

**Main features:**

- Complete solution with standard cable and mounting profile, ready for connection
- Optimised system efficiency thanks to directional lighting and integrated heat removal
- Perfect combination of COB LEDs and optics for high quality of light
- Available in different lengths, beam angles, colour temperatures and operating voltages
- Long life: 35,000 hours (70% drop in luminous flux/tc point temperature 45 °C)
- Accessories available for mounting and fixing
- Safety extra low voltage (SELV), protection class 3

**Applications:**

- Chillers in the food industry
- Presentation of merchandise in shelving systems, cabinets, etc.
- Use in luminaires

**Materials:**

- Cooling profile: anodised extruded aluminium
- End caps: aluminium
- Linear lenses: PMMA
- Mounting plate (TALEX Z161 RZ): PPT

**Installation**

- Mounting with TALEX mounting plate Z161 RZ
- Safety extra low voltage (SELV)
- Supplied with cable H03VVH cross-section 2x0.75 mm<sup>2</sup>, white, length 1 m

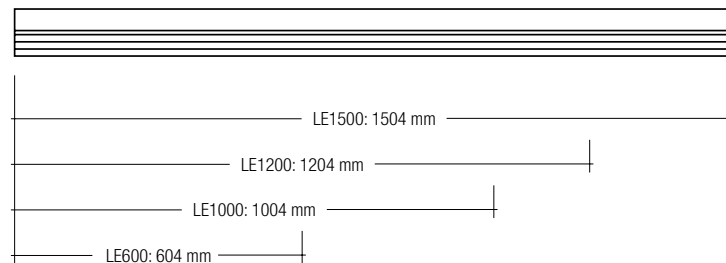
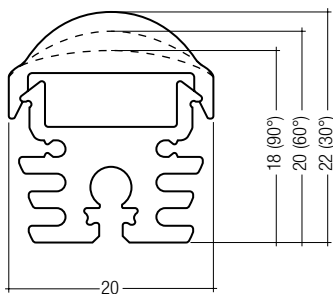
**Classification:**

- Ambient temperature: -30 °C to +30 °C
- Max. surface temperature on profile: 65 °C
- Type of protection IP 20
- Protection class 3

**Developed in accordance with:**

- EN 60598-1
- prEN 62031

Dimensions with 30°, 60° and 90° linear lenses



## Product overview for TALEXengine Line

## 24V

Type	article number	colour temp. K	voltage V	lens °
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## Length 600 mm

LE600 4P130 DL 24V - 30° Z22W	89600485	6500	24	30
LE600 4P130 DL 24V - 60° Z22W	89600616	6500	24	60
LE600 4P130 DL 24V - 90° Z22W	89600629	6500	24	90
LE600 4P130 NW 24V - 30° Z22W	89600489	4200	24	30
LE600 4P130 NW 24V - 60° Z22W	89600620	4200	24	60
LE600 4P130 NW 24V - 90° Z22W	89600634	4200	24	90
LE600 4P130 WW 24V - 30° Z22W	89600493	3000	24	30
LE600 4P130 WW 24V - 60° Z22W	89600625	3000	24	60
LE600 4P130 WW 24V - 90° Z22W	89600638	3000	24	90

## Length 1000 mm

LE1000 6P130 DL 24V - 30° Z22W	89600486	6500	24	30
LE1000 6P130 DL 24V - 60° Z22W	89600617	6500	24	60
LE1000 6P130 DL 24V - 90° Z22W	89600630	6500	24	90
LE1000 6P130 NW 24V - 30° Z22W	89600490	4200	24	30
LE1000 6P130 NW 24V - 60° Z22W	89600621	4200	24	60
LE1000 6P130 NW 24V - 90° Z22W	89600635	4200	24	90
LE1000 6P130 WW 24V - 30° Z22W	89600494	3000	24	30
LE1000 6P130 WW 24V - 60° Z22W	89600626	3000	24	60
LE1000 6P130 WW 24V - 90° Z22W	89600639	3000	24	90

