



# 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 & IP68 front panel sealing which combined 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 low profile style switches are now also available with a latching, push on - push off, action.

The illuminated versions are available in dot and ring LED indication and a variety of illumination colours including bi-colour LED's. Newer versions also feature LED illumination driven by 6V, 12V & 24V together with rear of panel sealing, these options will add that extra dimension to control panel layouts and functionality.

The standard range of vandal resistant switches are complemented by a range of 16mm stainless steel switches of robust construction designed for use in applications where space is at a premium.

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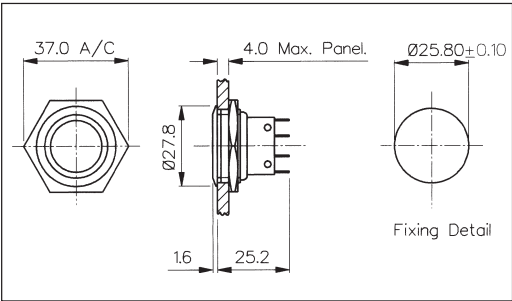
## Stainless Steel Low Profile Vandal Resistant - Momentary

**FRONT PANEL MOUNTING**



**MP0027**

- 28mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac

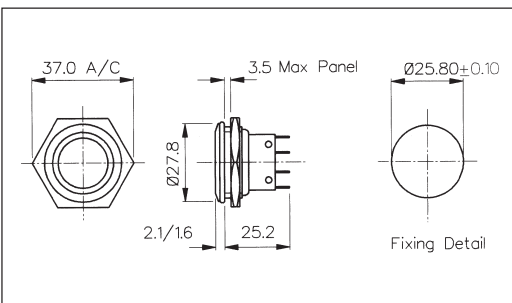


**FRONT PANEL MOUNTING**

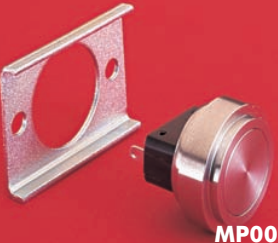


**MP0038**  
Sealed to IP66

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

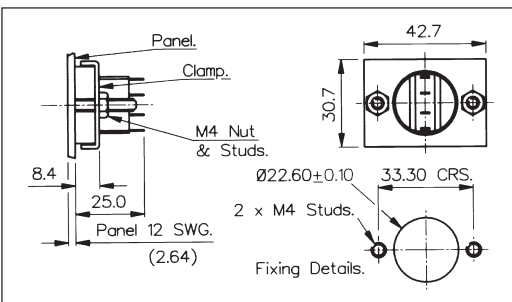


**REAR PANEL MOUNTING**



**MP0025**

- 22mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac



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, 250Vac 2A, 28Vdc	5A, 250Vac 2A, 28Vdc	5A, 250Vac 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10 <sup>3</sup> MΩ	>10 <sup>3</sup> MΩ.	>10 <sup>3</sup> MΩ
Dielectric Strength:	>2.0kVac	>2.0kVac	>2.0kVac
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:	1,000,000 (min)	1,000,000 (min)	1,000,000 (min)
Electrical:	35,000 (min)	35,000 (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:	Glass Filled Nylon	Glass Filled Nylon	Glass Filled Nylon
Tags/Terminations:	Brass, Tin Plated	Brass, Tin Plated	Brass, Tin Plated
Switch Body & Button:	Stainless Steel	Stainless Steel	Stainless Steel
Contacts:	Fine Silver	Fine Silver	Fine Silver
Thread size:	1.0" x 26TPI	1.0" x 26TPI	-
<b>RoHS</b>	Compliant	Compliant	Compliant

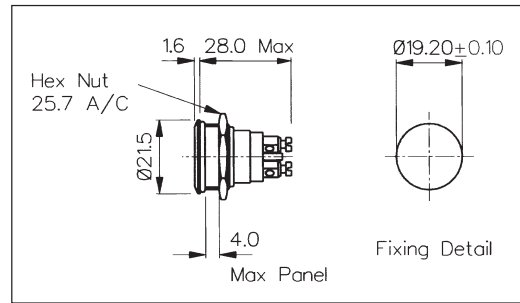
**Stainless Steel Low Profile Vandal Resistant - Momentary**

