

Flex Mini Floodlight E4-Series 90LED 220W

Highly efficient lighting in compact dimensions

Flex Mini floodlights are high-performance luminaires with great luminous power, designed in a compact format with reduced dimensions. They are ideal for floodlighting sports spaces that require top-quality lighting. They have an integrated support that makes them self-installable, without the need for additional elements. In addition, the support allows the floodlight to be rotated for precise orientation of the luminous flux, exposing only the relevant area to the lighting provided.

They stand out for their high efficiency, optimizing energy savings. In addition, the design of their structure enhances thermal dissipation to guarantee intensive operation without the risk of overheating. This way, the electronics are protected, their performance is improved and the service life of the luminaire is maximized.

Flex Mini floodlights meet the most challenging requirements of national and international sporting regulations, leagues and associations, ensuring optimum performance in any sporting environment, even at the highest level. The quality of the LED modules provides a great light evenness and colour homogeneity, resulting in clear visibility, good colour rendering and high visual comfort without glare for both players and viewers.

Flex Mini floodlights are made in Televes with high-quality materials (anodized aluminium). Thanks to the automation, an exhaustive control of each point of the process is achieved, resulting in highly durable floodlights that can perfectly withstand adverse weather conditions. In addition, its reduced surface area limits exposure to the wind, improving the stability of the floodlight in outdoor installations at elevated heights.

These floodlights are an excellent compact solution for sports facilities with demanding lighting requirements, optimizing both size and cost. Their small design makes them the right choice for maximizing illumination in space-constrained sports areas. Likewise, Flex Mini floodlights are a convenient solution for a variety of indoor and outdoor applications such as traffic circles, car parks, shopping centres and industrial areas.

The E4 series offers the possibility of including a cutomized and pre-programmed dimming profile, with several levels

and up to 5 steps.
Additionally, the E4 series allows DALI2 dimming options and communication via NFC, expanding the possibilities of adaptation to different contexts. With flexible lighting, adapted to each situation, maximum levels of efficiency can be achieved.
It is also compatible with an adapter for connecting Zhaga nodes, allowing the installation to be easily upgraded to a connected solution. This accessory facilitates the integration of Zhaga nodes, expanding the possibilities for managing and controlling the luminaire while optimising its efficiency and performance.

Ref.	67910300

Other features	
Number of LEDs	90
Optics	AS5
Lighting control	Dimmable
Power	220.00 W

Physical data	
Net weight	6,995.00 g
Gross volume	24.07 dm³
Gross weight	7,575.00 g
Width	376.00 mm
Height	213.00 mm
Depth	291.00 mm
Main product weight	6,995.00 g

Packaging info	
Box	1 pcs.

Highlights

- **Low wind load:** the compact design of the floodlights reduces the action of the wind against the floodlight, minimizing the oscillations caused at high altitudes
- **Integrated support:** its structure incorporates the support, allowing easy installation without requiring additional elements
- **Durability and resistance:** compact anodised aluminium structure, corrosion resistant even in the most aggressive environments, successfully passing resistance tests against severe conditions of use (EN 60598-1:2015) and against salt spray (ISO 9227:2017)
- **Vibration resistance:** robust structure tested against vibrations (EN 60068-2-6:2008)
- **Ease of repair:** access to the inside of the floodlight without having to remove it from the support, allowing the power supply to be replaced on site in case of failure

- **Quick return on investment:** the high light efficiency provides substantial energy savings of up to 80%
- **Minimizes maintenance costs:** due to its long working life and easy component replacement
- **Perfect thermal management:** heat conduction and convection are favoured by the dissipation curves of the luminaire structure
- **High luminous efficiency**
- **LED multi array modules:** selection of corresponding BINs with 3-step McAdam ellipse (SDCM <3) and maximum efficiency
- **Driver certificated ENEC**
- **100% made in Televes:** technology designed and manufactured in our cutting-edge facilities, guaranteeing total control, with demanding quality monitoring, over each of the production phases

Discover

Our ranges of luminaires encompass a wide range of powers and number of LEDs, in addition to being customizable in the types of lighting control, colour temperatures, optics and their light distribution, and finishes. **A product can be configured according to these parameters, and ordered by its numerical or logical reference**, as follows:

Selecting the luminaire by the numerical reference:

This is a numerical code made up of 14 digits:

- The first 6 digits represent a code that depends on the Series of the luminaire, the number of LEDs and the power
- The next 8 digits allow you to choose the configurable parameters of the luminaire: lighting control, colour temperature, type of optics and finish

