

THE LIGHT OF
NEW POSSIBILITIES

LINURA



ENGINEERS OF LIGHT

SURFACE-MOUNTED LUMINAIRES



ENG

Waldmann



THE LIGHT OF PERFORMANCE.

To ensure that the lights in the country remain lit, we all need to produce better, faster and more precisely. With LINURA, Waldmann is setting a new standard, as market leader for industrial and machine luminaires, that opens up a world of possibilities to you. Wherever LINURA is used, it delivers lighting solutions designed to meet the future needs of many sectors and applications. It is easy to install this luminaire, and it can be integrated perfectly into a machine and at the controller level where it delivers powerful, homogeneous light. In such optimum production conditions, even better work results can be achieved – and the lights in the country can continue to shine.



LINURA. THE LIGHT OF NEW POSSIBILITIES



Performance

Powerful and homogeneous light, better performance: With the latest LED technology (> 170 lm/W) and a lens to distribute light to optimum effect in a highly efficient manner while also improving the price-performance ratio. You can achieve the same level of lighting as before, but with smaller or fewer luminaires.

Quality

Robust housing, less downtime. A simple body made of aluminium, a lens made of PMMA, side parts made of glass-fibre-reinforced plastic (GRP). The special sealing concept for lens and side parts make this luminaire resistant to high ambient temperatures, liquids and dust.

Compactness

Slim design, less space required: It has been possible to compress the dimensions of the electronics and design (LINURA is available with diameters of 25 mm and 35 mm), the luminaire can be installed in confined spaces or in aluminium system and switch cabinet profiles.

Design

User-oriented design, great functionality: The shape of LINURA is based solely on its function – its application on or in the machine. The slimline design of this luminaire enables it to blend in seamlessly with the machine. Great aesthetics with high functionality.

Anyone who aspires to high standards personally and in terms of product quality is entitled to expect the same from the lighting on their production premises. Whether in terms of lighting performance, design, product range or installation: LINURA scores highly in every discipline. With the most powerful light possible for optimum visibility. With shapes that are as slimline as possible, to fit into any space available. With as many variants as possible for even more applications. Last but not least, with an installation as easy as possible. Wherever lighting conditions are good, it is possible to work better and more efficiently – to deliver ultimate quality.

extremely slim
extremely strong



Variety

Many sizes, more flexible

application options: To enable LINURA to be used as flexibly as possible, we have developed two basic concepts with variable lengths based on a 140mm grid: 10 lengths with a diameter of 25mm and 6 lengths with a diameter of 35mm. This ensures that optimum lighting conditions can be achieved everywhere and at all times.

Price

Degree of protection

appropriate for the application, better price: Thanks to a proprietary sealing concept developed for IP54, the seals are integrated in the enclosures, so no tools are required (2K). No adhesive bonding is required, reducing the production cost of LINURA, and helping to achieve an optimum price-performance ratio.

Mounting

Universal luminaire bracket, problem-free installation:

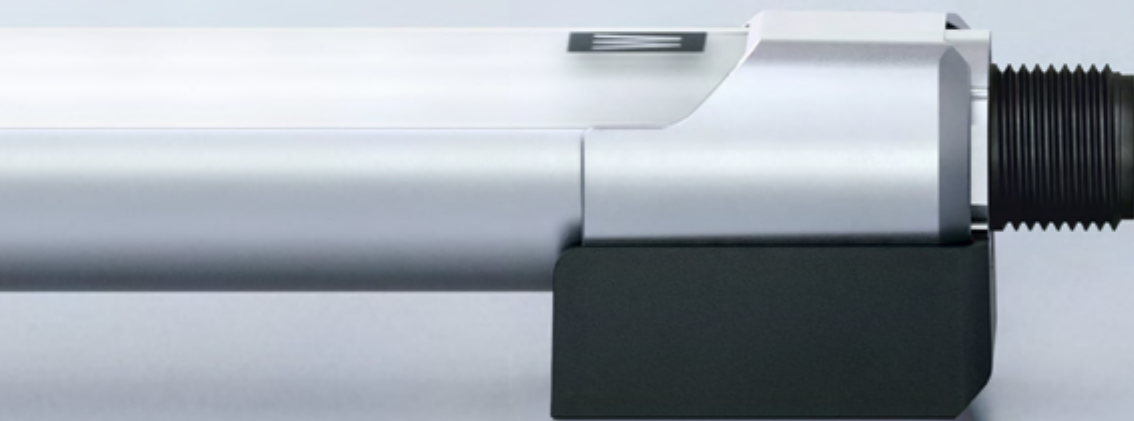
The scope of delivery includes brackets that make installation much simpler in typical situations such as aluminium system and switch cabinet profiles. The adjustment range of +/- 60° means that this luminaire can be used almost anywhere – and the changeover to LINURA is a very simple process.