**FRONT PANEL MOUNTING**



**MP0037**  
Sealed to IP68

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

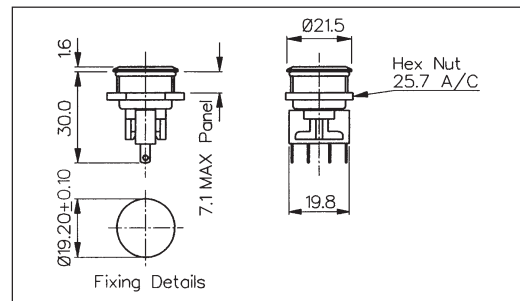


**FRONT PANEL MOUNTING**

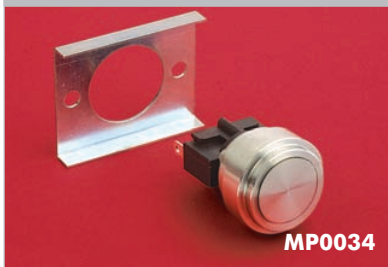


**MP0031**  
Sealed to IP66

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

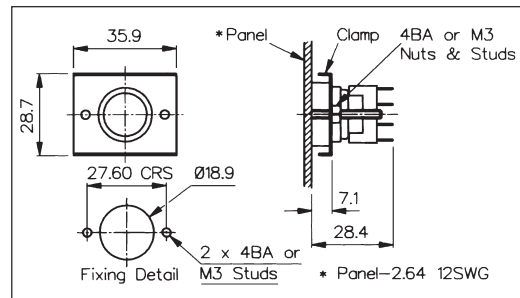


**REAR PANEL MOUNTING**



**MP0034**

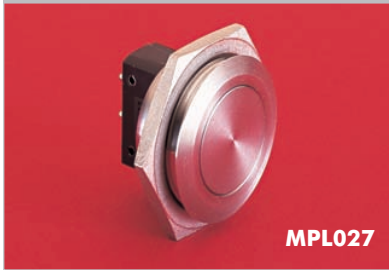
- Rear Panel Mounting
- Flush with Panel
- 19mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac



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, 50Vac/dc	5A, 250Vac 2A, 28Vdc	5A, 250Vac 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10 <sup>5</sup> MΩ	>10 <sup>3</sup> MΩ.	>10 <sup>3</sup> MΩ
Dielectric Strength:	>1.0kVac	>2.0kVac	>2.0kVac
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:	1,000,000 (min)	1,000,000 (min)	250,000 (min)
Electrical:	30,000 (min)	35,000 (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:	Glass Filled Nylon	Glass Filled Nylon	Glass Filled Nylon
Tags/Terminations:	Brass, Silver Plated	Brass, Tin Plated	Brass, Tin Plated
Switch Body & Button:	Stainless Steel	Stainless Steel	Stainless Steel
Contacts:	Brass, Silver Plated, Silver	Fine Silver	Fine Silver
Thread size:	0.747" x 26TPI	0.747" x 26TPI	-
<b>RoHS</b>	Compliant	Compliant	Compliant

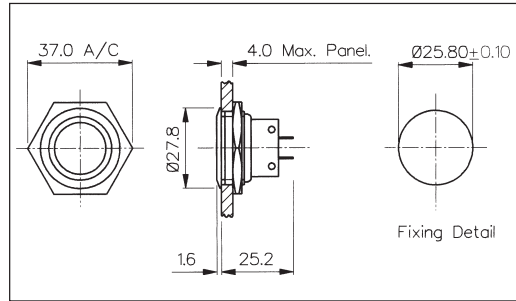
## Stainless Steel Low Profile Vandal Resistant - Latching

### FRONT PANEL MOUNTING



**MPL027**

- 28mm diameter
- 2A, 50Vac/dc
- Single pole push to make
- Latching switch

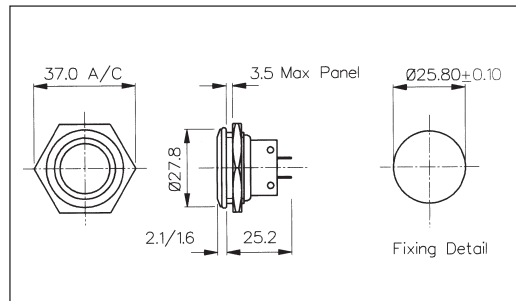


### FRONT PANEL MOUNTING

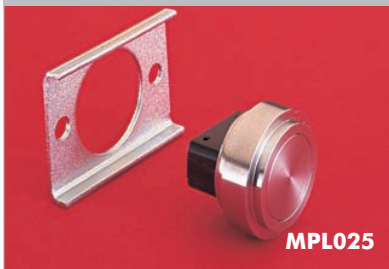


**MPL038**  
Sealed to IP66

- Front Panel Sealed to IP66
- 28mm diameter
- 2A, 50Vac/dc
- Single pole push to make
- Latching switch

