

Ex-LED-Linear light fitting

eLLK/M 92 LED 400A / eLLK/M 92 LED 800A / eLLK/M 92 LED 400A NE / eLLK 92 LED 800A NE
(Zone 1, 2, 21, 22)

The efficient solution for your explosion-protected lighting concept

The explosion-protected linear light fittings series eLLK/M 92 LED 400A/800A combines the latest LED technology with the protection of a reliable housing solution. As a result, this light fitting series is the ideal solution for lighting tasks in harsh and hazardous environments.

Latest lighting technology for a proven lighting concept

As a leading manufacturer of explosion-protected luminaires, we have redesigned our revolutionary LED module to fit into the eLLK/M... linear light fitting series.

With the new Gen2 modules, our LED linear luminaires are even more efficient and brighter than before. In addition, they now also have an extended temperature range from -25 °C to +55 °C. The new eLLK-2/4-C/W LED module can also be used for converting existing eLLK/M 92 light fittings with fluorescent lamps and an electronic ballast (EVG 09) into LED linear light fittings in just few simple steps.

The LED system design and certification allow the use in the proved Ex e technology of the eLLK/M 92 light fittings. With the use of our EVG 09 as the driver, we can rely on more than 20 years successful and safe operation in harsh and hazardous environments.

The advantages of the LED module:

- Environmentally friendly, no mercury
- Shock and vibration resistant, no filament or glass to break
- Immediate start, instant full illumination
- No life time reduction due to switching cycles
- Reduced disposal costs

Energy and cost savings

- >20% energy savings compared to fluorescent lamps
- Additional energy savings due to operation on demand (night/day and presence-mode)
- Reduced maintenance costs compared to standard fluorescent lamps
- Lower overall cost of ownership

Operating life

- The expected operating life of this LED module is up to 110,000 hours. This is a significant improvement compared to traditional light sources.
- Heat sinks are specifically engineered to remove heat from the LEDs to ensure a longer life, better lumen output and accurate colour temperature.
- Fully operational with V-CG-S modules for connection to CEAG central battery emergency lighting systems.
- Also available as self-contained emergency luminaire eLLK 92 LED ... NE.

Easy and cost-effective installation

Like all the luminaires in the eLLK lighting family, our standard LED linear luminaires feature a single-ended through-wiring, which, in conjunction with the generously dimensioned terminal compartment, allows a cost-effective installation. The double-sided locking facility with 10 or 20 latch points allows the protective bowl to be hinged on both sides, meaning that the fitting can be mounted on either side.

Features

- >20 % energy savings compared to similar fluorescent luminaires
- Special LED design with direct light distribution
- Proved technology. The EVG 09 has been used as a driver for more than 20 years
- Various light colour temperatures available - 4000 K / 5700 K
- Selected LED chips with perfect binning, low power loss and long life
- Ex-e technology for easy maintenance
- For ambient temperatures from -25 °C up to +55 °C