Connection

More connection options, less wiring:

LINURA has an integrated M12 connection and can connect other luminaires (variants). Control is performed via digital interfaces. This greatly reduces the amount of wiring needed.

AS ADAPTABLE AS POSSIBLE



LINURA.edge

The appropriate light colour for every application. LINURA.edge, with a diameter of 25 mm is the thinnest possible luminaire. It is available in 10 lengths ranging from 195 – 1455 mm and in these variants: white (5000 K/Ra > 80) for normal production processes and RGB (multi-coloured) to display machine and process statuses.

25 mm in diameter,
available in 10 different lengths

The most sophisticated solution by the machine luminaire specialist with full scope for delivering the right lighting to industry. LINURA.edge, the standard variant for wherever more light is needed in and on a machine. Its diameter of 25 mm also makes it ideal for use in confined spaces. And LINURA.maxx, the high-performance variant, for wherever even more light is needed. With a diameter of 35 mm, it also covers maximum lighting needs. This ensures that appropriate lighting is always there, wherever it is needed.



LINURA.maxx

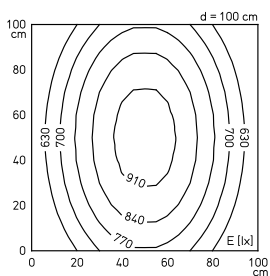
Can be integrated via digital inputs or an IO-Link interface. LINURA.maxx, with a diameter of 35 mm – still a slimline luminaire, but a real powerhouse. Available in 6 lengths, from 195–895 mm, and also with an IO-Link interface for problem-free integration into suitable IO-Link architectures.

35 mm in diameter,
available in 6 different lengths

ILLUMINATION AS PERFECT AS POSSIBLE

Whether made by a robot or by human hand, wherever things are produced or joined together, you need professional skills, concentration – and above all, good lighting conditions. LINURA.edge delivers powerful, homogeneous white light to monitor processes without specific spectral requirements, for example in assembly systems. Perfect illumination for perfect results.

- White light (5000 K/Ra > 80) to illuminate different production processes
- Digital input for powerless switching
- ADVANCED package for gradual dimming, automatic dimming when temperature limits are exceeded (at $T_a > 50^\circ\text{C}$), and for connecting an RGB luminaire (variants)
- Through-wiring for electrical interlinking of several luminaires (variants)



- | | |
|----------------|--|
| 0195 mm | |
| 0335 mm | |
| 0475 mm | |
| 0615 mm | |
| 0755 mm | |
| 0895 mm | |
| 1035 mm | |
| 1175 mm | |
| 1315 mm | |
| 1455 mm | |

