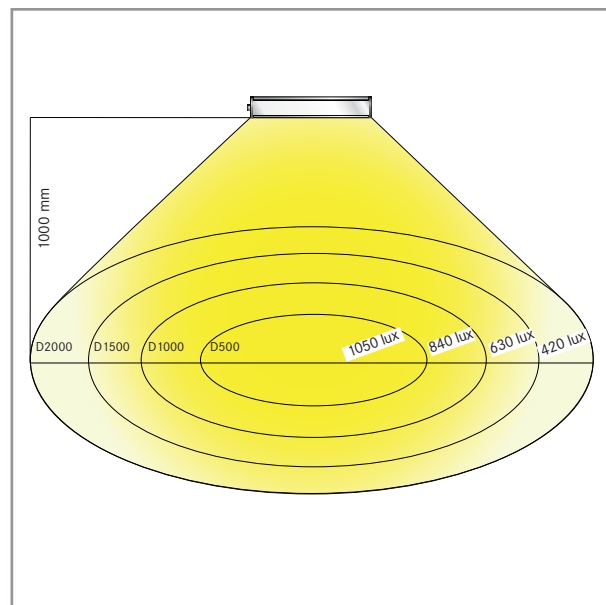
ILLUMINATION DISTRIBUTION CHARTS

HE-TRACK-ALPHA 2.50



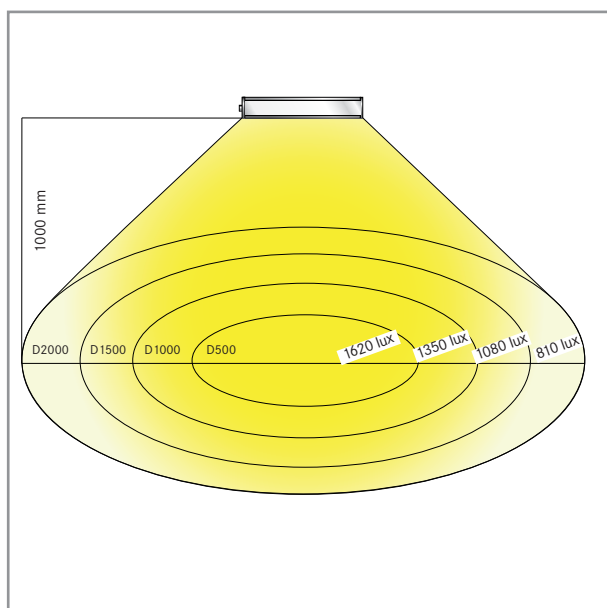
Technical details	Page 12
Lens	120°
Current	13 W / 0.6 A
Lighting systems	HE-TRACK ALPHA 2.50

HE-TRACK-ALPHA 5.50



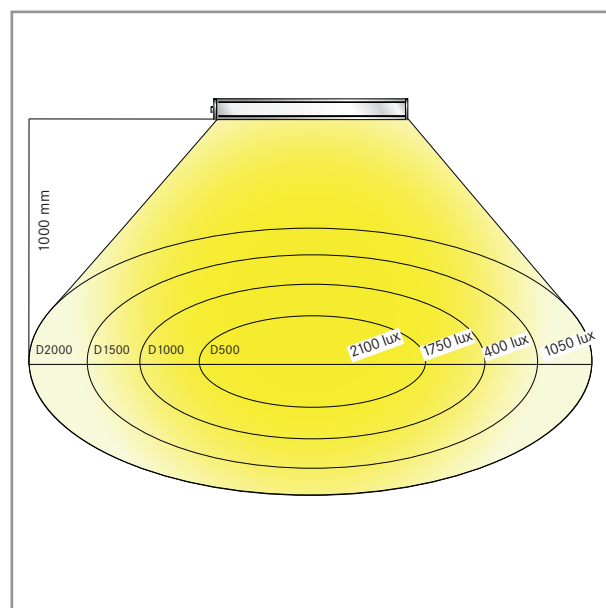
Technical details	Page 12
Lens	120°
Current	34 W / 1.5 A
Lighting systems	HE-TRACK ALPHA 5.50

HE-TRACK-ALPHA 7.50



Technical details	Page 12
Lens	120°
Current	47 W / 2.1 A
Lighting systems	HE-TRACK ALPHA 7.50

HE-TRACK-ALPHA 10.50



Technical details	Page 12
Lens	120°
Current	68 W / 3 A
Lighting systems	HE-TRACK ALPHA 10.50

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HE-TLED MACHINE LIGHTING

For constant illumination inside the machine, the HE-TLED lighting system was developed on a modular basis.

