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### LED TABLE LAMP



### **DOWNLIGHTS**

32



BASIC LESELI SC



38 **BASIC** LESELI CCT



**BASIC** LESELI DS SLIM



**PRO** RTF CCT IP65



**PRO** RTF100



REFL CCT UGR



PRO **HELIOS UGR** 



MINI DOWNLIGHTS



**BASIC** VALO MINI



**PRO** LESELI MINI PRO

### **TRACKLIGHT**



**PLUS** 54 **DURA BEAM** TRACK LIGHT



**PRO PROJECTOR DURA TL** 



62 EUROSTANDARD **PLUS** 



**PLUS DURABLE TRACK** 



100 **BASIC** SPOT-V E27

### **Indoor**

### LED PANELS 68



74 BASICSLIMFLUX SL

+ UGR



76 PRO SLIMFLUX SL+UGR



78 BASIC SLIMFLUX BL + UGR



80 PRO SLIMFLUX BL + UGR



SLIMFLUX BL UGR CCT



84 PRO SLIMFLUX BL + UGR



86 PLUS SLIMFLUX BL + UGR



88 PLUS SLIMFLUX PANEL ROUND 60



90 PLUS
SLIMFLUX PANEL
UP&DOWN
TRANSLUCENT
DIMMABLE PANEL



SLIMFLUX ACCESSORIES

### **Indoor / Outdoor**

### FIXTURES FOR RETROFIT LAMP



99 PLUS DURABLE TRACK GU10



100 BASIC SPOT-V E27



101 PLUS
DURABLE
SUSPENSION
GU10



103 BASIC SUSPENSION E27



105 BASIC SUSPENSION E27



106 PLUS DURABLE WALL ROUND



107 PLUS

DURABLE WALL
BRICK



109 PLUS
DURABLE
WALKABLE IP67



110 PLUS CATENARIA



111 BASIC CATENARIA

### **Indoor / Outdoor**



112 BASIC DURABLE ZKR2



113 BASIC DURABLE ZKR1



114 BASIC ZKRR - ORIENTABLE RECESSABLE RING



115 PLUS ZK4 -RECESSABLE RING IP65



116 BASIC ZK4 -RECESSABLE RING IP20



117 BASIC ZK4 -RECESSABLE RING IP20

### **Industrial**

#### **BATTEN**



120 BASIC FILINO T5



122 BASIC MINI BATTEN IP65



124 PRO BATTEN BT3 IP65



126 PRO
DAMP PROOF
LED LUMINAIRE
MULTIPOWER CCT
IP65



128 BASIC
DAMP PROOF IP65
COMPLETE WITH 1
TUBE



128 PRO
DAMP PROOF IP65
COMPLETE WITH 1
TUBE



130 BASIC DAMP PROOF IP65 COMPLETE WITH 2 TUBES



130 PRO
DAMP PROOF IP65
COMPLETE WITH 2
TUBES



132 BASIC DAMP PROOF IP65 WITHOUT TUBE



132 BASIC

DAMP PROOF IP65 WITHOUT TUBES

#### **HIGH BAY**



134 BASIC/PRO HBL BEATRIX IP65



136 PLUS PANTH SL2 IP65



HB2 PRO IP65



140 PRO HB5 PRO IP65



142 PRO HB6 CCT PRO IP65

### FLOODLIGHT PROJECTORS



146 BASIC PANTH ST



PANTH H1



152 PLUS PANTH EVO IP65



154 PLUS PANTH EVO PIR SENSOR IP44



136 PLUS PANTH SL2 IP65

### **Outdoor**

### **PROJECTORS**



158 PRO MINILINI IP65



161 BASIC SPIKE LED IP67



164 PLUS INGROUND WALK-ON FITTING IP67



109 PLUS DURABLE WALK-ON IP67

### **DECORATIVE FIXTURES**



166 BASIC PLAFO T2 IP40



168 BASIC BULKHEAD T&O - IP65



171 BASIC SEGNASENTIERO IP65



172 BASIC ZOE IP54

### DRIVERS AND CONTROLLERS



180



182

**3** Filippi **TARGETTI** 

### **3F Filippi** TARGETTI

Since 1952, 3F Filippi S.p.A has been a benchmark in the field of efficient technical lighting fixture design and manufacturing.

The products, which are designed and created exclusively in the Pian di Macina - Pianoro (Bologna) facilities, are an expression of the company's ability to combine the traditional and the modern, craftsmanship and technology, appearance and functionality, and efficiency and sustainability.



Targetti has been designing and producing indoor and outdoor architectural lighting fixtures since 1928.

For over ninety years, its products have been illuminating prized artistic and architectural works throughout the world and are the expression of innovation, research, and attention to detail.

The company has always placed its experience and expertise at the disposal of architects, designers, and professionals in the lighting world.



With decades of experience and solid technical skill, Duralamp offers a wide range of high quality and efficient products.

Thanks to its expertise, it selects the latest generation components, engineering reliable products, with an offer that includes sources, LED strips, and lighting fixtures.



#### An Italian company open to the world

Founded in Florence at the beginning of the 1980s as the Luminous Springs division of Targetti Sankey s.p.a., in 1982 Duralamp became independent and began to develop in the manner most congenial to it, with an emphasis on product engineering and the improvement of technologies and production processes.

The implementation of these processes and methodologies took shape at the beginning of the 2000s, on the one hand with the acquisition, in Joint-Venture, of a production site in China, and on the other hand with the development of reliable and long-lasting partnerships with other leading production realities both in Europe and in the East.

Duralamp is part of the 3F Filippi Group | TARGETTI. The recent acquisition by 3F Filippi has made it possible to develop synergies of great interest, and allowed the Group to structure an extremely varied product portfolio. The breadth of range, production capacity and customer response has now multiplied and is able to meet both the needs of Electrical Equipment Distribution and those of Specifiers and Buyers, Architects and Lighting Designers, at a global level.





#### **Mission and Vision**

We believe that by providing the best products at the best prices it is possible to build a relationship of trust with customers that lasts over time.

Why do we believe we can do it? Because restructuring Standardised commodity products and finding the right balance of quality or even 'forging' light to meet the particular needs of an installation to us is a source of great professional satisfaction that turns into customer service.

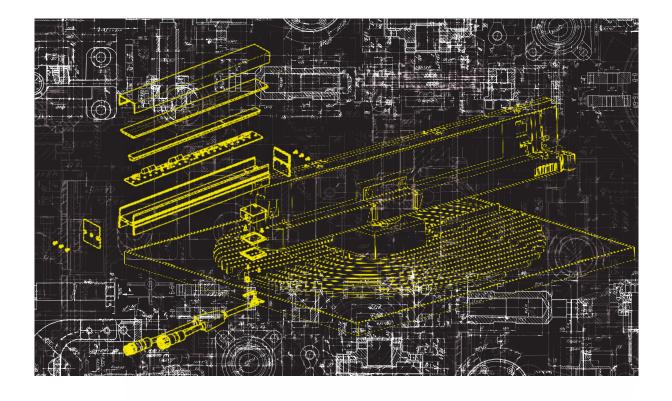
In a wider Vision we work to make a positive impact on people's lives with lighting environments that have never been seen before in terms of quality and usability. While paying attention to containing both design and production costs, we are committed to using cutting-edge technology to create a new dimension of light quality and control to place users at the centre of their choices.



#### **Technological evolution**

The entire world of mass produced "light fixtures" has changed: today the request is for "lighting solutions" that are differentiated according to uses and areas of application. Duralamp is able to provide both a range of retrofitting fixtures and commodity lighting fixtures (Panels, Led, Hi Bay, Batten, Projectors etc.) as well as LED strips and power supply systems and intelligent control systems (Smart Building).

Our product improvements are dedicated to making a difference to the lifespan, emission stability over time and full compliance with requested parameters: they may not be visible but it is their effectiveness that interests us. In a world in continuous evolution we manage to maintain control over production and the choice of components to produce products with a quality/price ratio that can meet the different needs of the market.





### **Custom-made products**

The majority of products distributed worldwide are those that appear in catalogues that are differentiated according to reference markets. Yet it is custom-made products that give us the most satisfaction and allow us to put into practice all our expertise and technical ability... To satisfy particular requests from specifiers, lighting designers and architects we are able to provide 'custom-made' products, engineered, designed and built with the care a tailor puts into a made to measure shirt...



#### Where can you find us?

In many areas Duralamp is present with direct sales representatives able to propose solutions and provide technical support for the choices made by Specifiers. The company can also rely on a network of Distributors who manage their respective local markets with stock and pre-sales and after-sales services. This extensive and varied commercial network is a real asset that complements the international structure of the various branches in the Group. The network Duralamp operates through is really extensive and allows them to participate actively and effectively in projects in different countries around the world, in Europe, the USA, South America and the Far East.



More details on www.duralamp.it



#### Why choose Duralamp

Duralamp has a great advantage: a streamlined and flexible structure ready to study technology to improve existing solutions or discover new ones. Four decades of first-hand experience in production sites in China, an onsite engineering team, constant research into the most suitable materials, the most effective industrial processes, monitoring and controlling all production processes and cutting edge technology in our production sites both in Italy and abroad... all allow us to provide the expertise that has allowed us to successfully conclude high-level projects around the world. Of course in addition to daily operations that are subject to ISO 9001 Certification Quality Standards.



All Duralamp products conform to all European Directives and where required have obtained Quality and Safety marks from other countries:







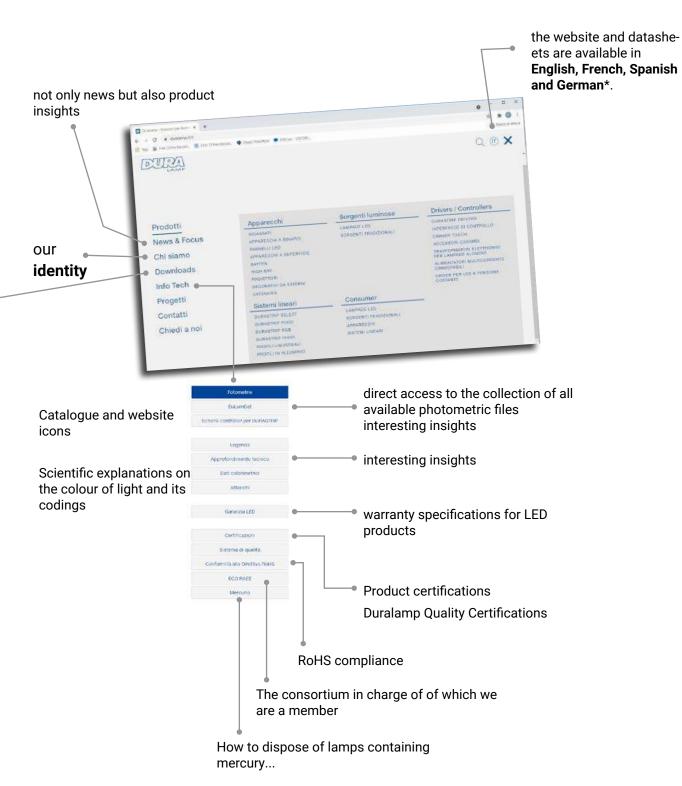


### www.duralamp.com LOADED WITH INFORMATION



We have built a site with a **simple and intuitive structure**: to find the **information you are looking for immediately!** 

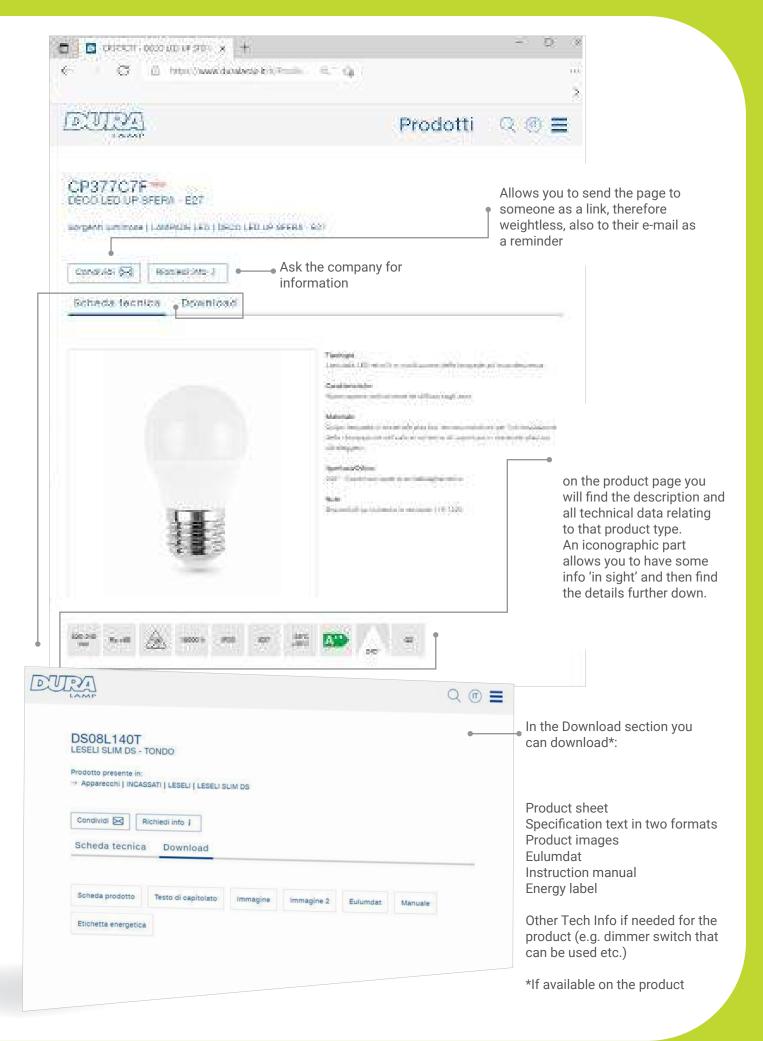
**Discover the tools** that customers, specifiers, lighting designers and the worldwide sales network need to be convincing and successful in the way that suits us best: with fairness and transparency.













re-think Reduce - Use

# Green Quest - a journey towards environmentally friendly methods and processes

### A 'green' mindset cannot be improvised.

At Duralamp, we have been working every day for decades to make our products ALWAYS MORE EFFICIENT, for real energy savings that can be seen from the very first days of use.

Energy saving is a fundamental point, but equally important are optimisations aimed at limiting the consumption of non-renewable raw materials. The right balance between product quality and the careful choice of raw materials, the weight and consistency of plastic materials where irreplaceable, the rationalisation of work processes aimed at reducing consumption in production, improving the environment and the lives of people working. Greater efficiency at all stages of processing to reduce the energy consumption needed to obtain the same result while avoiding waste: we are constantly working in this direction.

A battle fought chip by chip and shipment by shipment to improve the environment in which we all live.

Because the future is now.

### We have chosen.

to engage at various levels:

### Corporate

- Optimization achieved thanks to the new Group Data Centre
- Use of paper from FCC Forests for catalogue printing
- Separate collection at all levels, recycling and reuse wherever possible: the pillars of the green economy!

#### Product

- · Use of recyclable raw materials: commitment to increase their
- up to 90% of the components.
- Packaging made from 70% recycled paper.
- External packaging from FSC forests.
- Study of products that go beyond the concept of disposable equipment, returning to a wise concept of equipment to be reused, to reduce the consumption of materials and allow the use of products over time.

### we have also chosen to act on...

packaging. Packaging is one of the highest volume of 'wasted' materials, and therefore a commitment, for municipalities around the world.

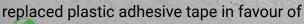
## The ECO packaging programme of Duralamp has:



totally eliminated plastic film on pallets in favour of

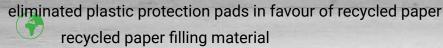


recyclable film





paper tape











paper catalogues from FCP forests





paper adhesive tape



PAPER SHOPPING BAGS coming from FCP forests





compostable pallbox protective hood



recycled or recyclable pallets



packaging boxes coming from FCP forests



<sup>\*</sup> Polystyrene and PVC fillers have been phased out, with rare exceptions.

We have chosen...

to 'rethink' how we produce our products. The right direction is to have more and more items built for long life use, that can be used again and again, and again...











**RETHINK** 

**REDUCE** 

REUSE

**RECYCLE** 









Replaceable lamp luminaires are

perfect for re-use and reduces the amount of materials needing to be disposed of

Previously unimagined lumen/watt efficiencies allow lamps to

significantly reduce energy consumption

Highly popular lamps with exceptionally long service lives means

investing in technology for the benefit of the ecosystem





## DURALAMP and the GREEN packaging revolution:

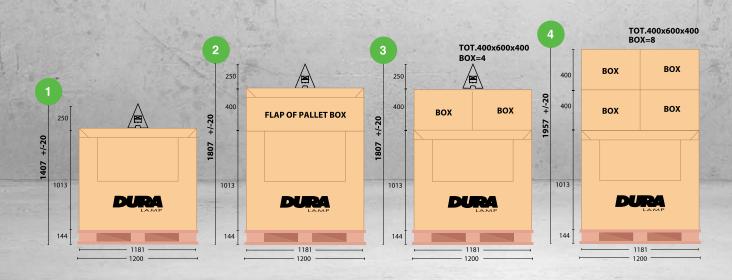
### DURALAMP contributes to a cleaner world ... while ensuring safer shipments.

Together with a leading company specialized in paper packaging, we studied some packaging solutions that guarantees a safer shipments of our products, while pursuing our desire to actively contribute to the elimination of plastic materials in favor of recyclables.

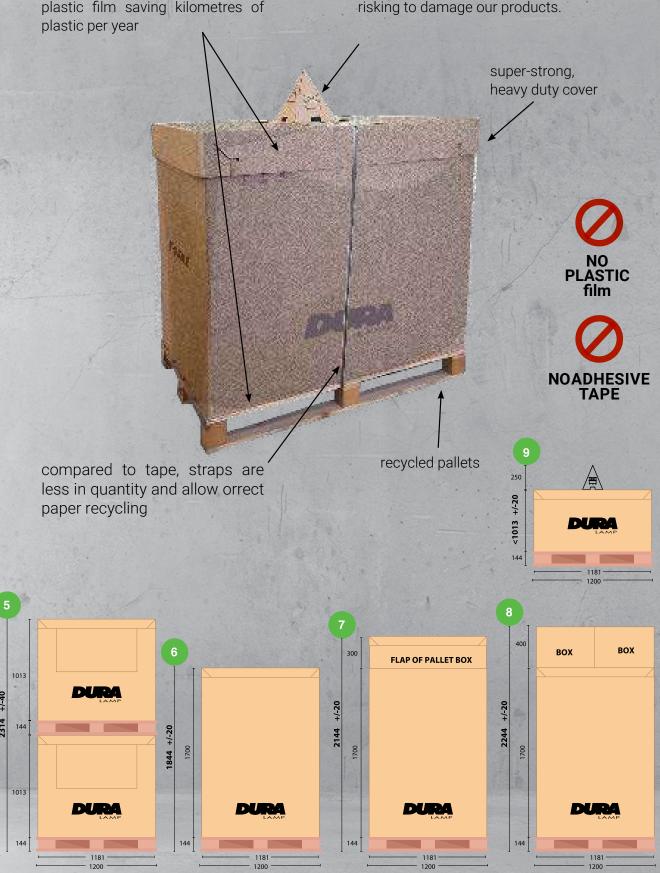
The 120x80 pallets packaging includes a high cardboard box, SUPERBOX, with central loading; a 'hood' in compostable material\* to replace the shrink plastic film, and a strap, instead of the plastic adhesive tape.

With this new palletization, products with a height of up to 170 cm (e.g. tubes) will be shipped vertically, fully protected inside a package complete with a robust closing cap. To better protect shipments, 'no overlapping triangles' will be placed on all pallets less than 2 meters high to prevent other goods to be stocked on top and risking to damage our products.

SUPERBOX: The stadard height is 1 meter but there are many packaging options...



protective cap made of compostable and biodegradable material\*: replaced heat-shrinkable plastic film saving kilometres of plastic per year 'no overlapping triangles' will be placed on all pallets less than 2 meters high to prevent other goods to be stocked on top and risking to damage our products.



<sup>\*</sup> Compliant with EN13432 with OK COMPOST certificate n. TA8011400928, issued by TUV Austria on 13/08/2018.







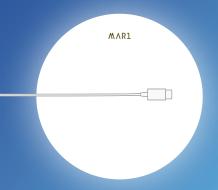








### **MARAMA**





MARAMA



### **MARAMA**

#### **TYPE**

LED table lamp, dimmable and cordless. Elegant and essential design, perfect for both modern and classical settings. Light directed downwards.

#### **CHARACTERISTICS**

Marama is produced in two versions, both dimmable: warm colour temperature (3000K) and changing the temperature of the light from warm to natural (1800K-4000K).

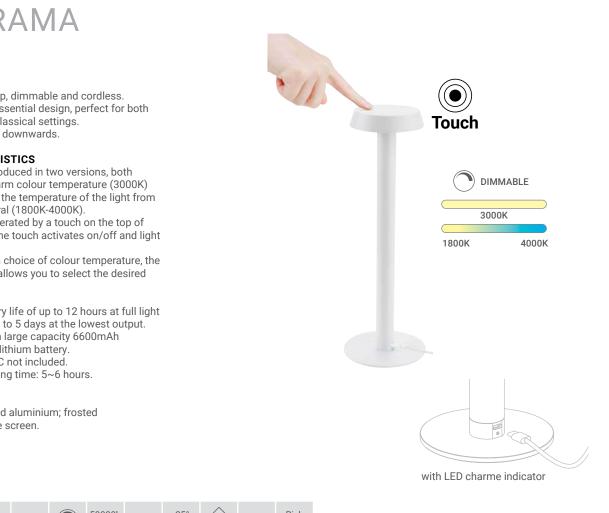
Marama is operated by a touch on the top of the diffuser: the touch activates on/off and light intensity.

Models with a choice of colour temperature, the same 'touch' allows you to select the desired temperature.

Battery: battery life of up to 12 hours at full light output and up to 5 days at the lowest output. Equipped with large capacity 6600mAh rechargeable lithium battery. Charger USB C not included. Battery charging time: 5~6 hours.

#### **MATERIALS**

Powder-coated aluminium; frosted polycarbonate screen.



art.         W         K         Ø         Ø1         H         B011905         ©           MAR13000DIMWH         2         3000         100         120         350         850         988111         10           MAR13000DIMCO         2         3000         100         120         350         850         988128         10           MAR13000DIMBL         2         3000         100         120         350         850         988104         10           MAR11840CCTWH         2         1800-4000         100         120         350         850         988159         10           MAR11840CCTBL         2         1800-4000         100         120         350         850         988166         10	PLUS	5V DC	Ra>90	50000h L70 B20	IP53	-25° +45°C		G3	Risk Group 0				
MAR13000DIMCO         2         3000         100         120         350         850         988128         10           MAR13000DIMBL         2         3000         100         120         350         850         988104         10           MAR11840CCTWH         2         1800-4000         100         120         350         850         988159         10	art.			W		K		Ø	Ø1	Н			
MAR13000DIMBL         2         3000         100         120         350         850         988104         10           MAR11840CCTWH         2         1800-4000         100         120         350         850         988159         10	MAR130	OODIN	1WH	2		3000		100	120	350	850	988111	10
MAR11840CCTWH 2 1800-4000 100 120 350 850 988159 10	MAR130	OODIN	100	2		3000		100	120	350	850	988128	10
	MAR130	OODIN	IBL	2		3000		100	120	350	850	988104	10
MAR11840CCTBL 2 1800-4000 100 120 350 850 988166 10	MAR11840CCTWH		2		1800-40	00	100	120	350	850	988159	10	
	MAR118	40CC	ГВL	2		1800-40	00	100	120	350	850	988166	10



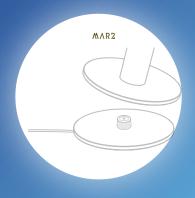
	art		L	L1	Н	8011905		
New	ZK-MAR1-8P	USB Multicharger 8 port	130	65	26	003616	1	



#### **SEE MARAMA'S STORY**



### **MARAMA**





MARAMA



### MARAMA WITH CHARGING BASE

#### **TYPE**

LED table lamp, dimmable and cordless. Elegant and essential design, perfect for both modern and classical settings. Light directed downwards.

#### **CHARACTERISTICS**

Marama is produced in three versions, all dimmable: warm colour temperature (3000K) and changing the temperature of the light from warm to natural (1800K-4000K).

Marama is operated by a touch on the top of the diffuser: the touch activates on/off and light intensity.

Models with a choice of colour temperature, the same 'touch' allows you to select the desired temperature.

Battery: battery life of up to 12 hours at full light output and up to 5 days at the lowest output. Equipped with large capacity 6600mAh rechargeable lithium battery.
Base de chargement incluse.
Battery charging time: 5~6 hours.

#### **MATERIALS**

Powder-coated aluminium; frosted polycarbonate screen.



MAR2 models are built to be charged only with their own base, a good deterrent for those who want steal it! Simply place the lamp on the base to start charging.

.....

PLUS	5V DC	Ra>90	50000h L70 B20	IP53	-25° +45°C	$\left\langle \overline{  }\right\rangle$	G3	Risk Group 0

	art.	W	K	Ø	Ø1	Н		8011905	
New	MAR23000DIMWH	2	3000	100	120	335	1000	994327	10
New	MAR23000DIMCO*	2	3000	100	120	335	1000	994334	10
New	MAR23000DIMBL	2	3000	100	120	335	1000	994310	10
New	MAR21840CCTWH	2	1800-4000	100	120	335	1000	994341	10
New	MAR21840CCTCO*	2	1800-4000	100	120	335	1000	994365	10
New	MAR21840CCTBL	2	1800-4000	100	120	335	1000	994358	10

\* Only by order



	art		L	L1	Н	8011905	
New	ZK-MAR6P	6 Contact Charging Base	510	270	60	994433	1



#### professional recharging with with 6 stations base:

The multiple base allows 6 lamps to be charged at the same time: up to 7 multibases can be connected in series. Perfect for teh hospitality sector.



#### SEE MARAMA'S STORY



### **DOWNLIGHTS**



LESELI SC Diffuse lighting, 4 sizes, 3 light colours for each, 110° wide beam: a range that meets all requirements up to 2600 lumens of real output.

### THE FUNDAMENTALS



### **PRO**

### **HELIOS UGR + FLOOD**

The HELIOS UGR range, luminaires with recessed source: a wide choice in the UGR version. Two luminaires in one with the 80° lens option: one luminaire, several optical solutions.

### LOW THICKNESS



### LESELI DS SLIM

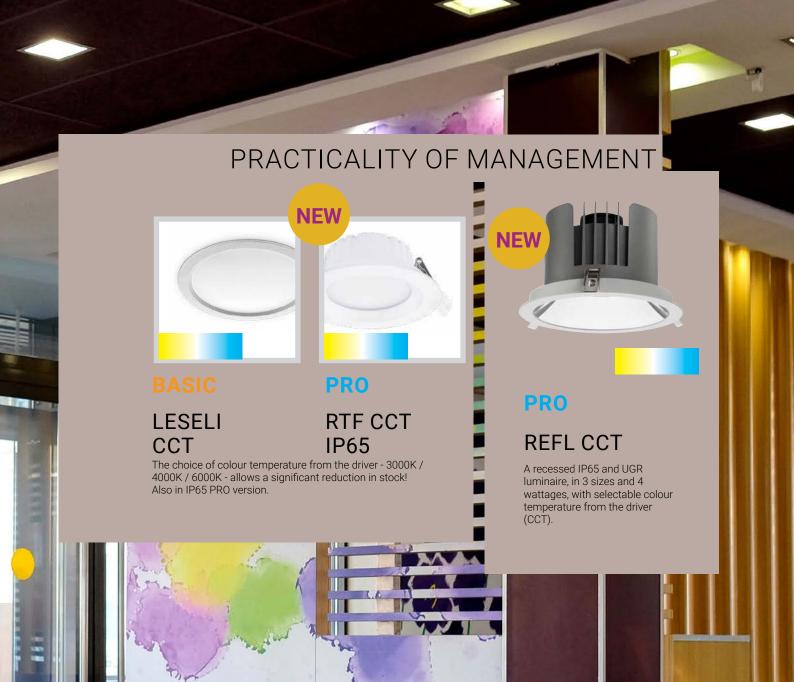
Low-thickness is the equirement? Multiple solutions: BASIC with LESELI SLIM DS, in round or square versions.

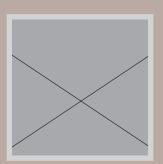


### **PRO**

### RTF100

PRO with the new RTF 100 range: finned aluminium body, choice of power in the two shapes, round and square, and long service life, 50,000h.





### BASIC

**VALO MINI** 



### **PRO**

LESELI MINI PRO

Two ranges, BASIC and PRO, to meet 'cut hole' requirements: all adjustable, plus a dimmable option. Essential design that can be used anywhere as a replacement for the old MR16.





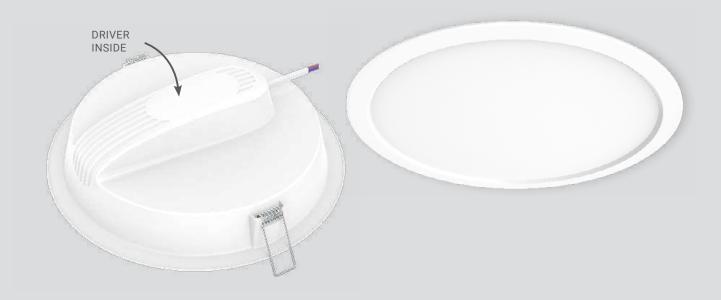
### **LOOKING FOR A DOWNLIGHT?**

									+		Items ordered by cut hole size
	art.	W	lm	Kelvin		Info	Driver	Ra			Page
PRO	DH25L130	9	850	3000K	36°	UGR	Е	>90	65		49
PRO	DH25L140	9	850	4000K	36°	UGR	Е	>90	65		49
PRO	D306TNW	8	680	4000K	36°			>80	68		51
PRO	D306TNW-D	9	575	4000K	36°			>95	68		51
PRO	RTF03L130T	7	600	3000K	110°		Е	>90	75		45
PRO	RTF03L140T	7	630	4000K	110°		E	>90	75		45
PRO	RTF03L160T	7	660	6500K	110°		Е	>90	75		45
PRO	RTF03L130Q	7	630	3000K	110°		Е	>90		75x75	45
PRO	RTF03L140Q	7	665	4000K	110°		Е	>90		75x75	45
PRO	RTF03L160Q	7	700	6500K	110°		E	>90		75x75	45
PRO	RTF03L2EXCCT	7	700	3/4/6000K	100°	IP65	E	>90	85		43
PRO	DR03L1-CCT	12	1100	3/4/6000K	55°	IP20	Е	>90	90		47
PRO	DH40L130	14	1450	3000K	36°	UGR	E	>90	100		49
PRO	DH40L140	14	1450	4000K	36°	UGR	E	>90	100		49
PRO	RTF04L130T	14	1195	3000K	110°		E	>90	120		45
PRO	RTF04L140T	14	1260	4000K	110°		E	>90	120		45
PRO	RTF04L160T	14	1325	6500K	110°		E	>90	120		45
PRO	RTF04L130Q	14	1260	3000K	110°		E	>90		120x120	45
PRO	RTF04L140Q	14	1325	4000K	110°		Е	>90		120x120	45
PRO	RTF04L160Q	14	1390	6500K	110°		Е	>90		120x120	45
PRO	RTF04L2EXCCT	14	1400	3/4/6000K	100°	IP65	Е	>90	120		43
PRO	DR04L2-CCT	20	1800	3/4/6000K	55°	UGR	Е	>90	125		47
PRO	DH60L130	28	2800	3/4000K	36°	UGR	Е	>90	150		49
PRO	DH60L140	28	2800	4000K	36°	UGR	Е	>90	150		49
PRO	RTF08L130T	24	2185	3000K	110°		E	>90	195		45
PRO	RTF08L140T	24	2300	4000K	110°		E	>90	195		45
PRO	RTF08L160T	24	2415	6500K	110°		E	>90	195		45
PRO	RTF08L130Q	24	2185	3000K	110°		E	>90		195x195	45
PRO	RTF08L140Q	24	2300	4000K	110°		E	>90		195x195	45
PRO	RTF08L160Q	24	2415	6500K	110°		Е	>90		195x195	45
PRO	DR04L1-CCT	30	2760	3/4/6000K	55°	UGR	Е	>90	125		47
PRO	RTF08L2EXCCT	32	3200	3/4/6000K	100°	IP65	Е	>90	200		43
PRO	DH80L130	37	3700	3000K	36°	UGR	Е	>90	200		49
PRO	DH80L140	37	3700	4000K	36°	UGR	Е	>90	200		49
PRO	DR08L1-CCT	50	4600	3/4/6000K	55°	UGR	Е	>90	200		47

100		
<b>+</b>	+	Items ordered by cut hole size

art.	W	lm	Kelvin		Info	Driver	Ra			Page
BASIC VA03L130T	7	620	3000K	40°			>80	72		50
BASIC VA03L140T	7	650	4000K	40°			>80	72		50
BASIC DS04L130T	6	310	3000K	120°		Е	>80	105		41
BASIC DS04L140T	6	330	4000K	120°		Е	>80	105		41
BASIC DS04L160T	6	350	6000K	120°		Е	>80	105		41
BASIC DS04L130Q	6	310	3000K	120°		Е	>80		105x105	41
BASIC DS04L140Q	6	330	4000K	120°		Е	>80		105x105	41
BASIC DS04L160Q	6	350	6000K	120°		Е	>80		105x105	41
BASIC DT40L1CCT	12	1200	3/4/6000K	110°		Е	>80	125		39
BASIC DT40L130	12	1000	3000K	110°			>80	150		37
BASIC DT40L140	12	1050	4000K	110°			>80	150		37
BASIC DT40L160	12	1050	6000K	110°			>80	150		37
BASIC DT80L130	22	2000	3000K	110°			>80	195		37
BASIC DT80L140	22	2050	4000K	110°			>80	195		37
BASIC DT80L160	22	2050	6000K	110°			>80	195		37
BASIC DT80L1HP30	30	2600	3000K	110°		Е	>80	195		37
BASIC DT80L1HP40	30	2600	4000K	110°		Е	>80	195		37
BASIC DT80L1HP60	30	2050	6000K	110°		Е	>80	195		37
BASIC DT80L1CCT	22	2200	3/4/6000K	110°		Е	>80	200		39
BASIC DT80L1CCTHP	30	3000	3/4/6000K	110°		Е	>80	200		39
BASIC DS08L130T	18	1230	3000K	120°		E	>80	203		41
BASIC DS08L140T	18	1300	4000K	120°		Е	>80	203		41
BASIC DS08L160T	18	1360	6000K	120°		Е	>80	203		41
BASIC DS08L130Q	18	1230	3000K	120°		Е	>80		203x203	41
BASIC DS08L140Q	18	1300	4000K	120°		Е	>80		203x203	41
BASIC DS08L160Q	18	1360	6000K	120°		Е	>80		203x203	41
BASIC D41540SL2	6	420	4000K	120°		Е	>80	208		41
BASIC DS10L130Q	24	1710	3000K	120°		Е	>80		277x277	41
BASIC DS10L140Q	24	1800	4000K	120°		Е	>80		277x277	41
BASIC DS10L160Q	24	1890	6000K	120°		Е	>80		277x277	41
BASIC DS10L130T	24	1710	3000K	120°		Е	>80	280		39
BASIC DS10L140T	24	1800	4000K	120°		Е	>80	280		39
BASIC DS10L160T	24	1890	6000K	120°		Е	>80	280		39

# LESELI DOWNLIGHT SC







12W

Ø150mm



22W/30W

Ø195mm



#### **REAL LUMENS**

Luminous Flux Data is REAL. Values are measured on actual use conditions. Nominal values of the LED source are not stated.

### LESELI DOWNLIGHT SC

#### TYPE

LED source with SMD technology and high efficiency chip integrated into a recessed luminaire. Built-in driver, except on code DT80L1HP with external driver.

#### **CHARACTERISTICS**

Soft satin effect polycarbonate anti-glare diffuser.

Flicker Free.

#### MOUNTING

Complete with springs for easy fastening into false ceilings. Cable (1 m) with IP65 quick connector.

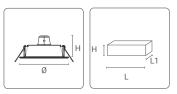
#### **MATERIALS**

Thermally conductive body; extremely light and manageable.



Providing greater visual comfort, improved definition of detail and reduction of stress.

BASIC 220- 240V 50/60Hz	Ra>80	///	5000h IF	P20 VI \$\frac{\psi}{2}\$		-25° -35°C	G	. ~	isk oup 1			
art.	W	lm	cd	K	PF		Ø	Н			8011905	
DT40L130	12	1000	350	3000	0,9	110°	166	54	150	129	984328	20
DT40L140	12	1050	365	4000	0,9	110°	166	54	150	129	984335	20
DT40L160	12	1050	365	6000	0,9	110°	166	54	150	129	984342	20
DT80L130	22	2000	700	3000	0,9	110°	216	58	195	258	984359	10
DT80L140	22	2050	715	4000	0,9	110°	216	58	195	258	984366	10
DT80L160	22	2050	715	6000	0,9	110°	216	58	195	258	984373	10
DT80L1HP30	30	2600	910	3000	0,9	110°	216	58	195	342	984465	10
DT80L1HP40	30	2600	910	4000	0,9	110°	216	58	195	342	984403	10
DT80L1HP60	30	2600	910	6000	0,9	110°	216	58	195	342	984410	10



DRIVER DT80L1HP:

L= 124 mm L1= 45 mm H= 30 mm

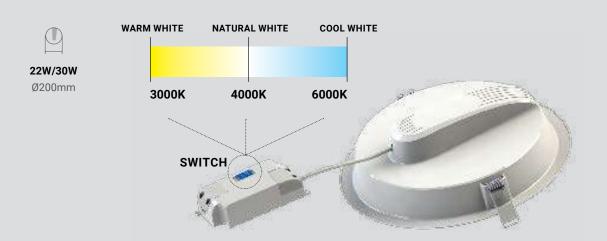
# LESELI DOWNLIGHT CCT







**12W** Ø125mm



#### **REAL LUMENS**

Luminous Flux Data is REAL. Values are measured on actual use conditions. Nominal values of the LED source are not stated.