## Length 1200 mm

LE1200 7P130 DL 24V - 30° Z22W	89600487	6500	24	30
LE1200 7P130 DL 24V - 60° Z22W	89600618	6500	24	60
LE1200 7P130 DL 24V - 90° Z22W	89600631	6500	24	90
LE1200 7P130 NW 24V - 30° Z22W	89600491	4200	24	30
LE1200 7P130 NW 24V - 60° Z22W	89600622	4200	24	60
LE1200 7P130 NW 24V - 90° Z22W	89600636	4200	24	90
LE1200 7P130 WW 24V - 30° Z22W	89600495	3000	24	30
LE1200 7P130 WW 24V - 60° Z22W	89600627	3000	24	60
LE1200 7P130 WW 24V - 90° Z22W	89600640	3000	24	90

## Length 1500 mm

LE1500 9P130 DL 24V - 30° Z22W	89600488	6500	24	30
LE1500 9P130 DL 24V - 60° Z22W	89600619	6500	24	60
LE1500 9P130 DL 24V - 90° Z22W	89600632	6500	24	90
LE1500 9P130 NW 24V - 30° Z22W	89600492	4200	24	30
LE1500 9P130 NW 24V - 60° Z22W	89600624	4200	24	60
LE1500 9P130 NW 24V - 90° Z22W	89600637	4200	24	90
LE1500 9P130 WW 24V - 30° Z22W	89600496	3000	24	30
LE1500 9P130 WW 24V - 60° Z22W	89600628	3000	24	60
LE1500 9P130 WW 24V - 90° Z22W	89600641	3000	24	90

## 12V

Type	article number	colour temp. K	voltage V	lens °
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## Length 600 mm

LE600 4P131 DL 12V - 30° Z22W	89600497	6500	12	30
LE600 4P131 DL 12V - 60° Z22W	89600460	6500	12	60
LE600 4P131 DL 12V - 90° Z22W	89600472	6500	12	90
LE600 4P131 NW 12V - 30° Z22W	89600502	4200	12	30
LE600 4P131 NW 12V - 60° Z22W	89600464	4200	12	60
LE600 4P131 NW 12V - 90° Z22W	89600476	4200	12	90
LE600 4P131 WW 12V - 30° Z22W	89600506	3000	12	30
LE600 4P131 WW 12V - 60° Z22W	89600468	3000	12	60
LE600 4P131 WW 12V - 90° Z22W	89600480	3000	12	90

## Length 1000 mm

LE1000 6P131 DL 12V - 30° Z22W	89600498	6500	12	30
LE1000 6P131 DL 12V - 60° Z22W	89600461	6500	12	60
LE1000 6P131 DL 12V - 90° Z22W	89600473	6500	12	90
LE1000 6P131 NW 12V - 30° Z22W	89600503	4200	12	30
LE1000 6P131 NW 12V - 60° Z22W	89600465	4200	12	60
LE1000 6P131 NW 12V - 90° Z22W	89600477	4200	12	90
LE1000 6P131 WW 12V - 30° Z22W	89600507	3000	12	30
LE1000 6P131 WW 12V - 60° Z22W	89600469	3000	12	60
LE1000 6P131 WW 12V - 90° Z22W	89600481	3000	12	90

## Length 1200 mm

LE1200 7P131 DL 12V - 30° Z22W	89600500	6500	12	30
LE1200 7P131 DL 12V - 60° Z22W	89600462	6500	12	60
LE1200 7P131 DL 12V - 90° Z22W	89600474	6500	12	90
LE1200 7P131 NW 12V - 30° Z22W	89600504	4200	12	30
LE1200 7P131 NW 12V - 60° Z22W	89600466	4200	12	60
LE1200 7P131 NW 12V - 90° Z22W	89600478	4200	12	90
LE1200 7P131 WW 12V - 30° Z22W	89600508	3000	12	30
LE1200 7P131 WW 12V - 60° Z22W	89600470	3000	12	60
LE1200 7P131 WW 12V - 90° Z22W	89600482	3000	12	90

