

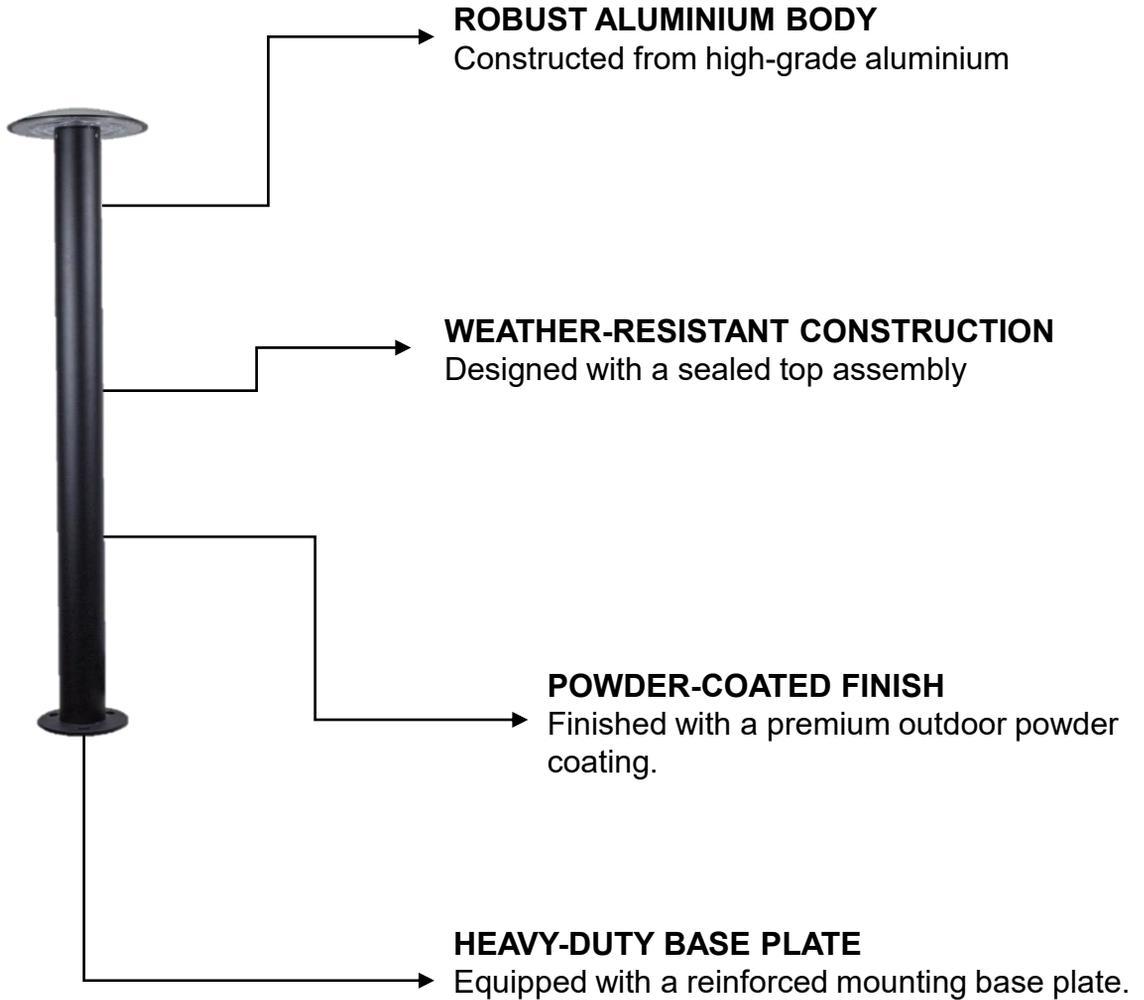
*Dark Sky
Logo*

BOLLAX MR

BLXMR-BLD-20W-XXXXK



PRODUCT HIGHLIGHTS



FEATURES



Thermal
Management



Corrosion
Resistance



Vibration
Resistance



Easy
Maintenance

DESCRIPTION

BOLLAX-MR 20W is a durable outdoor LED lighting solution engineered to perform reliably in demanding environmental conditions. With its weather-resistant construction and sleek, modern design, it seamlessly combines strength with aesthetic appeal. Ideal for pathways, landscapes, and outdoor environments.



