
LIGHT FOR INDUSTRY
CATALOGUE

VALID AS OF JULY 2016



QUICKFINDER

BY PRODUCT CATEGORIES

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ROOM LIGHTING

WORKPLACE LIGHTING

MACHINE LIGHTING

LIGHT FOR INDUSTRY
CATALOGUE

WALDMANN ENGINEER OF LIGHT

The global player from the Black Forest: Waldmann stands for innovative lighting expertise, intelligent designs and international experience.

Here, tradition, innovation and passion create a perfect combination. Waldmann develops sophisticated lighting solutions, which support people at work, allow for flexibility when taking into consideration varying room situations and help save

energy. This makes the owner-run company a technology leader in the divisions of industry, office, care & health as well as medical photo-therapy.

Since its foundation in 1928, its headquarters are located in Villingen-Schwenningen – today Waldmann has sales and production sites in 12 nations and 900 staff.

For you, this means: direct consulting by light specialists on site and tailor-made solutions.





WALDMANN

LIGHT WITH VERY HIGH STANDARDS

Tradition & future-oriented solutions

For well over 60 years, Waldmann has been developing lighting concepts for a wide range of sectors and fields of application. Health, productivity, safety and energy savings are at the forefront. The current state of technology and many years of experience guarantee viable solutions.



Know-how & unique consulting

Waldmann takes its established application know-how to customers and partners: You can go to LIGHTLINER, a specially designed truck, to obtain comprehensive consulting and test all lighting solutions yourself. It's never been easier to find the right light!



Craftsmanship & individual concepts

Waldmann manufactures "Customized lighting": The task and the environment are the most important parameters for the right lighting concept. Industrial customers benefit from German craftsmanship, which keeps what it promises: Exclusive solutions based on a broad application know-how.



Quality & highest standards

Waldmann is distinguished by quality, reliability and engineering know-how – everything that is associated abroad with "Made in Germany". Quality awareness is the basis of our actions. This is also what the active environmental management (certified to DIN EN 14001) stands for.







WALDMANN'S TWIN-C PHILOSOPHY

LIGHT CONCEPTS WITH ADDED VALUE

How can you achieve optimum lighting, one of the most important value-adding factors in industry? Very simple: with the right philosophy. At Waldmann, this philosophy is called "TWIN-C". This stands for "Concepts" and "Components" and forms the centre of a 4-step plan for a light concept that increases, among other things, productivity and safety.

The four steps for achieving an intelligent light concept

1. Analysis
2. Elaboration of the concept ("Concept")
3. Selection and definition of the right products ("Components")
4. Implementation

Advantages of TWIN-C: more productivity and safety

Productivity – an increase of up to 40 % possible

- Maximizing the workplace potential
- Individually adjustable light increases productivity
- Improved work performance
- Decrease of error and reject rates
- Increase in quality

Safety – fewer accidents by up to two thirds

- Well-lit workplaces reduce the risk of accidents
- Reduction of the number and seriousness of injuries
- Highly concentrated employees due to improved light situation
- Efficient light solutions instead of costly safety measures

WALDMANN'S TWIN-C PHILOSOPHY

INTELLIGENT LIGHTING

TWIN-C helps to fully exploit energy saving potentials – and to simultaneously increase comfort and illuminance. This is also an important topic in view of the demographic change since the light demand increases with advancing age. Every workplace poses special challenges to the light engineers: A modern light concept must meet individual requirements, including those of older employees, night and shift workers. This can be achieved by intelligent, workplace-related TWIN-C light solutions.

Advantages of TWIN-C: better health and more energy savings

Health – increased well-being

- Counteracting signs of ageing and deficiencies
- Staff needs are optimally taken into account
- Adapted to the requirements of older employees as well
- Long-term health-promoting for night and shift workers
- Fewer absences and increased motivation

Energy saving – in the double-figure percentage range

- Light for selective use
- Reduction in energy consumption in combination with increased illuminance
- High light efficiency at the workplace
- Increased comfort thanks to high-quality lighting concepts





IN AN ENTIRELY NEW LIGHT

A PASSION FOR INNOVATION

Waldmann light engineers make high demands on their work: innovative and individual light concepts at the highest level. On the basis of their mechanical and electronic know-how, their broad experience and intense dialogue with the customer, they develop reliable and long-lived products. This guarantees true insights!

Room lighting – a sophisticated concept all the way through

Waldmann assists you with flexible system solutions for different room situations. Especially production and logistics halls require very sophisticated light solutions. Waldmann lighting concepts meet a wide range of lighting needs, guarantee high flexibility and help save energy.

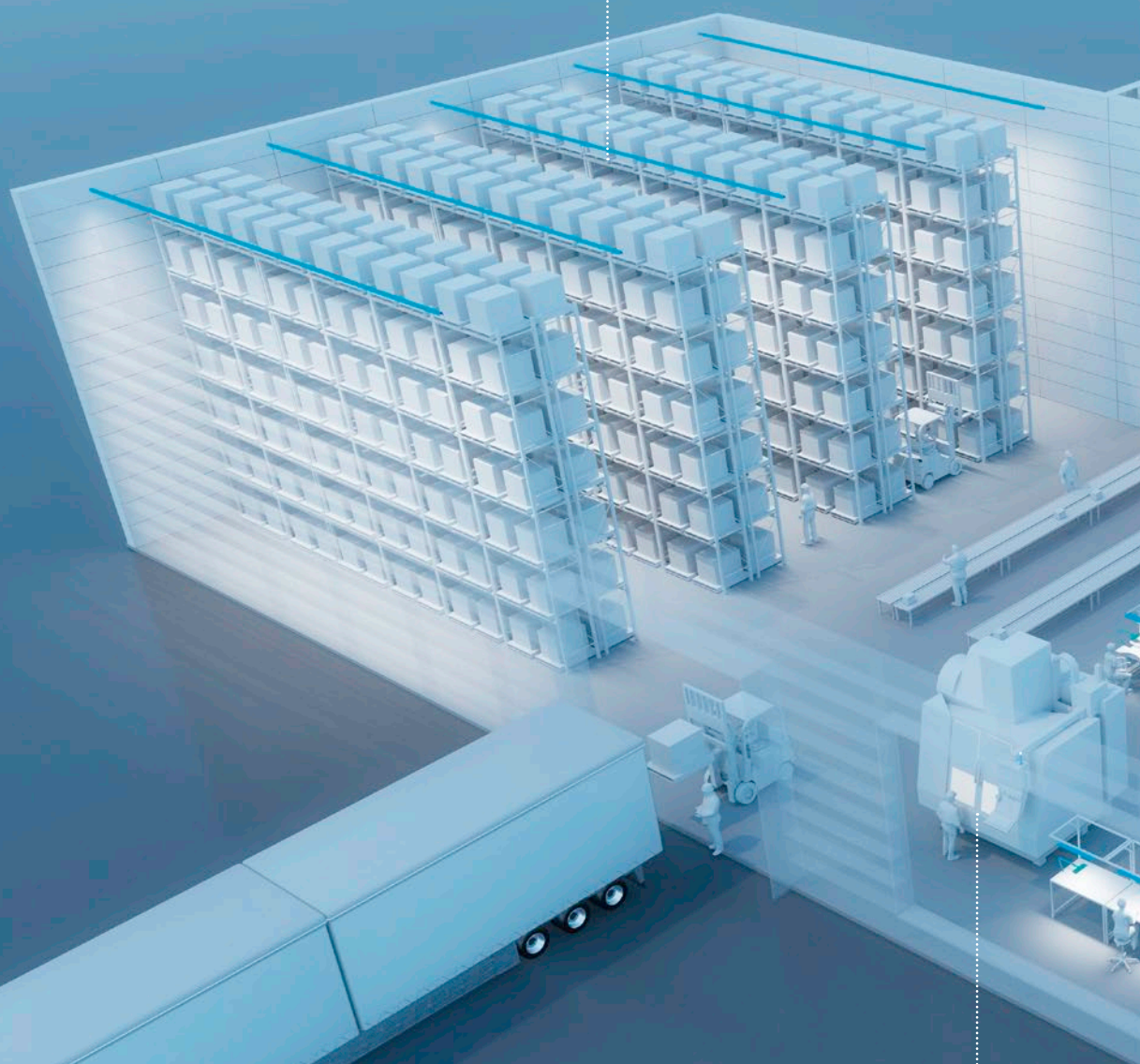
Workplace lighting – human beings come first

Waldmann's workplace lighting is guided by a simple principle: If the employee is well, this is good for the company. Even in a high-tech world, the human being is still at the centre of all work processes. Waldmann integrates his/her needs and requirements into optimum workplace lighting.

Machine lighting – light in extreme situations

For decades, Waldmann has been a strong partner in machine lighting matters. It presents product developers with particular challenges: The lights must withstand extreme temperatures and mechanical impacts. This is guaranteed by extensive vibration and shock tests and a 100 % tightness test.

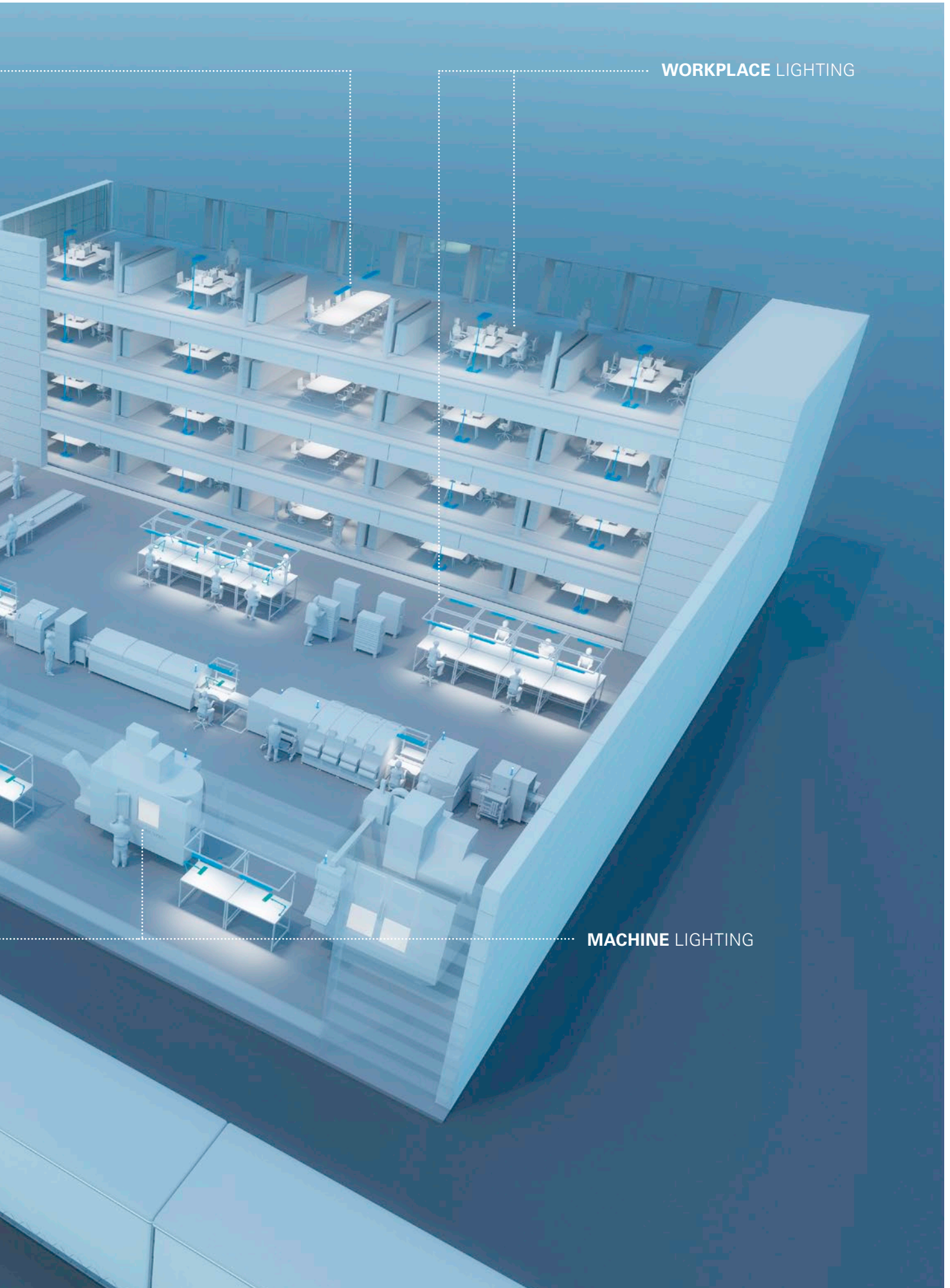
ROOM LIGHTING



**POSSIBLE APPLICATIONS
IN INDUSTRIAL COMPANIES**

WORKPLACE LIGHTING

MACHINE LIGHTING



ROOM LIGHTING



Production hall



WORKPLACE LIGHTING



Assembly workplace



Laboratory workplace



MACHINE LIGHTING

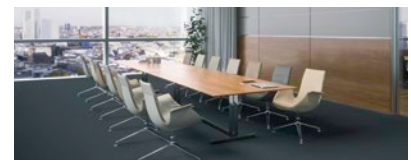
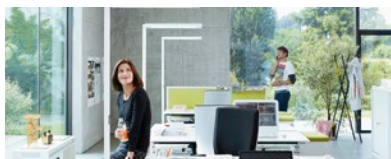


Machine tools













Track laying machines



**Logistics hall****Office****Meeting room****Electronics workplace****Workshop workplace****Inspection workplace****Watchmaker workplace****Office workplace****Textile machines****Printing machines****Packaging machines****Woodworking machines****Production facilities**

ROOM LIGHTING

<div> Production hall</div>		<div> Office</div>	
<div></div> <div>TAUREO 20</div>	<div></div> <div>ACANEO 24</div>	<div></div> <div>LAVIGO 30</div>	
<div> Logistics hall</div>		<div> Meeting room</div>	
<div></div> <div>TAUREO 20</div>	<div></div> <div>ACANEO 24</div>	<div></div> <div>LAVIGO 30</div>	

TAUREO FLEXIBLE LIGHTING WITH SYSTEM

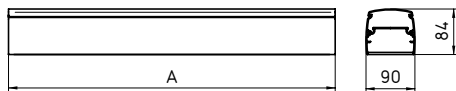




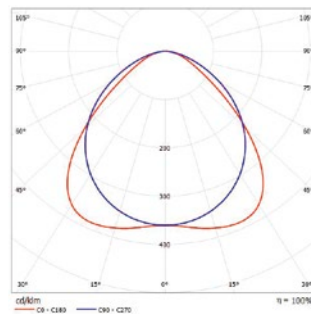
TAUREO emphasises the importance of Waldmann as quality brand for high-quality lighting solutions at the workplace: Via this new LED continuous-row system, the Engineer of Light addresses the hall lighting topic and supplements his concept of intelligent lighting solutions for industry by another convincing component.

As a modular system, TAUREO offers the suitable light in each case for different requirements, such as those found, for example, in productions halls, logistics halls, storage halls or cooling facilities. Thanks to its system character, TAUREO adapts itself also very easily to changed conditions.

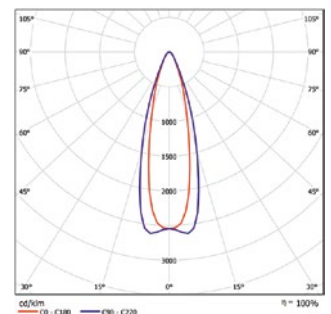
- Light modules with premium LEDs
- Variants of up to 4700 lumen
- Ambient temperature up to +55° C
- Energy saving of 50 % compared with conventional luminaires
- Maintenance-free: LED service life up to 60000 hours (L80B10) and more
- Continuous dimming and daylight and presence sensors as option
- Maximum flexibility through modular design
- Optimum thermal management with intelligent overheating protection
- Patented optics for precise light deflection and different beam characteristics
- Time- and cost-saving putting into operation through torsion-resistant and intelligent mounting profiles
- High-quality processing according to Waldmann quality standards
- 5-year system warranty
- 20-year spare part warranty



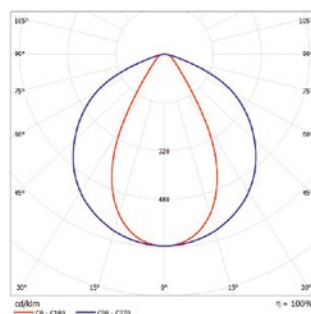
A = 600 mm, 1200 mm, 3000 mm or 4200 mm



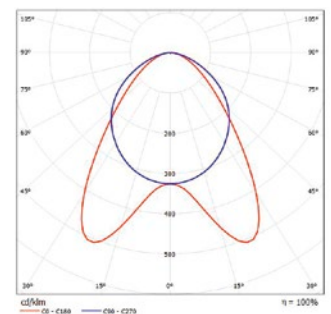
Wide-beam for hall heights of approx. 4–6 m, W optics



Extra narrow-beam for hall heights of approx. 10 – 18 m, xN optics



Narrow-beam for hall heights of approx. 6–10 m, N optics

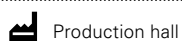


Double asymmetric for storage halls, D optics

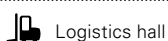
TAUREO at a glance

- Power consumption from 22 W, 28 W or 33 W (system power)
- Net luminous flux package 3,300 lm, 4,000 lm or 4700 lm
- Temperature of use: - 25 °C to + 45 °C (at 4700 lm)
- 25 °C to + 50 °C (at 4000 lm)
- 25 °C to + 55 °C (at 3300 lm)
- Residual light current 80 % after 60000 operating hours (IES LM 80 & TM 21)
- Colour temperature neutral white 4000 K, 5000 K and daylight white 6500 K
- Internal optics for different beam characteristics (wide-beam, narrow-beam, extra narrow-beam, double asymmetric)
- Support profile made of robust aluminium
- 7-wire premounted conductor group in 2.5 mm²
- Continuously dimmable 1 – 10 V or DALI standard
- Completely protected and extruded light modules and operating devices
- Phase selection via simple DIP switch
- Degree of protection IP20/IP40/IP54 for overall system, protection class I
- Overvoltage resistance 4 kV
- DALI, daylight control and presence sensors available as option
- Emergency lighting as option can be integrated directly into the support profile
- Dimensions of the support profile: 4200 mm/3000 mm/1200 mm/
600 mm x 90 mm x 84 mm
- Dimensions of the light module: 592 x 72 mm
- Weight per 4200 mm: 15.4 kg fully equipped, 9.1 kg without equipment









Production hall



Logistics hall

LIGHT MODULE	Light current	Light colour	Power	Order no.
 W optics	4000 lm	4000K	28 W	H10 000 059 - 006 211 82
	4000 lm	5000K	28 W	H10 000 329 - 006 791 60
	4000 lm	6500K	28 W	H10 000 289 - 006 462 49
	4700 lm	4000K	33 W	H10 000 399 - 006 959 38
	4700 lm	5000K	33 W	H10 000 409 - 006 959 41
	4700 lm	6500K	33 W	H10 000 419 - 006 959 44
 N optics	4000 lm	4000K	28 W	H10 000 049 - 006 211 74
	4000 lm	5000K	28 W	H10 000 469 - 006 960 05
	4000 lm	6500K	28 W	H10 000 279 - 006 462 46
	4700 lm	4000K	33 W	H10 000 489 - 006 960 11
	4700 lm	5000K	33 W	H10 000 499 - 006 960 14
	4700 lm	6500K	33 W	H10 000 509 - 006 960 17
 xN optics	4000 lm	4000K	28 W	H10 000 249 - 006 296 24
	4000 lm	5000K	28 W	H10 000 559 - 006 960 32
	4000 lm	6500K	28 W	H10 000 269 - 006 462 43
	4700 lm	4000K	33 W	H10 000 579 - 006 960 38
	4700 lm	5000K	33 W	H10 000 589 - 006 960 41
	4700 lm	6500K	33 W	H10 000 599 - 006 960 44
 D optics	4000 lm	4000K	28 W	H10 000 069 - 006 211 91
	4000 lm	5000K	28 W	H10 000 649 - 006 960 60
	4000 lm	6500K	28 W	H10 000 299 - 006 462 52
	4700 lm	4000K	33 W	H10 000 669 - 006 960 67
	4700 lm	5000K	33 W	H10 000 679 - 006 960 70
	4700 lm	6500K	33 W	H10 000 689 - 006 960 74

Variants with a light current of 3300 lm upon request

OPERATING DEVICE	Connected load	Special feature	Order no.
	220 – 240 V	dimnable 1 – 10 V	H11 000 119 - 006 803 39
	220 – 240 V	DALI	H11 000 129 - 006 803 43

SUPPORT PROFILE	Length	Colour	Special feature	Order no.
	4200 mm	colourless anodised	7-pin, black cover	H12 000 119 - 006 714 31
	3000 mm	colourless anodised	7-pin, black cover	H12 000 129 - 006 714 39
	1200 mm	colourless anodised	7-pin, black cover	H12 000 139 - 006 714 42
	600 mm	colourless anodised	7-pin, black cover	H12 000 149 - 006 714 45



ACANEO STRONG LIGHTING PARTNER FOR ANY HEIGHT

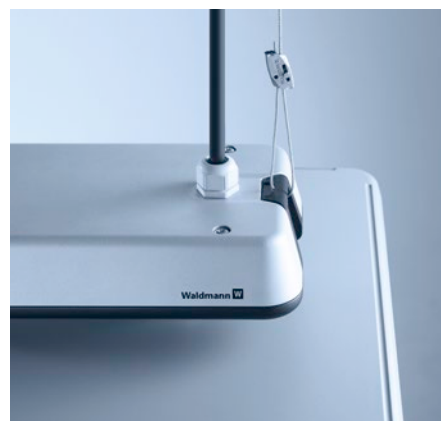


ACANEO is the ideal solution for wide-area general lighting of buildings with high room heights: Efficient lighting in halls up to 30 metres in height. This increases the performance of staff and the quality of their work. ACANEO also provides an important contribution to a positive energy balance. Your company benefits from these factors: Social responsibility and commitment to the environment have a favourable effect on cost efficiency.

- Advanced LED technology with up to 60 000 hours of service life (L80B10)
- Extremely robust die-cast aluminium housing
- Energy saving compared with conventional luminaires
- Time- and cost-saving mounting
- Thermal management with intelligent overheating protection
- Patented optics for precise light deflection
- High-quality processing according to Waldmann quality standards
- Maintenance-free
- 5-year system warranty
- Resistant to common coolants, oils and welding vapours
- Integrated constant light output (CLO)

ACANEO

ROBUST. LONG SERVICE LIFE. EFFICIENT.



Light technology in a new dimension

ACANEO is the right solution for different room situations: Waldmann offers the luminous flux package that matches different room heights and illuminance levels. The optics was developed with a view to achieving minimum glare and maximum homogeneity in the focus, which we managed to do convincingly ($UGR < 21$). This increases occupational safety, while reducing the number of accidents.

Light for extreme conditions

ACANEO fulfils the high demands of logistics, production and storage halls: The high bay luminaire works reliably even in dusty, humid and oil-containing air. The light does not require visible cooling ribs: The risk of contamination, for example by oil particles, is clearly reduced!

(Degree of protection: IP65; impact resistance up to IK10)

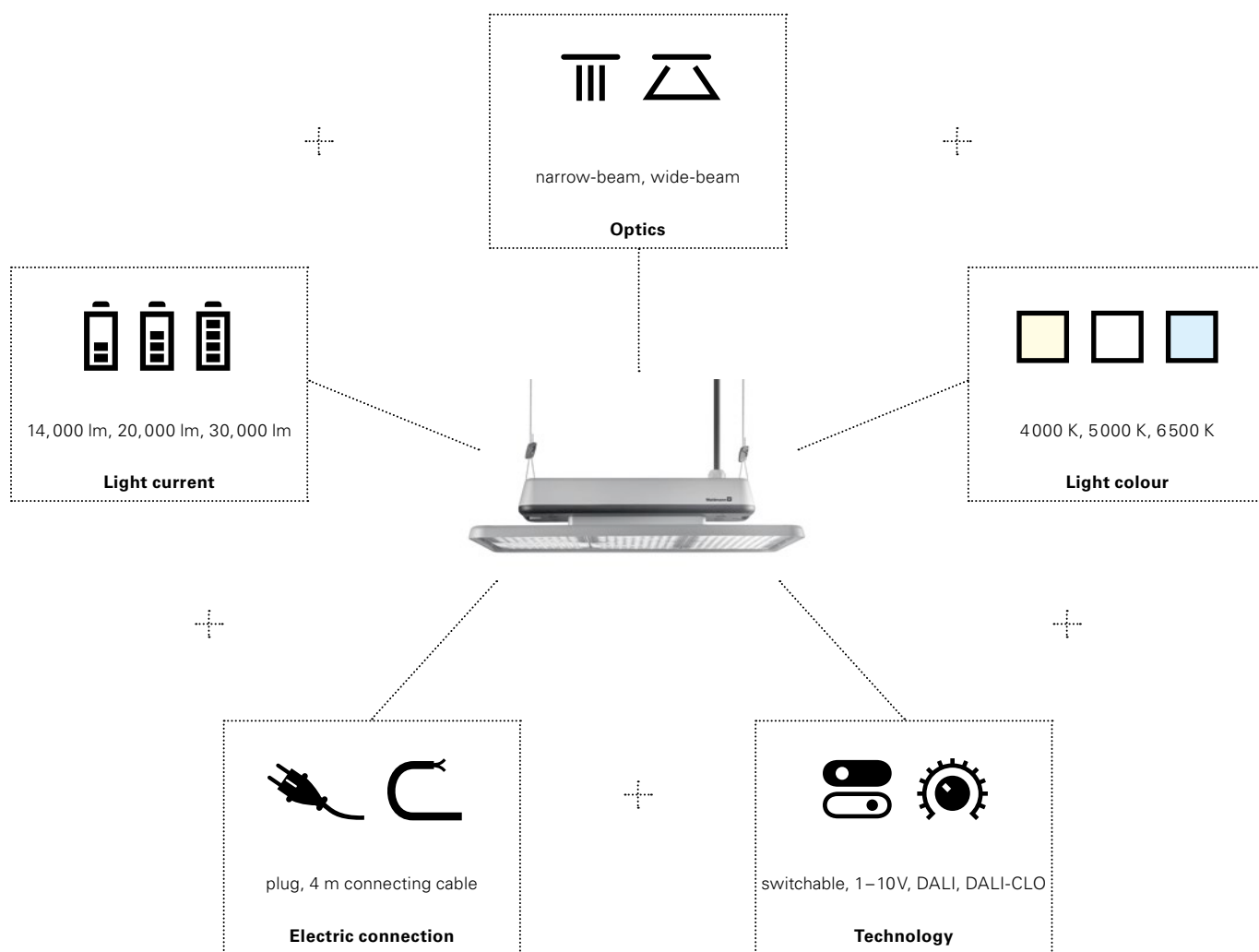
ACANEO is equipped with Constant Light Output (CLO), thus compensating the decrease in luminous flux over its entire service life. This service life of 60 000 hours remains stable even at more than 70° C – thanks to the intelligent housing concept, selective high-performance materials and thermal management. The illuminance fulfils the requirements of the standard, even when equipped with active overheating protection.

Simple mounting, high intelligence

Compared with conventional high bay luminaires, ACANEO provides its first cost savings already prior to being put into operation: Completely premounted and equipped with mains lead, the two suspension points at the ceiling can be combined to a single-point suspension. This results in self-alignment and complete mounting of ACANEO within a few minutes. Even vibrations and air movements are no longer able to twist the luminaire.

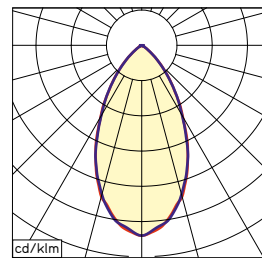
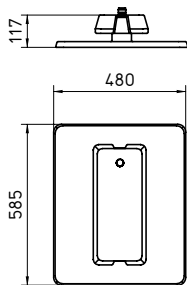
ACANEO MODULAR DESIGN SYSTEM

CUSTOMIZED LIGHTING – JUST CONFIGURE IT YOURSELF

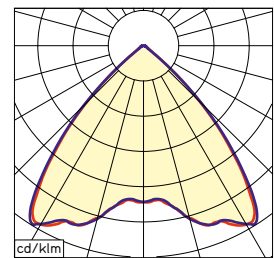


ACANEO stands for maximum flexibility: To allow you to tune the light to your room situation, the environment and the tasks to be carried out, Waldmann offers you the ACANEO configurator: Our product developers have designed ACANEO in such a way that a large number of components can be used in various combinations.

Variations in luminous flux, optics, light colour, technology and connecting cable combine to give a lighting solution tailored to your needs. In a nutshell: Our light does exactly what you want it to do!



N optics



W optics

ACANEO at a glance

- Net luminous flux package 30 000 lm (replaces > 700 W-HQL)
- Power consumption 230 W
- Temperature of use: -30 °C to +50 °C
- Residual luminous flux 80 % after 60 000 operating hours (L80B10)
- Colour temperature neutral white 4000 K, daylight white 5000 K and 6500 K
- Internal individual optics/narrow-beam or wide-beam
- Robust die-cast aluminium housing
- Premounted connecting cable (4 m), (variant)
- Switchable or continuously dimmable 1 – 10 V or DALI standard
- Degree of protection IP65; protection class I
- Overvoltage resistance 4 kV
- 5-year warranty
- Dimensions housing size: 585 mm x 480 mm x 117 mm
- Weight 10.8 kg



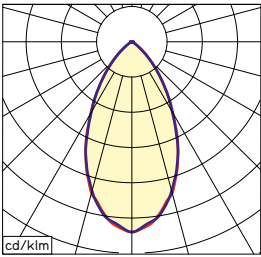
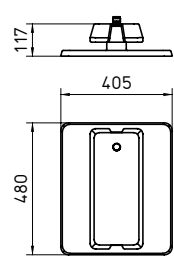
Production hall



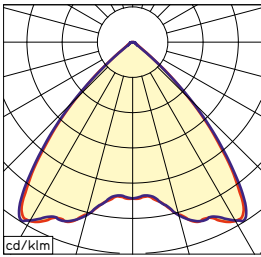
Logistics hall

Luminous flux 30 000 lm**Further variants on request**

Optics	Light colour	Technology	Model	Order no. with plug Order no. with connection cable
narrow-beam	4000 K	DALI	HIAL 30000/840/N/DALI	113 206 000 - 006 823 93
narrow-beam	4000 K	switchable	HIAL 30000/840/N/EA	113 233 000 - 006 824 79
narrow-beam	5000 K	DALI	HIAL 30000/850/N/DALI	113 331 000 - 006 926 70
narrow-beam	5000 K	switchable	HIAL 30000/850/N/EA	113 349 000 - 006 927 30
wide-beam	4000 K	DALI	HIAL 30000/840/W/DALI	113 207 000 - 006 823 97
wide-beam	4000 K	switchable	HIAL 30000/840/W/EA	113 234 000 - 006 824 82
wide-beam	5000 K	DALI	HIAL 30000/850/W/DALI	113 332 000 - 006 926 73
wide-beam	5000 K	switchable	HIAL 30000/850/W/EA	113 350 000 - 006 927 33
wide-beam	4000 K	DALI	HIAL 30000/840/W/DALI	113 373 000 - 006 928 52
wide-beam	4000 K	switchable	HIAL 30000/840/W/EA	113 400 000 - 006 929 37
wide-beam	5000 K	DALI	HIAL 30000/850/W/DALI	113 421 000 - 006 929 99
wide-beam	5000 K	switchable	HIAL 30000/850/W/EA	113 439 000 - 006 930 57
wide-beam	4000 K	DALI	HIAL 30000/840/W/DALI	113 374 000 - 006 928 55
wide-beam	4000 K	switchable	HIAL 30000/840/W/EA	113 401 000 - 006 929 40
wide-beam	5000 K	DALI	HIAL 30000/850/W/DALI	113 422 000 - 006 930 02
wide-beam	5000 K	switchable	HIAL 30000/850/W/EA	113 440 000 - 006 930 60



N optics



W optics



ACANEO at a glance

- Net luminous flux package 14 000 lm (replaces > 250 W-HQL)
- Net luminous flux package 20 000 lm (replaces > 400 W-HQL)
- Power consumption 100 W or 160 W
- Temperature of use: -30° C to +50° C (in combination with DALI up to +60° C)
- Residual luminous flux 80 % after 60 000 operating hours (L80B10)
- Colour temperature neutral white 4000 K, daylight white 5000 K and 6500 K
- Internal individual optics/narrow-beam or wide-beam
- Robust die-cast aluminium housing
- Premounted connecting cable (4 m), (variant)
- Switchable or continuously dimmable 1 – 10 V or DALI standard
- Degree of protection IP65; protection class I
- Overvoltage resistance 4 kV
- 5-year warranty
- Dimensions housing size: 480 mm x 405 mm x 117 mm
- Weight 8.2 kg

Production hall				Logistics hall	
Luminous flux 14 000 lm				Further variants on request	
Optics	Light colour	Technology	Model	Order no. with plug	Order no. with connection cable
narrow-beam	4 000 K	DALI	HIAL 14000/840/N/DALI	113 188 000 - 006 822 60	
				113 215 000 - 006 824 22	
narrow-beam	4 000 K	switchable	HIAL 14000/840/N/EA	113 319 000 - 006 926 34	
				113 337 000 - 006 926 89	
narrow-beam	5 000 K	DALI	HIAL 14000/850/N/DALI	113 189 000 - 006 822 63	
				113 216 000 - 006 824 25	
narrow-beam	5 000 K	switchable	HIAL 14000/850/N/EA	113 320 000 - 006 926 37	
				113 338 000 - 006 926 92	
wide-beam	4 000 K	DALI	HIAL 14000/840/W/DALI	113 355 000 - 006 927 51	
				113 382 000 - 006 928 79	
wide-beam	4 000 K	switchable	HIAL 14000/840/W/EA	113 409 000 - 006 929 66	
				113 427 000 - 006 930 17	
wide-beam	5 000 K	DALI	HIAL 14000/850/W/DALI	113 356 000 - 006 927 54	
				113 383 000 - 006 928 82	
wide-beam	5 000 K	switchable	HIAL 14000/850/W/EA	113 410 000 - 006 929 69	
				113 428 000 - 006 930 20	

Production hall				Logistics hall	
Luminous flux 20 000 lm				Further variants on request	
Optics	Light colour	Technology	Model	Order no. with plug	Order no. with connection cable
narrow-beam	4 000 K	DALI	HIAL 20000/840/N/DALI	113 197 000 - 006 822 88	
				113 224 000 - 006 824 52	
narrow-beam	4 000 K	switchable	HIAL 20000/840/N/EA	113 325 000 - 006 926 52	
				113 343 000 - 006 927 07	
narrow-beam	5 000 K	DALI	HIAL 20000/850/N/DALI	113 198 000 - 006 822 91	
				113 225 000 - 006 824 55	
narrow-beam	5 000 K	switchable	HIAL 20000/850/N/EA	113 326 000 - 006 926 55	
				113 344 000 - 006 927 10	
wide-beam	4 000 K	DALI	HIAL 20000/840/W/DALI	113 364 000 - 006 927 79	
				113 391 000 - 006 929 09	
wide-beam	4 000 K	switchable	HIAL 20000/840/W/EA	113 415 000 - 006 929 84	
				113 433 000 - 006 930 35	
wide-beam	5 000 K	DALI	HIAL 20000/850/W/DALI	113 365 000 - 006 927 82	
				113 392 000 - 006 929 12	
wide-beam	5 000 K	switchable	HIAL 20000/850/W/EA	113 416 000 - 006 929 87	
				113 434 000 - 006 930 38	

Variants with a temperature resistance of 70° C upon request



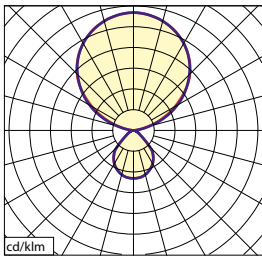
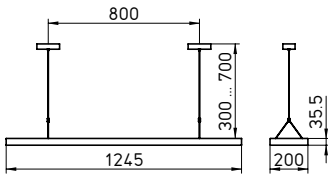
LAVIGO

SIMPLE ELEGANCE – HIGH BEAM POWER



LAVIGO impresses with its design based on the shape of a rectangle – and featuring slightly rounded-off borders as a particular detail. Visually, the suspended luminaire fits perfectly to different office concepts, interior design scenarios and furniture systems. Advanced technologies provide high efficiencies in combination with low current consumption. Moreover, the luminaire can be integrated into common building management systems.

