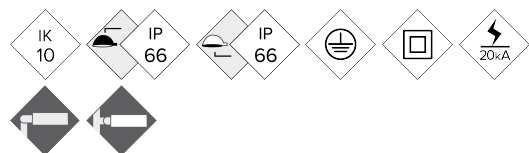


APM

Floodlight

MILAN M



Flat floodlight with low wind resistance. Comprehensive range available in four sizes with extensive optical and light distributions from 40W up to 460W to cover all applications. Can be tilted in all directions thanks to its fixing bracket. Ready for any intelligent lighting control solutions.

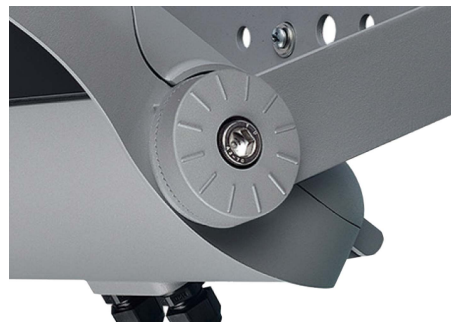
MAIN FEATURES:

- High efficiency. Up to 140 lm/W net
- 4 different sizes. From 40W to 460W
- Double compartment: driver and LED module
- 18 light distribution curves
- Zhaga Standard (Book 15)
- Ready 4IoT. Ready for any intelligent lighting control solution
- High resistance to 5G vibrations

APPLICATIONS:

- Tunnels and Underpasses
- Roundabouts
- Squares
- Car Parks
- Architectural; Buildings and Monuments
- Sports Facilities; Sports Halls, Sports Courts, Tennis, Padel
- Industrial Warehouses

DETAILS:



[Project sheet](#) | [CAD](#) | [Catalogue](#) | [Mounting instructions](#) | [HD image](#)

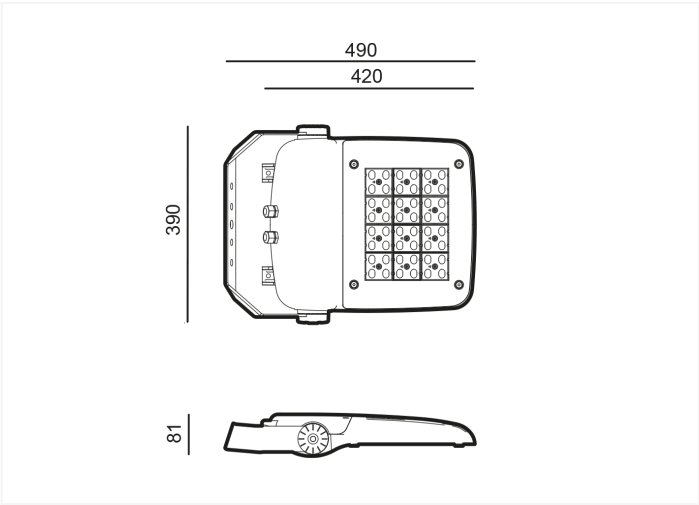
BENITO

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SPECIFICATIONS :

Housing material:	High pressure die-cast aluminium EN AC-43000, EN AC-43100, EN AC-43400, EN AC-44100, EN AC-47100 according to the UNE EN 1706 standard
Diffuser (optic system enclosure):	5mm tempered safety glass. UV filter
Fixing elements:	Stainless steel 18/8 - AISI 304
Housing:	Double compartment: driver / LED module
Sealing gaskets:	Silicone foam
IP rating (luminaire):	IP66
IP rating (optic system):	IP66
IK rating (impact resistance):	IK10
LEDs thermal dissipation:	Thermal dissipation through finless luminaire body, without conductive fluids. Passive convection dissipation ensuring thermal contact with the LED modules through a high-conductivity thermal transfer material
Anti-condensation valve:	Pressure-balancing valve to ensure moisture release, avoid condensation and maintain the luminaire IP tightness
Paint and finishes:	Polyester powder paint coating, electrostatically sprayed and sublimated in the oven. Resistant to corrosion
Colour:	RAL 9022. Optional: other colours
Mounting:	Fixing bracket
Tilt range:	From -120° to +120°
Maintenance:	Top opening. Modular concept for easy component replacement: LEDs, drivers, SPD
Recommended mounting height:	6-8 m
Driver:	Constant current adjustable and programmable driver. Embedded in the luminaire, pre-wired on a galvanised steel plate
Flow Reduction:	Dimmable driver 0-10V. Programmable on 5 levels. Optional: DALI 2. Includes the characteristics of Wireless, AOC, MTP, DTL
Ready4IOT - Connectivity:	<ul style="list-style-type: none">- Autonomous multiple-level dimming or virtual midnight- Ready4IoT- Dimming by main voltage- Line switch
Surge protection device (SPD):	Type 2, 10kV and 20kA transient surge protector. Series connection with thermofuse disconnecter for a more effective protection at the end of its service life

DRAWING:



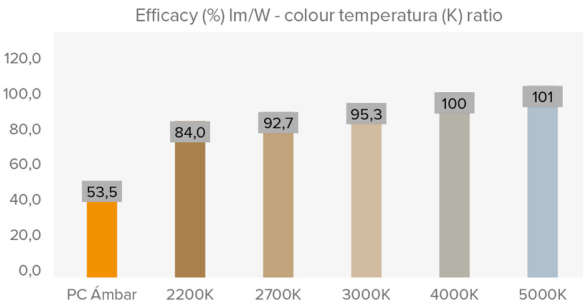
INSTALLATION:

TELECONTROL SYSTEM

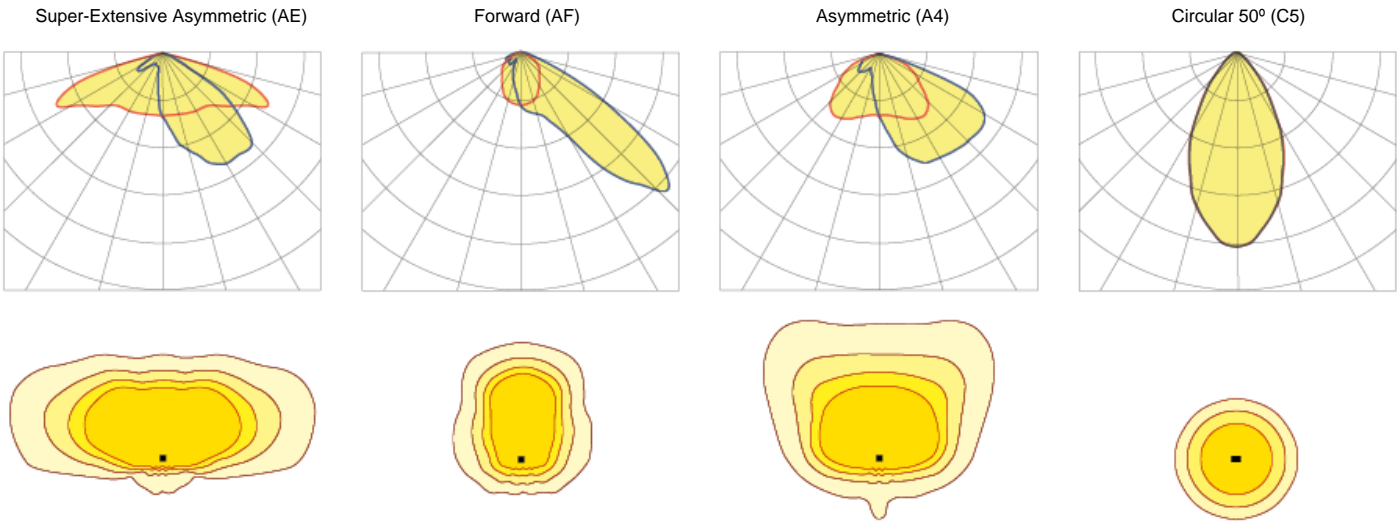
TECHNICAL DATA:

	REF.	N° 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
P Milan M	APM140	48	100	625	13900	139	15846	158
		48	120	750	16440	137	18742	156
		48	140	875	19040	136	21706	155

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:



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

V. 2024-02-23 | 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.

LEDs MODULE:

LEDs module:	BENITO-NOVATILU Zhaga standard for 8, 12 and 16 LEDs. Check colour temperature, CRI and light distributions	
Replaceable module:	Yes	
LED:	5050	
Number of LEDs:	48	
PCBs format:	3 Zhaga (Book 15) 2x8	
LED nominal efficacy:	172	
Colour temperature:	PC Amber, 2K2, 2K7, 3K, 4K, 5K	
Colour rendering index CRI:	>70 (optional >80)	
Average LED useful time L90B10:	L90B10 >100,000 hours	

OPTIC SPECIFICATIONS:

Optic system:	PMMA lenses 2x2	
Light distributions:	18 light distribution curves	
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 n°3:	>95%	
Photobiological safety:	RG0 (exempt of risk)	
Initial luminous flux Tj=25°C (up to):	lm	21706
Initial luminaire efficacy Tj=25°C (up to):	lm/W	158
Real luminous flux Tj=85°C (UNE EN 13032-4) (up to):	lm	19040
Real luminaire efficacy Tj=85°C (UNE EN 13032-4) (up to):	lm/W	139

ELECTRIC SPECIFICATIONS:

Nominal maximum power (LEDs):	W	126
Maximum power consumed (luminaire):	W	140
Power range:	W	80W - 140W
Maximum current of LED:	mA	<400 (<50% I _{max})
Power supply protection classes IEC:	Class I and II	
Surge protection device (SPD):	Type 2, 10kV and 20kA transient surge protector. Series connection with thermofuse disconnecter for a more effective protection at the end of its service life	
Common and differential mode protection (SPD) Udc:	kV	10 and optional NTC
Max current (8/20) (SPD):	kA	20
Thermal phase disconnection (SPD):	Yes	
Input voltage:	Vac	220-240
Input voltage (max rate):	Vac	198-264
Input frequency:	Hz	47-63
Starting current:	A	<65
Duration of the starting voltage peak:	ms	<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:	W	<0.4
Energy class:	A++ IPEA>1.15	

OPERATING CONDITIONS:

Average LED useful time L90B10:	hours	>100,000
Average driver useful life to Tp <70°C:	hours	100,000
Average luminaire useful life L90B10 (TM-21):	hours	72,167
Ambient temperature (Ta):	°C	From -35°C to +50°C
Aerodynamic resistance (CxS):	m2	0.039
Vibration test (15Hz 3 axis):		
Guarantee:	years	5 years (extensible up to 10 years)

PACKAGING DIMENSIONS:

Net weight	kg	8.2
Gross weight	kg	9.2
Luminaire dimensions (LxWxH)	mm	490x390x81
Packaging dimensions (LxWxH)	mm	500x395x110
Pieces per box	1	
Quantity per container 20ft	1344	
Quantity per container 40ft	2898	

CERTIFICATES:

Security certificates:	EN 60598-1 / EN 60598-2-5 / 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:	IEC 62262 / EN 13032-4 / EN 62717 / EN 6272-1 / EN 6272-2-1 / EN 61643-11

Company Certifications



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