Ordering details

Type	Version	Terminals	Through-wiring single-ended	twin-ended	Cable gland/ thread	Threaded plug	Blanking plug	Order No for 4000 K	Order No for 5700 K
eLLK 92 LED 400A									
eLLK 92 LED 400A	1/6-1K	1 x 6	x	-	2 x M25, Plastic		1	1 2265 505 101	1 2265 504 101
eLLK 92 LED 400A	2/6-2K	2 x 6	-	x	2 x M25, Plastic	2 x M25		1 2265 505 103	1 2265 504 103
eLLK 92 LED 400A	1/6-1M ¹⁾	1 x 6	x	-	2 x M20, Metal thread	1 x M20		1 2265 505 109	1 2265 504 109
eLLK 92 LED 400A	2/6-2M ¹⁾	2 x 6	-	x	4 x M20, Metal thread	2 x M20		1 2265 505 111	1 2265 504 111
eLLK 92 LED 800A									
eLLK 92 LED 800A	1/6-1K	1 x 6	x	-	2 x M25, Plastic		1	1 2266 505 101	1 2266 504 101
eLLK 92 LED 800A	2/6-2K	2 x 6	-	x	2 x M25, Plastic	2 x M25		1 2266 505 103	1 2266 504 103
eLLK 92 LED 800A	1/6-1M ¹⁾	1 x 6	x	-	2 x M20, Metal thread	1 x M20		1 2266 505 109	1 2266 504 109
eLLK 92 LED 800A	2/6-2M ¹⁾	2 x 6	-	x	4 x M20, Metal thread	2 x M20		1 2266 505 111	1 2266 504 111
eLLM 92 LED 400A/800A									
eLLM 92 LED 400A	1/3-1K	1 x 3	-	-	1 x M25, Plastic			1 2268 505 101	1 2268 504 101
eLLM 92 LED 800A	1/3-1K	1 x 3	-	-	1 x M25, Plastic			1 2269 505 101	1 2269 504 101
eLLK 92 LED 400 V-CG-S ²⁾									
eLLK 92 LED 400 V-CG-S	2/6-2K	2 x 6	-	x	2 x M25, Plastic	2 x M25		1 2265 517 103	1 2265 516 103
eLLK 92 LED 400 V-CG-S	2/6-2M ¹⁾	2 x 6	-	x	4 x M20, Metal thread	2 x M25		1 2265 517 111	1 2265 516 111
eLLK 92 LED 800 V-CG-S ²⁾									
eLLK 92 LED 800 V-CG-S	2/6-2K	2 x 6	-	x	2 x M25, Plastic	2 x M25		1 2266 517 103	1 2266 516 103
eLLK 92 LED 800 V-CG-S	2/6-2M ¹⁾	2 x 6	-	x	4 x M20, Metal thread	2 x M25		1 2266 517 111	1 2266 516 111
eLLK 92 LED 400A NE ³⁾									
eLLK 92 LED 400A NE	1/6-1K	1 x 6	x	-	2 x M25, Plastic		1	1 2260 588 101	1 2260 587 101
eLLK 92 LED 400A NE	2/6-2K	2 x 6	-	x	2 x M25, Plastic	2 x M25		1 2260 588 103	1 2260 587 103
eLLK 92 LED 400A NE	1/6-1M ¹⁾	1 x 6	x	-	2 x M20, Metal thread	1 x M20		1 2260 588 109	1 2260 587 109
eLLK 92 LED 400A NE	2/6-2M ¹⁾	2 x 6	-	x	4 x M20, Metal thread	2 x M20		1 2260 588 111	1 2260 587 111
eLLK 92 LED 400A NE	1/6-1M ¹⁾	1 x 6	x	-	2 x M25, Metal thread	2 x M25		1 2260 588 609	1 2260 587 609
eLLK 92 LED 400A NE	2/6-2M ¹⁾	2 x 6	-	x	4 x M25, Metal thread	4 x M25		1 2260 588 611	1 2260 587 611
eLLK 92 LED 800A NE ³⁾									
eLLK 92 LED 800A NE	1/6-1K	1 x 6	x	-	2 x M25, Plastic		1	1 2261 588 101	1 2261 587 101
eLLK 92 LED 800A NE	2/6-2K	2 x 6	-	x	2 x M25, Plastic	2 x M25		1 2261 588 103	1 2261 587 103
eLLK 92 LED 800A NE	1/6-1M ¹⁾	1 x 6	x	-	2 x M20, Metal thread	1 x M20		1 2261 588 109	1 2261 587 109
eLLK 92 LED 800A NE	2/6-2M ¹⁾	2 x 6	-	x	4 x M20, Metal thread	2 x M20		1 2261 588 111	1 2261 587 111
eLLK 92 LED 800A NE	1/6-1M ¹⁾	1 x 6	x	-	2 x M25, Metal thread	2 x M25		1 2261 588 609	1 2261 587 609
eLLK 92 LED 800A NE	2/6-2M ¹⁾	2 x 6	-	x	4 x M25, Metal thread	4 x M25		1 2261 588 611	1 2261 587 611
eLLM 92 LED 400A NE ³⁾									
eLLM 92 LED 400A NE	1/3-1K	1 x 3	-	-	1 x M25, Plastic			1 2273 588 101	1 2273 587 101

