

Bollard
MR.BO



TARGETTI

MR.BO

GENERAL INFO

Radial-emission bollard.
ø160mm
H 400mm – 800mm –
1000mm

LED

Chip on board
From 1427lm to 3817lm
2700K – 3000K – 4000K
Ra80

PRODUCT EFFICACY

Up to 47lm/W

OPTICS

90° - 90° + 90° - 180° - 360°

POWER SUPPLY

Electronic – DALI
Casambi control system
available using a dedicated
accessory (only for DALI
version products).

MATERIAL

Powdered coated
anodised die-cast
aluminium body. Die-cast
aluminium optical head.
Ferrite finish.

ON DEMAND

 Easy Custom Colour

 110-277Vac
power supply

 Ra90

 3500K

 Cataphoresis
treatment

LED bollard specifically designed to light large open spaces.

Its mechanical characteristics (IK10) and performance make it possible to use it in every space.

The highly controlled radial emission avoids any risk of glare while still ensuring deep lighting in pedestrian areas.

All versions have been designed to maintain the same level of lighting on the floor regardless of the combination of different versions used in the same project.

Accessory for the proper control of light pollution (0 cd/klm emission on angles equal or above 90°). On request it is possible to subject the product to cataphoresis treatment making it suitable to be installed near the sea (up to 5 metres) or in saline environment or in the presence of corrosive agents.

The entire range uses the “Waterblock Plus” technical solution that involves resin coating the connection cables and completely resin coating the integrated driver limiting the risk of humidity reaching the fixture.