- Closed luminaire body with cover
- Direct light with Light Forming Technology for uniform light distribution
- Connection to DALI light management systems
- Easy mounting, operating devices integrated into the luminaire


























LAVIGO at a glance


- Luminaire light output approx. 114 lm/W
 - Light distribution (direct/indirect) approx. 22 %/78 %
 - Luminance < 2800 cd/m²
 - UGR < 16
 - Colour rendering Ra > 80
 - Glare-free thanks to conical prismatic screen
- Connected loads 220 – 240 V; 50/60 Hz
 - Energy efficiency class A+
 - Degree of protection IP 20
 - Weight (net) 6.5 kg
 - Mains connection approx. 1 m; with free stranded wires/cable ends









Office		Meeting room	
Fitted with	Technology	Model	Order no. white
Power	Connected load	Light colour	Order no. silver
9200 lm	DALI	DPP 288/D	121 740 000 - 006 787 44
81 W	220 – 240 V, 50/60 Hz	neutral white 4000 K	121 740 000 - 006 787 47


WORKPLACE LIGHTING









 Assembly workplace			
			
TANEO 34	SNE 38	MINELA 42	TEVISIO 44
			
RING LED 48	SNLQ 50	TANEO 52	TANEO 54
			
TAMETO 56	TAMETO 58	TAMETO 60	TAMETO 62
			
ALE 64	SINEO 66		


 Electronics workplace			
			
TANEO 34	TEVISIO 44	SNLQ 50	TANEO 52
			
TANEO 54	TAMETO 60	TAMETO 62	










 Workshop workplace


 TANEO 34	 SNE 38	 MINELA 42	 TEVISIO 44
 RING LED 48	 SNLQ 50	 TAMETO 56	 TAMETO 60







 Laboratory workplace

 TANEO 34	 SNE 38	 TEVISIO 44	 SNLQ 50
 TANEO 52	 TANEO 54	 TAMETO 56	 TAMETO 60

 Inspection workplace

 TANEO 34	 SNE 38	 MINELA 42	 TEVISIO 44
 RING LED 48	 SNLQ 50	 TAMETO 56	 TAMETO 60
 ALE 64			

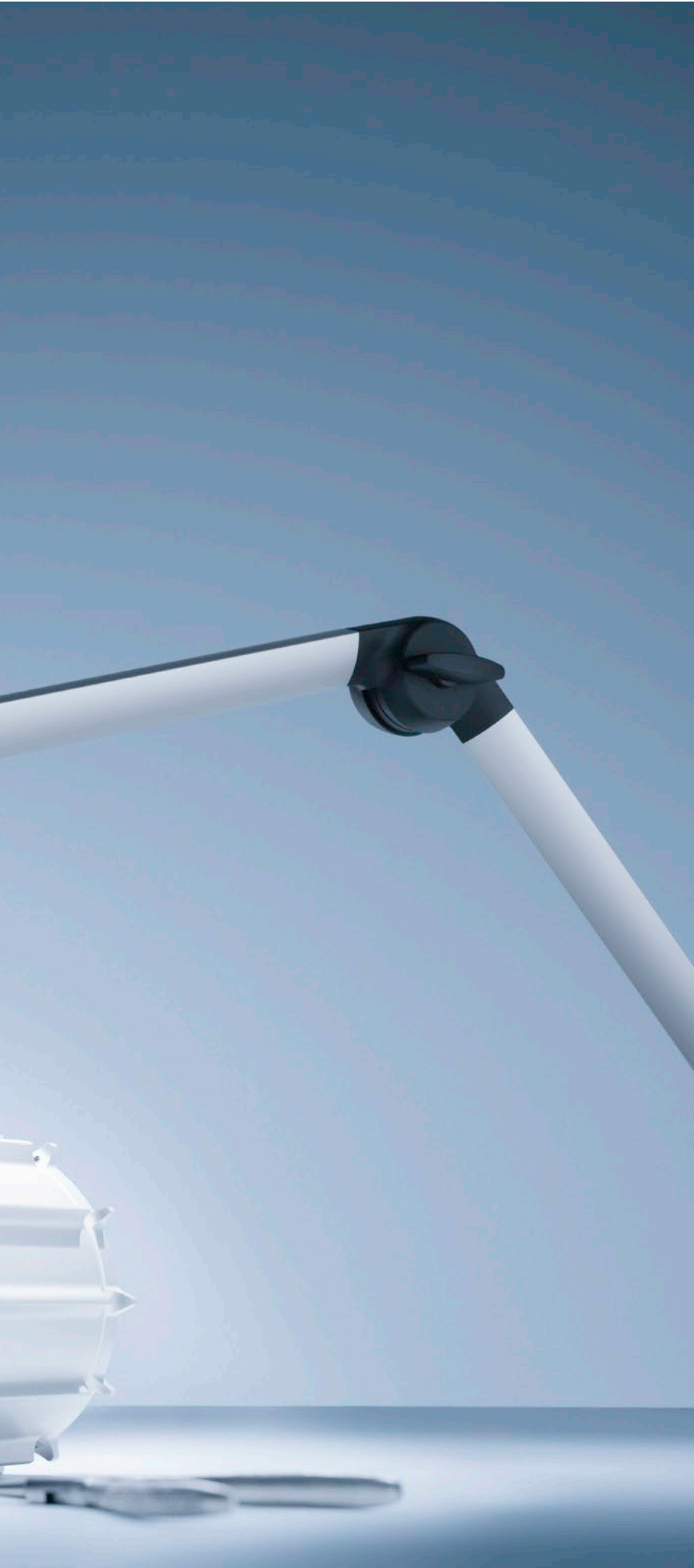
 Watchmaker workplace

 TANEO 34	 SNE 38	 TEVISIO 44	 SNLQ 50
<div> Office workplace</div>			
 TANEO 34	 AVENUE 40	 MINELA 42	 LAVIGO 68

TANEO

OPTIMUM VISIBILITY

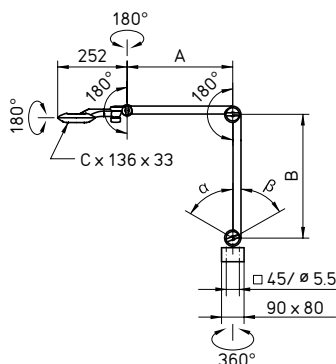




TANE0 is a true all-rounder. No matter for what workplace, no matter in what sector – wherever optimum visibility must be guaranteed, uncompromising lighting is essential.

With its light output suitable for nearly every application, high light quality and ergonomic handling, TANE0 provides optimum working conditions and offers incomparable flexibility regarding its adjustment to individual and activity-related requirements.

- Maintenance-free LED technology
- Performance levels that meet all requirements
- Continuous, flicker-free dimming
- Area light free of shadows and glare caused by reflection
- Good contrast viewing and very good colour recognition
- Optimum work results through application-oriented selection of screens
- Robust aluminium housing
- Closed design for protecting the user and the integrated technology
- Uniquely mobile and balanced arm with vast radius of action
- Also available in ESD design

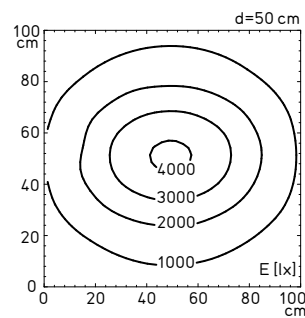


Design for watchmaker workplace:

$\alpha = 60^\circ$, $\beta = 0^\circ$

Any other designs:

$\alpha = 110^\circ$, $\beta = 20^\circ$



Illuminance based on the example
34 W with CDP screen

TANEO at a glance

- LED technology
- Colour temperature neutral white 4000 K or 5000 K
- Colour rendering $R_a > 85$ (CDP) or
 $R_a = 90$ (white opal screen)
- Glare-free thanks to conical prismatic screen (CDP) or white opal screen
- Housing made of colourless anodised aluminium or aluminium painted white or black and black plastic
- Screen made of PMMA (CDP) or PC (white opal screen)
- Spring-loaded arm with 3D head joint
- Membrane key integrated into the luminaire head for On/Off and dimming
- Degree of protection IP20; protection class I
- Supplied with approx. 3 m connecting cable with plug-in power supply unit (14 W) or table power supply unit (24 and 34 W) with plug type CEE 7/16 (Euro connector)
- Various fasteners and additional magnifier (3.5 dioptres) as accessories



Assembly workplace



Workshop workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 218 mm CDP screen, 4000 K, colourless anodised	563 lx ¹ 1 569 lx ¹	STZL 12 R 112 576 000 - 005 441 67
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 218 mm CDP screen, 5000 K, colourless anodised	563 lx ¹ 1 569 lx ¹	STZL 12 R 112 576 000 - 005 397 57
LED 24 W	table power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 398 mm CDP screen, 4000 K, colourless anodised	1 137 lx ¹ 3 053 lx ¹	STZL 24 R 112 577 000 - 005 441 79
LED 24 W	table power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 398 mm CDP screen, 5000 K, colourless anodised	1 137 lx ¹ 3 053 lx ¹	STZL 24 R 112 577 000 - 005 397 74
LED 34 W	table power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 577 mm CDP screen, 4000 K, colourless anodised	1 641 lx ¹ 4 046 lx ¹	STZL 36 R 112 578 000 - 005 441 82
LED 34 W	table power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 577 mm CDP screen, 5000 K, colourless anodised	1 641 lx ¹ 4 046 lx ¹	STZL 36 R 112 578 000 - 005 397 77

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm



Inspection workplace



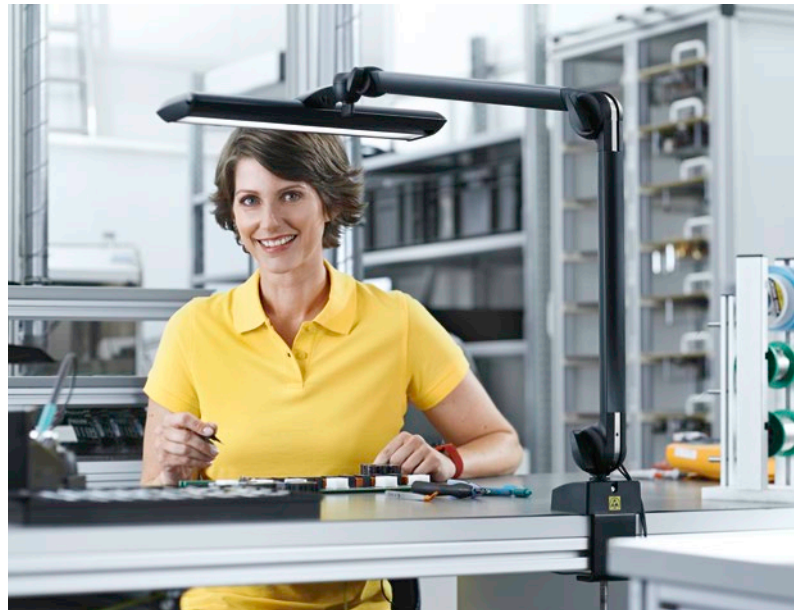
Laboratory workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 218 mm white opal screen, 4000 K, colourless anodised	361 lx ¹ 816 lx ¹	STZL 12 R 112 576 000 - 005 595 52
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 218 mm white opal screen, 5000 K, colourless anodised	361 lx ¹ 816 lx ¹	STZL 12 R 112 576 000 - 005 595 71
LED 24 W	table power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 398 mm white opal screen, 4000 K, colourless anodised	725 lx ¹ 1 578 lx ¹	STZL 24 R 112 577 000 - 005 595 74
LED 24 W	table power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 398 mm white opal screen, 5000 K, colourless anodised	725 lx ¹ 1 578 lx ¹	STZL 24 R 112 577 000 - 005 595 77
LED 34 W	table power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 577 mm white opal screen, 4000 K, colourless anodised	1 082 lx ¹ 2 219 lx ¹	STZL 36 R 112 578 000 - 005 595 80
LED 34 W	table power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 577 mm white opal screen, 5000 K, colourless anodised	1 082 lx ¹ 2 219 lx ¹	STZL 36 R 112 578 000 - 005 595 83

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm



TANEØ in ESD design



Electronics workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 24 W	table power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 398 mm CDP screen, 4000 K, painted black	1 016 lx ¹ 2 671 lx ¹	STZL 24 AR 113 020 000 - 005 645 43
LED 24 W	table power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 398 mm CDP screen, 5000 K, painted black	1 016 lx ¹ 2 671 lx ¹	STZL 24 AR 113 020 000 - 005 645 62

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm

Watchmaker workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 24 W	table power supply 100 – 240 V, 50/60 Hz	A = 244 mm, B = 450 mm, C = 398 mm white opal screen, 5000 K, colourless anodised	725 lx ¹ 1 578 lx ¹	STZL 24 R 113 085 000 - 005 832 20

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm

Office workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm, C = 218 mm CDP screen, 4000 K, painted white	563 lx ¹ 1 569 lx ¹	STZL 12 R 112 576 000 - 005 760 91

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm

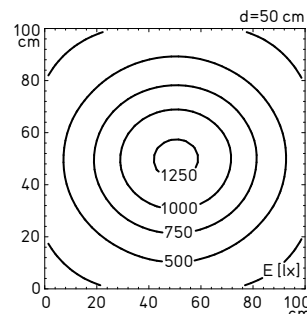
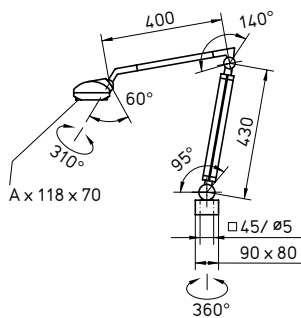
Also available as workplace-system luminaires



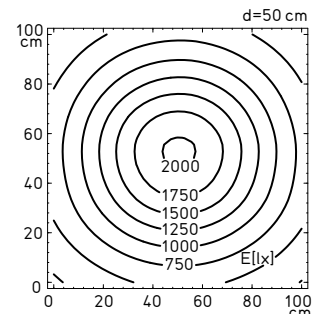
SNE EFFICIENT LIGHT COMFORT

SNE comfortably improves efficiency. And "efficiency" is nowadays far more than just a buzzword, it is an essential target in industry and trade. With its state-of-the-art fluorescent lamp technology, it provides a high level of efficiency. Its cleverly designed arm also ensures a radius of action that easily directs the light to where you want to have it.

- Energy-efficient fluorescent lamp technology
- Ultra low-glare, homogeneous light with soft transitions
- Quick and precise positioning
- Ergonomically shaped T-screws for arm adjustment without tools
- Luminaire head that remains cool
- Optimum work results through application-oriented selection of screens



Illuminance based on the example
1 x 36 W with screen



Illuminance based on the example
1 x 36 W with parabolic louvre

SNE at a glance

- Fluorescent lamp technology
- Colour temperature neutral white 4000 K
- Colour rendering $R_a > 80$
- Glare-free thanks to aluminiumised parabolic louvre or white opal screen
- Housing made of light-grey plastic
- PC screen or ABS parabolic louvre
- Spring-loaded arm
- Switch in the luminaire head for On/Off
- Degree of protection IP20, protection class I
- Supplied with approx. 1.5 m connecting cable and plug, type CEE 7/7 (grounded plug)
- Various fasteners and additional magnifier (3 dioptries) as accessories

Inspection workplace		Laboratory workplace	Watchmaker workplace	
Fitted with Power	Technology Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
TC-L 1 x 18 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 308 mm white opal screen	281 lx ¹ 633 lx ¹	SNE 118 111 581 002 - 000 955 97
TC-L 1 x 36 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 485 mm white opal screen	597 lx ¹ 1 268 lx ¹	SNE 136 111 591 002 - 000 955 95

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm

Assembly workplace		Workshop workplace		
Fitted with Power	Technology Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
TC-L 1 x 18 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 308 mm parabolic louvre	415 lx ¹ 946 lx ¹	SNE 118 111 581 000 - 000 589 89
TC-L 1 x 36 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 485 mm parabolic louvre	933 lx ¹ 2 010 lx ¹	SNE 136 111 591 000 - 000 718 46

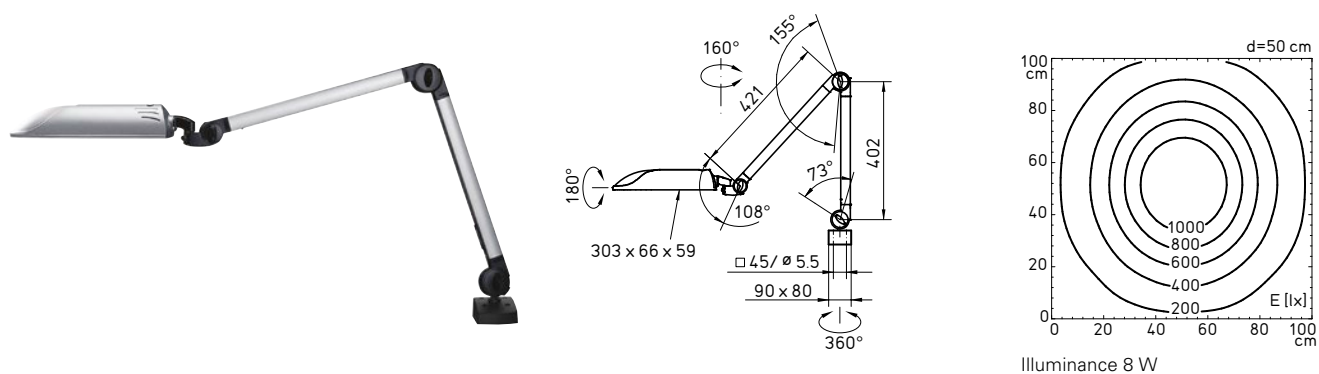
* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm



AVENUE VISUAL COMFORT IN LED


AVENUE is an optimal additional light source for supporting demanding activities at the workplace. There it provides extremely valuable services and improves visual comfort. Thanks to the moving arm, its LED light can be precisely adjusted and creates ergonomic work conditions.

- Maintenance-free LED technology
- Area light free of shadows and glare caused by reflection
- Light exit with conical prismatic structure for perfect glare-free lighting
- Closed design for protecting the user and the integrated technology
- Moving arm with 3D head joint



AVENUE at a glance

- LED technology
- Colour temperature neutral white 4000 K
- Colour rendering Ra > 80
- Glare-free thanks to conical prismatic screen (CDP)
- Housing made of colourless anodised aluminium or black and silver-grey plastic
- PMMA screen
- Spring-loaded arm with 3D head joint
- Switch in the luminaire head for On/Off
- Degree of protection IP20; protection class I
- Supplied with approx. 3 m connecting cable and plug-in power supply with plug type CEE 7/16 (Euro plug)
- Various fasteners as accessories

 Office workplace

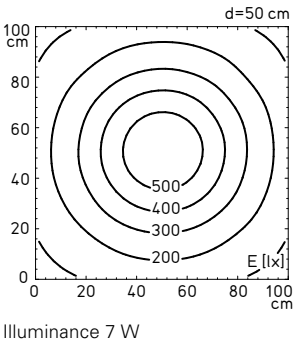
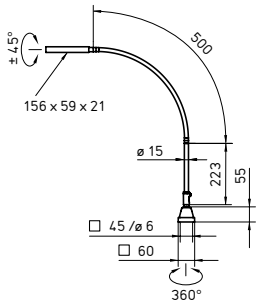
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 8 W	plug-in power supply 100 – 240 V, 50/60 Hz	– –	457 lx ¹ 1 243 lx ¹	AVE 18 113 105 000 - 006 808 27

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm

MINELA EFFICIENCY THANKS TO INTELLIGENCE





MINELA combines light quality, energy efficiency and design standard at a high level. The LED luminaire also impresses with its cleverly designed thermal management, which provides a long service life and low heating of the luminaire head.

- Maintenance-free LED technology
- Continuous dimming
- Operation via touch keys
- Exactly adjustable flexible tube
- Small space required



MINELA at a glance

- LED technology
- Colour temperature neutral white 4 000 K
- Colour rendering Ra > 80
- Light deflection by reflector
- Housing made of colourless anodised aluminium and black plastic
- PMMA screen
- Flexible metal tube for at least 20 000 motions
- Illuminated touch key integrated into the luminaire head for On/Off and dimming
- Degree of protection IP20; protection class I
- Supplied with approx. 2.5 m connecting cable and plug-in power supply with plug type CEE 7/16 (Euro plug), BS 1363 and NEMA 1-15P
- Various fasteners as accessories

 Assembly workplace	 Inspection workplace			
 Workshop workplace	 Office workplace			
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 7 W	plug-in power supply 100 – 240 V, 50/60 Hz	– –	268 lx ¹ 575 lx ¹	SOL 1 112 929 000 - 005 953 21

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm



LED



TEVISIO
NO. 1 FOR
MOBILITY & VISUAL QUALITY

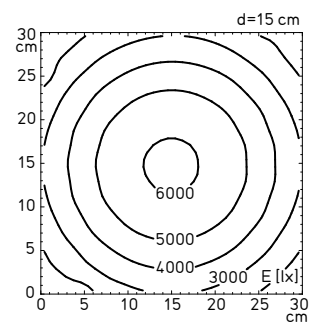
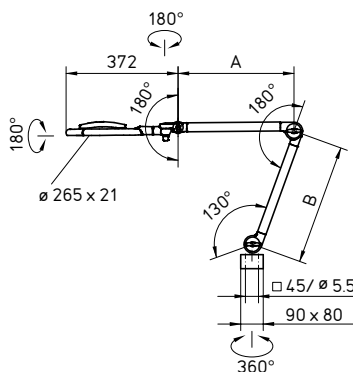


TEVISIO supports demanding viewing tasks with ergonomic perfection. Whether in the electronic, metal or watch sector, whether in assembly, workshop or inspection: TEVISIO is essential wherever demands on viewing are highest.

With its highly developed LED technology, innovative arm technology and a field of vision ideally matched to the distance to the eye, the TEVISIO magnifier luminaire offers optimum efficiency and ergonomics at the workplace.

- Maintenance-free LED technology
- For strong, large-area and uniform lighting
- Good contrast viewing and very good colour recognition
- Continuous dimming
- Variants with segment switching (visualizer function) for detecting very fine structures and errors
- Robust aluminium housing
- Closed design for protecting the user and the integrated technology
- Absolutely scratch-proof magnifying glass, optionally antireflective or with additional lens
- Large field of vision for distortion-free viewing
- Approximately double magnification
- Uniquely mobile and balanced arm with vast radius of action
- Also available in ESD design






Illuminance 14 W based on the example without ESD design

TEVISIO at a glance

- LED technology
- Colour temperature neutral white 4000 K
- Colour rendering Ra = 90
- Glare-free thanks to reflector
- Glass lens ø 160 mm with 3.5 dioptries or 3.5 + 8 dioptries (glued-on additional lens)
- Housing made of colourless anodised aluminium or aluminium painted black and black plastic
- Screen made of satined polyamide
- Spring-loaded arm with 3D head joint
- Membrane key integrated into the luminaire head for On/Off and dimming and, if desired, visualizer function (segment switching)
- Degree of protection IP20; protection class I
- Supplied with approx. 3 m connecting cable and plug-in power supply with plug type CEE 7/16 (Euro plug), BS 1363 and NEMA 1-15P
- Various fasteners and additional magnifier (3.5 dioptries) as accessories

 Assembly workplace


 Workshop workplace

 Laboratory workplace

 Watchmaker workplace

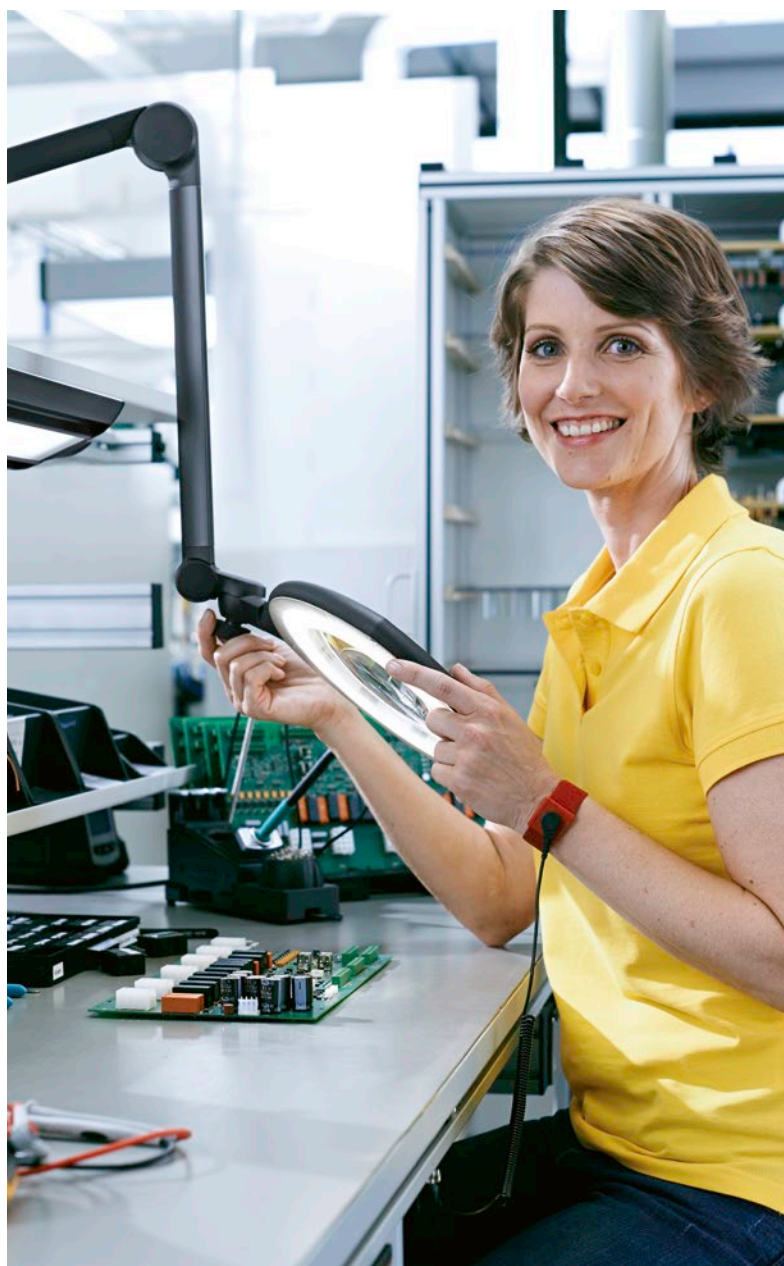
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max} *	Model Order no.
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 484 mm, B = 500 mm –	4 002 lx ¹ 6 141 lx ¹	RLLQ 48 R 112 918 000 - 004 908 93
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 484 mm, B = 500 mm anti-glare lens	4 002 lx ¹ 6 141 lx ¹	RLLQ 48 R 112 918 000 - 005 472 74
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 484 mm, B = 500 mm additional lens 8 dpt	4 002 lx ¹ 6 141 lx ¹	RLLQ 48 R 112 918 001 - 004 991 54
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm –	4 002 lx ¹ 6 141 lx ¹	RLLQ 48 R 112 919 000 - 004 917 86
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm glare-free lens	4 002 lx ¹ 6 141 lx ¹	RLLQ 48 R 112 919 000 - 005 489 59
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm additional lens 8 dpt	4 002 lx ¹ 6 141 lx ¹	RLLQ 48 R 112 919 001 - 004 991 59

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 15 cm


 Inspection workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max} *	Model Order no.
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 484 mm, B = 500 mm visualizer	4 002 lx ¹ 6 141 lx ¹	RLLQ 48/2 R 112 918 002 - 005 090 20
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 484 mm, B = 500 mm glare-free lens, visualizer	4 002 lx ¹ 6 141 lx ¹	RLLQ 48/2 R 112 918 000 - 005 472 79
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 484 mm, B = 500 mm additional lens 8 dpt, visualizer	4 002 lx ¹ 6 141 lx ¹	RLLQ 48/2 R 112 918 003 - 005 090 17
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm visualizer	4 002 lx ¹ 6 141 lx ¹	RLLQ 48/2 R 112 919 002 - 004 991 64
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm glare-free lens, visualizer	4 002 lx ¹ 6 141 lx ¹	RLLQ 48/2 R 112 919 000 - 005 489 62
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm additional lens 8 dpt, visualizer	4 002 lx ¹ 6 141 lx ¹	RLLQ 48/2 R 112 919 003 - 004 991 70

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 15 cm



TEVISIO in ESD design

 Electronics workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 484 mm, B = 500 mm visualizer	3089 lx ¹ 4636 lx ¹	RLLQ 48/2 AR 113 015 000 - 005 61 675
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	A = 384 mm, B = 400 mm visualizer	3089 lx ¹ 4636 lx ¹	RLLQ 48/2 AR 113 016 000 - 005 616 85

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 15 cm

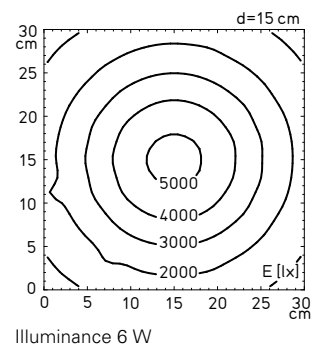
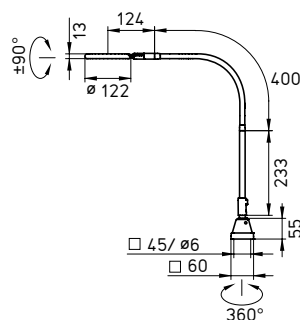


RING LED

EXACT LIGHT FOR EXACT WORK

RING LED is the solution for tasks involving miniature parts. When miniature parts need to be inspected or precisely processed at an industrial workplace, attention to detail is vital. RING LED has the perfect lens – and with its 63 LEDs also the optimum light to meet these requirements. Additional advantage: The luminaire also has an attractive appearance.

- Maintenance-free LED technology
- Low-distortion magnification right to the edge
- Hard-coated plastic lens
- Exactly adjustable flexible tube
- Low space requirements





RING LED at a glance

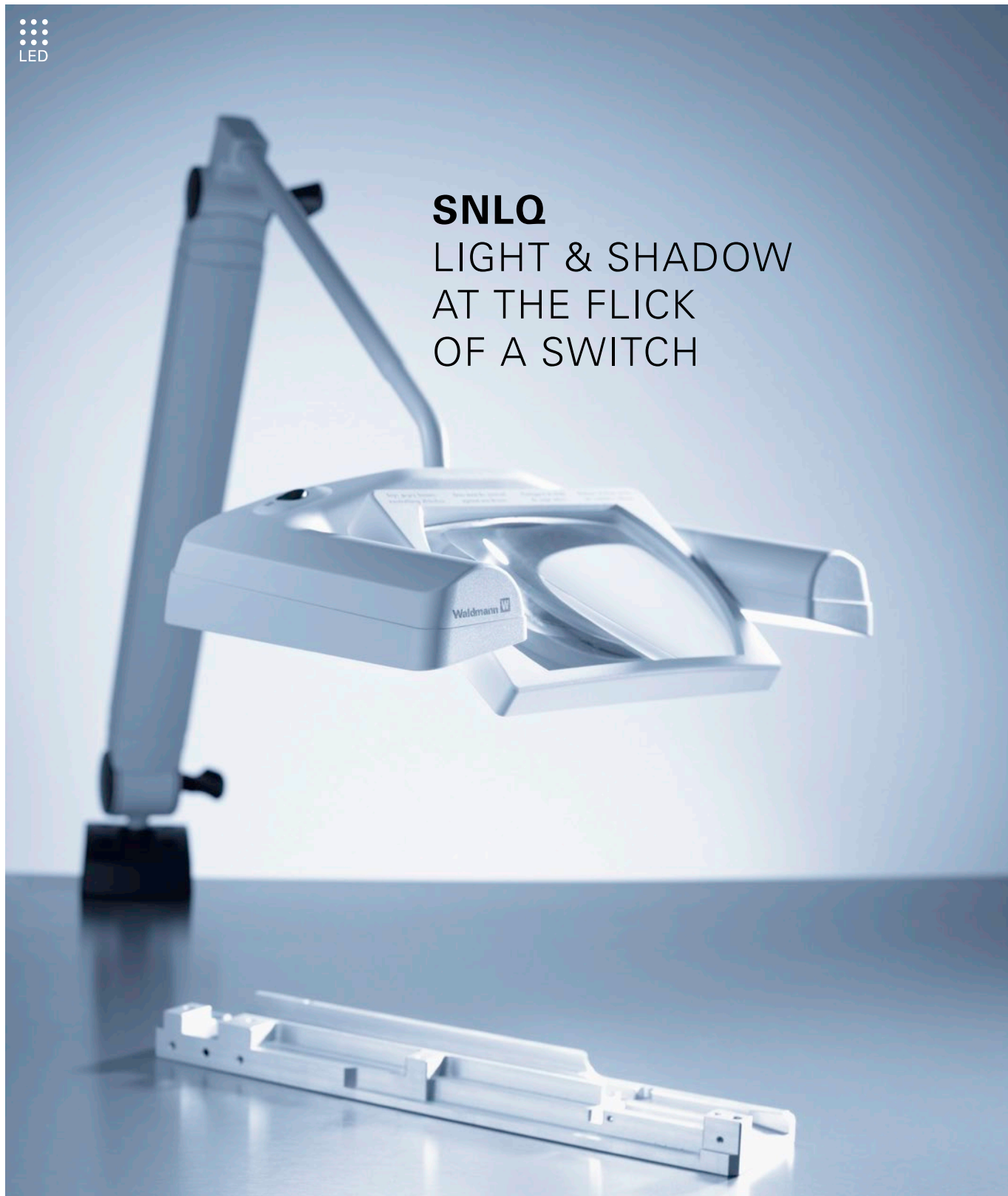
- LED technology
- Colour temperature neutral white 4000 K
- Colour rendering Ra > 80
- Glare-free thanks to satined screen
- Hard-coated plastic lens ø72 mm with 6 dioptries
- Housing made of colourless anodised aluminium and black plastic
- PMMA screen
- Flexible metal tube for at least 20000 motions
- Touch key integrated into luminaire head for On/Off
- Degree of protection IP20; protection class I
- Supplied with approx. 2 m connecting cable and plug-in power supply with plug type CEE 7/16 (Euro plug), BS 1363 and NEMA 1-15P
- Various fasteners as accessories

Assembly workplace		Workshop workplace		Inspection workplace
Fitted with	Operating device	Dimensions		
Power	Connected load	Special feature	E_m E_{max}^*	Model Order no.
LED	plug-in power supply	–	2663 lx ¹	RLLQ 63
6 W	100 – 240 V, 50/60 Hz	–	5282 lx ¹	113 142 000 - 006 188 24

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 15 cm

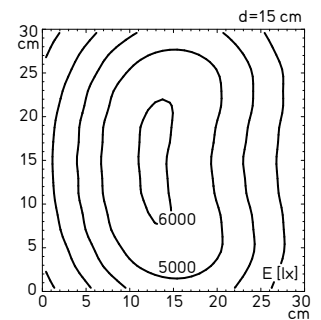
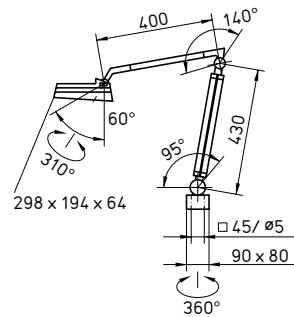
SNLQ

LIGHT & SHADOW AT THE FLICK OF A SWITCH



SNLQ brings literally "light and shadow": It allows you to use light incidence with significant shadow to recognise certain details. However, the SNLQ also provides completely shadow-free light – for example for assembly and inspection tasks. This special magnifier luminaire changes its lighting character simply with the flick of a switch.

