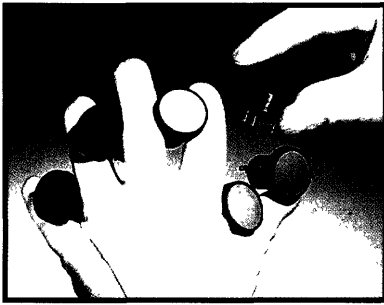


Series 76-91

PANEL SEALED RANGE



TW Switches



Series 76-91

PANEL SEALED RANGE

Description

A robust pushbutton switch designed for demanding environmental applications. The snap-action switch mechanism provides high quality switching behind an ice-proof, flexible actuator. The body of the series 76-91 is flame retardant to UL94-VO approval and the switch is panel sealed to IP67.

The range offers the choice of six button colours with solder/quick connect terminals as standard. Single and double pole versions are available in momentary or alternate actions. A locknut and sealing washer are supplied with the switch.

Features

- Waterproof panel seal – IP67 approved to BS5420 (IEC144)
- Flame retardant body – UL94-VO approved material
- High dielectric strength
- Wide temperature range – up to 80°C
- Robust construction – for harsh environments
- Positive tactile response – for operator feedback
- Operates at up to 10 Amps

Non-Standard Options

- 2 pole versions
- Alternate action versions
- PCB terminals
- Gold contacts
- Fully sealed with flying leads

Specification

Mechanical

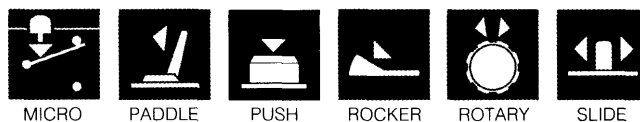
Travel	3,3mm reference
Life (min)	10 ⁶ cycles
Operating force (nom)	12N
(max)	15,5N
Contact bounce	<5ms
Panel thickness (max)	4mm
Locknut tightening torque (max)	2,85Nm

Electrical

Current (max) silver contacts	10A resistive 250 VAC
Current (min) silver contacts	10mA resistive 5 VDC
Life (min)	10 ⁵ cycles
Dielectric strength (min)	1 KVAC, 1 minute
Insulation resistance (min)	1GΩ @ 500 VDC
Contact resistance (max. initial)	25mΩ

Environmental & Physical

Ingress protection	IP67
Impact rating	2 Joules
Shock (min)	10g
Temperature	-40°C to +80°C
Body Material	Glass filled polyester
Button material	Polyether block amide
Sealing washer material	Nitrile rubber
Contacts	Fine silver
Terminals	Tin plated brass



