

Special
LED-Lighting



Machine**ll**umination

Built-on lights . Built-in lights . Signal lights

touch . switch . light

Machine Illumination...

The economical vision of space and time for light in machines.

"Bringing light with sufficient brightness directly to a certain place" or: "light-on only as long and as much as needed".

Machine wiring has developed over the last few decades from central cabinets to decentral IP67 solutions. On the one hand, to increase automation of machines and on the other hand to maximize machine availability and to reduce maintenance costs as well.

Thus, these days sensors with robust housings are directly mounted in rough applications. The connectivity (cables and connectors) was adapted to harsh environment requirements (drag-chains, cooling media, lubricants, aggressive detergents, etc.)

Today I/O-cards are integrated into IP67 fieldbus-stations.

The target of the decentral wiring- and control-philosophy is, collect information where it is created and run actions (switch, control, regulate) directly on site.

Escha TSL has exactly made use of this philosophy in the area of machine illumination. It is about integration of lights into the world of machine wiring and control.

The products

Mechanics

The housing-materials and – designs of the Escha TSL machine LED-lights are the same as those of IP67 junction-boxes and sensors. The LED-lights are potted and resistant against common coolants, lubricants, oils or aggressive detergents.

Connectivity

Robust industrial connectors (M12) with standardized pin configuration are exclusively used.

Light control

Due to the fact that the Escha TSL machine LED-lights are supplied by 24VDC and a current <0.5A the LED-lights can be controlled by a standard PLC-output via a passive junction box or a fieldbus station.

Integration is everything

Integration of light-on/off into the PLC-program will reduce energy costs – the process determines the on position period. Integrating the machine LED-lights into the standard IP67 machine wiring will reduce hardware costs through the abolition of additional components in the switching cabinet.

Surface-mounted lights IP67

Longitudinal light



| | |
|--|---|
| Article description Type of light | 1MB CWW M3101-6W Surface-mounted light |
| Photometric data Light colour Illumination-geometry Angle of radiation | cool white diffuse approx. 90° |
| Mechanical data Degree of protection Connection LED cover Housing | IP67 Overmoulded industrial connector M12 with cable double layer safety glass PA6GF15 |
| Operating temperature Dimensions Weight | -40°C +50°C 120 x 25 x 23.5 mm 120 g |
| Electrical data Operating voltage Power consumption Operating current | 24/36 V _{DC} 6W 250mA |




Cube light






| | |
|--|---|
| Article description Type of light | 1SB CWZ M3301-4W Surface-mounted light |
| Photometric data Light colour Illumination-geometry Angle of radiation | cool white circle approx. 120° |
| Mechanical data Degree of protection Connection LED cover Housing | IP67 industrial connector M12 tempered safety glass aluminium diecasting |
| Operating temperature Dimensions Weight | -40°C +50°C 66 x 41 x 41.5 mm 200 g |
| Electrical data Operating voltage Power consumption Operating current | 24/36 V _{DC} 4W 150mA |



Built-in lights IP67

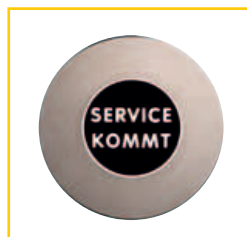
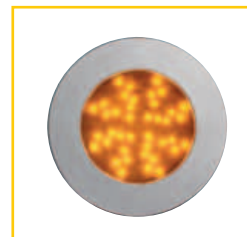
| Round light | | |
|---|--|--|
|  | Article description Type of light | 1MB CWN M5501-4W Built-in light |
| | Photometric data Light colour Illumination-geometry Angle of radiation | cool white circle approx. 32° |
| | Mechanical data Degree of protection Connection LED cover Housing Front cover Operating temperature Dimensions Weight Mounting | IP67 Overmoulded industrial connector M12 with cable PC PA6GF15 V2A, mat shot blasted -40°C +50°C Ø 100 mm 220 g front side (= 1MB CWN M5501-4W) back side (= 1MB CWN M5502-4W) |
| | Electrical data Operating voltage Power consumption Operating current | 24/36 V _{DC} 4W 150mA |
| Round light | | |
|  | Article description Type of light | 1MB CWN M5503-4W Built-in light |
| | Photometric data Light colour Illumination-geometry Angle of radiation | cool white oval approx. 14° x 49° |
| | Mechanical data Degree of protection Connection LED cover Housing Front cover Operating temperature Dimensions Weight Mounting | IP67 Overmoulded industrial connector M12 with cable PC PA6GF15 V2A, mat shot blasted -40°C +50°C Ø 100 mm 220 g front side (= 1MB CWN M5503-4W) back side (= 1MB CWN M5504-4W) |
| | Electrical data Operating voltage Power consumption Operating current | 24/36 V _{DC} 4W 150mA |
| Ball light | | |
|  | Article description Type of light | 1MF CWZ M5501-2,5W Built-in light |
| | Photometric data Light colour Illumination-geometry Angle of radiation Visible area | cool white diffuse approx. 120° 180° |
| | Mechanical data Degree of protection Connection LED cover Housing Front cover Operating temperature Dimensions Weight Mounting | IP67 Overmoulded industrial connector M12 with cable special glass satiné PA6GF15 V2A, mat shot blasted -40°C +50°C Ø 100 mm 280 g front side (= 1MF CWZ M5501-2,5W) back side (= 1MF CWZ M5502-2,5W) |
| | Electrical data Operating voltage Power consumption Operating current | 24 ... 110V _{DC} 2.5W 100 mA at 24 V |