### LESELI DOWNLIGHT CCT

#### **TYPE**

LED source with SMD technology and high efficiency chip integrated into a recessed luminaire. Luminaire with the possibility of selecting the colour temperature of installation.

#### **CHARACTERISTICS**

Soft satin effect polycarbonate anti-glare diffuser.

Remote power supply equipped with a dip-switch to select the colour temperature. Flicker Free.

#### MOUNTING

Complete with springs for easy fastening into false ceilings. Cable (1 m) with IP65 quick connector.

#### **MATERIALS**

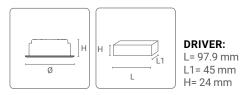
Thermally conductive body; extremely light and manageable.



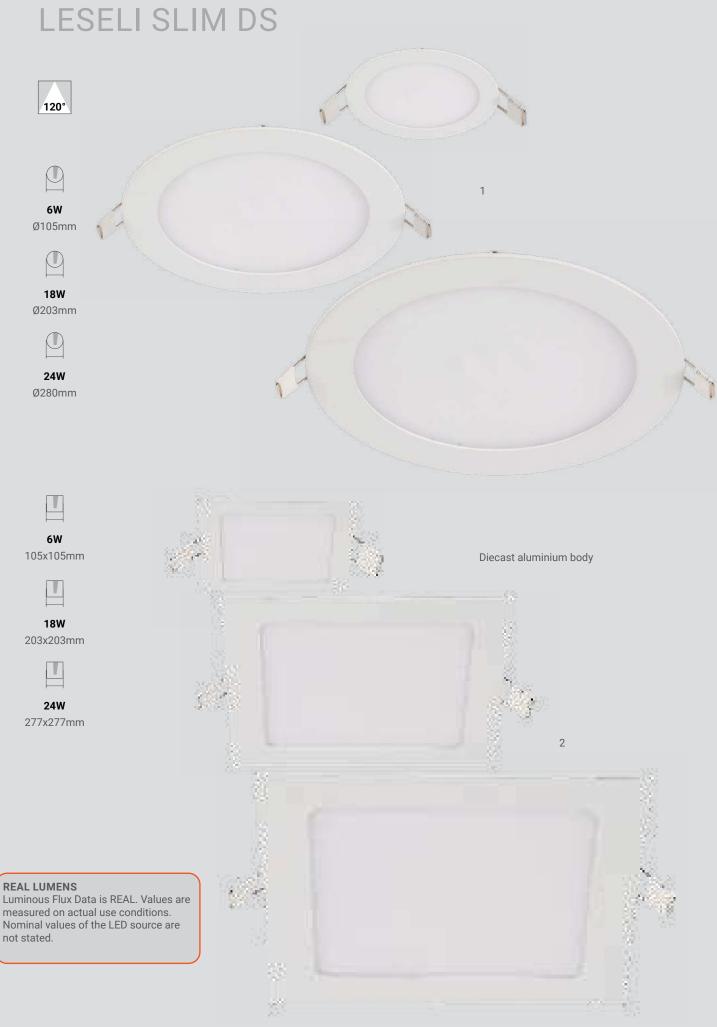
Providing greater visual comfort, improved definition of detail and reduction of stress.

BASIC 220- 240V 50/60Hz	Ra>80	25 L7	000h IF	P20 VI -2 P43 VO +3	5°C [		G3	Risk Group 1				
art.	W	lm	cd	K	PF		Ø	Н			8011905	<b>P</b>
DT40L1CCT	12	1200(1)	430	3000-4000-6000	0,5	110°	140	54	125	96	955441	30
DT80L1CCT	22	2200(1)	770	3000-4000-6000	0,5	110°	216	58	200	214	953133	10
DT80L1CCTHP	30	3000(1)	1050	3000-4000-6000	0,9	110°	216	58	200	214	953126	10

<sup>&</sup>lt;sup>(1)</sup>The lumen and power data indicated refers to the 4000K colour temperature.



For photometries please consult the website.



### LESELI SLIM DS

#### TYPE

Ultra slim LED downlights with SMD technology and a high-efficiency chip.

#### **CHARACTERISTICS**

Downlights with extremely limited thickness and remote driver.

#### MOUNTING

Complete with springs for easy fastening into false ceilings.

#### **MATERIALS**

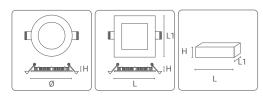
High dissipation die-cast aluminum body with anti-yellowing PC screen. Extremely lightweight for use in any false ceilings.



FLICKER FREE

Providing greater visual comfort, improved definition of detail and reduction of stress.

BASIC 240° 50/60	V Ra>80			h IP20 ' 0 IP43 \		NOOM N	-25° +35°C		G2	Risk Group 0				
art.	Photo	W	lm	cd	K		PF		Ø	Н			8011905	
DS04L130T	1	6	310	88	3000	)	0,5	120°	120	8,5	105	110	954871	40
DS04L140T	1	6	330	93	4000	)	0,5	120°	120	8,5	105	110	954888	40
DS04L160T	1	6	350	99	6000	)	0,5	120°	120	8,5	105	110	954895	40
DS08L130T	1	18	1230	340	3000	)	0,5	120°	225	8,5	203	280	954901	20
DS08L140T	1	18	1300	360	4000	)	0,5	120°	225	8,5	203	280	954918	20
DS08L160T	1	18	1360	378	6000	)	0,5	120°	225	8,5	203	280	954925	20
DS10L130T	1	24	1710	475	3000	)	0,5	120°	295	8,5	280	480	954932	10
DS10L140T	1	24	1800	500	4000	)	0,5	120°	295	8,5	280	480	954949	10
DS10L160T	1	24	1890	525	6000	)	0,5	120°	295	8,5	280	480	954956	10
art.	Photo	W	lm	cd	K	PF		L	L1	Н			8011905	
DS04L130Q	2	6	310	88	3000	0,5	120°	120	120	8,5	105x105	130	954963	40
DS04L140Q	2	6	330	93	4000	0,5	120°	120	120	8,5	105x105	130	954970	40
DS04L160Q	2	6	350	99	6000	0,5	120°	120	120	8,5	105x105	130	954987	40
DS08L130Q	2	18	1230	340	3000	0,5	120°	225	225	8,5	203x203	340	954994	20
DS08L140Q	2	18	1300	360	4000	0,5	120°	225	225	8,5	203x203	340	955007	20
DS08L160Q	2	18	1360	378	6000	0,5	120°	225	225	8,5	203x203	340	955014	20
DS10L130Q	2	24	1710	475	3000	0,5	120°	290	290	8,5	277x277	610	955021	10
DS10L140Q	2	24	1800	500	4000	0,5	120°	290	290	8,5	277x277	610	955038	10
DS10L160Q	2	24	1890	525	6000	0,5	120°	290	290	8,5	277x277	610	955045	10



DRIVER 6W-18W: DRIVER 24W:

L= 88 mm L1= 38 mm H= 22 mm

L= 99 mm L1= 40 mm H= 24 mm

For photometries please consult the website.

# RTF DOWNLIGHT CCT



**IP65** 







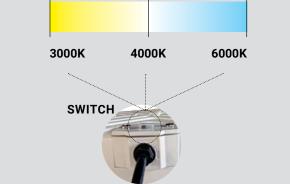
7W Ø85mm



14W Ø120mm



32W Ø200mm



NATURAL WHITE

**COOL WHITE** 

WARM WHITE

#### **REAL LUMENS**

Luminous Flux Data is REAL. Values are measured on actual use conditions. Nominal values of the LED source are not stated.

### RTF DOWNLIGHT CCT

#### **TYPE**

High-efficiency SMD LED sources integrated in an IP65 recessed luminaire, Ra>90, 50000 hours, with selectable temperature colour. The lumen and power data indicated refers to the 4000K colour temperature. Remote driver included.

#### **CHARACTERISTICS**

Family declined in 3 powers and sizes. Dip-switch for colour temperature selection located on the luminaire body. Soft satin effect polycarbonate anti-glare diffuser. Flicker Free.

#### MOUNTING

Complete with springs for easy fastening into false ceilings.

#### **MATERIALS**

Die-cast aluminium body.

#### **APPLICATIONS**

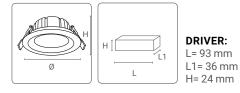
Can be used in bathrooms and humid areas.



Providing greater visual comfort, improved definition of detail and reduction of stress.

	PRO	220- 240V 50/60Hz	Ra>90		50000h .70 B20	IP65	-25° +35°C		G3	Risk Group 1				
	art.		W	lm	cd	K	PF		Ø	Н			8011905	
New	RTF03	L2EXCCT	7	700(1)	310	3000-4000-600	00 0,5	5 100°	100	38	85	242	017767	40
New	RTF04	L2EXCCT	Г 14	1400(1)	540	3000-4000-600	00 0,5	5 100°	140	38	120	300	017774	40
New	RTF08	L2EXCCT	32	3200(1)	1400	3000-4000-600	00 0,9	100°	230	48	200	692	017781	20

<sup>&</sup>lt;sup>(1)</sup>The lumen and power data indicated refers to the 4000K colour temperature.



# RTF100









#### **REAL LUMENS**

Luminous Flux Data is REAL. Values are measured on actual use conditions. Nominal values of the LED source are not stated.

### RTF100

#### TYPE

Ultra slim LED downlights with SMD technology and a high-efficiency chip.

#### **CHARACTERISTICS**

Downlights with extremely limited width and remote driver.

#### MOUNTING

Complete with springs for easy fastening into false ceilings.

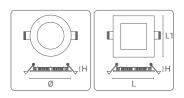
#### **MATERIALS**

High dissipation die-cast aluminum body with anti-yellowing PC screen. Extremely lightweight for use in any false ceilings.



PRO 220- 240\ 50/60I	/ Ra>90			)h IP2 20 IP43	0 VI 3 VO		-25° +35°C		G5/ h24	Risk Group (	0			
art.	Photo	W	lm	cd		K	PF		Ø	Н			8011905	
RTF03L130T	1	7	600	290	) 3(	000	0,5	110°	100	24	75	130	987503	10
RTF03L140T	1	7	630	305	5 40	000	0,5	110°	100	24	75	130	987510	10
RTF03L160T	1	7	660	320	) 60	000	0,5	110°	100	24	75	130	987527	10
RTF04L130T	1	14	1195	585	5 30	000	0,5	110°	145	26	120	208	987534	10
RTF04L140T	1	14	1260	615	5 40	000	0,5	110°	145	26	120	208	987541	10
RTF04L160T	1	14	1325	645	5 60	000	0,5	110°	145	26	120	208	987558	10
RTF08L130T	1	24	2185	965	5 30	000	0,95	110°	225	35	195	423	987565	5
RTF08L140T	1	24	2300	101	5 40	000	0,95	110°	225	35	195	423	987572	5
RTF08L160T	1	24	2415	106	5 60	000	0,95	110°	225	35	195	423	987589	5
art.	Photo	W	lm	cd	K	PF		L	L1	Н			8011905	
RTF03L130Q	2	7	630	310	3000	0,5	110°	100	100	24	75x75	141	987596	10
RTF03L140Q	2	7	665	325	4000	0,5	110°	100	100	24	75x75	141	987602	10
RTF03L160Q	2	7	700	340	6000	0,5	110°	100	100	24	75x75	141	987619	10
RTF04L130Q	2	14	1260	615	3000	0,5	110°	145	145	26	120x120	226	987626	10
RTF04L140Q	2	14	1325	645	4000	0,5	110°	145	145	26	120x120	226	987633	10
RTF04L160Q	2	14	1390	675	6000	0,5	110°	145	145	26	120x120	226	987640	10
RTF08L130Q	2	24	2185	965	3000	0,95	5 110°	225	225	26	195x195	550	987657	5
RTF08L140Q	2	24	2300	1015	4000	0,95	5 110°	225	225	26	195x195	550	987664	5
RTF08L160Q	2	24	2415	1065	6000	0,95	110°	225	225	26	195x195	550	987671	5

DIMMABILITY: RTF100 can be used with multi-current dimming power supply, code DELT40D-M. 3 HOUR STANDBY LIGHTING. Can be used with Kit: KTEMR03



For photometries please consult the website.

# REFL DOWNLIGHT CCT IP20





Ø90mm





20W-30W

Ø125mm

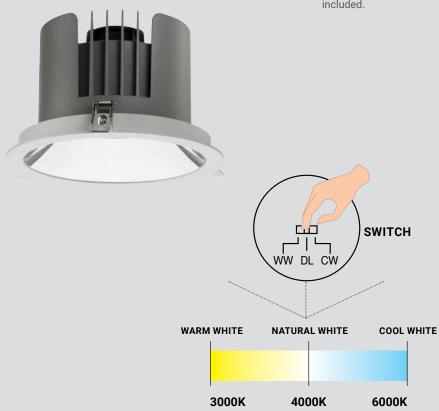


Die-cast aluminium body

Remote driver included.



**50W** Ø200mm



#### **REAL LUMENS**

Luminous Flux Data is REAL. Values are measured on actual use conditions. Nominal values of the LED source are not stated.

Ø 215MM 8"

Ø 135MM 4" Ø 100MM 3"

### REFL DOWNLIGHT CCT IP20

#### **TYPE**

High-efficiency COB LED sources integrated in an IP20 recessed luminaire, Ra>90, 50000 hours, with selectable temperature colour. The lumen and power data indicated refers to the 4000K colour temperature. Remote driver included.

#### **CHARACTERISTICS**

Family declined in 4 power ratings and 3 standard sizes. Dip-switch for colour temperature selection located on the luminaire body. Protective diffuser screen. Flicker Free.

#### **MOUNTING**

Complete with springs for easy fastening into false ceilings.

#### **MATERIALS**

Die-cast aluminium body.



Providing greater visual comfort, improved definition of detail and reduction of stress.

	PRO	220- 240V 50/60Hz	Ra>90		50000h L70	IP20	UGR<19		-25° +45°C		G5/ h24	Risk Group	1			
	art.		W	lm	cd		K	PF		Ø	Н			8011905		
New	DR03I	L1-CCT	12	1100*	1400	3000-4	000-6000	0,5	55°	100	70	90	240	017453	30	
New	DR04I	L2-CCT	20	1800*	3515	3000-4	000-6000	0,5	55°	135	96	125	440	325510	12	
New	DR04I	L1-CCT	30	2760*	3515	3000-4	000-6000	0,9	55°	135	96	125	440	017460	12	
New	DR08I	L1-CCT	50	4600*	4906	3000-4	000-6000	0,9	55°	215	135	200	1040	017477	8	

<sup>\*</sup>the lumen and power data indicated refers to the 4000K colour temperature.



# HELIOS UGR RECESSED FIXTURES



#### REAL LUMENS

Luminous Flux Data is REAL. Values are measured on actual use conditions. Nominal values of the LED source are not stated.

### HELIOS UGR RECESSED FIXTURES

#### **TYPE**

LED source with COB technology and an integrated high efficiency chip in a low glare UGR recessed light fixture. Remote driver included.

#### **CHARACTERISTICS**

The deep recess of the light source combined with the advanced lens technology ensures glare ratings from UGR<11 to UGR<19.

Applications include offices or places of work where computer screens are used and low glare is essential. A sealed light source provides easy maintenance and cleaning.

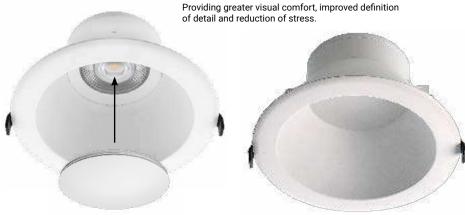
#### MOUNTING

Quick coupling system to false ceilings using springs.

#### **MATERIALS**

Aluminium body; extremely light and easy to manoeuvre.





PRO 220- 240V 50/60Hz	Ra>90		50000h L80 B20		UGR<11 UGR<13 UGR<15 UGR<19		-25° +45°C		G5/ h24	Risk Group 1			
art.	W	lm	cd	K	PF	UGR		Ø	Н			8011905	
DH25L130	9	850	1820	3000	0,95	19	36°	82	53	65	80	936792	50
+ KTDH25-LENS	<b>s</b> 9	750	460	3000	0,95	21	80°						
DH25L140	9	850	1820	4000	0,95	19	36°	82	53	65	80	936808	50
+ KTDH25-LENS	9	750	460	4000	0,95	21	80°						
DH40L130	14	1450	3800	3000	0,95	15	36°	118	60	100	100	936815	50
+ KTDH40-LENS	3 14	1050	650	3000	0,95	21	80°						
DH40L140	14	1450	3800	4000	0,95	15	36°	118	60	100	100	936822	50
+ KTDH40-LENS	14	1050	650	4000	0,95	21	80°						
DH60L130	28	2800	7250	3000	0,95	11	36°	172	98	150	220	936839	4
+ KTDH60-LENS	28	1900	1100	3000	0,95	21	80°						
DH60L140	28	2800	7250	4000	0,95	11	36°	172	98	150	220	936846	4
+ KTDH60-LENS	28	1900	1100	4000	0,95	21	80°						
DH80L130	37	3700	10300	3000	0,95	13	36°	230	128	200	400	936853	4
+ KTDH80-LENS	37	2700	1700	3000	0,95	21	80°						
DH80L140	37	3700	10300	4000	0,95	13	36°	230	128	200	400	936860	4
+ KTDH80-LENS	37	2700	1700	4000	0,95	21	80°						

DIMMABILITY: HELIOS UGR 14W/28W and 37W can be dimmed using multi-current dimming power supply, code DELT40D-M; 3 HOUR STANDBY LIGHTING. Can be used with Kit: KTEMR03



Optional lenses art		8011905	
KTDH25-LENS	Ø 82 Angle Lens 80°	988036	5
KTDH40-LENS	Ø 118 Angle Lens 80°	987992	5
KTDH60-LENS	Ø 172 Angle Lens 80°	988005	5
KTDH80-LENS	Ø 230 Angle Lens 80°	988012	5





DRIVER 2,5"	:DRIVER 4":	DRIVER 6":	DRIVER 8":
L= 100 mm	L= 88 mm	L= 117 mm	L= 117 mm
L1= 40 mm	L1= 40 mm	L1= 43 mm	L1= 43 mm
H= 25 mm	H= 23 mm	H= 24 mm	H= 24 mm

For photometries please consult the website.

### **VALO MINI**

#### **TYPE**

Low thickness, small size LED downlights.

#### CHARACTERISTICS

Compact and easy to install. Tilt Adjustability 30°. Special design of the lens ensures excellent light beam diffusion. Non removable internal power supply.

#### MOUNTING

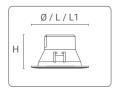
Complete with springs for easy fastening into false ceilings.

#### **MATERIALS**

Heat resistant, anti-yellowing plastic body.



BASIC 220- 240V 50/60Hz	Ra>80		15000h L70 B30	IP20 VI IP23 VO	-25 +35	°C □	G2	Risk Group 0			
art.	W	lm	cd	l K		Ø	Н			8011905	₽•
VA03L130T	7	620	70	0 3000	40°	90	40	72	80	987701	10
VA03L140T	7	650	73	5 4000	40°	90	40	72	80	987718	10



### LESELI MINI PRO

#### **TYPE**

Recessed LED fixtures with integrated drivers.

#### CHARACTERISTICS

A orientable optic with a dichroic effect. Tilt Adjustability 30°. The particular design of the lens ensures excellent diffusion of the light beam. Compact and easy to use.

Non removable internal power supply. Flicker free.

#### MOUNTING

Complete with springs to affix easily into ceilings.

#### **MATERIALS**

Extruded powder coated aluminium body.



Providing greater visual comfort, improved definition of detail and reduction of stress.



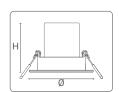


PRO	220- 240V 50/60Hz	Ra>80		50000h L70 B20	IP20 VI IP23 VO	8	-25° +35°C		G5/ h24	Risk Group 1			
art.		W	lm	cd	K			Ø	Н			8011905	
D306TN	W .	8	680	1820	400	0 36	 5°	85	55	68	182	941376	20

• To be discontinued

PRO 5	220- 240V 0/60Hz	Ra>95		50000h L70 B20	IP20 VI IP23 VO		-25° +35°C		G5/ h24	Risk Group 1			
art.		W	lm	cd	K			Ø	Н			8011905	
D306TNV	V-D +	9	575	1410	400	0 30	5°	85	55	68	182	987695	20

• To be discontinued





# **TRACKLIGHT**



### PLUS DURA BEAM TRACK LIGHT

Essential design, the classic cylinder, perfect in any interior. A best-selling range in the retail sector today with 50,000h lifetime and a new power: 40W, 3700 lumens and 7500 cd.



# PROJECTOR DURA TL

Distinctively designed projectors in extruded aluminium. Aperture of 24° on low power and 40° for higher powers. A high-profile range for prestigious installations. 50.000h.



### **EUROSTANDARD PLUS**

New codes but same options and accessories. The standard track version has been revised to achieve an optimised section and offer an even more elegant profile.

## **DURA BEAM - TRACK LIGHT**



The graduated ring opens by unscrewing and the lens can be replaced with a click.

Optimised optics for power.





The centre of gravity always remains in axis with the track irrespective of where the projector is aimed.

Cylindrical section and very small diameter: 50 mm 60 mm 80 mm

12W 20W 30W/40W

Can be equipped with several 'beam-cutting' accessories to meet different project needs:

















**ANTI-GLARE LOUVRES** 

**CUT OFF** 

**ASYMMETRICAL CUT OFF** 

# **DURA BEAM - TRACK LIGHT**

#### **TYPE**

Professional LED projectors for track mounting.

#### **CHARACTERISTICS**

Same shape with 3 different dimensions and 4 power choices to cover all requirements. Can be used with Eurostandard Plus tracks as well as with other brands': Staff, Nordlux, Nordic, Global, etc.

#### OPTIC

High efficiency **Ra>90** LED Chip on Board. Precision optics with dichroic effect lens. Adjustable from 0° to -90° on the vertical plane and 350° on the horizontal plane.

#### **MATERIALS**

Die-cast painted aluminium body; black or white colour.

#### MOUNTING

Onto an electrical track in 3 phases; fixtures equipped with a safety lock to fix to the tracks.

#### NB

Non Dimmable.

#### **POWER SUPPLY**

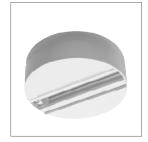
Electronic driver integrated in the fixture body.



220- PLUS 240V 50/60Hz	Ra>90	50000h L70 B20	IP20	-25° +35°C		G4	Risk Group 1				
art.	w	lm	cd	K		Ø	L	Н		8011905	
TB50L130-W	12	920	6100	3000	15°	50	136	136	305	936884	20
TB50L140-W	12	990	6600	4000	15°	50	136	136	305	936907	20
TB50L130-B	12	920	6100	3000	15°	50	136	136	305	936891	20
TB50L140-B	12	990	6600	4000	15°	50	136	136	305	936914	20
TB60L130-W	20	1700	3496	3000	36°	60	148	146	394	936921	20
TB60L140-W	20	1800	3700	4000	36°	60	148	146	394	936945	20
TB60L130-B	20	1700	3496	3000	36°	60	148	146	394	936938	20
TB60L140-B	20	1800	3700	4000	36°	60	148	146	394	936952	20
TB80L130-W	30	2500	5670	3000	36°	80	190	166	673	936969	10
TB80L140-W	30	2700	5880	4000	36°	80	190	166	673	936983	10
TB80L130-B	30	2500	5140	3000	36°	80	190	166	673	936976	10
TB80L140-B	30	2700	5550	4000	36°	80	190	166	673	936990	10
TB80L230-W	40	3500	6850	3000	36°	80	200	166	660	984847	10
TB80L240-W	40	3700	7605	4000	36°	80	200	166	660	984854	10
TB80L230-B	40	3500	6850	3000	36°	80	200	166	660	984861	10
TB80L240-B	40	3700	7605	4000	36°	80	200	166	660	984878	10



# DURA BEAM - TRACK LIGHT ACCESSORIES



#### Adapter for surface installations

art	8007753	
B60220	309284	1
B60221	309277	1



#### Optional lenses

art		8011905	
KTTB60LENS	Ø 60 - 24° - 10 pcs	937249	1
KTTB80LENS	Ø 80 - 24° - 10 pcs	937256	1



#### Anti-glare grid

art	8011905		
KTTB50AGL-B	937010 <b>KTTE</b>	<b>B50AGL-W</b> 937003 Ø 50 - 5 pcs	1
KTTB80AGL-B	937058 <b>KTTE</b>	<b>B80AGL-W</b> 937041 Ø 80 - 5 pcs	1



#### 'High' anti-glare grid

art	8011905	8011905	
KTTB50AGL1-B	937072	<b>KTTB50AGL1-W</b> 937065 Ø 50 - 5 pcs	1
KTTB80AGL1-B	937119	<b>KTTB80AGL1-W</b> 937102 Ø 80 - 5 pcs	1



#### Asymmetric cut off

-,					
art	8011905		8011905		
KTTB50ACO-B	937133	KTTB50ACO-W	937126	Ø 50 - 5 pcs	1
KTTB60ACO-B	937157	KTTB60ACO-W	937140	Ø 60 - 5 pcs	
КТТВ80АСО-В	937171	KTTB80ACO-W	937164	Ø 80 - 5 pcs	1



#### Cut off

art	8011905		8011905		
KTTB50AC01-B	937195	KTTB50AC01-W	937188	Ø 50 - 5 pcs	1
KTTB60ACO1-B	937218	KTTB60AC01-W	937201	Ø 60 - 5 pcs	1
KTTB80AC01-B	937232	KTTB80AC01-W	937225	Ø 80 - 5 pcs	1



# DURATL-TRACK LIGHT



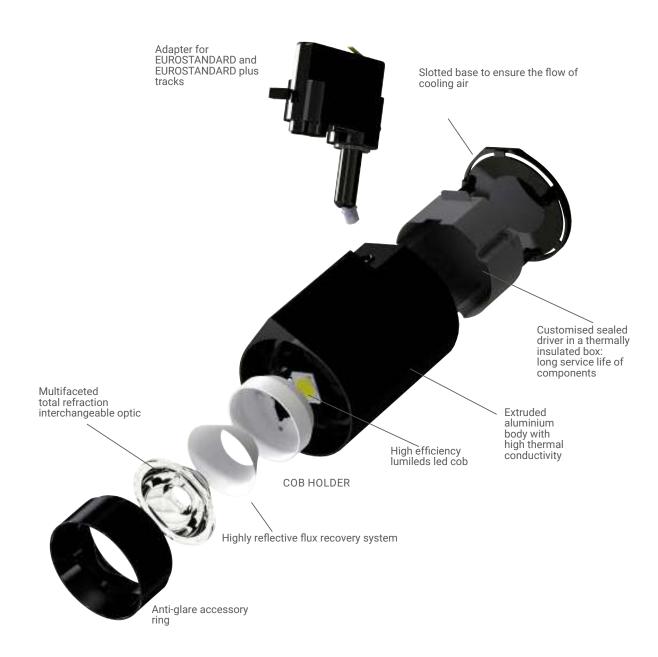




The centre of gravity always remains in axis with the track irrespective of where the projector is aimed.



# **DURA TL - TRACK LIGHT**



### **DURA TL - TRACK LIGHT**

#### **TYPE**

Professional LED projectors for track mounting.

#### **CHARACTERISTICS**

3 different dimensions and 4 power choices to cover all requirements. Can be used with Eurostandard Plus tracks as well as with other brands': Staff, Nordlux, Nordic, Global, etc.

#### **OPTIC**

High efficiency Ra>90 LED Chip on Board. Precision optics with dichroic effect lens. Adjustable from 0° to -90° on the vertical plane and 350° on the horizontal plane.

#### **MATERIALS**

Die-cast painted aluminium body; black or white colour.

#### MOUNTING

Onto an electrical track in 3 phases; fixtures equipped with a safety lock to fix to the tracks.



#### NB

Non Dimmable. TRIAC (200-250V) dimmable version on request.

#### **POWER SUPPLY**

Electronic driver integrated in the fixture body.

PRO 110- 240V Ra>85 50/60Hz		50000h L70 B20	IP20	-25° +35°C		G5/ h24	Risk Group 1					
art.	W		lm	cd	K		Ø	L	Н		8011905	
TD10S-3K8L-MSP-W +	10		855	2090	3000	24°	60	95	167	370	902674	20
TD10S-4K8L-MSP-W +	10		900	2200	4000	24°	60	95	167	370	863173	20
TD10S-3K8L-MSP-B +	10		855	2090	3000	24°	60	95	167	370	902667	20
TD10S-4K8L-MSP-B +	10		900	2200	4000	24°	60	95	167	370	861865	20
TD15M-3K8L-FL-W +	15		1235	1890	3000	40°	100	108	184	648	902681	10
TD15M-4K8L-FL-W +	15		1300	1990	4000	40°	100	108	184	648	851699	10
TD15M-3K8L-FL-B +	15		1235	1890	3000	40°	100	108	184	648	902698	10
TD15M-4K8L-FL-B +	15		1300	1990	4000	40°	100	108	184	648	851705	10
TD22M-3K8L-FL-W +	22		2185	3135	3000	40°	100	108	184	648	902711	10
TD22M-4K8L-FL-W +	22		2300	3300	4000	40°	100	108	184	648	863241	10
TD22M-3K8L-FL-B +	22		2185	3135	3000	40°	100	108	184	648	902704	10
TD22M-4K8L-FL-B +	22		2300	3300	4000	40°	100	108	184	648	861872	10
TD38L-3K8L-FL-W +	38		3800	5795	3000	40°	111	141	189	927	851668	10
TD38L-4K8L-FL-W +	38		4000	6100	4000	40°	111	141	189	927	863197	10
TD38L-3K8L-FL-B +	38		3800	5795	3000	40°	111	141	189	927	851682	10
TD38L-4K8L-FL-B •	38		4000	6100	4000	40°	111	141	189	927	861896	10



◆ To be discontinued

# ACCESSORIES DURA TL - TRACK LIGHT



#### Adapter for surface installations

art	8007753	
B60220 +	309284 1	
B60221 +	309277 1	



#### Optional lenses

art		8011905	
TDM-LENS24 •24° lens for MEDIUM BODY	24°	861254	10
TDM-LENS60 •60° lens for MEDIUM BODY	60°	861261	10
TDL-LENS24 • 24° lens for LARGE BODY	24°	861308	10
TDL-LENS60 • 60° lens for LARGE BODY	60°	861315	10



#### Anti-glare louvre

art		8011905	
TDM-AGL +	Anti-glare louvre for MEDIUM BODY	861278	6
TDL-AGL +	Anti-glare louver for LARGE BODY	861322	6



#### Barn door flaps

art		8011905	
TDM-BDF +	Barn door flaps for MEDIUM BODY	861285	6
TDL-BDF +	Barn door flaps for LARGE BODY	861339	6



#### Asymmetrical

art		8011905	
TDM-ACO +	Asymmetric cut-off for MEDIUM BODY	861292	6
TDL-ACO +	Asymmetric cut-off for LARGE BODY	861346	6

• To be discontinued

### **EUROSTANDARD PLUS**

#### **TYPE**

System is a 3 phase mixed system with two additional conductors intended to manage a general data signal (for example DALI, DMX). Electrified track in three lengths in extruded anodized aluminum or in extruded painted aluminium. Conductors in copper insulated in PVC.

#### MOUNTING

There are three possible installation systems: directly on false ceiling (using the needlepoints on the track and the suspension kit), on ceiling using a metal clip or hanging by a mounting kit.

#### **POWER SUPPLY**

Frequency: 50Hz.

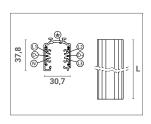
Rated current and voltage: L1/L2/L3/N/ground 16A/440V + D+/D-2x1A/50V FELV AC (DALI). Phase / phases power: 3,6kVA / 10,8kVA.

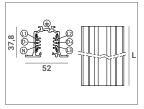






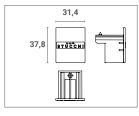
#### **TRACKS**

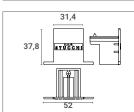




Standard					
art.		L			}
B60-1SB	B60-1SW	1000	1100	1	
B60-2SB	B60-2SW	2000	2100	1	
B60-3SB	B60-3SW	3000	3100	1	
Recessed					
art.		L		E	}
B60-1RB	B60-1RW	1000	1100	1	
B60-2RB	B60-2RW	2000	2200	1	
B60-3RB	B60-3RW	3000	3400	1	

#### **END CAPS**





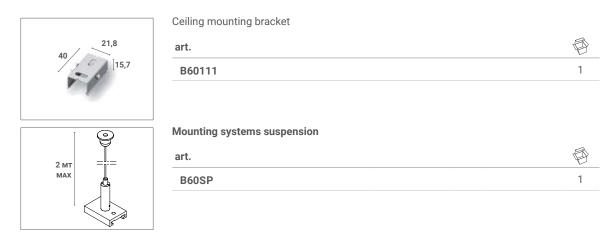
#### Dead end

B604B B604W 1

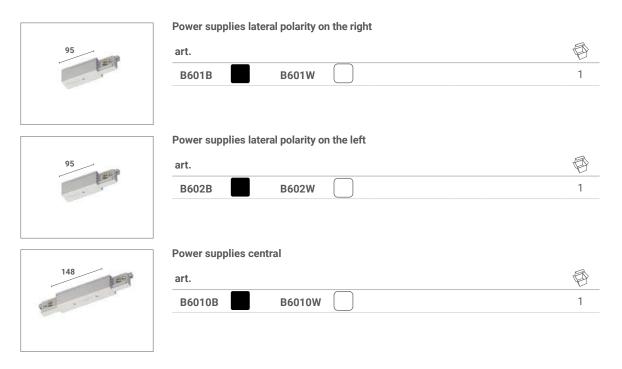
Dead end - recessed

B604RB B604RW 1

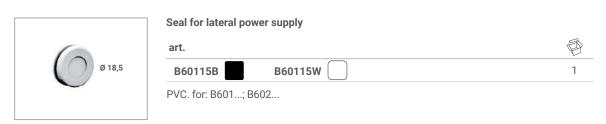
#### **MOUNTING SYSTEMS**



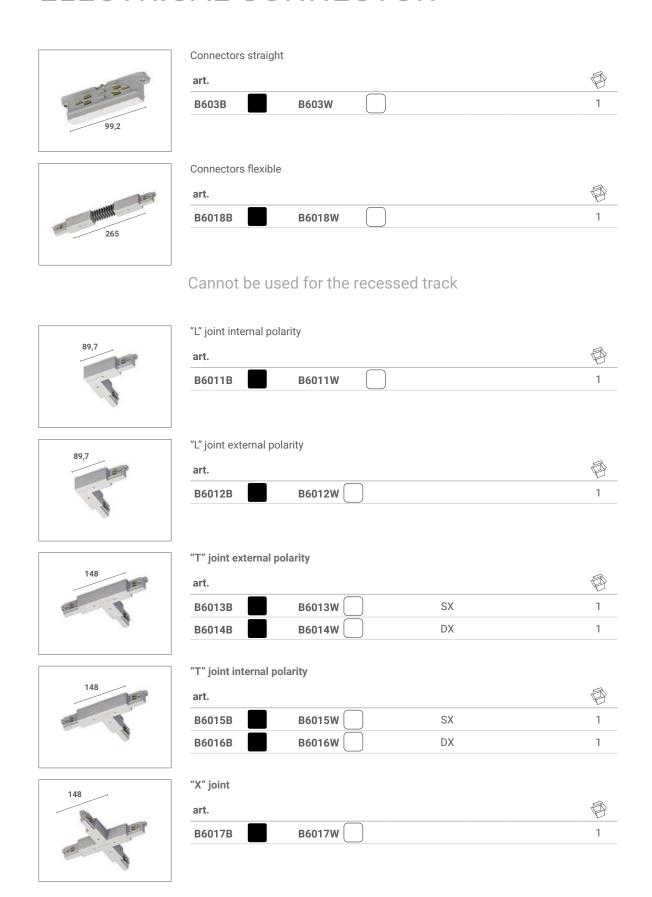
#### **POWER SUPPLY**



### LATERAL FEEDING SYSTEMS ACCESSORIES

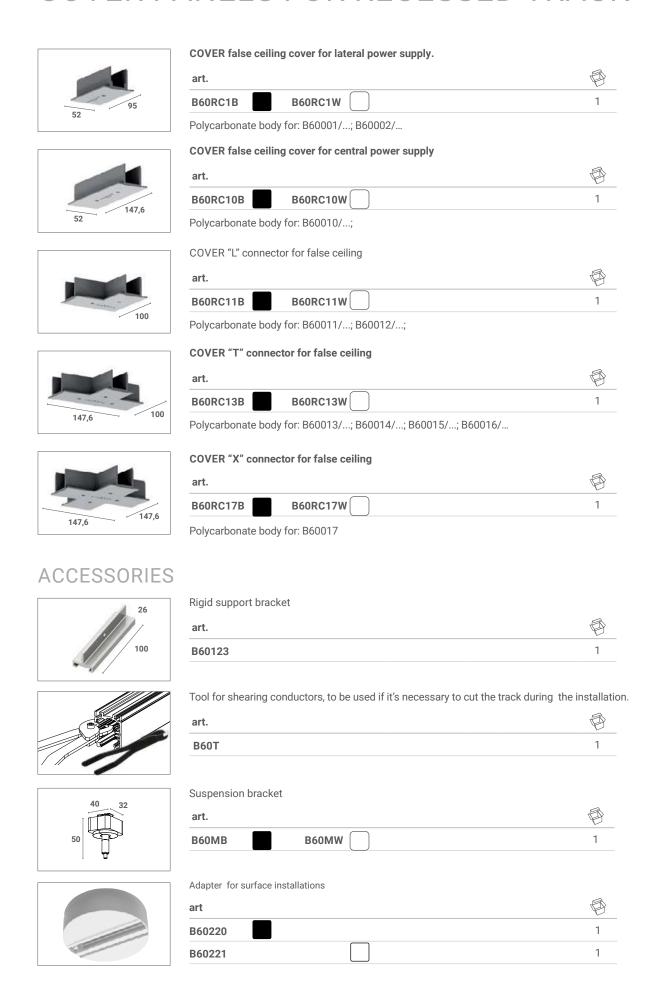


### **ELECTRICAL CONNECTOR**



Note: All joints except the linear joint can be used as power supply.