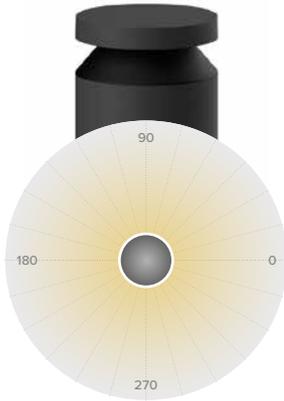
Outdoor



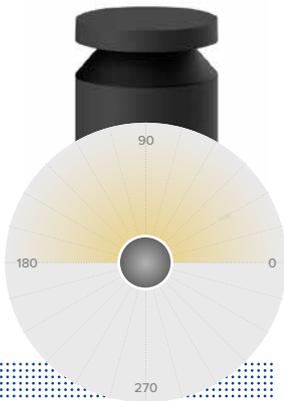
Bollards

Plus

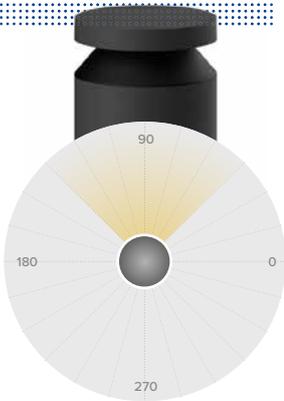
360°



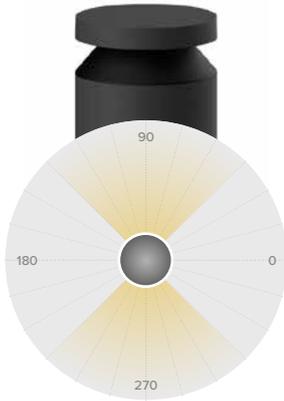
180°



90°

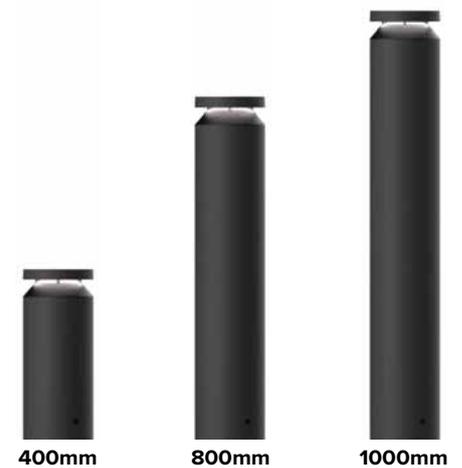
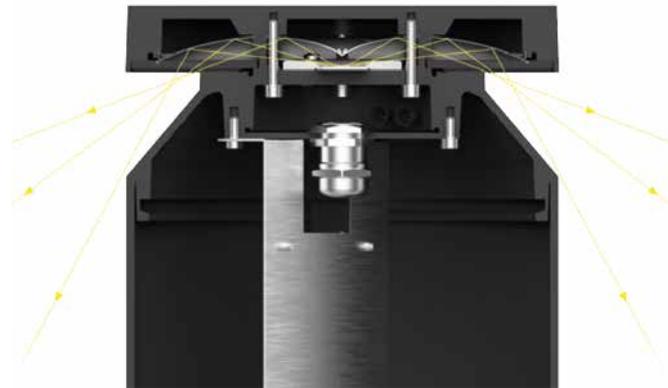


90°+90°

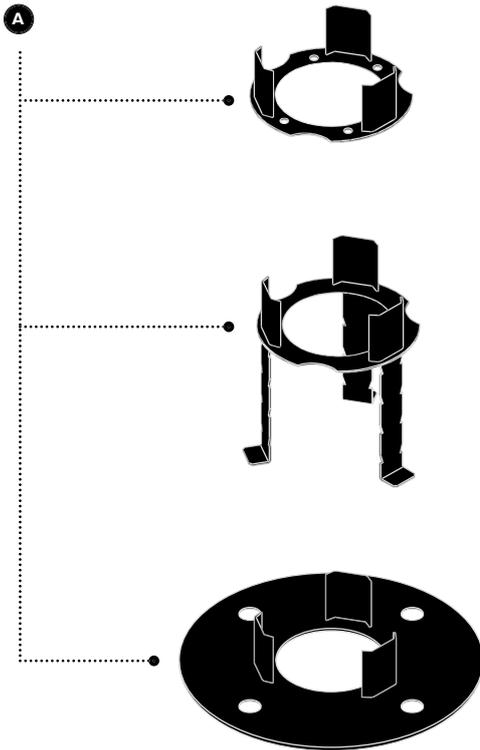


The fixture is made of three different elements

The fixture is composed of different elements that, combined together create various solutions. Four different optical units for four different radial emissions - from 90° to 360° - to be combined with poles available in three different heights 334mm, 734mm and 934mm and two different fixing systems.



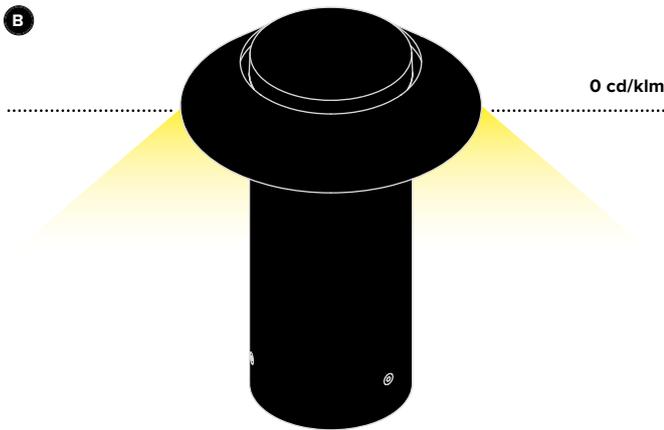
Outdoor



A Fixing system

There are 3 different installation systems available

- a small plate for surface installation. The plate is not visible when it is installed in the ground
- plate for installation with fixing rods for installation in concrete
- a large plate for surface installation. The plate remains visible even when the product is installed.

