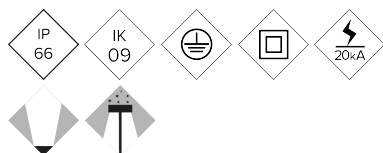


ABLTMA

Bollard

# TOMSK ALU



Rectangular, minimalist design bollard with direct light, robust and easy to maintain for lighting and signage applications. Made of 4mm thick die-cast aluminium alloy, oven-fire painted and finished in black micro-textured with high resistance to atmospheric agents and UV rays. Easy maintenance allowing the replacement of components (PCB, Driver and SPD).

## MAIN FEATURES:

## APPLICATIONS:

[Project sheet](#) | [CAD](#) | [HD image](#)

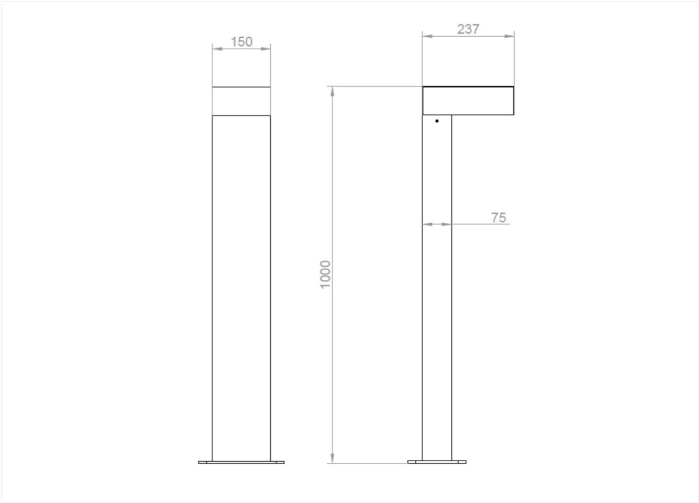
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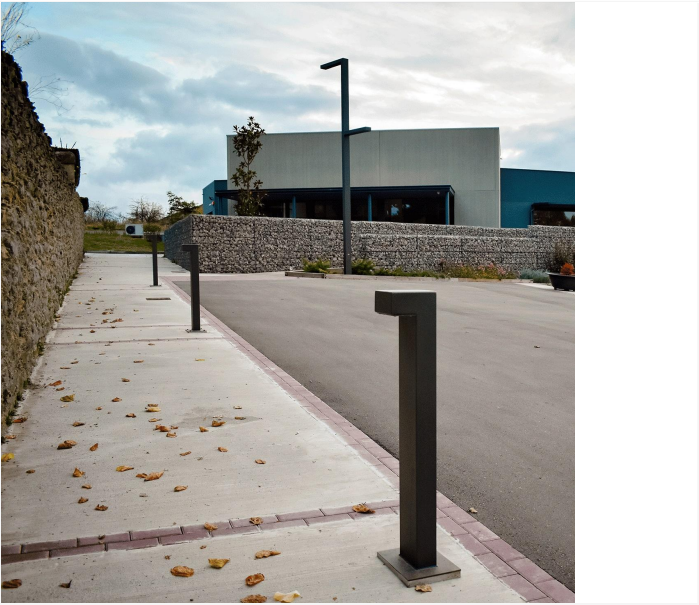
# SPECIFICATIONS :

Housing material:	High-strength die-cast aluminium body. Type EN AC-43000, EN AC-43100, EN AC-43400, EN AC-44100, EN AC-47100 in accordance with UNE EN 1706.
Diffuser (optic system enclosure):	4 mm tempered safety glass, filters UV.
Fixing elements:	Stainless Steel 18/8 - AISI 304
Housing:	It consists of two parts: the upper body, which houses the BENITO LED module, the Driver and the control electronics that includes the fixing support.
Sealing gaskets:	Silicone foam
IP rating (luminaire):	IP66
IP rating (optic system):	IP66
IK rating (impact resistance):	IK09
LEDs thermal dissipation:	Heat dissipation through the luminaire body, without external fins or conductive fluids. Passive dissipation by convection and ensuring thermal contact of the LED modules through highly conductive heat transfer material.
Anti-condensation valve:	Pressure compensation valve ensures the evacuation of humidity, preventing condensation and maintaining the IP tightness rating of the beacon.
Paint and finishes:	Polyester powder paint coating, electrostatically sprayed and sublimated in the oven. Corrosion resistant.
Colour:	Micro-textured black
Mounting:	Floor by means of 4 screws (not supplied).
Tilt range:	No.
Maintenance:	Easy to open with standard tools. Replaceable LED module, Driver and SPD.
Recommended mounting height:	-
Driver:	Constant current driver incorporated inside the bollard, pre-wired on galvanized steel plate.
Flow Reduction:	Non-adjustable driver.
Ready4IOT - Connectivity:	-
Surge protection device (SPD):	Type T2+T3, 10kV and 20kA transient surge protector. Series connection with thermofuse, disconnection for a more effective protection at the end of the SPD service life. (Optional SPD Full Permanent Surge Protector >264Vac to <170VAc).