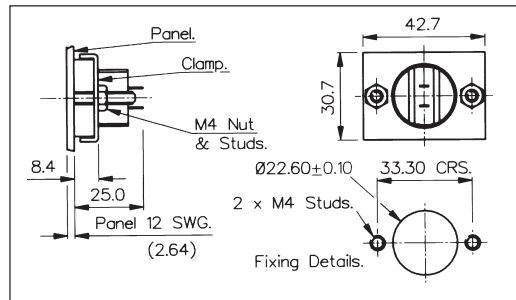


### REAR PANEL MOUNTING



**MPL025**

- 22mm diameter
- 2A, 50Vac/dc
- Single pole push to make
- Latching switch



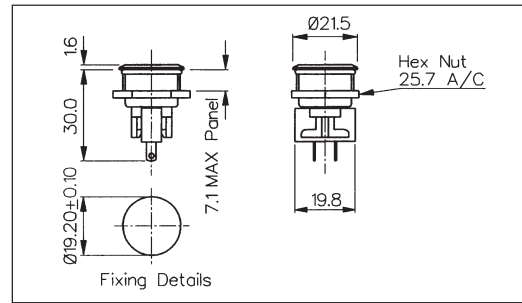
Specification	MPL027	MPL038	MPL025
Terminations:	Solder Tags	Solder Tags	Solder Tags
Switching:	S.P.M.B. - Latching	S.P.M.B. - Latching	S.P.M.B. - Latching
Max. Rating:	2A, 50Vac/dc	2A, 50Vac/dc	2A, 50Vac/dc
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10 <sup>3</sup> MΩ	>10 <sup>3</sup> MΩ.	>10 <sup>3</sup> MΩ
Dielectric Strength:	>2.0kVac	>2.0kVac	>2.0kVac
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 (Switch not sealed)	-
Operations			
Mechanical:	8,000 (min)	8,000 (min)	8,000 (min)
Electrical:	8,000 (min)	8,000 (min)	8,000 (min)
Operating Pressure:	5.5N (typ)	5.5N (typ)	5.5N (typ)
Rear Nut Fixing Torque:	2.5Nm	1.13Nm	-
Materials			
Mouldings:	Glass Filled Nylon	Glass Filled Nylon	Glass Filled Nylon
Tags/Terminations:	Brass, Tin Plated	Brass, Tin Plated	Brass, Tin Plated
Switch Body & Button:	Stainless Steel	Stainless Steel	Stainless Steel
Contacts:	Fine Silver	Fine Silver	Fine Silver
Thread size:	1.0" x 26TPI	1.0" x 26TPI	-
<b>RoHS</b>	Compliant	Compliant	Compliant

**Stainless Steel Low Profile Vandal Resistant - Latching**

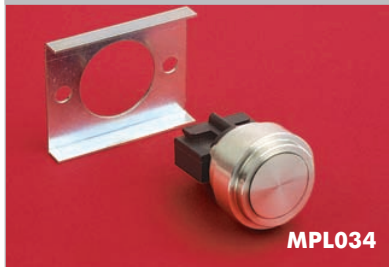
**FRONT PANEL MOUNTING**



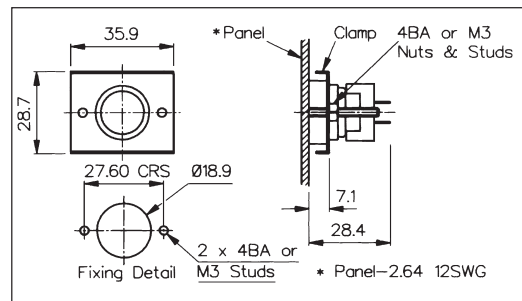
- Front Panel Sealed to IP66
- 21.5mm diameter
- 2A, 50Vac/dc
- Single pole push to make
- Latching switch