Scope of delivery including LED-module, without fixing material. Metal cable glands see catalogue part 2: 2.3.12 ff

1) with metal thread, without cable gland / 2) for operation with CEAG-emergency supply system / 3) self-contained emergency light fitting

Accessories

Type		Order No for 4000 K	Order No for 5700 K
eLLK-2	LED module for eLLK/M 92 018/18 incl. conversion kit for standard fluorescent light fittings	CCL 1635 129	CCL 1635 127
eLLK-4	LED module for eLLK/M 92 036/36 incl. conversion kit for standard fluorescent light fittings	CCL 1635 130	CCL 1635 128
eLLK-2	LED module for eLLK/M 92 018/18 LED Ready / eLLK 92 LED 400A	CCL 1634 699	CCL 1634 697
eLLK-4	LED module for eLLK/M 92 036/36 LED Ready / eLLK 92 LED 800A	CCL 1634 700	CCL 1634 698
Type		Order No	
Single sided through wiring 2/6 with 2 entries M25, incl. terminals and mounting material		2 2218 602 000	
Battery set Type 2710-12 with LED display for eLL..92..NE		2 2710 906 000	
Single sided through wiring 2/6 with 2 entries M25, incl. terminals and mounting material for eLLK 92 LED 400A/800A		2 2218 602 000	
Protective bowl with green filter for eye wash safety shower facilities (eLLK 92 LED 400A)		2 2215 402 018	
eLLK-2/eLLK-4 Diffuser for LED modul 400A (1pc) or 800A (2pc)		CHLPL1403-01	



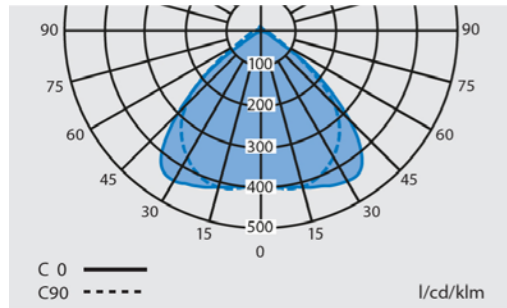
Polar curve / Dimension drawing

eLLK/M 92 LED 400A/800A / NE

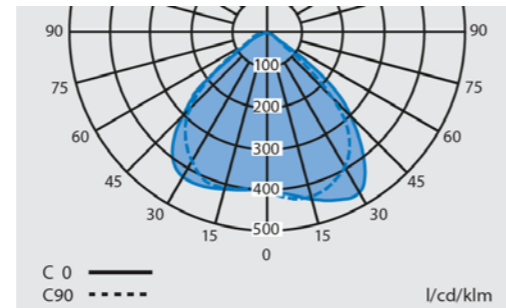
Technical data

eLLK 92 LED 400A/800A

Polar curve eLLK/M 92 LED 400A/800A



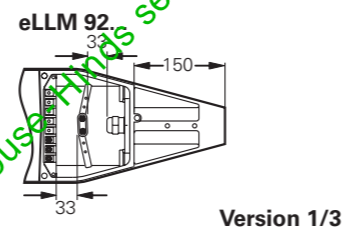
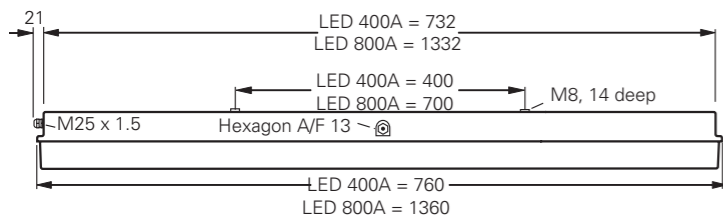
Polar curve eLLK/M 92 LED 400A/800A NE in emergency mode