Series		Dimming		Colour Temperature		Optics		Finish	
631703	*Urban Alameda E 24LED 53W*	**00**	*No Dimming*	**18**	*PC Amber*	**02**	*SP*	**02**	*Black*
631713	*Urban Alameda E 24LED 39W*	**01**	*Dimming*	**22**	*2200K*	**11**	*D90*	**xx**	*Custom*
				27	*2700K*	**17**	*T2-C90*		
				30	*3000K*	**18**	*T3-B90*		
				40	*4000K*				

Selecting the luminaire by logical reference:

This is an alphanumeric code composed of an unlimited number of characters, describing the luminaire's characteristics using logical abbreviations, to facilitate its interpretation. It is divided into 2 groups of characters, separated by a hyphen:

- The first group specifies: the luminaire series, the number of LEDs, the colour temperature, and the lighting control
- The second group specifies: the type of optics, the finish and the power

An example of a logical reference: UA2418D-D90BL53

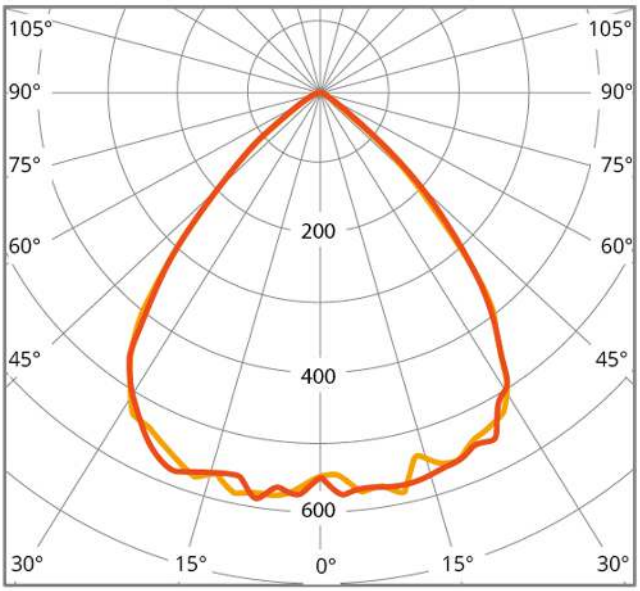
- UA – *Urban Alameda*
- 24 – *24 LEDs*
- 18 – *Colour Temperature: PC Amber*
- D – *Dimming included*

- D90 – *D90 Optics*
- BL – *Black colour*
- 53 – *53W Power*

Range & LED number		Colour Temperature		Dimming		Optics	Finish		Power	
UA24	*Urban Alameda E 24LED*	**18**	*PC Amber*	(ø)	*No Dimming*	**SP**	**BL**	*Black*	**53**	*53W*
		22	*2200K*	**D**	*Dimming*	**D90**	**xx**	*Custom*	**39**	*39W*
		27	*2700K*			**T2-C90**				
		30	*3000K*			**T3-B90**				
		40	*4000K*							