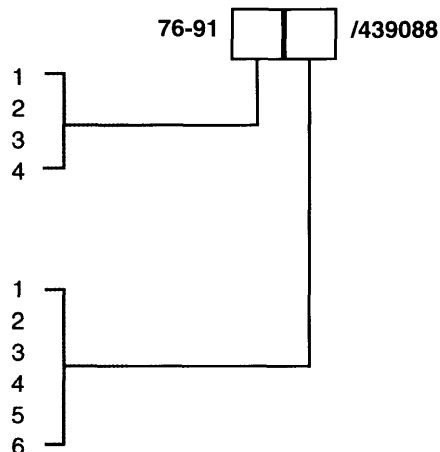
Ordering information

Contacts/Action

- Momentary 1 Pole
- Momentary 2 Pole
- Alternate 1 Pole
- Alternate 2 Pole

Button Colour

- White
- Red
- Green
- Blue
- Yellow
- Black

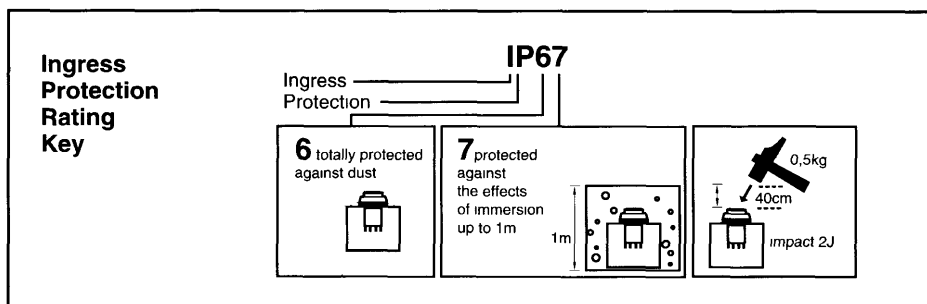


Panel mounting and construction information

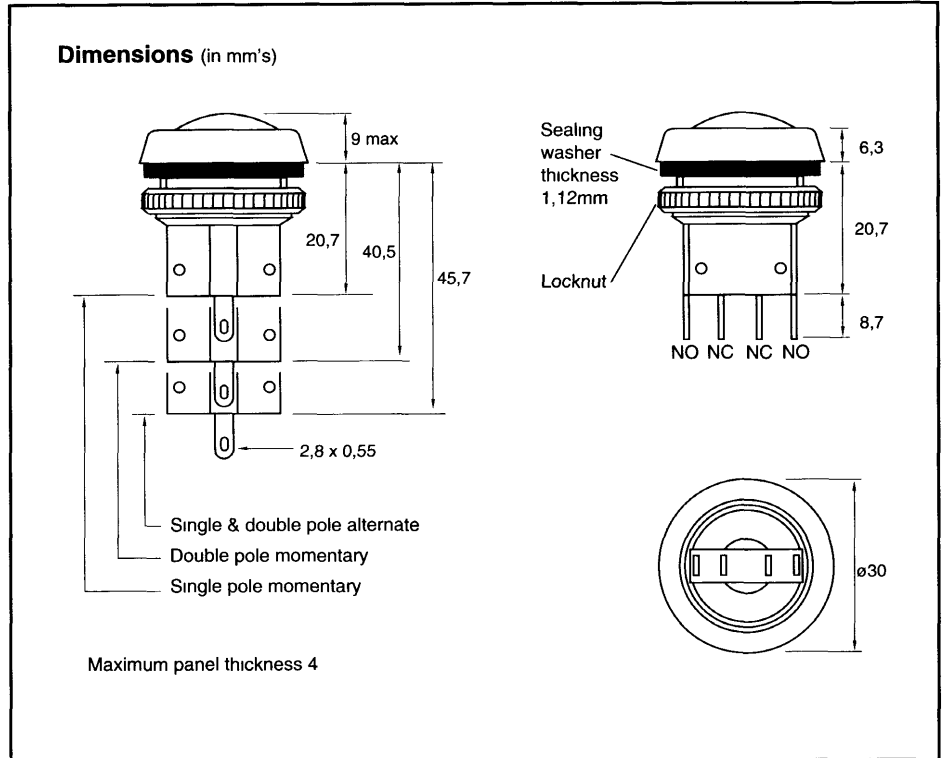
The series 76-91 mounts easily into panels not exceeding 4mm thickness. Front panel sealing to IP67 is achieved by use of the sealing washer which is fitted to the switch before it is inserted into the panel hole cut-out. Momentary single pole versions mount in a DIN standard 22,5mm diameter hole, or by reversing the special locknut, will mount

in a 25mm diameter hole. Alternate and double pole versions mount into 25mm hole*. The locknut is then screwed on from behind the panel to secure the switch in place. The tightening torque is from 1,5Nm to 2,85Nm.

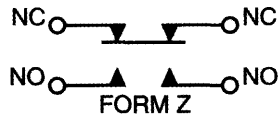
*(For 22,5mm fixing on these versions, please consult the factory.)



Product dimensions



Circuit form



Application references

- Mining
- Field Equipment
- Dairy
- Hydraulic vehicles
- Exterior security call points
- Marine instrumentation
- Car wash machinery

For further information on our complete range of switch products, please contact the Sales Office.

