# Standard indicator lights



















### **Creating Control and Signalling Solutions for Harsh Environnements**

## The range of possibilities:

#### 1) Functional and ergonomic indicator lights

- Versions for Ø8, Ø16, Ø22 or Ø30 mm cutouts.
- Flush, projecting or ultra-projecting bezels.
- Round or square.
- With flat, convex, conical, recessed, ... covers.
- Wide range of colours.

#### (2) "A la carte" brightness

- The brightness of the MAFELEC indicator lights can be adapted to their environment by selecting the model and the specific technology: single or multiple LEDs, SMD LED, water-droplet type LED, LEDs on BA9S socket, lamp.

#### 3 Evolutive markings

- Re-legendable heads
- Cover and lamp (BA9S versions) can be replaced from the front, without removing the indicator light.

#### 4 Choice of connections

- Screws and brackets or washers, IP2 protection
- Single or double tabs for 6.35 mm lugs straight, 90°, 45° (contact us for the other connection types).
- Tapping for earthing.

#### (5) Watertight and robust

- Watertight IP67 versions.
- High mechanical resistance.
- Tropicalisation.

#### 6 Rugged mode of attachment

- Moulded metal body.

(for most of the indicator lights in the Ø 22 and Ø 30 range)

- Attachment by punch screws (self-locking, anti-rotation) guaranteeing excellent resistance to shock and vibration.

The modular design of MAFELEC's control and signalling components provides for a multitude of combinations and adaptations..

The examples illustrated in this

The examples illustrated in this catalogue only represent a fraction of the designs produced by our Design Office every day for our customers.

All alternative solutions can be designed from the basic elements, to produce the desired function.





Our equipment complies with the European RoHS directive, restricting the use of certain dangerous substances in electrical equipment.

## Standard indicator lights



## **Environmental characteristics**

Compliance with standards	IEC et NF EN 60947-5-1 (depending on the model)
Protective finish	Tropicalisation (operation + 40°C with 95% humidity)
Resistance to vibration	Per IEC and NF EN 61373, IEC and NF EN 60068-2-6
Ambient air temperature	Storage : - 40°C to + 85°C  Operation : - 25°C to + 70°C IEC and NF EN 60068-2-1, IEC and NF EN 60068-2-2
Protection against surges	Depending on the model - Class 1 (Connection by tabs) or class 2 (screws, clamp plates IP2x) per IEC and NF EN 61140
Fire resistance	Per NF F 16 102 (depending on the model)
Protection level	Per IEC and NF EN 60529  - Ø 8 with truncated protective cover : IP65, IP66, IP67 & IP69K - Ø 8 with chrome plated-bezel : IP65 - Ø 12 with truncated protective cover : IP65, IP66, IP67 & IP69K - Ø 12 with chrome plated-bezel : IP40 - Ø 16 : IP 40 - Ø 22 : no gasket = IP 40 - with JE gasket = IP 54 - with JE gasket + capped head = IP66 to IP67
Protection against accidental contact with the active circuit	IP2X per IEC and NF EN 60529 (depending on the model)

## Electrical characteristics (depending on the model)

	LED lights	Lamp indicator lights
Power supply voltage	_6V to 400V AC / DC	6V to 400V AC / DC
Current consumption	From 10 mA to 40 mA	Depending on the lamps
Polarity marking	_Depending on the model	
Operating range	_0.8 Un U 1.1 Un	
Electrical surges	_Withstands 2.5 times the rated voltage for 10 μs	