As a result, the light provided by this system in the interior can be adapted specifically to actual needs. Units with three, six, nine, or twelve LEDs are available.



Modular machine interior lighting HE-TLED

The housing of the HE-TLED is of aluminium and polycarbonate and is ideal for dusty or wet environmental conditions e.g. inside machines. Also a scratchproof glass variant is available as an option for use in machining production areas. All HE-TLED versions fulfil the protective requirements for IP 68. The encapsulated design is an effective barrier against foreign particles and moisture for a constant high quality lighting at all times.

An LED has a max life of 50,000 hours, reducing maintenance work to a considerable degree. This long life and high lighting quality also help to reduce maintenance and energy consumption.



Machine interior lighting HE-TLED with three LED

Advantages of using HETLED lamps

- Compact measurements with maximum illumination
- Robust design for demanding applications
- Adjustable lighting angle, high flexibility
- Innovative fastening modes for max. installation convenience
- Resistant to most coolants and lubricants
- High IP rating, energy efficient
- LED technology for up to 50,000 hours of operation



Fastening with clips



Screw union with mount, see page 16

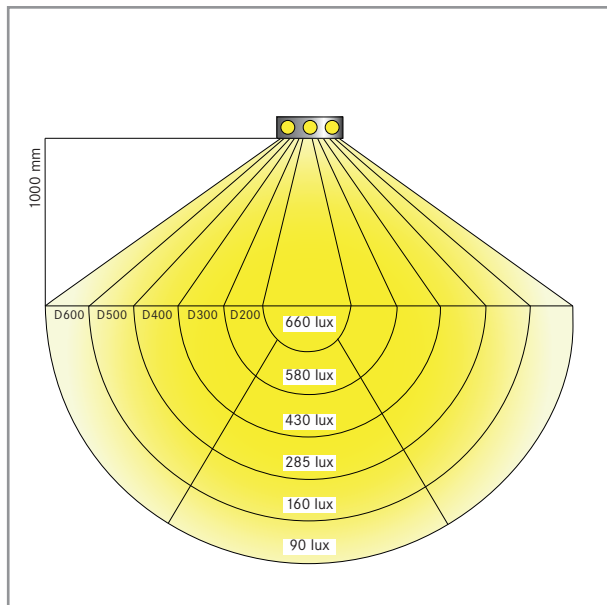


	HE-TLED 3	HE-TLED 6	HE-TLED 9	HE-TLED 12
Operating voltage 500 mA	6 W	12 W	18 W	24 W
Current	12-24 VDC/230 VAC	12-24 VDC/230 VAC	230 VAC	230 VAC
IEC marking	III	III	III	III
cable length	1.5 m	1.5 m	1.5 m	1.5 m
LED life	50 000 h	50 000 h	50 000 h	50 000 h
LED no	3	6	9	12
Light temperature	5000 K	5000 K	5000 K	5000 K
Lens	8° - 25° - 40°	8° - 25° - 40°	8° - 25° - 40°	8° - 25° - 40°
Dimensions (mm)	Ø 36x167	Ø 36x302	Ø 36x437	Ø 36x572
Fasteners	2 metal clips	2 metal clips	2 metal clips	2 metal clips
Colour	alloy	alloy	alloy	alloy
IP rating	IP68	IP68	IP68	IP68

HEMA also supplies an adapter matching the ordered illuminant type. Solely the operating voltage must be specified on the order (see table above). Delivered with cable lengths from 1.5 to 6 m. 230 Vac cables fitted with two-pin plug, 12-24 Vdc cable ends of bare wires.

