

Switches

Manufactured from Stainless Steel, Bulgin's extensive range of vandal resistant security switches are designed with a high resistance to wear and tear, corrosion and harsh use in potentially hostile environments, such as access control applications.

The front and rear panel mounted versions have three profiles — prominent, domed and low profile — with a choice of switching and IP66 front panel sealing and combine together to meet the ergonomic, electrical and environmental demands of switch panel design. And where the ultimate strength of steel is not needed, there is a brass, chrome plated alternative.

The illuminated versions, available in dot and ring indication, are new to the range and will add that extra dimension to control panel layouts.

Other switch types include conventional, push-button and toggle switches

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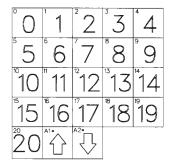


Vandal Resistant Switches

ENGRAVING OPTIONS

The low profile and prominent vandal resistant switches MP0025, MP0027, MP0031, MP0034, MP0038, MP0025/2, MP0027/2, MP0031/2, MP0034/2 and MP0038/2 are also available with engraved non-rotating buttons.

Engraving option 0 - 20 Numeric A1 = Up Arrow A2 = Down Arrow



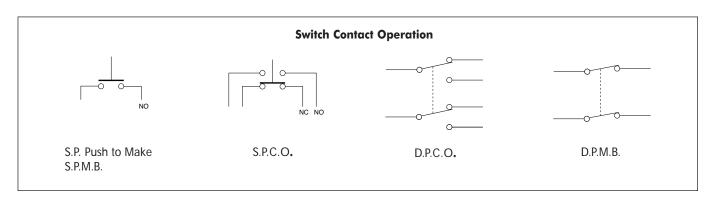
MP00xx/1/xx Switch Style MP0025, MP0025/2, MP0027, MP0027/2, MP0031, MP0031/2, MP0034, MP0034/2. MP0038, MP0038/2 Non Rotating Button

Examples

MP0031/1/A1 = MP0031 style switch, with non-rotating button engraved with an up arrow

MP0027/2/1/13 = MP0027 style switch with prominent non-rotating button engraved with numeric characters 13

SWITCH OPERATION

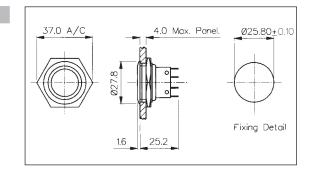




Stainless Steel Low Profile Vandal Resistant

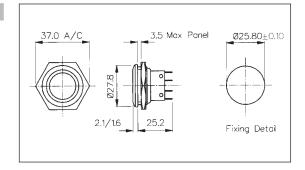


- 28mm diameter
- S.P.C.O. Microswitch
- 5A, 250V a.c.



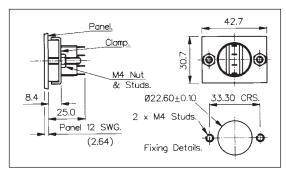
FRONT PANEL MOUNTING MP0038 Sealed to IP66

- Front Panel Sealed to IP66
- 28mm diameter
- S.P.C.O. Microswitch
- 5A, 250V a.c.





- 22mm diameter
- S.P.C.O. Microswitch
- 5A, 250V a.c.



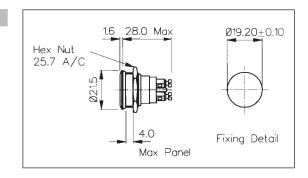
Specification	MP0027	MP0038	MP0025
Terminations:	Solder Tags	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250V a.c.	5A, 250V a.c.	5A, 250V a.c.
Contact Resistance:	<10mΩ	<10mΩ	$<$ 10m Ω
Insulation Resistance:	$> 10^3 M\Omega$	$> 10^3 M\Omega$.	$>$ 10 3 M Ω
Dielectric Strength:	>2.0kV a.c.	>2.0kV a.c.	>2.0kV a.c.
Operating Temp. Range:	_20°C to +70°C	-20°C to +70°C	–20°C to +70°C
Sealing (Front of panel only):		Protection Classification: IP66 EN60529 1992 (Micro switch not sealed)	
Operations Mechanical: Electrical:	1,000,000 (min) 35,000 (min)	1,000,000 (min) 35,000 (min)	1,000,000 (min) 35,000 (min)
Operating Pressure:	7.5N (typ)	12.5N (typ)	6.1N (typ)
Rear Nut Fixing Torque:	2.5Nm	1.13Nm	-
Materials Mouldings: Tags/Terminations: Switch Body & Button:	Glass Filled Nylon Brass, Tin Plated Stainless Steel	Glass Filled Nylon Brass, Tin Plated Stainless Steel	Glass Filled Nylon Brass, Tin Plated Stainless Steel
Contacts:	Fine Silver	Fine Silver	Fine Silver
Variants:	Engraved Button, Non-Rotating Button, details on request	Engraved Button, Non-Rotating Button, details on request	Engraved Button, Non-Rotating Button, details on request



