

22



LED LUMINAIRES

TREEVOS

ABOUT COMPANY



HISTORY

The TREVOS, a.s. company is a renowned Czech firm with 30 years of tradition in production of industrial light fittings which was established in 1990. Thanks to its long-term experience it implements and offers a wide range of industrial light fittings, the research and development of which is based on its own professional knowledge and protected know-how.

The total turnover of the company is divided into two basic groups: Domestic sales – 30 % and Export sales – 70 %.

REGIONAL POSITION

The interest of the market in the Czech Republic in industrial and indoor light fittings is mostly driven by the demand of assembling companies from the branch of electrical engineering. Deliveries are secured through the network of wiring material and light fitting wholesale customers. The TREVOS company ranks among leading manufacturers of industrial and office light fittings at the domestic market. With almost 300 employees, TREVOS counts itself as one of the largest employers in the region.

GLOBAL POSITION

Besides its significant share of the domestic market, the company is also very active in export. It successfully exports its products into more than 60 countries of the world, e.g. Italy, Germany, France, Brazil and many more.

The company acquired its illumination technology market share first of all by the implementation of its own research and development in the production of innovative models of light fittings as well as investments into quality thermoplastic materials and electric components. The business strategy of the company is also based on the production of continually innovated lines of light fittings inspired by modern trends of illumination technology while keeping reasonable prices in comparison with top world producers.

The business has been continually increasing especially with customers from the European Union, to which Trevos supplies complete products modified in details on the basis of individual customer's requirements.

COMPANY GOAL

The goal of the company is to offer its clients first-class products for competitive prices.

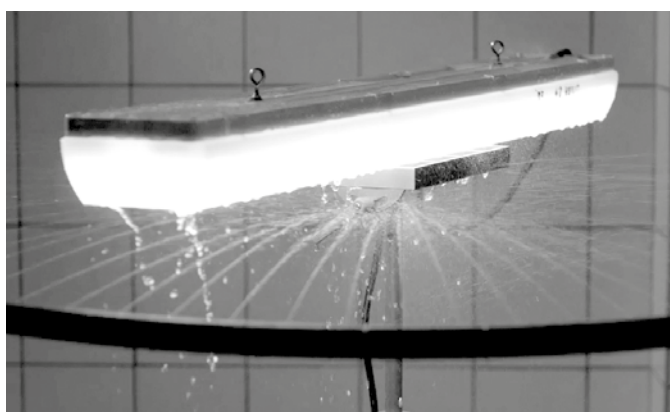
LIGHT FITTING DEVELOPMENT

All development tasks are subject to and strictly managed by the ISO 9001 quality process.

The development and implementation of production of new light fitting type lines is driven particularly by market requirements which are monitored in detail and summarized into marketing studies.

The projects are well secured as regards human resources. The members of the technical division have the required know-how and experience. They apply the results to industrial practice. Within the projects, they also closely cooperate with knowledgeable academicians of several technical universities.

The technical division has an extensive background of premises with cutting-edge equipment, serving for the implementation of applied research and experimental development including the execution of key measurement and tests.



PRODUCTION

The production program of the company is segmented into product lines of light fittings with similar or identical ways of use. Another criterion consists in type lines distinguishing the products by the achieved technical parameters and their capabilities.

The company has a large technological park that ensures its own production program. All injection machines are robotized. New innovative technologies include e.g. the robotized overmoulding of aluminium cores, the fully automated System Robot connecting workstation or the Sonderhoff foaming line.



CERTIFICATION

Company TREVOS, a.s. utilizes an integrated management system (IMS) that consists of a range of processes, rules, policies, and documents the company needs to deliver high-quality products and provide superior services in an appropriate and timely fashion, ensuring everything is done perfectly the first time. The company is managed in accordance with these processes, rules, policies, and documents.



ESČ certificate



ISO certificate



ENEC certificate

Our ISM integrates a variety of the company's performance criteria to ensure compliance with the requirements of a number of management system standards. These include ČSN EN ISO 9001:2016 (QMS) and ČSN EN ISO 14001:2016 (EMS) as well as ČSN EN ISO 50001:2019 (EnMS) and ČSN ISO 45001:2018 (OHSMS). The ISM uses simplified processes, procedures and documents while increasing production efficiency and eliminating the elementary approach. As a result, costs are cut, system efficiency increases, and less effort is required.

We are holders of the ENEC, CB, ESČ, EAC, ATEX and DLG certificates. We are authorized to the use the "Czech Quality" mark for light fittings with ESČ licence. Ex fittings designed for hazardous areas (zones 1, 21): conformity to type ensured by internal production management and product testing under the supervision of a notified body.



ENVIRONMENT

Pursuant to Czech Act No. 541/2020 Sb. [the Waste Act], and Act No. 542/2020 Sb., on End-of-life Products, Trevos participates in EKOLAMP, a non-profit initiative seeking to ensure compliance with applicable electrical appliance collection and recycling rules. Additionally, Trevos meets the requirements of Directive No. 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) as well as of Regulation No. 1907/2006 concerning the registration, evaluation, authorisation and restriction of chemicals (REACH).

Industrial plastic

NANOTTICA 10

NANOTTICA ES TRS 12
energy saver, exceptionally low UGR

NEW

NANOTTICA ES 16
energy saver

NEW

NANOTTICA TRS 20
exceptionally low UGR

NEW

NANOTTICA 24
basic version

NEW

NANOTTICA NB 28
for high ceilings

NEW

NANOTTICA WB 32
for low ceilings

NEW

NANOTTICA ES ABS 36 energy saver, chemically resistant version

NEW

NANOTTICA ABS 40
chemically resistant version

NEW

NANOTTICA NB ABS 44 for high ceilings, chemically resistant version

NEW

NANOTTICA WB ABS 48 for low ceilings, chemically resistant version

NEW

NANOTTICA VP 52
for outdoor spaces

NEW

NANOTTICA VP ABS 56 for outdoor spaces, chemically resistant version

NEW

NANOTTICA MAX 60
for extreme temperatures

NEW

NANOTTICA CLASS II 63
with Class II insulation

NEW

NANOTTICA SNS 67
with motion detector

NEW

Industrial plastic

INNOVA 72

INNOVA 74

INNOVA NB 77
for high ceilings

INNOVA WB 80
for low ceilings

INNOVA ABS 83
chemically resistant version

INNOVA NB ABS 86 for high ceilings, chemically resistant version

INNOVA WB ABS 89 for low ceilings, chemically resistant version

INNOVA TRS 92
for both direct and indirect illumina

Industrial plastic

FUTURA 96

FUTURA, ES PC, HE PC 98

FUTURA VP 109
for outdoor spaces

FUTURA NB 113
for high ceilings

FUTURA ABS, ES ABS, HE ABS 116
chemically resistant version

FUTURA CLASS II 126
with Class II insulation

FUTURA MAX 130
for extreme temperatures

FUTURA SENSOR 133
with motion detector

FROST 138

FROST 140
for cold stores and freezing facilities

NEW

FROST PLUS 143
for cold stores and freezing facilities

NEW

Industrial plastic

PRIMA LED 146

PRIMA LED 148



PRIMA LED VP 151
for outdoor spaces



PRIMA LED ABS 154
chemically resistant version



PRIMA LED CLASS II 157
with Class II insulation



PRIMA LED TRS 160
for both direct and indirect illumina



PRIMA LED MAX 163
for extreme temperatures



PRIMA LED SENSOR 165
with motion detector



PRIMA LED Ex 168
for explosion-hazard environment



PRIMA LED TUBE 171



CONCEPT RED 176

CONCEPT RED 176
with red light module



CONCEPT BLUE 178

CONCEPT BLUE 178
with blue light module

NEW



HUMAN CENTRIC LIGHTING 180

HUMAN CENTRIC LIGHTING 180
to boost circadian rhythms



Industrial metal

TREX 184

TREX 186
for explosion-hazard environment



PERUN SLIM 192

PERUN SLIM 194



ALUMAX LED 198

ALUMAX LED 200



ALUMAX LED MAX 203
for extreme temperatures



CANOPUS 208

CANOPUS 210



CANOPUS HE 217
high efficiency



CANOPUS MAX 220
for extreme temperatures



Indoor surface-mounted plastic

LINEA 228

LINEA 230



LINEA SQUARE 232



LINEA ROUND 234



LUXOR LED 238

LUXOR LED 240



SB LED 244

SB LED 246



LYRA 248

LYRA 250

NEW



Indoor surface-mounted plastic

BELTR LED 252

BELTR LED 254



BELTR LED TUBE 257

NAOS 262

NAOS 264



NAOS SQUARE 267



NAOS MPR 269



NAOS SQUARE MPR 272



MO LED 276

MO LED 278



Emergency light fittings

Emergency 284

PRIMA LED NM 286



FUTURA NM 289



NANOTTICA NM 292



BELTR LED NM 296



HELIOS LED 299



PLEXI LED 302



Additional information

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DALI PROFESSIONAL CONTROL 306



PROPOSAL OF EMERGENCY LIGHT FITTINGS 312

montážní výška [m]	FUTURA 24ft, 2.5ft					PRIMA 14ft, 1.5ft					
	2.0	4.2	9.3	8.9	8.6	3.9	4.4	10.0	9.1	8.1	3.6
2.5	4.2	11.5	11.1	10.6	6.3	6.7	12.2	11.0	9.8	4.0	
3.0	5.0	12.6	12.1	11.6	4.6	5.0	13.0	11.8	10.6	4.2	

CORRIDOR FUNCTION 314



SOURCE COLOUR RENDERING 316






























Source colour rendering correct choice	Warm white				White				Daylight				Neutral	
Light colour CIE division	71	21	827	121	830	133	25	33	840	943	350	945	145	54
Deep redshift														

CHEMICAL RESISTANCE 317

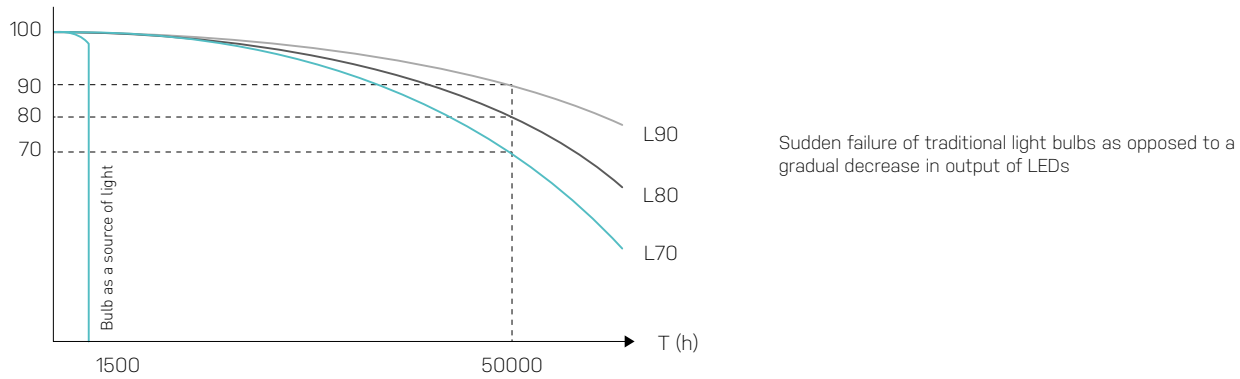
Acetic acid and Citric acid	20%	50%	10%	20%	50%	10%	20%	50%	10%	20%	50%
Citric acid	20%										
Formic acid	20%										
Hydrochloric acid	1%										
Hydrofluoric acid	30%										
Chromic acid	40%										
Formic acid	10%										

LIGHT FITTING MAINTENANCE FACTOR 318

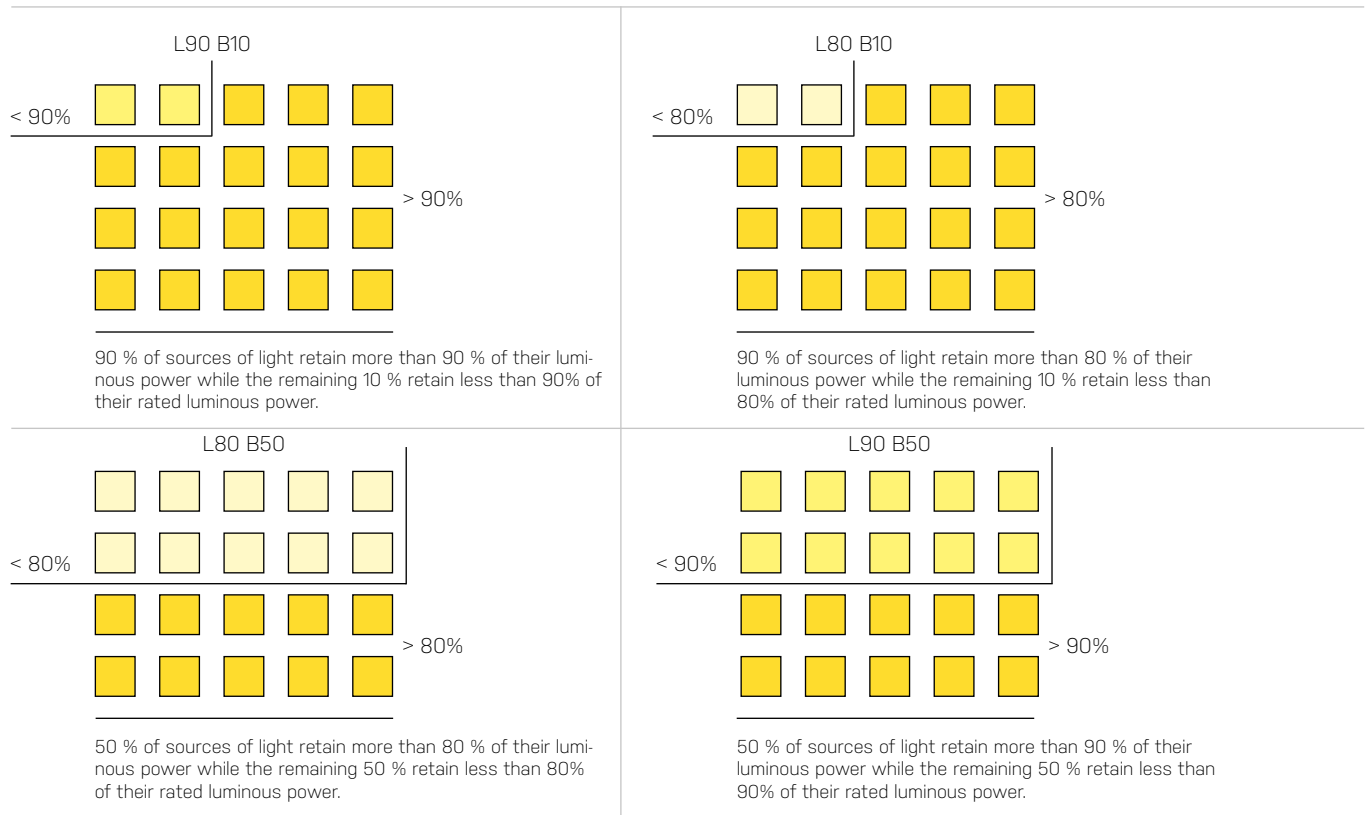
Environment	Cleaning intervals in years			
	1.0	1.5	2.0	3.0
Very clean	0.94	0.93	0.93	0.92
Clean	0.94	0.91	0.91	0.90

 (Ingress Protection) code for protection level against dust, solid items and water	 Nominal input voltage 220-240V, 50/60 Hz	 Conformity mark documenting conformity verification of product with all EU harmonising provisions
 Nominal maximum temperature of environment	 Electric equipment: with digital dimmable driver DALI	 Licence mark indicating product conformity with European standards for electric safety of product
 Fire and ignition resistance at test by hot loop heated to 850 °C	 1 phase through-wiring connection	 The mark is registered at the CENELEC as a Czech mark expressing the permanent conformity of a product with electrical safety standards
 Code for protection level against external impact Anti-vandalism version	 3 phase through-wiring connection	 Internationally acknowledged certificate. Product certification according to IEC standards
 LED light fitting	 Electric equipment: for emergency illumination with own independent source	 Electromagnetic compatibility
 Light fitting with 5-year warranty. It does not cover light fittings fitted with emergency module (2 years) and batteries (6 months).	 Electrical equipment: a microwave motion sensor	 Certificate of the United Customs Union (Russia, Belarus, Kazakhstan, Armenia, Kyrgyzstan)
 Light fitting external surface warming	 The colour rendering index determines the colour sensation accuracy at other than daily lighting	 Light fitting intended for environments with danger of explosion
 Class 1 light fitting - basic insulation, plus terminal for guard wire	 The chromaticity temperature determines the colour spectrum of the light (it is given in Kelvin - K)	 Declaration of conformity with legal norms for food industry
 Class 2 light fitting	 During the stated operation life and under observance of the specified operating conditions, no more than 10% (B10) chips could experience defaults and the total luminous flux of the light fitting will not drop under 90% (L90).	 The light fitting complies with the relevant requirements of the German Agricultural Society (DLG) and may be installed in agricultural buildings.
		 The luminaire complies with the resistance requirements as per DIN 18032-3 and DIN EN 13964 and may be installed in sports halls.
		 Light fittings meet photobiological safety requirements in accordance with the CSN EN 62471:2009 standard. Suitable for use in areas with persons sensitive to UV radiation & the blue visible spectrum (daylight).

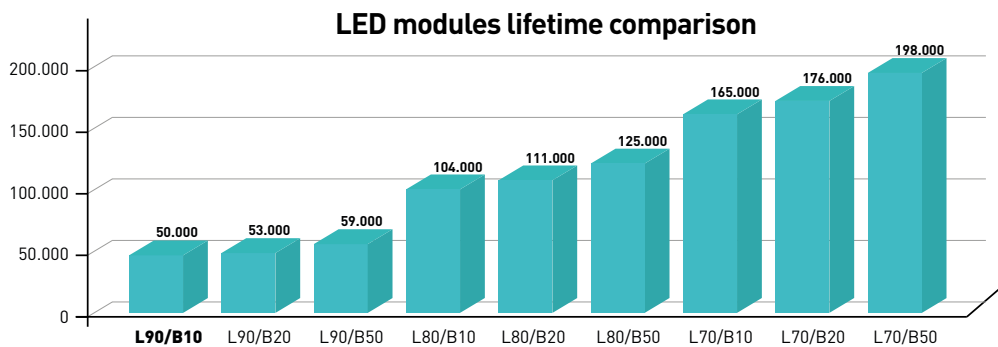
Reliability and long lifespan are some of the key advantages of LED technology. And while it is true that they do not last forever, unlike light bulbs and halogen lamps, LED chips never fail abruptly. Instead, they gradually fade over time until they become too dim.



WHAT DOES LxBx MEAN?



The values shown are based on LM-80 and TM-21 standards. TREVOS LED modules' standard lifespan is indicated by their L90B10 rating. All lifespans exceeding 60.000 hours are calculated without taking into consideration other possible types of failure. The stated lifespans are indicative only and not covered by the warranty.



The given values apply to the ambient temperatures prescribed for each luminaire type and for luminaires with a given luminous power.

LIGHT FITTING NAME X.Yft

X

- total number of LED module rows in light
- X = {1, 2, 4, 5, 6, 7}

Y

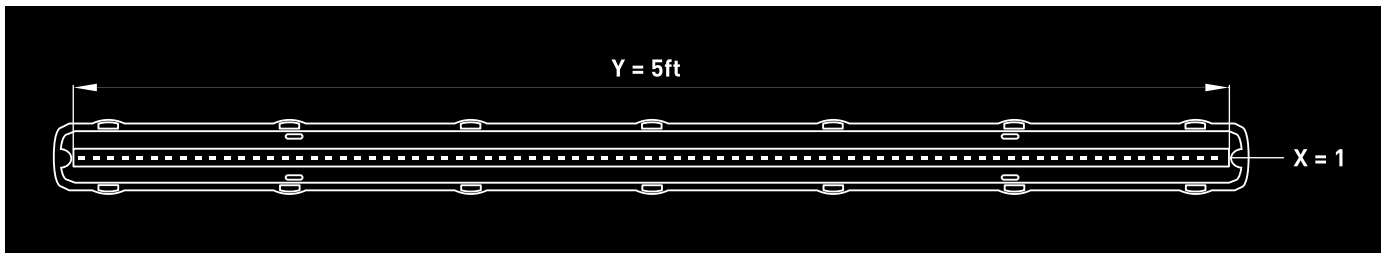
- total length of LED modules in one row
- Y = {1, 2, 4, 5}

ft

- unit of length
- 1ft = 1 feet (280 mm)

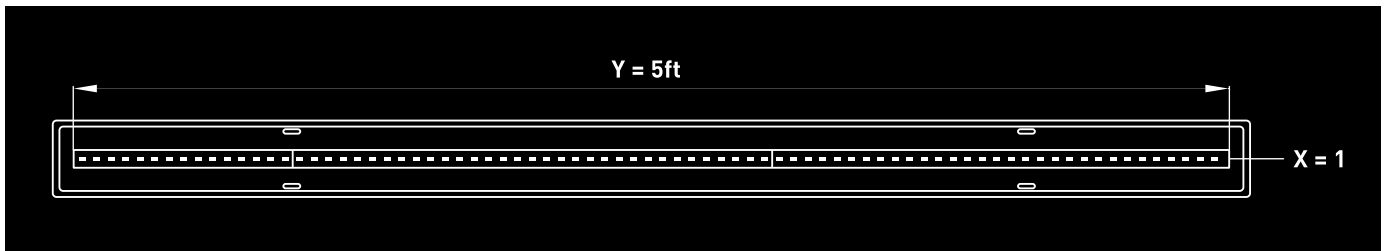
NANOTTICA 1.5ft

- X = 1
- Y = 5ft



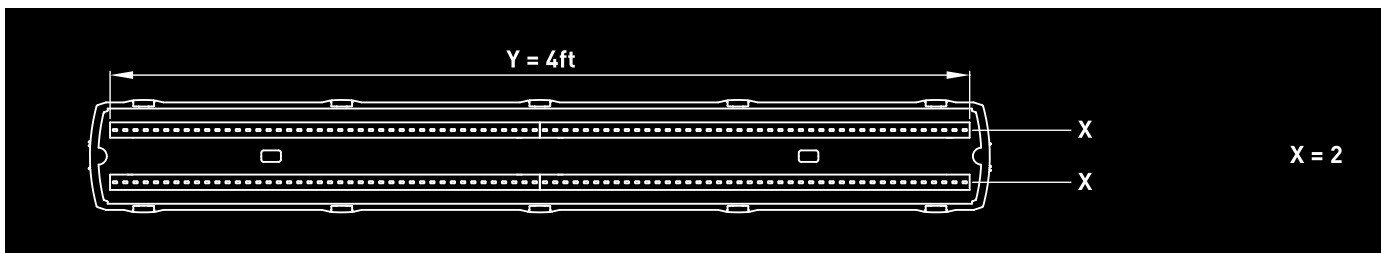
INNOVA 1.5ft

- X = 1
- Y = 5ft



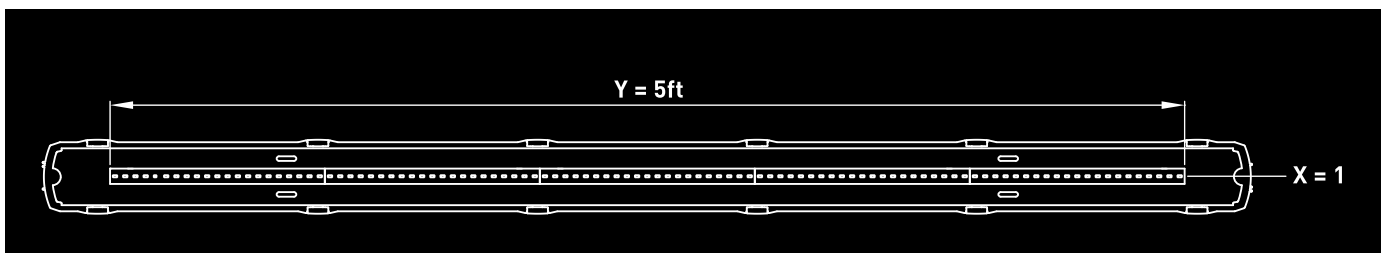
FUTURA 2.4ft

- X = 2
- Y = 4ft



PRIMA LED 1.5ft

- X = 1
- Y = 5ft





TAKE A SNEAK PEEK

The future of commercial lighting

Every year we come up with something new, be it a fixture we have just launched or a redesign of one that we have been offering for a while. In any case, we respect the needs of the market and do our best to suit each client's requirements.

Modern design process with BIM objects

Not only have we prepared BIM objects for our most popular luminaires – INNOVA, FUTURA, LINEA and PRIMA LED. We pioneered the use of BIM objects by becoming the first in the Czech Republic to offer them for this type of luminaires. Currently, designers and architects are welcome to download BIM plugins for Archicad or Revit.

bim.lighting

Are LED fittings worth it?

Here is one of the most frequently asked questions: Is investing in TREVOS LEDs and replacing an existing fluorescent lighting system worth it? Most probably yes! You can calculate replacement costs as well as your energy savings using our easy-to-use app.

trevos.eu/en/calculator

Luminaires deserve their own videos

Don't believe that exciting videos can be made about light fittings? Then check out our YouTube channel! There's an installation speed test video featuring two differently connected light fittings. There's one that shows you how to build a Trevos exhibition stand. And there are many more that introduce our products and manufacturing processes as well as test our light fittings.

[YouTube](#)

Keeping you posted on all things Trevos

Like us on Facebook to keep in touch with what we do. Be the first to check out our new and re-designed products, photos of our production floor and from trade fairs, and lots more. Feel free to like, share and comment.

facebook.com/trevos.cz

Sharing information with professionals

We also share info about our products as well as news on LinkedIn, though in a more formal way.

linkedin.com/company/trevos-a-s-

Hashtag TREVOS

Guess what! We have just started using a #hashtag. It gives our fans access to unusual product photos and short vids, exciting news about a product we are about to launch or redesign, and lots more.

[#trevoslighting](#)

Want us to keep you posted about all things Trevos? Contact us at marketing@trevos.cz



TREVOS.EU

















NANOTTICA



INDUSTRIAL
PLASTIC
DUSTPROOF
WATERPROOF
IMPACT RESISTANT



NANOTTICA – industrial plastic LED light fitting

<p>NANOTTICA ENERGY SAVER, EXCEPTIONALLY LOW UGR page 12</p>		<p>IP66 IP69</p>	<p>NANOTTICA ES TRS PC, PCc page 12</p>	<p>NANOTTICA FOR LOW CEILINGS, CHEMICALLY RESISTANT VERSION page 48</p>		<p>IP66 IP69</p>	<p>NANOTTICA WB ABS, ABSc page 48</p>
<p>NANOTTICA ES ENERGY SAVER page 16</p>		<p>IP66 IP69</p>	<p>NANOTTICA ES PC, PCc page 16</p>	<p>NANOTTICA FOR OUTDOOR SHELTERED SPACES page 52</p>		<p>IP66 IP69</p>	<p>NANOTTICA VP PC, PCc page 52</p>
<p>NANOTTICA EXCEPTIONALLY LOW UGR page 20</p>		<p>IP66 IP69</p>	<p>NANOTTICA ES TRS PC, PCc page 20</p>	<p>NANOTTICA FOR OUTDOOR SHELTERED SPACES, CHEMICALLY RESISTANT VERSION page 56</p>		<p>IP66 IP69</p>	<p>NANOTTICA VP ABS, ABSc page 56</p>
<p>NANOTTICA BASIC VERSION page 24</p>		<p>IP66 IP69</p>	<p>NANOTTICA PC, PCc page 24</p>	<p>NANOTTICA FOR EXTREME TEMPERATURES page 60</p>		<p>IP66 IP69</p>	<p>NANOTTICA MAX PCc page 60</p>
<p>NANOTTICA FOR HIGH CEILINGS page 28</p>		<p>IP66 IP69</p>	<p>NANOTTICA NB PC, PCc page 28</p>	<p>NANOTTICA WITH CLASS II INSULATION page 63</p>		<p>IP66 IP69</p>	<p>NANOTTICA CLASS II PC, PCc page 63</p>
<p>NANOTTICA FOR LOW CEILINGS page 32</p>		<p>IP66 IP69</p>	<p>NANOTTICA WB PC, PCc page 32</p>	<p>NANOTTICA WITH MOTION DETECTOR page 67</p>		<p>IP66 IP69</p>	<p>NANOTTICA SNS PC, PCc page 67</p>
<p>NANOTTICA ENERGY SAVER, CHEMICALLY RESISTANT VERSION page 36</p>		<p>IP66 IP69</p>	<p>NANOTTICA ES ABS, ABSc page 36</p>	<p>NANOTTICA ACCESSORIES page 71</p>		<p>NANOTTICA ACCESSORIES page 71</p>	
<p>NANOTTICA CHEMICALLY RESISTANT VERSION page 40</p>		<p>IP66 IP69</p>	<p>NANOTTICA ABS, ABSc page 40</p>	<p>NANOTTICA FOR HIGH CEILINGS, CHEMICALLY RESISTANT VERSION page 44</p>		<p>IP66 IP69</p>	<p>NANOTTICA NB ABS, ABSc page 44</p>

NANOTTICA ES TRS

NEW



... energy saver, exceptional efficiency and UGR, ceiling height from 3.5 to 8 m, impact resistant.

USE

Compared to its basic version, **fully transparent** Nanottica ES TRS PC boasts considerably **lower UGR values** as well as **lower energy consumption**, the latter translating into considerably **higher luminous efficacy (lm/W)**.

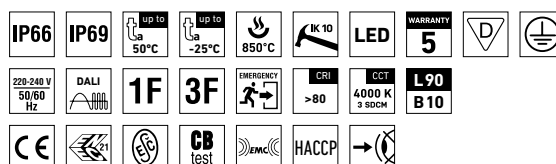
The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance**. These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

Its **standard beam angle** makes it a perfect choice for premises with an optimum luminaire installation height of **3.5 to 8 m**. It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Maximum light fitting efficiency: **155 lm/W**
- Patented optics ensures absolute control over light beam distribution
- Exceptionally low UGR values **range from 16.9 to 22.4**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to $t_a = 50^\circ\text{C}$
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips – easy attachment** to a track lighting system with a width of 60 mm
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI → 80: 4000 K
- On request CRI → 80: 3000 K, 5000 K, 6500 K
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **ESĈ, ENEC, CB, HACCP**



NANOTTICA ES TRS PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **155 lm/W**
- **UGR ranging from 16.9 to 22.4**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI → 80: 4000 K** - standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: **transparent PC** (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %

UGR EVALUATED FOR

X = 4 H, Y = 8 H S = 0.25 H

Reflectivity 70/50/20

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body transparent polycarbonate - diffusor with nanooptics (standard beam angle), transparent polycarbonate									
NANOTTICA 1.2ft ES TRS PC 1300/840	50	1300	1180	8	147	16.9 / 18.7	0,9	615	110 - 370
NANOTTICA 1.2ft ES TRS PC 1600/840	50	1600	1460	10	146	17.7 / 19.4	0,9	615	110 - 370
NANOTTICA 1.2ft ES TRS PC 2200/840	45	2200	2010	14	143	18.8 / 20.5	0,9	615	110 - 370
NANOTTICA 1.4ft ES TRS PC 2600/840	50	2600	2370	16	148	17.2 / 19.2	1,7	1175	700 - 960
NANOTTICA 1.4ft ES TRS PC 3200/840	50	3200	2920	19	153	17.9 / 19.9	1,7	1175	700 - 960
NANOTTICA 1.4ft ES TRS PC 4400/840	45	4400	4020	27	148	19.0 / 21.0	1,7	1175	700 - 960
NANOTTICA 1.4ft ES TRS PC 6400/840	45	6400	5850	38	153	20.3 / 22.4	1,7	1175	700 - 960
NANOTTICA 1.5ft ES TRS PC 3250/840	50	3250	2970	20	148	17.2 / 19.3	2,0	1455	970 - 1230
NANOTTICA 1.5ft ES TRS PC 4000/840	50	4000	3660	24	152	17.9 / 20.0	2,0	1455	970 - 1230
NANOTTICA 1.5ft ES TRS PC 5500/840	45	5500	5030	33	152	19.0 / 21.1	2,0	1455	970 - 1230
NANOTTICA 1.5ft ES TRS PC 8000/840	45	8000	7320	47	155	20.3 / 22.4	2,0	1455	970 - 1230

NANOTTICA ES TRS PC

Code	Type
103134	NANOTTICA 1.2ft ES TRS PC 1300/840
103135	NANOTTICA 1.2ft ES TRS PC 1600/840
103136	NANOTTICA 1.2ft ES TRS PC 2200/840
103137	NANOTTICA 1.4ft ES TRS PC 2600/840
103138	NANOTTICA 1.4ft ES TRS PC 3200/840
103139	NANOTTICA 1.4ft ES TRS PC 4400/840
103140	NANOTTICA 1.4ft ES TRS PC 6400/840
103141	NANOTTICA 1.5ft ES TRS PC 3250/840
103142	NANOTTICA 1.5ft ES TRS PC 4000/840
103143	NANOTTICA 1.5ft ES TRS PC 5500/840
103144	NANOTTICA 1.5ft ES TRS PC 8000/840

Non-dimmable driver - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
103145	103156	103167	x	x	x	x
103146	103157	103168	x	x	x	x
103147	103158	103169	x	x	x	x
103148	103159	103170	103178	103186	103194	
103149	103160	103171	103179	103187	103195	
103150	103161	103172	103180	103188	103196	
103151	103162	103173	103181	103189	103197	
103152	103163	103174	103182	103190	103198	
103153	103164	103175	103183	103191	103199	
103154	103165	103176	103184	103192	103200	
103155	103166	103177	103185	103193	103201	

NANOTTICA ES TRS PCc

Code	Type
103202	NANOTTICA 1.2ft ES TRS PCc 1300/840
103203	NANOTTICA 1.2ft ES TRS PCc 1600/840
103204	NANOTTICA 1.2ft ES TRS PCc 2200/840
103205	NANOTTICA 1.4ft ES TRS PCc 2600/840
103206	NANOTTICA 1.4ft ES TRS PCc 3200/840
103207	NANOTTICA 1.4ft ES TRS PCc 4400/840
103208	NANOTTICA 1.4ft ES TRS PCc 6400/840
103209	NANOTTICA 1.5ft ES TRS PCc 3250/840
103210	NANOTTICA 1.5ft ES TRS PCc 4000/840
103211	NANOTTICA 1.5ft ES TRS PCc 5500/840
103212	NANOTTICA 1.5ft ES TRS PCc 8000/840

Non-dimmable driver - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
103213	103224	103235	x	x	x	x
103214	103225	103236	x	x	x	x
103215	103226	103237	x	x	x	x
103216	103227	103238	103246	103254	103262	
103217	103228	103239	103247	103255	103263	
103218	103229	103240	103248	103256	103264	
103219	103230	103241	103249	103257	103265	
103220	103231	103242	103250	103258	103266	
103221	103232	103243	103251	103259	103267	
103222	103233	103244	103252	103260	103268	
103223	103234	103245	103253	103261	103269	

NANOTTICA ES TRS PC DALI

Code	Type
103270	NANOTTICA 1.2ft ES TRS PC 1300/840 DALI
103271	NANOTTICA 1.2ft ES TRS PC 1600/840 DALI
103272	NANOTTICA 1.2ft ES TRS PC 2200/840 DALI
103273	NANOTTICA 1.4ft ES TRS PC 2600/840 DALI
103274	NANOTTICA 1.4ft ES TRS PC 3200/840 DALI
103275	NANOTTICA 1.4ft ES TRS PC 4400/840 DALI
103276	NANOTTICA 1.4ft ES TRS PC 6400/840 DALI
103277	NANOTTICA 1.5ft ES TRS PC 3250/840 DALI
103278	NANOTTICA 1.5ft ES TRS PC 4000/840 DALI
103279	NANOTTICA 1.5ft ES TRS PC 5500/840 DALI
103280	NANOTTICA 1.5ft ES TRS PC 8000/840 DALI

Digital dimmable driver DALI - plastic clips

1F	3F	M1h	M3h	3F M1h	3F M3h
103281	x	103303	x	x	x
103282	x	103304	x	x	x
103283	x	103305	x	x	x
103284	103295	103306	103314	103322	103330
103285	103296	103307	103315	103323	103331
103286	103297	103308	103316	103324	103332
103287	103298	103309	103317	103325	103333
103288	103299	103310	103318	103326	103334
103289	103300	103311	103319	103327	103335
103290	103301	103312	103320	103328	103336
103291	103302	103313	103321	103329	103337

NANOTTICA ES TRS PCc DALI

Code	Type
103338	NANOTTICA 1.2ft ES TRS PCc 1300/840 DALI
103339	NANOTTICA 1.2ft ES TRS PCc 1600/840 DALI
103340	NANOTTICA 1.2ft ES TRS PCc 2200/840 DALI
103341	NANOTTICA 1.4ft ES TRS PCc 2600/840 DALI
103342	NANOTTICA 1.4ft ES TRS PCc 3200/840 DALI
103343	NANOTTICA 1.4ft ES TRS PCc 4400/840 DALI
103344	NANOTTICA 1.4ft ES TRS PCc 6400/840 DALI
103345	NANOTTICA 1.5ft ES TRS PCc 3250/840 DALI
103346	NANOTTICA 1.5ft ES TRS PCc 4000/840 DALI
103347	NANOTTICA 1.5ft ES TRS PCc 5500/840 DALI
103348	NANOTTICA 1.5ft ES TRS PCc 8000/840 DALI

Digital dimmable driver DALI - stainless clips (c)

1F	3F	M1h	M3h	3F M1h	3F M3h
103349	x	103371	x	x	x
103350	x	103372	x	x	x
103351	x	103373	x	x	x
103352	103363	103374	103382	103390	103398
103353	103364	103375	103383	103391	103399
103354	103365	103376	103384	103392	103400
103355	103366	103377	103385	103393	103401
103356	103367	103378	103386	103394	103402
103357	103368	103379	103387	103395	103403
103358	103369	103380	103388	103396	103404
103359	103370	103381	103389	103397	103405

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



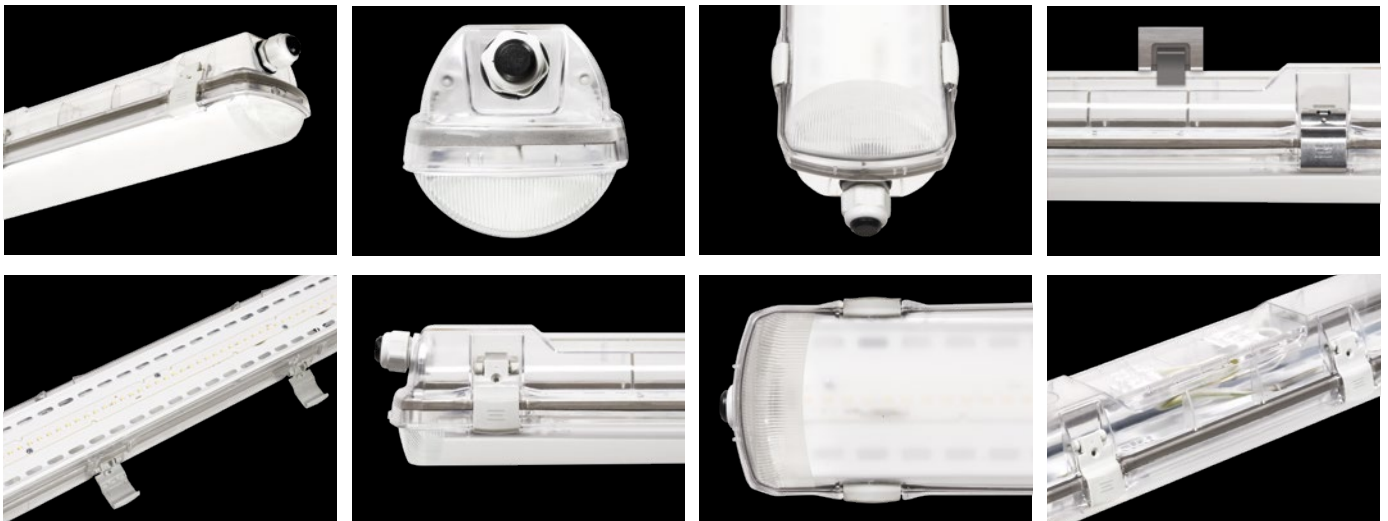
VARIABLE INSTALLATION PITCH

NANOTTICA ES TRS



LIGHT FITTING DETAILED VIEW

NANOTTICA ES TRS



NANOTTICA ES

NEW



... energy saver, exceptional efficiency,
ceiling height from 3.5 to 8 m, impact resistant.

USE

Compared to its basic version, Nanottica ES boasts **lower energy consumption**, which translates into **considerably higher luminous efficacy (lm/W)**.

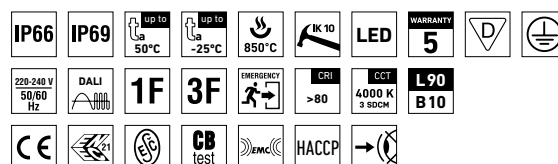
The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance**. These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

Its **standard beam angle** makes it a perfect choice for premises with an optimum luminaire installation height of **3.5 to 8 m**. It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Maximum light fitting efficiency: **160 lm/W**
- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 18.9 to 23.4**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to $t_a = 50^\circ\text{C}$
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips** - easy attachment to a track lighting system with a width of 60 mm
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI \rightarrow 80: 4000 K
- On request CRI \rightarrow 80: 3000 K, 5000 K, 6500 K
- CRI \rightarrow 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **ES \checkmark , ENEC, CB, HACCP**



NANOTTICA ES PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **160 lm/W**
- **UGR ranging from 18.9 to 23.4**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI → 80: 4000 K** – standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %

UGR EVALUATED FOR

X = 4 H, Y = 8 H S = 0.25 H

Reflectivity 70/50/20

NANOTTICA 1.5ft ES

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffuser with nanooptics (standard beam angle), transparent polycarbonate									
NANOTTICA 1.2ft ES PC 1300/840	50	1300	1220	8	152	18.9 / 19.9	0,9	615	110 - 370
NANOTTICA 1.2ft ES PC 1600/840	50	1600	1500	10	150	19.6 / 20.6	0,9	615	110 - 370
NANOTTICA 1.2ft ES PC 2200/840	45	2200	2060	14	147	20.7 / 21.7	0,9	615	110 - 370
NANOTTICA 1.4ft ES PC 2600/840	50	2600	2440	16	152	19.1 / 20.2	1,7	1175	700 - 960
NANOTTICA 1.4ft ES PC 3200/840	50	3200	3000	19	157	19.8 / 20.9	1,7	1175	700 - 960
NANOTTICA 1.4ft ES PC 4400/840	45	4400	4130	27	152	20.9 / 22.0	1,7	1175	700 - 960
NANOTTICA 1.4ft ES PC 6400/840	45	6400	6010	38	158	22.2 / 23.3	1,7	1175	700 - 960
NANOTTICA 1.5ft ES PC 3250/840	50	3250	3050	20	152	19.1 / 20.3	2,0	1455	970 - 1230
NANOTTICA 1.5ft ES PC 4000/840	50	4000	3760	24	156	19.9 / 21.0	2,0	1455	970 - 1230
NANOTTICA 1.5ft ES PC 5500/840	45	5500	5170	33	156	21.0 / 22.1	2,0	1455	970 - 1230
NANOTTICA 1.5ft ES PC 8000/840	45	8000	7520	47	160	22.3 / 23.4	2,0	1455	970 - 1230

NANOTTICA ES PC

Non-dimmable driver - plastic clips

Code	Type
102550	NANOTTICA 1.2ft ES PC 1300/840
102551	NANOTTICA 1.2ft ES PC 1600/840
102552	NANOTTICA 1.2ft ES PC 2200/840
102553	NANOTTICA 1.4ft ES PC 2600/840
102554	NANOTTICA 1.4ft ES PC 3200/840
102555	NANOTTICA 1.4ft ES PC 4400/840
102556	NANOTTICA 1.4ft ES PC 6400/840
102557	NANOTTICA 1.5ft ES PC 3250/840
102558	NANOTTICA 1.5ft ES PC 4000/840
102559	NANOTTICA 1.5ft ES PC 5500/840
102560	NANOTTICA 1.5ft ES PC 8000/840

	1F	3F	M1h	M3h	3F M1h	3F M3h
102561	102572	102583	x	x	x	
102562	102573	102584	x	x	x	
102563	102574	102585	x	x	x	
102564	102575	102586	102594	102602	102610	
102565	102576	102587	102595	102603	102611	
102566	102577	102588	102596	102604	102612	
102567	102578	102589	102597	102605	102613	
102568	102579	102590	102598	102606	102614	
102569	102580	102591	102599	102607	102615	
102570	102581	102592	102600	102608	102616	
102571	102582	102593	102601	102609	102617	

NANOTTICA ES PCc

Non-dimmable driver - stainless clips (c)

Code	Type
102618	NANOTTICA 1.2ft ES PCc 1300/840
102619	NANOTTICA 1.2ft ES PCc 1600/840
102620	NANOTTICA 1.2ft ES PCc 2200/840
102621	NANOTTICA 1.4ft ES PCc 2600/840
102622	NANOTTICA 1.4ft ES PCc 3200/840
102623	NANOTTICA 1.4ft ES PCc 4400/840
102624	NANOTTICA 1.4ft ES PCc 6400/840
102625	NANOTTICA 1.5ft ES PCc 3250/840
102626	NANOTTICA 1.5ft ES PCc 4000/840
102627	NANOTTICA 1.5ft ES PCc 5500/840
102628	NANOTTICA 1.5ft ES PCc 8000/840

	1F	3F	M1h	M3h	3F M1h	3F M3h
102629	102640	102651	x	x	x	
102630	102641	102652	x	x	x	
102631	102642	102653	x	x	x	
102632	102643	102654	102662	102670	102678	
102633	102644	102655	102663	102671	102679	
102634	102645	102656	102664	102672	102680	
102635	102646	102657	102665	102673	102681	
102636	102647	102658	102666	102674	102682	
102637	102648	102659	102667	102675	102683	
102638	102649	102660	102668	102676	102684	
102639	102650	102661	102669	102677	102685	

NANOTTICA ES PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102686	NANOTTICA 1.2ft ES PC 1300/840 DALI	102697	x	102719	x	x	x
102687	NANOTTICA 1.2ft ES PC 1600/840 DALI	102698	x	102720	x	x	x
102688	NANOTTICA 1.2ft ES PC 2200/840 DALI	102699	x	102721	x	x	x
102689	NANOTTICA 1.4ft ES PC 2600/840 DALI	102700	102711	102722	102730	102738	102746
102690	NANOTTICA 1.4ft ES PC 3200/840 DALI	102701	102712	102723	102731	102739	102747
102691	NANOTTICA 1.4ft ES PC 4400/840 DALI	102702	102713	102724	102732	102740	102748
102692	NANOTTICA 1.4ft ES PC 6400/840 DALI	102703	102714	102725	102733	102741	102749
102693	NANOTTICA 1.5ft ES PC 3250/840 DALI	102704	102715	102726	102734	102742	102750
102694	NANOTTICA 1.5ft ES PC 4000/840 DALI	102705	102716	102727	102735	102743	102751
102695	NANOTTICA 1.5ft ES PC 5500/840 DALI	102706	102717	102728	102736	102744	102752
102696	NANOTTICA 1.5ft ES PC 8000/840 DALI	102707	102718	102729	102737	102745	102753

NANOTTICA ES PCc DALI

Digital dimmable driver DALI - stainless clips (c)

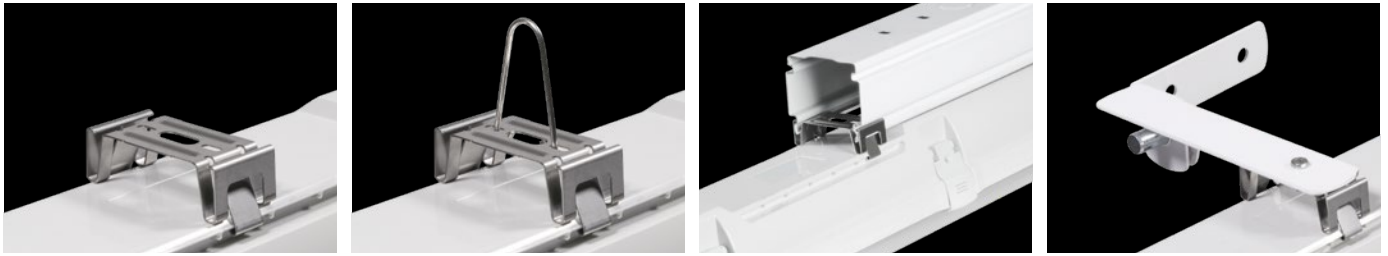
Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
102754	NANOTTICA 1.2ft ES PCc 1300/840 DALI	102765	x	102787	x	x	x
102755	NANOTTICA 1.2ft ES PCc 1600/840 DALI	102766	x	102788	x	x	x
102756	NANOTTICA 1.2ft ES PCc 2200/840 DALI	102767	x	102789	x	x	x
102757	NANOTTICA 1.4ft ES PCc 2600/840 DALI	102768	102779	102790	102798	102806	102814
102758	NANOTTICA 1.4ft ES PCc 3200/840 DALI	102769	102780	102791	102799	102807	102815
102759	NANOTTICA 1.4ft ES PCc 4400/840 DALI	102770	102781	102792	102800	102808	102816
102760	NANOTTICA 1.4ft ES PCc 6400/840 DALI	102771	102782	102793	102801	102809	102817
102761	NANOTTICA 1.5ft ES PCc 3250/840 DALI	102772	102783	102794	102802	102810	102818
102762	NANOTTICA 1.5ft ES PCc 4000/840 DALI	102773	102784	102795	102803	102811	102819
102763	NANOTTICA 1.5ft ES PCc 5500/840 DALI	102774	102785	102796	102804	102812	102820
102764	NANOTTICA 1.5ft ES PCc 8000/840 DALI	102775	102786	102797	102805	102813	102821

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall

**VARIABLE INSTALLATION PITCH**

NANOTTICA ES PC

**LIGHT FITTING DETAILED VIEW**

NANOTTICA ES PC



NANOTTICA TRS

NEW



... exceptionally low UGR, ceiling height from 3.5 to 8 m, impact resistant.

USE

Compared to its basic version, **fully transparent** Nanottica TRS PC boasts considerably **lower UGR values**.

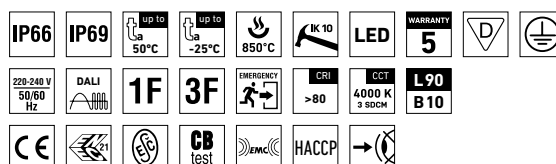
The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance**. These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

Its **standard beam angle** makes it a perfect choice for premises with an optimum luminaire installation height of **3.5 to 8 m**. It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Maximum light fitting efficiency: **136 lm/W**
- Patented optics ensures absolute control over light beam distribution
- Exceptionally low UGR values **range from 16.9 to 22.4**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to $t_a = 50^\circ\text{C}$
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips – easy attachment** to a track lighting system with a width of 60 mm
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI → 80: 4000 K
- On request CRI → 80: 3000 K, 5000 K, 6500 K
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **ESĊ, ENEC, CB, HACCP**



NANOTTICA TRS PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **136 lm/W**
- **UGR ranging from 16.9 to 22.4**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI → 80: 4000 K** - standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: **transparent PC** (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %

UGR EVALUATED FOR

X = 4 H, Y = 8 H S = 0.25 H

Reflectivity 70/50/20

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body transparent polycarbonate - diffusor with nanooptics (standard beam angle), transparent polycarbonate									
NANOTTICA 1.2ft TRS PC 1300/840	50	1300	1180	9	131	16.9 / 18.7	0,9	615	110 - 370
NANOTTICA 1.2ft TRS PC 1600/840	50	1600	1460	11	132	17.7 / 19.4	0,9	615	110 - 370
NANOTTICA 1.2ft TRS PC 2200/840	45	2200	2010	15	134	18.8 / 20.5	0,9	615	110 - 370
NANOTTICA 1.4ft TRS PC 2600/840	50	2600	2370	18	131	17.2 / 19.2	1,7	1175	700 - 960
NANOTTICA 1.4ft TRS PC 3200/840	50	3200	2920	22	132	17.9 / 19.9	1,7	1175	700 - 960
NANOTTICA 1.4ft TRS PC 4400/840	45	4400	4020	30	134	19.0 / 21.0	1,7	1175	700 - 960
NANOTTICA 1.4ft TRS PC 6400/840	45	6400	5850	43	136	20.3 / 22.4	1,7	1175	700 - 960
NANOTTICA 1.5ft TRS PC 3250/840	50	3250	2970	22	135	17.2 / 19.3	2,0	1455	970 - 1230
NANOTTICA 1.5ft TRS PC 4000/840	50	4000	3660	27	135	17.9 / 20.0	2,0	1455	970 - 1230
NANOTTICA 1.5ft TRS PC 5500/840	45	5500	5030	37	135	19.0 / 21.1	2,0	1455	970 - 1230
NANOTTICA 1.5ft TRS PC 8000/840	45	8000	7320	54	135	20.3 / 22.4	2,0	1455	970 - 1230

NANOTTICA TRS PC

Code	Type
103118	NANOTTICA 1.2ft TRS PC 1300/840
103119	NANOTTICA 1.2ft TRS PC 1600/840
103120	NANOTTICA 1.2ft TRS PC 2200/840
101544	NANOTTICA 1.4ft TRS PC 2600/840
101545	NANOTTICA 1.4ft TRS PC 3200/840
101546	NANOTTICA 1.4ft TRS PC 4400/840
101547	NANOTTICA 1.4ft TRS PC 6400/840
101548	NANOTTICA 1.5ft TRS PC 3250/840
101549	NANOTTICA 1.5ft TRS PC 4000/840
101550	NANOTTICA 1.5ft TRS PC 5500/840
101551	NANOTTICA 1.5ft TRS PC 8000/840

Non-dimmable driver - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
103121	101563	101574	x	x	x	x
101553	101564	101575	x	x	x	x
101554	101565	101576	x	x	x	x
101555	101566	101577	101585	101593	101601	101601
101556	101567	101578	101586	101594	101602	101602
101557	101568	101579	101587	101595	101603	101603
101558	101569	101580	101588	101596	101604	101604
101559	101570	101581	101589	101597	101605	101605
101560	101571	101582	101590	101598	101606	101606
101561	101572	101583	101591	101599	101607	101607
101562	101573	101584	101592	101600	101608	101608

NANOTTICA TRS PCc

Code	Type
101609	NANOTTICA 1.2ft TRS PCc 1300/840
101610	NANOTTICA 1.2ft TRS PCc 1600/840
101611	NANOTTICA 1.2ft TRS PCc 2200/840
101612	NANOTTICA 1.4ft TRS PCc 2600/840
101613	NANOTTICA 1.4ft TRS PCc 3200/840
101614	NANOTTICA 1.4ft TRS PCc 4400/840
101615	NANOTTICA 1.4ft TRS PCc 6400/840
101616	NANOTTICA 1.5ft TRS PCc 3250/840
101617	NANOTTICA 1.5ft TRS PCc 4000/840
101618	NANOTTICA 1.5ft TRS PCc 5500/840
101619	NANOTTICA 1.5ft TRS PCc 8000/840

Non-dimmable driver - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
101620	101631	101642	x	x	x	x
101621	101632	101643	x	x	x	x
101622	101633	101644	x	x	x	x
101623	101634	101645	101653	101661	x	x
101624	101635	101646	101654	101662	101670	101670
101625	101636	101647	101655	101663	101671	101671
101626	101637	101648	101656	101664	101672	101672
101627	101638	101649	101657	101665	101673	101673
101628	101639	101650	101658	101666	101674	101674
101629	101640	101651	101659	101667	101675	101675
101630	101641	101652	101660	101668	101676	101676

NANOTTICA TRS PC DALI

Code	Type
101677	NANOTTICA 1.2ft TRS PC 1300/840 DALI
101678	NANOTTICA 1.2ft TRS PC 1600/840 DALI
101679	NANOTTICA 1.2ft TRS PC 2200/840 DALI
101680	NANOTTICA 1.4ft TRS PC 2600/840 DALI
101681	NANOTTICA 1.4ft TRS PC 3200/840 DALI
101682	NANOTTICA 1.4ft TRS PC 4400/840 DALI
101683	NANOTTICA 1.4ft TRS PC 6400/840 DALI
101684	NANOTTICA 1.5ft TRS PC 3250/840 DALI
101685	NANOTTICA 1.5ft TRS PC 4000/840 DALI
101686	NANOTTICA 1.5ft TRS PC 5500/840 DALI
101687	NANOTTICA 1.5ft TRS PC 8000/840 DALI

Digital dimmable driver DALI - plastic clips

1F	3F	M1h	M3h	3F M1h	3F M3h
101688	x	101710	x	x	x
101689	x	101711	x	x	x
101690	x	101712	x	x	x
101691	101702	101713	101721	101729	101737
101692	101703	101714	101722	101730	101738
101693	101704	101715	101723	101731	101739
101694	101705	101716	101724	101732	101740
101695	101706	101717	101725	101733	101741
101696	101707	101718	101726	101734	101742
101697	101708	101719	101727	101735	101743
101698	101709	101720	101728	101736	101744

NANOTTICA TRS PCc DALI

Code	Type
101745	NANOTTICA 1.2ft TRS PCc 1300/840 DALI
101746	NANOTTICA 1.2ft TRS PCc 1600/840 DALI
101747	NANOTTICA 1.2ft TRS PCc 2200/840 DALI
101748	NANOTTICA 1.4ft TRS PCc 2600/840 DALI
101749	NANOTTICA 1.4ft TRS PCc 3200/840 DALI
101750	NANOTTICA 1.4ft TRS PCc 4400/840 DALI
101751	NANOTTICA 1.4ft TRS PCc 6400/840 DALI
101752	NANOTTICA 1.5ft TRS PCc 3250/840 DALI
101753	NANOTTICA 1.5ft TRS PCc 4000/840 DALI
101754	NANOTTICA 1.5ft TRS PCc 5500/840 DALI
101755	NANOTTICA 1.5ft TRS PCc 8000/840 DALI

Digital dimmable driver DALI - stainless clips (c)

1F	3F	M1h	M3h	3F M1h	3F M3h
101756	x	101778	x	x	x
101757	x	101779	x	x	x
101758	x	101780	x	x	x
101759	101770	101781	101789	101797	101805
101760	101771	101782	101790	101798	101806
101761	101772	101783	101791	101799	101807
101762	101773	101784	101792	101800	101808
101763	101774	101785	101793	101801	101809
101764	101775	101786	101794	101802	101810
101765	101776	101787	101795	101803	101811
101766	101777	101788	101796	101804	101812

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F M3h** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F M3h** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

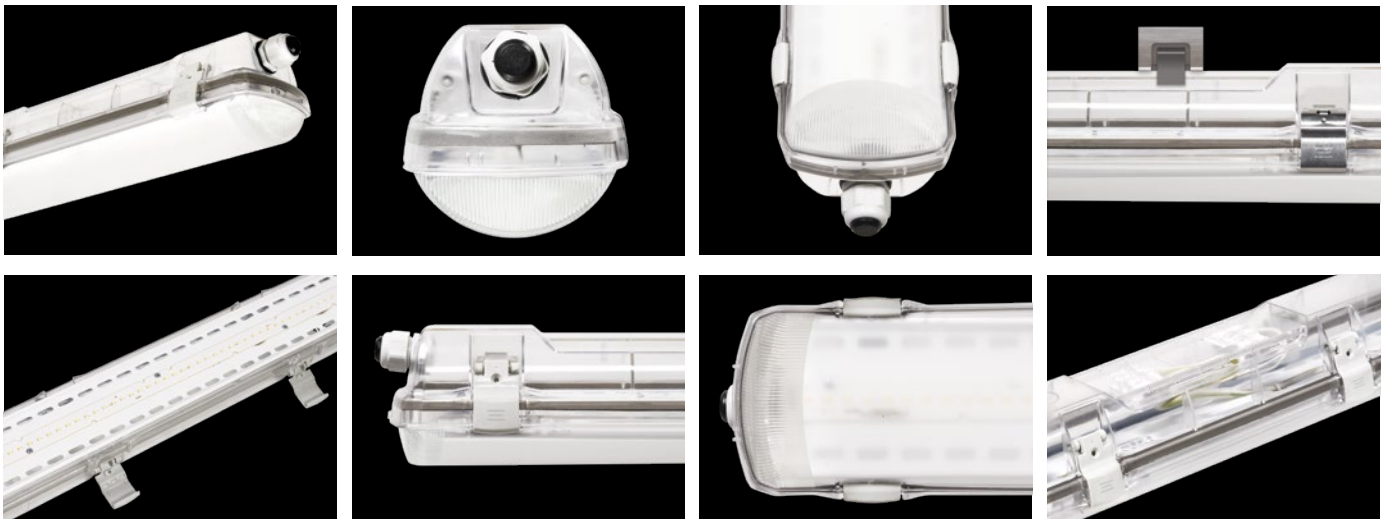
- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall

**VARIABLE INSTALLATION PITCH**

NANOTTICA TRS

**LIGHT FITTING DETAILED VIEW**

NANOTTICA TRS



NANOTTICA

NEW



... ceiling height from 3.5 to 8 m, impact resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity**.

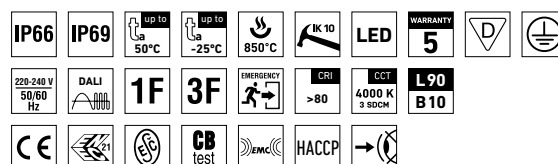
The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance**. These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

Its **standard beam angle** makes it a perfect choice for premises with an optimum luminaire installation height of **3.5 to 8 m**. It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 18.9 to 23.4**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from **ta = -25°C to ta = 50°C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips - easy attachment** to a track lighting system with a width of 60 mm
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI → 80: 4000 K
- On request CRI → 80: 3000 K, 5000 K, 6500 K
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **ESĈ, ENEC, CB, HACCP**



NANOTTICA PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **139 lm/W**
- **UGR ranging from 18.9 to 23.4**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI → 80: 4000 K** - standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %

UGR EVALUATED FOR

X = 4 H, Y = 8 H S = 0.25 H

Reflectivity 70/50/20

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffusor with nanooptics (standard beam angle), transparent polycarbonate									
NANOTTICA 1.2ft PC 1300/840	50	1300	1220	9	135	18.9 / 19.9	0,9	615	110 - 370
NANOTTICA 1.2ft PC 1600/840	50	1600	1500	11	136	19.6 / 20.6	0,9	615	110 - 370
NANOTTICA 1.2ft PC 2200/840	45	2200	2060	15	137	20.7 / 21.7	0,9	615	110 - 370
NANOTTICA 1.4ft PC 2600/840	50	2600	2440	18	135	19.1 / 20.2	1,7	1175	700 - 960
NANOTTICA 1.4ft PC 3200/840	50	3200	3000	22	136	19.8 / 20.9	1,7	1175	700 - 960
NANOTTICA 1.4ft PC 4400/840	45	4400	4130	30	137	20.9 / 22.0	1,7	1175	700 - 960
NANOTTICA 1.4ft PC 6400/840	45	6400	6010	43	139	22.2 / 23.3	1,7	1175	700 - 960
NANOTTICA 1.5ft PC 3250/840	50	3250	3050	22	138	19.1 / 20.3	2,0	1455	970 - 1230
NANOTTICA 1.5ft PC 4000/840	50	4000	3760	27	139	19.9 / 21.0	2,0	1455	970 - 1230
NANOTTICA 1.5ft PC 5500/840	45	5500	5170	37	139	21.0 / 22.1	2,0	1455	970 - 1230
NANOTTICA 1.5ft PC 8000/840	45	8000	7520	54	139	22.3 / 23.4	2,0	1455	970 - 1230

NANOTTICA PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100001	NANOTTICA 1.2ft PC 1300/840	100012	100023	100034	x	x	x
100002	NANOTTICA 1.2ft PC 1600/840	100013	100024	100035	x	x	x
100003	NANOTTICA 1.2ft PC 2200/840	100014	100025	100036	x	x	x
100004	NANOTTICA 1.4ft PC 2600/840	100015	100026	100037	100045	100053	100061
100005	NANOTTICA 1.4ft PC 3200/840	100016	100027	100038	100046	100054	100062
100006	NANOTTICA 1.4ft PC 4400/840	100017	100028	100039	100047	100055	100063
100007	NANOTTICA 1.4ft PC 6400/840	100018	100029	100040	100048	100056	100064
100008	NANOTTICA 1.5ft PC 3250/840	100019	100030	100041	100049	100057	100065
100009	NANOTTICA 1.5ft PC 4000/840	100020	100031	100042	100050	100058	100066
100010	NANOTTICA 1.5ft PC 5500/840	100021	100032	100043	100051	100059	100067
100011	NANOTTICA 1.5ft PC 8000/840	100022	100033	100044	100052	100060	100068

NANOTTICA PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100069	NANOTTICA 1.2ft PCc 1300/840	100080	100091	100102	x	x	x
100070	NANOTTICA 1.2ft PCc 1600/840	100081	100092	100103	x	x	x
100071	NANOTTICA 1.2ft PCc 2200/840	100082	100093	100104	x	x	x
100072	NANOTTICA 1.4ft PCc 2600/840	100083	100094	100105	100113	100121	100129
100073	NANOTTICA 1.4ft PCc 3200/840	100084	100095	100106	100114	100122	100130
100074	NANOTTICA 1.4ft PCc 4400/840	100085	100096	100107	100115	100123	100131
100075	NANOTTICA 1.4ft PCc 6400/840	100086	100097	100108	100116	100124	100132
100076	NANOTTICA 1.5ft PCc 3250/840	100087	100098	100109	100117	100125	100133
100077	NANOTTICA 1.5ft PCc 4000/840	100088	100099	100110	100118	100126	100134
100078	NANOTTICA 1.5ft PCc 5500/840	100089	100100	100111	100119	100127	100135
100079	NANOTTICA 1.5ft PCc 8000/840	100090	100101	100112	100120	100128	100136

NANOTTICA PC DALI

Code	Type
100137	NANOTTICA 1.2ft PC 1300/840 DALI
100138	NANOTTICA 1.2ft PC 1600/840 DALI
100139	NANOTTICA 1.2ft PC 2200/840 DALI
100140	NANOTTICA 1.4ft PC 2600/840 DALI
100141	NANOTTICA 1.4ft PC 3200/840 DALI
100142	NANOTTICA 1.4ft PC 4400/840 DALI
100143	NANOTTICA 1.4ft PC 6400/840 DALI
100144	NANOTTICA 1.5ft PC 3250/840 DALI
100145	NANOTTICA 1.5ft PC 4000/840 DALI
100146	NANOTTICA 1.5ft PC 5500/840 DALI
100147	NANOTTICA 1.5ft PC 8000/840 DALI

Digital dimmable driver DALI - plastic clips

1F	3F	M1h	M3h	3F M1h	3F M3h
100148	x	100170	x	x	x
100149	x	100171	x	x	x
100150	x	100172	x	x	x
100151	100162	100173	100181	100189	100197
100152	100163	100174	100182	100190	100198
100153	100164	100175	100183	100191	100199
100154	100165	100176	100184	100192	100200
100155	100166	100177	100185	100193	100201
100156	100167	100178	100186	100194	100202
100157	100168	100179	100187	100195	100203
100158	100169	100180	100188	100196	100204

NANOTTICA PCc DALI

Code	Type
100205	NANOTTICA 1.2ft PCc 1300/840 DALI
100206	NANOTTICA 1.2ft PCc 1600/840 DALI
100207	NANOTTICA 1.2ft PCc 2200/840 DALI
100208	NANOTTICA 1.4ft PCc 2600/840 DALI
100209	NANOTTICA 1.4ft PCc 3200/840 DALI
100210	NANOTTICA 1.4ft PCc 4400/840 DALI
100211	NANOTTICA 1.4ft PCc 6400/840 DALI
100212	NANOTTICA 1.5ft PCc 3250/840 DALI
100213	NANOTTICA 1.5ft PCc 4000/840 DALI
100214	NANOTTICA 1.5ft PCc 5500/840 DALI
100215	NANOTTICA 1.5ft PCc 8000/840 DALI

Digital dimmable driver DALI - stainless clips (c)

1F	3F	M1h	M3h	3F M1h	3F M3h
100216	x	100238	x	x	x
100217	x	100239	x	x	x
100218	x	100240	x	x	x
100219	100230	100241	100249	100257	100265
100220	100231	100242	100250	100258	100266
100221	100232	100243	100251	100259	100267
100222	100233	100244	100252	100260	100268
100223	100234	100245	100253	100261	100269
100224	100235	100246	100254	100262	100270
100225	100236	100247	100255	100263	100271
100226	100237	100248	100256	100264	100272

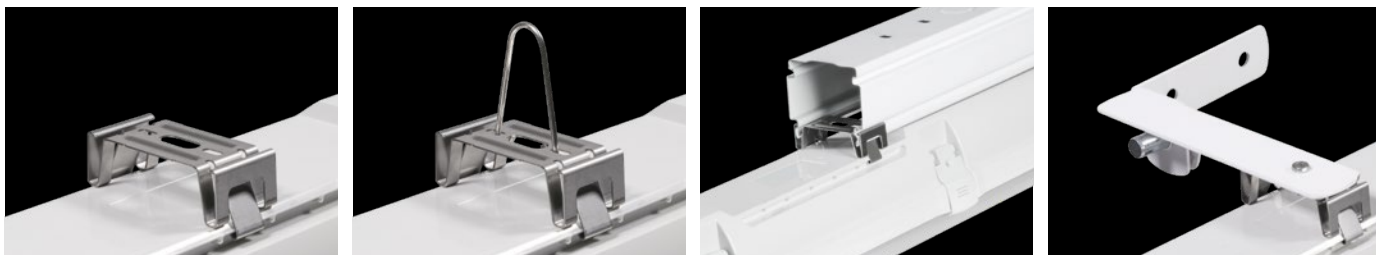
LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall

**VARIABLE INSTALLATION PITCH**

NANOTTICA PC

**LIGHT FITTING DETAILED VIEW**

NANOTTICA PC



NANOTTICA NB

NEW

1 / 2022



... ceiling height from 7.5 to 12 m, impact resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity**.

The luminaire's **narrow-beam angle** makes it suitable for premises with an optimum luminaire installation height of **7.5 to 12 m**.

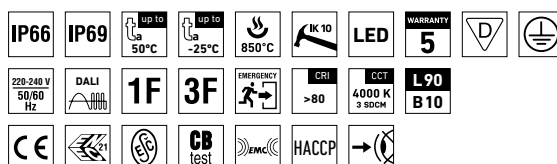
It is designed for indoor spaces, **walls and large corridors in high industrial and agricultural buildings as well as in warehouses and sports facilities. It is also a great choice for warehouse aisles and roofed sports halls.** IP69-rated and HACCP-compliant, the fitting's design also makes it a perfect choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Patented optics ensures absolute control over light beam distribution
- **Low UGR ranging from 16 to 25**
- **Narrow Beam angle (NB)**, optimum luminaire installation height **from 7.5 to 12 m**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to $t_a = 45^\circ\text{C}$
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips – easy attachment** to a track lighting system with a width of 60 mm
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI → 80: 4000 K
- On request CRI → 80: 3000 K, 5000 K, 6500 K
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **ESĊ, ENEC, CB, HACCP**



NANOTTICA NB PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 45 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **136 lm/W**
- **UGR ranging from 16 to 25**
- Optimum luminaire installation height **from 7.5 to 12 m**
- **CRI → 80: 4000 K** - standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics Narrow Beam** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %

UGR EVALUATED FOR

X = 4 H, Y = 8 H S = 0.25 H

Reflectivity 70/50/20

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 45 °C - body: grey polycarbonate - diffusor with nanooptics NB (narrow beam angle), transparent polycarbonate								
NANOTTICA 1.4ft NB PC 4400/840	45	4400	4040	30	134	1,7	1175	700 - 960
NANOTTICA 1.4ft NB PC 6400/840	45	6400	5880	43	136	1,7	1175	700 - 960
NANOTTICA 1.5ft NB PC 5500/840	45	5500	5060	37	136	2,0	1455	970 - 1230
NANOTTICA 1.5ft NB PC 8000/840	45	8000	7360	54	136	2,0	1455	970 - 1230

NANOTTICA NB PC

Code	Type
100273	NANOTTICA 1.4ft NB PC 4400/840
100274	NANOTTICA 1.4ft NB PC 6400/840
100275	NANOTTICA 1.5ft NB PC 5500/840
100276	NANOTTICA 1.5ft NB PC 8000/840

Non-dimmable driver - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
	100277	100281	100285	100289	100293	100297
	100278	100282	100286	100290	100294	100298
	100279	100283	100287	100291	100295	100299
	100280	100284	100288	100292	100296	100300

NANOTTICA NB PCc

Code	Type
100301	NANOTTICA 1.4ft NB PCc 4400/840
100302	NANOTTICA 1.4ft NB PCc 6400/840
100303	NANOTTICA 1.5ft NB PCc 5500/840
100304	NANOTTICA 1.5ft NB PCc 8000/840

Non-dimmable driver - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
	100305	100309	100313	100317	100321	100325
	100306	100310	100314	100318	100322	100326
	100307	100311	100315	100319	100323	100327
	100308	100312	100316	100320	100324	100328

NANOTTICA NB PC DALI

Code	Type
100329	NANOTTICA 1.4ft NB PC 4400/840 DALI
100330	NANOTTICA 1.4ft NB PC 6400/840 DALI
100331	NANOTTICA 1.5ft NB PC 5500/840 DALI
100332	NANOTTICA 1.5ft NB PC 8000/840 DALI

Digital dimmable driver DALI - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
	100333	100337	100341	100345	100349	100353
	100334	100338	100342	100346	100350	100354
	100335	100339	100343	100347	100351	100355
	100336	100340	100344	100348	100352	100356

NANOTTICA NB PCc DALI

Code	Type
100357	NANOTTICA 1.4ft NB PCc 4400/840 DALI
100358	NANOTTICA 1.4ft NB PCc 6400/840 DALI
100359	NANOTTICA 1.5ft NB PCc 5500/840 DALI
100360	NANOTTICA 1.5ft NB PCc 8000/840 DALI

Digital dimmable driver DALI - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
	100361	100365	100369	100373	100377	100381
	100362	100366	100370	100374	100378	100382
	100363	100367	100371	100375	100379	100383
	100364	100368	100372	100376	100380	100384

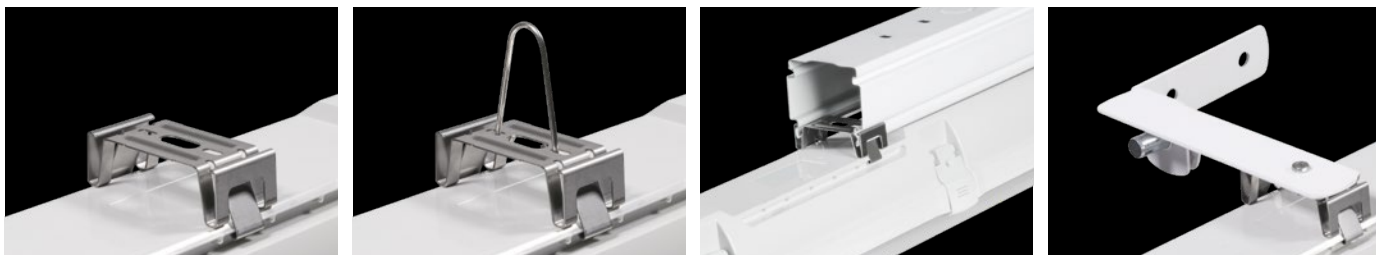
LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

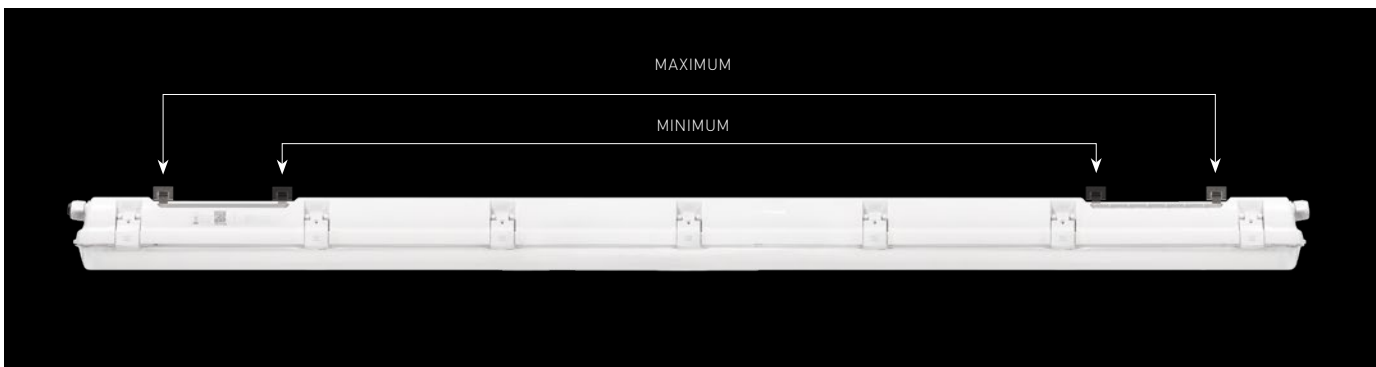
LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



VARIABLE INSTALLATION PITCH

NANOTTICA NB PC



LIGHT FITTING DETAILED VIEW

NANOTTICA NB PC





NANOTTICA WB

NEW

1 / 2022



... ceiling height from 2.5 to 4 m, impact resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity**.

