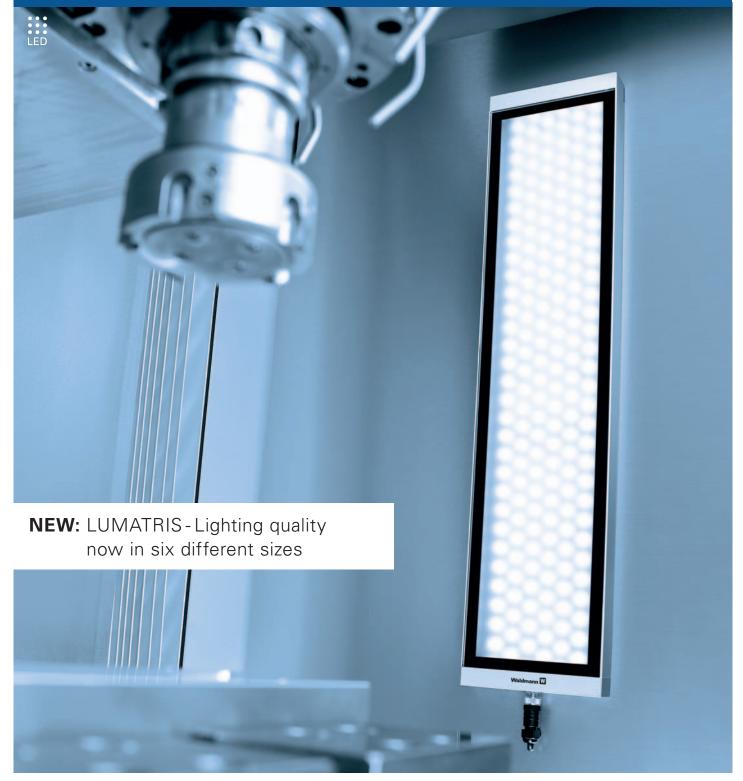
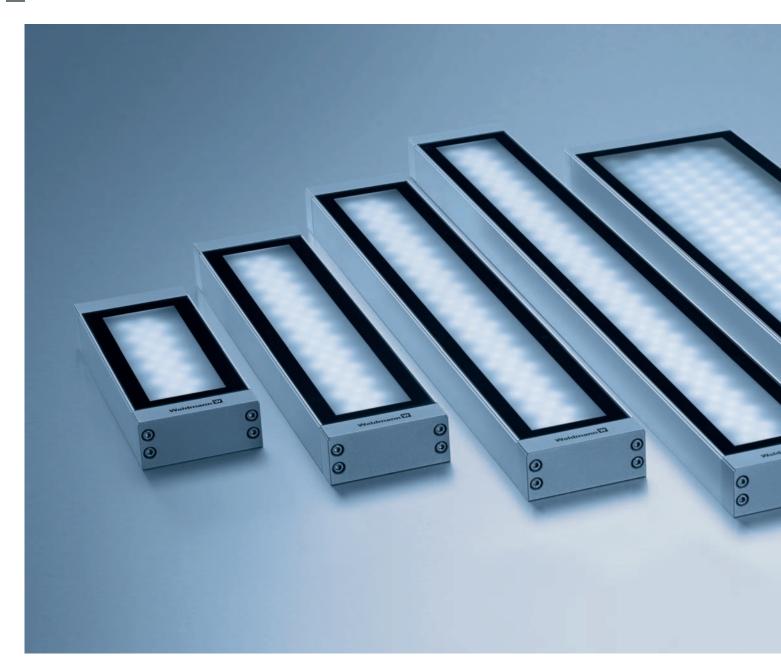


LUMATRIS | SURFACE-MOUNTED LUMINAIRE



ENG



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.



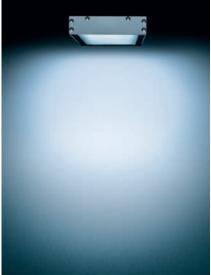
More applications

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



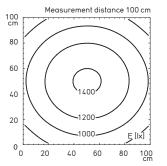
Tip: for the precise assembly dimensions, please request a detailed drawing.

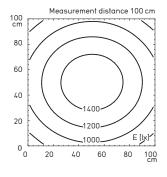
Features at a glance

- 24, 48, 72, 90, 96 or 180 x LED
- Color temperature daylight white 5,800 K
- Glare-free with diffuser or Light Forming Technology

efficient

- 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







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 lx1 | 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 lx1 | 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 lx1 | 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 lx1 | 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 |