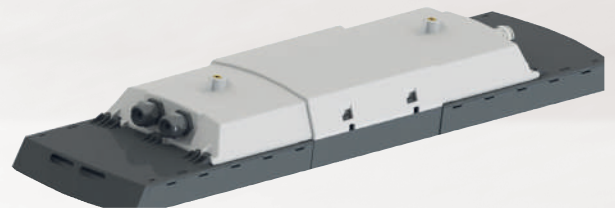
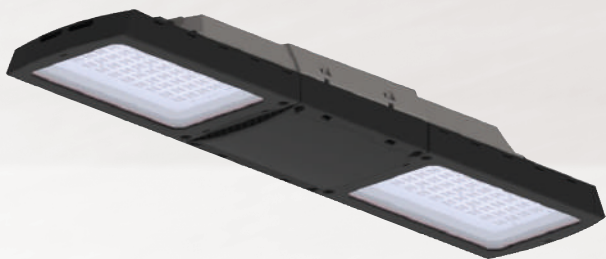


Explosion protected
linear light fixture

CROUSE-HINDS
SERIES

CEAG ExLin

LED linear fixtures for hazardous areas



EATON
Powering Business Worldwide



THORNE &
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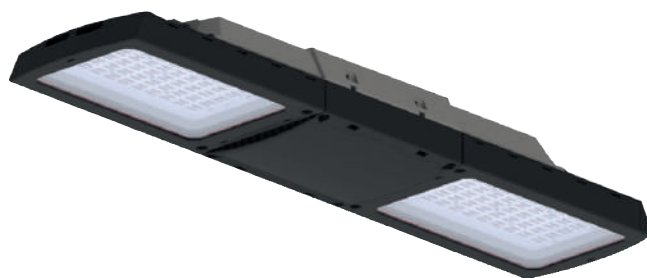
Thorne & Derrick
+44 (0) 191 410 4292
www.heatingandprocess.com



Introducing CEAG ExLin

A linear LED engineered for use in
Zone 1 and 21 hazardous areas.

CEAG ExLin delivers longer life,
improved efficiency and superior
performance with a competitive
payback vs. fluorescent fixtures.



The following CEAG ExLin models will replace
2x18W, 2x36W and 2x58W fluorescent fixtures

Model	Typical lumens with clear glass cover	Wattage	Lumens per watt	Equivalent fluorescent luminaire	Typical energy savings / lifetime
ExLin 3L-1	2,750	22W	125	2 x 18 W	> 40%
ExLin 5L-1	5,300	44W	120	2 x 36 W	> 40%
ExLin 5L-2	5,480	44W	125	2 x 36 W	> 40%
ExLin 7L-2	8,120	67W	121	2 x 58 W	> 40%

Applications:

- Designed to provide general illumination where moisture, dust, corrosion, and extreme temperature exist
- Areas requiring frequent on-and-off of lights
- Oil and gas refineries, petrochemical facilities, food and beverage facilities, platforms, loading docks, tunnels, outdoor wall and stanchion mounted general area lighting, and where flammable vapors and gases are present.

Why CEAG ExLin LED?

Safe, reliable, efficient. CEAG ExLin fixtures combine state-of-the-art LED technology with optimised thermal management and a time-tested enclosure to extend service life in extreme environments.



Superior performance and efficiency

- Replaces 2x18W, 2x36W and 2x58W fluorescent fixtures
- Rated life of 100,000 hours at 25°C based on L90C5 provides long term, low-maintenance operation
- Up to 120 LM/W provides up to 40% energy efficiency compared to traditional fluorescent fixtures
- Operating temperature from -40°C to +55°C

State-of-the-art LED technology coupled with a long history of hazardous area lighting design expertise

- LED light strings operate independently. Should one string fail, all other strings will continue to work, avoiding complete loss of illumination
- Enclosure material is time-tested and field-proven for durability in harsh and hazardous applications globally
- Optimised thermal management for extending service life in extreme environments

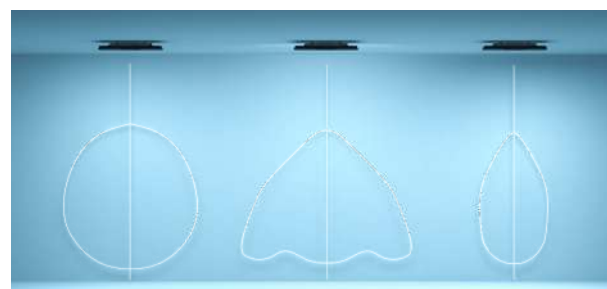
Optimised light distribution with optics and lens options