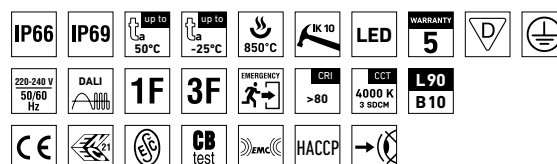
The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance**. These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

The fitting's **wide beam angle** makes it a great choice for premises with an optimum fitting installation height ranging from **2.5 to 4 m**. It is designed for indoor spaces, **production plants, multi-storey car parks and garages as well as workshops, corridors, cellars, pedestrian underpasses and underground spaces with low ceilings**. IP69-rated and HACCP-compliant, the fitting's design also makes it suitable for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Patented optics ensures absolute control over light beam distribution
- Wide Beam angle (WB), optimum luminaire installation height from 2.5 to 4 m
- Low **UGR ranging from 22 to 25**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to $t_a = 50^\circ\text{C}$
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips – easy attachment** to a track lighting system with a width of 60 mm
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI → 80: 4000 K
- On request CRI → 80: 3000 K, 5000 K, 6500 K
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **ESĊ, ENEC, CB, HACCP**

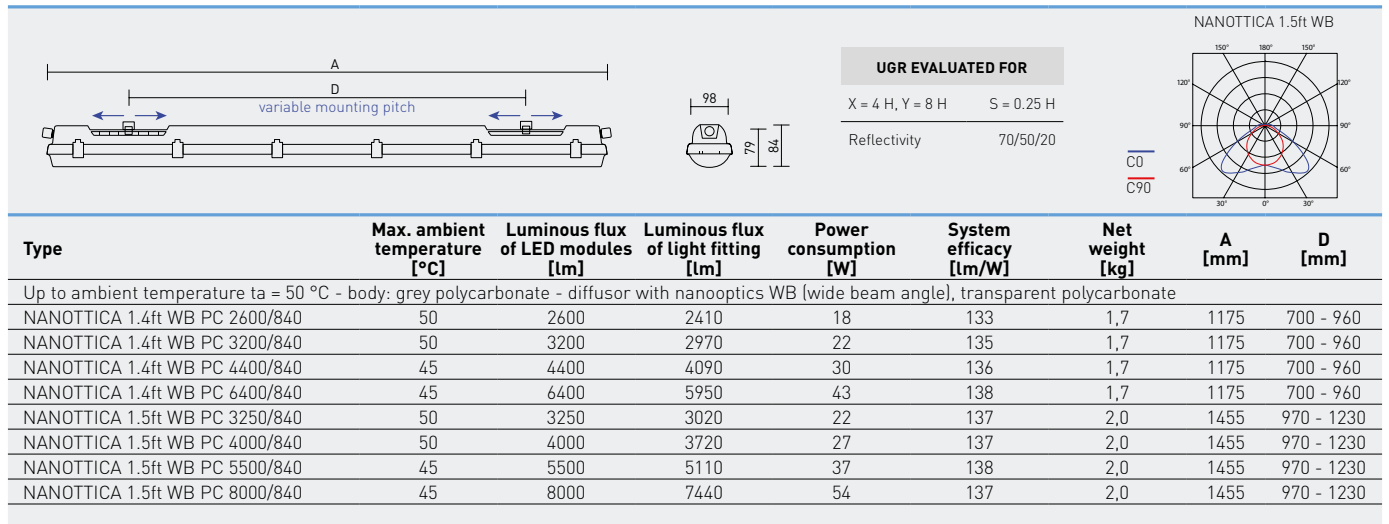


NANOTTICA WB PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **138 lm/W**
- **UGR ranging from 22 to 25**
- Optimum luminaire installation height **from 2.5 to 4 m**
- **CRI → 80: 4000 K** - standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics Wide Beam** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless and 3-pole (standard version), or screw terminal
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %



NANOTTICA WB PC

Code	Type
100385	NANOTTICA 1.4ft WB PC 2600/840
100386	NANOTTICA 1.4ft WB PC 3200/840
100387	NANOTTICA 1.4ft WB PC 4400/840
100388	NANOTTICA 1.4ft WB PC 6400/840
100389	NANOTTICA 1.5ft WB PC 3250/840
100390	NANOTTICA 1.5ft WB PC 4000/840
100391	NANOTTICA 1.5ft WB PC 5500/840
100392	NANOTTICA 1.5ft WB PC 8000/840

Non-dimmable driver - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
	100393	100401	100409	100417	100425	100433
	100394	100402	100410	100418	100426	100434
	100395	100403	100411	100419	100427	100435
	100396	100404	100412	100420	100428	100436
	100397	100405	100413	100421	100429	100437
	100398	100406	100414	100422	100430	100438
	100399	100407	100415	100423	100431	100439
	100400	100408	100416	100424	100432	100440

NANOTTICA WB PCc

Code	Type
100441	NANOTTICA 1.4ft WB PCc 2600/840
100442	NANOTTICA 1.4ft WB PCc 3200/840
100443	NANOTTICA 1.4ft WB PCc 4400/840
100444	NANOTTICA 1.4ft WB PCc 6400/840
100445	NANOTTICA 1.5ft WB PCc 3250/840
100446	NANOTTICA 1.5ft WB PCc 4000/840
100447	NANOTTICA 1.5ft WB PCc 5500/840
100448	NANOTTICA 1.5ft WB PCc 8000/840

Non-dimmable driver - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
	100449	100457	100465	100473	100481	100489
	100450	100458	100466	100474	100482	100490
	100451	100459	100467	100475	100483	100491
	100452	100460	100468	100476	100484	100492
	100453	100461	100469	100477	100485	100493
	100454	100462	100470	100478	100486	100494
	100455	100463	100471	100479	100487	100495
	100456	100464	100472	100480	100488	100496

NANOTTICA WB PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100497	NANOTTICA 1.4ft WB PC 2600/840 DALI	100505	100513	100521	100529	100537	100545
100498	NANOTTICA 1.4ft WB PC 3200/840 DALI	100506	100514	100522	100530	100538	100546
100499	NANOTTICA 1.4ft WB PC 4400/840 DALI	100507	100515	100523	100531	100539	100547
100500	NANOTTICA 1.4ft WB PC 6400/840 DALI	100508	100516	100524	100532	100540	100548
100501	NANOTTICA 1.5ft WB PC 3250/840 DALI	100509	100517	100525	100533	100541	100549
100502	NANOTTICA 1.5ft WB PC 4000/840 DALI	100510	100518	100526	100534	100542	100550
100503	NANOTTICA 1.5ft WB PC 5500/840 DALI	100511	100519	100527	100535	100543	100551
100504	NANOTTICA 1.5ft WB PC 8000/840 DALI	100512	100520	100528	100536	100544	100552

NANOTTICA WB PCc DALI

Digital dimmable driver DALI - stainless clips (c)

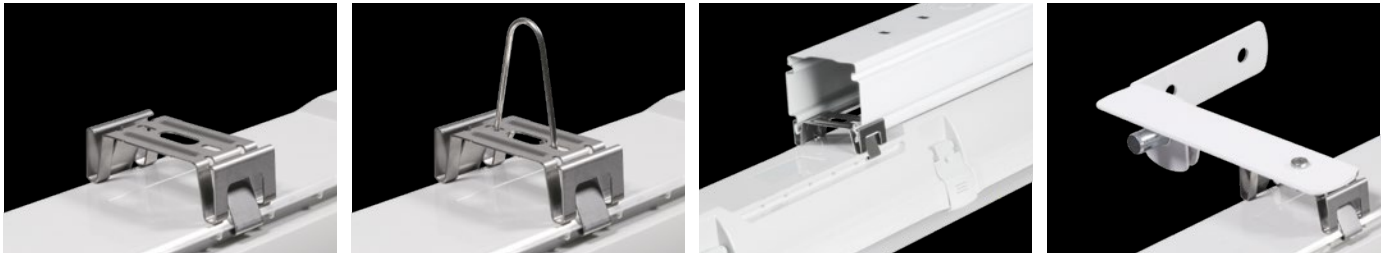
Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
100553	NANOTTICA 1.4ft WB PCc 2600/840 DALI	100561	100569	100577	100585	100593	100601
100554	NANOTTICA 1.4ft WB PCc 3200/840 DALI	100562	100570	100578	100586	100594	100602
100555	NANOTTICA 1.4ft WB PCc 4400/840 DALI	100563	100571	100579	100587	100595	100603
100556	NANOTTICA 1.4ft WB PCc 6400/840 DALI	100564	100572	100580	100588	100596	100604
100557	NANOTTICA 1.5ft WB PCc 3250/840 DALI	100565	100573	100581	100589	100597	100605
100558	NANOTTICA 1.5ft WB PCc 4000/840 DALI	100566	100574	100582	100590	100598	100606
100559	NANOTTICA 1.5ft WB PCc 5500/840 DALI	100567	100575	100583	100591	100599	100607
100560	NANOTTICA 1.5ft WB PCc 8000/840 DALI	100568	100576	100584	100592	100600	100608

LEGEND

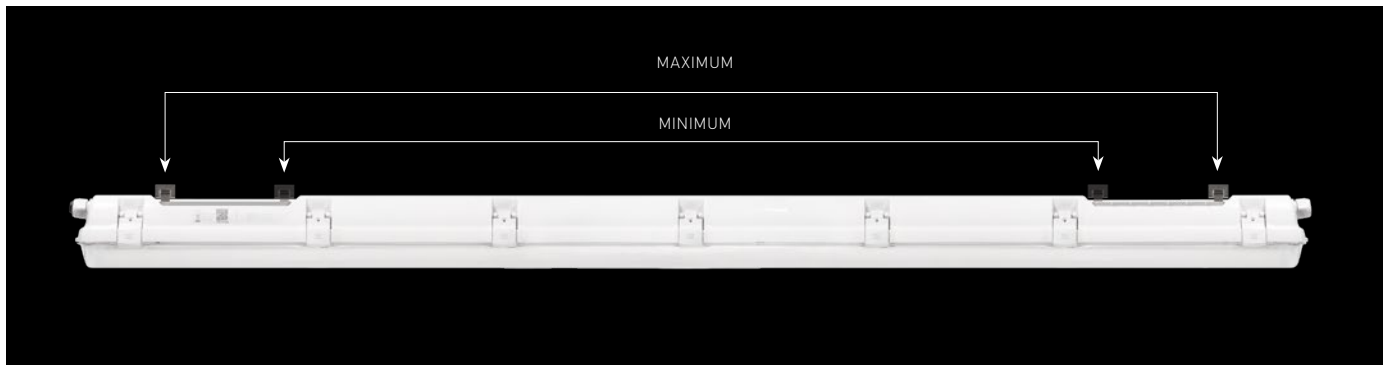
- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall

**VARIABLE INSTALLATION PITCH**

NANOTTICA WB PC

**LIGHT FITTING DETAILED VIEW**

NANOTTICA WB PC



NANOTTICA ES ABS, ABSc



TECHNICKÝ POPIS

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **144 lm/W**
- **UGR ranging from 18.6 to 23.1**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI → 80: 4000 K** - standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent AC with nanooptics** (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %

UGR STANOVENO PRO

X = 4 H, Y = 8 H S = 0.25 H

Odraznost 70/50/20

NANOTTICA 1.5ft ES ABS

Type	Max, ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body dark grey ABS - diffuser with nanooptics (standard beam angle), transparent acrylate									
NANOTTICA 1.2ft ES ABS 1300/840	50	1300	1100	8	137	18.6 / 19.6	0,9	615	110 - 370
NANOTTICA 1.2ft ES ABS 1600/840	50	1600	1360	10	136	19.4 / 20.3	0,9	615	110 - 370
NANOTTICA 1.2ft ES ABS 2200/840	45	2200	1870	14	133	20.5 / 21.4	0,9	615	110 - 370
NANOTTICA 1.4ft ES ABS 2600/840	50	2600	2210	16	138	18.8 / 19.9	1,7	1175	700 - 960
NANOTTICA 1.4ft ES ABS 3200/840	50	3200	2720	19	143	19.6 / 20.6	1,7	1175	700 - 960
NANOTTICA 1.4ft ES ABS 4400/840	45	4400	3740	27	138	20.7 / 21.7	1,7	1175	700 - 960
NANOTTICA 1.4ft ES ABS 6400/840	45	6400	5440	38	143	22.0 / 23.0	1,7	1175	700 - 960
NANOTTICA 1.5ft ES ABS 3250/840	50	3250	2760	20	138	18.9 / 20.0	2,0	1455	970 - 1230
NANOTTICA 1.5ft ES ABS 4000/840	50	4000	3400	24	141	19.6 / 20.7	2,0	1455	970 - 1230
NANOTTICA 1.5ft ES ABS 5500/840	45	5500	4670	33	141	20.7 / 21.8	2,0	1455	970 - 1230
NANOTTICA 1.5ft ES ABS 8000/840	45	8000	6800	47	144	22.0 / 23.1	2,0	1455	970 - 1230

NANOTTICA ES ABS

Code	Type
102822	NANOTTICA 1.2ft ES ABS 1300/840
102823	NANOTTICA 1.2ft ES ABS 1600/840
102824	NANOTTICA 1.2ft ES ABS 2200/840
102825	NANOTTICA 1.4ft ES ABS 2600/840
102826	NANOTTICA 1.4ft ES ABS 3200/840
102827	NANOTTICA 1.4ft ES ABS 4400/840
102828	NANOTTICA 1.4ft ES ABS 6400/840
102829	NANOTTICA 1.5ft ES ABS 3250/840
102830	NANOTTICA 1.5ft ES ABS 4000/840
102831	NANOTTICA 1.5ft ES ABS 5500/840
102832	NANOTTICA 1.5ft ES ABS 8000/840

Non-dimmable driver - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
102833	102844	102855	x	x	x	x
102834	102845	102856	x	x	x	x
102835	102846	102857	x	x	x	x
102836	102847	102858	102866	102874	102882	
102837	102848	102859	102867	102875	102883	
102838	102849	102860	102868	102876	102884	
102839	102850	102861	102869	102877	102885	
102840	102851	102862	102870	102878	102886	
102841	102852	102863	102871	102879	102887	
102842	102853	102864	102872	102880	102888	
102843	102854	102865	102873	102881	102889	

NANOTTICA ES ABSc

Code	Type
102890	NANOTTICA 1.2ft ES ABSc 1300/840
102891	NANOTTICA 1.2ft ES ABSc 1600/840
102892	NANOTTICA 1.2ft ES ABSc 2200/840
102893	NANOTTICA 1.4ft ES ABSc 2600/840
102894	NANOTTICA 1.4ft ES ABSc 3200/840
102895	NANOTTICA 1.4ft ES ABSc 4400/840
102896	NANOTTICA 1.4ft ES ABSc 6400/840
102897	NANOTTICA 1.5ft ES ABSc 3250/840
102898	NANOTTICA 1.5ft ES ABSc 4000/840
102899	NANOTTICA 1.5ft ES ABSc 5500/840
102900	NANOTTICA 1.5ft ES ABSc 8000/840

Non-dimmable driver - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
102901	102912	102923	x	x	x	x
102902	102913	102924	x	x	x	x
102903	102914	102925	x	x	x	x
102904	102915	102926	102934	102942	102950	
102905	102916	102927	102935	102943	102951	
102906	102917	102928	102936	102944	102952	
102907	102918	102929	102937	102945	102953	
102908	102919	102930	102938	102946	102954	
102909	102920	102931	102939	102947	102955	
102910	102921	102932	102940	102948	102956	
102911	102922	102933	102941	102949	102957	

NANOTTICA ES ABS DALI

Code	Type
102958	NANOTTICA 1.2ft ES ABS 1300/840 DALI
102959	NANOTTICA 1.2ft ES ABS 1600/840 DALI
102960	NANOTTICA 1.2ft ES ABS 2200/840 DALI
102961	NANOTTICA 1.4ft ES ABS 2600/840 DALI
102962	NANOTTICA 1.4ft ES ABS 3200/840 DALI
102963	NANOTTICA 1.4ft ES ABS 4400/840 DALI
102964	NANOTTICA 1.4ft ES ABS 6400/840 DALI
102965	NANOTTICA 1.5ft ES ABS 3250/840 DALI
102966	NANOTTICA 1.5ft ES ABS 4000/840 DALI
102967	NANOTTICA 1.5ft ES ABS 5500/840 DALI
102968	NANOTTICA 1.5ft ES ABS 8000/840 DALI

Digital dimmable driver DALI - plastic clips

1F	3F	M1h	M3h	3F M1h	3F M3h
102969	x	102991	x	x	x
102970	x	102992	x	x	x
102971	x	102993	x	x	x
102972	102983	102994	103002	103010	103018
102973	102984	102995	103003	103011	103019
102974	102985	102996	103004	103012	103020
102975	102986	102997	103005	103013	103021
102976	102987	102998	103006	103014	103022
102977	102988	102999	103007	103015	103023
102978	102989	103000	103008	103016	103024
102979	102990	103001	103009	103017	103025

NANOTTICA ES ABSc DALI

Code	Type
103026	NANOTTICA 1.2ft ES ABSc 1300/840 DALI
103027	NANOTTICA 1.2ft ES ABSc 1600/840 DALI
103028	NANOTTICA 1.2ft ES ABSc 2200/840 DALI
103029	NANOTTICA 1.4ft ES ABSc 2600/840 DALI
103030	NANOTTICA 1.4ft ES ABSc 3200/840 DALI
103031	NANOTTICA 1.4ft ES ABSc 4400/840 DALI
103032	NANOTTICA 1.4ft ES ABSc 6400/840 DALI
103033	NANOTTICA 1.5ft ES ABSc 3250/840 DALI
103034	NANOTTICA 1.5ft ES ABSc 4000/840 DALI
103035	NANOTTICA 1.5ft ES ABSc 5500/840 DALI
103036	NANOTTICA 1.5ft ES ABSc 8000/840 DALI

Digital dimmable driver DALI - stainless clips (c)

1F	3F	M1h	M3h	3F M1h	3F M3h
103037	x	103059	x	x	x
103038	x	103060	x	x	x
103039	x	103061	x	x	x
103040	103051	103062	103070	103078	103086
103041	103052	103063	103071	103079	103087
103042	103053	103064	103072	103080	103088
103043	103054	103065	103073	103081	103089
103044	103055	103066	103074	103082	103090
103045	103056	103067	103075	103083	103091
103046	103057	103068	103076	103084	103092
103047	103058	103069	103077	103085	103093

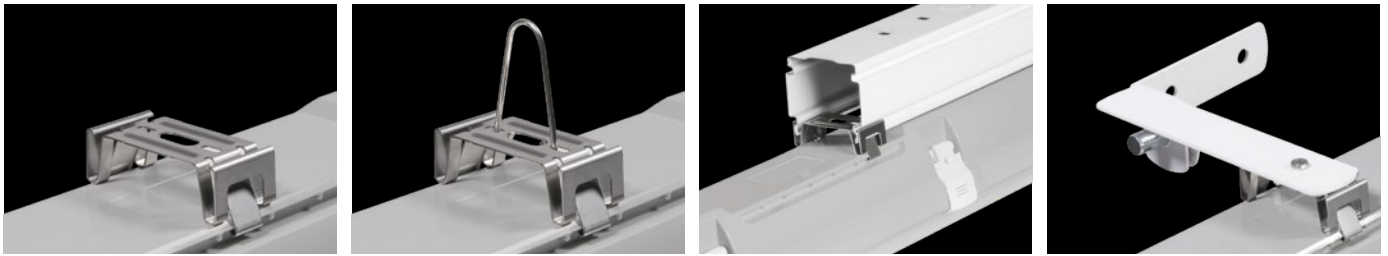
LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall

**VARIABLE INSTALLATION PITCH**

NANOTTICA ES ABS

**LIGHT FITTING DETAILED VIEW**

NANOTTICA ES ABS



NANOTTICA ABS

NEW



... ceiling height from 3.5 to 8 m, chemically resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity**.

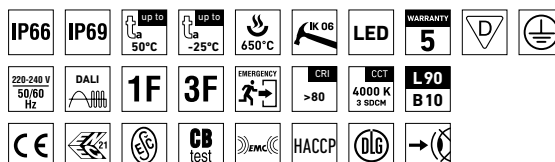
The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance**. These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

The fitting's standard beam angle makes it a great choice for premises with a fitting installation height of **3.5 to 8 m**. In addition to indoor spaces, it is designed for agricultural buildings and other spaces with chemically aggressive environments due to ammonia fumes, lye fumes, alkali and hot water (hydrolysis). The fitting is primarily intended for large **agricultural premises and industrial halls such as farms, stables, production plants and warehouses, car washes and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it suitable for the food industry.

The fitting's base is made of ABS and diffuser of AC, resulting in their **exceptional chemical resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 18.6 to 23.1**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to $t_a = 50^\circ\text{C}$
- Lifetime: 50 000 hours / L90B10
- High **chemical resistance**
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips – easy attachment** to a track lighting system with a width of 60 mm
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI → 80: 4000 K
- On request CRI → 80: 3000 K, 5000 K, 6500 K
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **ESĆ, ENEC, CB, DLG, HACCP**

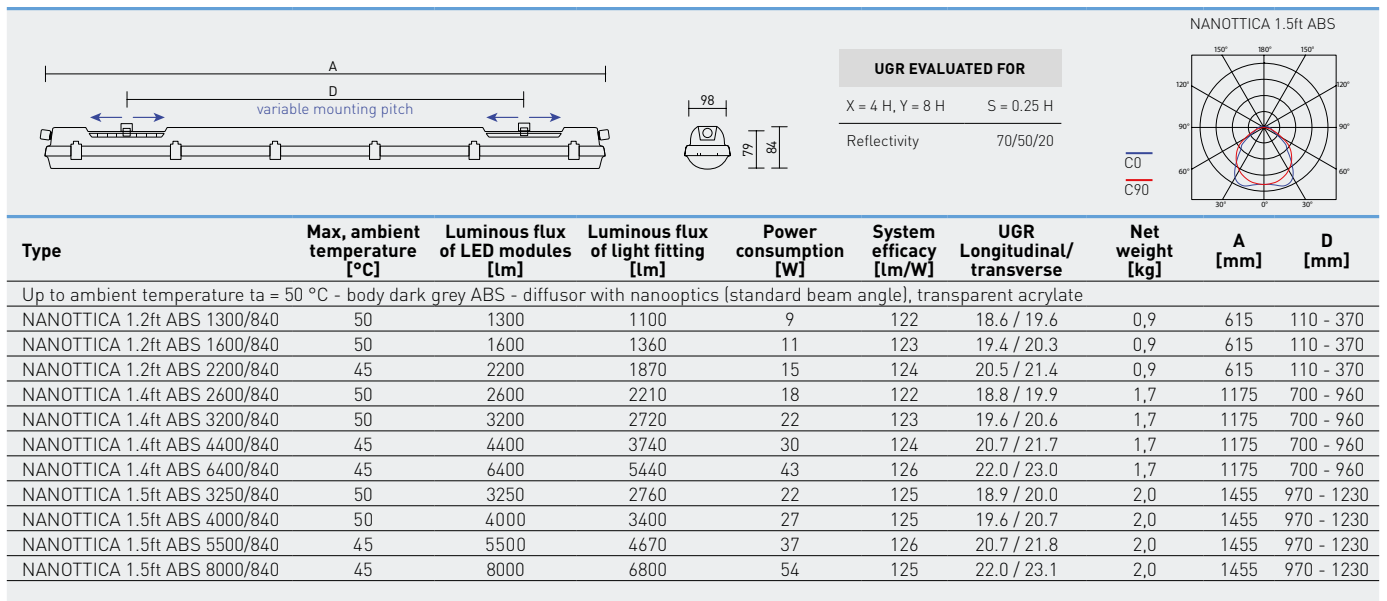


NANOTTICA ABS ABSc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **126 lm/W**
- **UGR ranging from 18.6 to 23.1**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI → 80: 4000 K** - standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent AC with nanooptics** (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %



NANOTTICA ABS

Code	Type
100609	NANOTTICA 1.2ft ABS 1300/840
100610	NANOTTICA 1.2ft ABS 1600/840
100611	NANOTTICA 1.2ft ABS 2200/840
100612	NANOTTICA 1.4ft ABS 2600/840
100613	NANOTTICA 1.4ft ABS 3200/840
100614	NANOTTICA 1.4ft ABS 4400/840
100615	NANOTTICA 1.4ft ABS 6400/840
100616	NANOTTICA 1.5ft ABS 3250/840
100617	NANOTTICA 1.5ft ABS 4000/840
100618	NANOTTICA 1.5ft ABS 5500/840
100619	NANOTTICA 1.5ft ABS 8000/840

Non-dimmable driver - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
100620	100631	100642	x	x	x	
100621	100632	100643	x	x	x	
100622	100633	100644	x	x	x	
100623	100634	100645	100653	100661	100669	
100624	100635	100646	100654	100662	100670	
100625	100636	100647	100655	100663	100671	
100626	100637	100648	100656	100664	100672	
100627	100638	100649	100657	100665	100673	
100628	100639	100650	100658	100666	100674	
100629	100640	100651	100659	100667	100675	
100630	100641	100652	100660	100668	100676	

NANOTTICA ABSc

Code	Type
100677	NANOTTICA 1.2ft ABSc 1300/840
100678	NANOTTICA 1.2ft ABSc 1600/840
100679	NANOTTICA 1.2ft ABSc 2200/840
100680	NANOTTICA 1.4ft ABSc 2600/840
100681	NANOTTICA 1.4ft ABSc 3200/840
100682	NANOTTICA 1.4ft ABSc 4400/840
100683	NANOTTICA 1.4ft ABSc 6400/840
100684	NANOTTICA 1.5ft ABSc 3250/840
100685	NANOTTICA 1.5ft ABSc 4000/840
100686	NANOTTICA 1.5ft ABSc 5500/840
100687	NANOTTICA 1.5ft ABSc 8000/840

Non-dimmable driver - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
100688	100699	100710	x	x	x	
100689	100700	100711	x	x	x	
100690	100701	100712	x	x	x	
100691	100702	100713	100721	100729	100737	
100692	100703	100714	100722	100730	100738	
100693	100704	100715	100723	100731	100739	
100694	100705	100716	100724	100732	100740	
100695	100706	100717	100725	100733	100741	
100696	100707	100718	100726	100734	100742	
100697	100708	100719	100727	100735	100743	
100698	100709	100720	100728	100736	100744	

NANOTTICA ABS DALI

Code	Type
100745	NANOTTICA 1.2ft ABS 1300/840 DALI
100746	NANOTTICA 1.2ft ABS 1600/840 DALI
100747	NANOTTICA 1.2ft ABS 2200/840 DALI
100748	NANOTTICA 1.4ft ABS 2600/840 DALI
100749	NANOTTICA 1.4ft ABS 3200/840 DALI
100750	NANOTTICA 1.4ft ABS 4400/840 DALI
100751	NANOTTICA 1.4ft ABS 6400/840 DALI
100752	NANOTTICA 1.5ft ABS 3250/840 DALI
100753	NANOTTICA 1.5ft ABS 4000/840 DALI
100754	NANOTTICA 1.5ft ABS 5500/840 DALI
100755	NANOTTICA 1.5ft ABS 8000/840 DALI

Digital dimmable driver DALI - plastic clips

1F	3F	M1h	M3h	3F M1h	3F M3h
100756	x	100778	x	x	x
100757	x	100779	x	x	x
100758	x	100780	x	x	x
100759	100770	100781	100789	100797	100805
100760	100771	100782	100790	100798	100806
100761	100772	100783	100791	100799	100807
100762	100773	100784	100792	100800	100808
100763	100774	100785	100793	100801	100809
100764	100775	100786	100794	100802	100810
100765	100776	100787	100795	100803	100811
100766	100777	100788	100796	100804	100812

NANOTTICA ABSc DALI

Code	Type
100813	NANOTTICA 1.2ft ABSc 1300/840 DALI
100814	NANOTTICA 1.2ft ABSc 1600/840 DALI
100815	NANOTTICA 1.2ft ABSc 2200/840 DALI
100816	NANOTTICA 1.4ft ABSc 2600/840 DALI
100817	NANOTTICA 1.4ft ABSc 3200/840 DALI
100818	NANOTTICA 1.4ft ABSc 4400/840 DALI
100819	NANOTTICA 1.4ft ABSc 6400/840 DALI
100820	NANOTTICA 1.5ft ABSc 3250/840 DALI
100821	NANOTTICA 1.5ft ABSc 4000/840 DALI
100822	NANOTTICA 1.5ft ABSc 5500/840 DALI
100823	NANOTTICA 1.5ft ABSc 8000/840 DALI

Digital dimmable driver DALI - stainless clips (c)

1F	3F	M1h	M3h	3F M1h	3F M3h
100824	x	100846	x	x	x
100825	x	100847	x	x	x
100826	x	100848	x	x	x
100827	100838	100849	100857	100865	100873
100828	100839	100850	100858	100866	100874
100829	100840	100851	100859	100867	100875
100830	100841	100852	100860	100868	100876
100831	100842	100853	100861	100869	100877
100832	100843	100854	100862	100870	100878
100833	100844	100855	100863	100871	100879
100834	100845	100856	100864	100872	100880

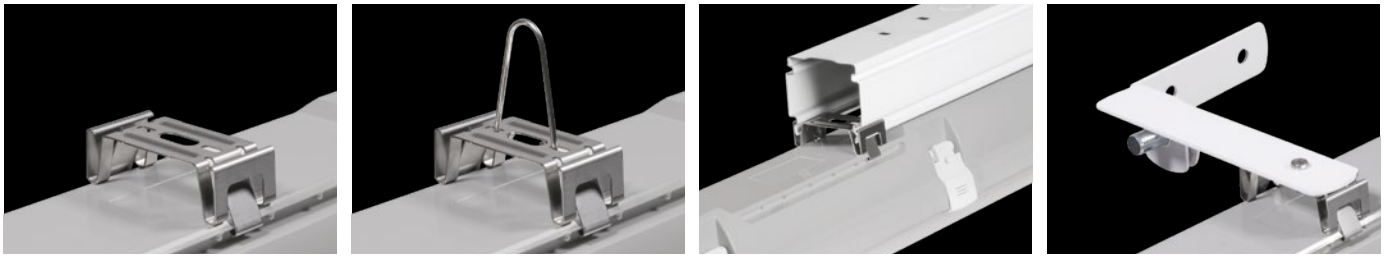
LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



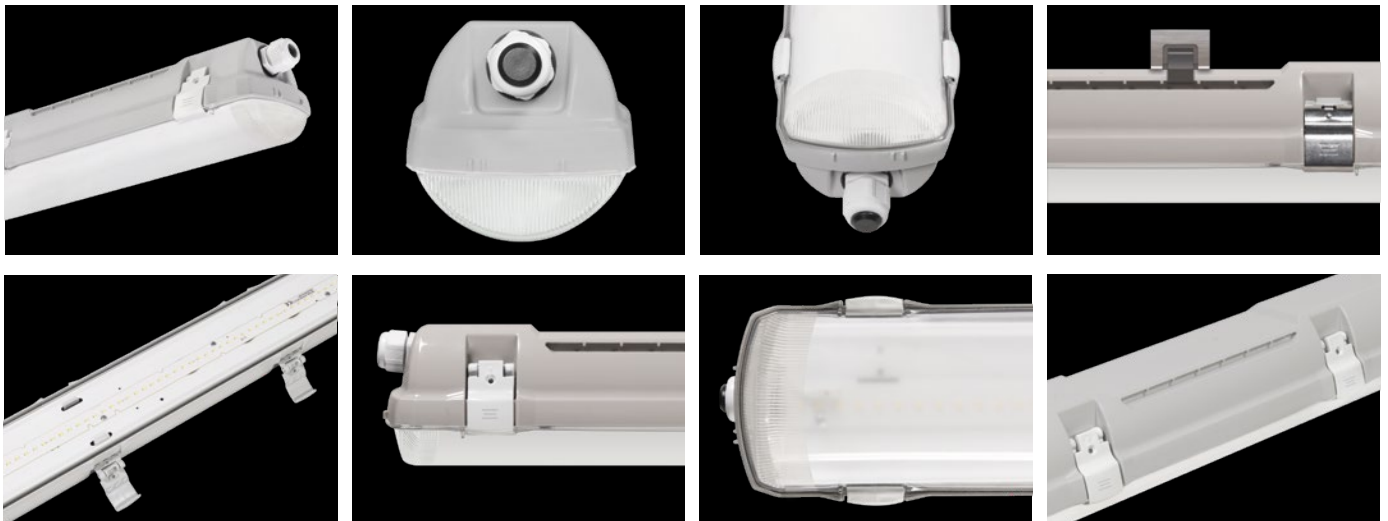
VARIABLE INSTALLATION PITCH

NANOTTICA ABS



LIGHT FITTING DETAILED VIEW

NANOTTICA ABS



NANOTTICA NB ABS

NEW

1 / 2022



... ceiling height from 7.5 to 12 m, chemically resistant.

USE

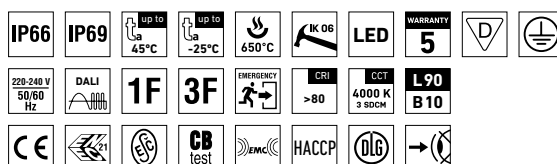
The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity**.

The luminaire's **narrow-beam angle** makes it suitable for premises with an optimum luminaire installation height of **7.5 to 12 m**. The luminaire is designed for indoor spaces as well as for agricultural buildings and other spaces with chemically aggressive environments due to ammonia fumes, lye fumes, alkali and hot water (hydrolysis). The fitting is primarily intended for **walls and large corridors in high industrial and agricultural buildings, production plants and warehouse aisles, farms, stables and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it suitable for the food industry.

The fitting's base is made of ABS and diffuser of AC, resulting in their **exceptional chemical resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Patented optics ensures absolute control over light beam distribution
- Narrow Beam angle (NB), optimum luminaire installation height **from 7.5 to 12 m**
- Low **UGR ranging from 16 to 25**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^{\circ}\text{C}$ to $t_a = 45^{\circ}\text{C}$
- Lifetime: 50 000 hours / L90B10
- High **chemical resistance**
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips – easy attachment** to a track lighting system with a width of 60 mm
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI → 80: 4000 K
- On request CRI → 80: 3000 K, 5000 K, 6500 K
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **ESĈ, ENEC, CB, DLG, HACCP**



NANOTTICA NB ABS, ABSc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 45 °C**
- Maximum ambient temperature: **ta = 0-25 °C** for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **129 lm/W**
- **UGR ranging from 16 to 25**
- Optimum luminaire installation height **from 7.5 to 12 m**
- **CRI → 80: 4000 K** - standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent AC with nanooptics Narrow Beam** (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %

UGR EVALUATED FOR

X = 4 H, Y = 8 H S = 0.25 H

Reflectivity 70/50/20

NANOTTICA 1.5ft NB ABS

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 45 °C - body dark grey ABS - diffusor with nanooptics NB (narrow beam angle), transparent acrylate								
NANOTTICA 1.4ft NB ABS 4400/840	45	4400	3820	30	127	1,7	1175	700 - 960
NANOTTICA 1.4ft NB ABS 6400/840	45	6400	5560	43	129	1,7	1175	700 - 960
NANOTTICA 1.5ft NB ABS 5500/840	45	5500	4780	37	129	2,0	1455	970 - 1230
NANOTTICA 1.5ft NB ABS 8000/840	45	8000	6960	54	128	2,0	1455	970 - 1230

NANOTTICA NB ABS

Code	Type
100881	NANOTTICA 1.4ft NB ABS 4400/840
100882	NANOTTICA 1.4ft NB ABS 6400/840
100883	NANOTTICA 1.5ft NB ABS 5500/840
100884	NANOTTICA 1.5ft NB ABS 8000/840

Non-dimmable driver - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
100885	100885	100889	100893	100897	100901	100905
100886	100886	100890	100894	100898	100902	100906
100887	100887	100891	100895	100899	100903	100907
100888	100888	100892	100896	100900	100904	100908

NANOTTICA NB ABSc

Code	Type
100909	NANOTTICA 1.4ft NB ABSc 4400/840
100910	NANOTTICA 1.4ft NB ABSc 6400/840
100911	NANOTTICA 1.5ft NB ABSc 5500/840
100912	NANOTTICA 1.5ft NB ABSc 8000/840

Non-dimmable driver - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
100913	100913	100917	100921	100925	100929	100933
100914	100914	100918	100922	100926	100930	100934
100915	100915	100919	100923	100927	100931	100935
100916	100916	100920	100924	100928	100932	100936

NANOTTICA NB ABS DALI

Code	Type
100937	NANOTTICA 1.4ft NB ABS 4400/840 DALI
100938	NANOTTICA 1.4ft NB ABS 6400/840 DALI
100939	NANOTTICA 1.5ft NB ABS 5500/840 DALI
100940	NANOTTICA 1.5ft NB ABS 8000/840 DALI

Digital dimmable driver DALI - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
100941	100941	100945	100949	100953	100957	100961
100942	100942	100946	100950	100954	100958	100962
100943	100943	100947	100951	100955	100959	100963
100944	100944	100948	100952	100956	100960	100964

NANOTTICA NB ABSc DALI

Code	Type
100965	NANOTTICA 1.4ft NB ABSc 4400/840 DALI
100966	NANOTTICA 1.4ft NB ABSc 6400/840 DALI
100967	NANOTTICA 1.5ft NB ABSc 5500/840 DALI
100968	NANOTTICA 1.5ft NB ABSc 8000/840 DALI

Digital dimmable driver DALI - stainless clips (c)

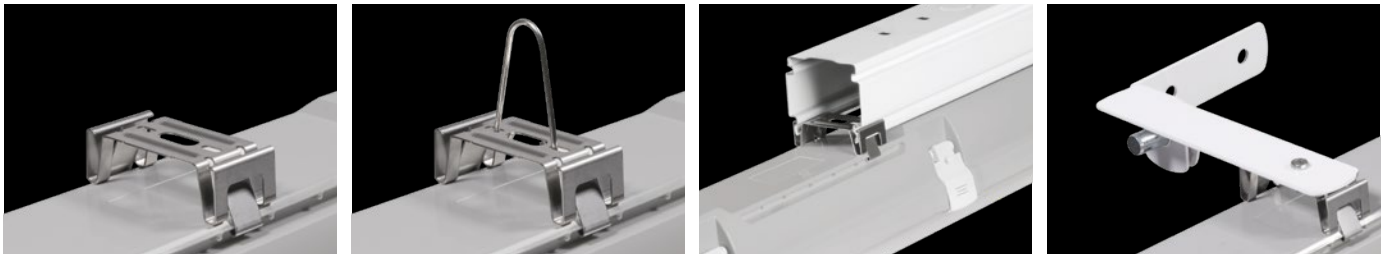
	1F	3F	M1h	M3h	3F M1h	3F M3h
100969	100969	100973	100977	100981	100985	100989
100970	100970	100974	100978	100982	100986	100990
100971	100971	100975	100979	100983	100987	100991
100972	100972	100976	100980	100984	100988	100992

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



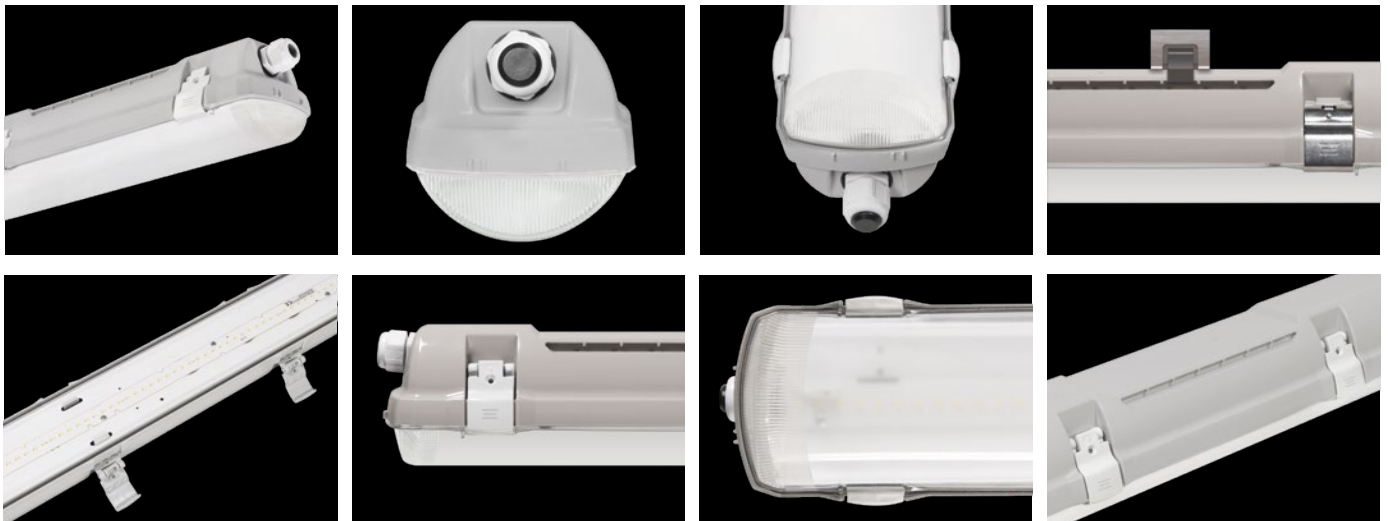
VARIABLE INSTALLATION PITCH

NANOTTICA NB ABS



LIGHT FITTING DETAILED VIEW

NANOTTICA NB ABS



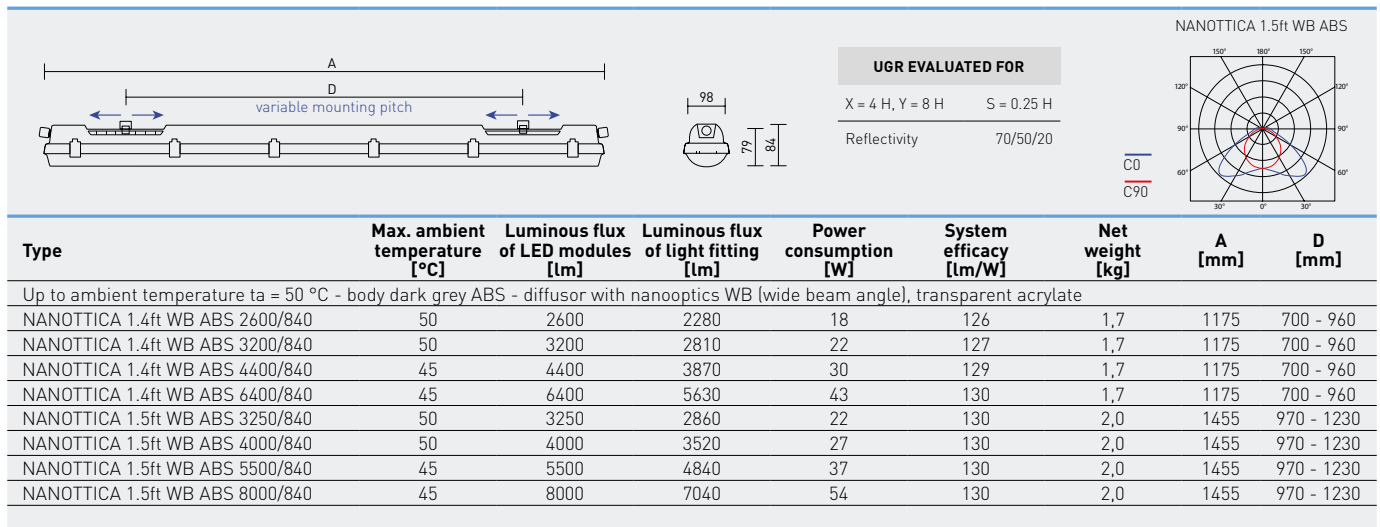


NANOTTICA WB ABS, ABSc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: **ta = 0-25 °C** for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **130 lm/W**
- **UGR ranging from 22 to 25**
- Optimum luminaire installation height **from 2.5 to 4 m**
- **CRI → 80: 4000 K** - standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent AC with nanooptics Wide Beam** (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %



NANOTTICA WB ABS

Code	Type
100993	NANOTTICA 1.4ft WB ABS 2600/840
100994	NANOTTICA 1.4ft WB ABS 3200/840
100995	NANOTTICA 1.4ft WB ABS 4400/840
100996	NANOTTICA 1.4ft WB ABS 6400/840
100997	NANOTTICA 1.5ft WB ABS 3250/840
100998	NANOTTICA 1.5ft WB ABS 4000/840
100999	NANOTTICA 1.5ft WB ABS 5500/840
101000	NANOTTICA 1.5ft WB ABS 8000/840

Non-dimmable driver - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
	101001	101009	101017	101025	101033	101041
	101002	101010	101018	101026	101034	101042
	101003	101011	101019	101027	101035	101043
	101004	101012	101020	101028	101036	101044
	101005	101013	101021	101029	101037	101045
	101006	101014	101022	101030	101038	101046
	101007	101015	101023	101031	101039	101047
	101008	101016	101024	101032	101040	101048

NANOTTICA WB ABSc

Code	Type
101049	NANOTTICA 1.4ft WB ABSc 2600/840
101050	NANOTTICA 1.4ft WB ABSc 3200/840
101051	NANOTTICA 1.4ft WB ABSc 4400/840
101052	NANOTTICA 1.4ft WB ABSc 6400/840
101053	NANOTTICA 1.5ft WB ABSc 3250/840
101054	NANOTTICA 1.5ft WB ABSc 4000/840
101055	NANOTTICA 1.5ft WB ABSc 5500/840
101056	NANOTTICA 1.5ft WB ABSc 8000/840

Non-dimmable driver - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
	101057	101065	101073	101081	101089	101097
	101058	101066	101074	101082	101090	101098
	101059	101067	101075	101083	101091	101099
	101060	101068	101076	101084	101092	101100
	101061	101069	101077	101085	101093	101101
	101062	101070	101078	101086	101094	101102
	101063	101071	101079	101087	101095	101103
	101064	101072	101080	101088	101096	101104

NANOTTICA WB ABS DALI

Code	Type
101105	NANOTTICA 1.4ft WB ABS DALI 2600/840
101106	NANOTTICA 1.4ft WB ABS DALI 3200/840
101107	NANOTTICA 1.4ft WB ABS DALI 4400/840
101108	NANOTTICA 1.4ft WB ABS DALI 6400/840
101109	NANOTTICA 1.5ft WB ABS DALI 3250/840
101110	NANOTTICA 1.5ft WB ABS DALI 4000/840
101111	NANOTTICA 1.5ft WB ABS DALI 5500/840
101112	NANOTTICA 1.5ft WB ABS DALI 8000/840

Digital dimmable driver DALI - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
	101113	101121	101129	101137	101145	101153
	101114	101122	101130	101138	101146	101154
	101115	101123	101131	101139	101147	101155
	101116	101124	101132	101140	101148	101156
	101117	101125	101133	101141	101149	101157
	101118	101126	101134	101142	101150	101158
	101119	101127	101135	101143	101151	101159
	101120	101128	101136	101144	101152	101160

NANOTTICA WB ABSc DALI

Digital dimmable driver DALI - stainless clips (c)

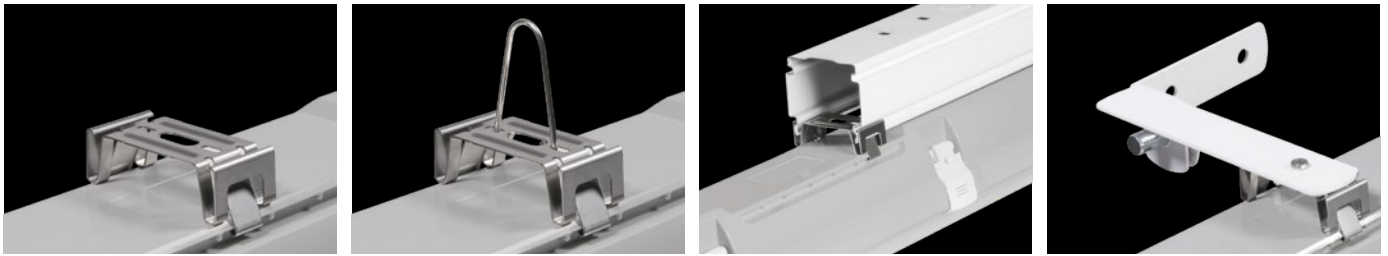
Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
101161	NANOTTICA 1.4ft WB ABSc 2600/840 DALI	101169	101177	101185	101193	101201	101209
101162	NANOTTICA 1.4ft WB ABSc 3200/840 DALI	101170	101178	101186	101194	101202	101210
101163	NANOTTICA 1.4ft WB ABSc 4400/840 DALI	101171	101179	101187	101195	101203	101211
101164	NANOTTICA 1.4ft WB ABSc 6400/840 DALI	101172	101180	101188	101196	101204	101212
101165	NANOTTICA 1.5ft WB ABSc 3250/840 DALI	101173	101181	101189	101197	101205	101213
101166	NANOTTICA 1.5ft WB ABSc 4000/840 DALI	101174	101182	101190	101198	101206	101214
101167	NANOTTICA 1.5ft WB ABSc 5500/840 DALI	101175	101183	101191	101199	101207	101215
101168	NANOTTICA 1.5ft WB ABSc 8000/840 DALI	101176	101184	101192	101200	101208	101216

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F M1h** 3-phase 5 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F M1h** 3-phase 7 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)

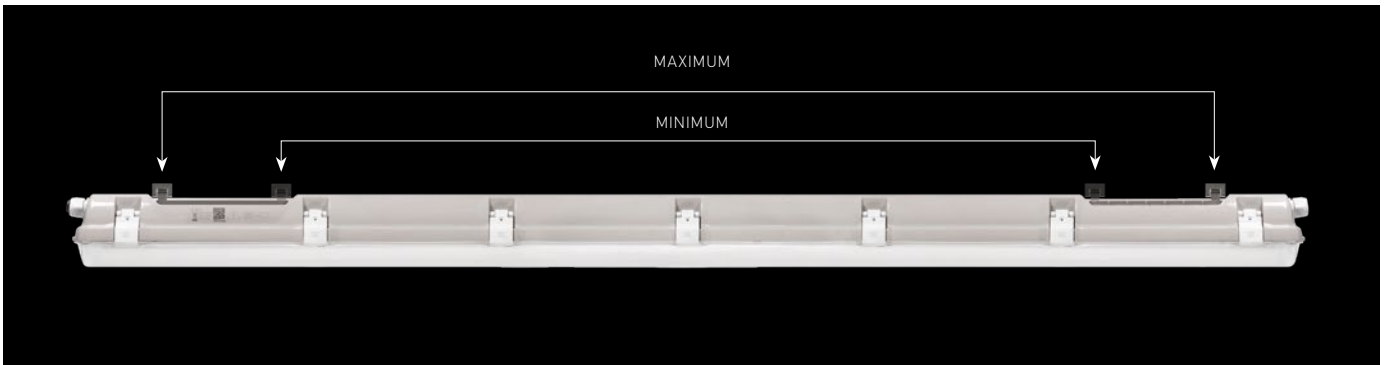
LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



VARIABLE INSTALLATION PITCH

NANOTTICA WB ABS



LIGHT FITTING DETAILED VIEW

NANOTTICA WB ABS



NANOTTICA VP

NEW



... for outdoor sheltered spaces, ceiling height from 3.5 to 8 m, impact resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity**.

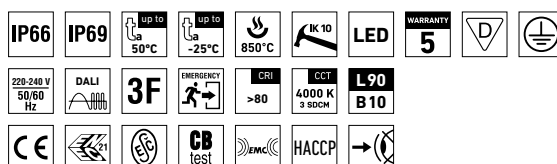
The fitting's **standard beam angle** makes it a great choice for premises with an optimum fitting installation height of **3.5 to 8 m**.

It is intended to be installed in **sheltered outdoor spaces**. It features a ventilation membrane that equalizes pressures while blocking water and contaminants that build up inside of the fitting as a result of temperature fluctuations. The fixture is highly recommended for **industrial premises, warehouses, agricultural buildings, sports facilities as well as transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 18.9 to 23.4**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from **ta = -25°C to ta = 50°C**
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips - easy attachment** to a track lighting system with a width of 60 mm
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI → 80: 4000 K, 6500 K
- On request CRI → 80: 3000 K, 5000 K, 6500 K
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **ESĊ, ENEC, CB, HACCP**



NANOTTICA VP PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **139 lm/W**
- **UGR ranging from 18.9 to 23.4**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI → 80: 4000 K** – standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- **A ventilation membrane** in the base equalizes pressures while blocking water and contaminants
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %

UGR EVALUATED FOR

X = 4 H, Y = 8 H S = 0.25 H

Reflectivity 70/50/20

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body: grey polycarbonate - diffusor with nanooptics (standard beam angle), transparent polycarbonate									
NANOTTICA 1.2ft VP PC 1300/840	50	1300	1220	9	135	18.9 / 19.9	0,9	615	110 - 370
NANOTTICA 1.2ft VP PC 1600/840	50	1600	1500	11	136	19.6 / 20.6	0,9	615	110 - 370
NANOTTICA 1.2ft VP PC 2200/840	45	2200	2060	15	137	20.7 / 21.7	0,9	615	110 - 370
NANOTTICA 1.4ft VP PC 2600/840	50	2600	2440	18	135	19.1 / 20.2	1,7	1175	700 - 960
NANOTTICA 1.4ft VP PC 3200/840	50	3200	3000	22	136	19.8 / 20.9	1,7	1175	700 - 960
NANOTTICA 1.4ft VP PC 4400/840	45	4400	4130	30	137	20.9 / 22.0	1,7	1175	700 - 960
NANOTTICA 1.4ft VP PC 6400/840	45	6400	6010	43	139	22.2 / 23.3	1,7	1175	700 - 960
NANOTTICA 1.5ft VP PC 3250/840	50	3250	3050	22	138	19.1 / 20.3	2,0	1455	970 - 1230
NANOTTICA 1.5ft VP PC 4000/840	50	4000	3760	27	139	19.9 / 21.0	2,0	1455	970 - 1230
NANOTTICA 1.5ft VP PC 5500/840	45	5500	5170	37	139	21.0 / 22.1	2,0	1455	970 - 1230
NANOTTICA 1.5ft VP PC 8000/840	45	8000	7520	54	139	22.3 / 23.4	2,0	1455	970 - 1230

NANOTTICA VP PC

Code	Type
101217	NANOTTICA 1.2ft VP PC 1300/840
101218	NANOTTICA 1.2ft VP PC 1600/840
101219	NANOTTICA 1.2ft VP PC 2200/840
101220	NANOTTICA 1.4ft VP PC 2600/840
101221	NANOTTICA 1.4ft VP PC 3200/840
101222	NANOTTICA 1.4ft VP PC 4400/840
101223	NANOTTICA 1.4ft VP PC 6400/840
101224	NANOTTICA 1.5ft VP PC 3250/840
101225	NANOTTICA 1.5ft VP PC 4000/840
101226	NANOTTICA 1.5ft VP PC 5500/840
101227	NANOTTICA 1.5ft VP PC 8000/840

Non-dimmable driver - plastic clips

	3F	M3h	3F M3h
	101228	x	x
	101229	x	x
	101230	x	x
	101231	101239	101247
	101232	101240	101248
	101233	101241	101249
	101234	101242	101250
	101235	101243	101251
	101236	101244	101252
	101237	101245	101253
	101238	101246	101254

NANOTTICA VP PCc

Code	Type
101255	NANOTTICA 1.2ft VP PCc 1300/840
101256	NANOTTICA 1.2ft VP PCc 1600/840
101257	NANOTTICA 1.2ft VP PCc 2200/840
101258	NANOTTICA 1.4ft VP PCc 2600/840
101259	NANOTTICA 1.4ft VP PCc 3200/840
101260	NANOTTICA 1.4ft VP PCc 4400/840
101261	NANOTTICA 1.4ft VP PCc 6400/840
101262	NANOTTICA 1.5ft VP PCc 3250/840
101263	NANOTTICA 1.5ft VP PCc 4000/840
101264	NANOTTICA 1.5ft VP PCc 5500/840
101265	NANOTTICA 1.5ft VP PCc 8000/840

Non-dimmable driver - stainless clips (c)

	3F	M3h	3F M3h
	101266	x	x
	101267	x	x
	101268	x	x
	101269	101277	101285
	101270	101278	101286
	101271	101279	101287
	101272	101280	101288
	101273	101281	101289
	101274	101282	101290
	101275	101283	101291
	101276	101284	101292

NANOTTICA VP PC DALI

Code	Type
101293	NANOTTICA 1.2ft VP PC 1300/840 DALI
101294	NANOTTICA 1.2ft VP PC 1600/840 DALI
101295	NANOTTICA 1.2ft VP PC 2200/840 DALI
101296	NANOTTICA 1.4ft VP PC 2600/840 DALI
101297	NANOTTICA 1.4ft VP PC 3200/840 DALI
101298	NANOTTICA 1.4ft VP PC 4400/840 DALI
101299	NANOTTICA 1.4ft VP PC 6400/840 DALI
101300	NANOTTICA 1.5ft VP PC 3250/840 DALI
101301	NANOTTICA 1.5ft VP PC 4000/840 DALI
101302	NANOTTICA 1.5ft VP PC 5500/840 DALI
101303	NANOTTICA 1.5ft VP PC 8000/840 DALI

Digital dimmable driver DALI - plastic clips

3F	M3h	3F M3h
x	x	x
x	x	x
x	x	x
101307	101315	101323
101308	101316	101324
101309	101317	101325
101310	101318	101326
101311	101319	101327
101312	101320	101328
101313	101321	101329
101314	101322	101330

NANOTTICA VP PCc DALI

Code	Type
101331	NANOTTICA 1.2ft VP PCc 1300/840 DALI
101332	NANOTTICA 1.2ft VP PCc 1600/840 DALI
101333	NANOTTICA 1.2ft VP PCc 2200/840 DALI
101334	NANOTTICA 1.4ft VP PCc 2600/840 DALI
101335	NANOTTICA 1.4ft VP PCc 3200/840 DALI
101336	NANOTTICA 1.4ft VP PCc 4400/840 DALI
101337	NANOTTICA 1.4ft VP PCc 6400/840 DALI
101338	NANOTTICA 1.5ft VP PCc 3250/840 DALI
101339	NANOTTICA 1.5ft VP PCc 4000/840 DALI
101340	NANOTTICA 1.5ft VP PCc 5500/840 DALI
101341	NANOTTICA 1.5ft VP PCc 8000/840 DALI

Digital dimmable driver DALI - stainless clips (c)

3F	M3h	3F M3h
x	x	x
x	x	x
x	x	x
101345	101353	101361
101346	101354	101362
101347	101355	101363
101348	101356	101364
101349	101357	101365
101350	101358	101366
101351	101359	101367
101352	101360	101368

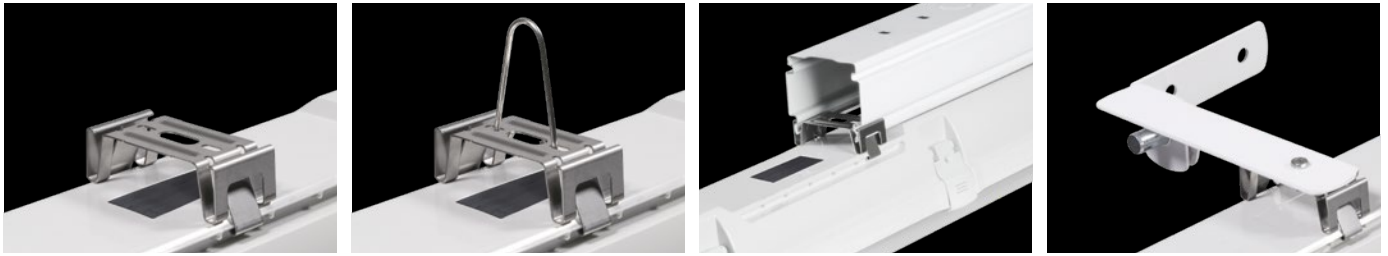
LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

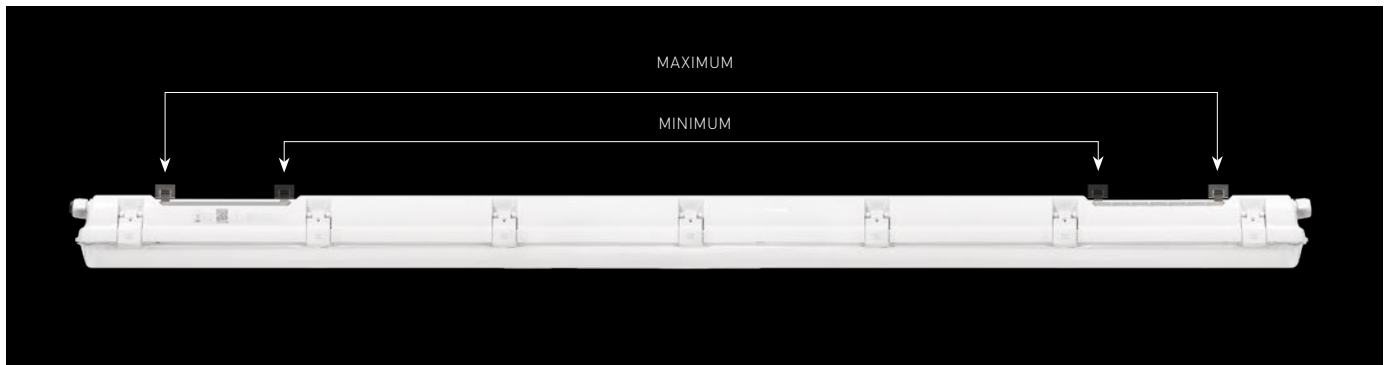
- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall

**VARIABLE INSTALLATION PITCH**

NANOTTICA VP PC

**LIGHT FITTING DETAILED VIEW**

NANOTTICA VP PC



NANOTTICA VP ABS

NEW



... for outdoor sheltered spaces, ceiling height from 3.5 to 8 m, chemically resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly translates into higher productivity.

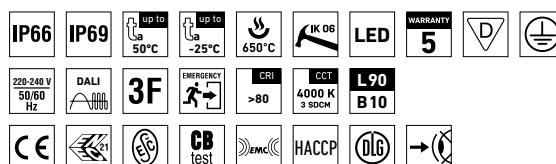
The fitting's **standard beam angle** makes it a great choice for premises with an optimum fitting installation height of **3.5 to 8 m**.

It is intended to be installed in **sheltered outdoor spaces**. It features a ventilation membrane that equalizes pressures while blocking water and contaminants that build up inside of the fitting as a result of temperature fluctuations. The fitting is highly recommended for agricultural buildings and other spaces with chemically aggressive environments due to ammonia fumes, lye fumes, alkali, hot water (hydrolysis) and oils. The product is primarily intended for **agricultural buildings and industrial halls such as farms, stables, production plants and warehouses, and spaces with permanently high humidity (such as car washes and tunnels)**. Additionally, it is a **perfect choice for the tropical zone and coastal areas**. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

The fitting's base is made of ABS and diffuser of AC, resulting in their **exceptional chemical resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 18.6 to 23.1**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to $t_a = 50^\circ\text{C}$
- Lifetime: 50 000 hours / L90B10
- High **chemical resistance**
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips – easy attachment** to a track lighting system with a width of 60 mm
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI → 80: 4000 K
- On request CRI → 80: 3000 K, 5000 K, 6500 K
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **ESĈ, ENEC, CB, DLG, HACCP**



NANOTTICA VP ABS, ABSc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: **ta = 0-25 °C** for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **126 lm/W**
- **UGR ranging from 18.6 to 23.1**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI → 80: 4000 K** - standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: transparent AC with nanooptics (high chemical resistance, UV stability)
- Body: dark **grey ABS** (high chemical resistance, UV stability)
- **A ventilation membrane** in the base equalizes pressures while blocking water and contaminants
- Reflector: steel sheet, white colour [RAL 9003]
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of $\pm 7.5 \%$

UGR EVALUATED FOR

X = 4 H, Y = 8 H S = 0.25 H

Reflectivity 70/50/20

NANOTTICA 1.5ft VP ABS

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/transverse	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature ta = 50 °C - body dark grey ABS - diffuser with nanooptics (standard beam angle), transparent acrylate									
NANOTTICA 1.2ft VP ABS 1300/840	50	1300	1100	9	122	18.6 / 19.6	0,9	615	110 - 370
NANOTTICA 1.2ft VP ABS 1600/840	50	1600	1360	11	123	19.4 / 20.3	0,9	615	110 - 370
NANOTTICA 1.2ft VP ABS 2200/840	45	2200	1870	15	124	20.5 / 21.4	0,9	615	110 - 370
NANOTTICA 1.4ft VP ABS 2600/840	50	2600	2210	18	122	18.8 / 19.9	1,7	1175	700 - 960
NANOTTICA 1.4ft VP ABS 3200/840	50	3200	2720	22	123	19.6 / 20.6	1,7	1175	700 - 960
NANOTTICA 1.4ft VP ABS 4400/840	45	4400	3740	30	124	20.7 / 21.7	1,7	1175	700 - 960
NANOTTICA 1.4ft VP ABS 6400/840	45	6400	5440	43	126	22.0 / 23.0	1,7	1175	700 - 960
NANOTTICA 1.5ft VP ABS 3250/840	50	3250	2760	22	125	18.9 / 20.0	2,0	1455	970 - 1230
NANOTTICA 1.5ft VP ABS 4000/840	50	4000	3400	27	125	19.6 / 20.7	2,0	1455	970 - 1230
NANOTTICA 1.5ft VP ABS 5500/840	45	5500	4670	37	126	20.7 / 21.8	2,0	1455	970 - 1230
NANOTTICA 1.5ft VP ABS 8000/840	45	8000	6800	54	125	22.0 / 23.1	2,0	1455	970 - 1230

NANOTTICA VP ABS

Code	Type
101369	NANOTTICA 1.2ft VP ABS 1300/840
101370	NANOTTICA 1.2ft VP ABS 1600/840
101371	NANOTTICA 1.2ft VP ABS 2200/840
101372	NANOTTICA 1.4ft VP ABS 2600/840
101373	NANOTTICA 1.4ft VP ABS 3200/840
101374	NANOTTICA 1.4ft VP ABS 4400/840
101375	NANOTTICA 1.4ft VP ABS 6400/840
101376	NANOTTICA 1.5ft VP ABS 3250/840
101377	NANOTTICA 1.5ft VP ABS 4000/840
101378	NANOTTICA 1.5ft VP ABS 5500/840
101379	NANOTTICA 1.5ft VP ABS 8000/840

Non-dimmable driver - plastic clips

	3F	M3h	3F M3h
	101380	x	x
	101381	x	x
	101382	x	x
	101383	101391	101399
	101384	101392	101400
	101385	101393	101401
	101386	101394	101402
	101387	101395	101403
	101388	101396	101404
	101389	101397	101405
	101390	101398	101406

NANOTTICA VP ABSc

Code	Type
101407	NANOTTICA 1.2ft VP ABSc 1300/840
101408	NANOTTICA 1.2ft VP ABSc 1600/840
101409	NANOTTICA 1.2ft VP ABSc 2200/840
101410	NANOTTICA 1.4ft VP ABSc 2600/840
101411	NANOTTICA 1.4ft VP ABSc 3200/840
101412	NANOTTICA 1.4ft VP ABSc 4400/840
101413	NANOTTICA 1.4ft VP ABSc 6400/840
101414	NANOTTICA 1.5ft VP ABSc 3250/840
101415	NANOTTICA 1.5ft VP ABSc 4000/840
101416	NANOTTICA 1.5ft VP ABSc 5500/840
101417	NANOTTICA 1.5ft VP ABSc 8000/840

Non-dimmable driver - stainless clips [c]

	3F	M3h	3F M3h
	101418	x	x
	101419	x	x
	101420	x	x
	101421	101429	101437
	101422	101430	101438
	101423	101431	101439
	101424	101432	101440
	101425	101433	101441
	101426	101434	101442
	101427	101435	101443
	101428	101436	101444

NANOTTICA VP ABS DALI

Code	Type
101445	NANOTTICA 1.2ft VP ABS 1300/840 DALI
101446	NANOTTICA 1.2ft VP ABS 1600/840 DALI
101447	NANOTTICA 1.2ft VP ABS 2200/840 DALI
101448	NANOTTICA 1.4ft VP ABS 2600/840 DALI
101449	NANOTTICA 1.4ft VP ABS 3200/840 DALI
101450	NANOTTICA 1.4ft VP ABS 4400/840 DALI
101451	NANOTTICA 1.4ft VP ABS 6400/840 DALI
101452	NANOTTICA 1.5ft VP ABS 3250/840 DALI
101453	NANOTTICA 1.5ft VP ABS 4000/840 DALI
101454	NANOTTICA 1.5ft VP ABS 5500/840 DALI
101455	NANOTTICA 1.5ft VP ABS 8000/840 DALI

Digital dimmable driver DALI - plastic clips

	3F	M3h	3F M3h
	x	x	x
	x	x	x
	x	x	x
	101459	101467	101475
	101460	101468	101476
	101461	101469	101477
	101462	101470	101478
	101463	101471	101479
	101464	101472	101480
	101465	101473	101481
	101466	101474	101482

NANOTTICA VP ABSc DALI

Code	Type
101483	NANOTTICA 1.2ft VP ABSc 1300/840 DALI
101484	NANOTTICA 1.2ft VP ABSc 1600/840 DALI
101485	NANOTTICA 1.2ft VP ABSc 2200/840 DALI
101486	NANOTTICA 1.4ft VP ABSc 2600/840 DALI
101487	NANOTTICA 1.4ft VP ABSc 3200/840 DALI
101488	NANOTTICA 1.4ft VP ABSc 4400/840 DALI
101489	NANOTTICA 1.4ft VP ABSc 6400/840 DALI
101490	NANOTTICA 1.5ft VP ABSc 3250/840 DALI
101491	NANOTTICA 1.5ft VP ABSc 4000/840 DALI
101492	NANOTTICA 1.5ft VP ABSc 5500/840 DALI
101493	NANOTTICA 1.5ft VP ABSc 8000/840 DALI

Digital dimmable driver DALI - stainless clips (c)

	3F	M3h	3F M3h
	x	x	x
	x	x	x
	x	x	x
	101497	101505	101513
	101498	101506	101514
	101499	101507	101515
	101500	101508	101516
	101501	101509	101517
	101502	101510	101518
	101503	101511	101519
	101504	101512	101520

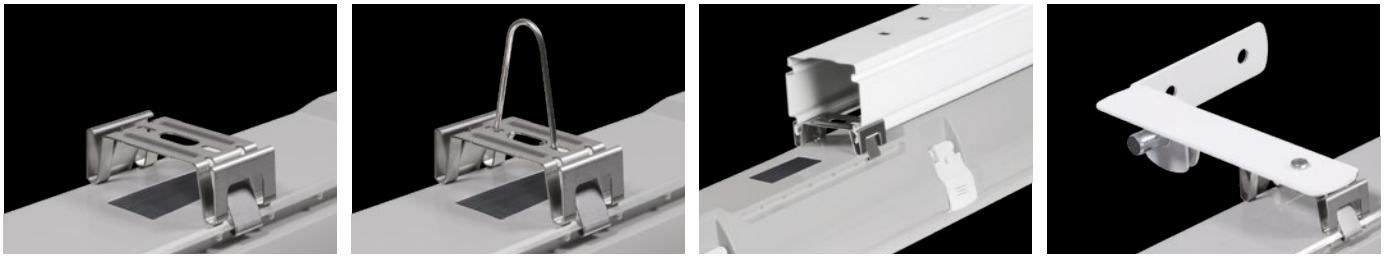
LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall

**VARIABLE INSTALLATION PITCH**

NANOTTICA VP ABS

**LIGHT FITTING DETAILED VIEW**

NANOTTICA VP ABS



NANOTTICA MAX

NEW



... for extreme temperatures $-40\text{ }^{\circ}\text{C}$ to $+65\text{ }^{\circ}\text{C}$, ceiling height from 3.5 to 8 m.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity**.

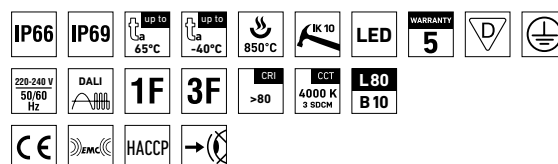
The fitting's **standard beam angle** makes it a great choice for premises with an optimum fitting installation height of **3.5 to 8 m**.

Designed to be installed indoors, in sheltered outdoor spaces as well as in spaces **with extreme ambient temperatures as low as $-40\text{ }^{\circ}\text{C}$ or as high as $+65\text{ }^{\circ}\text{C}$** . A ventilation membrane equalizes pressures while blocking water and contaminants that build up inside of the fitting as a result of temperature fluctuations. Highly recommended for **heating plants, metallurgical plants, glassworks, freezing plants, cooling plants** and other spaces with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 19.8 to 22.1**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from **$t_a = -40\text{ }^{\circ}\text{C}$ to $t_a = 65\text{ }^{\circ}\text{C}$**
- Lifetime: 50 000 hours / L80B10
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips – easy attachment** to a track lighting system with a width of 60 mm
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI \rightarrow 80: 4000 K
- On request CRI \rightarrow 80: 3000 K, 5000 K, 6500 K
- CRI \rightarrow 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **HACCP**

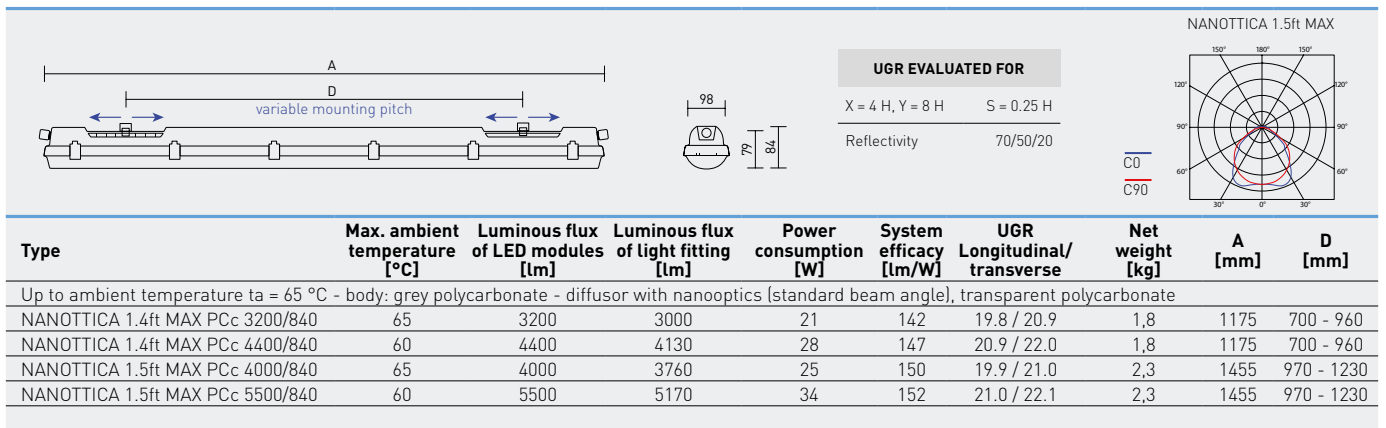


NANOTTICA MAX PCc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = -40 °C**
- Maximum ambient temperature: **ta = 65 °C**
- Lifetime: 50 000 hours / L80B10
- Maximum light fitting efficiency: **152 lm/W**
- **UGR ranging from 19.8 to 22.1**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI → 80: 4000 K** – standard
- CRI → 80: 3000 K, 5000 K, 6500 K – on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K – on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- **A ventilation membrane** in the base equalizes pressures while blocking water and contaminants
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %



NANOTTICA MAX PCc

Code	Type
101521	NANOTTICA 1.4ft MAX PCc 3200/840
101522	NANOTTICA 1.4ft MAX PCc 4400/840
101523	NANOTTICA 1.5ft MAX PCc 4000/840
101524	NANOTTICA 1.5ft MAX PCc 5500/840

Non-dimmable driver - stainless clips (c)

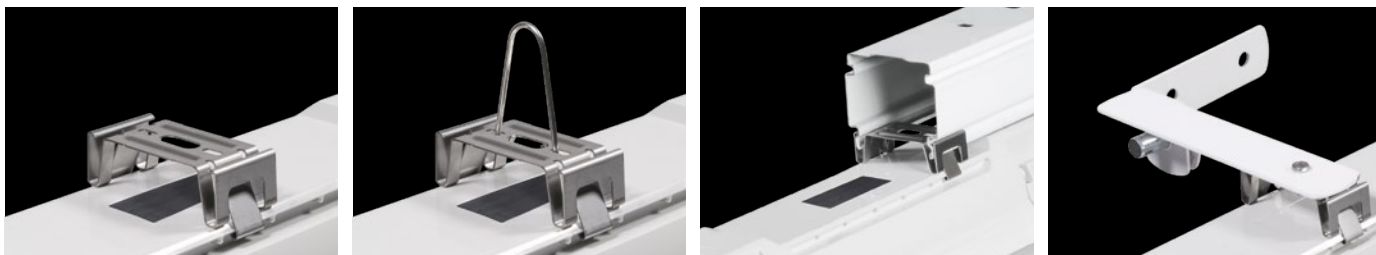
	1F	3F	M1h	M3h	DALI	DALI 3F
101525	101529		x	x	101533	101537
101526	101530		x	x	101534	101538
101527	101531		x	x	101535	101539
101528	101532		x	x	101536	101540

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



VARIABLE INSTALLATION PITCH

NANOTTICA MAX



LIGHT FITTING DETAILED VIEW

NANOTTICA MAX



NANOTTICA CLASS II

NEW



... class II insulation, ceiling height from 3.5 to 8 m, impact resistant.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity**.

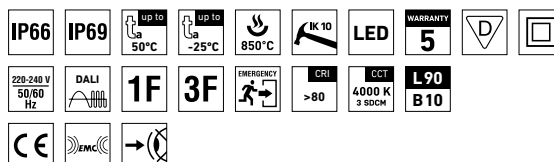
The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance**. These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

Its **standard beam angle** makes it a perfect choice for premises with an optimum luminaire installation height of **3.5 to 8 m**. The fixture is intended for indoor spaces, **industrial and agricultural buildings, warehouses, rail vehicle maintenance facilities, platforms, substations, depots, car parks, garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Patented optics ensures absolute control over light beam distribution
- Low **UGR ranging from 18.9 to 23.4**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^{\circ}\text{C}$ to $t_a = 50^{\circ}\text{C}$
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips – easy attachment** to a track lighting system with a width of 60 mm
- Optional throughwiring (up to 6 wires inside the light fitting)
- Standard model CRI → 80: 4000 K
- On request CRI → 80: 3000 K, 5000 K, 6500 K
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version

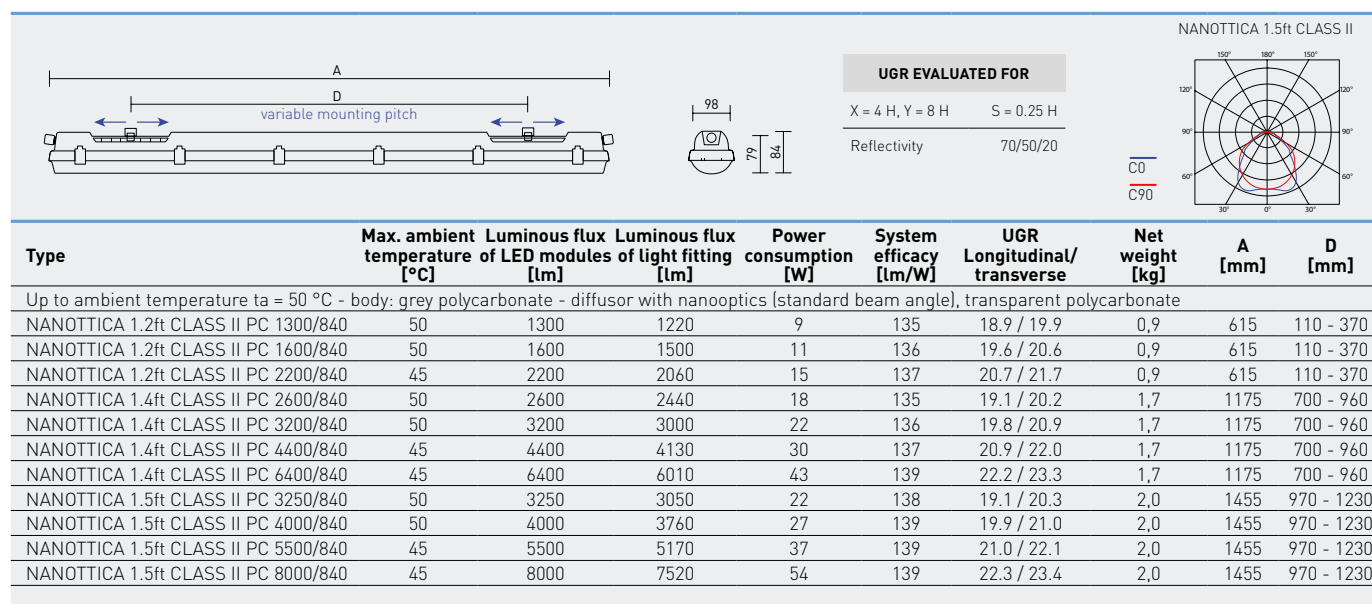


NANOTTICA CLASS II PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **139 lm/W**
- **UGR ranging from 18.9 to 23.4**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI → 80: 4000 K** - standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Connectors with 2, 4 or 6 poles, wire section 1.5 or 2.5 mm²
- The package includes the opposite of the counterpart
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %



NANOTTICA CLASS II PC

Code	Type
101813	NANOTTICA 1.2ft CLASS II PC 1300/840
101814	NANOTTICA 1.2ft CLASS II PC 1600/840
101815	NANOTTICA 1.2ft CLASS II PC 2200/840
101816	NANOTTICA 1.4ft CLASS II PC 2600/840
101817	NANOTTICA 1.4ft CLASS II PC 3200/840
101818	NANOTTICA 1.4ft CLASS II PC 4400/840
101819	NANOTTICA 1.4ft CLASS II PC 6400/840
101820	NANOTTICA 1.5ft CLASS II PC 3250/840
101821	NANOTTICA 1.5ft CLASS II PC 4000/840
101822	NANOTTICA 1.5ft CLASS II PC 5500/840
101823	NANOTTICA 1.5ft CLASS II PC 8000/840

Non-dimmable driver - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
101824		101835	x	x	x	x
101825		101836	x	x	x	x
101826		101837	x	x	x	x
101827		101838	101846	101854	101862	101870
101828		101839	101847	101855	101863	101871
101829		101840	101848	101856	101864	101872
101830		101841	101849	101857	101865	101873
101831		101842	101850	101858	101866	101874
101832		101843	101851	101859	101867	101875
101833		101844	101852	101860	101868	101876
101834		101845	101853	101861	101869	101877

NANOTTICA CLASS II PCc

Code	Type
101878	NANOTTICA 1.2ft CLASS II PCc 1300/840
101879	NANOTTICA 1.2ft CLASS II PCc 1600/840
101880	NANOTTICA 1.2ft CLASS II PCc 2200/840
101881	NANOTTICA 1.4ft CLASS II PCc 2600/840
101882	NANOTTICA 1.4ft CLASS II PCc 3200/840
101883	NANOTTICA 1.4ft CLASS II PCc 4400/840
101884	NANOTTICA 1.4ft CLASS II PCc 6400/840
101885	NANOTTICA 1.5ft CLASS II PCc 3250/840
101886	NANOTTICA 1.5ft CLASS II PCc 4000/840
101887	NANOTTICA 1.5ft CLASS II PCc 5500/840
101888	NANOTTICA 1.5ft CLASS II PCc 8000/840

Non-dimmable driver - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
101889		101900	x	x	x	x
101890		101901	x	x	x	x
101891		101902	x	x	x	x
101892		101903	101911	101919	101927	101935
101893		101904	101912	101920	101928	101936
101894		101905	101913	101921	101929	101937
101895		101906	101914	101922	101930	101938
101896		101907	101915	101923	101931	101939
101897		101908	101916	101924	101932	101940
101898		101909	101917	101925	101933	101941
101899		101910	101918	101926	101934	101942

NANOTTICA CLASS II PC DALI

Code	Type
101943	NANOTTICA 1.2ft CLASS II PC 1300/840 DALI
101944	NANOTTICA 1.2ft CLASS II PC 1600/840 DALI
101945	NANOTTICA 1.2ft CLASS II PC 2200/840 DALI
101946	NANOTTICA 1.4ft CLASS II PC 2600/840 DALI
101947	NANOTTICA 1.4ft CLASS II PC 3200/840 DALI
101948	NANOTTICA 1.4ft CLASS II PC 4400/840 DALI
101949	NANOTTICA 1.4ft CLASS II PC 6400/840 DALI
101950	NANOTTICA 1.5ft CLASS II PC 3250/840 DALI
101951	NANOTTICA 1.5ft CLASS II PC 4000/840 DALI
101952	NANOTTICA 1.5ft CLASS II PC 5500/840 DALI
101953	NANOTTICA 1.5ft CLASS II PC 8000/840 DALI

Digital dimmable driver DALI - plastic clips

1F	3F	M1h	M3h	3F M1h	3F M3h
101954	x	x	x	x	x
101955	x	x	x	x	x
101956	x	x	x	x	x
101957	101968	101976	101984	101992	102000
101958	101969	101977	101985	101993	102001
101959	101970	101978	101986	101994	102002
101960	101971	101979	101987	101995	102003
101961	101972	101980	101988	101996	102004
101962	101973	101981	101989	101997	102005
101963	101974	101982	101990	101998	102006
101964	101975	101983	101991	101999	102007

NANOTTICA CLASS II PCc DALI

Code	Type
102008	NANOTTICA 1.2ft CLASS II PCc 1300/840 DALI
102009	NANOTTICA 1.2ft CLASS II PCc 1600/840 DALI
102010	NANOTTICA 1.2ft CLASS II PCc 2200/840 DALI
102011	NANOTTICA 1.4ft CLASS II PCc 2600/840 DALI
102012	NANOTTICA 1.4ft CLASS II PCc 3200/840 DALI
102013	NANOTTICA 1.4ft CLASS II PCc 4400/840 DALI
102014	NANOTTICA 1.4ft CLASS II PCc 6400/840 DALI
102015	NANOTTICA 1.5ft CLASS II PCc 3250/840 DALI
102016	NANOTTICA 1.5ft CLASS II PCc 4000/840 DALI
102017	NANOTTICA 1.5ft CLASS II PCc 5500/840 DALI
102018	NANOTTICA 1.5ft CLASS II PCc 8000/840 DALI

Digital dimmable driver DALI - stainless clips (c)

1F	3F	M1h	M3h	3F M1h	3F M3h
102019	x	x	x	x	x
102020	x	x	x	x	x
102021	x	x	x	x	x
102022	102033	102041	102049	102057	102065
102023	102034	102042	102050	102058	102066
102024	102035	102043	102051	102059	102067
102025	102036	102044	102052	102060	102068
102026	102037	102045	102053	102061	102069
102027	102038	102046	102054	102062	102070
102028	102039	102047	102055	102063	102071
102029	102040	102048	102056	102064	102072

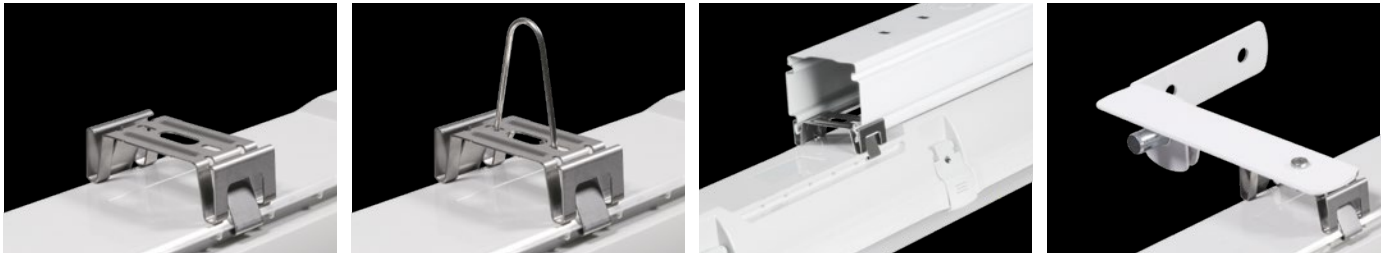
LEGEND

- CLASS II 1F** 1-phase 2 core through-wiring in the luminaire
- CLASS II 3F** 3-phase 4 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- CLASS II 3F Mxh** 3-phase 4 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
- CLASS II DALI 1F** 1-phase 4 core through-wiring in the luminaire
- CLASS II DALI 3F** 3-phase 6 core through-wiring in the luminaire
- CLASS II DALI 3F Mxh** 3-phase 6 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



VARIABLE INSTALLATION PITCH

NANOTTICA CLASS II



LIGHT FITTING DETAILED VIEW

NANOTTICA CLASS II



NANOTTICA SNS

NEW



... with movement detector, ceiling height from 3.5 to 6 m.