Conformity



Compliant with



Tested for Safety



Salt Spray



3G Vibration



Photobiological Safety

Insulation Class

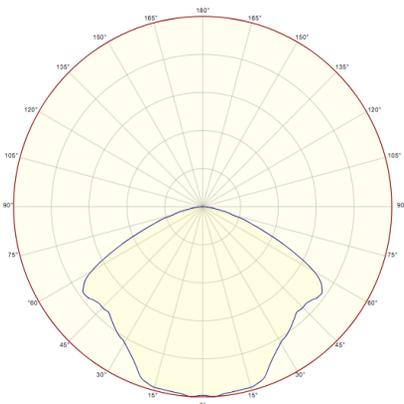


Protection Class

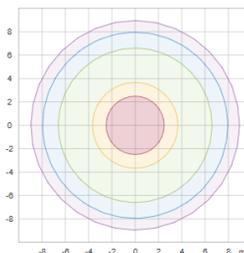
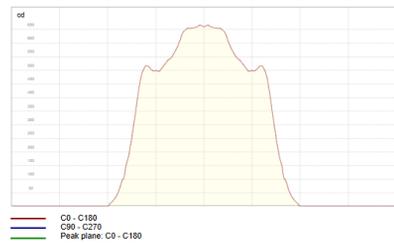


OPTICS & DISTRIBUTION

POLAR GRAPH - PEAK VALUES



LINEAR INTENSITY DISTRIBUTION DIAGRAM



ORDERING CODE

BLXMR-BLD-20W-XXXXK

PRODUCT NAME	CATEGORY	PRODUCT FAMILY	POWER	CCT	BODY COLOUR	CONTROL OPTIONS
BLX	MR	BLD	XXW	XXXXK	XX	XX
BOLLAX	MUSHROOM SHAPE	BOLLARD	UP TO 20W	2700K	BL (BLACK)	10V (1-10V)
				3000K	GR (GREY)	DA (DALI)
					SP (SPECIAL)	

TECHNICAL SPECIFICATION

LUMINAIRE DETAILS

PRODUCT NAME	BOLLAX MR
PRODUCT TYPE	LED BOLLARD LIGHT
PRODUCT CODE	BLXMR-BLD-20W-2700K

HOUSING DETAILS

BODY MATERIAL	CORROSION-RESISTANT ALUMINIUM DIE-CAST
LENS	UV-STABILIZED POLYCARBONATE (PC) LENS
OPTICS	SYMMETRIC
BODY COLOUR	BLACK / GREY / SPECIAL

CHIP DETAILS

LIGHT SOURCE	SMD LEDs
LED CHIP BRAND	CREE
AVAILABLE CCT	2700K / 3000K
MACADAM BINNING	STEP 2
CRI	≥80
ULOR(Upward Light Output Ratio)	0% (U0 – Zero Uplight)

ENVIRONMENTAL CONDITIONS

AMBIENT TEMPERATURE (TA)	-20°C TO +50°C
HUMIDITY	RH 10-95%



TECHNICAL SPECIFICATION

OPTICAL DETAILS

LUMINAIRE FLUX	2,097 lm (@ 17.63 W Tested)
EFFICACY	118.90 lm/W
OPTICAL TYPE	IES Type V (Very Short)
BEAM ANGLE	128.5°
BUG RATING	B1-U0-G1

ELECTRICAL DETAILS

NOMINAL VOLTAGE	220–240 VAC
FREQUENCY	50/60 HZ
POWER FACTOR	≥0.90
RATED POWER	UP TO 20W
THD	≤20%
CONTROL OPTIONS	DALI, 1–10V DIMMING