- Standard, narrow and wide beam optics optimise light distribution, providing light where the customer needs it with the potential to reduce the number of fixtures required
- Clear or diffused (frosted) LED module cover available in glass provides application flexibility. Also with stray light protection.
- The laminated glass version with external plastic foil prevents any glass splitters from falling, allowing safe use in critical application such as Food & Beverage, Chemical and Pharmaceutical industries



Low profile and lightweight design with drop in mounting compatibility to CEAG eLLK fluorescent

- Decreases footprint in confined applications and reduces installation effort
- Same fixing point as eLLK 2x18W fixtures and a mounting kit available allowing for easy replacement of 2x36W and 2x58W without changing cables or adding drilled holes



Standard

Wide

Narrow



CEAG ExLin technical specifications:

Certifications and compliances:

IECEX / ATEX Standards:

EC-Type Examination Certificate

- BVS 18 ATEX E 037 X

IECEX-Certification of conformity

- IECEX BVS 18.0028X

Marking accd. to 2014/34/EU

- Ex II 2G Ex eb ib op is q IIC T4/T5 Gb
- Ex II 2D Ex tb op is IIIC T 80/110°C Db

Marking accd. to IECEX

- Ex eb ib op is q IIC T4/T5 Gb
- Ex tb op is IIIC T 80/110°C Db

Permissible ambient temperature, depending on configuration

- -40°C up to +55°C*

Degree of protection accd. to EN 60529

- IP66/67

IK-class according to IEC/EN 62262

- IK10

* up to +50°C for 3L-1 and 5L-2 with through wiring and plastic cable glands. Up to +45°C for 5L-1 and 7L-2 with through wiring and plastic cable glands



3L-1 and 5L-1 models

5L-2 and 7L-2 models

LED system:

- Light colour / CRI: 5000K / 70 and 80 (4000K on request)
- Optics: Standard, narrow beam, wide beam.

Fixture life (IEC 62722):

LED

- L90 ~100,000 h at ta = +25 °C
- L85 ~75,000 h at ta = +55 °C

Control gear

- C5 ~100,000 h at ta = +25 °C
- C10 ~75,000 h at ta = +55 °C

Standard materials:

- Fixture enclosure - Glassfibre reinforced polyester
- LED module cover - toughened glass or plastic-laminated glass, clear or opaque

Dimensions and weights:

ExLin 3L-1 and 5L-1

- 770 x 201 x 115 mm
- 6.7 kg

ExLin 5L2 and 7L-2

- 931 x 201 x 115 mm
- 8.0 kg

Electrical ratings:

Model	ExLin 3L-1	ExLin 5L-1 / 5L-2	ExLin 7L-2
Voltage	110 up to 277 V AC/DC	110 up to 277 V AC/DC	110 up to 277 V AC/DC
Power consumption	22W	44W	67W
Lumens (clear glass cover) †	2750	5300/5480	8120
Lumens (frosted glass cover) †	2370	4580/4680	6920
Frequency	0/50 - 60 Hz	0/50 - 60 Hz	0/50 - 60 Hz
Inrush current	6A for 1ms	6A for 1ms	10A for 1ms
Power factor cos φ @ 230 V	≥ 0.92	≥ 0.95	≥ 0.95
Circuit	EVG	EVG	EVG
Protection class	I	I	I
Immunity to surge voltages according to EN6100-4-5	4 kV, L-N and L-PE	4 kV, L-N and L-PE	4 kV, L-N and L-PE
THD @230V	8%	5%	5%

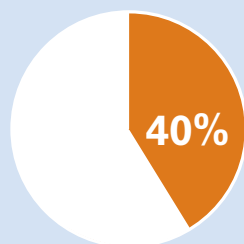
† Lumen values apply to 5000K light colour, 70 CRI fixtures with standard optic. Lumen output may vary slightly for different models.

LED vs. fluorescent savings at a glance

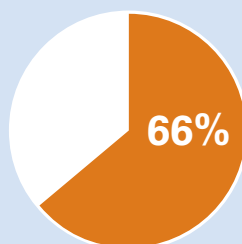
Why are so many facilities making the switch from fluorescent to LED?

The numbers say it all.