USE

The fixture boasts a **low unified glare rating with UGR values** its patented nanooptics. This ensures eye comfort, **high visual performance and workplace safety**, which indirectly **translates into higher productivity**.

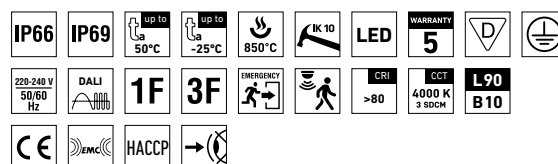
Highly recommended also for **illumination of spaces where workers' visual precision is of paramount importance**. These include workshops where fine assembly work is performed as well as visual inspection areas. Its **standard beam angle with the sensor** makes it a perfect choice for premises with an optimum luminaire installation height of **3.5 to 6 m**.

It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Patented optics ensures absolute control over light beam distribution
- Includes an in-built **microwave motion sensor**
- Low **UGR ranging from 19.1 to 23.4**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25\text{ °C}$ to $t_a = 50\text{ °C}$
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips – easy attachment** to a track lighting system with a width of 60 mm
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard fitting model CRI → 80: 4000 K
- On request CRI → 80: 3000 K, 5000 K, 6500 K
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **HACCP**

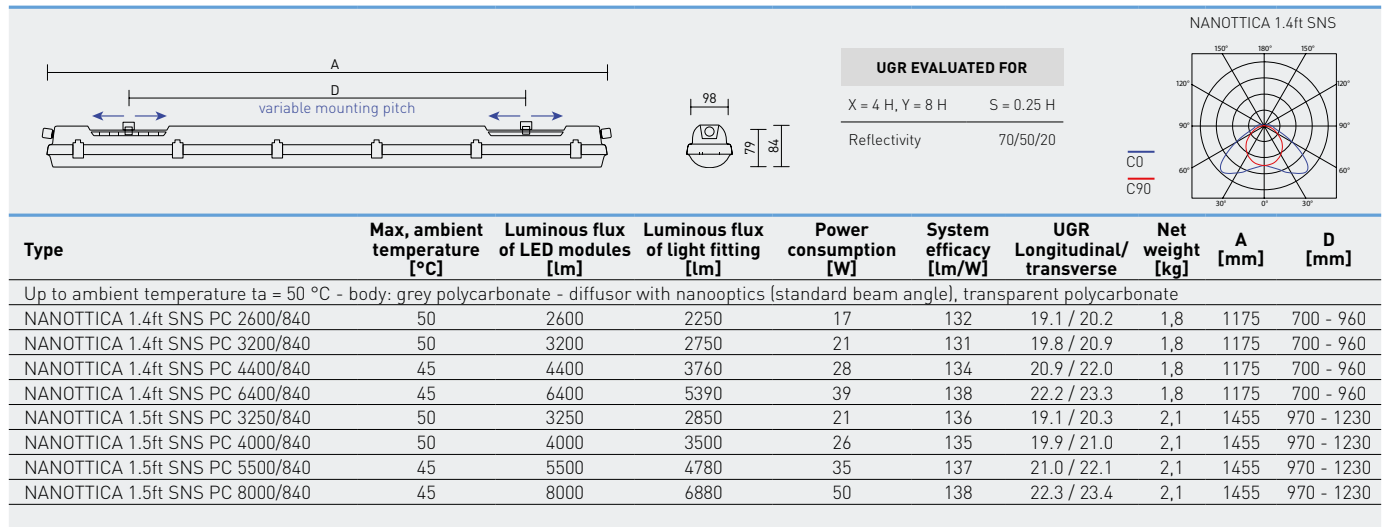


NANOTTICA SNS PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-25 °C for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **138 lm/W**
- **UGR ranging from 19,1 to 23,4**
- Optimum luminaire installation height **from 3.5 to 6 m**
- **CRI → 80: 4000 K** - standard
- CRI → 80: 3000 K, 5000 K, 6500 K - on request
- CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- **Motion sensor:** 360° range, switch on height 1 – 6 m, time range 5 sec – 30 min, switch-on sensitivity 2 – 50 lux
- Cable glands: screwed PG 13.5 (standard), or rubber (SBS)
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %



NANOTTICA SNS PC

Code	Type
102073	NANOTTICA 1.4ft SNS PC 2600/840
102074	NANOTTICA 1.4ft SNS PC 3200/840
102075	NANOTTICA 1.4ft SNS PC 4400/840
102076	NANOTTICA 1.4ft SNS PC 6400/840
102077	NANOTTICA 1.5ft SNS PC 3250/840
102078	NANOTTICA 1.5ft SNS PC 4000/840
102079	NANOTTICA 1.5ft SNS PC 5500/840
102080	NANOTTICA 1.5ft SNS PC 8000/840

Non-dimmable driver - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
	102081	102089	102097	102105	102111	102119
	102082	102090	102098	102106	102112	102120
	102083	102091	102099	102107	102113	102121
	102084	102092	102100	103647	102114	103648
	102085	102093	102101	102108	102115	102122
	102086	102094	102102	102109	102116	102123
	102087	102095	102103	102110	102117	102124
	102088	102096	102104	103649	102118	103418

NANOTTICA SNS PCc

Code	Type
102125	NANOTTICA 1.4ft SNS PCc 2600/840
102126	NANOTTICA 1.4ft SNS PCc 3200/840
102127	NANOTTICA 1.4ft SNS PCc 4400/840
102128	NANOTTICA 1.4ft SNS PCc 6400/840
102129	NANOTTICA 1.5ft SNS PCc 3250/840
102130	NANOTTICA 1.5ft SNS PCc 4000/840
102131	NANOTTICA 1.5ft SNS PCc 5500/840
102132	NANOTTICA 1.5ft SNS PCc 8000/840

Non-dimmable driver - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
	102133	102141	102149	102157	102163	102171
	102134	102142	102150	102158	102164	102172
	102135	102143	102151	102159	102165	102173
	102136	102144	102152	103419	102166	103420
	102137	102145	102153	102160	102167	102174
	102138	102146	102154	102161	102168	102175
	102139	102147	102155	102162	102169	102176
	102140	102148	102156	103421	102170	103422

NANOTTICA SNS PC CORRIDOR

Code	Type
102177	NANOTTICA 1.4ft SNS PC 2600/840 CORRIDOR
102178	NANOTTICA 1.4ft SNS PC 3200/840 CORRIDOR
102179	NANOTTICA 1.4ft SNS PC 4400/840 CORRIDOR
102180	NANOTTICA 1.4ft SNS PC 6400/840 CORRIDOR
102181	NANOTTICA 1.5ft SNS PC 3250/840 CORRIDOR
102182	NANOTTICA 1.5ft SNS PC 4000/840 CORRIDOR
102183	NANOTTICA 1.5ft SNS PC 5500/840 CORRIDOR
102184	NANOTTICA 1.5ft SNS PC 8000/840 CORRIDOR

Digital dimmable driver DALI - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
102185		102193	102201	x	102212	x
102186		102194	102202	x	102213	x
102187		102195	102203	x	102214	x
102188		102196	102204	103635	102215	103636
102189		102197	102205	102209	102216	102220
102190		102198	102206	102210	102217	102221
102191		102199	102207	102211	102218	102222
102192		102200	102208	103637	102219	103638

NANOTTICA SNS PCc CORRIDOR

Code	Type
102223	NANOTTICA 1.4ft SNS PCc 2600/840 CORRIDOR
102224	NANOTTICA 1.4ft SNS PCc 3200/840 CORRIDOR
102225	NANOTTICA 1.4ft SNS PCc 4400/840 CORRIDOR
102226	NANOTTICA 1.4ft SNS PCc 6400/840 CORRIDOR
102227	NANOTTICA 1.5ft SNS PCc 3250/840 CORRIDOR
102228	NANOTTICA 1.5ft SNS PCc 4000/840 CORRIDOR
102229	NANOTTICA 1.5ft SNS PCc 5500/840 CORRIDOR
102230	NANOTTICA 1.5ft SNS PCc 8000/840 CORRIDOR

Digital dimmable driver DALI - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
102231		102239	102247	x	102265	x
102232		102240	102248	x	102266	x
102233		102241	102256	x	102267	x
102234		102242	102257	103639	102268	103640
102235		102243	102258	102262	102269	102273
102236		102244	102259	102263	102270	102274
102237		102245	102260	102264	102271	102275
102238		102246	102261	103641	102272	103642

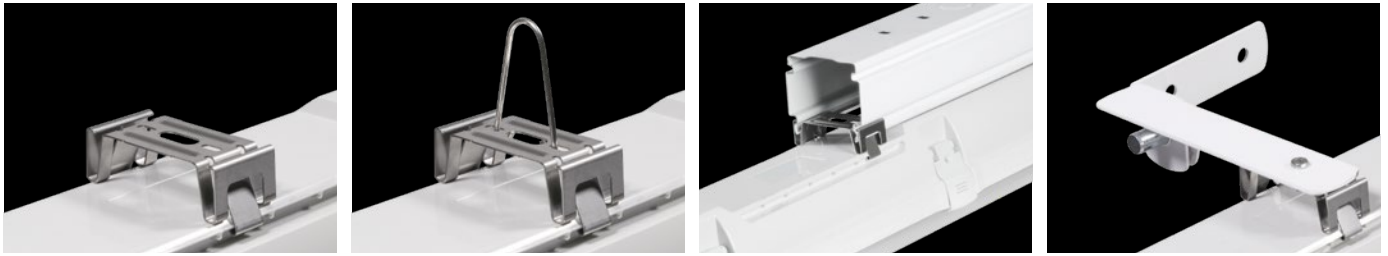
LEGEND

- SNS 1F** 1-phase 3 core through-wiring in the luminaire for connection of max. 5 slave luminaires
- SNS 3F** 3-phase 5 core through-wiring in the luminaire for connection of max. 5 slave luminaires (sensor connected to L3)
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- SNS 3F Mxh** 3-phase 5 core through-wiring in the luminaire for connection of max. 5 slave luminaires (sensor and emergency unit connected to L3)

- CORRIDOR** version with digital dimmable driver DALI and set corridor function
- CORRIDOR 1F** 1-phase 5 core through-wiring in the luminaire for connection of max. 20 luminaires
- CORRIDOR 3F** 3-phase 7 core through-wiring in the luminaire for connection of max. 20 luminaires (sensor connected to L3)
- CORRIDOR 3F Mxh** 3-phase 7 core through-wiring in the luminaire for connection of max. 20 luminaires (sensor and emergency unit connected to L3)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



VARIABLE INSTALLATION PITCH

NANOTTICA SNS



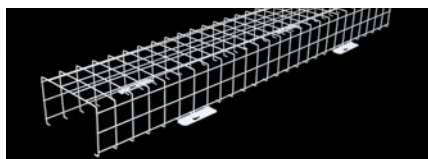
LIGHT FITTING DETAILED VIEW

NANOTTICA SNS



OM – protective grid

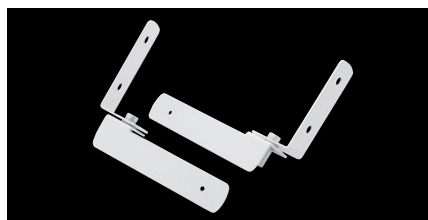
The metal grid protects the light fitting against mechanical damage and unauthorised handling. It is attached to the surface with the use of screws. The surface is treated with the RAL 9003 powder-coated colour.



Code	Type	Description	Weight [kg]
11942	OM 236	protective grid for Types 236, 228/254, x.4ft (1300×220×130 mm)	1,7
11943	OM 258	protective grid for Types 258, 235/249/280, x.5ft (1600×220×130 mm)	2,0

BZ – side hanger

It serves to attach the light fitting to the wall with the possibility of its positioning.



Code	Type	Description	Weight [kg]
90002	BZ	side hanger with blocking (set for 1 light fitting)	0,4

Canalis busbar system connector

The connector enables a quick 1 phase or 3 phase interconnection of light fittings without their opening.



Code	Type	Description	Weight [kg]
79001	KBA 40 ZU	light fitting suspended holder - Canalis KBA system	0,1
70002	KBC 10 CC211	connector with 1 m cable - Canalis KBA system	0,2

INNOVA




INDUSTRIAL
PLASTIC
IP66 / IP69
PLUG AND PLAY



INNOVA – industrial plastic LED light fitting

INNOVA
page 74



IP66 | **IP69**

INNOVA PC
page 74

INNOVA
FOR HIGH CEILINGS
page 77



IP66 | **IP69**

INNOVA NB PC
page 77


INNOVA
FOR LOW CEILINGS
page 80



IP66 | **IP69**

INNOVA WB PC
page 80

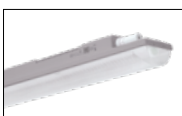
INNOVA - CHEMICALLY
RESISTANT VERSION
page 83



IP66 | **IP69**

INNOVA ABS
page 83

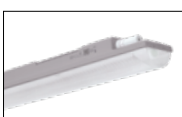
INNOVA FOR HIGH CEIL-
INGS - CHEMICALLY
RESISTANT VERSION
page 86



IP66 | **IP69**

INNOVA NB ABS
page 86


INNOVA FOR LOW
CEILINGS - CHEMICALLY
RESISTANT VERSION
page 89



IP66 | **IP69**

INNOVA WB ABS
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INNOVA FOR BOTH
DIRECT AND INDIRECT
ILLUMINA
page 92



IP66 | **IP69**

INNOVA TRS
page 92

INNOVA
ACCESSORIES
page 95



INNOVA
ACCESSORIES
page 95

INNOVA



BIM
ready

... dustproof, waterproof and impact-resistant.

USE

Closed and non-dismountable light fitting according to the standard ČSN EN 60598-1 part 4 suitable for indoor and outdoor space (even without shelter), **industrial, warehouse and agricultural buildings, sports premises, transport terminals, parking lots and garages, workshops and laboratories** without explosion hazard. The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

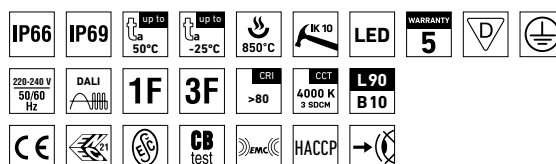
The light fitting resists dust, humidity and washing with spouting water up to 80°C. The body and the diffuser made of PC material have high mechanical resistance against impact and deformation.

An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system)**.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to **$t_a = 50^\circ\text{C}$**
- Lifetime: 50 000 hours / L90B10
- High mechanical resistance IK10
- Variable suspension pitch; optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Modernized stainless steel snap-in mounting clips – **easy attachment to a track lighting system with a width of 60 mm**
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**
- Optional arrangement of light fittings in line without gaps
- Fully automatic 100% control of functionality and tightness (leak test) during production
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESĚ, ENEC, CB, HACCP**

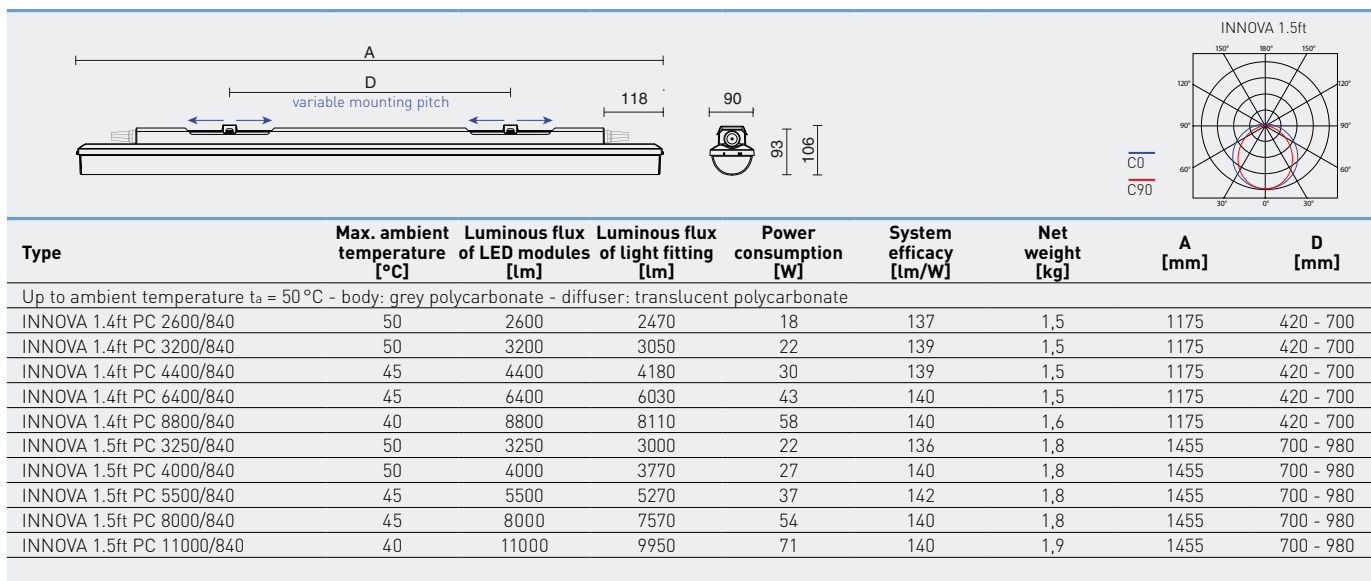


INNOVA PC



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 142 lm/W
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: translucent PC (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Snap-in mounting clips: made of stainless steel and allowing **easy attachment to a track lighting system** with a width of 60 mm
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm²
- Fittings may be **lined with zero distance** between them
- Optional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %



INNOVA 1.4ft PC 3200/840 = suitable replacement for tube light fitting PRIMA 136 PC – 1 × 36 W
 INNOVA 1.4ft PC 6400/840 = suitable replacement for tube light fitting PRIMA 236 PC – 2 × 36 W
 INNOVA 1.5ft PC 4000/840 = suitable replacement for tube light fitting PRIMA 158 PC – 1 × 58 W
 INNOVA 1.5ft PC 8000/840 = suitable replacement for tube light fitting PRIMA 258 PC – 2 × 58 W

INNOVA PC

Diffuser made of translucent polycarbonate

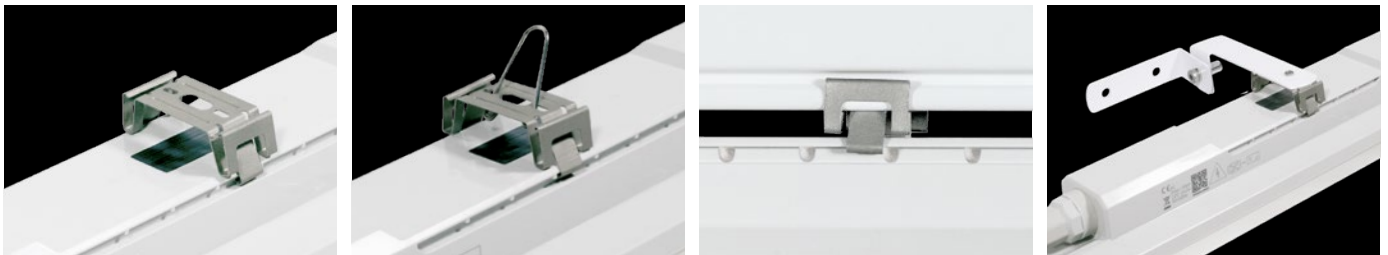
Type	1x3P	1x5P	1x5P DALI	2x3P	2x5P	2x5P DALI
INNOVA 1.4ft PC 2600/840...	72111	72112	72113	72115	72116	72117
INNOVA 1.4ft PC 3200/840...	72121	72122	72123	72125	72126	72127
INNOVA 1.4ft PC 4400/840...	72131	72132	72133	72135	72136	72137
INNOVA 1.4ft PC 6400/840...	72141	72142	72143	72145	72146	72147
INNOVA 1.4ft PC 8800/840...	72101	72102	72103	72105	72106	72107
INNOVA 1.5ft PC 3250/840...	72151	72152	72153	72155	72156	72157
INNOVA 1.5ft PC 4000/840...	72161	72162	72163	72165	72166	72167
INNOVA 1.5ft PC 5500/840...	72171	72172	72173	72175	72176	72177
INNOVA 1.5ft PC 8000/840...	72181	72182	72183	72185	72186	72187
INNOVA 1.5ft PC 11000/840...	72191	72192	72193	72195	72196	72197

LEGEND

- 1x3P** - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
- 1x5P** - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
- 1x5P DALI** - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip
- 2x3P** - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
- 2x5P** - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
- 2x5P DALI** - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



VARIABLE INSTALLATION PITCH

MINIMUM



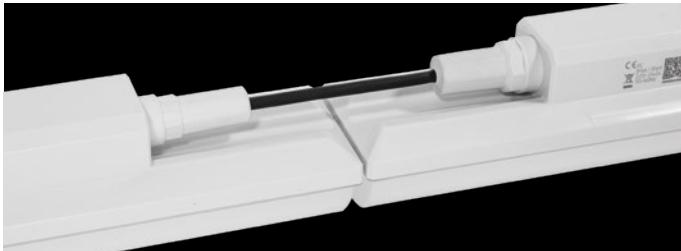
MAXIMUM



LIGHT FITTING INTERCONNECTION

An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing



LIGHT FITTING DETAILED VIEW

INNOVA PC



INNOVA NB



BIM
ready

... impact-resistant, for areas with high ceilings of 8 – 12 m.

USE

Closed and non-dismountable light fitting according to the standard ČSN EN 60598-1 part 4 **with Narrow Beam** optics suitable for inside and outside spaces (even without shelter) intended for suspension height from 8 to 12 m, e.g. **inside or outside walls and corridors of high industrial, agricultural, warehouse or sports buildings, rack aisles in warehouses, outdoor playgrounds, covered sports arenas.** The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

The light fitting resists dust, humidity and washing with spouting water up to 80°C. The body and the diffuser made of PC material have high mechanical resistance against impact and deformation.

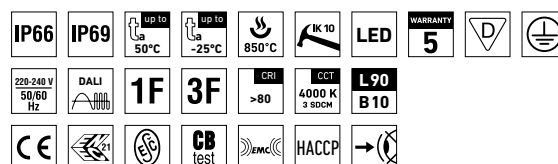
An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system).**

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to **$t_a = 45^\circ\text{C}$**
- Lifetime: 50 000 hours / L90B10
- High mechanical resistance IK10
- **Narrow Beam (NB)**, ceiling height 8 to 12 m
- **Variable suspension pitch**; optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Modernized stainless steel snap-in mounting clips – **easy attachment to a track lighting system** with a width of 60 mm
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**

- Optional arrangement of light fittings in line without gaps
- **Fully automatic 100% control of functionality and tightness (leak test) during production**
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESĚ, ENEC, CB, HACCP**

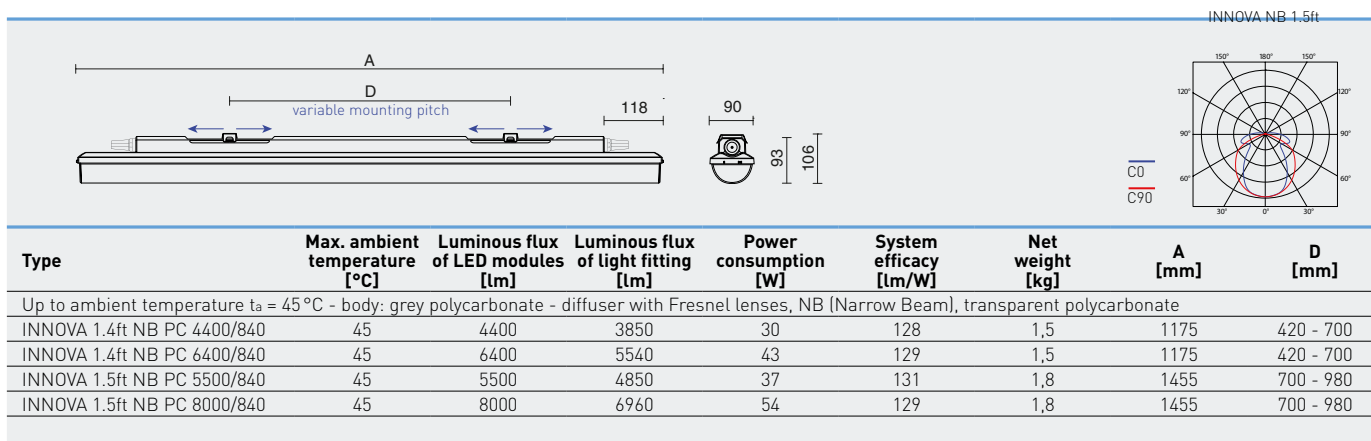


INNOVA NB PC



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 45 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 131 lm/W
- CRI > 80: 4000 K – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: transparent PC with Fresnel lenses, **Narrow Beam** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Snap-in mounting clips: made of stainless steel and allowing **easy attachment to a track lighting system** with a width of 60 mm
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm²
- Fittings may be **lined with zero distance** between them Optional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %



INNOVA NB

Diffuser with Fresnel lenses, Narrow Beam, transparent polycarbonate

Type	1x3P	1x5P	1x5P DALI	2x3P	2x5P	2x5P DALI
INNOVA 1.4ft NB PC 4400/840...	72211	72212	72213	72215	72216	72217
INNOVA 1.4ft NB PC 6400/840...	72221	72222	72223	72225	72226	72227
INNOVA 1.5ft NB PC 5500/840...	72231	72232	72233	72235	72236	72237
INNOVA 1.5ft NB PC 8000/840...	72241	72242	72243	72245	72246	72247

Example of type marking: 72223 = INNOVA 1.4ft NB PC 6400/840 **1x5P DALI**

LEGEND

- 1x3P** - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
- 1x5P** - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
- 1x5P DALI** - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip
- 2x3P** - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
- 2x5P** - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
- 2x5P DALI** - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



VARIABLE INSTALLATION PITCH

MINIMUM



MAXIMUM



LIGHT FITTING INTERCONNECTION

An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing



LIGHT FITTING DETAILED VIEW

INNOVA NB



INNOVA WB



BIM
ready

... impact-resistant, for areas with low ceilings of 2.5 – 5 m.

USE

Closed and non-dismountable light fitting according to the standard ČSN EN 60598-1 part 4 **with Wide Beam** optics, suitable for inside and outside spaces (even without shelter), intended for suspension height from 2.5 to 5 m, e.g.: **production premises, parking buildings and garages, workshops, cellars, pedestrian underpasses and underground rooms with low ceilings**. The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

The light fitting resists dust, humidity and washing with spouting water up to 80°C. The body and the diffuser made of PC material have high mechanical resistance against impact and deformation.

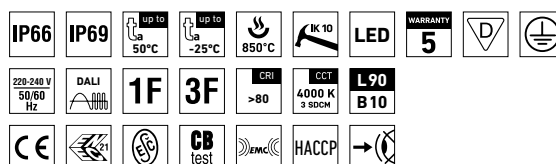
An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system)**.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to $t_a = 50^\circ\text{C}$
- Lifetime: 50 000 hours / L90B10
- High mechanical resistance IK10
- **Wide Beam (WB)**, ceiling height 2.5 to 5 m
- **Variable suspension pitch**; optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Modernized stainless steel snap-in mounting clips – **easy attachment to a track lighting system** with a width of 60 mm
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**

- Optional arrangement of light fittings in line without gaps
- **Fully automatic 100% control of functionality and tightness (leak test) during production**
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESĚ, ENEC, CB, HACCP**

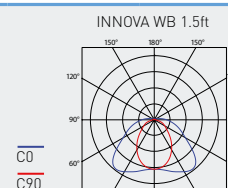
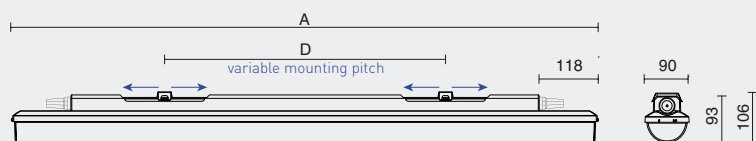


INNOVA WB PC



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 131 lm/W
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: transparent PC with Fresnel lenses, **Wide Beam** (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Snap-in mounting clips: made of stainless steel and allowing **easy attachment to a track lighting system** with a width of 60 mm
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm²
- Fittings may be **lined with zero distance** between them
- Optional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %



Type	Max. ambient temperature of LED [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature t _a = 50 °C - body: grey polycarbonate - diffuser with Fresnel lenses, WB (Wide Beam), transparent polycarbonate								
INNOVA 1.4ft WB PC 2600/840	50	2600	2270	18	126	1,5	1175	420 - 700
INNOVA 1.4ft WB PC 3200/840	50	3200	2810	22	128	1,5	1175	420 - 700
INNOVA 1.4ft WB PC 4400/840	45	4400	3850	30	128	1,5	1175	420 - 700
INNOVA 1.4ft WB PC 6400/840	45	6400	5540	43	129	1,5	1175	420 - 700
INNOVA 1.5ft WB PC 3250/840	50	3250	2750	22	125	1,8	1455	700 - 980
INNOVA 1.5ft WB PC 4000/840	50	4000	3470	27	129	1,8	1455	700 - 980
INNOVA 1.5ft WB PC 5500/840	45	5500	4850	37	131	1,8	1455	700 - 980
INNOVA 1.5ft WB PC 8000/840	45	8000	6960	54	129	1,8	1455	700 - 980

INNOVA WB

Diffuser with Fresnel lenses, Wide Beam, transparent polycarbonate

Type	1x3P	1x5P	1x5P DALI	2x3P	2x5P	2x5P DALI
INNOVA 1.4ft WB PC 2600/840...	72311	72312	72313	72315	72316	72317
INNOVA 1.4ft WB PC 3200/840...	72321	72322	72323	72325	72326	72327
INNOVA 1.4ft WB PC 4400/840...	72331	72332	72333	72335	72336	72337
INNOVA 1.4ft WB PC 6400/840...	72341	72342	72343	72345	72346	72347
INNOVA 1.5ft WB PC 3250/840...	72351	72352	72353	72355	72356	72357
INNOVA 1.5ft WB PC 4000/840...	72361	72362	72363	72365	72366	72367
INNOVA 1.5ft WB PC 5500/840...	72371	72372	72373	72375	72376	72377
INNOVA 1.5ft WB PC 8000/840...	72381	72382	72383	72385	72386	72387

Example of type marking: 72343 = INNOVA 1.4ft WB PC 6400/840 **1x5P DALI**

LEGEND

- 1x3P** - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
- 1x5P** - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
- 1x5P DALI** - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip
- 2x3P** - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
- 2x5P** - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
- 2x5P DALI** - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



VARIABLE INSTALLATION PITCH

MINIMUM



MAXIMUM



LIGHT FITTING INTERCONNECTION

An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing



LIGHT FITTING DETAILED VIEW

INNOVA WB



INNOVA ABS



BIM
ready



... dustproof, waterproof and chemically resistant.

USE

Closed and non-dismountable light fitting according to the standard ČSN EN 60598-1 part 4 intended for chemically challenging or agricultural premises with incidence of vapours like ammonia, lye, alkaline compounds and hot water (hydrolysis). The light fitting is suitable particularly for **agricultural and industrial buildings like farms, stables, production and warehouse premises, car wash units and laboratories** without explosion hazard. The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

The light fitting resists dust, humidity and washing with spouting water up to 80°C. The body and the diffuser made of ABS material have high chemical resistance.

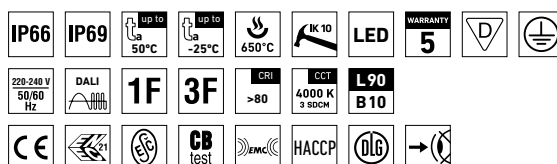
An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system)**.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page č. 317.

ADVANTAGES

- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to $t_a = 50^\circ\text{C}$
- Lifetime: 50 000 hours / L90B10
- High chemical resistance
- **Variable suspension pitch**: optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Modernized stainless steel snap-in mounting clips – **easy attachment to a track lighting system with a width of 60 mm**
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**

- Optional arrangement of light fittings in line without gaps
- **Fully automatic 100% control of functionality and tightness (leak test) during production**
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESĀ, ENEC, CB, DLG, HACCP**

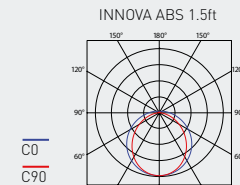
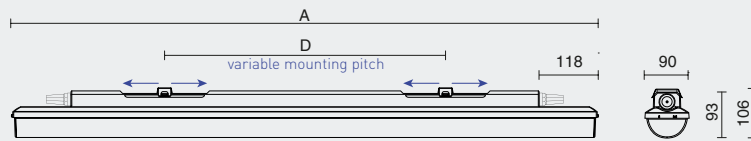


INNOVA ABS



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 142 lm/W
- CRI > 80: 4000 K – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: translucent ABS (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Snap-in mounting clips: made of stainless steel and allowing **easy attachment to a track lighting system** with a width of 60 mm
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm²
- Fittings may be **lined with zero distance** between them
- Optional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature t _a = 50 °C - body: dark grey ABS - diffuser: translucent ABS								
INNOVA 1.4ft ABS 2600/840	50	2600	2470	18	137	1,5	1175	420 - 700
INNOVA 1.4ft ABS 3200/840	50	3200	3050	22	139	1,5	1175	420 - 700
INNOVA 1.4ft ABS 4400/840	45	4400	4180	30	139	1,5	1175	420 - 700
INNOVA 1.4ft ABS 6400/840	45	6400	6030	43	140	1,5	1175	420 - 700
INNOVA 1.4ft ABS 8800/840	40	8800	8110	58	140	1,6	1175	420 - 700
INNOVA 1.5ft ABS 3250/840	50	3250	3000	22	136	1,8	1455	700 - 980
INNOVA 1.5ft ABS 4000/840	50	4000	3770	27	140	1,8	1455	700 - 980
INNOVA 1.5ft ABS 5500/840	45	5500	5270	37	142	1,8	1455	700 - 980
INNOVA 1.5ft ABS 8000/840	45	8000	7570	54	140	1,8	1455	700 - 980
INNOVA 1.5ft ABS 11000/840	40	11000	9950	71	140	1,9	1455	700 - 980

INNOVA 1.4ft ABS 3200/840 = suitable replacement for tube light fitting PRIMA 136 ABS – 1 × 36 W
 INNOVA 1.4ft ABS 6400/840 = suitable replacement for tube light fitting PRIMA 236 ABS – 2 × 36 W
 INNOVA 1.5ft ABS 4000/840 = suitable replacement for tube light fitting PRIMA 158 ABS – 1 × 58 W
 INNOVA 1.5ft ABS 8000/840 = suitable replacement for tube light fitting PRIMA 258 ABS – 2 × 58 W

INNOVA ABS

Diffuser from translucent ABS

Type	1x3P	1x5P	1x5P DALI	2x3P	2x5P	2x5P DALI
INNOVA 1.4ft ABS 2600/840...	72411	72412	72413	72415	72416	72417
INNOVA 1.4ft ABS 3200/840...	72421	72422	72423	72425	72426	72427
INNOVA 1.4ft ABS 4400/840...	72431	72432	72433	72435	72436	72437
INNOVA 1.4ft ABS 6400/840...	72441	72442	72443	72445	72446	72447
INNOVA 1.4ft ABS 8800/840...	72401	72402	72403	72405	72406	72407
INNOVA 1.5ft ABS 3250/840...	72451	72452	72453	72455	72456	72457
INNOVA 1.5ft ABS 4000/840...	72461	72462	72463	72465	72466	72467
INNOVA 1.5ft ABS 5500/840...	72471	72472	72473	72475	72476	72477
INNOVA 1.5ft ABS 8000/840...	72481	72482	72483	72485	72486	72487
INNOVA 1.5ft ABS 11000/840...	72491	72492	72493	72495	72496	72497

LEGEND

- 1x3P** - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
- 1x5P** - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
- 1x5P DALI** - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip
- 2x3P** - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
- 2x5P** - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
- 2x5P DALI** - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



VARIABLE INSTALLATION PITCH

MINIMUM



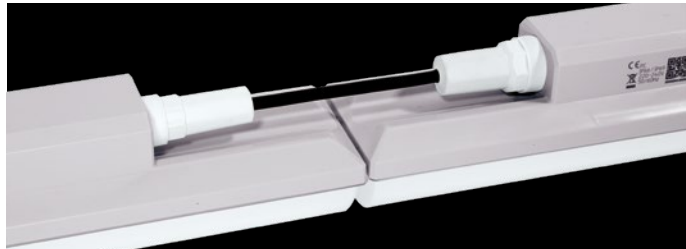
MAXIMUM



LIGHT FITTING INTERCONNECTION

An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing



LIGHT FITTING DETAILED VIEW

INNOVA ABS



INNOVA NB ABS



BIM
ready



... chemically resistant, for areas with high ceilings of 8 – 12 m.

USE

Closed and non-dismountable light fitting according to the standard ČSN EN 60598-1 part 4 intended for chemically challenging or agricultural premises with incidence of vapours like ammonia, lye, alkaline compounds and hot water (hydrolysis). Thanks to the **Narrow Beam** optics, it is suitable for inside spaces with high ceilings, intended for suspension height from 8 to 12 m, e.g. **inside walls and corridors of high agricultural and industrial buildings, rack aisles in production and storage spaces, farms, stables and laboratories** without explosion hazard. The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

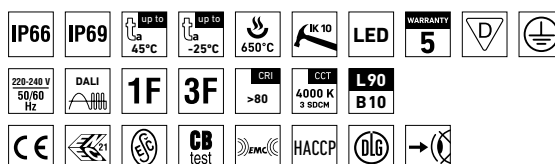
The light fitting resists dust, humidity and washing with spouting water up to 80 °C. The body and the diffuser made of ABS material have high chemical resistance.

An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system)**.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to $t_a = 45^\circ\text{C}$
- Lifetime: 50 000 hours / L90B10
- High chemical resistance
- **Narrow Beam (NB)**, ceiling height 8 to 12 m
- **Variable suspension pitch**; optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Modernized stainless steel snap-in mounting clips – **easy attachment to a track lighting system with a width of 60 mm**
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**
- Optional arrangement of light fittings in line without gaps
- **Fully automatic 100% control of functionality and tightness (leak test) during production**
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESĀ, ENEC, CB, DLG, HACCP**

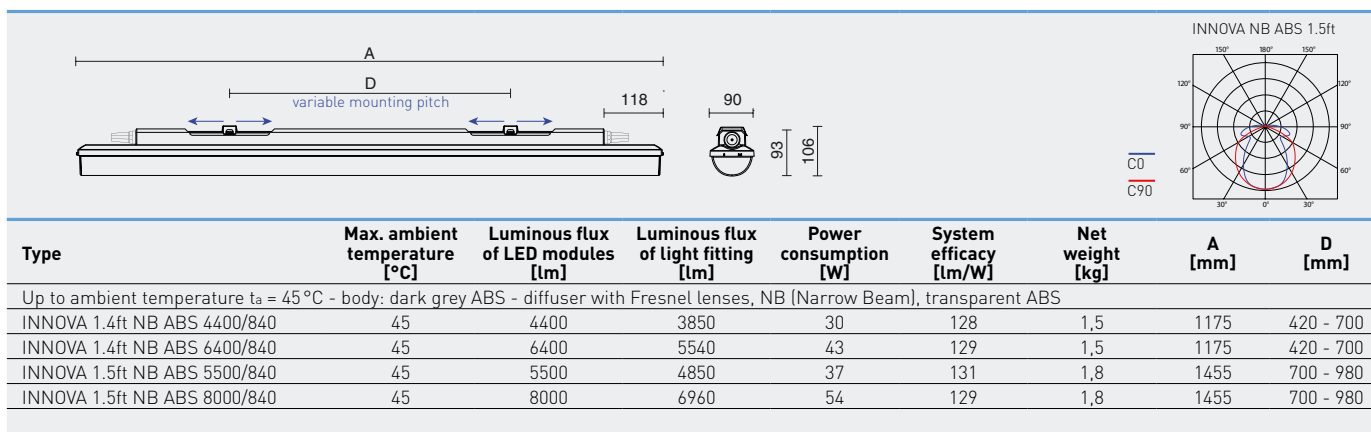


INNOVA NB ABS



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 45 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 131 lm/W
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: transparent ABS with Fresnel lenses, **Narrow Beam** (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Snap-in mounting clips: made of stainless steel and allowing **easy attachment to a track lighting system** with a width of 60 mm
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm²
- Fittings may be **lined with zero distance** between them
- Optional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %



INNOVA NB ABS

Diffuser with Fresnel lenses, Narrow Beam, transparent ABS

Type	1x3P	1x5P	1x5P DALI	2x3P	2x5P	2x5P DALI
INNOVA 1.4ft NB ABS 4400/840...	72511	72512	72513	72515	72516	72517
INNOVA 1.4ft NB ABS 6400/840...	72521	72522	72523	72525	72526	72527
INNOVA 1.5ft NB ABS 5500/840...	72531	72532	72533	72535	72536	72537
INNOVA 1.5ft NB ABS 8000/840...	72541	72542	72543	72545	72546	72547

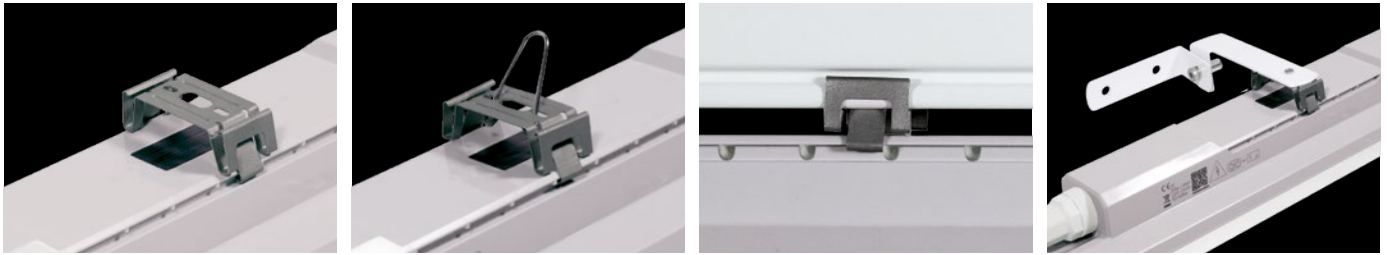
Example of type marking: 72523 = INNOVA 1.4ft NB ABS 6400/840 **1x5P DALI**

LEGEND

- 1x3P** - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
- 1x5P** - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
- 1x5P DALI** - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip
- 2x3P** - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
- 2x5P** - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
- 2x5P DALI** - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

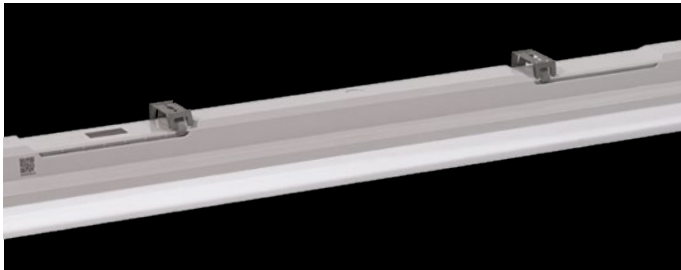
Light fitting attachment

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall

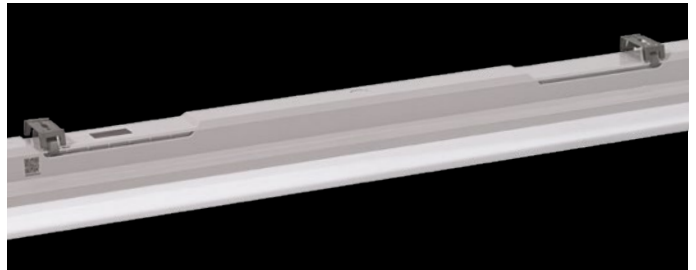


VARIABLE INSTALLATION PITCH

MINIMUM



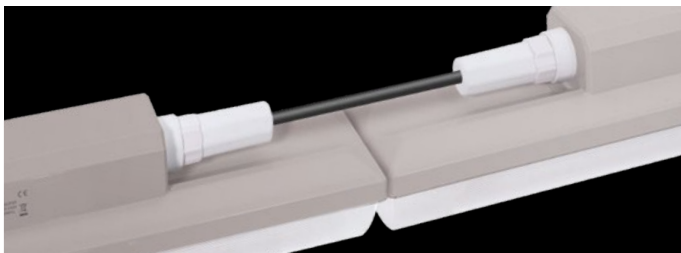
MAXIMUM



LIGHT FITTING INTERCONNECTION

An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing



LIGHT FITTING DETAILED VIEW

INNOVA NB ABS



INNOVA WB ABS



BIM
ready



... chemically resistant, for areas with low ceilings of 2.5 – 5 m.

USE

Closed and non-dismountable light fitting according to the standard ČSN EN 60598-1 part 4 intended for chemically challenging or agricultural premises with incidence of vapours like ammonia, lye, alkaline compounds and hot water (hydrolysis). Thanks to the **Wide Beam** optics it is suitable for inside spaces with low ceilings, intended for suspension height from 2.5 to 5m, e.g. **inside walls and corridors of low agricultural and industrial buildings, workshops, corridors, cellars, farms, stables and laboratories** without explosion hazard. The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

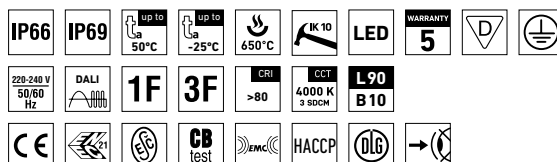
The light fitting resists dust, humidity and washing with spouting water up to 80°C. The body and the diffuser made of ABS material have high chemical resistance.

An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system)**.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 317.

ADVANTAGES

- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to $t_a = 50^\circ\text{C}$
- Lifetime: 50 000 hours / L90B10
- High chemical resistance
- **Wide Beam (WB)**, ceiling height 2.5 to 5 m
- **Variable suspension pitch**; optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Modernized stainless steel snap-in mounting clips – **easy attachment to a track lighting system with a width of 60 mm**
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**
- Optional arrangement of light fittings in line without gaps
- **Fully automatic 100% control of functionality and tightness (leak test) during production**
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESĀ, ENEC, CB, DLG, HACCP**

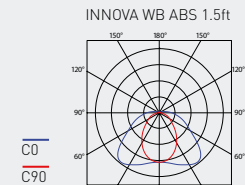
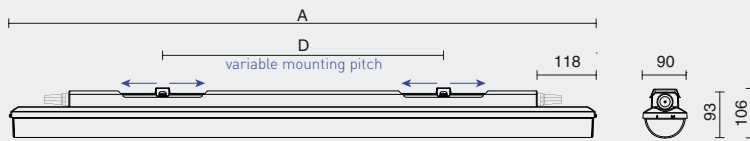


INNOVA WB ABS



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 131 lm/W
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: transparent ABS with Fresnel lenses, **Wide Beam** (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Snap-in mounting clips: made of stainless steel and allowing **easy attachment to a track lighting system** with a width of 60 mm
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm²
- Fittings may be **lined with zero distance** between them
- Optional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
Up to ambient temperature t _a = 50 °C - body: dark grey ABS - diffuser with Fresnel lenses, WB (Wide Beam), transparent ABS								
INNOVA 1.4ft WB ABS 2600/840	50	2600	2270	18	126	1,5	1175	420 - 700
INNOVA 1.4ft WB ABS 3200/840	50	3200	2810	22	128	1,5	1175	420 - 700
INNOVA 1.4ft WB ABS 4400/840	45	4400	3850	30	128	1,5	1175	420 - 700
INNOVA 1.4ft WB ABS 6400/840	45	6400	5540	43	129	1,5	1175	420 - 700
INNOVA 1.5ft WB ABS 3250/840	50	3250	2750	22	125	1,8	1455	700 - 980
INNOVA 1.5ft WB ABS 4000/840	50	4000	3470	27	129	1,8	1455	700 - 980
INNOVA 1.5ft WB ABS 5500/840	45	5500	4850	37	131	1,8	1455	700 - 980
INNOVA 1.5ft WB ABS 8000/840	45	8000	6960	54	129	1,8	1455	700 - 980

INNOVA WB ABS

Diffuser with Fresnel lenses, Wide Beam, transparent ABS

Type	1x3P	1x5P	1x5P DALI	2x3P	2x5P	2x5P DALI
INNOVA 1.4ft WB ABS 2600/840...	72611	72612	72613	72615	72616	72617
INNOVA 1.4ft WB ABS 3200/840...	72621	72622	72623	72625	72626	72627
INNOVA 1.4ft WB ABS 4400/840...	72631	72632	72633	72635	72636	72637
INNOVA 1.4ft WB ABS 6400/840...	72641	72642	72643	72645	72646	72647
INNOVA 1.5ft WB ABS 3250/840...	72651	72652	72653	72655	72656	72657
INNOVA 1.5ft WB ABS 4000/840...	72661	72662	72663	72665	72666	72667
INNOVA 1.5ft WB ABS 5500/840...	72671	72672	72673	72675	72676	72677
INNOVA 1.5ft WB ABS 8000/840...	72681	72682	72683	72685	72686	72687

Example of type marking: 72643 = INNOVA 1.4ft WB ABS 6400/840 **1x5P DALI**

LEGEND

- 1x3P** - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
- 1x5P** - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
- 1x5P DALI** - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip
- 2x3P** - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
- 2x5P** - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
- 2x5P DALI** - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall

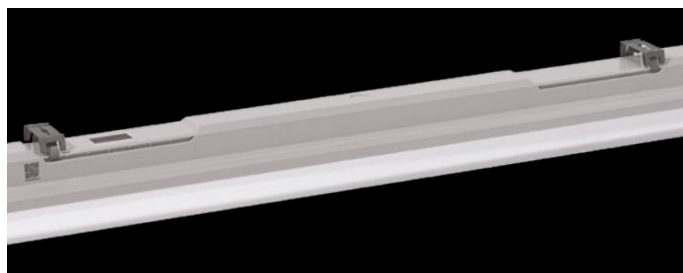


VARIABLE INSTALLATION PITCH

MINIMUM



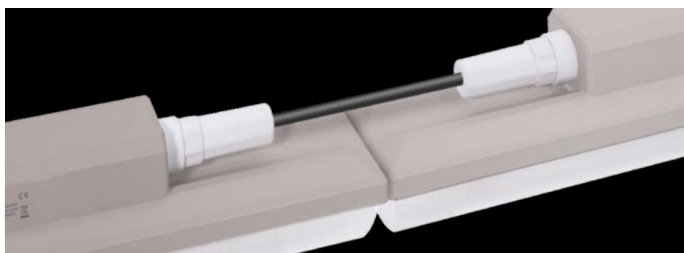
MAXIMUM



LIGHT FITTING INTERCONNECTION

An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing



LIGHT FITTING DETAILED VIEW

INNOVA WB ABS



INNOVA TRS



... for direct and indirect illumination.

USE

An enclosed, non-dismantable and **fully transparent** luminaire featuring a user non-replaceable light source in accordance with ČSN EN 60598-1(4). The fixture is a perfect choice for inside as well as outside spaces (roof and unroofed) with luminaire installation height ranging from 2.5 m to 5 m such as: **production plants, (multistorey) car parks and garages, workshops, corridors, cellars, pedestrian underpasses and underground spaces with low ceilings**. The structural design of the light fitting (IP69) allows even placement in food-processing industry - HACCP.

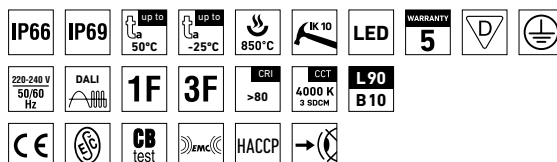
The light fitting resists dust, humidity and washing with spouting water up to 80°C. The body and the diffuser made of PC material have high mechanical resistance against impact and deformation.

An external terminal strip makes it easy and quick to connect the supply cable with no need to open the **fitting (PLUG and PLAY system)**.

Emissions in the environment of use may reduce the usability of the plastics see page č. 317.

ADVANTAGES

- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from $t_a = -25^\circ\text{C}$ to $t_a = 50^\circ\text{C}$
- Lifetime: 50 000 hours / L90B10
- High mechanical resistance IK10
- **For direct and indirect lighting**, ceiling height 2.5 to 5 m
- **Variable suspension pitch**; optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- Modernized stainless steel snap-in mounting clips – **easy attachment to a track lighting system with a width of 60 mm**
- **External terminal strip makes it easy to connect the supply cable – PLUG and PLAY system**
- Optional arrangement of light fittings in line without gaps
- **Fully automatic 100% control of functionality and tightness (leak test) during production**
- Easy cleaning and maintenance without need of replacing the light sources
- Eliminated risk of mechanical and electrostatic damage to LED chips
- Optional throughwiring (up to 5 wires inside the light fitting)
- Optional delivery in dimmable version
- Certificates: **ESČ, CB, HACCP**

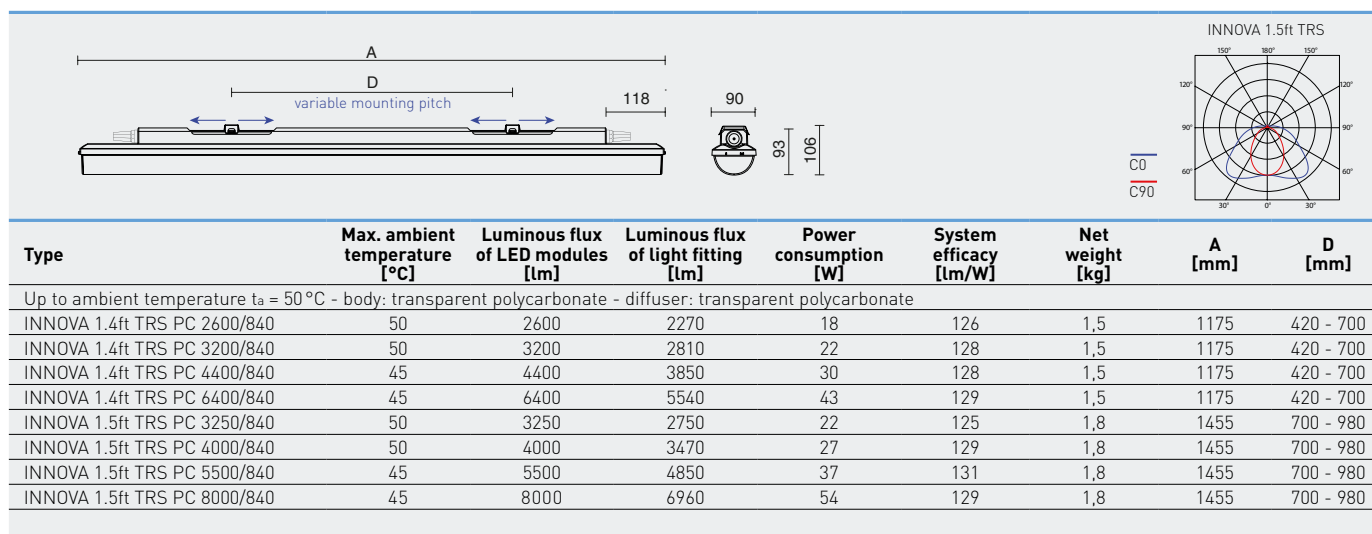


INNOVA TRS PC



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **t_a = 50 °C**
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: 131 lm/W
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- MacAdam = 3 SDCM
- Diffuser: transparent PC (high mechanical resistance, UV stability)
- Body: transparent PC (high mechanical resistance, UV stability)
- Reflector: modified for **indirect illumination**
- Snap-in mounting clips: made of stainless steel and allowing **easy attachment to a track lighting system** with a width of 60 mm
- Ventilation membrane in the base eliminating vacuum and condensate build-up
- 3 or 5-pole **external terminal strip**, conductor cross-sectional area: 1.5 or 2.5 mm²
- Fittings may be **lined with zero distance** between them
- Optional constant luminous flux (CLO) in DALI version
- Electric equipment: LED modules, fixed output driver or DALI driver
- The package includes: stainless hooks and stainless brackets, a connector's counterpart (if no cables are ordered)
- The values stated for power consumption and luminous flux are in a tolerance of ± 7,5 %



INNOVA TRS

Diffuser: transparent polycarbonate

Type	1x3P	1x5P	1x5P DALI	2x3P	2x5P	2x5P DALI
INNOVA 1.4ft TRS PC 2600/840...	16201	16202	16203	16205	16206	16207
INNOVA 1.4ft TRS PC 3200/840...	16211	16212	16213	16215	16216	16217
INNOVA 1.4ft TRS PC 4400/840...	16221	16222	16223	16225	16226	16227
INNOVA 1.4ft TRS PC 6400/840...	16231	16232	16233	16235	16236	16237
INNOVA 1.5ft TRS PC 3250/840...	16241	16242	16243	16245	16246	16247
INNOVA 1.5ft TRS PC 4000/840...	16251	16252	16253	16255	16256	16257
INNOVA 1.5ft TRS PC 5500/840...	16261	16262	16263	16265	16266	16267
INNOVA 1.5ft TRS PC 8000/840...	16271	16272	16273	16275	16276	16277

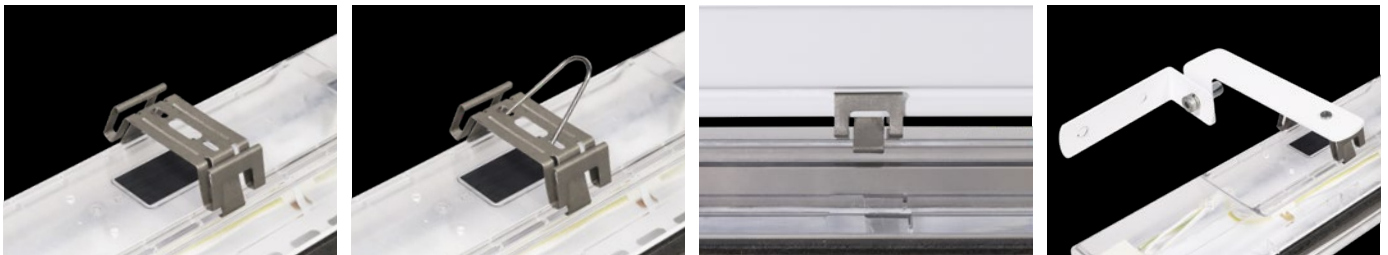
Example of type marking: 16233 = INNOVA 1.4ft TRS PC 6400/840 **1x5P DALI**

LEGEND

- 1x3P** - a version featuring a non-dimmable ballast and a single 3-pole external terminal strip
- 1x5P** - a version featuring a non-dimmable ballast and a single 5-pole external terminal strip
- 1x5P DALI** - a version featuring a digitally dimmable ballast and a single 5-pole external terminal strip
- 2x3P** - a version featuring a non-dimmable ballast, two 3-pole external terminal strips and 3-wire connecting cables (1F), for continuous row installation
- 2x5P** - a version featuring a non-dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (3F), for continuous row installation
- 2x5P DALI** - a version featuring a digitally dimmable ballast, two 5-pole external terminal strips and 5-wire connecting cables (DALI 1F), for continuous row installation

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



VARIABLE INSTALLATION PITCH

MINIMUM



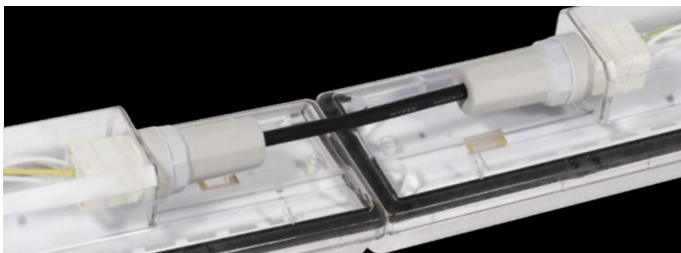
MAXIMUM



LIGHT FITTING INTERCONNECTION

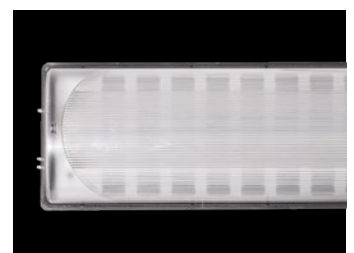
An external terminal strip is used to ensure the supply cable can easily and quickly be connected with no need to open the light fixture (PLUG and PLAY system)

Interconnection of light fittings without spacing



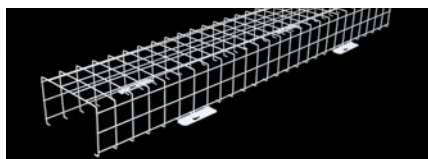
LIGHT FITTING DETAILED VIEW

INNOVA TRS



OM – protective grid

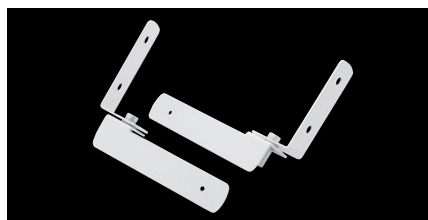
The metal grid protects the light fitting against mechanical damage and unauthorised handling. It is attached to the surface with the use of screws. The surface is treated with the RAL 9003 powder-coated colour.



Code	Type	Description	Weight [kg]
11942	OM 236	protective grid for Types 236, 228/254, x.4ft (1300×220×130 mm)	1,7
11943	OM 258	protective grid for Types 258, 235/249/280, x.5ft (1600×220×130 mm)	2,0

BZ – side hanger

It serves to attach the light fitting to the wall with the possibility of its positioning.



Code	Type	Description	Weight [kg]
90002	BZ	side hanger with blocking (set for 1 light fitting)	0,4

Canalis busbar system connector

The connector enables a quick 1 phase or 3 phase interconnection of light fittings without their opening.



Code	Type	Description	Weight [kg]
79001	KBA 40 ZU	light fitting suspension holder - Canalis KBA system	0,1
72971	KBC 10 CC212	three-pole connector with 1 m cable - Canalis KBA system	0,2
72972	KBC 10 CC213	five-pole connector with 1 m cable - Canalis KBA system	0,3













FUTURA



INDUSTRIAL
PLASTIC
DUSTPROOF
WATERPROOF
IMPACT-RESISTANT



FUTURA – industrial plastic LED light fitting

<p>FUTURA page 98</p>			
<p>IP66</p>	<p>FUTURA PC Al, PCc Al page 98</p>	<p>FUTURA ES PC Al, PCc Al page 102</p>	<p>FUTURA HE PC Al, PCc Al page 106</p>
<p>FUTURA FOR OUTDOOR SPACES page 109</p>			
<p>IP66</p>	<p>FUTURA VP Al, VPc Al page 109</p>		
<p>FUTURA FOR HIGH CEILINGS page 113</p>			
<p>IP66</p>	<p>FUTURA NB PC Al, PCc Al page 113</p>		
<p>FUTURA - CHEMICALLY RESISTANT VERSION page 116</p>			
<p>IP66</p>	<p>FUTURA ABS Al, ABSc Al page 116</p>	<p>FUTURA ES ABS Al, ABSc Al page 120</p>	<p>FUTURA HE ABS Al, ABSc Al page 123</p>
<p>FUTURA CLASS II INSULATION S. 126</p>			
<p>IP66</p>	<p>FUTURA CLASS II S. 126</p>		
<p>FUTURA FOR EXTREME TEMPERATURES page 130</p>			
<p>IP66</p>	<p>FUTURA MAX PCc Al page 130</p>		
<p>FUTURA WITH MOTION DETECTOR page 133</p>			
<p>IP66</p>	<p>FUTURA SNS PC Al, PCc Al page 133</p>		
<p>FUTURA ACCESSORIES page 136</p>			
<p>IP66</p>	<p>FUTURA ACCESSORIES page 136</p>		


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... dustproof, waterproof and impact-resistant.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page. 317).

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **t_a = 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- Certification: ENEC, CB, HACCP



FUTURA PC Al, PCc Al



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 50^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 144 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers (PC Al), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI

Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 50^\circ\text{C}$ - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate									
75010	FUTURA 2.2ft PC Al 2600/840	50	2600	2420	18	134	1,5	612	475
75020	FUTURA 2.2ft PC Al 3200/840	50	3200	2980	22	135	1,5	612	475
75030	FUTURA 2.2ft PC Al 4400/840	45	4400	4090	30	136	1,7	612	475
75040	FUTURA 2.4ft PC Al 5200/840	50	5200	4840	35	138	2,9	1172	700
75050	FUTURA 2.4ft PC Al 6400/840	50	6400	5950	42	142	2,9	1172	700
75060	FUTURA 2.4ft PC Al 8800/840	45	8800	8180	58	141	3,0	1172	700
75410	FUTURA 2.4ft PC Al 12800/840	35	12800	11900	85	140	3,0	1172	700
75070	FUTURA 2.5ft PC Al 6500/840	50	6500	6050	44	138	3,8	1452	940
75080	FUTURA 2.5ft PC Al 8000/840	50	8000	7440	53	140	3,9	1452	940
75090	FUTURA 2.5ft PC Al 11000/840	45	11000	10230	71	144	3,9	1452	940
75420	FUTURA 2.5ft PC Al 16000/840	35	16000	14880	106	140	3,9	1452	940

75020 FUTURA 2.2ft PC Al 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 - 2 x 18W
 75050 FUTURA 2.4ft PC Al 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 - 2 x 36W
 75080 FUTURA 2.5ft PC Al 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 - 2 x 58W

FUTURA PC Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
75010	FUTURA 2.2ft PC Al 2600/840	x	x	75014	75015	x	x
75020	FUTURA 2.2ft PC Al 3200/840	x	x	75024	75025	x	x
75030	FUTURA 2.2ft PC Al 4400/840	x	x	75034	75035	x	x
75040	FUTURA 2.4ft PC Al 5200/840	75140	75340	75044	75045	75344	75345
75050	FUTURA 2.4ft PC Al 6400/840	75150	75350	75054	75055	75354	75355
75060	FUTURA 2.4ft PC Al 8800/840	75160	75360	75064	75065	75364	75365
75410	FUTURA 2.4ft PC Al 12800/840	75411	75412	x	x	x	x
75070	FUTURA 2.5ft PC Al 6500/840	75170	75370	75074	75075	75374	75375
75080	FUTURA 2.5ft PC Al 8000/840	75180	75380	75084	75085	75384	75385
75090	FUTURA 2.5ft PC Al 11000/840	75190	75390	75094	75095	75394	75395
75420	FUTURA 2.5ft PC Al 16000/840	75421	75422	x	x	x	x

FUTURA PCc Al

Non-dimmable driver - stainless clips [c]

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
75210	FUTURA 2.2ft PCc Al 2600/840	x	x	75214	75215	x	x
75220	FUTURA 2.2ft PCc Al 3200/840	x	x	75224	75225	x	x
75230	FUTURA 2.2ft PCc Al 4400/840	x	x	75234	75235	x	x
75240	FUTURA 2.4ft PCc Al 5200/840	75540	75640	75244	75245	75644	75645
75250	FUTURA 2.4ft PCc Al 6400/840	75550	75650	75254	75255	75654	75655
75260	FUTURA 2.4ft PCc Al 8800/840	75560	75660	75264	75265	75664	75665
75430	FUTURA 2.4ft PCc Al 12800/840	75431	75432	x	x	x	x
75270	FUTURA 2.5ft PCc Al 6500/840	75570	75670	75274	75275	75674	75675
75280	FUTURA 2.5ft PCc Al 8000/840	75580	75680	75284	75285	75684	75685
75290	FUTURA 2.5ft PCc Al 11000/840	75590	75690	75294	75295	75694	75695
75440	FUTURA 2.5ft PCc Al 16000/840	75441	75442	x	x	x	x

Example of type marking: 75665 = FUTURA 2.4ft PCc Al 8800/840 **3F M3h**

FUTURA PC Al DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
75013	FUTURA 2.2ft PC Al 2600/840 DALI	x	x	75017	75019	x	x
75023	FUTURA 2.2ft PC Al 3200/840 DALI	x	x	75027	75029	x	x
75033	FUTURA 2.2ft PC Al 4400/840 DALI	x	x	75037	75039	x	x
75043	FUTURA 2.4ft PC Al 5200/840 DALI	75143	75343	75047	75049	75347	75349
75053	FUTURA 2.4ft PC Al 6400/840 DALI	75153	75353	75057	75059	75357	75359
75063	FUTURA 2.4ft PC Al 8800/840 DALI	75163	75363	75067	75069	75367	75369
75450	FUTURA 2.4ft PC Al 12800/840 DALI	75451	75452	x	x	x	x
75073	FUTURA 2.5ft PC Al 6500/840 DALI	75173	75373	75077	75079	75377	75379
75083	FUTURA 2.5ft PC Al 8000/840 DALI	75183	75383	75087	75089	75387	75389
75093	FUTURA 2.5ft PC Al 11000/840 DALI	75193	75393	75097	75099	75397	75399
75460	FUTURA 2.5ft PC Al 16000/840 DALI	75461	75462	x	x	x	x

FUTURA PCc Al DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
75213	FUTURA 2.2ft PCc Al 2600/840 DALI	x	x	75217	75219	x	x
75223	FUTURA 2.2ft PCc Al 3200/840 DALI	x	x	75227	75229	x	x
75233	FUTURA 2.2ft PCc Al 4400/840 DALI	x	x	75237	75239	x	x
75243	FUTURA 2.4ft PCc Al 5200/840 DALI	75543	75643	75247	75249	75647	75649
75253	FUTURA 2.4ft PCc Al 6400/840 DALI	75553	75653	75257	75259	75657	75659
75263	FUTURA 2.4ft PCc Al 8800/840 DALI	75563	75663	75267	75269	75667	75669
75470	FUTURA 2.4ft PCc Al 12800/840 DALI	75471	75472	x	x	x	x
75273	FUTURA 2.5ft PCc Al 6500/840 DALI	75573	75673	75277	75279	75677	75679
75283	FUTURA 2.5ft PCc Al 8000/840 DALI	75583	75683	75287	75289	75687	75689
75293	FUTURA 2.5ft PCc Al 11000/840 DALI	75593	75693	75297	75299	75697	75699
75480	FUTURA 2.5ft PCc Al 16000/840 DALI	75481	75482	x	x	x	x

Example of type marking: 75687 = FUTURA 2.5ft PCc Al 8000/840 DALI **3F M1h**

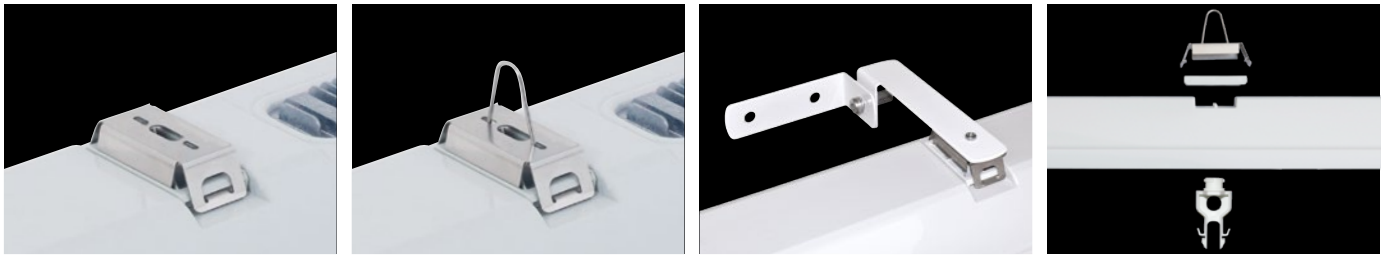
LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall

**LIGHT FITTING DETAILED VIEW**

FUTURA



FUTURA ES



157
lm/W

... Energy Saver.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page. 317).

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **t_a = 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 50 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- Certification: ENEC, CB, HACCP

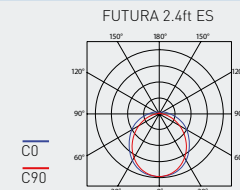
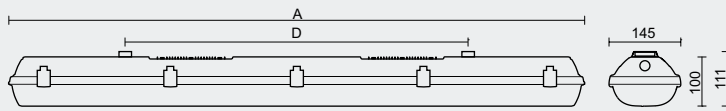


FUTURA ES PC Al, PCc Al



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 50^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 157 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers (PC Al), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 50^\circ\text{C}$ - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate									
10010	FUTURA 2.2ft ES PC Al 2600/840	50	2600	2420	16	151	1,5	612	475
10020	FUTURA 2.2ft ES PC Al 3200/840	50	3200	2980	19	157	1,5	612	475
10030	FUTURA 2.2ft ES PC Al 4400/840	45	4400	4090	27	151	1,7	612	475
10040	FUTURA 2.4ft ES PC Al 5200/840	50	5200	4840	32	151	2,9	1172	700
10050	FUTURA 2.4ft ES PC Al 6400/840	50	6400	5950	39	153	2,9	1172	700
10060	FUTURA 2.4ft ES PC Al 8800/840	45	8800	8180	54	151	3,0	1172	700
10070	FUTURA 2.4ft ES PC Al 12800/840	35	12800	11900	78	153	3,0	1172	700
10080	FUTURA 2.5ft ES PC Al 6500/840	50	6500	6050	40	151	3,8	1452	940
10090	FUTURA 2.5ft ES PC Al 8000/840	50	8000	7440	49	152	3,9	1452	940
10100	FUTURA 2.5ft ES PC Al 11000/840	45	11000	10230	67	153	3,9	1452	940
10110	FUTURA 2.5ft ES PC Al 16000/840	35	16000	14880	97	153	3,9	1452	940

10020 FUTURA 2.2ft ES PC Al 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 - 2 x 18W
 10050 FUTURA 2.4ft ES PC Al 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 - 2 x 36W
 10090 FUTURA 2.5ft ES PC Al 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 - 2 x 58W

FUTURA ES PC Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10010	FUTURA 2.2ft ES PC Al 2600/840	x	x	10014	10015	x	x
10020	FUTURA 2.2ft ES PC Al 3200/840	x	x	10024	10025	x	x
10030	FUTURA 2.2ft ES PC Al 4400/840	x	x	10034	10035	x	x
10040	FUTURA 2.4ft ES PC Al 5200/840	10041	10043	10044	10045	10046	10047
10050	FUTURA 2.4ft ES PC Al 6400/840	10051	10053	10054	10055	10056	10057
10060	FUTURA 2.4ft ES PC Al 8800/840	10061	10063	10064	10065	10066	10067
10070	FUTURA 2.4ft ES PC Al 12800/840	10071	10073	x	x	x	x
10080	FUTURA 2.5ft ES PC Al 6500/840	10081	10083	10084	10085	10086	10087
10090	FUTURA 2.5ft ES PC Al 8000/840	10091	10093	10094	10095	10096	10097
10100	FUTURA 2.5ft ES PC Al 11000/840	10101	10103	10104	10105	10106	10107
10110	FUTURA 2.5ft ES PC Al 16000/840	10111	10113	x	x	x	x

FUTURA ES PCc Al

Non-dimmable driver - stainless clips [c]

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10120	FUTURA 2.2ft ES PCc Al 2600/840	x	x	10124	10125	x	x
10130	FUTURA 2.2ft ES PCc Al 3200/840	x	x	10134	10135	x	x
10140	FUTURA 2.2ft ES PCc Al 4400/840	x	x	10144	10145	x	x
10150	FUTURA 2.4ft ES PCc Al 5200/840	10151	10153	10154	10155	10156	10157
10160	FUTURA 2.4ft ES PCc Al 6400/840	10161	10163	10164	10165	10166	10167
10170	FUTURA 2.4ft ES PCc Al 8800/840	10171	10173	10174	10175	10176	10177
10180	FUTURA 2.4ft ES PCc Al 12800/840	10181	10183	x	x	x	x
10190	FUTURA 2.5ft ES PCc Al 6500/840	10191	10193	10194	10195	10196	10197
10200	FUTURA 2.5ft ES PCc Al 8000/840	10201	10203	10204	10205	10206	10207
10210	FUTURA 2.5ft ES PCc Al 11000/840	10211	10213	10214	10215	10216	10217
10220	FUTURA 2.5ft ES PCc Al 16000/840	10221	10223	x	x	x	x

Example of type marking: 10177 = FUTURA 2.4ft ES PCc Al 8800/840 3F M3h

FUTURA ES PC Al DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10230	FUTURA 2.2ft ES PC Al 2600/840 DALI	x	x	10234	10235	x	x
10240	FUTURA 2.2ft ES PC Al 3200/840 DALI	x	x	10244	10245	x	x
10250	FUTURA 2.2ft ES PC Al 4400/840 DALI	x	x	10254	10255	x	x
10260	FUTURA 2.4ft ES PC Al 5200/840 DALI	10261	10263	10264	10265	10266	10267
10270	FUTURA 2.4ft ES PC Al 6400/840 DALI	10271	10273	10274	10275	10276	10277
10280	FUTURA 2.4ft ES PC Al 8800/840 DALI	10281	10283	10284	10285	10286	10287
10290	FUTURA 2.4ft ES PC Al 12800/840 DALI	10291	10293	x	x	x	x
10300	FUTURA 2.5ft ES PC Al 6500/840 DALI	10301	10303	10304	10305	10306	10307
10310	FUTURA 2.5ft ES PC Al 8000/840 DALI	10311	10313	10314	10315	10316	10317
10320	FUTURA 2.5ft ES PC Al 11000/840 DALI	10321	10323	10324	10325	10326	10327
10330	FUTURA 2.5ft ES PC Al 16000/840 DALI	10331	10333	x	x	x	x

FUTURA ES PCc Al DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10340	FUTURA 2.2ft ES PCc Al 2600/840 DALI	x	x	10344	10345	x	x
10350	FUTURA 2.2ft ES PCc Al 3200/840 DALI	x	x	10354	10355	x	x
10360	FUTURA 2.2ft ES PCc Al 4400/840 DALI	x	x	10364	10365	x	x
10370	FUTURA 2.4ft ES PCc Al 5200/840 DALI	10371	10373	10374	10375	10376	10377
10380	FUTURA 2.4ft ES PCc Al 6400/840 DALI	10381	10383	10384	10385	10386	10387
10390	FUTURA 2.4ft ES PCc Al 8800/840 DALI	10391	10393	10394	10395	10396	10397
10400	FUTURA 2.4ft ES PCc Al 12800/840 DALI	10401	10403	x	x	x	x
10410	FUTURA 2.5ft ES PCc Al 6500/840 DALI	10411	10413	10414	10415	10416	10417
10420	FUTURA 2.5ft ES PCc Al 8000/840 DALI	10421	10423	10424	10425	10426	10427
10430	FUTURA 2.5ft ES PCc Al 11000/840 DALI	10431	10433	10434	10435	10436	10437
10440	FUTURA 2.5ft ES PCc Al 16000/840 DALI	10441	10443	x	x	x	x

Example of type marking: 10426 = FUTURA 2.5ft ES PCc Al 8000/840 DALI **3F M1h**

LEGEND

- | | | | |
|---------------|---|--------------------|---|
| 1F | 1-phase 3 core through-wiring in the luminaire | DALI | version with digital dimmable driver DALI |
| 3F | 3-phase 5 core through-wiring in the luminaire | DALI 1F | 1-phase 5 core through-wiring in the luminaire |
| M1h | emergency back-up source with 1 hour operating time for maintained emergency illumination | DALI 3F | 3-phase 7 core through-wiring in the luminaire |
| M3h | emergency back-up source with 3 hour operating time for maintained emergency illumination | DALI 3F Mxh | 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply) |
| 3F Mxh | 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply) | | |

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall

**LIGHT FITTING DETAILED VIEW**

FUTURA ES



FUTURA HE



171
lm/W

... high efficiency, with sulphur-resistant LED chips.

