ABMA

Bollard

MAR

Elegant bollard with maximum robustness IK10 thanks to its anchoring, which makes it a TOTALLY vandal-proof and low maintenance product for signalling applications. Made of S-235-JR steel, galvanised rectangular section. Electrostatically powder coated polyester powder paint, electrostatically sprayed and oven sublimated. Corrosion resistant and finished in micro-textured black. Easy maintenance by allowing the replacement of its components (PCB LEDs, Driver and SPD).

MAIN FEATURES:

Double body; optical compartment and complete body for fixing.
Tempered glass with silicone sealing gasket for IP66 protection.
Easy maintenance, replaceable elements capacity (PCB, Driver and SPD).

APPLICATIONS:

Historical Centres
Bicycle Lanes and Narrow Roads
Pedestrian Zones
Rural Roads
Squares
Green Areas; Parks and Gardens

Project sheet | CAD | HD image

BENITO

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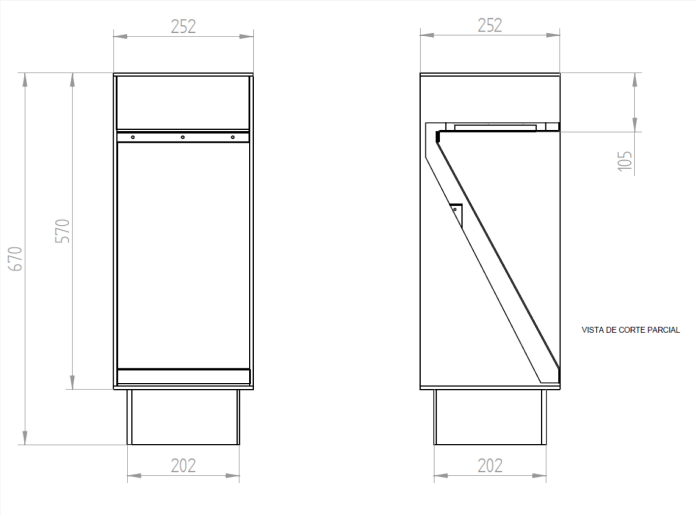
SPECIFICATIONS :

Housing material:	Body in S-235-JR steel with rectangular section.
Diffuser (optic system enclosure):	Tempered glass, 4 mm thick, filters UV rays.
Fixing elements:	Stainless Steel 18/8 - AISI 304
Housing:	It consists of two parts: The upper body, where the BENITO LED module, the driver, and the control electronics are housed including the mounting bracket.
Sealing gaskets:	Silicone foam
IP rating (luminaire):	IP66
IP rating (optic system):	IP66
IK rating (impact resistance):	IK10
LEDs thermal dissipation:	High efficiency heatsink with large dissipation surface, thanks to the anodised aluminium corrugated fin radiator. Passive dissipation by convection and ensuring thermal contact of the LED modules through high conductivity heat transfer material.
Anti-condensation valve:	Pressure compensation valve ensures the evacuation of humidity, preventing condensation and maintaining the IP tightness rating of the LED module.
Paint and finishes:	Polyester powder coating, electrostatically sprayed and oven-baked. Resistant to corrosion.
Colour:	Microtextured black and other colours on request.
Mounting:	Floor mounting using 4 screws (not supplied)
Tilt range:	No
Maintenance:	Easy opening with standard tools. Replaceable LED module, driver, and SPD.
Recommended mounting height:	-
Driver:	Constant current driver built into the beacon, pre-wired on galvanized steel plate.
Flow Reduction:	Adjustable 0-10V driver, programmable in 5 levels, with DALI 2 option. Featuring Wireless, AOC, MTP, DTL characteristics.
Ready4IOT - Connectivity:	-
Surge protection device (SPD):	Transient Surge Protector (SPD) of 10kV and 20kA Type T2+T3. Series connection with thermal fuse, disconnect for more effective protection at the end of the SPD's life. (Optional Full SPD Overvoltage Protector >264Vac to <170Vac)

DRAWING:



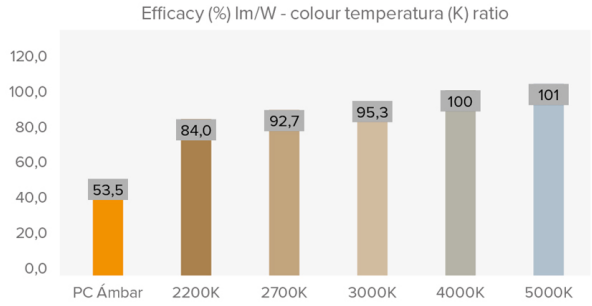
TECHNICAL DATA:

	REF.	Nº LEDs	Power W	I Driver mA	Real luminous flux (T) =85ºC) Flux lm	Real luminous flux (T) =85ºC) Efficacy lm/W	Initial luminous flux (T) =25ºC) Flux lm	Initial luminous flux (T) =25ºC) Efficacy lm/W
BALIZA MAR	ABMA	8	10	375	700	70	800	80
		8	20	750	1400	70	1600	80
		16	30	563	2100	70	2400	80
		16	40	750	2800	70	3200	80