## Length 1500 mm

LE1500 9P131 DL 12V - 30° Z22W	89600501	6500	12	30
LE1500 9P131 DL 12V - 60° Z22W	89600463	6500	12	60
LE1500 9P131 DL 12V - 90° Z22W	89600475	6500	12	90
LE1500 9P131 NW 12V - 30° Z22W	89600505	4200	12	30
LE1500 9P131 NW 12V - 60° Z22W	89600467	4200	12	60
LE1500 9P131 NW 12V - 90° Z22W	89600479	4200	12	90
LE1500 9P131 WW 12V - 30° Z22W	89600509	3000	12	30
LE1500 9P131 WW 12V - 60° Z22W	89600471	3000	12	60
LE1500 9P131 WW 12V - 90° Z22W	89600483	3000	12	90

## Technical data for TALEXengine Line

### Electrical properties:

- Supply voltage: 24V, 12V ③
- Power input: 21.4W per meter
- Dimmable by pulse width modulation (PWM) with controllers from TridonicAtco
- Supplied with cable H03VVH cross-section 2x0.75mm<sup>2</sup>, white, length 1 m
- Identification of polarity: + red / - black

### Note:

- Reversing the polarity may damage TALEXengine Line
- There is no provision for chaining multiple TALEXengine Line units

### Choice of control gear/protection functions:

The control gear protects the TALEX modules against overvoltage, over-current, overloads and short-circuits. The control gear must comply with the relevant stand-

ards governing safe operation. The necessary level of protection is ensured by using TALEX converters from TridonicAtco. If other control gear is used, it must provide the following protection:

- SELV
- Short-circuit protection
- Overload protection
- Overtemperature protection

### TALEXengine Line

Type	length mm	number of light sources P130/P131	typ. luminous flux (lm) ①			wattage ② W	Ra			weight kg	ta °C	tc profile °C	packing unit
			DL 6,500K	NW 4,200K	WW 3,000K		DL 6,500K	NW 4,200K	WW 3,000K				
LE600	604	4	420	350	320	14.3	75	80	80	0.3	-30 → +30	60	25
LE1000	1004	6	700	580	530	21.4	75	80	80	0.5	-30 → +30	60	25
LE1200	1204	7	840	700	640	25.0	75	80	80	0.6	-30 → +30	60	25
LE1500	1504	9	1050	870	800	32.1	75	80	80	0.7	-30 → +30	60	25

all data for ta = 25 °C

① Tolerance range for optical data: ±15% (values without lens)

② Tolerance range for electrical data: ±15%

③ Exceeding the maximum operating voltage leads to an overload on the TALEX module. This may in turn result in a significant reduction in lifetime or even destruction of the TALEX module. Operating at less than the permitted voltage reduces the amount of light produced but has no effect on the life of the TALEX module. Tolerance range for the supply voltage: +2V/-0V

### Thermal behaviour

ta °C	tc point on profile ① °C	tc point on module ① °C
-30	0	10
0	30	40
20	50	60
30 ②	60 ②	70 ②

① The values apply to operation at 100% output, natural convection

② If the maximum temperature limits are exceeded, the life of the module will be greatly reduced or the module may be destroyed.

The tc point temperature on the profile of TALEXengine Line should be measured in the thermally stable state and under operating conditions by means of a temperature sensor or temperature-sensitive sticker (available for example from [www.conrad.com](http://www.conrad.com), [www.rs-components.com](http://www.rs-components.com)) as per EN60598-1. The entire profile can be used as the tc point.

### Cable length

In view of the voltage drop along the cable, a voltage of at least 24V/12V must be applied to TALEXengine Line in order to achieve the rated luminous flux.

#### Maximum cable length for operation with TALEX converter

Type	0.75 mm <sup>2</sup>	1.0 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
24V	6 m	7,5 m	10 m	18 m
12V	2 m	3 m	4 m	7 m

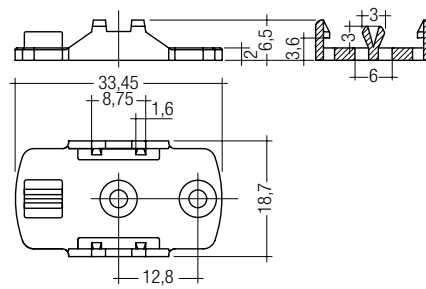
## Installation of TALEXengine Line

TALEXengine Line is suitable for installation/use in shelving, cabinets, chillers for the food industry and luminaires. It is mounted at the rear with mounting plate Z161 RZ, which includes a stud to enable TALEXengine Line to be mounted vertically if required.

