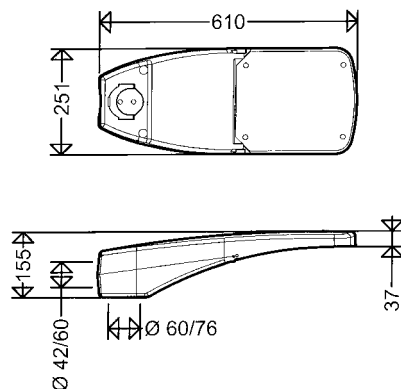




LED Outdoor Light Fitting with Multi-Purpose Mounting System Series 48...

DESIGN

Housing: Die-Cast aluminium, 2-parts, charcoal coloured metallic matt powder coated (almost DB 702). Upper section with LED-Module, optics; glass cover and ECG, hinged and detachable. Lower section with pole mounting system, adjustment of inclination, cable retainer, cable entry with pressure compensation system.

Glass cover: Flat safety glass, Impact resistance IK08.

Optic: Lens optics with asymmetric or asymmetric extremely wide beam (ABX) light distribution Multi-Layer technology.

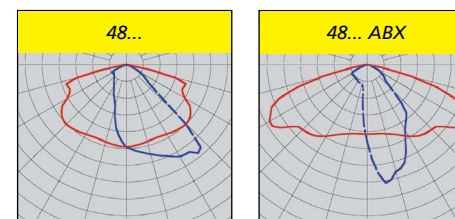
Connection: With isolating plug connection.

Pole mounting device: Die-Cast aluminium, universal system for post top mounting $\varnothing$ 60/76mm and side entry mounting $\varnothing$ 42/60mm x 100mm.

Inclination: Post top mounting 0°, 5° and 10° (standard: 0°). Side entry mounting 0°, -5°, -10° and -15° depending on inclination of the cantilever.

FEATURES AND BENEFITS:

- high quality, reliable at long time application
 - high system life time due to use of high-quality ECGs and LED boards
 - ECG with integrated overvoltage protection, reliable due to overload, short-circuit and over temperature protection as well as temperature control of the LED modules
 - optimized thermal management due to direct adaption of the LED modules to the die-cast aluminium housing, large cooling surface, excellent heat dissipation
 - long-lasting, corrosion resistant die-cast aluminium housing with plain surface
 - integrated pressure compensation system for defined „Breathing“ of the fitting
- easy to install, to maintain and to retrofit
 - removable upper part of the housing allows a comfortable, time- and cost-saving mounting in 2 steps:
 - 1st step:** Mount bottom part on the pole and connect the mains
 - 2nd step:** Hinge upper part, connect isolating plug and shut the housing. READY
 - tiltable universal pole mounting system for post top and side entry mounting, no tools required
 - adjustable inclination of the light fitting, no tools required
 - removable upper part of the housing allows a comfortable maintenance. No painful overhead working. ECG can be replaced on-site
 - upgrades or converts in regards to technical development by easy change of the upper-part of the housing. After the change of the LED modules the upper part of the housing can be used again.
- inexorably energy efficient and eco-friendly
 - constant high luminous flux via the life of the LED due to uniform luminous flux function (types CL).
 - optimal light distribution due to highly efficient lens optics
 - homogeneous illumination due to the Multi-Layer-Technology i.e. every individual LED illuminates the whole surface, the light curves of the individual LED are overlapping.
 - eco-friendly, no light emission into the upper half-space. Dark-Sky requirements are fulfilled
 - future proof by using standardized LED-modules (Zhaga)





Article no.	Type	Power consumption Wj*	Power consumption Wj* (end of operating life)	Luminous flux [lm] *	Luminous efficacy [lm/W]	Uniform luminous flux function (CL)	Output reduction (LR) **	Energy efficiency class	Weight [kg] (without packing material)
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48...



asymmetrical wide beam light distribution

48001 0030	48 0801	11		1.190	108			A++	7,5
48001 0045	48 0802	14		1.600	114			A++	7,5
48001 0046	48 0803	20		2.070	104			A++	7,5
48001 0005	48 1601	19		2.260	119			A++	7,6
48001 0006	48 1602	26		3.060	118			A++	7,6
48001 0007	48 1603	36		4.040	112			A++	7,6
48001 0047	48 2401	28		3.520	126			A++	7,6
48001 0048	48 2402	39		4.680	120			A++	7,6
48001 0049	48 2403	54		6.020	111			A++	7,6
48001 0015	48 3201	36		4.410	123			A++	7,7
48001 0016	48 3202	50		5.970	119			A++	7,7
48001 0017	48 3203	70		7.810	112			A++	7,7
48001 0056	48 0802 CL	11	14	1.280	116	•		A++	7,5
48001 0057	48 0803 CL	16	20	1.660	104	•		A++	7,5
48001 0105	48 1601 CL	15	19	1.810	121	•		A++	7,6
48001 0106	48 1602 CL	21	26	2.450	117	•		A++	7,6
48001 0107	48 1603 CL	29	36	3.230	111	•		A++	7,6
48001 0058	48 2401 CL	22	28	2.810	128	•		A++	7,6
48001 0059	48 2402 CL	31	39	3.740	121	•		A++	7,6
48001 0060	48 2403 CL	43	54	4.820	112	•		A++	7,6
48001 0115	48 3201 CL	29	36	3.530	122	•		A++	7,7
48001 0116	48 3202 CL	40	50	4.770	119	•		A++	7,7
48001 0117	48 3203 CL	56	70	6.250	112	•		A++	7,7
48001 0061	48 0802 LR	14		1.600	114		•	A++	7,5
48001 0092	48 0803 LR	20		2.070	104		•	A++	7,5
48001 0025	48 1601 LR	19		2.260	119		•	A++	7,6
48001 0026	48 1602 LR	26		3.060	118		•	A++	7,6
48001 0027	48 1603 LR	36		4.040	112		•	A++	7,6
48001 0068	48 2401 LR	28		3.520	126		•	A++	7,6
48001 0070	48 2402 LR	39		4.680	120		•	A++	7,6
48001 0078	48 2403 LR	54		6.020	111		•	A++	7,6
48001 0035	48 3201 LR	36		4.410	123		•	A++	7,7
48001 0036	48 3202 LR	50		5.970	119		•	A++	7,7
48001 0037	48 3203 LR	70		7.810	112		•	A++	7,7

