



LED LIGHTING



LED Lighting Catalog

PUBLIC TRANSPORT AND INDUSTRY



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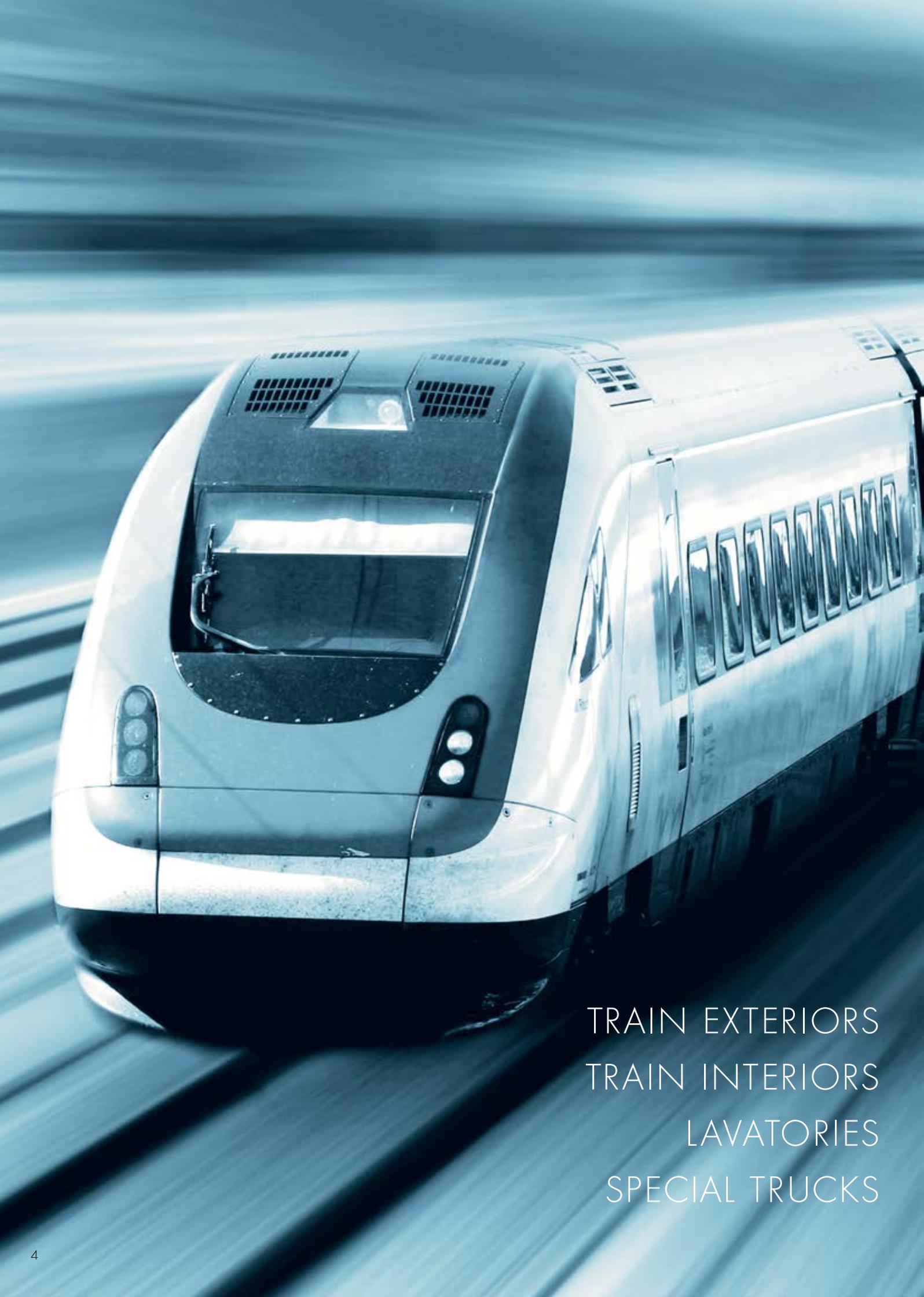
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PUBLIC TRANSPORT AND INDUSTRY



TRAIN EXTERIORS
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Buses and railway vehicles operate worldwide along various longitudes and latitudes. TSL products are specifically designed for reliable operation in all climate zones.

A LED light should not only operate reliably in extreme heat or freezing temperatures, but also in dusty or humid conditions. Therefore, TSL-ESCHA strives to fulfill the high requirements of our customers through a wide selection of LED products.



OUR LIGHTS FOR PUBLIC TRANSPORT

PUBLIC TRANSPORT



TRAIN EXTERIORS

Rail vehicles are used worldwide in a wide variety of climate zones. LED lights mounted on exterior door areas are subject to extreme environmental conditions, temperature changes, and mechanical stress. Thus, there are high requirements of tightness because rail vehicles are exposed around the clock to dust, rain, humidity, and freezing temperatures. TSL products are designed to reliably function in all climates.

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TRAIN INTERIORS

Door areas are the busiest and most critical sections of trains. In very limited space and in very short time, many passengers board and exit wagons. TSL LED lights are designed for floor installation in order to enhance safety while boarding and exiting.

Other applications for TSL LED interior lights are train ceilings, dark corners, or any other train interior dark area.

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LAVATORIES

Components or devices in lavatories must fulfill high requirements because of their exposure to wet environments. TSL ESCHA offers products in different robust housing materials, protection level IP67, and with exceptional brightness.

There are also special diffuse light panels available to prevent uncomfortable glare, for example at dipper changing tables.