USE

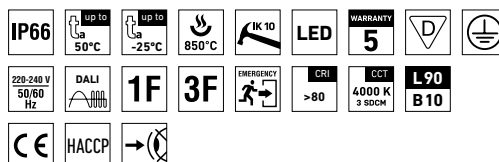
The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page. 317).

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **t_a = 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 55 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- **Chips with high sulphur resistance**
- Long lifetime due to low thermal resistance

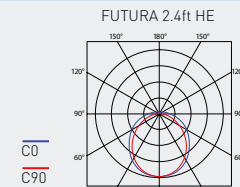
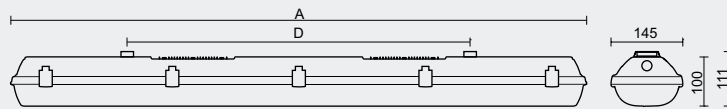


FUTURA HE PC AL, PCc AL



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 50^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 171 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers (PC AL), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED sulphur-resistant modules, current driver or current driver DALI



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 50^\circ\text{C}$ - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate									
11000	FUTURA 2.2ft HE PC AL 3200/840	50	3200	2980	18	166	1,7	612	475
11010	FUTURA 2.2ft HE PC AL 4400/840	45	4400	4090	24	170	1,7	612	475
11003	FUTURA 2.2ft HE PC AL 6400/840	35	6400	5950	35	170	1,7	612	475
11006	FUTURA 2.4ft HE PC AL 6400/840	50	6400	5950	36	165	3,0	1172	700
11020	FUTURA 2.4ft HE PC AL 8800/840	45	8800	8180	48	170	3,0	1172	700
11016	FUTURA 2.4ft HE PC AL 12800/840	35	12800	11900	70	170	3,0	1172	700
11019	FUTURA 2.5ft HE PC AL 8000/840	50	8000	7440	45	165	3,9	1452	940
11030	FUTURA 2.5ft HE PC AL 11000/840	45	11000	10230	60	171	3,9	1452	940
11041	FUTURA 2.5ft HE PC AL 16000/840	35	16000	14880	87	171	3,9	1452	940
103406	FUTURA 2.5ft HE PC AL 22000/840	35	22000	20460	130	157	4,0	1452	940

FUTURA HE PC AL

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11000	FUTURA 2.2ft HE PC AL 3200/840	x	x	11001	11002	x	x
11010	FUTURA 2.2ft HE PC AL 4400/840	x	x	11014	11015	x	x
11003	FUTURA 2.2ft HE PC AL 6400/840	x	x	11004	11005	x	x
11006	FUTURA 2.4ft HE PC AL 6400/840	11007	11008	11009	11011	11012	11013
11020	FUTURA 2.4ft HE PC AL 8800/840	11021	11023	11024	11025	11026	11027
11016	FUTURA 2.4ft HE PC AL 12800/840	11017	11018	x	x	x	x
11019	FUTURA 2.5ft HE PC AL 8000/840	11022	11028	11029	11032	11038	11039
11030	FUTURA 2.5ft HE PC AL 11000/840	11031	11033	11034	11035	11036	11037
11041	FUTURA 2.5ft HE PC AL 16000/840	11042	11043	x	x	x	x
103406	FUTURA 2.5ft HE PC AL 22000/840	103407	103408	x	x	x	x

FUTURA HE PCc AL

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11046	FUTURA 2.2ft HE PCc AL 3200/840	x	x	11047	11048	x	x
11040	FUTURA 2.2ft HE PCc AL 4400/840	x	x	11044	11045	x	x
11049	FUTURA 2.2ft HE PCc AL 6400/840	x	x	11052	11058	x	x
11059	FUTURA 2.4ft HE PCc AL 6400/840	11062	11068	11069	11071	11072	11073
11050	FUTURA 2.4ft HE PCc AL 8800/840	11051	11053	11054	11055	11056	11057
11076	FUTURA 2.4ft HE PCc AL 12800/840	11077	11078	x	x	x	x
11079	FUTURA 2.5ft HE PCc AL 8000/840	11082	11088	11089	11092	11098	11099
11060	FUTURA 2.5ft HE PCc AL 11000/840	11061	11063	11064	11065	11066	11067
11101	FUTURA 2.5ft HE PCc AL 16000/840	11102	11103	x	x	x	x
103412	FUTURA 2.5ft HE PCc AL 22000/840	103413	103414	x	x	x	x

FUTURA HE PC AL DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11106	FUTURA 2.2ft HE PC AL 3200/840 DALI	x	x	11107	11108	x	x
11070	FUTURA 2.2ft HE PC AL 4400/840 DALI	x	x	11074	11075	x	x
11109	FUTURA 2.2ft HE PC AL 6400/840 DALI	x	x	11112	11118	x	x
11119	FUTURA 2.4ft HE PC AL 6400/840 DALI	11122	11128	11129	11130	11131	11132
11080	FUTURA 2.4ft HE PC AL 8800/840 DALI	11081	11083	11084	11085	11086	11087
11133	FUTURA 2.4ft HE PC AL 12800/840 DALI	11134	11135	x	x	x	x
11136	FUTURA 2.5ft HE PC AL 8000/840 DALI	11137	11138	11139	11140	11141	11142
11090	FUTURA 2.5ft HE PC AL 11000/840 DALI	11091	11093	11094	11095	11096	11097
11143	FUTURA 2.5ft HE PC AL 16000/840 DALI	11144	11145	x	x	x	x
103411	FUTURA 2.5ft HE PC AL 22000/840 DALI	103409	103410	x	x	x	x

FUTURA HE PCc AL DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11146	FUTURA 2.2ft HE PCc AL 3200/840 DALI	x	x	11147	11148	x	x
11100	FUTURA 2.2ft HE PCc AL 4400/840 DALI	x	x	11104	11105	x	x
11149	FUTURA 2.2ft HE PCc AL 6400/840 DALI	x	x	11150	11151	x	x
11152	FUTURA 2.4ft HE PCc AL 6400/840 DALI	11153	11154	11155	11156	11157	11158
11110	FUTURA 2.4ft HE PCc AL 8800/840 DALI	11111	11113	11114	11115	11116	11117
11159	FUTURA 2.4ft HE PCc AL 12800/840 DALI	11160	11161	x	x	x	x
11162	FUTURA 2.5ft HE PCc AL 8000/840 DALI	11163	11164	11165	11166	11167	11168
11120	FUTURA 2.5ft HE PCc AL 11000/840 DALI	11121	11123	11124	11125	11126	11127
11169	FUTURA 2.5ft HE PCc AL 16000/840 DALI	11170	11171	x	x	x	x
103415	FUTURA 2.5ft HE PCc AL 22000/840 DALI	103416	103417	x	x	x	x

Example of type marking: 11116 = FUTURA 2.4ft HE PCc AL 8800/840 DALI **3F M1h**

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
 - 3F** 3-phase 5 core through-wiring in the luminaire
 - M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
 - M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
 - 3F Mxx** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
 - DALI 1F** 1-phase 5 core through-wiring in the luminaire
 - DALI 3F** 3-phase 7 core through-wiring in the luminaire
 - DALI 3F Mxx** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

FUTURA HE



FUTURA VP



BIM
ready

... for outdoor spaces.

USE

The light fitting is suitable for the installation in outdoor spaces with shelter. It is equipped with a ventilation plug made of polyamide which eliminates the presence of condensation fumes and underpressure in the light fitting caused by ambient temperature fluctuations.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 317).

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **$t_a = 50^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25°C
- Standard model - CRI > 80: 4000 K

- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- Certification: ENEC, CB, HACCP



FUTURA VP Al, VPc Al



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 50^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 141 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers, UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Ventilation plug: type BVPB-01 made of polyamide, size M12 \times 1.5
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI

Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 50^\circ\text{C}$ - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate									
76010	FUTURA 2.2ft VP Al 2600/840	50	2600	2490	18	138	1,5	612	475
76020	FUTURA 2.2ft VP Al 3200/840	50	3200	3050	22	139	1,5	612	475
76030	FUTURA 2.2ft VP Al 4400/840	45	4400	4230	30	141	1,7	612	475
76040	FUTURA 2.4ft VP Al 5200/840	50	5200	4910	35	140	2,9	1172	700
76050	FUTURA 2.4ft VP Al 6400/840	50	6400	5880	42	140	2,9	1172	700
76060	FUTURA 2.4ft VP Al 8800/840	45	8800	8110	58	140	3,0	1172	700
76410	FUTURA 2.4ft VP Al 12800/840	35	12800	11900	85	140	3,0	1172	700
76070	FUTURA 2.5ft VP Al 6500/840	50	6500	6190	44	141	3,8	1452	940
76080	FUTURA 2.5ft VP Al 8000/840	50	8000	7440	53	140	3,9	1452	940
76090	FUTURA 2.5ft VP Al 11000/840	45	11000	9950	71	140	3,9	1452	940
76420	FUTURA 2.5ft VP Al 16000/840	35	16000	14810	106	140	3,9	1452	940

76020 FUTURA 2.2ft VP Al 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 - 2 \times 18 W
 76050 FUTURA 2.4ft VP Al 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 - 2 \times 36 W
 76080 FUTURA 2.5ft VP Al 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 - 2 \times 58 W

FUTURA VP Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
76010	FUTURA 2.2ft VP Al 2600/840	x	x	76014	76015	x	x
76020	FUTURA 2.2ft VP Al 3200/840	x	x	76024	76025	x	x
76030	FUTURA 2.2ft VP Al 4400/840	x	x	76034	76035	x	x
76040	FUTURA 2.4ft VP Al 5200/840	76140	76340	76044	76045	76344	76345
76050	FUTURA 2.4ft VP Al 6400/840	76150	76350	76054	76055	76354	76355
76060	FUTURA 2.4ft VP Al 8800/840	76160	76360	76064	76065	76364	76365
76410	FUTURA 2.4ft VP Al 12800/840	76411	76412	x	x	x	x
76070	FUTURA 2.5ft VP Al 6500/840	76170	76370	76074	76075	76374	76375
76080	FUTURA 2.5ft VP Al 8000/840	76180	76380	76084	76085	76384	76385
76090	FUTURA 2.5ft VP Al 11000/840	76190	76390	76094	76095	76394	76395
76420	FUTURA 2.5ft VP Al 16000/840	76421	76422	x	x	x	x

FUTURA VPc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
76210	FUTURA 2.2ft VPc Al 2600/840	x	x	76214	76215	x	x
76220	FUTURA 2.2ft VPc Al 3200/840	x	x	76224	76225	x	x
76230	FUTURA 2.2ft VPc Al 4400/840	x	x	76234	76235	x	x
76240	FUTURA 2.4ft VPc Al 5200/840	76540	76640	76244	76245	76644	76645
76250	FUTURA 2.4ft VPc Al 6400/840	76550	76650	76254	76255	76654	76655
76260	FUTURA 2.4ft VPc Al 8800/840	76560	76660	76264	76265	76664	76665
76430	FUTURA 2.4ft VPc Al 12800/840	76431	76432	x	x	x	x
76270	FUTURA 2.5ft VPc Al 6500/840	76570	76670	76274	76275	76674	76675
76280	FUTURA 2.5ft VPc Al 8000/840	76580	76680	76284	76285	76684	76685
76290	FUTURA 2.5ft VPc Al 11000/840	76590	76690	76294	76295	76694	76695
76440	FUTURA 2.5ft VPc Al 16000/840	76441	76442	x	x	x	x

Example of type marking: 76664 = FUTURA 2.4ft VPc Al 8800/840 **3F M1h**

FUTURA VP AL DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
76013	FUTURA 2.2ft VP AL 2600/840 DALI	x	x	76017	76019	x	x
76023	FUTURA 2.2ft VP AL 3200/840 DALI	x	x	76027	76029	x	x
76033	FUTURA 2.2ft VP AL 4400/840 DALI	x	x	76037	76039	x	x
76043	FUTURA 2.4ft VP AL 5200/840 DALI	76143	76343	76047	76049	76347	76349
76053	FUTURA 2.4ft VP AL 6400/840 DALI	76153	76353	76057	76059	76357	76359
76063	FUTURA 2.4ft VP AL 8800/840 DALI	76163	76363	76067	76069	76367	76369
76450	FUTURA 2.4ft VP AL 12800/840 DALI	76451	76452	x	x	x	x
76073	FUTURA 2.5ft VP AL 6500/840 DALI	76173	76373	76077	76079	76377	76379
76083	FUTURA 2.5ft VP AL 8000/840 DALI	76183	76383	76087	76089	76387	76389
76093	FUTURA 2.5ft VP AL 11000/840 DALI	76193	76393	76097	76099	76397	76399
76460	FUTURA 2.5ft VP AL 16000/840 DALI	76461	76462	x	x	x	x

FUTURA VPc AL DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
76213	FUTURA 2.2ft VPc AL 2600/840 DALI	x	x	76217	76219	x	x
76223	FUTURA 2.2ft VPc AL 3200/840 DALI	x	x	76227	76229	x	x
76233	FUTURA 2.2ft VPc AL 4400/840 DALI	x	x	76237	76239	x	x
76243	FUTURA 2.4ft VPc AL 5200/840 DALI	76543	76643	76247	76249	76647	76649
76253	FUTURA 2.4ft VPc AL 6400/840 DALI	76553	76653	76257	76259	76657	76659
76263	FUTURA 2.4ft VPc AL 8800/840 DALI	76563	76663	76267	76269	76667	76669
76470	FUTURA 2.4ft VPc AL 12800/840 DALI	76471	76472	x	x	x	x
76273	FUTURA 2.5ft VPc AL 6500/840 DALI	76573	76673	76277	76279	76677	76679
76283	FUTURA 2.5ft VPc AL 8000/840 DALI	76583	76683	76287	76289	76687	76689
76293	FUTURA 2.5ft VPc AL 11000/840 DALI	76593	76693	76297	76299	76697	76699
76480	FUTURA 2.5ft VPc AL 16000/840 DALI	76481	76482	x	x	x	x

Example of type marking: 76667 = FUTURA 2.4ft VPc AL 8800/840 DALI **3F M1h**

LEGEND

1F	1-phase 3 core through-wiring in the luminaire
3F	3-phase 5 core through-wiring in the luminaire
M1h	emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h	emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh	3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

DALI	version with digital dimmable driver DALI
DALI 1F	1-phase 5 core through-wiring in the luminaire
DALI 3F	3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh	3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

FUTURA VP



FUTURA NB



BIM
ready

... for storage rack lanes with high ceilings 10-15 m.

USE

The light fitting with narrow emitting characteristics is suitable to illuminate storage rack lanes and narrow spaces with high ceilings. Its assembly height is 10-15 m.

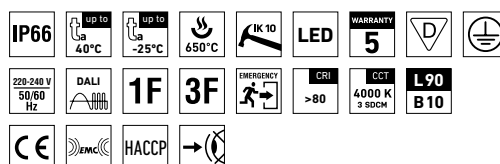
The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 317).

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **$t_a = 40^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B10
- Diffuser: transparent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25°C
- Standard model - CRI > 80: 4000 K

- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- It can be delivered with a grille to reduce the longitudinal UGR
- Through-wiring of up to 10 wires at body
- Certification: HACCP

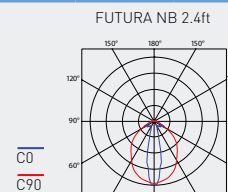
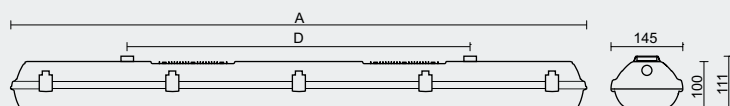


FUTURA NB PC AL, PCc AL



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 40^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 131 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: transparent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers (PC AL), UV stable, impact-resistant
- Reflector: parabolic polished aluminium with narrow emitting characteristics (NB - narrow beam)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 40^\circ\text{C}$ - body: grey polycarbonate with Al coolers - diffuser: transparent polycarbonate									
78060	FUTURA 2.4ft NB PC AL 8800/840	40	8800	7460	58	129	3,3	1172	700
78070	FUTURA 2.4ft NB PC AL 12800/840	30	12800	11070	85	130	3,3	1172	700
78090	FUTURA 2.5ft NB PC AL 11000/840	40	11000	9130	71	129	3,9	1452	940
78080	FUTURA 2.5ft NB PC AL 16000/840	30	16000	13840	106	131	3,9	1452	940

FUTURA NB PC AL

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
78060	FUTURA 2.4ft NB PC AL 8800/840	78160	78360	78064	78065	78364	78365
78070	FUTURA 2.4ft NB PC AL 12800/840	78170	78370	x	x	x	x
78090	FUTURA 2.5ft NB PC AL 11000/840	78190	78390	78094	78095	78394	78395
78080	FUTURA 2.5ft NB PC AL 16000/840	78180	78380	x	x	x	x

FUTURA NB PCc AL

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
78260	FUTURA 2.4ft NB PCc AL 8800/840	78560	78660	78264	78265	78664	78665
78270	FUTURA 2.4ft NB PCc AL 12800/840	78570	78670	x	x	x	x
78290	FUTURA 2.5ft NB PCc AL 11000/840	78590	78690	78294	78295	78694	78695
78280	FUTURA 2.5ft NB PCc AL 16000/840	78580	78680	x	x	x	x

FUTURA NB PC AL DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
78063	FUTURA 2.4ft NB PC AL 8800/840 DALI	78163	78363	78067	78069	78367	78369
78073	FUTURA 2.4ft NB PC AL 12800/840 DALI	78173	78373	x	x	x	x
78093	FUTURA 2.5ft NB PC AL 11000/840 DALI	78193	78393	78097	78099	78397	78399
78083	FUTURA 2.5ft NB PC AL 16000/840 DALI	78183	78383	x	x	x	x

FUTURA NB PCc AL DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
78263	FUTURA 2.4ft NB PCc AL 8800/840 DALI	78563	78663	78267	78269	78667	78669
78273	FUTURA 2.4ft NB PCc AL 12800/840 DALI	78573	78673	x	x	x	x
78293	FUTURA 2.5ft NB PCc AL 11000/840 DALI	78593	78693	78297	78299	78697	78699
78283	FUTURA 2.5ft NB PCc AL 16000/840 DALI	78583	78683	x	x	x	x

Example of type marking: 78669 = FUTURA 2.4ft NB PCc AL 8800/840 DALI 3F M3h

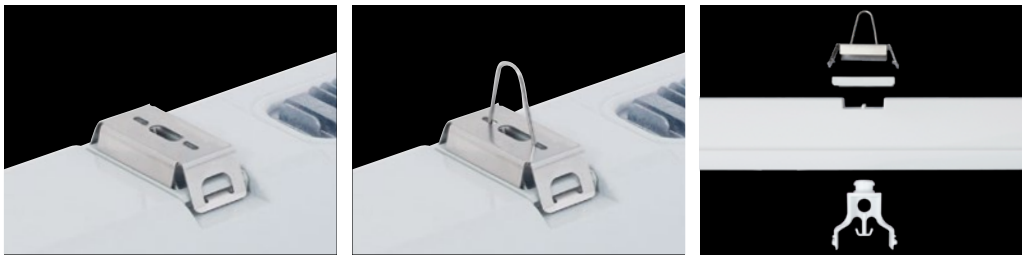
LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks



LIGHT FITTING DETAILED VIEW

FUTURA NB



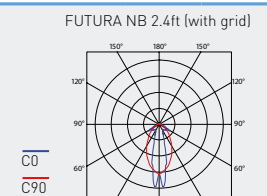
ACCESSORIES

Grid FUTURA NB

Additional grid for reducing the longitudinal UGR for FUTURA NB lamps.
The grid reduces the glare value in the longitudinal direction to below 19 (see the luminance curve below).



Code	Type	Description	Weight [kg]
11989	MNB 2.4	grid FUTURA 2.4ft NB	0,36
11990	MNB 2.5	grid FUTURA 2.5ft NB	0,45



Code	Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
Change of the values for lamp variants with grid								
78060	FUTURA 2.4ft NB PC Al 8800/840	8800	5850	58	101	3,7	1172	700
78070	FUTURA 2.4ft NB PC Al 12800/840	12800	8680	85	102	3,7	1172	700
78090	FUTURA 2.5ft NB PC Al 11000/840	11000	7250	71	102	4,4	1452	940
78080	FUTURA 2.5ft NB PC Al 16000/840	16000	10850	106	102	4,4	1452	940

FUTURA ABS



BIM
ready

... dustproof, waterproof and chemically resistant.

USE

The light fitting is suitable for the environment where ammoniac fumes, lixivants, alkaline compounds and hot water (hydrolyses) can be present. We recommend this light fitting for agricultural operations, stables, car washing lines, warehouses, mechanical workshops and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body made of ABS and the diffuser made of AC have increased chemical resistance.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 317).

Always open the cover of the light fitting out of an environment with aggressive volatile substances.

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **ta = 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC) = high chemical resistance
- Body: dark grey ABS with Al coolers (ABS Al) = high chemical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K

- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- Certification: ENEC, CB, (except RED), HACCP

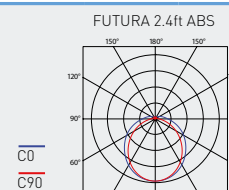
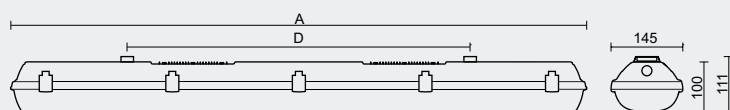


FUTURA ABS Al, ABSc Al



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 50^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 136 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS with Al coolers (ABS Al), UV stable, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15% glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10% glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 50^\circ\text{C}$ - body: dark grey ABS with Al coolers - diffuser: translucent acrylate									
77010	FUTURA 2.2ft ABS Al 2600/840	50	2600	2290	18	127	1,5	612	475
77020	FUTURA 2.2ft ABS Al 3200/840	50	3200	2820	22	128	1,5	612	475
77030	FUTURA 2.2ft ABS Al 4400/840	45	4400	3870	30	129	1,7	612	475
77040	FUTURA 2.4ft ABS Al 5200/840	50	5200	4580	35	131	2,9	1172	700
77050	FUTURA 2.4ft ABS Al 6400/840	50	6400	5630	42	134	2,9	1172	700
77060	FUTURA 2.4ft ABS Al 8800/840	45	8800	7740	58	133	3,0	1172	700
77410	FUTURA 2.4ft ABS Al 12800/840	35	12800	11260	85	132	3,0	1172	700
77070	FUTURA 2.5ft ABS Al 6500/840	50	6500	5720	44	130	3,8	1452	940
77080	FUTURA 2.5ft ABS Al 8000/840	50	8000	7040	53	133	3,9	1452	940
77090	FUTURA 2.5ft ABS Al 11000/840	45	11000	9680	71	136	3,9	1452	940
77420	FUTURA 2.5ft ABS Al 16000/840	35	16000	14080	106	133	3,9	1452	940

77020 FUTURA 2.2ft ABS Al 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 - 2 x 18W

77050 FUTURA 2.4ft ABS Al 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 - 2 x 36W

77080 FUTURA 2.5ft ABS Al 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 - 2 x 58W

FUTURA ABS Al

Code	Type
77010	FUTURA 2.2ft ABS Al 2600/840
77020	FUTURA 2.2ft ABS Al 3200/840
77030	FUTURA 2.2ft ABS Al 4400/840
77040	FUTURA 2.4ft ABS Al 5200/840
77050	FUTURA 2.4ft ABS Al 6400/840
77060	FUTURA 2.4ft ABS Al 8800/840
77410	FUTURA 2.4ft ABS Al 12800/840
77070	FUTURA 2.5ft ABS Al 6500/840
77080	FUTURA 2.5ft ABS Al 8000/840
77090	FUTURA 2.5ft ABS Al 11000/840
77420	FUTURA 2.5ft ABS Al 16000/840

Non-dimmable driver - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
	x	x	77014	77015	x	x
	x	x	77024	77025	x	x
	x	x	77034	77035	x	x
	77140	77340	77044	77045	77344	77345
	77150	77350	77054	77055	77354	77355
	77160	77360	77064	77065	77364	77365
	77411	77412	x	x	x	x
	77170	77370	77074	77075	77374	77375
	77180	77380	77084	77085	77384	77385
	77190	77390	77094	77095	77394	77395
	77421	77422	x	x	x	x

FUTURA ABSc Al

Code	Type
77210	FUTURA 2.2ft ABSc Al 2600/840
77220	FUTURA 2.2ft ABSc Al 3200/840
77230	FUTURA 2.2ft ABSc Al 4400/840
77240	FUTURA 2.4ft ABSc Al 5200/840
77250	FUTURA 2.4ft ABSc Al 6400/840
77260	FUTURA 2.4ft ABSc Al 8800/840
77430	FUTURA 2.4ft ABSc Al 12800/840
77270	FUTURA 2.5ft ABSc Al 6500/840
77280	FUTURA 2.5ft ABSc Al 8000/840
77290	FUTURA 2.5ft ABSc Al 11000/840
77440	FUTURA 2.5ft ABSc Al 16000/840

Non-dimmable driver - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
	x	x	77214	77215	x	x
	x	x	77224	77225	x	x
	x	x	77234	77235	x	x
	77540	77640	77244	77245	77644	77645
	77550	77650	77254	77255	77654	77655
	77560	77660	77264	77265	77664	77665
	77431	77432	x	x	x	x
	77570	77670	77274	77275	77674	77675
	77580	77680	77284	77285	77684	77685
	77590	77690	77294	77295	77694	77695
	77441	77442	x	x	x	x

FUTURA ABS AI DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
77013	FUTURA 2.2ft ABS AI 2600/840 DALI	x	x	77017	77019	x	x
77023	FUTURA 2.2ft ABS AI 3200/840 DALI	x	x	77027	77029	x	x
77033	FUTURA 2.2ft ABS AI 4400/840 DALI	x	x	77037	77039	x	x
77043	FUTURA 2.4ft ABS AI 5200/840 DALI	77143	77343	77047	77049	77347	77349
77053	FUTURA 2.4ft ABS AI 6400/840 DALI	77153	77353	77057	77059	77357	77359
77063	FUTURA 2.4ft ABS AI 8800/840 DALI	77163	77363	77067	77069	77367	77369
77450	FUTURA 2.4ft ABS AI 12800/840 DALI	77451	77452	x	x	x	x
77073	FUTURA 2.5ft ABS AI 6500/840 DALI	77173	77373	77077	77079	77377	77379
77083	FUTURA 2.5ft ABS AI 8000/840 DALI	77183	77383	77087	77089	77387	77389
77093	FUTURA 2.5ft ABS AI 11000/840 DALI	77193	77393	77097	77099	77397	77399
77460	FUTURA 2.5ft ABS AI 16000/840 DALI	77461	77462	x	x	x	x

FUTURA ABSc AI DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
77213	FUTURA 2.2ft ABSc AI 2600/840 DALI	x	x	77217	77219	x	x
77223	FUTURA 2.2ft ABSc AI 3200/840 DALI	x	x	77227	77229	x	x
77233	FUTURA 2.2ft ABSc AI 4400/840 DALI	x	x	77237	77239	x	x
77243	FUTURA 2.4ft ABSc AI 5200/840 DALI	77543	77643	77247	77249	77647	77649
77253	FUTURA 2.4ft ABSc AI 6400/840 DALI	77553	77653	77257	77259	77657	77659
77263	FUTURA 2.4ft ABSc AI 8800/840 DALI	77563	77663	77267	77269	77667	77669
77470	FUTURA 2.4ft ABSc AI 12800/840 DALI	77471	77472	x	x	x	x
77273	FUTURA 2.5ft ABSc AI 6500/840 DALI	77573	77673	77277	77279	77677	77679
77283	FUTURA 2.5ft ABSc AI 8000/840 DALI	77583	77683	77287	77289	77687	77689
77293	FUTURA 2.5ft ABSc AI 11000/840 DALI	77593	77693	77297	77299	77697	77699
77480	FUTURA 2.5ft ABSc AI 16000/840 DALI	77481	77482	x	x	x	x

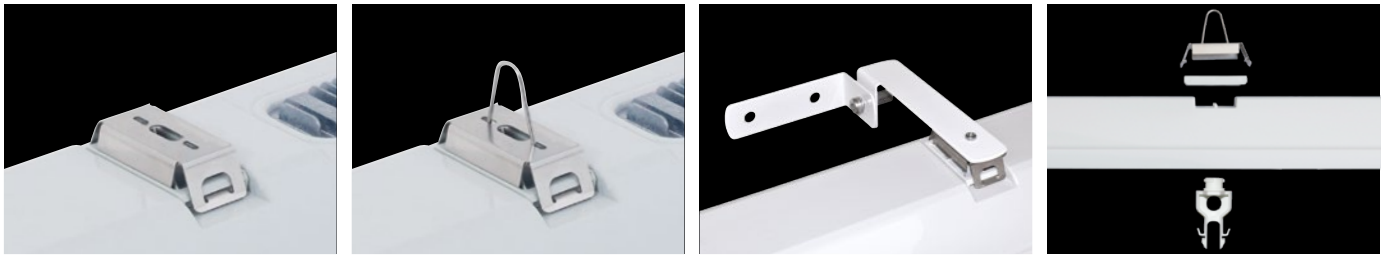
Example of type marking: 77667 = FUTURA 2.4ft ABSc AI 8800/840 DALI **3F M1h**

LEGEND

- | | | | |
|---------------|--|--------------------|--|
| 1F | 1-phase 3 core through-wiring in the luminaire | DALI | version with digital dimmable driver DALI |
| 3F | 3-phase 5 core through-wiring in the luminaire | DALI 1F | 1-phase 5 core through-wiring in the luminaire |
| M1h | emergency back-up source with 1 hour operating time for maintained emergency illumination | DALI 3F | 3-phase 7 core through-wiring in the luminaire |
| M3h | emergency back-up source with 3 hour operating time for maintained emergency illumination | DALI 3F Mxh | 3-phase 7 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply) |
| 3F Mxh | 3-phase 5 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply) | | |

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall

**LIGHT FITTING DETAILED VIEW**

FUTURA ABS



FUTURA ES ABS



148
lm/W

... Energy Saver, chemically resistant.

USE

The light fitting is suitable for the environment where ammoniac fumes, lixivants, alkaline compounds and hot water (hydrolyses) can be present. We recommend this light fitting for agricultural operations, stables, car washing lines, warehouses, mechanical workshops and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body made of ABS and the diffuser made of AC have increased chemical resistance.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 317).

Always open the cover of the light fitting out of an environment with aggressive volatile substances.

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **ta = 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC) = high chemical resistance
- Body: dark grey ABS with Al coolers (ABS Al) = high chemical resistance
- Up to 50 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C

- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- Certification: ENEC, CB, HACCP



FUTURA ES ABS Al, ABSc Al



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 50^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 148 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS with Al coolers (ABS Al), UV stable, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15% glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10% glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI

Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 50^\circ\text{C}$ - body: dark grey ABS with Al coolers - diffuser: translucent acrylate									
10510	FUTURA 2.2ft ES ABS Al 2600/840	50	2600	2290	16	143	1,5	612	475
10520	FUTURA 2.2ft ES ABS Al 3200/840	50	3200	2820	19	148	1,5	612	475
10530	FUTURA 2.2ft ES ABS Al 4400/840	45	4400	3870	27	143	1,7	612	475
10540	FUTURA 2.4ft ES ABS Al 5200/840	50	5200	4580	32	143	2,9	1172	700
10550	FUTURA 2.4ft ES ABS Al 6400/840	50	6400	5630	39	144	2,9	1172	700
10560	FUTURA 2.4ft ES ABS Al 8800/840	45	8800	7740	54	143	3,0	1172	700
10570	FUTURA 2.4ft ES ABS Al 12800/840	35	12800	11260	78	144	3,0	1172	700
10580	FUTURA 2.5ft ES ABS Al 6500/840	50	6500	5720	40	143	3,8	1452	940
10590	FUTURA 2.5ft ES ABS Al 8000/840	50	8000	7040	49	144	3,9	1452	940
10600	FUTURA 2.5ft ES ABS Al 11000/840	45	11000	9680	67	144	3,9	1452	940
10610	FUTURA 2.5ft ES ABS Al 16000/840	35	16000	14080	97	145	3,9	1452	940

77020 FUTURA 2.2ft ES ABS Al 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 – 2x18W
 77050 FUTURA 2.4ft ES ABS Al 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2x36W
 77080 FUTURA 2.5ft ES ABS Al 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2x58W

FUTURA ES ABS Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10510	FUTURA 2.2ft ES ABS Al 2600/840	x	x	10514	10515	x	x
10520	FUTURA 2.2ft ES ABS Al 3200/840	x	x	10524	10525	x	x
10530	FUTURA 2.2ft ES ABS Al 4400/840	x	x	10534	10535	x	x
10540	FUTURA 2.4ft ES ABS Al 5200/840	10541	10543	10544	10545	10546	10547
10550	FUTURA 2.4ft ES ABS Al 6400/840	10551	10553	10554	10555	10556	10557
10560	FUTURA 2.4ft ES ABS Al 8800/840	10561	10563	10564	10565	10566	10567
10570	FUTURA 2.4ft ES ABS Al 12800/840	10571	10573	x	x	x	x
10580	FUTURA 2.5ft ES ABS Al 6500/840	10581	10583	10584	10585	10586	10587
10590	FUTURA 2.5ft ES ABS Al 8000/840	10591	10593	10594	10595	10596	10597
10600	FUTURA 2.5ft ES ABS Al 11000/840	10601	10603	10604	10605	10606	10607
10610	FUTURA 2.5ft ES ABS Al 16000/840	10611	10613	x	x	x	x

FUTURA ES ABSc Al

Non-dimmable driver - stainless clips [c]

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10620	FUTURA 2.2ft ES ABSc Al 2600/840	x	x	10624	10625	x	x
10630	FUTURA 2.2ft ES ABSc Al 3200/840	x	x	10634	10635	x	x
10640	FUTURA 2.2ft ES ABSc Al 4400/840	x	x	10644	10645	x	x
10650	FUTURA 2.4ft ES ABSc Al 5200/840	10651	10653	10654	10655	10656	10657
10660	FUTURA 2.4ft ES ABSc Al 6400/840	10661	10663	10664	10665	10666	10667
10670	FUTURA 2.4ft ES ABSc Al 8800/840	10671	10673	10674	10675	10676	10677
10680	FUTURA 2.4ft ES ABSc Al 12800/840	10681	10683	x	x	x	x
10690	FUTURA 2.5ft ES ABSc Al 6500/840	10691	10693	10694	10695	10696	10697
10700	FUTURA 2.5ft ES ABSc Al 8000/840	10701	10703	10704	10705	10706	10707
10710	FUTURA 2.5ft ES ABSc Al 11000/840	10711	10713	10714	10715	10716	10717
10720	FUTURA 2.5ft ES ABSc Al 16000/840	10721	10723	x	x	x	x

Example of type marking: 10706 = FUTURA 2.4ft ES ABSc Al 8800/840 **3F M1h**

FUTURA ES ABS AI DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10730	FUTURA 2.2ft ES ABS AI 2600/840 DALI	x	x	10734	10735	x	x
10740	FUTURA 2.2ft ES ABS AI 3200/840 DALI	x	x	10744	10745	x	x
10750	FUTURA 2.2ft ES ABS AI 4400/840 DALI	x	x	10754	10755	x	x
10760	FUTURA 2.4ft ES ABS AI 5200/840 DALI	10761	10763	10764	10765	10766	10767
10770	FUTURA 2.4ft ES ABS AI 6400/840 DALI	10771	10773	10774	10775	10776	10777
10780	FUTURA 2.4ft ES ABS AI 8800/840 DALI	10781	10783	10784	10785	10786	10787
10790	FUTURA 2.4ft ES ABS AI 12800/840 DALI	10791	10793	x	x	x	x
10800	FUTURA 2.5ft ES ABS AI 6500/840 DALI	10801	10803	10804	10805	10806	10807
10810	FUTURA 2.5ft ES ABS AI 8000/840 DALI	10811	10813	10814	10815	10816	10817
10820	FUTURA 2.5ft ES ABS AI 11000/840 DALI	10821	10823	10824	10825	10826	10827
10830	FUTURA 2.5ft ES ABS AI 16000/840 DALI	10831	10833	x	x	x	x

FUTURA ES ABSc AI DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10840	FUTURA 2.2ft ES ABSc AI 2600/840 DALI	x	x	10844	10845	x	x
10850	FUTURA 2.2ft ES ABSc AI 3200/840 DALI	x	x	10854	10855	x	x
10860	FUTURA 2.2ft ES ABSc AI 4400/840 DALI	x	x	10864	10865	x	x
10870	FUTURA 2.4ft ES ABSc AI 5200/840 DALI	10871	10873	10874	10875	10876	10877
10880	FUTURA 2.4ft ES ABSc AI 6400/840 DALI	10881	10883	10884	10885	10886	10887
10890	FUTURA 2.4ft ES ABSc AI 8800/840 DALI	10891	10893	10894	10895	10896	10897
10900	FUTURA 2.4ft ES ABSc AI 12800/840 DALI	10901	10903	x	x	x	x
10910	FUTURA 2.5ft ES ABSc AI 6500/840 DALI	10911	10913	10914	10915	10916	10917
10920	FUTURA 2.5ft ES ABSc AI 8000/840 DALI	10921	10923	10924	10925	10926	10927
10930	FUTURA 2.5ft ES ABSc AI 11000/840 DALI	10931	10933	10934	10935	10936	10937
10940	FUTURA 2.5ft ES ABSc AI 16000/840 DALI	10941	10943	x	x	x	x

Example of type marking: 10896 = FUTURA 2.4ft ES ABSc AI 8800/840 DALI **3F M1h**

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

FUTURA ES ABS



FUTURA HE ABS



162
lm/W

... high efficiency, with sulphur-resistant LED chips, chemically resistant.

USE

The light fitting is suitable for the environment where ammoniac fumes, lixivants, alkaline compounds and hot water (hydrolyses) can be present. We recommend this light fitting for agricultural operations, stables, car washing lines, warehouses, mechanical workshops and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body made of ABS and the diffuser made of AC have increased chemical resistance.

[It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 317].

Always open the cover of the light fitting out of an environment with aggressive volatile substances.

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **t_a = 50 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC) = high chemical resistance
- Body: dark grey ABS with Al coolers (ABS Al) = high chemical resistance
- Up to 55 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- **Chips with high sulphur resistance**
- Long lifetime due to low thermal resistance

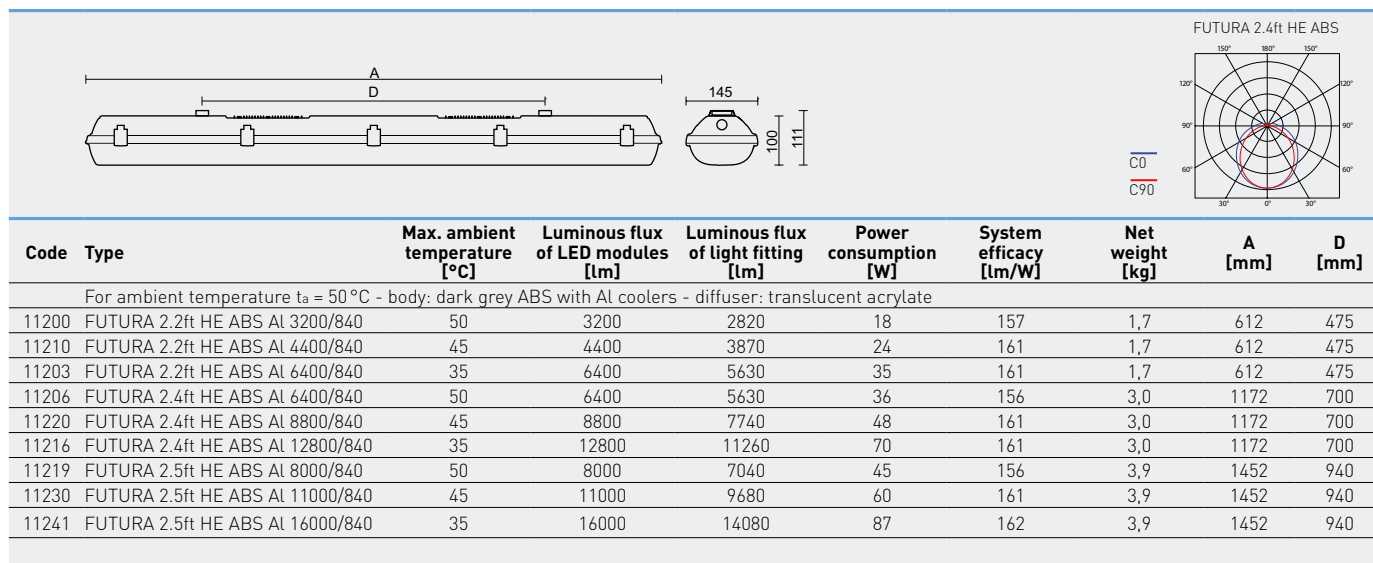


FUTURA HE ABS Al, ABSc Al



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 50^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 162 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS with Al coolers (ABS Al), UV stable, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15% glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10% glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED sulphur-resistant modules, current driver or current driver DALI



FUTURA HE ABS Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11200	FUTURA 2.2ft HE ABS Al 3200/840	x	x	11201	11202	x	x
11210	FUTURA 2.2ft HE ABS Al 4400/840	x	x	11214	11215	x	x
11203	FUTURA 2.2ft HE ABS Al 6400/840	x	x	11204	11205	x	x
11206	FUTURA 2.4ft HE ABS Al 6400/840	11207	11208	11209	11211	11212	11213
11220	FUTURA 2.4ft HE ABS Al 8800/840	11221	11223	11224	11225	11226	11227
11216	FUTURA 2.4ft HE ABS Al 12800/840	11217	11218	x	x	x	x
11219	FUTURA 2.5ft HE ABS Al 8000/840	11222	11228	11229	11232	11238	11239
11230	FUTURA 2.5ft HE ABS Al 11000/840	11231	11233	11234	11235	11236	11237
11241	FUTURA 2.5ft HE ABS Al 16000/840	11242	11243	x	x	x	x

FUTURA HE ABSc Al

Non-dimmable driver - stainless clips [c]

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11246	FUTURA 2.2ft HE ABSc Al 3200/840	x	x	11247	11248	x	x
11240	FUTURA 2.2ft HE ABSc Al 4400/840	x	x	11244	11245	x	x
11249	FUTURA 2.2ft HE ABSc Al 6400/840	x	x	11252	11258	x	x
11259	FUTURA 2.4ft HE ABSc Al 6400/840	11262	11268	11269	11271	11272	11273
11250	FUTURA 2.4ft HE ABSc Al 8800/840	11251	11253	11254	11255	11256	11257
11276	FUTURA 2.4ft HE ABSc Al 12800/840	11277	11278	x	x	x	x
11279	FUTURA 2.5ft HE ABSc Al 8000/840	11282	11288	11289	11292	11298	11299
11260	FUTURA 2.5ft HE ABSc Al 11000/840	11261	11263	11264	11265	11266	11267
11301	FUTURA 2.5ft HE ABSc Al 16000/840	11302	11303	x	x	x	x

Example of type marking: 11256 = FUTURA 2.4ft HE ABSc Al 8800/840 3F M1h

FUTURA HE ABS Al DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11306	FUTURA 2.2ft HE ABS Al 3200/840 DALI	x	x	11307	11308	x	x
11270	FUTURA 2.2ft HE ABS Al 4400/840 DALI	x	x	11274	11275	x	x
11309	FUTURA 2.2ft HE ABS Al 6400/840 DALI	x	x	11312	11318	x	x
11319	FUTURA 2.4ft HE ABS Al 6400/840 DALI	11322	11328	11329	11330	11331	11332
11280	FUTURA 2.4ft HE ABS Al 8800/840 DALI	11281	11283	11284	11285	11286	11287
11333	FUTURA 2.4ft HE ABS Al 12800/840 DALI	11334	11335	x	x	x	x
11336	FUTURA 2.5ft HE ABS Al 8000/840 DALI	11337	11338	11339	11340	11341	11342
11290	FUTURA 2.5ft HE ABS Al 11000/840 DALI	11291	11293	11294	11295	11296	11297
11343	FUTURA 2.5ft HE ABS Al 16000/840 DALI	11344	11345	x	x	x	x

FUTURA HE ABSc Al DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
11346	FUTURA 2.2ft HE ABSc Al 3200/840 DALI	x	x	11347	11348	x	x
11300	FUTURA 2.2ft HE ABSc Al 4400/840 DALI	x	x	11304	11305	x	x
11349	FUTURA 2.2ft HE ABSc Al 6400/840 DALI	x	x	11350	11351	x	x
11352	FUTURA 2.4ft HE ABSc Al 6400/840 DALI	11353	11354	11355	11356	11357	11358
11310	FUTURA 2.4ft HE ABSc Al 8800/840 DALI	11311	11313	11314	11315	11316	11317
11359	FUTURA 2.4ft HE ABSc Al 12800/840 DALI	11360	11361	x	x	x	x
11362	FUTURA 2.5ft HE ABSc Al 8000/840 DALI	11363	11364	11365	11366	11367	11368
11320	FUTURA 2.5ft HE ABSc Al 11000/840 DALI	11321	11323	11324	11325	11326	11327
11369	FUTURA 2.5ft HE ABSc Al 16000/840 DALI	11370	11371	x	x	x	x

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
 - 3F** 3-phase 5 core through-wiring in the luminaire
 - M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
 - M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
 - 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
 - DALI 1F** 1-phase 5 core through-wiring in the luminaire
 - DALI 3F** 3-phase 7 core through-wiring in the luminaire
 - DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

FUTURA HE ABS



FUTURA CLASS II



... with Class II insulation.

USE

It is suitable for **industrial, warehouse and agricultural buildings, sports premises, transport terminals, railway vehicle repair shops, platforms, traction substations, depots, parking lots and garages, workshops and laboratories** without explosion hazard.

The light fitting resists dust, humidity and spouting water. The body and the diffuser made of PC material have high mechanical resistance against impact and deformation.

Easy, fast and maximally **efficient mounting is achieved when using the cables with connectors delivered by us.**

It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment.

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **$t_a = 50^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25°C

- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Available in ABS chemical resistant version
- Through-wiring of up to 6 wires at body (2.4ft and 2.5ft)

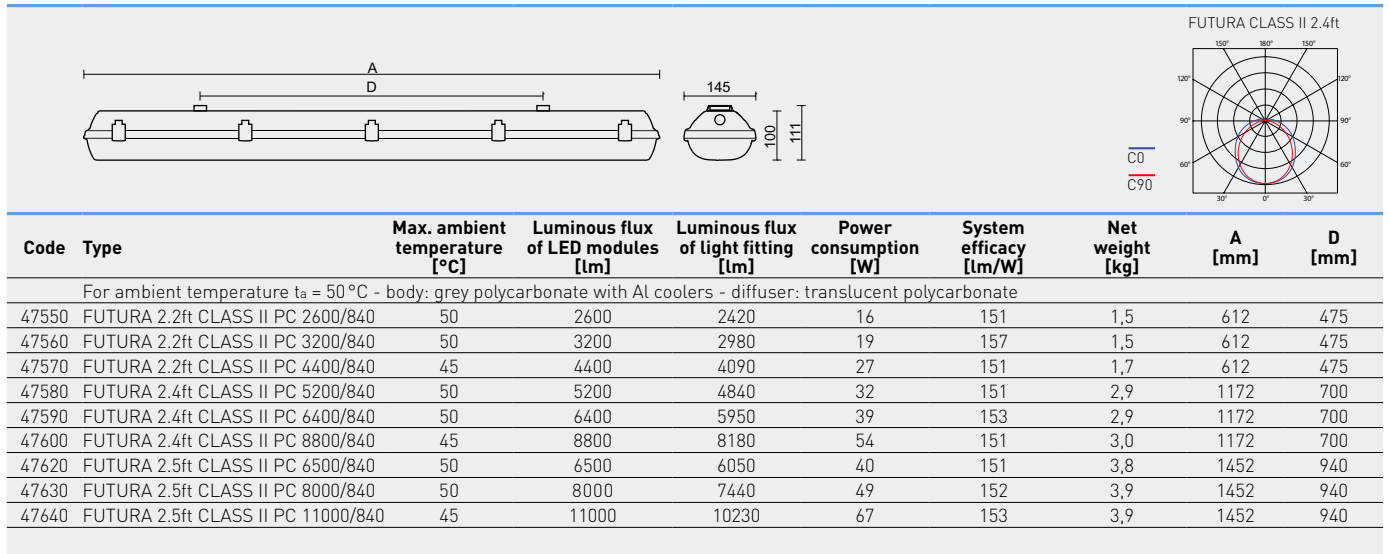


FUTURA CLASS II PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 50^\circ\text{C}$,
Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$
(version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 157 lm/W
- AWEX emergency light module generates a luminous flux of 440 lm
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: **Connectors with 2, 4 or 6 poles, wire section 1.5 or 2.5 mm**
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI



47560 FUTURA 2.2ft CLASS II PC 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 – 2 × 18W
 47590 FUTURA 2.4ft CLASS II PC 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2 × 36W
 47630 FUTURA 2.5ft CLASS II PC 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2 × 58W

FUTURA CLASS II PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
47550	FUTURA 2.2ft CLASS II PC 2600/840	x	x	47554	47555	x	x
47560	FUTURA 2.2ft CLASS II PC 3200/840	x	x	47564	47565	x	x
47570	FUTURA 2.2ft CLASS II PC 4400/840	x	x	47574	47575	x	x
47580	FUTURA 2.4ft CLASS II PC 5200/840	47581	47583	47584	47585	47586	47587
47590	FUTURA 2.4ft CLASS II PC 6400/840	47591	47593	47594	47595	47596	47597
47600	FUTURA 2.4ft CLASS II PC 8800/840	47601	47603	47604	47605	47606	47607
47620	FUTURA 2.5ft CLASS II PC 6500/840	47621	47623	47624	47625	47626	47627
47630	FUTURA 2.5ft CLASS II PC 8000/840	47631	47633	47634	47635	47636	47637
47640	FUTURA 2.5ft CLASS II PC 11000/840	47641	47643	47644	47645	47646	47647

FUTURA CLASS II PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
47660	FUTURA 2.2ft CLASS II PCc 2600/840	x	x	47664	47665	x	x
47670	FUTURA 2.2ft CLASS II PCc 3200/840	x	x	47674	47675	x	x
47680	FUTURA 2.2ft CLASS II PCc 4400/840	x	x	47684	47685	x	x
47690	FUTURA 2.4ft CLASS II PCc 5200/840	47691	47693	47694	47695	47696	47697
47700	FUTURA 2.4ft CLASS II PCc 6400/840	47701	47703	47704	47705	47706	47707
47710	FUTURA 2.4ft CLASS II PCc 8800/840	47711	47713	47714	47715	47716	47717
47730	FUTURA 2.5ft CLASS II PCc 6500/840	47731	47733	47734	47735	47736	47737
47740	FUTURA 2.5ft CLASS II PCc 8000/840	47741	47743	47744	47745	47746	47747
47750	FUTURA 2.5ft CLASS II PCc 11000/840	47751	47753	47754	47755	47756	47757

Example of type marking: 47717 = FUTURA 2.4ft CLASS II PCc 8800/840 **3F M3h**

FUTURA CLASS II PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
47770	FUTURA 2.2ft CLASS II PC 2600/840 DALI	x	x	47774	47775	x	x
47780	FUTURA 2.2ft CLASS II PC 3200/840 DALI	x	x	47784	47785	x	x
47790	FUTURA 2.2ft CLASS II PC 4400/840 DALI	x	x	47794	47795	x	x
47800	FUTURA 2.4ft CLASS II PC 5200/840 DALI	47801	47803	47804	47805	47806	47807
47810	FUTURA 2.4ft CLASS II PC 6400/840 DALI	47811	47813	47814	47815	47816	47817
47820	FUTURA 2.4ft CLASS II PC 8800/840 DALI	47821	47823	47824	47825	47826	47827
47840	FUTURA 2.5ft CLASS II PC 6500/840 DALI	47841	47843	47844	47845	47846	47847
47850	FUTURA 2.5ft CLASS II PC 8000/840 DALI	47851	47853	47854	47855	47856	47857
47860	FUTURA 2.5ft CLASS II PC 11000/840 DALI	47861	47863	47864	47865	47866	47867

FUTURA CLASS II PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
47880	FUTURA 2.2ft CLASS II PCc 2600/840 DALI	x	x	47884	47885	x	x
47890	FUTURA 2.2ft CLASS II PCc 3200/840 DALI	x	x	47894	47895	x	x
47900	FUTURA 2.2ft CLASS II PCc 4400/840 DALI	x	x	47904	47905	x	x
47910	FUTURA 2.4ft CLASS II PCc 5200/840 DALI	47911	47913	47914	47915	47916	47917
47920	FUTURA 2.4ft CLASS II PCc 6400/840 DALI	47921	47923	47924	47925	47926	47927
47930	FUTURA 2.4ft CLASS II PCc 8800/840 DALI	47931	47933	47934	47935	47936	47937
47950	FUTURA 2.5ft CLASS II PCc 6500/840 DALI	47951	47953	47954	47955	47956	47957
47960	FUTURA 2.5ft CLASS II PCc 8000/840 DALI	47961	47963	47964	47965	47966	47967
47970	FUTURA 2.5ft CLASS II PCc 11000/840 DALI	47971	47973	47974	47975	47976	47977

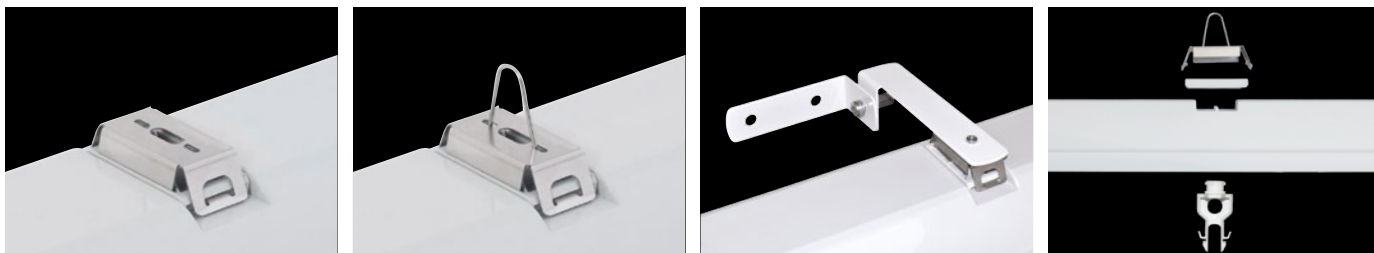
Example of type marking: 47966 = FUTURA CLASS II 2.5ft PCc 8000/840 DALI **3F M1h**

LEGEND

- CLASS II 1F** 1-phase 2 core through-wiring in the luminaire
- CLASS II 3F** 3-phase 4 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- CLASS II 3F Mxh** 3-phase 4 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
- CLASS II DALI 1F** 1-phase 4 core through-wiring in the luminaire
- CLASS II DALI 3F** 3-phase 6 core through-wiring in the luminaire
- CLASS II DALI 3F Mxh** 3-phase 6 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall

**LIGHT FITTING DETAILED VIEW**

FUTURA CLASS II



STUCCHI 37xx

WIELAND

FUTURA MAX



... for extreme temperatures -40°C to $+70^{\circ}\text{C}$.

USE

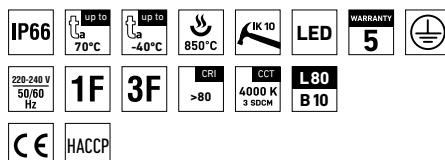
The light fitting is suitable for indoor and outdoor spaces with roof with extreme ambient temperatures from **-40°C to $+70^{\circ}\text{C}$** . The light fitting is destined mainly for heating stations, metallurgical lines, glass-works, as well as for freezers, cooling plants and other premises without danger of explosion of gases, dusts and flammable vapors.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 317).

ADVANTAGES

- Light fitting protection **IP66**
- Minimum ambient temperature up to **$t_a = -40^{\circ}\text{C}$**
- Maximum ambient temperature up to **$t_a = 70^{\circ}\text{C}$**
- Lifetime: 50,000 hours / L80B10
- Possibility of using in even higher ambient temperatures under the condition of a shortened service life of the light fitting – parameters solved within a particular project
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- Constant luminous flux even in ambient temperature of -40°C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K
- Through-wiring of up to 10 wires at body
- Certification: HACCP

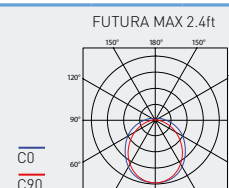
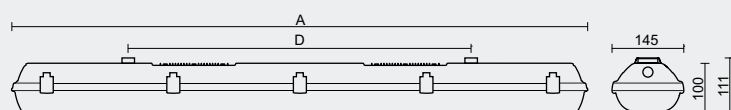


FUTURA MAX PCc Al



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Minimum ambient temperature: $t_a = -40^\circ\text{C}$
- Maximum ambient temperature: $t_a = 70^\circ\text{C}$
- Lifetime: 50,000 hours / L80B10
- Possibility of using in even higher ambient temperatures under the condition of a shortened service life of the light fitting – parameters solved within a particular project
- Maximum system efficacy: 157 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers (PC Al), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Ventilation plug: type BVPB-01 made of polyamide, size M12 x 1.5
- Clips: stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 70^\circ\text{C}$ - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate									
79820	FUTURA 1.5ft MAX PCc Al 4000/840	70	4000	3720	24	155	3,6	1452	940
79830	FUTURA 1.5ft MAX PCc Al 5500/840	65	5500	5120	33	155	3,6	1452	940
79840	FUTURA 2.4ft MAX PCc Al 6400/840	65	6400	5950	38	157	3,0	1172	700
79800	FUTURA 2.4ft MAX PCc Al 8800/840	60	8800	8180	52	157	3,0	1172	700
79850	FUTURA 2.5ft MAX PCc Al 8000/840	65	8000	7440	48	155	3,9	1452	940
79810	FUTURA 2.5ft MAX PCc Al 11000/840	60	11000	10230	65	157	3,9	1452	940

FUTURA MAX PCc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	DALI	DALI 3F
79820	FUTURA 1.5ft MAX PCc Al 4000/840	79821	79823	x	x	79825	79826
79830	FUTURA 1.5ft MAX PCc Al 5500/840	79831	79833	x	x	79835	79836
79840	FUTURA 2.4ft MAX PCc Al 6400/840	79841	79843	x	x	79845	79846
79800	FUTURA 2.4ft MAX PCc Al 8800/840	79801	79803	x	x	79805	79806
79850	FUTURA 2.5ft MAX PCc Al 8000/840	79851	79853	x	x	79855	79856
79810	FUTURA 2.5ft MAX PCc Al 11000/840	79811	79813	x	x	79815	79816

Example of type marking: 79813 = FUTURA MAX 2.5ft PCc Al 11000/840 3F

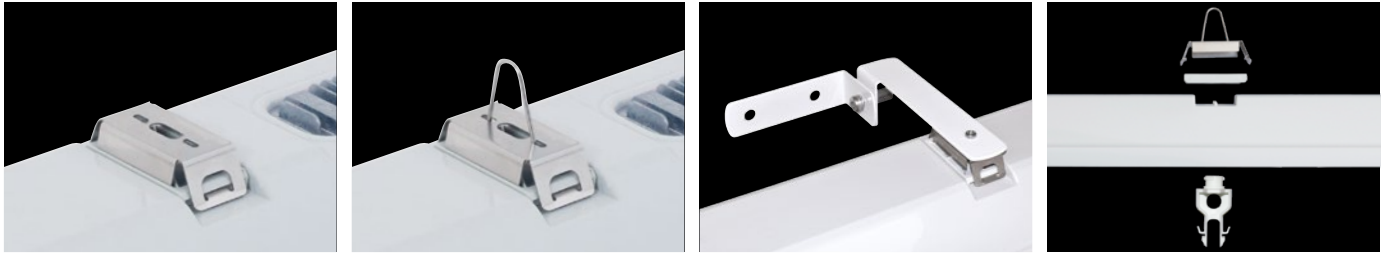
LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

FUTURA MAX



FUTURA Sensor



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... dustproof, waterproof and impact-resistant.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 317).

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **$t_a = 50^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- Current driver with the possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25°C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 4000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- With built-in **microwave motion sensor**
- The possibility of setting the sensor using the DIP switch
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- Certification: HACCP



FUTURA SNS PC AL, PCc AL



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 50^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 141 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers (PC AL), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or digital dimmable driver DALI
- Motion sensor: 360° range, switch on height 1 – 6 m, time range 5 sec – 30 min, switch-on sensitivity 2 – 50 lux

Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 50^\circ\text{C}$ - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate									
79010	FUTURA 2.2ft SNS PC AL 2600/840	50	2600	2490	18	138	1,5	612	475
79020	FUTURA 2.2ft SNS PC AL 3200/840	50	3200	3050	22	139	1,5	612	475
79030	FUTURA 2.2ft SNS PC AL 4400/840	45	4400	4230	30	141	1,7	612	475
79040	FUTURA 2.4ft SNS PC AL 5200/840	50	5200	4910	35	140	2,9	1172	700
79050	FUTURA 2.4ft SNS PC AL 6400/840	50	6400	5880	42	140	2,9	1172	700
79060	FUTURA 2.4ft SNS PC AL 8800/840	45	8800	8110	58	140	3,0	1172	700
79410	FUTURA 2.4ft SNS PC AL 12800/840	35	12800	11900	85	140	3,0	1172	700
79070	FUTURA 2.5ft SNS PC AL 6500/840	50	6500	6190	44	141	3,8	1452	940
79080	FUTURA 2.5ft SNS PC AL 8000/840	50	8000	7440	53	140	3,9	1452	940
79090	FUTURA 2.5ft SNS PC AL 11000/840	45	11000	9950	71	140	3,9	1452	940
79420	FUTURA 2.5ft SNS PC AL 16000/840	35	16000	14810	106	140	3,9	1452	940

79050 FUTURA 2.4ft SNS PC AL 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2x36 W
 79080 FUTURA 2.5ft SNS PC AL 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2x58 W

FUTURA SNS PC AL

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
79010	FUTURA 2.2ft SNS PC AL 2600/840	x	x	79014	x	x	x
79020	FUTURA 2.2ft SNS PC AL 3200/840	x	x	79024	x	x	x
79030	FUTURA 2.2ft SNS PC AL 4400/840	x	x	79034	x	x	x
79040	FUTURA 2.4ft SNS PC AL 5200/840	79140	79340	79044	79045	79344	79345
79050	FUTURA 2.4ft SNS PC AL 6400/840	79150	79350	79054	79055	79354	79355
79060	FUTURA 2.4ft SNS PC AL 8800/840	79160	79360	79064	79065	79364	79365
79410	FUTURA 2.4ft SNS PC AL 12800/840	79411	79412	x	x	x	x
79070	FUTURA 2.5ft SNS PC AL 6500/840	79170	79370	79074	79075	79374	79375
79080	FUTURA 2.5ft SNS PC AL 8000/840	79180	79380	79084	79085	79384	79385
79090	FUTURA 2.5ft SNS PC AL 11000/840	79190	79390	79094	79095	79394	79395
79420	FUTURA 2.5ft SNS PC AL 16000/840	79421	79422	x	x	x	x

FUTURA SNS PCc AL

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
79210	FUTURA 2.2ft SNS PCc AL 2600/840	x	x	79214	x	x	x
79220	FUTURA 2.2ft SNS PCc AL 3200/840	x	x	79224	x	x	x
79230	FUTURA 2.2ft SNS PCc AL 4400/840	x	x	79234	x	x	x
79240	FUTURA 2.4ft SNS PCc AL 5200/840	79540	79640	79244	79245	79644	79645
79250	FUTURA 2.4ft SNS PCc AL 6400/840	79550	79650	79254	79255	79654	79655
79260	FUTURA 2.4ft SNS PCc AL 8800/840	79560	79660	79264	79265	79664	79665
79430	FUTURA 2.4ft SNS PCc AL 12800/840	79431	79432	x	x	x	x
79270	FUTURA 2.5ft SNS PCc AL 6500/840	79570	79670	79274	79275	79674	79675
79280	FUTURA 2.5ft SNS PCc AL 8000/840	79580	79680	79284	79285	79684	79685
79290	FUTURA 2.5ft SNS PCc AL 11000/840	79590	79690	79294	79295	79694	79695
79440	FUTURA 2.5ft SNS PCc AL 16000/840	79441	79442	x	x	x	x

Example of type marking: 79684 = FUTURA 2.5ft SNS PCc AL 8000/840 3F M1h

FUTURA SNS PC Al CORRIDOR

Digital dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
79043	FUTURA 2.4ft SNS PC Al 5200/840 CORRIDOR	79143	79343	79047	79049	79347	79349
79053	FUTURA 2.4ft SNS PC Al 6400/840 CORRIDOR	79153	79353	79057	79059	79357	79359
79063	FUTURA 2.4ft SNS PC Al 8800/840 CORRIDOR	79163	79363	79067	79069	79367	79369
79073	FUTURA 2.5ft SNS PC Al 6500/840 CORRIDOR	79173	79373	79077	79079	79377	79379
79083	FUTURA 2.5ft SNS PC Al 8000/840 CORRIDOR	79183	79383	79087	79089	79387	79389
79093	FUTURA 2.5ft SNS PC Al 11000/840 CORRIDOR	79193	79393	79097	79099	79397	79399

FUTURA SNS PCc Al CORRIDOR

Digital dimmable driver - stainless clips [c]

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
79243	FUTURA 2.4ft SNS PCc Al 5200/840 CORRIDOR	79543	79643	79247	79249	79647	79649
79253	FUTURA 2.4ft SNS PCc Al 6400/840 CORRIDOR	79553	79653	79257	79259	79657	79659
79263	FUTURA 2.4ft SNS PCc Al 8800/840 CORRIDOR	79563	79663	79267	79269	79667	79669
79273	FUTURA 2.5ft SNS PCc Al 6500/840 CORRIDOR	79573	79673	79277	79279	79677	79679
79283	FUTURA 2.5ft SNS PCc Al 8000/840 CORRIDOR	79583	79683	79287	79289	79687	79689
79293	FUTURA 2.5ft SNS PCc Al 11000/840 CORRIDOR	79593	79693	79297	79299	79697	79699

Example of type marking: 79687 = FUTURA 2.5ft SNS PCc Al 8000/840 CORRIDOR **3F M1h**

LEGEND

- SNS 1F** 1-phase 3 core through-wiring in the luminaire for connection of max. 5 slave luminaires
- SNS 3F** 3-phase 5 core through-wiring in the luminaire for connection of max. 5 slave luminaires (sensor connected to L3)
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- SNS 3F Mxh** 3-phase 5 core through-wiring in the luminaire for connection of max. 5 slave luminaires (sensor and emergency unit connected to L3)
- CORRIDOR** version with digital dimmable driver DALI and set corridor function
- CORRIDOR 1F** 1-phase 5 core through-wiring in the luminaire for connection of max. 20 luminaires
- CORRIDOR 3F** 3-phase 7 core through-wiring in the luminaire for connection of max. 20 luminaires (sensor connected to L3)
- CORRIDOR 3F Mxh** 3-phase 7 core through-wiring in the luminaire for connection of max. 20 luminaires (sensor and emergency unit connected to L3)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall



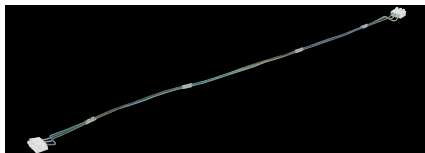
LIGHT FITTING DETAILED VIEW

FUTURA SNS

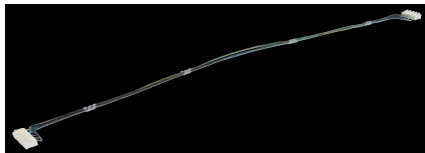


Through-wiring cables

Additional furnishing of 1 phase, 3 phase or multi-phase through-wiring in the body to the light fitting.



Code	Type	Description	Weight [kg]
11995	Z1F-2.4	1 phase cables for through-wiring at body 2.4ft	0,1
11996	Z1F-2.5	1 phase cables for through-wiring at body 2.5ft	0,1



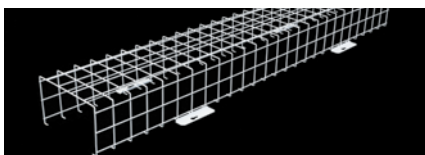
Code	Type	Description	Weight [kg]
11997	Z3F-2.4	3 phase cables for through-wiring at body 2.4ft	0,1
11998	Z3F-2.5	3 phase cables for through-wiring at body 2.5ft	0,1



Code	Type	Description	Weight [kg]
11987	Z2x3F-2.4	2x 3 phase cables for through-wiring at body 2.4ft	0,1
11988	Z2x3F-2.5	2x 3 phase cables for through-wiring at body 2.5ft	0,1

OM – protective grid

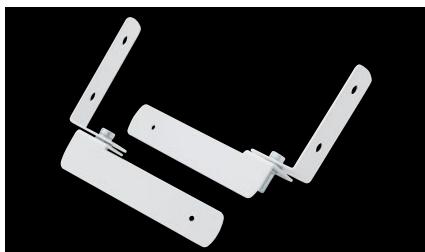
The metal grid protects the light fitting against mechanical damage and unauthorised handling. It is attached to the surface with the use of screws. The surface is treated with the RAL 9003 powder-coated colour.



Code	Type	Description	Weight [kg]
11941	OM 218	protective grid for types 218, 214/224, 2.2ft (700×220×130 mm)	1,0
11942	OM 236	protective grid for types 236, 228/254, 2.4ft (1300×220×130 mm)	1,7
11943	OM 258	protective grid for types 258, 235/249/280, 2.5ft (1600×220×130 mm)	2,0

BZ – side hanger

It serves to attach the light fitting to the wall with the possibility of its positioning.



Code	Type	Description	Weight [kg]
90002	BZ	side hanger with blocking (set for 1 light fitting)	0,4

Canalis busbar system connector

The connector enables a quick 1 phase or 3 phase interconnection of light fittings without their opening.



Code	Type	Description	Weight [kg]
79001	KBA 40 ZU	light fitting suspended holder - Canalis KBA system	0,1
70002	KBC 10 CC211	connector with 1 m cable - Canalis KBA system	0,2

Light fitting inputs

The version with four inputs in the body side for types 2.4ft and 2.5ft can be made-to-order.



Stucchi or Wieland connector

The connector enables a quick 1 phase or 3 phase interconnection of light fittings without their opening.



FROST



INDUSTRIAL
PLASTIC
DUSTPROOF
WATERPROOF
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IMPACT-RESISTANT



FROST – industrial plastic LED light fitting

FROST
page 140



IP66

FROST
page 140

FROST PLUS
page 143



IP66

FROST PLUS
page 143


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... for cold stores and freezing facilities with temperatures down to -25 °C

USE

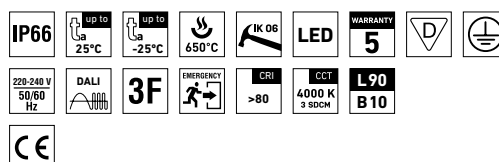
Temperatures of chilled foods range from 0-5 degrees, whilst in freezing facilities can drop up to -25 degrees Celsius. Suitable luminaires for such demanding environments must handle extreme low temperatures, withstand condensation and vapors, have low maintenance and long service life to keep costs low.

Our lighting fixture for freezing storage and chilled storage surroundings is made of ABS material, is weather-proofed and chemically resistant (IP66 and IK 06).

FROST provide with high quality and good solution enduring a long service life of 50 000 hours.

ADVATAGES

- Light fitting protection IP66
- Maximum ambient temperature down to $t_a = -25\text{ °C}$
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS, UV stable, chemically resistant
- Constant luminous flux even in ambient temperatures up to -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 5 wires at body
- Certification: CE

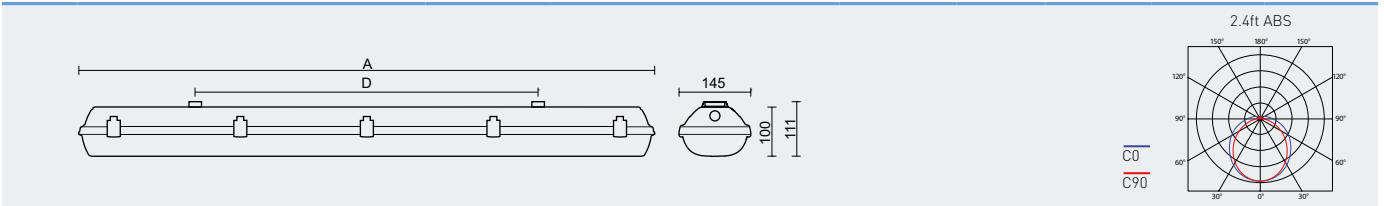


FROST



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Minimum ambient temperature: $t_a = -25\text{ }^\circ\text{C}$, Maximum ambient temperature: $t_a = 25\text{ }^\circ\text{C}$ (version with emergency back-up source for 3 hours; M3h)
- Maximum system efficacy: 136 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS, UV stable, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15% glass fibre
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10% glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature down to $t_a = 25\text{ }^\circ\text{C}$ - body: dark grey - diffuser: translucent acrylate									
103094	FROST 2.4ft 5200/840	-25	5200	4580	35	131	2,7	1172	700
103095	FROST 2.4ft 6400/840	-25	6400	5630	42	134	2,7	1172	700
103096	FROST 2.4ft 8800/840	-25	8800	7740	58	133	2,8	1172	700
103097	FROST 2.5ft 6500/840	-25	6500	5720	44	130	3,5	1452	940
103098	FROST 2.5ft 8000/840	-25	8000	7040	53	133	3,6	1452	940
103099	FROST 2.5ft 11000/840	-25	11000	9680	71	136	3,6	1452	940

Battery heating consumption 10W

FROST

Non-dimmable driver - plastic clips

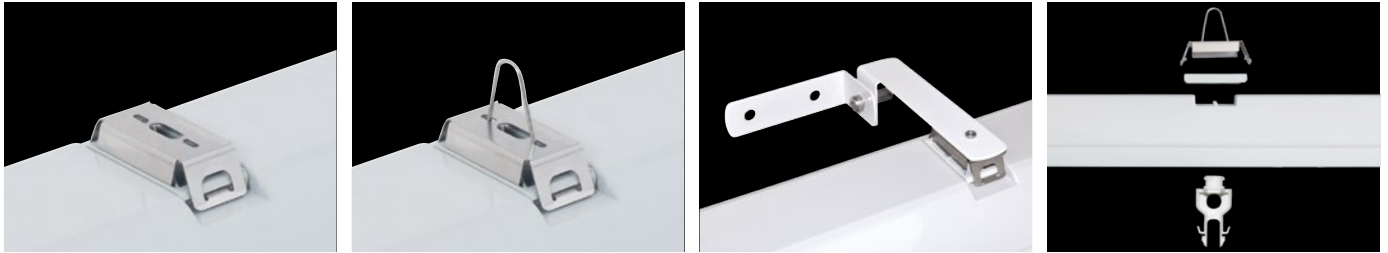
Code	Type	3F	M3h	3F M3h
103094	FROST 2.4ft 5200/840	103100	103106	103112
103095	FROST 2.4ft 6400/840	103101	103107	103113
103096	FROST 2.4ft 8800/840	103102	103108	103114
103097	FROST 2.5ft 6500/840	103103	103109	103115
103098	FROST 2.5ft 8000/840	103104	103110	103116
103099	FROST 2.5ft 11000/840	103105	103111	103117

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

FROST



FROST PLUS



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... for cold stores and freezing facilities with temperatures down up to -40 °C

USE

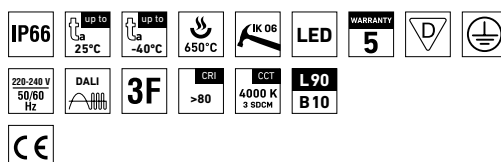
Temperatures of chilled foods range from 0-5 degrees, whilst in freezing facilities can drop up to -40 degrees Celsius. Suitable luminaires for such demanding environments must handle extreme low temperatures, withstand condensation and vapors, have low maintenance and long service life to keep costs low.

Our lighting fixture for freezing storage and chilled storage surroundings is made of ABS material, is weather-proofed and chemically resistant (IP66 and IK 06).

FROST PLUS provide with high quality and good solution enduring a long service life of 50 000 hours.

ADVATAGES

- Light fitting protection IP66
- Maximum ambient temperature down to $t_a = -40\text{ °C}$
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS, UV stable, chemically resistant
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K
- It can be delivered in dimmable version
- Through-wiring of up to 5 wires at body
- Certification: CE

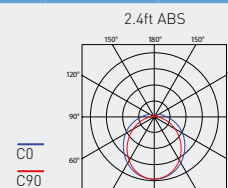
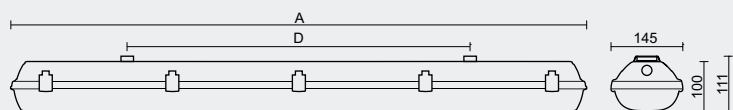


FROST PLUS



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Minimum ambient temperature: $t_a = -40\text{ }^\circ\text{C}$
- Maximum ambient temperature: $t_a = 0\text{-}25\text{ }^\circ\text{C}$
- Maximum system efficacy: 136 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS, UV stable, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15% glass fibre
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10% glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature down to $t_a = 25\text{ }^\circ\text{C}$ - body: dark grey - diffuser: translucent acrylate									
103122	FROST PLUS 2.4ft 5200/840	-40	5200	4580	35	131	2,7	1172	700
103123	FROST PLUS 2.4ft 6400/840	-40	6400	5630	42	134	2,7	1172	700
103124	FROST PLUS 2.4ft 8800/840	-40	8800	7740	58	133	2,8	1172	700
103125	FROST PLUS 2.5ft 6500/840	-40	6500	5720	44	130	3,5	1452	940
103126	FROST PLUS 2.5ft 8000/840	-40	8000	7040	53	133	3,6	1452	940
103127	FROST PLUS 2.5ft 11000/840	-40	11000	9680	71	136	3,6	1452	940

Battery heating consumption 10W

FROST PLUS

Non-dimmable driver - plastic clips

Code	Type	3F
103122	FROST PLUS 2.4ft 5200/840	103128
103123	FROST PLUS 2.4ft 6400/840	103129
103124	FROST PLUS 2.4ft 8800/840	103130
103125	FROST PLUS 2.5ft 6500/840	103131
103126	FROST PLUS 2.5ft 8000/840	103132
103127	FROST PLUS 2.5ft 11000/840	103133

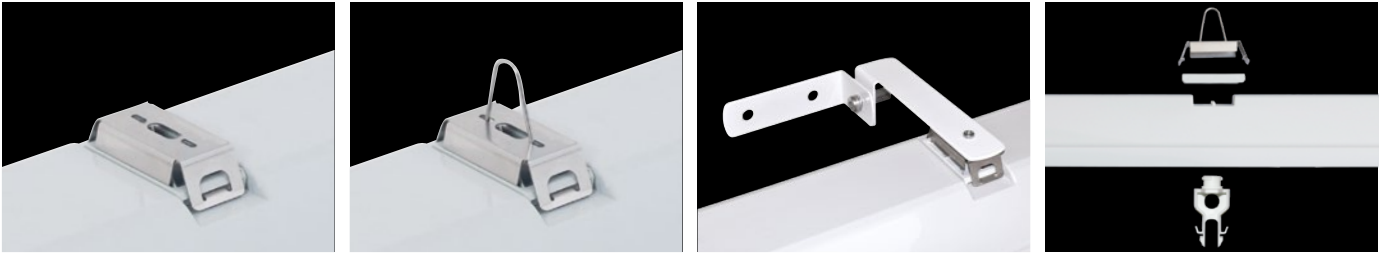
LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall

**LIGHT FITTING DETAILED VIEW**

FROST PLUS



PRIMA LED



INDUSTRIAL
PLASTIC
DUSTPROOF
WATERPROOF
IMPACT-RESISTANT



PRIMA LED – industrial plastic LED light fitting

PRIMA LED
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PRIMA LED
PC, PCc
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IP66

PRIMA LED FOR
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IP66

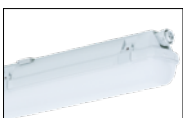
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CLASS II
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IP66

PRIMA LED FOR EXTREME
TEMPERATURES
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PRIMA LED
MAX PCc
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IP66

PRIMA LED WITH
MOTION DETECTOR
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PRIMA LED
SNS PC, SNS PCc
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IP66

PRIMA LED FOR ENVIRON-
MENT WITH A DANGER OF
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PRIMA LED Ex PCc
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IP66

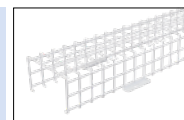
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PRIMA LED TUBE
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IP66

PRIMA LED
ACCESSORIES
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PRIMA LED
ACCESSORIES
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PRIMA LED



BIM
ready

... dustproof, waterproof and impact-resistant.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment, see also page 317).

