

LUMATRIS EVOLUTION IN MACHINE LIGHTING.

In mechanical engineering, competitive ability equals the sum of innovative components and functions. The newest LED technology is finding its way into the heterogeneous world of machines with LUMATRIS. It economically transforms the punctiform lighting characteristic of LEDs into extremely homogeneous area light.

- Maintenance-free: LED life of up 50,000 hours and more
- Light Forming Technology for optimum light control and perfect glare-free technology

- Particularly resource-friendly variants with eco mode
- Flicker-free light with no IR or UV content
- Unlimited functionality even after frequent switching
- Direct, reverse-polarity protected 24 VDC plug with no additional components
- Rear or side plug connection with an M12 plug connector
- For integration or mounting

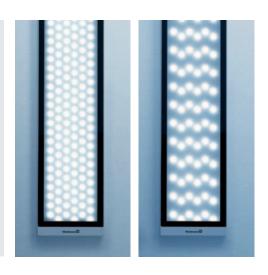
- Robust aluminum and safety glass housing for the toughest application conditions
- IP68-1m & IPX9K system of protection
- For ambient temperatures of up to 50 °C
- No burning-in of coolants or lubricants thanks to low surface temperature
- Resistance-tested with many coolants and lubricants



OPTIMUM ILLUMINATION - PROTECTING RESOURCES.

The selection of especially high-performance LEDs and the use of Light Forming Technology* make LUMATRIS one of the most energy-efficient lighting solutions in this light class.

In addition, the power consumption can be further reduced for the larger variants by using the standard eco mode if full luminous power is not needed for less critical visual tasks. This solution shuts down every second LED, which – even in eco mode – prevents the dangerous stroboscope effect that can occur when the luminaire is dimmed. The luminaire can be switched to eco mode by either applying 24 V to one pin, or by shorting two pins.



* selectable, see overview of variations

LUMATRIS SIMPLY MORE POSSIBILITIES.



More applications

With six different luminaire sizes, LUMATRIS introduces the advantages of modern LED light technology to every machine. It outdoes itself In large-volume workrooms with immense illuminance and proves itself in limited spaces with its small housing shape.

The high-tech electronics are embedded in housing with optimum heat management, making LUMATRIS suitable for higher ambient temperatures of up to 50 °C without reducing the service life of the LEDs.

The IP68-1m & IPX9K system of protection allows it to be used in the toughest conditions.





More lighting possibilities

The luminaire is optionally available with Light Forming Technology instead of a diffuser. In addition to the best glare-free properties and increased efficiency, its narrower radiation characteristic facilitates a wide range of tasks.

TECHNICAL DATA



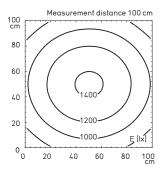


Features at a glance

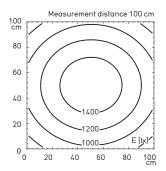
- 24, 48, 72, 90, 96 or 180 x LED
- Color temperature daylight white 5,800 K
- Glare-free with diffuser or Light Forming Technology
- Colorless anodized aluminum housing, silver-painted side parts made of die-cast, 4 mm thick safety glass
- For integration or mounting
- 31 and 62 W variants, switchable in two stages (eco mode)
- System of protection IP68-1m and IPX9K in accordance with DIN 40050-9; class of protection III
- Supplied without mains lead, side or rear connection via M12 plug connector



Tip: for the precise assembly dimensions, please request a detailed drawing.