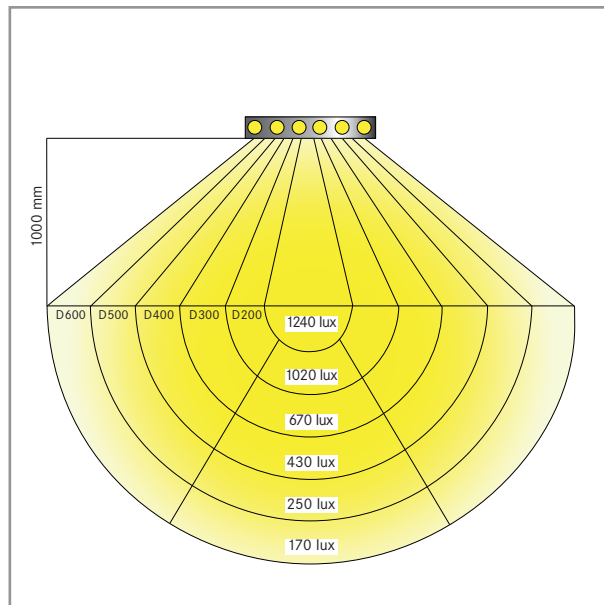
ILLUMINATION DISTRIBUTION CHARTS

HE-TLED3



Technical details	Page 14
Lens	40°
Current	500 mA
Lighting systems	HE-TLED3

HE-TLED6



Technical details	Page 14
Lens	40°
Current	500 mA
Lighting systems	HE-TLED6

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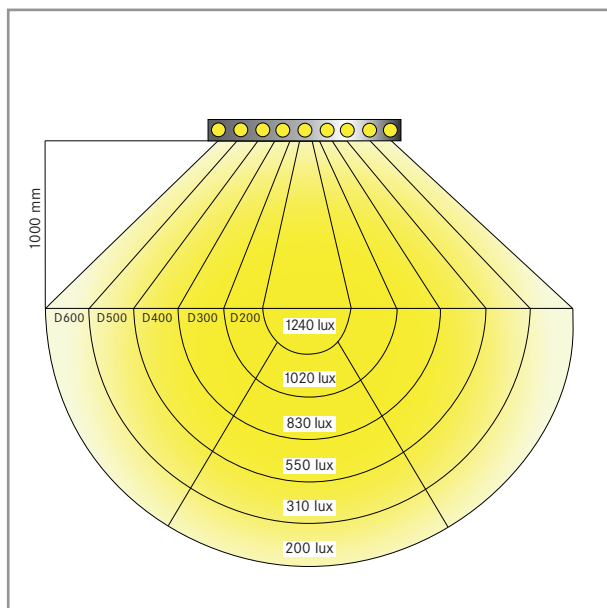
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INTEGRATED
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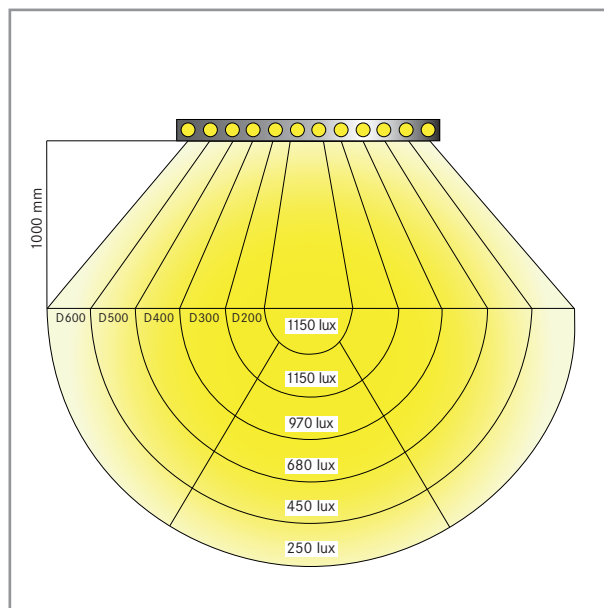
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HE-TLED9



Technical details	Page 14
Lens	40°
Current	500 mA
Lighting systems	HE-TLED9

HE-TLED12



Technical details	Page 14
Lens	40°
Current	500 mA
Lighting systems	HE-TLED12

HE-TCITY MACHINE LIGHTING

Like the HE-TLED Series, also HE-TCITY is perfect for the permanent illumination of machine interiors. HE-TCITY is available in four sizes: 6 W, 12 W, 18 W, and 24 W. The HE-TCITY housing is made of aluminium encased in borosilicate glass. All HE-TCITY versions fulfil the protective requirements for IP 68.