- Maintenance-free LED technology
- For strong, large-area and uniform lighting
- Very good colour recognition
- Segment switching for detecting very fine structures and errors
- Large field of vision for distortion-free viewing
- Absolutely scratch-proof magnifying glass
- Independent setting of luminaire head and magnifier
- Also available in ESD design





Illuminance 13 W based on
the example without ESD design

SNLQ at a glance


- LED technology
- Colour temperature neutral white 4000 K
- Colour rendering $R_a > 95$
- Glare-free thanks to white opal screen
- Swivelling glass lens 175 x 105 mm with 3 dioptries
- Housing made of light-grey or black plastic
- PC screen
- Spring-loaded arm
- Switch in the luminaire head for On/Off and segment switching
- Degree of protection IP20; protection class I
- Supplied with approx. 3 m connecting cable and plug, type CEE 7/7 (grounded plug)
- Various fasteners and additional magnifier (4 dioptries) as accessories

 Assembly workplace

 Workshop workplace

 Watchmaker workplace

 Inspection workplace

 Laboratory workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 13 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	– –	4 299 lx ¹ 6 093 lx ¹	SNLQ 54/2 113 460 000 - 006 955 01

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 15 cm



SNLQ in ESD design

 Electronics workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 13 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	– –	3 363 lx ¹ 4 912 lx ¹	SNLQ 54/2 A 113 459 000 - 006 955 07

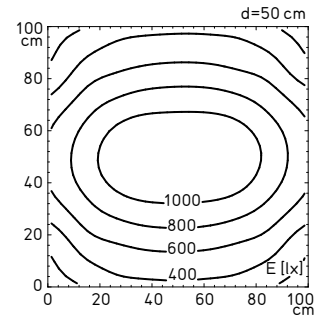
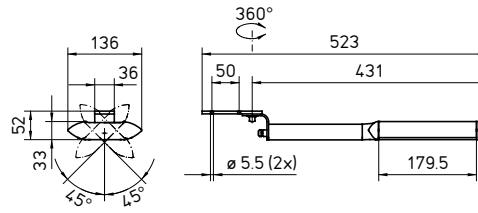
* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 15 cm



TANEO COMFORTABLE SWIVELLING – FLEXIBLE LIGHTING

TANEO in the luminaire variant with pivoting arm can be moved horizontally thanks to its handy arm. This innovative connection allows, for example, lateral illumination and thus shadow-free work in any task position. To this end, ideally a pair of luminaires is used. Additional flexibility thanks to the rotating luminaire head. TANEO thus guarantees correct lighting at all times, even when different tasks have to be performed at the same workplace.

- Maintenance-free LED technology
- Continuous, flicker-free dimming
- Area light free of shadows and glare caused by reflection
- Good contrast viewing and very good colour recognition
- Optimum work results through application-oriented selection of screens
- Robust aluminium housing
- Also available in ESD design



Illuminance based on the example with two 14 W luminaires swivelled by 90° with CDP screen without ESD design (distance of the two luminaire heads approx. 90 cm)

TANEO at a glance

- LED technology
- Colour temperature neutral white 4000 K or 5000 K
- Colour temperature $R_a > 85$ (CDP) or $R_a = 90$ (white opal screen)
- Glare-free thanks to conical prismatic screen (CDP) or white opal screen
- Housing made of colourless anodised aluminium or aluminium painted black and black plastic
- Screen made of PMMA (CDP) or PC (white opal screen)
- Pivoting arm with rotatable head joint
- Membrane key integrated into the luminaire head for On/Off and dimming
- Degree of protection IP20; protection class I
- Supplied with approx. 4 m connecting cable and plug-in power supply with plug type CEE 7/16 (Euro plug)

Assembly workplace		Laboratory workplace			
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.	
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	179.5 mm x 136 mm CDP screen, 4000 K	563 lx ¹ 1 569 lx ¹	SARKL 12 R 112 991 000 - 005 525 84	
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	179.5 mm x 136 mm CDP screen, 5000 K	563 lx ¹ 1 569 lx ¹	SARKL 12 R 112 991 000 - 005 592 47	
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	179.5 mm x 136 mm opal white screen, 4000 K	361 lx ¹ 816 lx ¹	SARKL 12 R 112 991 000 - 005 592 50	
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	179.5 mm x 136 mm opal white screen, 5000 K	361 lx ¹ 816 lx ¹	SARKL 12 R 112 991 000 - 005 592 53	

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm



TANEO in ESD design

Electronics workplace					
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.	
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	179.5 mm x 136 mm CDP screen, 4000 K	490 lx ¹ 1 346 lx ¹	SARKL 12 AR 113 021 000 - 005 645 65	
LED 14 W	plug-in power supply 100 – 240 V, 50/60 Hz	179.5 mm x 136 mm CDP screen, 5000 K	490 lx ¹ 1 346 lx ¹	SARKL 12 AR 113 021 000 - 005 645 68	

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm

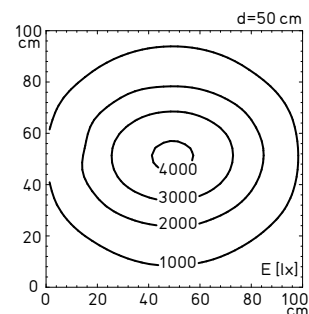
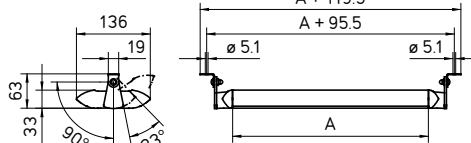
Also available as arm-mounted luminaires



TANEO SPACE-SAVING INTEGRATION – YET SURPRISINGLY VERSATILE

TANEO offers particularly space-saving and unobtrusive mounting options, for example under adjustable shelves. However, thanks to its rotating luminaire head, it is still flexible. Its dimmability means that it can be easily adjusted to individual requirements. At the same time, its high-quality light reduces eye strain when working.

- Maintenance-free LED technology
- Performance levels that meet all requirements
- Continuous, flicker-free dimming
- Area light free of shadows and glare caused by reflection
- Good contrast viewing and very good colour recognition
- Optimum work results through application-oriented selection of screens
- Robust aluminium housing
- Also available in ESD design



Illuminance based on the example
34 W with CDP screen

TANEO at a glance

- LED technology
- Colour temperature neutral white 4000 K or 5000 K
- Colour rendering $R_a > 85$ (CDP) or $R_a = 90$ (opal white screen)
- Glare-free thanks to conical prismatic screen (CDP) or white opal screen
- Housing made of colourless anodised aluminium or aluminium painted black and black plastic
- Screen made of PMMA (CDP) or PC (white opal screen)
- Fixed connection thanks to rotating head joint
- Membrane key integrated into the luminaire head for On/Off and dimming
- Degree of protection IP20; protection class I
- Supplied with approx. 6 m connecting cable and table power supply with plug type CEE 7/16 (Euro plug)

Assembly workplace		Laboratory workplace		
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 24 W	table power supply 100 – 240 V, 50/60 Hz	A = 359.5 mm x 136 mm CDP screen, 4000 K	1 137 lx ¹ 3053 lx ¹	SARL 24 R 112 992 000 - 005 525 87
LED 24 W	table power supply 100 – 240 V, 50/60 Hz	A = 359.5 mm x 136 mm CDP screen, 5000 K	1 137 lx ¹ 3053 lx ¹	SARL 24 R 112 992 000 - 005 593 08
LED 24 W	table power supply 100 – 240 V, 50/60 Hz	A = 359.5 mm x 136 mm opal white screen, 4000 K	725 lx ¹ 1 578 lx ¹	SARL 24 R 112 992 000 - 005 593 11
LED 24 W	table power supply 100 – 240 V, 50/60 Hz	A = 359.5 mm x 136 mm opal white screen, 5000 K	725 lx ¹ 1 578 lx ¹	SARL 24 R 112 992 000 - 005 593 15
LED 34 W	table power supply 100 – 240 V, 50/60 Hz	A = 538.5 mm x 136 mm CDP screen, 4000 K	1 641 lx ¹ 4 046 lx ¹	SARL 36 R 112 993 000 - 005 525 93
LED 34 W	table power supply 100 – 240 V, 50/60 Hz	A = 538.5 mm x 136 mm CDP screen, 5000 K	1 641 lx ¹ 4 046 lx ¹	SARL 36 R 112 993 000 - 005 593 18
LED 34 W	table power supply 100 – 240 V, 50/60 Hz	A = 538.5 mm x 136 mm opal white screen, 4000 K	1 082 lx ¹ 2 219 lx ¹	SARL 36 R 112 993 000 - 005 593 21
LED 34 W	table power supply 100 – 240 V, 50/60 Hz	A = 538.5 mm x 136 mm opal white screen, 5000 K	1 082 lx ¹ 2 219 lx ¹	SARL 36 R 112 993 000 - 005 594 45

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm



TANEO in ESD design

Electronics workplace				
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 24 W	table power supply 100 – 240 V, 50/60 Hz	A = 359.5 mm x 136 mm CDP screen, 4000 K	1 016 lx ¹ 2 671 lx ¹	SARL 24 AR 113 022 000 - 005 645 71
LED 24 W	table power supply 100 – 240 V, 50/60 Hz	A = 359.5 mm x 136 mm CDP screen, 5000 K	1 016 lx ¹ 2 671 lx ¹	SARL 24 AR 113 022 000 - 005 645 75

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm

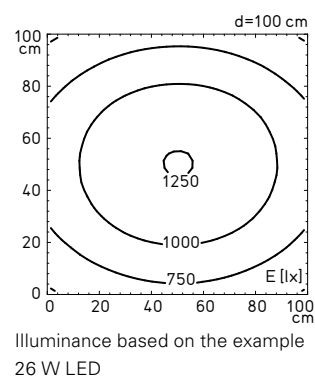
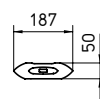
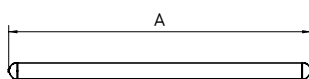
Also available as arm-mounted luminaires



TAMETO ERGONOMIC SYSTEMATIC LIGHTING

TAMETO is available with state-of-the-art T5 fluorescent lamp technology or the latest LED technology. It also offers a range of installation options.

- Available with maintenance-free LED technology or energy-efficient fluorescent lamp technology
- Extremely homogeneous, glare-free and flicker-free light
- Light exit with conical prismatic structure for perfect glare-free lighting
- Continuously dimmable (variants)
- Various lengths for different table widths and lighting needs
- Robust aluminium housing
- Closed construction protects the inside of the luminaire and keeps the work surface clean
- Integrated T-slots
- Available as externally operated luminaire or luminaires for electrical daisy chaining



TAMETO at a glance

- LED technology or fluorescent lamp technology
 - Colour temperature neutral white 4000 K, additional neutral white 5000 K and daylight white 6500 K (SAHQ 44 R, 66 R, 88 R)
 - Colour rendering $R_a > 80$
 - Glare-free thanks to conical prismatic screen (CDP)
 - Housing made of colourless anodised aluminium and black plastic
 - PMMA screen
 - Mounting by means of mounting angle brackets or T-slots (8 mm)
 - Switch for On/Off or button for additional dimming
 - Degree of protection IP20; protection class I
- Supplied with
- Approx. 3 m connecting cable and plug type CEE 7/7 (grounded plug)
 - Approx. 3 m connecting cable and plug WAGO WINSTA® MINI for externally operated variants
 - Approx. 0.3 m connecting and plug/socket Wieland GST18i3 for variants with through-wiring
- Accessories
- Luminaire bracket set for C-rails and luminaire brackets for rotatable mounting to extension arm
 - Cable for connecting through-wired luminaires
 - Operating unit and cable for connecting externally operated luminaires
 - Distributor and connecting cable for central connection of several externally operated luminaires to one operating unit



Fitted with Power	Operating device Connected load	Dimensions Special feature	E _m E _{max} *	Model Order no.
LED	integrated driver	A = 656 mm x 187 mm	606 lx ¹	SAHQ 44
18 W	220 – 240 V, 50/60 Hz	4000 K	841 lx ¹	112 971 000 - 005 513 37
LED	integrated driver	A = 656 mm x 187 mm	606 lx ¹	SAHQ 44 D
18 W	220 – 240 V, 50/60 Hz	4000 K, through-wired	841 lx ¹	112 971 000 - 005 555 76
LED	integrated driver	A = 656 mm x 187 mm	606 lx ¹	SAHQ 44 R
18 W	220 – 240 V, 50/60 Hz	4000 K, dimmable	841 lx ¹	112 972 000 - 005 513 40
LED	integrated driver	A = 656 mm x 187 mm	606 lx ¹	SAHQ 44 RD
18 W	220 – 240 V, 50/60 Hz	4000 K, dimmable, through-wired	841 lx ¹	112 972 000 - 005 555 80
LED	integrated driver	A = 656 mm x 187 mm	606 lx ¹	SAHQ 44 R
18 W	220 – 240 V, 50/60 Hz	4000 K, dimmable, externally operated	841 lx ¹	113 129 000 - 006 150 52
LED	integrated driver	A = 656 mm x 187 mm	606 lx ¹	SAHQ 44 R
18 W	220 – 240 V, 50/60 Hz	5000 K, dimmable	841 lx ¹	112 972 000 - 006 882 52
LED	integrated driver	A = 656 mm x 187 mm	606 lx ¹	SAHQ 44 R
18 W	220 – 240 V, 50/60 Hz	6500 K, dimmable	841 lx ¹	112 972 000 - 006 882 56
LED	integrated driver	A = 956 mm x 187 mm	922 lx ¹	SAHQ 66
26 W	220 – 240 V, 50/60 Hz	4000 K	1 254 lx ¹	112 975 000 - 005 513 49
LED	integrated driver	A = 956 mm x 187 mm	922 lx ¹	SAHQ 66 D
26 W	220 – 240 V, 50/60 Hz	4000 K, through-wired	1 254 lx ¹	112 975 000 - 005 556 28
LED	integrated driver	A = 956 mm x 187 mm	922 lx ¹	SAHQ 66 R
26 W	220 – 240 V, 50/60 Hz	4000 K, dimmable	1 254 lx ¹	112 976 000 - 005 513 52
LED	integrated driver	A = 956 mm x 187 mm	922 lx ¹	SAHQ 66 RD
26 W	220 – 240 V, 50/60 Hz	4000 K, dimmable, through-wired	1 254 lx ¹	112 976 000 - 005 556 31
LED	integrated driver	A = 956 mm x 187 mm	922 lx ¹	SAHQ 66 R
26 W	220 – 240 V, 50/60 Hz	4000 K, dimmable, externally operated	1 254 lx ¹	113 102 000 - 006 009 08
LED	integrated driver	A = 956 mm x 187 mm	922 lx ¹	SAHQ 66 R
26 W	220 – 240 V, 50/60 Hz	5000 K, dimmable	1 254 lx ¹	112 976 000 - 006 870 81
LED	integrated driver	A = 956 mm x 187 mm	922 lx ¹	SAHQ 66 R
26 W	220 – 240 V, 50/60 Hz	6500 K, dimmable	1 254 lx ¹	112 976 000 - 006 870 84
LED	integrated driver	A = 1 256 mm x 187 mm	1 139 lx ¹	SAHQ 88
33 W	220 – 240 V, 50/60 Hz	4000 K	1 509 lx ¹	112 979 000 - 005 513 61
LED	integrated driver	A = 1 256 mm x 187 mm	1 139 lx ¹	SAHQ 88 D
33 W	220 – 240 V, 50/60 Hz	4000 K, through-wired	1 509 lx ¹	112 979 000 - 005 556 94
LED	integrated driver	A = 1 256 mm x 187 mm	1 139 lx ¹	SAHQ 88 R
33 W	220 – 240 V, 50/60 Hz	4000 K, dimmable	1 509 lx ¹	112 980 000 - 005 513 64
LED	integrated driver	A = 1 256 mm x 187 mm	1 139 lx ¹	SAHQ 88 RD
33 W	220 – 240 V, 50/60 Hz	4000 K, dimmable, through-wired	1 509 lx ¹	112 980 000 - 005 556 97
LED	integrated driver	A = 1 256 mm x 187 mm	1 139 lx ¹	SAHQ 88 R
33 W	220 – 240 V, 50/60 Hz	4000 K, dimmable, externally operated	1 509 lx ¹	113 141 000 - 006 150 59
LED	integrated driver	A = 1 256 mm x 187 mm	1 139 lx ¹	SAHQ 88 R
33 W	220 – 240 V, 50/60 Hz	5000 K, dimmable	1 509 lx ¹	112 980 000 - 006 870 95
LED	integrated driver	A = 1 256 mm x 187 mm	1 139 lx ¹	SAHQ 88 R
33 W	220 – 240 V, 50/60 Hz	6500 K, dimmable	1 509 lx ¹	112 980 000 - 006 871 00
T5	integrated electronic ballast	A = 656 mm x 187 mm	499 lx ¹	SAH 124 R
1 x 24 W	220 – 240 V, 50/60 Hz	4000 K, dimmable	685 lx ¹	112 970 000 - 005 558 14
T5	integrated electronic ballast	A = 656 mm x 187 mm	499 lx ¹	SAH 124 RD
1 x 24 W	220 – 240 V, 50/60 Hz	4000 K, dimmable, through-wired	685 lx ¹	112 970 000 - 005 558 20
T5	integrated electronic ballast	A = 956 mm x 187 mm	915 lx ¹	SAH 139 R
1 x 39 W	220 – 240 V, 50/60 Hz	4000 K, dimmable	1 229 lx ¹	112 974 000 - 005 561 46
T5	integrated electronic ballast	A = 956 mm x 187 mm	915 lx ¹	SAH 139 RD
1 x 39 W	220 – 240 V, 50/60 Hz	4000 K, dimmable, through-wired	1 229 lx ¹	112 976 000 - 005 561 52
T5	integrated electronic ballast	A = 1 256 mm x 187 mm	1 270 lx ¹	SAH 154 R
1 x 54 W	220 – 240 V, 50/60 Hz	4000 K, dimmable	1 709 lx ¹	112 978 000 - 005 561 86
T5	integrated electronic ballast	A = 1 256 mm x 187 mm	1 270 lx ¹	SAH 154 RD
1 x 54 W	220 – 240 V, 50/60 Hz	4000 K, dimmable, through-wired	1 709 lx ¹	112 978 000 - 005 561 92

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

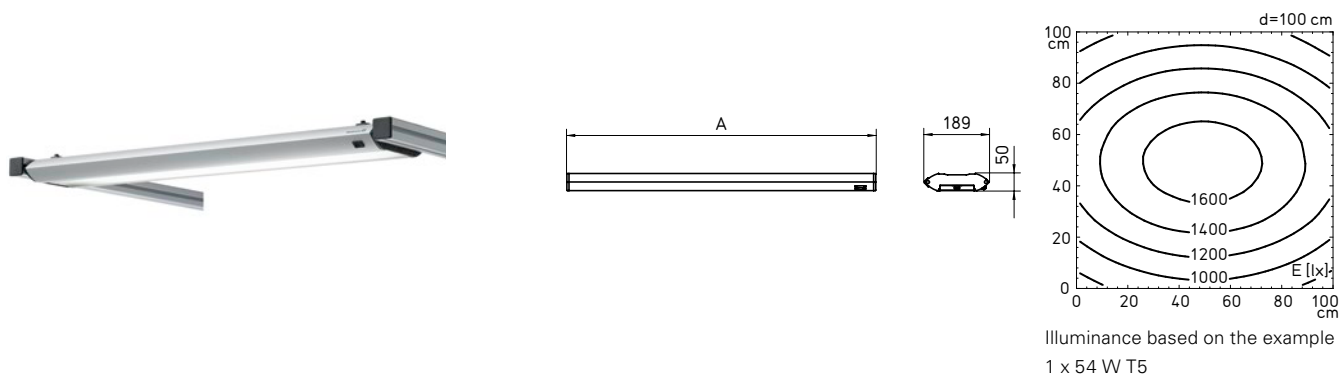


TAMEO FITS PRECISELY WHERE IT NEEDS TO



TAMEO is available in special variants in three lengths for dimensionally accurate integration of lighting between the extension arms. Through-wiring facilitates connection to daisy-chained workstations.

- Available with maintenance-free LED technology or energy-efficient fluorescent lamp technology
- Extremely homogeneous, glare-free and flicker-free light
- Light exit with conical prismatic structure for perfect glare-freeness
- Continuously dimmable (variants)
- Various lengths for different table widths and lighting needs
- Robust aluminium housing
- Closed construction protects the inside of the luminaire and keeps the work surface clean
- Integrated T-slots
- Luminaires for daisy chaining



TAMETO at a glance

- LED technology or fluorescent lamp technology
- Colour temperature neutral white 4000 K
- Colour rendering Ra > 80
- Glare-free thanks to conical prismatic screen (CDP)
- Housing made of colourless anodised aluminium and black plastic
- PMMA screen
- Mounting by means of mounting angle brackets or T-slots (8 mm)
- Switch for On/Off or button for additional dimming
- Degree of protection IP20; protection class I
- Supplied with Wieland GST18i3 connector/socket
- Cable for connecting several luminaires as accessory

Assembly workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED	integrated driver	A = 599 mm x 189 mm	606 lx ¹	SAHQ 44 D
18 W	220 – 240 V, 50/60 Hz	through-wired	841 lx ¹	113 034 000 - 005 776 11
LED	integrated driver	A = 599 mm x 189 mm	606 lx ¹	SAHQ 44 RD
18 W	220 – 240 V, 50/60 Hz	dimmbable, through-wired	841 lx ¹	113 035 000 - 005 776 14
LED	integrated driver	A = 899 mm x 189 mm	922 lx ¹	SAHQ 66 D
26 W	220 – 240 V, 50/60 Hz	through-wired	1 254 lx ¹	113 036 000 - 005 776 17
LED	integrated driver	A = 899 mm x 189 mm	922 lx ¹	SAHQ 66 RD
26 W	220 – 240 V, 50/60 Hz	dimmbable, through-wired	1 254 lx ¹	113 037 000 - 005 776 20
LED	integrated driver	A = 1 199 mm x 189 mm	1 139 lx ¹	SAHQ 88 D
33 W	220 – 240 V, 50/60 Hz	through-wired	1 509 lx ¹	113 038 000 - 005 776 23
LED	integrated driver	A = 1 199 mm x 189 mm	1 139 lx ¹	SAHQ 88 RD
33 W	220 – 240 V, 50/60 Hz	dimmbable, through-wired	1 509 lx ¹	113 039 000 - 005 776 26
T5	integrated electronic ballast	A = 599 mm x 189 mm	499 lx ¹	SAH 124 RD
1 x 24 W	220 – 240 V, 50/60 Hz	dimmbable, through-wired	685 lx ¹	113 030 000 - 005 775 99
T5	integrated electronic ballast	A = 899 mm x 189 mm	915 lx ¹	SAH 139 RD
1 x 39 W	220 – 240 V, 50/60 Hz	dimmbable, through-wired	1 229 lx ¹	113 031 000 - 005 776 02
T5	integrated electronic ballast	A = 1 199 mm x 189 mm	1 270 lx ¹	SAH 154 RD
1 x 54 W	220 – 240 V, 50/60 Hz	dimmbable, through-wired	1 709 lx ¹	113 033 000 - 005 776 08

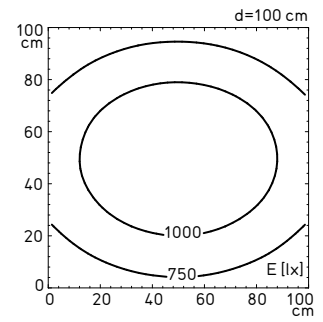
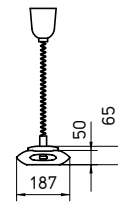
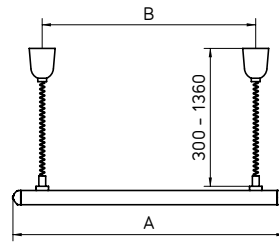
* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



TAMETO THE RIGHT SETTING TO WORK ERGONOMICALLY

TAMETO with suspended mounting is the first choice when a continuously height-adjustable workplace-system luminaire is required. TAMETO is mounted on the top crossbeam of the system workplace by means of a counterweight pendant. Depending on individual lighting needs and the visual task, it can be set to the optimum height. Its handling is especially easy, and the variable-length spiral cable ensures a tidy appearance.

- Available with maintenance-free LED technology or energy-efficient fluorescent lamp technology
- Extremely homogeneous, glare-free and flicker-free light
- Light exit with conical prismatic structure for perfect glare-free lighting
- Continuously dimmable (variants)
- Two lengths for different table widths and lighting needs
- Robust aluminium housing
- Closed construction protects the inside of the luminaire and keeps the work surface clean
- Also available in ESD design



Illuminance based on the example
1 x 39 W T5 without ESD design

TAMETO at a glance

- LED technology or fluorescent lamp technology
- Colour temperature neutral white 4000 K
- Colour rendering $R_a > 80$
- Glare-free thanks to conical prismatic screen (CDP)
- Housing made of colourless anodised aluminium or aluminium painted black and black plastic
- PMMA screen
- Mounted by means of a counterweight pendant with an extension length of 0.3 – 1.36 m
- Switch for On/Off or button for additional dimming
- Degree of protection IP20; protection class I
- Supplied without connecting cable (connection in ceiling rose by means of a connection terminal)

Assembly workplace

Workshop workplace

Inspection workplace

Laboratory workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED	integrated driver	A = 956 mm x 187 mm, B = 750mm	922 lx ¹	SAHZQ 66
26 W	220 – 240 V, 50/60 Hz	–	1254 lx ¹	112 983 000 - 005 513 73
LED	integrated driver	A = 956 mm x 187 mm, B = 750mm	922 lx ¹	SAHZQ 66 R
26 W	220 – 240 V, 50/60 Hz	dimmbable	1254 lx ¹	112 984 000 - 005 513 77
LED	integrated driver	A = 1256 mm x 187 mm, B = 1050 mm	1139 lx ¹	SAHZQ 88
33 W	220 – 240 V, 50/60 Hz	–	1509 lx ¹	112 987 000 - 005 513 86
LED	integrated driver	A = 1256 mm x 187 mm, B = 1050 mm	1139 lx ¹	SAHZQ 88 R
33 W	220 – 240 V, 50/60 Hz	dimmbable	1509 lx ¹	112 988 000 - 005 513 89
T5	integrated electronic ballast	A = 956 mm x 187 mm, B = 750mm	915 lx ¹	SAHZ 139 R
1 x 39 W	220 – 240 V, 50/60 Hz	dimmbable	1229 lx ¹	112 982 000 - 005 513 70
T5	integrated electronic ballast	A = 1256 mm x 187 mm, B = 1050 mm	1270 lx ¹	SAHZ 154 R
1 x 54 W	220 – 240 V, 50/60 Hz	dimmbable	1709 lx ¹	112 986 000 - 005 513 83

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

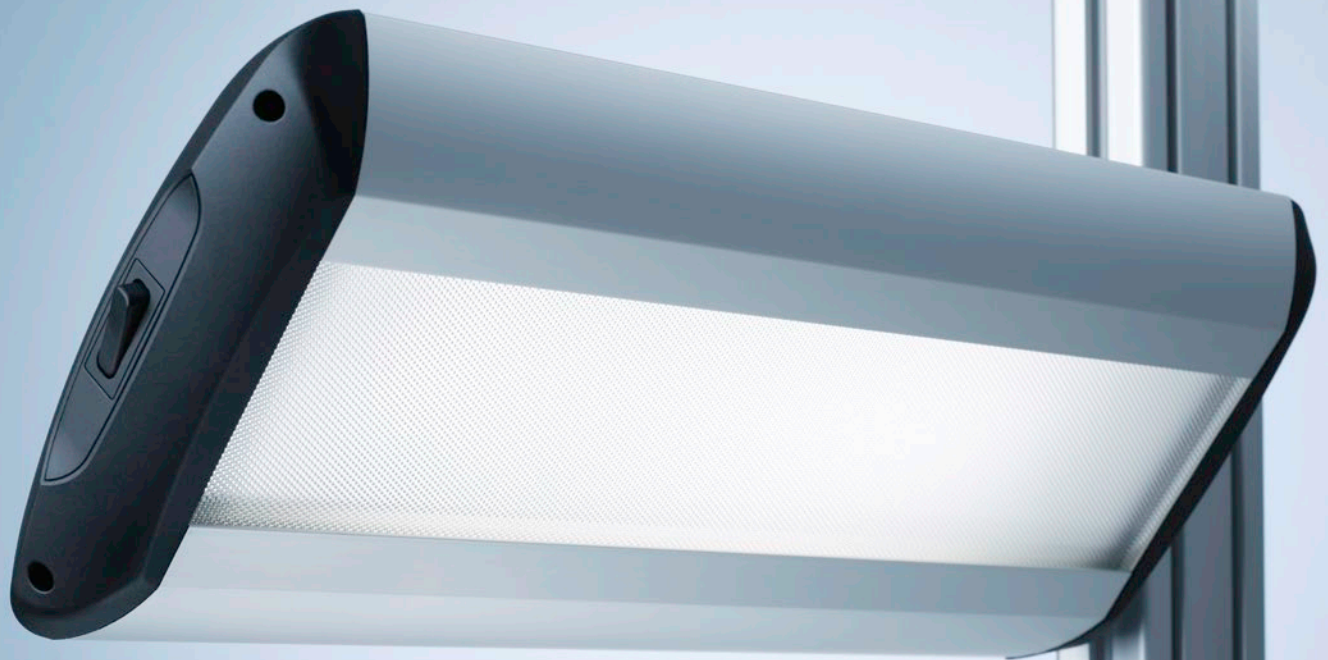


TAMETO in ESD design

Electronics workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED	integrated driver	A = 956 mm x 187 mm, B = 750mm	806 lx ¹	SAHZQ 66 A
26 W	220 – 240 V, 50/60 Hz	–	1092 lx ¹	113 026 000 - 005 746 37
T5	integrated electronic ballast	A = 956 mm x 187 mm, B = 750mm	814 lx ¹	SAHZ 139 A
1 x 39 W	220 – 240 V, 50/60 Hz	–	1084 lx ¹	113 027 000 - 005 746 40

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

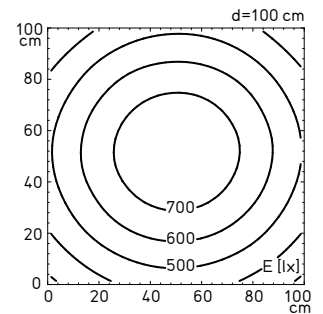
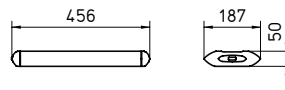


TAMETO

AN EXTRA HELPING OF LIGHT

TAMETO – this laterally mounted luminaire produces completely shadow-free lighting or an intended shadow effect, as desired. This can, for example, make fine surface irregularities visible. Of course, lateral luminaires are also suitable when more light is needed for certain visual tasks. TAMETO luminaires are mounted on the vertical pillars of the system workplace at the desired height and the desired beam angle using the supplied mounting angle brackets.

- Maintenance-free LED technology
- Extremely homogeneous, glare-free and flicker-free light
- Light exit with conical prismatic structure for perfect glare-free lighting
- Robust aluminium housing
- Closed construction protects the inside of the luminaire and keeps the work surface clean
- Also available in ESD design



Illuminance based on the example
18 W without ESD design

TAMETO at a glance

- LED technology
- Colour temperature neutral white 4000 K
- Colour rendering Ra > 80
- Glare-free thanks to conical prismatic screen (CDP)
- Housing made of colourless anodised aluminium or aluminium painted black and black plastic
- PMMA screen
- Mounting via mounting angle brackets
- Switch for On/Off
- Degree of protection IP20, protection class I
- Supplied with approx. 3 m connecting cable and plug, type CEE 7/7 (grounded plug)
- Additional angle bracket as an accessory for assembly on the rotating extension arm

Assembly workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 18 W	integrated driver 220 – 240 V, 50/60 Hz	456 mm x 187 mm –	572 lx ¹ 778 lx ¹	SAHKQ 60 112 989 000 - 005 513 92

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



TAMETO in ESD design

Electronics workplace

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 18 W	integrated driver 220 – 240 V, 50/60 Hz	456 mm x 187 mm –	496 lx ¹ 675 lx ¹	SAHKQ 60 A 113 028 000 - 005 750 17

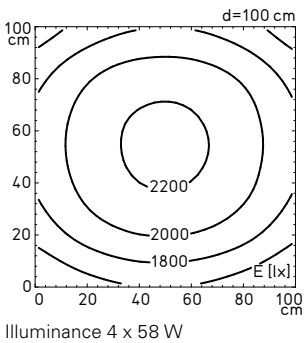
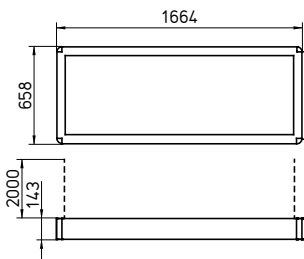
* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



ALE BRILLIANT INSPECTION LIGHT FOR EXCELLENT RESULTS

ALE is the standardised inspection light for production and quality assurance, when premium colour fidelity and surface quality are key. ALE ensures that visual inspections can be carried out without undesirable metamerism effects or other disruptive influences.

- Energy-efficient fluorescent lamp technology
- Area light free of shadows and glare caused by reflection
- Optimum colour rendering in the daylight spectrum
- Light exit with conical prismatic structure for perfect glare-free lighting
- Error-free inspection of high-gloss surfaces



ALE at a glance

- Fluorescent lamp technology
 - Colour temperature daylight white 5300 K
 - Colour rendering Ra > 90
 - Glare-free thanks to structured screen
 - Housing made sheet steel painted grey
- PMMA screen
 - Chain-mounted
 - Integrated switch and operating hours counter
 - Degree of protection IP20; protection class I
 - Supplied with approx. 5 m connecting cable and free stranded wires

Assembly workplace		Inspection workplace		
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
T8 4 x 58 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	– –	1941 lx ¹ 2248 lx ¹	ALE 458 101 442 000 - 000 890 47

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



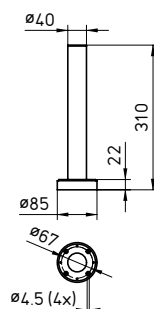
SINEO A STRONG SIGNAL

SINEO Due to the slim, almost transparent light design, the signals appear to float. To this end, each individual signal level is lit with particular homogeneity and intensity thanks to the light guide technology. A low pedestal height emphasises the elegant design. Thus, there is nothing to prevent innovative signalling on manual or semi-automated workplace and on Kanban systems.

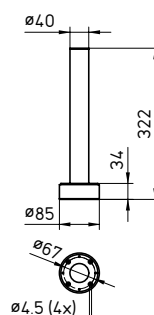
- Maintenance-free LED technology
- Adjustable colours and fluorescent images through RGB LEDs
- Three or four signal levels
- Intense light colours thanks to innovative light guide technology
- Variants with IO link communication system
- Versions with acoustic signal generator
- Robust plastic housing
- Prevents accumulation of dirt
- Customising by means of design case



SINEO without acoustic signal generator



SINEO with acoustic signal generator

**SINEO at a glance**

- LED technology
- RGB LEDs
- Light deflection by light guide technology
- Luminaire body made of PC
- Screw-mounted
- IO link (variants) with EVS (electronic visibility improvement)
- Degree of protection IP65, protection class III
- Supplied with approx. 0.4 m connecting cable and M12 plug connector, A-coded (lateral cable outlet)
- M12 connection technology and design cases as accessories

Assembly workplace

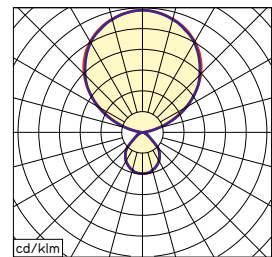
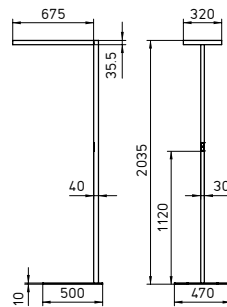
Signal levels Power	Fluorescent image Connected load	Special feature	Model Order no.
3 7.5 W	continuous/blinking light 22 – 26 VDC	–	MNAFL 24 S H20 011 000 - 006 233 97
4 9.0 W	continuous/blinking light 22 – 26 VDC	–	MNAFL 32 S H20 013 000 - 006 234 04
4 9.0 W	continuous/blinking/flash light, EVS 22 – 26 VDC	IO link	MNAFL 32 S H20 015 000 - 006 234 10
3 8.5 W	continuous/blinking light 22 – 26 VDC	with acoustic signal	MNAFL 24 S H20 012 000 - 006 234 01
4 10.0 W	continuous/blinking light 22 – 26 VDC	with acoustic signal	MNAFL 32 S H20 014 000 - 006 234 07
4 10.0 W	continuous/blinking/flash light, EVS 22 – 26 VDC	IO link, with acoustic signal	MNAFL 32 S H20 016 000 - 006 234 13

LAVIGO FOR THE FUTURE OF OFFICE LIGHTING



As free-standing luminaire, LAVIGO meets the requirements of modern office lighting. High-quality design and intelligent technology bring high light quality directly to the workplace. The direct and indirect components of light can be dimmed separately and allow individual tuning of the lighting quality.

