

A blend of classic design and modern technology

### LIGHT WITH STYLE: MS LUX AMBIENT LIGHTING

The high-tech product with built-in optical technology is designed for a variety of applications on public roads, including bicycle paths and roadways. This outstanding adaptability is achieved through three different structural sizes, designated as SX, MX, and LX, each providing different luminous fluxes and multiple light distribution options.





























### **Light characteristics**

Luminous flux	12300 -27100lm	
Colour temperature (CCT)	3000 K (2200/2700/4000 K	
	option)	
Luminous efficacy	120 – 149lm/W	
Colour rendering index (CRI)	> 70, (80 option)	
Protective cover	Flat tempered glass	
Glass thickness	5mm	
LED lifetime L90B10	> 100,000h	
SDCM (McAdam)	< 5	
ULOR	0% (full cutoff)	
UV radiation	0%	
Warm-up time	< 0.5s	
Lens type	Individual asymmetric	

### **Certificates, Standards**

CE marking	Yes
ENEC license	Yes
ENEC+ license	Yes
EMC certificate	Yes
LVD certificate	Yes
ENV certificate	Yes
Impact resistance	IK 09
Resistance to water and dust penetration	IP 66
Vibration certificate	Yes
Salt mist certificate	Yes
RoHS	Yes
Warranty	6 years
Possibility of extending warranty	Yes

### **Electrical characteristics**

Input voltage	220-240V AC
Operating frequency	50-60Hz
Power factor	> 0.95
Electrical protection class	Class I, Class II
Ambient temperature	-35°C +55°C
Overvoltage protection (kV)	CM – 10kV
options	DM – 10kV
Zhaga (from Zhaga Book 18)	Yes

### Control

Autonomous control	AstroDim
Luminous flux control	DALI-2
Control range	10-100%
Dim-to-off	Yes
Built-in CLO system (option)	Yes
Wireless driver programming	NFC
, , ,	

### **Mechanical characteristics**

Housing material	Die-cast aluminium
Corrosion protection	Electrostatic coating
	powder/paint
Cooling system	Passive-internal radiator,
	External flat heat dissipator
Outer surface	Slightly inclined to achieve
	self-cleaning effect
Power off switch	Yes
Clips, fasteners, screws	Inox
material	
Lens material	PMMA
Colour	Grey (RAL 7046 + RAL 9003)
Pressure equalization	Yes
vent	
Opening the housing	Yes
without tools	
Lamp fitting housing gaskets	Silicone
Max. surface exposed	LX (0.064m²)
to wind	

















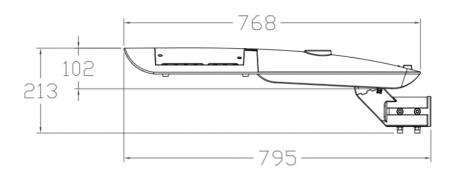
### Other characteristics

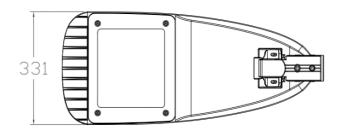
Model	Lamp fitting power (W)	Luminous flux (lm)	Efficacy (lm/W)	ССТ	CRI
Urban LX	100 - 200	12300 - 27100	120 - 149	3000	>70

### **Dimensions**

(r	/idth Le nm)	ngth (mm)	Height (mm)	Base diameter (mm)	Mass (kg)
Urban LX 2	292	584	103	60	6.3

### Urban LX







Connecting and disconnecting of the lamp fitting and all its parts MUST be done in a voltage-free state.

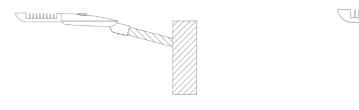
#### Mounting the lamp fitting

- 1. The lamp fitting power cord comes out of the lamp fitting door, where:
  - a. L brown
  - b. N blue
  - c. Grounding (GND) yellow green
- 2. Bring the LV mains connection cable to the lamp fitting door. If an additional bracket (arm) is used, run the cable through the bracket (arm).

The lamp fitting is connected directly to the mains with the included 3x1mm² cable (rubber) or via the WAGO 294-5013 connector. The cable is connected to the network, made with a self-supporting cable bundle, to a single phase (one conductor of the public lighting network L1-L2 or L1-L3 or L2-L3), and this is done alternately to two phase conductors intended for powering public lighting. An outlet +inlet plug is provided for manipulation. The N-conductor is used for consumer networks.

For a network built with five bare conductors, the cable is connected to the public lighting conductor and a common N-conductor of the consumer network and the public lighting network.