Variant 1455 mm



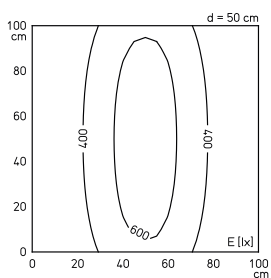
LINURA.edge YELLOW



**MONITOR AS
SENSITIVELY
AS POSSIBLE**

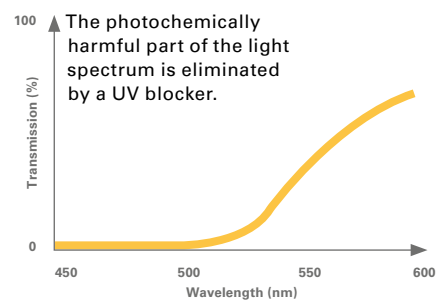
Photochemically sensitive processes require an equally sensitive lighting solution. Specially developed for use in microelectronics, photolithography, pharmaceuticals, etc., LINURA.edge provides efficient UV-free light, protecting photoresists or similar from unintentional exposure.

- Yellow light (>500 nm without UV) for the illumination of photochemically sensitive processes
- Digital inputs for powerless switching



0195 mm	
0335 mm	
0475 mm	
0615 mm	
0755 mm	
0895 mm	
1035 mm	
1175 mm	
1315 mm	
1455 mm	

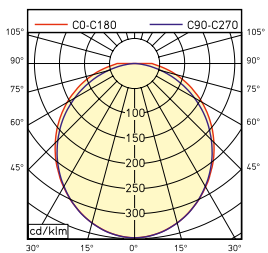
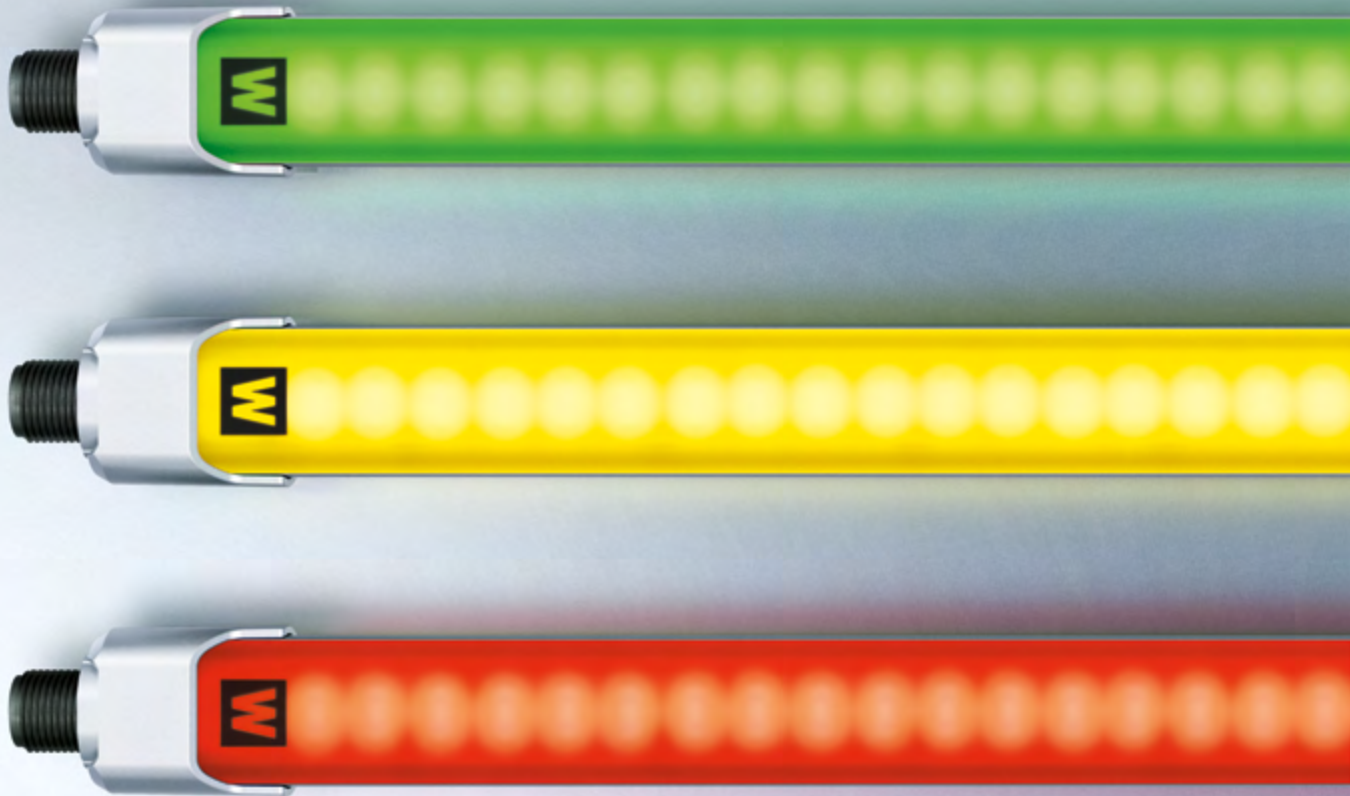
Variant 1455 mm