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **t_a = 45 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESĀ, ENEC, CB, HACCP



PRIMA LED PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 45^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 131 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, five-pole (basic version), or screwed
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI

Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 45^\circ\text{C}$ - body: grey polycarbonate - diffuser: translucent polycarbonate									
65010	PRIMA LED 1.2ft PC 1300/840	45	1300	1150	9	127	1,3	662	350
65020	PRIMA LED 1.2ft PC 1600/840	45	1600	1410	11	128	1,3	662	350
65030	PRIMA LED 1.2ft PC 2200/840	40	2200	1940	15	129	1,3	662	350
65040	PRIMA LED 1.4ft PC 2600/840	45	2600	2300	18	127	1,9	1272	700
65050	PRIMA LED 1.4ft PC 3200/840	45	3200	2830	22	128	1,9	1272	700
65060	PRIMA LED 1.4ft PC 4400/840	40	4400	3890	30	129	1,9	1272	700
65460	PRIMA LED 1.4ft PC 6400/840	40	6400	5660	43	131	1,9	1272	700
65070	PRIMA LED 1.5ft PC 3250/840	45	3250	2870	22	130	2,3	1572	940
65080	PRIMA LED 1.5ft PC 4000/840	45	4000	3540	27	131	2,3	1572	940
65090	PRIMA LED 1.5ft PC 5500/840	40	5500	4860	37	131	2,3	1572	940
65490	PRIMA LED 1.5ft PC 8000/840	40	8000	7080	54	131	2,3	1572	940

65020 PRIMA LED 1.2ft PC 1600/840 = suitable replacement for T8 fl. tube light fitting PRIMA 118 - 1x18W
 65050 PRIMA LED 1.4ft PC 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 136 - 1x36W
 65460 PRIMA LED 1.4ft PC 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 - 2x36W
 65080 PRIMA LED 1.5ft PC 4000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 158 - 1x58W
 65490 PRIMA LED 1.5ft PC 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 - 2x58W

PRIMA LED PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
65010	PRIMA LED 1.2ft PC 1300/840	x	x	x	x	x	x
65020	PRIMA LED 1.2ft PC 1600/840	x	x	x	x	x	x
65030	PRIMA LED 1.2ft PC 2200/840	x	x	x	x	x	x
65040	PRIMA LED 1.4ft PC 2600/840	65140	65340	65044	65045	65344	65345
65050	PRIMA LED 1.4ft PC 3200/840	65150	65350	65054	65055	65354	65355
65060	PRIMA LED 1.4ft PC 4400/840	65160	65360	65064	65065	65364	65365
65460	PRIMA LED 1.4ft PC 6400/840	65461	65462	x	x	x	x
65070	PRIMA LED 1.5ft PC 3250/840	65170	65370	65074	65075	65374	65375
65080	PRIMA LED 1.5ft PC 4000/840	65180	65380	65084	65085	65384	65385
65090	PRIMA LED 1.5ft PC 5500/840	65190	65390	65094	65095	65394	65395
65490	PRIMA LED 1.5ft PC 8000/840	65491	65492	x	x	x	x

PRIMA LED PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
65210	PRIMA LED 1.2ft PCc 1300/840	x	x	x	x	x	x
65220	PRIMA LED 1.2ft PCc 1600/840	x	x	x	x	x	x
65230	PRIMA LED 1.2ft PCc 2200/840	x	x	x	x	x	x
65240	PRIMA LED 1.4ft PCc 2600/840	65540	65640	65244	65245	65644	65645
65250	PRIMA LED 1.4ft PCc 3200/840	65550	65650	65254	65255	65654	65655
65260	PRIMA LED 1.4ft PCc 4400/840	65560	65660	65264	65265	65664	65665
65760	PRIMA LED 1.4ft PCc 6400/840	65761	65762	x	x	x	x
65270	PRIMA LED 1.5ft PCc 3250/840	65570	65670	65274	65275	65674	65675
65280	PRIMA LED 1.5ft PCc 4000/840	65580	65680	65284	65285	65684	65685
65290	PRIMA LED 1.5ft PCc 5500/840	65590	65690	65294	65295	65694	65695
65790	PRIMA LED 1.5ft PCc 8000/840	65791	65792	x	x	x	x

Example of type marking: 65644 = PRIMA LED 1.4ft PCc 2600/840 **3F M1h**

PRIMA LED PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
65013	PRIMA LED 1.2ft PC 1300/840 DALI	x	x	x	x	x	x
65023	PRIMA LED 1.2ft PC 1600/840 DALI	x	x	x	x	x	x
65033	PRIMA LED 1.2ft PC 2200/840 DALI	x	x	x	x	x	x
65043	PRIMA LED 1.4ft PC 2600/840 DALI	65143	65343	65047	65048	65347	65348
65053	PRIMA LED 1.4ft PC 3200/840 DALI	65153	65353	65057	65058	65357	65358
65063	PRIMA LED 1.4ft PC 4400/840 DALI	65163	65363	65067	65068	65367	65368
65860	PRIMA LED 1.4ft PC 6400/840 DALI	65861	65862	x	x	x	x
65073	PRIMA LED 1.5ft PC 3250/840 DALI	65173	65373	65077	65078	65377	65378
65083	PRIMA LED 1.5ft PC 4000/840 DALI	65183	65383	65087	65088	65387	65388
65093	PRIMA LED 1.5ft PC 5500/840 DALI	65193	65393	65097	65098	65397	65398
65890	PRIMA LED 1.5ft PC 8000/840 DALI	65891	65892	x	x	x	x

PRIMA LED PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
65213	PRIMA LED 1.2ft PCc 1300/840 DALI	x	x	x	x	x	x
65223	PRIMA LED 1.2ft PCc 1600/840 DALI	x	x	x	x	x	x
65233	PRIMA LED 1.2ft PCc 2200/840 DALI	x	x	x	x	x	x
65243	PRIMA LED 1.4ft PCc 2600/840 DALI	65543	65643	65247	65248	65647	65648
65253	PRIMA LED 1.4ft PCc 3200/840 DALI	65553	65653	65257	65258	65657	65658
65263	PRIMA LED 1.4ft PCc 4400/840 DALI	65563	65663	65267	65268	65667	65668
65960	PRIMA LED 1.4ft PCc 6400/840 DALI	65961	65962	x	x	x	x
65273	PRIMA LED 1.5ft PCc 3250/840 DALI	65573	65673	65277	65278	65677	65678
65283	PRIMA LED 1.5ft PCc 4000/840 DALI	65583	65683	65287	65288	65687	65688
65293	PRIMA LED 1.5ft PCc 5500/840 DALI	65593	65693	65297	65298	65697	65698
65990	PRIMA LED 1.5ft PCc 8000/840 DALI	65991	65992	x	x	x	x

Example of type marking: 65693 = PRIMA LED 1.5ft PCc 5500/840 DALI 3F

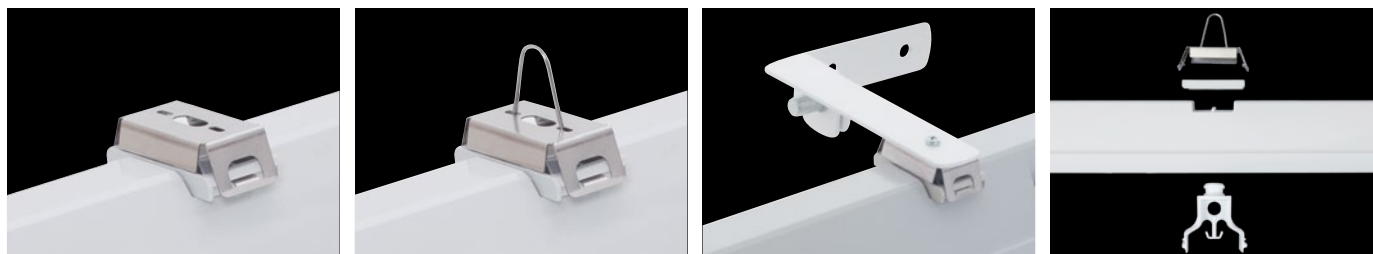
LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

PRIMA LED



PRIMA LED VP



BIM
ready

... for outdoor spaces.

USE

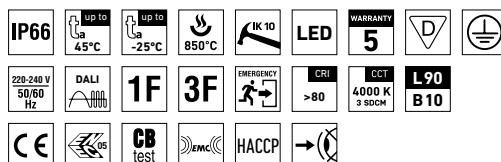
The light fitting is suitable for the installation in outdoor spaces with shelter. It is equipped with a ventilation plug made of polyamide which eliminates the presence of condensation fumes and underpressure in the light fitting caused by ambient temperature fluctuations.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment, see also page 317).

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **$t_a = 45^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25°C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ, ENEC, CB, HACCP



PRIMA LED VP, VPc



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 45^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 134 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Ventilation plug: type BVPB-01 made of polyamide, size M12 x 1.5
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, five-pole (basic version), or screwed
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI

Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 45^\circ\text{C}$ - body: grey polycarbonate - diffuser: translucent polycarbonate									
66010	PRIMA LED 1.2ft VP 1300/840	45	1300	1150	9	127	1,3	662	350
66020	PRIMA LED 1.2ft VP 1600/840	45	1600	1410	11	128	1,2	662	350
66030	PRIMA LED 1.2ft VP 2200/840	40	2200	1950	15	130	1,3	662	350
66040	PRIMA LED 1.4ft VP 2600/840	45	2600	2320	18	129	1,9	1272	700
66050	PRIMA LED 1.4ft VP 3200/840	45	3200	2860	22	130	1,7	1272	700
66060	PRIMA LED 1.4ft VP 4400/840	40	4400	3920	30	131	1,9	1272	700
66460	PRIMA LED 1.4ft VP 6400/840	40	6400	5650	43	131	1,9	1272	700
66070	PRIMA LED 1.5ft VP 3250/840	45	3250	2810	22	128	2,3	1572	940
66080	PRIMA LED 1.5ft VP 4000/840	45	4000	3530	27	131	2,2	1572	940
66090	PRIMA LED 1.5ft VP 5500/840	40	5500	4940	37	134	2,3	1572	940
66490	PRIMA LED 1.5ft VP 8000/840	40	8000	7090	54	131	2,3	1572	940

66020 PRIMA LED 1.2ft VP 1600/840 = suitable replacement for T8 fl. tube light fitting PRIMA 118 - 1x18W
 66050 PRIMA LED 1.4ft VP 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 136 - 1x36W
 66460 PRIMA LED 1.4ft VP 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 - 2x36W
 66080 PRIMA LED 1.5ft VP 4000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 158 - 1x58W
 66490 PRIMA LED 1.5ft VP 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 - 2x58W

PRIMA LED VP

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
66010	PRIMA LED 1.2ft VP 1300/840	x	x	x	x	x	x
66020	PRIMA LED 1.2ft VP 1600/840	x	x	x	x	x	x
66030	PRIMA LED 1.2ft VP 2200/840	x	x	x	x	x	x
66040	PRIMA LED 1.4ft VP 2600/840	66140	66340	66044	66045	66344	66345
66050	PRIMA LED 1.4ft VP 3200/840	66150	66350	66054	66055	66354	66355
66060	PRIMA LED 1.4ft VP 4400/840	66160	66360	66064	66065	66364	66365
66460	PRIMA LED 1.4ft VP 6400/840	66461	66462	x	x	x	x
66070	PRIMA LED 1.5ft VP 3250/840	66170	66370	66074	66075	66374	66375
66080	PRIMA LED 1.5ft VP 4000/840	66180	66380	66084	66085	66384	66385
66090	PRIMA LED 1.5ft VP 5500/840	66190	66390	66094	66095	66394	66395
66490	PRIMA LED 1.5ft VP 8000/840	66491	66492	x	x	x	x

PRIMA LED VPc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
66210	PRIMA LED 1.2ft VPc 1300/840	x	x	x	x	x	x
66220	PRIMA LED 1.2ft VPc 1600/840	x	x	x	x	x	x
66230	PRIMA LED 1.2ft VPc 2200/840	x	x	x	x	x	x
66240	PRIMA LED 1.4ft VPc 2600/840	66540	66640	66244	66245	66644	66645
66250	PRIMA LED 1.4ft VPc 3200/840	66550	66650	66254	66255	66654	66655
66260	PRIMA LED 1.4ft VPc 4400/840	66560	66660	66264	66265	66664	66665
66760	PRIMA LED 1.4ft VPc 6400/840	66761	66762	x	x	x	x
66270	PRIMA LED 1.5ft VPc 3250/840	66570	66670	66274	66275	66674	66675
66280	PRIMA LED 1.5ft VPc 4000/840	66580	66680	66284	66285	66684	66685
66290	PRIMA LED 1.5ft VPc 5500/840	66590	66690	66294	66295	66694	66695
66790	PRIMA LED 1.5ft VPc 8000/840	66791	66792	x	x	x	x

Example of type marking: 66644 = PRIMA LED 1.4ft VP 2600/840 3F M1h

PRIMA LED VP DALI

Code	Type
66013	PRIMA LED 1.2ft VP 1300/840 DALI
66023	PRIMA LED 1.2ft VP 1600/840 DALI
66033	PRIMA LED 1.2ft VP 2200/840 DALI
66043	PRIMA LED 1.4ft VP 2600/840 DALI
66053	PRIMA LED 1.4ft VP 3200/840 DALI
66063	PRIMA LED 1.4ft VP 4400/840 DALI
66860	PRIMA LED 1.4ft VP 6400/840 DALI
66073	PRIMA LED 1.5ft VP 3250/840 DALI
66083	PRIMA LED 1.5ft VP 4000/840 DALI
66093	PRIMA LED 1.5ft VP 5500/840 DALI
66890	PRIMA LED 1.5ft VP 8000/840 DALI

Digital dimmable driver DALI - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
	x	x	x	x	x	x
	x	x	x	x	x	x
	x	x	x	x	x	x
66143		66343	66047	66048	66347	66348
66153		66353	66057	66058	66357	66358
66163		66363	66067	66068	66367	66368
66861		66862	x	x	x	x
66173		66373	66077	66078	66377	66378
66183		66383	66087	66088	66387	66388
66193		66393	66097	66098	66397	66398
66891		66892	x	x	x	x

PRIMA LED VPc DALI

Code	Type
66213	PRIMA LED 1.2ft VPc 1300/840 DALI
66223	PRIMA LED 1.2ft VPc 1600/840 DALI
66233	PRIMA LED 1.2ft VPc 2200/840 DALI
66243	PRIMA LED 1.4ft VPc 2600/840 DALI
66253	PRIMA LED 1.4ft VPc 3200/840 DALI
66263	PRIMA LED 1.4ft VPc 4400/840 DALI
66960	PRIMA LED 1.4ft VPc 6400/840 DALI
66273	PRIMA LED 1.5ft VPc 3250/840 DALI
66283	PRIMA LED 1.5ft VPc 4000/840 DALI
66293	PRIMA LED 1.5ft VPc 5500/840 DALI
66990	PRIMA LED 1.5ft VPc 8000/840 DALI

Digital dimmable driver DALI - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
	x	x	x	x	x	x
	x	x	x	x	x	x
	x	x	x	x	x	x
66543		66643	66247	66248	66647	66648
66553		66653	66257	66258	66657	66658
66563		66663	66267	66268	66667	66668
66961		66962	x	x	x	x
66573		66673	66277	66278	66677	66678
66583		66683	66287	66288	66687	66688
66593		66693	66297	66298	66697	66698
66991		66992	x	x	x	x

Example of type marking: 66693 = PRIMA LED 1.5ft VPc 5500/840 DALI **3F**

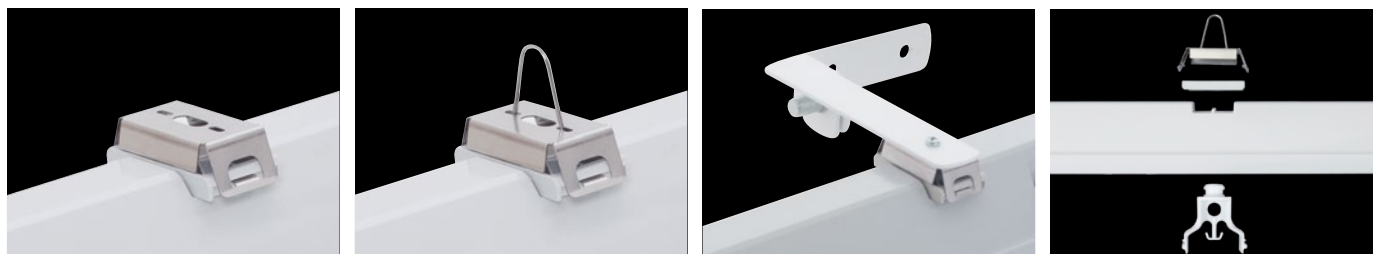
LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
3F 3-phase 5 core through-wiring in the luminaire
M1h emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h emergency back-up source with 3 hour operating time for maintained emergency illumination
3F Mxh 3-phase 5 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
DALI 1F 1-phase 5 core through-wiring in the luminaire
DALI 3F 3-phase 7 core through-wiring in the luminaire
DALI 3F Mxh 3-phase 7 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

PRIMA LED VP



PRIMA LED ABS



BIM
ready

... dustproof, waterproof and chemically resistant.

USE

The light fitting is suitable for the environment where ammoniac fumes, lixivants, alkaline compounds and hot water (hydrolyses) can be present. We recommend this light fitting for agricultural operations, stables, car washing lines, warehouses, mechanical workshops and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body made of ABS and the diffuser made of AC have increased chemical resistance.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment, see also page 317).

Always open the cover of the light fitting out of an environment with aggressive volatile substances.

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **t_a = 45 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC) = high chemical resistance
- Body: dark grey (ABS) = high chemical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K

- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ, ENEC, CB, HACCP

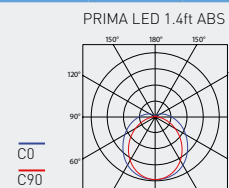
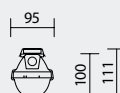
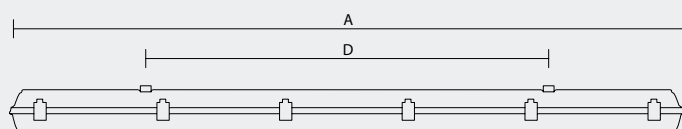


PRIMA LED ABS, ABSc



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 45^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 134 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey (ABS), UV stable, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, five-pole (basic version), or screwed
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 45^\circ\text{C}$ - body: dark grey ABS - diffuser: translucent acrylate									
67010	PRIMA LED 1.2ft ABS 1300/840	45	1300	1150	9	127	1,3	662	350
67020	PRIMA LED 1.2ft ABS 1600/840	45	1600	1410	11	128	1,2	662	350
67030	PRIMA LED 1.2ft ABS 2200/840	40	2200	1950	15	130	1,3	662	350
67040	PRIMA LED 1.4ft ABS 2600/840	45	2600	2320	18	129	1,9	1272	700
67050	PRIMA LED 1.4ft ABS 3200/840	45	3200	2860	22	130	1,7	1272	700
67060	PRIMA LED 1.4ft ABS 4400/840	40	4400	3920	30	131	1,9	1272	700
67460	PRIMA LED 1.4ft ABS 6400/840	40	6400	5650	43	131	1,9	1272	700
67070	PRIMA LED 1.5ft ABS 3250/840	45	3250	2810	22	128	2,3	1572	940
67080	PRIMA LED 1.5ft ABS 4000/840	45	4000	3530	27	131	2,2	1572	940
67090	PRIMA LED 1.5ft ABS 5500/840	40	5500	4940	37	134	2,3	1572	940
67490	PRIMA LED 1.5ft ABS 8000/840	40	8000	7090	54	131	2,3	1572	940

67020 PRIMA LED 1.2ft ABS 1600/840 = suitable replacement for T8 fl. tube light fitting PRIMA 118 - 1x18 W

67050 PRIMA LED 1.4ft ABS 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 136 - 1x36 W

67490 PRIMA LED 1.5ft ABS 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 - 2x58 W

PRIMA LED ABS

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
67010	PRIMA LED 1.2ft ABS 1300/840	x	x	x	x	x	x
67020	PRIMA LED 1.2ft ABS 1600/840	x	x	x	x	x	x
67030	PRIMA LED 1.2ft ABS 2200/840	x	x	x	x	x	x
67040	PRIMA LED 1.4ft ABS 2600/840	67140	67340	67044	67045	67344	67345
67050	PRIMA LED 1.4ft ABS 3200/840	67150	67350	67054	67055	67354	67355
67060	PRIMA LED 1.4ft ABS 4400/840	67160	67360	67064	67065	67364	67365
67460	PRIMA LED 1.4ft ABS 6400/840	67461	67462	x	x	x	x
67070	PRIMA LED 1.5ft ABS 3250/840	67170	67370	67074	67075	67374	67375
67080	PRIMA LED 1.5ft ABS 4000/840	67180	67380	67084	67085	67384	67385
67090	PRIMA LED 1.5ft ABS 5500/840	67190	67390	67094	67095	67394	67395
67490	PRIMA LED 1.5ft ABS 8000/840	67491	67492	x	x	x	x

PRIMA LED ABSc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
67210	PRIMA LED 1.2ft ABSc 1300/840	x	x	x	x	x	x
67220	PRIMA LED 1.2ft ABSc 1600/840	x	x	x	x	x	x
67230	PRIMA LED 1.2ft ABSc 2200/840	x	x	x	x	x	x
67240	PRIMA LED 1.4ft ABSc 2600/840	67540	67640	67244	67245	67644	67645
67250	PRIMA LED 1.4ft ABSc 3200/840	67550	67650	67254	67255	67654	67655
67260	PRIMA LED 1.4ft ABSc 4400/840	67560	67660	67264	67265	67664	67665
67760	PRIMA LED 1.4ft ABSc 6400/840	67761	67762	x	x	x	x
67270	PRIMA LED 1.5ft ABSc 3250/840	67570	67670	67274	67275	67674	67675
67280	PRIMA LED 1.5ft ABSc 4000/840	67580	67680	67284	67285	67684	67685
67290	PRIMA LED 1.5ft ABSc 5500/840	67590	67690	67294	67295	67694	67695
67790	PRIMA LED 1.5ft ABSc 8000/840	67791	67792	x	x	x	x

Example of type marking: 67644 = PRIMA LED 1.4ft ABS 2600/840 3F M1h

PRIMA LED ABS DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
67013	PRIMA LED 1.2ft ABS 1300/840 DALI	x	x	x	x	x	x
67023	PRIMA LED 1.2ft ABS 1600/840 DALI	x	x	x	x	x	x
67033	PRIMA LED 1.2ft ABS 2200/840 DALI	x	x	x	x	x	x
67043	PRIMA LED 1.4ft ABS 2600/840 DALI	67143	67343	67047	67048	67347	67348
67053	PRIMA LED 1.4ft ABS 3200/840 DALI	67153	67353	67057	67058	67357	67358
67063	PRIMA LED 1.4ft ABS 4400/840 DALI	67163	67363	67067	67068	67367	67368
67860	PRIMA LED 1.4ft ABS 6400/840 DALI	67861	67862	x	x	x	x
67073	PRIMA LED 1.5ft ABS 3250/840 DALI	67173	67373	67077	67078	67377	67378
67083	PRIMA LED 1.5ft ABS 4000/840 DALI	67183	67383	67087	67088	67387	67388
67093	PRIMA LED 1.5ft ABS 5500/840 DALI	67193	67393	67097	67098	67397	67398
67890	PRIMA LED 1.5ft ABS 8000/840 DALI	67891	67892	x	x	x	x

PRIMA LED ABSc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
67213	PRIMA LED 1.2ft ABSc 1300/840 DALI	x	x	x	x	x	x
67223	PRIMA LED 1.2ft ABSc 1600/840 DALI	x	x	x	x	x	x
67233	PRIMA LED 1.2ft ABSc 2200/840 DALI	x	x	x	x	x	x
67243	PRIMA LED 1.4ft ABSc 2600/840 DALI	67543	67643	67247	67248	67647	67648
67253	PRIMA LED 1.4ft ABSc 3200/840 DALI	67553	67653	67257	67258	67657	67658
67263	PRIMA LED 1.4ft ABSc 4400/840 DALI	67563	67663	67267	67268	67667	67668
67960	PRIMA LED 1.4ft ABSc 6400/840 DALI	67961	67962	x	x	x	x
67273	PRIMA LED 1.5ft ABSc 3250/840 DALI	67573	67673	67277	67278	67677	67678
67283	PRIMA LED 1.5ft ABSc 4000/840 DALI	67583	67683	67287	67288	67687	67688
67293	PRIMA LED 1.5ft ABSc 5500/840 DALI	67593	67693	67297	67298	67697	67698
67990	PRIMA LED 1.5ft ABSc 8000/840 DALI	67991	67992	x	x	x	x

Example of type marking: 67693 = PRIMA LED 1.5ft ABSc 5500/840 DALI 3F

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
 - 3F** 3-phase 5 core through-wiring in the luminaire
 - M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
 - M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
 - 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
 - DALI 1F** 1-phase 5 core through-wiring in the luminaire
 - DALI 3F** 3-phase 7 core through-wiring in the luminaire
 - DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

PRIMA LED ABS



PRIMA LED CLASS II



... with Class II insulation.

USE

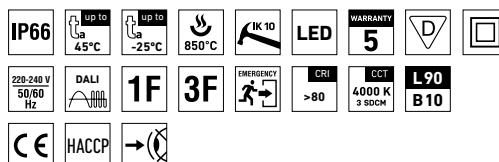
Light fitting is suitable for **industrial, warehouse and agricultural buildings, sports premises, transport terminals, railway vehicle repair shops, platforms, traction substations, depots, parking lots and garages, workshops and laboratories** without explosion hazard.

The light fitting resists dust, humidity and spouting water. The body and the diffuser made of PC material have high mechanical resistance against impact and deformation.

Emissions in the environment of use may reduce the usability of the plastics.

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **$t_a = 45^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25°C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Available in ABS chemical resistant version
- Through-wiring of up to 6 wires at body (1.4ft and 1.5ft)



PRIMA LED CLASS II PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 45\text{ }^\circ\text{C}$,
- Maximum ambient temperature: $t_a = 0\text{-}25\text{ }^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 134 lm/W
- AWEX emergency light module generates a luminous flux of 440 lm
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: **Connectors with 2, 4 or 6 poles, wire section 1.5 or 2.5 mm**
- Installation: package contains stainless hooks, stainless brackets and a connector's counterpart
- Electric equipment: LED modules, current driver or current driver DALI

PRIMA LED 1.4ft CLASS II PC

Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 45\text{ }^\circ\text{C}$ - body: grey polycarbonate - diffuser: translucent polycarbonate									
71200	PRIMA LED 1.2ft CLASS II PC 1300/840	45	1300	1150	9	127	1,3	662	350
71210	PRIMA LED 1.2ft CLASS II PC 1600/840	45	1600	1410	11	128	1,2	662	350
71220	PRIMA LED 1.2ft CLASS II PC 2200/840	40	2200	1950	15	130	1,3	662	350
71230	PRIMA LED 1.4ft CLASS II PC 2600/840	45	2600	2320	18	129	1,9	1272	700
71240	PRIMA LED 1.4ft CLASS II PC 3200/840	45	3200	2860	22	130	1,7	1272	700
71250	PRIMA LED 1.4ft CLASS II PC 4400/840	40	4400	3920	30	131	1,9	1272	700
71260	PRIMA LED 1.4ft CLASS II PC 6400/840	40	6400	5650	43	131	1,9	1272	700
71270	PRIMA LED 1.5ft CLASS II PC 3250/840	45	3250	2810	22	128	2,3	1572	940
71280	PRIMA LED 1.5ft CLASS II PC 4000/840	45	4000	3530	27	131	2,2	1572	940
71290	PRIMA LED 1.5ft CLASS II PC 5500/840	40	5500	4940	37	134	2,3	1572	940
71300	PRIMA LED 1.5ft CLASS II PC 8000/840	40	8000	7090	54	131	2,3	1572	940

71210 PRIMA LED 1.2ft CLASS II PC 1600/840 = suitable replacement for T8 fl. tube light fitting PRIMA 118 - 1x18W
 71240 PRIMA LED 1.4ft CLASS II PC 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 136 - 1x36W
 71260 PRIMA LED 1.4ft CLASS II PC 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 - 2x36W
 71280 PRIMA LED 1.5ft CLASS II PC 4000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 158 - 1x58W
 71300 PRIMA LED 1.5ft CLASS II PC 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 - 2x58W

PRIMA LED CLASS II PC

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
71200	PRIMA LED 1.2ft CLASS II PC 1300/840	x	x	x	x	x	x
71210	PRIMA LED 1.2ft CLASS II PC 1600/840	x	x	x	x	x	x
71220	PRIMA LED 1.2ft CLASS II PC 2200/840	x	x	x	x	x	x
71230	PRIMA LED 1.4ft CLASS II PC 2600/840	71231	71233	71234	71235	71236	71237
71240	PRIMA LED 1.4ft CLASS II PC 3200/840	71241	71243	71244	71245	71246	71247
71250	PRIMA LED 1.4ft CLASS II PC 4400/840	71251	71253	71254	71255	71256	71257
71260	PRIMA LED 1.4ft CLASS II PC 6400/840	71261	71263	x	x	x	x
71270	PRIMA LED 1.5ft CLASS II PC 3250/840	71271	71273	71274	71275	71276	71277
71280	PRIMA LED 1.5ft CLASS II PC 4000/840	71281	71283	71284	71285	71286	71287
71290	PRIMA LED 1.5ft CLASS II PC 5500/840	71291	71293	71294	71295	71296	71297
71300	PRIMA LED 1.5ft CLASS II PC 8000/840	71301	71303	x	x	x	x

PRIMA LED CLASS II PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
71310	PRIMA LED 1.2ft CLASS II PCc 1300/840	x	x	x	x	x	x
71320	PRIMA LED 1.2ft CLASS II PCc 1600/840	x	x	x	x	x	x
71330	PRIMA LED 1.2ft CLASS II PCc 2200/840	x	x	x	x	x	x
71340	PRIMA LED 1.4ft CLASS II PCc 2600/840	71341	71343	71344	71345	71346	71347
71350	PRIMA LED 1.4ft CLASS II PCc 3200/840	71351	71353	71354	71355	71356	71357
71360	PRIMA LED 1.4ft CLASS II PCc 4400/840	71361	71363	71364	71365	71366	71367
71370	PRIMA LED 1.4ft CLASS II PCc 6400/840	71371	71373	x	x	x	x
71380	PRIMA LED 1.5ft CLASS II PCc 3250/840	71381	71383	71384	71385	71386	71387
71390	PRIMA LED 1.5ft CLASS II PCc 4000/840	71391	71393	71394	71395	71396	71397
71400	PRIMA LED 1.5ft CLASS II PCc 5500/840	71401	71403	71404	71405	71406	71407
71410	PRIMA LED 1.5ft CLASS II PCc 8000/840	71411	71413	x	x	x	x

Example of type marking: 71346 = PRIMA LED 1.4ft CLASS II PCc 2600/840 **3F M1h**

PRIMA LED CLASS II PC DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
71420	PRIMA LED 1.2ft CLASS II PC 1300/840 DALI	x	x	x	x	x	x
71430	PRIMA LED 1.2ft CLASS II PC 1600/840 DALI	x	x	x	x	x	x
71440	PRIMA LED 1.2ft CLASS II PC 2200/840 DALI	x	x	x	x	x	x
71450	PRIMA LED 1.4ft CLASS II PC 2600/840 DALI	71451	71453	71454	71455	71456	71457
71460	PRIMA LED 1.4ft CLASS II PC 3200/840 DALI	71461	71463	71464	71465	71466	71467
71470	PRIMA LED 1.4ft CLASS II PC 4400/840 DALI	71471	71473	71474	71475	71476	71477
71480	PRIMA LED 1.4ft CLASS II PC 6400/840 DALI	71481	71483	x	x	x	x
71490	PRIMA LED 1.5ft CLASS II PC 3250/840 DALI	71491	71493	71494	71495	71496	71497
71500	PRIMA LED 1.5ft CLASS II PC 4000/840 DALI	71501	71503	71504	71505	71506	71507
71510	PRIMA LED 1.5ft CLASS II PC 5500/840 DALI	71511	71513	71514	71515	71516	71517
71520	PRIMA LED 1.5ft CLASS II PC 8000/840 DALI	71521	71523	x	x	x	x

PRIMA LED CLASS II PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
71530	PRIMA LED 1.2ft CLASS II PCc 1300/840 DALI	x	x	x	x	x	x
71540	PRIMA LED 1.2ft CLASS II PCc 1600/840 DALI	x	x	x	x	x	x
71550	PRIMA LED 1.2ft CLASS II PCc 2200/840 DALI	x	x	x	x	x	x
71560	PRIMA LED 1.4ft CLASS II PCc 2600/840 DALI	71561	71563	71564	71565	71566	71567
71570	PRIMA LED 1.4ft CLASS II PCc 3200/840 DALI	71571	71573	71574	71575	71576	71577
71580	PRIMA LED 1.4ft CLASS II PCc 4400/840 DALI	71581	71583	71584	71585	71586	71587
71590	PRIMA LED 1.4ft CLASS II PCc 6400/840 DALI	71591	71593	x	x	x	x
71600	PRIMA LED 1.5ft CLASS II PCc 3250/840 DALI	71601	71603	71604	71605	71606	71607
71610	PRIMA LED 1.5ft CLASS II PCc 4000/840 DALI	71611	71613	71614	71615	71616	71617
71620	PRIMA LED 1.5ft CLASS II PCc 5500/840 DALI	71621	71623	71624	71625	71626	71627
71630	PRIMA LED 1.5ft CLASS II PCc 8000/840 DALI	71631	71633	x	x	x	x

Example of type marking: 71623 = PRIMA LED 1.5ft CLASS II PCc 5500/840 DALI **3F**

LEGEND

CLASS II 1F	1-phase 2 core through-wiring in the luminaire
CLASS II 3F	3-phase 4 core through-wiring in the luminaire
M1h	emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h	emergency back-up source with 3 hour operating time for maintained emergency illumination
CLASS II 3F Mxh	3-phase 4 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
DALI	version with digital dimmable driver DALI
CLASS II DALI 1F	1-phase 4 core through-wiring in the luminaire
CLASS II DALI 3F	3-phase 6 core through-wiring in the luminaire
CLASS II DALI 3F Mxh	3-phase 6 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- Directly to a ceiling or a wall with the use of screws and stainless brackets
- Suspension with the use of stainless hooks
- Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

PRIMA LED CLASS II



STUCCHI 37xx

WIELAND

PRIMA LED TRS



... for direct and indirect illumination.

USE

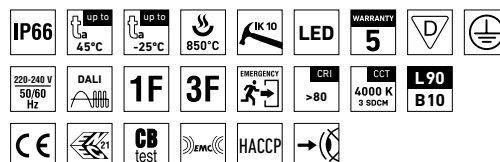
This luminaire, which features a clear base, is a perfect source of both direct and indirect illumination for spaces with low ceilings. The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment.

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **t_a = 45°C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: clear polycarbonate (PC) = high mechanical resistance
- Body: clear polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable version
- It can be delivered in Tunable White version at request
- Certification: EŠČ, CB, HACCP



PRIMA LED TRS PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 45^\circ\text{C}$,
- Maximum system efficacy: 134 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: clear polycarbonate (PC) = high mechanical resistance
- Body: clear polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003) modified for indirect illumination
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version), or screwed
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI

Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 45^\circ\text{C}$ - body: clear polycarbonate - diffuser: clear polycarbonate									
88000	PRIMA LED 1.2ft TRS PC 1300/840	45	1300	1150	9	127	1,3	662	350
88010	PRIMA LED 1.2ft TRS PC 1600/840	45	1600	1410	11	128	1,2	662	350
88020	PRIMA LED 1.2ft TRS PC 2200/840	40	2200	1950	15	130	1,3	662	350
88030	PRIMA LED 1.4ft TRS PC 2600/840	45	2600	2320	18	129	1,9	1272	700
88040	PRIMA LED 1.4ft TRS PC 3200/840	45	3200	2860	22	130	1,7	1272	700
88050	PRIMA LED 1.4ft TRS PC 4400/840	40	4400	3920	30	131	1,9	1272	700
88060	PRIMA LED 1.4ft TRS PC 6400/840	40	6400	5650	43	131	1,9	1272	700
88070	PRIMA LED 1.5ft TRS PC 3250/840	45	3250	2810	22	128	2,3	1572	940
88080	PRIMA LED 1.5ft TRS PC 4000/840	45	4000	3530	27	131	2,2	1572	940
88090	PRIMA LED 1.5ft TRS PC 5500/840	40	5500	4940	37	134	2,3	1572	940
88100	PRIMA LED 1.5ft TRS PC 8000/840	40	8000	7090	54	131	2,3	1572	940

88010 PRIMA LED 1.2ft TRS PC 1600/840 = suitable replacement for T8 fl. tube light fitting PRIMA 118 - 1 × 18 W
 88040 PRIMA LED 1.4ft TRS PC 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 136 - 1 × 36 W
 88060 PRIMA LED 1.4ft TRS PC 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 - 2 × 36 W
 88080 PRIMA LED 1.5ft TRS PC 4000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 158 - 1 × 58 W
 88100 PRIMA LED 1.5ft TRS PC 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 - 2 × 58 W

PRIMA LED TRS PC

Plastic clips

Code	Type	1F	3F	DALI	DALI 1F	DALI 3F
88000	PRIMA LED 1.2ft TRS PC 1300/840	x	x	88220	x	x
88010	PRIMA LED 1.2ft TRS PC 1600/840	x	x	88230	x	x
88020	PRIMA LED 1.2ft TRS PC 2200/840	x	x	88240	x	x
88030	PRIMA LED 1.4ft TRS PC 2600/840	88031	88033	88250	88251	88253
88040	PRIMA LED 1.4ft TRS PC 3200/840	88041	88043	88260	88261	88263
88050	PRIMA LED 1.4ft TRS PC 4400/840	88051	88053	88270	88271	88273
88060	PRIMA LED 1.4ft TRS PC 6400/840	88061	88063	88280	88281	88283
88070	PRIMA LED 1.5ft TRS PC 3250/840	88071	88073	88290	88291	88293
88080	PRIMA LED 1.5ft TRS PC 4000/840	88081	88083	88300	88301	88303
88090	PRIMA LED 1.5ft TRS PC 5500/840	88091	88093	88310	88311	88313
88100	PRIMA LED 1.5ft TRS PC 8000/840	88101	88103	88320	88321	88323

PRIMA LED TRS PCc

Stainless clips [c]

Code	Type	1F	3F	DALI	DALI 1F	DALI 3F
88110	PRIMA LED 1.2ft TRS PCc 1300/840	x	x	88330	x	x
88120	PRIMA LED 1.2ft TRS PCc 1600/840	x	x	88340	x	x
88130	PRIMA LED 1.2ft TRS PCc 2200/840	x	x	88350	x	x
88140	PRIMA LED 1.4ft TRS PCc 2600/840	88141	88143	88360	88361	88363
88150	PRIMA LED 1.4ft TRS PCc 3200/840	88151	88153	88370	88371	88373
88160	PRIMA LED 1.4ft TRS PCc 4400/840	88161	88163	88380	88381	88383
88170	PRIMA LED 1.4ft TRS PCc 6400/840	88171	88173	88390	88391	88393
88180	PRIMA LED 1.5ft TRS PCc 3250/840	88181	88183	88400	88401	88403
88190	PRIMA LED 1.5ft TRS PCc 4000/840	88191	88193	88410	88411	88413
88200	PRIMA LED 1.5ft TRS PCc 5500/840	88201	88203	88420	88421	88423
88210	PRIMA LED 1.5ft TRS PCc 8000/840	88211	88213	88430	88431	88433

Example of type marking: 88363 = PRIMA LED 1.4ft TRS PCc 2600/840 DALI 3F

LEGEND

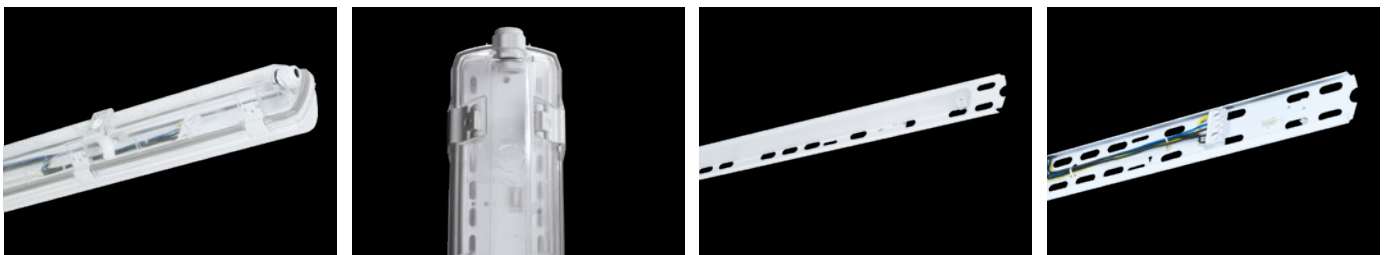
1F	1-phase 3 core through-wiring in the luminaire	DALI	version with digital dimmable driver DALI
3F	3-phase 5 core through-wiring in the luminaire	DALI 1F	1-phase 5 core through-wiring in the luminaire
M1h	emergency back-up source with 1 hour operating time for maintained emergency illumination	DALI 3F	3-phase 7 core through-wiring in the luminaire
M3h	emergency back-up source with 3 hour operating time for maintained emergency illumination	DALI 3F Mxh	3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
3F Mxh	3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)		

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW



PRIMA LED MAX



BIM
ready

... for extreme temperatures -40°C to $+65^{\circ}\text{C}$.

USE

The light fitting is suitable for indoor and outdoor spaces with roof with extreme ambient temperatures from **-40°C to $+65^{\circ}\text{C}$** . The light fitting is destined mainly for heating stations, metallurgical lines, glass-works, as well as for freezers, cooling plants and other premises without danger of explosion of gases, dusts and flammable vapors.

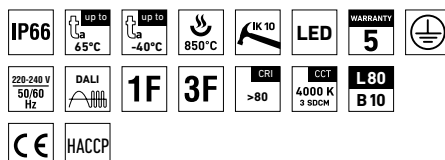
The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment, see also page 317).

ADVANTAGES

- Light fitting protection **IP66**
- Minimum ambient temperature up to **$t_a = -40^{\circ}\text{C}$**
- Maximum ambient temperature up to **$t_a = 65^{\circ}\text{C}$**
- Lifetime: 50,000 hours / L80B10
- Possibility of using in even higher ambient temperatures under the condition of a shortened service life of the light fitting – parameters solved within a particular project
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance

- Up to 45 % lower electricity consumption when compared to tubes T5
- Constant luminous flux even in ambient temperature of -40°C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K
- Certification: HACCP

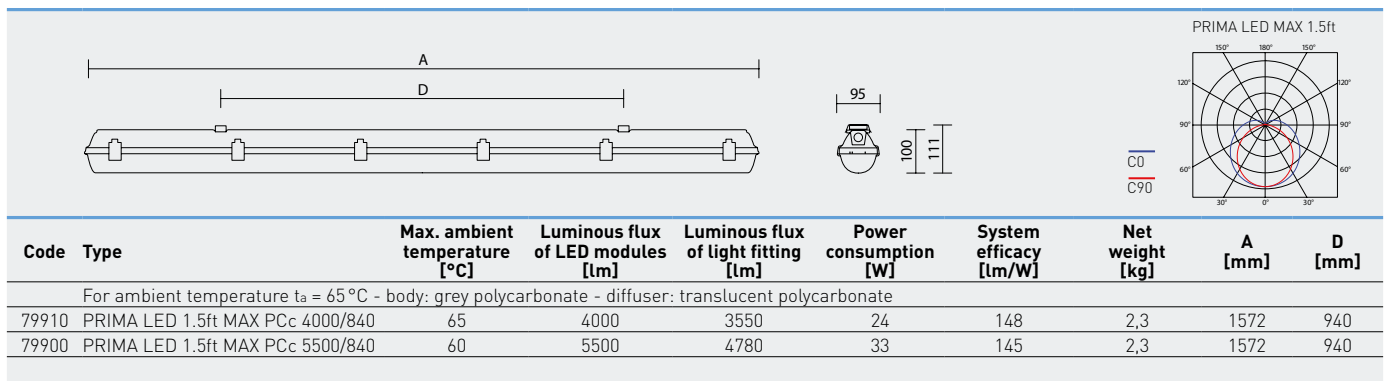


PRIMA LED MAX PCc



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Minimum ambient temperature: $t_a = -40^\circ\text{C}$
- Maximum ambient temperature: $t_a = 65^\circ\text{C}$
- Lifetime: 50,000 hours / L80B10
- Possibility of using in even higher ambient temperatures under the condition of a shortened service life of the light fitting – parameters solved within a particular project
- Maximum system efficacy: 148 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Ventilation plug: type BVPB-01 made of polyamide, size M12 x 1.5
- Clips: stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, five-pole (basic version), or screwed
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver



PRIMA LED MAX PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	DALI	DALI 3F
79910	PRIMA LED 1.5ft MAX PCc 4000/840	79911	79913	x	x	79915	79916
79900	PRIMA LED 1.5ft MAX PCc 5500/840	79901	79903	x	x	79905	79906

Example of type marking: 79903 = PRIMA LED MAX 1.5ft PCc 5500/840 **3F**

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- Directly to a ceiling with the use of screws and stainless brackets
- Suspension with the use of stainless hooks
- Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

PRIMA LED MAX



PRIMA LED Sensor



BIM
ready

... dustproof, waterproof and impact-resistant.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals, utility structures and laboratories without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment, see also page 317).

ADVANTAGES

- Light fitting protection IP66
- Maximum ambient temperature up to $t_a = 45^\circ\text{C}$
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- Current driver with the possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25°C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- With built-in **microwave motion sensor**
- The possibility of setting the sensor using the DIP switch
- It can be delivered in dimmable or emergency version
- Certification: HACCP



PRIMA LED SNS PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 45^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 134 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5, or rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, five-pole (basic version), or screwed
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or digital dimmable driver DALI
- Motion sensor: 360° range, switch on height 1 – 6 m, time range 5 sec – 30 min, switch-on sensitivity 2 – 50 lux

Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 45^\circ\text{C}$ - body: grey polycarbonate - diffuser: translucent polycarbonate									
64040	PRIMA LED 1.4ft SNS PC 2600/840	45	2600	2320	18	129	1,9	1272	700
64050	PRIMA LED 1.4ft SNS PC 3200/840	45	3200	2860	22	130	1,7	1272	700
64060	PRIMA LED 1.4ft SNS PC 4400/840	40	4400	3920	30	131	1,9	1272	700
64460	PRIMA LED 1.4ft SNS PC 6400/840	40	6400	5650	43	131	1,9	1272	700
64070	PRIMA LED 1.5ft SNS PC 3250/840	45	3250	2810	22	128	2,3	1572	940
64080	PRIMA LED 1.5ft SNS PC 4000/840	45	4000	3530	27	131	2,2	1572	940
64090	PRIMA LED 1.5ft SNS PC 5500/840	40	5500	4940	37	134	2,3	1572	940
64490	PRIMA LED 1.5ft SNS PC 8000/840	40	8000	7090	54	131	2,3	1572	940

64050 PRIMA LED 1.4ft SNS PC 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 136 – 1 × 36 W
 64460 PRIMA LED 1.4ft SNS PC 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2 × 36 W
 64080 PRIMA LED 1.5ft SNS PC 4000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 158 – 1 × 58 W
 64490 PRIMA LED 1.5ft SNS PC 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2 × 58 W

PRIMA LED SNS PC

Code	Type
64040	PRIMA LED 1.4ft SNS PC 2600/840
64050	PRIMA LED 1.4ft SNS PC 3200/840
64060	PRIMA LED 1.4ft SNS PC 4400/840
64460	PRIMA LED 1.4ft SNS PC 6400/840
64070	PRIMA LED 1.5ft SNS PC 3250/840
64080	PRIMA LED 1.5ft SNS PC 4000/840
64090	PRIMA LED 1.5ft SNS PC 5500/840
64490	PRIMA LED 1.5ft SNS PC 8000/840

Non-dimmable driver - plastic clips

	1F	3F	M1h	M3h	3F M1h	3F M3h
64140	64340	64044	64045	64344	64345	
64150	64350	64054	64055	64354	64355	
64160	64360	64064	64065	64364	64365	
64461	64462	x	x	x	x	
64170	64370	64074	64075	64374	64375	
64180	64380	64084	64085	64384	64385	
64190	64390	64094	64095	64394	64395	
64491	64492	x	x	x	x	

PRIMA LED SNS PCc

Code	Type
64240	PRIMA LED 1.4ft SNS PCc 2600/840
64250	PRIMA LED 1.4ft SNS PCc 3200/840
64260	PRIMA LED 1.4ft SNS PCc 4400/840
64760	PRIMA LED 1.4ft SNS PCc 6400/840
64270	PRIMA LED 1.5ft SNS PCc 3250/840
64280	PRIMA LED 1.5ft SNS PCc 4000/840
64290	PRIMA LED 1.5ft SNS PCc 5500/840
64790	PRIMA LED 1.5ft SNS PCc 8000/840

Non-dimmable driver - stainless clips (c)

	1F	3F	M1h	M3h	3F M1h	3F M3h
64540	64640	64244	64245	64644	64645	
64550	64650	64254	64255	64654	64655	
64560	64660	64264	64265	64664	64665	
64761	64762	x	x	x	x	
64570	64670	64274	64275	64674	64675	
64580	64680	64284	64285	64684	64685	
64590	64690	64294	64295	64694	64695	
64791	64792	x	x	x	x	

Example of type marking: 64644 = PRIMA LED 1.4ft SNS PC 2600/840 **3F M1h**

PRIMA LED SNS PC CORRIDOR

Code	Type	Digital dimmable driver - plastic clips					
		1F	3F	M1h	M3h	3F M1h	3F M3h
64043	PRIMA LED 1.4ft SNS PC 2600/840 CORRIDOR	64143	64343	64047	x	64347	x
64053	PRIMA LED 1.4ft SNS PC 3200/840 CORRIDOR	64153	64353	64057	x	64357	x
64063	PRIMA LED 1.4ft SNS PC 4400/840 CORRIDOR	64163	64363	64067	x	64367	x
64073	PRIMA LED 1.5ft SNS PC 3250/840 CORRIDOR	64173	64373	64077	64078	64377	64378
64083	PRIMA LED 1.5ft SNS PC 4000/840 CORRIDOR	64183	64383	64087	64088	64387	64388
64093	PRIMA LED 1.5ft SNS PC 5500/840 CORRIDOR	64193	64393	64097	64098	64397	64398

PRIMA LED SNS PCc CORRIDOR

Code	Type	Digital dimmable driver - stainless clips (c)					
		1F	3F	M1h	M3h	3F M1h	3F M3h
64243	PRIMA LED 1.4ft SNS PCc 2600/840 CORRIDOR	64543	64643	64247	x	64647	x
64253	PRIMA LED 1.4ft SNS PCc 3200/840 CORRIDOR	64553	64653	64257	x	64657	x
64263	PRIMA LED 1.4ft SNS PCc 4400/840 CORRIDOR	64563	64663	64267	x	64667	x
64273	PRIMA LED 1.5ft SNS PCc 3250/840 CORRIDOR	64573	64673	64277	64278	64677	64678
64283	PRIMA LED 1.5ft SNS PCc 4000/840 CORRIDOR	64583	64683	64287	64288	64687	64688
64293	PRIMA LED 1.5ft SNS PCc 5500/840 CORRIDOR	64593	64693	64297	64298	64697	64698

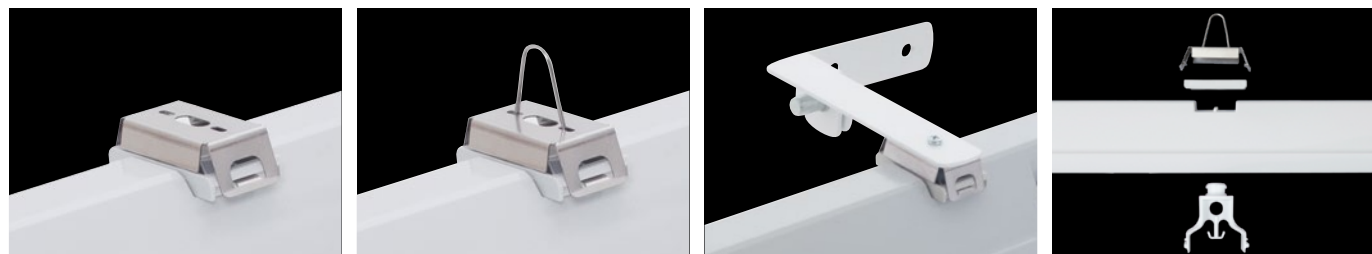
Example of type marking: 64693 = PRIMA LED 1.5ft SNS PCc 5500/840 CORRIDOR **3F**

LEGEND

SNS 1F	1-phase 3 core through-wiring in the luminaire for connection of max. 5 slave luminaires
SNS 3F	3-phase 5 core through-wiring in the luminaire for connection of max. 5 slave luminaires (sensor connected to L3)
M1h	emergency back-up source with 1 hour operating time for maintained emergency illumination
M3h	emergency back-up source with 3 hour operating time for maintained emergency illumination
SNS 3F Mxh	3-phase 5 core through-wiring in the luminaire for connection of max. 5 slave luminaires (sensor and emergency unit connected to L3)
CORRIDOR	version with digital dimmable driver DALI and set corridor function
CORRIDOR 1F	1-phase 5 core through-wiring in the luminaire for connection of max. 20 luminaires
CORRIDOR 3F	3-phase 7 core through-wiring in the luminaire for connection of max. 20 luminaires (sensor connected to L3)
CORRIDOR 3F Mxh	3-phase 7 core through-wiring in the luminaire for connection of max. 20 luminaires (sensor and emergency unit connected to L3)

LIGHT FITTING ATTACHMENT

- Directly to a ceiling or a wall with the use of screws and stainless brackets
- Suspension with the use of stainless hooks
- Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

PRIMA LED SNS

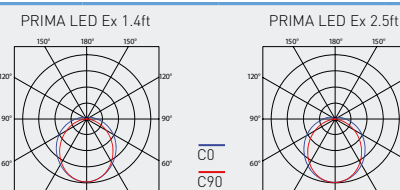
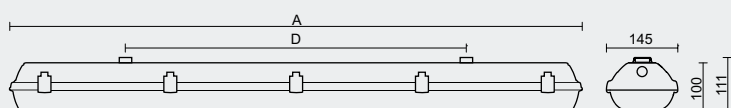


PRIMA LED Ex PCc



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: from -25 to 55 °C
- Maximum ambient temperature: from 0 to 50 °C (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 141 lm/W
- The watt and lumen values can vary by $\pm 7,5 \%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: stainless steel + polyamide + 15 % glass fibre
- Ventilation plug steel, size M12 x 1,5 ATEX (for version with emergency back-up source M1h, M3h)
- Cable glands: screwed M20 x 1,5 ATEX
- Distance part: polyamide + 10 % glass fibre, serves to suspend the reflector during assembly
- Terminal block: screwless, five-pole (version 1.4ft and 1.5ft), three-pole incl. earthing tape & screw for a perfect connection (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver, halogen-free wires with higher temperature resistance



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 55 \text{ °C}$ - body: grey polycarbonate - diffuser: translucent polycarbonate									
14810	PRIMA LED Ex 1.4ft PCc 3200/840	55	3200	2910	22	132	3,2	1272	700
14820	PRIMA LED Ex 1.4ft PCc 4400/840	55	4400	4000	30	133	3,3	1272	700
14830	PRIMA LED Ex 1.5ft PCc 4000/840	55	4000	3640	27	135	4,1	1572	940
14840	PRIMA LED Ex 1.5ft PCc 5500/840	55	5500	5010	37	135	4,2	1572	940
14850	PRIMA LED Ex 2.4ft PCc 6400/840	55	6400	5820	42	139	3,4	1272	700
14860	PRIMA LED Ex 2.4ft PCc 8800/840	55	8800	8010	58	138	3,5	1272	700
14870	PRIMA LED Ex 2.5ft PCc 8000/840	55	8000	7280	53	137	4,3	1572	940
14880	PRIMA LED Ex 2.5ft PCc 11000/840	55	11000	10010	71	141	4,4	1572	940
Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]	
Version with emergency back-up source M1h, M3h									
PRIMA LED Ex 1.4ft PCc 3200/840 Mxh	50	3200	2910	22	132	3,7	1272	700	
PRIMA LED Ex 1.4ft PCc 4400/840 Mxh	50	4400	4000	30	133	3,8	1272	700	
PRIMA LED Ex 1.5ft PCc 4000/840 Mxh	50	4000	3640	27	135	4,6	1572	940	
PRIMA LED Ex 1.5ft PCc 5500/840 Mxh	50	5500	5010	37	135	4,7	1572	940	
PRIMA LED Ex 2.4ft PCc 6400/840 Mxh	45	6400	5820	42	139	3,9	1272	700	
PRIMA LED Ex 2.4ft PCc 8800/840 Mxh	40	8800	8010	58	138	4,0	1272	700	
PRIMA LED Ex 2.5ft PCc 8000/840 Mxh	45	8000	7280	53	137	4,8	1572	940	
PRIMA LED Ex 2.5ft PCc 11000/840 Mxh	40	11000	10010	71	141	4,9	1572	940	

14810 PRIMA LED Ex 1.4ft PCc 3200/840 = suitable replacement for PRIMA Ex 136 PCc E - 1 x 36 W

14830 PRIMA LED Ex 1.5ft PCc 4000/840 = suitable replacement for PRIMA Ex 158 PCc E - 1 x 58 W

14850 PRIMA LED Ex 2.4ft PCc 6400/840 = suitable replacement for PRIMA Ex 236 PCc E - 2 x 36 W

14870 PRIMA LED Ex 2.5ft PCc 8000/840 = suitable replacement for PRIMA Ex 258 PCc E - 2 x 58 W

PRIMA LED Ex PCc

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
14810	PRIMA LED Ex 1.4ft PCc 3200/840	14811	14813	14814	14815	14817	14818
14820	PRIMA LED Ex 1.4ft PCc 4400/840	14821	14823	14824	14825	14827	14828
14830	PRIMA LED Ex 1.5ft PCc 4000/840	14831	14833	14834	14835	14837	14838
14840	PRIMA LED Ex 1.5ft PCc 5500/840	14841	14843	14844	14845	14847	14848
14850	PRIMA LED Ex 2.4ft PCc 6400/840	14851	14853	14854	14855	14857	14858
14860	PRIMA LED Ex 2.4ft PCc 8800/840	14861	14863	14864	14865	14867	14868
14870	PRIMA LED Ex 2.5ft PCc 8000/840	14871	14873	14874	14875	14877	14878
14880	PRIMA LED Ex 2.5ft PCc 11000/840	14881	14883	14884	14885	14887	14888

Example of type marking: 14853 = PRIMA LED Ex 2.4ft PCc 6400/840 **3F**

PRIMA LED Ex PCc DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
14910	PRIMA LED Ex 1.4ft PCc 3200/840 DALI	14911	14913	14914	14915	14917	14918
14920	PRIMA LED Ex 1.4ft PCc 4400/840 DALI	14921	14923	14924	14925	14927	14928
14930	PRIMA LED Ex 1.5ft PCc 4000/840 DALI	14931	14933	14934	14935	14937	14938
14940	PRIMA LED Ex 1.5ft PCc 5500/840 DALI	14941	14943	14944	14945	14947	14948
14950	PRIMA LED Ex 2.4ft PCc 6400/840 DALI	14951	14953	14954	14955	14957	14958
14960	PRIMA LED Ex 2.4ft PCc 8800/840 DALI	14961	14963	14964	14965	14967	14968
14970	PRIMA LED Ex 2.5ft PCc 8000/840 DALI	14971	14973	14974	14975	14977	14978
14980	PRIMA LED Ex 2.5ft PCc 11000/840 DALI	14981	14983	14984	14985	14987	14988

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

PRIMA LED Ex



ATEX CERTIFICATE

PRIMA LED Ex



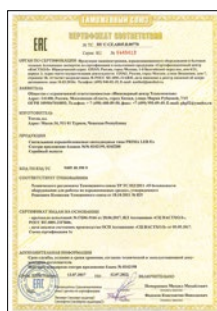
ATEX CERTIFICATE

PRIMA LED Ex Mxh



EAC CERTIFICATE

PRIMA LED Ex



PRIMA LED TUBE



... dustproof, waterproof and impact-resistant.

USE

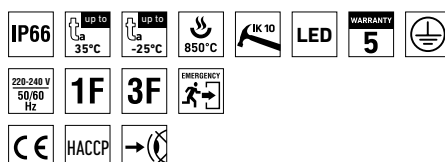
The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, sports areas, workshops, garages, transport terminals and utility structures without a danger of explosion of gas, dust and combustible fumes.

The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic at installations in an aggressive environment, see also page 317).

ADVANTAGES

- Light fitting protection **IP66**
- Diffuser: transparent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Constant luminous flux even in ambient temperature of -25°C
- Through-wiring of up to 10 wires at bodies of 2x120 and 2x150 type light fittings
- It can be delivered in emergency version



PRIMA LED TUBE PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 35^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 146 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- MacAdam = 3 SDCM
- Diffuser: transparent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: rubber (SBS)
- Distance part: polyamide + 10 % glass fibre
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: for LED tubes Osram SubstiTUBE T8 EM Value 4000 K, 6500 K; lampholder G13

Code	Type	Luminous flux of LED modules [lm]*	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 35^\circ\text{C}$ - body: grey polycarbonate - diffuser: transparent polycarbonate - lampholder G13								
37510	PRIMA LED TUBE 1x60 PC	800*	770	6,6	117	0,8	662	350
37520	PRIMA LED TUBE 1x120 PC	1800*	1730	15	115	1,7	1272	700
37530	PRIMA LED TUBE 1x150 PC	2200*	2120	18,3	116	1,9	1572	940
37540	PRIMA LED TUBE 2x60 PC	1600*	1480	13,2	112	1,1	662	350
37550	PRIMA LED TUBE 2x120 PC	3600*	3330	30	111	2,1	1272	700
37560	PRIMA LED TUBE 2x150 PC	4400*	4070	36,6	111	2,5	1572	940

* - total luminous flux of the light fitting with Osram SubstiTUBE T8 EM Value sources

PRIMA LED TUBE PC

For LED tubes Osram SubstiTUBE T8 EM Value - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
37510	PRIMA LED TUBE 1x60 PC	37511	37513	x	x	x	x
37520	PRIMA LED TUBE 1x120 PC	37521	37523	x	x	x	x
37530	PRIMA LED TUBE 1x150 PC	37531	37533	x	x	x	x
37540	PRIMA LED TUBE 2x60 PC	37541	37543	37544	37545	37546	37547
37550	PRIMA LED TUBE 2x120 PC	37551	37553	37554	37555	37556	37557
37560	PRIMA LED TUBE 2x150 PC	37561	37563	37564	37565	37566	37567

PRIMA LED TUBE PCc

For LED tubes Osram SubstiTUBE T8 EM Value - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
37610	PRIMA LED TUBE 1x60 PCc	37611	37613	x	x	x	x
37620	PRIMA LED TUBE 1x120 PCc	37621	37623	x	x	x	x
37630	PRIMA LED TUBE 1x150 PCc	37631	37633	x	x	x	x
37640	PRIMA LED TUBE 2x60 PCc	37641	37643	37644	37645	37646	37647
37650	PRIMA LED TUBE 2x120 PCc	37651	37653	37654	37655	37656	37657
37660	PRIMA LED TUBE 2x150 PCc	37661	37663	37664	37665	37666	37667

Example of type marking: 37653 = PRIMA LED TUBE 2x120 PCc 3F

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) Attachment with the use of side hangers to the wall

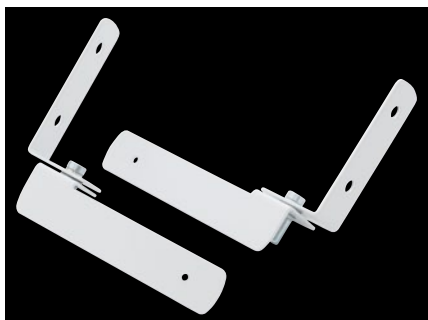
**LIGHT FITTING DETAILED VIEW**

PRIMA LED TUBE



BZ – side hanger

It serves to attach the light fitting to the wall with the possibility of its positioning.



Code	Type	Description	Weight [kg]
90002	BZ	side hanger with blocking (set for 1 light fitting)	0,4

Canalis busbar system connector

The connector enables a quick 1 phase or 3 phase interconnection of light fittings without their opening.



Code	Type	Description	Weight [kg]
79001	KBA 40 ZU	light fitting suspended holder - Canalis KBA system	0,1
70002	KBC 10 CC211	connector with 1 m cable - Canalis KBA system	0,2

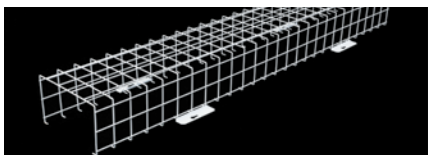
Stucchi or Wieland connector

The connector enables a quick 1 phase or 3 phase interconnection of light fittings without their opening.



OM – protective grid

The metal grid protects the light fitting against mechanical damage and unauthorised handling. It is attached to the surface with the use of screws. The surface is treated with the RAL 9003 powder-coated colour.



Code	Type	Description	Weight [kg]
11941	OM 218	protective grid for types 218, 214/224, x.2ft (700×220×130 mm)	1,0
11942	OM 236	protective grid for types 236, 228/254, x.4ft (1300×220×130 mm)	1,7
11943	OM 258	protective grid for types 258, 235/249/280, x.5ft (1600×220×130 mm)	2,0



CONCEPT RED



... for cows in the barns, chemically resistant.

USE

Cows barely detect a red light and therefore it is a perfect solution for illumination of barns when workers have to work with the animals during a time of the day when the cows have night. We know that cows need eight hours a day of darkness to be able to rest well. This solution saves you money and allows you to go on your rounds or carry out work without disturbing the cows.

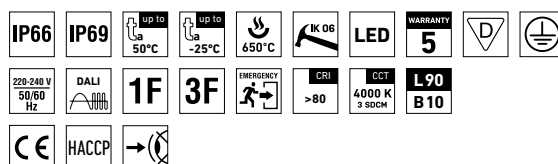
It can be integrated into our NANOTTICA, INNOVA and FUTURA lighting.

The light fixtures withstand exposure to chemically aggressive environments (ammonia in the air) typical of livestock farms.

The body made of ABS and the diffuser made of AC have increased chemical resistance.

In addition to being protected against dust and humidity (IP66), the fixtures boast excellent thermal resistance, withstanding temperatures up to 50 °C.

IP69-rated, our INNOVA and NANOTTICA-range fittings may be washed using hot water (up to 80 °C).



NANOTTICA

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
NANOTTICA 1.5ft ABS 5500/840	45	5500	4670	37	126	2,0	1455	970 - 1230
NANOTTICA 1.5ft ABS 5500/840 RED	45	5500 / 620	4940 / 550	37 / 12	126 / 45	2,3	1455	970 - 1230

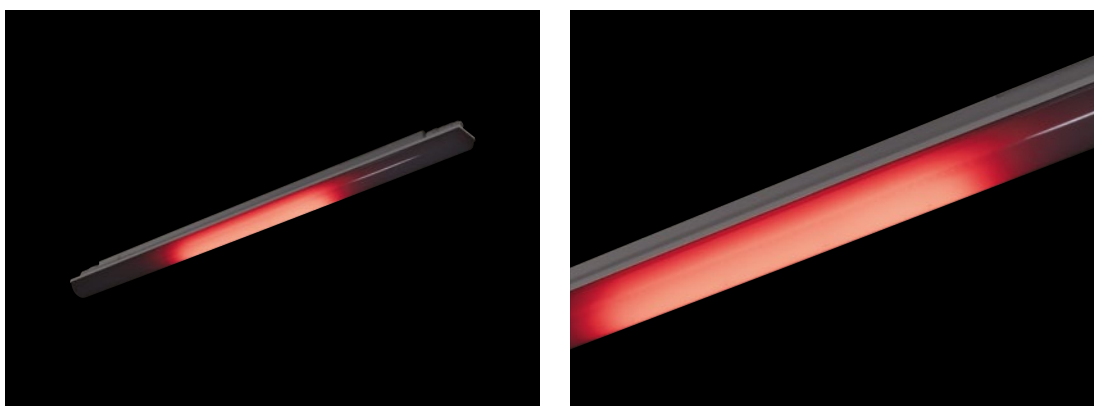
INNOVA

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
INNOVA 1.5ft ABS 4000/840	50	4000	3570	27	132	1,8	1455	700-980
INNOVA 1.5ft ABS 4000/840 RED	50	4000 / 620	3570 / 550	27 / 12	132 / 45	2,0	1455	700-980

FUTURA

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
FUTURA 2.5ft ABS 11000/840	45	11000	9620	71	135	3,9	1452	940
FUTURA 2.5ft ABS 11000/840 RED	45	11000 / 620	9620 / 550	71 / 12	135 / 45	4,1	1452	940

LUMINAIRES FITTED WITH A RED LIGHT MODULE - DEMO



CONCEPT BLUE

NEW



... for poultry farms, chemically resistant.

USE

Light fixtures fitted with our special blue light producing LED module are primarily designed **to be used in poultry farms**. The benefit of this specific colour is it calms the poultry and suppresses aggressive its behavior.

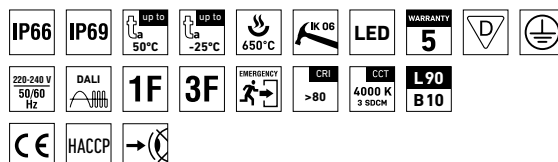
The light fixtures contain only the blue light LED module.

Our NANOTTICA, INNOVA, and FUTURA-range luminaires may be fitted with this module.

The light fixtures withstand exposure to chemically aggressive environments (ammonia in the air) typical of livestock farms.

The body made of ABS and the diffuser made of AC have increased chemical resistance. In addition to being protected against dust and humidity (IP66), the fixtures boast excellent thermal resistance, withstanding temperatures up to 50 °C.

IP69-rated, our INNOVA and NANOTTICA -range fittings may be washed using hot water (up to 80 °C).



NANOTTICA

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
NANOTTICA 1.5ft ABS 5500/840	45	5500	4670	37	126	2,0	1455	970 - 1230
NANOTTICA 1.5ft ABS 5500/840 BLUE	45	5500 / 640	4940 / 560	37 / 16	126 / 35	2,3	1455	970 - 1230

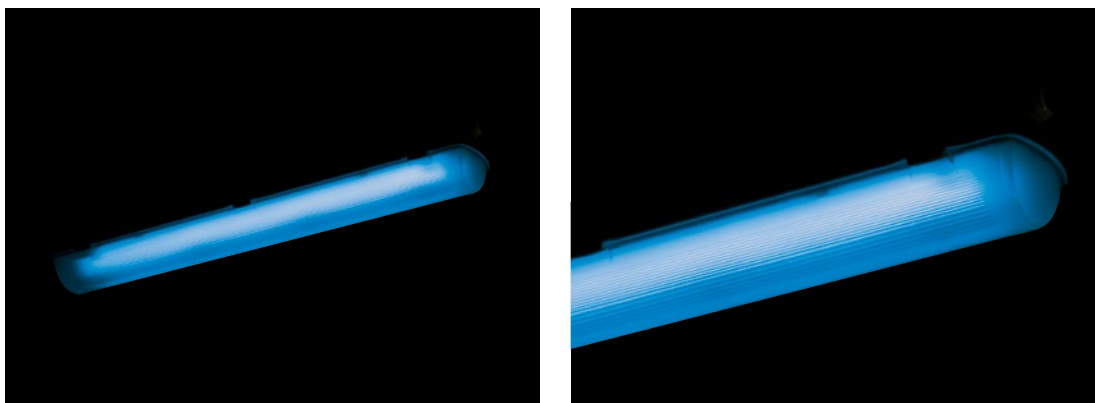
INNOVA

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
INNOVA 1.5ft ABS 4000/840	50	4000	3570	27	132	1,8	1455	700-980
INNOVA 1.5ft ABS 4000/840 BLUE	50	4000 / 640	3570 / 560	27 / 16	132 / 35	2,0	1455	700-980

FUTURA

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
FUTURA 2.5ft ABS 11000/840	45	11000	9620	71	135	3,9	1452	940
FUTURA 2.5ft ABS 11000/840 BLUE	45	11000 / 640	9620 / 560	71 / 16	135 / 35	4,1	1452	940

LUMINAIRES FITTED WITH A BLUE LIGHT MODULE - DEMO



HUMAN CENTRIC LIGHTING



... to boost circadian rhythms.

INTRODUCING HUMAN CENTRIC LIGHTING

Ours is an era when people spend a big part of their day indoors in artificial light. Human centric lighting (HCL) is designed to mimic natural daylight as closely as possible to match the ideal circadian rhythms and thereby improve motivation and productivity, enhance concentration and promote well-being at workplace.

Adjustability of correlated colour temperature (CCT) to suit different tasks and times of day is a major benefit of HCL. While low CCT (warm) light helps users to calm down such as when facing high stress, cooler white light (high CCT) energizes and boosts productivity and creativity.

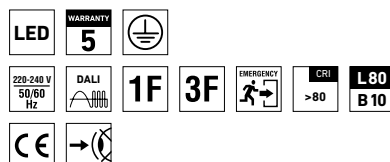
Here is how HCL works. Imagine you and your children are waking up on a Monday morning. Warm, lower intensity light at sunrise will give your family a soft start to the day while cooler light will help you concentrate at the important meeting later on. Switching back to warm light later in the afternoon is what people normally do because it promotes relaxation. However,

if you have to work late today to meet a rapidly approaching deadline, sticking to cooler light longer will help you stay alert and creative. In contrast, a few hours later, with the children in bed and a productive day behind you, it is finally time to enjoy a bit of a me time, perhaps with a book in your lap. Whatever the way you choose to wind down before going to sleep, warm light will help you do just that. And it will take some of the strain off your eyes too.

HCL is commonly used in offices, hospitals, schools, libraries and care homes but is recently also gaining popularity in residential spaces as well as in industrial and agricultural facilities.

SPECIFICATIONS

- Lifetime: 50,000 hours (L80B10)
- Constant light output (CLO) for the duration of the product's lifetime (if fitted with a DALI)
- Emergency version available
- Controlled through a mobile app installed on your smartphone or tablet
- Adjustable correlated colour temperature (CCT)
- Dimming
- Lighting planning with time programmes
- Creation of separately controlled groups and scenes possible
- Simple system adjustment and extension



NANOTTICA

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
NANOTTICA 1.5ft ABS 5500/827-865 TW	45	5500	4670	39	126	2,0	1455	970 - 1230

LINEA

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
LINEA 1.4ft 4400/827-865 TW	35	4400	3720	30	124	1,9	1160	650

NAOS

Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
EXAMPLE								
NAOS 1.5ft 5500/827-865 TW	35	5500	4500	39	115	4,4	1460	1310

CRI > 80

Type	Luminous flux of LED modules [lm]	Power consumption [W]
CRI > 80		
Luminaire 1.2ft TW xx 2200/827-865	2200	16
Luminaire 1.4ft TW xx 4400/827-865	4400	31
Luminaire 1.5ft TW xx 5500/827-865	5500	39
Luminaire 2.2ft TW xx 4400/827-865	4400	31
Luminaire 2.4ft TW xx 8800/827-865	8800	62
Luminaire 2.5ft TW xx 11000/827-865	11000	78

Example: PRIMA LED 1.5ft TW PC 5500/827-865

CRI > 90

Type	Luminous flux of LED modules [lm]	Power consumption [W]
CRI > 90		
Luminaire 1.2ft TW xx 3200/927-965	3200	29
Luminaire 1.4ft TW xx 6400/927-965	6400	49
Luminaire 1.5ft TW xx 8000/927-965	8000	60

Example: NAOS 1.2ft TW 3200/927-965

LEGEND

xx – materials (PC, ABS, applicable for the luminaires INNOVA, FUTURA and PRIMA LED)

A TW module is available for most of our luminaires:

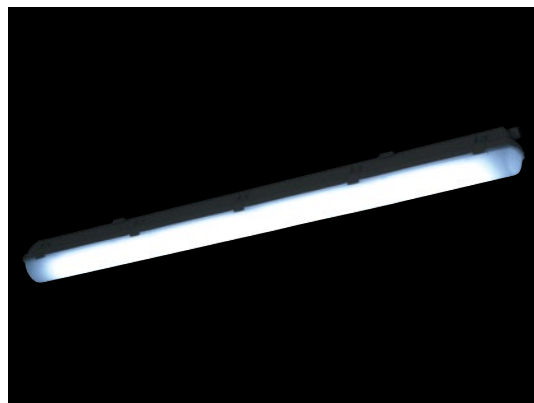
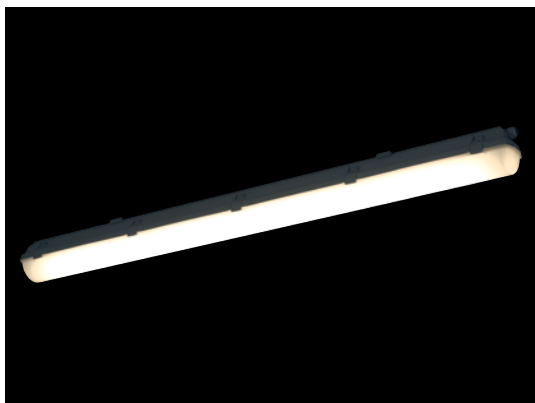
Industrial fittings:

NANOTTICA,
INNOVA,
FUTURA,
PRIMA LED,
PERUN SLIM,
ALUMAX LED

Indoor fittings:

LINEA and LINEA SQUARE,
BELTR LED,
NAOS
LUXOR LED

LUMINAIRES FITTED WITH A TUNABLE WHITE LIGHT MODULE – DEMO





TrEx



INDUSTRIAL
STEEL / INOX
DUSTPROOF
WATERPROOF



TrEx – industrial metal LED light fitting for the environment with a danger of explosion

TrEx
page 186



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TrEx



... for explosion hazard environment group II, category 2 (zone 1, 21 and 2, 22).

USE

The metal light fitting with satinated tempered safety glass is suitable for environment with hazard of explosion of gases, vapours and dust for zones 1, 21 and 2,22. It meets the requirements of the European Community Directive No. 2014/34/EU. It is resistant against chemically aggressive environment, therefore it fits for industrial premises like chemical factories, plants for processing of gases and oil, power plants, army facilities, automotive factories, laboratories and other facilities of heavy and mechanical engineering. The light fitting in IP66 protection is resistant against dust and splashing water.

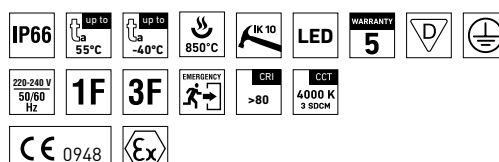
USE IN ENVIRONMENT WITH HAZARD OF EXPLOSION

TÜV CY 21 ATEX 0206562X	Light fitting with disconnecter	II 2G Ex db eb mb op is IIC T4 Gb
	Light fitting Mxh with disconnecter	II 2D Ex tb IIIC T 68°C IP66 Db
AR19ATEX131U	Light fitting without disconnecter	II 2G Ex eb mb op is IIC T4 Gb
	Light fitting Mxh without disconnecter	II 2D Ex tb IIIC T 68°C IP66 Db
AR19ATEX131U	Ex battery box HM 4Ah	II 2GEx d IIC T4 Gb
TÜV CY 20 ATEX 0206368U	Ex disconnecter OT 2A-2C Ex d	II 2G Ex db IIC Gb

The basic requirements for safety and health protection are secured by verification of conformity with EN 60079-0, EN 60079-7, EN 60079-18, EN 60079-1, EN 60079-28 and EN 60079-31.

