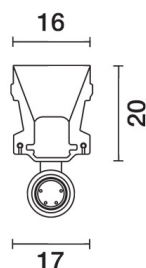


Last information update: April 2024

Product configuration: E410

E410: Top-Bend 16mm version - Warm white Led - 24Vdc - L=404mm

**Product code**

E410: Top-Bend 16mm version - Warm white Led - 24Vdc - L=404mm

Technical description

Luminaire for indoor and outdoor architectural linear lighting – with warm white monochrome Leds – on a 24Vdc flexible white circuit, length L=404mm. 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 TOP-BEND can be used to create straight lines on flat and curved 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 stainless steel wires 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 250mm for 16mm TOP-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. High linear aluminium profiles (L=1000-2000mm) are available and high aluminium and AISI 316 stainless steel clips (L=40mm) that hide the cables with the connectors in the bottom part.

Colour

White (01)

Weight (Kg)

0.15

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



IK10

IP68

**Technical data**

Im system:	160	Life Time LED 1:	100,000h - L80 - B10 (Ta 25°C)
W system:	2	Life Time LED 2:	100,000h - L80 - B10 (Ta 40°C)
Im source:	-	Voltage [Vin]:	24
W source:	-	Lamp code:	LED
Luminous efficiency (Im/W, 80 real value):		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]:	12	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]:	10
Colour temperature [K]:	2900	Control:	PWM
MacAdam Step:	3		

C5-185		Lux				
		h	d1	d2	Em	E _{max}
		1	3.7	2.9	27	47
		2	7.4	5.8	7	12
		3	11.1	8.7	3	5
		4	14.8	11.6	2	3
$\alpha = 123^\circ / 111^\circ$						

Figure 1 is a graph showing the illuminance (lux) of a circular area of diameter 1 m as a function of the distance h (m) and the angle α (degrees). The x-axis represents the distance h in meters, ranging from -1 to 10. The y-axis represents the illuminance in lux, ranging from 0 to 100. The graph displays several curves corresponding to different values of α : 0.1, 0.2, 0.3, 0.5, 0.7, 1.0, 1.4, and 2.0 degrees. A red circle of diameter 1 m is shown at $h=0$, labeled "LED / 2 W".