Signal lights IP67

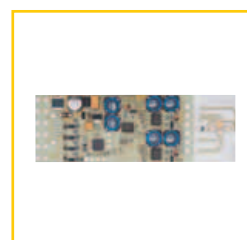
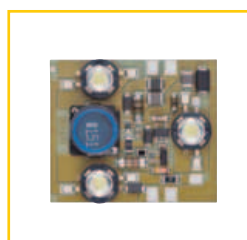
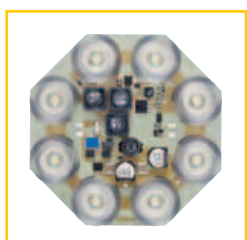
| Longitudinal light yellow | | |
|---|----------------------------|---|
|  | Article description | 1LG ZYZ M1101-2,5W |
| | Type of light | Signal light |
| | Photometric data | |
| | Light colour | yellow |
| | Illumination-geometry | diffuse |
| | Angle of radiation | approx. 120° |
| | Visible area | 180° |
| | Mechanical data | |
| | Degree of protection | IP67 |
| | Connection | Overmoulded industrial connector M12 with cable |
| | LED cover | special glass satined |
| | Housing | polycarbonate UL94V0 |
| | Front cover | V2A, mat shot blasted |
| | Operating temperature | -40°C +50°C |
| | Dimensions | 200 x 50 x 55 mm |
| | Weight | 300 g |
| | Electrical data | |
| | Operating voltage | 24 ... 110 V _{DC} |
| | Power consumption | 2.5W |
| | Operating current | 100mA at 24 V |
| Longitudinal light red | | |
|  | Article description | 1LG ZRZ M1101-2,5W |
| | Type of light | Signal light |
| | Photometric data | |
| | Light colour | red |
| | Illumination-geometry | diffuse |
| | Angle of radiation | approx. 120° |
| | Visible area | 180° |
| | Mechanical data | |
| | Degree of protection | IP67 |
| | Connection | Overmoulded industrial connector M12 with cable |
| | LED cover | special glass satined |
| | Housing | polycarbonate UL94V0 |
| | Front cover | V2A, mat shot blasted |
| | Operating temperature | -40°C +50°C |
| | Dimensions | 200 x 50 x 55 mm |
| | Weight | 300 g |
| | Electrical data | |
| | Operating voltage | 24 ... 110 V _{DC} |
| | Power consumption | 2.5W |
| | Operating current | 100mA at 24 V |
| Longitudinal light green | | |
|  | Article description | 1LG ZGZ M1101-2,5W |
| | Type of light | Signal light |
| | Photometric data | |
| | Light colour | green |
| | Illumination-geometry | diffuse |
| | Angle of radiation | approx. 120° |
| | Visible area | 180° |
| | Mechanical data | |
| | Degree of protection | IP67 |
| | Connection | Overmoulded industrial connector M12 with cable |
| | LED cover | special glass satined |
| | Housing | polycarbonate UL94V0 |
| | Front cover | V2A, mat shot blasted |
| | Operating temperature | -40°C +50°C |
| | Dimensions | 200 x 50 x 55 mm |
| | Weight | 300 g |
| | Electrical data | |
| | Operating voltage | 24 ... 110 V _{DC} |
| | Power consumption | 2.5W |
| | Operating current | 100mA at 24 V |

More LED products

LED push-buttons



LED illuminants



Supplied by our partner Turck duotec GmbH



Contact

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The Turck-Group



industrial automation



connector and housing technology



switches and lights for rugged applications



integrated electronic moduls and devices

touch . switch . light

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