* see notes ** 45% Rated input power with 50% luminous flux

ELECTRICAL DESIGN:

LED: Highpower-LED, neutral white, 4,000K, Ra > 70, lifetime (L80) up to 100,000h depending on version
ECG: 220-240V, 50-60Hz, lifetime 100,000h. Due to the inrush current of the electronic ballasts, the maximum permissible number of light fittings per circuit breaker is limited. Overvoltage protection 10kV, excess temperature protection, overload and short circuit protection as well as temperature control of the LED modules.

Output reduction:

With control phase (LR): For reducing the luminous flux to 50% at times of low traffic density. Control phase (LST) required. Switching via control phase (LST = 230V: 100%; LST = 0V: 50%)

Without control phase (LA): Autonomic dimming by integrated timer. Reduced operation 50% between 22:00 and 4:00h CET or 23.00 and 5.00h CEST

Uniform m luminous flux function (CL): Luminous flux is kept on a constant level over the entire life time of the LED-modules (L100)

OPTIONS:

- 3,000K (light colour 730)
- protection class I
- autonomic output reduction without control phase (LA), also possible with deviating times and with a second dimming step
- optics for ME-classes (AB3)
- low glare optics (ABL)
- seawater resistant version
- for connection to group or central battery systems (ZB)
- Light Management System (LIMAS)
- screening device to the house side
- special painting in RAL colours



Article no.	Type	Power consumption Wj*	Power consumption Wj* (end of operating life)	Luminous flux [lm] *	Luminous efficacy [lm/W]	Uniform luminous flux function (CL)	Output reduction (LR) **	Energy efficiency class	Weight [kg] (without packing material)
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48... ABX



asymmetrical extremely wide beam light distribution

48001 0001	48 0801ABX	11		1.200	109			A++	7,5
48001 0011	48 0802ABX	14		1.610	115			A++	7,5
48001 0013	48 0803ABX	20		2.090	105			A++	7,5
48001 0002	48 1601ABX	19		2.250	118			A++	7,6
48001 0012	48 1602ABX	26		3.060	118			A++	7,6
48001 0014	48 1603ABX	36		4.020	112			A++	7,6
48001 0003	48 2401ABX	28		3.520	126			A++	7,6
48001 0004	48 2402ABX	39		4.680	120			A++	7,6
48001 0009	48 2403ABX	54		6.030	112			A++	7,6
48001 0079	48 3201ABX	36		4.400	122			A++	7,7
48001 0080	48 3202ABX	50		5.950	119			A++	7,7
48001 0081	48 3203ABX	70		7.790	111			A++	7,7
48001 0111	48 0802ABX CL	11	14	1.290	117	•		A++	7,5
48001 0113	48 0803ABX CL	16	20	1.670	104	•		A++	7,5
48001 0102	48 1601ABX CL	15	19	1.800	120	•		A++	7,6
48001 0112	48 1602ABX CL	21	26	2.440	116	•		A++	7,6
48001 0114	48 1603ABX CL	29	36	3.220	111	•		A++	7,6
48001 0103	48 2401ABX CL	22	28	2.810	128	•		A++	7,6
48001 0166	48 2402ABX CL	31	39	3.740	121	•		A++	7,6
48001 0109	48 2403ABX CL	43	54	4.820	112	•		A++	7,6
48001 0082	48 3201ABX CL	29	36	3.520	121	•		A++	7,7
48001 0083	48 3202ABX CL	40	50	4.760	119	•		A++	7,7
48001 0084	48 3203ABX CL	56	70	6.230	111	•		A++	7,7
48001 0031	48 0802ABX LR	14		1.610	115		•	A++	7,5
48001 0033	48 0803ABX LR	20		2.090	105		•	A++	7,5
48001 0022	48 1601ABX LR	19		2.250	118		•	A++	7,6
48001 0032	48 1602ABX LR	26		3.060	118		•	A++	7,6
48001 0034	48 1603ABX LR	36		4.020	112		•	A++	7,6
48001 0023	48 2401ABX LR	28		3.520	126		•	A++	7,6
48001 0024	48 2402ABX LR	39		4.680	120		•	A++	7,6
48001 0029	48 2403ABX LR	54		6.030	112		•	A++	7,6
48001 0086	48 3201ABX LR	36		4.400	122		•	A++	7,7
48001 0087	48 3202ABX LR	50		5.950	119		•	A++	7,7
48001 0091	48 3203ABX LR	70		7.790	111		•	A++	7,7

* see notes

** 45% Rated input power with 50% luminous flux