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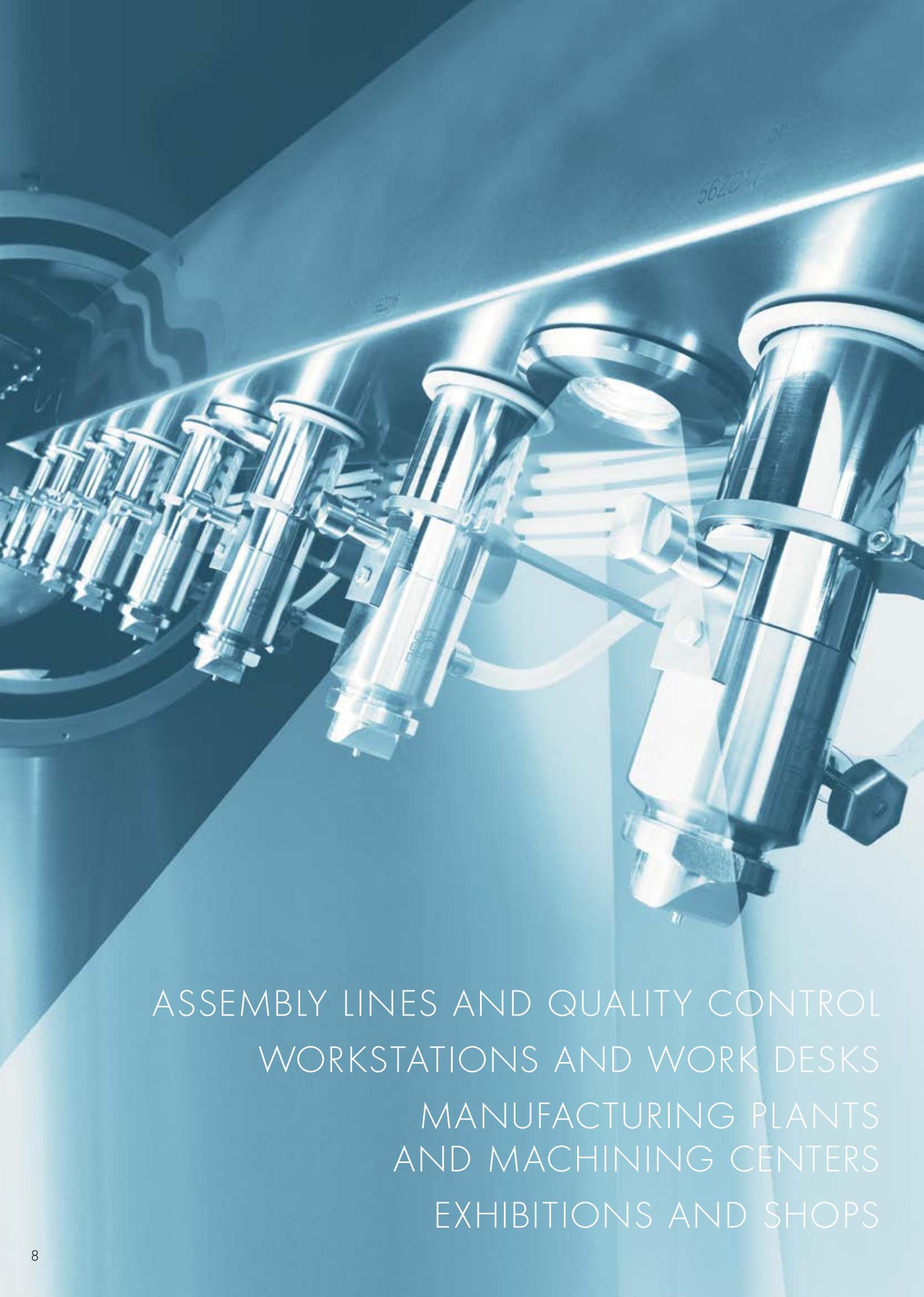


SPECIAL TRUCKS

Fire trucks, emergency vehicles, and construction trucks undergo more severe environmental impacts than other ordinary vehicles. Thus, components have to be made of the highest quality. LED lights must be waterproof, shockproof, and of robust material. TSL ESCHA lights meet all those determinant requirements and thanks to high-power LEDs are well recognizable from lateral view or in the event of direct sunlight.

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ASSEMBLY LINES AND QUALITY CONTROL
WORKSTATIONS AND WORK DESKS
MANUFACTURING PLANTS
AND MACHINING CENTERS
EXHIBITIONS AND SHOPS

For industrial applications, having optimal lighting is more and more important. TSL-ESCHA has developed top quality products for different industrial applications.

Top features are maximum efficiency, exceptional brightness, robust housing technology, and intelligent light and thermal management.



OUR LIGHTS FOR INDUSTRIAL APPLICATIONS



ASSEMBLY LINES AND QUALITY CONTROL

TSL-ESCHA work station lights are intensely bright and yet require remarkably little space due to their stylish flat design. The adjustable color temperature and light intensity enhance efficient and concentrated task performance. The innovative prism technology prevents multiple shadows, an exceptional advantage during meticulous manual tasks under direct light.

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EXHIBITIONS AND SHOPS

High brightness, compact design, no-burning risk, easy installation, and comfortable ambient temperature in shops and exhibition stands! LED lights feature easy installation, fast connectivity, long-lasting life, space-saving, and pleasant light ambience. TSL-ESCHA lights significantly simplify the setup and dismantling of exhibition stands, reducing time and assembling costs. Our lights do not require an external bulky power supply to work. With an intelligent set up of electronics, our design engineers made possible to integrate the power supply into the light unit. Thanks to its robust design and fast and easy connectivity, these LED lights are optimal for hectic exhibition set-up time. The electronics are unaffected in the event of shock due to its high tech encapsulated material. In spite of the high light intensity, the LED lights generate no heat due to their intelligent thermo management technology. There is no risk of hand burn when re-adjusting beam alignment.

A comfortable booth or shop temperature prevails even during hot days.

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MANUFACTURING PLANTS AND MACHINING CENTERS

Integrating LED lights in the automation world! The robust LED lights, just like sensors and actuators, are connected via 24V_{DC} wiring. The standard M12 connection technology with the common actuator pin-out allows direct connection to a passive distributor box or a field bus system and can be controlled via a PLC output. The housing materials are resistant to coolants and reach protection level IP67. Thus, they are ideally suitable for machining centers. Other product variations are possible for applications in control cabinets, automatic assembly lines, or dosing machines.

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WORKSTATIONS AND WORK DESKS

Optimal illumination is always a determining factor in work places. TSL-ESCHA developed a LED desk light especially for work stations that features maximum efficiency. Our LED product highlights are appealing optic design, adjustable light intensity as well as adjustable color temperature.

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ROUND LIGHTS

HPLS 24V_{DC}

The LED Spot Light is extremely resistant to shock and vibration thanks to high-tech safety glass, metal housing, and encapsulation of electronics. The IP67 housing concept allows for applications in extremely harsh areas, for example, in machines with aggressive coolants. The HPLS can be controlled directly via PLC output or fieldbus.

The LED-Spot has a sophisticated active and passive temperature management. Thus, a long lifetime of up to 50,000 operating hours is guaranteed.