### Mounting plate Z161 RZ

- Mounting plate with stud to prevent TALEXengine Line sliding if mounted vertically
- Metric M 2.5 screws or self-tapping screws with a diameter of 2.2 to 2.9 mm and a screw head height of no more than 2.2 mm are recommended for fixing the mounting plate. E.g. screws from Bossard ([www.bossard.com](http://www.bossard.com)): metric M 2.5/Torx (BN6404) or self-tapping screws  $\varnothing$  2.2/Torx (BN13274)

Dimensions Z161 RZ:

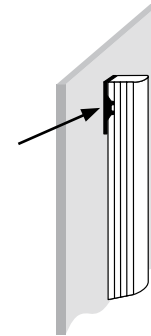


Type	article number	material	colour	dimensions (LxWxH) mm	weight per unit g	packing unit
Z161 RZ mounting plates	88166859	PMMA	white	33.45 x 18.7 x 6.5	1	100

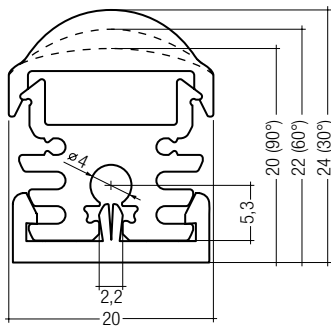
### Number of Z161 RZ mounting plates required

Type	horizontal	vertical ①	overhead
LE600	2	2	2
LE1000	2	2	2
LE1200	3	3	3
LE1500	3	3	3

① Z161 RZ at the top of TALEXengine Line: the stud on the end cap prevents the unit sliding down.



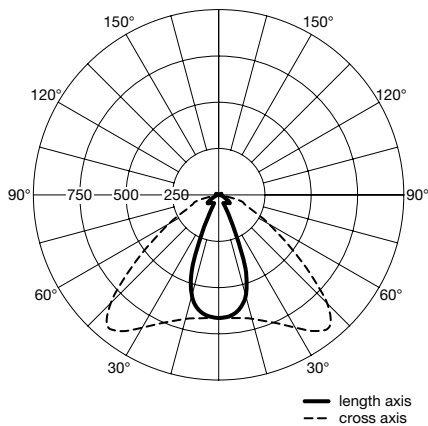
The mounting plate must not be subjected to any further mechanical stresses. If this cannot be guaranteed (because of vibrations for example) it may become detached and must therefore be secured with additional fastenings.



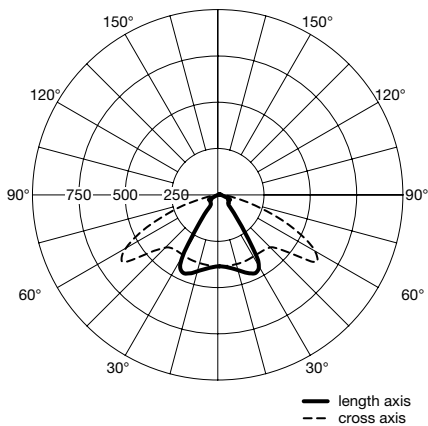
**Optical properties (DL, LE1500)**

ta = 25 °C / tc point on profile = 65 °C

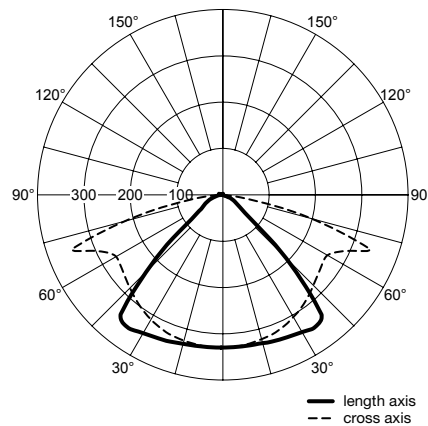
**Luminous intensity distribution curve 30°**