- Optimised ratio of direct to indirect light for standard-compliant lighting
- Easy-to-reach, multifunctional operating element
- Closed luminaire body with cover



LAVIGO at a glance

- Luminaire light output approx. 115 lm/W
- Light distribution (direct/indirect) approx. 20 %/80 %
- Luminance < 2500 cd/m²
- UGR < 16
- Colour rendering Ra > 80
- Glare-free thanks to conical prismatic screen
- Connected loads 220 – 240 V; 50/60 Hz
- Energy efficiency class A+
- Degree of protection IP 20
- Weight (net) approx. 18.4 kg
- Mains connection approx. 3 m lead with mains plug



Office workplace

Fitted with Power	Technology Connected load	Model Light colour	Order no. white Order no. silver
8600 lm approx. 75 W	PULSE PIR 220 – 240 V, 50/60 Hz	DPS 288/R neutral white 4000 K	121 710 000 - 006 307 41 121 710 000 - 006 357 51

MACHINE LIGHTING



Machine tools



MACH LED PLUS
74



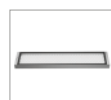
MACH LED PLUS
76



MACH LED PRO
80



FLAT LED
82



LUMATRIS
88



FLAT TEC
92



SPOT LED
94



HEAD LED
96



MACH LED PRO
100



FLAT LED
102



FLAT TEC
104



SPOT LED
106



RL 70 LE
114



RL 70 E
118



RL 70 H
122



AWD
124



ROCIA
126



ROCIA
128



ROCIA
130



ABL
132



ROCIA
134



ABL
136



SINEO
138



Printing machines



SLIM LED
84



ONE LED
98



RL 25 LE
110



RL 40 LE
112



RL 70 E
118



RL 70 H
122



SINEO
138



Textile machines

MACH LED PLUS
74MACH LED PLUS
76MACH LED PRO
80FLAT LED
82SLIM LED
84SPOT LED
94HEAD LED
96ONE LED
98RL 25 LE
110RL 40 LE
112RL 70 LE
114RL 70 E
118RL 70 H
122ROCIA
126ROCIA
128ROCIA
130ROCIA
134SINEO
138

Woodworking machines

MACH LED PLUS
74MACH LED PLUS
76MACH LED PRO
80FLAT LED
82SLIM LED
84SPOT LED
94HEAD LED
96MACH LED PRO
100FLAT LED
102SPOT LED
106RL 25 LE
110RL 40 LE
112RL 70 LE
114RL 70 E
118RL 70 H
122ROCIA
126ROCIA
128ROCIA
130ROCIA
134SINEO
138

Packaging machines

MKEL
108RL 25 LE
110RL 40 LE
112SINEO
138

Track laying machines

RL 40 LE
112RL 70 LE
116

Production facilities

MACH LED PLUS
74MACH LED PLUS
76MACH LED PRO
80FLAT LED
82SLIM LED
84ONE LED
98RL 25 LE
110RL 40 LE
112RL 70 LE
114RL 70 E
118RL 70 H
122SINEO
138



MACH LED PLUS is the quintessence of hundreds of thousands of Waldmann machine luminaires that are being used day by day in the entire world in rough environments: They have provided the specifications for the highly developed and robust MACH LED PLUS.

The efficient and maintenance-free LED technology, clever lighting technology and extremely robust housing in the attractive design make MACH LED PLUS the first choice for lighting engineering of machines and production facilities.

Different lengths and output levels enable standard-compliant lighting conditions for any lighting and room situation. Flexible adaptation options, M12 connectors and through-wiring (versions for electrical daisy chaining of several luminaires) ensure a fast and easy integration.

If required, all important components can be replaced. This makes MACH LED PLUS one of the most sustainable machine luminaires on the market.

MACH LED PLUS

FOR THE ADDED PLUS OF POSSIBILITIES



For use in a wide range of areas, the MACH LED PLUS is available in two basic versions with a large number of variants.

In its extremely compact form, the MACH LED PLUS.forty, it combines the latest LED technology with the latest innovations from the area of housing technology. It can be integrated easily even if there is little space in the working area.

As MACH LED PLUS.seventy, it is compatible with classic tube luminaires in form, dimensions and connection options. This makes it the perfect solution for replacement of older luminaires. But it is also suitable for a wide-area illumination when carrying out initial equipping of machines.



MACH LED PLUS.forty

MASTER CLASS IN SLIM DESIGN

Thanks to many different kinds of lighting characteristics, MACH LED PLUS.forty supports a variety of visual tasks, even if sometimes space is limited.

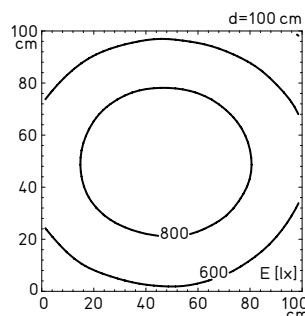
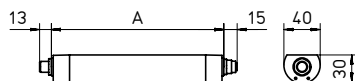
With an outer diameter of 40 mm and a minimum length of 190 mm, MACH LED PLUS.forty enables high illuminance even in the most restricted space. Its output density is very impressive: Just a single luminaire of the shortest version enables standard-compliant illumination of smaller working spaces.

The MACH LED PLUS.forty reflects state-of-the-art technology: the latest LED technology, specially developed optics system and the most modern housing concept by the Engineer of Light. MACH LED PLUS.forty: high-tech light for high-tech machines.

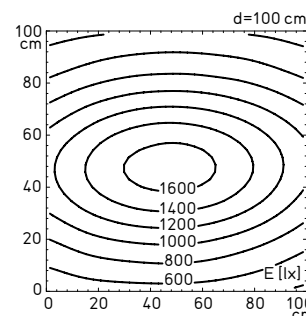
- Maintenance-free LED technology
- Ultra low-glare, homogeneous light with soft transitions
- With narrow- or wide-beam illumination characteristic, as desired
- Outer diameter of 40 mm for integration in case of restricted space
- Robust aluminium housing with solid safety glass screen
- Side parts made of high-performance plastic
- Potted M12 connector
- Viton® seal for high degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Sensitive to shocks and vibrations
- Ideal for high mechanical and thermal stress
- Direct connection to machine voltage
- Luminaires for daisy chaining



MACH LED PLUS.forty with through-wiring



Illuminance based on the example of MLAL 57 S with 90° reflector



Illuminance based on the example of MLAL 57 S with 40° optics

MACH LED PLUS.forty at a glance

- LED technology
- Colour temperature neutral white 5000 K
- Colour rendering Ra > 80
- Beam angle 40° (optics) or 90° (reflector)
- Housing made of colourless anodised aluminium and black side parts made of high-performance plastic
- 4 mm thick safety glass
- Mounted by means of various brackets from the accessories
- Maximum allowed ambient temperature $T_{a_{max}}$ 50° C
- LED service life (L70) > 60000 h
- Vibrations-resistant at 10 to 55 Hz (amplitude 0.35 mm), shock-proof up to 50 g
- Degree of protection IP67, protection class III
- Connection via M12 connector, A-coded
- Various brackets, M12 connection technology and operating device as accessories for connection to the mains voltage



Machine tools



Textile machines



Woodworking machines



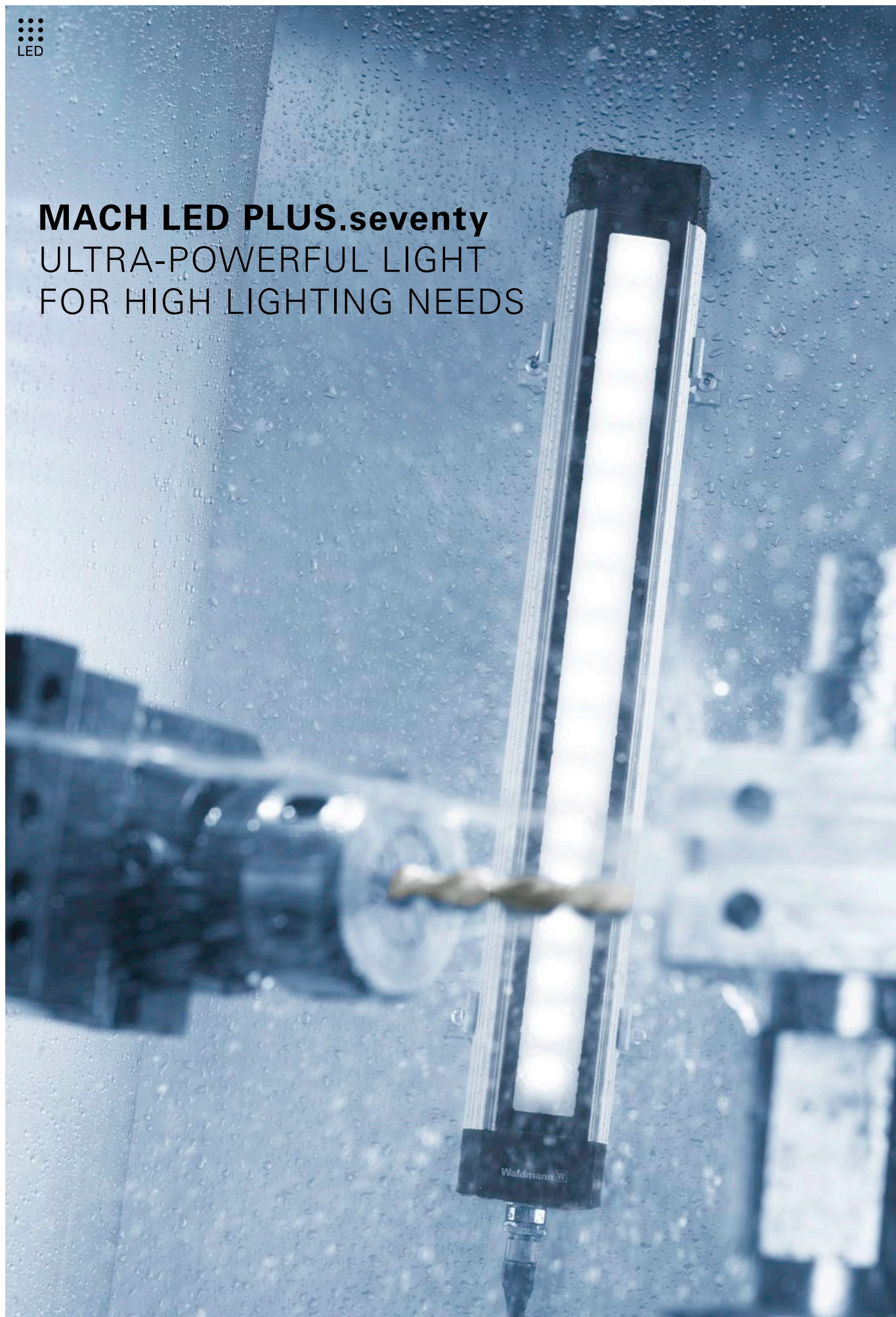
Production facilities

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED	–	A = 190 mm x 40 mm	156 lx ¹	MLAL 12 S
5.0 W	20 – 28 VDC	90° reflector	216 lx ¹	113 161 000 - 006 625 75
LED	–	A = 190 mm x 40 mm	223 lx ¹	MLAL 12 S
5.0 W	20 – 28 VDC	40° optics	393 lx ¹	113 161 000 - 006 600 33
LED	–	A = 190 mm x 40 mm	156 lx ¹	MLAL 12 SD
5.0 W	20 – 28 VDC	90° reflector, through-wiring	216 lx ¹	113 161 000 - 006 626 00
LED	–	A = 365 mm x 40 mm	348 lx ¹	MLAL 27 S
10.5 W	20 – 28 VDC	90° reflector	477 lx ¹	113 162 000 - 006 626 85
LED	–	A = 365 mm x 40 mm	487 lx ¹	MLAL 27 S
10.5 W	20 – 28 VDC	40° optics	846 lx ¹	113 162 000 - 006 606 81
LED	–	A = 365 mm x 40 mm	348 lx ¹	MLAL 27 SD
10.5 W	20 – 28 VDC	90° reflector, through-wiring	477 lx ¹	113 162 000 - 006 627 06
LED	–	A = 540 mm x 40 mm	541 lx ¹	MLAL 42 S
16.0 W	20 – 28 VDC	90° reflector	732 lx ¹	113 163 000 - 006 627 17
LED	–	A = 540 mm x 40 mm	746 lx ¹	MLAL 42 S
16.0 W	20 – 28 VDC	40° optics	1 270 lx ¹	113 163 000 - 006 606 84
LED	–	A = 540 mm x 40 mm	541 lx ¹	MLAL 42 SD
16.0 W	20 – 28 VDC	90° reflector, through-wiring	732 lx ¹	113 163 000 - 006 627 35
LED	–	A = 715 mm x 40 mm	718 lx ¹	MLAL 57 S
21.5 W	20 – 28 VDC	90° reflector	957 lx ¹	113 164 000 - 006 628 06
LED	–	A = 715 mm x 40 mm	1 001 lx ¹	MLAL 57 S
21.5 W	20 – 28 VDC	40° optics	1 692 lx ¹	113 164 000 - 006 606 87
LED	–	A = 715 mm x 40 mm	718 lx ¹	MLAL 57 SD
21.5 W	20 – 28 VDC	90° reflector, through-wiring	957 lx ¹	113 164 000 - 006 628 33

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



MACH LED PLUS.seventy
ULTRA-POWERFUL LIGHT
FOR HIGH LIGHTING NEEDS



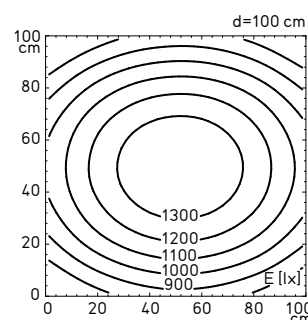
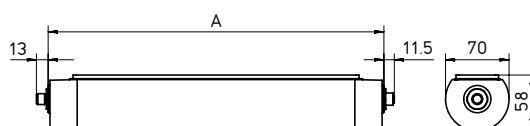
The MACH LED PLUS.seventy ensures a wide-area illumination both as a replacement for classic tube luminaires or for initial equipping of machines. With a diameter of 70 mm, long versions ranging from 370 mm to 1 070 mm and the connection option to 24V or 100/120/220 – 240V, the MACH LED PLUS.seventy is the optimum solution to convert machines and production facilities from classic tube luminaires to modern LED lighting technology. The versions fitted with Eco components are often sufficient to ensure comparable illumination.

Thanks to their long versions and power fitting with twice the number of LEDs, the MACH LED PLUS.seventy is also particularly suitable for initial equipment, especially for larger machines that have higher lighting demands.

- Maintenance-free LED technology
- Ultra low-glare, homogeneous light with soft transitions
- Outer diameter of 70 mm for easy replacement of traditional tube luminaires
- Robust aluminium housing with solid safety glass screen
- Side parts made of high-performance plastic
- Potted M12 connector
- Viton® seal for high degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Sensitive to shocks and vibrations
- Ideal for high mechanical and thermal stress
- Connection to machine or mains voltage
- Luminaires for daisy chaining



MACH LED PLUS.seventy with through-wiring



Illuminance based on the example of MQAL 84 S

MACH LED PLUS.seventy at a glance

- LED technology
- Colour temperature neutral white 5000 K
- Colour rendering Ra > 80
- Glare-free with Light Forming Technology
- Housing made of colourless anodised aluminium and black side parts made of high-performance plastic
- 4 mm thick safety glass
- Mounted by means of various brackets from the accessories
- Maximum allowed ambient temperature $T_{a_{max}}$:
Eco: 50 °C (24V) or 45 °C (100/120/220 – 240 V),
Power: 45 °C (24 V) or 40 °C (100/120/220 – 240 V)
- LED service life (L70) > 60 000 h
- Vibrations-resistant at 10 to 55 Hz (amplitude 0.35 mm), shock-proof up to 50 g
- Degree of protection IP67, protection class I (100/120/220 – 240 V) or protection class III (24 V)
- Connection via M12 plug connector, S-coded (100/120/220 – 240 V) or A-coded (24 V)
- Various brackets and M12 connection technology as accessories



Machine tools



Textile machines



Woodworking machines



Production facilities

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}	Model Order no.
LED	–	A = 370 mm x 70 mm	184 lx ¹	MQAL 12 S
7 W	18 – 30 VDC	Eco	241 lx ¹	113 045 000 - 005 807 02
LED	–	A = 370 mm x 70 mm	184 lx ¹	MQAL 12 SD
7 W	18 – 30 VDC	Eco, through-wired	241 lx ¹	113 046 000 - 005 806 96
LED	–	A = 370 mm x 70 mm	340 lx ¹	MQAL 24 S
12 W	18 – 30 VDC	Power	443 lx ¹	113 047 000 - 005 806 93
LED	–	A = 370 mm x 70 mm	340 lx ¹	MQAL 24 SD
12 W	18 – 30 VDC	Power, through-wired	443 lx ¹	113 048 000 - 005 805 73
LED	–	A = 510 mm x 70 mm	273 lx ¹	MQAL 18 S
10 W	18 – 30 VDC	Eco	354 lx ¹	113 053 000 - 005 805 88
LED	–	A = 510 mm x 70 mm	273 lx ¹	MQAL 18 SD
10 W	18 – 30 VDC	Eco, through-wired	354 lx ¹	113 054 000 - 005 805 91
LED	–	A = 510 mm x 70 mm	506 lx ¹	MQAL 36 S
18 W	18 – 30 VDC	Power	662 lx ¹	113 055 000 - 005 805 94
LED	–	A = 510 mm x 70 mm	506 lx ¹	MQAL 36 SD
18 W	18 – 30 VDC	Power, through-wired	662 lx ¹	113 056 000 - 005 805 97
LED	–	A = 565 mm x 70 mm	273 lx ¹	MQAL 18 S
10 W	18 – 30 VDC	Eco	354 lx ¹	113 061 000 - 005 806 12
LED	–	A = 565 mm x 70 mm	273 lx ¹	MQAL 18 SD
10 W	18 – 30 VDC	Eco, through-wired	354 lx ¹	113 062 000 - 005 806 15
LED	–	A = 565 mm x 70 mm	506 lx ¹	MQAL 36 S
18 W	18 – 30 VDC	Power	662 lx ¹	113 063 000 - 005 806 18
LED	–	A = 565 mm x 70 mm	506 lx ¹	MQAL 36 SD
18 W	18 – 30 VDC	Power, through-wired	662 lx ¹	113 064 000 - 005 806 21
LED	–	A = 650 mm x 70 mm	364 lx ¹	MQAL 24 S
13 W	18 – 30 VDC	Eco	477 lx ¹	113 069 000 - 005 806 39
LED	–	A = 650 mm x 70 mm	364 lx ¹	MQAL 24 SD
13 W	18 – 30 VDC	Eco, through-wired	477 lx ¹	113 070 000 - 005 806 42
LED	–	A = 650 mm x 70 mm	657 lx ¹	MQAL 48 S
24 W	18 – 30 VDC	Power	856 lx ¹	113 071 000 - 005 806 45
LED	–	A = 650 mm x 70 mm	657 lx ¹	MQAL 48 SD
24 W	18 – 30 VDC	Power, through-wired	856 lx ¹	113 072 000 - 005 806 48
LED	–	A = 790 mm x 70 mm	444 lx ¹	MQAL 30 S
16 W	18 – 30 VDC	Eco	573 lx ¹	113 077 000 - 005 806 63
LED	–	A = 790 mm x 70 mm	444 lx ¹	MQAL 30 SD
16 W	18 – 30 VDC	Eco, through-wired	573 lx ¹	113 078 000 - 005 806 66
LED	–	A = 790 mm x 70 mm	814 lx ¹	MQAL 60 S
30 W	18 – 30 VDC	Power	1056 lx ¹	113 124 000 - 006 118 55
LED	–	A = 790 mm x 70 mm	814 lx ¹	MQAL 60 SD
30 W	18 – 30 VDC	Power, through-wired	1056 lx ¹	113 125 000 - 006 128 44
LED	–	A = 1070 mm x 70 mm	597 lx ¹	MQAL 42 S
22 W	18 – 30 VDC	Eco	756 lx ¹	113 081 000 - 005 806 75
LED	–	A = 1070 mm x 70 mm	597 lx ¹	MQAL 42 SD
22 W	18 – 30 VDC	Eco, through-wired	756 lx ¹	113 082 000 - 005 806 81
LED	–	A = 1070 mm x 70 mm	1089 lx ¹	MQAL 84 S
42 W	18 – 30 VDC	Power	1391 lx ¹	113 126 000 - 006 129 73
LED	–	A = 1070 mm x 70 mm	1089 lx ¹	MQAL 84 SD
42 W	18 – 30 VDC	Power, through-wired	1391 lx ¹	113 122 000 - 006 098 07

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



Machine tools



Textile machines



Woodworking machines



Production facilities

Fitted with Power	Operating device Connected load	Dimensions Special feature	E _m E _{max} *	Model Order no.
LED 9 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 370 mm x 70 mm Eco	184 lx ¹ 241 lx ¹	MQAL 12 N 113 049 000 - 005 805 76
LED 9 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 370 mm x 70 mm Eco, through-wired	184 lx ¹ 241 lx ¹	MQAL 12 ND 113 050 000 - 005 805 79
LED 15 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 370 mm x 70 mm Power	340 lx ¹ 443 lx ¹	MQAL 24 N 113 051 000 - 005 805 82
LED 15 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 370 mm x 70 mm Power, through-wired	340 lx ¹ 443 lx ¹	MQAL 24 ND 113 052 000 - 005 805 85
LED 12 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 510 mm x 70 mm Eco	273 lx ¹ 354 lx ¹	MQAL 18 N 113 057 000 - 005 806 00
LED 12 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 510 mm x 70 mm Eco, through-wired	273 lx ¹ 354 lx ¹	MQAL 18 ND 113 058 000 - 005 806 03
LED 21 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 510 mm x 70 mm Power	506 lx ¹ 662 lx ¹	MQAL 36 N 113 059 000 - 005 806 06
LED 21 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 510 mm x 70 mm Power, through-wired	506 lx ¹ 662 lx ¹	MQAL 36 ND 113 060 000 - 005 806 09
LED 12 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 565 mm x 70 mm Eco	273 lx ¹ 354 lx ¹	MQAL 18 N 113 065 000 - 005 806 24
LED 12 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 565 mm x 70 mm Eco, through-wired	273 lx ¹ 354 lx ¹	MQAL 18 ND 113 066 000 - 005 806 30
LED 21 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 565 mm x 70 mm Power	506 lx ¹ 662 lx ¹	MQAL 36 N 113 067 000 - 005 806 33
LED 21 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 565 mm x 70 mm Power, through-wired	506 lx ¹ 662 lx ¹	MQAL 36 ND 113 068 000 - 005 806 36
LED 15 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 650 mm x 70 mm Eco	364 lx ¹ 477 lx ¹	MQAL 24 N 113 073 000 - 005 806 51
LED 15 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 650 mm x 70 mm Eco, through-wired	364 lx ¹ 477 lx ¹	MQAL 24 ND 113 074 000 - 005 806 54
LED 27 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 650 mm x 70 mm Power	657 lx ¹ 856 lx ¹	MQAL 48 N 113 075 000 - 005 806 57
LED 27 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 650 mm x 70 mm Power, through-wired	657 lx ¹ 856 lx ¹	MQAL 48 ND 113 076 000 - 005 806 60
LED 20 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 790 mm x 70 mm Eco	444 lx ¹ 573 lx ¹	MQAL 30 N 113 079 000 - 005 806 69
LED 20 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 790 mm x 70 mm Eco, through-wired	444 lx ¹ 573 lx ¹	MQAL 30 ND 113 080 000 - 005 806 72
LED 26 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 1070 mm x 70 mm Eco	597 lx ¹ 756 lx ¹	MQAL 42 N 113 083 000 - 005 806 84
LED 26 W	integrated transformer 100/120/220 – 240 V, 50/60 Hz	A = 1070 mm x 70 mm Eco, through-wired	597 lx ¹ 756 lx ¹	MQAL 42 ND 113 084 000 - 005 806 90

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



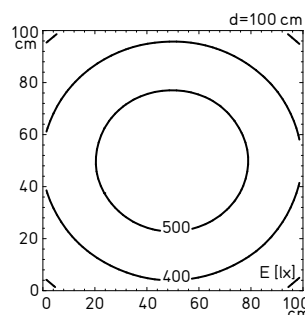
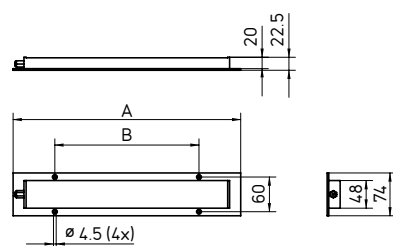
MACH LED PRO

SURPRISINGLY STRONG,
SURPRISINGLY FLAT

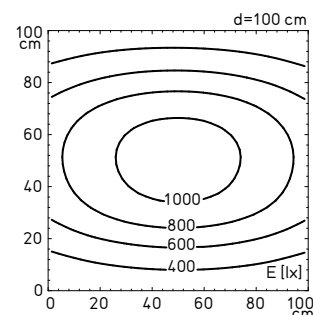


MACH LED PRO is an extremely flat machine luminaire family with several length variants. Waldmann has developed this optimum solution for situations with a lack of positioning options for lighting in machines and production facilities. MACH LED PRO is ideal for many lighting tasks – whether you require light dispersed over a large area or focused lighting.

- Maintenance-free LED technology
- Strong high-power LEDs for maximum light
- With narrow- or wide-beam illumination characteristic, as desired
- Robust aluminium housing with solid safety glass screen
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Ideal for high mechanical and thermal stress
- Direct connection to machine voltage



Illuminance base of the example
of 24 W without optics (95°)



Illuminance based on the example
of 24 W with 30° optics

MACH LED PRO at a glance

- LED technology
- Colour temperature neutral white 5000 K
- Colour rendering Ra > 80
- Beam angle 30° (optics) or 95° (without optics)
- Housing made of colourless anodised aluminium
- 4 mm thick safety glass
- Screw-mounted
- Maximum allowed ambient temperature $T_{a_{max}}$ 40° C
- LED service life (L70) > 50000 h
- Degree of protection IP67, protection class III
- Supplied with approx. 3 m connecting cable and free stranded wires
- Operating device as accessories for connection to the mains voltage



Machine tools



Textile machines



Woodworking machines



Production facilities

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}	Model Order no.
LED 6 W	– 20 – 28 VDC	A = 220 mm x 74 mm, B = 125 mm (1x) –	113 lx ¹ 147 lx ¹	MUAL 1 S 112 571 022 - 000 821 86
LED 6 W	– 20 – 28 VDC	A = 220 mm x 74 mm, B = 125 mm (1x) 30° optics	200 lx ¹ 316 lx ¹	MUAL 1 S 112 571 020 - 000 790 42
LED 12 W	– 20 – 28 VDC	A = 395 mm x 74 mm, B = 250 mm (1x) –	230 lx ¹ 296 lx ¹	MUAL 2 S 112 571 026 - 000 825 11
LED 12 W	– 20 – 28 VDC	A = 395 mm x 74 mm, B = 250 mm (1x) 30° optics	368 lx ¹ 600 lx ¹	MUAL 2 S 112 571 024 - 000 824 56
LED 18 W	– 20 – 28 VDC	A = 570 mm x 74 mm, B = 200 mm (2x) –	334 lx ¹ 425 lx ¹	MUAL 3 S 112 571 032 - 000 828 20
LED 18 W	– 20 – 28 VDC	A = 570 mm x 74 mm, B = 200 mm (2x) 30° optics	564 lx ¹ 895 lx ¹	MUAL 3 S 112 571 030 - 000 827 88
LED 24 W	– 20 – 28 VDC	A = 745 mm x 74 mm, B = 250 mm (2x) –	445 lx ¹ 564 lx ¹	MUAL 4 S 112 571 036 - 000 828 46
LED 24 W	– 20 – 28 VDC	A = 745 mm x 74 mm, B = 250 mm (2x) 30° optics	685 lx ¹ 1 091 lx ¹	MUAL 4 S 112 571 034 - 000 828 44

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

Also available as integrated machine luminaires



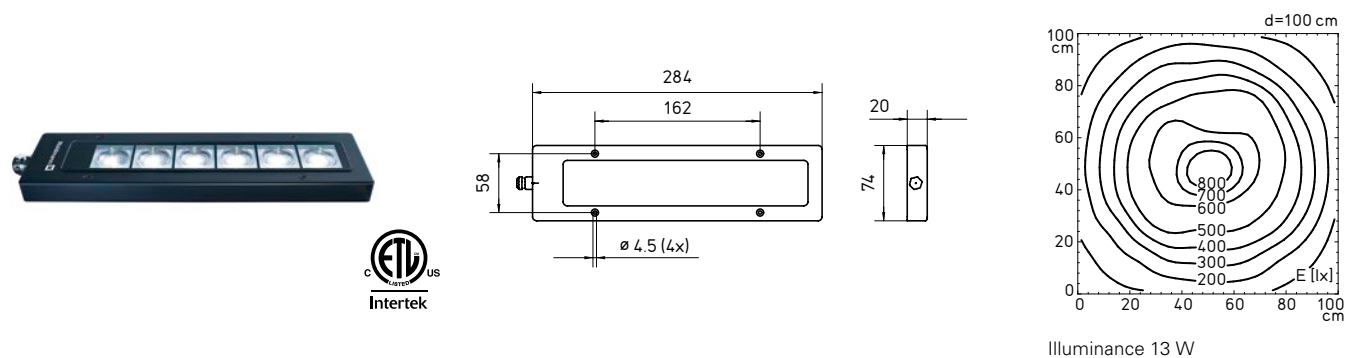
FLAT LED

STROKE OF GENIUS IN A FLAT DESIGN







FLAT LED is a convincingly flat solution – for cases where it is not possible to integrate the luminaire into the machine wall. To avoid significantly changing the interference contour, even in compact workrooms, or in blind spots of production facilities, the luminaire compresses the maximum luminous power to the flattest possible space, using a combination of 6 high-power LEDs and Waldmann's special optics technology, which evenly disperses the beam over the entire area.

- Maintenance-free LED technology
- Strong high-power LEDs for maximum light
- Robust aluminium housing with solid safety glass screen
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Ideal for high mechanical and thermal stress
- Direct connection to machine voltage




FLAT LED at a glance

- LED technology
- Colour temperature daylight white 6500 K
- Colour rendering Ra > 65
- Beam angle 60°
- Housing made of black anodised aluminium
- 4 mm thick safety glass
- Screw-mounted
- Maximum allowed ambient temperature $T_{a_{max}}$ 40° C
- LED service life (L70) > 50000 h
- Degree of protection IP67 and IPX9K, protection class III
- Supplied with approx. 3 m connecting cable and free stranded wires
- Luminaire bracket as accessory to adjust the luminaire and operating unit for connection to the mains voltage

 Machine tools	 Textile machines
 Woodworking machines	 Production facilities

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 13 W	– 10 – 40 VDC	284 mm x 74 mm –	347 lx ¹ 869 lx ¹	MYAL 6 S 112 560 000 - 000 030 69

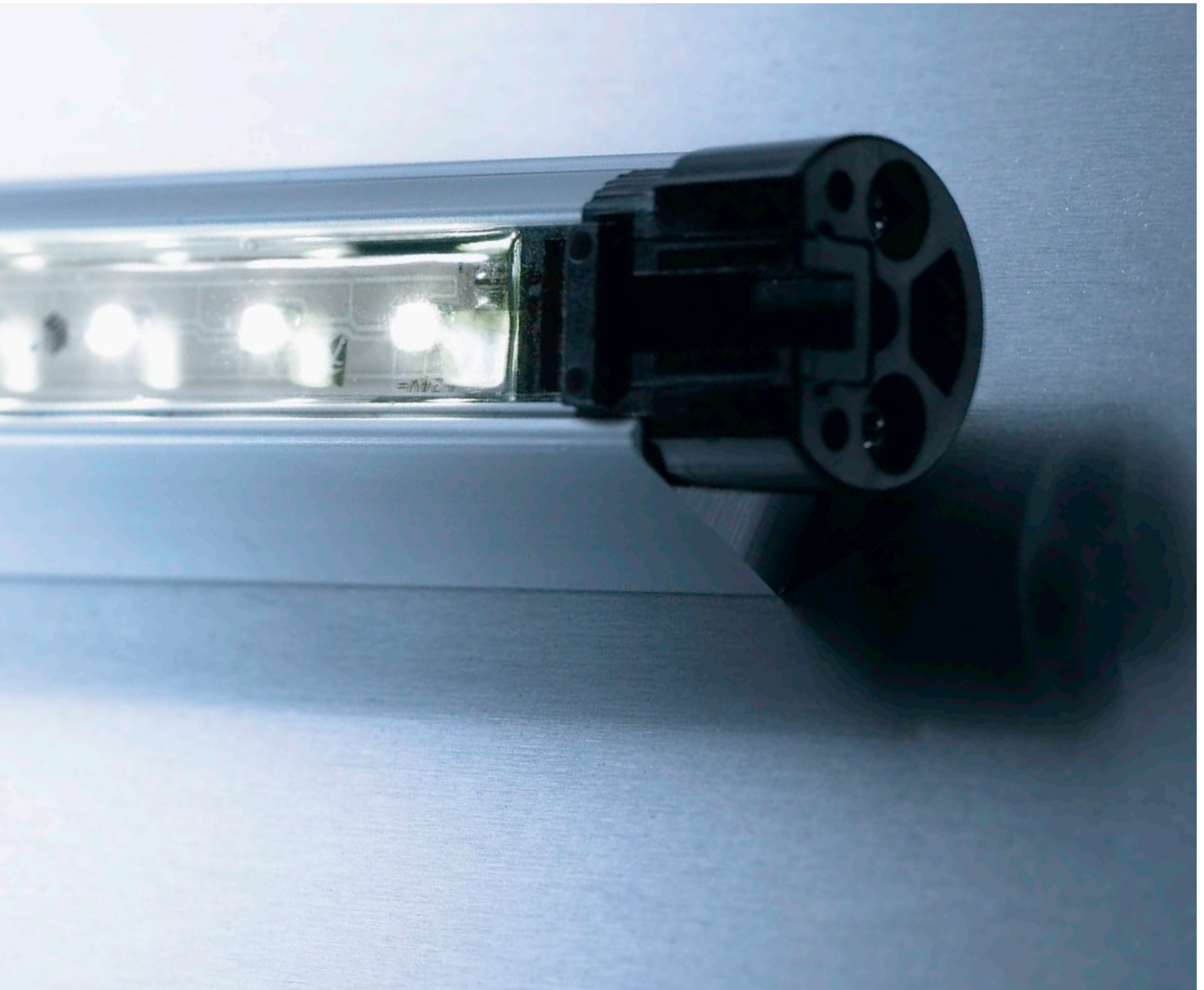
* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm
Also available as an integrated machine luminaire



SLIM LED STRONG PERFORMANCE – SLIM LINE

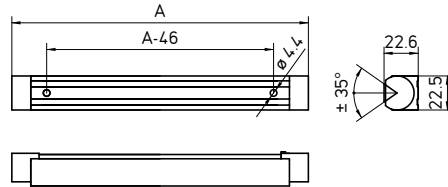
SLIM LED – its name speaks for itself: This luminaire is suitable wherever not enough space is available for strong lighting. Especially in the narrowest of installation situations, the slimline profile of the SLIM LED is a convincing solution. And in case the light doesn't have the ideal angle of incidence, the adjustable variant can help!