Stainless Steel Low Profile Vandal Resistant

FRONT PANEL MOUNTING MP0037 Sealed to IP68

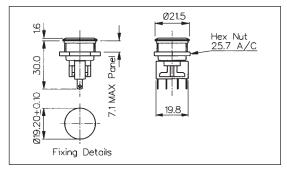
- Front Panel Sealed to IP68
- 21.5mm diameter
- S.P. Push to Make
- 1A, 50V
- Industry Standard Size



FRONT PANEL MOUNTING



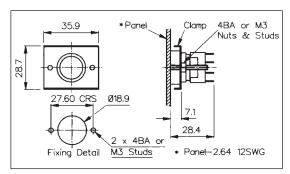
- Front Panel Sealed to IP66
- 21.5mm diameter
- S.P.C.O. Microswitch
- 5A, 250V a.c.



REAR PANEL MOLINTING



- Rear Panel Mounting
- Flush with Panel
- 19mm diameter
- S.PC.O. Microswitch
- 5A, 250V a.c.

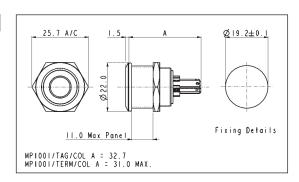


Specification	MP0037	MP0031	MP0034
Terminations:	Screw Terminals	Solder Tags	Solder Tags
Switching:	S.P. Push to make Momentary action	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	1A, 50V	5A, 250V a.c.	5A, 250V a.c.
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	$> 10^5 M\Omega$	$> 10^3 M\Omega$.	$> 10^3 M\Omega$
Dielectric Strength:	>1.0kV a.c.	>2.0kV a.c.	>2.0kV a.c.
Operating Temp. Range:	-20°C to +70°C	-20°C to +70°C	–20°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP68 EN60529 1992 (Terminals not sealed)	Protection Classification: IP66 EN60529 1992 (Micro switch not sealed)	
Operations Mechanical: Electrical:	1,000,000 (min) 30,000 (min)	1,000,000 (min) 35,000 (min)	250,000 (min) 35,000 (min)
Operating Pressure:	7.5N (typ)	4.7N (typ)	2.7N (typ)
Rear Nut Fixing Torque:	0.57Nm	0.57Nm	-
Materials Mouldings: Tags/Terminations: Switch Body & Button:	Glass Filled Nylon Brass, Silver Plated Stainless Steel	Glass Filled Nylon Brass, Tin Plated Stainless Steel	Glass Filled Nylon Brass, Tin Plated Stainless Steel
Contacts:	Brass, Silver Plated, Silver	Fine Silver	Fine Silver
Variants:	-	Engraved Button, Non-Rotating Button, details on request	Engraved Button, Non-Rotating Button, details on request

Stainless Steel Illuminated Vandal Resistant

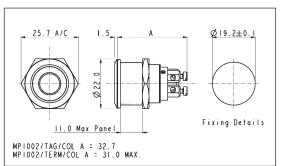
MPI001 Sealed to IP66

- Dot Illuminated
- 22mm diameter
- S.P. Push to Make
- 50mA, 24V dc contact rating
- Red, Green, Amber or Blue Illumination
- Bright Daylight LEDs
- Separate LED Terminals





- Ring Illuminated
- 22mm diameter
- S.P. Push to Make
- 50mA, 24V dc contact rating
- Red, Green, Amber or Blue Illumination
- Bright Daylight LEDs
- Separate LED Terminals



Specification	MPI001/Termination/Col	MPI002/Termination/Col		
Terminations:	/28 (2.8mm tabs), /Term (screw terminals)	/28 (2.8mm tabs), /Term (screw terminals)		
Switching:	S.P. Push to make, tactile	S.P. Push to make, tactile		
Max. Rating:	50mA, 24V d.c.	50mA, 24V d.c.		
Contact Resistance:	<100mΩ	<100mΩ		
Insulation Resistance:	$>$ 10 3 M Ω	$> 10^3 M\Omega$.		
Dielectric Strength:	Contact to Panel >2.0kV Contact to Contact 1500V	Contact to Panel >2.0kV Contact to Contact 1500V		
Operating Temp. Range:	-30°C to +70°C	-30°C to +70°C		
Sealing (Front of panel only):	Protection Classification: IP66 EN60529 1992	Protection Classification: IP66 EN60529 1992		
Operations Mechanical: Electrical:	750,000 (min) 35,000 (min)	750,000 (min) 35,000 (min)		
Operating Pressure:	12N	12N		
Rear Nut Fixing Torque:	0.57Nm	0.57Nm		
Materials Switch assembly: Tags: Terminals: Switch Body & Button: Lens and Lens Body: O rings: Contact Plate:	UL94V-0 rated Polyamide (Nylon) Copper Alloy Copper Alloy Stainless Steel Polycarbonate Nitrile and Silicone Gold Plated	UL94V-0 rated Polyamide (Nylon) Copper Alloy Copper Alloy Stainless Steel Polycarbonate Nitrile and Silicone Gold Plated		
LEDs (ratings @ 20mA) Colours Luminous Intensity Forward Voltage* Part No.	Red Green Amber Blue 900mcd 1500mcd 220mcd 1500mcd 1.85V 3.0V 2.0V 3.4V /RD /GN /AM /BL *A resistor must be series connected by the	Red Green Amber Blue 900mcd 1500mcd 220mcd 1500mcd 1.85V 3.0V 2.0V 3.4V /RD /GN /AM /BL e user		