PROTECTION & DURABILITY

IP RATING	IP66
IK RATING	IK09

DARKSKY COMPLIANCE NOTES

- **Designed for DarkSky Compliance:** This product is engineered in accordance with DarkSky lighting principles, aiming to minimize light pollution and promote responsible outdoor lighting.
- **Zero Uplight (U0):** The luminaire emits no light above the horizontal plane, ensuring that upward light is completely eliminated, reducing skyglow and protecting nocturnal environments.
- **Environmentally Responsible:** Suitable for outdoor installations, supporting the preservation of natural nightscapes and reduction of ecological impact.
- **Dimming Options:** The luminaire supports flexible dimming solutions, including DALI and 1–10V, allowing energy savings and adaptable lighting levels as required.
- **Applicable Configurations:** DarkSky compliance is intended for the specified wattage, CCT options of 2700K and 3000K, and optical configurations. Proper installation is required to support DarkSky-friendly performance.



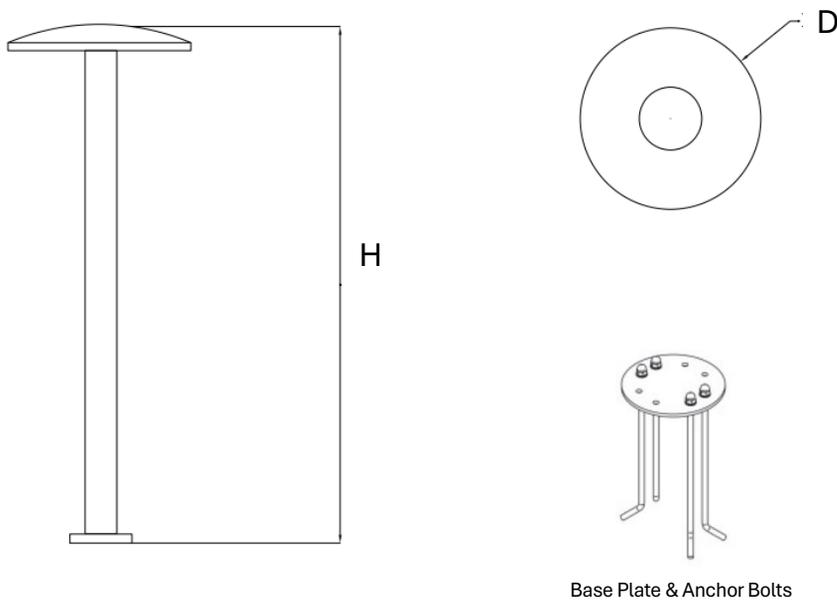
CUSTOM DIMMING PROFILE

The bollard luminaire supports 1–10 V dimming as well as DALI dimming, allowing smooth and reliable adjustment of light output according to the required ambiance or energy-saving needs. By integrating with compatible lighting control systems, the brightness can be adjusted from full output to lower levels while maintaining stable performance.

- 1–10 V dimming: Simple analog dimming.
- DALI dimming: Digital, programmable dimming for advanced control.

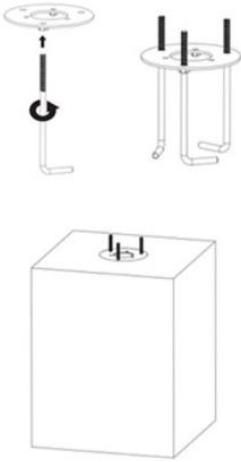
This feature is ideal for pathways, landscapes, and architectural outdoor applications where lighting levels may need to be adjusted at different times of the night, improving visual comfort while reducing energy consumption

DIMENSIONAL DETAILS



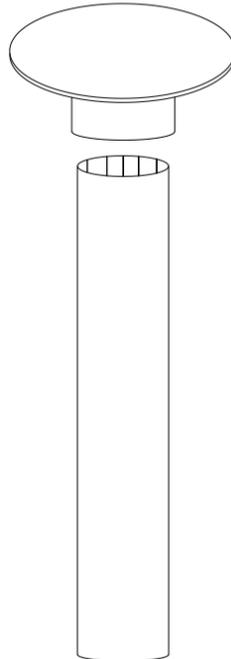
DIMENSIONS	
DIAMETER	150 mm
HEIGHT	1000 mm

GENERIC INSTALLATION STEPS



1. Base Preparation

Prepare a stable concrete base or mounting plate and route the power cable to the installation point.