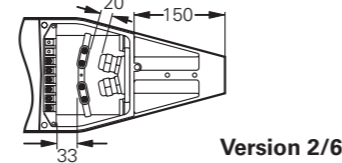
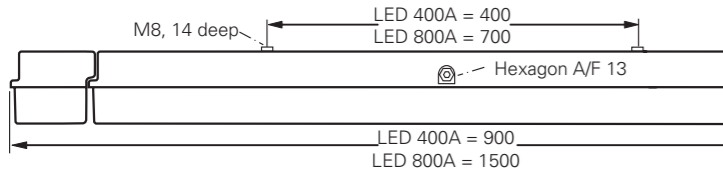
Technical data

	eLLK/M 92 LED 400A	eLLK/M 92 LED 800A
EC-Type Examination Certificate	BVS 09 ATEX E 034	BVS 09 ATEX E 034
IECEx Certificate of Conformity	IECEx BVS 09.0033	IECEx BVS 09.0033
Marking accd. to 2014/34/EU	II 2 G Ex db eb mb op is IIC T4 Gb II 2 D Ex tb IIIC T80 °C Db IP66	II 2 G Ex db eb mb op is IIC T4 Gb II 2 D Ex tb IIIC T80 °C Db IP66
Marking accd. to IECEx	Ex db eb mb op is IIC T4 Gb Ex tb IIIC T80 °C Db	Ex db eb mb op is IIC T4 Gb Ex tb IIIC T80 °C Db
Permissible ambient temperature	-25 °C up to +55 °C	-25 °C up to +55 °C
IK-class according to EN 62262	IK 10 ± 20 J	IK 10 ± 20 J
Rated voltage	110 V - 254 V AC 110 V - 250 V DC	110 V - 254 V AC 110 V - 250 V DC
Power consumption	30 W	50 W
Frequency	50 - 60 Hz	50 - 60 Hz
Life expectancy LED module	L 70 = 110.000 h at ta=25 °C	L 70 = 110.000 h at ta=25 °C
Power factor cos φ	≥ 0.95	≥ 0.95
Circuit	EVG	EVG
Protection class	I	I
Immunity to surge voltages according to EN 61000-4-5	4 kV, L - N and L - PE	4 kV, L - N and L - PE
Illuminance at measurement plane	comparable with luminaires for fluorescent lamps	comparable with luminaires for fluorescent lamps
CRI	> 80	> 80
Lamp / Illuminant	eLLK-2-C - 2 x 13 W	eLLK-2-C - 2 x 26 W
Light colour	5700 K or 4000 K	5700 K or 4000 K
Rated luminous flux of the luminaire (typical, ± 10 %)	3230 lm (5700 K) / 3230 lm (4000 K)	6120 lm (5700 K) / 6120 lm (4000 K)
Dimensions (L x W x H)	760 x 188 x 130 mm (eLLK) 1060 x 188 x 130 mm (eLLM)	1360 x 188 x 130 mm
Connecting terminals	L1, L2, L3, L, N, PE; max. 2 x 6 mm² per terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm² per terminal
Enclosure colour	RAL 7035 light grey	RAL 7035 light grey
Enclosure material	Glass-fibre reinforced polyester	Glass-fibre reinforced polyester
Weight	7.2 kg (eLLK) / 9.2 kg (eLLM)	11.1 kg (eLLK) / 13.1 kg (eLLM)
Cable glands / gland plates / enclosure drilling	Ex-e cable glands M25 x 1.5 (plastic), option: M20/M25 x 1.5 metal thread1)	Ex-e cable glands M25 x 1.5 (plastic), option: M20/M25 x 1.5 metal thread1)
Degree of protection accd. to EN 60529	IP66/IP67	IP66/IP67
Protective cover / protective bowl	Polycarbonate	Polycarbonate