ADVANTAGES

- Light fitting protection **IP66**
- High temperature resistance on a range from **t_a = -40 °C to t_a = 55 °C**
- For hazardous areas of zones 1, 21 and 2, 22
- Lifetime: 75 000 hours / L80B50 at t_a = 55 °C, 110 000 hours / L70B50 at t_a = 55 °C
- Cable glands: plastic ATEX M20 × 1,5, or metallic (INOX version on request)
- Wide fixing options including recessed frame for false ceiling
- Up to 45 % lower power consumption as compared to fluorescent tubes
- Constant luminous flux even at ambient temperature of -40 °C
- Standard model CRI > 80: 4000 K, at request CRI > 80: 6000 K
- Optional through-wiring of up to 7 wires at reflector



TrEx



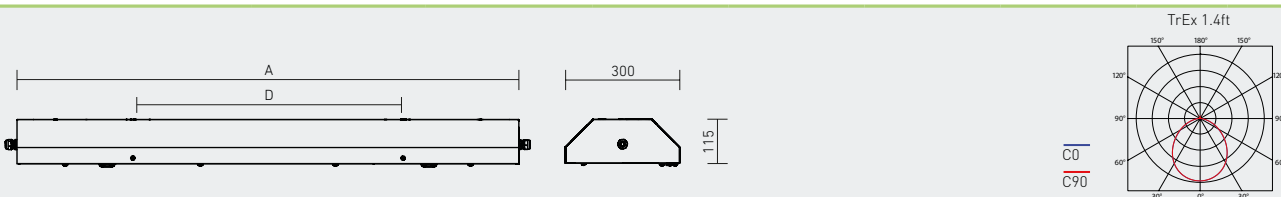
TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Minimum ambient temperature: $t_a = -40^\circ\text{C}$
- Maximum ambient temperature: $t_a = 55^\circ\text{C}$
- Ambient temperature: $t_a = 0-40^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 147 lm/W
- CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 75 000 hours / L80B50 at $t_a = 55^\circ\text{C}$, 110 000 hours / L70B50 at $t_a = 55^\circ\text{C}$
- Body: powder coated steel sheet RAL 9003, or INOX (AISI 304)
- Diffuser: satedated tempered safety glass
- Sealing: glued EPDM
- Cable glands: plastic ATEX M20 x 1,5, or metallic (INOX version on request)
- Terminal block: ATEX, screwless WAGO, Cable cross-section max: 4 mm²

- Installation: the package includes suspensory eyes 2 x M6
- Electric equipment: LED modules, current driver, disconnecter and Ex battery box with ATEX certificate
- The watt and lumen values can vary by $\pm 7,5\%$

AT REQUEST

- CRI > 80: 6000 K
- Halogen-free wires
- Design modification for fixing and connecting in the false ceiling
- Diffuser: transparent tempered safety glass
- Cable glands: metal or armoured ATEX cable glands M20 x 1,5 or M25 x 1,5
- Increased number of cable entries on sides and in upper part of light fitting if recessed frame for false ceiling mounted



Type	Min. and max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
Light fitting without a battery system								
TrEx 1.2ft 3200/840	-40 / 55	3200	2350	19	123	8,3	730	350
TrEx 1.2ft 4400/840	-40 / 55	4400	3360	27	124	8,3	730	350
TrEx 1.4ft 6400/840	-40 / 55	6400	4700	35	134	14,6	1300	700
TrEx 1.4ft 8800/840	-40 / 55	8800	6720	50	134	14,6	1300	700
TrEx 1.5ft 8000/840	-40 / 55	8000	5880	40	147	17,3	1580	700
TrEx 1.5ft 11000/840	-40 / 55	11000	8400	59	142	17,3	1580	700
TrEx 2.2ft 6400/840	-40 / 55	6400	4700	35	134	8,9	730	350
TrEx 2.2ft 8800/840	-40 / 50	8800	6720	50	134	8,9	730	350
TrEx 2.4ft 12800/840	-40 / 55	12800	9400	67	140	16,0	1300	700
TrEx 2.4ft 17600/840	-40 / 50	17600	13440	100	134	16,0	1300	700
TrEx 2.5ft 16000/840	-40 / 55	16000	11760	80	147	18,9	1580	700
TrEx 2.5ft 22000/840	-40 / 50	22000	16800	121	138	18,9	1580	700

Type	Min. and max. ambient temperature [°C]	Emergency light flux of light fitting 1h [lm]	Emergency light flux of light fitting 3h [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM emergency lighting kit						
TrEx 1.2ft 4400/840 Mxh	0 / 40	990	630	2	NiCd HT	+1,3
TrEx 1.4ft 6400/840 Mxh	0 / 40	790	600	2	NiCd HT	+1,3
TrEx 1.4ft 8800/840 Mxh	0 / 40	630	580	2	NiCd HT	+1,3
TrEx 1.5ft 8000/840 Mxh	0 / 40	580	580	2	NiCd HT	+1,3

TrEx

Code	Type
10219	TrEx 1.2ft 3200/840
10222	TrEx 1.2ft 4400/840
10224	TrEx 1.4ft 6400/840
10225	TrEx 1.4ft 8800/840
10226	TrEx 1.5ft 8000/840
10227	TrEx 1.5ft 11000/840
10228	TrEx 2.2ft 6400/840
10229	TrEx 2.2ft 8800/840
10231	TrEx 2.4ft 12800/840
10232	TrEx 2.4ft 17600/840
10233	TrEx 2.5ft 16000/840
10236	TrEx 2.5ft 22000/840

Light fitting without disconnecter

1F	3F	M1h	M3h	3F M1h	3F M3h
10237	10253	x	x	x	x
10238	10256	10289	10298	10318	10334
10239	10257	x	x	x	x
10241	10258	10294	10302	10322	10336
10242	10259	x	x	x	x
10243	10262	x	x	x	x
10246	10268	x	x	x	x
10247	10269	x	x	x	x
10248	10272	x	x	x	x
10249	10278	x	x	x	x
10251	10279	x	x	x	x
10252	10282	x	x	x	x

TrEx DIS

Code	Type
10339	TrEx 1.2ft 3200/840 DIS
10341	TrEx 1.2ft 4400/840 DIS
10342	TrEx 1.4ft 6400/840 DIS
10343	TrEx 1.4ft 8800/840 DIS
10346	TrEx 1.5ft 8000/840 DIS
10347	TrEx 1.5ft 11000/840 DIS
10348	TrEx 2.2ft 6400/840 DIS
10349	TrEx 2.2ft 8800/840 DIS
10351	TrEx 2.4ft 12800/840 DIS
10352	TrEx 2.4ft 17600/840 DIS
10353	TrEx 2.5ft 16000/840 DIS
10356	TrEx 2.5ft 22000/840 DIS

Light fitting with disconnecter

1F	3F	M1h	M3h	3F M1h	3F M3h
10357	10379	x	x	x	x
10358	10382	10409	10429	10445	10451
10359	10388	x	x	x	x
10361	10389	10418	10438	10447	10453
10362	10392	x	x	x	x
10363	10398	x	x	x	x
10366	10399	x	x	x	x
10367	10402	x	x	x	x
10368	10404	x	x	x	x
10369	10405	x	x	x	x
10372	10406	x	x	x	x
10378	10407	x	x	x	x

TrEx INOX

Code	Type
10456	TrEx 1.2ft 3200/840 INOX
10457	TrEx 1.2ft 4400/840 INOX
10458	TrEx 1.4ft 6400/840 INOX
10459	TrEx 1.4ft 8800/840 INOX
10460	TrEx 1.5ft 8000/840 INOX
10461	TrEx 1.5ft 11000/840 INOX
10462	TrEx 2.2ft 6400/840 INOX
10463	TrEx 2.2ft 8800/840 INOX
10464	TrEx 2.4ft 12800/840 INOX
10465	TrEx 2.4ft 17600/840 INOX
10466	TrEx 2.5ft 16000/840 INOX
10467	TrEx 2.5ft 22000/840 INOX

Light fitting without disconnecter, body steel sheet grade AISI 304

1F	3F	M1h	M3h	3F M1h	3F M3h
10468	10480	x	x	x	x
10469	10481	10493	10499	10505	10512
10470	10482	x	x	x	x
10471	10483	10495	10501	10507	10516
10472	10484	x	x	x	x
10473	10485	x	x	x	x
10474	10486	x	x	x	x
10475	10487	x	x	x	x
10476	10488	x	x	x	x
10477	10489	x	x	x	x
10478	10490	x	x	x	x
10479	10491	x	x	x	x

TrEx DIS INOX

Code	Type
10519	TrEx 1.2ft 3200/840 DIS INOX
10521	TrEx 1.2ft 4400/840 DIS INOX
10522	TrEx 1.4ft 6400/840 DIS INOX
10523	TrEx 1.4ft 8800/840 DIS INOX
10526	TrEx 1.5ft 8000/840 DIS INOX
10527	TrEx 1.5ft 11000/840 DIS INOX
10528	TrEx 2.2ft 6400/840 DIS INOX
10529	TrEx 2.2ft 8800/840 DIS INOX
10531	TrEx 2.4ft 12800/840 DIS INOX
10532	TrEx 2.4ft 17600/840 DIS INOX
10533	TrEx 2.5ft 16000/840 DIS INOX
10536	TrEx 2.5ft 22000/840 DIS INOX

Light fitting with disconnecter, body steel sheet grade AISI 304

1F	3F	M1h	M3h	3F M1h	3F M3h
10537	10572	x	x	x	x
10538	10574	10602	10616	10623	10632
10539	10575	x	x	x	x
10542	10576	10609	10618	10627	10636
10548	10577	x	x	x	x
10549	10578	x	x	x	x
10552	10579	x	x	x	x
10558	10582	x	x	x	x
10559	10588	x	x	x	x
10562	10589	x	x	x	x
10568	10592	x	x	x	x
10569	10598	x	x	x	x

LEGEND

1F 1-phase 3 core through-wiring in the luminaire**3F** 3-phase 5 core through-wiring in the luminaire**M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination**M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination**3F Mxh** 3-phase 5 core through-wiring in the luminaire
(L3 used for emergency unit unswitched power supply)**DIS** - light fitting with disconnecter

CERTIFICATION

TÜV CY 21 ATEX 0206562X - TrEx, TrEx Mxh		
Directive		Standards
2014/34/EU	ATEX	EN 60079-0:2012 + A11:2013
		EN IEC 60079-0:2018
		EN 60079-1:2014
		EN 60079-7:2015
		EN 60079-18:2015
		EN 60079-28:2015
2014/35/EU	General requirements and standards	EN 60079-31:2014
		EN 60598-1:2015
		EN 60598-2-1:89
		EN 62471:2008
		EN 55015:2013
		EN 60598-2-22:2014
		EN 61547:2009
		EN 61000-3-2:14
2011/65/EN	RoHS	EN 61000-3-3:13
		EN 50581:2012

AR19ATEX131U - Ex battery box HM4Ah

Directive		Standards
2014/34/EU	ATEX	EN IEC 60079-0:2018 EN 60079-1:2014

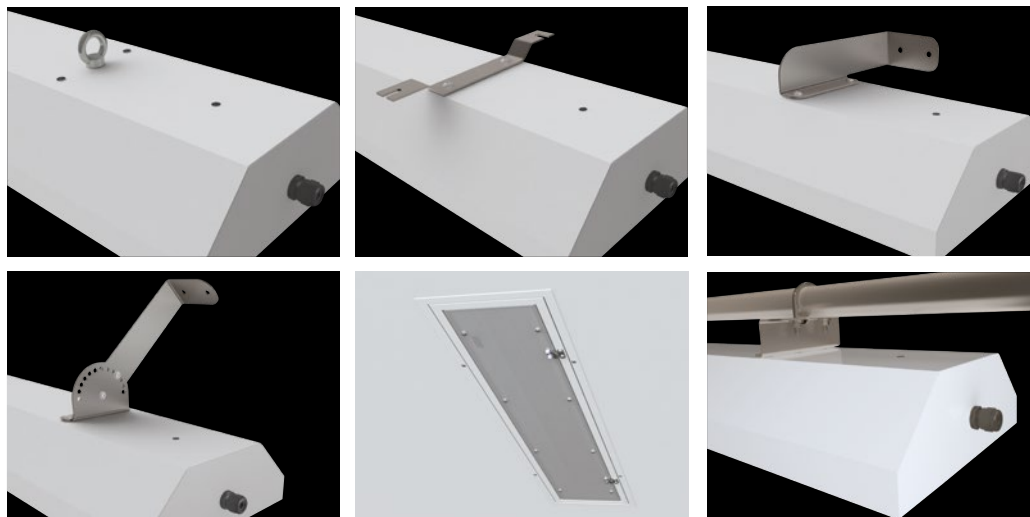
TÜV CY 20 ATEX 0206368 U - Ex disconnecter OT 2A-2C Ex d

Directive		Standards
2014/34/EU	ATEX	EN IEC 60079-0:2018 EN 60079-1:2014

	Identification of external influences	Classification of spaces	
		Identification	Establishment regulation
Hazard of explosion of flammable dust	BE3N1	ZONE 21, 22	EN 60079-17
			EN 60079-14
			EN 60079-10-2
Hazard of explosion of flammable gases and vapours	BE3N2	ZONE 1, 2	EN 60079-10-1
			EN 60079-14
			EN 60079-17

LIGHT FITTING ATTACHMENT

- a) Suspension eyes 2×M6 - in standard model
 b) Holders directly on the ceiling
 c) Side suspensions on the wall
 d) Adjustable side suspensions on the wall
 e) Recessed frame for false ceiling
 f) Holders on tube structures



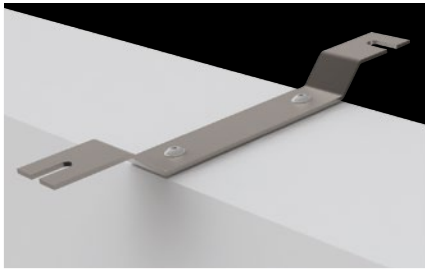
LIGHT FITTING DETAILED VIEW

TrEx



Ceiling suspension

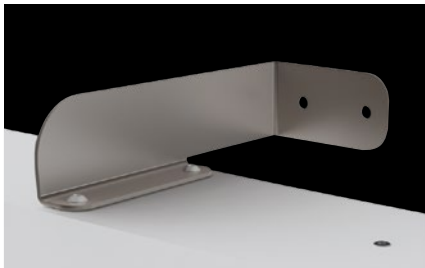
Serves for hanging the light fitting on the ceiling.



Code	Type	Description	Weight [kg]
62694	TrEx suspension 3	Metal holder for direct suspending on the ceiling. Holder - 2 pcs, screw M6×16 - 4 pcs assembly.	0,6
62695	TrEx suspension 3 INOX	Stainless-steel holder for direct suspending on the ceiling. Holder - 2 pcs, screw M6×16 - 4 pcs for assembling.	0,6

Side suspension

Serves for firm fixation of the light fitting on the wall.



Code	Type	Description	Weight [kg]
62690	TrEx suspension 1	Metal holder for direct suspension on the wall. Holder - 2 pcs, screw M6×16 - 4 pcs for assembling	1,4
62691	TrEx suspension 1 INOX	Stainless-steel holder for direct suspension on the wall. Holder - 2 pcs, screw M6×16 - 4 pcs for assembling	1,4

Adjustable side suspension

Serves for hanging the light fitting on the wall, ceiling, sloped surfaces, and enables positioning the light fitting from 0 to 90°, with a step of 15°.



Code	Type	Description	Weight [kg]
62692	TrEx suspension 2	Metal holder for direct suspending on the wall or ceiling. Holder - 2 pcs, screw M6×16 - 8 pcs for assembling.	1,5
62693	TrEx suspension 2 INOX	Stainless-steel holder for direct suspending on the wall and ceiling. Holder - 2 pcs, screw M6×16 - 8 pcs for assembling.	1,5

Pipeline holder

Serves for suspending the light fitting to tube structures with a diameter of ¾" - 2" by means of pipeline clamps.



Code	Type	Description	Weight [kg]
62696	TrEx holder	Metal holder for direct suspending on the tube structures. Holder - 2 pcs, screw M6×16 - 4 pcs, nut M8 - 4 pcs, washer 8.2 - 4 pcs, pipeline clamp ETR M8 - 2 pcs for assembling.	0,8
62697	TrEx holder INOX	Stainless-steel holder for direct suspending to tube structures. Holder - 2 pcs, screw M6×16 - 4 pcs, nut M8 - 4 pcs, washer 8.2 - 4 pcs, pipeline clamp ETR M8 - 2 pcs for assembling.	0,8

Recessed frame for false ceiling

Serves for fixing the light fitting into the false ceiling by means of a recessed frame and modified customize body.



Type	Description
TrEx fixture body with a frame	Raster ceiling mounted fixture body, frame, screw M6×16 - 4 pcs, screw M6×60 - 4 pcs, washer 6,2 - 4 pcs, suspension M6 for plasterboard - 4 pcs for assembling.

Please, contact our sales representative to order a raster ceiling mounted fixture body with a frame.



PERUN SLIM



INDUSTRIAL
STAINLESS
DUSTPROOF
WATERPROOF



PERUN SLIM – industrial metal LED light fitting

PERUN SLIM
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IP65

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PERUN SLIM



... stainless, dustproof, waterproof.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, garages, workshops, sports areas, transport terminals, utility structures, agricultural operations and laboratories without a danger of explosion of gas, dust and combustible fumes.

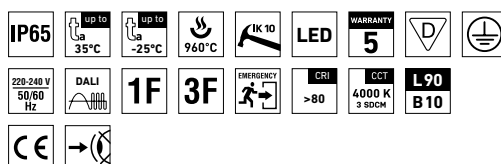
The light fitting is resistant to deformation, dust, spouting water and have increased chemical resistance.

Characteristics of the used tempered glass and its shattering power are controlled by the ČSN EN 12150-1 standard. For applications where spontaneous fracture means a higher safety risk, we recommend to use the version with the safety film (SF).

ADVANTAGES

- Light fitting protection **IP65**
- Maximum ambient temperature up to **$t_a = 35^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B10
- High chemical and mechanical robustness IK10
- Diffuser: polished thermally toughened safety glass
- Body: stainless sheet
- Up to 45 % lower electricity consumption when compared to tubes T5
- It can be delivered in dimmable or permanent emergency version M1h and M3hAt

- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25°C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K

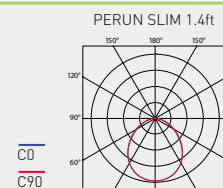
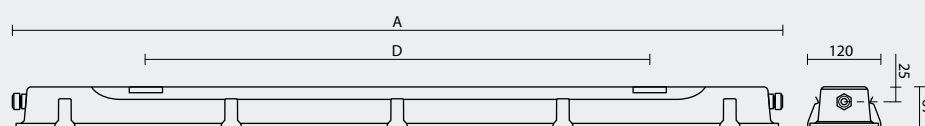


PERUN SLIM



TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Maximum ambient temperature: $t_a = 35^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ with a back-up power supply M1h, M3hAt
- Maximum system efficacy: 121 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: polished thermally toughened safety glass
- Possibility of delivery of the diffuser with a safety foil (SF)
- Possibility of delivery of an EM kit M1h with battery autotesting
- Body: stainless sheet, impact-resistant, chemically resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: stainless
- Sealing: silicone, at light fitting body
- Cable glands: PG 13.5 brass with surface treatment
- Terminal block: screwless, three-pole (basic version)
- The package includes: stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI



Code	Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
Body: stainless sheet - diffuser: polished thermally toughened safety glass								
86710	PERUN SLIM 1.2ft 1300/840	1300	1040	9	115	2,4	680	360
86720	PERUN SLIM 1.2ft 1600/840	1600	1280	11	116	2,4	680	360
86730	PERUN SLIM 1.2ft 2200/840	2200	1760	15	117	2,4	680	360
86740	PERUN SLIM 1.4ft 2600/840	2600	2090	18	116	4,3	1290	850
86750	PERUN SLIM 1.4ft 3200/840	3200	2580	22	117	4,3	1290	850
86760	PERUN SLIM 1.4ft 4400/840	4400	3540	30	118	4,3	1290	850
86770	PERUN SLIM 1.4ft 6400/840	6400	5100	43	119	4,3	1290	850
86780	PERUN SLIM 1.5ft 3250/840	3250	2540	22	115	5,3	1600	1050
86790	PERUN SLIM 1.5ft 4000/840	4000	3190	27	118	5,3	1600	1050
86800	PERUN SLIM 1.5ft 5500/840	5500	4460	37	121	5,3	1600	1050
86810	PERUN SLIM 1.5ft 8000/840	8000	6410	54	119	5,3	1600	1050

86720 PERUN SLIM 1.2ft 1600/840 = suitable replacement for T8 fl. tube light fitting PERUN 118 - 1 x 18 W

86750 PERUN SLIM 1.4ft 3200/840 = suitable replacement for T8 fl. tube light fitting PERUN 136 - 1 x 36 W

86770 PERUN SLIM 1.4ft 6400/840 = suitable replacement for T8 fl. tube light fitting PERUN 236 - 2 x 36 W

86790 PERUN SLIM 1.5ft 4000/840 = suitable replacement for T8 fl. tube light fitting PERUN 158 - 1 x 58 W

86810 PERUN SLIM 1.5ft 8000/840 = suitable replacement for T8 fl. tube light fitting PERUN 258 - 2 x 58 W

PERUN SLIM

Non-dimmable driver, diffuser: polished thermally toughened safety glass

Code	Type	1F	3F	M1h	M3hAt	3F M1h	3F M3hAt
86710	PERUN SLIM 1.2ft 1300/840	86711	86713	x	x	x	x
86720	PERUN SLIM 1.2ft 1600/840	86721	86723	x	x	x	x
86730	PERUN SLIM 1.2ft 2200/840	86731	86733	x	x	x	x
86740	PERUN SLIM 1.4ft 2600/840	86741	86743	86744	86745	86746	86747
86750	PERUN SLIM 1.4ft 3200/840	86751	86753	86754	86755	86756	86757
86760	PERUN SLIM 1.4ft 4400/840	86761	86763	86764	86765	86766	86767
86770	PERUN SLIM 1.4ft 6400/840	86771	86773	x	x	x	x
86780	PERUN SLIM 1.5ft 3250/840	86781	86783	86784	86785	86786	86787
86790	PERUN SLIM 1.5ft 4000/840	86791	86793	86794	86795	86796	86797
86800	PERUN SLIM 1.5ft 5500/840	86801	86803	86804	86805	86806	86807
86810	PERUN SLIM 1.5ft 8000/840	86811	86813	x	x	x	x

PERUN SLIM DALI

Digital dimmable driver DALI, diffuser: polished thermally toughened safety glass

Code	Type	1F	3F	M1h	M3hAt	3F M1h	3F M3hAt
86820	PERUN SLIM 1.2ft 1300/840 DALI	86821	x	x	x	x	x
86830	PERUN SLIM 1.2ft 1600/840 DALI	86831	x	x	x	x	x
86840	PERUN SLIM 1.2ft 2200/840 DALI	86841	x	x	x	x	x
86850	PERUN SLIM 1.4ft 2600/840 DALI	86851	86853	86854	86855	86856	86857
86860	PERUN SLIM 1.4ft 3200/840 DALI	86861	86863	86864	86865	86866	86867
86870	PERUN SLIM 1.4ft 4400/840 DALI	86871	86873	86874	86875	86876	86877
86880	PERUN SLIM 1.4ft 6400/840 DALI	86881	86883	x	x	x	x
86890	PERUN SLIM 1.5ft 3250/840 DALI	86891	86893	86894	86895	86896	86897
86900	PERUN SLIM 1.5ft 4000/840 DALI	86901	86903	86904	86905	86906	86907
86910	PERUN SLIM 1.5ft 5500/840 DALI	86911	86913	86914	86915	86916	86917
86920	PERUN SLIM 1.5ft 8000/840 DALI	86921	86923	x	x	x	x

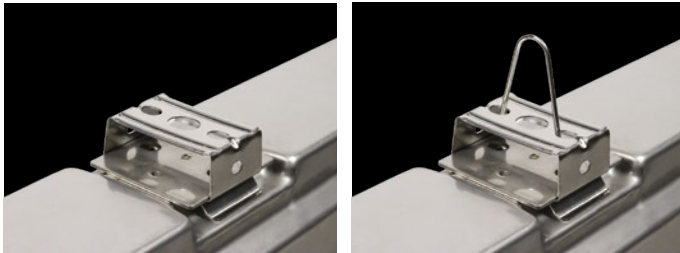
Example of type marking: 86916 = PERUN SLIM 1.5ft 5500/840 3F M1h

LEGEND

1F	1-phase 3 core through-wiring in the luminaire	DALI	version with digital dimmable driver DALI
3F	3-phase 5 core through-wiring in the luminaire	DALI 1F	1-phase 5 core through-wiring in the luminaire
M1h	emergency back-up source with 1 hour operating time for maintained emergency illumination	DALI 3F	3-phase 7 core through-wiring in the luminaire
M3h	emergency back-up source with 3 hour operating time for maintained emergency illumination	DALI 3F Mxh	3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
3F Mxh	3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)		

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks



LIGHT FITTING DETAILED VIEW

PERUN SLIM





ALUMAX LED



INDUSTRIAL
DUSTPROOF
WATERPROOF
ALUMINIUM PROFILE



ALUMAX LED – industrial metal LED light fitting

ALUMAX LED
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IP66

ALUMAX LED
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ALUMAX LED FOR
EXTREME TEMPERATURES
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IP66

ALUMAX LED MAX
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ALUMAX LED
ACCESSORIES
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ALUMAX LED
ACCESSORIES
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ALUMAX LED



... aluminium, dustproof, waterproof, chemically resistant.

USE

The light fitting is suitable for industrial indoor and outdoor roofed spaces, warehouses, garages, workshops, sports areas, transport terminals, utility structures, agricultural operations and laboratories without a danger of explosion of gas, dust and combustible fumes.

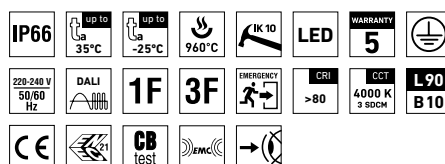
The light fitting is resistant to deformation, dust, spouting water and chemically aggressive environment.

Characteristics of the used tempered glass and its shattering power are controlled by the ČSN EN 12150-1 standard.

ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **$t_a = 35^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B10
- Diffuser: tempered glass with high mechanical resistance
- Body: grey aluminium profile, surface treated with powder-coated colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)

- Constant luminous flux even in ambient temperature of -25°C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ENEC, CB

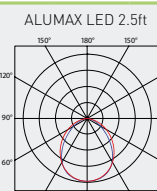
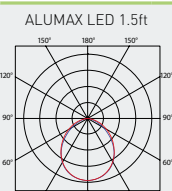
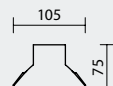
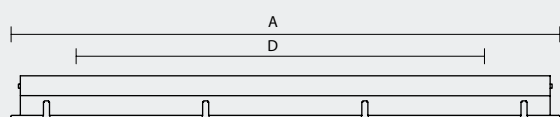


ALUMAX LED



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 35^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ with a back-up power supply M1h, M3h
- Maximum system efficacy: 117 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: tempered glass
- Body: grey aluminium profile, surface treated with powder-coated colour
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: stainless
- Sealing: polyurethane (PUR) in body groove
- Side covers: grey aluminium alloy with plastic side plates for fixation and suspension of glass at assembly, surface treated with powder-coated colour
- Terminal block: screwless, three-pole (basic version)
- Cable glands: brass M18 x 1,5
- Installation: package contains stainless sheet suspension brackets and FeZn sliding hangers
- Electric equipment: LED modules, current driver or current driver DALI



Code	Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
Diffuser made of tempered glass								
50410	ALUMAX LED 1.2ft 1300/840	1300	1050	9	116	2,2	624	534
50420	ALUMAX LED 1.2ft 1600/840	1600	1290	11	117	2,2	624	534
50430	ALUMAX LED 1.2ft 2200/840	2200	1670	15	111	2,2	624	534
50440	ALUMAX LED 1.4ft 2600/840	2600	1990	18	111	4,2	1224	1134
50450	ALUMAX LED 1.4ft 3200/840	3200	2450	22	111	4,2	1224	1134
50460	ALUMAX LED 1.4ft 4400/840	4400	3370	30	112	4,2	1224	1134
50470	ALUMAX LED 1.5ft 3250/840	3250	2410	22	110	5,0	1524	1434
50480	ALUMAX LED 1.5ft 4000/840	4000	3030	27	112	5,0	1524	1434
50490	ALUMAX LED 1.5ft 5500/840	5500	4240	37	115	5,0	1524	1434
50510	ALUMAX LED 2.2ft 2600/840	2600	1950	18	108	2,4	624	534
50520	ALUMAX LED 2.2ft 3200/840	3200	2420	22	110	2,4	624	534
50530	ALUMAX LED 2.2ft 4400/840	4400	3320	30	111	2,4	624	534
50540	ALUMAX LED 2.4ft 5200/840	5200	3870	35	111	4,3	1224	1134
50550	ALUMAX LED 2.4ft 6400/840	6400	4760	42	113	4,3	1224	1134
50560	ALUMAX LED 2.4ft 8800/840	8800	6660	58	115	4,3	1224	1134
50570	ALUMAX LED 2.5ft 6500/840	6500	4880	44	111	5,3	1524	1434
50580	ALUMAX LED 2.5ft 8000/840	8000	5960	53	112	5,3	1524	1434
50590	ALUMAX LED 2.5ft 11000/840	11000	8150	71	115	5,3	1524	1434

50450 ALUMAX LED 1.4ft 3200/840 = suitable replacement for ALUMAX 136 E - 1 x 36 W

50480 ALUMAX LED 1.5ft 4000/840 = suitable replacement for ALUMAX 158 E - 1 x 58 W

50550 ALUMAX LED 2.4ft 6400/840 = suitable replacement for ALUMAX 236 E - 2 x 36 W

50580 ALUMAX LED 2.5ft 8000/840 = suitable replacement for ALUMAX 258 E - 2 x 58 W

ALUMAX LED

Diffuser made of tempered glass, stainless clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
50410	ALUMAX LED 1.2ft 1300/840	x	x	50414	x	x	x
50420	ALUMAX LED 1.2ft 1600/840	x	x	50424	x	x	x
50430	ALUMAX LED 1.2ft 2200/840	x	x	50434	x	x	x
50440	ALUMAX LED 1.4ft 2600/840	50441	50443	50444	50445	50447	50448
50450	ALUMAX LED 1.4ft 3200/840	50451	50453	50454	50455	50457	50458
50460	ALUMAX LED 1.4ft 4400/840	50461	50463	50464	50465	50467	50468
50470	ALUMAX LED 1.5ft 3250/840	50471	50473	50474	50475	50477	50478
50480	ALUMAX LED 1.5ft 4000/840	50481	50483	50484	50485	50487	50488
50490	ALUMAX LED 1.5ft 5500/840	50491	50493	50494	50495	50497	50498
50510	ALUMAX LED 2.2ft 2600/840	x	x	50514	x	x	x
50520	ALUMAX LED 2.2ft 3200/840	x	x	50524	x	x	x
50530	ALUMAX LED 2.2ft 4400/840	x	x	50534	x	x	x
50540	ALUMAX LED 2.4ft 5200/840	50541	50543	50544	50545	50547	50548
50550	ALUMAX LED 2.4ft 6400/840	50551	50553	50554	50555	50557	50558
50560	ALUMAX LED 2.4ft 8800/840	50561	50563	x	x	x	x
50570	ALUMAX LED 2.5ft 6500/840	50571	50573	50574	50575	50577	50578
50580	ALUMAX LED 2.5ft 8000/840	50581	50583	50584	50585	50587	50588
50590	ALUMAX LED 2.5ft 11000/840	50591	50593	x	x	x	x

Example of type marking: 50555 = ALUMAX LED 2.4ft 6400/840 M3h

ALUMAX LED DALI

Digital dimmable driver DALI, diffuser made of tempered glass, stainless clips

Code	Type	3F	M1h	M3h	3F M1h	3F M3h
50610	ALUMAX LED 1.2ft 1300/840 DALI	x	50614	x	x	x
50620	ALUMAX LED 1.2ft 1600/840 DALI	x	50624	x	x	x
50630	ALUMAX LED 1.2ft 2200/840 DALI	x	50634	x	x	x
50640	ALUMAX LED 1.4ft 2600/840 DALI	50643	50644	50645	50647	50648
50650	ALUMAX LED 1.4ft 3200/840 DALI	50653	50654	50655	50657	50658
50660	ALUMAX LED 1.4ft 4400/840 DALI	50663	50664	50665	50667	50668
50670	ALUMAX LED 1.5ft 3250/840 DALI	50673	50674	50675	50677	50678
50680	ALUMAX LED 1.5ft 4000/840 DALI	50683	50684	50685	50687	50688
50690	ALUMAX LED 1.5ft 5500/840 DALI	50693	50694	50695	50697	50698
50710	ALUMAX LED 2.2ft 2600/840 DALI	x	x	x	x	x
50720	ALUMAX LED 2.2ft 3200/840 DALI	x	x	x	x	x
50730	ALUMAX LED 2.2ft 4400/840 DALI	x	x	x	x	x
50740	ALUMAX LED 2.4ft 5200/840 DALI	50743	50744	50745	50747	50748
50750	ALUMAX LED 2.4ft 6400/840 DALI	50753	50754	50755	50757	50758
50760	ALUMAX LED 2.4ft 8800/840 DALI	50763	x	x	x	x
50770	ALUMAX LED 2.5ft 6500/840 DALI	50773	50774	50775	50777	50778
50780	ALUMAX LED 2.5ft 8000/840 DALI	50783	50784	50785	50787	50788
50790	ALUMAX LED 2.5ft 11000/840 DALI	50793	x	x	x	x

Example of type marking: 50694 = ALUMAX LED 1.5ft 5500/840 DALI **M1h**

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) To a ceiling or a wall with the use of FeZn sliding hangers in body groove
- c) Attachment with the use of side hangers to the wall



LIGHT FITTING DETAILED VIEW

ALUMAX LED



ALUMAX LED MAX



... for extreme temperatures -40°C to $+75^{\circ}\text{C}$.

USE

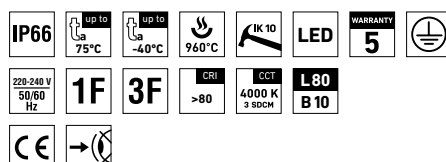
The light fitting is suitable for indoor and outdoor spaces with roof with extreme ambient temperatures from **-40°C to $+75^{\circ}\text{C}$** . The light fitting is destined mainly for heating stations, metallurgical lines, glass-works, as well as for freezers, cooling plants and other premises without danger of explosion of gases, dusts and flammable vapors.

The light fitting is resistant to deformation, dust, spouting water and chemically aggressive environment.

Characteristics of the used tempered glass and its shattering power are controlled by the ČSN EN 12150-1 standard.

ADVANTAGES

- Light fitting protection **IP66**
- Minimum ambient temperature up to **$t_a = -40^{\circ}\text{C}$**
- Maximum ambient temperature up to **$t_a = 75^{\circ}\text{C}$**
- Lifetime: 50,000 hours / L80B10
- Possibility of using in even higher ambient temperatures under the condition of a shortened service life of the light fitting – parameters solved within a particular project
- Diffuser: tempered glass with high mechanical resistance
- Body: grey aluminium profile, surface treated with powder-coated colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- Constant luminous flux even in ambient temperature of -40°C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K

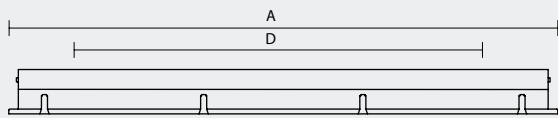


ALUMAX LED MAX

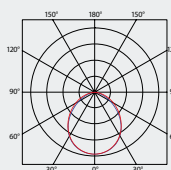


TECHNICAL DESCRIPTION

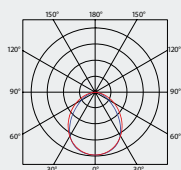
- Light fitting protection: IP66
- Minimum ambient temperature: $t_a = -40^\circ\text{C}$
- Maximum ambient temperature: $t_a = 75^\circ\text{C}$
- Lifetime: 50,000 hours / L80B10
- Possibility of using in even higher ambient temperatures under the condition of a shortened service life of the light fitting – parameters solved within a particular project
- Maximum system efficacy: 129 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Diffuser: tempered glass
- Body: grey aluminium profile, surface treated with powder-coated colour
- Reflector: steel sheet, white colour (RAL 9003)
- Ventilation plug: type BVPB-01 made of brass, size M12 x 1,5
- Side covers: grey aluminium alloy with plastic side plates for fixation and suspension of glass at assembly, surface treated with powder-coated colour
- Clips: stainless
- Sealing: polyurethane (PUR) in body groove
- Terminal block: screwless, three-pole (basic version)
- Cable glands: brass M18 x 1,5
- Installation: package contains stainless sheet suspension brackets and FeZn sliding hangers
- Electric equipment: LED modules, current driver



ALUMAX LED MAX 1.5ft



ALUMAX LED MAX 2.5ft



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature up to $t_a = 75^\circ\text{C}$ - body: aluminum profile - diffuser: thermally toughened glass									
79730	ALUMAX LED 1.5ft MAX 4000/840	75	4000	3050	24	127	5,0	1524	1434
79700	ALUMAX LED 1.5ft MAX 5500/840	70	5500	4100	33	124	5,0	1524	1434
79740	ALUMAX LED 2.4ft MAX 6400/840	70	6400	4920	38	129	4,3	1224	1134
79710	ALUMAX LED 2.4ft MAX 8800/840	65	8800	6480	52	125	4,3	1224	1134
79750	ALUMAX LED 2.5ft MAX 8000/840	70	8000	6020	48	125	5,3	1524	1434
79720	ALUMAX LED 2.5ft MAX 11000/840	65	11000	8100	65	125	5,3	1524	1434

ALUMAX LED MAX

Diffuser: polished thermally toughened glass, stainless clips

Code	Type	1F	3F	M1h	M3h	DALI	DALI 3F
79730	ALUMAX LED 1.5ft MAX 4000/840	79731	79733	x	x	79735	79736
79700	ALUMAX LED 1.5ft MAX 5500/840	79701	79703	x	x	79705	79706
79740	ALUMAX LED 2.4ft MAX 6400/840	79741	79743	x	x	79745	79746
79710	ALUMAX LED 2.4ft MAX 8800/840	79711	79713	x	x	79715	79716
79750	ALUMAX LED 2.5ft MAX 8000/840	79751	79753	x	x	79755	79756
79720	ALUMAX LED 2.5ft MAX 11000/840	79721	79723	x	x	79725	79726

Example of type marking: 79713 = ALUMAX LED MAX 2.4ft 8800/840 3F

LEGEND

DALI – version with digital dimmable driver DALI

1F – 1 phase wiring cables for through-wiring

3F – 3 phase wiring cables for through-wiring

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) To a ceiling or a wall with the use of FeZn sliding hangers in body groove
- c) Attachment with the use of side hangers to the wall

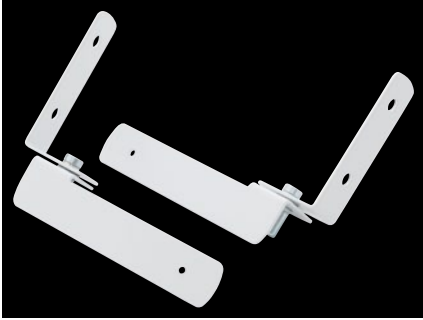
**LIGHT FITTING DETAILED VIEW**

ALUMAX LED MAX



BZ – side hanger

It serves to attach the light fitting to the wall with the possibility of its positioning.



Code	Type	Description	Weight [kg]
90002	BZ	side hanger with blocking (set for 1 light fitting)	0,4



CANOPUS

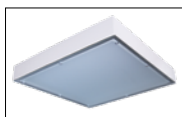


INDUSTRIAL
METAL
FOR HIGH CEILINGS



CANOPUS – industrial metal LED light fitting

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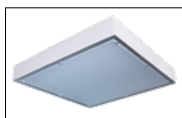
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IP65

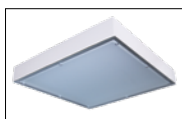
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IP65

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IP65

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CANOPUS



... dustproof, waterproof, for high ceilings.

USE

The light fitting is suitable for large operations with high ceilings, industrial outdoor and indoor roofed spaces, warehouses, workshops, sports areas, transport terminals and utility structures without a danger of explosion of gas, dust and combustible fumes.

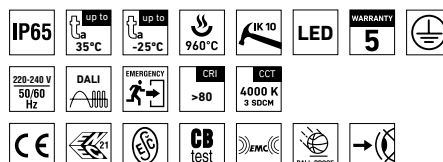
The light fitting is resistant to deformation, dust and splashing water.

Characteristics of the used tempered glass and its shattering power are controlled by the ČSN EN 12150-1 standard. For applications where spontaneous fracture means a higher safety risk, we recommend to use the version with the safety film (SF).

ADVANTAGES

- Light fitting protection **IP65**
- Maximum ambient temperature up to **$t_a = 35^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B50
- High mechanical robustness IK10
- Diffuser: satinized or transparent tempered safety glass
- Body: steel sheet - white colour (RAL 9003), or inox AISI 304 at request
- Up to 45 % lower electricity consumption when compared to tubes T5
- Possibility of delivery either in a deemed or permanently emergency design M1hAt and M3hAt

- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25°C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Easy installation with the help of supply connector with cable 0,4 m CYSY 3 × 1,5, without necessity of opening the light fitting
- Certification: ESC, ENEC, CB, BALL-PROOF

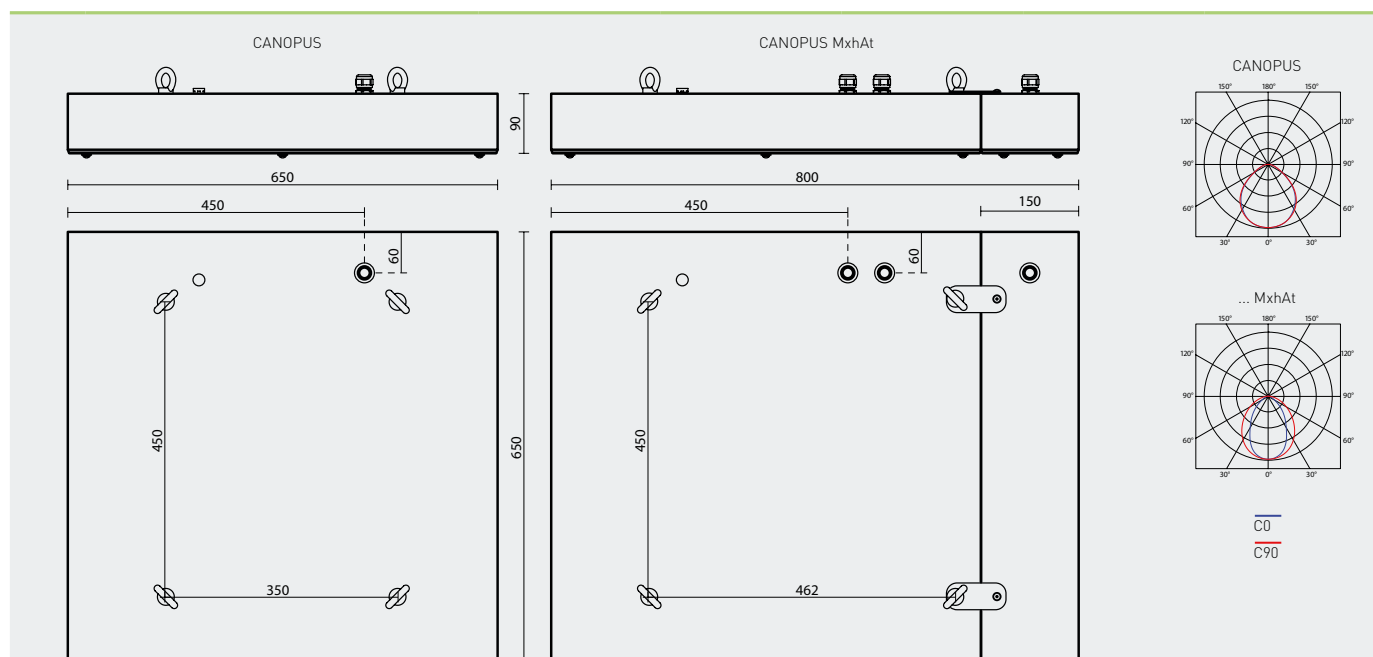


CANOPUS



TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Maximum ambient temperature: $t_a = 0-35^\circ\text{C}$ and for the design with a back-up power supply M1hAt, M3hAt
- Maximum system efficacy: 134 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B50
- Diffuser: satinized tempered safety glass
- Possibility of delivery of the diffuser with a safety foil (SF)
- EM kit with battery autotesting for M1hAt and M3hAt
- Body: steel sheet, white colour (RAL 9003), or inox AISI 304 at request
- Ventilation plug: type BVPB-01 made of polyamide, size M12 \times 1,5
- Sealing: EPDM attached to light fitting body
- Terminal block: interconnecting connector, 0,4 m cable
- Installation: all versions delivered including suspension lugs (4 pcs)
- Electric equipment: LED modules, current driver or current driver DALI (2 - 3 pcs depending on type)



Code	Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]
For ambient temperature $t_a = 35^\circ\text{C}$ - body: steel sheet, white colour - diffuser: satinized tempered safety glass						
74010	CANOPUS 22000/840	22000	18110	146	124	11,6
74020	CANOPUS 26000/840	26000	21190	158	134	11,8
74030	CANOPUS 30000/840	30000	24450	186	131	11,8

Type	Autonomy [hrs]	Emergency light flux of light fitting [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM kit for permanent emergency lighting with battery autotesting - diffuser: satinized tempered safety glass					
... M1hAt	1	440	1,5	LiFePO ₄	+4,2
... M3hAt	3	440	1,5	LiFePO ₄	+4,4

CANOPUS

Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74010	CANOPUS 22000/840	74011	74013	74016	74017	74018
74020	CANOPUS 26000/840	74021	74023	74026	74027	74028
74030	CANOPUS 30000/840	74031	74033	74036	74037	74038

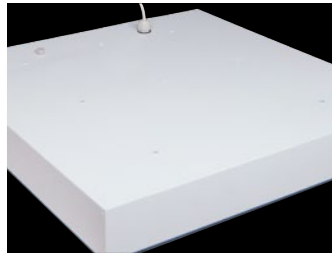
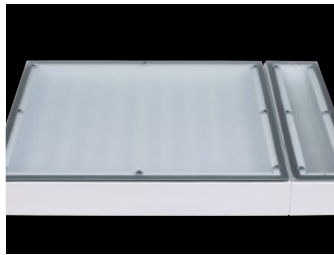
Example of type marking: 74036 = CANOPUS 30000/840 DALI

LEGEND

- DALI** – version with digital dimmable driver DALI (2 - 3 pcs)
- M1hAt** – emergency back-up source with operating time of 1 hour (SA) for permanent illumination with battery autotesting
- M3hAt** – emergency back-up source with operating time of 3 hours (SA) for permanent illumination with battery autotesting
- Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

- a) With help of suspension eyes of M6
- b) With help of a holder directly to the ceiling
- c) With the help of adjustable holder directly on the ceiling or on the wall
- d) With help of a chain hinge

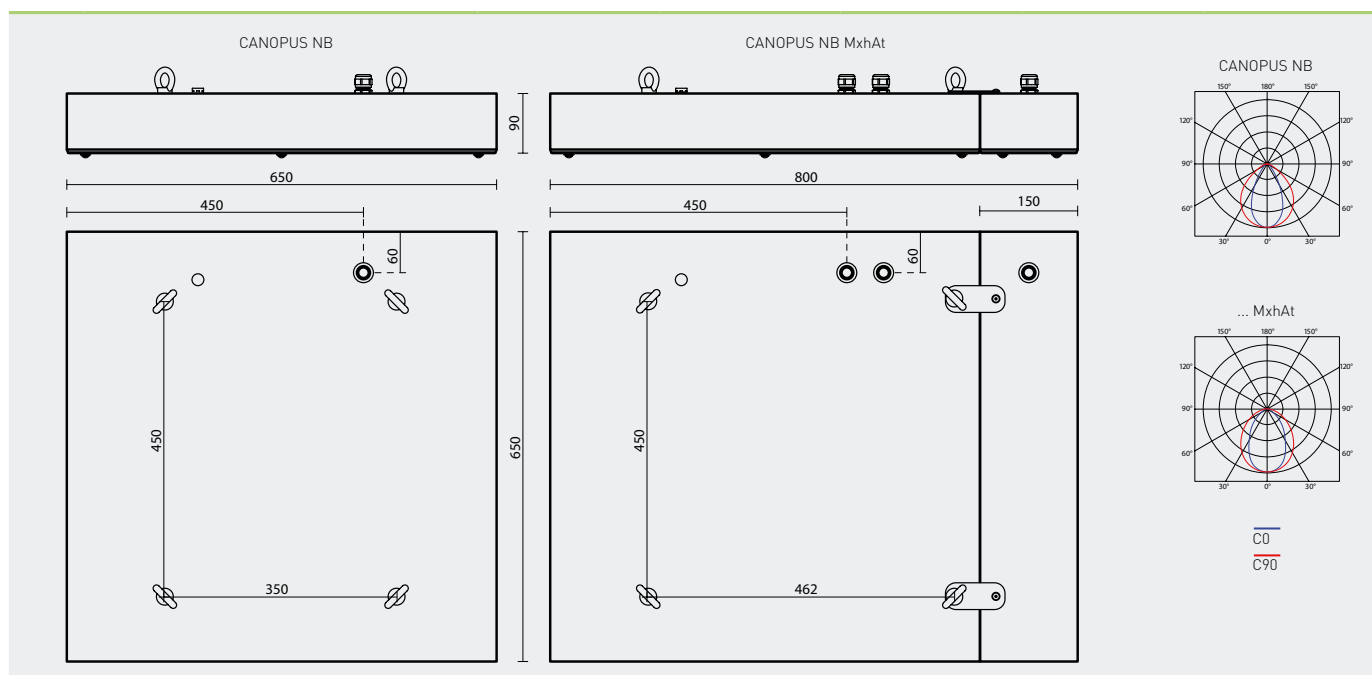
**LIGHT FITTING DETAILED VIEW****LIGHT FITTING DETAILED VIEW WITH AN EMERGENCY MODULE**

CANOPUS NB



TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Maximum ambient temperature: $t_a = 0-35^\circ\text{C}$ and for the design with a back-up power supply M1hAt, M3hAt
- Maximum system efficacy: 130 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B50
- Diffuser: satinized tempered safety glass
- Possibility of delivery of the diffuser with a safety foil (SF)
- EM kit with battery autotesting for M1hAt and M3hAt
- Reflector: parabolic polished aluminium with narrow emitting characteristics (NB - narrow beam)
- Body: steel sheet, white colour (RAL 9003), or inox AISI 304 at request
- Ventilation plug: type BVPB-01 made of polyamide, size M12 \times 1.5
- Sealing: EPDM attached to light fitting body
- Terminal block: interconnecting connector, 0.4 m cable
- Installation: all versions delivered including suspension lugs (4 pcs)
- Electric equipment: LED modules, current driver or current driver DALI (2 - 3 pcs depending on type)



Code	Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]
For ambient temperature $t_a = 35^\circ\text{C}$ - body: steel sheet, white colour - diffuser: satinized tempered safety glass with parabolic reflector						
74110	CANOPUS NB 22000/840	22000	17570	146	120	12,3
74120	CANOPUS NB 26000/840	26000	20540	158	130	12,5
74130	CANOPUS NB 30000/840	30000	23700	186	127	12,5

Type	Autonomy [hrs]	Emergency light flux of light fitting [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM kit for permanent emergency lighting with battery autotesting - diffuser: satinized tempered safety glass					
... M1hAt	1	440	1,5	LiFePO ₄	+4,2
... M3hAt	3	440	1,5	LiFePO ₄	+4,4

CANOPUS NB

Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74110	CANOPUS NB 22000/840	74111	74113	74116	74117	74118
74120	CANOPUS NB 26000/840	74121	74123	74126	74127	74128
74130	CANOPUS NB 30000/840	74131	74133	74136	74137	74138

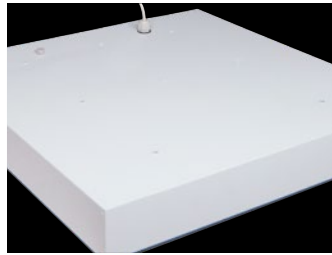
Example of type marking: 74136 = CANOPUS NB 30000/840 DALI

LEGEND

- DALI** – version with digital dimmable driver DALI (2 - 3 pcs)
M1hAt – emergency back-up source with operating time of 1 hour [SA] for permanent illumination with battery autotesting
M3hAt – emergency back-up source with operating time of 3 hours [SA] for permanent illumination with battery autotesting
 Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

- a) With help of suspension eyes of M6
- b) With help of a holder directly to the ceiling
- c) With the help of adjustable holder directly on the ceiling or on the wall
- d) With help of a chain hinge

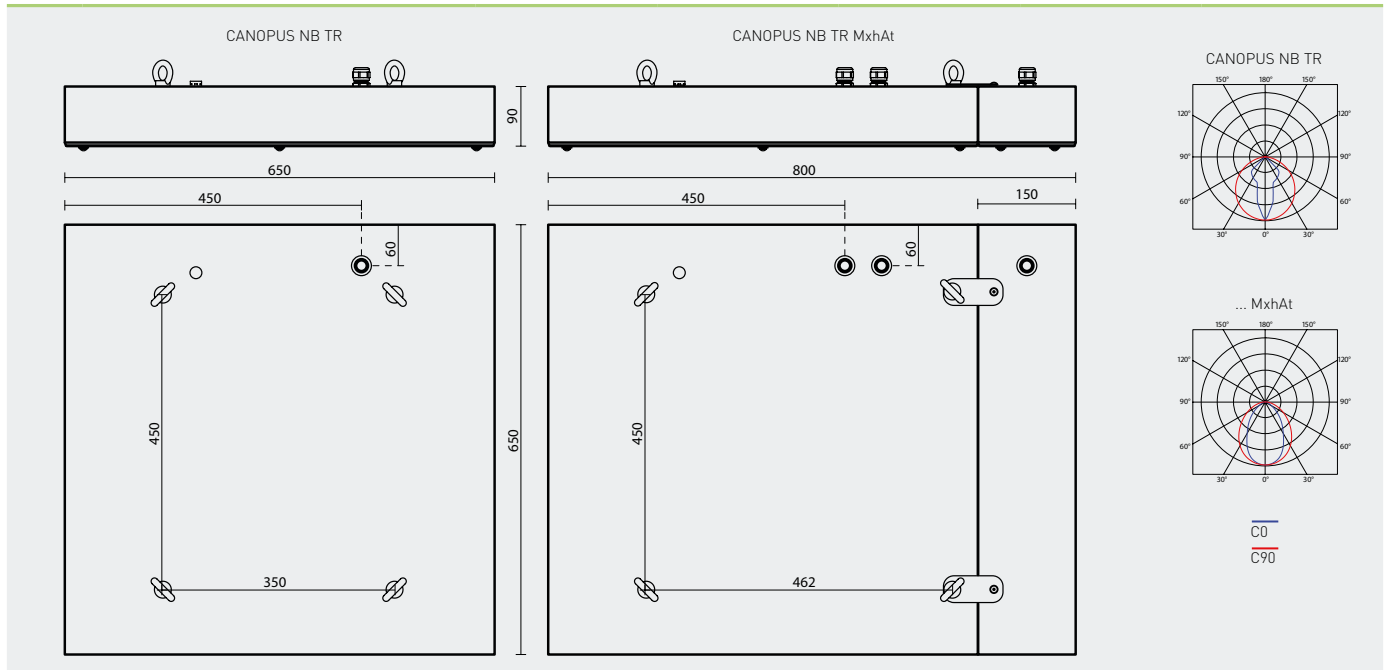
**LIGHT FITTING DETAILED VIEW****LIGHT FITTING DETAILED VIEW WITH AN EMERGENCY MODULE**

CANOPUS NB TR



TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Maximum ambient temperature: $t_a = 0-35^\circ\text{C}$ and for the design with a back-up power supply M1hAt, M3hAt
- Maximum system efficacy: 136 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B50
- Diffuser: transparent tempered safety glass (TR)
- Possibility of delivery of the diffuser with a safety foil (SF)
- EM kit with battery autotesting for M1hAt and M3hAt
- Reflector: parabolic polished aluminium with narrow emitting characteristics (NB - narrow beam)
- Body: steel sheet, white colour (RAL 9003), or inox AISI 304 at request
- Ventilation plug: type BVPB-01 made of polyamide, size M12 \times 1.5
- Sealing: EPDM attached to light fitting body
- Terminal block: interconnecting connector, 0.4 m cable
- Installation: all versions delivered including suspension lugs (4 pcs)
- Electric equipment: LED modules, current driver or current driver DALI (2 - 3 pcs depending on type)



Code	Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]
For ambient temperature $t_a = 35^\circ\text{C}$ - body: steel sheet, white colour - diffuser: tempered safety glass with parabolic reflector [TR]						
74210	CANOPUS NB TR 22000/840	22000	18540	146	127	12,3
74220	CANOPUS NB TR 26000/840	26000	21580	158	136	12,5
74230	CANOPUS NB TR 30000/840	30000	24900	186	133	12,5

Type	Autonomy [hrs]	Emergency light flux of light fitting [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM kit for permanent emergency lighting with battery autotesting - diffuser: satinized tempered safety glass					
... M1hAt	1	440	1,5	LiFePO ₄	+4,2
... M3hAt	3	440	1,5	LiFePO ₄	+4,4

CANOPUS NB TR

Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74210	CANOPUS NB TR 22000/840	74211	74213	74216	74217	74218
74220	CANOPUS NB TR 26000/840	74221	74223	74226	74227	74228
74230	CANOPUS NB TR 30000/840	74231	74233	74236	74237	74238

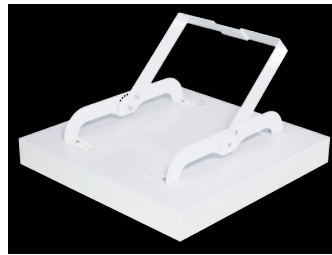
Example of type marking: 74236 = CANOPUS NB TR 30000/840 DALI

LEGEND

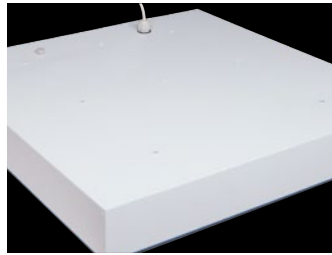
- DALI** – version with digital dimmable driver DALI (2 - 3 pcs)
M1hAt – emergency back-up source with operating time of 1 hour [SA] for permanent illumination with battery autotesting
M3hAt – emergency back-up source with operating time of 3 hours [SA] for permanent illumination with battery autotesting
 Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

- a) With help of suspension eyes of M6
- b) With help of a holder directly to the ceiling
- c) With the help of adjustable holder directly on the ceiling or on the wall
- d) With help of a chain hinge



LIGHT FITTING DETAILED VIEW



LIGHT FITTING DETAILED VIEW WITH AN EMERGENCY MODULE



CANOPUS HE



152
lm/W



... high efficiency, for high ceilings, with sulphur-resistant LED chips.

USE

The light fitting is suitable for large operations with high ceilings, industrial outdoor and indoor roofed spaces, warehouses, workshops, sports areas, transport terminals and utility structures without a danger of explosion of gas, dust and combustible fumes.

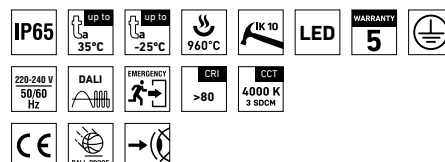
The light fitting is resistant to deformation, dust and splashing water.

Characteristics of the used tempered glass and its shattering power are controlled by the ČSN EN 12150-1 standard. For applications where spontaneous fracture means a higher safety risk, we recommend to use the version with the safety film (SF).

ADVANTAGES

- Light fitting protection **IP65**
- Maximum ambient temperature up to **$t_a = 35^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B50
- High mechanical robustness IK10
- Diffuser: satinized or transparent tempered safety glass
- Body: steel sheet - white colour (RAL 9003), or inox AISI 304 at request
- Up to 45 % lower electricity consumption when compared to tubes T5
- Possibility of delivery either in a deemed or permanently emergency design M1hAt and M3hAt

- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25°C
- Standard model - CRI > 80: 4000 K
- Easy installation with the help of supply connector with cable 0,4 m CYSY 3 x 1,5, without necessity of opening the light fitting
- **Chips with high sulphur resistance**
- Certification: BALL-PROOF

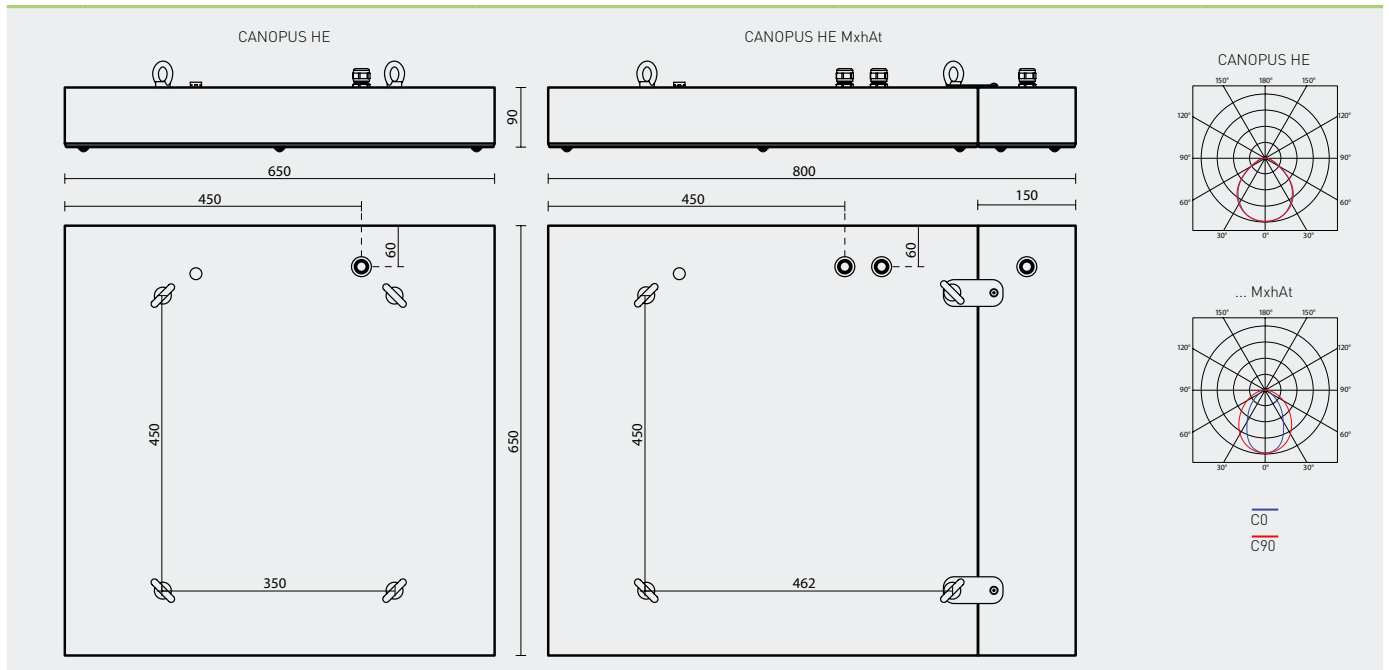


CANOPUS HE



TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Maximum ambient temperature: $t_a = 0-35\text{ }^\circ\text{C}$ and for the design with a back-up power supply M1hAt, M3hAt
- Maximum system efficacy: 152 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B50
- Diffuser: satinized tempered safety glass
- Possibility of delivery of the diffuser with a safety foil (SF)
- EM kit with battery autotesting for M1hAt and M3hAt
- Body: steel sheet, white colour (RAL 9003), or inox AISI 304 at request
- Ventilation plug: type BVPB-01 made of polyamide, size M12 \times 1.5
- Sealing: EPDM attached to light fitting body
- Terminal block: interconnecting connector, 0.4 m cable
- Installation: all versions delivered including suspension lugs (4 pcs)
- Electric equipment: LED sulphur-resistant modules, current driver or current driver DALI (2 - 3 pcs depending on type)



Code	Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]
For ambient temperature $t_a = 35\text{ }^\circ\text{C}$ - body: steel sheet, white colour - diffuser: satinized tempered safety glass						
74810	CANOPUS HE 22000/840	22000	17360	116	150	11,6
74820	CANOPUS HE 26000/840	26000	21300	140	152	11,8
74830	CANOPUS HE 30000/840	30000	24240	162	150	11,8

Type	Autonomy [hrs]	Emergency light flux of light fitting [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM kit for permanent emergency lighting with battery autotesting - diffuser: satinized tempered safety glass					
... M1hAt	1	440	1,5	LiFePO ₄	+4,2
... M3hAt	3	440	1,5	LiFePO ₄	+4,4

CANOPUS HE

Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74810	CANOPUS HE 22000/840	74811	74812	74813	74814	74815
74820	CANOPUS HE 26000/840	74821	74822	74823	74824	74825
74830	CANOPUS HE 30000/840	74831	74832	74833	74834	74835

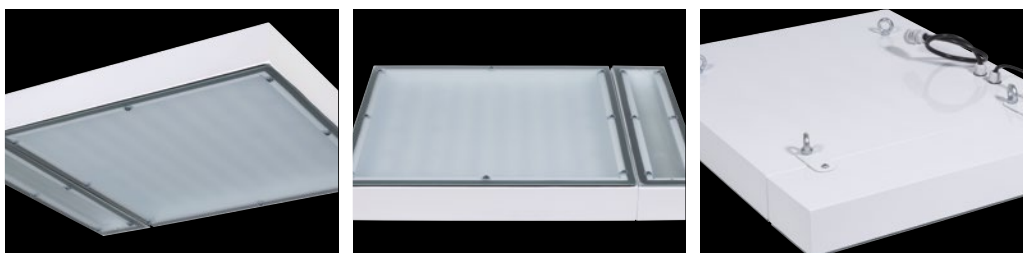
Example of type marking: 74834 = CANOPUS HE 30000/840 DALI M1hAt

LEGEND

- DALI** – version with digital dimmable driver DALI (2 - 3 pcs)
- M1hAt** – emergency back-up source with operating time of 1 hour [SA] for permanent illumination with battery autotesting
- M3hAt** – emergency back-up source with operating time of 3 hours [SA] for permanent illumination with battery autotesting
- Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

- a) With help of suspension eyes of M6
- b) With help of a holder directly to the ceiling
- c) With the help of adjustable holder directly on the ceiling or on the wall
- d) With help of a chain hinge

**LIGHT FITTING DETAILED VIEW****LIGHT FITTING DETAILED VIEW WITH AN EMERGENCY MODULE**

CANOPUS MAX



... for extreme temperatures -40°C to $+60^{\circ}\text{C}$.

USE

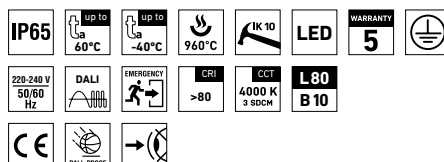
The light fitting is suitable for sizable premises with high ceilings and external ambient temperatures from -40°C to $+60^{\circ}\text{C}$. The light fitting is destined mainly for heating stations, metallurgical lines, glass-works, but also for freezers, cooling plants and other premises without danger of explosion of gases, dusts and flammable vapors.

The light fitting is resistant to deformation, dust and splashing water.

Characteristics of the used tempered glass and its shattering power are controlled by the ČSN EN 12150-1 standard. For applications where spontaneous fracture means a higher safety risk, we recommend to use the version with the safety film (SF).

ADVANTAGES

- Light fitting protection **IP65**
- Minimal ambient temperature $t_a = -40^{\circ}\text{C}$
- Maximum ambient temperature up to $t_a = 60^{\circ}\text{C}$
- Lifetime: 50,000 hours / L80B10
- High mechanical robustness IK10
- Diffuser: satinized or transparent tempered safety glass
- Body: steel sheet, white colour (RAL 9003), or inox AISI 304
- Up to 45 % lower electricity consumption when compared to tubes T5
- Possibility of delivery either in a deemed or permanently emergency design M1hAt and M3hAt
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -40°C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Easy installation with the help of supply connector with cable 0,4 m CYSY 3 x 1.5, without necessity of opening the light fitting
- Certification: Ball Proof

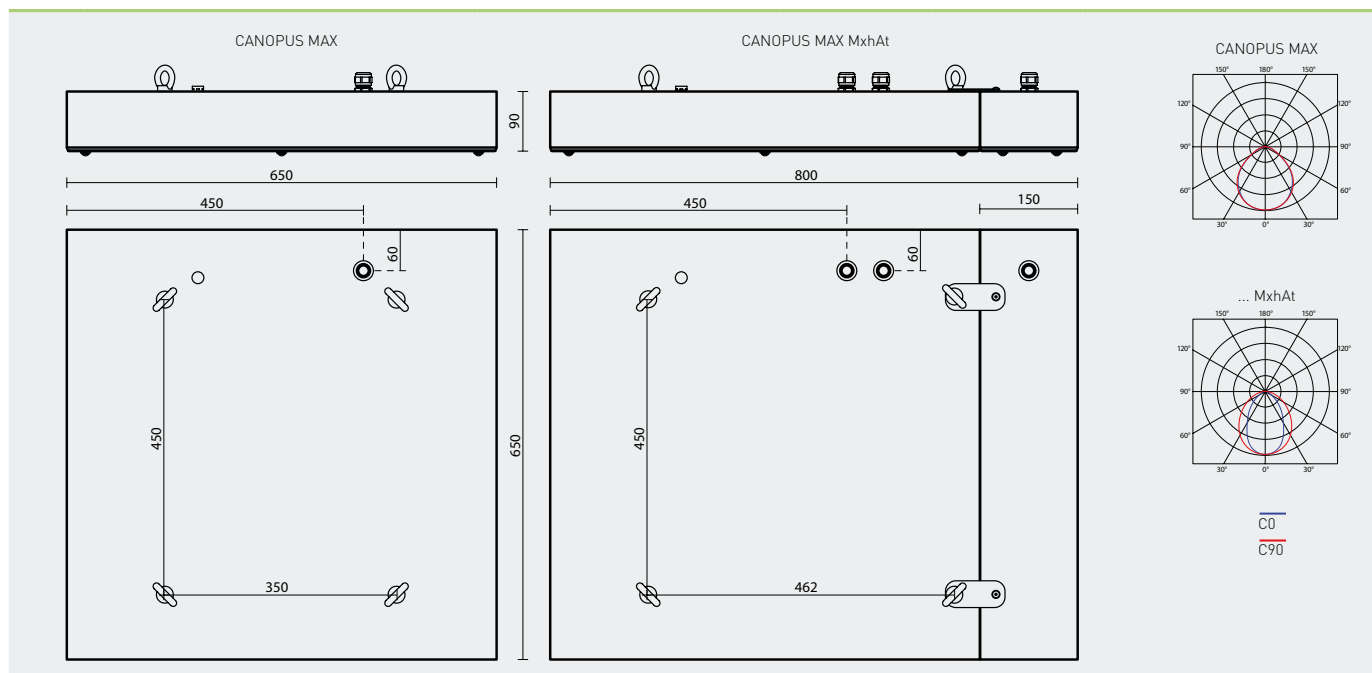


CANOPUS MAX



TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Minimal ambient temperature $t_a = -40\text{ }^\circ\text{C}$
- Maximum ambient temperature: $t_a = 60\text{ }^\circ\text{C}$
Maximum ambient temperature: $t_a = 0-35\text{ }^\circ\text{C}$ with a back-up power supply M1hAt, M3hAt
- Lifetime: 50,000 hours / L80B10
- Maximum system efficacy: 138 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Diffuser: satinized tempered safety glass
- Possibility to equip the diffuser with a safety foil (SF)
- EM kit with battery autotesting
- Body: steel sheet, white colour (RAL 9003), or inox AISI 304
- Ventilation plug: type BVPB-01 made of polyamide, size M12 x 1.5
- Sealing: EPDM attached to light fitting body
- Terminal block: interconnecting connector, 0.4 m cable
- Installation: all versions delivered including suspension lugs (4 pcs)
- Electric equipment: LED modules, current driver or current driver DALI (2 pcs)



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]
For ambient temperature $t_a = 60\text{ }^\circ\text{C}$ - body: steel sheet, white colour - diffuser: satinized tempered safety glass							
74610	CANOPUS MAX 22000/840	60	22000	18250	132	138	16,0
74600	CANOPUS MAX 26000/840	55	26000	20750	153	135	16,0
74620	CANOPUS MAX 30000/840	50	30000	24600	186	132	16,0

Type	Autonomy [hrs]	Emergency light flux of light fitting [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM kit for permanent emergency lighting with battery autotesting - diffuser: satinized tempered safety glass					
... M1hAt	1	440	1,5	LiFePO ₄	+4,2
... M3hAt	3	440	1,5	LiFePO ₄	+4,4

CANOPUS MAX

steel sheet, white colour (RAL 9003)

Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74610	CANOPUS MAX 22000/840	74611	74612	74615	74616	74617
74600	CANOPUS MAX 26000/840	74601	74602	74605	74606	74607
74620	CANOPUS MAX 30000/840	74621	74622	74625	74626	74627

Example of type marking: 74625 = CANOPUS MAX 30000/840 DALI

CANOPUS MAX INOX

inox AISI 304

Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74710	CANOPUS MAX 22000/840 INOX	74711	74712	74715	74716	74717
74700	CANOPUS MAX 26000/840 INOX	74701	74702	74705	74706	74707
74720	CANOPUS MAX 30000/840 INOX	74721	74722	74725	74726	74727

LEGEND

DALI – version with digital dimmable driver DALI

M1hAt – emergency back-up source with operating time of 1 hour [SA] for permanent illumination with battery autotesting

M3hAt – emergency back-up source with operating time of 3 hours [SA] for permanent illumination with battery autotesting
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

- a) With help of suspension eyes of M6
- b) With help of a holder directly to the ceiling
- c) With the help of adjustable holder directly on the ceiling or on the wall
- d) With help of a chain hinge

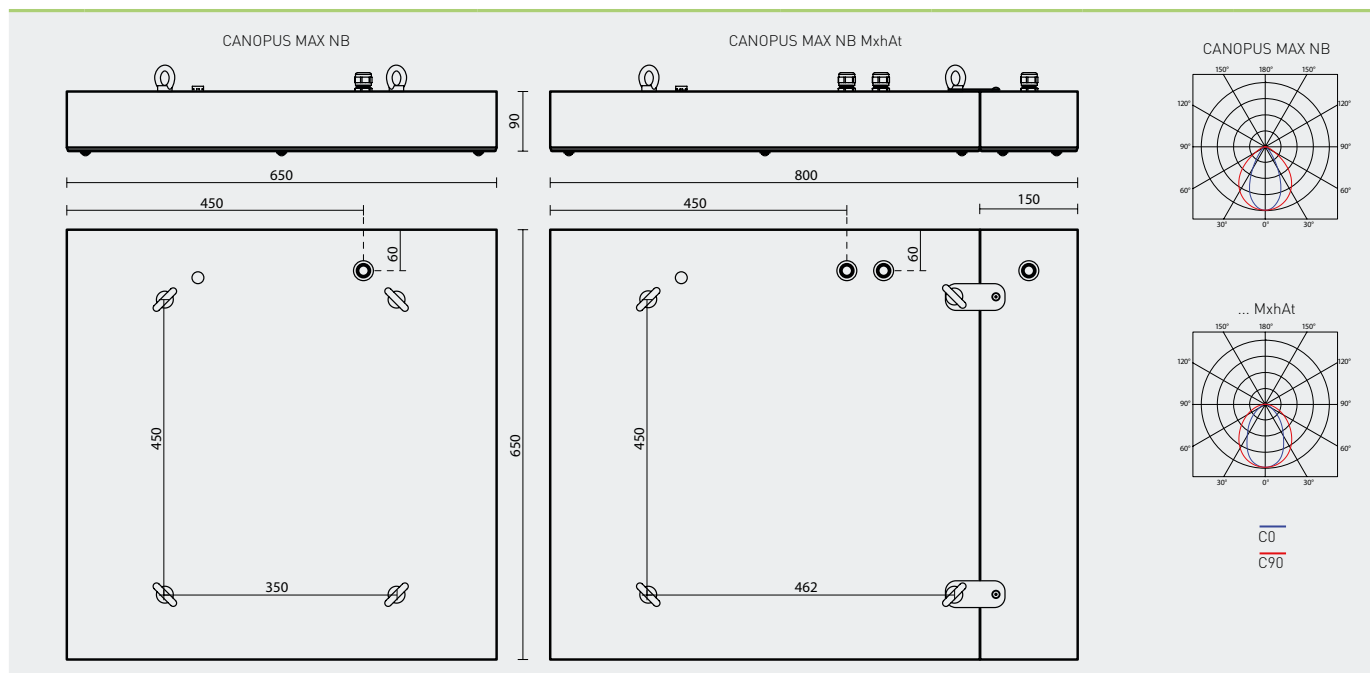
**LIGHT FITTING DETAILED VIEW****LIGHT FITTING DETAILED VIEW WITH AN EMERGENCY MODULE**

CANOPUS MAX NB



TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Minimal ambient temperature $t_a = -40\text{ }^\circ\text{C}$
- Maximum ambient temperature: $t_a = 60\text{ }^\circ\text{C}$
Maximum ambient temperature: $t_a = 0-35\text{ }^\circ\text{C}$ with a back-up power supply M1hAt, M3hAt
- Lifetime: 50,000 hours / L80B10
- Maximum system efficacy: 135 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Diffuser: satinized tempered safety glass
- Possibility to equip the diffuser with a safety foil (SF)
- Reflector: parabolic polished aluminium with narrow emitting characteristics (NB - narrow beam)
- EM kit with battery autotesting
- Body: steel sheet, white colour (RAL 9003), or inox AISI 304
- Ventilation plug: type BVPB-01 made of polyamide, size M12 x 1.5
- Sealing: EPDM attached to light fitting body
- Terminal block: interconnecting connector, 0.4 m cable
- Installation: all versions delivered including suspension lugs (4 pcs)
- Electric equipment: LED modules, current driver or current driver DALI (2 pcs)



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]
For ambient temperature $t_a = 60\text{ }^\circ\text{C}$ - body: steel sheet, white colour - diffuser: satinized tempered safety glass with parabolic reflector							
74640	CANOPUS MAX NB 22000/840	60	22000	17900	132	135	16,6
74630	CANOPUS MAX NB 26000/840	55	26000	20350	153	133	16,6
74650	CANOPUS MAX NB 30000/840	50	30000	24100	186	130	16,6

Type	Autonomy [hrs]	Emergency light flux of light fitting [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM kit for permanent emergency lighting with battery autotesting - diffuser: satinized tempered safety glass					
... M1hAt	1	440	1,5	LiFePO ₄	+4,2
... M3hAt	3	440	1,5	LiFePO ₄	+4,4

CANOPUS MAX NB

steel sheet, white colour (RAL 9003)

Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74640	CANOPUS MAX NB 22000/840	74641	74642	74645	74646	74647
74630	CANOPUS MAX NB 26000/840	74631	74632	74635	74636	74637
74650	CANOPUS MAX NB 30000/840	74651	74652	74655	74656	74657

Example of type marking: 74655 = CANOPUS MAX NB 30000/840 DALI

CANOPUS MAX NB INOX

inox AISI 304

Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74740	CANOPUS MAX NB 22000/840 INOX	74741	74742	74745	74746	74747
74730	CANOPUS MAX NB 26000/840 INOX	74731	74732	74735	74736	74737
74750	CANOPUS MAX NB 30000/840 INOX	74751	74752	74755	74756	74757

LEGENDA

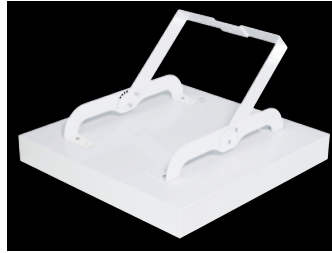
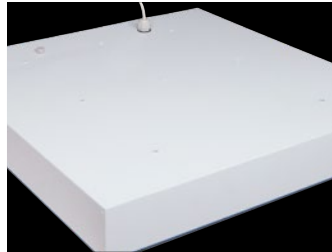
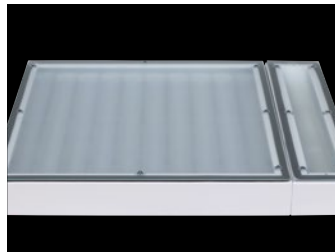
DALI – version with digital dimmable driver DALI

M1hAt – emergency back-up source with operating time of 1 hour [SA] for permanent illumination with battery autotesting

M3hAt – emergency back-up source with operating time of 3 hours [SA] for permanent illumination with battery autotesting
Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

- a) With help of suspension eyes of M6
- b) With help of a holder directly to the ceiling
- c) With the help of adjustable holder directly on the ceiling or on the wall
- d) With help of a chain hinge

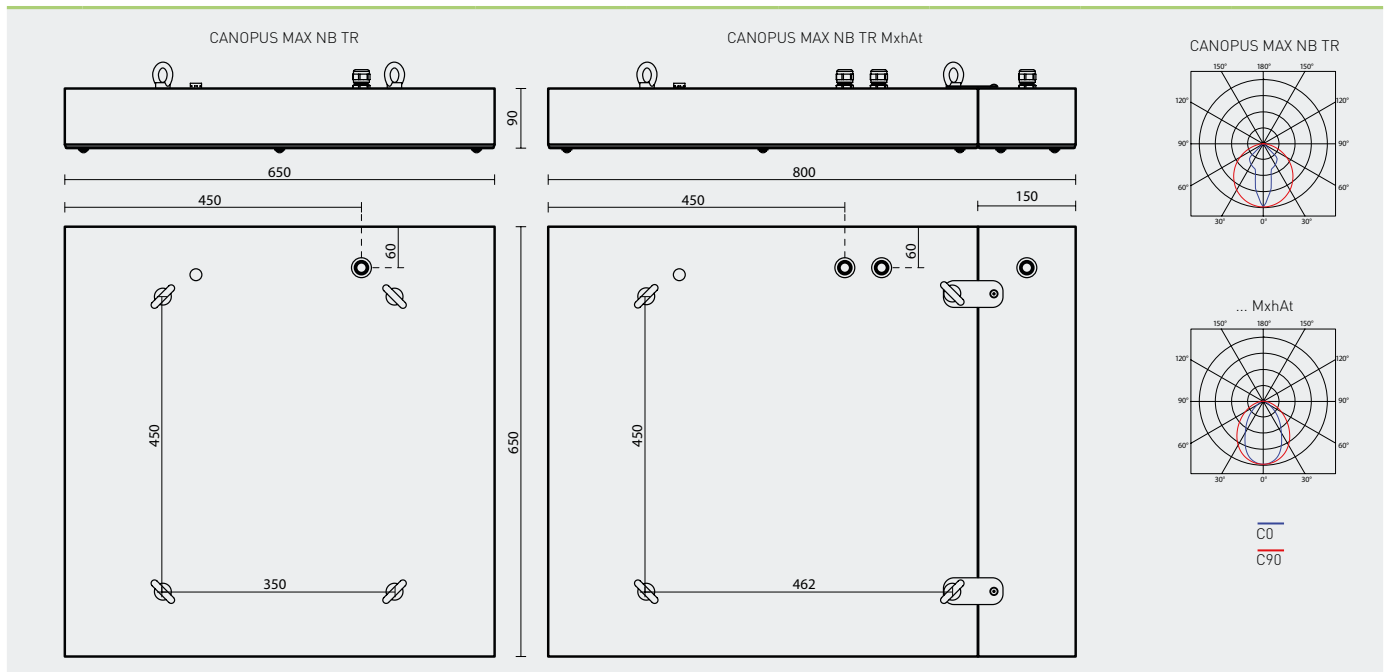
**LIGHT FITTING DETAILED VIEW****LIGHT FITTING DETAILED VIEW WITH AN EMERGENCY MODULE**

CANOPUS MAX NB TR



TECHNICAL DESCRIPTION

- Light fitting protection: IP65
- Minimal ambient temperature $t_a = -40\text{ °C}$
- Maximum ambient temperature: $t_a = 60\text{ °C}$
Maximum ambient temperature: $t_a = 0-35\text{ °C}$ with a back-up power supply M1hAt, M3hAt
- Lifetime: 50,000 hours / L80B10
- Maximum system efficacy: 141 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Diffuser: transparent tempered safety glass (TR)
- Possibility to equip the diffuser with a safety foil (SF)
- Reflector: parabolic polished aluminium with narrow emitting characteristics (NB - narrow beam)
- EM kit with battery autotesting
- Body: steel sheet, white colour (RAL 9003), or inox AISI 304
- Ventilation plug: type BVPB-01 made of polyamide, size M12 x 1.5
- Sealing: EPDM attached to light fitting body
- Terminal block: interconnecting connector, 0.4 m cable
- Installation: all versions delivered including suspension lugs (4 pcs)
- Electric equipment: LED modules, current driver or current driver DALI (2 pcs)



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]
For ambient temperature $t_a = 60\text{ °C}$ - body: steel sheet, white colour - diffuser: tempered safety glass with parabolic reflector (TR)							
74670	CANOPUS MAX NB TR 22000/840	60	22000	18650	132	141	16,6
74660	CANOPUS MAX NB TR 26000/840	55	26000	21200	153	138	16,6
74680	CANOPUS MAX NB TR 30000/840	50	30000	25150	186	135	16,6

Type	Autonomy [hrs]	Emergency light flux of light fitting [lm]	Power in standby mode [W]	Battery type	Net weight [kg]
EM kit for permanent emergency lighting with battery autotesting - diffuser: satinized tempered safety glass					
... M1hAt	1	440	1,5	LiFePO ₄	+4,2
... M3hAt	3	440	1,5	LiFePO ₄	+4,4

CANOPUS MAX NB TR

steel sheet, white colour (RAL 9003)

Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74670	CANOPUS MAX NB TR 22000/840	74671	74672	74675	74676	74677
74660	CANOPUS MAX NB TR 26000/840	74661	74662	74665	74666	74667
74680	CANOPUS MAX NB TR 30000/840	74681	74682	74685	74686	74687

Example of type marking: 74685 = CANOPUS MAX NB TR 30000/840 DALI

CANOPUS MAX NB TR INOX

inox AISI 304

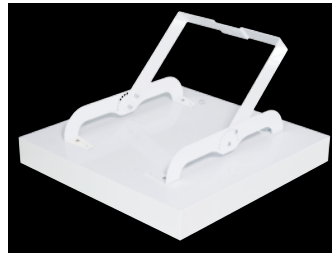
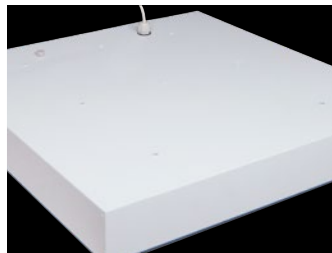
Code	Type	M1hAt	M3hAt	DALI	DALI M1hAt	DALI M3hAt
74770	CANOPUS MAX NB TR 22000/840 INOX	74771	74772	74775	74776	74777
74760	CANOPUS MAX NB TR 26000/840 INOX	74761	74762	74765	74766	74767
74780	CANOPUS MAX NB TR 30000/840 INOX	74781	74782	74785	74786	74787

LEGEND**DALI** – version with digital dimmable driver DALI**M1hAt** – emergency back-up source with operating time of 1 hour [SA] for permanent illumination with battery autotesting**M3hAt** – emergency back-up source with operating time of 3 hours [SA] for permanent illumination with battery autotesting

Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

- a) With help of suspension eyes of M6
- b) With help of a holder directly to the ceiling
- c) With the help of adjustable holder directly on the ceiling or on the wall
- d) With help of a chain hinge

**LIGHT FITTING DETAILED VIEW****LIGHT FITTING DETAILED VIEW WITH AN EMERGENCY MODULE**

Ceiling holder

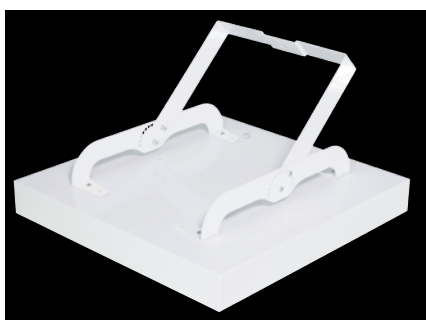
Serves to suspend the light fitting from the ceiling.