# COVER PANELS FOR RECESSED TRACK

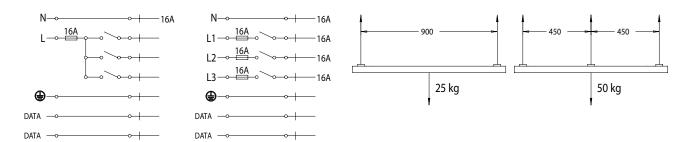


### **EUROSTANDARD PLUS**

#### **ELECTRICAL SCHEME**

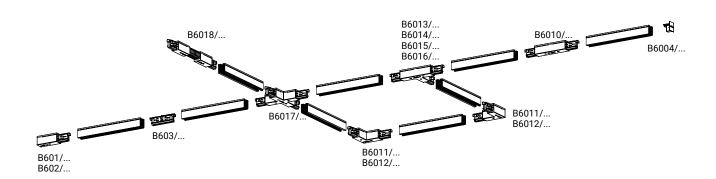
#### **LOAD SCHEME**

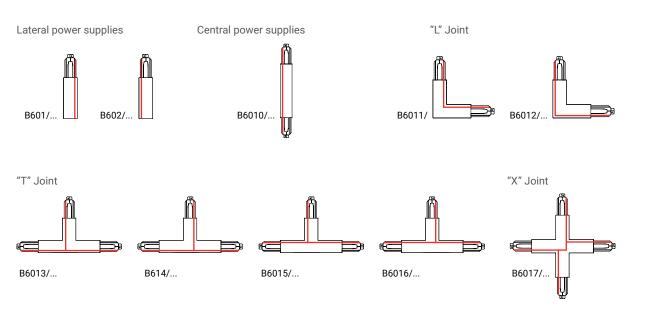
During the wiring the electrical scheme of picture must be followed.



#### INSTALLATION

There is a polarity on the lighting track to guarantee the right connection of the multiple pieces of the track. Also end-feeds and connection joints have a polarity that must be taken into account in order to choose the right component. In the catalogue sketches of these articles, the position of the polarity is highlighted with a red line.





Top view



**DURA BEAM** 3000K and 4000K

# **LED PANELS**



### **BASIC**

SLIMFLUX SL S3 + UGR



### **SIDELIGHT**



SLIMFLUX SL C + UGR



### LED PANELS



#### **PLUS**

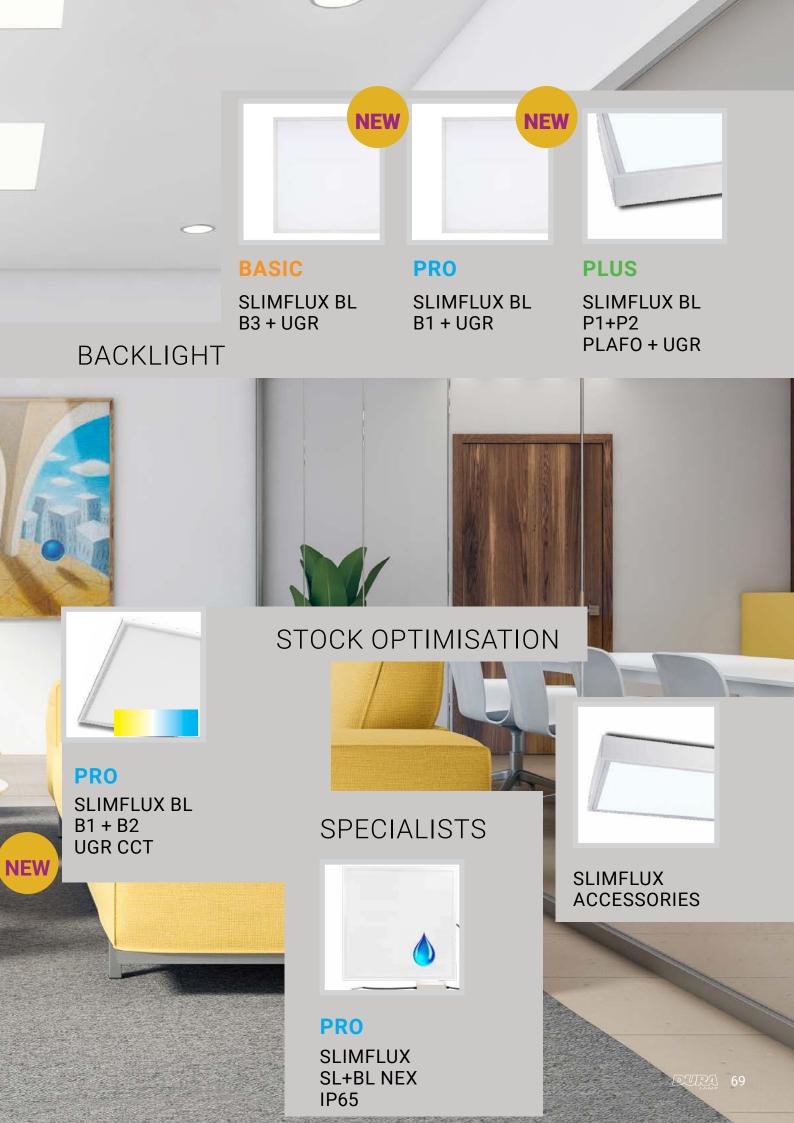
**SLIMFLUX PANEL ROUND 60** 



#### **PLUS**

**SLIMFLUX PANEL UP&DOWN TRANSLUCENT DIMMABLE PANEL** 





# LOOKING FOR A LED PANEL?



25000h **G2** 



35000h

**G3** 



50000h

G4h24

62X62

60X60

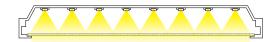
60x120

30x120

### **SLIMFLUX SL**



### **SLIMFLUX BL**



BACKLIGHT LED PANELS DIRECT ILLUMINANCE

		art.	W	BL/SL	. Im	Kelvin	UGR	Ra	IP	
	BASIC	LP6060B3-830	30	BL	3400	3000K		80	IP20	
	BASIC	LP6060B3-840	30	BL	3600	4000K		80	IP20	
	BASIC	LP6060B3-860	30	BL	3600	6000K		80	IP20	
New	BASIC	LP6060B3-830ST	40	BL	3600	3000K		80	IP20	
New	BASIC	LP6060B3-840ST	40	BL	4000	4000K		80	IP20	
New	BASIC	LP6060B3-860ST	40	BL	4000	6000K		80	IP20	
New	BASIC	LP6060B3UGR-840ST	40	BL	4000	4000K	•	80	IP20	
New	BASIC	LP6060S3-840	30	SL	3600	4000K		80	IP20	
New	BASIC	LP6060S3UGR-840	30	SL	3600	4000K	•	80	IP20	
	PLUS	LP6060P1-840	40	BL	4000	4000K		80	IP20	
	PLUS	LP6060P2-840	60	BL	6000	4000K		80	IP20	
	PLUS	LP6060P2-860	60	BL	6000	6000K		80	IP20	
	PLUS	LP6060P1UGR-840 □	40	BL	4000	4000K	•	80	IP20	60X60
New	PRO	LP6060UGR-840C (x)	28	SL	3730	4000K	•	80	IP20	OUVOO
	PRO	LP6060B1-840	40	BL	4000	4000K		80	IP20	
	PRO	LP6060B1UGR-840HP	45	BL	5500	4000K	•	80	IP20	
	PRO	LP6060B1UGR-840	28	BL	4000	4000K	•	80	IP20	
New	PRO	LP6060B1UGR-840Z1 (x)	28	BL	4000	4000K	•	80	IP20	
	PRO	LP6060B1UGR-930	40	BL	3000	4000K	•	90	IP20	
	PRO	LP6060B1UGR-940	40	BL	4000	4000K	•	90	IP20	
	PRO	LP6060B1UGR-8CCT	40	BL	4500*	3/4/6000K	•	80	IP20	
	PRO	LP6060B2UGR-8CCT	47	BL	5500*	3/4/6000K	•	80	IP20	
	PRO	LP6060B1UGR-9CCT	40	BL	4000*	3/4/6000K	•	90	IP20	
	PRO	LP6060B1NEX	40	BL	4000	4000K		80	IP65	
										40744
	PRO	LP6262UGR-840	33	SL	4350	4000K	•	80 I	P20	62X62
New	BASIC	LP30120S3-840	30	SL	3600	4000K		80 I	P20	
New	BASIC	LP30120B3UGR-840ST	40	BL	4000	4000K	•	80 I	P20	
	PLUS	LP30120P1-840	40	BL	4000	4000K		80 I	P20	30x120
New	PRO	LP30120UGR-840C (x)	28	SL	3730	4000K	•	80 I	P20	00/11
New	PRO	LP30120B1UGR-840	28	BL	4000	4000K	•	80 I	P20	
	PRO	LP30120B1UGR-9CCT	40	BL	4000*	3/4/6000K	•	90 I	P20	
	PLUS	LP60120P1-840	60	BL	6000	4000		80 I	P20	60x120
	PRO	LP60120B1UGR-9CCT	50	BL	5200*	3/4/6000K	•	90 I	P20	00X 1 Z 0

<sup>(</sup>x) Without driver

art.

W BL/SL

lm

Kelvin

UGR Ra

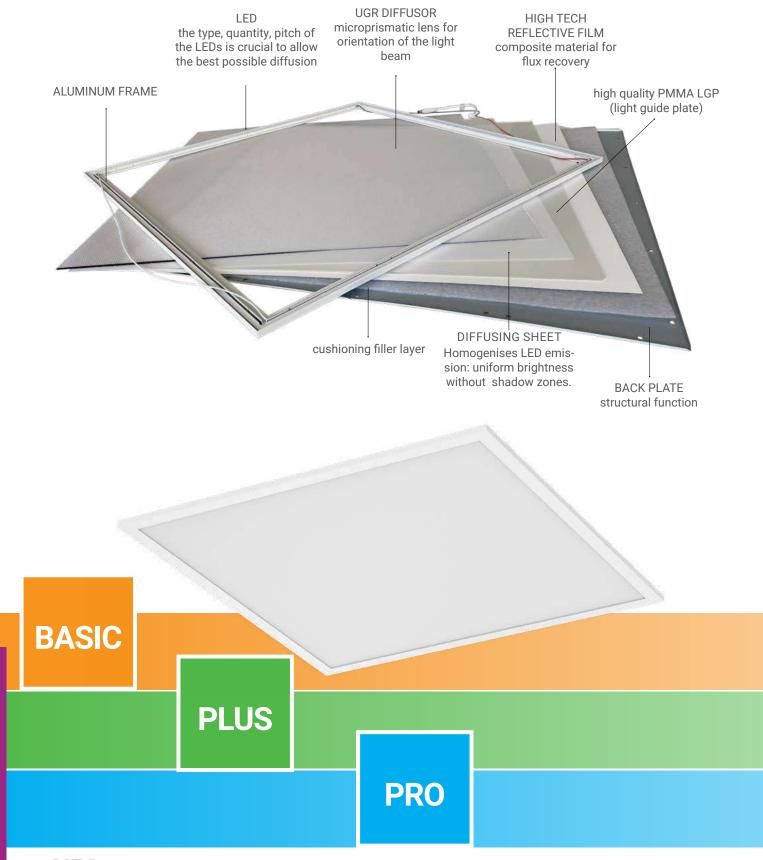
<sup>\*</sup> Lumen and power data are referred to 4000K colour temperature.

<sup>☐</sup> Version with integrated frame for surface mounting.

# WHAT'S THE

# **SIDELIGHT PANELS:**

**EXTREMELY THIN DIFFERENCE?** LIGHT IS DIFFUSED FROM THE SIDE OF THE FRAME TO THE PANEL

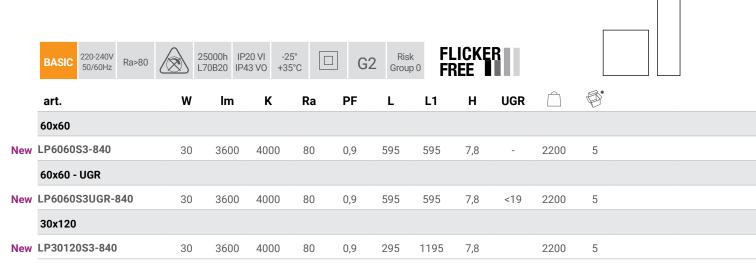


# **BACKLIGHT PANELS:**

DIRECT LIGHT BEST EFFICIENCY



# SLIMFLUX SL + UGR BASIC SIDELIGHT



<sup>-</sup> BASIC: high-transmittance PMMA primary optics.

## NOTE:

<sup>-</sup> SLIMFLUX SL - BASIC: 5 pieces pack with single items' box.

<sup>•</sup> Minimum Order Quantity

The one-piece frames are equipped with a rear bracket to be fixed to the ceiling. Kit frames are fixed directly to the ceiling: the panel is slid inside the three sides already fixed before closing.

# SLIMFLUX SL + UGR BASIC BASIC SIDELIGHT



LPLAF060 LPLAF0603 LPLAF0604 LPLAF060P

LPLAF0120 LPLAF01203 LPLAF0301204 LPLAF0601204

KTLP-SPU LP-SSK FASTCON-30 KTLPW1-MS KTEMR03

OPTIONAL DRIVERS DELT65D-M

UGR<19

• • • • LP6060S3-840

• • • • LP6060S3UGR-840

LP30120S3-840



Monoblock Frames LPLAF060 thickness 6 cm LPLAF0120 thickness 6 cm



Anti-fall safety wire and terminal block LP-SSK Only terminal block FASTCON-30



Mounting kit frames LPLAF0603 thickness 5cm LPLAF01203 thickness 5cm LPLAF0604 thickness 8cm LPLAF0301204 thickness 8cm



Adjustable suspension wires kit KTLP-SPU



Frame with springs for flush mounting (kit to be assembled) LPLAFO60P



Metal springs kit for recessed installation KTLPW1-MS



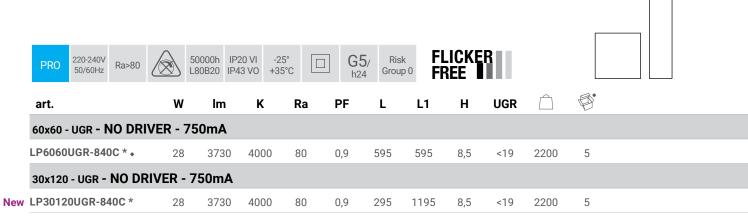
Power supply for backup lighting KTEMR03



ON/OFF, multicurrent dimmable DALI and 1-10V drivers: see drivers' section



# SLIMFLUX SL UGR PRO SIDELIGHT



<sup>\*</sup> Driver NOT included, to be fitted with the suitable driver. Safety wire included. .

• Minimum Order Quantity

	art.	W	lm	K	Ra	PF	L	L1	Н	UGR		ۥ
	62x62 - UGR - NO DRIVE	R - 900	)mA									
New	LP6262UGR-840	33	4350	4000	80	0,9	615	615	9	<19	2500	5

 $<sup>\</sup>mbox{\ensuremath{^{\star}}}$  Driver NOT included, to be fitted with the suitable driver. Safety wire included. .

## NOTE:

<sup>-</sup> PRO: high-transmittance PMMA primary optics.

<sup>-</sup> SLIMFLUX SL - PRO: 5 pieces pack with single items' box.

d. .

<sup>-</sup> PRO: high-transmittance PMMA primary optics.

Minimum Order Quantity

<sup>-</sup> SLIMFLUX SL - PRO: 5 pieces pack with single items' box.

The one-piece frames are equipped with a rear bracket to be fixed to the ceiling. Kit frames are fixed directly to the ceiling: the panel is slid inside the three sides already fixed before closing.

# SLIMFLUX SL UGR PRO SIDELIGHT



LPLAF060 LPLAF0603 LPLAF0604 LPLAF060P

LPLAF0120 LPLAF01203 LPLAF0301204

KTLP-SPU

LPLAF0601204

LP-SSK
FASTCON-30
KTLPW1-MS

KTEMR03

OPTIONAL DRIVERS DALI

UGR<19

• • • • LP6060UGR-840C

• • • • • • LP30120UGR-840C

A01485 ZKLP700EL A01486

LP6262UGR-840

ZKLP700EL

A01486



Monoblock Frames LPLAF060 thickness 6 cm LPLAF0120 thickness 6 cm



Anti-fall safety wire and terminal block LP-SSK Only terminal block FASTCON-30



Mounting kit frames LPLAF0603 thickness 5cm LPLAF01203 thickness 5cm LPLAF0604 thickness 8cm LPLAF0301204 thickness 8cm



Adjustable suspension wires kit KTLP-SPU



Frame with springs for flush mounting (kit to be assembled) LPLAFO60P



Metal springs kit for recessed installation KTLPW1-MS

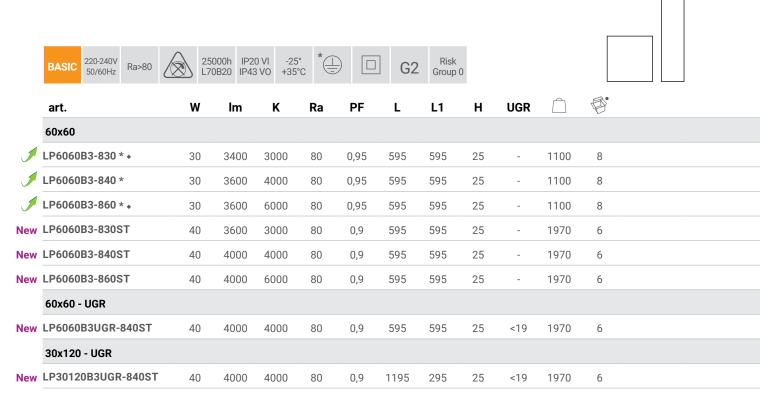


Power supply for backup lighting KTEMR03



ON/OFF, multicurrent dimmable DALI and 1-10V drivers: see drivers' section

# SLIMFLUX BL - BASIC BACKLIGHT



• To be discontinued • Minimum Order Quantity

- BASIC: high-transmittance PMMA primary optics.
- SLIMFLUX BL BASIC: 6 or 8 pieces package with 2-pcs inner box.

### NOTES:

- Insulation Class I panels cannot be made dimmable by changing the driver nor can they be used with the ballast for stand-by lighting.
- Pay attention to the thickness of the backlit panels. In these panels the driver is recessed between the rear compartment and the edge of the panel and does not extrude from the total thickness shown in the table.
- The one-piece frames are equipped with a rear bracket to be fixed to the ceiling. Kit frames are fixed directly to the ceiling: the panel is slid inside the three sides already fixed before closing.

# SLIMFLUX BL - BASIC BACKLIGHT

					~	204	204							
0	03	40	O <sub>D</sub>	20	AF01203	LAF0301204	LPLAF0601204	_		1-30	TLPW1-MS	_	اب	Σ̈́
LPLAF060	AF0603	AF0604	AF060P	LPLAF0120	5	ဝ္ပ	90	SP	×	FASTCON	۲	KTEMR03	OPTIONAL DRIVERS	DELT65D-
₹		Š	Š	₹		Š	Ž	ICP-SI	LP-SSK	ST(	Ē	Ξ	₽¥	LT6
<u>م</u>	L	ם	F.	<u>م</u>	딥	ᅙ	Ъ.	Ξ	<u>-</u>	₹	Ā	Ā	P.R.	

•	•	•	•		•	•	•			LP6060B3-830
•	•	•	•		•	•	•			LP6060B3-840
•	•	•	•		•	•	•			LP6060B3-860
		•	•		•	•	•	•	•	• LP6060B3-830ST
		•	•		•	•	•	•	•	• LP6060B3-840ST
		•	•		•	•	•	•	•	• LP6060B3-860ST
		•	•		•	•	•	•	•	• LP6060B3UGR-840ST
				•	•	•	•	•	•	• LP30120B3UGR-840ST



Monoblock Frames LPLAF060 thickness 6 cm LPLAF0120 thickness 6 cm



Mounting kit frames LPLAF0603 thickness 5cm LPLAF0604 thickness 8cm



Frame with springs for flush mounting (kit to be assembled) LPLAF060P



Power supply for backup lighting KTEMR03



Anti-fall safety wire and terminal block LP-SSK Only terminal block FASTCON-30



Adjustable suspension wires kit KTLP-SPU

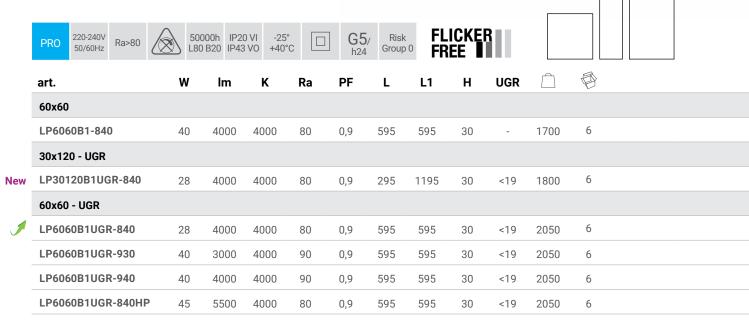


Metal springs kit for recessed installation KTLPW1-MS



ON/OFF, multicurrent dimmable DALI and 1-10V drivers: see drivers' section

# SLIMFLUX BL + UGR - PROBACKLIGHT



<sup>-</sup> SLIMFLUX BL - PRO: high-transmittance PMMA primary optics.

<sup>- 6</sup> pieces pack with single items' box.

	art.	W	lm	K	Ra	PF	L	L1	Н	UGR		
	60x60 UGR - NO DRIVER	R - 750	)mA									
New	LP6060B1UGR-840Z1 *	28	3600	4000	80	-	595	595	35	<19	1700	6

<sup>\*</sup> This panel es supplied with safety wire and terminal blocks; no driver included.

### NOTES:

- Pay attention to the thickness of the backlit panels. In these panels the driver is recessed between the rear compartment and the edge of the panel and does not extrude from the total thickness shown in the table.
- When installing BL panels with a surface frame, using dimmable drivers or backlighting drivers, it is necessary to order the frames with a height of 8 cm.
- The one-piece frames are equipped with a rear bracket to be fixed to the ceiling. Kit frames are fixed directly to the ceiling: the panel is slid inside the three sides already fixed before closing.

<sup>-</sup> SLIMFLUX BL - PRO: high-transmittance PMMA primary optics.

<sup>- 6</sup> pieces pack with single items' box.

# SLIMFLUX BL + UGR - PRO BACKLIGHT

LPLAFO603
LPLAFO603
LPLAFO604
LPLAFO1203
LPLAFO1203
LPLAFO301204
LPLAFO601204
KTLP-SPU
LP-SSK
KTLPW1-MS
KTEMR03
OPTIONAL
DRIVERS
DELT65D-M



•	•	•		•	•	•	•	• •	LP6060B1-840
			•	•	•	•	•	• •	LP30120B1UGR-840
•	•	•		•	•	•	•	• •	LP6060B1UGR-840
•	•	•		•	•	•	•	•	LP6060B1UGR-930
•	•	•		•	•	•	•	•	LP6060B1UGR-940
	•	•		•	•	•	•	•	LP6060B1UGR-840HP

A01485 ZKLP700EL A01486

LP6060B1UGR-840Z1



Monoblock Frames LPLAF060 thickness 6 cm LPLAF0120 thickness 6 cm



Anti-fall safety wire and terminal block LP-SSK Only terminal block FASTCON-30



Mounting kit frames LPLAF0603 thickness 5cm LPLAF01203 thickness 5cm LPLAF0604 thickness 8cm LPLAF0301204 thickness 8cm



Adjustable suspension wires kit KTLP-SPU



Frame with springs for flush mounting (kit to be assembled)
LPLAF060P



Metal springs kit for recessed installation KTLPW1-MS



Power supply for backup lighting KTEMR03



ON/OFF, multicurrent dimmable DALI and 1-10V drivers: see drivers' section

SLIMFLUX BL UGR CCT - PRO **BACKLIGHT** FLICK<u>er</u> 50000h IP20 VI 220-240V Ra>80 -25° G5/ Risk PRO L80 B20 IP43 VO +40°C 50/60Hz Ra>90 Group 0 **UGR** art. W lm Κ Ra PF L1 60x60 LP6060B1UGR-8CCT 4500\* 3000/4000/6000 0,95 595 595 2230 40 80 40 <19 4 LP6060B2UGR-8CCT (1) 5500\* 3000/4000/6000 0,95 2230 4 47 80 595 595 40 <19 LP6060B1UGR-9CCT 40 4000\* 3000/4000/6000 90 0,95 595 595 40 <19 2230 4 30x120 LP30120B1UGR-9CCT 40 4000\* 3000/4000/6000 90 0,95 295 1195 40 <19 2950 4 60x120 LP60120B1UGR-9CCT 50 5200\* 3000/4000/6000 90 0,95 595 1195 40 <19 3960 4

Minimum Order Quantity

## NOTES:

- Pay attention to the thickness of the backlit panels. In these panels the driver is recessed between the rear compartment and the edge of the panel and does not extrude from the total thickness shown in the table.
- When installing BL panels with a surface frame, using dimmable drivers or backlighting drivers, it is necessary to order the frames with a height of 8 cm.
- The one-piece frames are equipped with a rear bracket to be fixed to the ceiling. Kit frames are fixed directly to the ceiling: the panel is slid inside the three sides already fixed before closing.

<sup>-</sup> SLIMFLUX BL CCT - PRO: high-transmittance PMMA primary optics. 4 pieces pack with single items' protection plastic bag.

<sup>\*</sup> Lumen and power data are referred to 4000K colour temperature.

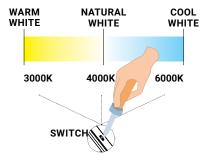
<sup>(1)</sup> Orders only with MOQ.

# SLIMFLUX BL UGR CCT - PRO BACKLIGHT





•	•			•	•	•	•	•	LP6060B1UGR-8CCT * *
•	•			•	•	•	•	•	LP6060B2UGR-8CCT * *
•	•			•	•	•	•	•	LP6060B1UGR-9CCT * *
		•		•	•	•	•	•	LP30120B1UGR-9CCT * *
			•		•	•	•	•	LP60120B1UGR-9CCT * *





Monoblock Frames LPLAF060 thickness 6 cm LPLAF0120 thickness 6 cm



Mounting kit frames LPLAF0604 thickness 8cm LPLAF0301204 thickness 8cm LPLAF0601204 thickness 8cm



Frame with springs for flush mounting (kit to be assembled) LPLAF060P



Power supply for backup lighting KTEMR03



Anti-fall safety wire and terminal block LP-SSK Only terminal block FASTCON-30



Adjustable suspension wires kit KTLP-SPU

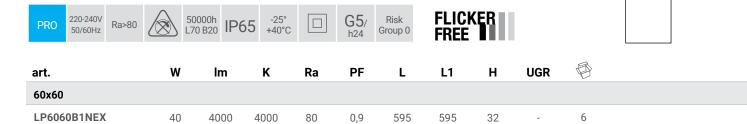


Metal springs kit for recessed installation KTLPW1-MS



ON/OFF, multicurrent and dimmable drivers: see driver's secion

# SLIMFLUX BL IP65 - PRO BACKLIGHT



- High-transmittance PMMA primary optics.
- Equipped with a GORE-TEX® valve to compensate for pressure variations
- SLIMFLUX BL IP65 PRO: 6 pieces pack with single items' box.

#### NOTES

- Pay attention to the thickness of the backlit panels. In these panels the driver is recessed between the rear compartment and the edge of the panel and does not extrude from the total thickness shown in the table.
- When installing BL panels with a surface frame, using dimmable drivers or backlighting drivers, it is necessary to order the frames with a height of 8 cm.
- The one-piece frames are equipped with a rear bracket to be fixed to the ceiling. Kit frames are fixed directly to the ceiling: the panel is slid inside the three sides already fixed before closing.



# SLIMFLUX BL IP65 - PRO BACKLIGHT

LPLAFO603
LPLAFO604
LPLAFO604
LPLAFO120
LPLAFO1203
LPLAFO1204
LPLAFO301204
KTLP-SPU
LP-SSK
FASTCON-30
KTLPW1-MS
KTEMR03
OPTIONAL
DRIVERS

LP6060B1NEX



Monoblock Frames LPLAF060 thickness 6 cm LPLAF0120 thickness 6 cm



Anti-fall safety wire and terminal block LP-SSK Only terminal block FASTCON-30



Mounting kit frames LPLAF0603 thickness 5cm LPLAF01203 thickness 5cm LPLAF0604 thickness 8cm LPLAF0301204 thickness 8cm



Adjustable suspension wires kit KTLP-SPU



Frame with springs for flush mounting (kit to be assembled) LPLAFO60P



Metal springs kit for recessed installation KTLPW1-MS



Power supply for backup lighting KTEMR03



ON/OFF, multicurrent dimmable DALI and 1-10V drivers: see drivers' section



# SLIMFLUX BL PLAFO + UGR PLUS BACKLIGHT



PLUS 220-240V 50/60Hz Ra>80			P20 VI P43 VO +	25° [	□ G	3 Ris		ICKE	R			
art.	W	lm	K	Ra	PF	L	L1	Н	UGR			
60x60												
LP6060P1-840	40	4000	4000	80	0,95	600	600	40	-	2000	5	
LP6060P2-840	60	6000	4000	80	0,95	600	600	40	-	2100	5	
LP6060P2-860	60	6000	6000	80	0,95	600	600	40	-	2100	5	
30x120												
LP30120P1-840	40	4000	4000	80	0,95	300	1200	40	-	2400	5	
60x120												
LP60120P1-840	60	6000	4000	80	0,95	600	1200	40	-	4500	3	
60x60 - UGR												
LP6060P1UGR-840	40	4000	4000	80	0,95	600	600	40	<19	2300	5	

- PLUS PANELS: high-transmittance PMMA primary optics.
- SLIMFLUX BL PLAFO PLUS: 5 pieces pack with single items' box (except 60x120, 3 pieces).





# **SLIMFLUX**

4000K

# SLIMFLUX ROUND - PLUS

















# SLIMFLUX ROUND SURFACE MOUNTING - PLUS

art.	W	lm	K	Ra	PF	Ø	L1	Н	UGR		
LP60T830-A	40	3800	3000	80	0,9	592	33	19,5	-	3600	5
LP60T840-A	40	4000	4000	80	0,9	592	33	19,5	-	3200	5

# SLIMFLUX ROUND TRANSLUCENT UP&DOWN SUSPENSION - PLUS

art.	W	lm	K	Ra	PF	Ø	L1	Н	UGR		
LP60T830DE-A	40	3800	3000	80	0,9	592	-	19,5	-	3200	5
LP60T840DE-A	40	4000	4000	80	0,9	592	-	19,5	-	3600	5

- High transmittance optical PMMA screen.
- Double emission upwards and downwards.
- SLIMFLUX ROUND PLUS: 5 pieces pack with single items' box.





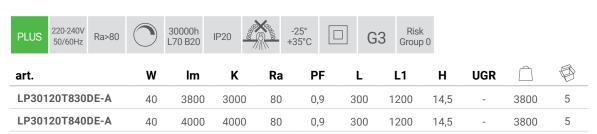
The power cable is one with the suspension cables, therefore invisible.

Light is diffused from the fine white frame to the methacrylate panel. Fractioned by micro incisions on the panel light is directed predominantly downwards. 30% of the light is projected upwards to create a striking effect that adds to any classic or modern environment.

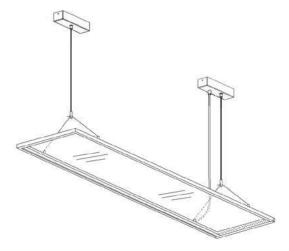
## NOTES:

The Round Translucent Up&-Down panels are complete with suspension cables and driver integrated in the ceiling rose. Maximum suspension length 150 cm.

# SLIMFLUX TRANSLUCENT UP&DOWN - PLUS



- High transmittance optical PMMA screen.
- Double emission upwards and downwards.
- SLIMFLUX TRANSLUCENT UP&DOWN PLUS: 5 pieces pack with single items' box.





The power cable is one with the suspension cables, therefore invisible.

Light is diffused from the fine white frame to the methacrylate panel. Fractioned by micro incisions on the panel light is directed predominantly downwards. 30% of the light is projected upwards to create a striking effect that adds to any classic or modern environment.

### NOTES:

The Translucent Up&Down 30x120 panels are complete with suspension cables and driver integrated in the ceiling rose.

Maximum suspension length 150 cm.



# SLIMFLUX ACCESSORY

#### **TYPE**

Frames for mounting LED panels on ceilings.

**CHARACTERISTICS**Make it possible to use SLIMFLUX panels in ceilings where there is no possibility to install recessed panels; frames can hide the drivers.

# **MATERIALS**

LPLAF060/120: painted sheet metal. Other models in mounting kit: extruded aluminium. White colour.

The LPLAFO60 and LPLAFO120 models are installed using surface fixing brackets. Other models in mounting kit: the frame fixes directly to the surface. Screws and plugs supplied.



Slimflux 60x60: surface mounting with the frame.





art		L	L1	Н	
LPLAF060	Fully assembled plus model for 60x60 panels	603	603	60	1
LPLAF0120	Fully assembled plus model for 120x30 panels	1203	303	60	1







art		L	L1	Н		
LPLAF0603	Self assembly kit Basic model for 60x60 panels - h 5 cm	600	600	50	40	
LPLAF0604	Self assembly kit Basic model for 60x60 - kit to assemble - h 8 cm	600	600	80	25	
LPLAF01203	Self assembly kit Basic model for 30x120 - kit to assemble - h 5 cm	1200	300	50	20	
LPLAF0301204	Self assembly kit Basic model for 30x120 - kit to assemble - h 8 cm	1200	300	80	20	
LPLAF0601204	Self assembly kit Basic model for 60x120 panels - h 8 cm	1200	600	80	20	

# SLIMFLUX ACCESSORY





art	Frames for recessed installation of LED panels in non-modular ceilings.	L	L1	Н	
LPLAF060P	Self assembly kit Basic model for 60x60 panels	603	603	60	1





(Not suitable for Backlit panels)

KTLPW1-MS Metal springs kit for recessed installation - 4 pieces 1



art		L	F	
LP-SSK	Anti-fall safety wire and terminal block	1200	1	



art		L	
FASTCON-30	Terminal block with 27cm wire	270	1



art		L	
KTLP-SPU	Adjustable suspension wires kit	2000	1

# FIXTURES FOR REPLACEABLE LAMP

CHOOSE THE MOST SUITABLE LAMP, CHANGE IT WHEN NECESSARY, VARY THE BEAM ANGLE AS REQUIRED..



# **PLUS**

DURABLE WALL ROUND



# **PLUS**

DURABLE WALL BRICK

# **APPLIQUES**

DOUBLE EMISSION FOR THESE IP44 WALL LIGHTS

Decorative luminaires with pure lines, to be used with GU10 lamps, available in two colours, it fits all settings, modern or classic.

# SUSPENSIONS

Elegant pendants for residential and restaurants. And Catenaria for parties and special occasions!



DURABLE SUSPENSION GU10



BASIC SUSPENSION E27



BASIC CATENARIA



BASIC CATENARIA



**WALK-ON** 



**PLUS** 

# DURABLE WALKABLE IP67

An easy-to-use luminaire, for the new GU10 Long Life 50,000 hours or any PAR16 in the range, with no need for drivers.

# **DOWNLIGHTS**



BASIC DURABLE ZKR2



BASIC DURABLE ZKR1



**NEW** 

ZKRR
ORIENTABLE
RECESSABLE RING



DURABLE BLACK DOWNLIGHT



PLUS ZK4 - RECESSABLE RING IP65



ZK4 - RECESSABLE RING IP20



ZK4 - RECESSABLE RING IP20

# **TRACKLIGHT**



PLUS DURABLE TRACK GU10



BASIC SPOT-V E27



PLUS
DURABLE
SUSPENSION
GU10



Easy with the DuraSmart range! Smart lamps that make life easier



DuraSmart sources are activated and managed with TUYA APPs, used by the whole world of home automation.



APP: TUYA SMART SMART LIFE





WI-FI Bluetooh Amazon Alexa Assistenti Vocali Google



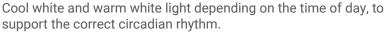
Colou light effects



The DURABLE line, luminaires for replaceable light sources, is perfect for taking advantage of the flexibility in light colour, and thus room perception, offered by the DuraSmart line of lamps.

So the pendant on the restaurant table can have cool white light for lunch and warm light for dinner, the spotlights in a shop window can emit light of any colour, for fixed or dynamic settings simply set by a smart phone.









System compatible with iOS 8.0 or higher; Android 4.3 or higher.



# **DURABLE - TRACK SPOT FOR GU10**

## **TYPE**

Professional LED projectors for track mounting with GU10 lampholder.

#### **CHARACTERISTICS**

Can be used with Eurostandard Plus tracks as well as with other brands': Staff, Nordlux, Nordic, Global, etc.

#### **OPTIC**

Can be used with all GU10 lamps in the catalogue: select the desired power and beam opening.

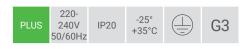
#### **MATERIALS**

Die-cast painted aluminium body.

### MOUNTING

Onto an electrical track in 3 phases; fixtures equipped with a safety lock to fix to the tracks.





The luminaire does not include the lamp: choose the most suitable lamp from our range.

