

KARO

BOLLARDS & COLUMNS | KARO





- ▶ **Exists in «Line» version with front vertical tie, customizable in color or backlit.**
 - ▶ **White or black diffuser according to the photometric needs.**



With its rounded square section and designed to meet PMR standards, the Karo bollard offers optimal lighting for pathways, parks and bike paths. Available in 2 sizes (900 and 1200 mm), it accommodates 8 or 16 LEDs and provides perfectly sized lighting thanks to a wide range of color temperatures and photometrics, while ensuring compliance with the regulations against light pollution. It has a transparent polycarbonate bowl with IK10 UV protection and a fully waterproof IP66 optical compartment. In its “Line” version, the aluminum body can be fitted with a vertical white stripe on the front, while other colors are available on request. This tie is also available in a backlit version for a premium look. Its compatibility with the Zhaga standard, its eco-friendly design and its performance make it an ideal solution for projects where efficiency, durability and aesthetics are required.



*Regulation specific to France: Decree of 27/12/2018 relating to the prevention, reduction and limitation of light nuisance: product configuration to be defined according to the nature of the project.

03/06/2024 - All informations are subject to change without notice.

KARO

BOLLARD'S SPECIFICATIONS

Bollard's body & control gear

	900	1200
Weight	9 kg	10 kg
Materials	Aluminium	



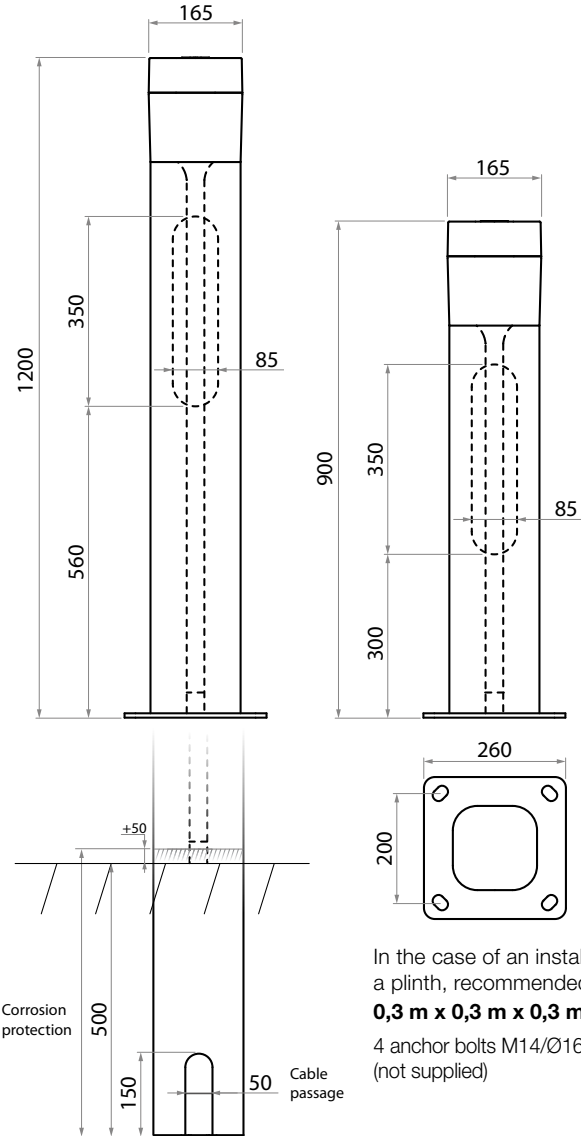
8 or 16 LED PCB - From 920 to 2700 lm (see attached Karo datasheet for details on power, light intensity and photometry available). Integrated smart driver (control, automatic adjustment, CLO, graduation via voltage variation or DALI). ULR < 1.5% (ULR: Upward Light Ratio).

Materials	Anti-UV treated polycarbonate
Electric class	I and II
Protection index	IP66
Shock resistance	IK10

Operating temperature: -40°C to +35°C (up to +50° under conditions).

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Dimensions (mm)



Options

- Surge protector.
- NTC sensor.

KARO LINE Options



- Backlit front vertical stripe.
- White colored front vertical stripe (other colors optional).
- Custom cutout in the front vertical band.

Ecodesign

Luminaire designed in compliance with the environmental criteria of energy efficiency, recyclability and interoperability.