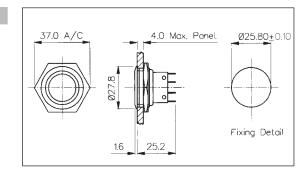
WITCHE



Low Profile Brass Chrome Plated Vandal Resistant

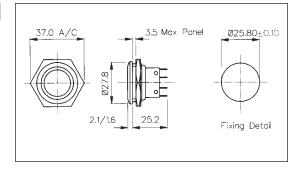
FRONT PANEL MOUNTING MPB027

- 28mm diameter
- S.P.C.O. Microswitch
- 5A, 250V a.c.



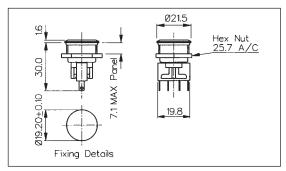
FRONT PANEL MOUNTING MPB038 Sealed to IP66

- Front Panel Sealed to IP66
- 28mm diameter
- S.P.C.O. Microswitch
- 5A, 250V a.c.





- Front Panel Sealed to IP66
- 21mm diameter
- S.P.C.O. Microswitch
- 5A, 250V a.c.



Specification	MPB027	MPB038	MPB031
Terminations:	Solder Tags	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250V a.c.	5A, 250V a.c.	5A, 250V a.c.
Contact Resistance:	$<$ 10m Ω	$<$ 10m Ω	<10mΩ
Insulation Resistance:	$>10^3 M\Omega$	$>$ 10 3 M Ω .	$> 10^3 M\Omega$
Dielectric Strength:	>2.0kV a.c.	>2.0kV a.c.	>2.0kV a.c.
Operating Temp. Range:	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Sealing (Front of panel only):		Protection Classification: IP66 EN60529 1992 (Micro switch not sealed)	Protection Classification: IP66 EN60529 1992 (Micro switch not sealed)
Operations Mechanical: Electrical:	1,000,000 (min) 35,000 (min)	1,000,000 (min) 35,000 (min)	1,000,000 (min) 35,000 (min)
Operating Pressure:	7.5N (typ)	12.5N (typ)	4.7N (typ)
Rear Nut Fixing Torque:	2.5Nm	1.13Nm	0.57Nm
Materials Mouldings: Tags/Terminations: Switch Body & Button:	Glass Filled Nylon Brass, Tin Plated Brass, Chrome Plated	Glass Filled Nylon Brass, Tin Plated Brass, Chrome Plated	Glass Filled Nylon Brass, Tin Plated Brass, Chrome Plated
Contacts:	Fine Silver	Fine Silver	Fine Silver
Variants:	Non-Rotating Button, details on request	Non-Rotating Button, details on request	Non-Rotating Button, details on request

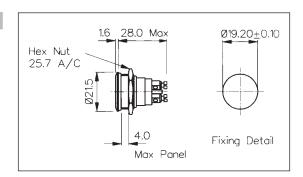




Low Profile Brass Chrome Plated Vandal Resistant



- Front Panel Sealed to IP68
- 21.5mm diameter
- S.P. Push to Make
- 1A, 50V



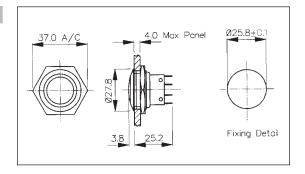
Specification	MPB037
Terminations:	Screw Terminals
Switching:	S.P. Push to make Momentary action
Max. Rating:	1A, 50V
Contact Resistance:	$<$ 10m Ω
Insulation Resistance:	$>$ 10 5 M Ω
Dielectric Strength:	>1.0kV a.c.
Operating Temp. Range:	-20°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP68 EN60529 1992 (Terminals not sealed)
Operations Mechanical: Electrical:	1,000,000 (min) 30,000 (min)
Operating Pressure:	7.5N (typ)
Rear Nut Fixing Torque:	0.57Nm
Materials Mouldings: Tags/Terminations: Switch Body & Button:	Glass Filled Nylon Brass, Silver Plated Brass, Chrome Plated
Contacts:	Brass, Silver Plated, Silver
Variants:	



Stainless Steel Domed Vandal Resistant

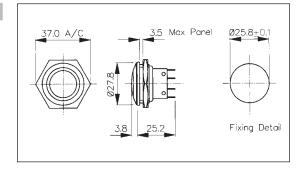
FRONT PANEL MOUNTING MP0027/3

- 28mm diameter
- Domed Profile
- S.P.C.O. Microswitch
- 5A, 250V a.c.