Code	Type	Description	Weight [kg]
50080	CANOPUS holder 1	Metal suspender for direct suspension from the ceiling. Screw M6 × 16 - 8 pcs for assembly.	2,3
50086	CANOPUS holder 1 INOX	Stainless-steel suspender for direct suspension from the ceiling. Screw M6 × 16 - 8 pcs for assembly.	2,3

Adjustable holder

Serves to suspend the light fitting on the wall, ceiling and skew surface, allows adjusting the light fitting from 0-90°, by 15°.



Code	Type	Description	Weight [kg]
50081	CANOPUS holder 2	Metal adjustable holder for the ceiling and for the wall. Adjustment by 15° in a range of 0-90°. Screw M6 × 16 - 8 pcs for assembly.	3,0
50087	CANOPUS holder 2 INOX	Stainless-steel adjustable holder for the ceiling and for the wall. Adjustment by 15° in a range of 0-90°. Screw M6 × 16 - 8 pcs for assembly.	3,0

Chain suspender

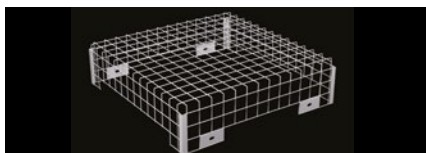
Serves to suspend the light fitting with the help of chains on a threaded rod or with the help of a lug on a hook.



Code	Type	Description	Weight [kg]
50082	CANOPUS suspender	Chain suspender with height 40 cm. [Suspender holder - 1 pc, lugs M6 - 4 pcs, snap-hooks - 4 pcs, chains - 4 pcs].	0,6
50088	CANOPUS suspender INOX	INOX chain suspender with height 40 cm. [Suspender holder - 1 pc, lugs M6 - 4 pcs, snap-hooks - 4 pcs, chains - 4 pcs].	0,6

Protective grille

The metal grille protects the light fitting against mechanical damage and tampering. It is fixed on the ceiling holder of the light fitting. Surface finish with RAL 9003 powder coating.



Code	Type	Description	Weight [kg]
50083	CANOPUS protective grille	Metal protective grille (for variants without an emergency module) with mesh size 50×50 mm. [Protective basket, 2 threaded rods M10, 4 closed nuts M10, 4 distance tubes IRS16, 4 washers M10].	3,6
50085	CANOPUS Mxh protective grille	Metal protective grille (for variants with an emergency module) with mesh size 50×50 mm. [Protective basket, 2 threaded rods M10, 4 closed nuts M10, 4 distance tubes IRS16, 4 washers M10].	4,4

LINEA

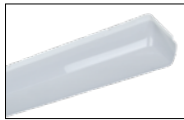


INDOOR
PLASTIC
SURFACE-MOUNTED



LINEA – indoor plastic LED light fitting

LINEA
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IP54

LINEA
page 230

LINEA SQUARE
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IP54

LINEA SQUARE
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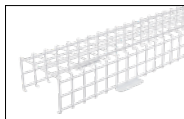
LINEA ROUND
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IP54

LINEA ROUND
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LINEA
ACCESSORIES
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LINEA
ACCESSORIES
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LINEA



BIM
ready

... indoor, surface-mounted, plastic.

USE

LINEA family is a perfect lighting solution of modern and technically functional illumination. It offers ceiling and wall-mounted luminaires with balanced shadowing and uniform light. Thanks to various sizes, individual premises as well as public buildings can be attractively illuminated.

The Linea light fitting line can be used as a comprehensive solution for lighting of office buildings, schools, hospitals, libraries, as well as individual lighting of flat interiors, corridors, sanitary and welfare facilities.

Thanks to its high luminous efficiency and low electricity consumption it is a suitable replacement for light fittings with fluorescent tubes.

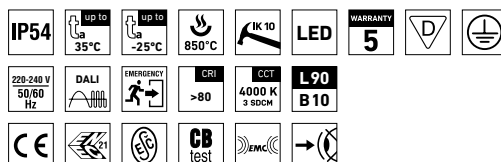
T A
Č R

Technology
Agency
of the Czech Republic

ADVANTAGES

- Light fitting protection **IP54**
- Maximum ambient temperature up to **t_a = 35 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high light transmission
- Body: white polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)

- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ, ENEC, CB

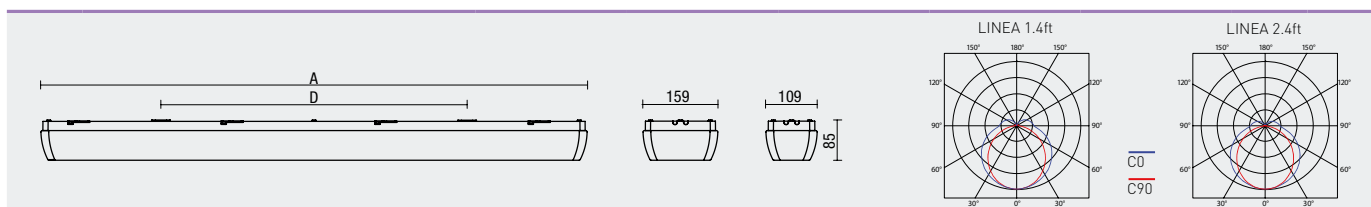


LINEA



TECHNICAL DESCRIPTION

- Light fitting protection: IP54
- Maximum ambient temperature: $t_a = 35^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h with autotest)
- Maximum system efficacy: 126 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: white polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Rotary cap: polyamide + 10 % glass fibre
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: rubber (SBS)
- Terminal block: screwless, three-pole (basic version)
- Electric equipment: LED modules, current driver or current driver DALI



Code	Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 35^\circ\text{C}$ - body: white polycarbonate - diffuser: translucent polycarbonate								
63140	LINEA 1.4ft 2600/840	2600	2240	18	124	1,9	1160	650
63150	LINEA 1.4ft 3200/840	3200	2720	22	124	1,9	1160	650
63160	LINEA 1.4ft 4400/840	4400	3720	30	124	1,9	1160	650
63240	LINEA 2.4ft 5200/840	5200	4330	35	124	2,5	1160	650
63250	LINEA 2.4ft 6400/840	6400	5210	42	124	2,5	1160	650
63260	LINEA 2.4ft 8800/840	8800	7280	58	126	2,5	1160	650

63150 LINEA 1.4ft 3200/840 = suitable replacement for T8 fl. tube light fitting SM 136 - 1x36W
 63160 LINEA 1.4ft 4400/840 = suitable replacement for T8 fl. tube light fitting SM 158 - 1x58W

63250 LINEA 2.4ft 6400/840 = suitable replacement for T8 fl. tube light fitting SM 236 - 2x36W
 63260 LINEA 2.4ft 8800/840 = suitable replacement for T8 fl. tube light fitting SM 258 - 2x58W

LINEA

Diffuser made of translucent polycarbonate

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h	Senzor	DALI Senzor
63140	LINEA 1.4ft 2600/840	63144	x	63143	63147	x	x	x
63150	LINEA 1.4ft 3200/840	63154	x	63153	63157	x	x	x
63160	LINEA 1.4ft 4400/840	63164	x	63163	63167	x	x	x
63240	LINEA 2.4ft 5200/840	63244	63245	63243	63247	63246	63241	63248
63250	LINEA 2.4ft 6400/840	63254	63255	63253	63257	63256	63251	63258
63260	LINEA 2.4ft 8800/840	63264	63265	63263	63267	63266	63261	63268

LEGEND

DALI - version with digital dimmable driver DALI ; the corridor function can be used

M1h - emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination with autotest

M3h - emergency back-up source with operating time of 3 hours (SA) for both permanent and emergency illumination with autotest

Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT AND ITS DETAILED VIEW

Directly to a ceiling or a wall with the use of screws



LINEA



LINEA SQUARE



BIM
ready

... interior square, plastic, surface-mounting.

USE

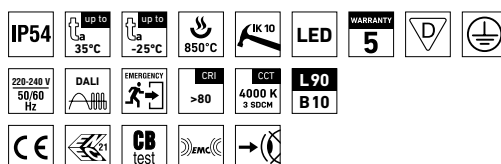
LINEA family is a perfect lighting solution of modern and technically functional illumination. It offers ceiling and wall-mounted luminaires with balanced shadowing and uniform light. Thanks to various sizes, individual premises as well as public buildings can be attractively illuminated.

The Linea light fitting line can be used as a comprehensive solution for lighting of office buildings, schools, hospitals, libraries, as well as individual lighting of flat interiors, corridors, sanitary and welfare facilities.

Thanks to its high luminous efficiency and low electricity consumption it is a suitable replacement for light fittings with fluorescent tubes.

ADVANTAGES

- Light fitting protection **IP54**
- Maximum ambient temperature up to **t_a = 35 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high light transmission
- Body: white polycarbonate (PC) = high mechanical resistance
- Up to 50 % lower electricity consumption when compared to compact fluorescent tubes
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ENEC, CB

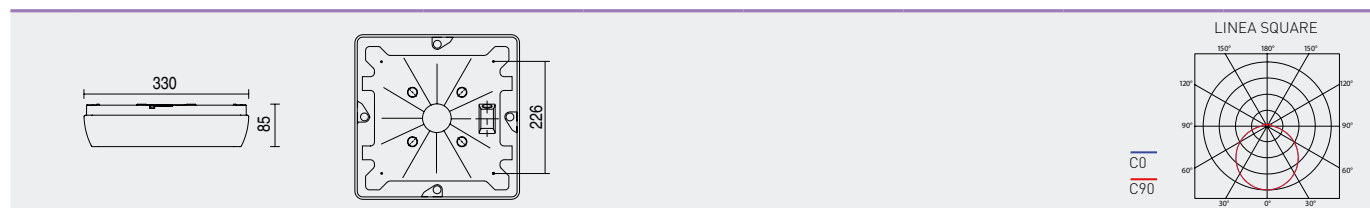


LINEA SQUARE



TECHNICAL DESCRIPTION

- Light fitting protection: IP54
- Maximum ambient temperature: $t_a = 35^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h with autotest)
- Maximum system efficacy: 127 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: white polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Rotary cap: polyamide + 10 % glass fibre
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: rubber (SBS)
- Terminal block: screwless, three-pole (basic version)
- Electric equipment: LED modules, current driver or current driver DALI



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]
For ambient temperature max. $t_a = 35^\circ\text{C}$ - body: white polycarbonate - diffuser: translucent polycarbonate							
63348	LINEA SQUARE 1550/840	35	1550	1240	10	124	1,4
63349	LINEA SQUARE 1900/840	35	1900	1520	12	127	1,4
63350	LINEA SQUARE 2200/840	35	2200	1760	14	126	1,4
63351	LINEA SQUARE 2500/840	35	2500	2000	16	125	1,4
63560	LINEA SQUARE 3600/840	30	3600	2880	24	120	1,5

63560 LINEA SQUARE 3600/840 = suitable replacement for compact fluorescent lamps 2x26 W

LINEA SQUARE

Diffuser made of translucent polycarbonate

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h	SNS	SNS M1h	SNS M3h	SNS DALI	SNS M1h DALI	SNS M3h DALI
63348	LINEA SQUARE 1550/840	63356	63360	x	x	x	63352	63365	63369	x	x	x
63349	LINEA SQUARE 1900/840	63357	63361	63374	63381	63384	63353	63366	63370	63377	63388	63392
63350	LINEA SQUARE 2200/840	63358	63362	63375	63382	63385	63354	63367	63371	63378	63389	63393
63351	LINEA SQUARE 2500/840	63359	63363	63376	63383	63386	63355	63368	63372	63379	63390	63394
63560	LINEA SQUARE 3600/840	63564	63364	63563	63567	63387	63561	63566	63373	63380	63391	63395

Example of type marking: 63376 = LINEA SQUARE 2500/840 DALI

LEGEND

- DALI** – version with digital dimmable driver DALI
- SNS** – microwave motion sensor

- M1h** – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination with autotest

- M3h** – emergency back-up source with operating time of 3 hours (SA) for both permanent and emergency illumination with autotest

Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT AND ITS DETAILED VIEW

Directly to a ceiling or a wall with the use of screws



LINEA SQUARE



LINEA ROUND



BIM
ready

... interior circular, plastic, surface-mounting.

USE

LINEA family is a perfect lighting solution of modern and technically functional illumination. It offers ceiling and wall-mounted luminaires with balanced shadowing and uniform light. Thanks to various sizes, individual premises as well as public buildings can be attractively illuminated.

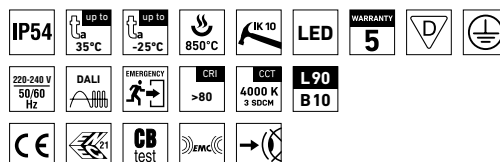
The Linea light fitting line can be used as a comprehensive solution for lighting of office buildings, schools, hospitals, libraries, as well as individual lighting of flat interiors, corridors, sanitary and welfare facilities.

Thanks to its high luminous efficiency and low electricity consumption it is a suitable replacement for light fittings with fluorescent tubes.

ADVANTAGES

- Light fitting protection **IP54**
- Maximum ambient temperature up to **t_a = 35 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high light transmission
- Body: white polycarbonate (PC) = high mechanical resistance
- Up to 50 % lower electricity consumption when compared to compact fluorescent tubes
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)

- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ENEC, CB

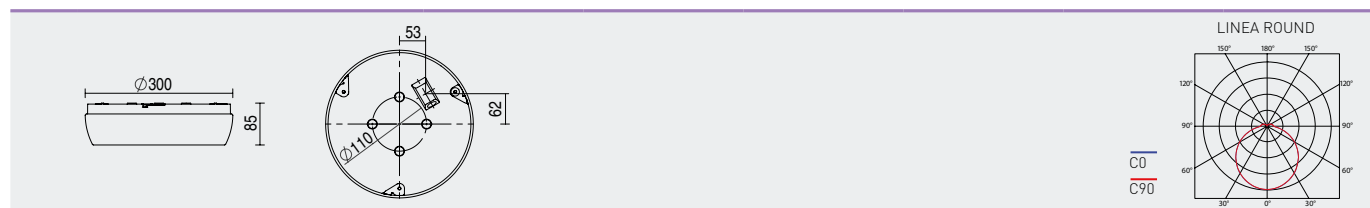


LINEA ROUND



TECHNICAL DESCRIPTION

- Light fitting protection: IP54
- Maximum ambient temperature: $t_a = 35^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h with autotest)
- Maximum system efficacy: 125 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: white polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Rotary cap: polyamide + 10 % glass fibre
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: rubber (SBS)
- Terminal block: screwless, three-pole (basic version)
- Electric equipment: LED modules, current driver or current driver DALI



Code	Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]
For ambient temperature max. $t_a = 35^\circ\text{C}$ - body: white polycarbonate - diffuser: translucent polycarbonate							
63301	LINEA ROUND 1550/840	35	1550	1220	10	122	1
63302	LINEA ROUND 1900/840	35	1900	1500	12	125	1
63303	LINEA ROUND 2200/840	35	2200	1740	14	124	1
63304	LINEA ROUND 2500/840	35	2500	1980	16	124	1
63640	LINEA ROUND 3600/840	30	3600	2840	24	118	1,1

63640 LINEA ROUND 3600/840 = suitable replacement for compact fluorescent lamps 2x26 W

LINEA ROUND

Diffuser made of translucent polycarbonate

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h	SNS	SNS M1h	SNS M3h	SNS DALI	SNS M1h DALI	SNS M3h DALI
63301	LINEA ROUND 1550/840	63309	63313	x	x	x	63305	63317	63321	x	x	x
63302	LINEA ROUND 1900/840	63310	63314	63326	63333	63336	63306	63318	63322	63329	63340	63344
63303	LINEA ROUND 2200/840	63311	63315	63327	63334	63337	63307	63319	63323	63330	63341	63345
63304	LINEA ROUND 2500/840	63312	63316	63328	63335	63338	63308	63320	63324	63331	63342	63346
63640	LINEA ROUND 3600/840	63664	63665	63663	63667	63339	63641	63646	63325	63332	63343	63347

Example of type marking: 63333 = LINEA ROUND 1900/840 DALI M1h

LEGEND

- DALI** - version with digital dimmable driver DALI
- SNS** - microwave motion sensor

M1h - emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination with autotest

M3h - emergency back-up source with operating time of 3 hours (SA) for both permanent and emergency illumination with autotest

Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT AND ITS DETAILED VIEW

Directly to a ceiling or a wall with the use of screws

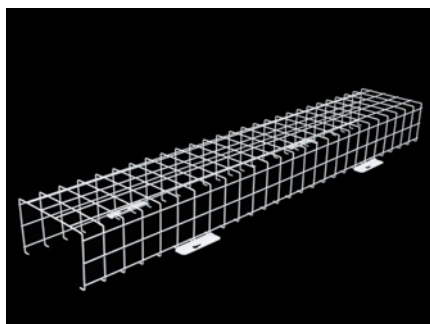


LINEA ROUND



OM – protective grid

The metal grid protects the light fitting against mechanical damage and unauthorised handling. It is attached to the surface with the use of screws. The surface is treated with the RAL 9003 powder-coated colour.



Code	Type	Description	Weight [kg]
11942	OM 236	protective grid for types 236, 228/254, 2.4ft (1300 x 220 x 130 mm)	1,7



LUXOR LED



INDOOR
METAL
CEILING-MOUNTED
RASTER



LUXOR LED – indoor metal LED light fitting

LUXOR LED
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LUXOR LED



... indoor metal.

USE

LUXOR LED is the perfect solution for office, education, halls, hospitals and shop & retail. Various sizes and three mounting methods are available.

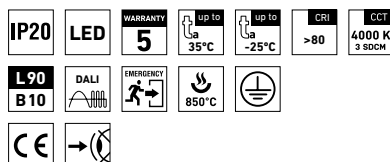
It is the luminaire with highly specular parabolic louvre of glare-free effects, **UGR <19**.

LUXOR LED creates an atmosphere of well-being and can be used for daycare facilities too. LUXOR LED complies the European Lighting Standard EN 12461-1 and can also be used for day nurseries.

ADVANTAGES

- Light fitting protection **IP20**
- Maximum ambient temperature up to **t_a = 35 °C**
- Lifetime: 50 000 hours / L90B10
- Optical system: shiny parabolic louvre, UGR < 19
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)

- Standard model - CRI → 80: 4000 K
- At request CRI → 80: 3000 K, 5000 K, 6500 K, CRI → 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version

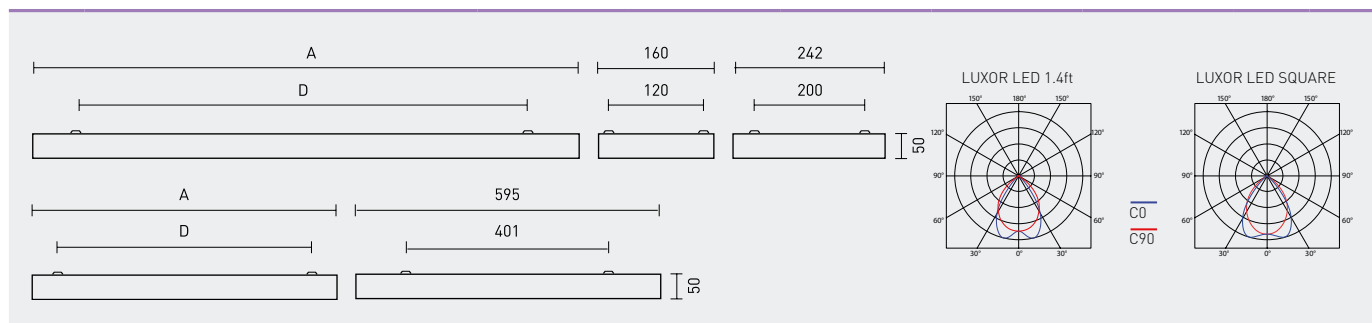


LUXOR LED



TECHNICAL DESCRIPTION

- Light fitting protection: IP20
- Maximum ambient temperature: $t_a = 35\text{ }^\circ\text{C}$,
Maximum ambient temperature: $t_a = 0-25\text{ }^\circ\text{C}$
version with emergency back-up source Mxh with autotest
- Maximum system efficacy: 97 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50 000 hodin / L90B10
- Diffuser: shiny parabolical grid, UGR 19
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Cable gland: rubber (SBS), white
- Terminal block: screwless, three-pole
- Cover secured by: magnets and plastic rivets
- Electric equipment: LED modules, current driver or current driver DAL



Code	Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 35\text{ }^\circ\text{C}$ - body: steel sheet, white colour - diffuser shiny parabolical grid								
102249	LUXOR LED 1.2ft 1600/840	1600	1020	11	92	2,7	664	450
102250	LUXOR LED 1.4ft 3200/840	3200	2050	22	93	4,4	1224	1030
102251	LUXOR LED 1.5ft 4000/840	4000	2560	27	94	5,2	1504	1310
102252	LUXOR LED 2.2ft 3200/840	3200	2050	22	93	3,3	664	450
102253	LUXOR LED 2.4ft 6400/840	6400	4100	42	97	5,5	1224	1030
102254	LUXOR LED 2.5ft 8000/840	8000	5120	53	96	6,8	1504	1310
102255	LUXOR LED SQUARE 6400/840	6400	4100	42	97	6,0	595	500

LUXOR LED

body lacquered steel sheet - white colour

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h
102249	LUXOR LED 1.2ft 1600/840	102281	102288	102295	102302	102309
102250	LUXOR LED 1.4ft 3200/840	102282	102289	102296	102303	102310
102251	LUXOR LED 1.5ft 4000/840	102283	102290	102297	102304	102311
102252	LUXOR LED 2.2ft 3200/840	102284	102291	102298	102305	102312
102253	LUXOR LED 2.4ft 6400/840	102285	102292	102299	102306	102313
102254	LUXOR LED 2.5ft 8000/840	102286	102293	102300	102307	102314
102255	LUXOR LED SQUARE 6400/840	102287	102294	102301	102308	102315

Example of type marking: 102306 = LUXOR LED 2.4ft 6400/840 DALI M1h

LUXOR LED s

body lacquered steel sheet - silver colour (s)

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h
102316	LUXOR LED 1.2ft 1600/840	102323	102330	102337	102344	102351
102317	LUXOR LED 1.4ft 3200/840	102324	102331	102338	102345	102352
102318	LUXOR LED 1.5ft 4000/840	102325	102332	102339	102346	102353
102319	LUXOR LED 2.2ft 3200/840	102326	102333	102340	102347	102354
102320	LUXOR LED 2.4ft 6400/840	102327	102334	102341	102348	102355
102321	LUXOR LED 2.5ft 8000/840	102328	102335	102342	102349	102356
102322	LUXOR LED SQUARE 6400/840	102329	102336	102343	102350	102357

Example of type marking: 102326 = LUXOR LED 2.2ft 4400/840 M1h s

LEGEND

s – silver colour RAL 9006

DALI – version with electronic and digitally dimmed ballast module operated via DALI protocol

M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination with autotest

M3h – emergency back-up source with operating time of 3 hour (SA) for both permanent and emergency illumination with autotest

Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

- Directly to a ceiling or a wall with the use of screws
- By suspending to a ceiling with the use of wire-cord suspensions
- Installation into lower ceiling

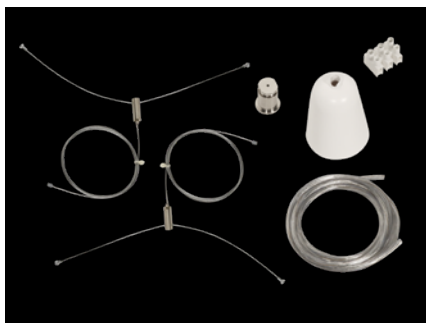


LIGHT FITTING DETAILED VIEW

LUXOR LED



Ceiling suspender kit for LUXOR luminaires



Code	Type	Description	Weight [kg]
101344	ZL 1 - S3	a wire suspension kit with a maximum length of 1.5m to hang single-line light fixtures (1.2ft, 1.4ft, 1.5ft) including a 3-core supply cable (a steel Y wire with a keyhole hanging bracket and a span of 150 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101458	ZL 1 - S5	a wire suspension kit with a maximum length of 1.5m to hang single-line light fixtures (1.2ft, 1.4ft, 1.5ft) including a 5-core supply cable (a steel Y wire with a keyhole hanging bracket and a span of 150 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
Code	Type	Description	Weight [kg]
101456	ZL 2 - S3	a wire suspension kit with a maximum length of 1.5m to hang double-line light fixtures (2.2ft, 2.4ft, 2.5ft) including a 3-core supply cable (a steel Y wire with a keyhole hanging bracket and a span of 300 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101494	ZL 2 - S5	a wire suspension kit with a maximum length of 1.5m to hang double-line light fixtures (2.2ft, 2.4ft, 2.5ft) including a 5-core supply cable (a steel Y wire with a keyhole hanging bracket and a span of 300 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2

Ceiling suspender kit for LUXOR SQUARE luminaires



Code	Type	Description	Weight [kg]
101457	ZL 3 - S3	a wire suspension kit with a maximum length of 1.5 m to hang square light fixtures including a 3-core supply cable (a steel wire with a keyhole hanging bracket and a ceiling hook – 4 pcs, M5 bolt with a fan disc washer – 4pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101495	ZL 3 - S5	a wire suspension kit with a maximum length of 1.5 m to hang square light fixtures including a 5-core supply cable (a steel wire with a keyhole hanging bracket and a ceiling hook – 4 pcs, M5 bolt with a fan disc washer – 4pcs, supply cable, ceiling rose, five-pole terminal block)	0,2

SB LED



INTERIOR
ALUMINUM
WALL/CEILING-MOUNTED



SB LED – interior aluminium LED fixture

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SB LED



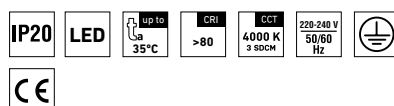
... indoor.

USE

The luminaire is an excellent choice for sanitary rooms, toilets, kitchen units, wall units, dressing rooms, worktops and shop windows.

ADVANTAGES

- Light fitting protection IP20
- Maximum ambient temperature up to $t_a = 35^\circ\text{C}$
- Integrated switch in side plastic cover
- Packaging: white cover, scratch protection
- Sliding mounting spacers

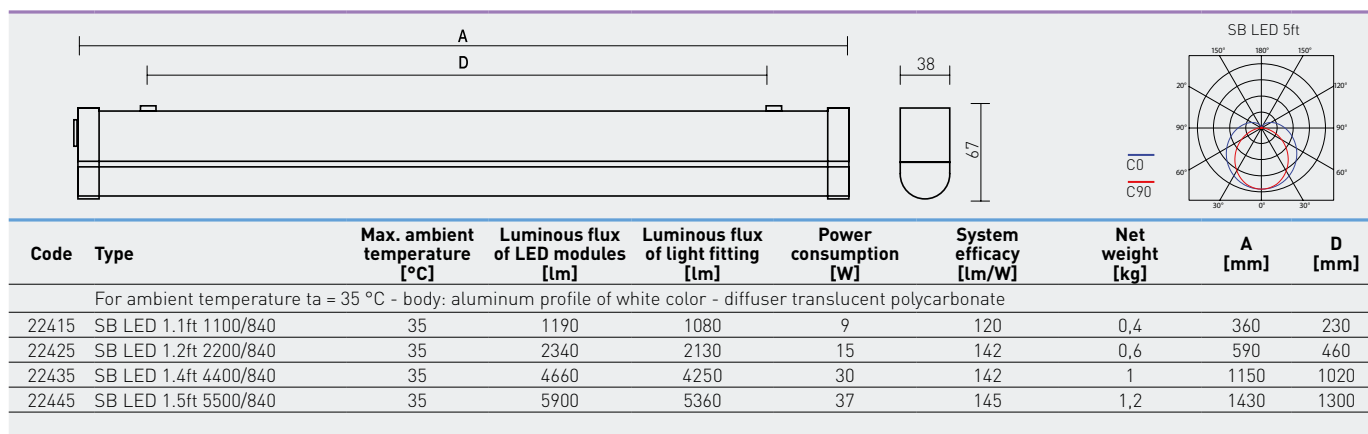


SB LED



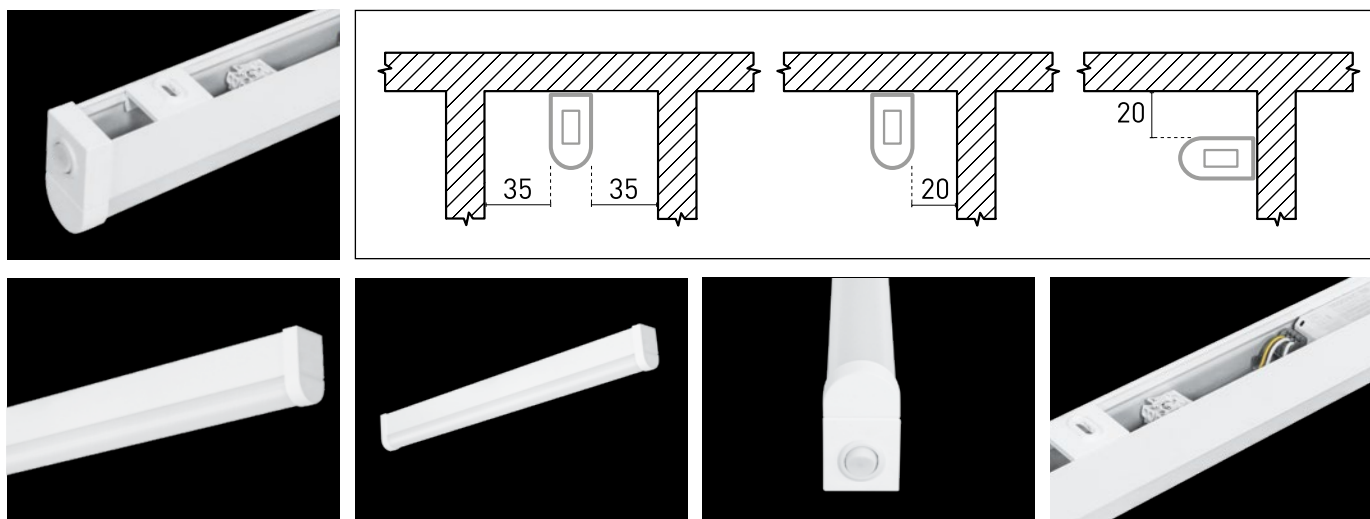
TECHNICAL DESCRIPTION

- Light fitting protection: IP20
- Maximum ambient temperature up to $t_a = 35\text{ °C}$
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: aluminium profile, white (RAL 9003)
- Terminal block: screwed, three-poles
- Side cover: white, plastic (ABS)
- Integrated switch in side plastic cover
- Electric equipment: LED modules, current driver
- Maximum system efficacy: 145 lm/W
- MacAdam = 3 SDCM
- The watt and lumen values can, in accordance with valid standards, vary by $\pm 7,5\%$
- CRI \rightarrow 80: 3000, 4000 K
- Sliding spacers (PA-GF)



LIGHT FITTING ATTACHMENT

Directly to a ceiling or a wall with the use of screws



LYRA



INDOOR
PLASTIC
SURFACE-MOUNTED



LYRA – indoor plastic LED light fitting

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LYRA

NEW



... fashionable for every interior.

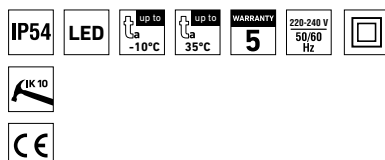
USE

LYRA is round LED wall and ceiling – mounted fashionable luminaire for every interior.

It is perfect solution for residential zones, corridors, lounges, hotels, restaurants and entrance areas.

ADVANTAGES

- Light fitting protection IP54
- Temperature resistance from t_a -10 to 35 °C
- Lifetime: 50 000 hours / L80B50
- High mechanical resistance: IK10

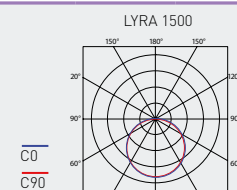
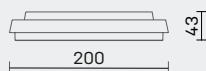
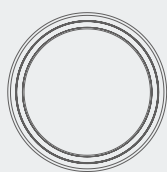


LYRA



TECHNICAL DESCRIPTION

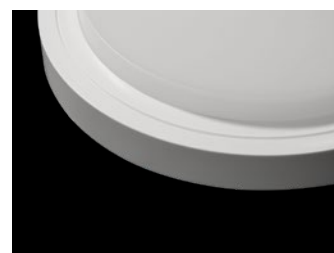
- Light fitting protection: IP54
 - Maximum ambient temperature: 35 °C
 - Lifetime: 50 000 hours / L80B50
 - Maximum light fitting efficiency: 103 lm/W
 - CRI > 80: 4000 K
 - CRI > 80: 3000 K
 - Diffuser: translucent polycarbonate
 - Body: polycarbonate
 - Light source body: polycarbonate
 - Electronic equipment: LED modules, fixed output driver
- The values stated for power consumption and luminous flux are in a tolerance of + - 7,5%



Code	Type	Max. ambient temperature [°C]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	D [mm]
For ambient temperature max. $t_a = 35\text{ °C}$ - body: polycarbonate - diffuser: translucent polycarbonate								
41001	LYRA 1500/840	35	1550	15	103	0,6	200	43
41002	LYRA 1500/830	35	1500	15	100	0,6	200	43

LIGHT FITTING ATTACHMENT AND ITS DETAILED VIEW

Directly to a ceiling or a wall with the use of screws



BELTR LED



INDOOR
PLASTIC
SURFACE-MOUNTED
BATTEN



BELTR LED – indoor plastic LED light fitting

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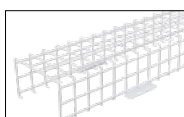
BELTR LED TUBE
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IP40

BELTR LED TUBE
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BELTR LED
ACCESSORIES
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BELTR LED
ACCESSORIES
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BELTR LED



... indoor, plastic, surface-mounted, batten.

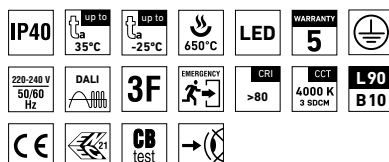
USE

The light fitting is suitable for offices, hallways, school interiors, libraries, lecture rooms, sanitary rooms, hospitals and passenger terminals.

Thanks to its high luminous efficiency and low electricity consumption it is a suitable replacement for light fittings with fluorescent tubes.

ADVANTAGES

- Light fitting protection **IP40**
- Maximum ambient temperature up to **t_a = 35 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: steel sheet, white colour (RAL 9003)
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Possibility to through-wire individual light fittings to row with the use of external terminal blocks
- Certification: ENEC, CB

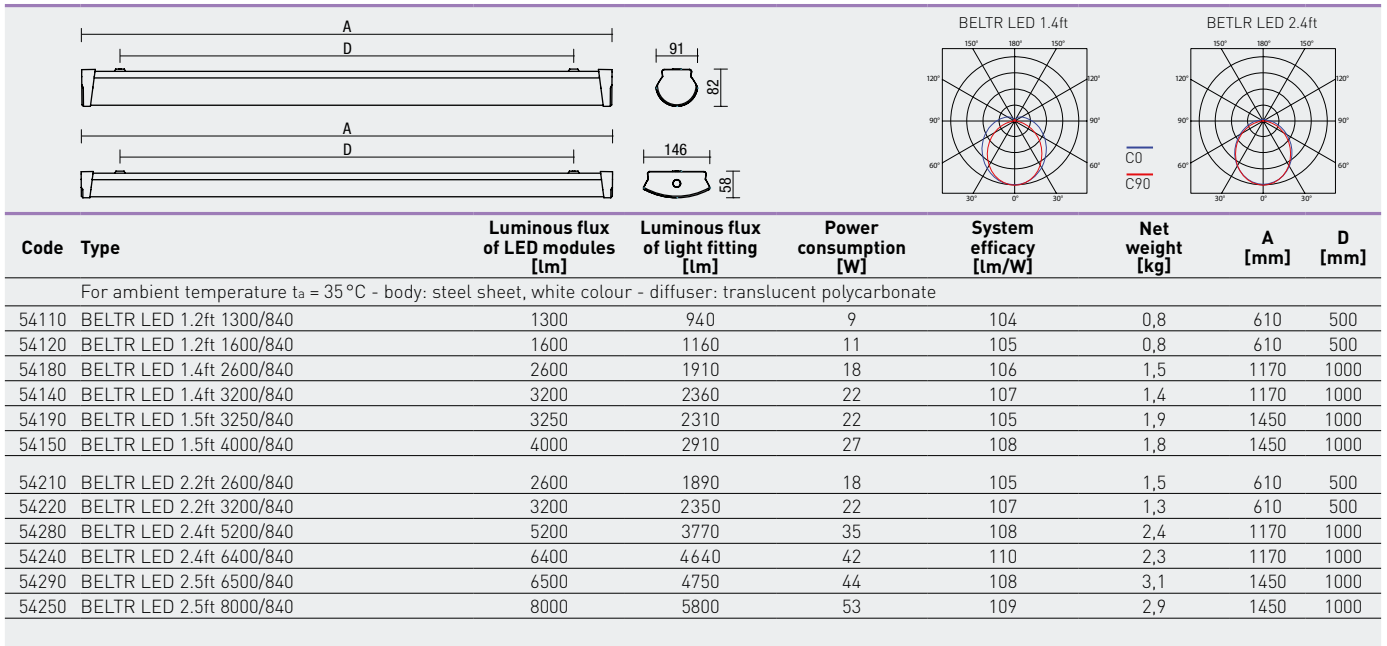


BELTR LED



TECHNICAL DESCRIPTION

- Light fitting protection: IP40
- Maximum ambient temperature: $t_a = 35^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 hour; M1h)
- Maximum system efficacy: 110 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: steel sheet, white colour (RAL 9003)
- Side covers: white (ABS), UV stable, with offsets allowing fixing the light fitting with enclosed screws M4 against tampering
- Cable gland: white, rubber
- Terminal block: screwless, three-pole (basic version)
- Electric equipment: LED modules, current driver or current driver DALI



54120 BELTR LED 1.2ft 1600/840 = suitable replacement for T8 fl. tube light fitting BELTR 118 - 1x18W
 54140 BELTR LED 1.4ft 3200/840 = suitable replacement for T8 fl. tube light fitting BELTR 136 - 1x36W
 54150 BELTR LED 1.5ft 4000/840 = suitable replacement for T8 fl. tube light fitting BELTR 158 - 1x58W
 54220 BELTR LED 2.2ft 3200/840 = suitable replacement for T8 fl. tube light fitting BELTR 218 - 2x18W
 54240 BELTR LED 2.4ft 6400/840 = suitable replacement for T8 fl. tube light fitting BELTR 236 - 2x36W
 54250 BELTR LED 2.5ft 8000/840 = suitable replacement for T8 fl. tube light fitting BELTR 258 - 2x58W

BELTR LED

Diffuser made of translucent polycarbonate

Code	Type	M1h	DALI	DALI M1h	Sensor
54110	BELTR LED 1.2ft 1300/840	x	54113	x	x
54120	BELTR LED 1.2ft 1600/840	x	54123	x	x
54180	BELTR LED 1.4ft 2600/840	54184	54183	54187	x
54140	BELTR LED 1.4ft 3200/840	54144	54143	54147	x
54190	BELTR LED 1.5ft 3250/840	54194	54193	54197	x
54150	BELTR LED 1.5ft 4000/840	54154	54153	54157	x
54210	BELTR LED 2.2ft 2600/840	x	54213	x	54218
54220	BELTR LED 2.2ft 3200/840	x	54223	x	54228
54280	BELTR LED 2.4ft 5200/840	54284	54283	54287	54288
54240	BELTR LED 2.4ft 6400/840	54244	54243	54247	54248
54290	BELTR LED 2.5ft 6500/840	54294	54293	54297	54298
54250	BELTR LED 2.5ft 8000/840	54254	54253	54257	54258

Example of type marking: 54243 = BELTR LED 2.4ft 6400/840 DALI M1h

BELTR LED S3F

Diffuser made of translucent polycarbonate, through-wiring with the use of external terminal blocks Wieland (S) GST15i5

Code	Type	M1h	DALI	DALI M1h	Senzor
54410	BELTR LED 2.2ft S3F 2600/840	x	54413	X	54418
54420	BELTR LED 2.2ft S3F 3200/840	x	54423	x	54428
54480	BELTR LED 2.4ft S3F 5200/840	54484	54483	x	54488
54440	BELTR LED 2.4ft S3F 6400/840	54444	54443	x	54448
54490	BELTR LED 2.5ft S3F 6500/840	54494	54493	x	54498
54450	BELTR LED 2.5ft S3F 8000/840	54454	54453	x	54458

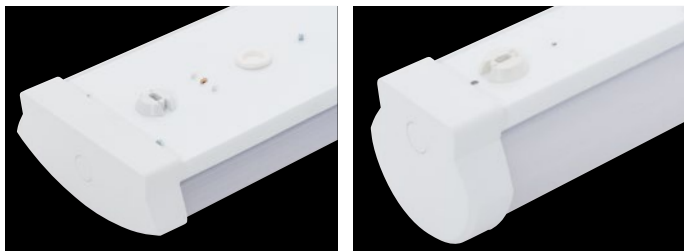
Example of type marking: 54453 = BELTR LED 2.5ft S3F 8000/840 DALI

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
- DALI** version with digital dimmable driver DALI
- DALI 1F** 1-phase 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

LIGHT FITTING ATTACHMENT

Directly to a ceiling or a wall with the use of screws



LIGHT FITTING DETAILED VIEW

BELTR LED



BELTR LED TUBE



... indoor, plastic, surface-mounted, batten.

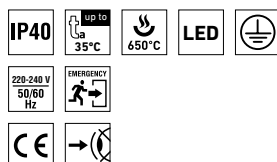
USE

The light fitting is suitable for offices, hallways, school interiors, libraries, lecture rooms, sanitary rooms, hospitals and passenger terminals.

Thanks to its high luminous efficiency and low electricity consumption it is a suitable replacement for light fittings with fluorescent tubes.

ADVANTAGES

- Light fitting protection **IP40**
- Maximum ambient temperature up to **t_a = 35°C**
- Diffuser: transparent polycarbonate = high mechanical resistance
- Body: steel sheet, white colour (RAL 9003)
- Up to 45 % lower electricity consumption when compared to tubes T5
- It can be delivered in emergency version

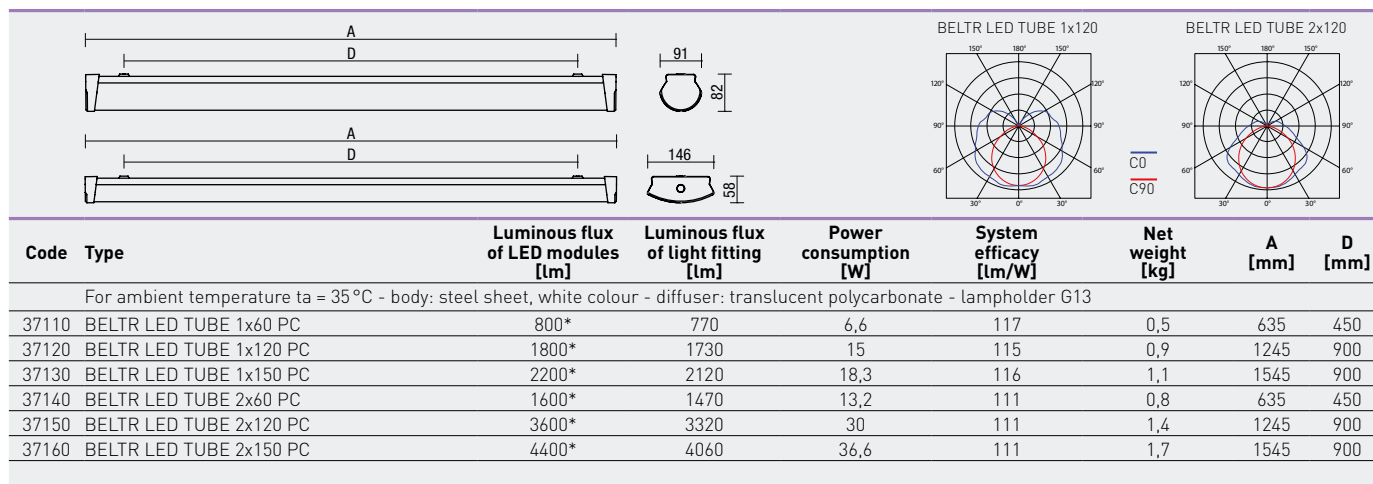


BELTR LED TUBE



TECHNICAL DESCRIPTION

- Light fitting protection: IP40
- Maximum ambient temperature: $t_a = 35^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 hour; M1h)
- Maximum system efficacy: 145 lm/W
- MacAdam = 3 SDCM
- The watt and lumen values can vary by $\pm 7,5\%$
- Diffuser: transparent polycarbonate, UV stable, impact-resistant
- Body: steel sheet, white colour (RAL 9003)
- Side covers: white (ABS), UV stable
- Cable gland: white, rubber
- Terminal block: screwless, three-pole (basic version)
- Electric equipment: for LED tubes Osram SubstiTUBE T8 EM Value 4000 K, 6500 K; lampholder G13



* - total luminous flux of the light fitting with Osram SubstiTUBE T8 EM Value sources

BELTR LED TUBE

Code	Type	For LED tubes Osram SubstiTUBE T8 EM Value			
		1F	3F	M1h	M3h
37110	BELTR LED TUBE 1x60	x	x	x	x
37120	BELTR LED TUBE 1x120	x	x	x	x
37130	BELTR LED TUBE 1x150	x	x	x	x
37140	BELTR LED TUBE 2x60	x	x	37144	37145
37150	BELTR LED TUBE 2x120	x	x	37154	37155
37160	BELTR LED TUBE 2x150	x	x	37164	37165

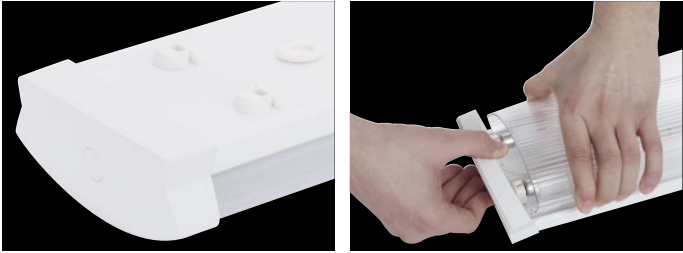
Example of type marking: 37164 = BELTR LED TUBE 2x150 M1h

LEGEND

- 1F** - 1 phase wiring cables for through-wiring
 - 3F** - 3 phase wiring cables for through-wiring
 - M1h** - emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination
 - M3h** - emergency back-up source with operating time of 3 hours (SA) for both permanent and emergency illumination
- Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

Directly to a ceiling or a wall with the use of screws



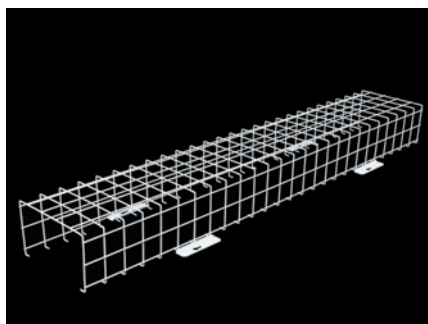
LIGHT FITTING DETAILED VIEW

BELTR LED TUBE



OM – protective grid

The metal grid protects the light fitting against mechanical damage and unauthorised handling. It is attached to the surface with the use of screws. The surface is treated with the RAL 9003 powder-coated colour.



Code	Type	Description	Weight [kg]
11941	OM 218	protective grid for types 218, 214/224, 2.2ft (700×220×130 mm)	1,0
11942	OM 236	protective grid for types 236, 228/254, 2.4ft (1300×220×130 mm)	1,7
11943	OM 258	protective grid for types 258, 235/249/280, 2.5ft (1600×220×130 mm)	2,0

Connection cables and connectors



Code	Type	Description	Weight [kg]
27401	GST 15i5-S1	5-pole wiring terminal block	0,1



Code	Type	Description	Weight [kg]
27421	GST 15i5-S21	interconnecting cable 5x1.5 mm ² - female/male L=1m	0,2
27422	GST 15i5-S22	interconnecting cable 5x1.5 mm ² - female/male L=2m	0,3
27423	GST 15i5-S23	interconnecting cable 5x1.5 mm ² - female/male L=3m	0,4
27424	GST 15i5-S24	interconnecting cable 5x1.5 mm ² - female/male L=4m	0,5
27425	GST 15i5-S25	interconnecting cable 5x1.5 mm ² - female/male L=5m	0,6
27426	GST 15i5-S26	interconnecting cable 5x1.5 mm ² - female/male L=6m	0,7
27427	GST 15i5-S27	interconnecting cable 5x1.5 mm ² - female/male L=7m	0,8
27428	GST 15i5-S28	interconnecting cable 5x1.5 mm ² - female/male L=8m	0,9



Code	Type	Description	Weight [kg]
27431	GST 15i5-S31	connecting cable 5x1.5 mm ² - male/free end L=1m	0,2
27432	GST 15i5-S32	connecting cable 5x1.5 mm ² - male/free end L=2m	0,3
27433	GST 15i5-S33	connecting cable 5x1.5 mm ² - male/free end L=3m	0,4
27434	GST 15i5-S34	connecting cable 5x1.5 mm ² - male/free end L=4m	0,5
27435	GST 15i5-S35	connecting cable 5x1.5 mm ² - male/free end L=5m	0,6
27436	GST 15i5-S36	connecting cable 5x1.5 mm ² - male/free end L=6m	0,7
27437	GST 15i5-S37	connecting cable 5x1.5 mm ² - male/free end L=7m	0,8
27438	GST 15i5-S38	connecting cable 5x1.5 mm ² - male/free end L=8m	0,9



Code	Type	Description	Weight [kg]
27441	GST 15i5-S41	connecting cable 5x1.5 mm ² - female/free end L=1m	0,2
27442	GST 15i5-S42	connecting cable 5x1.5 mm ² - female/free end L=2m	0,3
27443	GST 15i5-S43	connecting cable 5x1.5 mm ² - female/free end L=3m	0,4
27444	GST 15i5-S44	connecting cable 5x1.5 mm ² - female/free end L=4m	0,5
27445	GST 15i5-S45	connecting cable 5x1.5 mm ² - female/free end L=5m	0,6
27446	GST 15i5-S46	connecting cable 5x1.5 mm ² - female/free end L=6m	0,7
27447	GST 15i5-S47	connecting cable 5x1.5 mm ² - female/free end L=7m	0,8
27448	GST 15i5-S48	connecting cable 5x1.5 mm ² - female/free end L=8m	0,9



NAOS



INDOOR
METAL



NAOS – indoor metal LED light fitting

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NAOS SQUARE
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NAOS SQUARE
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NAOS MPR
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NAOS MPR
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NAOS SQUARE MPR
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IP20

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NAOS



... indoor, metal.

USE

Advanced lamp with low profile of total height of 34 mm only.

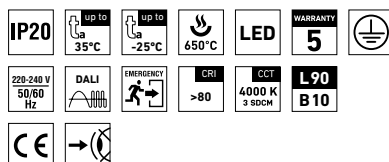
Body of the lamp is made of painted metal sheet and it is supplemented with acryl diffuser sandblasted on both sides.

The light fitting is suitable for offices, hallways, school interiors, libraries, lecture rooms, sanitary rooms, hospitals and passenger terminals.

ADVANTAGES

- Light fitting protection **IP20**
- Maximum ambient temperature up to **t_a = 35 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: acryl (PMMA) sandblasted on both sides
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)

- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ

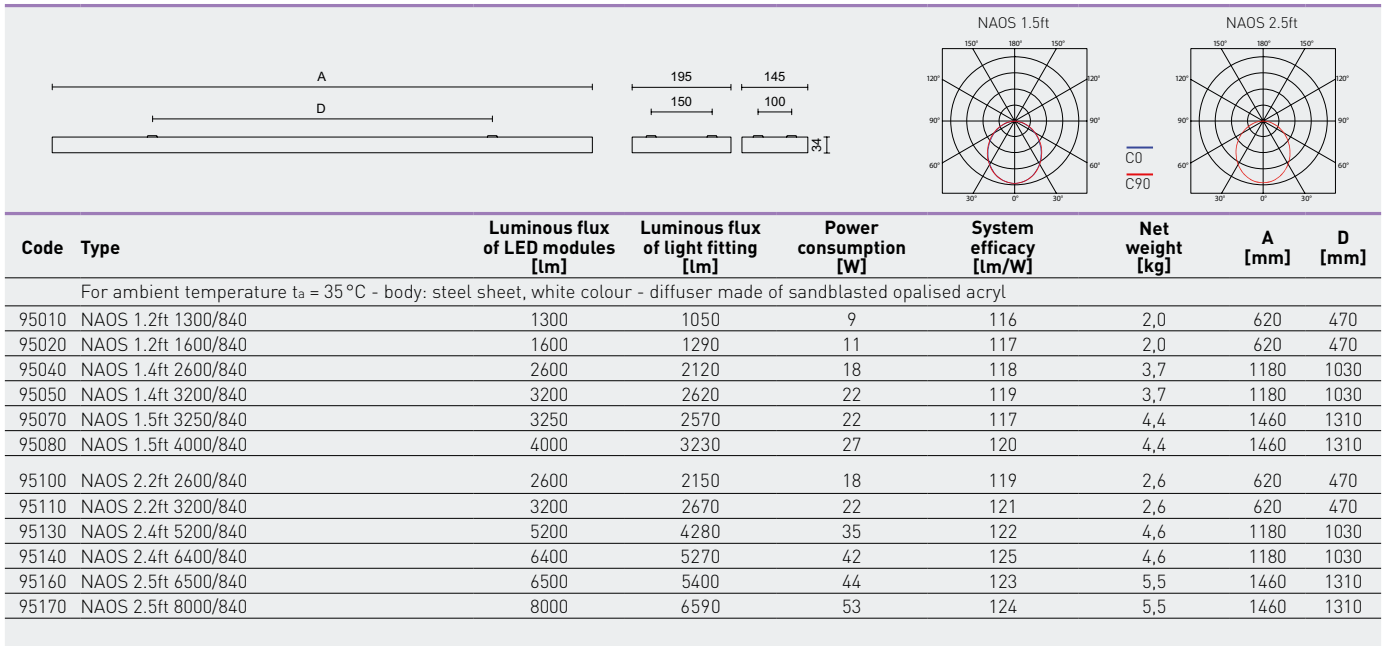


NAOS



TECHNICAL DESCRIPTION

- Light fitting protection: IP20
- Maximum ambient temperature: $t_a = 35^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 hour; M1h)
- Maximum system efficacy: 125 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: acryl (PMMA) sandblasted on both sides
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Cable gland: rubber (SBS), white
- Terminal block: screwless, five-pole
- Securing of the cover: by the means of magnets
- Electric equipment: LED modules, current driver or current driver DALI



95050 NAOS 1.4ft 3200/840 = suitable replacement for T5 fl. tube light fitting LUXOR 154 OP ET5 - 1x54 W
 95140 NAOS 2.4ft 6400/840 = suitable replacement for T5 fl. tube light fitting LUXOR 254 OP ET5 - 2x54 W

NAOS

Diffuser made from sandblasted opalised acryl, white colour

Code	Type	M1h	DALI	DALI M1h
95010	NAOS 1.2ft 1300/840	95013	95015	95016
95020	NAOS 1.2ft 1600/840	95023	95025	95026
95040	NAOS 1.4ft 2600/840	95043	95045	95046
95050	NAOS 1.4ft 3200/840	95053	95055	95056
95070	NAOS 1.5ft 3250/840	95073	95075	95076
95080	NAOS 1.5ft 4000/840	95083	95085	95086
95100	NAOS 2.2ft 2600/840	95103	95105	95106
95110	NAOS 2.2ft 3200/840	95113	95115	95116
95130	NAOS 2.4ft 5200/840	95133	95135	95136
95140	NAOS 2.4ft 6400/840	95143	95145	95146
95160	NAOS 2.5ft 6500/840	95163	95165	95166
95170	NAOS 2.5ft 8000/840	95173	95175	95176

Example of type marking: 95146 = NAOS 2.4ft 6400/840 DALI M1h

NAOS s

Code	Type
95310	NAOS 1.2ft 1300/840 s
95320	NAOS 1.2ft 1600/840 s
95340	NAOS 1.4ft 2600/840 s
95350	NAOS 1.4ft 3200/840 s
95370	NAOS 1.5ft 3250/840 s
95380	NAOS 1.5ft 4000/840 s
95400	NAOS 2.2ft 2600/840 s
95410	NAOS 2.2ft 3200/840 s
95430	NAOS 2.4ft 5200/840 s
95440	NAOS 2.4ft 6400/840 s
95460	NAOS 2.5ft 6500/840 s
95470	NAOS 2.5ft 8000/840 s

Diffuser made from sandblasted opalised acryl, silver colour (s)

M1h	DALI	DALI M1h
95313	95315	95316
95323	95325	95326
95343	95345	95346
95353	95355	95356
95373	95375	95376
95383	95385	95386
95403	95405	95406
95413	95415	95416
95433	95435	95436
95443	95445	95446
95463	95465	95466
95473	95475	95476

Example of type marking: 95413 = NAOS 2.2ft 3200/840 **M1h** s

LEGEND

s – silver colour RAL 9006

DALI – version with electronic and digitally dimmed ballast module operated via DALI protocol

M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination

Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

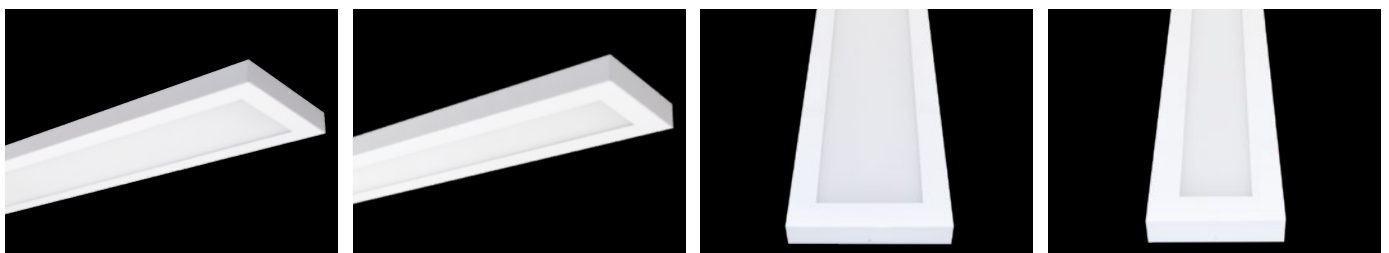
LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws
- b) By suspending to a ceiling with the use of wire-cord suspensions



LIGHT FITTING DETAILED VIEW

NAOS



NAOS SQUARE



... indoor, square, metal.

USE

Advanced lamp with low profile of total height of 34 mm only.

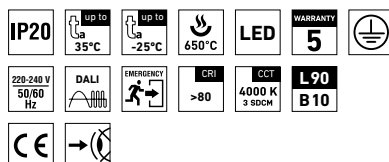
Body of the lamp is made of painted metal sheet and it is supplemented with acryl diffuser sandblasted on both sides.

The light fitting is suitable for offices, hallways, school interiors, libraries, lecture rooms, sanitary rooms, hospitals and passenger terminals.

ADVANTAGES

- Light fitting protection **IP20**
- Maximum ambient temperature up to **$t_a = 35^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B10
- Diffuser: acryl (PMMA) sandblasted on both sides
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)

- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ

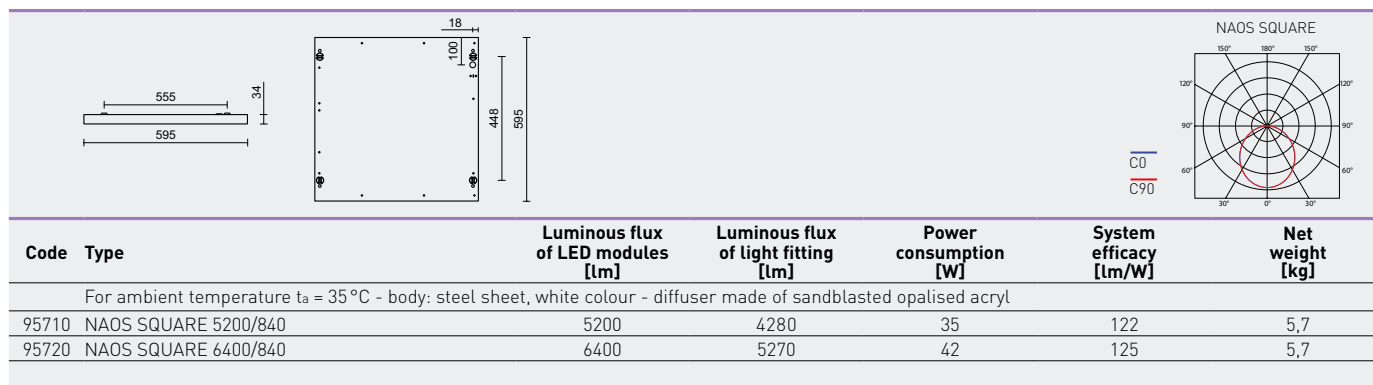


NAOS SQUARE



TECHNICAL DESCRIPTION

- Light fitting protection: IP20
- Maximum ambient temperature: $t_a = 35^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 125 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: acryl (PMMA) sandblasted on both sides
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Cable gland: rubber (SBS), white
- Terminal block: screwless, five-pole
- Securing of the cover: by the means of magnets
- Electric equipment: LED modules, current driver or current driver DALI



95710 NAOS SQUARE 5200/840 = suitable replacement surface mounted or recessed fluorescent light fittings 4x18W a 4x14W

NAOS SQUARE

Diffuser made from sandblasted opalised acryl, white colour

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h
95710	NAOS SQUARE 5200/840	95713	95714	95715	95716	95717
95720	NAOS SQUARE 6400/840	95723	95724	95725	95726	95727

NAOS SQUARE s

Diffuser made from sandblasted opalised acryl, silver colour (s)

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h
95750	NAOS SQUARE 5200/840 s	95753	95754	95755	95756	95757
95760	NAOS SQUARE 6400/840 s	95763	95764	95765	95766	95767

Example of type marking: 95756 = NAOS SQUARE 5200/840 DALI M1h s

LEGEND

s – silver colour RAL 9006

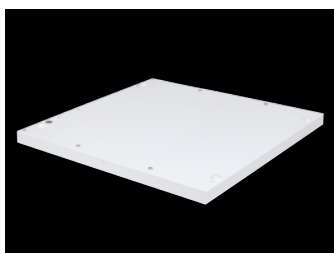
DALI – version with electronic and digitally dimmed ballast module operated via DALI protocol

M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination

Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

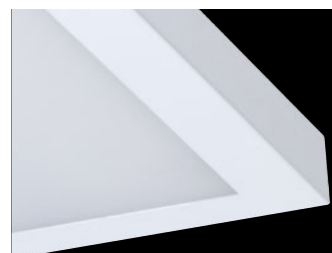
LIGHT FITTING ATTACHMENT

- Directly to a ceiling or a wall with the use of screws
- By suspending to a ceiling with the use of wire-cord suspensions
- Installation into 600 x 600mm grid lower ceiling



LIGHT FITTING DETAILED VIEW

NAOS SQUARE



NAOS MPR



... indoor, metal, with low UGR.

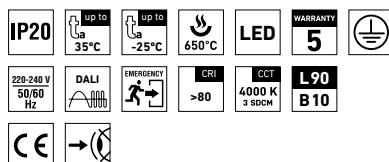
USE

Advanced lamp **with low profile** of total height of **34 mm only**.

The light fitting is suitable for offices, hallways, school interiors, libraries, lecture rooms, sanitary rooms, hospitals and passenger terminals.

ADVANTAGES

- Light fitting protection **IP20**
- Maximum ambient temperature up to **t_a = 35 °C**
- Lifetime: 50,000 hours / L90B10
- Diffuser: multi-layer micro pyramid optics (MPR) with UGR < 19
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ

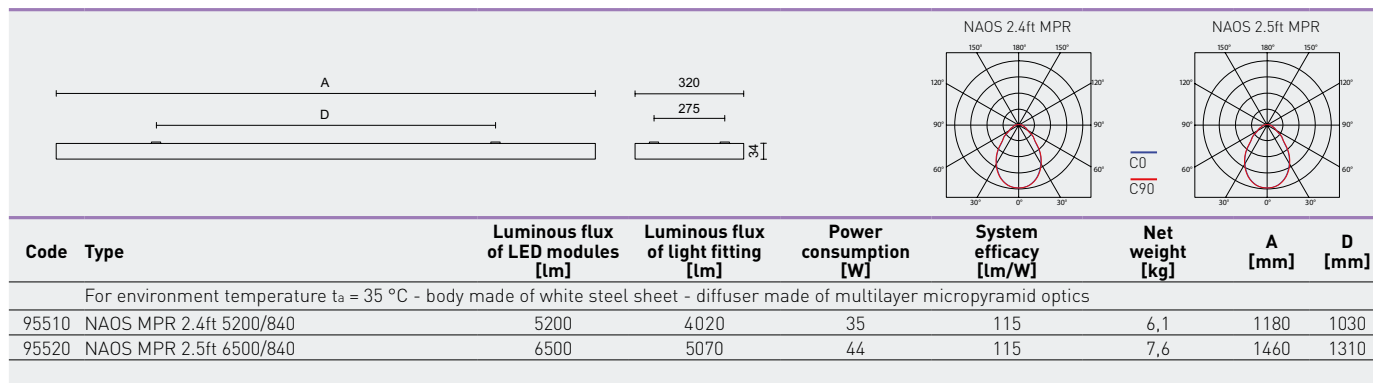


NAOS MPR



TECHNICAL DESCRIPTION

- Light fitting protection: IP20
- Maximum ambient temperature: $t_a = 35^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 hour; M1h)
- Maximum system efficacy: 115 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: multi-layer micropramid optics MPR for light distribution without glare according to EN 12464-1 with UGR < 19
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Cable gland: rubber (SBS), white
- Terminal block: screwless, five-pole
- Securing of the cover: by the means of magnets
- Electric equipment: LED modules, current driver or current driver DALI



95510 NAOS MPR 2.4ft 5200/840 = suitable replacement for T5 fl. tube light fitting LUXOR 235 OP ET5 - 2 x 35W
 95520 NAOS MPR 2.4ft 6500/840 = suitable replacement for T5 fl. tube light fitting LUXOR 249 OP ET5 - 2 x 49W

NAOS MPR

Diffuser with multilayer micropramid optics, white colour

Code	Type	M1h	DALI	DALI M1h
95510	NAOS MPR 2.4ft 5200/840	95513	95515	95516
95520	NAOS MPR 2.5ft 6500/840	95523	95525	95526

NAOS MPR s

Diffuser with multilayer micropramid optics, silver colour (s)

Code	Type	M1h	DALI	DALI M1h
95610	NAOS MPR 2.4ft 5200/840 s	95613	95615	95616
95620	NAOS MPR 2.5ft 6500/840 s	95623	95625	95626

Example of type marking: 95626 = NAOS MPR 2.5ft 6500/840 **DALI M1h**

LEGEND

s - silver colour RAL 9006

DALI - version with electronic and digitally dimmed ballast module operated via DALI protocol

M1h - emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination

Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws
- b) By suspending to a ceiling with the use of wire-cord suspensions

**LIGHT FITTING DETAILED VIEW**

NAOS MPR



NAOS SQUARE MPR



... indoor, square, metal, with low UGR.

USE

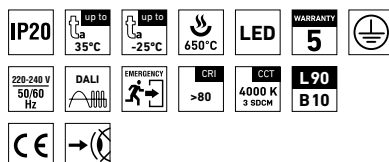
Advanced lamp **with low profile** of total height of **34 mm only**.

The light fitting is suitable for offices, hallways, school interiors, libraries, lecture rooms, sanitary rooms, hospitals and passenger terminals.

ADVANTAGES

- Light fitting protection **IP20**
- Maximum ambient temperature up to **$t_a = 35^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B10
- Diffuser: multi-layer micro pyramid optics (MPR) with UGR < 19
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)

- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Certification: ESČ



NAOS SQUARE MPR



TECHNICAL DESCRIPTION

- Light fitting protection: IP20
- Maximum ambient temperature: $t_a = 35^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 115 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: multi-layer micropramid optics MPR for light distribution without glare according to EN 12464-1 with UGR < 19
- Body: steel sheet, white (RAL 9003) or silver (RAL 9006) colour
- Cable gland: rubber (SBS), white
- Terminal block: screwless, five-pole
- Securing of the cover: by the means of magnets
- Electric equipment: LED modules, current driver or current driver DALI

Code	Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]
For environment temperature $t_a = 35^\circ\text{C}$ - body made of white steel sheet - diffuser made of multilayer micropramid optics						
95810	NAOS SQUARE MPR 5200/840	5200	4020	35	115	5,7

95810 NAOS SQUARE MPR 5200/840 = suitable replacement surface mounted or recessed fluorescent light fittings 4x18W a 4x14W

NAOS SQUARE MPR

Diffuser with multilayer micropramid optics, white colour

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h
95810	NAOS SQUARE MPR 5200/840	95813	95814	95815	95816	95817

NAOS SQUARE MPR s

Diffuser with multilayer micropramid optics, silver colour (s)

Code	Type	M1h	M3h	DALI	DALI M1h	DALI M3h
95850	NAOS SQUARE MPR 5200/840 s	95853	95854	95855	95856	95857

Example of type marking: 95856 = NAOS SQUARE MPR 5200/840 DALI M1h s

LEGEND

s – silver colour RAL 9006

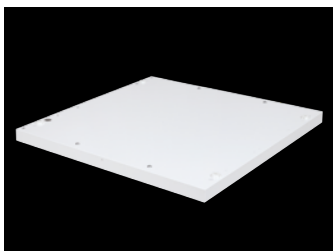
DALI – version with electronic and digitally dimmed ballast module operated via DALI protocol

M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination

Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

- Directly to a ceiling or a wall with the use of screws
- By suspending to a ceiling with the use of wire-cord suspensions
- Installation into 600 x 600mm grid lower ceiling

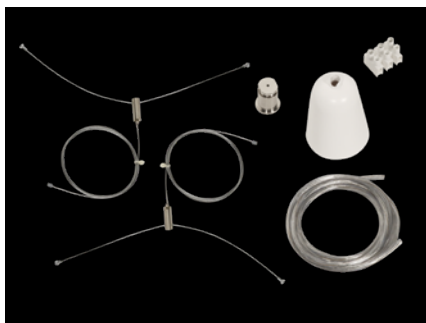


LIGHT FITTING DETAILED VIEW

NAOS SQUARE MPR



Ceiling suspender kit for NAOS luminaires



Code	Type	Description	Weight [kg]
101344	ZL 1 - S3	a wire suspension kit with a maximum length of 1.5m to hang single-line light fixtures (1.2ft, 1.4ft, 1.5ft) including a 3-core supply cable (a steel Y wire with a keyhole hanging bracket and a span of 150 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101458	ZL 1 - S5	a wire suspension kit with a maximum length of 1.5m to hang single-line light fixtures (1.2ft, 1.4ft, 1.5ft) including a 5-core supply cable (a steel Y wire with a keyhole hanging bracket and a span of 150 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2

Code	Type	Description	Weight [kg]
101456	ZL 2 - S3	a wire suspension kit with a maximum length of 1.5m to hang double-line light fixtures (2.2ft, 2.4ft, 2.5ft) including a 3-core supply cable (a steel Y wire with a keyhole hanging bracket and a span of 300 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101494	ZL 2 - S5	a wire suspension kit with a maximum length of 1.5m to hang double-line light fixtures (2.2ft, 2.4ft, 2.5ft) including a 5-core supply cable (a steel Y wire with a keyhole hanging bracket and a span of 300 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2

Ceiling suspender kit for NAOS MPR luminaires



Code	Type	Description	Weight [kg]
101456	ZL 2 - S3	a wire suspension kit with a maximum length of 1.5m to hang double-line light fixtures (2.2ft, 2.4ft, 2.5ft) including a 3-core supply cable (a steel Y wire with a keyhole hanging bracket and a span of 300 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101494	ZL 2 - S5	a wire suspension kit with a maximum length of 1.5m to hang double-line light fixtures (2.2ft, 2.4ft, 2.5ft) including a 5-core supply cable (a steel Y wire with a keyhole hanging bracket and a span of 300 mm including a ceiling wire holder clip – 2 pcs, supply cable, ceiling rose, three-pole terminal block)	0,2

Ceiling suspender kit for NAOS SQUARE, NAOS SQUARE MPR luminaires



Code	Type	Description	Weight [kg]
101457	ZL 3 - S3	a wire suspension kit with a maximum length of 1.5 m to hang square light fixtures including a 3-core supply cable (a steel wire with a keyhole hanging bracket and a ceiling hook – 4 pcs, M5 bolt with a fan disc washer – 4pcs, supply cable, ceiling rose, three-pole terminal block)	0,2
101495	ZL 3 - S5	a wire suspension kit with a maximum length of 1.5 m to hang square light fixtures including a 5-core supply cable (a steel wire with a keyhole hanging bracket and a ceiling hook – 4 pcs, M5 bolt with a fan disc washer – 4pcs, supply cable, ceiling rose, five-pole terminal block)	0,2



MO LED



INDOOR
BATTEN



MO LED – indoor batten LED light fittings

MO LED
p. 278



MO LED
p. 278

IP20

MO LED
ACCESSORIES
p. 281



MO LED
ACCESSORIES
p. 281

MO LED



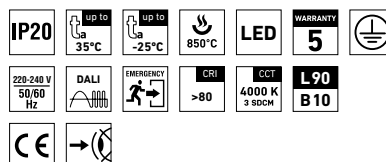
... indoor suspended LED light fitting.

USE

Interior light fitting from aluminum profile and PC of diffuser. It is suitable for selling premises, offices, corridors, entrance and terminal halls, interiors of schools, lecture rooms and hospitals. The light fittings can be easily connected to different lengths and shapes.