CEAG ExLin vs. x 36W Fluorescent



40% REDUCTION IN ENERGY COSTS



66% LOWER TOTAL COST OF OWNERSHIP



100% LAMP MAINTENANCE REDUCTION

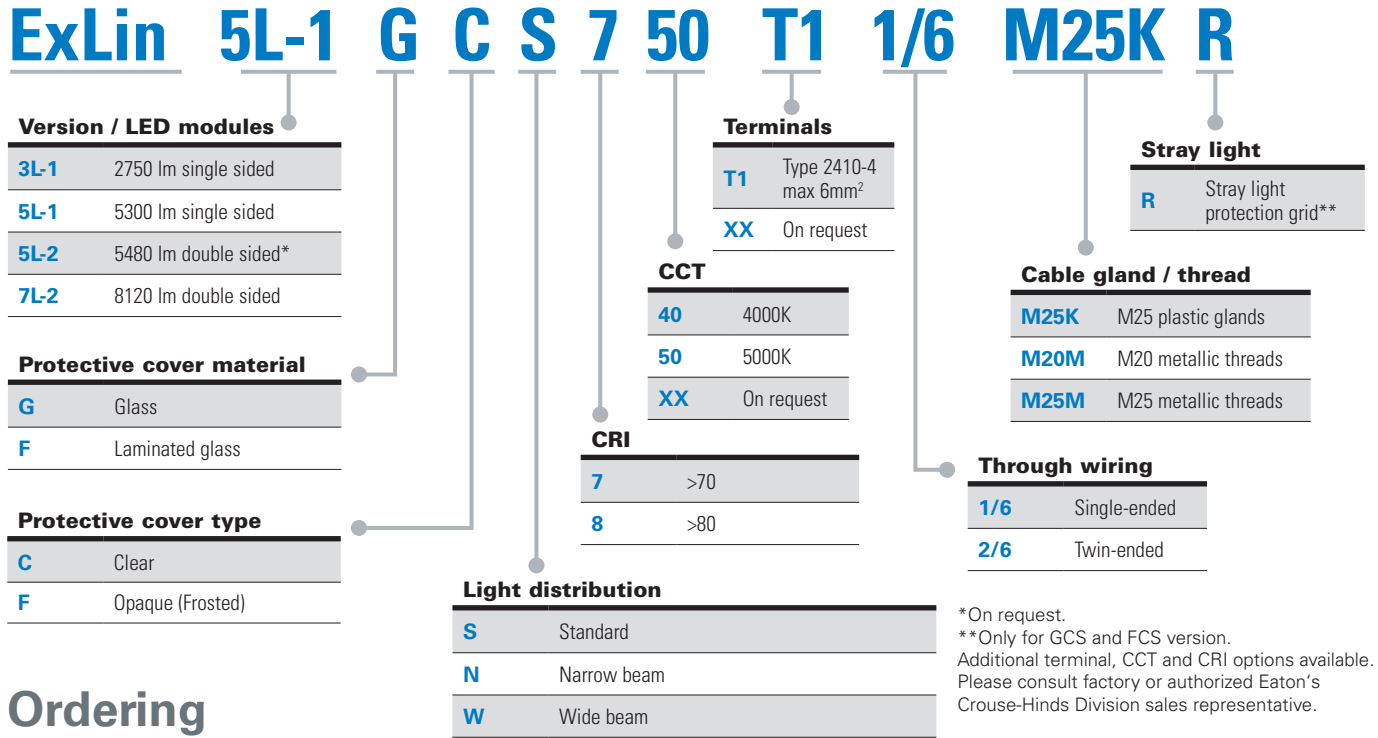
Assumptions: Calculations based on overall life of the LED system. Energy cost of €0.09 per kilowatt; 24 hour per day operation; labor rate of €75 each for 2 workers; average time for fixture maintenance of 2 hours.

Catalog Numbering System:

Part number example

ExLin 5L-1 G C S 7 50 T1 1/6 M25K R

CEAG ExLin linear, 5300 lumens, glass lens, clear lens, standard light beam, >70 CRI, 5000K, Type 2410-4 terminals, single-ended wiring, M25 plastic cable gland



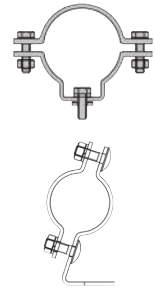
Ordering information:

Model	Cover type	Light distribution	Through wiring		Cable gland/thread	Order No	
			single-ended	twin-ended		CRI70	CRI80
ExLin 3L-1							
ExLin 3L-1 G C S 750 T1 1/6 M25K	Glass, Clear	Standard	X		M25 Plastic cable gland	1 2300 120 101	1 2300 320 101
ExLin 3L-1 G C S 750 T1 2/6 M25K	Glass, Clear	Standard		X	M25 Plastic cable gland	1 2300 120 103	1 2300 320 103
ExLin 3L-1 G C S 750 T1 1/6 M20M	Glass, Clear	Standard	X		M20 Metal thread	1 2300 120 109	1 2300 320 109
ExLin 3L-1 G C S 750 T1 2/6 M20M	Glass, Clear	Standard		X	M20 Metal thread	1 2300 120 111	1 2300 320 111
ExLin 3L-1 G F S 750 T1 1/6 M25K	Glass, Frosted	Standard	X		M25 Plastic cable gland	1 2300 125 101	1 2300 325 101
ExLin 3L-1 G F S 750 T1 2/6 M25K	Glass, Frosted	Standard		X	M25 Plastic cable gland	1 2300 125 103	1 2300 325 103
ExLin 3L-1 G F S 750 T1 1/6 M20M	Glass, Frosted	Standard	X		M20 Metal thread	1 2300 125 109	1 2300 325 109
ExLin 3L-1 G F S 750 T1 2/6 M20M	Glass, Frosted	Standard		X	M20 Metal thread	1 2300 125 111	1 2300 325 111
ExLin 5L-1							
ExLin 5L-1 G C S 750 T1 1/6 M25K	Glass, Clear	Standard	X		M25 Plastic cable gland	1 2300 140 101	1 2300 340 101
ExLin 5L-1 G C S 750 T1 2/6 M25K	Glass, Clear	Standard		X	M25 Plastic cable gland	1 2300 140 103	1 2300 340 103
ExLin 5L-1 G C S 750 T1 1/6 M20M	Glass, Clear	Standard	X		M20 Metal thread	1 2300 140 109	1 2300 340 109
ExLin 5L-1 G C S 750 T1 2/6 M20M	Glass, Clear	Standard		X	M20 Metal thread	1 2300 140 111	1 2300 340 111
ExLin 5L-1 G F S 750 T1 1/6 M25K	Glass, Frosted	Standard	X		M25 Plastic cable gland	1 2300 145 101	1 2300 345 101
ExLin 5L-1 G F S 750 T1 2/6 M25K	Glass, Frosted	Standard		X	M25 Plastic cable gland	1 2300 145 103	1 2300 345 103
ExLin 5L-1 G F S 750 T1 1/6 M20M	Glass, Frosted	Standard	X		M20 Metal thread	1 2300 145 109	1 2300 345 109
ExLin 5L-1 G F S 750 T1 2/6 M20M	Glass, Frosted	Standard		X	M20 Metal thread	1 2300 145 111	1 2300 345 111
ExLin 7L-2							
ExLin 7L-2 G C S 750 T1 1/6 M25K	Glass, Clear	Standard	X		M25 Plastic cable gland	1 2300 170 101	1 2300 370 101
ExLin 7L-2 G C S 750 T1 2/6 M25K	Glass, Clear	Standard		X	M25 Plastic cable gland	1 2300 170 103	1 2300 370 103
ExLin 7L-2 G C S 750 T1 1/6 M20M	Glass, Clear	Standard	X		M20 Metal thread	1 2300 170 109	1 2300 370 109
ExLin 7L-2 G C S 750 T1 2/6 M20M	Glass, Clear	Standard		X	M20 Metal thread	1 2300 170 111	1 2300 370 111
ExLin 7L-2 G F S 750 T1 1/6 M25K	Glass, Frosted	Standard	X		M25 Plastic cable gland	1 2300 175 101	1 2300 375 101
ExLin 7L-2 G F S 750 T1 2/6 M25K	Glass, Frosted	Standard		X	M25 Plastic cable gland	1 2300 175 103	1 2300 375 103
ExLin 7L-2 G F S 750 T1 1/6 M20M	Glass, Frosted	Standard	X		M20 Metal thread	1 2300 175 109	1 2300 375 109
ExLin 7L-2 G F S 750 T1 2/6 M20M	Glass, Frosted	Standard		X	M20 Metal thread	1 2300 175 111	1 2300 375 111

Mounting Accessories (Order Separately)