Operating voltage	24V _{DC}
Nominal current	860mA
Nominal power	20W
Housing material	Aluminum
Operating temperature	-40 to 50°C
Protection level	IP67

Article Number	Housing Color	LED Color	Connection	Dimensions	Features	Application field
8606682	Black	Cool white	Industrial connector male, female M12x1	Ø160mm, H=57mm	8° beam angle, LED cover of special glass	
8606873	Black	Cool white	Industrial connector male, female M12x1	Ø160mm, H=57mm	38° beam angle, LED cover of special glass	
8606707	Silver	Cool white	Industrial connector male, female M12x1	Ø160mm, H=57mm	8° beam angle, LED cover of special glass	



Double connection M12 male, female



HPLS 230V_{AC}

The High Power LED Spot Light for 230V applications reaches protection level IP67, and it is shock and vibration resistant. Another highlight is the connectivity options of the High Power LED-Spot. The product is available in several variants.

The LED-Spot has a sophisticated active and passive temperature management. Thus, a long lifetime of up to 50,000 operating hours is guaranteed.



Operating voltage 230V_{AC}
 Nominal current 150mA
 Nominal power 24W
 Housing material Aluminum
 Operating temperature -40 to 50°C
 Protection level IP67-IP20
 with track adapter

Article Number	Housing Color	LED Color	Connection	Dimensions	Features	Application field
8606681	Black	Neutral white	1100mm rubber cable, wire-end sleeve	Ø160mm, H=57mm	38° beam angle, LED cover of special glass	
8700281	Black	Neutral white	1100mm rubber cable, wire-end sleeve	Ø160mm, H=57mm	8° beam angle, LED cover of special glass	
8606933	Black	Neutral white	1100mm rubber cable with earthing type plug	Ø160mm, H=57mm	38° beam angle, LED cover of special glass	
8607134	Black	Neutral white	1100mm rubber cable with earthing type plug, male and female	Ø160mm, H=57mm	38° beam angle, LED cover of special glass	
8702213	Black	Neutral white	5000mm rubber cable, wire-end sleeve	Ø160mm, H=57mm	38° beam angle, LED cover of special glass	
8606680	Black	Neutral white	Three-phase track adapter	Ø160mm, H=57mm	38° beam angle, LED cover of special glass	
8606782	Silver	Neutral white	Three-phase track adapter	Ø160mm, H=57mm	38° beam angle, LED cover of special glass	
8700274	Silver	Neutral white	Three-phase track adapter	Ø160mm, H=57mm	8° beam angle, LED cover of special glass	
8606708	Silver	Neutral white	1100mm rubber cable, wire-end sleeve	Ø160mm, H=57mm	38° beam angle, LED cover of special glass	
8700221	Black	Warm white	1100mm rubber cable, wire-end sleeve	Ø160mm, H=57mm	8° beam angle, LED cover of special glass	
8700763	Black	Warm white	1100mm rubber cable, wire-end sleeve	Ø160mm, H=57mm	38° beam angle, LED cover of special glass	
8700757	Black	Warm white	1100mm rubber cable with earthing type plug, male and female	Ø160mm, H=57mm	8° beam angle, LED cover of special glass	
8702128	Black	Warm white	Three-phase track adapter	Ø160mm, H=57mm	38° beam angle, LED cover of special glass	
8702129	Black	Warm white	Three-phase track adapter	Ø160mm, H=57mm	8° beam angle, LED cover of special glass	
8607468	Silver	Warm white	1100mm rubber cable with earthing type plug, male and female	Ø160mm, H=57mm	8° beam angle, LED cover of special glass	
8607471	Silver	Warm white	Three-phase track adapter	Ø160mm, H=57mm	8° beam angle, LED cover of special glass	
8700297	Black	Cool white	1100mm rubber cable, wire-end sleeve	Ø160mm, H=57mm	8° beam angle, LED cover of special glass	

ROUND LIGHTS

HPLS EX

The EX HPLS series was designed for installation in potentially explosive areas, zone 2 (gas) and zone 22 (dust). The compact design is suitable for mounting on valves or for installation in machine areas with difficult access.

The LED-Spot has integrated an active and passive temperature management. Thus, a long lifetime of up to 50,000 operating hours is guaranteed.



Operating voltage	24V _{DC}
Nominal current	860mA
Nominal power	20W
Housing material	Aluminum
Operating temperature	-40 to 50°C
Protection level	IP67
Suitable for EX-zone	2, 22

Article Number	Housing Color	LED Color	Connection	Dimensions	Features	Application field
8701124	Black	Cool white	3000mm rubber cable, wire-end sleeve	Ø160mm, H=57mm	8° beam angle, LED cover of special glass	
8607390	Black	Cool white	3000mm rubber cable, wire-end sleeve	Ø160mm, H=57mm	38° beam angle, LED cover of special glass	

HPLS ACCESSORIES

Accessories such as the additional protective glass are commonly used in applications like workstations or machining centers as an additional lamp protection against flying sparks. Later, it may only be necessary to replace the glass not the whole LED Light.



8704045



8702367



8702368



Article Number	Product	Material	Type
8704045	Pedestal	Stainless steel 1.4301	RAL 9005 mounting screws
8702367	Glass clamp for HPLS	Stainless steel 1.4301	-
8702368	Protective glass HPLS	Single layer safety glass	Clear, without sealing

PL14

The PL14 was developed to fit into the PL150 Light System. The installation of the PL14 into the PL150 Light System is possible with different components offered by TSL-ESCHA.

Thanks to its slim design, the most common use of PL14 light is under-shelf installation fast and easy thanks to pre-assembled magnets. This linear light features uniform illumination as well as adjustable light intensity and color definition (cool white to warm white).



Operating voltage 48V_{DC} +/-2%
 Housing material Aluminum
 Operating temperature -40 to 40°C
 Protection level IP20

Article Number	Housing Color	LED Color	Connection	Electrical Data	Dimensions	Features	Application field
8701300	Silver	Warm white and cool white	8mm Connector	400mA, 20W	800x23x17mm	LED cover of special PMMA-glass	
8701952	Silver	Warm white and cool white	8mm Connector	290mA, 14W	600x23x17mm	LED cover of special PMMA-glass	
8701670	Silver	Warm white and cool white	8mm Connector	140mA, 7W	300x23x17mm	LED cover of special PMMA-glass	



LINEAR LIGHTS

PL18 24V_{DC}

The especially robust housing material of the PL18 series with small openings protects the electronics and the lamp glass from damages (for example, stones or larger metal swarf). In addition, the PL18 reaches protection level IP67. The light can be controlled via PLC output or fieldbus. The product is equipped with M12 plug and coupling for stringing together multiple lights.