MP0038/3 Sealed to IP66

- Front Panel Sealed to IP66
- 28mm diameter
- Domed Profile
- S.P.C.O. Microswitch
- 5A, 250V a.c.

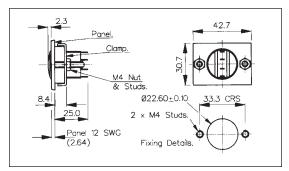




MP0027/3

Specification

- 22mm diameter
- Domed Profile
- S.P.C.O. Microswitch
- 5A, 250V a.c.



MP0025/3

	002170	0000/0	1
Terminations:	Solder Tags	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250V a.c.	5A, 250V a.c.	5A, 250V a.c.
Contact Resistance:	<10mΩ	$<10m\Omega$	<10mΩ
Insulation Resistance:	$>10^3 M\Omega$	$> 10^3 M\Omega$.	$> 10^3 M\Omega$
Dielectric Strength:	>2.0kV a.c.	>2.0kV a.c.	>2.0kV a.c.
Operating Temp. Range:	-20°C to +70°C	-20°C to +70°C	_20°C to +70°C
Sealing (Front of panel only):		Protection Classification: IP66 EN60529 1992 (Micro switch not sealed)	
Operations Mechanical: Electrical:	1,00,000 (min) 35,000 (min)	1,000,000 (min) 35,000 (min)	1,000,000 (min) 35,000 (min)
Operating Pressure:	7.5N (typ)	12.5N (typ)	6.1N (typ)
Rear Nut Fixing Torque:	2.5Nm	1.13Nm	-
Materials Mouldings: Tags/Terminations: Switch Body & Button:	Glass Filled Nylon Brass, Tin Plated Stainless Steel	Glass Filled Nylon Brass, Tin Plated Stainless Steel	Glass Filled Nylon Brass, Tin Plated Stainless Steel
Contacts:	Fine Silver	Fine Silver	Fine Silver
Variants:	Non-Rotating Button, details on request	Non-Rotating Button, details on request	Non-Rotating Button, details on request

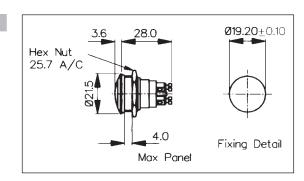
MP0038/3



Stainless Steel Domed Vandal Resistant

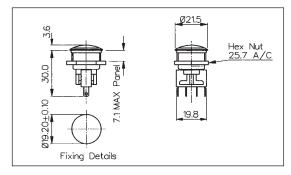


- Front Panel Sealed to IP68
- 21.5mm diameter
- Domed Profile
- S.P. Push to Make
- 1A, 50V



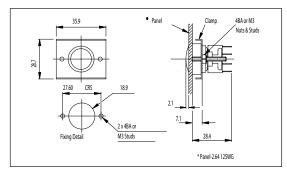


- Front Panel Sealed to IP66
- 21.5mm diameter
- Domed Profile
- S.P.C.O. Microswitch
- 5A, 250V a.c.





- Rear Panel Mounting
- 19mm diameter
- Domed Profile
- S.PC.O. Microswitch
- 5A, 250V a.c.



Specification	MP0037/3	MP0031/3	MP0034/3
Terminations:	Screw Terminals	Solder Tags	Solder Tags
Switching:	S.P. Push to make Momentary action	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	1A, 50V	5A, 250V a.c.	5A, 250V a.c.
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	$> 10^5 M\Omega$	$> 10^3 M\Omega$.	$> 10^3 M\Omega$
Dielectric Strength:	>1.0kV a.c.	>2.0kV a.c.	>2.0kV a.c.
Operating Temp. Range:	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP68 EN60529 1992 (Terminals not sealed)	Protection Classification: IP66 EN60529 1992 (Micro switch not sealed)	-
Operations Mechanical: Electrical:	1,000,000 (min) 30,000 (min)	1,000,000 (min) 35,000 (min)	250,000 (min) 35,000 (min)
Operating Pressure:	7.5N	4.7N (typ)	2.7N (typ)
Rear Nut Fixing Torque:	0.57Nm	0.57Nm	-
Materials Mouldings: Tags/Terminations: Switch Body & Button:	Glass Filled Nylon Brass, Silver Plated Stainless Steel	Glass Filled Nylon Brass, Tin Plated Stainless Steel	Glass Filled Nylon Brass, Tin Plated Stainless Steel
Contacts:	Brass, Silver Plated, Silver	Fine Silver	Fine Silver
Variants:		Non-Rotating Button, details on request	

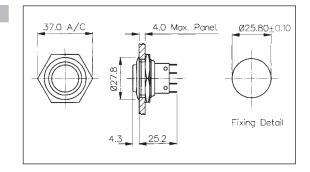


Stainless Steel Prominent Button Vandal Resistant

MP0027/2

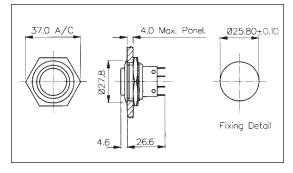
FRONT PANEL MOUNTING

- 28mm diameter
- Prominent Button
- S.P.C.O. Microswitch
- 5A, 250V a.c.