SIGNALLING AS CLEARLY AS POSSIBLE

Luminaire with signal action: LINURA.edge RGB uses RGB-LEDs in various colours to display machine and process statuses, or to achieve colour effects. An RGB luminaire can be operated in a line with white luminaires (ADVANCED package). The dimming level of white light and the colour of the RGB light can be controlled by a single supply line.

- Digital inputs for powerless switching
- 7 colours for status messages and design effects



- 0195 mm
- 0335 mm
- 0475 mm
- 0615 mm



Fill up with inspiration, charge up with lighting ideas.
In showroom EMIL 28, the spirit of the company founder
Emil Waldmann shines out.
#blackforestlight

SHINE A

Waldmann W

Shine the light of precision
so people can build better things.

Shine the light of reason
so people can see more clearly.

Shine the light of creation
so people have brighter ideas.

Shine the light of knowledge
so science reveals more.

Shine the light of day so your
people stay healthy at work.

Shine the light of sustainability
so nothing is wasted.

Shine the light of connectivity
so your building works as one.

Shine the light of experience so
your projects evade costly errors.

Shine the light of success so your
organisation can grow and prosper.

Shine the #blackforestlight
and conquer darkness, forever.

ALL LIGHT



COMBINING AS CLEVERLY AS POSSIBLE

Let there be light – quite automatically: The distance sensor for LINURA.edge enables the luminaire to be switched automatically. For example in the switch cabinet when the door is being opened and closed. A manual pushbutton is provided for manual switching. And best of all: accessories are just as easy to install as the luminaire itself.

- The scope of delivery includes flexible brackets with an adjustment range of +/- 60°, also suitable for commonly used types of aluminium system and switch cabinet profiles, compatible with previous models
- Laser-based time-of-flight sensor with M12 plug connectors, for the automatic switching of luminaires
- Capacitive sensor with M12 plug connectors for the manual switching of luminaires



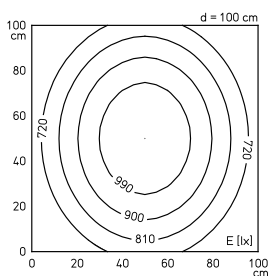
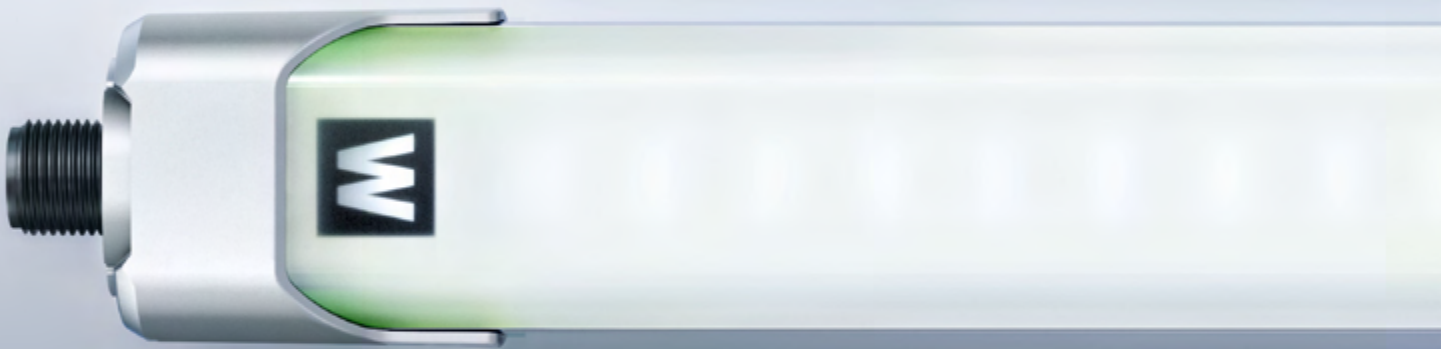


