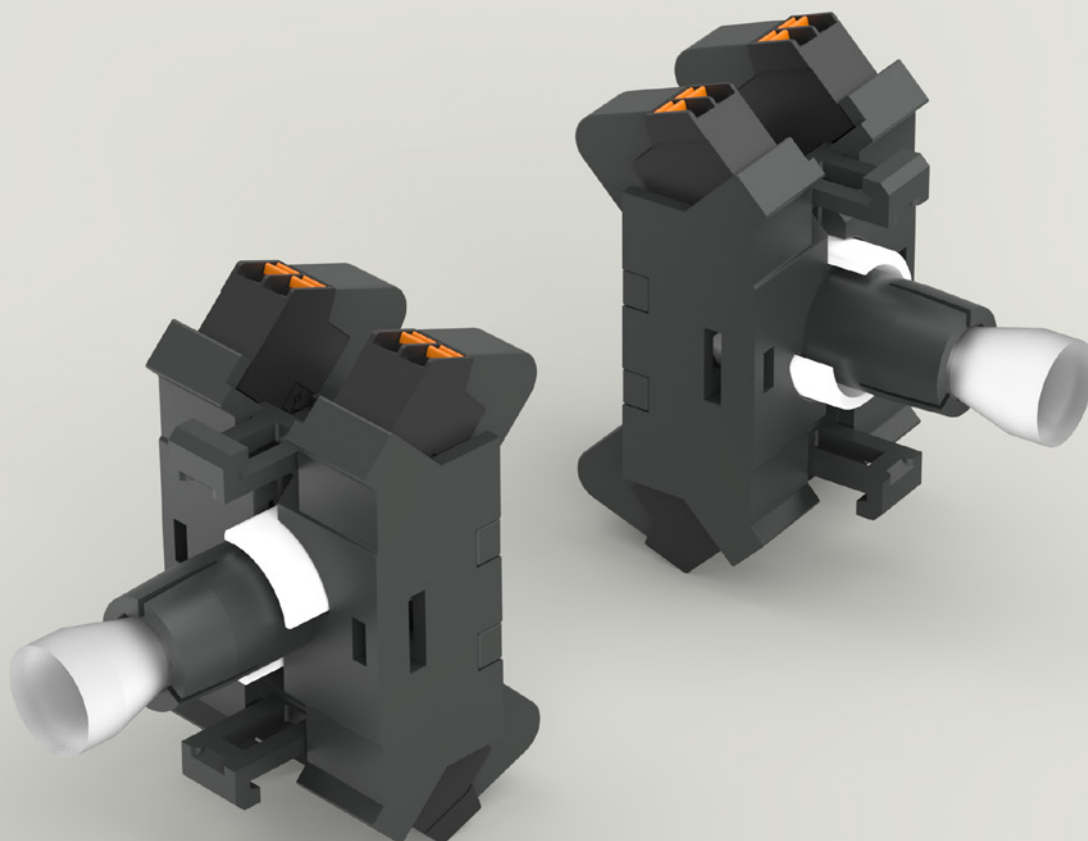


Series

04

*Dual LED lamp block.*

[www.eao.com](http://www.eao.com)



# Series 04

## *Dual LED lamp block.*

EAO's proven Series 04 includes an innovative lamp block that integrates two LEDs to provide dual, reliable and safe illumination.

Public transportation today needs easy to use, modern actuators and indicators. EAO, the expert partner for Human Machine Interfaces (HMIs), offers with the innovative dual LED lamp block an accessory that is ideal for the challenging conditions often found within all types of rail transportation applications.

This reliable illumination accessory is designed for all Series 04 illuminated devices in order to enhance operating safety in the driver's cab and on the control panel by way of intuitively quick, visual recognition.

The lamp block allows one device to display different states in a unique way. Thanks to the pulsed control of the two inputs for the dual LED display, the user gets quick, positive feedback of proper operation. Or, if one input signal fails (0VDC), the LED display flashes a warning. The pulsed inputs need to be generated by an upstream, external control.