For professional use we suggest items 28530LL/28540LL.

art.		Ø	L	L1		8011905	
DBTR160-W	GU10	60	130	170	290	980535	20
DBTR160-B	GU10	60	130	170	290	981082	20

# **MULTI GU10LL**



art.	W	<b>\</b>	lm	cd	K		Ø	Н	8011905	₽•
/ 28530LL	4,5	GU10	580	900	3000	38°	50	55	979911	10
2854011	6	GU10	700	850	4000	38°	50	55	979928	10

• Minimum Order Quantity













# TRACK MOUNTING FITTING FOR REPLACEABLE LAMP

#### **TYPE**

Adjustable fitting complete with adaptor for track mounting and E27 lampholder.

### **CHARACTERISTICS**

Satisfies the needs of those who prefer a trackmounted luminaire for replaceable lamps. Can be used with Eurostandard Plus tracks as well as with other brands': Staff, Nordlux, Nordic, Global, Nuco etc.

Adjustable from +90° to -90° on the vertical plane and 350° on the horizontal plane. Suitable for PAR20, PAR30, PAR38, REFLECT LED, A60 lamps: see the list of lamps that can be fitted. Max 30W.

#### **MATERIALS**

Die-cast painted aluminium body, white color; steel adjustable arm.

#### **MONTING**

Mounting on an electrical track in 3 phases; fixtures equipped with a safety lock to fix to the tracks.

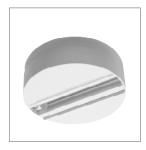








art.		Ø	L		8011905	
SP01-W	E27	108	127	277	935252	1



Adapter for surface installatior	าร
----------------------------------	----

art	8007753	
B60220	309284	1
B60221	309277	1

CAN BE USED WITH PAR38 L868W, L868; REFLECTLED: L758WB, L915WB: A60: DA6020W.



# DURABLE - PENDANT FOR GU10

### TYPE

Pendant luminaire for direct lighting, for replaceable lamp with GU10 socket.

# CHARACTERISTICS

Minimal, simple design and precise finishing. Available in different size and colours.

Can be used with all GU10 lamps in the catalogue: select the desired power and beam opening.

#### MATERIAL

Die-cast painted aluminium body.

Cable lenght 1,5 m.













The luminaire does not include the lamp: choose the most suitable lamp from our range. For professional use we suggest items 28530LL/28540LL.



art.		Ø	L	8011905	
DBSP115-W	GU10	60	150	980573	20
DBSP115-B	GU10	60	150	981105	20
DBSP130-W	GU10	60	300	980559	20
DBSP130-B	GU10	60	300	981099	20



art.		Ø	L	8011905	
DBSP215-W	GU10	60	150	982225	20
DBSP215-B	GU10	60	150	982232	20
DBSP230-W	GU10	60	300	982249	20
DBSP230-B	GU10	60	300	982256	20





MULTI GU10: 38° - 50° MULTI 100: 100°





XSPOT: 10°



SIRIUS-P







# SUSPENSION CABLES WITH E27 LAMP HOLDER AND CEILING CUP

### **TYPE**

Diverse materials suspension wires with E27 lamp holder and ceiling cup.

## CHARACTERISTICS

Minimal, simple design and precise finishing.

Silicone for white and black versions; metal for other models.

Cable lenght 2 m.





art.	-	Ø	Н	8011905	
TN-E27N	E27	85	2000	850692	10
TN-E27B	E27	85	2000	850708	10
TN-E27CR	E27	100	2000	850715	10
TN-E27CU	E27	100	2000	850722	10
TN-E270T	E27	100	2000	861575	10







#### **TYPE**

Adjustable, square and round recessed luminaire with shiny black reflector and GU10

Can be modified with the optional glossy metallic reflector.

### **CHARACTERISTICS**

Recessed luminaires with a cuthole size similar to the old halogen recessed luminaires are widely used in retail installations. In addition to meeting the needs of those who prefer a recessed luminaire for replaceable lamps, DURABLE NERO offers the possibility of achieving two different atmospheres just by changing the reflector.

Houses PAR16 lamps; compatible with all GU10 lamps in the Duralamp catalogue. Max 10W.

### **MATERIALS**

Polycarbonate.

## MOUNTING

Recessed with the special galvanised aluminium springs. Complete with GU10 lamp











x GU10









New DBDQ100-A

	art.		Ø	Н			8011905		
New	DBDT100-A	x GU10	90	52	75	138	015329	1	

90

L1

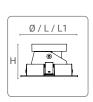
90

Н

52



# • Minimum Order Quantity











8011905

015336

154

75x75



# **DURABLE - WALL LAMP TONDO IP44**

#### **TYPE**

Double emission wall light for replaceable lamp with GU10 socket.

### **CHARACTERISTICS**

The design of the fixture sees the positioning of the lamp a few centimetres from the wall allowing the cone of light to develop on the wall in a harmonious way, without excessive glare.

### **OPTICS**

Can be used with all GU10 lamps in the catalogue: select the desired power and beam opening.

#### **MATERIALS**

Aluminium body with epoxy coating; glass diffusers.

#### **MONTING**

By means of the rear bracket.















The luminaire does not include the lamp: choose the most suitable lamp from our

For professional use we suggest items 28530LL/28540LL.

art.		L	L1	Н		8011905	
DBAT100-W	GU10	67	93	152	470	980597	20
DBAT100-B	GU10	67	93	152	470	981112	20



DURASMART 36°









## **DURABLE - WALL LAMP BRICK IP44**

#### TYPE

Double emission wall light for replaceable lamp with GU10 socket.

#### **CHARACTERISTICS**

The design of the fixture sees the positioning of the lamp a few centimetres from the wall allowing the cone of light to develop on the wall in a harmonious way, without excessive glare.

#### **OPTICS**

Can be used with all GU10 lamps in the catalogue: select the desired power and beam opening.

#### **MATERIALS**

Aluminium body with epoxy coating; glass diffusers.

### MONTING

By means of the rear bracket.











The luminaire does not include the lamp: choose the most suitable lamp from our For professional use we suggest items 28530LL/28540LL.

art.		L	L1	Н		8011905	
DBAQ100-W	GU10	67	95	152	550	980610	20
DBAQ100-B	GU10	67	95	152	550	981129	20















## **INGROUND WALK-ON IP67**

#### **TYPE**

Walk-on fixture for inground installation complete with GU10 lampholder.

### **CHARACTERISTICS**

Complete with steel outer ring and screws, clear glass.

#### OPTIC

Can be used with all GU10 lamps in the catalogue: select the desired power and beam opening.

#### **MATERIALS**

Metal body, brushed steel ring, shockproof IK10 glass screen; plastic sleeve.



















The luminaire does not include the lamp: choose the most suitable lamp from our range. For professional use we suggest items 28530LL/28540LL.

art.		Ø	Н	8011905
DBIN100-0	GU10	110	125	980627 20













## **CATENARIA**

#### **TYPE**

Long run conductive cable with 24 factory attached lamp holders.

### **CHARACTERISTICS**

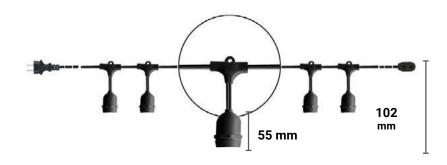
Two different models: with lamp holder on the cable or with pendant. Lampholders are fitted with IP44 protection rings.

#### **APPLICATIONS**

Widely used for festoons indoor and outdoor garden lighting decoration, patio umbrella lighting, etc. Suggested lamps PING BALL, Color GLS or Stargazer lamp.

#### NB

Factory prepped outdoor IP44 Schuko socket for Europe, US plug or end prep wiring options for the USA. Cannot be connected in series.







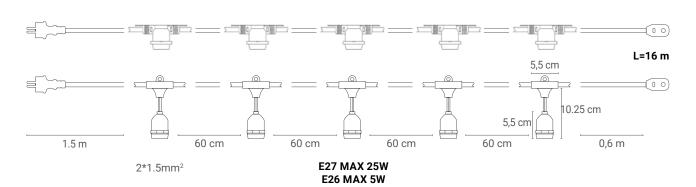


art.	W max	W max Tot	N# 🥃		L	8011905	
CLE2724	25	670	24	E27	16 m	843823	4
120V							

120V AC	E26 base: for o	countries at mai	ns = 120V				
CLE2624 *	5	120	24	E26	16 m	43830	4

120V AC		E26 base: for o	ountries at mai	ns = 120V				
CLE2624	4S *	5	120	24	E26	16 m	976644	4

<sup>\*</sup> Avaialble upon order also with GU10 lampholder.



# CATENARIA IN SERIES VERSION

#### **TYPE**

Long run conductive cable with 15 factory attached lamp holders.

#### **CHARACTERISTICS**

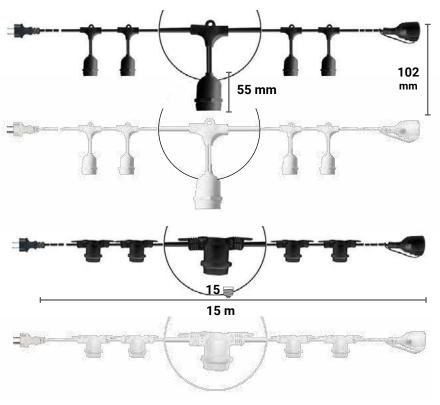
Two different models: with lamp holder on the cable or with pendant. The 15 lamp holder sockets can be linked in series. Lampholders are fitted with IP44 protection rings.

#### **APPLICATIONS**

Widely used for festoons indoor and outdoor garden lighting decoration, patio umbrella lighting, etc. Suggested lamps PING BALL, Color GLS or Stargazer lamp.

#### NR

Only Catenaria with 15 lamp holders can be connected in serie with the IP44 Schuko plug and socket on the sides.

















Catenaria with 15 lamp holders can be connected consecutively up to a maximum length of 45 metres. Also available in white, perfect for reception areas, weddings etc....

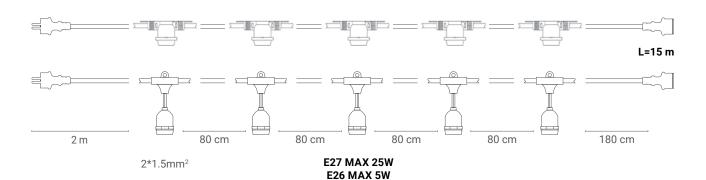
.....



art.	W max	W max Tot	N# <b>■</b>		L	8011905	
CLE2715	25	370	15	E27	15 m	856144	4
CLE2715-WH	25	370	15	E27	15 m	950736	4



CLE2715-S	25	370	15	E27	15 m	856168	4
CLE2715-SWH	25	370	15	E27	15 m	950729	4



## MULTI-OPTIC RECESSED FIXTURE

#### **TYPE**

Rectangular recessed fixture for two adjustable GU10 lamps.

#### **CHARACTERISTICS**

Widely used in retail installations, it meets the needs of those who prefer a recessed ceiling luminaire with replaceable lamps. It offers the advantage of having both multidirectional and adjustable light beams from + 15 ° to -15 ° in the vertical plane. Houses PAR16 lamps; compatible with all GU10 lamps in the Duralamp catalogue. Max 30W.

#### **MATERIALS**

Body painted aluminium.

### MOUNTING

Recessed with the special galvanised aluminium springs. Complete with GU10 lamp holder

Silver colour frame and rings.

ZKR2-ST



Silver colour frame and black rings.

ZKR2-STB





art.		L	L2	Н		8011905	
ZKR2-ST	GU10	107	202	110	95x180	935269	1
ZKR2-STB	GU10	107	202	110	95x180	981693	1

The luminaire does not include the lamp: choose the most suitable lamp from our range.

For professional use we suggest items 28530LL/28540LL.

The front ring locks the lamp



In this picture with MULTI100 GU10.



DURASMART 36°









112

## SINGLE-OPTIC RECESSED FIXTURE

#### **TYPE**

Rectangular recessed fixture for one adjustable GU10 lamp.

### **CHARACTERISTICS**

Widely used in retail installations, it meets the needs of those who prefer a recessed ceiling luminaire with replaceable lamps. It offers the advantage of having both multidirectional and adjustable light beams from + 15 ° to -15° in the vertical plane. Houses PAR16 lamps; compatible with all GU10 lamps in the Duralamp catalogue.

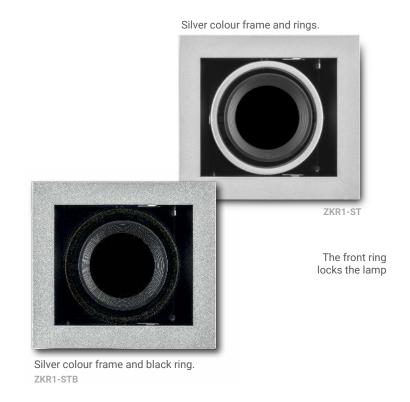
Max 15W.

#### **MATERIALS**

Body in black painted aluminium with silver colour frame.

#### **MOUNTING**

Recessed with the special galvanised aluminium springs. Complete with GU10 lamp





The luminaire does not include the lamp: choose the most suitable lamp from our range.

For professional use we suggest items 28530LL/28540LL.

art.		L	L2	Н		8011905	
ZKR1-ST	GU10	110	110	125	95x95	975845	1
ZKR1-STB	GU10	110	110	125	95x95	981693	1













# ZKRR RECESSABLE RING: ADJUSTABLE AND WITH OPTIONAL OPTICS

#### **TYPE**

Recessed orientable ring with interchangeable optional optics for MR16, PAR16 lamps and Module.

### **CHARACTERISTICS**

The recessed ring, that allows an orientation of the source of 20°, can be fitted (snap on) with metal optics that can modify the lighting output by offering accent or antiglare solutions.

#### **MATERIALS**

Body and optics in painted metal body.

#### MOUNTING

Equipped with springs for quick installation.









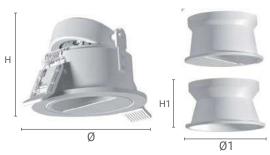


The possibility to easily change the beam usign the beam shapers, allows to obtain different effects with the same fixture: ideal in retail spaces.

The ZKRR ring mounts the lamp in a recessed position of 4 cm.

art.		Ø	Н		8011905		
ZKRR	Adjustable recessed ring - White colour	90	53	78	844059	10	

To be completed with the wired lampholders code T053 and T010.

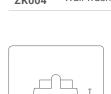


art.		Photo	Ø	Ø1	Н	H1		8011905	
ZK001	Spot effect beam shaper	1	90	68,5	53	36,7	78	844066	10
ZK002	Wide beam shaper	2	90	68,5	53	36,7	78	844073	10
ZK003	Side beam shaper	3	90	68,5	53	36,7	78	844080	10
ZK004	Wall washer	4	90	68,5	53	36,7	78	844097	10

To be completed with GU10 or GU5.3 lampholder







## ZK RECESSABLE RINGS: FIXED IP65

#### TYPE

Recessed orientable ring with interchangeable optional optics for MR16 and PAR16 lamps. IP65 fixed version.

#### **CHARACTERISTICS**

The same ring declined in two versions to fulfill different installation needs in the same environments. Ring for recessed installation of MR16 / PAR16 lamps complete with front screen.

#### **MATERIALS**

Painted metal body.

#### **MOUNTING**

Equipped with springs for quick installation.



IP65





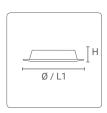


art.	Photo	Ø/L1	Н		8011905	
ZKR65QB	1 IP65 Square white ring	90	33	72	836863	10
ZKR65QG	2 IP65 Square gray ring	90	33	72	836870	10





art.	Photo	Ø/L1	Н		8011905	
ZKR65TB	3 IP65 Round white ring	90	33	72	836849	10
ZKR65TG	4 IP65 Round gray ring	90	33	72	836856	10



To be completed with GU10 or GU5.3 lampholder





## ZK RECESSABLE RINGS: ORIENTABLE IP20

#### **TYPE**

Recessed orientable ring with interchangeable optional optics for MR16 and PAR16 lamps. IP20 orientable.

### **CHARACTERISTICS**

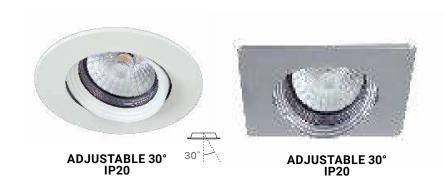
The same ring declined in two versions to fulfill different installation needs in the same environments. Ring for recessed installation of MR16 / PAR16 lamps complete with front screen.

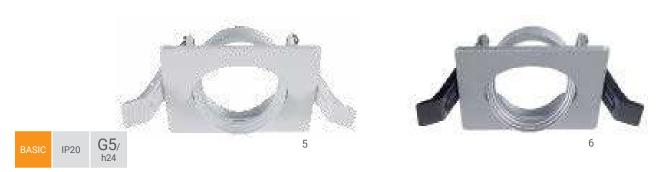
#### **MATERIALS**

Painted metal body.

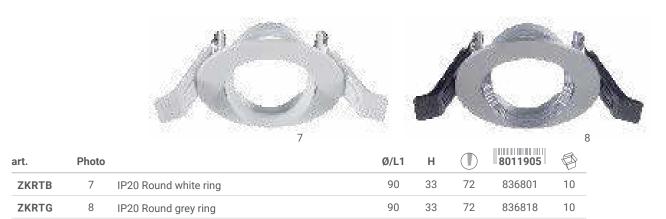
#### **MOUNTING**

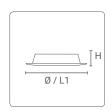
Equipped with springs for quick installation.





art.	Photo		Ø/L1	Н		8011905	
ZKRQB	5	IP20 Square white ring	90	33	72	836825	10
ZKRQG	6	IP20 Square gray ring	90	33	72	836832	10





To be completed with GU10 or GU5.3 lampholder





## ZK RECESSABLE RING: IP20 FIXED

#### **TYPE**

Ring for recessed installation of MR16/PAR16 lamps, IP20.

## CHARACTERISTICS

The spring type lamp holder allows this recessed mounting ring to be used with any type of lamp fitted with a front closure.

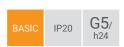
### **MATERIALS**

White painted metal body.

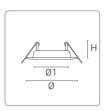
## MOUNTING

Equipped with springs for quick installation. To be completed with the wired lampholders code T053 and T010.





art.	Ø1	Ø	Н		8011905	
ZKRTB2	51	78	26	65	861483	10







art.		8011905	₽•
T053	Kit lampholder GU5,3 + terminal block	834388	4
art.		8011905	<b>P</b> *
T010	Kit lampholder GU10 + terminal block	834371	4

• Minimum Order Quantity

# **INDUSTRIAL**



**BASIC** 

**FILINO T5** 



**PRO** 

**BATTEN BT3 IP65** 

General indoor and outdoor lighting, diffuse light in the three classic sizes. Wide choice of versions with LED and CCT, with tubes on board or without tubes.

For use in shops, workshops, garages, cellars....





**PRO** 

**DAMP PROOF** CCT IP65

**BASIC** 

MINI BATTEN **IP65** 



**NEW** 

**BASIC** 

**DAMP PROOF IP65** WITH TUBES 25000h / 50000h

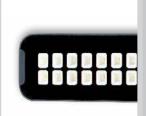


3000K 4000K



**BASIC** 

**HBL BEATRIX IP65** 



**PRO** 

**HBL BEATRIX IP65** 

The BEATRIX Linear HighBay is much more than it looks! Unique aesthetics, enhanced in the 50,000h PRO version, linkable in cascade and with a cool black finish. The BASIC version features natural and warm light colour, ideal in retail and offices.



**DAMP PROOF IP65** WITHOUT TUBES

# HIGH BAY



**PRO** 

HB2 PRO **IP65** 

From the simplest requirements to technical applications in the production as well as retail environments. Luminaires capable of high light output, continuously updated in technology.



**PRO** 

**PRO** 

**HB6 CCT IP65** 



## FLOODLIGHT PROJECTORS

The range of low-profile projectors has expanded considerably: from 10W to 350W, with a choice of light colour and luminaire body, for any type of indoor or outdoor use.

**NEW** 



**PLUS** 

**PANTH ST IP65** 



**PLUS** 

**PANTH EVO IP65** 



**PLUS** 

**PANTH SL2 IP65** 



**PLUS** 

**PANTH EVO PIR SENSOR IP44** 



**SENSOR IP65** 



## FILINO T5



30 CM 3000K - 4000K - 6000K

60 CM 3000K - 4000K - 6000K

90 CM 3000K - 4000K - 6000K

120 CM 3000K - 4000K - 6000K

150 CM 3000K - 4000K - 6000K

**APPLICATIONS** 

Shelving lights for stores, and under and over cabinets etc.



ANGULAR CONNECTIONS





INSTALLATIONS IN LIGHT CONTINUITY WITHOUT CONTINUOUS LINES INTERRUPTIONS

## FILINO T5

#### **TYPE**

LED T5 replacement professional undercabinet/ceiling batten light.

#### **CHARACTERISTICS**

It attaches to both walls and ceilings using the clip included. Filino T5 batten can be installed in series code KTLRT, up to a maximum of 10 units (20W/23W); 15 units (10W/14W); 20 units 4W. Exceptional light quality & easy fixing with the clips provided. On/off switch on the batten body; Free-wire connection: use the accessory cable with a separate code if a plug is required. Filino T5 batten can be installed in series by joining together the units or using the accessory connection cable, code KTLRT.

#### **MATERIALS**

Shockproof plastic body and screen; anti-glare milky white screen. Package complete with free wires, connection, 4.



BASIC 220- 240V 50/60Hz	Ra>80		000h B30	-25 +35°		G2	Risk Group 0				
art.	W	lm	cd	K		L	Н	L2		8011905	
LRT530WW	4	300	55	3000	270°	24	39	300	100	936709	10
LRT530NW	4	350	64	4000	270°	24	39	300	100	936716	10
LRT530CW	4	400	74	6000	270°	24	39	300	100	936723	10
LRT560WW	10	850	157	3000	270°	24	39	600	134	910518	10
LRT560NW	8	850	167	4000	270°	24	39	600	134	861100	10
LRT560CW	8	900	186	6000	270°	24	39	600	134	910495	10
LRT590WW	14	1210	223	3000	270°	24	39	900	200	936730	10
LRT590NW	14	1450	232	4000	270°	24	39	900	200	936747	10
LRT590CW	14	1800	241	6000	270°	24	39	900	200	936754	10
LRT5120WW	18	1900	325	3000	270°	24	39	1200	235	910471	10
LRT5120NW	18	1900	335	4000	270°	24	39	1200	235	861117	10
LRT5120CW	20	1950	353	6000	270°	24	39	1200	235	910457	10
LRT5150WW	23	2050	260	3000	270°	24	39	1500	250	936761	10
LRT5150NW	24	2400	369	4000	270°	24	39	1500	250	936778	10
LRT5150CW	23	2150	378	6000	270°	24	39	1500	250	936785	10





Connection wire	e 15.6 cm	١		
art	L	L2	8011905	
KTLRT	19	15,6	861124	1



Wire with plug for Reglette Filino T5

art	L2	8011905	
KTLRT-CORD	2000	939946	1

# MINI BATTEN IP65





## MINI BATTEN IP65

#### **TYPE**

Luminaire with dimensions quite similar to a T8 tube with the advantage of direct mains connection and IP65 protection.

## CHARACTERISTICS

Ease of use in various applications, even in wet and dusty environments thanks to IP65: easily removable and repositionable.
Great energy saving.
Immediate switch on, no flickering or buzzes.

#### **MATERIAL**

Flame retardant PC.

#### **ASSEMBLY**

It attaches to the clips with which the product is supplied.

#### **APPLICATIONS**

Workshops, production areas, garages, service corridors, commercial installations.

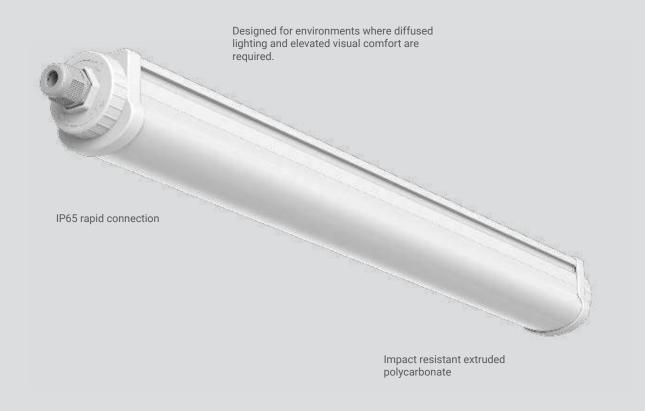


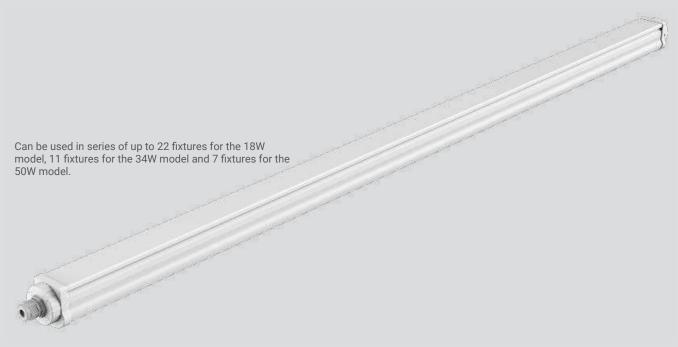
	art.	W	lm	K	PF		Ø	Н	8011905	₽•
New	BM120NW	20	2200	4000	0,9	160°	29	1200	016524	10
New	BM120CW	20	2250	6000	0,9	160°	29	1200	016531	10

Minimum Order Quantity



# **BATTEN BT3**





## **BATTEN BT3**

#### TYPE

Linear ceiling fixture equipped with high efficiency LED sources. Fitted with a quick spring clamp for connection in series.

#### **CHARACTERISTICS**

Quick opening mechanism for wiring. Easy to connect in series thanks to the quick spring clamp supplied.

Can be used in series of up to 22 fixtures for the 18W model, 11 fixtures for the 34W model and 7 fixtures for the 50W model.

#### **MATERIALS**

Polycarbonate body: opal polycarbonate screen equipped with internal fins for flow recovery and emission optimisation.

#### **ASSEMBLY**

AISI 316 stainless steel 'snap on' bracket to anchor to the ceiling or to be used to suspend the fixture.

Every batten is equipped with brackets. Adjustable suspension cables available as a separate code.

## **APPLICATIONS**

Supermarkets, car parks, laboratories, warehouses.etc.

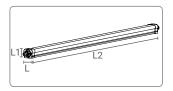




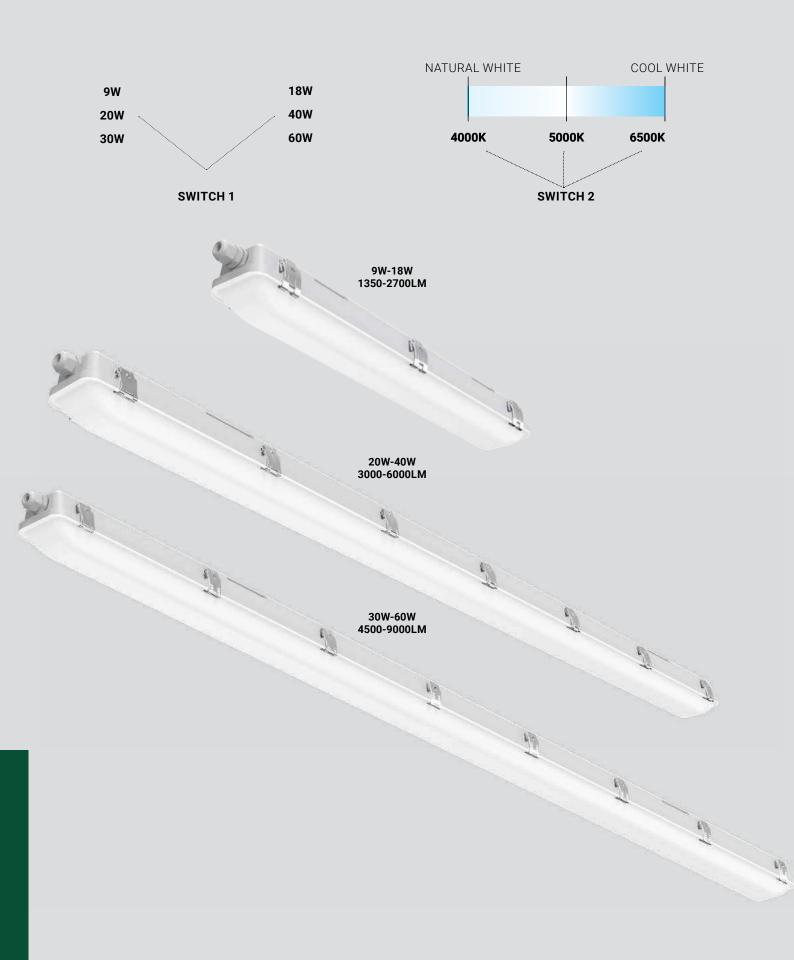
	220- 240V 0/60Hz	Ra>80		50000h L70 B20	IP65	IK08	G5/ h24	Risk Group 1				
art.	W	/	lm	K	PF		L	L1	L2		8011905	
BT105V	<b>v</b> 18	8 2	2025	3000	0,9	120°	63	63	600	850	974615	10
BT105N	<b>1</b> 18	8 2	2250	4000	0,9	120°	63	63	600	850	976408	10
BT1050	; 18	8 2	2250	6000	0,9	120°	63	63	600	850	976392	10
BT103V	<b>N</b> 34	4 4	1050	3000	0,9	120°	63	63	1200	850	941130	10
BT103N	1 34	4 4	1300	4000	0,9	120°	63	63	1200	850	941116	10
BT1030	34	4 4	1450	6000	0,9	120°	63	63	1200	850	941123	10
BT104V	<b>v</b> 50	0 6	5050	3000	0,9	120°	63	63	1500	1100	941161	10
BT104N	<b>1</b> 50	0 6	5300	4000	0,9	120°	63	63	1500	1100	941147	10
BT1040	5 50	0 6	5450	6000	0,9	120°	63	63	1500	1100	941154	10



art.	L	8011905	
KT-BT1-FS Adjustable suspension wires kit	1000	927653	1



# DAMP PROOF MULTIPOWER CCT IP65 LED LUMINAIRE



# AMP PROOF MULTIPOWER CCT IP65 ED LUMINAIRE

Waterproof linear ceiling light equipped with high-efficiency LEDs. Fitted with a quick spring clamp for connection in series.

#### **CHARACTERISTICS**

Quick opening mechanism for wiring. Easy to connect in series thanks to the quick spring clamp supplied.

#### **MATERIAL**

Polycarbonate body: opal polycarbonate screen equipped with internal fins for flow recovery and emission optimization.

#### **ASSEMBLY**

"Snap on" AISI 316 stainless steel brackets for ceiling or suspension installation. Every batten is equipped with brackets.

#### **APPLICATIONS**

Supermarkets, car parks, laboratories, warehouses.

PRO	220- 240V 50/60Hz	50000h L70 B20	IP65	IK08	G5	Risk Group 0
	30/00112					

	art.	W	lm	K	PF	L	L1	Н	8011905	<b>E</b>
New	SM060CCT	9-18	1350-2700	4000-5000-6500	0,7	600	85	70	015244	6
New	SM120CCT	20-40	3000-6000	4000-5000-6500	0,7	1200	85	70	015251	6
New	SM150CCT	30-60	4500-9000	4000-5000-6500	0,7	1500	85	70	015268	6

<sup>\*</sup> The lumen and power data indicated refers to the 4000K colour temperature.

This DAMP PROOF LUMINAIRE is multi current =

2 fixtures in one ...

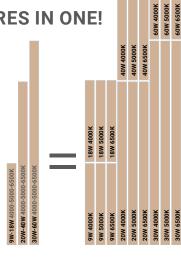
in this DAMP PROOF LUMINAIRE you can also

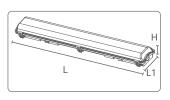
choose from 3 color temperatures =

3 fixtures in one =

**TOTAL: 6 FIXTURES IN ONE!** 







# DAMP PROOF LUMINAIRE S1T IP65 COMPLETE WITH 1 TUBE



## DAMP PROOF LUMINAIRE S1T IP65 COMPLETE WITH 1 TUBE

#### TYPE

Damp proof linear ceiling light with G13 connection for 1 Tube.
Complete with 25,000h or 50,000h Tuboled.

### **CHARACTERISTICS**

Quick opening mechanism for wiring.

#### **MATERIAL**

Polycarbonate body: opal polycarbonate screen equipped with internal fins for flow recovery and emission optimization.

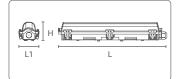
#### **ASSEMBLY**

"Snap on" AISI 316 stainless steel brackets for ceiling or suspension installation. Every batten is equipped with brackets.

## **APPLICATIONS**

Supermarkets, car parks, laboratories, warehouses.

		000h 0 B20	IK07	G2	INION	MP PI			INAIRE CO 'B 25.000H	
	art.	W*	Max W	lm	K	L	L1	Н	8011905	₽.
New	S1T060L1W	9	Max 10W	875	3000	665	65	60	017071	10
New	S1T060L1N	9	Max 10W	920	4000	665	65	60	017088	10
New	S1T060L1C	9	Max 10W	920	6000	665	65	60	017095	10
New	S1T0120L1W	18	Max 20W	1760	3000	1275	65	60	325381	10
New	S1T0120L1N	18	Max 20W	1850	4000	1275	65	60	017118	10
New	S1T0120L1C	18	Max 20W	1850	6000	1275	65	60	017125	10
New	S1T0150L1W	20	Max 22W	2140	3000	1575	65	60	017132	10
New	S1T0150L1N	20	Max 22W	2250	4000	1575	65	60	017149	10
New	S1T0150L1C	20	Max 22W	2250	6000	1575	65	60	017156	10
		000h 0 B20	IK07	G4	Risk DA Group 0 W	MP PF TH 1 L	ROOF ED TI	LUMI JBE L		1inimum 0 MPLET
	art.	W*	Max W	lm	K	L	L1	Н	8011905	₽•
New	S1T060L2W	10	Max 10W	715	3000	665	65	60	016982	10
New	S1T060L2N	10	Max 10W	750	4000	665	65	60	016999	10
New	S1T060L2C	10	Max 10W	750	6000	665	65	60	017002	10
New	S1T0120L2W	18	Max 20W	1475	3000	1275	65	60	017019	10
New	S1T0120L2N	18	Max 20W	1550	4000	1275	65	60	017026	10
New	S1T0120L2C	18	Max 20W	1550	6000	1275	65	60	017033	10
New	S1T0150L2W	20	Max 22W	1740	3000	1575	65	60	017040	10
New	S1T0150L2N	20	Max 22W	1830	4000	1575	65	60	325398	10



20

Max 22W

1830

S1T0150L2C

New

\*POWER OF THE ORIGINAL DURALAMP TUBE PRE-INSTALLED

1575

60

65

017064

6000

• Minimum Order Quantity

10

## DAMP PROOF LUMINAIRE S2T IP65 COMPLETE WITH 2 TUBES



## DAMP PROOF LUMINAIRE S2T IP65 COMPLETE WITH 2 TUBES

#### TYPE

Damp proof linear ceiling light with G13 connection for 2 Tubes.
Complete with 25,000h or 50,000h Tuboled.

#### **CHARACTERISTICS**

Quick opening mechanism for wiring.

#### **MATERIAL**

Polycarbonate body: opal polycarbonate screen equipped with internal fins for flow recovery and emission optimization.

## **ASSEMBLY**

"Snap on" AISI 316 stainless steel brackets for ceiling or suspension installation. Every batten is equipped with brackets.

### **APPLICATIONS**

Supermarkets, car parks, laboratories, warehouses.

	BASIC 24		25000h L70 B20					KISK	DAM 2 LEI		ROOF JBES V		NAIRE CC 000H	MPLE
	art.		W	<b>/</b> *	Max	W	lm	К		L	L1	Н	8011905	₽•
New	S2T060L	.1W	1	8	Max 2x	10W	1760	300	0	665	95	60	017255	10
New	S2T060L	.1N	1	8	Max 2x	10W	1850	400	0	665	95	60	017262	10
New	S2T060L	.1C	1	8	Max 2x	10W	1850	600	0	665	95	60	017279	10
New	S2T0120	L1W	3	6	Max 2x	20W	3470	300	0	1275	95	60	017286	10
New	S2T0120	L1N	3	6	Max 2x	20W	3650	400	0	1275	95	60	017293	10
New	S2T0120	L1C	3	6	Max 2x	20W	3650	600	0	1275	95	60	017309	10
New	S2T0150	L1W	4	.0	Max 2x	22W	4275	300	0	1575	95	60	017316	10
New	S2T0150	L1N	4	.0	Max 2x	22W	4500	400	0	1575	95	60	017323	10
New	S2T0150	L1C	4	.0	Max 2x	22W	4500	600	0	1575	95	60	017330	10
													•	Minimum

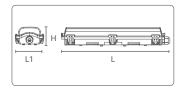
	PRO	220- 240V 50/60Hz	50000h L70 B20	IP65	IK07		G4	Risk Group 0	DA 2 L	MP PR ED TUI	OOF BES L	LUMI L 50.0	NAIRE ( )00H	COMPLET	EWIT
	art.			<b>V</b> *	Max	N	lm		K	L	L1	Н	801190	5	
New	S2T0	60L2W	2	20	Max 2x	10W	1425	30	000	665	95	60	017163	3 10	
New	S2T0	60L2N	2	20	Max 2x	10W	1500	40	000	665	95	60	017170	10	
New	S2T0	60L2C	2	20	Max 2x	10W	1500	60	000	665	95	60	017187	7 10	
New	S2T0	120L2W	3	36	Max 2x2	20W	2945	30	000	1275	95	60	017194	1 10	
New	S2T0	120L2N	3	36	Max 2x2	20W	3100	40	000	1275	95	60	017200	10	
New	S2T0	120L2C	3	36	Max 2x2	20W	3100	60	000	1275	95	60	017217	7 10	
New	S2T0	150L2W		10	Max 2x2	22W	3515	30	000	1575	95	60	017224	1 10	
New	S2T0	150L2N	4	10	Max 2x2	22W	3700	40	000	1575	95	60	017231	10	

3700

• Minimum Order Quantity

10

017248



40

Max 2x22W

S2T0150L2C

New

\*POWER OF THE ORIGINAL DURALAMP TUBE PRE-INSTALLED

1575

95

60

6000

# DAMP PROOF LUMINAIRE S1T/S2T IP65 WITHOUT TUBE



## DAMP PROOF LUMINAIRE S1T/S2T IP65 WITHOUT TUBE

#### TYPE

Damp proof linear ceiling light with G13 connection for 1 or 2 Tubes. Tubes not included.