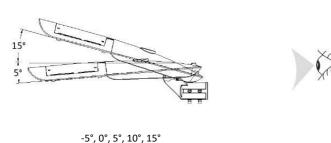
- 3. Using terminal blocks, connect the phase (L), zero (N) and grounding (GND) wires correctly. The terminal blocks are not included with the lamp fitting.
- 4. When installing the lamp fitting, additionally check that the protective cover of the Zhaga socket is properly fastened.
- 5. Attach/mount the lamp fitting to the mast or bracket (arm) by tightening the screws located on the lamp fitting neck (2xM8 screws).
- 6. The lamp fitting is fixed directly on the mast (top) or bracket (arm), in the position as shown in the figures.

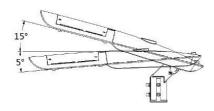


Bracket (arm) mounting

Mast mounting

7. If necessary, change the inclination of the lamp fitting on the mast or bracket (arm) by regulating the lamp fitting door (in the -5° to +15° range), for arm mounting (in the -5° to +15° range)



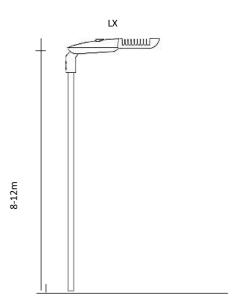


-5°, 0°, 5°, 10°, 15°



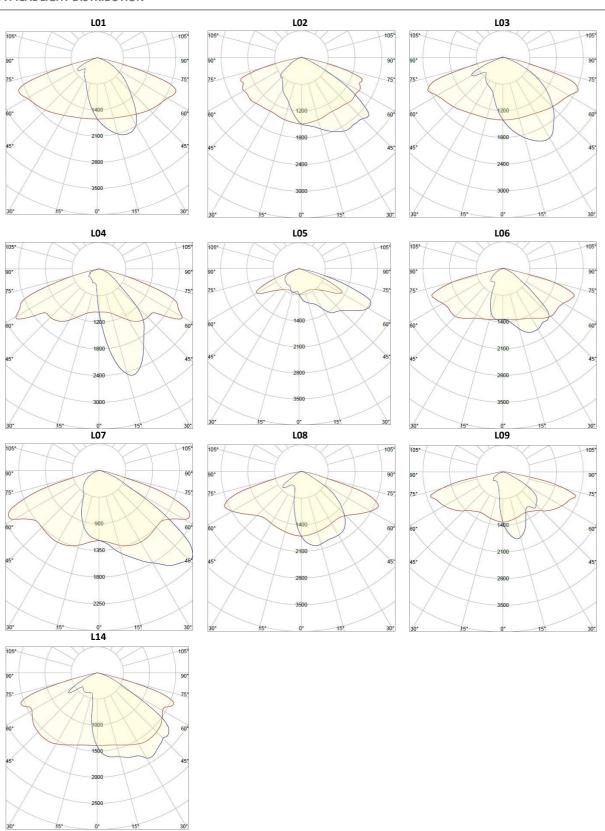
Optima	mounting	height (m)	
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Model LX 8 – 12





### TYPICAL LIGHT DISTRIBUTION





### Lamp fitting maintenance

The lamp fitting is modular so that in the event of malfunction of individual parts, the replacement can be done without dismantling the entire lamp fitting from the mast or bracket (arm).

For this purpose, the lamp fitting is designed in such a way that it is possible to open the housing without using tools. If maintenance is carried out without dismantling, the lamp fitting must not be opened during bad weather to avoid condensation of moisture inside the lamp fitting.

Before closing the protective cover, the interior of the lamp fitting should be wiped with a dry soft cloth. In doing so, it is necessary to check the condition of the protective cover gasket and replace it if damaged.

#### Installation and maintenance

The lamp fittings may only be installed/dismantled by qualified persons authorised by the manufacturer.

In the event that the installation/dismantling is carried out by an unauthorised person, the lamp fitting warranty is lost.

The standard lamp fitting warranty is 6 years unless otherwise indicated.

The lamp fittings may only be serviced by the manufacturer or by an authorised repairer.

The light source located inside the luminaire may only be serviced by the manufacturer, an authorised repairer or another qualified person authorised by the manufacturer.

Torque in Nm applied to any screw fixing the lamp fitting to the mast: 3Nm.

### Manufacturer and authorised repairer

M SAN Grupa d.o.o. Dugoselska ulica 5, 10 372 Rugvica Tel.+385 (0) 1 3654 900 Fax.+385 (0) 1 3654 926

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