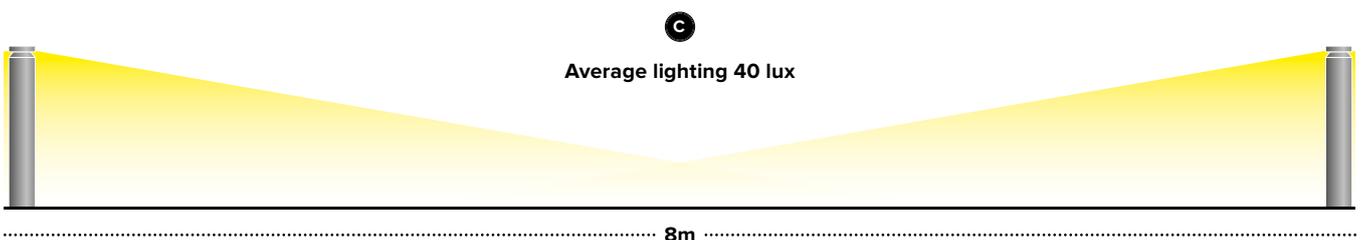


B Perfect control of light emission

Thanks to the new accessory for the dark light control, Mr. Bo guarantees no light spill (0 cd/klm emission) for angles $\geq 90^\circ$, complying with international norms to control the light pollution. This makes Mr. Bo ideal especially for urban landscaping in public environments, where the prescriptions on light pollution are more strict.

C Excellent lighting performance

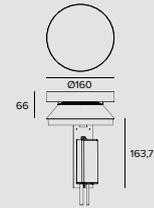
The high quality optical system developed for Mr. Bo makes it possible to obtain an average lighting of 40 lux even with a distance of 8mt between fixtures.



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Optic head for bollard H. 334mm



LED / 8W / 90°



		3000K		H(m)		D1(m)		D2(m)		Emax(lx)	
		Ra80		40°		76°					
Fixture Power	9W	1	3.12	3.35	68						
Source Flux	1488lm	2	6.23	6.71	17						
Fixture Flux	226lm	3	9.35	10.06	8						
Efficacy	26lm/W	4	12.46	13.42	4						
TS1120	Imax=166cd/klm	Imax	247cd	5	15.58	16.77	3				

Driver	Colour	2700K	3000K	4000K
EL.	●	1E3428EL	1E3429EL	1E3430EL
DALI	●	1E3428DA	1E3429DA	1E3430DA

LED / 12W / 90°+90°



		3000K	
		Ra80	
Fixture Power	14W		
Source Flux	2034lm		
Fixture Flux	456lm		
Efficacy	34lm/W		
TS1121	Imax=122cd/klm	Imax	247cd

Driver	Colour	2700K	3000K	4000K
EL.	●	1E3431EL	1E3432EL	1E3433EL
DALI	●	1E3431DA	1E3432DA	1E3433DA

LED / 12W / 180°



		3000K		H(m)		D1(m)		D2(m)		Emax(lx)	
		Ra80		44°		110°					
Fixture Power	14W	1	3.51	6.10	91						
Source Flux	2034lm	2	7.02	12.20	23						
Fixture Flux	454lm	3	10.53	18.30	10						
Efficacy	34lm/W	4	14.04	24.40	6						
TS1119	Imax=146cd/klm	Imax	297cd	5	17.55	30.50	4				

Driver	Colour	2700K	3000K	4000K
EL.	●	1E3425EL	1E3426EL	1E3427EL
DALI	●	1E3425DA	1E3426DA	1E3427DA

LED / 17W / 360°



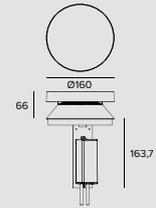
		3000K	
		Ra80	
Fixture Power	20W		
Source Flux	2783lm		
Fixture Flux	910lm		
Efficacy	46lm/W		
TS1118	Imax=100cd/klm	Imax	278cd

Driver	Colour	2700K	3000K	4000K
EL.	●	1E3422EL	1E3423EL	1E3424EL
DALI	●	1E3422DA	1E3423DA	1E3424DA

MR.BO



Optic head for bollard H. 734/934mm



LED / 12W / 90°



		3000K		H(m)		D1(m)		D2(m)		E _{max} (lx)	
		Ra80		40°		76°					
TS1120		Fixture Power	14W	1	3.12	3.35	92				
		Source Flux	2034lm	2	6.23	6.71	23				
		Fixture Flux	309lm	3	9.35	10.06	10				
		Efficacy	23lm/W	4	12.46	13.42	6				
		Imax	337cd	5	15.58	16.77	4				