- Maintenance-free LED technology
- Ultra low-glare, homogeneous light with soft transitions
- Aluminium housing potted in epoxy resin
- Variants with additional clear or satined screen
- High degree of protection
- Direct connection to machine voltage

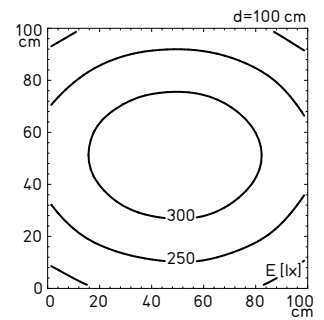
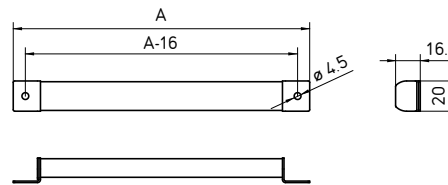




SLIM LED +/- 35° adjustable



SLIM LED with fixed lugs



Illuminance based on the example of 28 W with clear screen

SLIM LED at a glance

- LED technology
- Colour temperature daylight white 5400 K
- Colour rendering $R_a > 70$
- Direct beam or glare-free thanks to satined additional screen
- Housing made of colourless anodised aluminium
- Potted in epoxy resin with additional screen (variants)
- Screw-mounted to fixed lugs or +/- 35° adjustable support profile
- Maximum allowed ambient temperature $T_{a_{max}} 40^\circ \text{C}$
- LED service life (L70) > 50000 h
- Degree of protection IP67, protection class III
- Supplied with approx. 3 m connecting cable and free stranded wires
- Operating device as accessories for connection to the mains voltage





Printing machines



Textile machines



Woodworking machines



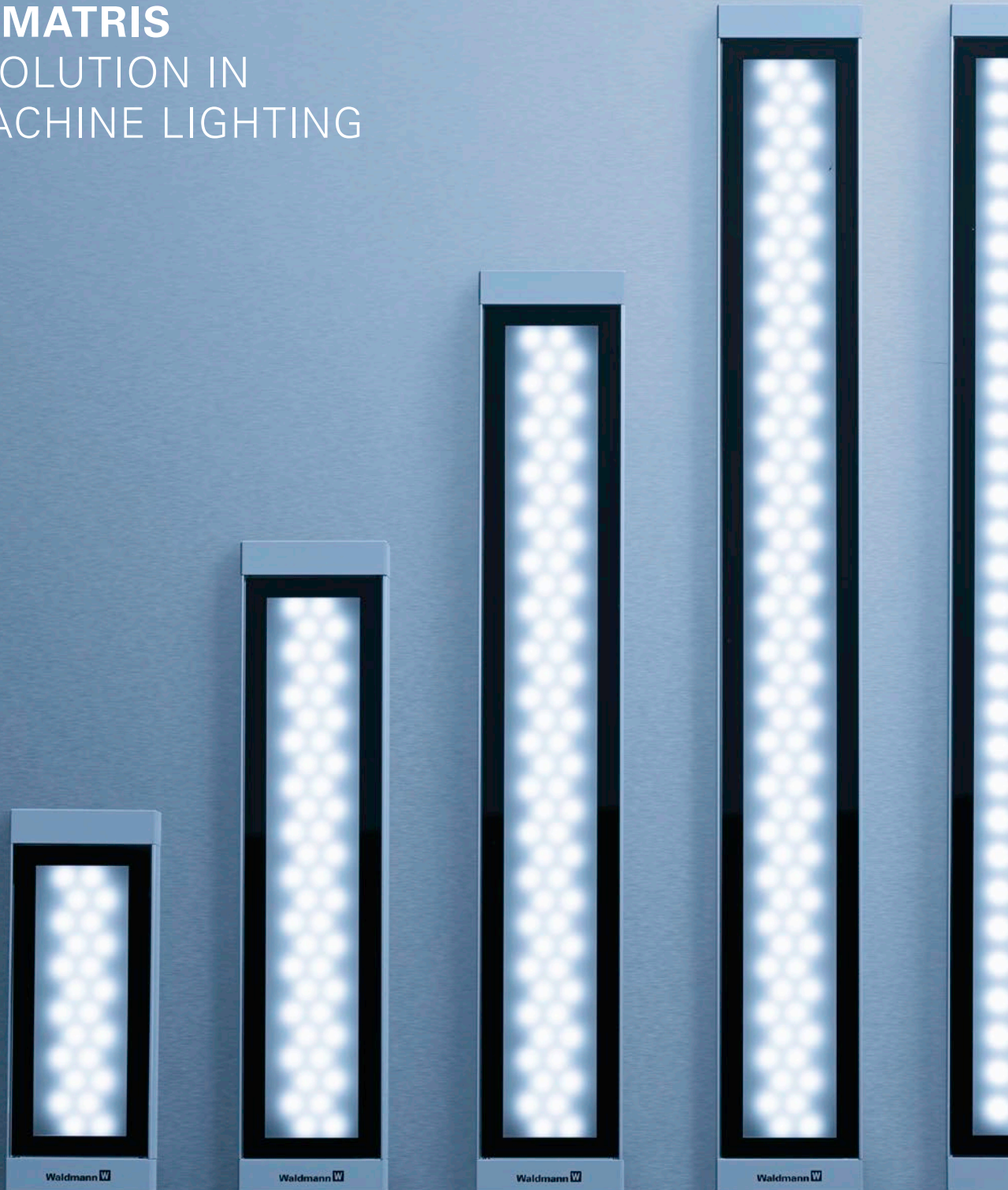
Production facilities

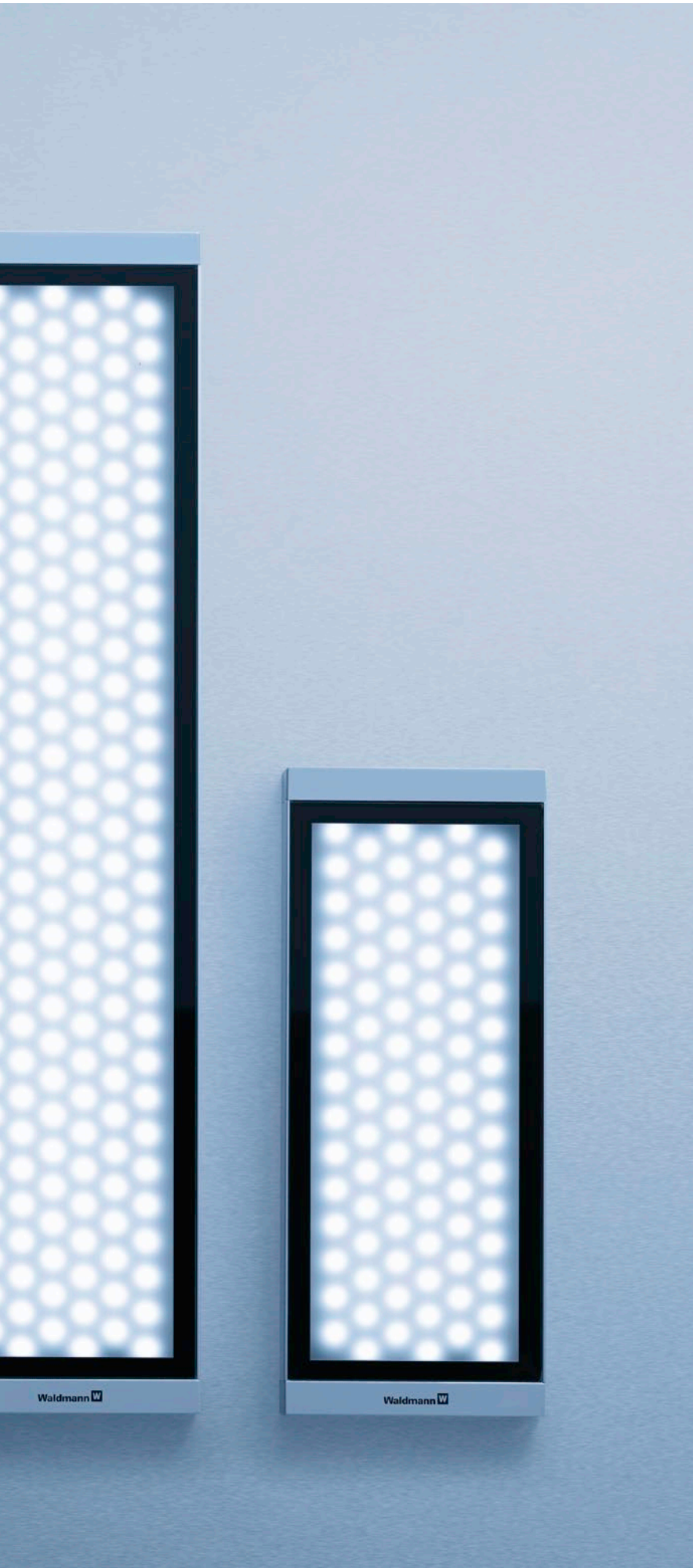
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED	–	A = 196 mm x 22.5 mm	41 lx ¹	LIQ 6
3.5 W	22 – 29 VDC	clear screen, adjustable	53 lx ¹	112 544 000 - 000 013 28
LED	–	A = 196 mm x 22.5 mm	40 lx ¹	LIQ 6
3.5 W	22 – 29 VDC	satined screen, adjustable	53 lx ¹	112 544 005 - 000 111 00
LED	–	A = 196 mm x 22.5 mm	42 lx ¹	LIQ 6
3.5 W	22 – 29 VDC	adjustable	55 lx ¹	112 544 010 - 000 111 01
LED	–	A = 196 mm x 20 mm	41 lx ¹	LIQ 6
3.5 W	22 – 29 VDC	clear screen	53 lx ¹	112 545 000 - 000 013 51
LED	–	A = 196 mm x 20 mm	40 lx ¹	LIQ 6
3.5 W	22 – 29 VDC	satined screen	53 lx ¹	112 545 005 - 000 111 20
LED	–	A = 196 mm x 20 mm	42 lx ¹	LIQ 6
3.5 W	22 – 29 VDC	–	55 lx ¹	112 545 010 - 000 111 21
LED	–	A = 336 mm x 22.5 mm	79 lx ¹	LIQ 12
7.0 W	22 – 29 VDC	clear screen, adjustable	104 lx ¹	112 544 001 - 000 110 81
LED	–	A = 336 mm x 22.5 mm	77 lx ¹	LIQ 12
7.0 W	22 – 29 VDC	satined screen, adjustable	103 lx ¹	112 544 006 - 000 110 88
LED	–	A = 336 mm x 22.5 mm	83 lx ¹	LIQ 12
7.0 W	22 – 29 VDC	adjustable	108 lx ¹	112 544 011 - 000 111 02
LED	–	A = 336 mm x 20 mm	79 lx ¹	LIQ 12
7.0 W	22 – 29 VDC	clear screen	104 lx ¹	112 545 001 - 000 111 25
LED	–	A = 336 mm x 20 mm	77 lx ¹	LIQ 12
7.0 W	22 – 29 VDC	satined screen	103 lx ¹	112 545 006 - 000 111 28
LED	–	A = 336 mm x 20 mm	83 lx ¹	LIQ 12
7.0 W	22 – 29 VDC	–	108 lx ¹	112 545 011 - 000 111 29
LED	–	A = 616 mm x 22.5 mm	159 lx ¹	LIQ 24
14.0 W	22 – 29 VDC	clear screen, adjustable	207 lx ¹	112 544 002 - 000 110 82
LED	–	A = 616 mm x 22.5 mm	155 lx ¹	LIQ 24
14.0 W	22 – 29 VDC	satined screen, adjustable	205 lx ¹	112 544 007 - 000 110 85
LED	–	A = 616 mm x 22.5 mm	165 lx ¹	LIQ 24
14.0 W	22 – 29 VDC	adjustable	211 lx ¹	112 544 012 - 000 111 03
LED	–	A = 616 mm x 20 mm	159 lx ¹	LIQ 24
14.0 W	22 – 29 VDC	clear screen	207 lx ¹	112 545 002 - 000 111 30
LED	–	A = 616 mm x 20 mm	155 lx ¹	LIQ 24
14.0 W	22 – 29 VDC	satined screen	205 lx ¹	112 545 007 - 000 111 31
LED	–	A = 616 mm x 20 mm	165 lx ¹	LIQ 24
14.0 W	22 – 29 VDC	–	211 lx ¹	112 545 012 - 000 111 32
LED	–	A = 896 mm x 22.5 mm	220 lx ¹	LIQ 36
21.0 W	22 – 29 VDC	clear screen, adjustable	278 lx ¹	112 544 003 - 000 110 83
LED	–	A = 896 mm x 22.5 mm	212 lx ¹	LIQ 36
21.0 W	22 – 29 VDC	satined screen, adjustable	274 lx ¹	112 544 008 - 000 110 86
LED	–	A = 896 mm x 22.5 mm	229 lx ¹	LIQ 36
21.0 W	22 – 29 VDC	adjustable	290 lx ¹	112 544 013 - 000 111 04
LED	–	A = 896 mm x 20 mm	220 lx ¹	LIQ 36
21.0 W	22 – 29 VDC	clear screen	278 lx ¹	112 545 003 - 000 111 33
LED	–	A = 896 mm x 20 mm	212 lx ¹	LIQ 36
21.0 W	22 – 29 VDC	satined screen	274 lx ¹	112 545 008 - 000 111 34
LED	–	A = 896 mm x 20 mm	229 lx ¹	LIQ 36
21.0 W	22 – 29 VDC	–	290 lx ¹	112 545 013 - 000 111 35
LED	–	A = 1 176 mm x 22.5 mm	270 lx ¹	LIQ 48
28.0 W	22 – 29 VDC	clear screen, adjustable	334 lx ¹	112 544 004 - 000 110 84
LED	–	A = 1 176 mm x 22.5 mm	261 lx ¹	LIQ 48
28.0 W	22 – 29 VDC	satined screen, adjustable	328 lx ¹	112 544 009 - 000 110 87
LED	–	A = 1 176 mm x 22.5 mm	281 lx ¹	LIQ 48
28.0 W	22 – 29 VDC	adjustable	365 lx ¹	112 544 014 - 000 111 05
LED	–	A = 1 176 mm x 20 mm	270 lx ¹	LIQ 48
28.0 W	22 – 29 VDC	clear screen	334 lx ¹	112 545 004 - 000 111 36
LED	–	A = 1 176 mm x 20 mm	261 lx ¹	LIQ 48
28.0 W	22 – 29 VDC	satined screen	328 lx ¹	112 545 009 - 000 111 37
LED	–	A = 1 176 mm x 20 mm	281 lx ¹	LIQ 48
28.0 W	22 – 29 VDC	–	345 lx ¹	112 545 014 - 000 111 38

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

LUMATRIS

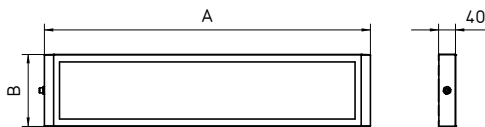
EVOLUTION IN
MACHINE LIGHTING



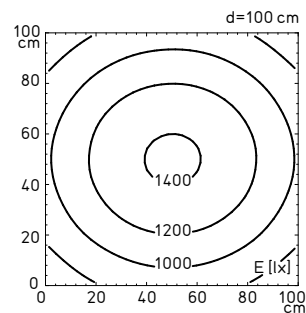


LUMATRIS brings the latest LED technology to medium- and large-sized machines. Waldmann knows that in mechanical engineering competitive ability equals the sum of innovative components and functions. LUMATRIS transforms the spot light characteristics of LEDs economically into an extremely homogeneous area light.

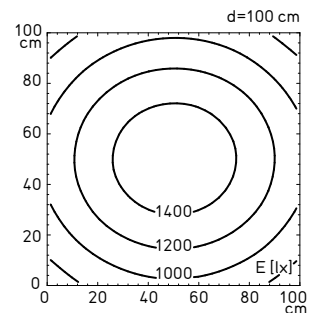
- Maintenance-free LED technology
- Particularly resource-saving variants with Eco mode
- Wide-beam light characteristics
- Variants with Light Forming Technology for optimum light deflection and glare-free lighting
- Robust aluminium housing with solid safety glass screen
- Die-cast side parts
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Ideal for high mechanical and thermal stress
- Direct connection to machine voltage
- Lateral or rear connection by means of M12 plug connector



Note: For the precise assembly dimensions, please request a detailed drawing.



Illuminance based on the example of 50 W without Light Forming Technology



Illuminance based on the example of 50 W with Light Forming Technology

LUMATRIS at a glance

- LED technology
- Colour temperature daylight white 5800 K
- Colour rendering $R_a > 80$
- Glare-free thanks to diffuser or Light Forming Technology
- Housing made of colourless anodised aluminium and die-cast side parts painted in silver
- 4 mm thick safety glass
- Screw-mounted or mounted by means of various fasteners from the range of accessories
- Maximum allowed ambient temperature $T_{a_{max}}$:
Luminaire width 170 mm: 60 °C
Luminaire width 95 mm: 55 °C
- LED service life (L70) > 50000 h
- Degree of protection IP68-1m and IPX9K, protection class III
- Connection via M12 connector, A-coded
- Various fasteners, M12 connection technology and operating devices as accessories for connection to the mains voltage



Light Forming Technology



Diffuser

Optionally, the luminaire is equipped with Light Forming Technology instead of the diffuser (see overview of variants). In addition to optimum glare-free lighting and increased efficiency, this results in a more narrow-beam characteristic, allowing different tasks to be solved.



Machine tools

Fitted with Power	Operating device Connected load	Dimensions Special feature	E _m E _{max} *	Model Order no.
LED	–	A = 246 mm x B = 95 mm	163 lx ¹	MSAL 24 S
8 W	22 – 26 VDC	rear connection, Light Forming Technology	220 lx ¹	113 094 000 - 005 967 88
LED	–	A = 246 mm x B = 95 mm	163 lx ¹	MSAL 24 S
8 W	22 – 26 VDC	side connection, Light Forming Technology	220 lx ¹	113 094 000 - 005 967 22
LED	–	A = 246 mm x B = 95 mm	153 lx ¹	MSAL 24 S
8 W	22 – 26 VDC	side connection	205 lx ¹	113 094 000 - 005 967 91
LED	–	A = 246 mm x B = 95 mm	153 lx ¹	MSAL 24 S
8 W	22 – 26 VDC	rear connection	205 lx ¹	113 094 000 - 005 967 94
LED	–	A = 420 mm x B = 95 mm	341 lx ¹	MSAL 48 S
16 W	22 – 26 VDC	rear connection, Light Forming Technology	454 lx ¹	113 095 000 - 005 968 03
LED	–	A = 420 mm x B = 95 mm	341 lx ¹	MSAL 48 S
16 W	22 – 26 VDC	side connection, Light Forming Technology	454 lx ¹	113 095 000 - 005 967 61
LED	–	A = 420 mm x B = 95 mm	319 lx ¹	MSAL 48 S
16 W	22 – 26 VDC	side connection	423 lx ¹	113 095 000 - 005 968 06
LED	–	A = 420 mm x B = 95 mm	319 lx ¹	MSAL 48 S
16 W	22 – 26 VDC	rear connection	423 lx ¹	113 095 000 - 005 968 09
LED	–	A = 596 mm x B = 95 mm	507 lx ¹	MSAL 72 S
24 W	22 – 26 VDC	rear connection, Light Forming Technology	671 lx ¹	113 096 000 - 005 968 57
LED	–	A = 596 mm x B = 95 mm	507 lx ¹	MSAL 72 S
24 W	22 – 26 VDC	side connection, Light Forming Technology	671 lx ¹	113 096 000 - 005 967 64
LED	–	A = 596 mm x B = 95 mm	463 lx ¹	MSAL 72 S
24 W	22 – 26 VDC	side connection	607 lx ¹	113 096 000 - 005 968 62
LED	–	A = 596 mm x B = 95 mm	463 lx ¹	MSAL 72 S
24 W	22 – 26 VDC	rear connection	607 lx ¹	113 096 000 - 005 968 70
LED	–	A = 770 mm x B = 95 mm	662 lx ¹	MSAL 96 S
32 W	22 – 26 VDC	rear connection, Light Forming Technology	862 lx ¹	113 097 000 - 005 968 74
LED	–	A = 770 mm x B = 95 mm	662 lx ¹	MSAL 96 S
32 W	22 – 26 VDC	side connection, Light Forming Technology	862 lx ¹	113 097 000 - 005 967 67
LED	–	A = 770 mm x B = 95 mm	616 lx ¹	MSAL 96 S
32 W	22 – 26 VDC	side connection	796 lx ¹	113 097 000 - 005 968 77
LED	–	A = 770 mm x B = 95 mm	616 lx ¹	MSAL 96 S
32 W	22 – 26 VDC	rear connection	796 lx ¹	113 097 000 - 005 968 80
LED	–	A = 420 mm x B = 170 mm	603 lx ¹	MSAL 90 S
25 W	22 – 26 VDC	rear connection, Light Forming, Eco mode	806 lx ¹	112 573 000 - 004 994 89
LED	–	A = 420 mm x B = 170 mm	603 lx ¹	MSAL 90 S
25 W	22 – 26 VDC	side connection, Light Forming, Eco mode	806 lx ¹	112 573 001 - 005 142 71
LED	–	A = 420 mm x B = 170 mm	572 lx ¹	MSAL 90 S
25 W	22 – 26 VDC	side connection, Eco mode	763 lx ¹	112 573 000 - 006 086 66
LED	–	A = 420 mm x B = 170 mm	572 lx ¹	MSAL 90 S
25 W	22 – 26 VDC	side connection, Eco mode	763 lx ¹	112 573 000 - 006 086 73
LED	–	A = 770 mm x B = 170 mm	1 175 lx ¹	MSAL 180 S
50 W	22 – 26 VDC	rear connection, Light Forming, Eco mode	1 530 lx ¹	112 574 000 - 004 994 93
LED	–	A = 770 mm x B = 170 mm	1 175 lx ¹	MSAL 180 S
50 W	22 – 26 VDC	side connection, Light Forming, Eco mode	1 530 lx ¹	112 574 001 - 005 111 40
LED	–	A = 770 mm x B = 170 mm	1 092 lx ¹	MSAL 180 S
50 W	22 – 26 VDC	side connection, Eco mode	1 417 lx ¹	112 574 000 - 006 086 80
LED	–	A = 770 mm x B = 170 mm	1 092 lx ¹	MSAL 180 S
50 W	22 – 26 VDC	side connection, Eco mode	1 417 lx ¹	112 574 000 - 006 086 77

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

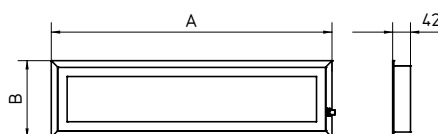


FLAT TEC

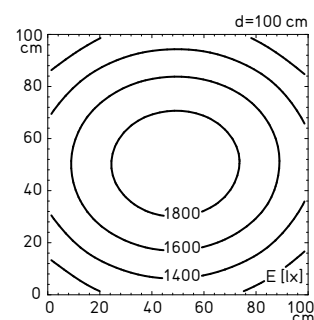
THE ULTIMATE IN LIGHTING AND HOUSING TECHNOLOGY

FLAT TEC is a small efficiency miracle. No light without energy. With this in mind, FLAT TEC skillfully uses as little energy as possible to generate the maximum amount of light. It does so with a housing shape that is so flat that it doesn't even appear obtrusive when positioned as a surface-mounted luminaire in the centre of activity.

- Energy-efficient fluorescent lamp technology
- For strong, large-area and uniform lighting
- Wide-beam light characteristics
- Light exit with conical prismatic structure for perfect glare-free lighting
- Robust aluminium housing with solid safety glass screen
- High degree of protection
- Chemically resistant to many media such as oils and cooling lubricants
- Connection to machine or mains voltage
- M12 plug connector



Note: For the precise assembly dimensions,
please request a detailed drawing.



Illuminance based on the example
of 2 x 54 W

FLAT TEC at a glance

- Fluorescent lamp technology
- Colour temperature daylight white 6500 K
- Colour rendering Ra > 80
- Glare-free thanks to conical prismatic screen
- Housing made of colourless anodised aluminium
- 3 mm thick safety glass
- Screw-mounted
- Degree of protection IP68-1m and IPX9K, protection class I
- Connection via M12 connector, A-coded
- M12 connection technology as accessory

Machine tools

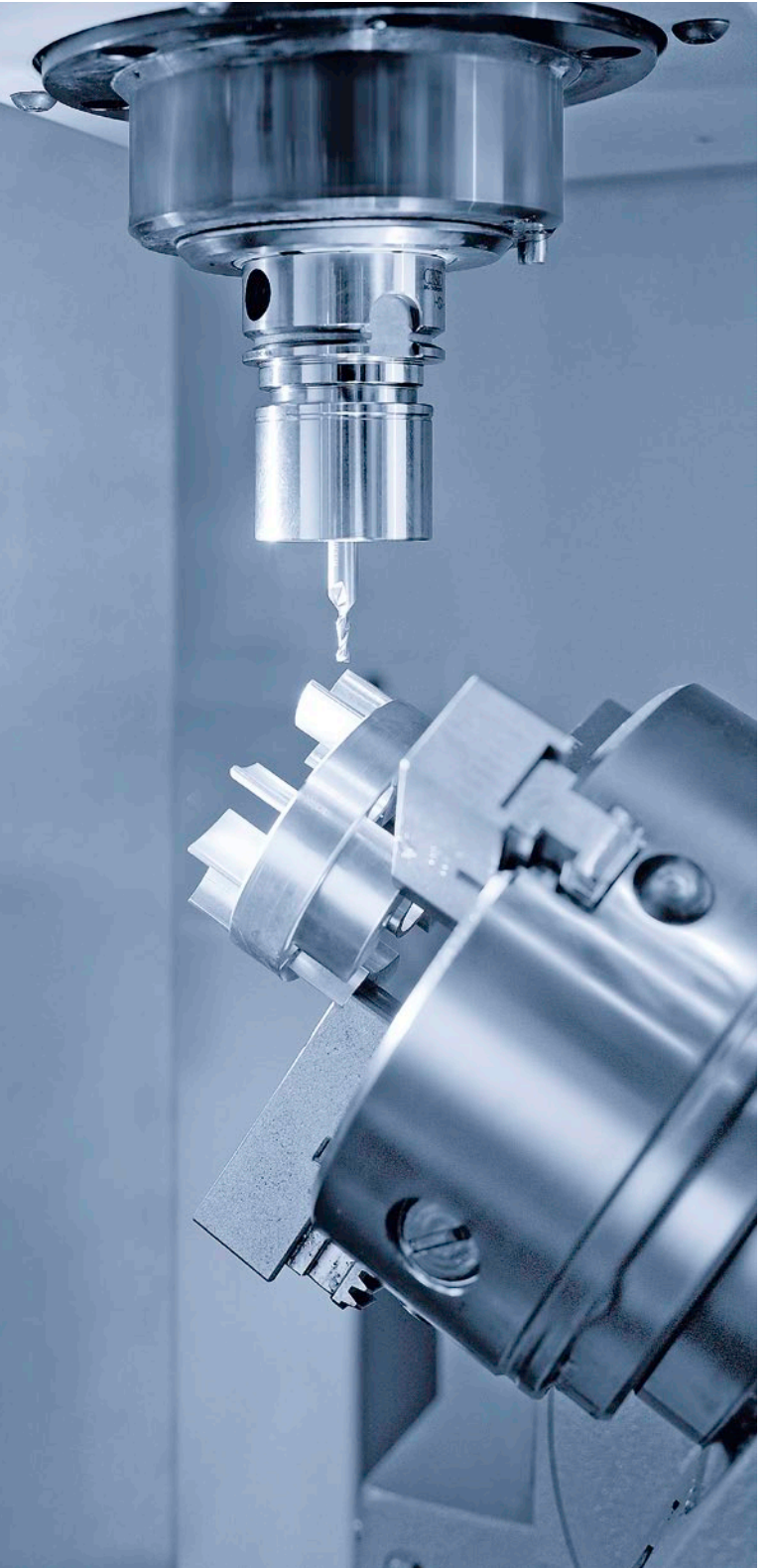
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
T5 3 x 24 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 660 mm x B = 300 mm –	1 000 lx ¹ 1 274 lx ¹	MZA 324 N 112 999 000 - 005 555 19
T5 2 x 24 W	integrated electronic ballast 100 – 250 V, 50/60 Hz	A = 660 mm x B = 220 mm –	669 lx ¹ 863 lx ¹	MZA 224 N 113 002 000 - 005 555 48
T5 2 x 39 W	integrated electronic ballast 100 – 250 V, 50/60 Hz	A = 960 mm x B = 220 mm –	1 096 lx ¹ 1 395 lx ¹	MZA 239 N 113 004 000 - 005 555 61
T5 2 x 54 W	integrated electronic ballast 100 – 250 V, 50/60 Hz	A = 1 260 mm x B = 220 mm –	1 546 lx ¹ 1 921 lx ¹	MZA 254 N 113 013 000 - 005 556 85
T5 1 x 24 W	integrated electronic ballast 24 VDC	A = 660 mm x B = 180 mm –	363 lx ¹ 466 lx ¹	MZA 124 S 112 995 000 - 005 554 69
T5 1 x 39 W	integrated electronic ballast 24 VDC	A = 960 mm x B = 180 mm –	601 lx ¹ 766 lx ¹	MZA 139 S 112 996 000 - 005 554 84

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

Also available as integrated machine luminaires

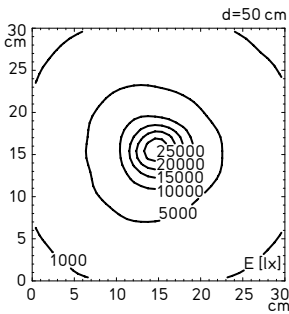
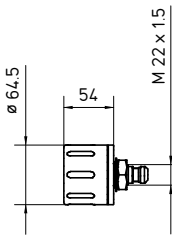


SPOT LED POWER LIGHT IN MINI FORMAT

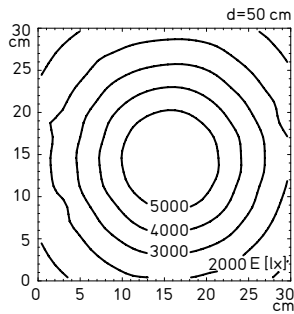


SPOT LED is a surprisingly compact luminaire with a lot of power: The round, robust aluminium housing of the SPOT LED combines three 3 LEDs, which allow either spot or area lighting, depending on the particular variant. And they're absolutely flicker-free. This means that it is not just the design of the integrated LED spotlight that is a feast for the eyes.

- Maintenance-free LED technology
- Strong high-power LEDs for maximum light
- With narrow- or wide-beam illumination characteristic, as desired
- Robust aluminium housing with solid safety glass screen
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Direct connection to machine voltage



Illuminance with 10° optics



Illuminance with 40° optics

SPOT LED at a glance

- LED technology
 - Colour temperature daylight white 5700 K
 - Colour rendering Ra > 70
 - Beam angle 10° or 40°
 - Housing made of black anodised aluminium
 - 3 mm thick safety glass
- Screw-mounted
 - LED service life (L70) > 50000 h
 - Degree of protection IP67, protection class III
 - Supplied with approx. 3 m connecting cable and free stranded wires
 - Operating device as accessories for connection to the mains voltage

Machine tools		Woodworking machines		Textile machines	
Fitted with	Operating device	Dimensions	E _m	Model	
Power	Connected load	Special feature	E _{max} *	Order no.	
LED	–	ø 64.5 mm	4086 lx ¹	MCAYL 3 S	
6 W	16 – 30 VAC/16 – 40 VDC	10° optics	27500 lx ¹	112 461 001 - 000 830 05	
LED	–	ø 64.5 mm	3000 lx ¹	MCAYL 3 S	
6 W	16 – 30 VAC/16 – 40 VDC	40° optics	5958 lx ¹	112 461 003 - 000 878 71	

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 50 cm
Also available as integrated machine luminaires



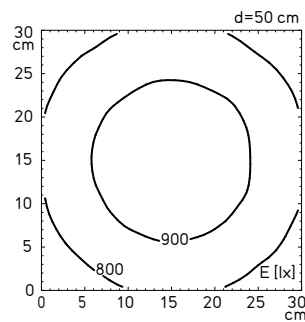
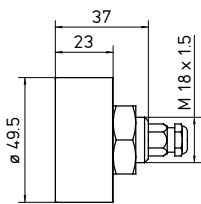
HEAD LED

SMALL LIGHT WITH HIGH POWER

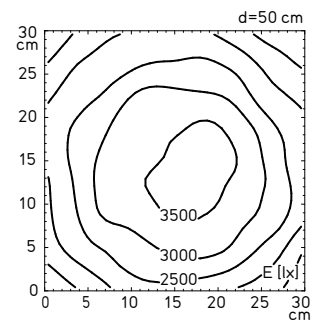


HEAD LED brightens the heart of any machine: the working area. It deserves a special spotlight: Waldmann's smallest light ever. Thanks to its compact dimensions, HEAD LED always fits into the tool area and generates a powerful focused LED spotlight thanks to Waldmann's cleverly devised optics.

- Maintenance-free LED technology
- Strong high-power LED for maximum light
- With narrow- or wide-beam illumination characteristic, as desired
- Robust aluminium housing with solid safety glass screen
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Direct connection to machine voltage
- M12 plug connector



Illuminance without optics (100°)



Illuminance with 70° optics

HEAD LED at a glance

- LED technology
- Colour temperature daylight white 5600 K
- Colour rendering $R_a > 70$
- Beam angle 70° or 100° (without optics)
- Housing made of colourless anodised aluminium
- 4 mm thick safety glass
- Screw-mounted
- LED service life (L70) > 50 000 h
- Degree of protection IP67, protection class III
- Supplied with approx. 0.2 m connecting cable and M12 plug connector, A-coded
- M12 connection technology and operating devices as accessories for connection to the mains voltage

Machine tools		Woodworking machines		Textile machines	
Fitted with	Operating device	Dimensions		E_m	Model
Power	Connected load	Special feature		E_{max}^*	Order no.
LED	–	ø 49.5 mm		862 lx ¹	MCAYL 4 S
11 W	16 – 32 VDC	–		964 lx ¹	113 155 000 - 006 464 85
LED	–	ø 49.5 mm		2658 lx ¹	MCAYL 4 S
11 W	16 – 32 VDC	70° optics		3755 lx ¹	113 155 000 - 006 696 09

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 50 cm

For cooling purposes, the luminaire must be attached to a metal surface (see instructions for use).



ONE LED COOL HEAD DESPITE FULL POWER

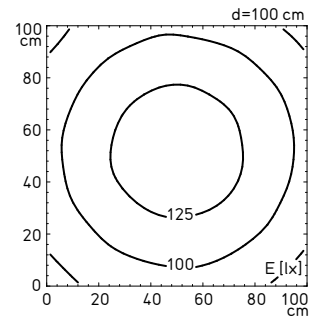
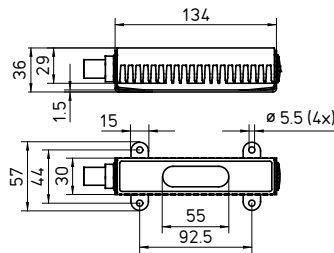


Where most lights often fail, ONE LED shows its true capabilities: restricted space and high temperatures – in some machines, you are faced with both of these problems. Thanks to its minimalist, but very robust construction, ONE LED even withstands very high temperatures, although its high-power LED display an enormous lighting power.

- Maintenance-free LED technology
- Strong high-power LED for maximum light
- Robust die-cast housing with solid safety glass or plastic screen
- High degree of protection
- Ideal for high thermal stress
- Quick and precise positioning
- Direct connection to machine voltage
- Connection via M12 plug connector or quick connector
- Luminaires for daisy chaining



ONE LED without through-wiring



Illuminance 6 W

ONE LED at a glance

- LED technology
- Colour temperature neutral white 5000 K
- Colour rendering Ra > 80
- Direct beam
- Aluminium housing
- 4 mm thick safety glass or acrylic screen
- Screw-mounted to the +/- 90° adjustable support plate
- Maximum allowed ambient temperature $T_{a_{max}}$ 50° C
- LED service life (L70) > 50000 h
- Degree of protection IP54 (acrylic screen) or IP67 (safety glass), protection class III
- Connection via quick connector or M12 plug connector, A-coded
- M12 connection technology and operating devices as accessories for connection to the mains voltage



Printing machines



Textile machines

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED	–	162.5 mm x 57 mm	108 lx ¹	MVAL 1 S
6 W	20 – 28 VDC	PMMA screen, quick connector	141 lx ¹	112 887 027 - 000 760 50
LED	–	162.5 mm x 57 mm	108 lx ¹	MVAL 1 SD
6 W	20 – 28 VDC	PMMA screen, quick connector, through-wired	141 lx ¹	112 887 007 - 000 760 13
LED	–	162.5 mm x 57 mm	108 lx ¹	MVAL 1 S
6 W	20 – 28 VDC	PMMA screen, M12 plug connector	141 lx ¹	112 887 040 - 000 941 16
LED	–	162.5 mm x 57 mm	108 lx ¹	MVAL 1 SD
6 W	20 – 28 VDC	PMMA screen, M12 plug connector, through-wired	141 lx ¹	112 887 000 - 006 849 59

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



Production facilities



Textile machines

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED	–	162.5 mm x 57 mm	108 lx ¹	MVAL 1 S
6 W	20 – 28 VDC	glass screen, quick connector	141 lx ¹	112 887 037 - 000 760 65
LED	–	162.5 mm x 57 mm	108 lx ¹	MVAL 1 SD
6 W	20 – 28 VDC	glass screen, quick connector, through-wired	141 lx ¹	112 887 017 - 000 760 30
LED	–	162.5 mm x 57 mm	108 lx ¹	MVAL 1 S
6 W	20 – 28 VDC	glass screen, M12 plug connector	141 lx ¹	112 887 050 - 000 941 17
LED	–	162.5 mm x 57 mm	108 lx ¹	MVAL 1 SD
6 W	20 – 28 VDC	glass screen, M12 plug connector, through-wired	141 lx ¹	112 887 043 - 004 692 58

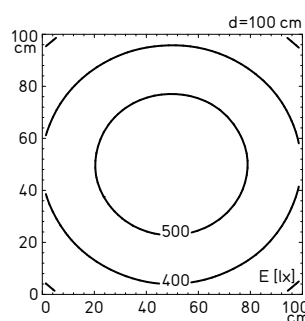
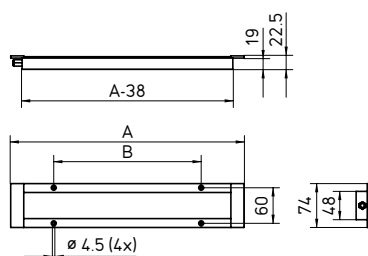
* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



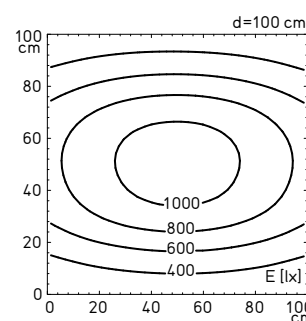
MACH LED PRO INCREDIBLY VARIABLE, CAN BE UNOBTRUSIVELY INTEGRATED

The MACH LED PRO model series embodies absolute variability in terms of area lighting. Even though the machine design requirements tend to be individual, they are not necessarily tailored to the luminaire. This is taken into account in the MACH LED PRO by designs of different lengths with 1, 2, 3 or 4 LEDs and two beam angles of 30° and 95°. This means that the luminaire practically disappears inside the machine wall thanks to the unique construction principle.