Associate member of the Zhaga consortium, Ragni integrates electronic elements in this product that comply with the Zhaga standard, which ensures its scalability and interoperability.

Member of the Global Compact since 2018, Ragni is committed to working towards the 17 Sustainable Development Goals (SDG 11, 12, 13, 15).

Luminaire guaranteed free of hazardous substances.

Luminaire eligible for the energy savings certificate.

Luminaire compliant with the decree of 27/12/2018 on the prevention, reduction and limitation of light pollution: product configuration to be defined according to the nature of the project.



Applicable standards

IEC/EN 60598-1 / IEC/EN 60598-2-3 / NF EN 60529 / NF EN 62262 / IEC/EN 55015 / IEC/EN 61547 / IEC/EN 61000-3.2 / IEC/EN 61000-3.3 / IEC/EN 62493 / IEC/EN 62031 / IEC/EN 62471 / IEC/EN 61347-1 / IEC/EN 61347-2-13 / NF EN 13201-3 / NF EN 13201-4 / EN 13032-1+A1 & EN 13032-4 / LM79 / NF EN 12981

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Aesthetic proposals

- **Standard color:** Sanded grey 2900.
- **Option:** other colors on request.

TRAITEMENT SPÉCIAUX :

Wood decor

Walnut



Kentucky



Elm



Pine



2m



1m



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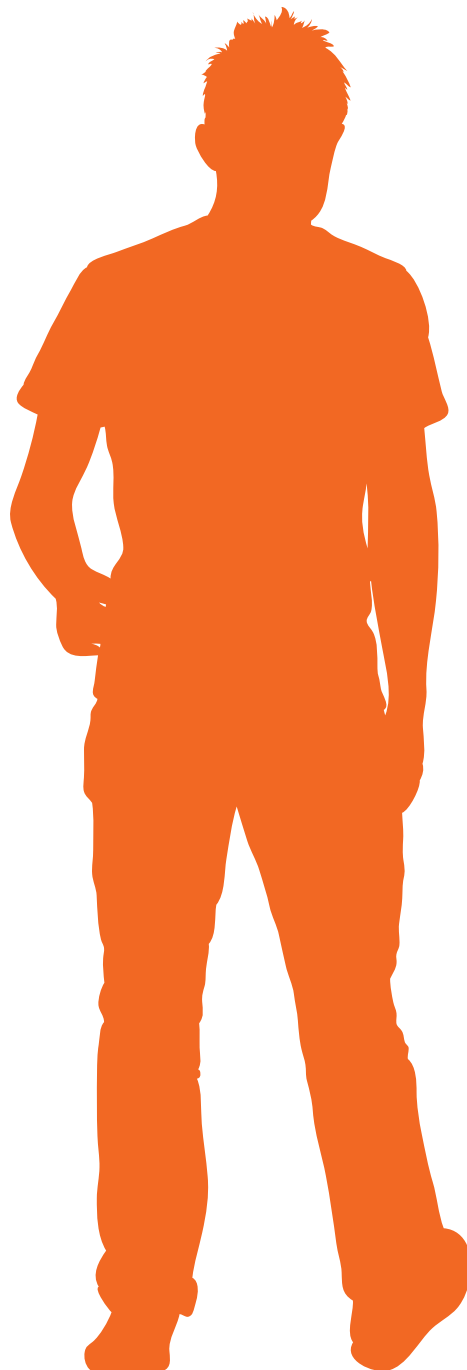
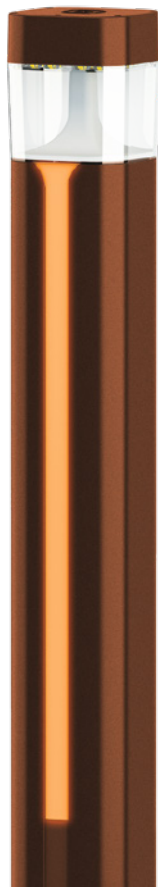


A | KARO
Sanded grey 2900
Black diffuser

B | KARO LINE
Sanded grey 2900
RAL 5003
White diffuser
Backlighted opal polyethylene vertical band

C | KARO LINE
RAL 9003
Black diffuser
Vertical band RAL9004

KARO



D | KARO
Sanded grey 2900
Kentucky wood decor

E | KARO LINE
Mars 2525
White diffuser
Orange backlighted opal
polyethylene vertical band

F | KARO
RAL 6005
White diffuser