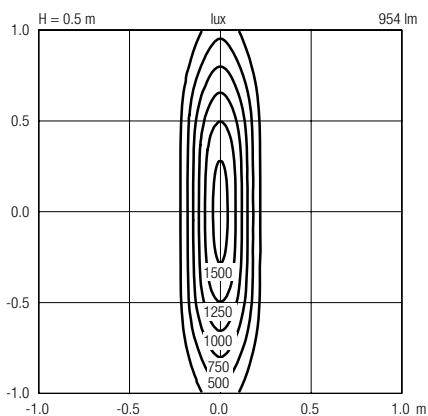
**Luminous intensity distribution curve 60°**



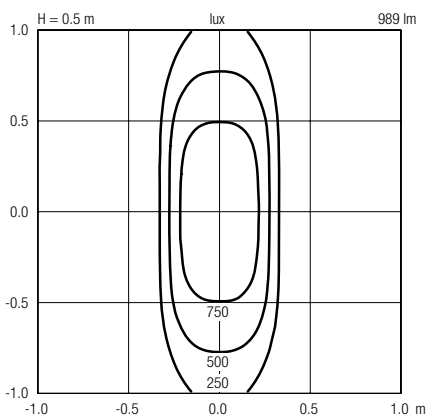
**Luminous intensity distribution curve 90°**



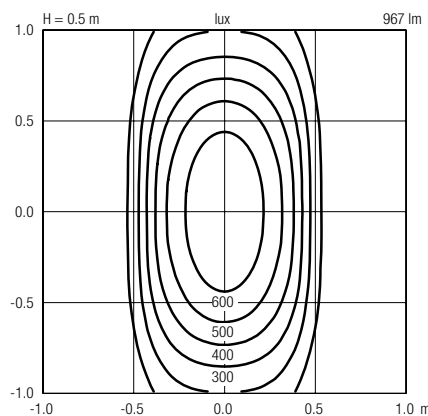
**Illuminance distribution 30° (0.5 m)**



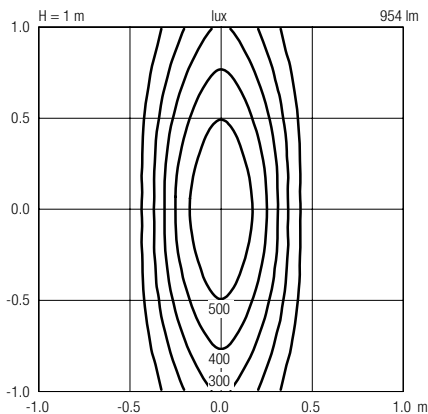
**Illuminance distribution 60° (0.5 m)**



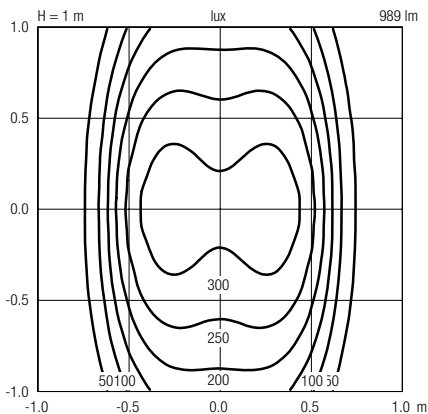
**Illuminance distribution 90° (0.5 m)**



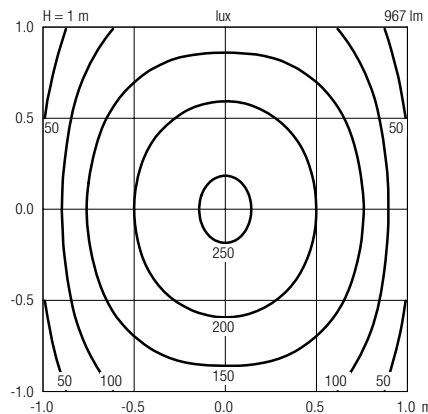
**Illuminance distribution 30° (1.0 m)**