- Maintenance-free LED technology
- Strong high-power LEDs for maximum light
- With narrow- or wide-beam illumination characteristic, as desired
- Robust aluminium housing with solid safety glass screen
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Ideal for high mechanical and thermal stress
- Nearly flush-mounted installation
- Prevents accumulation of chips
- Direct connection to machine voltage



Illuminance based on the example
24 W without optics (95°)



Illuminance based on the example of
24 W with 30° optics

MACH LED PRO at a glance

- LED technology
- Colour temperature neutral white 5000 K
- Colour rendering Ra > 80
- Beam angle 30° (optics) or 95° (without optics)
- Housing made of colourless anodised aluminium
- 4 mm thick safety glass
- Mounted in recess with screws
- Maximum allowed ambient temperature $T_{a_{max}}$ 40° C
- LED service life (L70) > 50000 h
- Degree of protection IP67, protection class III
- Supplied with approx. 3 m connecting cable and free stranded wires
- Operating device as accessories for connection to the mains voltage



Machine tools



Woodworking machines

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED	–	A = 220 mm x 74 mm, B = 125 mm (1x)	113 lx ¹	MUEL 1 S
6 W	20 – 28 VDC	–	147 lx ¹	112 571 002 - 000 852 16
LED	–	A = 220 mm x 74 mm, B = 125 mm (1x)	200 lx ¹	MUEL 1 S
6 W	20 – 28 VDC	30° optics	316 lx ¹	112 571 000 - 000 845 79
LED	–	A = 395 mm x 74 mm, B = 250 mm (1x)	230 lx ¹	MUEL 2 S
12 W	20 – 28 VDC	–	296 lx ¹	112 571 006 - 000 852 24
LED	–	A = 395 mm x 74 mm, B = 250 mm (1x)	368 lx ¹	MUEL 2 S
12 W	20 – 28 VDC	30° optics	600 lx ¹	112 571 004 - 000 852 20
LED	–	A = 570 mm x 74 mm, B = 200 mm (2x)	334 lx ¹	MUEL 3 S
18 W	20 – 28 VDC	–	425 lx ¹	112 571 012 - 000 852 28
LED	–	A = 570 mm x 74 mm, B = 200 mm (2x)	564 lx ¹	MUEL 3 S
18 W	20 – 28 VDC	30° optics	895 lx ¹	112 571 010 - 000 852 27
LED	–	A = 745 mm x 74 mm, B = 250 mm (2x)	445 lx ¹	MUEL 4 S
24 W	20 – 28 VDC	–	564 lx ¹	112 571 016 - 000 852 76
LED	–	A = 745 mm x 74 mm, B = 250 mm (2x)	685 lx ¹	MUEL 4 S
24 W	20 – 28 VDC	30° optics	1 091 lx ¹	112 571 014 - 000 852 75

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

Also available as surface-mounted luminaires



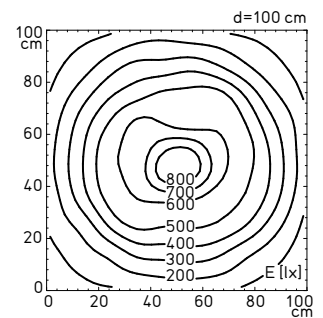
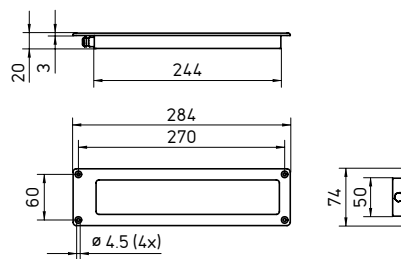
FLAT LED

LED TECHNOLOGY INGENIOUSLY INTEGRATED



FLAT LED is highly suitable for integration into the increasingly more compact machines, because this integrated machine luminaire is particularly small and powerful. Its 6 LEDs provide optimum area light in spite of its compressed construction and low integration depth.

- Maintenance-free LED technology
- Strong high-power LEDs for maximum light
- Robust aluminium housing with safety glass screen
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Ideal for high mechanical and thermal stress
- Nearly flush-mounted installation
- Prevents accumulation of chips
- Direct connection to machine voltage



Illuminance 13 W

FLAT LED at a glance

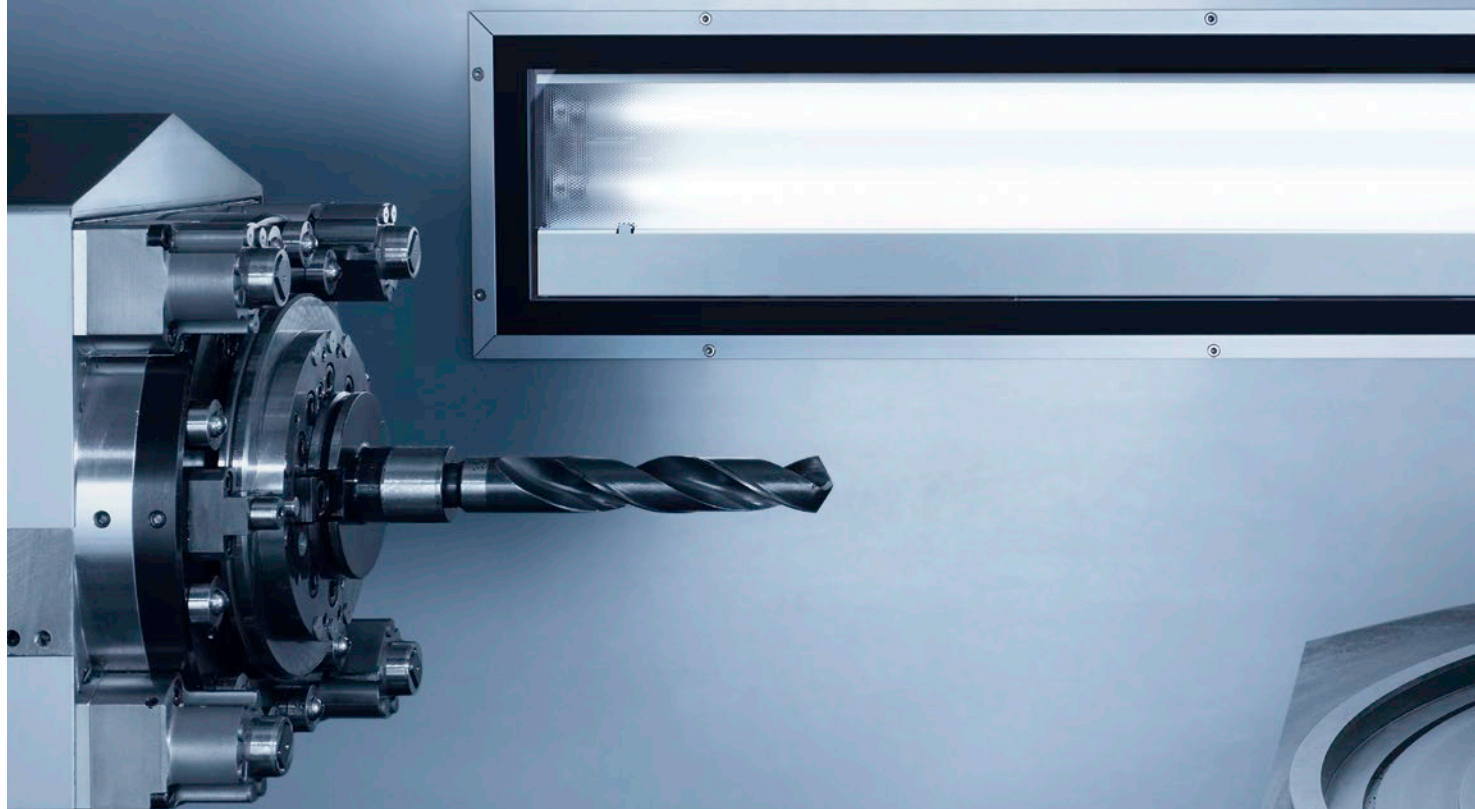
- LED technology
- Colour temperature daylight white 6500 K
- Colour rendering $R_a > 65$
- Beam angle 60°
- Housing made of black anodised aluminium
- 4 mm thick safety glass
- Mounted in recess with screws
- Maximum allowed ambient temperature $T_{a_{max}} 40^\circ \text{C}$
- LED service life (L_{70}) $> 50000 \text{ h}$
- Degree of protection IP67 and IPX9K, protection class III
- Supplied with approx. 3 m connecting cable and free stranded wires
- Operating device as accessories for connection to the mains voltage

Machine tools		Woodworking machines			
Fitted with	Operating device	Dimensions		E_m	Model
Power	Connected load	Special feature		E_{max}^*	Order no.
LED	–	284 mm x 74 mm		347 lx ¹	MYEL 6 S
13 W	10 – 40 VDC	–		869 lx ¹	112 560 001 - 000 031 66

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm
Also available as a surface-mounted luminaire

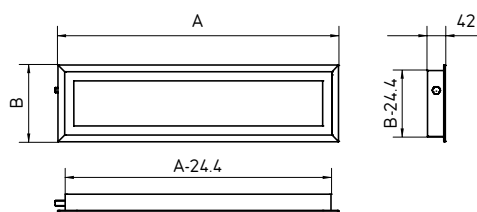
FLAT TEC

INTEGRATED MAXIMUM PERFORMANCE

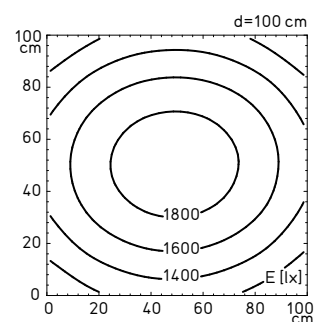


FLAT TEC generates the right illuminance not only for large-sized machines and plants. It also impressively demonstrates how much light you can generate with a minimum amount of energy. That's precisely what counts: ideally, a luminaire should take up as little space as possible and offer high efficiency.

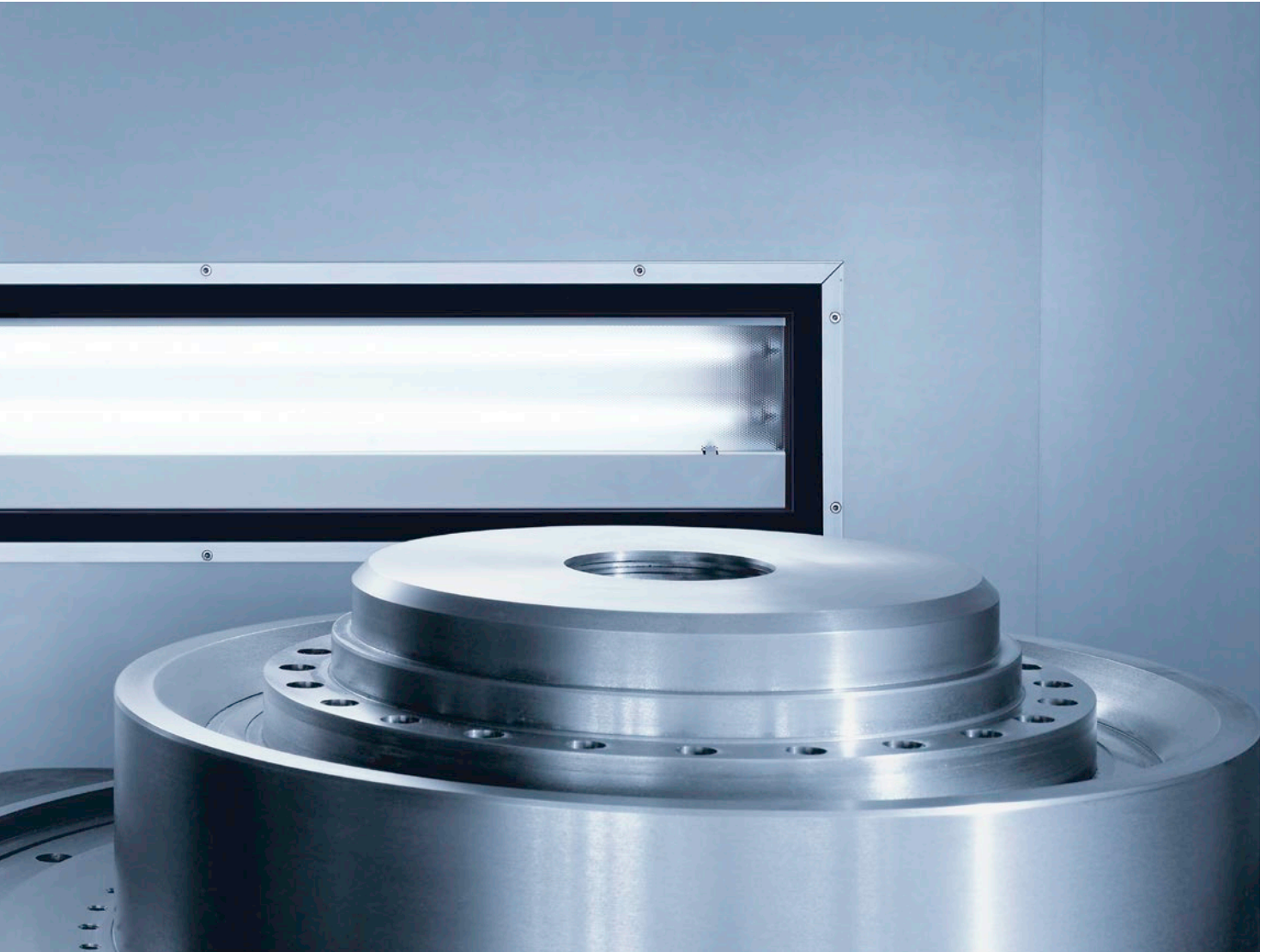
- Energy-efficient fluorescent lamp technology
- For strong, large-area and uniform lighting
- Wide-beam light characteristics
- Light exit with conical prismatic structure for perfect glare-free lighting
- Robust aluminium housing with solid safety glass screen
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Nearly flush-mounted installation
- Prevents accumulation of chips
- Connection to machine or mains voltage
- M12 plug connector



Note: For the precise assembly dimensions, please request a detailed drawing.



Illuminance based on the example
2 x 54 W



FLAT TEC at a glance

- Fluorescent lamp technology
- Colour temperature daylight white 6500 K
- Colour rendering Ra > 80
- Glare-free thanks to conical prismatic screen
- Housing made of colourless anodised aluminium
- 3 mm thick safety glass
- Mounted in recess with screws
- Degree of protection IP68-1m and IPX9K, protection class I
- Connection via M12 connector, A-coded
- M12 connection technology as accessory



Machine tools

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max} *	Model Order no.
T5	integrated electronic ballast	A = 660 mm x B = 300 mm	1 000 lx ¹	MZE 324 N
3 x 24 W	220 – 240 V, 50/60 Hz	–	1 274 lx ¹	112 999 000 - 005 555 16
T5	integrated electronic ballast	A = 660 mm x B = 220 mm	669 lx ¹	MZE 224 N
2 x 24 W	100 – 250 V, 50/60 Hz	–	863 lx ¹	113 002 000 - 005 555 45
T5	integrated electronic ballast	A = 960 mm x B = 220 mm	1 096 lx ¹	MZE 239 N
2 x 39 W	100 – 250 V, 50/60 Hz	–	1 395 lx ¹	113 004 000 - 005 555 67
T5	integrated electronic ballast	A = 1 260 mm x B = 220 mm	1 546 lx ¹	MZE 254 N
2 x 54 W	100 – 250 V, 50/60 Hz	–	1 921 lx ¹	113 013 000 - 005 556 82
T5	integrated electronic ballast	A = 660 mm x B = 180 mm	363 lx ¹	MZE 124 S
1 x 24 W	24 VDC	–	466 lx ¹	112 995 000 - 005 554 56
T5	integrated electronic ballast	A = 960 mm x B = 180 mm	601 lx ¹	MZE 139 S
1 x 39 W	24 VDC	–	766 lx ¹	112 966 000 - 005 554 81

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

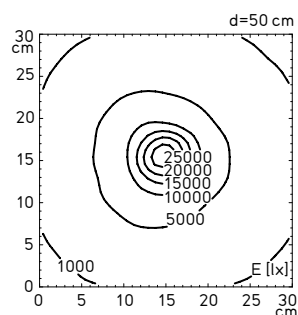
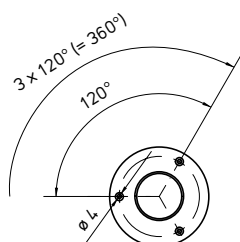
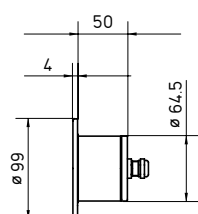
Also available as surface-mounted luminaires



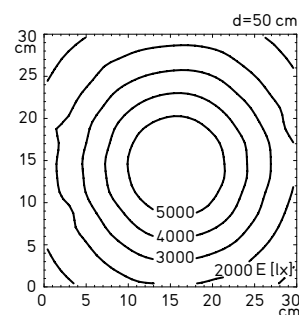
SPOT LED HIGHLY CONCENTRATED IN A MINIMUM OF SPACE

The SPOT LED for permanent integration into the machine combines 3 LEDs in such a compact housing that you could hardly imagine a smaller luminaire.

- Maintenance-free LED technology
- Strong high-power LEDs for maximum light
- With narrow- or wide-beam illumination characteristic, as desired
- Robust aluminium housing with solid safety glass screen
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Nearly flush-mounted installation
- Prevents accumulation of chips
- Direct connection to machine voltage



Illuminance with 10° optics



Illuminance with 40° optics

SPOT LED at a glance

- LED technology
- Colour temperature daylight white 5700 K
- Colour rendering Ra > 70
- Beam angle 10° or 40°
- Housing made of black anodised aluminium
- 3 mm thick safety glass
- Mounted in recess with screws
- LED service life (L70) > 50000 h
- Degree of protection IP67, protection class III
- Supplied with approx. 3 m connecting cable and free stranded wires
- Operating device as accessories for connection to the mains voltage

Machine tools		Woodworking machines			
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.	
LED 6 W	– 16 – 30 VAC/16 – 40 VDC	ø 99 mm 10° optics	4086 lx ¹ 27500 lx ¹	MCEYL 3 S 112 460 001 - 000 829 95	
LED 6 W	– 16 – 30 VAC/16 – 40 VDC	ø 99 mm 40° optics	3000 lx ¹ 5958 lx ¹	MCEYL 3 S 112 460 003 - 000 878 91	

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 50 cm

Also available as surface-mounted luminaires

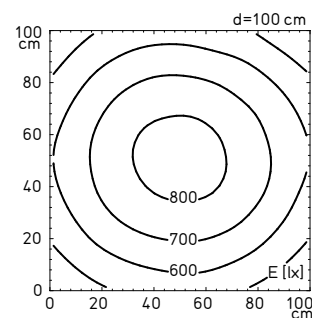
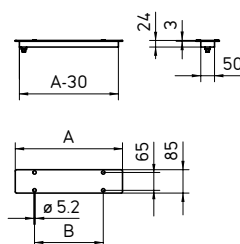


MKEL

LED CLEVERLY PACKAGED

MKEL meets the particularly high requirements of the food-stuff industry. The LED integrated machine luminaire is used in packaging machines where it prevents accumulation of dirt and is distinguished by its resistance to agents for sterilising packages or the machine.

- Maintenance-free LED technology
- Robust aluminium housing with plastic screen
- Self-adhesive seal
- High degree of protection
- Chemically resistant to many media such as cleaning and sterilising agents
- Ideal for high thermal stress
- Nearly flush-mounted installation
- Prevents accumulation of dirt
- Direct connection to machine voltage
- M12 plug connector



Illuminance based on the example
21.5 W

MKEL at a glance

- LED technology
- Colour temperature neutral white 5000 K
- Colour rendering Ra > 80
- Glare-free thanks to satined screen
- Aluminium housing
- PC screen
- Installation in recess by means of self-adhesive seal and additional fastening screws
- Maximum allowed ambient temperature $T_{a_{max}}$ 60° C
- LED service life (L70) > 25 000 h
- Degree of protection IP67, protection class III
- Connection via M12 connector, A-coded
- M12 connection technology and operating devices as accessories for connection to the mains voltage

Packaging machines

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 5.0 W	– 20 – 28 VDC	215 mm x 85 mm –	148 lx ¹ 195 lx ¹	MKEL 12 S 113 170 000 - 006 807 62
LED 10.5 W	– 20 – 28 VDC	390 mm x 85 mm –	326 lx ¹ 428 lx ¹	MKEL 27 S 113 170 000 - 006 807 65
LED 16.0 W	– 20 – 28 VDC	535 mm x 85 mm –	507 lx ¹ 658 lx ¹	MKEL 42 S 113 170 000 - 006 500 48
LED 21.5 W	– 20 – 28 VDC	710 mm x 85 mm –	654 lx ¹ 840 lx ¹	MKEL 57 S 113 170 000 - 006 501 05

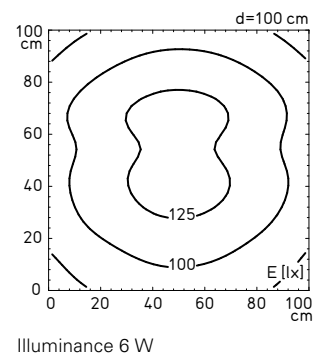
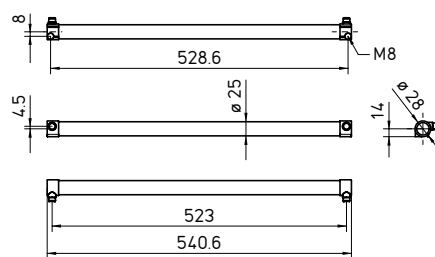
* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



When used in machines and plants, RL 25 LE provides optimum light conditions and fully exploits its advantages: a small diameter in combination with low weight ensures that the most compact of all tube luminaires finds space in any angle.






- Maintenance-free LED technology
- Optimum glare-free lighting thanks to integrated glare protection edge
- Plastic housing
- High degree of protection
- Ideal for high thermal stress
- Direct connection to machine voltage
- Potted M12 connector
- Through-wiring for electrical daisy-chaining of several luminaires

RL 25 LE COMPACT ALL-ROUND TALENT



RL 25 LE at a glance

- LED technology
- Colour temperature daylight white 6000 K
- Colour rendering Ra > 85
- Direct beam with glare protection edge on one side
- PVC housing
- Screw-mounted
- Maximum allowed ambient temperature $T_{a_{max}}$ 40° C
- LED service life (L70) > 50000 h
- Degree of protection IP65, protection class III
- Connection via M12 connector, A-coded
- M12 connection technology and operating devices as accessories for connection to the mains voltage

 Printing machines		 Packaging machines		 Production facilities	
 Woodworking machines		 Textile machines			
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}	Model Order no.	
LED 6 W	– 20 – 28 VDC	541 mm x 25 mm –	105 lx ¹ 133 lx ¹	RL25LE-24 D 112 957 000 - 005 316 85	

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



RL 40 LE

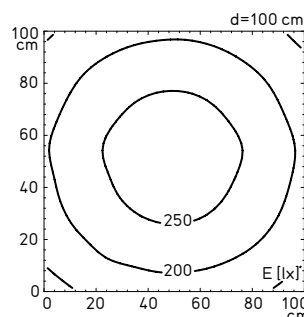
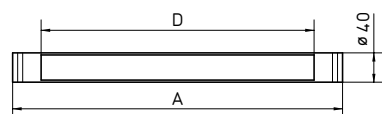
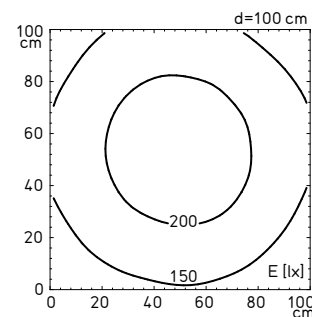
ROBUST COMPETENCE

RL 40 LE as slim LED tube luminaire is highly suitable for many machines and production facilities or their periphery. Even in the most demanding application, this bright and robust luminaire presents itself with competence, such as when used on track laying machines.

- Maintenance-free LED technology
- Housing made of impact-resistant plastic
- Outer diameter of 40 mm for integration in case of restricted space
- High degree of protection
- Ideal for high mechanical and thermal stress
- Direct connection to machine voltage
- Connection via quick connector
- Luminaires for daisy chaining



RL 40 LE with through-wiring

Illuminance based on the example
10 W with transparent luminaire tubeIlluminance based on the example
10 W with white opal luminaire tube**RL 40 LE at a glance**

- LED technology
- Colour temperature daylight white 5700 K
- Colour rendering Ra > 80
- Direct beam or glare-free thanks to white opal luminaire body
- Luminaire body made of PC
- Mounted by means of various brackets from the accessories
- Maximum allowed ambient temperature $T_{a_{max}}$ 40° C
- LED service life (L70) > 50 000 h
- Degree of protection IP67, protection class III
- Connection via quick connector
- Various brackets and operating device as accessories for connection to the mains voltage

Printing machines Woodworking machines		Packaging machines Textile machines		Production facilities	
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.	
LED 5 W	– 16 – 32 VDC	A = 368 mm, D = 307 mm transparent tube	113 lx ¹ 147 lx ¹	RL40LE-12 113 446 000 - 006 941 80	
LED 5 W	– 16 – 32 VDC	A = 368 mm, D = 307 mm transparent tube, through-wired	113 lx ¹ 147 lx ¹	RL40LE-12 D 113 017 000 - 006 941 74	
LED 10 W	– 16 – 32 VDC	A = 652 mm, D = 591 mm transparent tube	218 lx ¹ 280 lx ¹	RL40LE-24 113 447 000 - 006 941 95	
LED 10 W	– 16 – 32 VDC	A = 652 mm, D = 591 mm transparent tube, through-wired	218 lx ¹ 280 lx ¹	RL40LE-24 D 113 019 000 - 006 941 89	

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

Track laying machines		Dimensions Special feature	E_m E_{max}^*	Model Order no.	
LED 5 W	– 16 – 32 VDC	A = 368 mm, D = 307 mm white opal screen	90 lx ¹ 119 lx ¹	RL40LE-12 113 446 000 - 006 941 77	
LED 5 W	– 16 – 32 VDC	A = 368 mm, D = 307 mm white opal screen, through-wired	90 lx ¹ 119 lx ¹	RL40LE-12 D 113 017 000 - 006 941 71	
LED 10 W	– 16 – 32 VDC	A = 652 mm, D = 591 mm white opal screen	178 lx ¹ 230 lx ¹	RL40LE-24 113 447 000 - 006 941 92	
LED 10 W	– 16 – 32 VDC	A = 652 mm, D = 591 mm white opal screen, through-wired	178 lx ¹ 230 lx ¹	RL40LE-24 D 113 019 000 - 006 941 83	

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

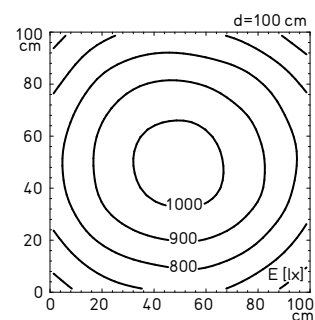
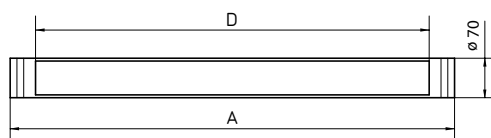


RL 70 LE THE MODERN CLASSIC WITH LED TECHNOLOGY



RL 70 LE as 70-mm tube luminaire is the traditional model of machine lights. The construction proven for decades promises maximum reliability not only in terms of the housing technology – the LED equipment allows permanent operation without lamp replacement. Moreover, an optimum length range allows a simple 1:1 replacement of conventional Waldmann tube luminaires.

- Maintenance-free LED technology
- Ultra low-glare, homogeneous light with soft transitions
- Light Forming Technology for optimum light deflection and glare-free lighting
- Outer diameter of 70 mm for easy replacement of traditional tube luminaires
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Ideal for high mechanical and thermal stress
- Direct connection to machine voltage



Illuminance based on the example
50 W

RL 70 LE at a glance

- LED technology
- Colour temperature neutral white 5000 K
- Colour rendering Ra > 80
- Glare-free with Light Forming Technology
- Luminaire body made of borosilicate glass
- Mounted by means of various brackets from the accessories
- LED service life (L70) > 50000 h
- Maximum allowed ambient temperature $T_{a_{max}}$ 40° C
- Degree of protection IP67, protection class III
- Connection via cable gland
- Various brackets and operating device as accessories for connection to the mains voltage



Machine tools



Textile machines



Woodworking machines



Production facilities

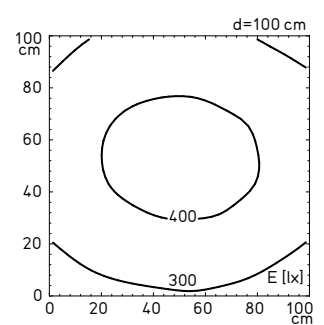
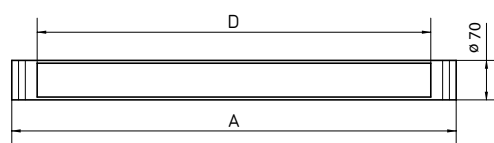
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 12.5 W	– 22 – 26 VDC	A = 370 mm, D = 316 mm –	242 lx ¹ 317 lx ¹	RL70LE-24 N 113 279 000 - 006 413 86
LED 19.0 W	– 22 – 26 VDC	A = 510 mm, D = 456 mm –	355 lx ¹ 462 lx ¹	RL70LE-36 N 113 280 000 - 006 413 89
LED 25.0 W	– 22 – 26 VDC	A = 650 mm, D = 596 mm –	505 lx ¹ 646 lx ¹	RL70LE-48 N 113 281 000 - 006 413 92
LED 31.5 W	– 22 – 26 VDC	A = 790 mm, D = 736 mm –	624 lx ¹ 795 lx ¹	RL70LE-60 N 113 282 000 - 006 413 95
LED 44.0 W	– 22 – 26 VDC	A = 1070 mm, D = 1016 mm –	837 lx ¹ 1042 lx ¹	RL70LE-84 N 113 283 000 - 006 413 98
LED 50.0 W	– 22 – 26 VDC	A = 1210 mm, D = 1156 mm –	968 lx ¹ 1190 lx ¹	RL70LE-96 N 113 284 000 - 006 414 01

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

LED



RL 70 LE with through-wiring



Illuminance based on the example
30 W

RL 70 LE

STRONG UNDER EXTREME CONDITIONS

RL 70 LE with impact-resistant polycarbonate tube is predestined for rough and demanding application environments, for example on track laying machines. State-of-the-art LED technology in a white opal luminaire tube ensures reduced glare and uniform light distribution. The through-wired designs allow the light to be scaled further in length: for optimum vision all around!

- Maintenance-free LED technology
- Housing made of impact-resistant plastic
- High degree of protection
- Ideal for high mechanical and thermal stress
- Direct connection to machine voltage
- Connection via quick connector
- Luminaires for daisy chaining

RL 70 LE at a glance

- LED technology
- Colour temperature daylight white 5700 K
- Colour rendering $R_a > 80$
- Glare-free thanks to white opal luminaire body
- Luminaire body made of PC
- Mounted by means of various brackets from the accessories
- LED service life (L70) $> 50\,000$ h
- Maximum allowed ambient temperature $T_{a_{max}} 40^\circ\text{C}$
- Degree of protection IP67, protection class III
- Connection via quick connector
- Various brackets and operating device as accessories for connection to the mains voltage



Track laying machines

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 10 W	– 16 – 32 VDC	A = 935 mm, D = 824 mm –	195 lx ¹ 245 lx ¹	RL70LE-36 113 448 000 - 006 946 22
LED 10 W	– 16 – 32 VDC	A = 935 mm, D = 824 mm through-wired	195 lx ¹ 245 lx ¹	RL70LE-36 D 113 179 000 - 006 946 19
LED 30 W	– 16 – 32 VDC	A = 1362 mm, D = 1251 mm –	361 lx ¹ 437 lx ¹	RL70LE-108 113 449 000 - 006 946 40
LED 30 W	– 16 – 32 VDC	A = 1362 mm, D = 1251 mm through-wired	361 lx ¹ 437 lx ¹	RL70LE-108 D 113 180 000 - 006 946 37

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

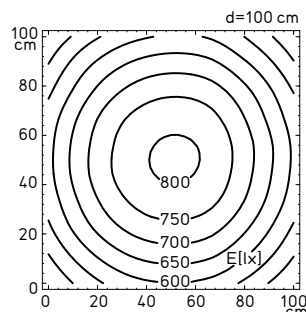
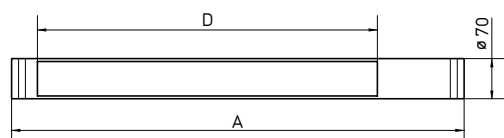


RL 70 E

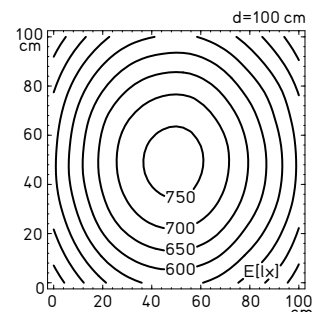
ESTABLISHED TOP PERFORMANCE

RL 70 E is the established solution for maximum wide-range lighting of the inside of the machine – even if glare-free viewing is required. This tube luminaire does not require an external ballast unit nor is it afraid of the toughest conditions of use.