**REAR PANEL MOUNTING**



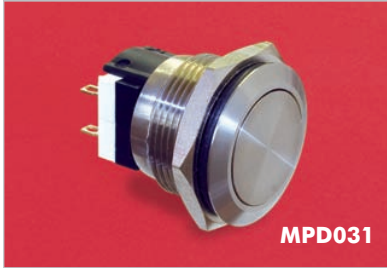
- Rear Panel Mounting
- Flush with Panel
- 19mm diameter
- 2A, 50Vac/dc
- Single pole push to make
- Latching switch



Specification	MPL031	MPL034
Terminations:	Solder Tags	Solder Tags
Switching:	S.P.M.B. - Latching	S.P.M.B. - Latching
Max. Rating:	2A, 50Vac/dc	2A, 50Vac/dc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10 <sup>3</sup> MΩ	>10 <sup>3</sup> MΩ
Dielectric Strength:	>2.0kVac	>2.0kVac
Operating Temp. Range:	-20°C to +70°C	-20°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP66 EN60529 1992 (Switch not sealed)	
Operations		
Mechanical:	8,000 (min)	8,000 (min)
Electrical:	8,000 (min)	8,000 (min)
Operating Pressure:	5.5N (typ)	5.5N (typ)
Rear Nut Fixing Torque:	0.57Nm	-
Materials		
Mouldings:	Glass Filled Nylon	Glass Filled Nylon
Tags/Terminations:	Brass, Tin Plated	Brass, Tin Plated
Switch Body & Button:	Stainless Steel	Stainless Steel
Contacts:	Fine Silver	Fine Silver
Thread size:	0.747" x 26TPI	-
<b>RoHS</b>	Compliant	Compliant

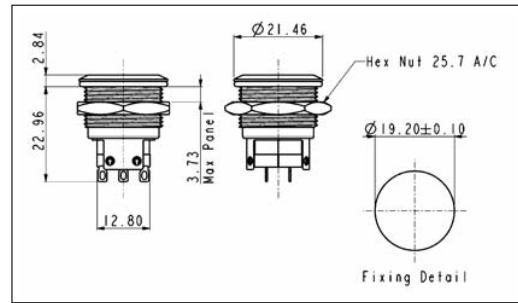
## Stainless Steel Low Profile Vandal Resistant - Momentary - Double Pole

### FRONT PANEL MOUNTING



**MPD031**

- Front Panel Sealed to IP66
- 21.5mm diameter
- D.P.C.O. Microswitch
- 3A, 125Vac



Specification	MPD031
Terminations:	Solder Tags
Switching:	D.P.C.O. Momentary Action (Microswitch)
Max. Rating:	3A, 125Vac
Contact Resistance:	30-100m $\Omega$ max.
Insulation Resistance:	100M $\Omega$ min.
Dielectric Strength:	1,000VacRMS
Operating Temp. Range:	-20°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP66 EN60529 1992 (Micro switch not sealed)
Operations	
Mechanical:	1,000,000
Electrical:	10,000 @ 3A, 125Vac
Rear Nut Fixing Torque:	0.57Nm
Materials	
Mouldings:	Glass Filled Nylon
Tags/Terminations:	Brass, Tin Plated
Switch Body & Button:	Stainless Steel
Contacts:	Brass, Silver Plated
Thread size:	0.747" x 26TPI
<b>RoHS</b>	Compliant

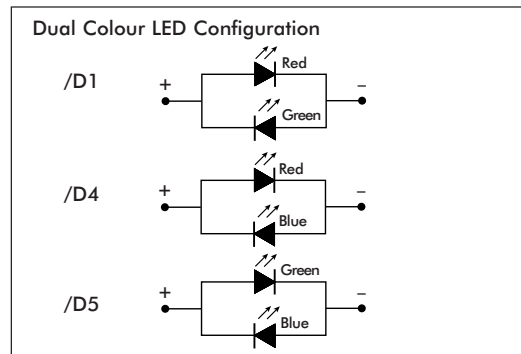
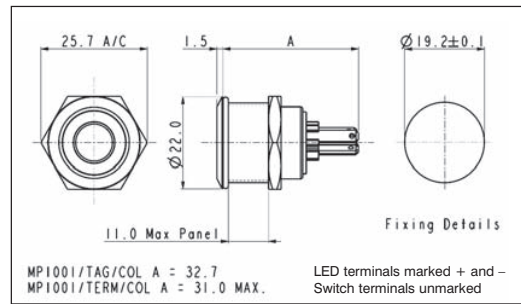
Stainless Steel Illuminated Vandal Resistant