Operating voltage 24V_{DC}
 Housing material Aluminum
 Operating temperature -40 to 50°C
 Protection level IP67

Article Number	Housing Color	LED Color	Connection	Electrical Data	Dimensions	Features	Application field
8700118	Silver	Cool white	Industrial connector male, female M12x1	675mA, 16W	L=445mm, Ø60mm	42° beam angle, single layer safety glass	
8700119	Silver	Cool white	Industrial connector male, female M12x1	1.3A, 32W	L=835mm, Ø60mm	42° beam angle, single layer safety glass	

PL18 230V_{AC}

The 230V_{AC} version of the PL18 series offers the same mechanical characteristics as the 24V version. However, connection in series is not possible.



Operating voltage 230V_{AC}
 Housing material Aluminum
 Operating temperature -40 to 50°C
 Protection level IP67

Article Number	Housing Color	LED Color	Connection	Electrical Data	Dimensions	Features	Application field
8700098	Silver	Cool white	1100mm rubber cable, wire-end sleeve	80mA, 19W	L=445mm, Ø60mm	42° beam angle, single layer safety glass	
8700112	Silver	Cool white	1100mm rubber cable, wire-end sleeve	160mA, 38W	L=835mm, Ø60mm	42° beam angle, single layer safety glass	

PL30

The High Power LED Light PL30 was especially designed for harsh applications. Thanks to its flat design, this LED light fits perfectly in small compartments or corners. Its high protection level, robust housing design, and Viton® sealing assure reliable operation in critical areas exposed to shock and vibration, water, coolants, lubricants, etc. The light provides comprehensive illumination in harsh areas. The installation and adjustment of the luminaire is simple with pre-mounted swivel brackets.



Operating voltage 24/36V_{DC}
 Housing material Aluminum
 Operating temperature -20 to 50°C
 Protection level IP67

Article Number	Housing Color	LED Color	Connection	Electrical Data	Dimensions	Features	Application field
8701224	Silver	Cool white	M12x1 Connector	620mA, 16W	420x45.5x27mm	Single layer safety glass, VITON sealing	
8701692	Silver	Cool white	M12x1 Connector	1240mA, 32W	820x45.5x27mm	Single layer safety glass, VITON sealing	

PL30 ACCESSORIES

Accessories such as the additional protective glass are commonly used in applications like workstations or machining centers as an additional lamp protection against flying sparks. Later, it may only be necessary to replace the glass not the whole LED Light.



8703081



8703083

Article Number	Product	Material	Type
8703081	Glass clamp for PL30	Stainless steel 1.4301	-
8703083	Protective glass PL30	Single layer safety glass	Clear, without sealing
8703492	Protective glass PL30 diffuse	Single layer safety glass	diffuse



TL12

The LED Miniature Light TL12 was designed to light up tight small areas in machines. Thanks to its compact design, robust housing, and low weight the light can be installed close to objects difficult to illuminate. The TL12 light assembles with current M12 mounting components, due to the integration of electronics into a standard M12 threaded rod. This feature allows for a quick installation and easy adjustment of the lamp.

Typical areas of use are metal working machines, assembly line lighting, and robot applications.



Operating voltage	24V _{DC}
Nominal current	50mA
Nominal power	1W
Housing material	CuZn
Operating temperature	-25 to 50°C
Protection level	IP67

Article Number	Housing Color	LED Color	Connection	Dimensions	Features	Application field
8702079	Silver	Cool white	Connector M12x1	L=71mm, Ø11.9mm	23° beam angle, M12 sensor case	

TL83

The LED Miniature Light TL83 was designed for direct installation in rough environments. It reaches protection level IP67, and it is shock and vibration resistant. Due to its compact design and robust construction, this light is suitable for many different applications. It features a thermal management technology that regulates the heating generation. The light can be controlled via PLC output or fieldbus.

Tip: this light is available in different colors (Signal lights catalog)



Operating voltage	24V _{DC}
Nominal current	140mA
Nominal power	4W
Housing material	Aluminum
Operating temperature	-40 to 50°C
Protection level	IP67

Article Number	Housing Color	LED Color	Connection	Dimensions	Features	Application field
8701622	Off-gray	Cool white	500mm PUR cable with connector M12x1	120x25.5x13mm	120° beam angle, 2-layer safety glass with light diffuser	
8701621	Off-gray	Cool white	500mm PUR cable with connector M12x1	120x25.5x13mm	80° beam angle, 2-layer clear safety glass	
8701624	Off-gray	Cool white	8mm Connector adapter	120x25.5x13mm	120° beam angle, 2-layer safety glass with light diffuser	
8701623	Off-gray	Cool white	8mm Connector adapter	120x25.5x13mm	80° beam angle, 2-layer clear safety glass	
8701620	Off-gray	Cool white	2000mm PUR cable	120x25.5x13mm	120° beam angle, 2-layer safety glass with light diffuser	
8701619	Off-gray	Cool white	2000mm PUR cable	120x25.5x13mm	80° beam angle, 2-layer clear safety glass	
8702029	Off-gray	Cool white	3000mm PUR cable	120x25.5x13mm	120° beam angle, 2-layer safety glass light diffuser	
8701966	Off-gray	Cool white	2000mm Tenuis cable, wire-end sleeve	120x25.5x3mm	80° beam angle, 2-layer clear safety glass	

MINIATURE LIGHTS

TL80

The TL80 is a compact light designed for applications with tight mounting space. It is a versatile light suitable for diverse applications such as ramp warning indicator, stairs illumination, or orientation in buildings and vehicles.

Because its two-layer safety glass, this light is especially robust and resistant to vandalism damage.



Operating voltage 110 V_{DC}
 Nominal current 35 mA
 Nominal power 2.5W
 Housing material PA6GF15
 Operating temperature -40 to 50°C
 Protection level IP67

Article Number	Housing Color	LED Color	Connection	Dimensions	Features	Application field
8703418	Black	Cool white	2m Tenuis cable with wire-end sleeve	120x25x24.3mm	3 LED's, VSG matte	
8702347	Black	Cool white	270mm Tenuis cable with M12-connector	120x25x24.3mm	2 LED's, VSG matte	
8607032	Black	Cool white	180mm Tenuis cable with Wago connector	120x25x24.3mm	2 LED's, ESG clear	



CUBE

The cube is a compact, robust LED light in 24V version for simpler applications. The light orientation is adjustable. Moreover, it can be controlled via PLC output or fieldbus. The cube is available with a synthetic LED-cover (preferred for food applications).