- Energy-efficient fluorescent lamp technology
- Ultra low-glare, homogeneous light with soft transitions
- Variants with parabolic louvre for ideal glare-free viewing
- Integrated electronic ballast unit
- Different tube materials for use in accordance with the application
- Bayonet connection for easy lamp replacement
- High degree of protection
- Connection to machine or mains voltage



Illuminance based on the example
of 2 x 39 W without parabolic louvre



Illuminance based on the example
of 2 x 39 W

RL 70 E at a glance

- Fluorescent lamp technology
- Colour temperature neutral white 4000 K
- Colour rendering $R_a > 80$ (TC-L and T5 fluorescent lamps) or $R_a > 60$ (T8 fluorescent lamp)
- Direct illumination or glare-free thanks to aluminiumized parabolic louvre
- Luminaire body made of acrylic or borosilicate glass
- Mounted by means of various brackets from the accessories
- Degree of protection IP67, protection class I
- Connection via cable gland
- Various brackets as accessories



Printing machines



Textile machines



Woodworking machines



Production facilities

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}	Model Order no.
T8 1 x 18 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 916 mm, D = 597 mm acrylic	207 lx ¹ 262 lx ¹	RL70E-118 111 841 000 - 000 679 40
T8 1 x 18 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 916 mm, D = 597 mm acrylic; parabolic louvre	172 lx ¹ 222 lx ¹	RL70E-118 111 841 010 - 000 688 91
T8 1 x 36 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 1 724 mm, D = 1 200 mm acrylic	410 lx ¹ 490 lx ¹	RL70E-136 111 821 000 - 000 661 92
T8 1 x 36 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 1 724 mm, D = 1 200 mm acrylic; parabolic louvre	348 lx ¹ 420 lx ¹	RL70E-136 111 821 010 - 000 695 45
T8 1 x 58 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 2 027 mm, D = 1 548 mm acrylic	497 lx ¹ 693 lx ¹	RL70E-158 111 911 000 - 000 651 95
T8 1 x 58 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 2 027 mm, D = 1 548 mm acrylic; parabolic louvre	425 lx ¹ 620 lx ¹	RL70E-158 111 911 010 000 - 695 46
TC-L 1 x 18 W	integrated electronic ballast 100/120/230 V, 50/60 Hz	A = 486 mm, D = 198 mm acrylic	160 lx ¹ 205 lx ¹	RL70CE-118 111 371 000 - 000 570 24
TC-L 1 x 18 W	integrated electronic ballast 100/120/230 V, 50/60 Hz	A = 486 mm, D = 198 mm acrylic; parabolic louvre	154 lx ¹ 211 lx ¹	RL70CE-118 111 371 010 - 000 570 23
TC-L 1 x 24 W	integrated electronic ballast 100/120/230 V, 50/60 Hz	A = 572 mm, D = 293 mm acrylic	259 lx ¹ 333 lx ¹	RL70CE-124 111 381 002 - 000 570 29
TC-L 1 x 24 W	integrated electronic ballast 100/120/230 V, 50/60 Hz	A = 572 mm, D = 293 mm acrylic; parabolic louvre	220 lx ¹ 313 lx ¹	RL70CE-124 111 381 004 - 000 570 28
TC-L 1 x 36 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 827 mm, D = 363 mm acrylic	337 lx ¹ 437 lx ¹	RL70CE-136 112 009 000 - 000 661 19
TC-L 1 x 36 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 827 mm, D = 363 mm acrylic; parabolic louvre	327 lx ¹ 450 lx ¹	RL70CE-136 112 009 010 - 000 661 17
T5 2 x 39 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 1 472 mm, D = 829 mm acrylic	641 lx ¹ 805 lx ¹	RL70E-329 112 501 000 - 000 975 72
T5 2 x 39 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 1 472 mm, D = 829 mm acrylic; parabolic louvre	577 lx ¹ 765 lx ¹	RL70E-239 112 501 010 - 000 975 74

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



Printing machines



Textile machines



Woodworking machines



Production facilities

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}	Model Order no.
TC-L 1 x 18 W	integrated electronic ballast 24 VDC	A = 524 mm, D = 212 mm acrylic	159 lx ¹ 205 lx ¹	RL70CE-118 112 370 000 - 000 841 57
TC-L 1 x 18 W	integrated electronic ballast 24 VDC	A = 524 mm, D = 212 mm acrylic; parabolic louvre	152 lx ¹ 208 lx ¹	RL70CE-118 112 370 010 - 000 841 68
T8 1 x 18 W	integrated electronic ballast 24 VDC	A = 919 mm, D = 597 mm acrylic	207 lx ¹ 262 lx ¹	RL70E-118 111 690 000 - 000 634 06
T8 1 x 18 W	integrated electronic ballast 24 VDC	A = 919 mm, D = 597 mm acrylic; parabolic louvre	172 lx ¹ 222 lx ¹	RL70E-118 111 690 010 - 000 674 71
TC-L 1 x 24 W	integrated electronic ballast 24 VDC	A = 639 mm, D = 317 mm acrylic	259 lx ¹ 333 lx ¹	RL70CE-124 111 440 000 - 000 571 73
TC-L 1 x 24 W	integrated electronic ballast 24 VDC	A = 639 mm, D = 317 mm acrylic; parabolic louvre	220 lx ¹ 313 lx ¹	RL70CE-124 111 440 010 - 000 571 74
TC-L 1 x 36 W	integrated electronic ballast 24 VDC	A = 747 mm, D = 364 mm acrylic	337 lx ¹ 437 lx ¹	RL70CE-136 111 450 000 - 000 640 46
TC-L 1 x 36 W	integrated electronic ballast 24 VDC	A = 747 mm, D = 364 mm acrylic; parabolic louvre	327 lx ¹ 450 lx ¹	RL70CE-136 111 450 010 - 000 644 22
T8 1 x 36 W	integrated electronic ballast 24 VDC	A = 1532 mm, D = 1210 mm acrylic	410 lx ¹ 490 lx ¹	RL70E-136 111 730 000 - 000 599 87
T8 1 x 36 W	integrated electronic ballast 24 VDC	A = 1532 mm, D = 1210 mm acrylic; parabolic louvre	348 lx ¹ 420 lx ¹	RL70E-136 111 730 010 - 000 599 90
T8 1 x 58 W	integrated electronic ballast 24 VDC	A = 1850 mm, D = 1541 mm acrylic	497 lx ¹ 693 lx ¹	RL70E-158 112 170 000 - 000 867 80
T8 1 x 58 W	integrated electronic ballast 24 VDC	A = 1850 mm, D = 1541 mm acrylic; parabolic louvre	425 lx ¹ 620 lx ¹	RL70E-158 112 170 010 - 000 887 53
TC-L 1 x 18 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 524 mm, D = 212 mm acrylic	159 lx ¹ 205 lx ¹	RL70CE-118 112 369 000 - 000 841 94
TC-L 1 x 18 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 524 mm, D = 212 mm acrylic; parabolic louvre	152 lx ¹ 208 lx ¹	RL70CE-118 112 369 010 - 000 841 95
T8 1 x 18 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 919 mm, D = 597 mm acrylic	207 lx ¹ 262 lx ¹	RL70CE-118 111 650 000 - 000 630 29
T8 1 x 18 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 919 mm, D = 597 mm acrylic; parabolic louvre	172 lx ¹ 222 lx ¹	RL70CE-118 111 650 010 - 000 815 94
TC-L 1 x 24 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 639 mm, D = 317 mm acrylic	259 lx ¹ 333 lx ¹	RL70CE-124 111 410 000 - 000 571 56
TC-L 1 x 24 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 639 mm, D = 317 mm acrylic; parabolic louvre	220 lx ¹ 313 lx ¹	RL70CE-124 111 410 010 - 000 571 57
TC-L 1 x 36 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 747 mm, D = 364 mm Acrylic	337 lx ¹ 437 lx ¹	RL70CE-136 111 420 000 - 000 571 61
TC-L 1 x 36 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 747 mm, D = 364 mm acrylic; parabolic louvre	327 lx ¹ 450 lx ¹	RL70CE-136 111 420 010 - 000 571 62

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



Machine tools



Textile machines



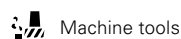
Woodworking machines



Production facilities

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}	Model Order no.
T8 1 x 18 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 916 mm, D = 597 mm borosilicate glass	207 lx ¹ 262 lx ¹	RL70E-118 111 841 001 - 000 687 31
T8 1 x 18 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 916 mm, D = 597 mm borosilicate glass; parabolic louvre	172 lx ¹ 222 lx ¹	RL70E-118 111 841 011 - 000 868 78
T8 1 x 36 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 1724 mm, D = 1200 mm borosilicate glass	410 lx ¹ 490 lx ¹	RL70E-136 111 821 001 - 000 632 28
T8 1 x 36 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 1724 mm, D = 1200 mm borosilicate glass; parabolic louvre	348 lx ¹ 420 lx ¹	RL70E-136 111 821 011 - 000 851 07
T8 1 x 58 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 2027 mm, D = 1548 mm borosilicate glass	497 lx ¹ 693 lx ¹	RL70E-158 111 911 001 - 000 651 94
T8 1 x 58 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 2027 mm, D = 1548 mm borosilicate glass; parabolic louvre	425 lx ¹ 620 lx ¹	RL70E-158 111 911 011 - 000 651 96

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm



Machine tools



Textile machines



Woodworking machines



Production facilities

Fitted with Power	Operating device Connected load	Dimensions Special feature	E _m E _{max} *	Model Order no.
TC-L 1 x 18 W	integrated electronic ballast 100/120/230 V, 50/60 Hz	A = 486 mm, D = 198 mm borosilicate glass	160 lx ¹ 205 lx ¹	RL70CE-118 111 371 001 - 000 570 26
TC-L 1 x 18 W	integrated electronic ballast 100/120/230 V, 50/60 Hz	A = 486 mm, D = 198 mm borosilicate glass; parabolic louvre	154 lx ¹ 211 lx ¹	RL70CE-118 111 371 011 - 000 570 25
TC-L 1 x 24 W	integrated electronic ballast 100/120/230 V, 50/60 Hz	A = 572 mm, D = 293 mm borosilicate glass	259 lx ¹ 333 lx ¹	RL70CE-124 111 381 003 - 000 570 31
TC-L 1 x 24 W	integrated electronic ballast 100/120/230 V, 50/60 Hz	A = 572 mm, D = 293 mm borosilicate glass; parabolic louvre	220 lx ¹ 313 lx ¹	RL70CE-124 111 381 005 - 000 570 30
TC-L 1 x 36 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 827 mm, D = 363 mm borosilicate glass	337 lx ¹ 437 lx ¹	RL70CE-136 112 009 001 - 000 661 18
TC-L 1 x 36 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 827 mm, D = 363 mm borosilicate glass; parabolic louvre	327 lx ¹ 450 lx ¹	RL70CE-136 112 009 011 - 000 661 16
T5 2 x 39 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 1 475 mm, D = 829 mm borosilicate glass	641 lx ¹ 805 lx ¹	RL70E-239 112 501 001 - 000 975 73
T5 2 x 39 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 1 475 mm, D = 829 mm borosilicate glass; parabolic louvre	577 lx ¹ 765 lx ¹	RL70E-239 112 501 011 - 000 975 75
T5 2 x 54 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 1 744 mm, D = 1 048 mm borosilicate glass	923 lx ¹ 1 427 lx ¹	RL70E-254 112 180 001 - 000 863 00
T5 2 x 54 W	integrated electronic ballast 220 – 240 V, 50/60 Hz	A = 1 744 mm, D = 1 048 mm borosilicate glass; parabolic louvre	698 lx ¹ 1 1185 lx ¹	RL70E-254 112 180 011 - 000 863 01
TC-L 1 x 40 W	integrated electronic ballast 110 – 230 V, 50/60 Hz	A = 1 040 mm, D = 530 mm borosilicate glass	442 lx ¹ 563 lx ¹	RL70CE-140 112 331 003 - 000 307 81**
TC-L 1 x 40 W	integrated electronic ballast 110 – 230 V, 50/60 Hz	A = 1 040 mm, D = 530 mm borosilicate glass; parabolic louvre	400 lx ¹ 552 lx ¹	RL70CE-140 112 331 005 - 000 307 75**
TC-L 1 x 18 W	integrated electronic ballast 24 VDC	A = 524 mm, D = 212 mm borosilicate glass	159 lx ¹ 205 lx ¹	RL70CE-118 112 370 001 - 000 841 61
TC-L 1 x 18 W	integrated electronic ballast 24 VDC	A = 524 mm, D = 212 mm borosilicate glass; parabolic louvre	152 lx ¹ 208 lx ¹	RL70CE-118 112 370 011 - 000 841 69
T8 1 x 18 W	integrated electronic ballast 24 VDC	A = 919 mm, D = 597 mm borosilicate glass	207 lx ¹ 262 lx ¹	RL70E-118 111 690 001 - 000 634 08
T8 1 x 18 W	integrated electronic ballast 24 VDC	A = 919 mm, D = 597 mm borosilicate glass; parabolic louvre	172 lx ¹ 222 lx ¹	RL70E-118 111 690 011 - 000 634 07
TC-L 1 x 24 W	integrated electronic ballast 24 VDC	A = 639 mm, D = 317 mm borosilicate glass	259 lx ¹ 333 lx ¹	RL70CE-124 111 440 001 - 000 571 75
TC-L 1 x 24 W	integrated electronic ballast 24 VDC	A = 639 mm, D = 317 mm borosilicate glass; parabolic louvre	220 lx ¹ 313 lx ¹	RL70CE-124 111 440 011 - 000 571 76
TC-L 1 x 36 W	integrated electronic ballast 24 VDC	A = 747 mm, D = 364 mm borosilicate glass	337 lx ¹ 437 lx ¹	RL70CE-136 111 450 001 - 000 571 77
TC-L 1 x 36 W	integrated electronic ballast 24 VDC	A = 747 mm, D = 364 mm borosilicate glass; parabolic louvre	271 lx ¹ 352 lx ¹	RL70CE-136 111 450 011 - 000 571 78
T8 1 x 36 W	integrated electronic ballast 24 VDC	A = 1 532 mm, D = 1 210 mm borosilicate glass	410 lx ¹ 490 lx ¹	RL70E-136 111 730 001 - 000 599 91
T8 1 x 36 W	integrated electronic ballast 24 VDC	A = 1 532 mm, D = 1 210 mm borosilicate glass; parabolic louvre	348 lx ¹ 420 lx ¹	RL70E-136 111 730 011 - 00 599 88
T8 1 x 58 W	integrated electronic ballast 24 VDC	A = 1 850 mm, D = 1 541 mm borosilicate glass	497 lx ¹ 693 lx ¹	RL70E-158 112 170 001 - 000 855 33
T8 1 x 58 W	integrated electronic ballast 24 VDC	A = 1 850 mm, D = 1 541 mm borosilicate glass; parabolic louvre	425 lx ¹ 620 lx ¹	RL70E-158 112 170 011 - 000 865 01
TC-L 1 x 18 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 524 mm, D = 212 mm borosilicate glass	159 lx ¹ 205 lx ¹	RL70CE-118 112 369 001 - 000 842 04
TC-L 1 x 18 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 524 mm, D = 212 mm borosilicate glass; parabolic louvre	152 lx ¹ 208 lx ¹	RL70CE-118 112 369 011 - 000 841 97
T8 1 x 18 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 919 mm, D = 597 mm borosilicate glass	207 lx ¹ 262 lx ¹	RL70E-118 111 650 001 - 000 630 30
T8 1 x 18 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 919 mm, D = 597 mm borosilicate glass; parabolic louvre	172 lx ¹ 222 lx ¹	RL70E-118 111 650 011 - 000 630 31
TC-L 1 x 24 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 639 mm, D = 317 mm borosilicate glass	259 lx ¹ 333 lx ¹	RL70CE-124 111 410 001 - 000 571 58
TC-L 1 x 24 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 639 mm, D = 317 mm borosilicate glass; parabolic louvre	220 lx ¹ 313 lx ¹	RL70CE-124 111 410 011 - 000 571 59
TC-L 1 x 36 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 747 mm, D = 364 mm borosilicate glass	337 lx ¹ 437 lx ¹	RL70CE-136 111 420 001 - 000 571 64
TC-L 1 x 36 W	integrated electronic ballast 24 VAC, 50/60 Hz	A = 747 mm, D = 364 mm borosilicate glass; parabolic louvre	327 lx ¹ 450 lx ¹	RL70CE-136 111 420 011 - 000 571 67

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

** Design with cETLus approval

RL 70 H

ILLUMINATES ALONG ITS ENTIRE LENGTH



The RL 70 H intelligently combines the advantages of an integrated electronic ballast luminaire with the advantages of separate ballast unit. It practically illuminates the entire tube length without requiring any further components.

- Energy-efficient fluorescent lamp technology
- Light exit over almost the entire luminaire length
- Ultra low-glare, homogeneous light with soft transitions
- Variants with parabolic louvre for ideal glare-free viewing
- Integrated electronic ballast unit
- Bayonet connection for easy lamp replacement
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Connection to machine or mains voltage



Printing machines



Textile machines



Woodworking machines

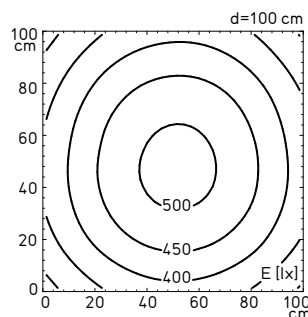
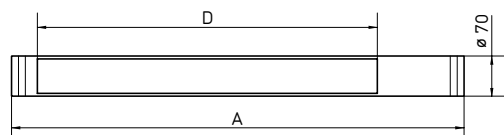


Production facilities

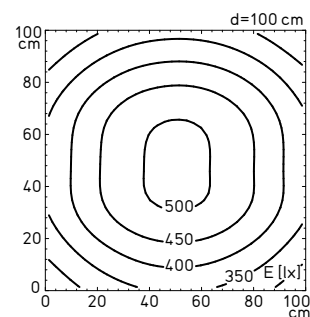
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max} *	Model Order no.
TC-L 1 x 36 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 585 mm, D = 395 mm acrylic	280 lx ¹ 354 lx ¹	RL70CE-136 H 112 472 000 - 000 908 25
TC-L 1 x 36 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 585 mm, D = 395 mm acrylic; parabolic louvre	271 lx ¹ 352 lx ¹	RL70CE-136 H 112 472 010 - 000 878 15
TC-L 2 x 36 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 1065 mm, D = 790 mm acrylic	421 lx ¹ 515 lx ¹	RL70CE-236 H 112 449 000 - 000 813 04
TC-L 2 x 36 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 1065 mm, D = 790 mm acrylic; parabolic louvre	409 lx ¹ 510 lx ¹	RL70CE-236 H 112 449 010 - 000 828 68
TC-L 1 x 36 W	integrated electronic ballast 110/230 V, 50/60 Hz	A = 585 mm, D = 395 mm acrylic	280 lx ¹ 354 lx ¹	RL70CE-136 H 619 063 007 - 000 831 50**
TC-L 1 x 36 W	integrated electronic ballast 110/230 V, 50/60 Hz	A = 585 mm, D = 395 mm acrylic; parabolic louvre	256 lx ¹ 350 lx ¹	RL70CE-136 H 619 063 017 - 000 831 49**
TC-L 1 x 24 W	integrated electronic ballast 100 – 250 V, 50/60 Hz	A = 495 mm, D = 311 mm acrylic	242 lx ¹ 305 lx ¹	RL70CE-124 H 112 911 000 - 004 887 10
TC-L 1 x 24 W	integrated electronic ballast 100 – 250 V, 50/60 Hz	A = 495 mm, D = 311 mm acrylic; parabolic louvre	207 lx ¹ 281 lx ¹	RL70CE-124 H 112 911 010 - 004 888 15
TC-L 1 x 24 W	integrated electronic ballast 24 VAC/DC	A = 475 mm, D = 331 mm acrylic	204 lx ¹ 259 lx ¹	RL70CE-124 H 112 470 004 - 000 929 98
TC-L 1 x 24 W	integrated electronic ballast 24 VAC/DC	A = 475 mm, D = 331 mm acrylic; parabolic louvre	196 lx ¹ 257 lx ¹	RL70CE-124 H 112 470 006 - 000 930 00
TC-L 1 x 36 W	integrated electronic ballast 24 VAC/DC	A = 585 mm, D = 395 mm acrylic	258 lx ¹ 322 lx ¹	RL70CE-136 H 112 411 000 - 000 939 95
TC-L 1 x 36 W	integrated electronic ballast 24 VAC/DC	A = 585 mm, D = 395 mm acrylic; parabolic louvre	271 lx ¹ 352 lx ¹	RL70CE-136 H 112 411 010 - 000 939 96

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

** Design with cETLus approval



Illuminance based on the example
of 2 x 36 W without parabolic louvre
(112 449 001 - 000 813 05)



Illuminance based on the example
of 2 x 36 W with parabolic louvre
(112 449 011 - 000 813 32)

RL 70 H at a glance

- Fluorescent lamp technology
- Colour temperature neutral white 4000 K
- Colour rendering Ra > 80
- Direct illumination or glare-free thanks to aluminiumized parabolic louvre
- Luminaire body made of acrylic or borosilicate glass
- Mounted by means of various brackets from the accessories
- Degree of protection IP67, protection class I
- Connection via cable gland
- Various brackets as accessories



Machine tools



Textile machines



Woodworking machines

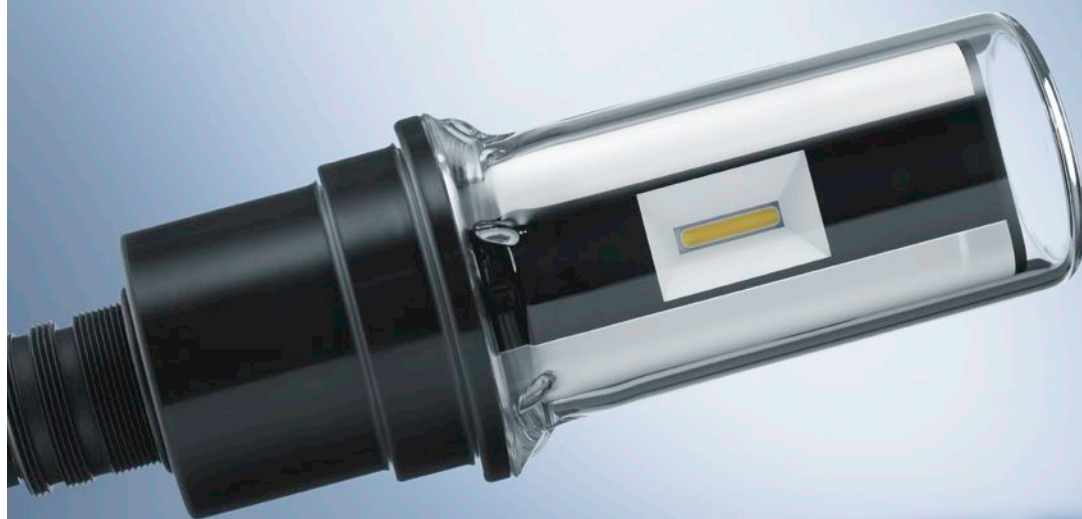


Production facilities

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
TC-L 1 x 36 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 585 mm, D = 395 mm borosilicate glass	280 lx ¹ 354 lx ¹	RL70CE-136 H 112 472 001 - 000 908 24
TC-L 1 x 36 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 585 mm, D = 395 mm borosilicate glass; parabolic louvre	271 lx ¹ 352 lx ¹	RL70CE-136 H 112 472 011 - 000 908 03
TC-L 2 x 36 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 1 065 mm, D = 790 mm borosilicate glass	421 lx ¹ 515 lx ¹	RL70CE-236 H 112 449 001 - 000 813 05
TC-L 2 x 36 W	integrated electronic ballast 230 – 240 V, 50/60 Hz	A = 1 065 mm, D = 790 mm borosilicate glass; parabolic louvre	409 lx ¹ 510 lx ¹	RL70CE-236 H 112 449 011 - 000 813 32
TC-L 1 x 36 W	integrated electronic ballast 110/230 V, 50/60 Hz	A = 585 mm, D = 395 mm borosilicate glass	280 lx ¹ 354 lx ¹	RL70CE-136 H 619 063 001 - 000 109 61**
TC-L 1 x 36 W	integrated electronic ballast 110/230 V, 50/60 Hz	A = 585 mm, D = 395 mm borosilicate glass; parabolic louvre	256 lx ¹ 350 lx ¹	RL70CE-136 H 619 063 011 - 000 059 22**
TC-L 1 x 24 W	integrated electronic ballast 100 – 250 V, 50/60 Hz	A = 495 mm, D = 311 mm borosilicate glass	242 lx ¹ 305 lx ¹	RL70CE-124 H 112 911 001 - 004 887 13
TC-L 1 x 24 W	integrated electronic ballast 100 – 250 V, 50/60 Hz	A = 495 mm, D = 311 mm borosilicate glass; parabolic louvre	207 lx ¹ 281 lx ¹	RL70CE-124 H 112 911 011 - 004 888 18
TC-L 1 x 24 W	integrated electronic ballast 24 VAC/DC	A = 475 mm, D = 331 mm borosilicate glass	204 lx ¹ 259 lx ¹	RL70CE-124 H 112 470 005 - 000 929 99
TC-L 1 x 24 W	integrated electronic ballast 24 VAC/DC	A = 475 mm, D = 331 mm borosilicate glass; parabolic louvre	196 lx ¹ 257 lx ¹	RL70CE-124 H 112 470 007 - 000 930 01
TC-L 1 x 36 W	integrated electronic ballast 24 VAC/DC	A = 585 mm, D = 395 mm borosilicate glass	258 lx ¹ 322 lx ¹	RL70CE-136 H 112 411 001 - 000 940 03
TC-L 1 x 36 W	integrated electronic ballast 24 VAC/DC	A = 585 mm, D = 395 mm borosilicate glass; parabolic louvre	271 lx ¹ 352 lx ¹	RL70CE-136 H 112 411 011 - 000 940 04

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

** Design with cETLus approval



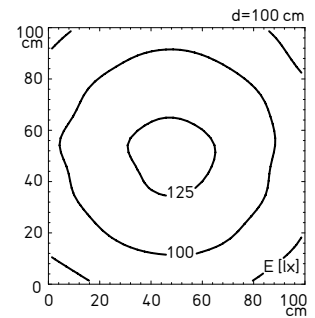
AWD A STRONG LIGHT IN TOUGH CONDITIONS

AWD is the ideal tube luminaire for lighting up tight spaces: its dimensions are short and compact, which doesn't prevent it from being a powerful, energy-efficient luminaire.

- Available with maintenance-free LED technology or energy-efficient fluorescent lamp technology
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Resistant even when a lot of chips are flying around
- Direct connection to machine voltage



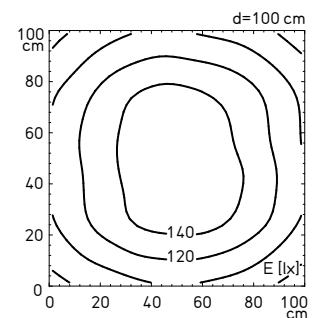
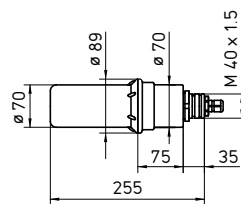
AWDL 1



Illuminance AWDL 1



AWDCE 118 with parabolic louvre

Illuminance AWDCE
with reflector

AWD at a glance

- LED technology or fluorescent lamp technology
- Colour temperature neutral white 4000 K
- Colour rendering Ra > 80
- Direct illumination or glare-free thanks to aluminiumized parabolic louvre
- Luminaire body made of borosilicate glass
- Mounted by means of screw connection or bracket from the accessories
- Degree of protection IP67, protection class II (AWDCE) or protection class III (AWDL 1)
- Connection via cable gland
- Bracket as accessory



Machine tools

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED	–	ø 70 mm	102 lx ¹	AWDL 1
5.5 W	24 VDC	borosilicate glass; reflector	132 lx ¹	112 950 000 - 005 215 46
TC-DEL	integrated electronic ballast	ø 70 mm	122 lx ¹	AWDCE 118
18.0 W	24 VDC	borosilicate glass; reflector	158 lx ¹	112 153 001 - 000 836 32
TC-DEL	integrated electronic ballast	ø 70 mm	108 lx ¹	AWDCE 118
18.0 W	24 VDC	borosilicate glass; parabolic louvre	140 lx ¹	112 153 011 - 000 836 33

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

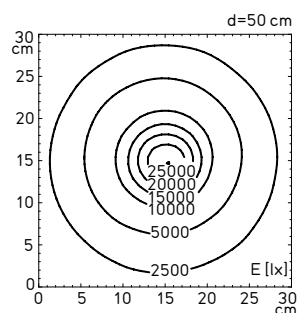
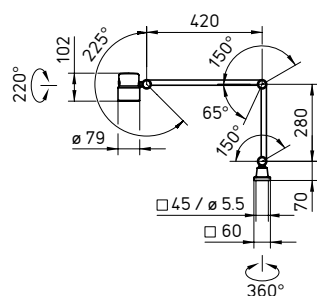


ROCIA.focus

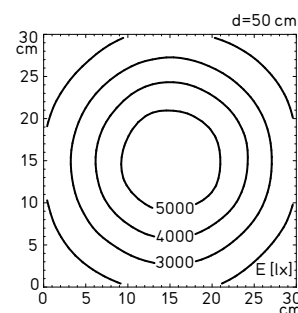
SPOT ON: PINPOINT LIGHTING

The ROCIA.focus impresses with unique resistance. Even in the roughest industrial environments, the luminaire preserves its stability and ensures precise and focused lighting. Its exactly adjustable arm, optics with different beam angles and a flicker-free dimming allow an optimum control of the state-of-the-art high-power LEDs.

- Maintenance-free LED technology
- Strong high-power LEDs for maximum light
- With narrow- or wide-beam illumination characteristic, as desired
- Continuous, flicker-free dimming (switchable)
- Robust aluminium housing with solid safety glass screen
- Viton® seal for high degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Exactly adjustable arm
- Connection to machine or mains voltage



Illuminance with 10° optics



Illuminance with 40° optics

ROCIA.focus compact

- LED technology
- Colour temperature neutral white 5000 K
- Colour rendering Ra > 80
- Beam angle 10° or 40°
- Housing made of black and colourless anodised aluminium
- 3 mm thick safety glass
- Partially spring-loaded arm
- Maximum allowed ambient temperature $T_{a_{max}}$ 40 °C (without transformer)
- LED service life (L70) > 60 000 h
- Button integrated into the luminaire head for On/Off and dimming
- Degree of protection IP67, protection class I (with transformer) or protection class III (without transformer)
- Supplied with approx. 3 m connecting cable and shock-proof plug, type CEE 7/7 (with transformer) or free strand ends (without transformer)
- Various fasteners as accessories



Machine tools



Woodworking machines



Textile machines

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED 9.5 W	integrated transformer 100 – 240 V, 50/60 Hz	– 10° optics, dimmable	5088 lx ¹ 30053 lx ¹	RFD 600/850/D 113 181 000 - 006 791 31
LED 9.5 W	integrated transformer 100 – 240 V, 50/60 Hz	– 40° optics, dimmable	3255 lx ¹ 5600 lx ¹	RFD 600/850/D 113 181 000 - 006 801 67
LED 8.5 W	– 12 – 28 VAC, 12 – 40 VDC	– 10° optics, dimmable	5088 lx ¹ 30053 lx ¹	RFD 600/850/DS 113 182 000 - 006 801 10
LED 8.5 W	– 12 – 28 VAC, 12 – 40 VDC	– 40° optics, dimmable	3255 lx ¹ 5600 lx ¹	RFD 600/850/DS 113 182 000 - 006 802 08

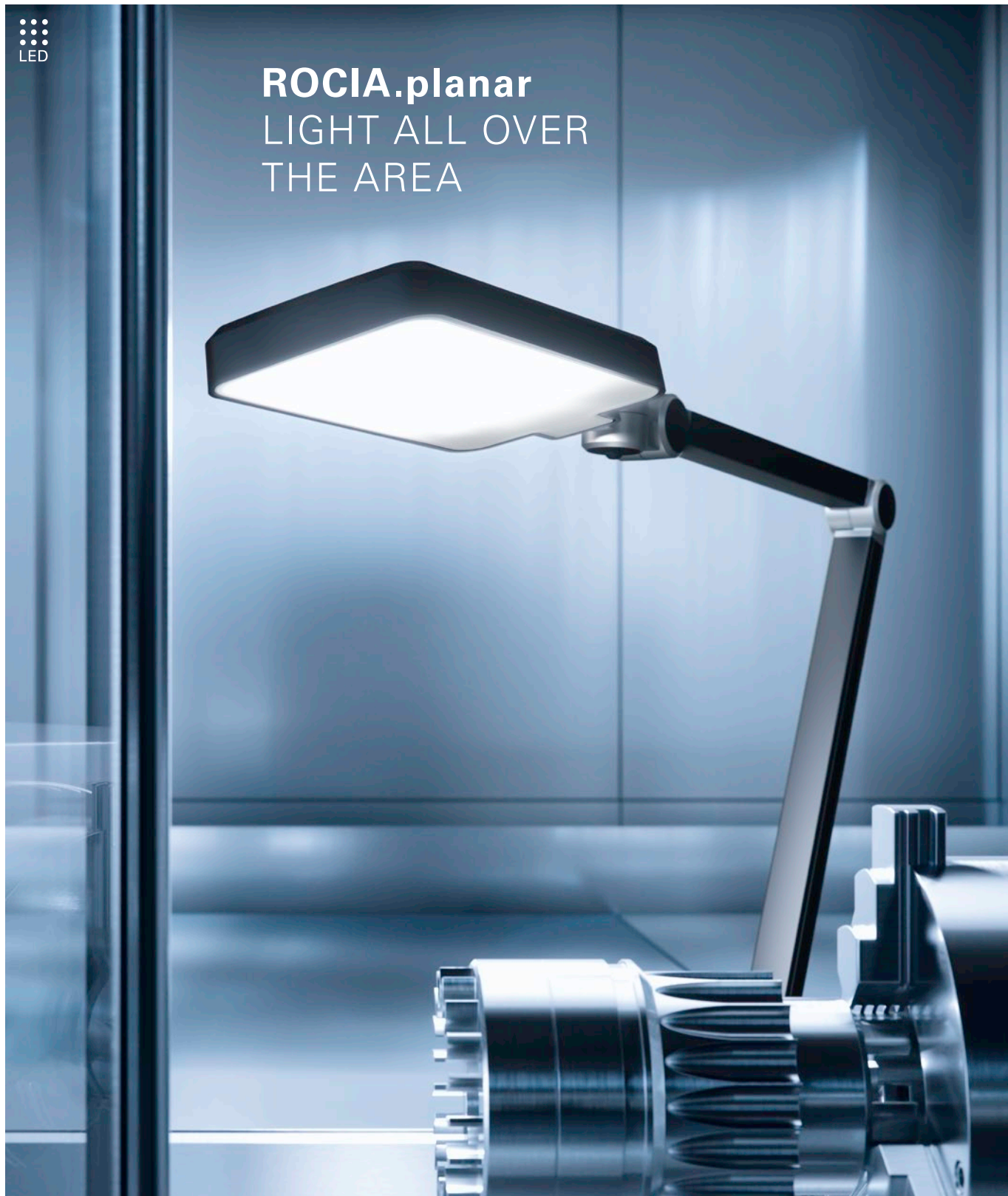
* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 50 cm

Also available as a flexible-tube and pivoting-head luminaires



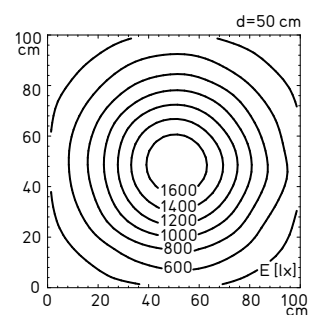
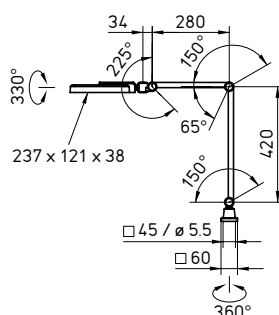
ROCIA.planar

LIGHT ALL OVER THE AREA



ROCIA.planar is a robust and simultaneously high-precision spotlight whose technical details, in particular the full-metal design, guarantee a high security of investment. Its 3D head joint, high illuminance and outstanding light quality guarantee exact adjustability and set standards in terms of ergonomics.