LINURA.maxx

LINKING AS INTELLIGENTLY AS POSSIBLE

Wherever good lighting – and a lot of it – is needed, LINURA.maxx delivers the goods. This slimline luminaire does more than just deliver power, it is also really smart: Available with ADVANCED package or IO-Link, it provides intelligent lighting solutions for automation. Via an IO-Link interface, it can also be integrated seamlessly into all IO-Link architectures.

- White light (5000 K/Ra > 80) for the illumination of various types of production processes
- ADVANCED package for powerless switching, progressive dimming and automatic dimming when temperature limits are exceeded (at $T_a > 50\text{ }^\circ\text{C}$) (variants)
- Through-wiring for electrical interlinking of several luminaires (variants)
- IO-Link interface for the configuration and control of lighting functions such as switching, dimming and flashing, as well as for evaluating diagnostic information and error messages (variants)



Variant 0895 mm

- | | |
|---------|--|
| 0195 mm | |
| 0335 mm | |
| 0475 mm | |
| 0615 mm | |
| 0755 mm | |
| 0895 mm | |

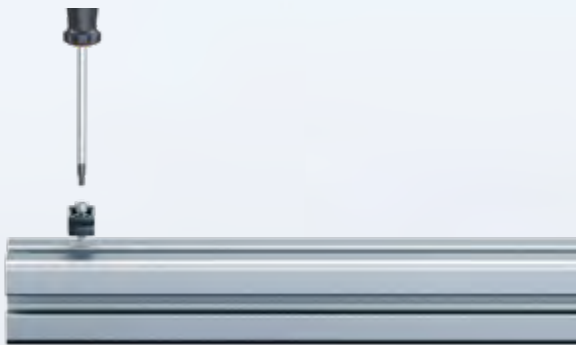


LINURA installation

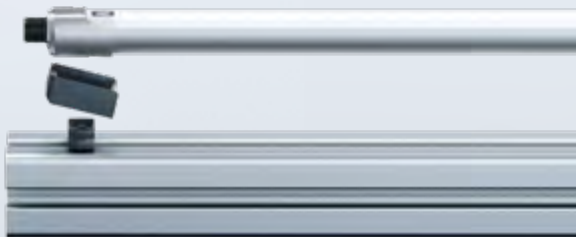
**INSTALLING
AS FAST
AS POSSIBLE**

What use is the smartest product if installation is a very resource-intensive operation? Great that LINURA also scores highly in terms of installation. It is easily done without problems, thanks to a universal luminaire bracket, a clever clip system and M12 plug connectors. In a few simple steps. For replacement, a simple twist is all it takes to remove the luminaire from its bracket.