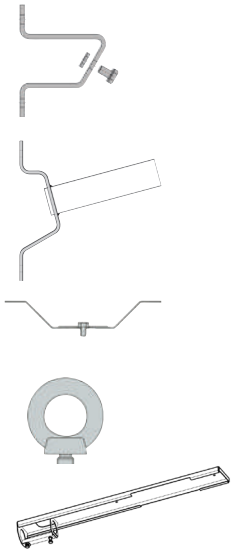
Pipe Clamps

Ordering Code	Description
2 2480 462 000 *	2 pcs. R12 (1 1/4"), Ø 38 - 42 mm with screws and polyamide washer, hot-dip galvanized
2 2480 472 000 *	2 pcs. R22 (1 1/2"), Ø 47 - 51 mm with screws and polyamide washer, hot-dip galvanized
2 2480 482 000 *	2 pcs. R32 (2"), Ø 56 - 60 mm with screws and polyamide washer, hot-dip galvanized
NOR 000 005 009 211	1 pcs. A8 (1 1/2") D 47 - 51 mm for AB 12.. with screws and polyamide washer, hot-dip galvanized
NOR 000 005 009 229	1 pcs. A9 (2") D 56 - 60 mm for AB 12.. with screws and polyamide washer, hot-dip galvanized
2 2480 550 010	2 pcs. Two-part, for pipe mounting LB 48 - FT with screws and polyamide washer, hot-dip galvanized



Fixing Accessories

Ordering Code	Description
2 2480 550 013	2 pcs. luminaire mounting bracket with 30° angle, wall mounting LH 30 - FT, hot-dip galvanized
2 2480 550 014	2 pcs. luminaire mounting bracket with 45° angle, wall mounting LH 45 - FT, hot-dip galvanized
2 2480 000 122	2 pcs. wall mounting bracket with 30° angle, with screws and polyamide washer, hot-dip galvanized
NOR 000 005 009 196	1 pcs. wall bracket 45° with screws and polyamide washer, hot-dip galvanized
2 2483 027 000	1 pcs. wall bracket W 27, 15°, for pole-mounting fitting Ø 42 mm, hot-dip galvanized
2 2480 092 000	2 pcs. ceiling mounting bracket D 92 with screws and polyamide washer, stainless steel
NOR 000 005 009 162	1 pcs. ceiling mounting bracket A5 with screws and polyamide washer, hot-dip galvanized
2 2480 550 011	2 pcs. C-bracket for luminaire mounting LAB-C50 - ER, stainless steel
2 2480 054 000	2 pcs. hexagon screw M8 x 20 for luminaire mounting, with polyamide washer
2 2480 002 000 *	2 pcs. eye bolt M8 for luminaire mounting, hot-dip galvanized
NOR 000 005 009 261	1 pcs. eye bolt M8 - A1 for luminaire mounting, hot-dip galvanized
22480600001	Pole mounting adapter - 42-49mm diameter
22480600002	Pole mounting adapter - 52-62mm diameter



* Also available in stainless steel. Consult factory for ordering code.

Metallic Cable Glands (Order Separately)

ADE-1F2

Catalog #	Metric Thread Size	Cable Types	Cable sealing range - Min	Cable sealing range - Max
ADE1M200NPN	M20	Non-armoured, Marine shipboard, Type P; Tray cable (armoured)	2.8	5.5
ADE1M201NPN	M20		4.5	8.5
ADE1M202NPN	M20		7.0	12.0
ADE1M203NPN	M20		10.0	16.0



ADE-4F

Catalog #	Metric Thread Size	Cable Types	Cable sealing range inner sheath		Cable sealing range outer sheath		Armor	
			Min.	Max.	Min.	Max.	Min.	Max.
ADE4M200NPN	M20	SWA, SWB, STA, Braided marine shipboard, Type P; Lead sheathed cable (with addition of earthing washer)	2.8	5.5	4.5	8.5	0.2	0.9
ADE4M201NPN	M20		4.5	8.0	7.0	12.0	0.2	0.9
ADE4M202NPN	M20		7.0	12.0	10.0	16.0	0.2	1.3
ADE4M203NPN	M20		10.0	15.5	13.5	21.0	0.2	1.3



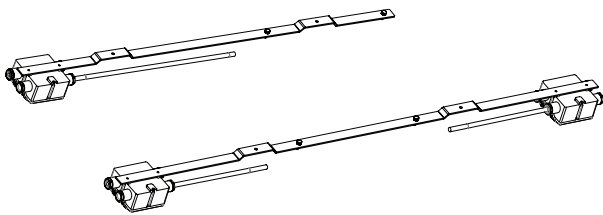
ADE-1F2 and ADE-4F catalog numbers are for nickel-plated brass; For other material options, refer to our cable glands section within www.crouse-hinds.de/en/

Adapter Kits for eLLK Retrofits (Order Separately)

CEAG ExLin LED fixtures are designed with the same fixing point as Crouse-Hinds series CEAG eLLK 2x18W fixtures, making retrofits simple and cost-effective.