## CHARACTERISTICS

Quick opening mechanism for wiring.

#### **MATERIAL**

Polycarbonate body: opal polycarbonate screen equipped with internal fins for flow recovery and emission optimization.

#### **ASSEMBLY**

"Snap on" AISI 316 stainless steel brackets for ceiling or suspension installation. Every batten is equipped with brackets.

### **APPLICATIONS**

Supermarkets, car parks, laboratories, warehouses.

	BASIC 220- 240V 50/60Hz	IP65	IK07		G2	DAMP PROO	F LUM	INAIF	RE FOI	R 1 T8 LED	TUBE
	art.			Max	W		L	L1	Н	8011905	₽•
New	S1T060L2			Max 1	OW		665	65	60	016975	10
New	S1T120L2			Max 2	0W		1275	65	60	015138	10
New	S1T150L2			Max 2	2W		1575	65	60	015145	10

• Minimum Order Quantity

	220- 240V I 50/60Hz	P65 IK07	□ G2	DAMP PROOF	F LUM	INAIR	E FOI	R 2 T8 LED	TUBES
	art.		Max W		L	L1	Н	8011905	₽•
New	S2T060L2	N	lax 2x10W		665	95	60	015152	10
New	S2T120L2	N	lax 2x20W		1275	95	60	015169	10
New	S2T150L2	N	lax 2x22W		1575	95	60	015176	10

• Minimum Order Quantity

## HBL - BEATRIX LINEAR HIGH BAY



## HBL - BEATRIX LINEAR HIGH BAY

#### **TYPE**

Suspension fixture for installations in large commercial and industrial spaces; uses SMD technology.

#### **CHARACTERISTICS**

Fixtures with single optics to maximise flux. The collection is divided into versions with standard drivers and those with Tridonic drivers. HBL PRO can be used in series of up to 10 fixtures for the 40W model and up to 6 fixtures for the 80W model.

#### **OPTIC**

Optical systems composed of micro optics that direct the flux of the LED sources. The LED sources are protected by sealed optics to be used in dusty or dirty environments.

#### **MATERIALS**

Extruded PC body; glass front screen.

#### **MOUNTING**

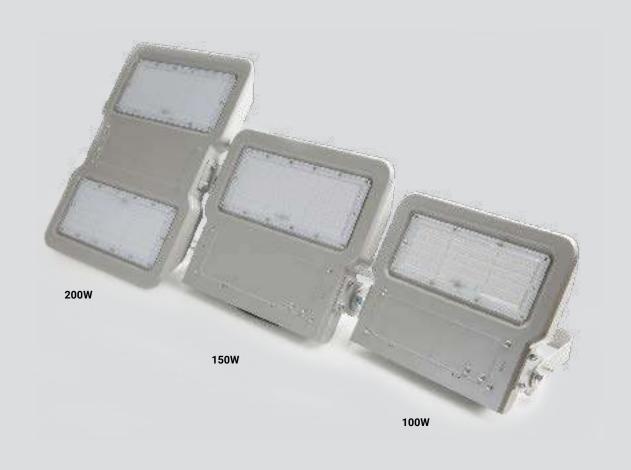
Easy cabling using an IP65 connection box attached to the body of the fixture. Wall/ceiling installation with the brackets supplied or suspension mounted. The separate accessory code for suspension installation includes 3m length cables.

BASIC 200- 240V 50/60H:	Ra>80		30000h L70 B20	IP65	IK08	-25° +35°C		G3	Risk Group 1				
art.	photo	W	lm	cd	K		PF	L	L1	Н		8011905	
HBL6001W	1	40	3450	2680	3000	60°	0,9	606	120	53.2	1250	990503	6
HBL6001N	1	40	3600	2800	4000	60°	0,9	606	120	53.2	1250	941321	6
HBL12001W	2	80	6850	5650	3000	60°	0,9	1147	120	53.2	2350	990497	6
HBL12001N	2	80	7200	5900	4000	60°	0,9	1147	120	53.2	2350	941338	6
PRO 200- 240V 50/60H:	Ra>80		50000h L70 B20	IP65	IK08	-25° +35°C		G5/ h24	Risk Group 1				
art.	photo	W	lm	cd	K		PF	L	L1	Н		8011905	
HBL6002N	3	40	3600	2800	4000	60°	0,9	606	120	53.2	1250	941345	6
HBL12002N	4	80	7200	5900	4000	60°	0,9	1147	120	53.2	2350	941352	6





# PANTH - SL2





## PANTH - SL2

#### **TYPE**

LED projector for outdoor, indoor and construction site application.

## CHARACTERISTICS

Compact dimensions: easy to use and handle. Equipped with fixing bracket, adjustable on the vertical axis. Free wire for professional use (1.5 m long). It can be connected to motion or twilight sensors.

#### **MATERIALS**

Grey painted pressed metal body. Completely sealed IP65 driver.

#### NB

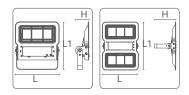
Non Dimming.



THE 200W MODEL CAN ALSO BE USED AS A HIGH BAY: 400 LUX AT 5 METRES HEIGHT.



art.	W	lm	cd	K		L	L1	Н		8011905	
PANTH-SL1002	100	11000	5380	4000	100°x60°	300	325	92,5	2300	861810	5
PANTH-SL1502	150	13500	6780	4000	100°x60°	360	377	95,5	3000	861841	5
PANTH-SL2002	200	20000	10600	4000	100°x60°	360	480	216	4100	861858	2



# HB2 - HIGH BAY





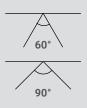
Optional lens:





200W 120° 200W 120° DALI

Optional lens:









## HB2 - HIGH BAY

#### **TYPE**

Suspension fixture for installation in large commercial or industrial spaces; it uses SMD technology. Also available in a DALI version.

#### **CHARACTERISTICS**

It is composed of an independent power supply system connected to the body of the fixture with small columns for improved thermal management. The optical unit is integrated into the aluminium body for perfect heat dissipation. The fixture body can be completed with an aluminium or polycarbonate reflector to obtain a different aesthetic and antiglare effect.

#### OPTIC

The optical system is composed of an array of SMD optimised lenses with a beam opening of 90° for the 100W and 150W and 120° aperture for the 200W.

#### **MATERIALS**

Grooved die-cast aluminium for heat dissipation.

#### **ASSEMBLY**

Equipped with a mounting ring for suspension installation. For ceiling or wall installation order the accessory code that comprises the bracket and the relative accessories.



To obtain a more attractive aesthetic and reduce glaring the luminaire can be completed with an aluminium or a transparent polycarbonate reflector.

PRO	220- 240V Ra>80 L70		P65 IF	<08 <sub>+</sub>	-25° -45°C		G5/ h24	Risk Group 1					
	art.	W	lm	cd	K		PF	Ø	Н	H1		8011905	
	<b> HB2-100</b>	100	15000	7200	4000	90°	0,92	260	116	161	2000	929459	1
	<b>/</b> HB2-150	150	23000	11200	4000	90°	0,92	260	116	161	2000	941017	1
	<b>/</b> HB2-200	200	30000	9300	4000	120°	0,92	305	123	168	2400	929466	1
	J HB2-100DALI	100	15000	7200	4000	90°	0,9	260	116	161	2000	938680	1
	<b> HB2-150DALI</b>	150	20000	11200	4000	90°	0,9	260	116	161	2000	941000	1
	J HB2-200DALI	200	30000	9300	4000	120°	0,92	305	123	168	2400	933180	1

HB2 HIGH BAY: flux and dimensional data being updated: greater efficiency and compactness.

### Accessories, see page 144

Optional polycarbonate lens for HB2- 100W - 150W - 60°

Optional polycarbonate lens for HB2-  $100W - 150W - 110^{\circ}$ 

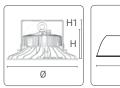
Optional polycarbonate lens for HB2-200W -  $60^{\circ}$ 

Optional polycarbonate lens for HB2-200W -  $90^{\circ}$ 

Polycarbonate reflector for HB2-100W - 150W - 200W

Aluminium reflector for HB2-100W - 150W - 200W

Surface Mounting Bracket for HB2-100W - 150W - 200W





For photometries please consult the website.



## HB5-HIGH BAY

#### **TYPE**

Suspended luminaire for installation in large commercial and industrial spaces; uses highly efficient SMD technology. Available in 3 sizes and 4 wattages. Polycarbonate or aluminium reflector available with accessory code.

#### **CHARACTERISTICS**

The optical unit is integrated into the aluminium body for perfect heat dissipation. Equipped with 4kV/6kV voltage surge protection. Arrangement for remote-controlled sensor, see accessory codes.

#### **OPENING/BEAM**

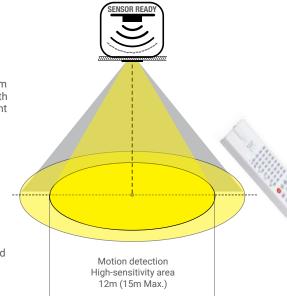
Optical system consisting of an array of PC lens optimised for SMDs, opening beam 90°. Optional polycarbonate lenses available for diffuse illumination, 120° beam opening.

#### **MATERIALS**

Grooved die-cast aluminium for heat dissipation. Suitable for use in dusty and humid environments due to its high IP rating.

#### ASSEMBLY

Equipped with a mounting ring for suspension installation. For surface mounting, order bracket accessory code.



## Efficiency 160lm/watt!

REMOTE-CONTROLLED SENSOR FUNCTIONS

Via the remote control it is possible to switch the luminaire on and off, dim and select the lighting mode with motion detection or room brightness detection.

AESTHETICS AND FUNCTIONALITY

To achieve a more attractive appearance and reduce glare, the housing can be completed with an aluminium or transparent polycarbonate reflector.



PRO	220- 240V 50/60Hz	Ra>80	100000h L70 B50	IP65	IK08	-25° +45°C	G5/ h24	Risk Group 1

Equipped with 4kV/6kV voltage surge protection.

	art.	W	lm	cd	K		PF	Ø	Н	H1		8011905	4
New	HB5-2813-STN	80	13000	6800	4000	90°	0,9	280	84	120	1500	014988	1
New	HB5-3222-STN	140	22000	11400	4000	90°	0,9	320	84	120	1880	014995	1
New	HB5-3227-STN	170	27000	13700	4000	90°	0,9	320	84	120	2000	015008	1
New	HB5-3632-STN	200	32000	16200	4000	90°	0,9	360	84	120	2260	015015	1

	Accessories, see page 145
New	Sensor for HB5 or HB6
New	Remote control for sensor for HB5 or HB6
New	Aluminium reflector for HB5 Ø 280 mm
New	Aluminium reflector for HB5 or HB6 Ø 320 mm
New	Aluminium reflector for HB5 or HB6 Ø 360 mm
New	Polycarbonate reflector for HB5 Ø 280 mm
New	Polycarbonate reflector for HB5 or HB6 Ø 320 mm
New	Surface Mounting Bracket for HB5 or HB6
New	Optional polycarbonate lens for HB5 Ø 280 mm 120°
New	Optional polycarbonate lens for HB5 or HB6 Ø 320 mm 120°
New	Optional polycarbonate lens for HB5 or HB6 Ø 360 mm 120°

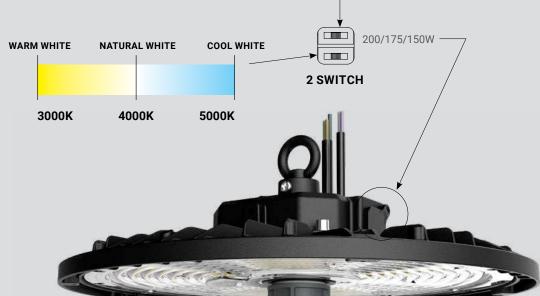


## HB6 - HIGH BAY CCT MULTIPOWER





























### HB6 - HIGH BAY CCT MULTIPOWER

#### **TYPE**

Suspended luminaire for installation in large commercial and industrial spaces; uses highly efficient SMD technology, up to 180lm/W.

#### **CHARACTERISTICS**

Version with power and colour temperature selector switch and dimmable 1-10 in the same luminaire. Equipped with 4kV/6kV voltage surge protection. Arrangement for remote-controlled sensor, see accessory codes.

#### OPENING/BEAM

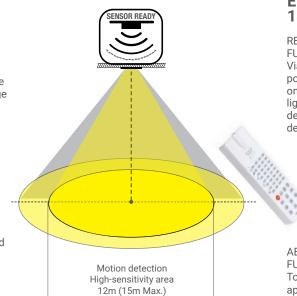
Optical system consisting of an array of PC lens optimised for SMDs, opening beam 90°. Optional polycarbonate lenses available for diffuse illumination, 120° beam opening.

#### **MATERIALS**

Grooved die-cast aluminium for heat dissipation. Suitable for use in dusty and humid environments due to its high IP rating.

#### **ASSEMBLY**

Equipped with a mounting ring for suspension installation. For surface mounting, order bracket accessory code.



### Efficiency 180lm/watt!

REMOTE-CONTROLLED SENSOR FUNCTIONS

Via the remote control it is possible to switch the luminaire on and off, dim and select the lighting mode with motion detection or room brightness detection.

AESTHETICS AND FUNCTIONALITY

To achieve a more attractive appearance and reduce glare, the housing can be completed with an aluminium or transparent polycarbonate reflector (32 cm diameter only),

	PRO 220- 240V Ra>8 50/60Hz	80 (	1000 L70		-25° +45°C		G5,		Equippe protection		4kV/6kV volta	ige surge
	art.	W	lm	cd	K		PF	Ø	Н Н1		8011905	
		80	13000 *	6300								
New	HB6-3222-CCTD10	113	18000 *	8800	3000/4000/5000	90°	0,9	320 8	120	1940	015534	1
		140	22000 *	10400								
		150	24000 *	12200								
New	HB6-3632-CCTD10	175	28000 *	13700	3000/4000/5000	90°	0,9	360 8	120	2340	015541	1
		200	32000 *	15400								

<sup>\*</sup> The indicated lumen data refers to the 4000K colour temperature.

#### Accessories, see page 145

New	Sensor for HB5 or HB6
New	Remote control for sensor for HB5 or HB6
New	Aluminium reflector for HB5 or HB6 Ø 320 mm
New	Aluminium reflector for HB5 or HB6 Ø 360 mm
New	Polycarbonate reflector for HB5 or HB6 Ø 320 mm
New	Surface Mounting Bracket for HB5 or HB6
New	Optional polycarbonate lens for HB5 or HB6 Ø 320 mm 120°
New	Optional polycarbonate lens for HB5 or HB6 Ø 360 mm 120°



# HB2 - HIGH BAY



art.	Description	Ø	Н	8011905	
KTHB2-100-LENS60	Optional polycarbonate lens for HB2- 100W - 150W - 60°	196		991142	1
KTHB2-100-LENS110	Optional polycarbonate lens for HB2- 100W - 150W - 110°	196		991159	1
KTHB2-200-LENS60	Optional polycarbonate lens for HB2-200W - 60°	242		991166	1
KTHB2-200-LENS90	Optional polycarbonate lens for HB2-200W - 90°	242		991173	1
KTHB2-100-PCR	Polycarbonate reflector for HB2-100W - 150W - 200W	345	95	943370	1
KTHB2-100-R	Aluminium reflector for HB2-100W - 150W - 200W	390	122	929497	1
KTHB2-100-F	Surface Mounting Bracket for HB2-100W - 150W - 200W		127	929473	1

The optional aluminium reflector provides direction the light: ideal in the workplace where video terminals or machines with LCDs are used, the antiglare optic prevents light from being reflected on screens positioned under the fixture.





# HB5-HB6 CCT-HIGH BAY

		art.	Description	Ø/L	н	8011905	
0	New	KTHB5-6-MW	Sensor for HB5 or HB6	50	34	015121	100
# = 0	New	KTHB5-6-TC	Remote control for sensor of HB5 or HB6	55	174	325374	50
	New	KTHB5-6-28-R1	Aluminium reflector for HB5 Ø 280 mm	415	205	015084	2
	New	KTHB5-6-32-R1	Aluminium reflector for HB5 or HB6 Ø 320 mm	500	236	015091	2
	New	KTHB5-6-36-R1	Aluminium reflector for HB5 or HB6 Ø 360 mm	572	263	015107	2
	New	KTHB5-6-28-PCR	Polycarbonate reflector for HB5 Ø 280 mm	415	205	017842	2
	New	KTHB5-6-32-PCR	Polycarbonate reflector for HB5 or HB6 Ø 320 mm	480	250	325367	2
Π	New	KTHB5-6-F	Surface Mounting Bracket for HB5 or HB6	122	150	015114	10
@	New	KTHB5-28_LENS120	Optional polycarbonate lens for HB5 Ø 280 mm 120°	252	2	015022	25
(3)	New	KTHB5-6-32_LS120	Optional polycarbonate lens for HB5 or HB6 Ø 320 mm 120°	288	2	325350	25
(3)	New	KTHB5-6-36_LS120	Optional polycarbonate lens for HB5 or HB6 Ø 360 mm 120°	327	2	355343	25

The optional aluminium reflector provides direction the light: ideal in the workplace where video terminals or machines with LCDs are used, the antiglare optic prevents light from being reflected on screens positioned under the fixture.







#### **TYPE**

High power, ultra-thin LED projector; can be used outdoor and indoor.

#### **CHARACTERISTICS**

It can be connected to motion or twilight sensors.

#### **MATERIALS**

Painted diecast aluminium. Black and white colour.

#### NB

Free wire for professional use. Models from 100W upwards are equipped with a compensation valve.

BASIC 220- 240V Ra>80 50/60Hz	Æ		20000h .70 B30	IP65	-25° +35°C		G2	Risk Group 1					
art.		W	lm	cd	K	PF		L	Н	L1	8011905		
PANTH-STWH10N		10	800	350	4000	0,9	120°	103	83	26	976682	185	5 •
PANTH-STWH10C		10	800	350	6500	0,9	120°	103	83	26	976675	185	5 <b>•</b>
PANTH-STWH20N		20	1600	650	4000	0,9	120°	121	95	26	976668	320	5 °
PANTH-STWH20C		20	1600	650	6500	0,9	120°	121	95	26	976651	320	5 <b>°</b>
PANTH-STWH30N		30	2400	950	4000	0,9	120°	160	123	30	976354	610	5 <b>•</b>
PANTH-STWH30C		30	2400	950	6500	0,9	120°	160	123	30	976347	610	5 •
PANTH-STWH50N		50	4000	1500	4000	0,9	120°	206	160	31,5	976330	870	10
PANTH-STWH50C		50	4000	1500	6500	0,9	120°	206	160	31,5	976323	870	10
PANTH-STWH100N		100	8000	3400	4000	0,9	120°	270	210	35	976316	1410	10
PANTH-STWH100C		100	8000	3400	6500	0,9	120°	270	210	35	976309	1410	10
PANTH-STWH150N		150	12000	5100	4000	0,9	120°	330	250	35	976293	2790	5
PANTH-STWH150C		150	12000	5100	6500	0,9	120°	330	250	35	976286	2790	5
PANTH-STWH200N		200	16000	6800	4000	0,9	120°	388	288	36	976279	4270	5
PANTH-STWH200C		200	16000	6800	6500	0,9	120°	388	288	36	976262	4270	5
PANTH-STWH250N		250	25000	8800	4000	0,9	120°	445	334	45,5	976231	4270	4
PANTH-STWH250C		250	25000	8800	6500	0,9	120°	445	334	45,5	976224	4270	4
PANTH-STWH350N		350	35000	12000	4000	0,9	120°	490	370	49	976194	6000	2
PANTH-STWH350C		350	35000	12000	6500	0,9	120°	490	370	49	976187	6000	2

• Minimum Order Quantity





BASIC 220- 240V Ra>80 50/60Hz		20000h L70 B30	IP65	-25° +35°C		G2	Risk Group 1					
art.	W	lm	cd	K	PF		L	Н	L1	8011905		<b>P</b>
PANTH-ST10W	10	800	320	3000	0,9	120°	103	83	26	933135	185	5 •
PANTH-ST10N	10	850	340	4000	0,9	120°	103	83	26	932299	185	5 <b>°</b>
PANTH-ST10C	10	850	340	6500	0,9	120°	103	83	26	931636	185	5 <b>•</b>
PANTH-ST20W	20	1600	600	3000	0,9	120°	121	95	26	933142	320	5 <b>°</b>
PANTH-ST20N	20	1600	660	4000	0,9	120°	121	95	26	932305	320	5 <b>°</b>
PANTH-ST20C	20	1600	660	6500	0,9	120°	121	95	26	931629	320	5 <b>•</b>
PANTH-ST30W	30	2400	890	3000	0,9	120°	160	123	30	933159	610	5 <b>•</b>
PANTH-ST30N	30	2400	950	4000	0,9	120°	160	123	30	932312	610	5 <b>•</b>
PANTH-ST30C	30	2400	950	6500	0,9	120°	160	123	30	931612	610	5 •
PANTH-ST50W	50	4000	1400	3000	0,9	120°	206	160	31,5	933166	870	10
PANTH-ST50N	50	4000	1540	4000	0,9	120°	206	160	31,5	932329	870	10
PANTH-ST50C	50	4000	1540	6500	0,9	120°	206	160	31,5	931605	870	10
PANTH-ST100W	100	8000	3100	3000	0,9	120°	270	210	35	941048	1410	10
PANTH-ST100N	100	8000	3300	4000	0,9	120°	270	210	35	941031	1410	10
PANTH-ST100C	100	8000	3300	6500	0,9	120°	270	210	35	941024	1410	10
PANTH-ST150W	150	12000	4700	3000	0,9	120°	330	250	35	941079	2790	5
PANTH-ST150N	150	12000	5000	4000	0,9	120°	330	250	35	941062	2790	5
PANTH-ST150C	150	12000	5000	6500	0,9	120°	330	250	35	941055	2790	5
PANTH-ST200N	200	16000	6510	4000	0,9	120°	388	288	36	976255	4270	5
PANTH-ST200C	200	16000	6510	6500	0,9	120°	388	288	36	976705	4270	5
PANTH-ST250W	250	22000	8200	3000	0,9	120°	445	334	45,5	941109	4270	4
PANTH-ST250N	250	25000	8200	4000	0,9	120°	445	334	45,5	941093	4270	4
PANTH-ST250C	250	25000	8200	6500	0,9	120°	445	334	45,5	941086	4270	4
PANTH-ST350N	350	35000	11000	4000	0,9	120°	490	370	49	976217	6000	2
PANTH-ST350C	350	35000	11000	6500	0,9	120°	490	370	49	976200	6000	2

• Minimum Order Quantity



### PANTH H1

Super-compact Hight efficiency uo to 30.000 lumen

Efficiency 175lm/watt!

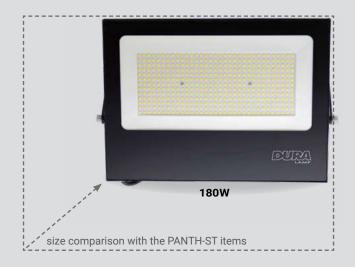
40W

L = 95cm









L = 95cm

### sensor version:

Adjustable ambient lighting
TIME SENS LUX

SENS LUX

AM 8M 10M

### PANTH H1

#### **TYPE**

Super-compact professional projectors for large commercial and industrial spaces; uses highly efficient SMD technology, up to 175lm/W.

#### **CHARACTERISTICS**

Ultra-flat, highly efficient, long service life: reliable products for use in all areas where powerful light output with significant energy savings is required. Equipped with voltage surge protection, see details.

#### **OPENING/BEAM**

110°

#### **MATERIALS**

Die-cast aluminium body. Suitable for use in dusty and humid environments due to its high IP rating.

#### **ASSEMBLY**

Free-standing or fixed to the surface with its swivelling bracket (cable length 30 cm or 95 cm depending on model).

### Efficiency 175lm/watt!



	PRO 220- 240V 50/60Hz	Ra>80		50000h L70 B20	IP65	IK06	-25° +35°C		G5/ h24	Risk Group 1				
	art.		W	lm	cd	K	PF		L	Н	L1	8011905		
New	PAH1L04BLW	1)	24	3900	1450	3000	0,5	110°	145	105	29	326715	324	20
New	PAH1L04BLN	1)	24	4200	1540	4000	0,5	110°	145	105	29	326272	324	20
New	PAH1L04BLC (1	)	24	4100	1500	6000	0,5	110°	145	105	29	326289	324	20
New	PAH1L10BLW	2)	60	9900	3550	3000	0,95	110°	225	155	35	326722	771	10
New	PAH1L10BLN (	2)	60	10500	3750	4000	0,95	110°	225	155	35	326319	771	10
New	PAH1L10BLC (2	2)	60	10200	3640	6000	0,95	110°	225	155	35	326326	771	10
New	PAH1L20BLW	2)	120	20000	7100	3000	0,95	110°	305	220	35	326739	1608	10
New	PAH1L20BLN	2)	120	21000	7520	4000	0,95	110°	305	220	35	326333	1608	10
New	PAH1L20BLC (2	2)	120	20500	7340	6000	0,95	110°	305	220	35	326340	1608	10
New	PAH1L30BLW	2)	165	28500	10000	3000	0,95	110°	355	260	36	326746	2217	5
New	PAH1L30BLN (2	2)	165	31000	11120	4000	0,95	110°	355	260	36	326357	2217	5
New	PAH1L30BLC (2	2)	165	30000	10840	6000	0,95	110°	355	260	36	326364	2217	5

### PANTH H1 WITH SENSOR

	art.	W	lm	cd	K	PF		L	Н	L1	8011905		
New	PAH1L03WHNS (1)	15	2600	980	4000	0,55	110°	115	82	27	326258	259	20
New	PAH1L03BLNS (1)	15	2600	980	4000	0,55	110°	115	82	27	326265	259	20
New	PAH1L07WHNS (2)	40	7000	2500	4000	0,95	110°	190	125	29	326296	572	10
New	PAH1L07BLNS (2)	40	7000	2500	4000	0,95	110°	190	125	29	326302	572	10





Fixtures suitable for installation and use in residential, commercial and light industrial environments, in systems with "Category I" of impulse withstand in compliance with CEI EN 64-8 / 4 (IEC 60364-4-44).

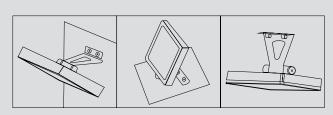
In case of installation in public areas, it is advisable to use overvoltage surge protection. The HP2 models are designed to withstand voltage peaks up to 4kV.

# PANTH EVO





#### **DIFFERENT MOUNTING OPTIONS**



### PANTH EVO

#### TYPE

LED projector 'minimal design' for outdoor and indoor applications.

#### **CHARACTERISTICS**

It can be connected to motion or twilight sensors.

#### OPENING/BEAM

120°

#### **MATERIALS**

Painted die-cast metal body.

#### NB

Free wire for professional use (1 m long).





Z 1 \*\*\*\*

Emergency fixture with a centralised power supply for emergency lighting.

art.	W	lm	cd	K	PF		L	Н	L1		8011905	
PANTH-B10N	10	900	350	4000	0,94	120°	116	82	23	205	849818	30
PANTH-WH10W	10	900	350	3000	0,94	120°	116	82	23	205	862671	30
PANTH-WH10N	10	900	350	4000	0,94	120°	116	82	23	205	855482	30
PANTH-B20N	20	1850	700	4000	0,94	120°	147	103	29	360	849825	20
PANTH-WH20W	20	1850	700	3000	0,94	120°	147	103	29	360	862664	20
PANTH-WH20N	20	1850	700	4000	0,94	120°	147	103	29	360	855505	20
PANTH-B30N	30	2650	950	4000	0,98	120°	189	133	29	580	849832	20
PANTH-WH30W	30	2900	950	3000	0,98	120°	189	133	29	580	862657	20
PANTH-WH30N	30	3000	950	4000	0,98	120°	189	133	29	580	855529	20
PANTH-B50N	50	4500	1600	4000	0,96	120°	221	155	34	820	849849	10
PANTH-WH50W	50	5000	1600	3000	0,96	120°	221	155	34	820	862640	10
PANTH-WH50N	50	5200	1600	4000	0,96	120°	221	155	34	820	855543	10

ADJUSTABLE ON THE HORIZONTAL AXIS



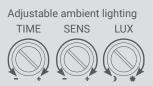


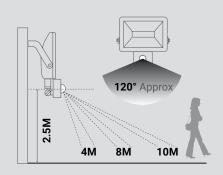
L = 100cm

# PANTH EVO PIR SENSOR









FOR SAFETY AND ENERGY SAVING

### PANTH EVO PIR SENSOR

#### **TYPE**

LED projector 'minimal design' for outdoor and indoor applications with PIR sensor.

#### **CHARACTERISTICS**

Twilight and movement sensor: 10 meters detection range.

#### **OPENING/BEAM**

120°

#### **MATERIALS**

Painted diecast aluminium. Black colour.

#### NB

Free wire for professional use (1 m long).

#### PIR SPECS:

Ambient lighting: 3-2000LUX (adjustable) Switch on time: min: 10sec÷3sec Max: 7min÷3min Installation height: 1.8m÷2.5m Motion Detection Speed: 0.6~1.5m/s Detection distance: Max.10m (<24°C ta)

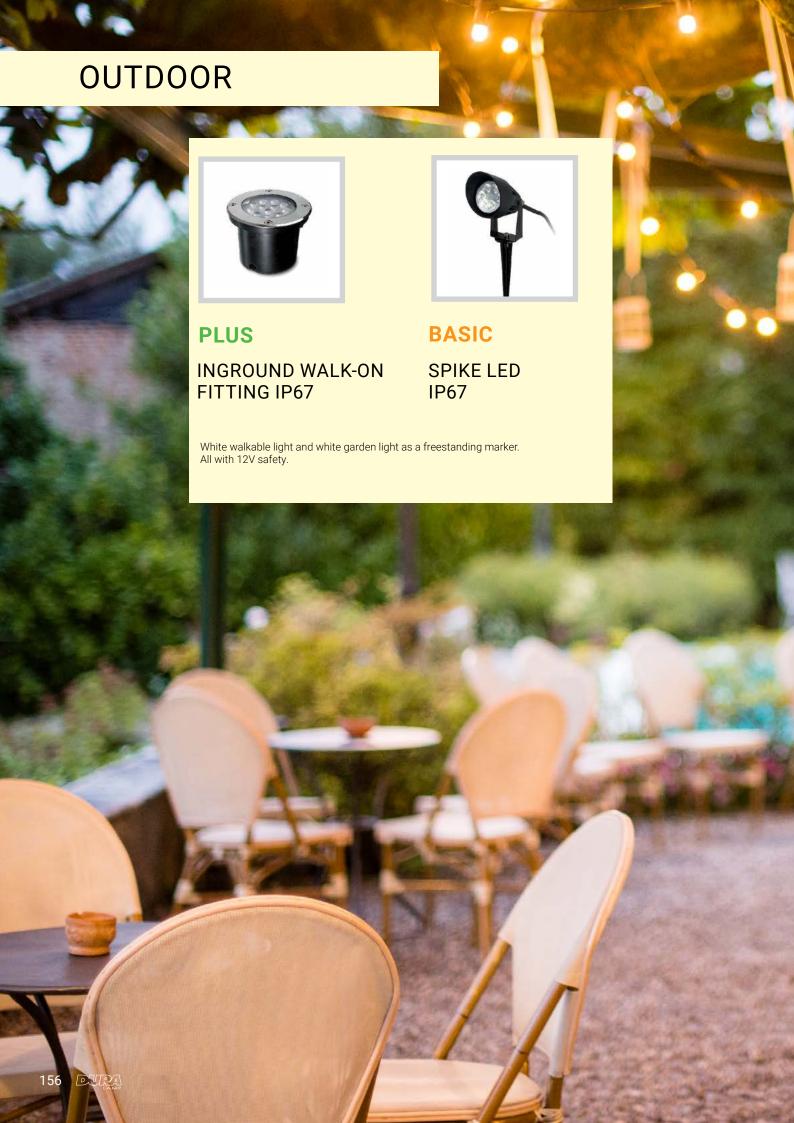




art.	W	lm	cd	K		L	L1	Н	H1	8011905	
PANTH-B30NS	30	2650	950	4000	120°	190	29	135	210	855789	20
PANTH-B50NS	50	4500	1600	4000	120°	221	34	155	230	855833	10



L = 100cm





# FACADE PROJECTORS



### **PRO**

### **MINILINI IP65**

MINILINI, the linear outdoor lighting from 30 cm to 120 cm, now available with two beam angles, 110° and asymmetric 36°x80°. A quality product for important projects.

### **DECORATIVE FIXTURES**



**BULKHEAD** T&O - IP65

Decorative luminaires, wall-mounted or recessed, for indoor and outdoor.



PLAFO T2 IP40



**BASIC** 

**BASIC** 



**SEGNASENTIERO** IP65

**BASIC** 



ZOE IP54

**BASIC** 



### MINILINI IP65

#### **TYPE**

Mains voltage architectural linear projector for surface mounted installation.

#### **CHARACTERISTICS**

It is constructed from extruded aluminium with an opal polycarbonate cover and is rated IP65 making it suitable for exterior environments: 40 mm wide and 295 or 585 mm long and available in various beam angles and wattages.

Accessories include a selection of fixed and angled surface mounting brackets providing installation uniformity or adjustable brackets for further flexibility.

MINILINI is complete with integrated protection from voltage spikes.

#### **DIMMABILITY**

230V: Dimmable 10-100%; TRIAC Leading edge

#### CONNECTIONS

Maximum connection length: see table.

#### **ASSEMBLY**

Choice of surface mounting brackets with different fixed angles - 15°, 30°, 45° - or with adjustable brackets of different heights to be ordered with separate codes.

#### **BINNING**

ANSI/SDCM: 2 step. 3000K - 4000K



#### **Converter Wiring Diagram**



#### MINILINI CONFIGURATIONS + CONNECTION TABLE

POWER	WATT SET	Modules size	Max N# of modules	Max length each line*	Max W power
4W	1x4W	30,1cm	72	20,4m	288W
8W	1x8W	30,1cm	36	10,2m	288W
8W	2x4W	59,1cm	36	21m	288W
16W	1x16W	30,1cm	18	5,1m	288W
16W	2x8W	59,1cm	18	10,5m	288W
32W	2x16W	59,1cm	9	5,1m	288W
64W	4x16W	114,6cm	4	5,1m	288W

## MINILINI IP65

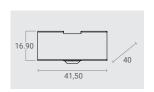




art.	W	lm	cd	K	PF		L	Н	L1	8011905	
MNL016EP12WGC30E •	16	850	640	3000	0,95	36°x80°	40	40	295	967598	1
MNL016EP12WGC40E •	16	880	665	4000	0,95	36°x80°	40	40	295	967581	1
MNL016EP12FL030E •	16	695	240	3000	0,95	110°	40	40	295	955311	1
MNL016EP12FL040E •	16	720	250	4000	0,95	110°	40	40	295	955328	1
MNL032EP24WGC30E •	32	1700	1285	3000	0,95	36°x80°	40	40	585	967574	1
MNL032EP24WGC40E •	32	1760	1330	4000	0,95	36°x80°	40	40	585	967567	1
MNL032EP24FL030E •	32	1390	480	3000	0,95	110°	40	40	585	955335	1
MNL032EP24FL040E •	32	1440	495	4000	0,95	110°	40	40	585	955342	1
MNL064EP48WGC30E •	64	3400	2570	3000	0,95	36°x80°	40	40	1200	967543	1
MNL064EP48WGC40E •	64	3520	2660	4000	0,95	36°x80°	40	40	1200	967550	1

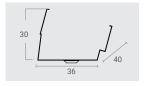
Description

art

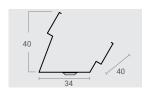


304 steel surface mounting bracket for vertical positioning (10
We recommend using 2 for every module





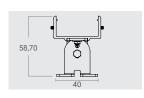
art	Description	
KTMNLBKT15	304 steel surface mounting bracket with an angle of 15° (10 pieces).	1



art	Description	
KTMNLBKT30	304 steel surface mounting bracket with an angle of 30° (10 pieces).	1



art	Description	
KTMNLBKT45	304 steel surface mounting bracket with an angle of 45° (10 pieces).	1



art	Description	
ORDEV1	35 mm surface mounting bracket, can swivel 90° in both directions (2 pieces).	1



art	Description	
KTMNLEFC	Mains connection IP65 cable. Must be completed with end caps.	1
KTMNLMFSC	IP65 cable end caps	1

<sup>■</sup> Limited availability - reorderable only with MOQ



### SPIKE LED

#### **TYPE**

Garden spike LED light: classic use with modern technology.

#### CHARACTERISTICS

Diffused light from a smaller point of origin: only 128mm above ground. Complete with an anti-glare cover.

#### **MATERIALS**

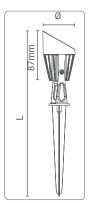
Die-cast aluminium body; epoxy painted metal body and spike.

Do not use with drivers for halogen lamps; 12V AC/DC power supply not included.



BASIC	12V AC/DC	Ra>80		25000h L70 B30	IP67	IK10	-25° +35°C		G3	Risk Group 1			
art.		W	Ir	n d	cd	K	PF		Ø	L		8011905	
LND0760	NW	7	43	30 4	34	4000	0,70	60°	56	290	290	850562	50

Can be used with Duralamp's driver for LEDs: SLD-50-24 MAX 3 light fixtures





### **SPIKE LED IP67**

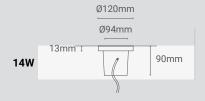
Orientable and almost invisible

# **INGROUND WALK-ON IP67 FITTING**









### **INGROUND WALK-ON IP67**

#### TYPE

LED fixtures with SMD technology for inground installation; walk-on fixtures.