- Compensation for hole spacings in a tolerance range of 15 mm (LINURA.edge) or 25 mm (LINURA.maxx)
- Suitable for all commonly used switch cabinet profiles
- Compatible with the mounting bores on previous models
- Tool-free installation/disassembly of luminaires in their brackets
- Luminaire adjustment across a range of +/- 60°
- Connection via M12 plug connector
- Variants with connection option for other luminaires (through-wiring)
- Identical mounting of accessories (manual pushbutton/distance sensor)



1. The enclosed fastening elements are mounted on the installation surface with appropriate screws.



2. The enclosed brackets are inserted into the grooves in the end caps of the luminaire.



3. The brackets are used to clip the luminaire onto the retaining elements. Then just plug it into the electric supply – job done.



Consumption	Dimensions	Special feature	E_m / E_{max}^*	Model	Order no.
LINURA.edge					
2.5 W	195 mm	ADVANCED package	91/126 lx ¹	LEA 300/850/MS	114080000-00803510
5.0 W	335 mm	ADVANCED package	181/249 lx ¹	LEA 600/850/MS	114082000-00803512
7.5 W	475 mm	ADVANCED package	268/367 lx ¹	LEA 900/850/MS	114084000-00803550
10.0 W	615 mm	ADVANCED package	353/477 lx ¹	LEA 1200/850/MS	114086000-00803552
12.5 W	755 mm	ADVANCED package	433/578 lx ¹	LEA 1500/850/MS	114088000-00803555
15.0 W	895 mm	ADVANCED package	508/671 lx ¹	LEA 1800/850/MS	114090000-00803570
17.5 W	1 035 mm	ADVANCED package	577/753 lx ¹	LEA 2100/850/MS	114092000-00803585
20.0 W	1 175 mm	ADVANCED package	642/825 lx ¹	LEA 2400/850/MS	114094000-00803612
22.5 W	1 315 mm	ADVANCED package	699/888 lx ¹	LEA 2700/850/MS	114096000-00803618
25.0 W	1 455 mm	ADVANCED package	751/942 lx ¹	LEA 3000/850/MS	114098000-00803703
2.5 W	195 mm	ADVANCED package, through-wired	91/126 lx ¹	LEA 300/850/MST	114081000-00803511
5.0 W	335 mm	ADVANCED package, through-wired	181/249 lx ¹	LEA 600/850/MST	114083000-00803513
7.5 W	475 mm	ADVANCED package, through-wired	268/367 lx ¹	LEA 900/850/MST	114085000-00803551
10.0 W	615 mm	ADVANCED package, through-wired	353/477 lx ¹	LEA 1200/850/MST	114087000-00803553
12.5 W	755 mm	ADVANCED package, through-wired	433/578 lx ¹	LEA 1500/850/MST	114089000-00803561
15.0 W	895 mm	ADVANCED package, through-wired	508/671 lx ¹	LEA 1800/850/MST	114091000-00803583
17.5 W	1 035 mm	ADVANCED package, through-wired	577/753 lx ¹	LEA 2100/850/MST	114093000-00803611
20.0 W	1 175 mm	ADVANCED package, through-wired	642/825 lx ¹	LEA 2400/850/MST	114095000-00803615
22.5 W	1 315 mm	ADVANCED package, through-wired	699/888 lx ¹	LEA 2700/850/MST	114097000-00803632
25.0 W	1 455 mm	ADVANCED package, through-wired	751/942 lx ¹	LEA 3000/850/MST	114099000-00803705
3.0 W	195 mm		91/126 lx ¹	LEA 300/850/S	114033000-00801340
6.0 W	335 mm		181/249 lx ¹	LEA 600/850/S	114035000-00801346
9.0 W	475 mm		268/367 lx ¹	LEA 900/850/S	114037000-00801349
12.0 W	615 mm		353/477 lx ¹	LEA 1200/850/S	114039000-00801355
15.0 W	755 mm		433/578 lx ¹	LEA 1500/850/S	114041000-00801360
18.0 W	895 mm		508/671 lx ¹	LEA 1800/850/S	114043000-00801374
21.0 W	1 035 mm		577/753 lx ¹	LEA 2100/850/S	114045000-00801392
24.0 W	1 175 mm		642/825 lx ¹	LEA 2400/850/S	114047000-00801394
27.0 W	1 315 mm		699/888 lx ¹	LEA 2700/850/S	114049000-00801397
30.0 W	1 455 mm		751/942 lx ¹	LEA 3000/850/S	114051000-00801409
3.0 W	195 mm	through-wired	91/126 lx ¹	LEA 300/850/ST	114032000-00801320
6.0 W	335 mm	through-wired	181/249 lx ¹	LEA 600/850/ST	114034000-00801344
9.0 W	475 mm	through-wired	268/367 lx ¹	LEA 900/850/ST	114036000-00801348
12.0 W	615 mm	through-wired	353/477 lx ¹	LEA 1200/850/ST	114038000-00801350
15.0 W	755 mm	through-wired	433/578 lx ¹	LEA 1500/850/ST	114040000-00801356
18.0 W	895 mm	through-wired	508/671 lx ¹	LEA 1800/850/ST	114042000-00801366
21.0 W	1 035 mm	through-wired	577/753 lx ¹	LEA 2100/850/ST	114044000-00801380
24.0 W	1 175 mm	through-wired	642/825 lx ¹	LEA 2400/850/ST	114046000-00801393
27.0 W	1 315 mm	through-wired	699/888 lx ¹	LEA 2700/850/ST	114048000-00801396
30.0 W	1 455 mm	through-wired	751/942 lx ¹	LEA 3000/850/ST	114050000-00801408