2. Fixture Mounting

Position the bollard on the base and secure it firmly using anchor bolts.



3. Wiring & Test

Connect the power cables as per the wiring diagram and switch on the power to test the luminaire.

Note:

- Use only suitably rated IP connectors (minimum IP65 or above) for all electrical connections.
- Where remote controllers are used, they shall be installed within appropriately rated IP enclosures to ensure protection against environmental ingress.

UNDERSTANDING BOLLARD HEIGHT SELECTION



Tall Height Bollard:

Designed for primary pathway lighting, public spaces, and open areas where enhanced visibility and wider light distribution are required. Typically configured with a taller form factor.

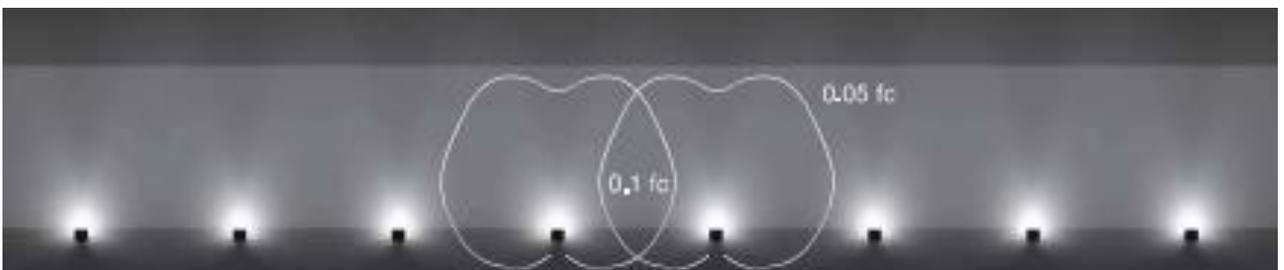
Medium Height Bollards:

Ideal for balanced pathway lighting in residential and commercial outdoor spaces. With a medium-height configuration, it offers an optimal balance between visibility and visual comfort without overpowering the surroundings.



Compact Bollards:

Suitable for landscape areas, pathways, and decorative applications where subtle illumination is preferred. Featuring a lower height profile, it provides soft guidance lighting with minimal glare and enhanced visual comfort.



DARK SKY LIGHTING FOR SUSTAINABLE ENVIRONMENTS

Dark Sky lighting refers to the design and application of luminaires that minimize unnecessary light emission into the night sky. It focuses on directing light only where it is required, reducing upward light, glare, and light trespass. Dark sky-compliant luminaires are typically designed with full cut-off optics and controlled light distribution, ensuring that little or no light is emitted above the horizontal plane. This approach helps preserve the natural darkness of the night sky while maintaining effective outdoor illumination.

The importance of Dark Sky lighting lies in its environmental, visual, and energy benefits. By reducing sky glow and light pollution, it helps protect nocturnal wildlife, supports natural ecosystems, and allows clearer visibility of the night sky for astronomical observation. At the same time, well-controlled lighting improves visual comfort and safety by minimizing glare and directing light only to the intended areas. It also contributes to energy efficiency, as less light is wasted and power consumption can be optimized.

At Hansa Green Technology, we are committed to supporting sustainable and responsible outdoor lighting practices. As part of this initiative, several of our luminaires are being designed and evaluated to meet Dark Sky-friendly lighting principles, focusing on reduced upward light output, optimized optics, and improved light control. Our goal is to develop products that not only deliver high performance and reliability but also contribute to the reduction of light pollution and protecting the natural night environment.



*Dark Sky
Logo*