Graphic documentation

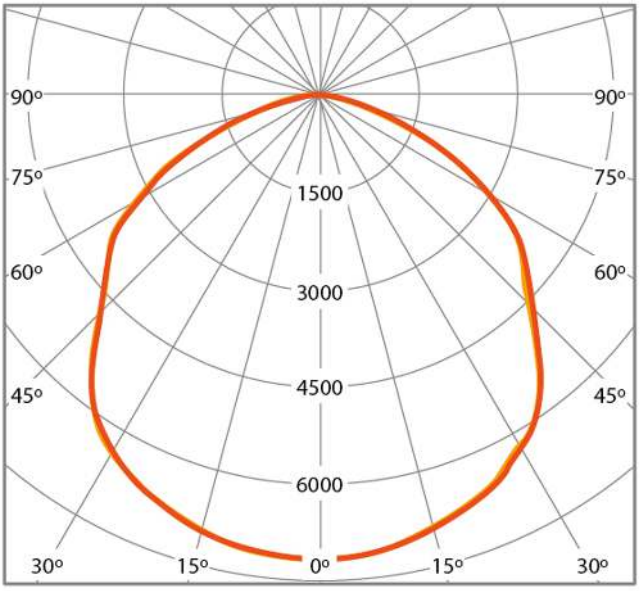
S90



cd/klm C0 - C180 C90 - C270 $\eta = 100\%$

Light distribution curve

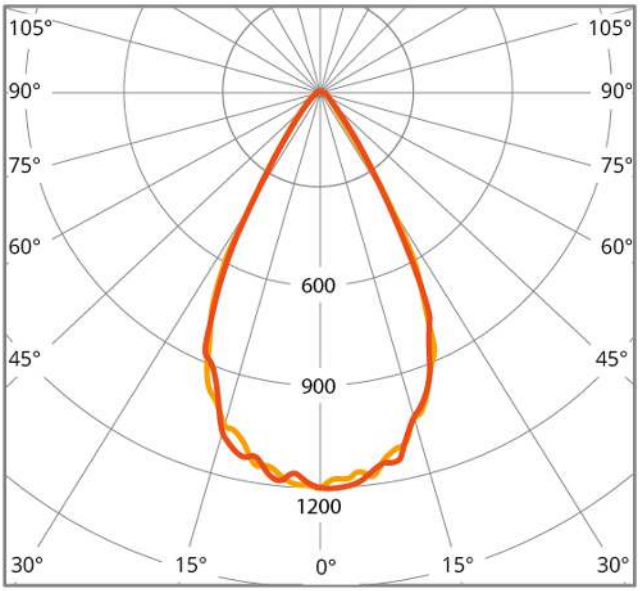
S120



cd/klm C0 - C180 C90 - C270 $\eta = 100\%$

Light distribution curve

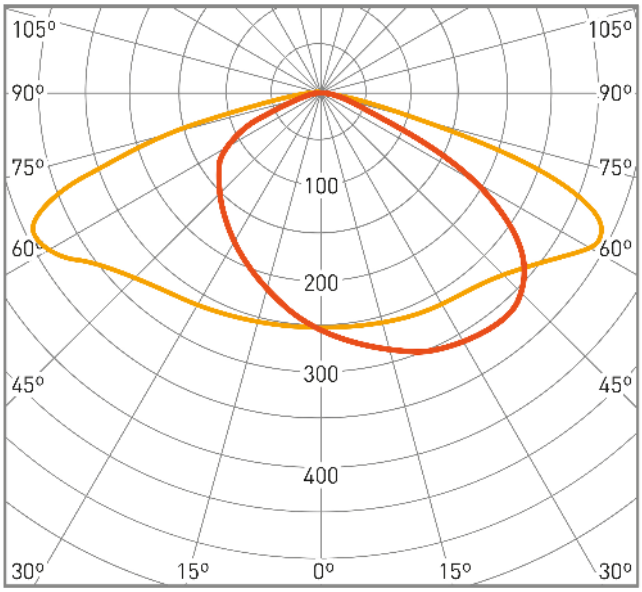
S60



cd/klm C0 - C180 C90 - C270 $\eta = 99\%$

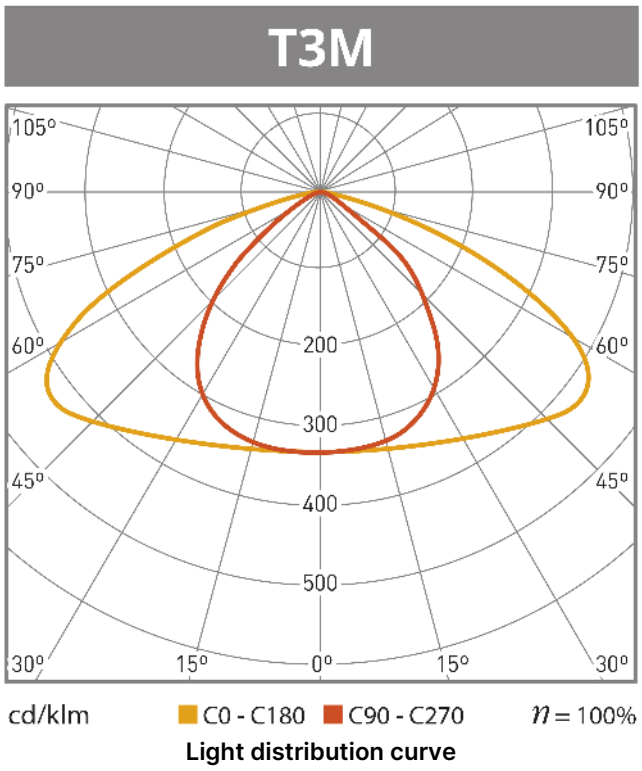
Light distribution curve

T2M



cd/klm C0 - C180 C90 - C270 $\eta = 100\%$

Light distribution curve



Light distribution curve

Features



Excellent profitability for small spaces

Flex Mini floodlights stand out for their high power and efficiency in a compact format. They ensure appropriate lighting, with high performance for sports facilities with space constraints, such as paddle and tennis courts. The compact size, with a moderate weight, and the integrated support in the structure, allow an easy installation in different positions (ceiling, wall, towers...) without requiring additional elements. All this results in reduced costs and a quick return on the initial investment.