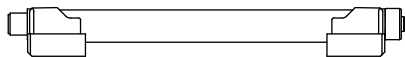
* E_m = medium illuminance; E_{ma} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

Consumption	Dimensions	Special feature	E_m/E_{max}^*	Model	Order no.
LINURA.edge YELLOW					
3,0 W	195 mm	Luminous flux 150 lm		LEA 100/YEL/S	114100000-00804404
6,0 W	335 mm	Luminous flux 300 lm		LEA 200/YEL/S	114101000-00804405
9,0 W	475 mm	Luminous flux 450 lm		LEA 300/YEL/S	114102000-00804406
12,0 W	615 mm	Luminous flux 600 lm		LEA 400/YEL/S	114103000-00804407
15,0 W	755 mm	Luminous flux 750 lm		LEA 500/YEL/S	114104000-00804408
18,0 W	895 mm	Luminous flux 900 lm		LEA 600/YEL/S	114105000-00804409
21,0 W	1035 mm	Luminous flux 1.050 lm		LEA 700/YEL/S	114106000-00804410
24,0 W	1175 mm	Luminous flux 1.200 lm		LEA 800/YEL/S	114107000-00804411
27,0 W	1315 mm	Luminous flux 1.350 lm		LEA 900/YEL/S	114108000-00804412
30,0 W	1455 mm	Luminous flux 1.500 lm		LEA 1000/YEL/S	114109000-00804413
LINURA.edge RGB					
3.0 W	195 mm	Luminous flux 70 lm		LEA 100/RGB/S	114052000-00802116
6.0 W	335 mm	Luminous flux 140 lm		LEA 200/RGB/S	114053000-00802117
9.0 W	475 mm	Luminous flux 210 lm		LEA 300/RGB/S	114054000-00802118
12.0 W	615 mm	Luminous flux 280 lm		LEA 400/RGB/S	114055000-00802119
LINURA.maxx					
5.0 W	195 mm	IO-Link	167/225 lx ¹	LMA 500/850/BS	114110000-00804046
9.0 W	335 mm	IO-Link	332/445 lx ¹	LMA 1000/850/BS	114113000-00804049
13.0 W	475 mm	IO-Link	493/657 lx ¹	LMA 1500/850/BS	114116000-00804052
17.0 W	615 mm	IO-Link	648/856 lx ¹	LMA 2000/850/BS	114119000-00804055
21.0 W	755 mm	IO-Link	796/1042 lx ¹	LMA 2500/850/BS	114122000-00804058
25.0 W	895 mm	IO-Link	935/1212 lx ¹	LMA 3000/850/BS	114125000-00804061
5.0 W	195 mm	ADVANCED package	167/225 lx ¹	LMA 500/850/MS	114111000-00804047
9.0 W	335 mm	ADVANCED package	332/445 lx ¹	LMA 1000/850/MS	114114000-00804050
13.0 W	475 mm	ADVANCED package	493/657 lx ¹	LMA 1500/850/MS	114117000-00804053
17.0 W	615 mm	ADVANCED package	648/856 lx ¹	LMA 2000/850/MS	114120000-00804056
21.0 W	755 mm	ADVANCED package	796/1042 lx ¹	LMA 2500/850/MS	114123000-00804059
25.0 W	895 mm	ADVANCED package	935/1212 lx ¹	LMA 3000/850/MS	114126000-00804062
5.0 W	195 mm	ADVANCED package, through-wired	167/225 lx ¹	LMA 500/850/MST	114112000-00804048
9.0 W	335 mm	ADVANCED package, through-wired	332/445 lx ¹	LMA 1000/850/MST	114115000-00804051
13.0 W	475 mm	ADVANCED package, through-wired	493/657 lx ¹	LMA 1500/850/MST	114118000-00804054
17.0 W	615 mm	ADVANCED package, through-wired	648/856 lx ¹	LMA 2000/850/MST	114121000-00804057
21.0 W	755 mm	ADVANCED package, through-wired	796/1042 lx ¹	LMA 2500/850/MST	114124000-00804060
25.0 W	895 mm	ADVANCED package, through-wired	935/1212 lx ¹	LMA 3000/850/MST	114127000-00804063
Accessories					
manual pushbutton	115 mm	capacitive contact sensor with M12 plug connectors		LTS/ST	114129000-00805353
distance sensor	115 mm	laser-based time-of-flight sensor with M12 plug connectors		LDS/ST	114128000-00805352