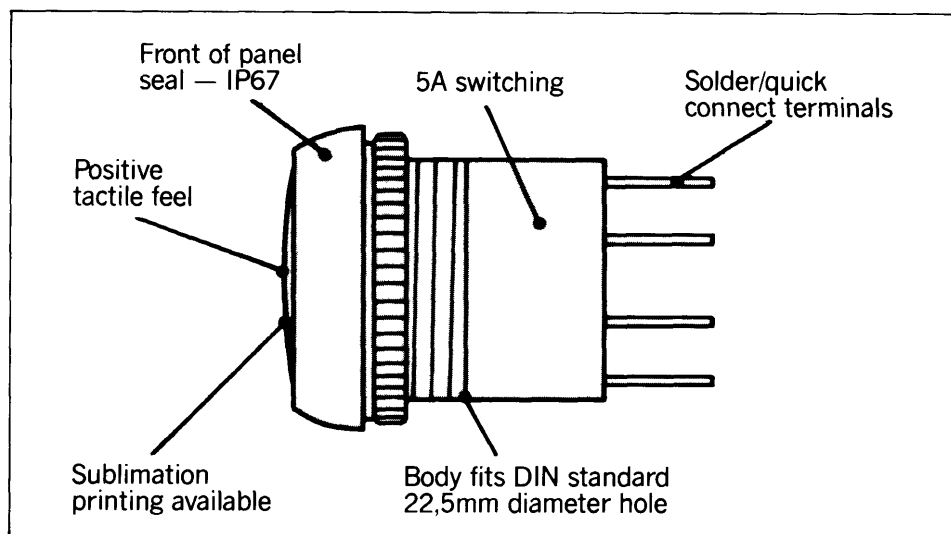
ITW Switches

ITW Switches
A Division of ITW Limited
Norway Road
Portsmouth, England PO3 5HT

Telephone: (01705) 694971 (INT +44 1705 694971)
Facsimile: (01705) 666352 (INT +44 1705 666352)

Due to our policy of continuous product development, ITW Switches retain the right to change the specification at any time without prior notice

FLEXIBUTTON



5(2,75)/250~++μ
5(2,75)/28=++μ

Description

This popular pushbutton gives high quality switching with a front of panel seal to IP67 at low cost. The switch unit uses the series 16 microswitch with the well proven butterfly action, giving a compact switch with snap-action.

Solder/quick connect or pcb terminals are available as well as a choice of button colours. Momentary single pole versions mount in a DIN standard 22,5mm diameter hole, or by reversing the special locknut will mount into a 25mm diameter hole. Alternate and double pole versions mount in a 25mm diameter hole. A locknut and sealing washer are supplied with the switch.

Features

- Positive tactile feel — for operator feedback
- Sublimation printing available — low cost and wear proof
- 6 button colours — design flexibility
- Waterproof panel seal — IP67 to IEC144/BS5420
- Ice proof button — for temperatures down to -40°C
- Momentary or 1 level alternate — same switch for both actions
- Up to 2 pole form Z circuitry — for all switching requirements
- Robust — for harsh environments

Non-standard options

- Other circuit forms — X, Y & C
- 10 amp, gold and logic load version
- Flame retardant to UL 94-VO version

Specification

Mechanical

Travel (nominal): 1,6mm.
Life (min): 10^7 cycles.
Operating Force (max): 12,7N.

Environmental

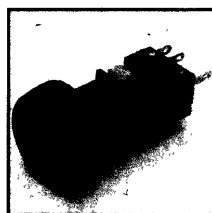
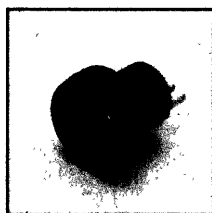
Ingress Protection: Approved to IP67.
Shock (min): 10g.
Temperature (ambient): -20°C to $+70^{\circ}\text{C}$.

Electrical

Current: 5A/250V~ max. (10A version available),
10mA/5V= min. (logic load version available).
Life (min): 10^5 cycles.
Dielectric Strength (min): 1KV~, 1 minute.
Insulation Resistance (min): $1\text{G}\Omega @ 500\text{V}=\text{}$
Contact Resistance (max. initial): $25\text{m}\Omega$.

FLEXIBUTTON

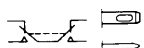
Ordering Information



button colours

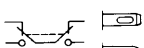
- X = 1-White
- 2-Red
- 3-Green
- 4-Blue
- 5-Yellow
- 6-Black

momentary

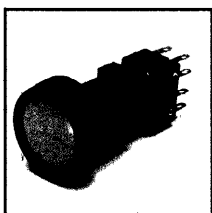
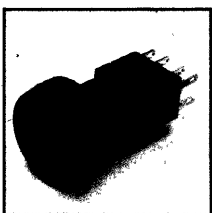


76-911X/439088
76-911X/439098

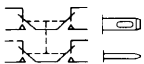
alternate



76-913X/439088
76-913X/439098

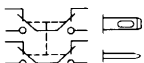


double pole momentary

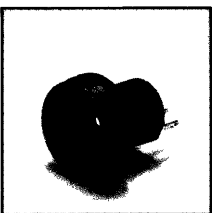


76-912X/439088
76-912X/439098

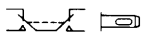
double pole alternate



76-914X/439088
76-914X/439098



momentary



76-917X/439088
Flame retardant
to UL94-VO

