## VANDAL RESISTANT RANGE

**TW Switches** Sensors, Switches, Electronic Controls

#### SERIES 76-95 – VANDAL RESISTANT RANGE

Having been designed to withstand impacts of significant force, the 76-95 Series of pushbutton switches are extremely rugged making them particularly suited to applications in which vandal resistance is a necessity.

The switch body and buttons are machined from hard-wearing stainless steel and come in front and rear mounting styles. The front mounting versions have a low profile bezel that protrudes a maximum of 2.5mm from the front panel, including sealing washer, while the rear mounting version is capable of providing a flush interface when viewed from the front. Both switches make it very difficult for a vandal to get an object behind in order to lever the switch from its mounting.

The 76-95 Series all provide momentary action and are based on our proven Series 16 snap action microswitch. Connections are made via the solder terminals at the rear of the switch.

#### **APPLICATIONS:**

- · Vandal resistant requirements
- Military environments
- Robust industrial requirements
- Process control
- Railway carriage equipment
- External security door controls

#### **Key Features:**

- Vandal resistant
- Panel sealed to IP67
- · Flush-with-panel requirements
- Form Z contacts to cover all switching requirements
- · Attractively machined from stainless steel
- Wide temperature range
- Microswitch action
- Rear mounting version can be mounted to appear totally flush
- Solder terminals
- High contact rating



- Elevators
- Marine equipment
- Crane gantry equipment
- Earth moving equipment

#### **Non-Standard Options:**

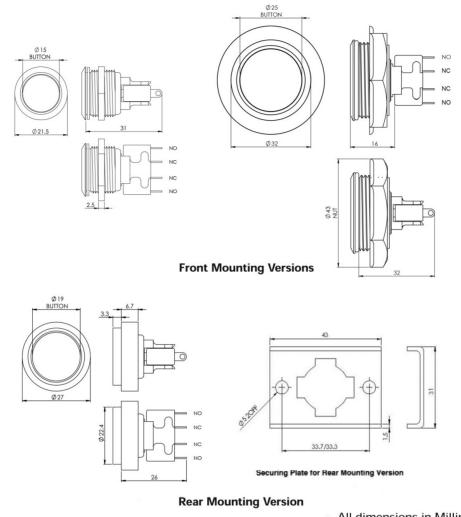
- Solder/Faston terminals
- PCB terminals
- Gold contacts
- Two pole version
- Special operating forces

-🛞

# VANDAL RESISTANT RANGE

## SERIES 76-95 – VANDAL RESISTANT RANGE

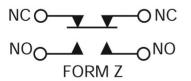
### **PRODUCT DRAWINGS**



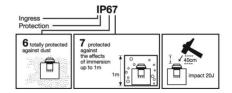
All dimensions in Millimetres

## **CIRCUIT FORM:**

۲



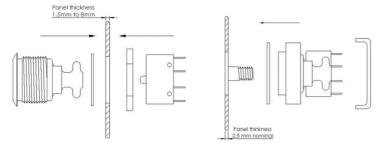
## **INGRESS PROTECTION IMPACT KEY**



www.itwswitches.co.uk | www.itwswitches.com

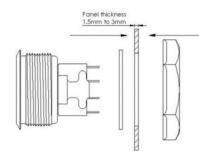
### SERIES 76-95 – VANDAL RESISTANT RANGE

#### PANEL MOUNTING DIAGRAMS



Inting diag

Nounting diagram for front panel, 15mm button option



Mounting diagram for front panel, 25mm button optio

#### PANEL MOUNTING & CONSTRUCTION INFORMATION:

The front panel 76-95 mounts from the front into either a 19.25mm or 30.1mm diameter panel cut out. Panel sealing is achieved by means of a sealing washer which is fitted to the switch body before it is inserted into the panel hole. The switch is then held in place by a lock-nut screwed on from the rear and with the 19.25mm diameter version the microswitch can then be snapped into position at the base of the switch body. The rear panel 76-95 locates from the rear into a 22.5mm diameter cut out in the front panel. Panel sealing is once again achieved by means of a sealing washer placed over the shoulder of the switch before location. The switch is then clamped in place by a bracket (supplied) fitting over the switch body and two threaded studs pre-welded to the customer's panel. Two nuts then fasten the bracket to the panel and switch allowing access to the switches terminals.

#### **ORDERING INFORMATION:**

| Series | Style and<br>Material/Finish   | Switch<br>Element                       | Colour*  |
|--------|--|---|--|
| 76-95  | <ul> <li>10 - 15mm Button, Front Panel - Stainless Steel</li> <li>11 - 19mm Button, Rear Panel - Stainless Steel</li> <li>12 - 25mm Button, Front Panel - Stainless Steel</li> <li>13 - 15mm Button, Front Panel - Anodised Aluminium</li> <li>16 - 15mm Button, Front Panel - Brass</li> <li>17 - 25mm Button, Front Panel - Brass</li> </ul> | 4044 - Solder terminals,<br>single pole | B - Black<br>G - Green<br>GO - Gold<br>N - Blue<br>P - Purple<br>R - Red |

\* For anodised aluminium options only

Copyright © 2015. ITW Switches 6/2015

Designs and specifications are subject to change without notice due to product improvement.

## VANDAL RESISTANT RANGE

#### Mechanical / Electrical / Environmental Characteristics:

#### **Operating force:** 2.6N (typical) **Panel thickness:** 1.5mm to 8mm (FP) – 15mm button 2.5mm nominal (RP) – 19mm button 1.5mm to 3mm (FP) – 25mm button

#### Body diameter:

M19 thread (FP) – 15mm button 27mm (RP) – 19mm button M30 thread (FP) – 25mm button **Panel cut out:** ø19.25mm (FP) – 15mm button ø 22.5mm (RP) – 19mm button ø 30.1mm (FP) – 25mm button

Life (min):

1,000,000 cycles

#### **Dielectric strength:**

1KV AC 1 minute Insulation resistance: 1GΩ @ 500V d.c.

Contact resistance (initial):  $25m\Omega$ 

Electrical load: 10mA 5V d.c. min

10A 250V a.c. max

Life: 50,000 cycles (max load) @ 70°C

#### Ingress protection:

IP67 (Panel Sealed) **Operating temperature range:** -30°C to +105°C

Body material: Stainless steel

Actuator material: Stainless steel

Contact material:

Fine silver



+ 44 (0) 2392 656200

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Pushbutton Switches category:

Click to view products by ITW Switches manufacturer:

Other Similar products are found below :

LW1L-M1C10V-A LW2L-A1C20M-GD LW2L-M1C20M-A 60324L M7E-HRN2 67021K512 67081K512X 701PB580 719-5504-000 MDPSSGLFS 810KSV30B FLT 2U EE 01A MML21KA3ABK MML23KA3AC05K-001 MML23KW3AA01W 8418K2 8646AB6X718UL 8646ABUL FSDWH 9001KXRK 9001T8BK 9533CD4+U574+U4922 1203MRA A22EM01S A595 1202A6 12037A2ULCSA 1203A2UL ABD122N-B 1211390004 ABN111-Y ABN400-R 1211500044 1211580012 1212MRA 1232A6NF RA3CSH6A 1241.1183.7047 1241.2511 1241.3428 1223A2ULCSA 1223MRA 1232AX2119 1241.1183.8000 1241.1183.8029 1241.2506 1241.2606 12MA6 1301940184 RELBARF6X10(PLASTIC)