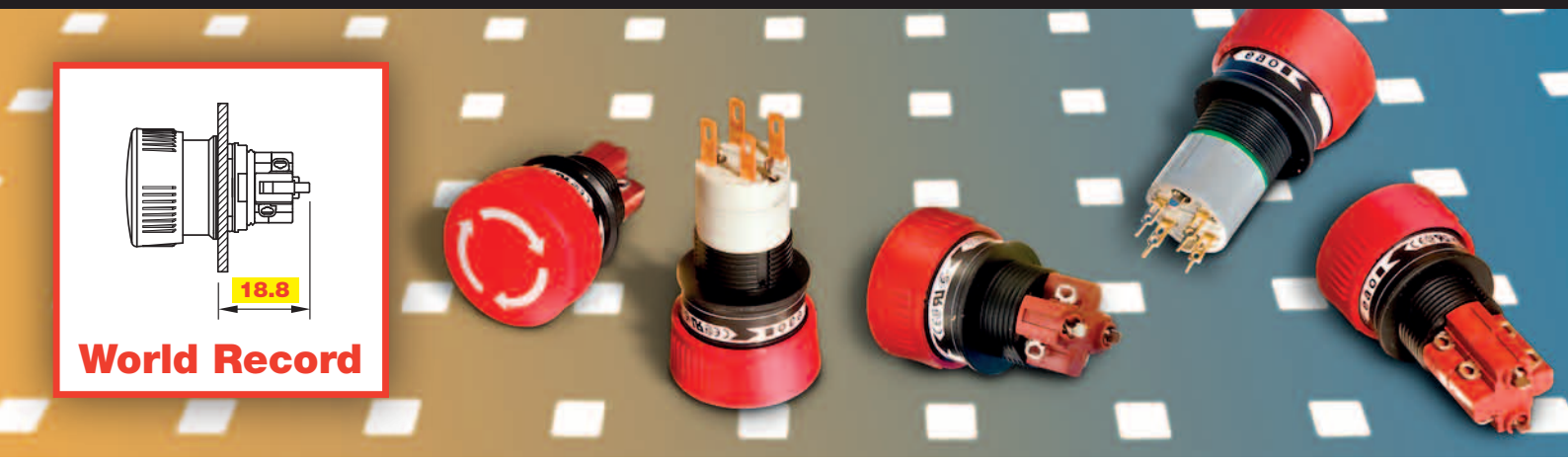
EAO – Your Expert Partner for
Human Machine Interfaces

Stop Switch, Series 51



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 application including:

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

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)
Actuator	Polybutylene Terephthalate (PBT)
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

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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

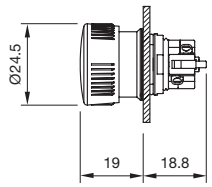
Solder element:	min. 5 VAC/DC, 1 mA
	max. 250 VAC/DC, 5 A
Plug-in/solder element:	min. 5 VAC/DC, 1 mA
	max. 250 VAC/DC, 5 A
Plug-in/solder/PCB element:	min. 100 µV/10 µA
	max. 42 VAC/DC, 100 mA

Environmental conditions

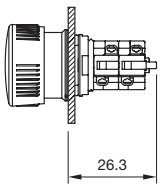
- Temperature:
  - – Storage temperature: –40 °C ... +85 °C
  - – Operating temperature: –25 °C ... +55 °C
- Degree of front protection: IP65
- Approvals: UL pending, CSA, CB, ENEC (EN 61058-1)
- Declaration of conformity: CE

Versions

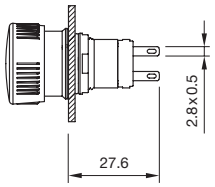
Solder connection



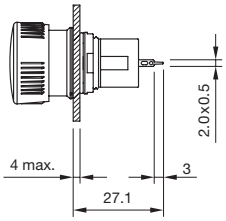
Solder connection



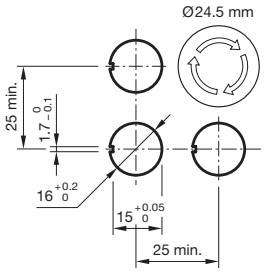
Plug-in/solder connection



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.