ADVANTAGES

- Light fitting protection **IP20**
- Maximum ambient temperature up to **$t_a = 35^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B10
- Possibility of connection of light fittings to required lengths and shapes
- Diffuser: polycarbonate with translucent foil (PC)
- Body: aluminium profile, white (RAL 9003) or silver (RAL 9006) colour
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or permanent emergency version M1h and M3hAt
- Through-wiring in basic version

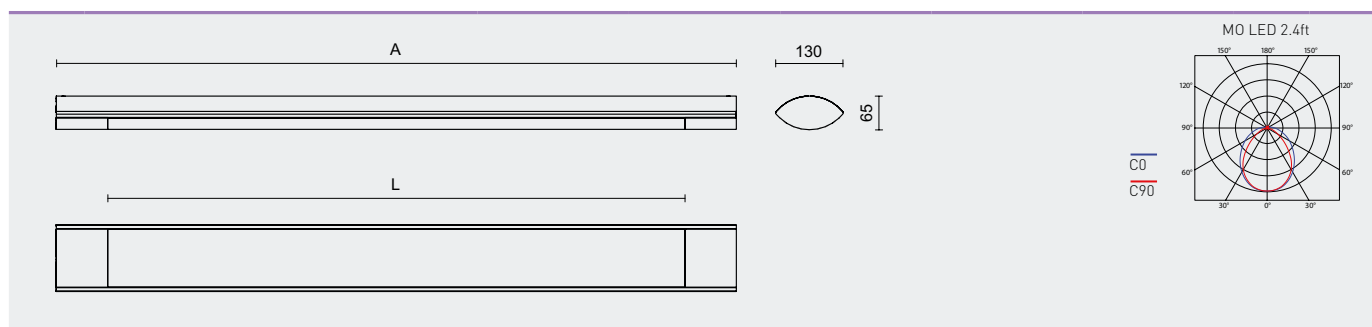


MO LED



TECHNICAL DESCRIPTION

- Light fitting protection: IP20
- Maximum ambient temperature: $t_a = 35^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-25^\circ\text{C}$ (version with emergency back-up source M1h a M3hAt)
- Maximum system efficacy: 121 lm/W
- The watt and lumen values can vary by $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: polycarbonate with translucent foil (PC)
- Body: aluminium profile, white (RAL 9003) or silver (RAL 9006) colour
- Reflector: steel sheet, white colour (RAL 9003)
- Terminal block: 2x screwless-type, five-poles, three-phase connection
- Electric equipment: LED modules, current driver or current driver DALI



Code	Type	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Net weight [kg]	A [mm]	L [mm]
For ambient temperature $t_a = 35^\circ\text{C}$ - aluminum profile of white color - polycarbonate with translucent foil								
86410	MO LED 1.2ft 1600/840	1600	1220	11	110	1,9	764	564
86420	MO LED 1.2ft 2200/840	2200	1760	15	117	1,9	764	564
86430	MO LED 1.4ft 3200/840	3200	2560	23	111	3,2	1324	1124
86440	MO LED 1.4ft 4400/840	4400	3520	31	114	3,2	1324	1124
86450	MO LED 1.5ft 4000/840	4000	3200	28	114	3,7	1604	1404
86460	MO LED 1.5ft 5500/840	5500	4400	38	116	3,7	1604	1404
86470	MO LED 2.2ft 3200/840	3200	2560	23	111	1,9	764	564
86480	MO LED 2.2ft 4400/840	4400	3520	31	114	1,9	764	564
86490	MO LED 2.4ft 6400/840	6400	5120	43	119	3,3	1324	1124
86500	MO LED 2.4ft 8800/840	8800	7040	59	119	3,3	1324	1124
86510	MO LED 2.5ft 8000/840	8000	6400	54	119	3,8	1604	1404
86520	MO LED 2.5ft 11000/840	11000	8800	73	121	3,8	1604	1404

86410 MO LED 1.2ft 1600/840 = suitable replacement for T5 fl. tube light fitting MO 118 - 1x18W
 86430 MO LED 1.4ft 3200/840 = suitable replacement for T5 fl. tube light fitting MO 136 - 1x36W
 86450 MO LED 1.5ft 4000/840 = suitable replacement for T5 fl. tube light fitting MO 158 - 1x58W
 86470 MO LED 2.2ft 3200/840 = suitable replacement for T5 fl. tube light fitting MO 218 - 2x18W
 86490 MO LED 2.4ft 6400/840 = suitable replacement for T5 fl. tube light fitting MO 236 - 2x36W
 86510 MO LED 2.5ft 8000/840 = suitable replacement for T5 fl. tube light fitting MO 258 - 2x58W

MO LED

Body: white colour (RAL 9003)

Code	Type	M1h	M3hAt	DALI	DALI M1h	DALI M3hAt
86410	MO LED 1.2ft 1600/840	x	x	86419	x	x
86420	MO LED 1.2ft 2200/840	x	x	86429	x	x
86430	MO LED 1.4ft 3200/840	86434	86435	86439	86438	86437
86440	MO LED 1.4ft 4400/840	86444	86445	86449	86448	86447
86450	MO LED 1.5ft 4000/840	86454	86455	86459	86458	86457
86460	MO LED 1.5ft 5500/840	86464	86465	86469	86468	86467
86470	MO LED 2.2ft 3200/840	x	x	86479	x	x
86480	MO LED 2.2ft 4400/840	x	x	86489	x	x
86490	MO LED 2.4ft 6400/840	86494	86495	86499	86498	86497
86500	MO LED 2.4ft 8800/840	86504	86505	86509	86508	86507
86510	MO LED 2.5ft 8000/840	86514	86515	86519	86518	86517
86520	MO LED 2.5ft 11000/840	86524	86525	86529	86528	86527

Example of type marking: 86495 = MO LED 2.4ft 6400/840 M3hAt

MO LED s

Body: silver colour (RAL 9006)

Code	Type	M1h	M3hAt	DALI	DALI M1h	DALI M3hAt
86530	MO LED 1.2ft 1600/840 s	x	x	86539	x	x
86540	MO LED 1.2ft 2200/840 s	x	x	86549	x	x
86550	MO LED 1.4ft 3200/840 s	86554	86555	86559	86558	86557
86560	MO LED 1.4ft 4400/840 s	86564	86565	86569	86568	86567
86570	MO LED 1.5ft 4000/840 s	86574	86575	86579	86578	86577
86580	MO LED 1.5ft 5500/840 s	86584	86585	86589	86588	86587
86590	MO LED 2.2ft 3200/840 s	x	x	86599	x	x
86600	MO LED 2.2ft 4400/840 s	x	x	86609	x	x
86610	MO LED 2.4ft 6400/840 s	86614	86615	86619	86618	86617
86620	MO LED 2.4ft 8800/840 s	86624	86625	86629	86628	86627
86630	MO LED 2.5ft 8000/840 s	86634	86635	86639	86638	86637
86640	MO LED 2.5ft 11000/840 s	86644	86645	86649	86648	86647

LEGEND

s – silver colour RAL 9006

DALI – version with electronic and digitally dimmed ballast module operated via DALI protocol

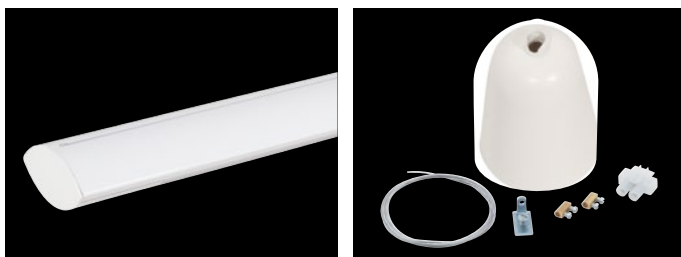
M1h – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination

M3hAt – emergency back-up source with operating time of 1 hour (SA) for both permanent and emergency illumination with battery autotesting

Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

LIGHT FITTING ATTACHMENT

a) With the use of wire-cord suspensions and joints



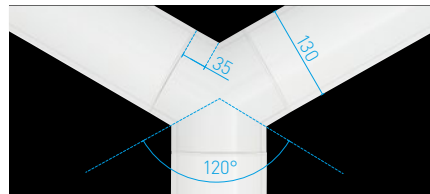
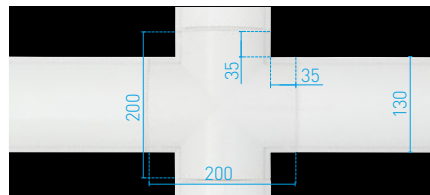
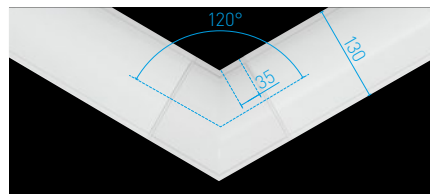
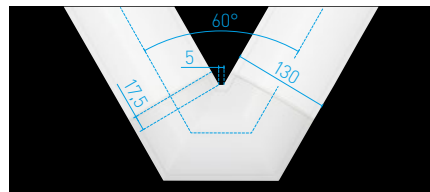
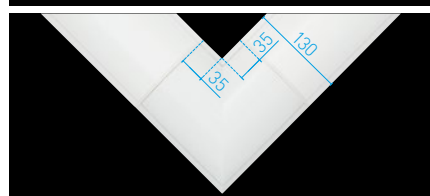
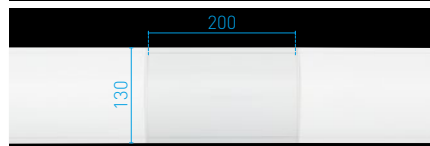
LIGHT FITTING DETAILED VIEW

MO LED



Metal joints

Metal joints in RAL colour serve to interconnect light fittings into various shapes. Joints are including connecting material.



Code	Type	Description	Weight [kg]
16190	MO-S	direct connection of light fittings into row, white RAL 9003	0.1
16192	MO-S s	direct connection of light fittings into row, silver RAL 9006	0.1

Code	Type	Description	Weight [kg]
16111	MO-I	direct connection of light fittings into row (200 mm), white RAL 9003	0.5
16112	MO-I s	direct connection of light fittings into row (200 mm), silver RAL 9006	0.5

Code	Type	Description	Weight [kg]
16121	MO-L	connection of light fittings in L shape with angle of 90°, white RAL 9003	0.6
16122	MO-L s	connection of light fittings in L shape with angle of 90°, silver RAL 9006	0.6

Code	Type	Description	Weight [kg]
16131	MO-T	connection of light fittings in T shape with angles of 90°, white RAL 9003	0.7
16132	MO-T s	connection of light fittings in T shape with angles of 90°, silver RAL 9006	0.7

Code	Type	Description	Weight [kg]
16141	MO-U	connection of light fittings with angles from 45° to 89° - standardly supplied angle is 60°; other angles can be made-to-order, white RAL 9003	0.6
16142	MO-U s	connection of light fittings with angles from 45° to 89° - standardly supplied angle is 60°; other angles can be made-to-order, silver RAL 9006	0.6

Code	Type	Description	Weight [kg]
16151	MO-V	connection of light fittings with angles from 91° to 175° - standardly supplied angle is 120°; other angles can be made-to-order, white RAL 9003	0.6
16152	MO-V s	connection of light fittings with angles from 91° to 175° - standardly supplied angle is 120°; other angles can be made-to-order, silver RAL 9006	0.6

Code	Type	Description	Weight [kg]
16161	MO-X	connection of light fittings in X shape with angles of 90°, white RAL 9003	0.8
16162	MO-X s	connection of light fittings in X shape with angles of 90°, silver RAL 9006	0.8

Code	Type	Description	Weight [kg]
16171	MO-Y	connection of light fittings with angle of 120°, white RAL 9003	0.7
16172	MO-Y s	connection of light fittings with angle of 120°, silver RAL 9006	0.7

Code	Type	Description	Weight [kg]
16181	MO-K	plastic end cap, white RAL 9003	0.1
16182	MO-K s	plastic end cap, silver RAL 9006	0.1

Code	Type	Description	Weight [kg]
16002	MO tube body	tube body for addition of set shape, max. length 2m, white	according to length
16003	MO tube cover	tube cover for addition of set shape, max. length 2m, white	according to length
16202	MO tube body-s	tube body for addition of set shape, max. length 2m, silver	according to length
16203	MO tube cover-s	tube cover for addition of set shape, max. length 2m, silver	according to length

Z4 - ceiling suspension

Steel wire cord 1.1m, wire-cord brackets, metal slider into tube groove, plastic cap on ceiling in white or silver colour.



Code	Type	Description	Weight [kg]
16101	Z4-F1	ceiling wire-cord suspension for type MO/RPK, white RAL 9003	0.1
16102	Z4-F1 s	ceiling wire-cord suspension for type MO/RPK, silver RAL 9006	0.1

Supply cable

The twisted cable for electricity supply into a set of light fittings.



Code	Type	Description	Weight [kg]
13401	KPK 3x0.5 KR	cable, length 30 - 80 cm - short - white	0.1
13402	KPK 3x0.5 DL	cable, length 80 - 160 cm - long - white	0.2
13403	KPK 3x0.75 KR	cable, length 30 - 80 cm - short - white	0.1
13404	KPK 3x0.75 DL	cable, length 80 - 160 cm - long - white	0.2
13405	KPK 3x1.0 KR	cable, length 30 - 60 cm - short - white	0.1
13406	KPK 3x1.0 DL	cable, length 60 - 120 cm - long - white	0.2
13408	KPK 3x1.5 DL	cable, length 60 - 120 cm - long - white	0.2
13415	KPK 4x1.0 KR	cable, length 30 - 60 cm - short - white	0.1
13416	KPK 4x1.0 DL	cable, length 60 - 120 cm - long - white	0.2
13426	KPK 5x1.0 DL	cable, length 60 - 120 cm - long - white	0.2
13434	KPK 3x0.75 DL cr	cable, length 80 - 160 cm - long - black	0.2



EMERGENCY LED



NANOTTICA
PRIMA LED
FUTURA
BELTR LED
HELIOS LED
PLEXI LED



PRIMA LED – plastic emergency LED light fitting

PRIMA LED NM
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PRIMA LED NM
page 286

IP66

FUTURA – plastic emergency LED light fitting

FUTURA NM
str. 289



FUTURA NM
str. 289

IP66

NANOTTICA – plastic emergency LED light fitting

NANOTTICA NM
str. 292



NANOTTICA NM
str. 292

IP66

BELTR LED NM – plastic emergency LED light fitting

BELTR LED NM
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BELTR LED NM
str. 296

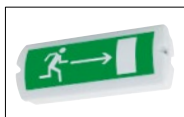
IP40



BELTR LED NM
ACCESSORIES
page 304

HELIOS LED – all-plastic emergency LED light fitting

HELIOS LED
page 299



HELIOS LED
page 300



HELIOS DS LED
page 301

IP42 **IP65**



HELIOS LED
ACCESSORIES
page 304

PLEXI LED – emergency LED light fitting for installation into plasterboard lower ceilings

PLEXI LED
page 302



PLEXI LED
page 302

IP20



PLEXI LED
ACCESSORIES
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PRIMA LED NM



... emergency.

USE

Non-maintained emergency luminaire for escape routes, available for use in high ambient temperature, $t_a = 50^\circ\text{C}$, is intended by its function and shape primarily for being in a set with Prima LED and Innova light fittings.

It is recommended for escape routes of interior industrial rooms, storage halls, sports premises, agricultural buildings and laboratories without hazard of explosion of gases, dusts and flammable vapours.

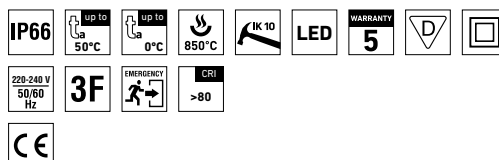
It is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have increased resistance against deformation and impact.

Atmosphere emissions must be considered, as they may reduce the usability of plastics at installation in aggressive environment, see p. 317.

ADVANTAGES

- Light fitting protection **IP66**
- High thermal resistance ranging **from $t_a = 0^\circ\text{C}$ to $t_a = 50^\circ\text{C}$** also for basic Ni-Cd battery type
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Emergency module **1h or 3h**
- Optional selection of EM kit with battery autotest

- Integrated diode for indication of correct operation
- Optional selection of battery type between **Ni-Cd** or **LiFePO₄**
- Low energy consumption in StandBy mode
- Optional selection of connection between **cable gland** or **connector**
- Insulation class II



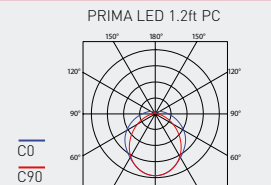
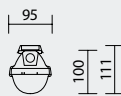
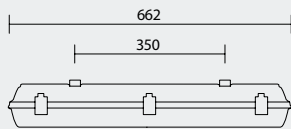
PRIMA LED PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66**
- Maximum ambient temperature: **t_a = 50 °C**
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Maximum light fitting efficiency: 133 lm/W
- **CRI > 80: 6500 K**
- MacAdam = 3 SDCM
- Diffuser: translucent PC (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: white steel sheet (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foam-filled body

- groove
- Light fitting connection: **cable gland PG 13,5 / 16** or **connector**
- Distance holder: polyamide + 10 % glass fibre
- Electric equipment:
 - **EM kit including Ni-Cd battery without autotest, LED module**
 - **EM kit including LiFePO₄ battery with autotest, LED module**
- The package includes: stainless hooks and stainless brackets
- 1-year warranty for battery, 2-year warranty for EM kit (unit + LED module)
- The above stated values of power consumption and luminous flux are within a tolerance of ± 7,5 %



Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Light fitting efficiency [lm/W]	Battery type	Power in standby mode [W]	Charging time [hrs]	Power in charging mode [W]	Net weight [kg]
Non-maintained emergency luminaire without autotest									
PRIMA LED 1.2ft PC NM1h	1	440	4,5	98	Ni-Cd	1,5	24	9	1,2
PRIMA LED 1.2ft PC NM3h	3	440	4,5	98	Ni-Cd	1,5	24	9	1,4
Non-maintained emergency luminaire with autotest									
PRIMA LED 1.2ft PC NM1hAt	1	440	3,3	133	LiFePO ₄	0,7	12	3,5	1,2
PRIMA LED 1.2ft PC NM3hAt	3	440	3,3	133	LiFePO ₄	0,7	12	3,5	1,4

PRIMA LED PC with cable glands

Type	NM1h	3F NM1h	DALI 3F NM1h	NM3h	3F NM3h	DALI 3F NM3h
PRIMA LED 1.2ft PC ...	62210	62211	x	62213	62214	x

Type	NM1hAt	3F NM1hAt	DALI 3F NM1hAt	NM3hAt	3F NM3hAt	DALI 3F NM3hAt
PRIMA LED 1.2ft PC ...	62220	62221	x	62223	62224	x

Non-maintained emergency luminaire without autotest - cable glands PG 13,5 / 16 - plastic clips

Non-maintained emergency luminaire with autotest - cable glands PG 13,5 / 16 - plastic clips

PRIMA LED PCc with cable glands

Type	NM1h	3F NM1h	DALI 3F NM1h	NM3h	3F NM3h	DALI 3F NM3h
PRIMA LED 1.2ft PCc ...	62230	62231	x	62233	62234	x

Type	NM1hAt	3F NM1hAt	DALI 3F NM1hAt	NM3hAt	3F NM3hAt	DALI 3F NM3hAt
PRIMA LED 1.2ft PCc ...	62240	62241	x	62243	62244	x

Non-maintained emergency luminaire without autotest - cable glands PG 13,5 / 16 - stainless clips (c)

Non-maintained emergency luminaire with autotest - cable glands PG 13,5 / 16 - stainless clips (c)

PRIMA LED PC with connectors

Type	L1 2x5P NM1h	L3 2x5P NM1h	L1 2x7P NM1h	L1 2x5P NM3h	L3 2x5P NM3h	L1 2x7P NM3h
PRIMA LED 1.2ft PC ...	62250	62251	62252	62253	62254	62255

Type	L1 2x5P NM1hAt	L3 2x5P NM1hAt	L1 2x7P NM1hAt	L1 2x5P NM3hAt	L3 2x5P NM3hAt	L1 2x7P NM3hAt
PRIMA LED 1.2ft PC ...	62260	62261	62262	62263	62264	62265

Non-maintained emergency luminaire without autotest - interconnecting connectors - plastic clips

Non-maintained emergency luminaire with autotest - interconnecting connectors - plastic clips

PRIMA LED PCc with connectors

Type	L1 2x5P NM1h	L3 2x5P NM1h	L1 2x7P NM1h	L1 2x5P NM3h	L3 2x5P NM3h	L1 2x7P NM3h
PRIMA LED 1.2ft PCc ...	62270	62271	62272	62273	62274	62275

Type	L1 2x5P NM1hAt	L3 2x5P NM1hAt	L1 2x7P NM1hAt	L1 2x5P NM3hAt	L3 2x5P NM3hAt	L1 2x7P NM3hAt
PRIMA LED 1.2ft PCc ...	62280	62281	62282	62283	62284	62285

Non-maintained emergency luminaire without autotest - interconnecting connectors - stainless clips (c)

Non-maintained emergency luminaire with autotest - interconnecting connectors - stainless clips (c)

LEGEND

- NM1h** – non-maintained emergency luminaire, operation time 1 hour
- 3F NM1h** – non-maintained emergency luminaire, operation time 1 hour, 5-wire throughwiring (3F)
- DALI 3F NM1h** – non-maintained emergency luminaire, operation time 1 hour, 7-wire throughwiring (DALI 3F)
- NM3h** – non-maintained emergency luminaire, operation time 3 hours
- 3F NM3h** – non-maintained emergency luminaire, operation time 3 hours, 5-wire throughwiring (3F)
- DALI 3F NM3h** – non-maintained emergency luminaire, operation time 3 hours, 7-wire throughwiring (DALI 3F)

- L1 2x5P NM1h** – non-maintained emergency luminaire, 2x5P connectors and 5-wire throughwiring (3F), operation time 1 hour, line connection, power supply from L1
- L3 2x5P NM1h** – non-maintained emergency luminaire, 2x5P connectors and 5-wire throughwiring (3F), operation time 1 hour, line connection, power supply from L3
- L1 2x7P NM1h** – non-maintained emergency luminaire, 2x7P connectors and 7-wire throughwiring (DALI 3F), operation time 1 hour, line connection, power supply from L1
- L1 2x5P NM3h** – non-maintained emergency luminaire, 2x5P connectors and 5-wire throughwiring (3F), operation time 3 hours, line connection, power supply from L1
- L3 2x5P NM3h** – non-maintained emergency luminaire, 2x5P connectors and 5-wire throughwiring (3F), operation time 3 hours, line connection, power supply from L3
- L1 2x7P NM3h** – non-maintained emergency luminaire, 2x7P connectors and 7-wire throughwiring (DALI 3F), operation time 3 hours, line connection, power supply from L1

- ...At** – version with battery autotest

Module signalling without autotest

LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

Module signalling with autotest (At)

LED colour	Information
● green ● red	
flashing -	battery charging
- flashing	defective LED module
- shining	defective battery
- -	running test/emergency mode

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks



LIGHT FITTING DETAILED VIEW

PRIMA LED PC



FUTURA NM



... emergency.

USE

Non-maintained emergency luminaire for escape routes, available for use in high ambient temperature, $t_a = 50^\circ\text{C}$, is intended by its function and shape primarily for being in a set with Futura and Innova light fittings.

It is recommended for escape routes of interior industrial rooms, storage halls, sports premises, agricultural buildings and laboratories without hazard of explosion of gases, dusts and flammable vapours.

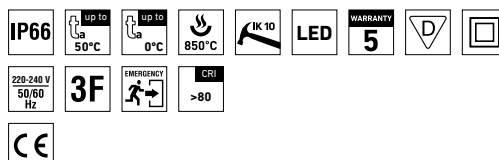
It is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have increased resistance against deformation and impact.

Atmosphere emissions must be considered, as they may reduce the usability of plastics at installation in aggressive environment, see p. 317.

ADVANTAGES

- Light fitting protection **IP66**
- High thermal resistance ranging **from $t_a = 0^\circ\text{C}$ to $t_a = 50^\circ\text{C}$** also for basic Ni-Cd battery type
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Emergency module **1h or 3h**
- Optional selection of EM kit with battery autotest

- Integrated diode for indication of correct operation
- Optional selection of battery type between **Ni-Cd** or **LiFePO₄**
- Low energy consumption in StandBy mode
- Optional selection of connection between **cable gland** or **connector**
- Insulation class II

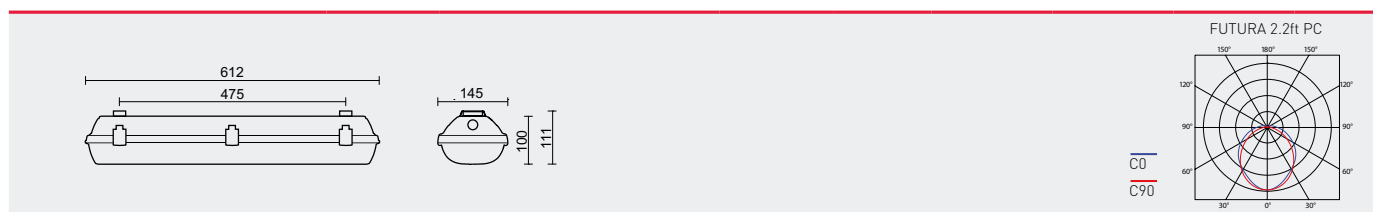


FUTURA PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66**
- Maximum ambient temperature: **t_a = 50 °C**
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Maximum light fitting efficiency: 133 lm/W
- **CRI > 80: 6500 K**
- MacAdam = 3 SDCM
- Diffuser: translucent PC (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: white steel sheet (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foam-filled body groove
- Light fitting connection: **cable gland PG 13,5 / 16 or connector**
- Distance holder: polyamide + 10 % glass fibre
- Electric equipment: **EM kit including Ni-Cd battery without autotest, LED module**
- **EM kit including LiFePO₄ battery with autotest, LED module**
- The package includes: stainless hooks and stainless brackets
- 1-year warranty for battery, 2-year warranty for EM kit (unit + LED module)
- The above stated values of power consumption and luminous flux are within a tolerance of ± 7,5 %



Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Light fitting efficiency [lm/W]	Battery type	Power in standby mode [W]	Charging time [hrs]	Power in charging mode [W]	Net weight [kg]
Non-maintained emergency luminaire without autotest									
FUTURA 2.2ft PC NM1h	1	440	4,5	98	Ni-Cd	1,5	24	9	1,2
FUTURA 2.2ft PC NM3h	3	440	4,5	98	Ni-Cd	1,5	24	9	1,4
Non-maintained emergency luminaire with autotest									
FUTURA 2.2ft PC NM1hAt	1	440	3,3	133	LiFePO ₄	0,7	12	3,5	1,2
FUTURA 2.2ft PC NM3hAt	3	440	3,3	133	LiFePO ₄	0,7	12	3,5	1,4

FUTURA PC with cable glands		Non-maintained emergency luminaire without autotest - cable glands PG 13,5 / 16 - plastic clips			
Type		NM1h	3F NM1h	NM3h	3F NM3h
FUTURA 2.2ft PC ...		62410	62411	62413	62414
FUTURA PC with cable glands		Non-maintained emergency luminaire with autotest - cable glands PG 13,5 / 16 - plastic clips			
Type		NM1hAt	3F NM1hAt	NM3hAt	3F NM3hAt
FUTURA 2.2ft PC ...		62420	62421	62423	62424

FUTURA PC with cable glands		Non-maintained emergency luminaire without autotest - cable glands PG 13,5 / 16 - stainless clips (c)			
Type		NM1h	3F NM1h	NM3h	3F NM3h
FUTURA 2.2ft PCc ...		62430	62431	62433	62434
FUTURA PC with cable glands		Non-maintained emergency luminaire with autotest - cable glands PG 13,5 / 16 - stainless clips (c)			
Type		NM1hAt	3F NM1hAt	NM3hAt	3F NM3hAt
FUTURA 2.2ft PCc ...		62440	62441	62443	62444

LEGEND

- NM1h** – non-maintained emergency luminaire, operation time 1 hour
- 3F NM1h** – non-maintained emergency luminaire, operation time 1 hour, 5-wire throughwiring (3F)
- NM3h** – non-maintained emergency luminaire, operation time 3 hours
- 3F NM3h** – non-maintained emergency luminaire, operation time 3 hours, 5-wire throughwiring (3F)
- ...At** – version with battery autotest

Module signalling without autotest

LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

Module signalling with autotest (At)

LED colour	Information
● green ● red	
flashing -	battery charging
- flashing	defective LED module
- shining	defective battery
- -	running test/emergency mode

LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks

**LIGHT FITTING DETAILED VIEW**

FUTURA PC



NANOTTICA NM

NEW



... emergency.

USE

Non-maintained emergency luminaire for escape routes, available for use in high ambient temperature, $t_a = 50^\circ\text{C}$, is intended by its function and shape primarily for being in a set with NANOTTICA light fittings.

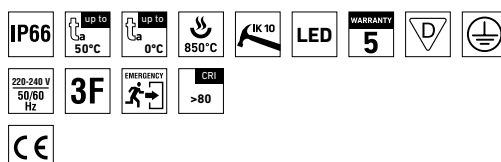
It is recommended for escape routes of interior industrial rooms, storage halls, sports premises, agricultural buildings and laboratories without hazard of explosion of gases, dusts and flammable vapours.

It is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have increased resistance against deformation and impact.

Atmosphere emissions must be considered, as they may reduce the usability of plastics at installation in aggressive environment, see p. 317.

ADVANTAGES

- Light fitting protection **IP66**
- High thermal resistance ranging **from $t_a = 0^\circ\text{C}$ to $t_a = 50^\circ\text{C}$** also for basic Ni-Cd battery type
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Emergency module **1h or 3h**
- Integrated diode for indication of correct operation
- Low energy consumption in StandBy mode



NANOTTICA PC, PCc



TECHNICAL DESCRIPTION

- Light fitting protection: **IP66**
- Maximum ambient temperature: **t_a = 50 °C**
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Maximum light fitting efficiency: 133 lm/W
- **CRI > 80: 6500 K**
- MacAdam = 3 SDCM
- Diffuser: translucent PC (high mechanical resistance, UV stability)
- Body: grey PC (high mechanical resistance, UV stability)
- Reflector: white steel sheet (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foam-filled body groove
- Light fitting connection: **cable gland PG 13,5**
- Electric equipment: **EM kit including Ni-Cd battery without autotest, LED module**
- **EM kit including LiFePO₄ battery with autotest, LED module**
- The package includes: stainless hooks and stainless brackets
- 1-year warranty for battery, 2-year warranty for EM kit (unit + LED module)
- The above stated values of power consumption and luminous flux are within a tolerance of ± 7,5 %

Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Light fitting efficiency [lm/W]	Battery type	Power in standby mode [W]	Charging time [hrs]	Power in charging mode [W]	Net weight [kg]
Non-maintained emergency luminaire without autotest									
NANOTTICA 1.2ft PC NM1h	1	460	4,5	102	Ni-Cd	1,5	24	9	1,2
Non-maintained emergency luminaire with autotest									
NANOTTICA 1.2ft PC NM1hAt	1	460	3,3	133	LiFePO ₄	0,7	12	3,5	1,2

NANOTTICA PC with cable glands		Non-maintained emergency luminaire without autotest - cable glands PG 13,5 - plastic clips	
Type		NM1h	3F NM1h
NANOTTICA 1.2ft PC ...		103644	103645
NANOTTICA PCc with cable glands		Non-maintained emergency luminaire without autotest - cable glands PG 13,5 - stainless clips (c)	
Type		NM1h	3F NM1h
NANOTTICA 1.2ft PCc ...		103651	103652
		Non-maintained emergency luminaire with autotest - cable glands PG 13,5 - plastic clips	
Type		NM3hAt	3F NM3hAt
NANOTTICA 1.2ft PC ...		103643	103646
		Non-maintained emergency luminaire with autotest - cable glands PG 13,5 - stainless clips (c)	
Type		NM3hAt	3F NM3hAt
NANOTTICA 1.2ft PCc ...		103650	103653

LEGEND

- NM1h** – non-maintained emergency luminaire, operation time 1 hour
- 3F NM1h At** – non-maintained emergency luminaire, operation time 1 hour, 5-wire throughwiring (3F), version with battery autotest
- NM3h** – non-maintained emergency luminaire, operation time 3 hours
- 3F NM3hAt** – non-maintained emergency luminaire, operation time 3 hours, 5-wire throughwiring (3F), version with battery autotest

Module signalling without autotest

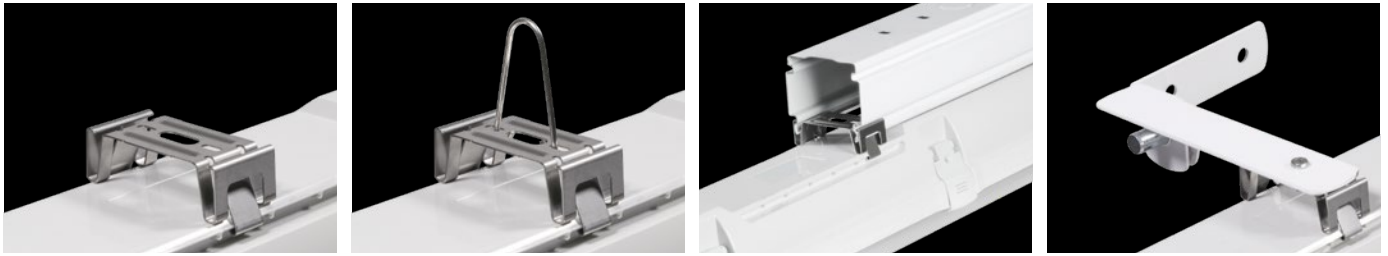
LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

Module signalling with autotest (At)

LED colour	Information
● green ● red	
flashing -	battery charging
- flashing	defective LED module
- shining	defective battery
- -	running test/emergency mode

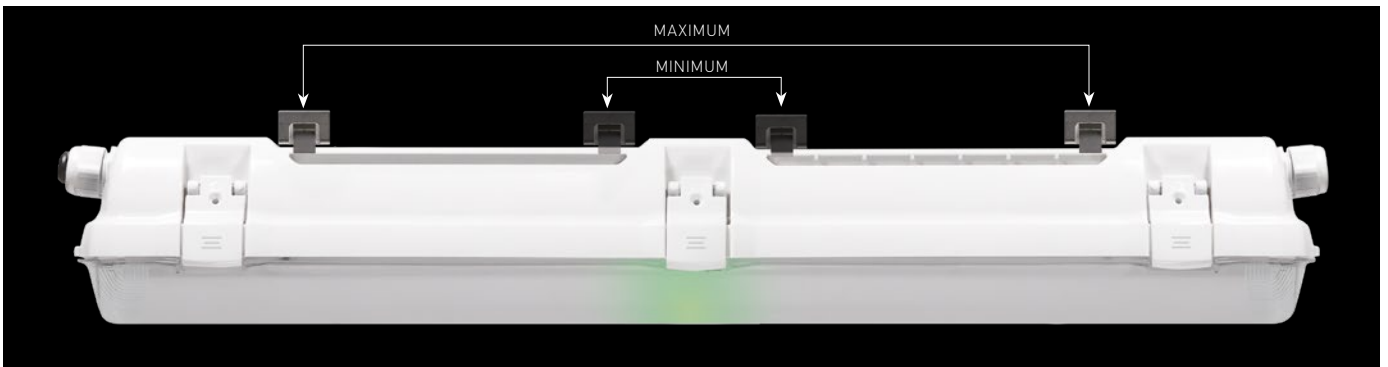
LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling or a wall with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks
- c) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



VARIABLE INSTALLATION PITCH

NANOTTICA NM



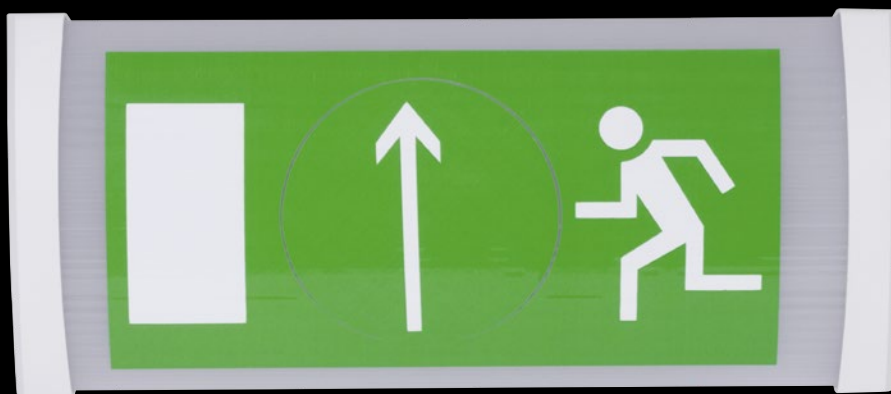
LIGHT FITTING DETAILED VIEW

NANOTTICA NM





BELTR LED NM



... emergency.

USE

The light fitting is suitable for emergency and orientation illumination of hallways, offices, warehouses.

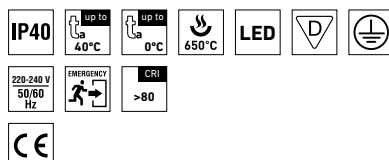
Non-maintained emergency luminaire for escape routes, available for use in high ambient temperature, $t_a = 40^\circ\text{C}$.

Atmosphere emissions must be considered, as they may reduce the usability of plastics at installation in aggressive environment, see p. 317.

ADVANTAGES

- Light fitting protection **IP40**
- High thermal resistance ranging from $t_a = 0^\circ\text{C}$ to $t_a = 40^\circ\text{C}$ also for basic Ni-Cd battery type
- LED module lifetime: 50 000 hours / L80B20
- Luminous flux of the light fitting: **440 lm**
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: steel sheet, white colour (RAL 9003)
- Emergency module **1h or 3h**
- Optional selection of EM kit with battery autotest

- Integrated diode for indication of correct operation
- Optional selection of battery type between **Ni-Cd** or **LiFePO₄**
- Low energy consumption in StandBy mode



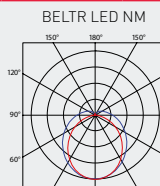
BELTR LED NM, NMAAt



TECHNICAL DESCRIPTION

- Recognizing distance: 25 m
 - Light fitting protection: **IP40**
 - Maximum ambient temperature: **t_a = 40 °C**
 - LED module lifetime: 50 000 hours / L80B20
 - Luminous flux of the light fitting: **440 lm**
 - Maximum light fitting efficiency: 135 lm/W
 - **CRI > 80: 6500 K**
 - MacAdam = 3 SDCM
 - Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
 - Body: steel sheet, white colour (RAL 9003)
- Cable gland: white, rubber
 - Electric equipment:
 - **EM kit including Ni-Cd battery without autotest, LED module**
 - **EM kit including LiFePO₄ battery with autotest, LED module**
 - 1-year warranty for battery, 2-year warranty for EM kit (unit + LED module)
 - The above stated values of power consumption and luminous flux are within a tolerance of ± 7,5 %

Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Light fitting efficiency [lm/W]	Battery type	Power in standby mode [W]	Charging time [hrs]	Power in charging mode [W]	Net weight [kg]
Non-maintained emergency luminaire without autotest									
BELTR LED 2.1ft NM1h	1	440	4,5	98	Ni-Cd	1,5	24	9	1,2
BELTR LED 2.1ft NM3h	3	440	4,5	98	Ni-Cd	1,5	24	9	1,4
Non-maintained emergency luminaire with autotest									
BELTR LED 2.1ft NM1hAt	1	440	3,3	135	LiFePO ₄	0,7	12	3,5	1,2
BELTR LED 2.1ft NM3hAt	3	440	3,3	135	LiFePO ₄	0,7	12	3,5	1,4



BELTR LED NM, NMAAt

Type	Non-maintained emergency luminaire without autotest	
	NM1h	NM3h
BELTR LED 2.1ft NM	54510	54520
Type	Non-maintained emergency luminaire with autotest	
	NM1hAt	NM3hAt
BELTR LED 2.1ft NMAAt	54530	54540

LEGEND

- NM1h** – non-maintained emergency luminaire, operation time 1 hour
- NM3h** – non-maintained emergency luminaire, operation time 3 hours
- ...At** – version with battery autotest

Module signalling without autotest

LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

Module signalling with autotest (At)

LED colour	Information
● green	
● red	
flashing	battery charging
-	flashing defective LED module
-	shining defective battery
-	- running test/emergency mode

LIGHT FITTING ATTACHMENT

Directly to a ceiling or a wall with the use of screws



LIGHT FITTING DETAILED VIEW

BELTR LED NM, NMAAt





HELIOS LED



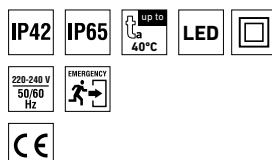
... emergency and orientation.

USE

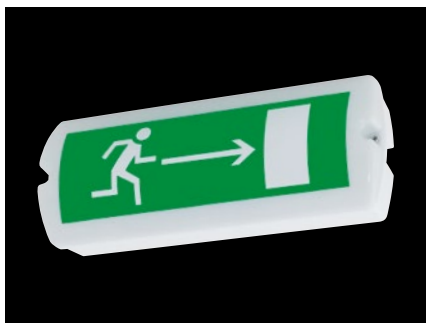
The light fitting is suitable for emergency and orientation illumination of hallways, offices, warehouses and production shop floors.

ADVANTAGES

- Emergency module **1 hr or 3 hrs**
- High-temperature **Ni-Cd HT** battery (M1h and M3h), or LiFePO₄ battery for version with self-test (M1hAt and M3hAt)
- LED indicator of correct operation
- Electronic protection against complete battery discharge
- Possible connection for both permanent (SA) and emergency (SE) lighting
- Light fitting protection **IP42 or IP65**
- High thermal resistance ranging **from t_a = 0 °C to t_a = 40 °C** also for basic Ni-Cd battery type
- Insulation: Class 2

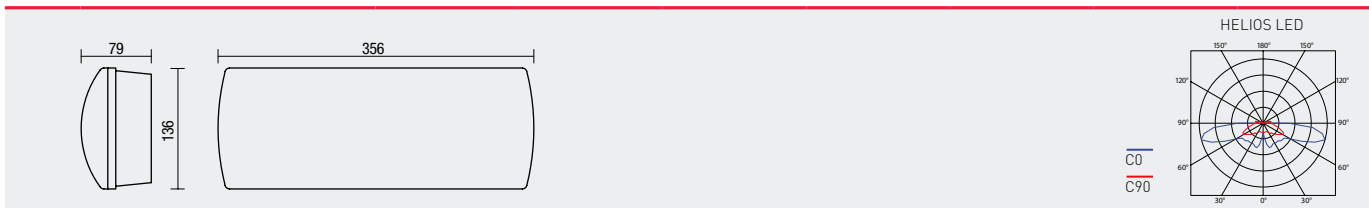


HELIOS LED



TECHNICAL DESCRIPTION

- Recognizing distance: 25 m
- Light fitting protection: IP42 or IP65
- Maximum ambient temperature: $t_a = 40^\circ\text{C}$
- Diffuser: opalized polycarbonate, UV stable
- Body: white polycarbonate
- Reflector: white polycarbonate
- MacAdam = 3 SDCM
- Diffuser and body connected: by screws
- Charging:
 - M1h and M3h variants max. 24 h,
 - M1hAt and M3hAt variant max. 12 h
- Electric equipment: driver, emergency module 1h or 3h; M1h and M3h variants including Ni-Cd HT battery (3,6V); M1hAt and M3hAt variants including LiFePO₄ (6,4V)



Code	Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Light fitting efficiency [lm/W]	Battery type	Charging time [hrs]	Net weight [kg]
Diffuser made of opalized polycarbonate - emergency standby source for both permanent (SA) and emergency (SE) lighting								
43518	HELIOS LED 101 M1h	1	80	1	80	Ni-Cd HT	24	1,1
43511	HELIOS LED 102 M1h	1	150	2	75	Ni-Cd HT	24	1,2
43618	HELIOS LED IP65 101 M1h	1	80	1	80	Ni-Cd HT	24	1,2
43611	HELIOS LED IP65 102 M1h	1	150	2	75	Ni-Cd HT	24	1,2
43538	HELIOS LED 101 M3h	3	80	1	80	Ni-Cd HT	24	1,2
43531	HELIOS LED 102 M3h	3	150	2	75	Ni-Cd HT	24	1,4
43638	HELIOS LED IP65 101 M3h	3	80	1	80	Ni-Cd HT	24	1,2
43631	HELIOS LED IP65 102 M3h	3	150	2	75	Ni-Cd HT	24	1,4
Diffuser made of opalized polycarbonate - emergency standby source for both permanent (SA) and emergency (SE) lighting with autotest								
43548	HELIOS LED 101 M1hAt	1	80	1	80	LiFePO ₄	12	1,1
43541	HELIOS LED 102 M1hAt	1	150	2	75	LiFePO ₄	12	1,2
43648	HELIOS LED IP65 101 M1hAt	1	80	1	80	LiFePO ₄	12	1,1
43641	HELIOS LED IP65 102 M1hAt	1	150	2	75	LiFePO ₄	12	1,1
43568	HELIOS LED 101 M3hAt	3	80	1	80	LiFePO ₄	12	1,1
43561	HELIOS LED 102 M3hAt	3	150	2	75	LiFePO ₄	12	1,3
43668	HELIOS LED IP65 101 M3hAt	3	80	1	80	LiFePO ₄	12	1,1
43661	HELIOS LED IP65 102 M3hAt	3	150	2	75	LiFePO ₄	12	1,2

Example of type marking: 43638 = HELIOS LED IP65 101 M3h

LEGEND

- M1-3h** – emergency standby source with operation time 1-3 hours for both permanent (SA) and emergency (SE) lighting
M1-3hAt – emergency standby source with operation time 1-3 hours for both permanent (SA) and emergency (SE) lighting with autotest
 Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

Module signalling without autotest

LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

Module signalling with autotest (At)

LED colour	Information
● green ● red	
flashing -	battery charging
- flashing	defective LED module
- shining	defective battery
- -	running test/emergency mode

LIGHT FITTING ATTACHMENT

Directly to a ceiling or a wall with the use of screws



LIGHT FITTING DETAILED VIEW

HELIOS LED

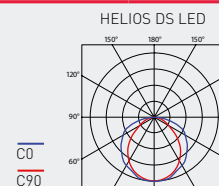
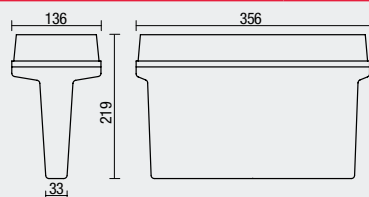


HELIOS DS LED



TECHNICAL DESCRIPTION

- Recognizing distance: 25 m
- Light fitting protection: IP42 or IP65
- Maximum ambient temperature: $t_a = 40^\circ\text{C}$
- Diffuser: opalized polycarbonate, UV stable
- Body: white polycarbonate
- MacAdam = 3 SDCM
- Reflector: white polycarbonate
- Diffuser and body connected: by screws
- Charging:
 - M1h and M3h variants max. 24 h,
 - M1hAt and M3hAt variant max. 12 h
- Electric equipment: driver, emergency module 1h or 3h; M1h and M3h variants including Ni-Cd HT battery (3,6V); M1hAt and M3hAt variants including LiFePO₄ (6,4V)



Code	Type	Autonomy [hrs]	Luminous flux of light fitting [lm]	Power in emergency mode [W]	Light fitting efficiency [lm/W]	Battery type	Charging time [hrs]	Net weight [kg]
Diffuser made of opalized polycarbonate - emergency standby source for both permanent (SA) and emergency (SE) lighting								
43718	HELIOS DS LED 101 M1h	1	80	1	80	Ni-Cd HT	24	1,3
43711	HELIOS DS LED 102 M1h	1	150	2	75	Ni-Cd HT	24	1,4
43818	HELIOS DS LED IP65 101 M1h	1	80	1	80	Ni-Cd HT	24	1,4
43811	HELIOS DS LED IP65 102 M1h	1	150	2	75	Ni-Cd HT	24	1,4
43738	HELIOS DS LED 101 M3h	3	80	1	80	Ni-Cd HT	24	1,4
43731	HELIOS DS LED 102 M3h	3	150	2	75	Ni-Cd HT	24	1,6
43838	HELIOS DS LED IP65 101 M3h	3	80	1	80	Ni-Cd HT	24	1,4
43831	HELIOS DS LED IP65 102 M3h	3	150	2	75	Ni-Cd HT	24	1,6
Diffuser made of opalized polycarbonate - emergency standby source for both permanent (SA) and emergency (SE) lighting with autotest								
43748	HELIOS DS LED 101 M1hAt	1	80	1	80	LiFePO ₄	12	1,3
43741	HELIOS DS LED 102 M1hAt	1	150	2	75	LiFePO ₄	12	1,4
43848	HELIOS DS LED IP65 101 M1hAt	1	80	1	80	LiFePO ₄	12	1,3
43841	HELIOS DS LED IP65 102 M1hAt	1	150	2	75	LiFePO ₄	12	1,3
43768	HELIOS DS LED 101 M3hAt	3	80	1	80	LiFePO ₄	12	1,3
43761	HELIOS DS LED 102 M3hAt	3	150	2	75	LiFePO ₄	12	1,5
43868	HELIOS DS LED IP65 101 M3hAt	3	80	1	80	LiFePO ₄	12	1,3
43861	HELIOS DS LED IP65 102 M3hAt	3	150	2	75	LiFePO ₄	12	1,4

Example of type marking: 43838 = HELIOS DS LED IP65 101 M3h

LEGEND

- M1-3h** – emergency standby source with operation time 1–3 hours for both permanent (SA) and emergency (SE) lighting
M1-3hAt – emergency standby source with operation time 1–3 hours for both permanent (SA) and emergency (SE) lighting with autotest
 Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

Module signalling without autotest

LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

Module signalling with autotest (At)

LED colour	Information
● green ● red	
flashing -	battery charging
- flashing	defective LED module
- shining	defective battery
- -	running test/emergency mode

LIGHT FITTING ATTACHMENT

Directly to a ceiling or a wall with the use of screws



LIGHT FITTING DETAILED VIEW

HELIOS DS LED



PLEXI LED



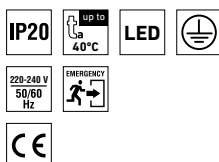
... emergency and orientation, into lower ceilings.

USE

The light fitting is suitable for emergency illumination of hallways and offices. It is intended for installation into plasterboard lower ceilings.

ADVANTAGES

- Emergency module **1 hr or 3 hrs**
- High-temperature **Ni-Cd HT** battery (M1h and M3h), or LiFePO₄ battery for version with self-test (M1hAt and M3hAt)
- LED indicator of correct operation
- Electronic protection against complete battery discharge
- Possible connection for both permanent (SA) and emergency (SE) lighting
- Light fitting protection **IP20**
- High thermal resistance ranging **from t_a = 0 °C to t_a = 40 °C** also for basic Ni-Cd battery type
- Insulation: Class 1

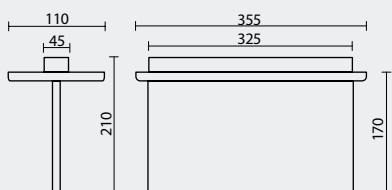


PLEXI LED



TECHNICAL DESCRIPTION

- Recognizing distance: 30 m
- Light fitting protection: IP20
- Maximum ambient temperature: $t_a = 40^\circ\text{C}$
- Diffuser: transparent plexi glass, UV stable
- Body: steel sheet, silver (RAL 9006)
- MacAdam = 3 SDCM
- Charging:
 - M1h and M3h variants max. 24 h,
 - M1hAt and M3hAt variant max. 12 h
- Electric equipment: driver, emergency module 1h or 3h; M1h and M3h variants including Ni-Cd HT battery (3,6V); M1hAt and M3hAt variants including LiFePO₄ (6,4V)



Code	Type	Autonomy [hrs]	Power in emergency mode [W]	Battery type	Charging time [hrs]	Net weight [kg]
Diffuser made of transparent plexi glass - emergency standby source for emergency (SE) lighting						
41519	PLEXI LED 101 NM1h	1	1	Ni-Cd HT	24	2,1
41539	PLEXI LED 101 NM3h	3	1	Ni-Cd HT	24	2,2
Diffuser made of transparent plexi glass - emergency standby source for both permanent (SA) and emergency (SE) lighting						
41518	PLEXI LED 101 M1h	1	1	Ni-Cd HT	24	2,0
41538	PLEXI LED 101 M3h	3	1	Ni-Cd HT	24	2,1
Diffuser made of transparent plexi glass - emergency standby source for both permanent (SA) and emergency (SE) lighting with autotest						
41548	PLEXI LED 101 M1hAt	1	1	LiFePO ₄	12	2,0
41568	PLEXI LED 101 M3hAt	3	1	LiFePO ₄	12	2,1
Diffuser made of transparent plexi glass - driver for central battery supply AC/DC (CB = central battery)						
41578	PLEXI LED 101 CB	-	1	-	-	2,1

Example of type marking: 41538 = PLEXI LED **M3h**

LEGEND

- M1-3h** - emergency back-up source with operating time of 1 - 3 hours (SA) for both permanent and emergency illumination
- M1-3hAt** - emergency back-up source with operating time of 1 - 3 hours (SA) for both permanent and emergency illumination with autotest
- NM1-3h** - emergency back-up source with operating time of 1 - 3 hours (SE) for emergency (non-maintained) illumination
- CB** - for central battery power supply AC/DC (CB = central battery)

Batteries must be formatted before their putting into operation. Assembly instructions must be observed at installation.

Module signalling without autotest

LED colour	Information
● green	
flashing	battery charging
-	running test/emergency mode

Module signalling with autotest (At)

LED colour	Information
● green ● red	
flashing -	battery charging
- flashing	defective LED module
- shining	defective battery
- -	running test/emergency mode

LIGHT FITTING ATTACHMENT

Recessed into plasterboard lower ceilings



LIGHT FITTING DETAILED VIEW

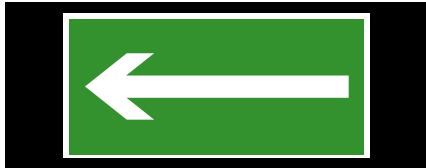
PLEXI LED



Stickers with pictograms for emergency light fittings



Code	Type	Description	Dimensions [mm]
43901	Pictogram 01 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 x 250
41901	Pictogram 01 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300



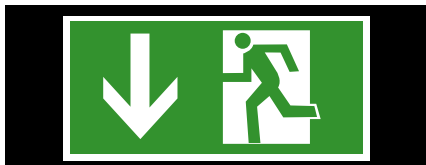
Code	Type	Description	Dimensions [mm]
43902	Pictogram 02 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 x 250
41902	Pictogram 02 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300



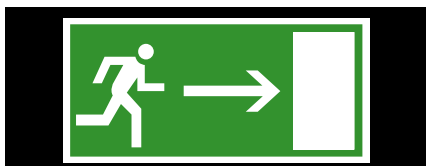
Code	Type	Description	Dimensions [mm]
43904	Pictogram 04 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 x 250
41904	Pictogram 04 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300



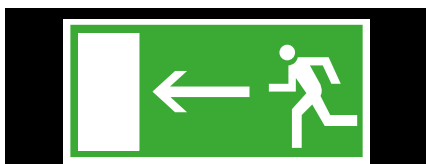
Code	Type	Description	Dimensions [mm]
43905	Pictogram 05 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 x 250
41905	Pictogram 05 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300



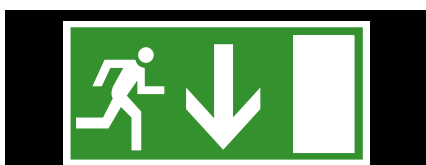
Code	Type	Description	Dimensions [mm]
43906	Pictogram 06 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 x 250
41906	Pictogram 06 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300



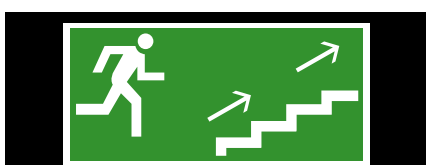
Code	Type	Description	Dimensions [mm]
43907	Pictogram 07 HE	for HELIOS typ and BELTR LED NM types e - 25 m distance	125 x 250
41907	Pictogram 07 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300



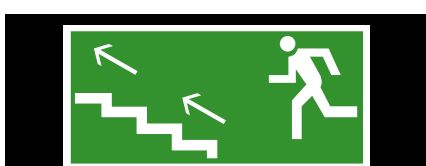
Code	Type	Description	Dimensions [mm]
43908	Pictogram 08 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 x 250
41908	Pictogram 08 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300



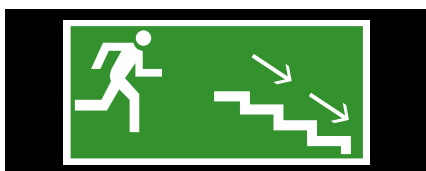
Code	Type	Description	Dimensions [mm]
43909	Pictogram 09 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 x 250
41909	Pictogram 09 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300



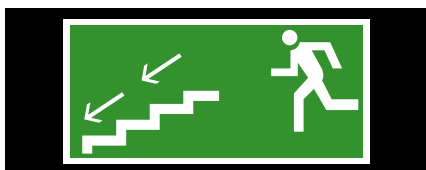
Code	Type	Description	Dimensions [mm]
43910	Pictogram 10 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 x 250
41910	Pictogram 10 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300



Code	Type	Description	Dimensions [mm]
43911	Pictogram 11 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 x 250
41911	Pictogram 11 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300



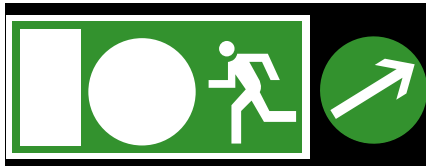
Code	Type	Description	Dimensions [mm]
43912	Pictogram 12 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 x 250
41912	Pictogram 12 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300



Code	Type	Description	Dimensions [mm]
43913	Pictogram 13 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 x 250
41913	Pictogram 13 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300



Code	Type	Description	Dimensions [mm]
43914	Pictogram 14 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 x 250
41914	Pictogram 14 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300



Code	Type	Description	Dimensions [mm]
43915	Pictogram 15 HE	for HELIOS and BELTR LED NM types - 25 m distance	125 x 250
41915	Pictogram 15 PL	for TYLIUS and PLEXI types - 30 m distance	150 x 300

Protective grid



Code	Type	Description	Weight [kg]
43900	OM-HE, TG	protective grid for HELIOS types	0.4

Frame



Code	Type	Description	Weight [kg]
41900	TYLIUS frame	accessories for built-in installation for TYLIUS AC and TYLIUS AL light fitting types	0.4

LIGHTING MANAGEMENT



MANAGEMENT
FOR SIMPLE AND LARGE
LIGHTING SYSTEMS



LIGHTING MANAGEMENT

This innovative system brings a new trend in lighting control. It expands the existing advantages of LED technology by allowing easy control and creation of a variety of lighting scenes. The system is designed for simple as well as complex lighting solutions for offices, corridors and halls. The systems make it possible to regulate lighting based on daylight level, occupancy as well as tunable white and RGB requirements.

DALleco

Our DALleco system is designed for simple installations.

Designed for:

- offices
- showrooms
- conference rooms
- corridors
- school classrooms






DALleco CONTROL

Advantages:

- unit features two DALI circuits (a total of 16 fixtures may be connected to each DALI circuit)
- up to 4 light sensors may be connected
- controlled by a regular button, or an IR remote control
- small dimensions (suitable to be placed in light fixtures)
- the Touch DIM function substituted in problematic installations
- predefined operating modes ensure simplified switch-on process
- the corridor function may be set

Components for DALleco:

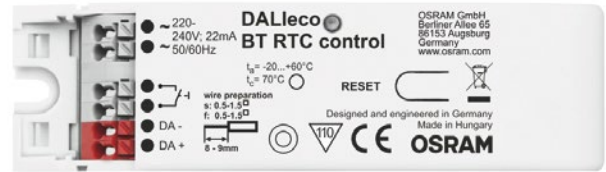
DALleco LS/PD LI	User Remote	DALleco REMOTE
<ul style="list-style-type: none"> • regulation of lighting based on daylight level and occupancy • recessed and surface-mounted installation possible 	<ul style="list-style-type: none"> • infra-red remote control • 4 lighting scenes may be saved and recalled • up to 15 independently controlled systems due to adaptable IR coding 	<ul style="list-style-type: none"> • configuration and switching on of lighting management systems by a remote control 

DALIeco BT RTC

Our DALIeco BT RTC system is designed for simple installation

Designed for:

- offices
- showrooms
- corridors
- training rooms



DALIeco BT RTC

Advantages:

- up to 32 fixtures may be controlled
- tunable white fully supported (device type 8)
- in-built clock for time plans + human centric lighting with up to 24 points
- controlled by a mobile phone or a regular button
- up to 4 separately controlled groups – lighting scenes created easily using an app (Android or iOS)
- small dimensions (suitable to be placed in light fixtures)
- up to 4 sensors and 4 buttons

Components for DALIeco BT RTC:

DALIeco LS/PD CI G2

- regulation of lighting based on daylight level and occupancy
- recessed and surface-mounted installation possible



DALI PRO PB Coupler

- 4 independent push-button inputs
- standard buttons and switches may be used



basicDIM Wireless

Our basicDIM Wireless system is designed for simple installations as well as for medium-size installations where lighting regulation is required but the existing cabling must be retained.

Designed for:

- offices
- showrooms
- conference rooms
- restaurants

Advantages:

- automatic creation of wireless communication with up to 250 units
- may be controlled/set by a mobile app
- wireless connection of light fixtures using an app
- no external gateway required for communication
- firmware easily updated

Components for basicDIM Wireless:

basicDIM Wireless Module	basicDIM Wireless Sensor 5DP 38rc	basicDIM Wireless User Interface
<ul style="list-style-type: none"> when placed in a fixture, the fixture becomes wireless 	<ul style="list-style-type: none"> regulation of lighting based on daylight level and occupancy power supply parts and accessories that correspond to installation type (surface-mounted, recessed) covers to limit motion detection perfect for installation height not exceeding 4 m 	<ul style="list-style-type: none"> battery-powered wall-mounted control panel 4 lighting scenes may be saved and recalled dimming and CCT adjustment possible 

sceneCOM S

Our sceneCOM S system is suitable for a majority of installations.

Designed for:

- offices
- restaurants
- assembly and production halls
- warehouses
- shop floors

Advantages:

- up to 64 fixtures may be controlled
- certified as a DALI-2 device
- small dimensions (may be placed under a wall-mounted switch)
- simple addressing using a mobile app
- time plans may be set
- tunable white fully supported (device type 8)
- up to 16 groups may be created and up to 16 scenes may be saved
- 4 independent inputs for buttons
- power supply ensured by DALI



sceneCOM S Controller

Components for sceneCOM S:

DALI XC G3 CWM 30 DA2

- 4 independent programmable inputs
- to be installed under a wall-mounted switch



DALI PS3

- DALI-2 (70 mA) power supply
- small dimensions



MSensor G3 PIR 10DPI WH

- monitoring of the surrounding areas and motion detection
- parts and accessories that correspond to installation type (surface-mounted, recessed)
- designed for installation height up to 5, 10 or 16 m depending on sensor type



REMOTECONTROL IR6

- infra-red remote control



DALI PROFESSIONAL

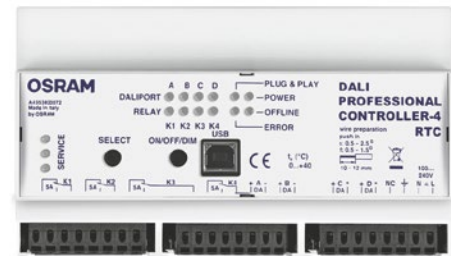
Our DALI PROFESSIONAL system is primarily intended for large installations.

Designed for:

- offices
- restaurants
- assembly and production halls
- warehouses
- shop floors

Advantages:

- 4 DALI circuits – each circuit allows up to 64 fixtures to be controlled
- 16 groups may be created and 16 scenes may be saved in each DALI circuit.
- 4 programmable relays (4x5 A) integrated in the controller
- integrated clock to manage events
- weekly planning possible
- may easily be mounted on a DIN rail
- plug-and-play configuration for instant use without setting



DALI PRO CONT-4-RTC

Components for DALI PROFESSIONAL:

DALI PRO COUPLER

- 4 independent programmable inputs
- standard buttons and switches may be used



DALI HIGH BAY ADAPTER

- integrated lighting control sensor
- regulation of lighting for installation heights up to 13 m
- direct connection to DALI



HIGH BAY

- energy savings up to 35 % (compared to manual switching)
- motion sensor with a switch contact (adjustable power-off delay ranging from 20 seconds to 20 minutes)





ORIENTATIONAL CHART OF ARRANGEMENT OF EMERGENCY LIGHT FITTINGS

Installation height [m]	NANOTTICA					FUTURA				
2,0	3,5	8,5	8,9	9,2	3,8	4,1	9,3	9,0	8,6	3,7
2,5	3,9	9,4	9,9	10,3	4,3	4,3	11,2	10,8	10,3	4,1
3,0	4,3	10,3	10,8	11,2	4,7	4,6	12,0	11,5	11,1	4,3
3,5	4,6	11,1	11,6	12,0	5,0	4,8	12,6	12,1	11,7	4,5
4,0	4,8	11,9	12,4	12,8	5,1	4,9	13,1	12,7	12,2	4,7
5,0	5,0	13,2	13,6	14,1	5,4	5,2	13,7	13,1	12,7	4,9
6,0	5,2	13,8	14,3	14,8	5,4	5,3	14,0	13,5	13,2	5,1

Installation height [m]	PRIMA LED					ALUMAX LED				
2,0	4,1	9,6	8,8	8,0	3,5	3,1	6,7	7,3	7,7	3,4
2,5	4,5	11,4	10,5	9,6	3,9	3,4	8,3	9,0	9,4	4,0
3,0	4,6	12,2	11,3	10,3	4,1	3,7	9,1	9,8	10,3	4,3
3,5	4,8	12,8	11,9	11,0	4,3	4,0	9,8	10,5	11,2	4,6
4,0	4,9	13,3	12,4	11,5	4,4	4,1	10,4	11,2	11,9	4,7
5,0	5,2	13,7	13,0	12,3	4,6	4,6	11,2	12,1	12,8	5,2
6,0	5,4	14,1	13,3	12,8	4,8	4,8	12,1	13,1	13,7	5,4

Installation height [m]	PERUN SLIM					CANOPUS				
2,0	3,6	8,1	8,3	8,6	3,7	3,0	5,9	7,1	8,0	4,1
2,5	4,0	9,8	10,1	10,3	4,1	3,3	7,4	8,8	10,0	4,5
3,0	4,3	10,6	10,9	11,1	4,4	3,7	8,8	10,3	11,9	4,8
3,5	4,5	11,4	11,6	11,8	4,6	3,9	9,6	11,1	12,7	5,0
4,0	4,6	12,0	12,2	12,4	4,7	4,1	10,2	11,8	13,4	5,3
5,0	4,9	12,6	12,7	13,1	5,0	4,6	11,3	12,9	14,6	5,7
6,0	5,1	13,2	13,3	13,7	5,2	4,7	12,2	13,8	15,5	5,9

Installation height [m]	NAOS MPR					NAOS				
2,0	3,2	7,4	7,4	7,5	3,2	3,3	8,4	8,5	8,6	3,4
2,5	3,4	8,7	8,6	8,5	3,5	3,7	9,2	9,3	9,4	3,7
3,0	3,8	9,3	9,2	9,2	3,8	3,8	10,0	10,0	10,0	3,8
3,5	4,1	9,9	10,0	10,0	4,1	4,0	10,4	10,5	10,6	4,0
4,0	4,3	10,5	10,6	10,7	4,2	4,1	10,9	10,9	11,0	4,1

ORIENTATIONAL CHART OF ARRANGEMENT OF EMERGENCY LIGHT FITTINGS

Installation height [m]	LINEA Square					LINEA Round				
2,0	3,8	9,5	9,5	9,5	3,8	3,8	9,5	9,5	9,5	3,8
2,0	4,2	10,4	10,4	10,4	4,2	4,0	10,4	10,4	10,4	4,0
3,0	4,3	11,2	11,1	11,1	4,3	4,3	11,1	11,1	11,1	4,3
3,0	4,5	11,8	11,8	11,7	4,5	4,5	11,7	11,7	11,7	4,5
4,0	4,6	12,3	12,3	12,3	4,6	4,6	12,2	12,2	12,2	4,6

Installation height [m]	LINEA				
2,0	3,4	9,0	8,4	7,7	3,0
2,5	3,7	9,7	9,0	8,3	3,3
3,0	3,8	10,2	9,6	8,9	3,3
3,5	3,8	10,7	10,0	9,3	3,3
4,0	3,8	10,9	10,2	9,5	3,4

Installation height [m]	BELTR LED					MO LED				
2,0	3,4	8,5	8,3	7,8	3,2	4,0	9,8	8,7	7,7	3,2
2,5	3,7	9,3	9,1	8,7	3,4	4,2	10,6	9,6	8,5	3,5
3,0	3,8	10,0	9,8	9,3	3,7	4,5	11,4	10,3	9,3	3,8
3,5	4,0	10,5	10,3	9,8	3,7	4,7	12,0	11,0	10,0	4,0
4,0	4,1	11,0	10,8	10,3	3,8	4,8	12,5	11,5	10,5	4,2

The table of distances is based on the following parameters:

- Maintenance factor: 0.80
- Emergency lighting factor: 1.00
- Minimum illuminance in axis: 1 lx
- Minimum illuminance at half-width of escape route: 0.50 lx
- Evenness in axis max. 40 : 1
- Escape route width: 2.00 m

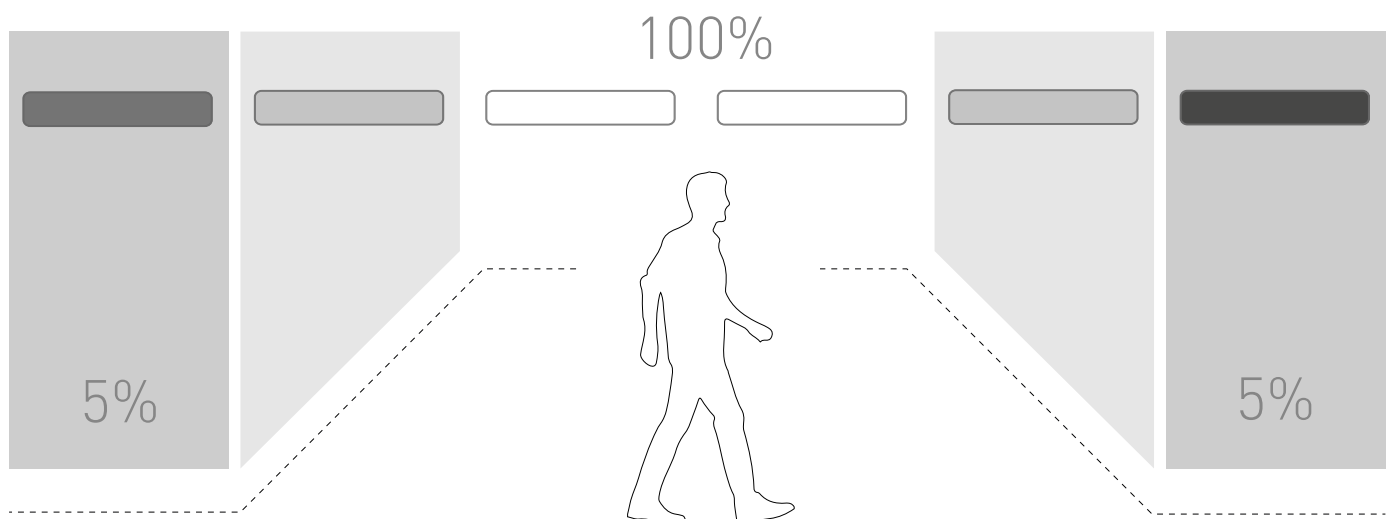
CORRIDOR FUNCTION



Corridor function refers to controlling lighting based on whether motion has been detected.

This is achieved by connecting a regular motion detector to the ballast (with a relay, no triak). Combining the use of such a sensor and the function of the ballast makes it

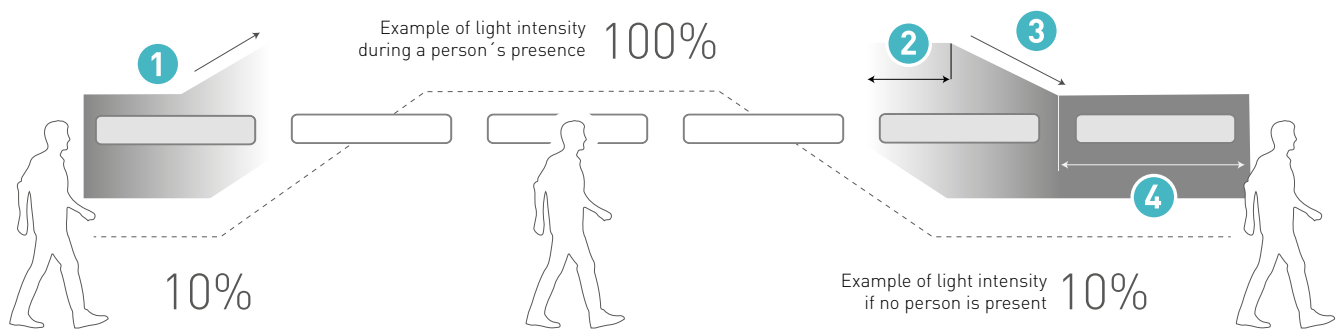
possible to control a single fixture or an entire set of luminaires. Light intensity increases when a person enters the room. When the person has left, the motion detector is set to turn off with a delay, resulting in an automatic reduction of light intensity.



Corridor function is a perfect choice for spaces that require permanent illumination due to security reasons. These include e.g. public buildings, extensive residential complexes, parking houses and lots, pedestrian underpasses and underground railway stations. Light intensity in such spaces is normally low but increases if more light is required.

LED drivers feature a variety of profiles, allowing them to provide the best output under a range of conditions. It is necessary to have the LED driver programmed in order to set the corridor function. Alternatively, a lighting control system may be used to change the parameters.

Profiles are defined by a variety of values (corridor mode):



1. Attack time: time that starts to run once occupancy has been detected. Light intensity increases during this period of time until it reaches the occupancy value (default 0,7s to 100%).
2. Start time: time that starts to run once occupancy is no longer detected (120s). If a person occupying the space is detected during this period of time, start time is reset and starts to run again from zero. If no occupancy is detected during attack time, reduction time will be triggered.
3. Reduction time: period of time during which light intensity is reduced from occupancy value to non-occupancy value (default 32s from 100% to 10%).
4. Turn-off delay time: period of time for which non-occupancy value is maintained. Turn-off delay time may vary based on the profile selected or it may remain undefined (never turns off).
5. Non-occupancy value: light intensity when no person occupies the space (default 10%).
6. Occupancy value: light intensity when one or more persons occupy the space (default 100%).

A user may choose to opt for a digital signal controller (DSI or DALI) anytime without having to replace the luminaire or provide additional control lines.

MERRYTEK MC030S E occupancy sensor: a settings example

It is possible to set sensor data precisely for every application by selecting a combination of DIP switch variables.

DIP Switch settings

Recognition area (sensitivity)

	1	2	3	
I	ON	ON	ON	100%
II	-	ON	ON	75%
III	ON	-	ON	50%
IV	-	-	ON	25%
V	-	-	ON	25%

Daylight threshold

	7	8	9	
I	ON	ON	ON	2 Lux
II	ON	ON	-	10 Lux
III	-	ON	-	25 Lux
IV	ON	-	-	50 Lux
V	-	-	-	*Disabled

Activation time

	7	8	9	
	4	5	6	
I	ON	ON	ON	5s
II	-	ON	ON	30s
III	ON	-	ON	90s
IV	-	-	ON	3 min
V	ON	ON	-	20 min
VI	-	-	-	30 min

*Disabled means daylight sensor is out of order. Once motion has been detected, the switch turns on the fixture regardless of the light intensity of the surroundings.

Source colour rendering correct choice	Shot light 79	Warm white					White				Daylight			Horti-cultural 54
		29	827	927	830	930	25	33	840	940	950	865	965	
Light colour CIE division		3	1B	1A	1B	1A	2A	2B	1B	1A	1A	1B	1A	2A
Shop - foodstuff					●				●					
Shop - meat	●								●					
Shop - textiles, leather				●		●				●				
Hairdressers', beauty salons				●		●				●				
Workshops, mechanics									●		●			
Printing										●	●		●	
Warehouses									●					
Paintshops									●			●		
Colour testing											●		●	
Growing of plants													●	
Households, restaurants			●	●										
Offices, school rooms					●				●					
Museums						●				●				
Hospital rooms				●		●								
Consulting rooms										●				
Sporting facilities					●				●					
Outdoor illumination		●						●					●	

● Recommended ■ Permissible

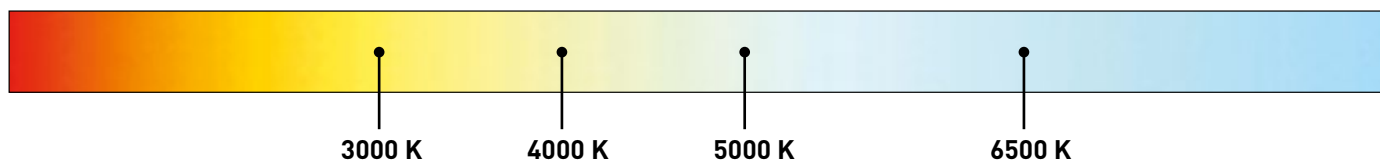
CRI - COLOUR RENDERING INDEX

It determines the colour sensation accuracy at other than daily lighting. It is given at the scale from 0 to 100; the higher the value, the better. The standard colour rendering index of TREVOS LED light fittings is 80, or 90 upon request.

CCT - CHROMATICITY TEMPERATURE

It determines the colour spectrum of the light (it is given in Kelvin - K).

The optimal lighting values are perceived as white light - about 5.000 - 7.000 K (5.000 K - common daylight); higher values are perceived as a light with blue shade, while lower values as a light with yellow to red shade. The standard chromaticity temperature of TREVOS LED light fittings is 4.000 K, or 3.000, 5.000 or 6.500 K upon request.



CHEMICAL RESISTANCE OF SELECTED MATERIALS

Environment	Maximum concentration	Polycarbonate/PC			Acrylate/AC (SAN, PMMA)			ABS			Aluminium/Al			Polyamide (PA6/66)			INOX AISI 304		
		Resistance			Resistance			Resistance			Resistance			Resistance			Resistance		
		yes	partially	no	yes	partially	no	yes	partially	no	yes	partially	no	yes	partially	no	yes	partially	no
Aceton (ketones)		●		●		●		●		●		●		●		●		●	
Aniline			●	●			●	●			●	●			●	●			●
Ammonia	5%			●		●		●			●		●			●			●
Benzaldehyde				●		●			●			●			●			●	
Benzene				●		●			●			●			●			●	
Diethylether (ethers)				●		●			●			●			●			●	
Potassium nitrate	40%	●		●		●		●			●		●			●			●
Ethanol (alcohols)	50%	●		●		●			●			●			●			●	
Ethylacetate (esters)				●		●			●			●			●			●	
Ethyl alcohol		●		●		●		●			●		●			●			●
Phenol				●		●			●			●			●			●	
Glycerine			●	●		●			●			●			●			●	
Heptane				●		●			●			●			●			●	
Ammonium hydroxide	25%			●		●			●			●			●			●	
Sodium hydroxide - base	60%			●		●		●			●			●			●		●
Sodium chloride - salt solution	15%	●		●		●		●			●		●			●			●
Sulphur chloride and Calcium chloride		●		●		●		●			●		●			●			●
Carbon tetrachloride and Chloric ether				●		●			●			●			●			●	
Iron dichloride		●		●		●		●			●		●			●			●
Arsenic acid and Oleic acid		●		●		●		●			●		●			●			●
Citric acid	20%	●		●		●		●			●		●			●			●
Nitric acid	20%		●	●		●			●			●			●			●	
Nitric acid	50%			●		●			●			●			●			●	
Phosphoric acid	30%		●	●		●		●			●		●			●			●
Hydrochlorid acid	5%	●		●		●		●			●		●			●			●
Hydrochlorid acid	35%			●		●			●			●			●			●	
Chromic acid	40%		●	●		●			●			●			●			●	
Formic acid	30%			●		●			●			●			●			●	
Acetic acid	10%	●		●		●			●			●			●			●	
Sulphuric acid	30%	●		●		●			●			●			●			●	
Methanol				●		●			●			●			●			●	
Fuel oil			●	●		●		●			●		●			●			●
Mineral oil			●	●		●		●			●		●			●			●
Vegetable oil			●	●		●		●			●		●			●			●
Rape oil			●	●		●			●			●			●			●	
Lamp oil			●	●		●			●			●			●			●	
Hydrogen peroxide	30%	●		●		●		●			●		●			●			●
Ammonium sulphate	15%	●		●		●		●			●		●			●			●
Toluene				●		●			●			●			●			●	
Turpentine oil				●		●			●			●			●			●	
Trichlorethylene				●		●			●			●			●			●	
Sodium carbonate	20%	●		●		●		●			●		●			●			●
Aliphatic hydrocarbons		●		●		●			●			●			●			●	
Aromatic hydrocarbons				●		●			●			●			●			●	
Alkali				●		●			●			●			●			●	

APPROXIMATE VALUES OF LIGHT FITTING MAINTENANCE FACTOR (LMF)

IP65, IP66 light fittings – NANOTTICA, INNOVA, FUTURA, PRIMA LED, TREX, PERUN SLIM, ALUMAX LED, CANOPUS, LINEA					
	Cleaning intervals in years				
Environment	1,0	1,5	2,0	2,5	3,0
Very clean	0,96	0,93	0,93	0,92	0,92
Clean	0,94	0,91	0,91	0,90	0,90
Common (optional)	0,90	0,88	0,86	0,85	0,84
Dirty (optional)	0,86	0,83	0,81	0,80	0,79

IP20, IP40 light fittings – BELTR LED, M0 LED					
	Cleaning intervals in years				
Environment	1,0	1,5	2,0	2,5	3,0
Very clean	0,94	0,93	0,91	0,9	0,89
Clean	0,88	0,85	0,83	0,81	0,79
Common (optional)	0,82	0,79	0,77	0,75	0,73
Dirty (optional)	0,77	0,73	0,71	0,68	0,65

The table includes only approximate values that may not match the maintenance values achievable for a specific device.

Only damp microfiber cloth can be used for cleaning.

TREVOS, a. s.
Nova Ves 34 — 511 01 Turnov
Czech Republic



trevos.eu

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