FRONT PANEL MOUNTING MP0038/2 Sealed to IP66

- Front Panel Sealed to IP66
- 28mm diameter
- Prominent Button
- S.P.C.O. Microswitch
- 5A, 250V a.c.

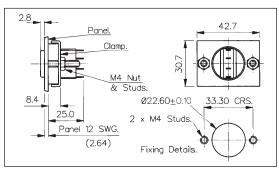




MP0027/2

Specification

- 22mm diameter
- Prominent Button
- S.P.C.O. Microswitch
- 5A, 250V a.c.



MP0025/2

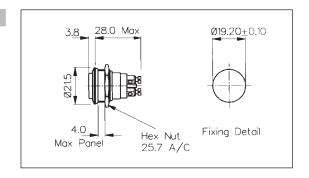
-	******		
Terminations:	Solder Tags	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250V a.c.	5A, 250V a.c.	5A, 250V a.c.
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	$> 10^3 M\Omega$	$> 10^3 M\Omega$.	$>$ 10 3 M Ω
Dielectric Strength:	>2.0kV a.c.	>2.0kV a.c.	>2.0kV a.c.
Operating Temp. Range:	-20°C to +70°C	-20°C to +70°C	–20°C to +70°C
Sealing (Front of panel only):	-	Protection Classification: IP66 EN60529 1992 (Micro switch not sealed)	-
Operations Mechanical: Electrical:	1,000,000 (min) 35,000 (min)	1,000,000 (min) 35,000 (min)	1,000,000 (min) 35,000 (min)
Operating Pressure:	7.5N (typ)	12.5N (typ)	6.1N (typ)
Rear Nut Fixing Torque:	2.5Nm	1.13Nm	-
Materials Mouldings: Tags/Terminations: Switch Body & Button:	Glass Filled Nylon Brass, Tin Plated Stainless Steel	Glass Filled Nylon Brass, Tin Plated Stainless Steel	Glass Filled Nylon Brass, Tin Plated Stainless Steel
Contacts:	Fine Silver	Fine Silver	Fine Silver
Variants:	Engraved Button, Non-Rotating Button, details on request	Engraved Button, Non-Rotating Button, details on request	Engraved Button, Non-Rotating Button, details on request

MP0038/2

Stainless Steel Prominent Button Vandal Resistant

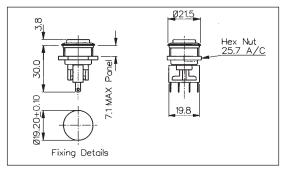
FRONT PANEL MOUNTING MP0037/2 Sealed to IP68

- Front Panel Sealed to IP68
- 21.5mm diameter
- **Prominent Button**
- S.P. Push to Make
- 1A, 50V



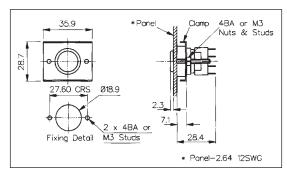


- Front Panel Sealed to IP66
- 21.5mm diameter
- **Prominent Button**
- S.P.C.O. Microswitch
- 5A, 250V a.c.





- 19mm diameter
- **Prominent Button**
- S.PC.O. Microswitch
- 5A, 250V a.c.



MP0037/2 MP0031/2 MP0034/2 **Specification**

Terminations: Screw Terminals Switching: S.P. Push to make Slow momentary action Max. Rating: 1A, 50V

Contact Resistance: <10m Ω Insulation Resistance: $> 10^5 \, M\Omega$ >1.0kV a.c. Dielectric Strength: Operating Temp. Range: -20°C to +70°C

Sealing (Front of panel only)

Operations Mechanical: 1,000,000 (min) Electrical: 30,000 (min)

Rear Nut Fixing Torque: 0.57Nm

Mouldings: Tags/Terminations: Switch Body & Button:

Operating Pressure:

Contacts: Variants:

Materials

(Microswitch) 5A, 250V a.c. < 10m Ω $> 10^3 M\Omega$. >2.0kV a.c.

Protection Classification: IP68 EN60529 1992 (Terminals not sealed)

7.5N (typ)

Glass Filled Nylon Brass, Silver Plated Stainless Steel

Brass, Silver Plated, Silver

Solder Tags

S.P.C.O. Momentary Action

-20°C to +70°C

Protection Classification: IP66 EN60529 1992 (Micro switch not sealed)

1,000,000 (min) 35,000 (min) 4.7N (typ) 0.57Nm

Glass Filled Nylon Brass, Tin Plated Stainless Steel Fine Silver

Engraved Button, Non-Rotating Button, details on request

Solder Tags

S.P.C.O. Momentary Action (Microswitch)

5A, 250V a.c. $< 10 m\Omega$

 $> 10^3 M\Omega$ >2.0kV a.c. -20°C to +70°C

250,000 (min) 35,000 (min) 2.7N (typ)