# DRAWING:



# INSTALLATION:



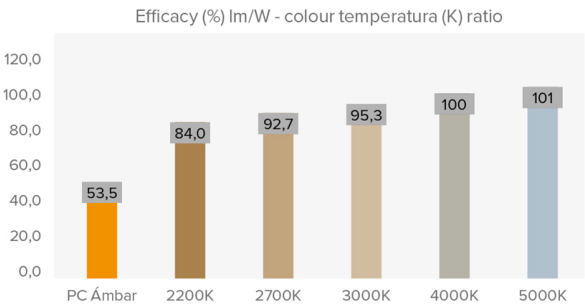
V. 2024-02-22 | The constant improvement and evolution of our products may result in some modifications of the technical specifications and characteristics of the products without prior notice.



TECHNICAL DATA:

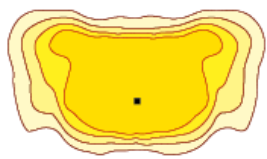
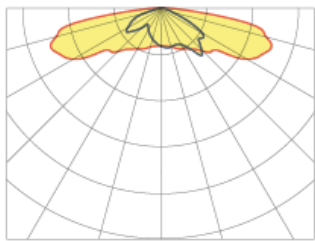
	REF.	Nº LEDs	Power W	I Driver mA	Real luminous flux (T) =85°C		Initial luminous flux (T) =25°C	
					Flux lm	Efficacy lm/W	Flux lm	Efficacy lm/W
BALIZA TOMSK ALU	ALBTMA	14	12	-	1320	110	1560	130

Luminous flux and efficiency at 4000°K and CRi>70.  
Luminous flux tolerance < +/-3%.  
Values may be subject to changes due to LED binning.



PHOTOMETRY:

Asymmetric (A3)



\*Show 4 recommended lighting distributions. Refer to the 18 typologies.

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**LEDs MODULE:**

LEDs module:	BENITO format 14 LEDs. Consult Color Temperatures, CRI and Light Distributions		
Replaceable module:	Yes		
LED:	3030		
Number of LEDs:	14		
PCBs format:	-		
LED nominal efficacy:	194 lm/W		
Colour temperature:	3K (optional PC Amber- 1K8, 2K2, 2K7, 4K)		
Colour rendering index CRI:	> 70 (optional >80)		
Average LED useful time L90B10:	L90B10 >75.000 hours		

**OPTIC SPECIFICATIONS:**

Optic system:	2x2 PMMA lenses	
Light distributions:	5 Lighting Distributions available	
Upward light output ratio ULOR:	0%	
Downward light output ratio DLOR:	100%	
Glare index:	Between D5 and D6 (depends on light distribution)	
Luminous intensity category:	Between G*4 and G*6 (depends on light distribution)	
Luminous flux CIE n°3:	>95% (See 18 Light distributions)	
Photobiological safety:	RG0 (risk free)	
Initial luminous flux Tj=25°C (up to):	lm	1560
Initial luminaire efficacy Tj=25°C (up to):	lm/W	130
Real luminous flux Tj=85°C (UNE EN 13032-4) (up to):	lm	1320
Real luminaire efficacy Tj=85°C (UNE EN 13032-4) (up to):	lm/W	110

**ELECTRIC SPECIFICATIONS:**

Nominal maximum power (LEDs):	W	9
Maximum power consumed (luminaire):	W	12
Power range:	W	12W
Maximum current of LED:	mA	<470 (LED Current = 50% Driver Current).
Power supply protection classes IEC:	Class I and II	
Surge protection device (SPD):	Type 2 and Type 3, 10kV and 20kA transient surge protector. Series connection with thermal fuse disconnector for a more effective protection at the end of its service life.	
Common and differential mode protection (SPD) Udc:	10	
Max current (8/20) (SPD):	20	
Thermal phase disconnection (SPD):	Yes	
Input voltage:	220-240	
Input voltage (max rate):	198-264	
Input frequency:	47-63	
Starting current:	<65	
Duration of the starting voltage peak:	<0,3	
Driver efficacy:	>90%	
Power factor 100% consumption:	>0,98	
Power factor 50% consumption:	>0,95	
Total harmonic distortion (THD):	<10	
Power consumption on standby mode:	<0,4	
Energy class:	C (According to EU Regulation 2019/2015 EPREL) - A++ IPEA>1,15	

**OPERATING CONDITIONS:**

Average LED useful time L90B10:	>75.000	
Average driver useful life to Tp <70°C:	>50.000	
Average luminaire useful life L90B10 (TM-21):	>50.000	
Ambient temperature (Ta):	°C	de -35°C a +50°C
Aerodynamic resistance (CxS):	m2	-
Vibration test (15Hz 3 axis):	-	
Guarantee:	years	5

**PACKAGING DIMENSIONS:**

Net weight	kg	7,2
Gross weight	kg	7,8
Luminaire dimensions (LxWxH)	mm	1000x237x150
Packaging dimensions (LxWxH)	mm	1045x285x185
Pieces per box	1	
Quantity per container 20ft	-	
Quantity per container 40ft	-	

**CERTIFICATES:**

Security certificates:	EN 60598-1 / EN 60598-2-3 / EN 62493 / IEC 62471
EMC certificates:	EN 55015 / EN 61547 / EN 61000-3-2 / EN 61000-3-3 / EN 61347-2-13 / EN 61347-1 / EN 62384
Other certifications:	EN 13032-4 / ISO 9001 / ISO 50001 / ISO 14001 / ISO 45001

Company Certifications

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