Adapter kits allow for easy replacement of 2x36W and 2x58W eLLK fixtures without changing already-installed cables or mounting brackets. Adapter kits include a metal bar, junction box and connection cables between the junction box and ExLin fixture.

Ordering Code	Description
2 2300 500 001	2 pcs. ExLin adapter kit for retrofitting to eLLK 2x36W fixture - includes metal bar, junction box, plastic glands and connection cable between box and fixture*
2 2300 500 002	1 pcs. ExLin adapter kit for retrofitting to eLLK 2x58W fixture - includes metal bar, two junction boxes, plastic glands and connection cable between boxes and fixture*



*Metal bar available also as stand alone, for easy replacement without additional drilling. Consult Customer Service for availability.

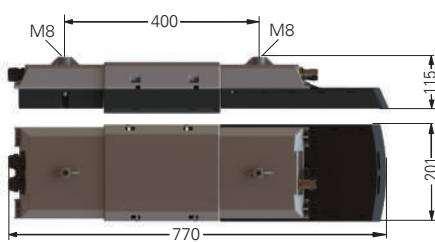
See for yourself how easy it is to upgrade your eLLK lighting installation to our state-of-the-art ExLin LED solution!



Visit eaton.com/ellk-to-exlin to watch the fast and simple retrofit process using our adapter kit

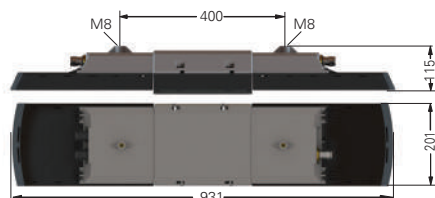
Dimensions and Weights:

CEAG ExLin 3L-1 and 5L-1:



Weight: 6.7 kg

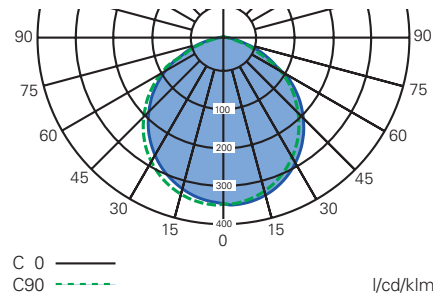
CEAG ExLin 5L and 7L-2:



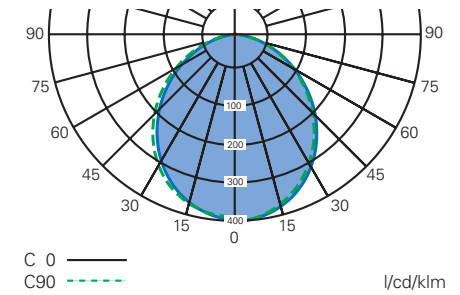
Weight: 8.0 kg

Polar Curves:

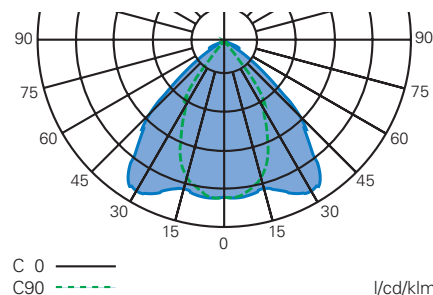
CEAG ExLin standard beam with clear cover



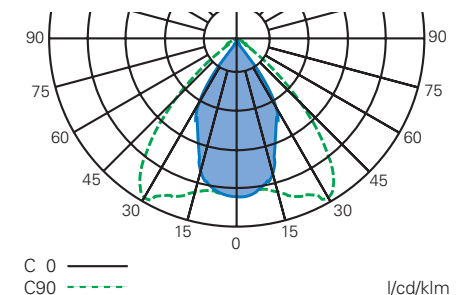
CEAG ExLin standard beam with frosted cover



CEAG ExLin wide beam



CEAG ExLin narrow beam



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See the complete offering of hazardous and industrial products at www.crouse-hinds.de.

For more information:

If further assistance is required, please contact an authorized Eaton Distributor, Sales Office, or Customer Service Department.

Eaton's Crouse-Hinds Division

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