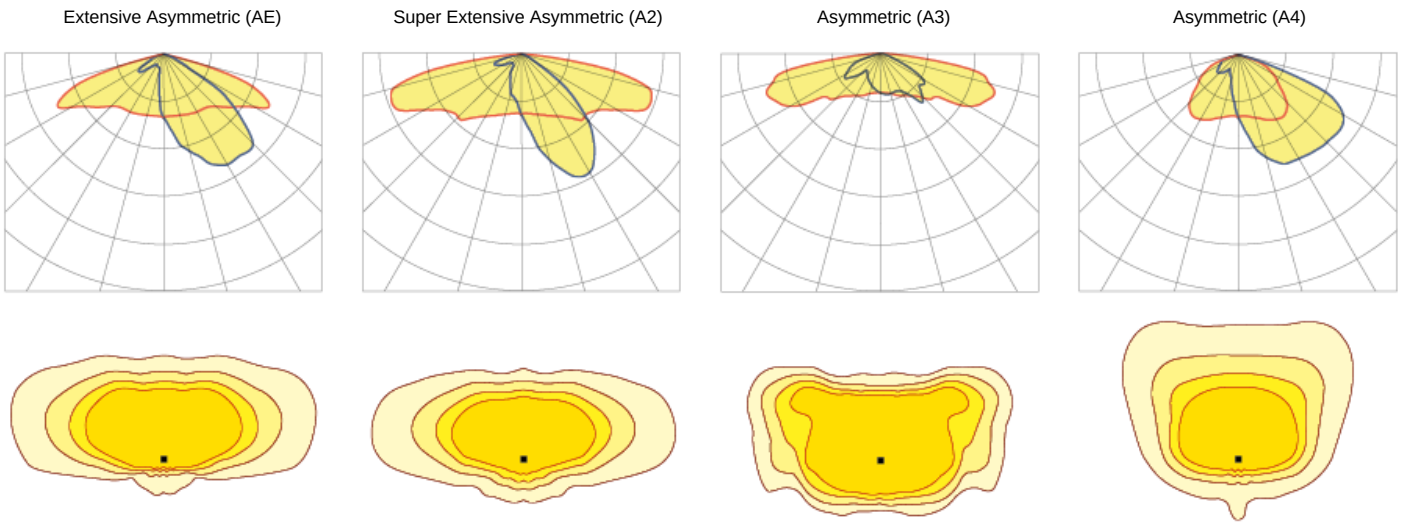
Luminous flux and efficiency at 4000ºK and CRI>70.

Luminous flux tolerance < +/-3%.

Values may be subject to changes due to LED binning.



PHOTOMETRY:



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

LEDs MODULE:

LEDs module:	BENITO Zhaga 8 LED format. Please consult Color Temperatures, CRI, and Light Distributions.
Replaceable module:	Yes
LED:	5050
Number of LEDs:	8 - 16
PCBs format:	1 o 2 Zhaga (Book 15) 2x4
LED nominal efficacy:	194 lm/W
Colour temperature:	PC Amber - 1K8, 2K2, 2K7, 3K, 4K
Colour rendering index CRI:	>70 (optional >80)
Average LED useful time L90B10:	L90B10 >100.000 horas

OPTIC SPECIFICATIONS:

Optic system:		2x2 PMMA lenses
Light distributions:		18 available light distributions
Upward light output ratio ULOR:		0%
Downward light output ratio DLOR:		100%
Glare index:		Between D5 and D6 (depending on the light distribution)
Luminous intensity category:		Between G*4 and G*6 (depending on the light distribution)
Luminous flux CIE nº3:		>95% (Please consult the 18 available light distributions).
Photobiological safety:		RG0 (risk-free)
Initial luminous flux Tj=25ºC (up to):	lm	2800
Initial luminaire efficacy Tj=25ºC (up to):	lm/W	70
Real luminous flux Tj=85ºC (UNE EN 13032-4) (up to):	lm	3200
Real luminaire efficacy Tj=85ºC (UNE EN 13032-4) (up to):	lm/W	80

ELECTRIC SPECIFICATIONS:

Nominal maximum power (LEDs):	W	36
Maximum power consumed (luminaire):	W	40
Power range:	W	10 - 40 W
Maximum current of LED:	mA	<470 (LED Current = 50% Driver Current).
Power supply protection classes IEC:		Class I and II
Surge protection device (SPD):		Transient Surge Protector (SPD) of 10kV and 20kA T2 + T3. Series connection with disconnect thermal fuse for more effective protection at the end of the SPD's 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 frecquency:		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:		>100.000
Average driver useful life to Tp <70ºC:		100.000
Average luminaire useful life L90B10 (TM-21):		>100.000
Ambient temperature (Ta):	ºC	de -35°C a +50°C
Aerodynamic resistance (CxS):	m2	-
Vibration test (15Hz 3 axis):		-
Guarantee:		5 (optional up to 10)

PACKAGING DIMENSIONS:

Net weight	kg	29,5
Gross weight	kg	30,0
Luminaire dimensions (LxWxH)	mm	670x250x250
Packaging dimensions (LxWxH)	mm	-
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

ISO 9001 ISO 50001 ISO 14001 ISO 45001

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