Machine inner lighting HE-TCITY with mounting

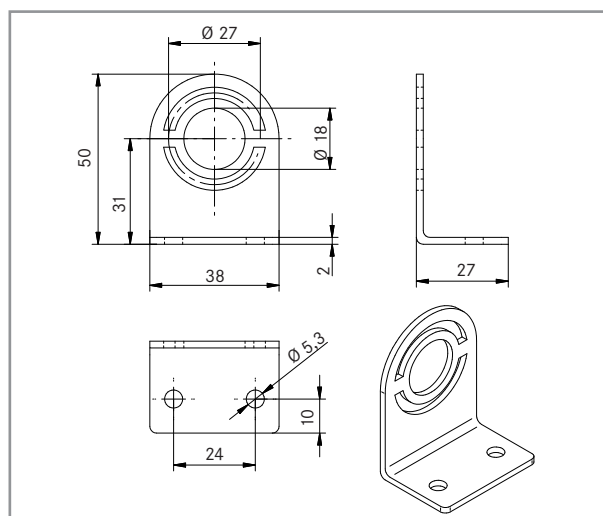
The encapsulated design is an effective barrier against foreign particles and moisture for a maintained high quality of lighting. The LEDs are designed for a long service life and high light quality, reducing maintenance work and energy costs to a considerable degree.

Advantages of using HE-TCITY lamps

- Compact measurements with maximum illumination
- Robust design for demanding applications
- 120° lighting angle
- Direct 24 V connector, integrated adapter
- Innovative fastening modes for maximised installation convenience
- Resistant to most coolants and lubricants
- High IP 68 rating
- LED technology for up to 50,000 hours of operation



Machine inner lighting HE-TCITY



Holder to screw for HE-TCITY and HE-TLED

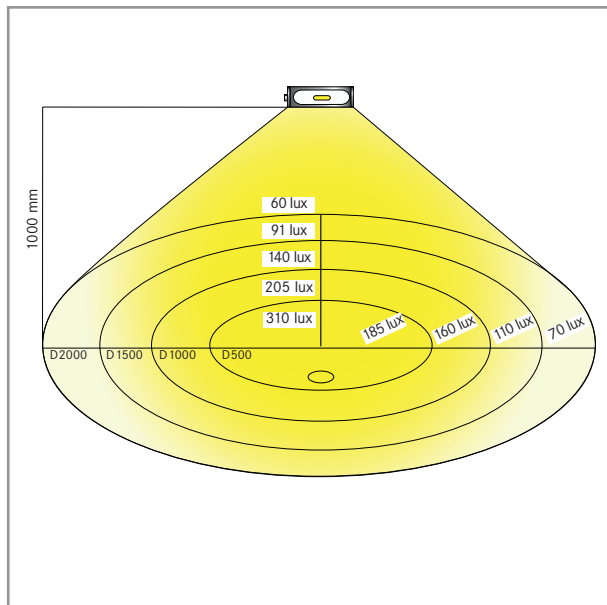


	HE-TCITY6	HE-TCITY12	HE-TCITY18	HE-TCITY24
Current 700 mA	6 W	12 W	-	-
Current 1,400 mA	-	-	18 W	24 W
Operating voltage	24 VDC	24 VDC	24 VDC	24 VDC
IEC marking	III	III	III	III
Cable length standard	1.5 m	1.5 m	1.5 m	1.5 m
LED life cycle	ca. 50,000 h	ca. 50,000 h	ca. 50,000 h	ca. 50,000 h
Number of LEDs	1	2	3	4
Light temperature	5000 K Ra65	5000 K Ra65	5000 K Ra65	5000 K Ra65
Lens	120°	120°	120°	120°
Dimensions (mm)	Ø 38x202	Ø 38x372	Ø 38x542	Ø 38x712
Fasteners	Holder / Clips	Holder / Clips	Holder / Clips	Holder / Clips
Colour	Aluminium/Glass	Aluminium/Glass	Aluminium/Glass	Aluminium/Glass
IP Class	IP68	IP68	IP68	IP68

Delivery with cable lengths 1.5m, 24 Vdc cable ends of bare wires.