#### **CHARACTERISTICS**

Complete with finishing ring and completely sealed transparent glass.

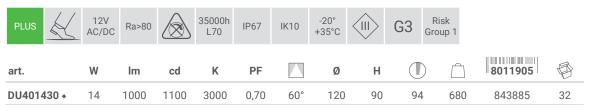
#### **MATERIALS**

Metal body, brushed steel ring, shockproof IK10 glass screen; plastic sleeve.

#### NB

Do not use with drivers for halogen lamps; 12V AC/DC power supply not included.





• To be discontinued



### PLAFO T2

#### **TYPE**

LED lamps with SMD technology in a fixture for ceiling or surface installations. Version with proximity sensor.

#### **CHARACTERISTICS**

Excellent light diffusion across the entire surface. Non-replaceable internal power supply.

#### **MATERIALS**

Metal body; satin effect plastic diffusor.

#### **APPLICATIONS**

Typically used in stairwells, apartment and residential building entrances, waiting rooms and surgeries, etc.

#### NB

Do not use with dimmers. Connection to the mains with terminal block.



Version with proximity sensor: ideal where increased visibility and safety is required obtaining the certainty of energy saving.

The sensor is housed inside a cover and is therefore invisible.



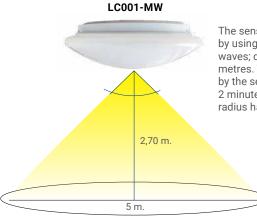
BASIC 220- 240V 50/60Hz	Ra>80		000h B30 IP4	-25° +35°C		G3	Risk Group 0	7			
art.	W	lm	cd	K	PF		Ø	L		8011905	
LC001W	20	1650	370	3000	0,7	120°	280	90	350	862688	10
LC001	20	1700	400	4000	0,7	120°	280	90	350	861162	10
LC002W	30	2550	570	3000	0,97	120°	400	120	750	862695	5
LC002	30	2600	600	4000	0,97	120°	400	120	750	861179	5
art.	W	lm	cd	K	PF		Ø	L		8011905	

art.	W	lm	cd	K	PF		Ø	L		8011905	
LC001-MW *	20	1600	400	4000	0,70	120°	270	90	290	927349	10

<sup>\*</sup> Fixture fitted with a proximity sensor.







The sensor detects movement by using frequency modulation waves; detection distance 5-8 metres. The fixture is turned on by the sensor and stays on for 2 minutes once the detection radius has been cleared.



PLAFO T2

4000K

# **BULKHEAD T&O IP65**





#### **ACCESSORIES**







APPLICATIONS
Stairwell lighting, terraces, corridors, common areas, gardens, bathrooms etc.



### **BULKHEAD T&O IP65**

#### TYPE

IP65 ceiling/wall light with new generation LED sources using SMD technology.

#### **CHARACTERISTICS**

Typically used for diffused lighting for both indoor and outdoor or wet environments (IP65). Substitutes ceiling fixtures with fluorescent lamps to give immediate lighting without flickering and increased duration.

#### **MATERIALS**

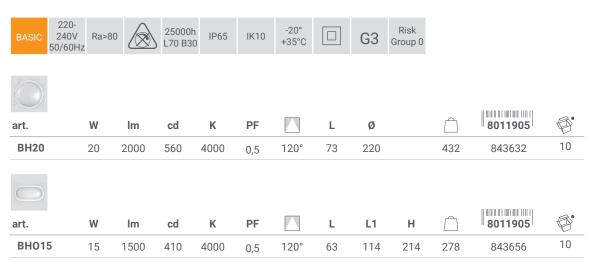
Shockproof plastic IK10 body and screen. Driver on board not accessible.

#### MOUNTING

The bracket attaches to the wall or the ceiling and the fixture is screwed onto the bracket.

#### NB

No Dimming.



• Minimum Order Quantity





# **ACCESSORIES T&O**



Black or white anti-glare for round bulkhead

art	L	Ø		8011905	
КТВН20НМВ	55	227	62	861032	1
KTBH20HMW	55	227	62	861247	1



Black or white grid accessory for round bulkhead

art	L	Ø		8011905	
KTBH20GRB	54	227	65	861216	1
KTBH20GRW	54	227	65	861209	1



Black ring accessory for round bulkhead

art	L	Ø		8011905	
KTBH20ARB	24	227	50	861056	1



Black or white grid accessory for oval bulkhead

art	L	Н	L1		8011905	
KTBH15GRB	120	220	46	50	861230	1
KTBH15GRW	120	220	46	50	861223	1



Black ring accessory for oval bulkhead

art	L	Н	L1		8011905	
KTBH15ARB	120	220	24	40	861070	1





# **SEGNASENTIERO IP65**

#### TYPE

Wall mounted. Surface pathway markers

#### CHARACTERISTICS

Three light shielding versions for different lighting effects: full light, downwards and up&down.

#### MATERIAL

Heat-resistant plastic body; opal polycarbonate screen.

#### INSTALLATION

Surface with the bracket supplied.

#### **APPLICATIONS**

Pathway marker.





UP&DOWN 3







art.	Photo	W	lm	K	PF		L	L1	L2	8011905	
SW001W +	1	4	370	3000	0,51	120°	140	140	51	927424	50
SW001N +	1	4	370	4000	0,51	120°	140	140	51	927455	50
SW002W +	2	4	180	3000	0,51	120°	140	140	53	927431	50
SW002N +	2	4	180	4000	0,51	120°	140	140	53	927462	50
SW003W +	3	4	100	3000	0,51	120°	140	140	53	927448	50
SW003N +	3	4	100	4000	0,51	120°	140	140	53	927479	50

• To be discontinued



### **ZOE STEP-MARKER IP54**

#### **TYPE**

Die-cast aluminium recessed step-marker.

#### **CHARACTERISTICS**

Extremely compact, indirect lighting, staggered reflective compartment to maximise flux and optics protected from insects.

Powder coated die-cast aluminium in three different colours.

#### INSTALLATION

Recessed using the springs supplied.

#### **APPLICATIONS**

Step-marker. Ideal for use on stairs to improve safety.

#### WHITE 1



#### GREY 3



#### BLACK 2



BASIC	220- 240V 50/60Hz	Ra>80	15000h L70 B20	IP54	-25° +35°C	G2	Risk Group 0

art.	Photo	W	lm	K	PF	L	Н	L2	8011905	
ZW01W-W +	1	3	90	3000	0,7	84	84	30	941178	10
ZW01N-W +	1	3	90	4000	0,7	84	84	30	941185	10
ZW01W-B •	2	3	90	3000	0,7	84	84	30	941192	10
ZW01N-B +	2	3	90	4000	0,7	84	84	30	941208	10
ZW01W-G •	3	3	90	3000	0,7	84	84	30	941215	10
ZW01N-G +	3	3	90	4000	0,7	84	84	30	941222	10

<sup>•</sup> To be discontinued

Installed with countercasing

8011905 art.

KT000B 8011905972271





The back box is automatically shipped with each ZOE item.







**ZOE STEP-MARKER IP54** 

4000K

# DRIVERS AND CONTROLLERS

### **DURASTRIP DRIVERS**

#### **CHARACTERISTICS**

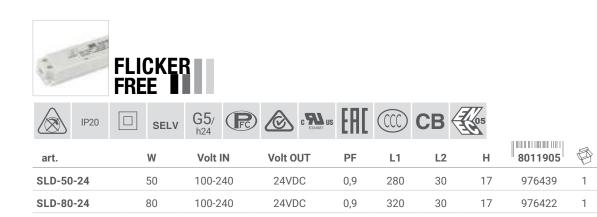
New SLD-150-24

SELV equivalent; protection device in case of short circuit or overload in the secondary circuit

150

100-240

**IP20** 



24VDC

0,9

330

32

22

000776

1



### **DURASTRIP DALI DRIVERS**

**IP67** 







art.	W/Volt IN	W/Volt IN	W/Volt OUT	PF	L	L2	Н	8011905	E)
ELG-75-24DA-3Y	75 (220V-240V)	60 (100V-120V)	24VDC	0,9	180	63	35,5	975807	1
ELG-100-24DA-3Y	96 (220V-240V)	70 (100V-120V)	24VDC	0,9	199	63	35,5	975753	1
ELG-150-24DA-3Y	150 (220V-240V)	105 (100V-120V)	24VDC	0,9	219	63	35,5	975760	1
ELG-200-24DA-3Y	200 (220V-240V)	150 (100V-120V)	24VDC	0,9	244	71	37,5	975821	1
ELG-240-24DA-3Y	240 (220V-240V)	180 (100V-120V)	24VDC	0,9	244	71	37,5	975814	1

Dimming curve expressed as a function of the load, i.e. inversely proportional to the percentage value of the power supply load. If the product is used at full load, the dimming curve is linear from 10 to 100%, if it is used at half load, the dimming possibility is halved, i.e. a dimming on the control side of 50% will produce a real load dimming of 25%.

It is important to distribute the power evenly over the power supplies in the same area of the installation to achieve consistent dimming levels. It is important to distribute the power evenly over the power supplies in the same area of the installation to achieve consistent dimming levels.

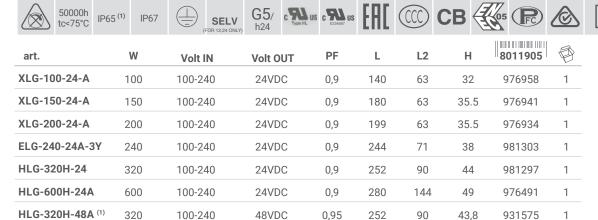
### **DURASTRIP DRIVERS**











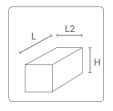
## **CONNECTION DIAGRAM**



#### **ELECTRICAL CONNECTION: CONNECTIONS IN SERIES OR PARALLEL**

single reel power (W)	L (m)	connection	driver @24Vdc	note
280	50m	-	320W [48Vdc]	
220	20m	-	320W	
220	40m	-	600W	
210	5m	-	320W	
150	5m	-	200 W	
120	5m	-	150W	
120	10m	Parallel	300 ÷320W	
120	15m	Parallel	>400W	
110	5m	-	120 ÷150W	
110	10m	Parallel	240W	
110	15m	Parallel	>400W	
100	5m	Parallel	120W	
100	10m	Parallel	240W	
100	15m	Parallel	320W	
75W	5m	-	100 W	
75W	10 m	Parallel	200 W	Each 5m must be installed in parallel
75W	20m	Parallel	320W	
60 W	5m	-	100 W	
60 W	10 m	Parallel	200 W	Each 5m must be installed in parallel
60 W	20m	Parallel	320W	
40 W/45 W	10 m	Series	100 W	
40 W/45 W	15m	Parallel	200 W	Each 10m must be installed in parallel
40 W/45 W	35m	Series and Parallel	320W	
25W	15m	Series	100 W	
25W	20 m	Parallel	120 ÷150W	Each 15m must be installed in parallel
25W	60m	Series and Parallel	320W	

For further details on other connection configurations see the connection diagrams by pointing at the qr code:









WE RECOMMEND TO USE THE POWER SUPPLIES FOR LED SOURCES INDICATED IN THE CATALOGUE.

# MULTI-CURRENT CONSTANT CURRENT

**IP20** 

#### **CHARACTERISTICS**

Can be used with fittings with replaceable remote driver. 220÷240V 50/60Hz



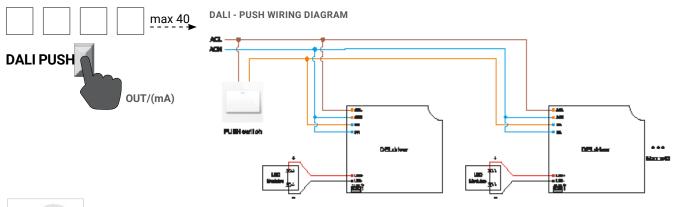




art.	W Max	Volt IN	OUTPUT current	PF	L1	L2	Н		8015466	
A01486 *	42	220/240Vac/dc	450÷1100mA	0,95	103	68,5	30,5	170	162287	1

\* DALI 2 - DALI Push

Suitable for use in a centralised power supply for emergency lighting.





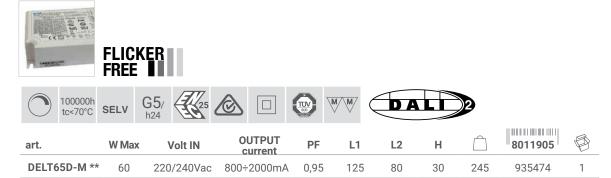




art.	W Max	Volt IN	OUTPUT current	PF	L1	L2	Н		8011905		
DELT40D-M	40	220/240Vac	300÷1050mA	0,95	147	44	30	137	863210	1	

<sup>\*</sup> DALI 2 - DALI Push

Suitable for use in a centralised power supply for emergency lighting.



<sup>\*\*</sup> DALI 2 - 1-10V - DALI Push

# MULTI-CURRENT CONSTANT CURRENT **DIMMABLE DRIVERS**

**IP20** 





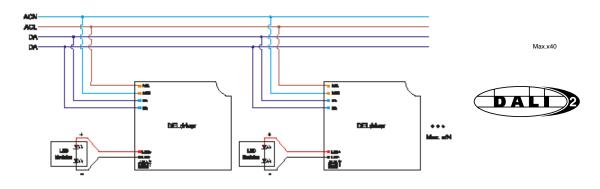
art.	W Max	Volt IN	OUTPUT current	PF	L1	L2	Н		8011905	
ZK600-14000S	50	220/240Vac	600÷1400mA	0,95	110	75	26	113	933265	1

<sup>\*</sup> DALI 2 - 1-10V - DALI Push

Suitable for use in a centralised power supply for emergency lighting.

Preset power supply for Slimflux CCT panels, 680mA OUT.

# DALI WIRING DIAGRAM







art.	W Max	Volt IN	OUTPUT current	PF	L1	L2	Н		8011905	
DELT40D-10V	40	220/240Vac	550÷1050mA	0,95	141	46	28	129	993061	1

1-10V



# MULTI-CURRENT CONSTANT CURRENT DRIVERS

**IP20** 

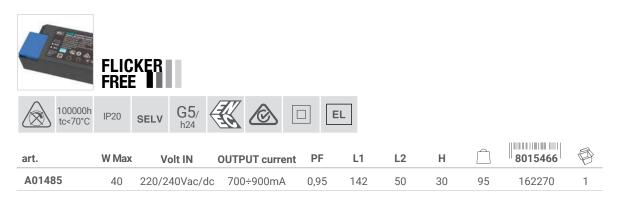
# **CHARACTERISTICS**

Can be used with fittings with replaceable remote driver. 220÷240V 50/60Hz



art.	W Max	Volt IN	OUTPUT current	PF	L1	L2	Н		8015466	
A01484	40	220/240Vac/dc	800÷1000mA	0,95	142	50	30	95	162263	1

Suitable for use in a centralised power supply for emergency lighting.



Suitable for use in a centralised power supply for emergency lighting.

# CONSTANT CURRENT DRIVERS





	art.	W Max	Volt IN	OUTPUT current	PF	L1	L2	Н		8011905	
NEW	ZKLP600EL	40	220/240Vac/dc	600mA	0,95	119	42,5	28	102	325930	1
	ZKLP700EL	31.5	220/240Vac/dc	750mA	0,95	119	42,5	28	95	990350	1
	ZKLP1400-EL	60	220/240Vac/dc	1400mA	0,95	156	50	38	195	990565	1



# **CONSTANT VOLTAGE DRIVERS**

**IP20** 

# NOTE

It is advisable not to charge the driver more than 55% of its power in order to consider the in-rush current of LED lamps.







art.	W	Volt OUT	Volt IN	L1	L2	Н		8011905	
DELT20A-12 +	20	12V <sub>DC</sub>	220-240V	154	50	22	59	834616	10

• To be discontinued



































art.	W	Volt OUT	Volt IN	PF	L1	L2	Н	8011905	
SLD-50-12	50	12VDC	110-305	0,9	280	30	17	976880	1
SI D-80-12	80	12VDC	110-305	nα	320	30	17	976873	1

# DRIVER FOR 12V HALOGEN LAMPS





art.	W	Volt	Volt OUT	Volt IN	L1	L2	Н		8011905	
DELT12150P +	50-150	220-240	11,5	220-240	180	46	36	230	826468	25

• To be discontinued



# CONTROL INTERFACE TO BE USED WITH DURASTRIP

Dimming and control systems can be used to improve the ambient aspect: they help creating special, different, soft and always lively atmospheres. Moreover, they have an important function of energy saving: by varying the emission and/or activating/deactivating the system or appliances, they allow optimising the presence of solar lighting.











# DALI CONTROLLER FOR DURASTRIP WHITE LIGHT

art.	Max current (A)	Volt OUT	Volt IN	Connection	IP	L1	L2	Н	8011905	
ZKCDAFF	8/CH	12-24V <sub>DC</sub>	12-24V <sub>DC</sub>	Screw	20	167	51	23	95541	1

2-channel controller.

### 1-10V CONTROLLER FOR DURASTRIP WHITE LIGHT

art.	Max current (A)			Connection	IP	L1	L2	Н	8011905	
ZKC1-10	10	12-24V <sub>DC</sub>	12-24V <sub>DC</sub>	Screw	20	168	51	23	833374	1

It can be used with all White light Durastrips.



# **DALI INTERFACE**

The DALI (Digital Addressable Lighting Interface) is a digital protocol interfacing with the power supplies. It is widely used in the lighting field as it provides visible benefits compared to the 1-10V analog control technology (it is essentially a flexible, digital control that allows addressing the single appliances).

The DALI protocol allows defining appliance units and managing the lighting sceneries, to create the right lighting of an ambient according to its use. Different lighting sceneries can be configured and enabled using a simple key, without involving the system wiring.

The DALI protocol is more simple and economic compared to the integrated management systems of a building (building management).

A DALI network can control up to 64 appliances/lamps.



# 1-10V DIMMING INTERFACE

The 1-10V luminous intensity control system

runs with analog technology: 1 corresponds to 0% and 10 to 100% of the lamp emission. The intensity can be adjusted by using the linear curve or logarithmic curve and it is the simplest system to install.

The connection is carried out by 2 polarity wires placed between the power supply and controller. It can be used with active or passive control systems.

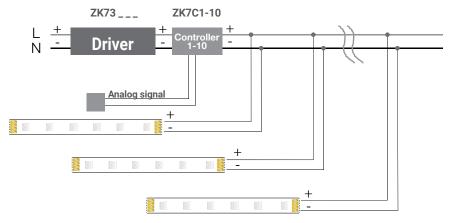
How to use DURASTRIP with our control-		DURASTRIP 24VDC
lers? Here the indications of maximum	ZKCDAFF	240W/CH
power.	ZKC1-10	240W



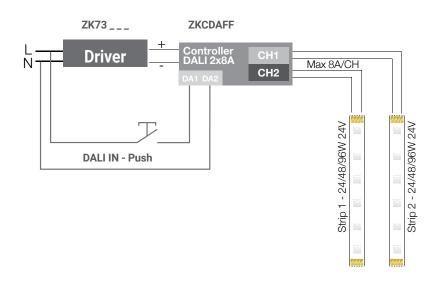
# **DURASTRIP WIRING DIAGRAMS**

Wire section suitable to length and load of installation

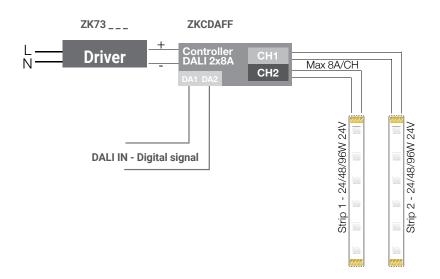
**DURASTRIP CONTROLLERS:** 1-10V scheme



**DURASTRIP CONTROLLERS:** DALI scheme (Push)



**DURASTRIP CONTROLLERS**: **DALI Scheme** 



# CONTROL INTERFACE TO BE USED WITH DURASTRIP

# DMX CONTROLLER FOR DURASTRIP RGB (OR WHITE ON 3 CHANNELS)

art.	Max current (A)	`		Connection	IP	L	L2	Н	8011905	
ZKCDMX-R *	5/CH	12-24V <sub>DC</sub>	12-24V <sub>DC</sub>	RJ45/Screw	20	178	42	33	838795	1

It can be used with all Durastrip RGB, and white.

# DMX 4 CHANNELS CONTROLLER FOR DURASTRIP RGB+WHITE (OR 4 CHANNELS)

art.	Max current (A)	Volt OUT	Volt IN	Connection	IP	L	L2	Н	8011905	
ZKCDMXW	5/CH	12-24V <sub>DC</sub>	12-24V <sub>DC</sub>	Screw	20	168	51	22	838942	1

Can be used with Durastrip RGB+white.

Connection diagrams are available at www.duralamp.it (in the product datasheet).

# PWM SIGNAL REPEATER FOR 4 CHANNELS WHITE LIGHT STRIPS

art.	Max current (A)	Volt OUT	Volt IN	Connection	IP	L	L2	Н	8011905	
ZKREP-4CH	5/CH	24V @ 480W	12-36V <sub>DC</sub>	Screw	20	178	46	22	862701	1
ZKREP-4CH-IF	<b>5/CH</b>	24V @ 480W	12-36V <sub>DC</sub>	Screw	67	181	74	38	862718	1





# **DMX INTERFACE**

DMX512, which abbreviation is DMX (Digital MultipleX), is a communication protocol mainly used to control lighting (even LED type), from computers or control units. It is normally used to control colored lighted or white lighted appliances (RGB) with variable temperature. Thanks to the high transmission speed of the data, the DMX allows making dynamic and even complex sceneries.

A DMX network consists in 512 channels; the number of appliances that can be controlled cannot be defined beforehand, as it depends on how many DMX channels each appliance uses. E.g., if every appliance of the DMX network uses 3 DMX channels, the network can contain 170 appliances.

ZKCDMX-R code version: Equipped with RJ45 connector for DMX signal, complete with looping system and remote sensor with plug (20 cm cable). It can be used in a traditional way or with remote control included in the packaging (signal distance 10 mt in free air).

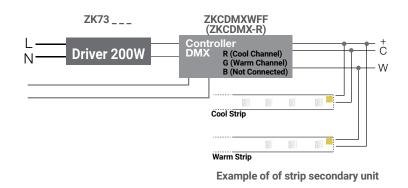
How to use DURASTRIP with our control-		DURASTRIP 24VDC
lers? Here the indications of maximum		
power.	ZKCDMX-R / ZKCDMXW	120W/CH



......

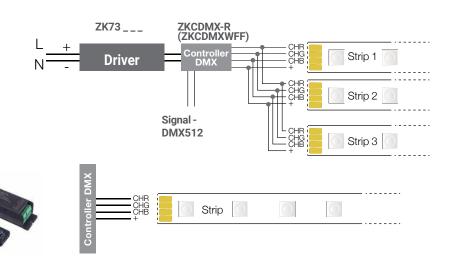
<sup>\*</sup> Version with RJ45 connector, which can be used in a traditional way or with remote control included in the package.

# DURASTRIP CONTROLLERS: DMX scheme linear system



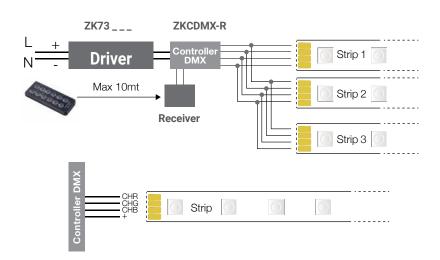
DURASTRIP

CONTROLLERS: DMX Scheme



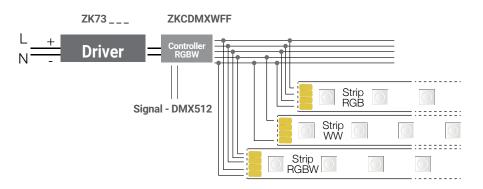
# **DURASTRIP**

CONTROLLERS: DMX IR Scheme



DURASTRIP RGBW

CONTROLLER RGB+W (Cod. ZKCDMXW)



# WALL TOUCH DIMMER - DMX

# **TYPE**

Dimmers for DURASTRIP white, for DURASTRIP CTC, DURASTRIP RGB and RGB+white.

# **CHARACTERISTIC**

external interface in tempered glass with high touch sensibility, immediate response to touch and control precision. 4 zones can be controlled separately or synchronised. Conforms with protocol DMX512(1990). Can be used with ZKCDMX, ZKCDMX-R, ZKCDMXW. Dimmer's driver included in the box (220-240Vac / 5Vdc). Easy installation and intuitive use.



0

4

4

3

# DMX WALL TOUCH DIMMER FOR WHITE LIGHT DURASTRIP

art.	Input Voltage	Number of DMX channels		Number of scenes	L1	L2	L3	8011905	
ZKTPC-DIM	5VDC	4	4	4	86	86	10	839635	1

Each channel can have 256 levels of light variation and 4 favourite scenes can be saved.

# DMX WALL DIMMER FOR CTC EFFECT

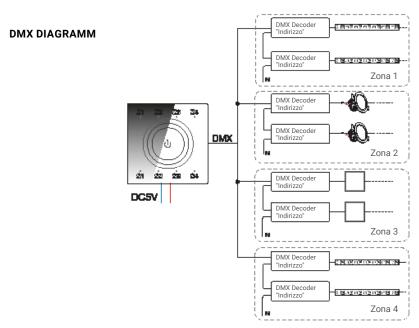
art.	Input Voltage	Number of DMX channels	Number of areas	Number of scenes	L1	L2	L3	8011905	
ZKTPC-CTC	5V <sub>DC</sub>	8	4	3	86	86	10	839642	1

Each channel can have 256 levels of light variation and 3 favourite scenes can be saved.

# DMX WALL TOUCH DIMMER FOR RGB - RGBW DURASTRIP

art.	Input Voltage	Number of DMX channels		Number of scenes	L1	L2	L3	8011905	
ZKTPC-RGBW	5V <sub>DC</sub>	16	4	4	146	106	10	839659	1

<sup>&</sup>quot;Memory" function: the last color level chosen is recalled when the light is switched back on; 4 favourite scenes can be saved. Simultaneous or sychronous control of the RGB colors and white. 36 setting modes.



<sup>&</sup>quot;Memory" function: the last color temperature chosen is recalled when the light is switched back on again; 3 scenes can be saved.

<sup>&</sup>quot;Memory" function: the last color temperature chosen is recalled when the light is switched back on again; 3 scenes can be saved.

# **DURASTRIP WIRING DIAGRAMS**

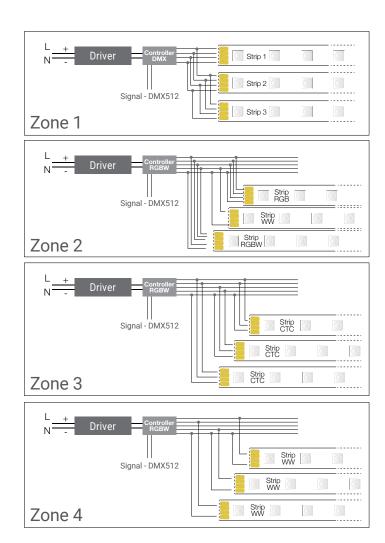
# **DURASTRIP DIMMER TOUCH**







Max power indications for the use of DURASTRIP with the controllers.

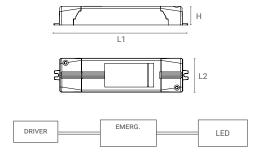


# STANDBY LIGHTING FOR FITTINGS

# **CHARACTERISTICS**

Emergency electronic unit for standby lighting suitable for current controlled power LED. Can be used for maintained or emergency operation.

Can be used with max 2A-90V. Battery life: 3 hours (Battery pack dimensions: 135x45x23mm); battery inserted in a protective case in accordance with regulations. Residual flux in emergency 7%.



Emergency	Emergency
working voltage	output
(VL)	current (I)
6-70V	10-62mA

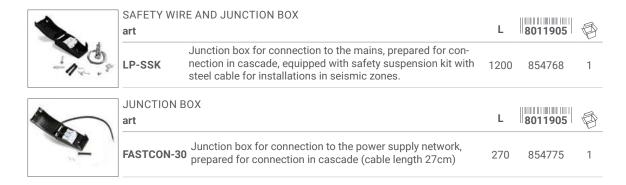
# LED EMERGENCY KIT FOR STANDBY LIGHTING\* FOR FITTINGS

art.	Volt IN	L1	L2	Н		8011905	
KTEMR03	220-240V	166,5	46	25	185	933012	1

<sup>\*</sup> As indicated by the UNI EN 1838.

Reserve lighting means lighting that allows you to continue normal activity without substantial change. Fixtures indicated as compatible with the kit have passed the required tests for the reserve lighting category in compliance with EN 60598-2-22

# ACCESSORIES FOR FITTINGS



# INFO AND TECHNICAL DATA



# PRODUCT CATEGORY KEY

PRO	Products for specific applications and top-level features, especially appreciable by industry professionals.
PLUS	Articles with outstanding performance and the best quality-price ratio, the best solution for the majority of applications.
BASIC	Ideal products for markets of consumers who desire a LED product and are seeking the most convenient solution in terms of its cost.

# LED WARRANTY SPECIFICATIONS KEY Warranties on all LED fixtures and LED lamps:

G2 anni GARANZIA	Up to 2 years (4000h/year)*	*4000h = 11h a day x 365 days. Without limitations on the duration of use for the first year, provided the observance of the installation conditions.
G3 anni GARANZIA	Up to 3 years (4000h/year)*	*4000h = 11h a day x 365 days.  Without limitations on the duration of use for the first year, provided the observance of the installation conditions.
G4/h24 anni GARANZIA	Full Guarantee 4 years (24h/24h)	h24, provides Total Warranty! The winning element for great projects.
G5/h24 anni GARANZIA	Full Guarantee 5 years (24h/24h)	h24, Total Warranty up to 5 years use!

The specific guarantee that each item enjoys is clearly indicated in the catalog and is subject to compliance to the limitations of use. For details, refer to www.duralamp.it or contact the sales force.

# **KEY**

# TABLE PAGES KEY

W	Rated watts for lamps or fixtures
V	Lamp or fixture voltage
lm	Lumen: unit of measurement of the flux emitted by a lamp or fixture. In the case of DURALAMP'S fixtures it indicates the real emission of the fixture in stable conditions. This data is the same used in the photometrics for lighting calculations.
K	K= Kelvin colour temperature indicated in Kelvin.
COLOUR NM	Colour in nanometres, unit of spatial measurement of wavelengths of visible/invisible radiation.
<b>\</b>	Lamp cap
PF	Power Factor
	Beam opening
Ø/L1/L2/L3/H	Diameter and other dimensions expressed in mm except where otherwise indicated.
	Weight of single item article in grams (except where otherwise indicated)
	Minimum packaging: complying with packaging quantities when ordering speeds orders and ensures greater safety of goods.
₽•	Minimum order quantity
	Class I Fixture- Fixture with protective earthing
	Class II Fixture – Fixture with double insulation, no earthing required
	Class III Fixture – Low voltage fixture, no earthing required
(	Can be used in the open air, in open fixtures and without protective glass
	Only use in fixtures fitted with protective glass
STOP	Elimination of UV rays.
	Do not cover with insulating material
	Can be used with a dimmer. A list of compatible dimmers is found in individual product files on the web site.
	Not to be used with a dimmer.
360°)	Adjustable
UGRXX	UGRxx: Indicates the degree of glare: the lower the number, the lower the glare
Ra>XX	Colour Rendering Index
XX000h	Operating life in hours indicated as L70 or L50, always measured at 25° room temperature AT. The life-span is modified substantially with a rise in temperature.
1	

Updated tech. data

DURA

LX0

Operating life of a LED fixture or lamp maintaining the indicated flux: L70= 70% flux; L50= 50% flux.

IK08

IK Code, International Protection Marking, classifies and rates the degree of protection for light fixtures against external mechanical impact.

IK01 0,15 Joule

IK02 0.20 Joule

IK03 0,35 Joule

IK04 0,5 Joule

IK05 0,7 Joule

IK06 1,00 Joule

IK07 2,00 Joule

IK08 5,00 Joule

IK09 10,00 Joule

IK10 20,00 Joule

IPXX

IP Code, International Protection Marking, classifies and rates the degree of protection for light fixtures against the intrusion of solid particles (first number) and water (second number).

IP20 protected against solid objects up to Ø 12 mm.

IP23 protected against solid objects up to  $\emptyset$  12 mm and sprays of water.

IP40 protected against solid objects over Ø 1 mm.

IP43 protected against solid objects over Ø 1 mm and sprays of water.

IP44 protected against solid objects over Ø 1 mm and splashed water.

IP54 protected against dust and splashed water.

IP55 protected against dust and low pressure jets of water.

IP65 Totally protected against dust and low pressure jets of water.

IP66 Totally protected against dust and strong jets of water.

IP67 Totally protected against dust and temporary immersion.

IP68 Totally protected against dust and immersion in water (with an indication of the permitted depth in metres).

IP rating of the internal housing side (VI) and Optic side IP rating (VO)

All measurements are expressed in mm except where expressly indicated.



Available on order: the message "Available on order" often appears in the catalogue. We've added it to offer our customers the broadest choice option. Careful though: if an article is available "on order", it means that it is not readily available in stock and only minimum quantities are available for purchase. We therefore recommend that you contact sales for further details.



# **CERTIFIED QUALITY**

All Duralamp products are CE marked, ie they comply with all applicable European Directives. The UL mark is issued after certification of the product by third parties such as UL, an independent, nongovernmental and non-profit organisation whose mission is to ensure that products conform to standards set by ANSI, the American National Standards Institute. UL certification is therefore a Quality and Safety mark and is required for products to be used in the United States and countries that make reference to the same standards.



The EAC mark is the Euroasian Conformity mark required for exporting products to the Customs Union of Russia, Belarus, Armenia, Kazakhstan, Kyrgyzstan. It is comparable to the CE mark and refers to the declaration of compliancy to the technical standards required by the Eurasian Customs Union.



Duralamp operate under ISO 9001, an international reference standard for quality management of all company processes.

# TECHNICAL ANALYSIS

lm

# FLUX AND EFFICIENCY

Luminous Flux and Efficiency represent the key information for the evaluation of the performance of a product. What do they represent exactly? Luminous flux represents the emission of the LED source, that is the total amount of light produced by the light source. Efficiency represents the ration between the emission and the power absorbed by the source, that is the total amount of emitted light divided per the energy consumed by the LED source. Nowadays there is not a sole way of publishing these data, each company on the market makes its own choice. This means that catalogues of different companies publish different kinds of information, ranging from the data declared by LED producers to values referable to the LED source in peculiar conditions, but also to values that take into account the "loss" due to reflectors, lenses, drivers and so onln general, the most reliable data is the value measured on the fixtue in its effective usage conditions. In order to let our customers have a clearer idea of the declared data, Duralamp specifies for each LED fixte both its effective flux/efficiencvalues and the values directly referable to the source, as declared by the producer. The purpose of this methodic choice is to simplify the understanding of the data, and, consequently, to provide our customer the immediate possibility of comparison among Duralamp lighting fixtues and those by other brands. The rapid technical progress of LED sources results in continuous changes in terms of luminous flux and, consequently, efficacy. The information provided by the catalogue should therefore be referred to the date of publication - for regularly updated information please visit the site web.

L70

### LED LIFESPAN

L80 B10

LED lamps, unlike traditional lamps do not suddenly stop working but gradually decrease their initial flow unless there are defects or electric shocks. A LED lamp is considered to be no longer functioning it reaches 70% of their initial flow (L70). Life tests are performed following standard IES LM-80. The life span of LED lamps is strongly influenced by the lamps operating temperature once they are installed in fixtures. Duralamp fixtures are designed to have a very low LED operating temperature to ensure the lamps have a very long lifespan.

According to the IEC / PAS 62717 standard, the useful life of a LED can be defined with an additional parameter, for example 50'000h L80B10, meaning the period of time (50'000h) in which 10% (B10) of the LED products of the same type has gradually fallen below 80% of the initial nominal flux.

TC

# TEMPERATURE AND PERFORMANCE

The working temperature of a LED source has a significant effect on its useful life, maintenance of luminous flux and efficiency. Correct temperature management, i.e. thermal management of the power in use is a crucial factor in ensuring the performance and reliability of products.

The main characteristic to determine reliability of a product and consistency of performance is measuring the junction temperature (Tj), that can be measured indirectly as luminous flux and the useful life are linked to this parameter. Tj values between 60°C and 90°C allow you to have products with high reliability, performance and estimated lifespans that adhere to market demands.

Careful attention must be paid when reading the declared data given that LED manufacturers provide data on the flux at a temperature of Tj 25°C, a condition that is not physically possible for normal use where the LED source is turned on and tested in a fraction of a second and does not produce any heat. Duralamp products are measured and characterised for thermal stability to provide real data on everyday use for the catalogue and users. Well-designed fixtures that ensure proper dissipation also ensure constant flow, colour and spectrum parameters as well as reliability and durability in the declared lifespan.



# **COLOUR CONSISTENCY**

LED lamps have extensive production tolerances in relation to chromaticity. For years Duralamp has only used lamps with colour consistency that is measured using the MacAdam Ellipse system. This allows for absolute repeatability of the colour characteristics compared to the binning based system. LED lamps used by Duralamp are at least 3-steps of MacAdam (3SDCM).

Ra

# COLOUR RENDERING INDEX CRI or Ra

The colour rendering index CRI indicates the ability of a light source to reveal colours faithfully. Lighting a coloured object with two sources with different CRI will reveal different colours depending on the source used. It is important not to confuse the CRI with data relating to the colour temperature of a source (expressed in K); two sources with the same colour temperature can have different colour rendering indexes. The CRI strongly influences the efficiency of a LED source and many times lighting designers have to

choose between the quality and quantity of light. The LED sources that are fitted in products in the Duralamp collection normally have a colour rendering index that reaches CRI 85. In some case there are also sources with a high colour rendering index (CRI>95).