Driver	Colour	2700K	3000K	4000K
EL.	●	1E3416EL	1E3417EL	1E3418EL
DALI	●	1E3416DA	1E3417DA	1E3418DA

LED / 17W / 90°+90°



		3000K	
		Ra80	
TS1121		Fixture Power	20W
		Source Flux	2783lm
		Fixture Flux	623lm
		Efficacy	31lm/W
		Imax	338cd

Driver	Colour	2700K	3000K	4000K
EL.	●	1E3419EL	1E3420EL	1E3421EL
DALI	●	1E3419DA	1E3420DA	1E3421DA

LED / 17W / 180°



		3000K		H(m)		D1(m)		D2(m)		E _{max} (lx)	
		Ra80		44°		110°					
TS1119		Fixture Power	20W	1	3.51	6.10	124				
		Source Flux	2783lm	2	7.02	12.20	31				
		Fixture Flux	621lm	3	10.53	18.30	14				
		Efficacy	31lm/W	4	14.04	24.40	8				
		Imax	407cd	5	17.55	30.50	5				

Driver	Colour	2700K	3000K	4000K
EL.	●	1E3413EL	1E3414EL	1E3415EL
DALI	●	1E3413DA	1E3414DA	1E3415DA

LED / 24W / 360°



		3000K	
		Ra80	
TS1118		Fixture Power	26W
		Source Flux	3723lm
		Fixture Flux	1217lm
		Efficacy	46lm/W
		Imax	372cd

Driver	Colour	2700K	3000K	4000K
EL.	●	1E3410EL	1E3411EL	1E3412EL
DALI	●	1E3410DA	1E3411DA	1E3412DA

Note

Available with three different height poles - 334, 734 and 934mm - to be combined with the relative head available in four different versions - 360°, 180°, 90°, 90°+90° (the same code for the 800 and 1000mm, specific code for the 400mm). To be completed with a stainless steel anchoring system, available for the double version with a plate for installation with dowels or with fixing rods for installation in concrete.

MR.BO

Related codes

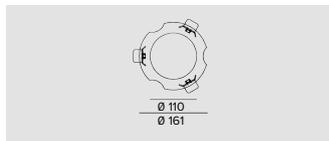
Bollard



	Kg	H	Colour	Code
	1.34	334	●	1E3434
	2.95	734	●	1E3435
	3.8	934	●	1E3436

Powder coated anodised aluminium pole.

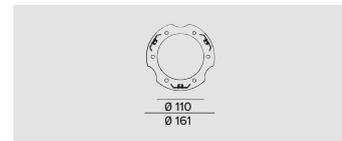
Mounting System



Code

1E3448

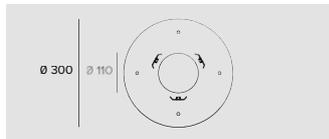
Plate with fixing rods for installation in concrete.
AISI 316 stainless steel.
0.34Kg.



Code

1E3449

Plate for surface installation (inside the pole).
AISI 316 stainless steel compatible with dowels to be inserted into holes with 8.5mm diameter.
0.68Kg.



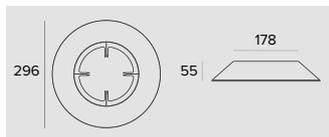
Code

1E3510

Plate for surface installation (outside the pole).
AISI 316 stainless steel compatible with dowels to be inserted into 4 holes with 22mm diameter.
1.10Kg.

Accessories

Dark Sky



Colour

Code



1E4036

Dark Sky optical accessory.
Reduces light spill above the horizon to 0 cd/klm, allowing the matching of national and international regulations on reduction of light pollution.
Made in stainless steel, allows a high resistance to both atmospheric agents and mechanical actions.
The accessory must be mounted outside the bollard MR. BO.

Outdoor

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Connector



Code

1E2769

Linear connection box IP66/IP68.
5 poles max. wire section 1.5mm².
Cable diameter range from 7 to 12mm.