Operating voltage	24V _{DC}
Nominal current	120mA
Nominal power	3W
Housing material	Aluminum
Operating temperature	-40 to 50°C
Protection level	IP67

Article Number	Housing Color	LED Color	Connection	Dimensions	Features	Application field
8606004	Black	Cool white	Industrial connector M12x1	41x41x66mm	120° beam angle, LED cover of special glass	
8606678	Black	Cool white	Industrial connector M12x1	41x41x66mm	120° beam angle, PC LED cover	
8701728	Black	Warm white	Industrial connector M12x1	41x41x66mm	120° beam angle, LED cover of special glass	



CUBE ACCESSORIES

Article Number	Product	Material	Type
8700406	Mounting bracket for cube	Stainless steel 1.4301 shot blasted	1 mounting screw



8700406



CUBE FS

The cube is a compact, robust LED light in 24V version for simpler applications. Since it has swan neck, the light orientation is infinitely adjustable. Moreover, it can be controlled via PLC output or fieldbus. The cube is available with a synthetic LED-cover (preferred for food applications).

Typical area of application is to illuminate either machine parts in small machines or tools.



Operating voltage	24V _{DC}
Nominal current	120mA
Nominal power	3W
Housing material	Aluminum
Operating temperature	-40 to 50°C
Protection level	IP67

Article Number	Housing Color	LED Color	Connection	Dimensions	Features	Application field
8606861	Black	Cool white	Industrial connector M12x1	41x41x66mm	120° beam angle, LED cover of special glass. Swan neck length approx. 400mm	

HPLS FS

The special encapsulation of electronics ensures shock and vibration resistance. The IP67 housing concept allows this light for applications in extremely harsh areas, for example, in machines with aggressive coolants. The HPLS FS can be controlled directly via PLC output or fieldbus. The LED-Spot has a sophisticated active and passive temperature management. Thus, a lifetime of up to 50,000 operating hours is guaranteed. Once screwed on, the swan neck enables changing the light to the desired position.



Housing material	Aluminum
Operating temperature	-40 to 50°C
Protection level	IP67

Article Number	Housing Color	LED Color	Connection	Electrical Data	Dimensions	Features	Application field
8700550	Black	Cool white	Industrial connector male, female M12x1	24V _{DC} , 1A, 20W	Ø160mm, H=57mm	8° beam angle, LED cover of special glass. Swan neck length approx. 360mm	
8607339	Black	Neutral white	5000mm rubber cable, wire-end sleeves	230 V _{AC} , 150mA, 24W	Ø160mm, H=57mm	38° beam angle, LED cover of special glass. Swan neck length approx. 360mm	
8701716	Black	Cool white	Industrial connector male, female M12x1	24V _{DC} , 1A, 20W	Ø160mm, H=57mm	38° beam angle, LED cover of special glass. Swan neck length approx. 360mm	

BUILT-IN LIGHTS

ELK63

The ELK63 is a robust, durable, and compact built-in LED light that guarantees constant brightness even in the event of voltage fluctuations. A lifespan of up to 50,000 operating hours is guaranteed by an active thermal management technology. The ELK63 is made of stainless steel and pressed glass, two robust materials that shield the lamp from external forces.



Nominal power 2.5W
 Housing material PC
 Operating temperature -40 to 50°C
 Protection level IP67

Article Number	Housing Color	LED Color	Connection	Electrical Data	Dimensions	Features	Application field
8606000	Silver	Cool white	200mm PUR cable with 8mm connector	24V _{DC} , 100mA	Ø100mm, H=41mm	Special frosted glass, stainless steel housing, V2A, matte shot blasted, back mounting	
8607033	Silver	Cool white	200mm Tenuis cable with Wago connector	24V-110V _{DC} , 100mA	Ø100mm, H=41mm	Special frosted glass, stainless steel housing, V2A, matte shot blasted, back mounting	
8606115	Silver	Cool white	500mm PUR cable with industrial connector M12x1	24V-110V _{DC} , 100mA	Ø100mm, H=41mm	Special frosted glass, stainless steel housing, V2A, matte shot blasted, mounting clips	
8606144	Silver	Cool white	500mm PUR cable with industrial connector M12x1	24V-110V _{DC} , 100mA	Ø100mm, H=41mm	Special frosted glass, stainless steel housing, V2A, matte shot blasted, back mounting	

ELK50 24V_{DC}

The ELK50 has the same product characteristics as the ELK63, but with a higher glass dome for optimum lateral visibility. Thanks to its compact housing construction of aluminum die-cast, the ELK50 is a great choice for high-tech application areas with tight mounting space.

The 24V_{DC} version is suitable for shop lighting or as machinery equipment.



Operating voltage	24 V _{DC}
Nominal current	200 mA
Nominal power	5 W
Housing material	Aluminium
Operating temperature	-40 to 50 °C
Protection level	IP67

Article Number	Housing Color	LED Color	Connection	Dimensions	Features	Application field
8703496	matte shot-blasted	Cool white >5,300K	420mm Tenuis cable with wire-end sleeve	Ø90mm, H=37mm	Backside mounting	
8703498	matte shot-blasted	Cool white >5,300K	420mm Tenuis cable with wire-end sleeve	Ø90mm, H=37mm	Assembly with mounting claw	

ELK50 110V_{DC}

The ELK50 has the same product characteristics as the ELK63, but with a higher glass dome for optimum lateral visibility. Thanks to its compact housing construction of aluminum die-cast, the ELK50 is a great choice for high-tech application areas with tight mounting space.

The 110V version is suitable for train interiors.



Operating voltage	110 V _{DC}
Nominal current	35 mA
Nominal power	4 W
Housing material	Aluminium
Operating temperature	-40 to 50 °C
Protection level	IP67

Article Number	Housing Color	LED Color	Connection	Dimensions	Features	Application field
8702402	matte shot-blasted	Cool white >5,300K	180mm Tenuis cable with wire-end sleeve	Ø90mm, H=37mm	Ball joints	

BUILT-IN LIGHTS

EL50 24V_{DC}

The LED built-in spot light offers an enormous advantage for end-consumers with reduced assembly time and therefore; reduced assembly expenses. Its durable and space-saving construction makes the EL50 24-V perfect for ceiling installation. Another common application is shops lighting or exhibition stands as the light creates a pleasant climate. It offers optimal illumination with hardly perceptible heat generation.