Glass Filled Nylon Brass, Tin Plated Stainless Steel Fine Silver

Engraved Button, Non-Rotating Button, details on request

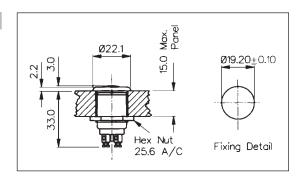
169



Push Button



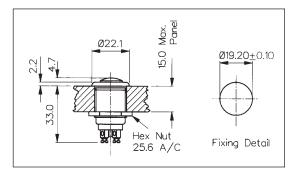
- Proud Fitting
- 22mm diameter
- S.P. Push to Make
- 1A, 50V
- Brass, Chrome Plated Body, Stainless Steel Button
- MP0033 Internally Sealed





MP0013, MP0033

- Prominent Button
- 22mm diameter
- S.P. Push to Make
- 1A, 50V
- Brass, Chrome Plated Body, Stainless Steel Button
- MP0033/2 Internally Sealed



•			
Terminations:	Screw Terminals	Screw Terminals	
Switching:	S.P. Push to make Slow momentary action	S.P. Push to make Slow momentary action	
Max. Rating:	1A, 50V a.c.	1A, 50V a.c.	
Contact Resistance:	<15mΩ	<15mΩ	
Insulation Resistance:	$>$ 10 4 M Ω	$>$ $10^4~\mathrm{M}\Omega$	
Dielectric Strength:	>2.5kV a.c.	>2.5kV a.c.	
Operating Temp. Range:	-20°C to +85°C	-20°C to +85°C	
Sealing (Front of panel only):	MP0033 only - internally sealed against ingress of water and dust	MP0033/2 only - internally sealed against ingress of water and dust	
Materials: Mouldings: Tags/Terminations: Switch Body & Button:	Glass Filled Nylon Brass, Silver Plated Body: Brass, Chrome Plated Button: Stainless Steel	Glass Filled Nylon Brass, Silver Plated Body: Brass, Chrome Plated Button: Stainless Steel	
Contacts:	Copper, Silver Plated	Copper, Silver Plated	
Variants:			

MP0013/2, MP0033/2

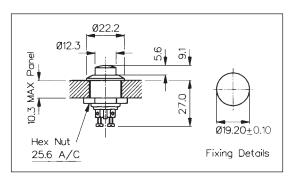
Specification

Push Button



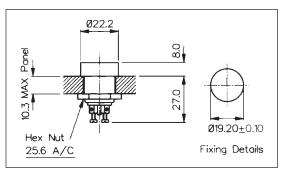
BBULGIN

- 22mm diameter
- **Prominent Button**
- S.P. Push to Make
- **Screw Terminals**
- Brass, Chrome Plated Body, Glass Filled Nylon Button



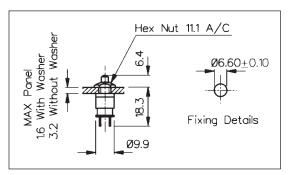


- 22mm diameter
- **Recessed Button**
- S.P. Push to Make
- **Screw Terminals**
- Brass, Chrome Plated Body, Glass Filled Nylon Button





- S.P. Push to Make
- Solder Tags
- 1A, 28V a.c./d.c.
- Brass Nickel Plated Body, Glass Filled Nylon Button



Specification	MP0012/Colour	MP0012/1/Colour	MP0016/Colour
Terminations:	Screw Terminals	Screw Terminals	Solder Tags

Switching: S.P. Push to Make Slow Momentary Action

Max. Rating: 0.25A. 250V a.c., 1A. 110V a.c., 2A. 12V a.c./d.c.

Contact Resistance: $<15 m\Omega$ Insulation Resistance: $> 10^4~M\Omega$ Dielectric Strength: >2.5kV a.c.

-20°C to +85°C Operating Temp. Range:

Materials: Moulding: Body:

Glass Filled Nylon Brass, Chrome Plated Contacts/Terms: Brass, Silver Plated

Variants: Button Colour: Standard - Black, /RD (Red)

Screw Terminals

S.P. Push to Make Slow Momentary Action

0.25A. 250V a.c., 1A. 110V a.c.,

2A. 12V a.c./d.c. $<15 m\Omega$

 $> 10^4 \, M\Omega$. >2.5kV a.c. -20 °C to +85 °C

Glass Filled Nylon Brass, Chrome Plated Brass, Silver Plated

Button Colour: Standard - Black, /RD (Red)

S.P. Push to Make Slow Momentary Action

1A 28V a.c./d.c. (non-inductive)

 $<15 m\Omega$

 $> 10^4 \ M\Omega$

>2.0kV a.c.