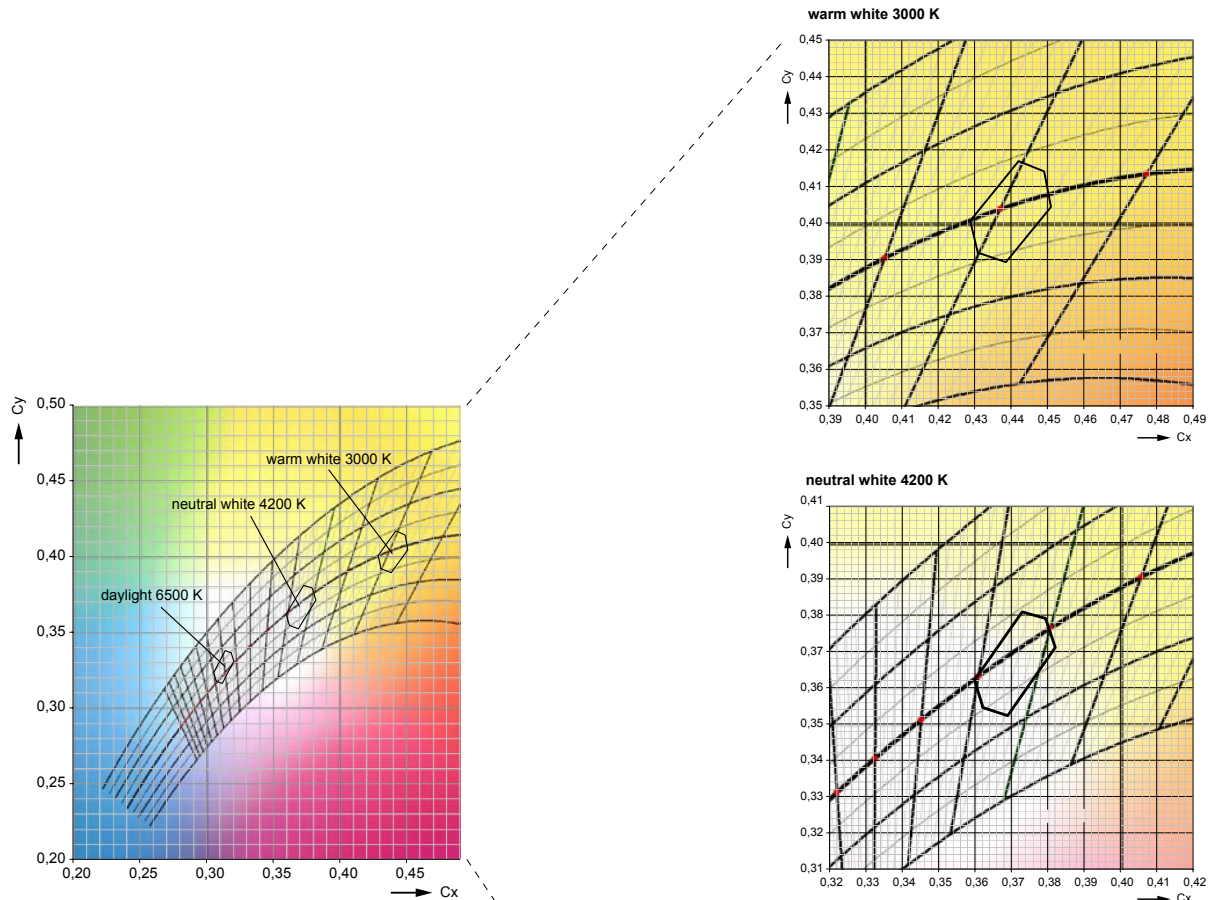
**Illuminance distribution 60° (1.0 m)**



**Illuminance distribution 90° (1.0 m)**



## Colour temperatures and CIE coordinates



### CIE coordinates: Tolerance area

#### warm white, 3,000 K

	Cx	Cy
tolerance area	0.4309	0.3919
	0.4288	0.4006
	0.4421	0.4169
	0.4491	0.4141
	0.4510	0.4044
	0.4386	0.3893

#### neutral white, 4,200 K

	Cx	Cy
tolerance area	0.3622	0.3545
	0.3599	0.3621
	0.3730	0.3809
	0.3794	0.3791
	0.3821	0.3711
	0.3690	0.3523

#### daylight white, 6,500 K

	Cx	Cy
tolerance area	0.3074	0.3175
	0.3055	0.3233
	0.3141	0.3378
	0.3186	0.3365
	0.3205	0.3308
	0.3119	0.3162