Operating voltage 24/36V_{DC}
 Housing material Aluminum die-cast
 Operating temperature -40 to 50°C
 Protection level IP67



Rear installation



Installation with claws



Installation with snap on ball joints and mounting bracket

Article Number	Housing Color	LED Color	Connection	Electrical Data	Dimensions	Features	Application field
8700204	Silver	Cool white	8mm Connector	200mA, 5W	Ø90mm- H=24.2mm	32° beam angle, back mounting, single-layer safety glass	
8700213	Silver	Cool white	8mm Connector	200mA, 5W	Ø90mm, H=24.2mm	32° beam angle, surface mounting with clips, single-layer safety glass	
8700214	Silver	Cool white	8mm Connector	200mA, 5W	Ø90mm, H=24.2mm	32° beam angle, back mounting, PC glass	
8700216	Silver	Cool white	8mm Connector	200mA, 5W	Ø90mm, H=24.2mm	32° beam angle, surface mounting with clips, PC glass	
8702473	Silver	Warm white	8mm Connector	200mA, 5W	Ø90mm, H=24.2mm	32° beam angle, surface mounting with clips, single-layer safety glass	
8700211	Silver	Cool white	420mm Tenuis cable with wire-end sleeve	200mA, 5W	Ø90mm, H=24.2mm	32° beam angle, back mounting, single-layer safety glass	
8700212	Silver	Cool white	420mm Tenuis cable with wire-end sleeve	200mA, 5W	Ø90mm, H=24.2mm	32° beam angle, surface mounting with clips, single-layer safety glass	
8700215	Silver	Cool white	420mm Tenuis cable with wire-end sleeve	200mA, 5W	Ø90mm, H=24.2mm	32° beam angle, back mounting, PC glass	
8700217	Silver	Cool white	420mm Tenuis cable with wire-end sleeve	200mA, 5W	Ø90mm, H=24.2mm	32° beam angle, surface mounting with clips, PC glass	
8701494	Silver	Cool white	180mm Tenuis cable with M8 connector	200mA, 5W	Ø90mm, H=24.2mm	32° beam angle, back mounting, ball joints, single-layer safety glass	
8701495	Silver	Cool white	180mm Tenuis cable with M8 connector	200mA, 5W	Ø90mm, H=24.2mm	14°x49° beam angle, back mounting, ball joints, single-layer safety glass	
8701584	Silver	Cool white	180mm Tenuis cable with M8 connector	200mA, 5W	Ø90mm, H=24.2mm	32° beam angle, surface mounting with clips, single-layer safety glass	
8701585	Silver	Cool white	180mm Tenuis cable with M8 connector	200mA, 5W	Ø90mm, H=24.2mm	14x49° beam angle, surface mounting with clips, single-layer safety glass	
8701254	Silver	Warm white	200mm Tenuis cable with M8 connector	200mA, 5W	Ø90mm, H=24.2mm	32° beam angle, surface mounting with clips, single-layer safety glass	

EL50 110V_{DC}

With an operating voltage of 110V_{DC} and standard-conformal components (among others, EN45545, NFF16-101) these spotlights are intended for assembly in trains. The different beam angles ensure optimum illumination of the respective areas. Thanks to its appealing design and compact size, this spotlight type is used in train interiors and lavatories.



Operating voltage 110V_{DC}
 Housing material Aluminum die-cast
 Operating temperature -40 to 50°C
 Protection level IP67

Article Number	Housing Color	LED Color	Connection	Electrical Data	Dimensions	Features	Application field
8700222	Silver	Cool white	420mm Tenuis cable with wire-end sleeve	35mA, 4W	Ø90mm, H=24.2mm	32° beam angle, back mounting, single-layer safety glass	
8700225	Silver	Cool white	420mm Tenuis cable with wire-end sleeve	35mA, 4W	Ø90mm, H=24.2mm	32° beam angle, surface mounting with clips, single layer-safety glass	
8700226	Silver	Cool white	420mm Tenuis cable with wire-end sleeve	35mA, 4W	Ø90mm, H=24.2mm	32° beam angle, back mounting with clips, PC glass	
8700227	Silver	Cool white	420mm Tenuis cable with wire-end sleeve	35mA, 4W	Ø90mm, H=24.2mm	32° beam angle, surface mounting with clips, PC glass	
8701432	Silver	Cool white	180mm Tenuis cable with Wago connector 733-203	35mA, 4W	Ø90mm, H=24.2mm	32° beam angle, back mounting, ball joints, single-layer safety glass	
8701462	Silver	Cool white	180mm Tenuis cable with Wago connector 733-203	35mA, 4W	Ø90mm, H=24.2mm	14°x49° beam angle, back mounting, ball joints, single-layer safety glass	
8701582	Silver	Cool white	180mm Tenuis cable with Wago connector 733-203	35mA, 4W	Ø90mm, H=24.2mm	14x49° beam angle, surface mounting with clips, single-layer safety glass	
8701583	Silver	Cool white	180mm Tenuis cable with Wago connector 733-203	35mA, 4W	Ø90mm, H=24.2mm	32° beam angle, surface mounting with clips, single-layer safety glass	



EL50 ACCESSORIES

Article Number	Product	Material	Type
8701498	Mounting brackets for EL50, DS20mm	Stainless steel 1.4301	with 2 springs (for ceiling thickness up to 20mm)