-20°C to +85°C Glass Filled Nylon

Brass, Chrome Plated Brass, Silver Plated

Button Colour: Standard - Black,

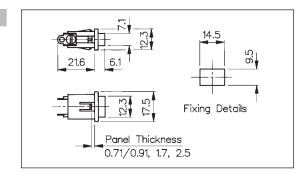
/RD (Red)



Push Button



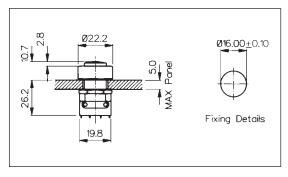
- S.P. Push to Make
- Solder Tags
- Nylon Body & Button



FRONT PANEL MOUNTING



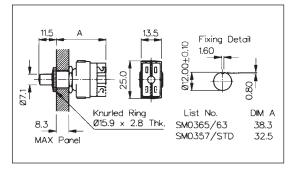
- Front Panel Sealed to IP66
- S.P.C.O. Microswitch
- Solder Tags
- 5A, 250V a.c.
- Black Anodised Aluminium Body
- Black, red or green Buttons



REAR PANEL MOUNTING



- SM0357 S.P.C.O.
 SM0365 S.P.M.B.
- Solder Tags
- SM0357 2A, 250V a.c.
 SM0365 3A, 250V a.c.



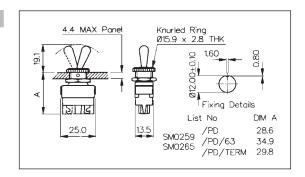
Specification	MP0022/Colour	SX0904/Colour	SM0357, SM0365
Terminations:	Solder Tags	Solder Tags	Solder Tags
Switching:	S.P. Push to Make Slow Momentary Action	S.P.C.O. Momentary Action (Microswitch)	SM0357 S.P.C.O. 2 pairs contacts SM0365 S.P.M.B. push to make 1 pair contacts
Max. Rating:	0.25A. 250V a.c., 0.5A. 110V a.c., 1A. 0.1 to 28V a.c./d.c.	5A. 250V a.c.	SM0357 2A, 250V a.c. SM0365 3A, 250V a.c.
Contact Resistance:	<15mΩ	<10mΩ	<10mΩ
Insulation Resistance:	$>10^4 \mathrm{M}\Omega$	$> 10^3 M\Omega$.	$> 10^3 M\Omega$
Dielectric Strength:	>2.5kV a.c.	>2.0kV a.c.	>4.5kV a.c.
Operating Temp. Range:	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Sealing:		Protection Classification IP66 BS5490 1992 (Microswitch not sealed)	
Materials: Moulding: Tags: Body:	Nylon Brass, Silver Plated Nylon	Glass Filled Nylon Brass, Tin Plated Black anodised aluminium	Phenolic Brass, Silver Plated Steel, Zinc Plated
Contacts/Terms:	Brass, Silver Plated	Fine Silver	Brass, Silver Plated
Variants:	Button Colours: Standard - Black, /WH (White) and /RD (Red). /TERM - (Screw terminals)	Button Colours: Standard - Black, /RD (Red) and /GN (Green). /28 (2.8mm tabs)	/TERM (Screw Terminals), /63 (6.3mm tabs) - (SM0365 only)



Toggle

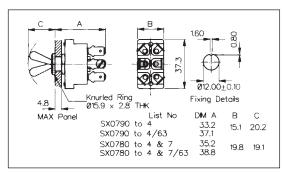


- SM0259/PD S.P.M.B.SM0265/PD S.P.C.O.
- Solder tags, 6.3mm tabs or Screw Terminals (SM0259)
- SM0259/PD 3A, 250V a.c.
 SM0265/PD 2A, 250V a.c.





- 6.3mm tabs or Screw Terminals
- 10A, 250V a.c.



Single Pole List No.	Description	1	2	3
SX0790	Change-over. Centre off	ON	OFF	ON
SX0791	Change-over. Centre off One position biased off	ON	OFF	ON
SX0792	Change-over. Centre off Two position biased off	ON	OFF	ON
SX0793	Change-over Two positions only	ON	-	ON
SX0794	ON/OFF Two positions only	OFF	-	ON

Specification	SM0259/PD, SM0265/PD	SX0790 Series
Terminations:	Solder Tags	Screw Terminals
Switching:	SM0259/PD S.P.M.B. 1 pair of contacts (Quick Make/Break) SM0265/PD S.P.C.O. 2 pairs of contacts (Quick Make/Break)	See table for types Slow Make, Slow Break
Max. Rating:	SM0259/PD 3A, 250V a.c. SM0265/PD 2A, 250V a.c.	10A, 250V a.c. 10A, 0-28V d.c. (non-reactive circuits)
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	$>10^3 M\Omega$	$>10^3 M\Omega$
Dielectric Strength:	>4.5kV a.c.	>2.5kV a.c.
Operating Temp. Range:	-20°C to +70°C	-20°C to +85°C
Materials: Mouldings: Tags:	Phenolic Brass, Silver Plated	Glass Filled Polyester Brass, Silver Plated
Contacts:	Brass, Silver Plated	Copper with Silver face
Variants:	/TERM (Screw Terminals) - /63 (6.3mm tabs) - (SM0259/PD only)	/63 (6.3mm tabs) - (except SX0791)
Accessories:	SX0550 (see page 175)	SX0550 (see page 175)

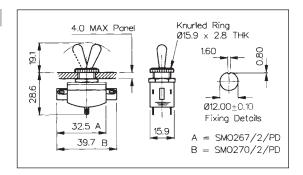
SWITCHE



Toggle

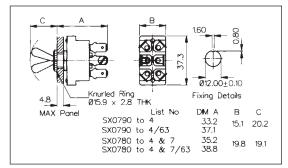


- SM0267/2/PD D.P.M.B SM0270/2/PD - D.P.C.O
- Solder tags
- 2A, 250V a.c.