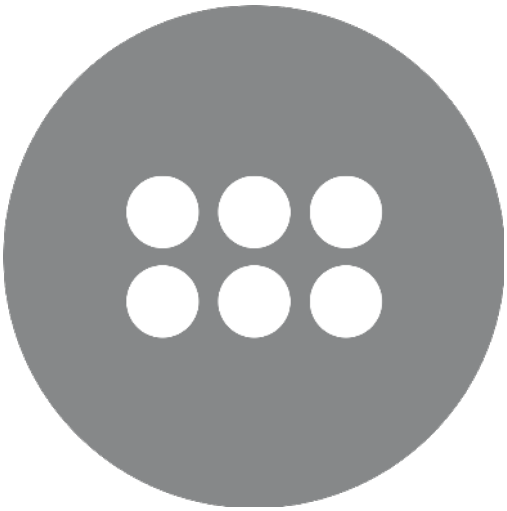
Uniform illumination without shadows or glare

Uniformity of light is an essential requirement in any application, being critical in sporting events. With Flex Mini floodlights, high quality uniform illumination is achieved, without glare or shadows, providing a pleasant and comfortable sports area for both participants and audience. The inclined structure avoids shadows, and it is vertically adjustable, up to 180º, ensuring a perfect orientation of the light according to the requirements.
It is essential to have the right combination of the different optics to be projected, which are determined by the lighting studies previously carried out.



Resistance to extreme conditions

The reliability of floodlights is a critical factor in ensuring the safety of users while maintaining correct illumination. Flex Mini floodlights have successfully passed resistance tests against severe conditions of use (EN 60598-1:2015) and against vibrations (EN 60068-2-6:2008). This, together with the quality of the materials and the meticulous traceability of the manufacturing process, guarantees optimum performance, minimizing the possibility of lighting interruption.



Control and connectivity

This range is equipped with D4i (Digital Illumination Interface Alliance) certified drivers, which have the ability to store luminaire data. At the same time, D4i defines how to feed from the driver to other DALI2 devices connected through the bus, simplifying communication with sensors.
In addition, E4 Series offers dimming options such as DALI2 and schedules and lighting curves can be programmed via NFC.



Flawless thermal management

The structure of the Flex Mini floodlight consists of an aluminium enclosure with dissipation curves that form part of the chassis itself and favour heat conduction and convection. In addition, the sealed driver and the LED modules are placed in two independent compartments, preventing heat transfer between them.
The thermal protection of the electronics maximises the useful life of the luminaire and improves its efficiency (up to 155 lm/W), allowing it to operate continuously, with no rest and keeping its temperature low.



Design and manufacture 100% made in Televes

Our cutting-edge facilities include all the means for the creation of this luminaire, from start to finish. This involves everything from the electronic and mechanical design, using advanced simulation processes, to the manufacture of the circuits, boards and all the elements of the chassis, using meticulous construction processes and assembly on robotised lines. An in-house design and manufacturing process also offers other advantages, such as quality verification at every point of development.



A world of possibilities

Each situation requires specific lighting features, that's why our luminaires offer multiple alternatives to meet the needs of each context:

- A selection of highly homogeneous colour temperatures (SDCM<3): 4,000 and 5,000ºK
- 4 different types of optics are available to achieve lighting adapted to any environment: S60, S90, S120 and T2M
- Variety of finishes in any colour of the RAL range
- CRI>80 and available on request CRI>90

And if you don't find what you are looking for, we have even more options available on request. We are pleased to study your project in a

tailored, non-binding way. Contact us, and we will help you choose the perfect lighting.

Technical specifications

Ref. 67910300

Number of leds		90		
Power	W	220		
Pre-programmed dimming		No		
Control interface		Dali 2		
Optic type options		S60	S90	S120
Lens type		PC lens	PC lens	PC lens
Color temperature options		4000K	5000K	
Luminous flux	lm	31614	31614	
Lighting efficiency	lm/W	143.7	143.7	
LED current	mA	835	835	
Duration	h	100000		
Working life		L90B10		
Constant ligh output (CLO)		Yes		
Standard Deviation Colour Matching (SDCM)		< 3		
Color rendering index (CRI)		80		
CE Mark		Yes		
ENEC Certificate		No		
Protection Class IEC		Class I		
EU RoHS Compliant		Yes		
IK Rating (light module)		10		
IK Rating (whole luminaire)		10		
IP Rating (light module)		66		
IP Rating (whole luminaire)		66		
Color		Aluminum		
Material		Aluminium		
Material cover		Without cover		
Fixation Material		Aluminium		
Mounting method (Floodlights)		Wall / Traverse / Pedestal/Floor		
Surface protection		Anodized		
Surface facing the wind	m^2	0.418		
Number of LED modules		1		
Minimum power factor		0.9500		
Lighting source type		LED		
Replaceable light source		Yes		
Cable		No		
Power consumption tolerance	%	5		
Lighting flux tolerance	%	8		
Electric connection		3-pole waterproof connector		
Inrush current	A	0.77		
Input voltage	Vac	220 ... 240		
Mains frequency		50 Hz		
Total harmonic distortion (THD)		10		
Max. Operating temperature	°F	104		
Min. Operating temperature	°F	-40		