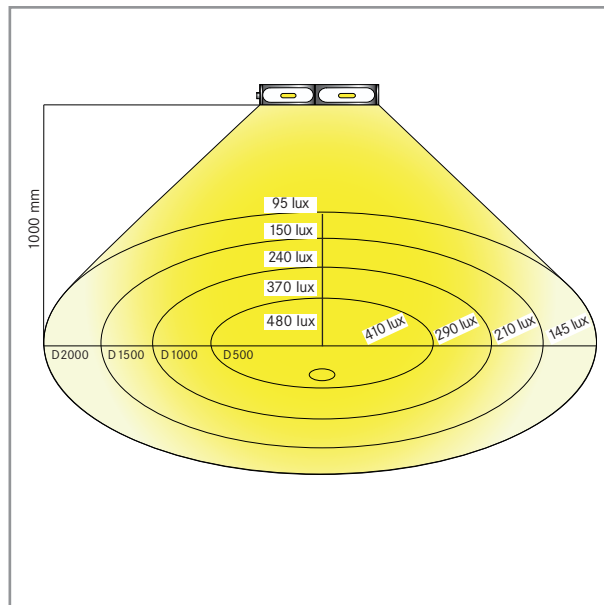
ILLUMINATION DISTRIBUTION CHARTS

HE-TCITY6



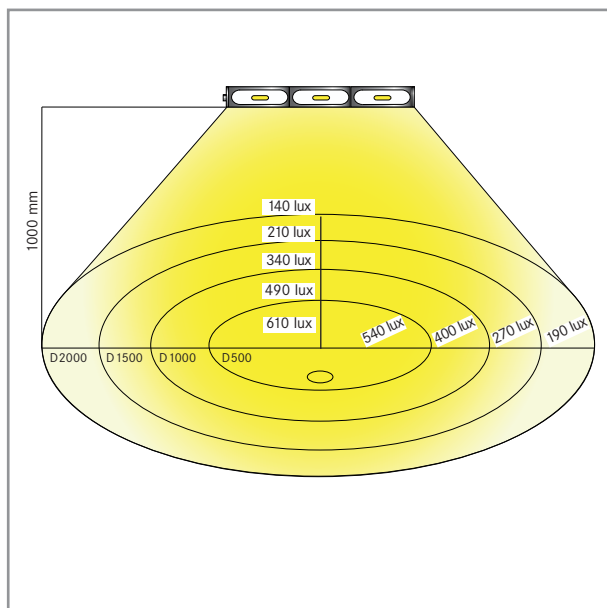
Technical details	Page 16
Lens	120°
Current	24V/700 mA
Lighting systems	HE-TCITY.6

HE-TCITY12



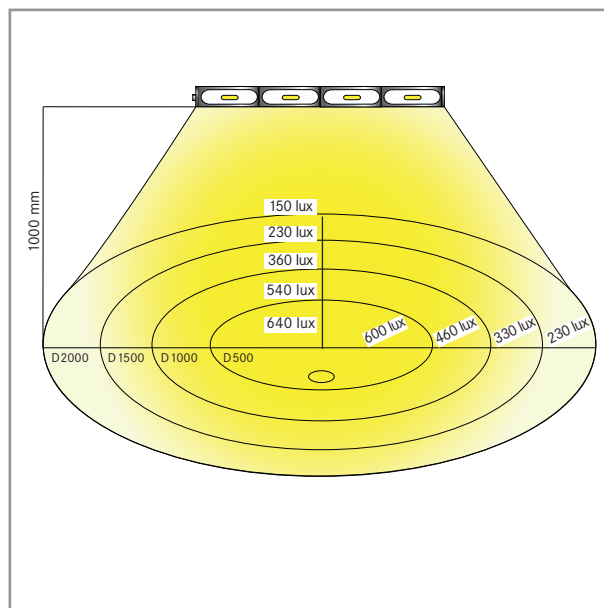
Technical details	Page 16
Lens	120°
Current	24V/700 mA
Lighting systems	HE-TCITY.12

HE-TCITY18



Technical details	Page 16
Lens	120°
Current	24V/1400 mA
Lighting systems	HE-TCITY.18

HE-TCITY24



Technical details	Page 16
Lens	120°
Current	24V/1400 mA
Lighting systems	HE-TCITY.24

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