8701498

LIGHT SYSTEMS

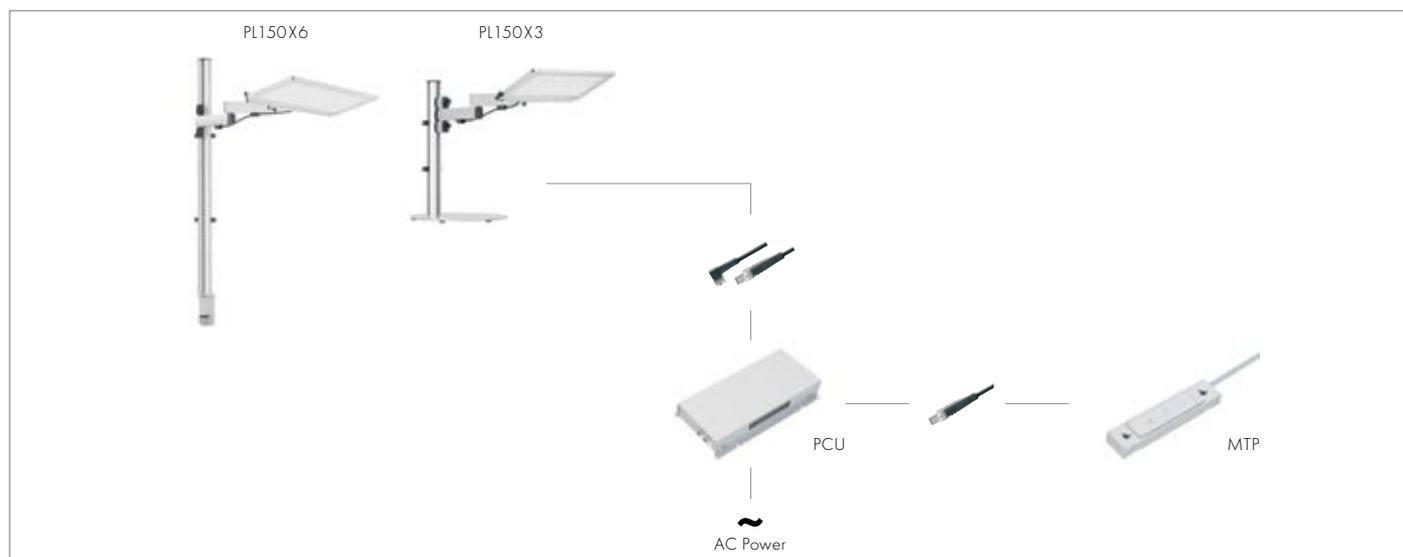
PL150 COMPLETE SYSTEM

The PL150 offers extreme luminosity and due to its flat design it only needs little space. This LED light features intelligent light management, personalized light intensity regulation, and customized light color definition (warm white to cool white). The PL150 light is available in different sizes and can be purchased as a complete system that consists of light control unit, power supply, and hand-held control device.



Operating voltage 48V_{DC}
 Housing material Aluminum
 Operating temperature -10 to 40°C
 Protection level IP20

Article Number	Housing Color	LED Color	Connection	Electrical Data	Dimensions	Features	Application field
8702670	Silver	Cool and warm white (adjustable)	Schuko plug	500mA, 24W	303x197x15mm (pole height 445mm)	Light PL150X3, foldable arm. System includes PCU, MTP, and connection cables	
8702671	Silver	Cool and warm white (adjustable)	Schuko plug	995mA, 48W	564x197x15mm (pole height 545mm)	Light PL150X6, foldable arm. System includes PCU, MTP, and connection cables	



Complete system

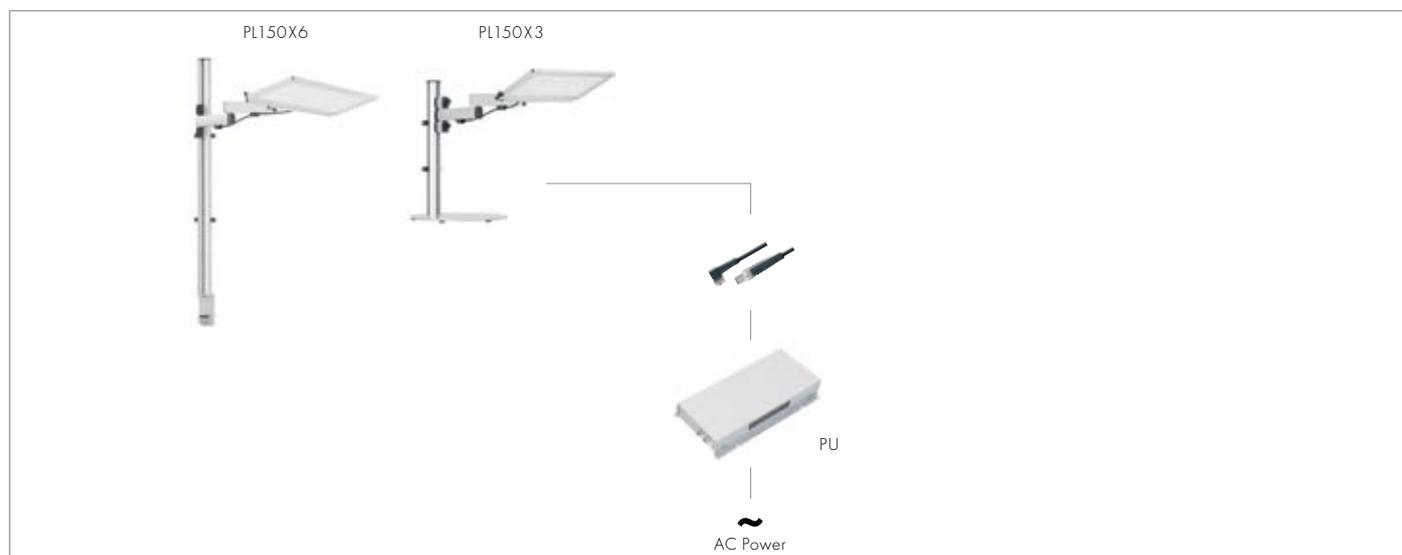
PL150 BASIC SYSTEM

The PL150 offers extreme luminosity and due to its flat design it only needs little space. Therefore, it is also suitable as desk light. The base is available in different sizes with corresponding power supply.



Operating voltage 48V_{DC}
 Housing material Aluminum
 Operating temperature -10 to 40°C
 Protection level IP20

Article Number	Housing Color	LED Color	Connection	Electrical Data	Dimensions	Features	Application field
8702995	Silver	Cool and warm white	Schukoplug	500mA, 24W	303x197x15mm (pole height 445mm)	Light PL150X3, foldable arm. System includes PU, and connection cables	
8702996	Silver	Cool and warm white	Schukoplug	995mA, 48W	564x197x15mm (pole height 545mm)	Light PL150X6, foldable arm. System includes PU connection cables	