Illuminance based on the example of 62 W with Light Forming Technology

22 – 26 VDC						cETLus
CONSUMPTION	OPERATING DEVICE	DIMENSIONS	SPECIAL FEATURE	E _m /E _{max} *	MODEL	ORDER NUMBER
10 W	_	A = 246 x B = 95 mm	Rear connection, Light Forming	163/220 lx1	MSAL 24 S	113 094 000 - 005 967 88
10 W	-	A = 246 x B = 95 mm	Side connection, Light Forming	163/220 lx1	MSAL 24 S	113 094 000 - 005 967 22
10 W	-	A = 246 x B = 95 mm	Side connection	153/205 lx1	MSAL 24 S	113 094 000 - 005 967 91
10 W	-	A = 246 x B = 95 mm	Rear connection	153/205 lx1	MSAL 24 S	113 094 000 - 005 967 94
20 W	-	A = 420 x B = 95 mm	Rear connection, Light Forming	341/454 lx1	MSAL 48 S	113 095 000 - 005 968 03
20 W	-	A = 420 x B = 95 mm	Side connection, Light Forming	341/454 lx1	MSAL 48 S	113 095 000 - 005 967 61
20 W	-	A = 420 x B = 95 mm	Side connection	319/423 lx1	MSAL 48 S	113 095 000 - 005 968 06
20 W	-	A = 420 x B = 95 mm	Rear connection	319/423 lx1	MSAL 48 S	113 095 000 - 005 968 09
30 W	-	A = 596 x B = 95 mm	Rear connection, Light Forming	507/671 lx1	MSAL 72 S	113 096 000 - 005 968 57
30 W	-	A = 596 x B = 95 mm	Side connection, Light Forming	507/671 lx ¹	MSAL 72 S	113 096 000 - 005 967 64
30 W	-	A = 596 x B = 95 mm	Side connection	463/607 lx1	MSAL 72 S	113 096 000 - 005 968 62
30 W	-	A = 596 x B = 95 mm	Rear connection	463/607 lx1	MSAL 72 S	113 096 000 - 005 968 70
40 W	-	A = 770 x B = 95 mm	Rear connection, Light Forming	662/862 lx1	MSAL 96 S	113 097 000 - 005 968 74
40 W	-	A = 770 x B = 95 mm	Side connection, Light Forming	662/862 lx1	MSAL 96 S	113 097 000 - 005 967 67
40 W	-	A = 770 x B = 95 mm	Side connection	616/796 lx1	MSAL 96 S	113 097 000 - 005 968 77
40 W	-	A = 770 x B = 95 mm	Rear connection	616/796 lx ¹	MSAL 96 S	113 097 000 - 005 968 80
31 W	-	A = 420 x B = 170 mm	Rear connection, Light Forming, eco mode	603/806 lx1	MSAL 90 S	112 573 000 - 004 994 89
31 W	-	A = 420 x B = 170 mm	Side connection, Light Forming, eco mode	603/806 lx1	MSAL 90 S	112 573 001 - 005 142 71
31 W	-	A = 420 x B = 170 mm	Side connection, eco mode	572/763 lx1	MSAL 90 S	112 573 000 - 006 086 66
31 W	-	A = 420 x B = 170 mm	Rear connection, eco mode	572/763 lx1	MSAL 90 S	112 573 000 - 006 086 73
62 W	-	A = 770 x B = 170 mm	Rear connection, Light Forming, eco mode	1157/1530 lx1	MSAL 180 S	112 574 000 - 004 994 93
62 W	-	A = 770 x B = 170 mm	Side connection, Light Forming, eco mode	1157/1530 lx ¹	MSAL 180 S	112 574 001 - 005 111 40
62 W	-	A = 770 x B = 170 mm	Side connection, eco mode	1092/1417 lx1	MSAL 180 S	112 574 000 - 006 086 80
62 W	-	A = 770 x B = 170 mm	Rear connection, eco mode	1092/1417 lx ¹	MSAL 180 S	112 574 000 - 006 086 77

 $^{^*}$ E $_m$ =Average illuminance; E_{max} =Maximum illuminance; 1 Measuring range 100 cm x 100 cm/Measuring distance 100 cm

LUMATRIS EASILY INTEGRATED MACHINE LUMINAIRES.









More installation possibilities

Threaded channels and T-slots on the back of the LUMATRIS make it possible to mount the luminaire in the machine without additional accessories.

In order to individually optimize workroom installation, further options are available: using a mounting frame*, the LUMATRIS can be flush-mounted into the machine wall. Dirt and chip ester don't stand a chance against this type of mounting. Furthermore, the LUMATRIS can easily be installed with a pair of mounting brackets*. Another flexible installation option for the machine wall is a pivoting head*, which enables the luminaire to be set simply and precisely.

* Accessories





More connection possibilities

The LUMATRIS is particularly easy to connect thanks to its M12 plug connector. The connection is reverse-polarity protected so that a faulty terminal contact doesn't result in negative consequences. The advantage of this plug connector is that it is simple to replace the cable in the event of a defect.

It can be connected on the side or rear so that it doesn't get in the way of any type of installation. Additional connection variations are possible, for example, pre-assembled or for customer-side assembling, also with cable protection system.

ACCESSORIES

MOUNTING FRAME



SPECIAL FEATURE	ORDER NUMBER
For luminaire size 246 x 95 mm	408 001 016 - 005 956 19
For luminaire size 420 x 95 mm	408 001 017 - 005 956 13
For luminaire size 596 x 95 mm	408 001 018 - 005 956 10
For luminaire size 770 x 95 mm	408 001 019 - 005 956 16
For luminaire size 420 x 170 mm	408 001 037 - 005 181 21
For luminaire size 770 x 170 mm	408 001 034 - 005 142 65

MOUNTING BRACKET SET



SPECIAL FEATURE	ORDER NUMBER
For luminaire width 95 mm	408 001 015 - 005 955 87
For luminaire width 170 mm	408 001 035 - 005 142 68

JOINTED HEAD



SPECIAL FEATURE	ORDER NUMBER
Adjustable	408 001 033 - 005 142 62

SLEEVE



SPECIAL FEATURE	ORDER NUMBER
Straight (for luminaires < 48 W)	336 615 019 - 005 220 18
Angled (for luminaires < 48 W)	336 615 029 - 005 220 15
Straight (for luminaires > 48 W)	336 882 010 - 005 975 41

CONNECTION CABLE WITH M12 CONNECTOR



SPECIAL FEATURE	ORDER NUMBER
Cable length 3 m / straight bushing (for luminaires < 48 W)	336 703 010 - 005 821 09
Cable length 7 m / straight bushing (for luminaires < 48 W)	336 703 020 - 005 433 41
Cable length 3 m / angled bushing (for luminaires < 48 W)	336 704 010 - 005 433 38
Cable length 7 m / angled bushing (for luminaires < 48 W)	336 704 020 - 005 433 44
Cable length 3 m / straight bushing (for luminaires > 48 W)	336 890 010 - 005 980 58
Cable length 7 m / straight bushing (for luminaires > 48 W)	336 891 020 - 005 979 48