TM30

# New TM30 Standard - a more precise colour definition

It is evident that a single index is not sufficient to completely characterize the colour rendering of a source. The TM-30 is the method by which we group together well-known evaluation systems, organized in a systematic way, with the introduction of two other different indexes, the Fidelity Index Rf (which indicates the fidelity of colour rendering) and the Gamut Index Rg (used to evaluate the increase or decrease in saturation), in turn accompanied by a form of graphic representation. Furthermore the method evaluates the illuminant on 99 samples (CES) that reflect the colours of the leaves, flowers, skin tones, paintings, etc. so as to extend our ability to establish its specific rendering.

UGR

UGR (Unified Glare Rating) is a unified factor in the international field developed by the CIE (International Commission on Illumination) to evaluate direct discomfort glare due to the use of lighting products. In the European Standard relating to indoor workplaces UNI EN 12464-1, the UGR varies from a minimum value of 10 (no glare) to a maximum value of 30 (considerable glare). The lower the value the lower the glare. The UGR value needs to be calculated because it takes into account the size and characteristics of the environment, the background luminance (ceiling, wall, etc), the luminance of light fixtures and the position of the latter in relation to the observation point.

UGR classification applications

- <13 imperceptible
- ≤16 perceptible technical drawings
- ≤19 perceptible reading, writing, schools, offices, working on a pc
- ≤22 perceptible industry and crafts
- ≤25 uncomfortable raw industrial jobs
- ≤28 uncomfortable railway tracks, warehouses
- >28 intolerable

# **Flicker**



Fixtures with the "SAFE FLICKER" logo have parameters of  $P_{st}^{LM}$ =1 and SVM≤1, in compliance with regulations IEC TR 61547-1 and IEC TR 63158, to ensure a more comfortable and safe light.

# P<sub>st</sub> (Short-Term flicker)

Quantifies visible Flicker that is harmful to human health caused by the modulation of light in the frequency range between 0.3Hz and 80Hz.

# The recommended threshold is $P_{\perp}^{LM} = 1$ .

Note - This value was determined based on a representative test group of people and identifies the average perception threshold of visible flicker.

# SVM (Stroboscopic Visibility Measure)

Quantifies stroboscopic effects that can occur in situations relating to objects in movement in the presence of modulation of light in the frequency range between 80Hz and 20KHz.

SVM=1 represents the visibility threshold in a test group of people that quantifies the stroboscopic effect in defined laboratory conditions.

Fixtures that do not bear the "SAFE FLICKER" logo on the other hand show the flicker value declared by the driver manufacturer which is not determined according to IEC criteria.

Constant renewal of drivers will bring about the introduction of new models in line with IEC requirements. For more details and/or specific needs please contact our technical department.

# Technical details

Flicker is defined as "the rapid variation of the intensity of a light source over time"; in particular that relating to the frequency range between 0-80Hz.

When fluctuations on the other hand belong to the interval between 80Hz-2KHz this are called "Stroboscopic effects" in which light fluctuation produces an incorrect perception of the movement of objects lit by the same source by a static observer.

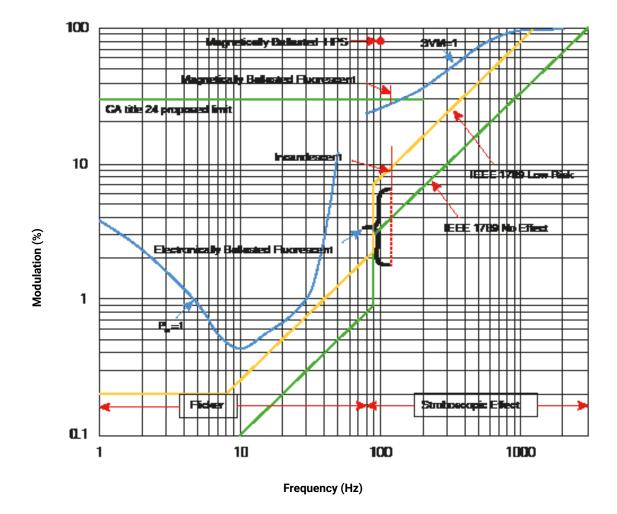
This phenomenon became increasingly important following the introduction of LED light sources for general lighting given the combination of the following aspects:

- LED sources are characterised by a high speed response to fluctuations in the power supply which translate into variations
  of the light emitted
- · Unwanted residual fluctuations of the driving current of LED sources generated by the electronic power supplies used
- Modulation of the driving current of LED sources for example PWM (Pulse Width Modulation), necessary to adjust the emission level
- · Any instability in the operation of dimmers connected externally to the LED source power supplies

This fluctuation in light intensity, according to the frequency, intensity, viewing angle, level of light in the environment, age of the observer and their sensitivity level, can be perceptible on a conscious and/or unconscious level and generate a series of side effects depending on the sensitivity level such as: headaches, visual fatigue, distraction etc.

In order to mitigate the risks on health in lighting contexts using LED sources, recommendations have been developed for the American market (see: IEEE Std 1789™-2015), and the European market with Technical Reports IEC TR 61547-1 and IEC TR 63158.

The graphic below summarises the limits provided for in the two different "regulations", based on different evaluation mechanisms to establish when a fixture is "SAFE" for observers.



# PHOTOMETRICS KEY

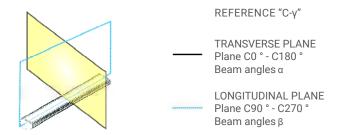
Photometric measurements were taken at the Duralamp Photometric Laboratory. These measurements are performed at a room temperature equal to 25±1 °C as required by UNI EN 13032-1 - Light and lighting - Measurement and presentation of photometric data of lamps and luminaries - Part 1.

The photometric values quoted are dependent on the optical system to which they relate, and from the light source used. In order to improve its production, the Company reserves the right to change these optical systems and consequently relative photometric data without

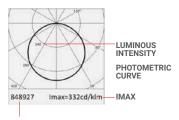
For ease of use, the photometric curve present within this catalogue is shown and explained below.

On the web site www.duralamp.it the special section "INFO TECH /Eulumdat" provides all the photometric data in ldt. format that is also given on every product datasheet.

The photometric curves shown in this catalogue are compiled according to the "C-γ" international reference system, where the C0-C180 plane is perpendicular to the fixtues and the C90-C270 plane is parallel to the fixtues, as depicted in the figue. For symmetrical and rotationally symmetric fixtues therefore, a single curve is used.



### POLAR DYAGRAM



4000K R	KELVIN - IRC/Ra		
Fixture Power	12W -	FIXTURE POWER	
Source Flux	1180lm -	LED FLUX	
Fixture Flux	1180lm -	FIXTURE FLUX	
Efficacy	98lm/W -	- EFFICACY	
Imax	391cd -	— IMAX	

H(m)	D(m)	Emax(lx)	
	118°-		BEAM ANGLE
1	3.31	391	- DISTANCE FROM THE PLAN (m)
2	6.61	98	
3	9.92 -	43	Ø LUMINOUS CONE (m)
4	13.23	24	
5	16.53	16 —	MAX ILLUMINATION (lx)
0.736		377.5	ot .====

PHOTOMETRIC CODE: these are the last 6 digits of the item's barcode

All Duralamp luminaires have integrated LED sources that cannot be separated: therefore the source flux and the luminaire flux show the same value.

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28530LL	99	B60MB	65	DBTR160-B	99	ELG-150-24DA-3Y	176
28540LL	99	B60MW	65	DBTR160-W	99	ELG-200-24DA-3Y	176
A01484	180	B60RC10B	65	DELT12150P	181	ELG-240-24A-3Y	176
A01485	180	B60RC10W	65	DELT20A-12	181	ELG-240-24DA-3Y	176
A01486	178	B60RC11B	65	DELT40D-10V	179	ELG-75-24DA-3Y	176
B60-1RB	62	B60RC11W	65	DELT40D-M	178	FASTCON-30	93, 188
B60-1RW	62	B60RC13B	65	DELT65D-M	178	HB2-100	139
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B60-1SW	62	B60RC17B	65	DH25L140	49	HB2-150	139
B60-2RB	62	B60RC17W	65	DH40L130	49	HB2-150DALI	139
B60-2RW	62	B60RC1B	65	DH40L140	49	HB2-200	139
B60-2SB	62	B60RC1W	65	DH60L130	49	HB2-200DALI	139
B60-2SW	62	B60SP	63	DH60L140	49	HB5-2813-STN	141
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B60111	63	BT103N	125	DS04L130Q	41	HBL12001W	135
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B60115W	63	BT104C	125	DS04L140Q	41	HBL6001N	135
B6011B	64	BT104N	125	DS04L140T	41	HBL6001W	135
B6011W	64	BT104W	125	DS04L160Q	41	HBL6002N	135
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B6012B	64	BT105N	125	DS08L130Q	41	HLG-320H-48A	176
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B6013W	64	CLE2624S	110	DS08L140T	41	KT-BT1-FS	125
B6014B	64	CLE2715	111	DS08L160Q	41	KT000B	172
B6014W	64	CLE2715-S	111	DS08L160T	41	KTBH15ARB	170
B6015B	64	CLE2715-SWH	111	DS10L130Q	41	KTBH15GRB	170
B6015W	64	CLE2715-WH	111	DS10L130T	41	KTBH15GRW	170
B6016B	64	CLE2724	110	DS10L140Q	41	KTBH20ARB	170
B6016W	64	D306TNW	51	DS10L140T	41	KTBH20GRB	170
B6017B	64	D306TNW-D	51	DS10L160Q	41	KTBH20GRW	170
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B603W	64	DBSP130-W	101	DT80L1HP30	37	KTHB2-100-LENS110	144
B604B	62	DBSP215-B	101	DT80L1HP40	37	KTHB2-100-LENS60	144
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KTHBS-6-28-PCR         145         L930120S3-840         74         LRT560WW         121         PANTH-ST100N         149           KTHBS-6-28-R1         145         L930120T330DE-A         90         LRT560WW         121         PANTH-ST100W         149           KTHBS-6-32-R1         145         L930120MCR-840C         76         LRT590WW         121         PANTH-ST100W         149           KTHBS-6-32-R1         145         L960120BTUGR-9CCT         82         LRT590WW         121         PANTH-ST10W         149           KTHBS-6-36-R1         145         L96060B1NER         80         MAR11840CCTBL         29         PANTH-ST150W         149           KTHBS-6-TC         145         L96060B1NER         80         MAR313000DIMIC         29         PANTH-ST200C         149           KTLPS-DU         39         LP6606B1UGR-840         80         MAR313000DIMMO         29         PANTH-ST200C         149           KTLPS-DU         39         LP6606B1UGR-840         80         MAR21340CCTLO         31         PANTH-ST200C         149           KTLPW-H-MS         193         LP6606B1UGR-8CT         82         MAR22340CCTLO         31         PANTH-ST200C         149           KTLPW-H-MS         1	KTHB2-200-LENS90	144	LP30120B3UGR-840ST	78	LRT530WW	121	PANTH-SL2002	137
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KTHBS-6-32-PCR         145         LP30120UGR-840C         76         LRT590WW         121         PANTH-STION         149           KTHBS-6-32-R1         145         LP60120PI-840         86         MARTI 1840CCTEL         29         PANTH-STISOC         149           KTHBS-6-56-R1         145         LP6060BI-840         80         MARTI 1840CCTWH         29         PANTH-STISON         149           KTHBS-6-FC         145         LP6060BI-840         80         MARTI 300001MMC         29         PANTH-ST200C         149           KTHBS-6-TC         145         LP6060BI-10GR-8402T         80         MARTI 300001MWC         29         PANTH-ST200C         149           KTLP-SPU         93         LP6060BI-10GR-8402T         80         MARZI 300001MWH         29         PANTH-ST200C         149           KTLP-SPU         93         LP6060BI-10GR-802T         80         MARZI 300001MWH         29         PANTH-ST200C         149           KTLR-CORD         121         LP6060BI-10GR-90CT         82         MARZI 300001MWH         31         PANTH-ST250C         149           KTMMLEKT3         160         LP6060BI-840S30         78         MARZI 300001MWH         31         PANTH-ST350C         149           <	KTHB5-6-28-R1	145	LP30120T830DE-A	90	LRT560WW	121	PANTH-ST100W	149
KTHBS-6-32-RI         145         LP60120B1UGR-9CCT         82         LRT590WW         121         PANTH-ST10W         149           KTHBS-6-36-LS120         145         LP60120B1-840         86         MAR11840CCTBL         29         PANTH-ST150C         149           KTHBS-6-6-RI         145         LP6060B1NEX         84         MAR13000DIMC         29         PANTH-ST150W         149           KTHBS-6-TO         145         LP6060B1UGR-840         80         MAR13000DIMC         29         PANTH-ST20C         149           KTLPS-PU         92         LP6060B1UGR-840PI         80         MAR13000DIMWH         79         PANTH-ST20C         149           KTLPS-PU         92         LP6060B1UGR-9CCT         80         MAR21840CCTC         31         PANTH-ST20C         149           KTLRT         121         LP6060B1UGR-9CCT         80         MAR2300DIMB         31         PANTH-ST20C         149           KTMLBIKTIS         160         LP6060B3UGR-8CCT         29         MAR2300DIMWH         31         PANTH-ST20C         149           KTMLBIKTIS         160         LP6060B3-830         78         MNLO16EP12WGC30E         160         PANTH-ST30C         149           KTMLBIKTIS         160	KTHB5-6-32_LS120	145	LP30120T840DE-A	90	LRT590CW	121	PANTH-ST10C	149
KTHB5-6-36_LRI20         145         LP60120P1-840         86         MART1840CCTBL         29         PANTH-ST150C         149           KTHB5-6-36-RI         145         LP600681-840         80         MART1840CCTWH         29         PANTH-ST150N         149           KTHB5-6-F         145         LP600681UGR-840         80         MART3000DIMC         29         PANTH-ST200C         149           KTHB5-6-TC         145         LP600681UGR-840ZI         80         MART3000DIMWH         29         PANTH-ST200C         149           KTLRT         121         LP600681UGR-840ZI         80         MAR21840CCTC         31         PANTH-ST20N         149           KTMLRT         121         LP600681UGR-90CT         80         MAR21840CCTW         31         PANTH-ST20N         149           KTMNLBKT3         160         LP600681UGR-9CT         82         MAR2300DIMS         31         PANTH-ST20N         149           KTMNLBKT3         160         LP600683-8303         78         MINU36EP12FL030E         160         PANTH-ST30N         149           KTMNLBKT4         160         LP606083-803         78         MINU36EP12FL030E         160         PANTH-ST30N         149           KTMMLRKTYBT <t< th=""><th>KTHB5-6-32-PCR</th><th>145</th><th>LP30120UGR-840C</th><th>76</th><th>LRT590NW</th><th>121</th><th>PANTH-ST10N</th><th>149</th></t<>	KTHB5-6-32-PCR	145	LP30120UGR-840C	76	LRT590NW	121	PANTH-ST10N	149
KTHBS-6-3G-R1         145         LP6060B1-840         80         MARTI1840CCTWH         29         PANTH-STISON         149           KTHBS-6-F         145         LP6060B1NEX         84         MARTI3000DIMBL         29         PANTH-STISON         149           KTHBS-6-TC         145         LP6060B1UGR-840HP         80         MARTI3000DIMWH         29         PANTH-ST20C         149           KTLPS-PU         93         LP6060B1UGR-840Z1         80         MARTI3000DIMWH         29         PANTH-ST20C         149           KTLRT-CORD         121         LP6060B1UGR-90Z         80         MARZ1840CCTUH         31         PANTH-ST20C         149           KTMLSKTIS         160         LP6060B1UGR-90Z         80         MARZ3000DIMC         31         PANTH-ST20C         149           KTMNLBKTIS         160         LP6060B1UGR-9CT         82         MARZ3000DIMWH         31         PANTH-ST20C         149           KTMNLBKTIS         160         LP6060B3-830         78         MILO16EP12FLO40E         160         PANTH-ST30C         149           KTMNLBKTYS         160         LP6060B3-860         78         MILO16EP12FLO40E         160         PANTH-ST30C         149           KTMSDACO-B	KTHB5-6-32-R1	145	LP60120B1UGR-9CCT	82	LRT590WW	121	PANTH-ST10W	149
KTHBS-6-F.         145         LP60060B1NEX         84         MAR13000DIMBL         29         PANTH-ST150W         1/2           KTHBS-6-HW         145         LP60060B1UGR-840P         80         MAR13000DIMCO         29         PANTH-ST200C         1/9           KTLBY-1-TC         145         LP60060B1UGR-840PI         80         MAR21840CCTCI         31         PANTH-ST200         1/9           KTLBY-1-WIN         93         LP60060B1UGR-80CT         82         MAR21840CCTCH         31         PANTH-ST20W         1/9           KTRLT         121         LP6060B1UGR-90CT         82         MAR23000DIMBL         31         PANTH-ST20W         1/9           KTMLBKKTS         160         LP6060B1UGR-9CCT         82         MAR23000DIMCH         31         PANTH-ST250W         1/9           KTMNLBKTS         160         LP6060B1UGR-9CCT         82         MAR23000DIMWH         31         PANTH-ST250W         1/9           KTMNLBKTS         160         LP6060B3-830ST         78         MINL016EP12FL030E         160         PANTH-ST30W         1/9           KTMNLBKTYBT         160         LP6060B3-840         78         MINL016EP12FL030E         160         PANTH-ST30W         1/9           KTMSDACO-B	KTHB5-6-36_LS120	145	LP60120P1-840	86	MAR11840CCTBL	29	PANTH-ST150C	149
KTHB5-6-MW         145         LP6660B1UGR-8401P         80         MAR13000DIMCO         29         PANTH-ST200C         149           KTHB5-6-TC         145         LP660B1UGR-8402T         80         MAR13000DIMWH         29         PANTH-ST200N         149           KTLP-SPU         93         LP660B1UGR-840ZT         80         MAR21840CCTC0         31         PANTH-ST20N         149           KTLRT         121         LP660B1UGR-90         80         MAR21840CCTWH         31         PANTH-ST20N         149           KTMLEKT15         160         LP660B1UGR-90         80         MAR23000DIMCD         31         PANTH-ST250N         149           KTMNLBKT30         160         LP660B32-80CT         82         MAR23000DIMWH         31         PANTH-ST250N         149           KTMNLBKT45         160         LP660B38-80         78         MNL016EP12FL040E         160         PANTH-ST30N         149           KTMNLBKT45         160         LP660B38-80         78         MNL016EP12FL040E         160         PANTH-ST30N         149           KTMNLBKT45         160         LP660B38-80         78         MNL03EP2F2M0C30E         160         PANTH-ST350N         149           KTMNLBCK         160 </th <th>KTHB5-6-36-R1</th> <th>145</th> <th>LP6060B1-840</th> <th>80</th> <th>MAR11840CCTWH</th> <th>29</th> <th>PANTH-ST150N</th> <th>149</th>	KTHB5-6-36-R1	145	LP6060B1-840	80	MAR11840CCTWH	29	PANTH-ST150N	149
KTHBS-6-TC         145         LP6660BTUGR-840PIP         80         MAR13000DIMWH         29         PANTH-ST200N         149           KTLP-SPU         39         LP6660BTUGR-840CT         80         MAR21840CCTDL         31         PANTH-ST20C         149           KTLPWI-MS         93         LP6606BTUGR-930         80         MAR21840CCTCH         31         PANTH-ST20W         149           KTLRT-CORD         121         LP6606BTUGR-9CCT         82         MAR23000DIMSL         31         PANTH-ST20W         149           KTMNLBKT15         160         LP6606BTUGR-9CCT         82         MAR23000DIMSL         31         PANTH-ST25W         149           KTMNLBKT30         160         LP6606BSUGR-9CCT         82         MAR23000DIMSL         31         PANTH-ST25W         149           KTMNLBKT45         160         LP6606BS-800T         78         MNL016FP12FL030E         160         PANTH-ST30C         149           KTMNLBKT45         160         LP6606BS-840ST         78         MNL03EP12WGC30E         160         PANTH-ST30C         149           KTMSDACO-B         56         LP6606BS-840ST         78         MNL03EP12WGC30E         160         PANTH-ST30C         149           KTTBSOACI-B	KTHB5-6-F	145	LP6060B1NEX	84	MAR13000DIMBL	29	PANTH-ST150W	149
KTLP-SPU         93         LP6660B1UGR-840Z1         80         MAR21840CCTBL         31         PANTH-ST20C         149           KTLWT-MS         93         LP6600B1UGR-930         80         MAR21840CCTC0         31         PANTH-ST20N         149           KTRNET-CORD         121         LP6600B1UGR-940         80         MAR223000DIMCD         31         PANTH-ST250C         149           KTMNLBKT15         160         LP6600B2UGR-9CCT         82         MAR23000DIMCD         31         PANTH-ST250N         149           KTMNLBKT15         160         LP6600B3-830         78         MRL016F1P1EL030E         160         PANTH-ST250N         149           KTMNLBKT45         160         LP66060B3-830ST         78         MNL016F1P1EL030E         160         PANTH-ST30N         149           KTMNLBFC         160         LP66060B3-840ST         78         MNL016F1P1EL030E         160         PANTH-ST30N         149           KTTBS0ACO-B         56         LP66060B3-860ST         78         MNL032F2P24FL030E         160         PANTH-ST350N         149           KTTBS0ACO-B         56         LP66060B3-860ST         78         MNL032F2P24FL030E         160         PANTH-ST350N         149           KTBS	KTHB5-6-MW	145	LP6060B1UGR-840	80	MAR13000DIMCO	29	PANTH-ST200C	149
KTLPW1-MS         93         LP6060B1UGR-8CCT         82         MAR21840CCTCO         31         PANTH-ST2DN         1/9           KTLRT         121         LP6060B1UGR-930         80         MAR21840CCTWH         31         PANTH-ST2DN         1/9           KTMRLBKT15         160         LP6060B1UGR-9CCT         82         MAR23000DIMCO         31         PANTH-ST250C         1/9           KTMNLBKT45         160         LP6060B2UGR-8CCT         82         MAR23000DIMCO         31         PANTH-ST250W         1/9           KTMNLBKT45         160         LP6060B3-830         78         MNL016EP12FL030E         160         PANTH-ST30W         1/9           KTMNLBKT45         160         LP6060B3-830ST         78         MNL016EP12WGC30E         160         PANTH-ST30W         1/9           KTMNLMFSC         160         LP6060B3-860ST         78         MNL032EP24FL030E         160         PANTH-ST30W         1/9           KTTBSOACO-B         56         LP6060B3-860ST         78         MNL032EP24WC20ZE         160         PANTH-ST350C         1/9           KTTBSOACO-B         56         LP6060B3-860ST         78         MNL032EP24WCC30E         160         PANTH-ST50W         1/9           KTTBSOACO-B <th>KTHB5-6-TC</th> <th>145</th> <th>LP6060B1UGR-840HP</th> <th>80</th> <th>MAR13000DIMWH</th> <th>29</th> <th>PANTH-ST200N</th> <th>149</th>	KTHB5-6-TC	145	LP6060B1UGR-840HP	80	MAR13000DIMWH	29	PANTH-ST200N	149
KTLRT         121         LP6060B1UGR-930         80         MAR21840CCTWH         31         PANTH-ST250V         149           KTLRT-CORD         121         LP6060B1UGR-940         80         MAR23000DIMBL         31         PANTH-ST250N         149           KTMNLBKT15         160         LP6060B1UGR-9CCT         82         MAR23000DIMWH         31         PANTH-ST250N         149           KTMNLBKT45         160         LP6060B3-830         78         MNL016EP12FL0A0E         160         PANTH-ST30N         149           KTMNLBKT45         160         LP6060B3-840         78         MNL016EP12FL0A0E         160         PANTH-ST30N         149           KTMNLBKT         160         LP6060B3-840ST         78         MNL016EP12WGC30E         160         PANTH-ST30N         149           KTMSDACO-B         56         LP6060B3-860         78         MNL032EP24FL0A0E         160         PANTH-ST350N         149           KTTB50ACO-B         56         LP6060B3-860         78         MNL032EP24FL0A0E         160         PANTH-ST350N         149           KTTB50ACO-B         56         LP6060B3-860         78         MNL032EP24FL0A0E         160         PANTH-ST350N         149           KTTB50ACO-B	KTLP-SPU	93	LP6060B1UGR-840Z1	80	MAR21840CCTBL	31	PANTH-ST20C	149
KTER-CORD	KTLPW1-MS	93	LP6060B1UGR-8CCT	82	MAR21840CCTCO	31	PANTH-ST20N	149
KTMNLBKT15         160         LP6060B1UGR-9CCT         82         MAR2300DIMCO         31         PANTH-ST250N         149           KTMNLBKT30         160         LP6060B2UGR-8CCT         82         MAR2300DIMWH         31         PANTH-ST350W         149           KTMNLBKT45         160         LP6060B3-830ST         78         MNL016EP12FL030E         160         PANTH-ST30C         149           KTMNLBFC         160         LP6060B3-840         78         MNL016EP12WGC30E         160         PANTH-ST30W         149           KTMNLMFSC         160         LP6060B3-840ST         78         MNL032EP24FL030E         160         PANTH-ST350W         149           KTTB50ACO-B         56         LP6060B3-860ST         78         MNL032EP24FL030E         160         PANTH-ST350N         149           KTTB50ACO-B         56         LP6060B3UGR-840ST         78         MNL032EP24WGC30E         160         PANTH-ST350N         149           KTTB50ACO-B         56         LP6060P1-840         86         MNL032EP24WGC30E         160         PANTH-ST350N         149           KTTB50ACI-B         56         LP6060P1-840         86         MNL032EP24WGC30E         160         PANTH-STW100         147           KTT	KTLRT	121	LP6060B1UGR-930	80	MAR21840CCTWH	31	PANTH-ST20W	149
KTMNLBKT30         160         LP6060B2UGR-BCCT         82         MAR23000DIMWH         31         PANTH-ST250W         149           KTMNLBKT45         160         LP6060B3-830         78         MKILO16EP12FL030E         160         PANTH-ST30C         149           KTMNLBT         160         LP6060B3-840         78         MKILO16EP12FL040E         160         PANTH-ST30W         149           KTMSDACO-B         160         LP6060B3-840ST         78         MKILO16EP12WGC40E         160         PANTH-ST30W         149           KTBSDACO-B         56         LP6060B3-860         78         MNLO32EP24FL030E         160         PANTH-ST350N         149           KTTBSDACO-B         56         LP6060B3-860T         78         MNLO32EP24FL030E         160         PANTH-ST550N         149           KTTBSDACO-B         56         LP6060B3-840         78         MNLO32EP24WGC30E         160         PANTH-ST550N         149           KTTBSDAGL-B         56         LP6060P1-840         86         MNLO32EP24WGC30E         160         PANTH-ST50N         147           KTTBSDAGL-B         56         LP6060P2-840         86         MNLO32EP24WGC40E         160         PANTH-STWH100         147           KTTBSDAG	KTLRT-CORD	121	LP6060B1UGR-940	80	MAR23000DIMBL	31	PANTH-ST250C	149
KTMNLBKT45         160         LP6060B3-830         78         MNLD16EP12FL030E         160         PANTH-ST30C         149           KTMNLBKTVERT         160         LP6060B3-830ST         78         MNLD16EP12FL040E         160         PANTH-ST30N         149           KTMNLMFSC         160         LP6060B3-840ST         78         MNLD16EP12WGC30E         160         PANTH-ST30W         149           KTTB50ACO-B         56         LP6060B3-860S         78         MNLD32EP24FL030E         160         PANTH-ST350N         149           KTTB50ACO-B         56         LP6060B3-860ST         78         MNLD32EP24FL030E         160         PANTH-ST350N         149           KTTB50ACO-B         56         LP6060B3-1840ST         78         MNLD32EP24FL030E         160         PANTH-ST50N         149           KTTB50ACO-B         56         LP6060B3-840         86         MNLO3EP24WGC40E         160         PANTH-ST50N         149           KTTB50AGL-B         56         LP6060P2-860         86         ORDEY1         160         PANTH-STWH10C         147           KTTB50AGL-W         56         LP6060P2-860         86         ORDEY1         160         PANTH-STWH10C         147           KTTB50AGL-W	KTMNLBKT15	160	LP6060B1UGR-9CCT	82	MAR23000DIMCO	31	PANTH-ST250N	149
KTMNLBKTVERT         160         LP6060B3-830ST         78         MNLO16EP12FL040E         160         PANTH-ST30W         149           KTMNLBFC         160         LP6060B3-840ST         78         MNLO16EP12WGC30E         160         PANTH-ST30W         149           KTMNLMFSC         160         LP6060B3-840ST         78         MNLO32EP24FL030E         160         PANTH-ST350C         149           KTTB50ACO-B         56         LP6060B3-860ST         78         MNLO32EP24FL030E         160         PANTH-ST350C         149           KTTB50ACO-B         56         LP6060B3UGR-840ST         78         MNLO32EP24WGC30E         160         PANTH-ST50N         149           KTTB50ACO1-W         56         LP6060P1UGR-840         86         MNL032EP24WGC30E         160         PANTH-ST50N         149           KTTB50AGL-B         56         LP6060P1UGR-840         86         MNL064EP48WGC30E         160         PANTH-STWH100C         147           KTTB50AGL-B         56         LP6060P2-840         86         ORDEV1         160         PANTH-STWH100C         147           KTTB50AGL-B         56         LP6060P3UGR-840         74         PAH1L03BLNS         151         PANTH-STWH100         147 <th< th=""><th>KTMNLBKT30</th><th>160</th><th>LP6060B2UGR-8CCT</th><th>82</th><th>MAR23000DIMWH</th><th>31</th><th>PANTH-ST250W</th><th>149</th></th<>	KTMNLBKT30	160	LP6060B2UGR-8CCT	82	MAR23000DIMWH	31	PANTH-ST250W	149
KTMNLEFC         160         LP6060B3-840         78         MNL016EP12WGC30E         160         PANTH-ST30W         149           KTMNLMFSC         160         LP6060B3-840ST         78         MNL016EP12WGC40E         160         PANTH-ST350C         149           KTTB50ACO-B         56         LP6060B3-860ST         78         MNL032EP24FL040E         160         PANTH-ST350N         149           KTTB50ACO-B         56         LP6060B3UGR-840ST         78         MNL032EP24FL040E         160         PANTH-ST350N         149           KTTB50ACO-B         56         LP6060P1-840         86         MNL032EP24FL040E         160         PANTH-ST550N         149           KTTB50AGL-B         56         LP6060P1-840         86         MNL032EP24WGC40E         160         PANTH-STWH100C         147           KTTB50AGL-B         56         LP6060P2-840         86         MNL032EP24WGC40E         160         PANTH-STWH100C         147           KTTB50AGL-B         56         LP6060P2-840         86         MNL032EP24WGC40E         160         PANTH-STWH100C         147           KTTB50AGL-B         56         LP6060P2-840         86         ORDEVI         160         PANTH-STWH100C         147           KTTB	KTMNLBKT45	160	LP6060B3-830	78	MNL016EP12FL030E	160	PANTH-ST30C	149
KTMNLEFC         160         LP6060B3-840         78         MNL016EP12WGC30E         160         PANTH-ST30W         149           KTMSDACO-B         56         LP6060B3-860ST         78         MNL032EP24FL030E         160         PANTH-ST350C         149           KTTB5DACO-W         56         LP6060B3-860ST         78         MNL032EP24FL040E         160         PANTH-ST350N         149           KTTB5DACO1-W         56         LP6060B3UGR-840ST         78         MNL032EP24FL040E         160         PANTH-ST550N         149           KTTB5DACO1-W         56         LP6060P1-840         86         MNL032EP24WGC30E         160         PANTH-ST50W         149           KTTB5DAGL-B         56         LP6060P2-840         86         MNL032EP24WGC30E         160         PANTH-STWH100C         147           KTTB5DAGL-W         56         LP6060P2-840         86         MNL04EP48WGC30E         160         PANTH-STWH100C         147           KTTB5DAGL-W         56         LP6060P2-840         86         ORDEVI         160         PANTH-STWH100C         147           KTTB5DAGL-W         56         LP6060P2-840         74         PAH1L03BLNS         151         PANTH-STWH100C         147           KTTB60ACO	KTMNLBKTVERT	160	LP6060B3-830ST	78	MNL016EP12FL040E	160	PANTH-ST30N	149
KTMNLMFSC         160         LP6060B3-840ST         78         MNL016EP12WGC40E         160         PANTH-ST350C         149           KTTB50ACO-B         56         LP6060B3-860ST         78         MNL032EP24FL030E         160         PANTH-ST350N         149           KTTB50ACO-B         56         LP6060B3-860ST         78         MNL032EP24WGC30E         160         PANTH-ST50N         149           KTTB50ACO-B         56         LP6060B3UGR-840ST         86         MNL032EP24WGC30E         160         PANTH-ST50N         149           KTTB50AGL-B         56         LP6060P1-840         86         MNL032EP24WGC40E         160         PANTH-STWH100C         147           KTTB50AGL-B         56         LP6060P2-840         86         MNL032EP24WGC40E         160         PANTH-STWH100C         147           KTTB50AGL-B         56         LP6060P2-840         86         ORDEV1         160         PANTH-STWH100C         147           KTTB50AGL-B         56         LP6060S340R-840         74         PAH1L03BLNS         151         PANTH-STWH100         147           KTTB60ACO-B         56         LP606B3UGR-840         76         PAH1L04BLC         151         PANTH-STWH120C         147           KTTB60	KTMNLEFC	160	LP6060B3-840	78	MNL016EP12WGC30E			
KTTB50ACO-B         56         LP6060B3-860         78         MNL032EP24FL030E         160         PANTH-ST350N         149           KTTB50ACO1-B         56         LP6060B3-860ST         78         MNL032EP24FL040E         160         PANTH-ST50C         149           KTTB50ACO1-B         56         LP6060P1-840         36         MNL032EP24WGC30E         160         PANTH-ST50W         149           KTTB50AG1-B         56         LP6060P1-840         36         MNL064EP48WGC40E         160         PANTH-ST50W         147           KTTB50AG1-B         56         LP6060P2-840         86         MNL064EP48WGC40E         160         PANTH-STWH100C         147           KTTB50AG1-B         56         LP6060P2-860         86         ORDEV1         160         PANTH-STWH100C         147           KTTB50AC0-B         56         LP6060S34GR-840         74         PAH1L03BLNS         151         PANTH-STWH150C         147           KTTB50ACO-B         56         LP6060S34GR-840         74         PAH1L03BLNS         151         PANTH-STWH150C         147           KTTB60ACO-B         56         LP6060UGR-840C         76         PAH1L04BLN         151         PANTH-STWH150C         147           KTTB60ACO1-B </th <th>KTMNLMFSC</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	KTMNLMFSC							
KTTB50ACO-W         56         LP6060B3-860ST         78         MNL032EP24FL040E         160         PANTH-ST50C         149           KTTB50ACO1-B         56         LP6060B3UGR-840ST         78         MNL032EP24WGC30E         160         PANTH-ST50N         149           KTTB50AC01-W         56         LP6060P1-840         86         MNL03EP24WGC40E         160         PANTH-STWH100C         147           KTTB50AGL-B         56         LP6060P2-840         86         MNL064EP48WGC40E         160         PANTH-STWH100N         147           KTTB50AGL-B         56         LP6060P2-860         86         ORDEV1         160         PANTH-STWH10N         147           KTTB50AGL-W         56         LP606093-860         36         ORDEV1         160         PANTH-STWH10D         147           KTTB60ACO-B         56         LP606093-840         74         PAHTL03BLNS         151         PANTH-STWH150         147           KTTB60ACO-B         56         LP6060S3UGR-840         74         PAHTL04BLC         151         PANTH-STWH150         147           KTTB60ACO-B         56         LP60T830E-A         38         PAHTL04BLW         151         PANTH-STWH200         147           KTTB60ACO-B <t< th=""><th>KTTB50ACO-B</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	KTTB50ACO-B							
KTTB50AC01-B         56         LP6060B3UGR-840ST         78         MML032EP24WGC30E         160         PANTH-ST50N         149           KTTB50AG1-B         56         LP6060P1-840         86         MNL032EP24WGC40E         160         PANTH-ST50W         149           KTTB50AG1-B         56         LP6060P1-840         86         MNL064EP48WGC30E         160         PANTH-STWH100C         147           KTTB50AG1-B         56         LP6060P2-860         86         MNL064EP48WGC40E         160         PANTH-STWH100C         147           KTTB50AGL1-W         56         LP6060S3-840         74         PAH1L03BLNS         151         PANTH-STWH100         147           KTTB60ACO-B         56         LP6060S3UGR-840         74         PAH1L03BLNS         151         PANTH-STWH150C         147           KTTB60ACO-B         56         LP6060S3UGR-840         74         PAH1L04BLC         151         PANTH-STWH150N         147           KTTB60ACO1-B         56         LP60T830-A         88         PAH1L04BLW         151         PANTH-STWH150N         147           KTTB60ACO1-B         56         LP60T830-A         88         PAH1L07BLN         151         PANTH-STWH20N         147           KTTB80ACO1-B </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>								
KTTB50AC01-W         56         LP6060P1-840         86         MNLO32EP24WGC40E         160         PANTH-ST50W         149           KTTB50AGL-B         56         LP6060P1UGR-840         86         MNL064EP48WGC30E         160         PANTH-STWH100C         147           KTTB50AGL1-B         56         LP6060P2-860         86         ORDEV1         160         PANTH-STWH100N         147           KTTB50AGL1-W         56         LP6060S3-840         74         PAH1L03BLNS         151         PANTH-STWH10N         147           KTTB60ACO-B         56         LP6060S3UGR-840         74         PAH1L03BLNS         151         PANTH-STWH150C         147           KTTB60ACO-W         56         LP6060UGR-840C         76         PAH1L03BLNS         151         PANTH-STWH150N         147           KTTB60ACO1-W         56         LP607830-A         88         PAH1L04BLN         151         PANTH-STWH200C         147           KTTB60ACO1-B         56         LP607830-A         88         PAH1L07BLNS         151         PANTH-STWH200C         147           KTTB80ACO-B         56         LP607830-A         88         PAH1L07BLNS         151         PANTH-STWH200C         147           KTTB80ACO-B <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>								
KTTB50AGL-B         56         LP6060P1UGR-840         86         MNL064EP48WGC30E         160         PANTH-STWH100C         147           KTTB50AGL-W         56         LP6060P2-840         86         MNL064EP48WGC40E         160         PANTH-STWH100N         147           KTTB50AGL1-B         56         LP606092-860         86         ORDEV1         160         PANTH-STWH100N         147           KTTB50AGL1-W         56         LP606033-840         74         PAH1L03BLNS         151         PANTH-STWH100         147           KTTB60ACO-B         56         LP60603330R-840         74         PAH1L03WNNS         151         PANTH-STWH150C         147           KTTB60ACO-W         56         LP6060330R-840         76         PAH1L04BLC         151         PANTH-STWH150N         147           KTTB60ACO1-W         56         LP607830DE-A         88         PAH1L04BLW         151         PANTH-STWH20C         147           KTTB80ACO-B         56         LP607830DE-A         88         PAH1L07WNNS         151         PANTH-STWH20C         147           KTTB80ACO-B         56         LP607840DE-A         88         PAH1L07WNNS         151         PANTH-STWH20C         147           KTTB80ACO-B								
KTTB50AGL-W         56         LP6060P2-840         86         MNL064EP48WGC40E         160         PANTH-STWH100N         147           KTTB50AGL1-B         56         LP6060P2-860         86         ORDEV1         160         PANTH-STWH10C         147           KTTB50AGL1-W         56         LP6060S3-840         74         PAH1L03BLNS         151         PANTH-STWH10N         147           KTTB60ACO-B         56         LP6060S3UGR-840C         76         PAH1L03WHNS         151         PANTH-STWH150C         147           KTTB60ACO-B         56         LP607830-A         88         PAH1L04BLC         151         PANTH-STWH200C         147           KTTB60ACO1-B         56         LP607830-A         88         PAH1L04BLW         151         PANTH-STWH200C         147           KTTB60ACO1-W         56         LP607840-A         88         PAH1L07BLNS         151         PANTH-STWH200         147           KTTB80ACO-B         56         LP607840DE-A         88         PAH1L07BLNS         151         PANTH-STWH200         147           KTTB80ACO-B         56         LP607840DE-A         88         PAH1L07BLNS         151         PANTH-STWH200         147           KTTB80ACO-B         56								
KTTB50AGL1-B         56         LP6060P2-860         86         ORDEV1         160         PANTH-STWH10C         147           KTTB50AGL1-W         56         LP6060S3-840         74         PAH1L03BLNS         151         PANTH-STWH10N         147           KTTB60ACO-B         56         LP6060S3UGR-840C         76         PAH1L03WHNS         151         PANTH-STWH150C         147           KTTB60ACO1-B         56         LP607830-A         88         PAH1L04BLW         151         PANTH-STWH200C         147           KTTB60ACO1-W         56         LP607830-A         88         PAH1L04BLW         151         PANTH-STWH200C         147           KTTB60ACO1-W         56         LP607840DE-A         88         PAH1L07BLNS         151         PANTH-STWH200C         147           KTTB80ACO-B         56         LP607840DE-A         88         PAH1L07BLNS         151         PANTH-STWH200         147           KTTB80ACO-B         56         LP607840DE-A         88         PAH1L07BLNS         151         PANTH-STWH200         147           KTTB80ACO-B         56         LP607840DE-A         88         PAH1L07BLNS         151         PANTH-STWH200         147           KTTB80ACO-B         56								
KTTB50AGL1-W         56         LP6060S3-840         74         PAHTL03BLNS         151         PANTH-STWH10N         147           KTTB60ACO-B         56         LP6060S3UGR-840         74         PAHTL03WHNS         151         PANTH-STWH150C         147           KTTB60ACO-W         56         LP6060UGR-840C         76         PAHTL03WHNS         151         PANTH-STWH150N         147           KTTB60ACO1-B         56         LP60T830-A         88         PAH1L04BLN         151         PANTH-STWH200C         147           KTTB60ACO1-W         56         LP60T830DE-A         88         PAH1L04BLW         151         PANTH-STWH200N         147           KTTB80ACO-B         56         LP60T840-A         88         PAH1L07BLNS         151         PANTH-STWH200N         147           KTTB80ACO-B         56         LP60T840DE-A         88         PAH1L07WHNS         151         PANTH-STWH20N         147           KTTB80ACO-B         56         LP6262UGR-840         76         PAH1L10BLC         151         PANTH-STWH250N         147           KTTB80ACO1-W         56         LPLAF01203         92         PAH1L10BLN         151         PANTH-STWH250N         147           KTTB80AGL-B         56								
KTTB60ACO-B         56         LP6060S3UGR-840         74         PAH1L03WHNS         151         PANTH-STWH150C         147           KTTB60ACO-W         56         LP6060UGR-840C         76         PAH1L04BLC         151         PANTH-STWH150N         147           KTTB60ACO1-B         56         LP60T830-A         88         PAH1L04BLW         151         PANTH-STWH200C         147           KTTB60ACO1-W         56         LP60T830DE-A         88         PAH1L04BLW         151         PANTH-STWH200N         147           KTTB60ACO-B         56         LP60T840-A         88         PAH1L07BLNS         151         PANTH-STWH200N         147           KTTB80ACO-B         56         LP60T840DE-A         88         PAH1L07WHNS         151         PANTH-STWH20C         147           KTTB80ACO-B         56         LP6262UGR-840         76         PAH1L10BLC         151         PANTH-STWH250C         147           KTTB80ACO-B         56         LPLAF0120         92         PAH1L10BLN         151         PANTH-STWH250N         147           KTTB80AGL-B         56         LPLAF01203         92         PAH1L20BLN         151         PANTH-STWH350N         147           KTTB80AGL-B         56								
KTTB60ACO-W         56         LP6060UGR-840C         76         PAH1L04BLC         151         PANTH-STWH150N         147           KTTB60ACO1-B         56         LP60T830-A         88         PAH1L04BLN         151         PANTH-STWH200C         147           KTTB60ACO1-W         56         LP60T830DE-A         88         PAH1L04BLW         151         PANTH-STWH200N         147           KTTB60LENS         56         LP60T840-A         88         PAH1L07BLNS         151         PANTH-STWH20C         147           KTTB80ACO-B         56         LP60T840DE-A         88         PAH1L07WHNS         151         PANTH-STWH20N         147           KTTB80ACO-W         56         LP6262UGR-840         76         PAH1L10BLC         151         PANTH-STWH250C         147           KTTB80ACO1-B         56         LPLAF0120         92         PAH1L10BLN         151         PANTH-STWH250N         147           KTTB80AGL-B         56         LPLAF01203         92         PAH1L10BLW         151         PANTH-STWH350N         147           KTTB80AGL-B         56         LPLAF0600         92         PAH1L20BLN         151         PANTH-STWH350N         147           KTTB80AGL-B         56         L								
KTTB60ACO1-B         56         LP60T830-A         88         PAH1L04BLN         151         PANTH-STWH200C         147           KTTB60ACO1-W         56         LP60T830DE-A         88         PAH1L04BLW         151         PANTH-STWH200N         147           KTTB60LENS         56         LP60T840-A         88         PAH1L07BLNS         151         PANTH-STWH20C         147           KTTB80ACO-B         56         LP60T840DE-A         88         PAH1L10BLC         151         PANTH-STWH20C         147           KTTB80ACO-W         56         LP6262UGR-840         76         PAH1L10BLC         151         PANTH-STWH250C         147           KTTB80ACO-W         56         LPLAF0120         92         PAH1L10BLN         151         PANTH-STWH250C         147           KTTB80ACO1-W         56         LPLAF01203         92         PAH1L10BLW         151         PANTH-STWH250C         147           KTTB80AGL-B         56         LPLAF0603         92         PAH1L20BLC         151         PANTH-STWH350C         147           KTTB80AGL1-B         56         LPLAF0601204         92         PAH1L20BLW         151         PANTH-STWH350N         147           KTB80AGL1-W         56         LPL								
KTTB60ACO1-W         56         LP60T830DE-A         88         PAH1L04BLW         151         PANTH-STWH200N         147           KTTB60LENS         56         LP60T840-A         88         PAH1L07BLNS         151         PANTH-STWH20C         147           KTTB80ACO-B         56         LP60T840DE-A         88         PAH1L07WHNS         151         PANTH-STWH20C         147           KTTB80ACO-W         56         LP6262UGR-840         76         PAH1L10BLC         151         PANTH-STWH250C         147           KTTB80ACO1-B         56         LPLAF0120         92         PAH1L10BLN         151         PANTH-STWH250N         147           KTTB80ACO1-W         56         LPLAF01203         92         PAH1L10BLW         151         PANTH-STWH350C         147           KTTB80AGL-B         56         LPLAF01203         92         PAH1L20BLW         151         PANTH-STWH300         147           KTTB80AGL-B         56         LPLAF0601         92         PAH1L20BLN         151         PANTH-STWH350N         147           KTTB80AGL-B         56         LPLAF0601204         92         PAH1L20BLW         151         PANTH-STWH350N         147           KTTB80AGL-B         56         LPLA								
KTTB60LENS         56         LP60T840-A         88         PAH1L07BLNS         151         PANTH-STWH20C         147           KTTB80ACO-B         56         LP60T840DE-A         88         PAH1L07WHNS         151         PANTH-STWH20N         147           KTTB80ACO-W         56         LP6262UGR-840         76         PAH1L10BLC         151         PANTH-STWH250C         147           KTTB80ACO1-B         56         LPLAF0120         92         PAH1L10BLN         151         PANTH-STWH250N         147           KTTB80AGL-B         56         LPLAF01203         92         PAH1L20BLC         151         PANTH-STWH30C         147           KTTB80AGL-B         56         LPLAF0600         92         PAH1L20BLN         151         PANTH-STWH350C         147           KTTB80AGL-B         56         LPLAF0600         92         PAH1L20BLN         151         PANTH-STWH350N         147           KTTB80AGL-B         56         LPLAF0601204         92         PAH1L30BLN         151         PANTH-STWH350N         147           KTTB80AGL-B         56         LPLAF0603         92         PAH1L30BLN         151         PANTH-STWH350N         147           KTTB80AGL-B         56         LPLAF0609<								
KTTB80ACO-B         56         LP60T840DE-A         88         PAH1L07WHNS         151         PANTH-STWH20N         147           KTTB80ACO-W         56         LP6262UGR-840         76         PAH1L10BLC         151         PANTH-STWH250C         147           KTTB80ACO1-B         56         LPLAF0120         92         PAH1L10BLW         151         PANTH-STWH250N         147           KTTB80AGL-B         56         LPLAF01203         92         PAH1L20BLC         151         PANTH-STWH30C         147           KTTB80AGL-B         56         LPLAF060         92         PAH1L20BLC         151         PANTH-STWH30N         147           KTTB80AGL-B         56         LPLAF0600         92         PAH1L20BLW         151         PANTH-STWH350N         147           KTTB80AGL-B         56         LPLAF0601204         92         PAH1L20BLW         151         PANTH-STWH350N         147           KTTB80AGL-B         56         LPLAF0601204         92         PAH1L20BLW         151         PANTH-STWH350N         147           KTTB80AGL-B         56         LPLAF0601204         92         PAH1L20BLW         151         PANTH-STWH350N         147           KTTB80AGL-B         56         LPLAF0								
KTTB80ACO-W         56         LP6262UGR-840         76         PAH1L10BLC         151         PANTH-STWH250C         147           KTTB80ACO1-B         56         LPLAF0120         92         PAH1L10BLN         151         PANTH-STWH250N         147           KTTB80ACO1-W         56         LPLAF01203         92         PAH1L10BLW         151         PANTH-STWH30C         147           KTTB80AGL-B         56         LPLAF0301204         92         PAH1L20BLC         151         PANTH-STWH30N         147           KTTB80AGL-B         56         LPLAF060         92         PAH1L20BLN         151         PANTH-STWH350C         147           KTTB80AGL1-B         56         LPLAF0601204         92         PAH1L30BLW         151         PANTH-STWH350N         147           KTTB80AGL1-W         56         LPLAF0603         92         PAH1L30BLW         151         PANTH-STWH350N         147           KTTB80LENS         56         LPLAF0603         92         PAH1L30BLW         151         PANTH-STWH350N         147           KTTB80LENS         56         LPLAF0604         92         PAH1L30BLW         151         PANTH-WH10N         153           LC001         166         LPLAF060P								
KTTB80ACO1-B         56         LPLAFO120         92         PAH1L10BLN         151         PANTH-STWH250N         147           KTTB80ACO1-W         56         LPLAFO1203         92         PAH1L10BLW         151         PANTH-STWH30C         147           KTTB80AGL-B         56         LPLAFO301204         92         PAH1L20BLC         151         PANTH-STWH30N         147           KTTB80AGL-W         56         LPLAFO60         92         PAH1L20BLN         151         PANTH-STWH350C         147           KTTB80AGL1-B         56         LPLAFO601204         92         PAH1L30BLW         151         PANTH-STWH350N         147           KTTB80AGL1-W         56         LPLAFO603         92         PAH1L30BLC         151         PANTH-STWH50N         147           KTTB80LENS         56         LPLAFO604         92         PAH1L30BLN         151         PANTH-STWH50N         147           LC001         166         LPLAFO60P         93         PAH1L30BLW         151         PANTH-WH10N         153           LC001-MW         166         LRT5120CW         121         PANTH-B10N         153         PANTH-WH10W         153           LC002         166         LRT5120WW         121 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>								
KTTB80ACO1-W         56         LPLAF01203         92         PAH1L10BLW         151         PANTH-STWH30C         147           KTTB80AGL-B         56         LPLAF0301204         92         PAH1L20BLC         151         PANTH-STWH30N         147           KTTB80AGL-W         56         LPLAF060         92         PAH1L20BLN         151         PANTH-STWH350C         147           KTTB80AGL1-B         56         LPLAF0601204         92         PAH1L30BLW         151         PANTH-STWH350N         147           KTTB80AGL1-W         56         LPLAF0603         92         PAH1L30BLC         151         PANTH-STWH50C         147           KTTB80LENS         56         LPLAF0604         92         PAH1L30BLN         151         PANTH-STWH50N         147           LC001         166         LPLAF060P         93         PAH1L30BLW         151         PANTH-WH10N         153           LC001-MW         166         LRT5120CW         121         PANTH-B10N         153         PANTH-WH10W         153           LC002         166         LRT5120WW         121         PANTH-B30N         153         PANTH-WH20W         153           LC002W         166         LRT5150W         121								
KTTB80AGL-B         56         LPLAF0301204         92         PAH1L20BLC         151         PANTH-STWH30N         147           KTTB80AGL-W         56         LPLAF060         92         PAH1L20BLN         151         PANTH-STWH350C         147           KTTB80AGL1-B         56         LPLAF0601204         92         PAH1L20BLW         151         PANTH-STWH350N         147           KTTB80AGL1-W         56         LPLAF0603         92         PAH1L30BLC         151         PANTH-STWH50C         147           KTTB80LENS         56         LPLAF0604         92         PAH1L30BLN         151         PANTH-STWH50N         147           LC001         166         LPLAF060P         93         PAH1L30BLW         151         PANTH-WH10N         153           LC001-MW         166         LRT5120CW         121         PANTH-B10N         153         PANTH-WH10W         153           LC001W         166         LRT5120WW         121         PANTH-B30N         153         PANTH-WH20W         153           LC002W         166         LRT5150CW         121         PANTH-B30NS         155         PANTH-WH30W         153           LP-SSK         93, 188         LRT5150WW         121								
KTTB80AGL-W         56         LPLAF060         92         PAH1L20BLN         151         PANTH-STWH350C         147           KTTB80AGL1-B         56         LPLAF0601204         92         PAH1L20BLW         151         PANTH-STWH350N         147           KTTB80AGL1-W         56         LPLAF0603         92         PAH1L30BLC         151         PANTH-STWH50C         147           KTTB80LENS         56         LPLAF0604         92         PAH1L30BLN         151         PANTH-STWH50N         147           LC001         166         LPLAF060P         93         PAH1L30BLW         151         PANTH-STWH50N         147           LC001-MW         166         LRT5120CW         121         PANTH-B10N         153         PANTH-WH10W         153           LC001W         166         LRT5120WW         121         PANTH-B20N         153         PANTH-WH20W         153           LC002W         166         LRT5150CW         121         PANTH-B30NS         155         PANTH-WH30N         153           LND0760NW         162         LRT5150NW         121         PANTH-B50NS         155         PANTH-WH30W         153           LP-SSK         93,188         LRT5150WW         121								
KTTB80AGL1-B         56         LPLAF0601204         92         PAH1L20BLW         151         PANTH-STWH350N         147           KTTB80AGL1-W         56         LPLAF0603         92         PAH1L30BLC         151         PANTH-STWH50C         147           KTTB80LENS         56         LPLAF0604         92         PAH1L30BLN         151         PANTH-STWH50N         147           LC001         166         LPLAF060P         93         PAH1L30BLW         151         PANTH-WH10N         153           LC001-MW         166         LRT5120CW         121         PANTH-B10N         153         PANTH-WH10W         153           LC001W         166         LRT5120WW         121         PANTH-B20N         153         PANTH-WH20N         153           LC002W         166         LRT5150CW         121         PANTH-B30NS         155         PANTH-WH30N         153           LND0760NW         162         LRT5150NW         121         PANTH-B50N         153         PANTH-WH30W         153           LP-SSK         93, 188         LRT5150WW         121         PANTH-B50NS         155         PANTH-WH50W         153           LP-SSK         93, 188         LRT530CW         121 <th< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>								
KTTB80AGL1-W         56         LPLAF0603         92         PAH1L30BLC         151         PANTH-STWH50C         147           KTTB80LENS         56         LPLAF0604         92         PAH1L30BLN         151         PANTH-STWH50N         147           LC001         166         LPLAF060P         93         PAH1L30BLW         151         PANTH-WH10N         153           LC001-MW         166         LRT5120CW         121         PANTH-B10N         153         PANTH-WH10W         153           LC001W         166         LRT5120WW         121         PANTH-B20N         153         PANTH-WH20N         153           LC002W         166         LRT5150CW         121         PANTH-B30NS         155         PANTH-WH30N         153           LND0760NW         162         LRT5150NW         121         PANTH-B50N         153         PANTH-WH30W         153           LP-SSK         93, 188         LRT5150WW         121         PANTH-B50NS         155         PANTH-WH50N         153           LP30120B1UGR-840         80         LRT530CW         121         PANTH-SL1002         137         PANTH-WH50W         153								
KTTB80LENS         56         LPLAF0604         92         PAH1L30BLN         151         PANTH-STWH50N         147           LC001         166         LPLAF060P         93         PAH1L30BLW         151         PANTH-WH10N         153           LC001-MW         166         LRT5120CW         121         PANTH-B10N         153         PANTH-WH20N         153           LC001W         166         LRT5120WW         121         PANTH-B30N         153         PANTH-WH20W         153           LC002W         166         LRT5150CW         121         PANTH-B30NS         155         PANTH-WH30N         153           LND0760NW         162         LRT5150NW         121         PANTH-B50N         153         PANTH-WH30W         153           LP-SSK         93, 188         LRT5150WW         121         PANTH-B50NS         155         PANTH-WH50N         153           LP30120B1UGR-840         80         LRT530CW         121         PANTH-SL1002         137         PANTH-WH50W         153								
LC001         166         LPLAF060P         93         PAH1L30BLW         151         PANTH-WH10N         153           LC001-MW         166         LRT5120CW         121         PANTH-B10N         153         PANTH-WH10W         153           LC001W         166         LRT5120NW         121         PANTH-B20N         153         PANTH-WH20N         153           LC002         166         LRT5120WW         121         PANTH-B30NS         155         PANTH-WH30N         153           LND0760NW         162         LRT5150NW         121         PANTH-B50N         153         PANTH-WH30W         153           LP-SSK         93, 188         LRT5150WW         121         PANTH-B50NS         155         PANTH-WH50N         153           LP30120B1UGR-840         80         LRT530CW         121         PANTH-SL1002         137         PANTH-WH50W         153								
LC001-MW       166       LRT5120CW       121       PANTH-B10N       153       PANTH-WH10W       153         LC001W       166       LRT5120NW       121       PANTH-B20N       153       PANTH-WH20N       153         LC002       166       LRT5120WW       121       PANTH-B30N       153       PANTH-WH20W       153         LC002W       166       LRT5150CW       121       PANTH-B30NS       155       PANTH-WH30N       153         LND0760NW       162       LRT5150NW       121       PANTH-B50N       153       PANTH-WH30W       153         LP-SSK       93, 188       LRT5150WW       121       PANTH-B50NS       155       PANTH-WH50N       153         LP30120B1UGR-840       80       LRT530CW       121       PANTH-SL1002       137       PANTH-WH50W       153								
LC001W       166       LRT5120NW       121       PANTH-B20N       153       PANTH-WH20N       153         LC002       166       LRT5120WW       121       PANTH-B30N       153       PANTH-WH20W       153         LC002W       166       LRT5150CW       121       PANTH-B30NS       155       PANTH-WH30N       153         LND0760NW       162       LRT5150NW       121       PANTH-B50N       153       PANTH-WH30W       153         LP-SSK       93, 188       LRT5150WW       121       PANTH-B50NS       155       PANTH-WH50N       153         LP30120B1UGR-840       80       LRT530CW       121       PANTH-SL1002       137       PANTH-WH50W       153								
LC002       166       LRT5120WW       121       PANTH-B30N       153       PANTH-WH20W       153         LC002W       166       LRT5150CW       121       PANTH-B30NS       155       PANTH-WH30N       153         LND0760NW       162       LRT5150NW       121       PANTH-B50N       153       PANTH-WH30W       153         LP-SSK       93, 188       LRT5150WW       121       PANTH-B50NS       155       PANTH-WH50N       153         LP30120B1UGR-840       80       LRT530CW       121       PANTH-SL1002       137       PANTH-WH50W       153								
LC002W       166       LRT5150CW       121       PANTH-B30NS       155       PANTH-WH30N       153         LND0760NW       162       LRT5150NW       121       PANTH-B50N       153       PANTH-WH30W       153         LP-SSK       93, 188       LRT5150WW       121       PANTH-B50NS       155       PANTH-WH50N       153         LP30120B1UGR-840       80       LRT530CW       121       PANTH-SL1002       137       PANTH-WH50W       153								
LND0760NW         162         LRT5150NW         121         PANTH-B50N         153         PANTH-WH30W         153           LP-SSK         93, 188         LRT5150WW         121         PANTH-B50NS         155         PANTH-WH50N         153           LP30120B1UGR-840         80         LRT530CW         121         PANTH-SL1002         137         PANTH-WH50W         153								
LP-SSK       93, 188       LRT5150WW       121       PANTH-B50NS       155       PANTH-WH50N       153         LP30120B1UGR-840       80       LRT530CW       121       PANTH-SL1002       137       PANTH-WH50W       153								
<b>LP30120B1UGR-840</b> 80 <b>LRT530CW</b> 121 <b>PANTH-SL1002</b> 137 <b>PANTH-WH50W</b> 153								
<b>LP30120B1UGR-9CCT</b> 82 <b>LRT530NW</b> 121 <b>PANTH-SL1502</b> 137 <b>RTF03L130Q</b> 45								
	LP30120B1UGR-9CCT	82	LRT530NW	121	PANTH-SL1502	137	RTF03L130Q	45