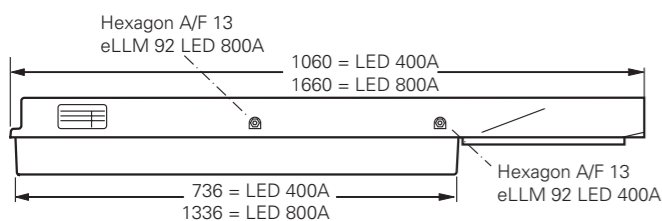
eLLK 92 LED 400A/800A



eLLK 92 LED 400A/800A NE



eLLM 92 LED 400A/800A



Dimensions in mm

1) with dustcover if entry/thread is not closed

Technical data

eLLK 92 LED 400A V-CG-S / eLLK 92 LED 800A V-CG-S



Technical data

	eLLK 92 LED 400A V-CG-S	eLLK 92 LED 800A V-CG-S
EC-Tye Examination Certificate	BVS 09 ATEX E 034	BVS 09 ATEX E 034
IECEx Certificate of Conformity	IECEx BVS 09.0033	IECEx BVS 09.0033
Marking to 2014/34/EU	II 2 G Ex db eb mb op is IIC T4 Gb II 2 D Ex tb IIIC T80 °C Db IP66	II 2 G Ex db eb mb op is IIC T4 Gb II 2 D Ex tb IIIC T80 °C Db IP66
Marking to IECEx	Ex db eb mb op is IIC T4 Gb Ex tb IIIC T80 °C Db	Ex db eb mb op is IIC T4 Gb Ex tb IIIC T80 °C Db
Permissible ambient temperature	-25 °C up to +50 °C	-25 °C up to +50 °C
IK-class according to IEC/EN 62262	IK 10 Δ 20 J	IK 10 Δ 20 J
Rated voltage	220 - 254 V AC 195 - 250 V DC	220 - 254 V AC 195 - 250 V DC
Power consumption	30 W	50 W
Frequency	50 - 60 Hz	50 - 60 Hz
Lifetime LED module	L 70 = 110.000 h at ta=25 °C	L 70 = 110.000 h at ta=25 °C
Power factor cos ϕ	$\geq 0,95$	$\geq 0,95$
Circuit	EVG/V-CG-S	EVG/V-CG-S
Insulation class	I	I
Illuminance at measurement plane	comparable with luminaires for fluorescent lamps	comparable with luminaires for fluorescent lamps
CRI	> 80	> 80
Lamp/Illuminant	eLLK-2-C - 2 x 13 W	eLLK-2-C - 2 x 26 W
Light colour	5700K or 4000K	5700K or 4000K
Rated luminous flux of the luminaire (typical, $\pm 10\%$)	3230 lm (5700 K) / 3230 lm (4000 K)	6120 lm (5700 K) / 6120 lm (4000 K)
Rated luminous flux in emergency operation of the luminaire (one LED-row)	1615 lm (5700 k) / 1615 lm (4000 K)	3060 lm (5700 k) / 3060 lm (4000 K)
Rated emergency operating time	-	-
Dimensions (L x W x H)	760 x 188 x 130 mm	1360 x 188 x 130 mm
Connecting terminals	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal
Enclosure colour	RAL 7035 light grey	RAL 7035 light grey
Enclosure material	Glass-fibre reinforced polyester	Glass-fibre reinforced polyester
Weight	7.6 kg	11.5 kg
Cable glands / Gland plates / Enclosure drilling	Ex-e cable glands M25 x 1.5 (plastic), option: M20/M25 x 1.5 metal thread ¹⁾	Ex-e cable glands M25 x 1.5 (plastic), option: M20/M25 x 1.5 metal thread ¹⁾
Degree of protection accd. EN 60529	IP66/IP67	IP66/IP67
Protective cover / protective bowl	Polycarbonate	Polycarbonate

