# EAO – Your Expert Partner for **Human Machine Interfaces**



EAO – the expert partner for Human Machine Interfaces – has launched a new compact stop switch with an ultra-low, less than 19 mm back panel depth. The new Series 51 Stop Switch utilises a mono block design with an integrated switching element to set a new space-saving standard for industry.

The mono block design minimises the back panel depth and offers an extremely rugged construction that protects the switch from damage caused by heavy-handed use, or operator abuse. The ground-breaking design has been tested beyond 100,000 actuations, so it's a genuine fit-and-forget product.

### Main features

- Back panel depth of only 18.8 mm, with solder terminal version S16
- Choice of connection methods: solder, plug-in or PCB mount
- Visible actuation status
- Attractive and ergonomic design
- Protected to IP65 from the front

# Mounting

16 mm Ø mounting hole

# **Typical applications**

This compact, cost effective switch is suitable for equipment that requires a reliable, rugged and attractive stop switch for non-hazardous applications including:

- Medical diagnostic equipment
- Hand held terminals
- Machine and process controls
- Instrumentation
- Supermarket check-outs
- Disabled lifts

### Switching system

- Switching element with solder connection
  - Self-cleaning, double-break snap-action switching system
  - 1 NC contact and 1 NO contact per switching element
  - Available with up to two switching elements (2 NC contact and 2 NO contact)
- Switching element with 2.8 mm plug-in/solder connection
  - Self-cleaning, double-break snap-action switching system. (1 NC contact and 1 NO contact)
- Low signal level switching element with 2.0 mm plug-in, solder or PCB mount connection.
  - Single-break momentary contact switch system. Two contacts per switching element with a combination of NC and NO contacts

### Material

Actuator housing Polyamide (PA66),

Thermoplastic elastomer (TPE)

Lens Polyamide (PA6)

Polybutylene Terephthalate (PBT) Actuator

Label R-640 polyester

# Switching element

Solder connection: Polyamide (PA 6.6) Plug-in/solder connection: Diallyl Phthalate (DAP),

Polyamide (PA), Polysulfone (PSU)

Plug-in/solder/PCB connection: Polysulfone (PSU)

# Contact material

Snap action solder connection: gold-plated silver Snap action plug-in/solder connection: gold-plated silver Low level plug-in/solder/PCB connection: gold-plated









# Stop Switch, Series 51

## **Mechanical properties**

- Connections
  - Solder or solder/plug connection, 2.8 × 0.5 mm
  - Universal connection
    - with 2.0 × 0.5 mm plug-in/solder
    - and PCB connection
- Actuating force: 4 ... 6 N (depending on the switching element)
- Mechanical lifetime: 100,000 switching cycles

### **Electrical properties**

Solder element: min. 5 VAC/DC, 1 mA

max. 250 VAC/DC, 5 A

Plug-in/solder element: min. 5 VAC/DC, 1 mA

max. 250 VAC/DC, 5 A

Plug-in/solder/PCB element: min. 100 μV/10 μA

max. 42 VAC/DC, 100 mA

### **Environmental conditions**

■ Temperature:

-40°C ... +85°C - Storage temperature: -25 °C ... +55 °C - Operating temperature:

■ Degree of front protection: IP65

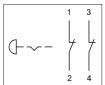
Approvals: UL/CSA pending, CB, ENEC

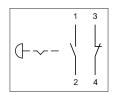
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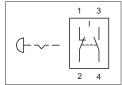
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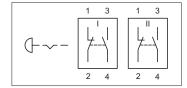
### **Wiring Diagrams**





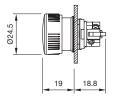




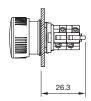


#### **Versions**

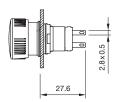
Solder connection



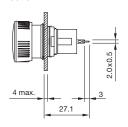
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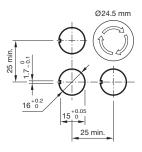
Plug-in/solder connection



Plug-in/solder/PCB connection



# **Drilling pattern**



3D product drawings are available in a range of formats to download from our website www.eao.com







EAO reserves the right to alter specifications without further notice.