PL150 Basic system

PANEL LIGHTS

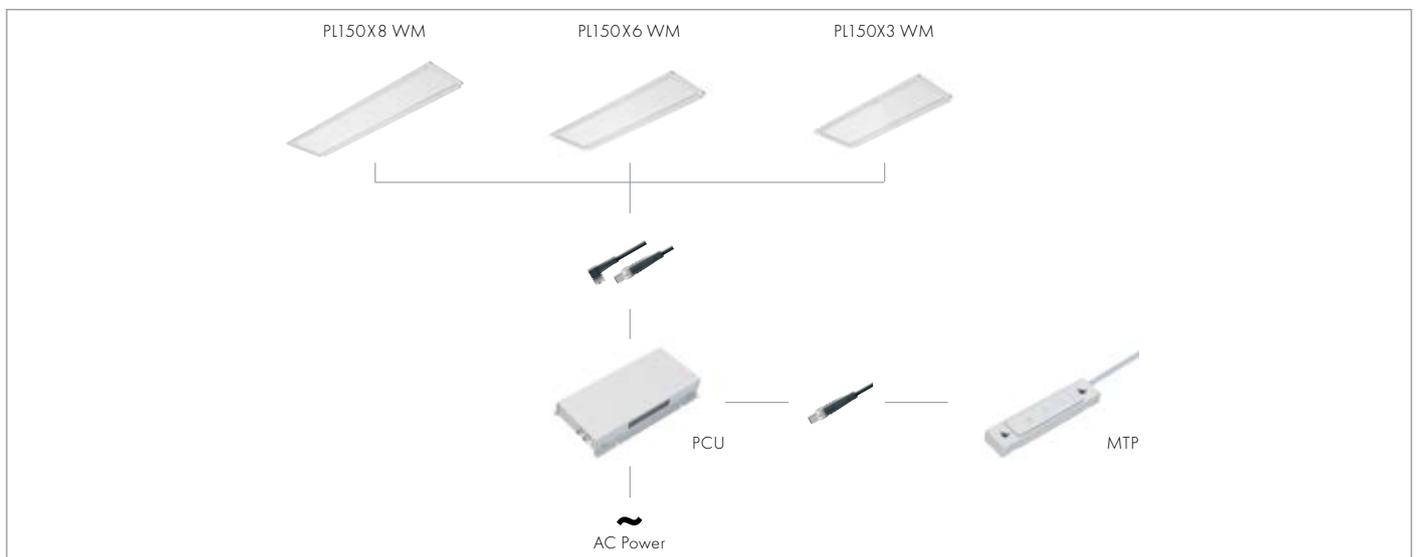
PL150

The PL150 LED Light provides optimum illumination in work places. This is ensured by a constant distribution of light that reduces light density and produces a glare-free light. It features personalized light intensity regulation, and customized light color definition (warm white to cool white). The innovative prism technology avoids multiple shadows; an exceptional advantage during meticulous tasks. Our LED technology and sophisticated temperature management guarantee a light lifetime of up to 50,000 working hours in spite of frequent on and off switching.



Operating voltage 48V_{DC}
 Housing material Aluminum
 Operating temperature -10 to 40°C
 Protection level IP20

Article Number	Housing Color	LED Color	Connection	Electrical Data	Dimensions	Features	Application field
8701667	Silver	Warm white and cool white	Industrial connector M8	500mA, 24W	303x197x15mm	LED cover of special PMMA-glass, adjustable light color	
8702420	Silver	Warm white and cool white	Industrial connector M8	995mA, 48W	564x197x15mm	LED cover of special PMMA-glass, adjustable light color	
8701047	Silver	Warm white and cool white	Industrial connector M8	1460mA, 72W	824x197x15mm	LED cover of special PMMA-glass, adjustable light color	



Plug & Play components



PL150 ACCESSORIES

Article Number	Product	Material	Dimensions	Type
8701525	NT100		200.5x69.5x35mm	100W Power supply
8702672	LCU	-	230x41x33mm	Dimmer
8702675	PCU	Steel sheet, zinc-coated	290x120x45mm	100W power supply and dimmer in a ready-to-connect housing for PL150
8702997	PU	Steel sheet, zinc-coated	290x120x45mm	100W power supply in a ready-to-connect housing for PL150
8702673	MTP	Aluminum	120x25x13mm	Hand-held control device
8702679	Security latch for pole of PL150 system	-	-	-
8702678	Cable guide for pole of PL150 system	-	-	-
8702801	Connection cable, PL150 to PCU/PU	PUR		Screw/snap lock/M8x1, 2000mm
8702676	Connection cable, PL150 to LCU	PUR		Snap lock, 2000mm, M8 and wire-end sleeve
8702677	Connection cable, PL14 to LCU	PUR		2000mm, M8 and wire-end sleeve
8702674	Connection cable, PL14 to PCU/PU	PUR		Screw/snap lock/M8x1, 2000mm



8702679



8702678



8702801



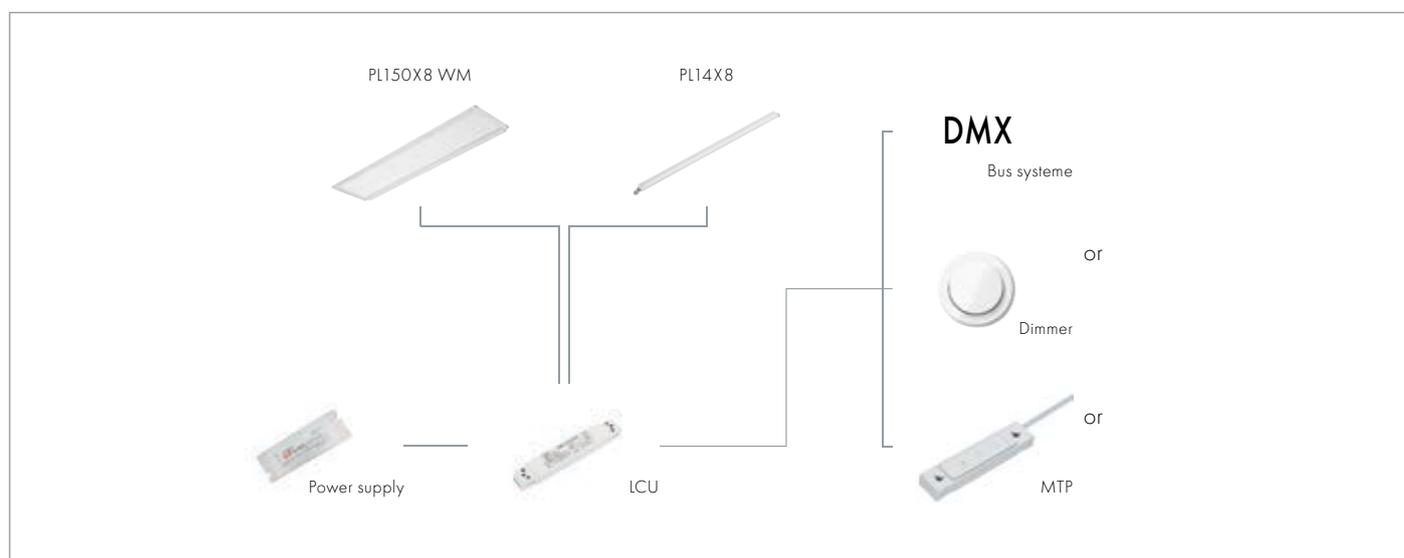
8702676



8702677



8702674



Individual components



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Pictographs used throughout the catalog for the recommended areas of application.

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