¹⁾ With dustcover if entry/thread is not closed

Technical data

eLLK/M 92 LED 400A NE / eLLK 92 LED 800A NE



Technical data

	eLLK/M 92 LED 400A NE	eLLK 92 LED 800A NE
EC-Tye Examination Certificate	BVS 09 ATEX E 034	BVS 09 ATEX E 034
IECEx Certificate of Conformity	IECEx BVS 09.0033	IECEx BVS 09.0033
Marking to 2014/34/EU	II 2 G Ex db eb mb op is IIC T4 Gb II 2 D Ex tb IIIC T80 °C Db IP66	II 2 G Ex db eb mb op is IIC T4 Gb II 2 D Ex tb IIIC T80 °C Db IP66
Marking to IECEx	Ex db eb mb ib op is IIC T4 Gb Ex tb IIIC T80 °C Db	Ex db eb mb ib op is IIC T4 Gb Ex tb IIIC T80 °C Db
Permissible ambient temperature	-25 °C up to +55 °C (specified data: -5 °C up to +35 °C)	-25 °C up to +55 °C (specified data: -5 °C up to +35 °C)
IK-class according to IEC/EN 62262	IK 10 Δ 20 J	IK 10 Δ 20 J
Battery	Battery set with 7 Ah-NC battery, with LED display and monitoring via microprocessor	Battery set with 7 Ah-NC battery, with LED display and monitoring via microprocessor
Rated voltage	120 V - 254 V AC	120 V - 254 V AC
Power consumption	34 W	54 W
Frequency	50 - 60 Hz	50 - 60 Hz
Charging duration	≥ 14 h	≥ 14 h
Lifetime LED module	L 70 = 110.000 h at ta=25 °C	L 70 = 110.000 h at ta=25 °C
Power factor cos ϕ	$\geq 0,95$	$\geq 0,95$
Circuit	EVG with emergency lighting supply	EVG with emergency lighting supply
Insulation class	I	I
Illuminance at measurement plane	comparable with luminaires for fluorescent lamps	comparable with luminaires for fluorescent lamps
CRI	> 80	> 80
Lamp/Illuminant	eLLK-2-C - 2 x 13 W	eLLK-2-C - 2 x 26 W
Light colour	5700K or 4000K	5700K or 4000K
Rated luminous flux of the luminaire (typical, $\pm 10\%$)	3230 lm (5700 K) / 3230 lm (4000 K)	6120 lm (5700 K) / 6120 lm (4000 K)
Rated luminous flux in emergency operation 1.5 hours	1534 lm (5700 k) / 1534 lm (4000 K)	1989 lm (5700 k) / 1989 lm (4000 K)
Rated luminous flux in emergency operation 3.0 hours	1049 lm (5700 k) / 1049 lm (4000 K)	1377 lm (5700 k) / 1377 lm (4000 K)
Rated emergency operating time	1.5 h or 3 h, adjustable on site	1.5 h or 3 h, adjustable on site
Dimensions (L x W x H)	900 x 188 x 130 mm / 1500 x 188 x 130 mm	900 x 188 x 130 mm / 1500 x 188 x 130 mm
Connecting terminals	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal
Enclosure colour	RAL 7035 light grey	RAL 7035 light grey
Enclosure material	Glass-fibre reinforced polyester	Glass-fibre reinforced polyester
Weight	10.3 kg	14.4 kg
Cable glands / Gland plates / Enclosure drilling	Ex-e-cable glands M25 x 1,5 (plastic), option: M20 x 1,5 metal thread ¹⁾	Ex-e-cable glands M25 x 1,5 (plastic), option: M20 x 1,5 metal thread ¹⁾
Degree of protection accd. EN 60529	IP66/IP67	IP66/IP67
Protective cover / protective bowl	Polycarbonate	Polycarbonate

¹⁾ With dustcover if entry/thread is not closed