- 6.3mm tabs or Screw Terminals
- 10A, 250V a.c.



Double Pole List No.	Description	1 🖺	2	3 着
SX0780	Change-over. Centre off	ON	OFF	ON
SX0782	Change-over. Centre off Two position biased off	ON	OFF	ON
SX0783	Change-over Two positions only	ON	-	ON
SX0784	ON/OFF Two positions only	OFF	-	ON
SX0787	Change-over. Two positions only biased to one position	ON	-	ON

Specification	SM0267/2/PD, SM0270/2/PD	SX0780 Series
Terminations:	Solder Tags	Screw Terminals
Switching:	SM0267/2/PD - D.P.M.B. 2 pairs of contacts SM0270/2/PD - D.P.C.O. 3 pairs of contacts (Quick Make/Break)	See table for types Slow Make, Slow Break
Max. Rating:	2A, 250V a.c.	10A, 250V a.c. 10A, 0-28V d.c. (non-reactive circuits)
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	$> 10^3 M\Omega$	$> 10^3 \mathrm{M}\Omega$
Dielectric Strength:	>3.5kV a.c.	>2.5kV a.c.
Operating Temp. Range:	-20°C to +70°C	-20°C to +85°C
Materials: Mouldings: Tags:	Phenolic Copper, Silver Plated	Glass Filled Polyester Brass, Silver Plated
Contacts/Terms:	Copper Silver Alloy	Copper with Silver face
Variants:	-	/63 (6.3mm tabs)
Accessories:	SX0550 (see page 175)	SX0550 (see page 175)



Accessories



- PVC Boot
- Water and Dust Resistant
- Glass Filled Nylon or Brass, Nickel Plated Insert
- For use with all Bulgin /PD Toggle Switches



- Completely Covers Toggle
- Brass, Nickel Plated Insert



- Switch Toggle Protrudes
- Brass, Nickel Plated Insert

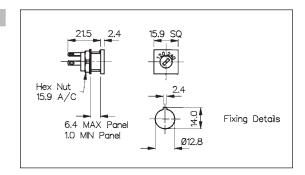
Specification	SX0550, SX0550/Brass	NX1030, NX1030/B	
	Water and dust resistant Black PVC cover for use with all Bulgin /PD switches	NX1030 Completely covers toggle NX1030/B Switch toggle protrudes	
Thread:	15/32" x 32 TPI. Whit Form, BS84	15/32" - 32NS - 2B	
Operating Temperature:	0°C to +60°C	-70° to +205°C	
Materials: Boot: Inserts:	Black PVC Glass Filled Nylon SX0550/BRASS: Brass, Nickel Plated	Silicone rubber Brass, Nickel Plated	



Voltage Selectors

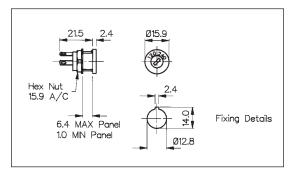
120/240V VOLTAGE SELECTOR VS0001

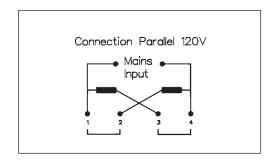
- 2.8 series tabs/solder tags
- Square Front Bezel
- 6.3A
- CSA, SEMKO & VDE approvals

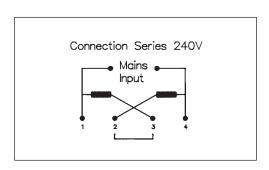


120/240V VOLTAGE SELECTOR VS0002

- 2.8 series tabs/Solder tags
- Round Front Bezel
- 6.3A
- CSA, SEMKO & VDE approvals







Specification	VS0001	VS0002	
Max. Rating:	6.3A, 120/240V	6.3A, 120/240V	
Insulation Resistance:	>10 ⁶ MΩ	$>$ 10 6 M Ω .	
Termination:	2.8 series tabs/solder tags	2.8 series tabs/solder tags	
Temperature Range:	-20°C to +85°C	-20°C to +85°C	
Materials: Mouldings: Tags:	Glass Filled Nylon UL94V-1 Brass, Silver Plated	Glass Filled Nylon UL94V-1 Brass, Silver Plated	
Contacts:	Copper Silver Alloy	Copper Silver Alloy	
Approvals:	\$ □	\$ \$ \$ \$	
Variants:	Other markings, details on request	Other markings, details on request	