- Maintenance-free LED technology
- For strong, large-area and uniform lighting
- Robust aluminium housing
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Exactly adjustable arm with 3D head joint
- Connection to mains voltage

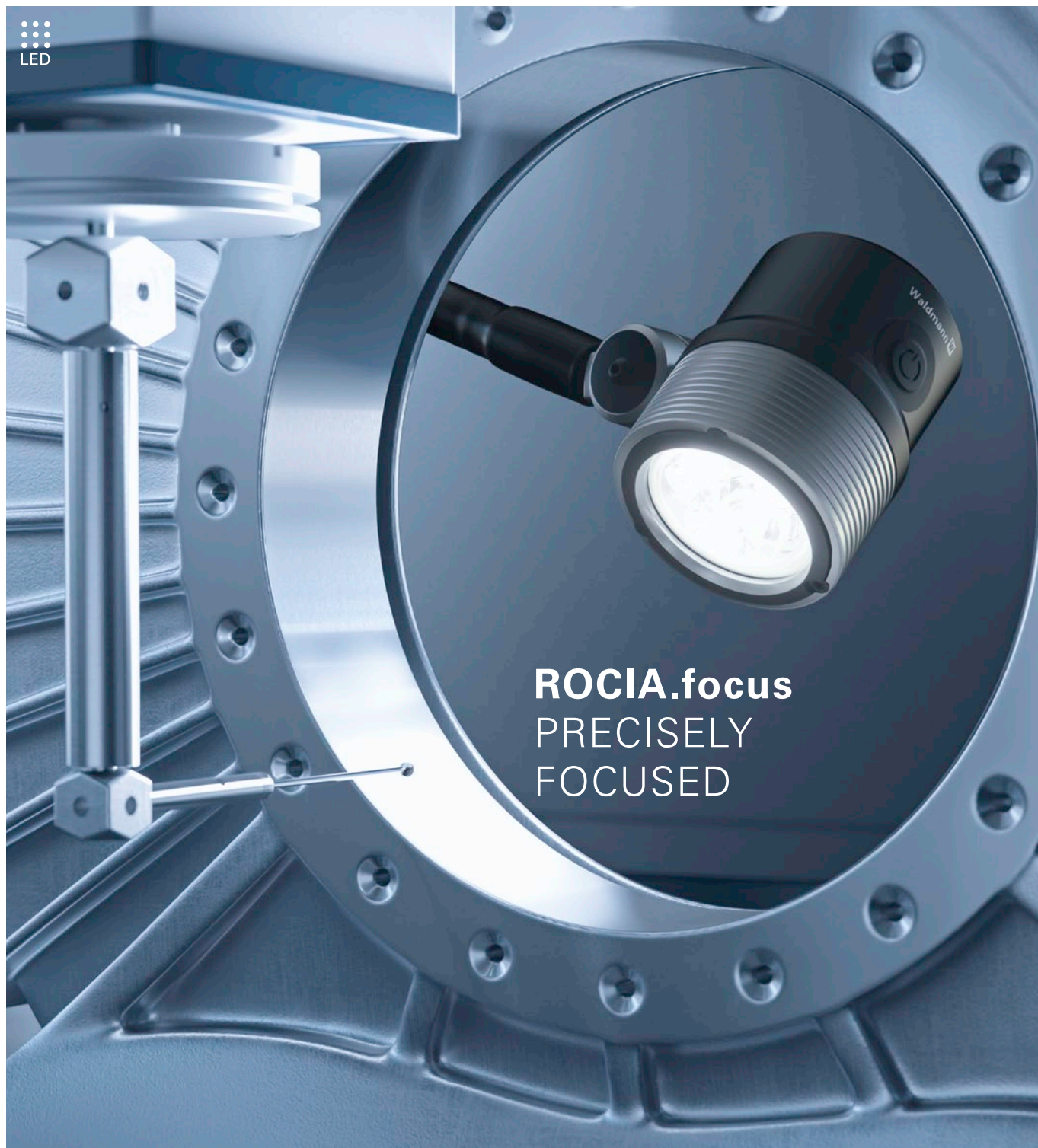


ROCIA.planar at a glance

- LED technology
- Colour temperature neutral white 5000 K
- Colour rendering Ra > 80
- Glare-free thanks to white opal screen
- Housing made of aluminium painted black
- Polycarbonate plastic screen
- Partially spring-loaded arm
- LED service life (L70) > 50000 h
- Switch in the luminaire head for On/Off
- Degree of protection IP67, protection class I
- Supplied with approx. 3 m connecting cable and plug, type CEE 7/7 (grounded plug)
- Various fasteners as accessories

Machine tools		Woodworking machines		Textile machines	
Fitted with	Operating device	Dimensions		E_m	Model
Power	Connected load	Special feature		E_{max}^*	Order no.
LED	integrated transformer	—		783 lx ¹	RPD 1700/850
18 W	100–240 V, 50/60 Hz	—		1 752 lx ¹	113 458 000 - 006 689 76

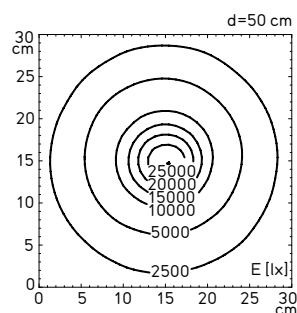
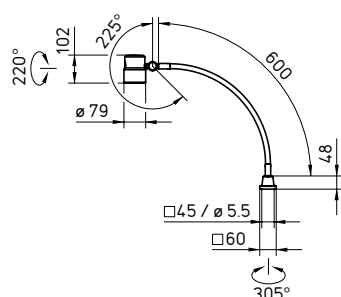
* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 50 cm



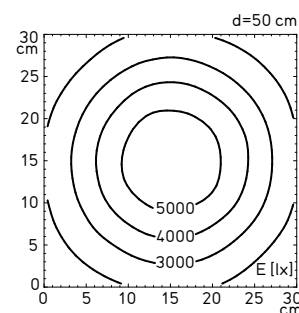
RO CIA.focus PRECISELY FOCUSED

RO CIA.focus in the flexible-tube luminaire design offers a lot of freedom when setting the light that fits perfectly. Its flexible tube with additional head joint makes it mobile and focuses the light directly and quickly – always exactly where it is needed. Even where space is limited, the lighting can be aligned exactly thanks to its flexible tube.

- Maintenance-free LED technology
- Strong high-power LEDs for maximum light
- With narrow- or wide-beam illumination characteristic, as desired.
- Continuous, flicker-free dimming (switchable)
- Robust aluminium housing with solid safety glass screen
- Viton® seal for high degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Exactly adjustable flexible tube
- Connection to machine or mains voltage



Illuminance with 10° optics



Illuminance with 40° optics

ROCIA.focus compact

- LED technology
- Colour temperature neutral white 5000 K
- Colour rendering Ra > 80
- Beam angle 10° or 40°
- Housing made of black and colourless anodised aluminium
- 3 mm thick safety glass
- Flexible metal tube for at least 20 000 motions
- Maximum allowed ambient temperature $T_{a_{max}}$ 40 °C (without transformer)
- LED service life (L70) > 60 000 h
- Button integrated into the luminaire head for On/Off and dimming
- Degree of protection IP67, protection class I (with transformer) or protection class III (without transformer)
- Supplied with approx. 3 m connecting cable and shock-proof plug, type CEE 7/7 (with transformer) or free strand ends (without transformer)
- Various fasteners as accessories



Machine tools



Woodworking machines



Textile machines

Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.
LED	integrated transformer	–	5088 lx ¹	RFF 600/850/D
9.5 W	100 – 240 V, 50/60 Hz	10° optics, dimmable	30053 lx ¹	113 183 000 - 006 689 96
LED	integrated transformer	–	3255 lx ¹	RFF 600/850/D
9.5 W	100 – 240 V, 50/60 Hz	40° optics, dimmable	5600 lx ¹	113 183 000 - 006 802 51
LED	–	–	5088 lx ¹	RFF 600/850/DS
8.5 W	12 – 28 VAC, 12 – 40 VDC	10° optics, dimmable	30053 lx ¹	113 184 000 - 006 802 72
LED	–	–	3255 lx ¹	RFF 600/850/DS
8.5 W	12 – 28 VAC, 12 – 40 VDC	40° optics, dimmable	5600 lx ¹	113 184 000 - 006 802 85

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 50 cm

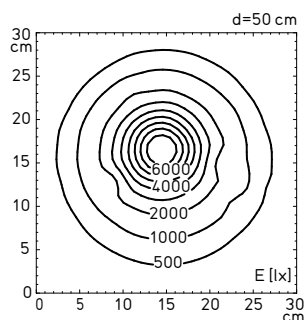
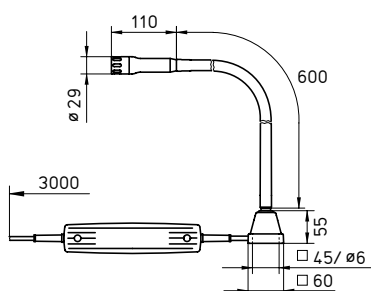
Also available as arm-mounted and pivoting-head luminaires



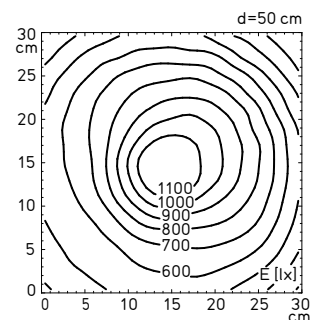
ABL THE FLEXIBLE HEAD FOR TOUGH TASKS

With its minimalist design, the ABL is as small and handy as a mini flashlight that can be fixed in any position. The fact that it is extremely tough in spite of its delicate appearance makes it a highly versatile luminaire.

- Maintenance-free LED technology
- Strong high-power LED for maximum light
- With narrow- or wide-beam illumination characteristic, as desired
- Robust aluminium housing with solid safety glass screen
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Exactly adjustable flexible tube



Illuminance with 6° optics



Illuminance with 25° optics

ABL at a glance

- LED technology
- Colour temperature daylight white 6000 K
- Colour rendering $R_a > 75$
- Beam angle 6° or 25°
- Housing made of black anodised aluminium
- 2 mm thick safety glass
- Flexible metal tube for at least 20 000 motions
- LED service life (L70) > 50 000 h
- Degree of protection IP67 (without transformer) or IP20 (with transformer, luminaire head IP67), protection class III (without transformer) or protection class II (with transformer)
- Supplied with approx. 3 m connecting cable and free stranded wires or integrated power supply with plug type CEE 7/16 (Euro plug)
- Various fasteners and operating devices as accessories



Machine tools

Fitted with Power	Operating device Connected load	Connection Special feature	E_m E_{max}^*	Model Order no.
LED 3 W	– depending on the operating device	constant current source with 350 or 700 mA 6° optics	1 219 lx ¹ 8 966 lx ¹	ABLTL 1 112 423 000 - 000 715 50
LED 3 W	– depending on the operating device	constant current source with 350 or 700 mA 25° optics	691 lx ¹ 1 260 lx ¹	ABLTL 1 112 423 001 - 000 715 49
LED 3 W	transformer in sep. housing 95 – 240 V, 50/60 Hz	– 6° optics	1 219 lx ¹ 8 966 lx ¹	ABLTLE 1 112 426 000 - 000 740 02
LED 3 W	transformer in sep. housing 95 – 240 V, 50/60 Hz	– 25° optics	691 lx ¹ 1 260 lx ¹	ABLTLE 1 112 426 001 - 000 741 55

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 50 cm

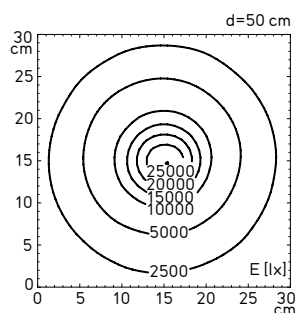
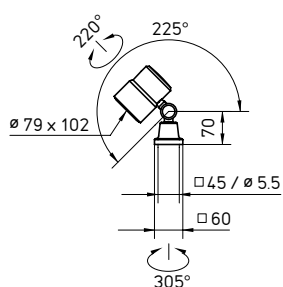
Also available as pivoting-head luminaires



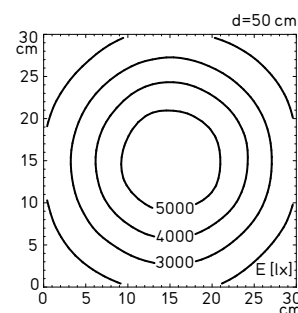
ROCIA.focus HERE THE FOCUS IS PRECISION

The pivoting-head luminaire ROCIA.focus offers maximum flexibility. The mobility of its pivoting head allows the light beam to be directed precisely to where it is needed. The extremely precise lighting allows focused and concentrated work – also thanks to different beam angles.

- Maintenance-free LED technology
- Strong high-power LEDs for maximum light
- With narrow- or wide-beam illumination characteristic, as desired
- Robust aluminium housing with solid safety glass screen
- Viton® seal for high degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Exactly adjustable pivoting head
- Direct connection to machine voltage



Illuminance with 10° optics



Illuminance with 40° optics

ROCIA.focus compact

- LED technology
- Colour temperature neutral white 5000 K
- Colour rendering Ra > 80
- Beam angle 10° or 40°
- Housing made of black and colourless anodised aluminium
- 3 mm thick safety glass
- Maximum allowed ambient temperature $T_{a_{max}}$ 40° C
- Head joint for individual settings
- LED service life (L70) > 60 000 h
- Degree of protection IP67, protection class III
- Supplied with approx. 3 m connecting cable and free stranded wires
- Various fasteners as accessories

Machine tools		Woodworking machines		Textile machines	
Fitted with Power	Operating device Connected load	Dimensions Special feature	E_m E_{max}^*	Model Order no.	
LED	–	–	5088 lx ¹	RFJ 600/850/S	
8.5 W	12 – 28 VAC, 12 – 40 VDC	10° optics	30 053 lx ¹	113 185 000 - 006 686 13	
LED	–	–	3255 lx ¹	RFJ 600/850/S	
8.5 W	12 – 28 VAC, 12 – 40 VDC	40° optics	5600 lx ¹	113 185 000 - 006 802 93	

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 50 cm

Also available as arm-mounted and pivoting-head luminaires

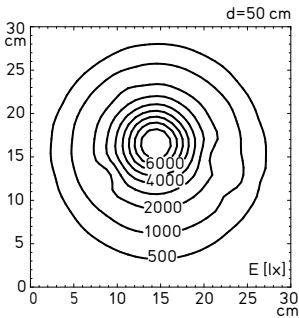
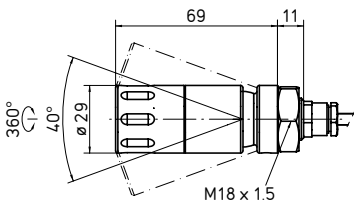


ABL SMALL, BUT ENORMOUSLY IMPORTANT

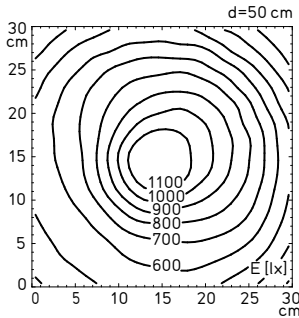


This may sound contradictory: The ABL is so small because it performs an essential task. With its compact dimensions and its integrated ball joint, it directs light to places where it seems almost impossible, but where it is urgently needed.

- Maintenance-free LED technology
- Strong high-power LED for maximum light
- With narrow- or wide-beam illumination characteristic, as desired
- Robust aluminium housing with solid safety glass screen
- High degree of protection
- Chemically resistant to many media such as oils or cooling lubricants
- Integrated ball joint



Illuminance with 6° optics



Illuminance with 25° optics

ABL at a glance

- LED technology
- Colour temperature daylight white 6000 K
- Colour rendering Ra > 75
- Beam angle 6° or 25°
- Housing made of black anodised aluminium
- 2 mm thick safety glass
- Ball joint for individual settings
- LED service life (L70) > 50000 h
- Degree of protection IP67, protection class III
- Supplied with approx. 1.5 m connecting cable and free stranded wires
- Various operating devices as accessories

Machine tools					
Fitted with Power	Operating device Connected load	Connection Special feature	E_m E_{max}	Model Order no.	
LED 3 W	– depending on the operating device	constant current source with 350 or 700 mA 6° optics	1 219 lx ¹ 8966 lx ¹	ABLL 1 112 353 000 - 000 412 01	
LED 3 W	– depending on the operating device	constant current source with 350 or 700 mA 25° optics	691 lx ¹ 1 260 lx ¹	ABLL 1 112 353 001 - 000 419 41	

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ measuring field 30 cm x 30 cm/measuring distance 50 cm
Also available as flexible-tube luminaires

SINEO THAT SENDS A CLEAR MESSAGE

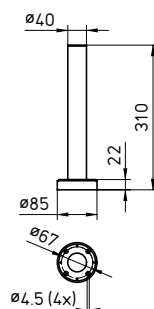
For decades, Waldmann has been successfully developing machine lights for the most demanding environmental conditions. Customers appreciate the reliability and quality of the products. The signal light SINEO is Waldmann's next milestone that will revolutionise signal technology.

Its unique functionality is as brilliant as its elegant design. Particularly homogeneously and intensely illuminated signal levels show much more than other signal lights can. Individually definable colours indicate states, sequences or any other measurable events on machines and plants.

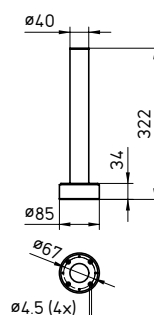
- Maintenance-free LED technology
- Adjustable colours and fluorescent images through RGB LEDs
- Three or four signal levels
- Intense light colours thanks to innovative light guide technology
- Variants with IO link communication system
- Versions with acoustic signal generator
- Robust plastic housing
- Prevents accumulation of dirt
- Direct connection to machine voltage
- Customising by means of design case



SINEO without acoustic signal generator



SINEO with acoustic signal generator

**SINEO at a glance**

- LED technology
- RGB LEDs
- Light deflection by light guide technology
- Luminaire body made of PC
- Screw-mounted
- IO link (variants) with EVS (electronic visibility improvement)
- Maximum allowed ambient temperature $T_{a_{max}}$ 50 °C
- Degree of protection IP65, protection class III
- Supplied with approx. 0.4 m connecting cable and M12 plug connector, A-coded (cable outlet at the bottom)
- M12 connection technology and design cases as accessories



Machine tools



Woodworking machines



Textile machines



Printing machines



Packaging machines



Production facilities

Signal levels Power	Fluorescent image Connected load	Special feature	Model Order no.
3 7.5 W	continuous/blinking light 22 – 26 VDC	–	MNAFL 24 S H20 001 000 - 006 175 98
4 9.0 W	continuous/blinking light 22 – 26 VDC	–	MNAFL 32 S H20 003 000 - 006 176 17
4 9.0 W	continuous/blinking/flash light, EVS 22 – 26 VDC	IO link	MNAFL 32 S H20 005 000 - 006 176 24
3 8.5 W	continuous/blinking light 22 – 26 VDC	with acoustic signal	MNAFL 24 S H20 002 000 - 006 176 01
4 10.0 W	continuous/blinking light 22 – 26 VDC	with acoustic signal	MNAFL 32 S H20 004 000 - 006 176 21
4 10.0 W	continuous/blinking/flash light, EVS 22 – 26 VDC	IO link, with acoustic signal	MNAFL 32 S H20 006 000 - 006 176 27



ACCESSORIES

Fasteners

Connection technology

Operating devices for LED luminaires

Control and sensors

Magnifiers

Protective covers

FASTENERS



Table clamp for all magnifier, arm-mounted and flexible-tube luminaires

Colour	Special feature	Order no.
black	0 – 45 mm	190 008 019 - 000 149 23
black	0 – 65 mm	190 007 019 - 000 149 04
black	65 – 135 mm	190 033 019 - 000 149 50
black	95 – 165 mm	190 035 019 - 000 149 56
black	0 – 65 mm, ESD design	190 007 059 - 000 580 94



Wall angle bracket for MINELA, RING LED, ROCIA arm-mounted luminaires, ROCIA flexible-tube luminaires and ABLTL

Colour	Special feature	Order no.
black	–	300 213 018 - 000 251 78
white	–	300 213 038 - 000 702 91



Wall bracket for TANEO, SNE, AVENUE, TEVISIO and SNLQ

Colour	Special feature	Order no.
black	–	226 108 019 - 006 107 54



Wall bracket for SNE, AVENUE, MINELA, SNLQ and RING LED

Colour	Special feature	Order no.
black	–	D13 148 000 - 000 754 04



Magnetic base for ROCIA pivoting-head luminaires

Colour	Special feature	Order no.
black	–	190 057 019 - 000 150 56



190 037



190 036

Table base for MINELA and RING LED

Colour	Special feature	Order no.
light grey	–	190 037 159 - 000 149 93
black	–	190 036 039 - 000 149 59
light grey	–	190 036 119 - 000 653 99



Additional angle bracket as an accessory for TAMETO for rotatable mounting of the side luminaire to the extension arm

Colour	Special feature	Order no.
black	adjustable	408 001 917 - 005 612 05



Luminaire bracket for TAMETO for rotatable mounting to the extension arm¹

Colour	Special feature	Order no.
black	adjustable	408 001 899 - 006 301 99



Luminaire bracket set for TAMETO for C-rails (pair)

Colour	Special feature	Order no.
black	adjustable	408 001 586 - 005 780 88



Mounting frame for LUMATRIS

Colour	Special feature	Order no.
silver-grey	for luminaire size 246 x 95 mm	408 001 016 - 005 956 19
silver-grey	for luminaire size 420 x 95 mm	408 001 017 - 005 956 13
silver-grey	for luminaire size 596 x 95 mm	408 001 018 - 005 956 10
silver-grey	for luminaire size 770 x 95 mm	408 001 019 - 005 956 16
silver-grey	for luminaire size 420 x 170 mm	408 001 037 - 005 181 21
silver-grey	for luminaire size 770 x 170 mm	408 001 034 - 005 142 65



Luminaire bracket set for LUMATRIS

Colour	Special feature	Order no.
silver-grey	for luminaire width 95 mm	408 001 015 - 005 955 87
silver-grey	for luminaire width 170 mm	408 001 035 - 005 142 68



Pivoting head for LUMATRIS

Colour	Special feature	Order no.
silver-grey	adjustable	408 001 033 - 005 142 62

¹ At least two brackets per luminaire required.



Luminaire bracket for FLAT LED surface-mounted luminaire

Colour	Special feature	Order no.
–	adjustable	203 081 019 - 000 194 78



Luminaire bracket set for MACH LED PLUS.forty

Colour	Special feature	Order no.
–	adjustable +/-90°	408 001 403 - 006 716 26



Luminaire bracket for MACH LED PLUS.forty¹

Colour	Special feature	Order no.
–	adjustable +/-20°	408 001 402 - 006 716 23



Luminaire bracket set for MACH LED PLUS.seventy

Colour	Special feature	Order no.
–	adjustable +/-65°	408 001 876 - 005 820 65



Luminaire bracket for MACH LED PLUS.seventy¹

Colour	Special feature	Order no.
–	adjustable +/-30°	408 001 878 - 005 855 35



Luminaire bracket set for RL 40

Colour	Special feature	Order no.
–	–	408 001 952 - 004 593 89

¹ At least two brackets per luminaire required.



Luminaire bracket for RL 40¹

Colour	Special feature	Order no.
–	–	306 266 022 - 000 859 12



Luminaire bracket for RL 40¹

Colour	Special feature	Order no.
–	–	190 174 019 - 000 920 88



Luminaire bracket for MACH LED PLUS.seventy and RL 70¹

Colour	Special feature	Order no.
–	with rubber profile	SK1 021 719 - 000 854 99



Luminaire bracket for MACH LED PLUS.seventy and RL 70¹

Colour	Special feature	Order no.
–	with rubber profile	SK0 995 719 - 000 856 52



Luminaire bracket for MACH LED PLUS.seventy and RL 70¹

Colour	Special feature	Order no.
–	with rubber profile	190 015 719 - 000 854 98



Luminaire bracket for RL 70¹

Colour	Special feature	Order no.
–	–	190 027 019 - 000 573 37

¹ At least two brackets per luminaire required.

**Luminaire bracket** for AWD

Colour	Special feature	Order no.
Black	–	191 092 019 - 000 867 27

**Luminaire bracket** for TAUREO for fastening to the luminaire

Colour	Special feature	Order no.
–	wire for cable mounting	H13 001 010 - 006 003 89
–	stainless steel for direct mounting	H13 001 020 - 006 003 95
–	stainless steel for cable mounting	H13 001 030 - 006 003 98

**Wire rope** for TAUREO and ACANEO

Colour	Special feature	Order no.
–	3000 mm, hook for trapezoidal metal ceiling	H13 003 010 - 006 043 34
–	3000 mm, M8 thread for trapezoidal hanger	H13 003 020 - 006 043 37
–	3000 mm, snap link for eyebolts (ceiling)	H13 003 040 - 006 043 43
–	3000 mm, hook for screw fixing (ceiling)	H13 003 030 - 006 043 40

**Wire rope holder** for TAUREO and ACANEO

Colour	Special feature	Order no.
–	for cable diameter 1.5 mm/2.0 mm/2.5 mm	H13 004 010 - 006 043 54

**Trapezoidal hanger** for TAUREO and ACANEO for fastening to the trapezoidal sheet metal ceiling

Colour	Special feature	Order no.
–	with M8 thread	H13 004 020 - 006 057 52

**Luminaire bracket for ceiling mounting** for ACANEO

Colour	Special feature	Order no.
–	fixed	337 818 010 - 006 951 71
–	adjustable	337 818 020 - 006 951 74



Luminare bracket for wall mounting for ACANEO

Colour	Special feature	Order no.
–	–	337 763 010 - 006 825 09



1-point suspension (ceiling mounting) for ACANEO

Colour	Special feature	Order no.
–	wire ropes will be required.	337 765 040 - 006 952 79



1-point suspension set (ceiling mounting) for ACANEO

Colour	Special feature	Order no.
–	1 x 1-point suspension, 2 wire rope holder, 2 wire ropes with hooks	226 234 019 - 007 011 56

CONNECTION TECHNOLOGY



Connection cable for TAMETO for connecting through-wired luminaires

Description	Connector type	Order no.
3 m lead	CEE 7/7 (grounded plug) – Wieland GST18i3	226 030 019 - 005 679 77



Connecting cable for TAMETO for connecting through-wired luminaires (only required for luminaires of dimensions = xx99 mm)

Description	Connector type	Order no.
0.3 m lead	Wieland GST18i3 – Wieland GST18i3	330 691 010 - 005 773 61



Connection technology for operating a TAMETO luminaire from an external operating unit

Description	Connector type	Order no.
connecting cable 3 m	CEE 7/7 (grounded plug) – Wieland GST18i3	226 030 019 - 005 679 77
operating unit for switching and dimming	Wieland GST18i3 – WAGO WINSTA® MINI	226 080 039 - 006 912 02



Connection technology for operating a maximum of 6 TAMETO luminaires centrally from 1 external operating unit

Description	Connector type	Order no.
connecting cable 3 m	CEE 7/7 (grounded plug) – Wieland GST18i3	226 030 019 - 005 679 77
operating unit for switching and dimming	Wieland GST18i3 – WAGO WINSTA® MINI	226 080 039 - 006 912 02
connecting cable for T-distributor 1m	WAGO WINSTA® MINI – WAGO WINSTA® MINI	337 782 010 - 006 847 37
T-distributor	WAGO WINSTA® MINI – WAGO WINSTA® MINI	337 783 010 - 006 865 23



Grounding cable for Taneo workplace-system luminaires (ESD)

Description	Connector type	Order no.
1.5 m lead	push button 10 mm /eyelet M5	408 001 866 - 005 874 70
3.0 m lead	push button 10 mm /eyelet M5	408 001 867 - 005 874 73



Connection socket for HEAD LED

Description	Connector type	Order no.
cable passage 3 - 6.5 mm, wires $\leq 0.75 \text{ mm}^2$	M12 socket: straight; 3-pole; A-coded	330 603 020 - 000 029 47



Connection socket for FLAT TEC

Description	Connector type	Order no.
cable passage 4 - 8 mm, wires $\leq 1.0 \text{ mm}^2$	M12 socket: straight; 4-pole; A-coded	330 634 010 - 000 039 70



Connection socket for LUMATRIS (> 48W)

Description	Connector type	Order no.
cable passage 6 - 8 mm, wires $\leq 1.5 \text{ mm}^2$	M12 socket: straight; 5-pole; A-coded	336 882 010 - 005 975 41



Connection socket for LUMATRIS (< 48W), MACH LED PLUS (24 V without TW*), HEAD LED, ONE LED (without TW*), MKEL and RL 25 LE

Description	Connector type	Order no.
cable passage 4 - 8 mm, wires $\leq 0.75 \text{ mm}^2$	M12 socket: straight; 5-pole; A-coded	336 615 019 - 005 220 18



Connection socket for MACH LED PLUS (24 V with TW*), ONE LED (TW*) and RL 25 LE

Description	Connector type	Order no.
cable passage 6 - 8 mm, wires $\leq 1.5 \text{ mm}^2$	M12 socket: straight; 4-pole; A-coded	336 883 010 - 005 975 30



Connection socket for MACH LED PLUS (100/120/220 - 240 V)

Description	Connector type	Order no.
cable passage 6 - 8 mm, wires $\leq 1.5 \text{ mm}^2$	M12 socket: straight; 4-pole; S-coded	336 885 010 - 005 975 38
cable passage 8 - 10 mm, wires $\leq 1.5 \text{ mm}^2$	M12 socket: straight; 4-pole; S-coded	336 885 020 - 006 346 14



Connecting plug for MACH LED PLUS (24 V with TW*) and ONE LED (TW*)

Description	Connector type	Order no.
cable passage 6 - 8 mm, wires $\leq 1.5 \text{ mm}^2$	M12 plug: straight; 4-pole; A-coded	336 884 010 - 005 975 20



Connecting plug for MACH LED PLUS (100/120/220 - 240 V with TW*)

Description	Connector type	Order no.
cable passage 6 - 8 mm, wires $\leq 1.5 \text{ mm}^2$	M12 plug: straight; 4-pole; S-coded	336 886 010 - 005 975 35
cable passage 8 - 10 mm, wires $\leq 1.5 \text{ mm}^2$	M12 plug: straight; 4-pole; S-coded	336 886 020 - 006 345 96



Protective cap for MACH LED PLUS (TW*) and ONE LED (TW*)

Description	Connector type	Order no.
10 units for	M12 socket	408 001 404 - 006 796 34

* TW: Through-wired (for daisy-chaining several luminaires)



Connection cable for LUMATRIS (> 48 W)

Description	Connector type	Order no.
3 m lead, 5 x 1.0 mm ²	M12 socket: straight; 5-pole; A-coded	336 890 010 - 005 980 58
7 m lead, 5 x 1.0 mm ²	M12 socket: straight; 5-pole; A-coded	336 890 020 - 005 980 63



Connection cable for LUMATRIS (< 48W), MACH LED PLUS (24 V without TW*), HEAD LED, ONE LED (without TW*), MKEL and RL 25 LE

Description	Connector type	Order no.
3 m lead, 5 x 0.5 mm ²	M12 socket: straight; 5-pole; A-coded	336 703 010 - 005 821 09
7 m lead, 5 x 0.5 mm ²	M12 socket: straight; 5-pole; A-coded	336 703 020 - 005 433 41



Connection cable for MACH LED PLUS (24 V with TW*), ONE LED (TW*) and RL 25 LE

Description	Connector type	Order no.
3 m lead, 3 x 1.5 mm ²	M12 socket: straight; 4-pole; A-coded	336 889 010 - 005 979 07
7 m lead, 3 x 1.5 mm ²	M12 socket: straight; 4-pole; A-coded	336 889 020 - 005 979 35



Connection cable for MACH LED PLUS (100/120/220 – 240 V)

Description	Connector type	Order no.
3 m lead, 3 x 1.5 mm ²	M12 socket: straight; 4-pole; S-coded	336 891 010 - 005 979 43
7 m lead, 3 x 1.5 mm ²	M12 socket: straight; 4-pole; S-coded	336 891 020 - 005 979 48



Connection cable for SINEO

Description	Connector type	Order no.
3 m lead, 12 x 0.14 mm ²	M12 socket: straight; 12-pole; A-coded	337 602 010 - 006 514 70
7 m lead, 12 x 0.14 mm ²	M12 socket: straight; 12-pole; A-coded	337 602 020 - 006 514 74



Connection cable for SINEO (IO link)

Description	Connector type	Order no.
3 m lead, 4 x 0.34 mm ²	M12 socket/plug: straight; 4-pole; A-coded	337 601 010 - 006 514 63
7 m lead, 4 x 0.34 mm ²	M12 socket/plug: straight; 4-pole; A-coded	337 601 020 - 006 514 66

* TW: Through-wired (for daisy-chaining several luminaires)

OPERATING DEVICES FOR LED LUMINAIRES



Operating device for ABLL1/ABLTL 1 (max. 3 units in series)

Power	Connection	Special feature	Order no.
33 W	220 – 240 V, 50/60 Hz; 350/700 mA constant current	clip for hat rail	209 585 039 - 000 040 06



Operating device for ABLL1/ABLTL 1 (max. 3 units in series)

Power	Connection	Special feature	Order no.
10 W	95 – 240 V, 50/60 Hz; 700 mA constant current	clip for hat rail	209 585 019 - 000 452 02



Operating device for ABLL1/ABLTL 1 (max. 5 units in series)

Power	Connection	Special feature	Order no.
14 W	24 VAC/DC, 50/60 Hz; 700 mA constant current	clip for hat rail	209 582 019 - 000 487 93



Operating device for machine luminaires with 24 VDC connection voltage

Power	Connection	Special feature	Order no.
30 W	100 – 240 V, 50/60 Hz; 24 VDC constant voltage	clip for hat rail	309 537 010 - 006 704 53



Operating device for machine luminaires with 24 VDC connection voltage

Power	Connection	Special feature	Order no.
100 W	100 – 240 V, 50/60 Hz; 24 VDC constant voltage	–	309 538 010 - 006 704 56



Operating device for machine luminaires with 24 VDC connection voltage

Power	Connection	Special feature	Order no.
75 W	220 – 240 V, 50/60 Hz; 24 VDC constant voltage	IP64	309 425 010 - 000 884 34

CONTROL AND SENSORS



Universal adapter box for TAUREO; 220 – 240 V, 50/60 Hz

Activation	Special feature	Order no.
–	for daylight and presence sensors	H13 007 010 - 006 251 32



Sensors for TAUREO; 220 – 240 V, 50/60 Hz

Activation	Special feature	Order no.
1 – 10 V	working height 8 m, presence sensor incl. daylight sensor in adapter box	H13 007 020 - 006 251 35
1 – 10 V	working height 10 m, presence sensor incl. daylight sensor in adapter box	H13 007 060 - 006 294 64
1 – 10 V	working height 8 m, light sensor in adapter box	H13 007 030 - 006 251 39
DALI	in adapter box/only for use with control	226 903 019 - 006 693 00



Netcomposer control (ncr) for TAUREO and ACANEO for digital activation

Activation	Special feature	Order no.
2 x 64 DALI operating devices for 1 NCR	netcomposer, clip for hat rail power supply for Netcomposer, clip for hat rail	336 673 010 - 005 336 03 336 391 010 - 004 857 30



Signal converter for TAUREO and ACANEO for implementation of controls in DALI

Activation	Special feature	Order no.
4-channel DALI	wall base	336 388 010 - 004 856 96
8-channel DALI	clip for hat rail	336 386 010 - 004 856 70

MAGNIFIERS



Additional magnifier for TEVISIO

Dimensions	Dioptres	Special feature	Order no.
ø 132 mm (lens)	3.5	plastic lens	190 208 019 - 005 759 24



Additional magnifier for SNLQ

Dimensions	Dioptres	Special feature	Order no.
50 x 100 mm (lens)	4	glass lens	190 080 019 - 000 151 20
50 x 100 mm (lens)	4	glass lens, ESD design	190 080 049 - 000 612 80



Magnifier for TANEQ

Dimensions	Dioptres	Special feature	Order no.
ø 132 mm (lens)	3.5	plastic lens	190 207 019 - 005 759 00



Magnifier for SNE

Dimensions	Dioptres	Special feature	Order no.
105 x 175 mm (lens)	3	glass lens	190 182 019 - 000 787 02

PROTECTIVE COVERS



Design case for SINEO

Dimensions	Colour	Order no.
–	silver	226 145 019 - 006 268 92
–	black	226 145 019 - 006 288 86
–	white	226 145 019 - 006 288 83



Protective cap set for MACH LED PLUS.seventy; not suitable for use with luminaire bracket set 408 001 876 - 005 820 65

Dimensions	Colour	Order no.
–	colourless anodised	408 001 875 - 005 820 72



End cap set for TAUREO

Dimensions	Colour	Order no.
–	colourless anodised	H13 000 027 - 006 638 45
–	colourless anodised, grey cable gland	H13 000 017 - 006 638 27



Module cover for TAUREO

Dimensions	Colour	Order no.
600 mm	grey	H13 002 010 - 006 004 14
1200 mm	grey	H13 002 020 - 006 004 18



Sealing clamp for TAUREO in IP54 applications

Dimensions	Colour	Order no.
–	black	H13 010 010 - 006 526 65

Safety glass for ACANEO in IK10 applications

Dimensions	Colour	Order no.
585 x 480 mm	transparent	337 764 020 - 006 951 62
480 x 405 mm	transparent	337 764 010 - 006 825 12

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INDUSTRY



Lighting for
machines, facilities, laboratories, industrial workplaces or halls

OFFICE



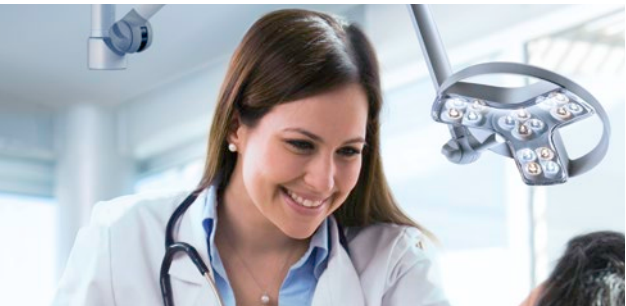
Lighting for
offices, meeting rooms, hallways and staircases

MEDICAL PHOTOTHERAPY



UV therapy systems,
lighting for diagnosis, examination and treatment

HEALTH & CARE



Lighting for
resident and patient rooms, common rooms and sanitary areas

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