Code

1E2494

Multiple connection box IP68.
1 IN - 3 OUT 4 poles max. wire section 2.5mm².
Cable diameter range from 6 to 12mm.

Tool



Code

1E3305

(Tightening) wrench for the connector kit.

Control systems



Code

1E3048

A IP67 Module for individual control of external devices equipped with DALI drivers.
The module needs to be positioned in order to receive radio signals.
The distance to the lighting fixtures can reach up to 50m.
Wireless control via the Casambi application.
LxHxP=56.5x22.3x35.8mm.



Code

1E3049

IP67 Extender for wireless control of DALI fixtures.
It generates a local DALI bus with the capacity to drive up to 64 fixtures.
Can control DALI fixtures in outdoor applications via the Casambi application.
LxHxP=150x40x148mm.

Requisites and information

All fixtures of the Targetti collection have been designed and produced to comply with European Standard EN60598-1 relative to the safety requisite of light fixtures.



All fixtures comply with the following directives:

- EMC Directive 2014/30/EU
- LV Directive 2014/35/EU
- RoHS Directive 2011/65/EU

Unless specified otherwise

- all fixtures are supplied without lamps;
- all fixtures are sold separately;
- all measurements are expressed in millimeters;
- all fixtures at low voltage are supplied without transformer;
- For products in Class III performance is only guaranteed using the electronic power supplies and drivers indicated in the catalogue.

Consorzio ecolight

Targetti Sankey Spa is a member of the Ecolight consortium that was set up in 2004 (D.Lgs. 49/2014) to comply with the provisions of the European Directive that was adopted in Italy as the European Directive 2012/19/EU for WEEE on managing, recovering and treating waste electrical and electronic equipment, used batteries and accumulators in compliance with all applicable legislation.

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TARGETTI SANKEY SpA

Certificated ISO 9001 n° 9130. TAR1
Certificated ISO 14001 n° IT319206

The Enec mark, ISO9001 and ISO14001 certifications and the CE marking all guarantee that the activities carried out internally in the company are governed and controlled by procedures which assure constant level of quality.

Accredited laboratory in accordance with ISO 17025.

Light beam apertures

from	to	beam	
5°	10°	Narrow Spot	NSP
11°	25°	Spot	SP
26°	40°	Flood	FL
41°	50°	Medium Wide Flood	MWFL
51°	70°	Wide Flood	WFL
71°	120°	Very Wide Flood	VWFL
		Wall Washer	WW
		Narrow Asymmetric	N. ASYM
		Asymmetric	ASYM

Icons legend

	Class I luminaire in which the protection against electrical shock is guaranteed by the connections of the conductive elements accessible to a protective conductor (earth connection).
	Luminaire in which the connection to a protective conductor (earth connection) guarantees the immunity to radio noises.
	Class II luminaire (double insulation), protected against the accidental contact with parts under tension from the user.
	Class III luminaire, suitable for connection to very low voltage circuits.
	Solid particle and liquid ingress protection degree.
	Protection degree - Recessed part . Protection degree - Exposed part.
	Impact protection degree.
	ENEC European Norms Electrical Certification.

Particular symbols

	Weight of the single fixture.
	Cable length.
	Walk-over.
	Driver-over safe.
	Fixtures that have parameters below the minimum visibility threshold $PstLM \leq 1$ and $SVM \leq 0.4$ (IEC TR 61547-1 and IEC TR 63158).
DBS	Dynamic Beam Shaper optical technology with remote management of the beam opening.
	LED with Ra__ where not present in the catalogue, available on request.
	Different colour temperatures available on request.
	Custom finish of your choice from the Targetti Colours range and RAL indicated in the colour chart can be downloaded on line from the download section.
	Treatment carried out on request.
	Supplied on request with an integrated or remote 110-277Vac power supply as indicated for the standard model.
	LED version with a different "Tunable White" tone available on request.

Note

- Please contact us for on demand treatments and versions.
- The performances reported on the products refer to the use of the recommended drivers.
- The drivers selected by Targetti make the fixtures "Safe Flicker".

