

# Rotary switches



Adaptability  
Modularity  
Safety  
Reliability

④



⑤



⑥



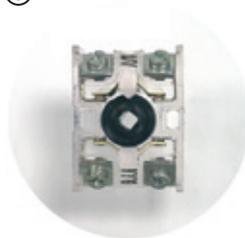
①



②



③



### The range of possibilities :

- ① **Functional and ergonomic button heads**
  - Flush or projecting bezels for Ø22 or Ø30 mm cutouts.
  - With handle, paddle, key, 5-sided key.
  - Metal (with key) or plastic material.
  - 4 standard colours (contact us for other colours).
- ② **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 other connection types)
  - Tapping for earthing.
- ③ **Contacts**
  - Rotary system with cams.
  - Contact identification per the standards..
- ④ **Modular electrical stack**
  - From 1 to 8 tiers
  - 2 lateral contacts per tier.
  - Provide for a very wide range of electrical schematics.
- ⑤ **Watertight and robust**
  - High mechanical resistance (versions with metal heads)
  - Watertight mechanism : IP66 to IP67 with metal gasket.
  - Tropicalisation.
- ⑥ **Rugged mode of attachment**
  - Moulded metal body.
  - 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 catalogue only represent a fraction of 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.

## Compliance with standards

<b>Certification</b>	IEC NF EN 60947-5-1, IEC NF EN 60077-2
<b>Protective finish</b>	Tropicalisation (operating +40°C with 95% humidity) per IEC NF EN 60068-2-3 and IEC NF EN 60068-2-30
<b>Vibration resistance</b>	IEC NF EN 60068-2-6 and IEC NF EN 61373
<b>Storage temperature</b>	- 40°C to + 85°C per IEC NF EN 60068-2-1, IEC NF EN 60068-2-2
<b>Operating temperature</b>	- 25°C to + 70°C per IEC NF EN 60068-2-1, IEC NF EN 60068-2-2
<b>Protection against accidental contact with active circuits</b>	IP2x per IEC NF EN 60529 with protector
<b>Fire resistance</b>	EN 45545
<b>Degree of protection</b>	IEC NF EN 60529, IP67 with TJ seal and capped head
<b>Mechanical service life in million switching cycles</b>	0.3

## Characteristics of the contact elements

<b>Rated thermal current</b>	I <sub>th</sub> = 20A per IEC NF EN 60947-5-1
<b>Rated insulation voltage</b>	U <sub>i</sub> = 630V per IEC NF EN 60947-5-1 and IEC NF EN 60077-2
<b>Rated surge voltage</b>	6 kV per IEC NF EN 60947-5-1 and IEC NF EN 60077-2
<b>Contact operation type</b>	Slow make depending action
<b>Activation force</b>	From 1 to 4 stacks : 0,5 Nm From 5 to 8 stacks : 0,8 Nm
<b>Contact material</b>	Standard : AgNi Harsh environment : AgPd Low-current : AgPd gold flash
<b>Maximum number of contacts</b>	16 (8 stacks)
<b>Terminal markings</b>	Per IEC NF EN 60947-5-1
<b>Operating power</b>	AC-12 : 230V/15A & 400V/8A AC-15 : 230/8A & 400V/8A DC-12 : 24V/15A & 110V/8A DC-13 : 24V/4A & 110V/1A
<b>Connection</b>	Screw and bracket : min. 1x 0.22 mm <sup>2</sup> , max. 2x2.5 mm <sup>2</sup> Single or double tab for 6.35 mm clip. Special connection on request

## Standard drawing for round head rotary switches

<b>Round head rotary switch Ø 22mm</b>	YSK7472
<b>Round head rotary switch Ø 30mm</b>	YSL4094