

Underscore InOut

Design iGuzzini

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Product configuration: E684+X162.12

E684: Side-Bend 6mm version - Neutral white Led - 24Vdc - L=454mm

X162.12: Pair of terminal linear profiles - L=104 - Aluminium



Product code

E684: Side-Bend 6mm version - Neutral white Led - 24Vdc - L=454mm **Attention! Code no longer in production**

Technical description

Luminaire for indoor and outdoor architectural linear lighting – with neutral white monochrome Leds – on a 24Vdc flexible white circuit, length L=454mm. The led circuit is completely IP68 encapsulated with a white (outside) and milky finish (over light emission) high performance polymer sheath: this material allows the device to be installed and used even at extreme temperatures: -30°C +45°C. Underscore InOut SIDE-BEND can be used to create straight or curved lines on flat surfaces. Even, spotfree lighting is guaranteed along the entire strip profile up to the end parts. On both ends (not the head), the product is supplied with a cable L=80mm with IP68 male and female connectors fitted with an anti-detachment locknut. The product is supplied with a stainless steel wire to stop the body from misshaping as this may damage the led circuit. Easy to install and a robust design for difficult environments (for example, it is salt water, UV and solvent resistant). Minimum curving radius 65mm for 6mm SIDE-BEND versions. The luminaire technical characteristics conform to EN 60598-1 standards and particular requirements.

Installation

Surface-mounted (ceiling and wall) using accessories to be ordered separately. The installation accessories available include end-low aluminium profiles with slots (L=104mm) and intermediate-low aluminium profiles with no slots (L=998mm to be cut to size) that are used to secure the linear Underscore InOut, with its side exit for the cable with connector. Aluminium low clips (L=40mm) and AISI 316 stainless steel low clips (L=40mm) ideal for curved sections are available.

Colour

White (01)

Weight (Kg)

0.09

Mounting

wall arm|wall surface|ceiling surface

Wiring

24Vdc $\pm 5\%$ LED circuit. Constant voltage ballasts to be ordered separately, both IP20 and IP67 are available and suitable for outdoor installation. DALI 120W 24V dimming interface available (code no. MWP3) or DALI/DMX/1-10V 12÷48Vdc 4-channel dimming interface available with 6A per channel, (code no. 9639) suitable for both RGB Led and white Led versions. The ballast and led strip are connected via cables with IP68 female connectors (L=115-1550-3050-5050mm) or IP68 male connectors (L=115-1500mm).

Notes

Underscore InOut can be powered in series up to a maximum length of L=7004mm. The product is not suitable for installation in swimming pools and fountains. The lengths indicated can have a tolerance of ± 4 mm compared to the nominal length.

Complies with EN60598-1 and pertinent regulations



Accessory code

X162.12: Pair of terminal linear profiles - L=104 - Aluminium **Attention! Code no longer in production**

Technical description

Pair of surface-mounted End-Low linear profiles L=104mm, with a side exit slot for cables with Underscore connectors. Made of anodised aluminium. Complete with S4 screw anchors and $\varnothing 3 \times 30$ mm screws.

Installation

Wall or ceiling installation using the special slot under the profile. Secure using screw anchors for concrete, cement and solid brick.

Colour

Aluminium (12)

Weight (Kg)

0.03

Mounting

wall arm|wall surface|ceiling surface

Notes

For Underscore InOut, 6mm SIDE-BEND, in standard lengths 3004-4004-5004-7004mm and lengths available on request 304-354-404-454-554-604-654-704-754-804-854-904-954mm. To be ordered together with Intermediate-Low profiles with no side slots code no.X163-X164-X165 for Underscore InOut lengths that require it (see instruction sheet). Thanks to special slots the cables with Underscore connectors exit from the side.

Complies with EN60598-1 and pertinent regulations

IK10

Im system:	131	Life Time LED 1:	50,000h - L70 - B20 (Ta 25°C)
W system:	3.8	Life Time LED 2:	30,000h - L70 - B20 (Ta 40°C)
Im source:	130.5	Voltage [Vin]:	24
W source:	3.8	Lamp code:	LED
Luminous efficiency (Im/W, real value):	34.3	Number of lamps for optical assembly:	1
Im in emergency mode:	-	ZVEI Code:	LED
Total light flux at or above an angle of 90° [Lm]:	34	Number of optical assemblies:	1
Light Output Ratio (L.O.R.) [%]:	100	Intervallo temperatura ambiente:	from -30°C to 45°C.
CRI (minimum):	80	LED current [mA]:	18
Colour temperature [K]:	3800	Control:	PWM
MacAdam Step:	3		

Figure 1 consists of a polar plot and a table. The polar plot shows the radiation pattern of a C0-180 antenna with a feed angle $\gamma = 43^\circ$. The plot is a circle with a radius of 24 cd, divided into four quadrants by a vertical line at 180° and a horizontal line at 0° . The radiation pattern is shown as a solid red line, with a dashed red line indicating the main beam. The main beam is at 180° . The radiation pattern is also shown as a solid blue line, which is a circle with a radius of 24 cd. The table on the right provides the radiation pattern data for four different feed angles α .

$\alpha = 168^\circ / 108^\circ$	h	d1	d2	Em	E _{max}
1	19	2.8	10	22	
2	38.1	5.5	2	6	
3	57.1	8.3	1	2	
4	76.1	11	0.6	1	