This modern LED technology allows for a long service life and homogenous illumination that is clearly visible – even in strong sunlight and low light conditions.

The dual LED lamp block can be combined with all Series 04 illuminated devices and offers the following benefits:

- Rail standard mounting for new designs or retrofit applications
- Can be combined with all proven Series 04 switching elements
- Support for up to three switching elements (six contacts)
- User-friendly push-in terminal (PIT)

#### **The Series 04 – Versatile, robust and reliable**

Thanks to their modern design, safe and ergonomically friendly operation, and pronounced tactile feedback, the Series 04 has become an established feature of driver's cabs in particular. The extensive range of Series 04 products offers square or round options that enable virtually flush front mounting styles.

Each function of the Series 04 can be designed precisely to specification for the given application. For instance, standardised or customised markings can enable intuitive operation – in the form of text or symbol engravings as found on the lens or marking plate.

Front bezels made of black or silver plastic, as well as natural or black anodised aluminium, lend these actuators and indicators a design that is as modern as it is robust.

The switching elements also offer a choice of screw or plug-in terminals as well as tool-less mounting using the intuitive option of push-in terminals (PIT). Combined with international approvals and compliance with relevant standards and directives, Series 04 actuators and indicators cater to all the needs of users.

# Advantages.

- Allows one device to display different states
- Dual indication safely signals the failure of one input signal
- Designed for all illuminated devices of the proven Series 04
- Reliable LED technology enables long service life
- Two separate LEDs in a single lamp block

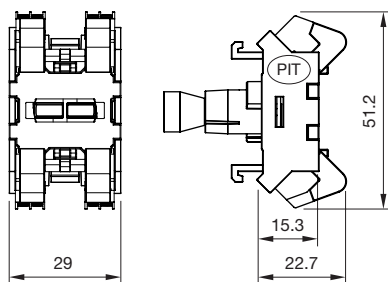
### Typical applications

- Driver's cab
- Control units
- Control cabinets

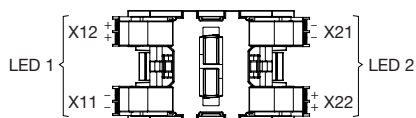
### Technical data

- Terminal  
Push-in terminal (PIT)
- Standards
  - UL-94 V0
  - EN 45545 (fire protection on railway vehicles)
- LED colour  
Two separate controllable inputs:  
white/white (other colours on request)
- Material  
Plastic
- Colour  
Dark grey
- Operating voltage  
24VDC or 110VDC (-30% / +25%)
- Operating temperature  
-40°C to +60°C

### Dimensions



### Component layout



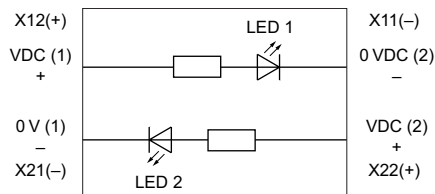
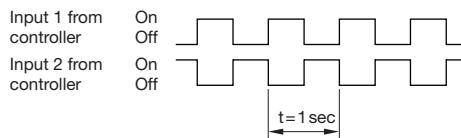
All dimensions in mm.

### Application example for safety function

Pulsed control inputs for dual LED display.

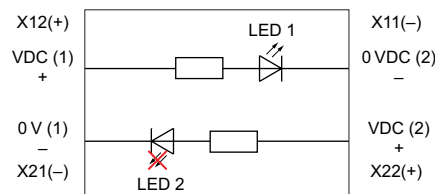
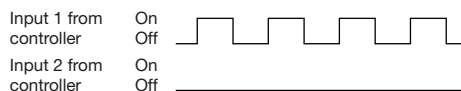
### Correct function

When both signal inputs are properly working – both LEDs rapidly flash so that illumination appears to be constant.



### Warning function

When one input signal fails (0VDC) – only the LED with the input flashes so that illumination appears flashing to the user which indicates an operational error.



Please find additional specifications in the product catalogue.

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