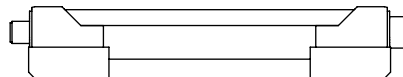
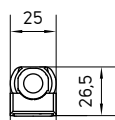
* E_m = medium illuminance; E_{ma} = maximum illuminance; ¹ measuring field 100 cm x 100 cm/measuring distance 100 cm

SPECIFICATIONS ARE EASILY ACHIEVED

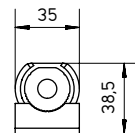
Lamps:	LED technology
Beam angle:	90°
Glare-free technology:	direct beam via a diffuse lens
Housing:	basic body made of aluminium, lens made of PMMA, side parts made of glass-fibre-reinforced PA
Ambient temperature $T_{a_{max}}$:	40°C or 50°C with automatic dimming whenever temperature is exceeded (variants with ADVANCED package or IO-Link)
LED service life:	> 60000 h [L70 B50] (white variants)
Degree of protection / Protection class:	IP54/III
Connection:	M12 plug connector (aligned), A-coded
Power supply:	22–26 VDC
Certificates:	CE, cETLus, D
Accessories:	manual pushbutton and distance sensor for looping into the supply line bracket, +/- 60° adjustable (included in scope of delivery)



LINURA.edge



LINURA.maxx



THE LIGHT OF INDUSTRY.

Wherever you may be, and whatever you may produce. Since 1928, Waldmann has been helping people to achieve cost targets, to standardise their purchased parts and to eliminate quality problems. Do you wish to integrate components electrically, system-specifically and mechanically in the simplest way possible? Do you insist on having ultimate robustness and quality in your components? Do your employees wish to have optimum visibility to enable them to work to a genuinely zero-defect, safe and ergonomic standard? Waldmann is the one-stop solution. For a planet on which Swabian light never goes out.

(1 of 1000)

We would like to spotlight the people at Waldmann who do their utmost to create the best possible lighting solutions. Thank you Josephine!



ENGINEERS OF LIGHT: JOSEPHINE