RTF03L130T	45	S2T060L1C	131	TD22M AVOLEL W	60	7VDTD2	117
		S2T060L1C S2T060L1N		TD22M-4K8L-FL-W	60	ZKRTB2	117
RTF03L140Q	45		131	TD38L-3K8L-FL-B	60	ZKRTG	116
RTF03L140T	45 45	S2T060L1W	131	TD38L-3K8L-FL-W	60	ZKTPC-CTC	186
RTF03L160Q	45 45	S2T060L2	133	TD38L-4K8L-FL-B	60	ZKTPC-DIM	186
RTF03L160T	45	S2T060L2C	131	TD38L-4K8L-FL-W	60	ZKTPC-RGBW	186
RTF03L2EXCCT	43	S2T060L2N	131	TDL-ACO	61	ZW01N-B	172
RTF04L130Q	45	S2T060L2W	131	TDL-AGL	61	ZW01N-G	172
RTF04L130T	45	S2T120L2	133	TDL-BDF	61	ZW01N-W	172
RTF04L140Q	45	S2T150L2	133	TDL-LENS24	61	ZW01W-B	172
RTF04L140T	45	SLD-150-24	175	TDL-LENS60	61	ZW01W-G	172
RTF04L160Q	45	SLD-50-12	181	TDM-ACO	61	ZW01W-W	172
RTF04L160T	45	SLD-50-24	175	TDM-AGL	61		
RTF04L2EXCCT	43	SLD-80-12	181	TDM-BDF	61		
RTF08L130Q	45	SLD-80-24	175	TDM-LENS24	61		
RTF08L130T	45	SM060CCT	127	TDM-LENS60	61		
RTF08L140Q	45	SM120CCT	127	TN-E27B	103		
RTF08L140T	45	SM150CCT	127	TN-E27CR	103		
RTF08L160Q	45	SP01-W	100	TN-E27CU	103		
RTF08L160T	45	SW001N	171	TN-E27N	103		
RTF08L2EXCCT	43	SW001W	171	TN-E270T	103		
S1T0120L1C	129	SW002N	171	VA03L130T	50		
S1T0120L1N	129	SW002W	171	VA03L140T	50		
S1T0120L1W	129	SW003N	171	XLG-100-24-A	176		
S1T0120L2C	129	SW003W	171	XLG-150-24-A	176		
S1T0120L2N	129	T010	117	XLG-200-24-A	176		
S1T0120L2W S1T0150L1C	129	T053	117	ZK-MAR1-8P	29		
S1T0150L1C	129 129	TB50L130-B TB50L130-W	55 55	ZK-MAR6P	31		
S1T0150L1W	129	TB50L140-B	55	ZK001 ZK002	114 114		
S1T0150L1W	129	TB50L140-W	55	ZK002 ZK003	114		
S1T0150L2N	129	TB60L130-B	55	ZK004	114		
S1T0150L2W	129	TB60L130-W	55	ZK600-14000S	179		
S1T060L1C	129	TB60L140-B	55	ZKC1-10	182		
S1T060L1N	129	TB60L140-W	55	ZKCDAFF	182		
S1T060L1W	129	TB80L130-B	55	ZKCDMX-R	184		
S1T060L2	133	TB80L130-W	55	ZKCDMXW	184		
S1T060L2C	129	TB80L140-B	55	ZKLP1400-EL	180		
S1T060L2N	129	TB80L140-W	55	ZKLP600EL	180		
S1T060L2W	129	TB80L230-B	55	ZKLP700EL	180		
S1T120L2	133	TB80L230-W	55	ZKR1-ST	113		
S1T150L2	133	TB80L240-B	55	ZKR1-STB	113		
S2T0120L1C	131	TB80L240-W	55	ZKR2-ST	112		
S2T0120L1N	131	TD10S-3K8L-MSP-B	60	ZKR2-STB	112		
S2T0120L1W	131	TD10S-3K8L-MSP-W	60	ZKR65QB	115		
S2T0120L2C	131	TD10S-4K8L-MSP-B	60	ZKR65QG	115		
S2T0120L2N	131	TD10S-4K8L-MSP-W	60	ZKR65TB	115		
S2T0120L2W	131	TD15M-3K8L-FL-B	60	ZKR65TG	115		
S2T0150L1C	131	TD15M-3K8L-FL-W	60	ZKREP-4CH	184		
S2T0150L1N	131	TD15M-4K8L-FL-B	60	ZKREP-4CH-IP	184		
S2T0150L1W	131	TD15M-4K8L-FL-W	60	ZKRQB	116		
S2T0150L2C	131	TD22M-3K8L-FL-B	60	ZKRQG	116		
S2T0150L2N	131	TD22M-3K8L-FL-W	60	ZKRR	114		
S2T0150L2W	131	TD22M-4K8L-FL-B	60	ZKRTB	116		

# GENERAL SALES CONDITIONS

- 1.1 These general conditions (hereafter the "Conditions") constitute an integral and essential part of the contract of sale between the Parties. The Conditions shall regulate all legal relationships between Duralamp S.p.A. (hereafter "Duralamp") and the purchaser (hereafter the "Purchaser") where the said relationships are not disciplined by the applicable terms of the Italian Civil Code (C.C.). The nullity of any of the terms of these Conditions shall not prejudice the validity of the remaining Conditions or the Contract.
- 1.2 Any changes to these Conditions shall be agreed between the Parties in writing, with the exception of the provisions set down in article 1341 of the Italian C.C..

### 2. Sales

- 2.1 Sale requests for the products (hereafter the "Products") shall be accepted 'subject to the seller's approval" and shall be considered to be irrevocable in accordance with and as an effect of article 1329 of the C.C. for a period of 1 (one) month from the date of the order requesting execution without prior acknowledgement, pursuant to and as an effect of article 1327 of the C.C. from the date on which the order is received by Duralamp.
- 2.2 The Products detailed in the individual orders and the relevant accessories shall be supplied to the Purchaser by Duralamp with "Retention of Title" pursuant to and as an effect of articles 1523-1526 of the Italian C.C. In this case, the transfer of ownership of the Products to the Purchaser shall take place exclusively upon the full payment of the price agreed, whilst any risks shall be the responsibility of the Purchaser from the moment of delivery of the Products.
- 2.3 Whilst confirming the terms stated above, the Parties hereby agree that should the Products and relevant accessories be destroyed for causes not attributable to Duralamp, the Purchaser shall not be released from the obligation to pay for the same, even where the Products have not yet been delivered.

- 3.1 The prices detailed on the price list shall be applied to Product sales orders. The aforementioned prices shall be unit prices per single item, except where stated otherwise for certain Products. The Parties shall have the right to agree, in writing, any derogations and/or special conditions of sale.
- 3.2 Moreover, the Parties hereby agree that the following conditions shall be
- applied: (I) Minimum order: € 300 (three hundred) for Italy € 750 (seven hundred and
- (II) Delivery free to destination in Italy for orders of € 300 (three hundred and or more;
  (III) Ex-Works deliveries for other countries.
- 3.3 The prices given above do not include VAT and installation costs.
- 3.4 The prices provided in this catalogue shall be valid until a new price list is

# 4. Currency

All prices are given in Euros (exclusive of VAT). Invoices shall be drawn up in

# Special requests

Products can be supplied to the Purchaser in non-standard colours and with special features. The relevant price, minimum quantities per order, methods and timing of deliveries shall be agreed in each individual case, in relation to the

# 6. Transport

- 6.1 Duralamp shall not be liable for any damage and/or losses which may occur during the transportation of the Products, unless the Products are delivered free
- 6.2 Duralamp shall have the right to establish the method of transportation to be used for the Products, unless the Parties have previously established a method of transport in writing
- 6.3 Upon delivery, the Purchaser shall undertake to verify the condition of the products and shall make any complaints directly to the carrier and/or conduct any actions necessary in the event of loss, misplacement, removal or damage, or delays in transportation and/or the methods of delivery of the Products.

# 7. Complaints

- 7.1 In the event that the Products are found to have any faults and/or defects, the Purchaser shall undertake to notify Duralamp of the same in writing, by means of a registered letter, no later than 8 (eight) days following the discovery of the said faults and/or defects, at the risk of invalidating the obligations of the guarantee provided by Duralamp. In this case, the faulty Products, which should be reported within the terms established, should be returned to Duralamp, once the Purchaser has received specific permission to do so in writing.
- 7.2 In the event that the Purchaser's complaints are held to be valid, Duralamp, Products, excluding the attribution of any further charges, obligations, indemnification or compensation to the same. The Products in question should be returned to the Duralamp S.p.A. plant in Via Pratese 164, 50145, Firenze, Italy. In the event that, following an inspection by Duralamp, the Products returned by the Purchaser are not found to be faulty and/or defective, Duralamp shall return the Products to the Purchaser, charging the same an amount equal to 15% (fifteen percent) of the value of the said Products.

# 8. Delivery

8.1 The Parties hereby agree that the terms established for the delivery of the Products shall not be considered absolute or essential and that, in any case, each item shall be exclusively in favor of Duralamp, unless otherwise agreed in writing between the Parties.

- 8.2 In the event of delayed delivery, once 15 (fifteen) days have passed since the agreed date, the Purchaser may send Duralamp written warning to complete the delivery within a further term of no more than 15 (fifteen) days from receipt of the same. In the event that Duralamp has not completed the delivery within this further term the Purchaser may withdraw from the order with regard to the Products that have not yet been delivered. In this case the Purchaser shall only be obliged to pay Duralamp for the Products actually delivered, excluding the payment of any further indemnification and/or compensation to the Purchaser.
- 8.3 Duralamp shall not be responsible for any other breaches, including the failure to deliver or delayed delivery of the Products, caused by events outside its reasonable control such as, purely by way of an example and not limited to the same: the failure to deliver or delayed delivery of manufacturing materials by Duralamp's suppliers, equipment breakdowns, strikes and other trade union action, electricity blackouts, suspension of or difficulties with transportation.

# 9. Payment

- 9.1 The price due shall be paid by the Purchaser according to the conditions and modalities set down in the order and, in any case, by means of payments made exclusively to "DURALAMP S.P.A.".
- 9.2 Duralamp shall only recognize the validity of the payments when the same are made in compliance with the provisions of article 9.1 above. This means that amounts paid using any other method shall not be considered to be a payment in discharge of the Purchaser's obligations. The eventual acceptance by Duralamp of a bank draft or other trade bill shall only occur with the application of the proviso "under usual reserve".
- 9.3 In the event of delayed payment with respect to the terms agreed, the Parties hereby agree that bank interest shall be due to Duralamp at the current PRIME RATE increased by 3 points. interest shall be applied as of right, with no obligation for Duralamp to send the Purchaser a formal notice to pay.
- 9.4 Moreover, in the event of a delay in payment of more than 15 (fifteen) days, Duralamp shall have the right to terminate the order as of right pursuant to article 1456 C.C., sending written notification of the same, barring compensation for any damage.
- 9.5 In the event that the Parties have agreed upon a method of payment by instalments for the Products, the failure to pay several instalments or just one instalment exceeding one eighth of the overall price of the Products, shall result in the loss of the Purchaser's right to pay in instalments and shall give Duralamp the right to request the remaining balance of the price or, alternatively, at its own discretion, to terminate the contract with immediate return of the Products and the acquisition of the instalments paid, as indemnification, barring the right to compensation for any damage sustained.

### 10. Guarantee

- 10.1 The Products provided by Duralamp shall be guaranteed for a period of 12 (twelve) months from the date of delivery against any manufacturing or material defects and/or faults and against any breakdowns not attributable to the Purchaser. Duralamp's only obligation and the Purchaser's right with regard to claims related to the guarantee shall be limited, as decided by Duralamp, to the replacement or repair of the defective or non-compliant product or the reimburgement of the price for the purpose of parties product. Duralamp shall be green. replacement of repair of the defective or non-compilant product or the reimbursement of the price for the purchase of another product. Duralamp shall be granted a reasonable amount of time to repair or replace the product, or to make the previously authorized reimbursement. Any defective or non-compliant Products shall become the property of Duralamp as soon as they have been replaced or reimbursed.
- 10.2 The guarantee shall exclude any failures due to circumstances beyond the control of Duralamp (lightning, flooding, etc.), as well as any damage caused by the improper use of the Products and/or relevant accessories. Notwithstanding the above, Duralamp shall not be bound by the guarantee if the contested defects or non-compliances have occurred as a result of submitting the Products to resistance or environmental tests, the incorrect use of the same, or in the event that the use of or conditions of use of the Products is different from that indicated in the instructions and technical information, as a result of negligence, installation or accident or if they derive from impropre renairs alteraincorrect installation or accident, or if they derive from improper repairs, alterations, modifications, storage or transportation or by incorrect handling.
- 10.3 The Purchaser shall send the Products returned in accordance with the terms of the guarantee to the place indicated by Duralamp in compliance with the Duralamp policy regarding authorization to return materials in force at the time. In the event that the Products returned are found to be compliant or not faulty, the Purchaser shall pay the cost of returning the same as well as the cost of insuring, inspecting and handling the Products.
- 10.4 LED products Enjoy specific guarantees: details are published on www.duralamp.it

# 11. Limitation of Liability

- 11.1 With the sole exclusion of criminal intent and gross negligence, duralamp shall not be liable for loss of profits or savings, loss of reputation or goodwill, any direct, indirect, consequential or special damage that may derive from or be connected to the contract or sale of products or services by duralamp or by the use of the same of a contractual or extra-contractual nature or deriving from any other source, even where duralamp has been notified of or is aware of the possibility of such damage.
- 11.2 The limitations and exclusions stated in article 11 shall apply within the limits permitted by law.
- 12. Applicable law and place of jurisdiction
- 12.1 These Conditions and all the effects of the same shall be governed by Italian law. The Parties hereby agree that any disputes related to these Conditions shall refer to Italian jurisdiction to the exclusion of all others.
- 12.2 The exclusive place of jurisdiction shall be the registered offices of Duralamp S.p.A., with the express exclusion of any other competing places of jurisdiction.



DURA LAMP S.r.l. Registered office Via Pratese, 164 – 50145 Firenze Tel. 055 894 881 e-mail: duralamp@duralamp.it

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A complete list of the Duralamp distribution and project network is available at:

www.duralamp.com

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Indoor or outdoor setting photos are used to illustrate the possible applications of the product.





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