FRONT PANEL MOUNTING



MPI001 - front panel seal to IP66

- Dot illumination
- 22mm diameter
- Single pole push to make
- 50mA, 24Vdc contact rating
- Red, Green, Amber, Blue, White or dual colour illumination
- Bright daylight LEDs
- Independent LED terminals
- Front panel seal to IP66
- Integral supply resistors
- TVS protection



Specification | MPI001/Termination/Colour/Voltage

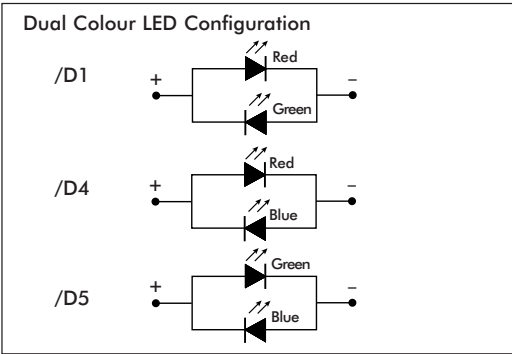
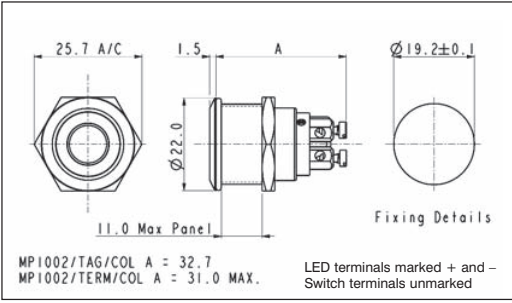
<p> <b>Illumination style:</b> Dot  <b>Terminations:</b> /28 (2.8mm tabs), /TERM or /TE (screw terminals)  <b>Switching:</b> Single pole, push to make, tactile (momentary action)  <b>Max. Switch Rating:</b> 50mA, 24Vdc  <b>LEDs (ratings @ 20mA)</b>                      Part No.                      Colours                      Luminous Intensity                      Forward Voltage                      Forward Current                      Moulding Colour  <b>Illumination Voltage:</b>                      /no suffix No resistor fitted. <b>An appropriate resistor must be series connected by the user.</b> Voltages as above.                      /6 6Vdc                      /12 12Vdc                      /24 24Vdc  <b>Contact Resistance:</b> &lt;100mΩ  <b>Insulation Resistance:</b> &gt;10<sup>3</sup> MΩ  <b>Dielectric Strength:</b> Contact to Panel &gt;2.0kV                      Contact to Contact 1500V  <b>Operating Temp. Range:</b> -30°C to +70°C  <b>Sealing (Front of panel only):</b> Protection Classification: IP66 EN60529 1992  <b>Operations</b>                      Mechanical: 750,000 (min)                      Electrical: 35,000 (min)  <b>Operating Pressure:</b> 12N  <b>Rear Nut Fixing Torque:</b> 0.57Nm  <b>Materials</b>                      Switch assembly: UL94V-0 rated Polyamide (Nylon)                      Tags: Copper Alloy                      Terminals: Copper Alloy                      Switch Body &amp; Button: Stainless Steel                      Lens and Lens Body: Polycarbonate                      O ring: Nitrile                      Internal seal: Silicone                      Contact Plate: Gold Plated  <b>Thread size:</b> 18.97mm x 26TPI   ESD Handling precautions must be taken   Compliant                 </p>	<table border="1"> <thead> <tr> <th>Part No.</th> <th>/RD</th> <th>/GN</th> <th>/AM</th> <th>/BL</th> <th>/WH</th> <th>/D1</th> <th>/D4</th> <th>/D5</th> </tr> </thead> <tbody> <tr> <td>Colours</td> <td>Red</td> <td>Green</td> <td>Amber</td> <td>Blue</td> <td>White</td> <td>Red/Green</td> <td>Red/Blue</td> <td>Green/Blue</td> </tr> <tr> <td>Luminous Intensity</td> <td>900mcd</td> <td>2500mcd</td> <td>900mcd</td> <td>1500mcd</td> <td>900mcd</td> <td>2500mcd/5000mcd</td> <td>2000mcd/850mcd</td> <td>4000mcd/2000mcd</td> </tr> <tr> <td>Forward Voltage</td> <td>1.85V</td> <td>3.5V</td> <td>2.3V</td> <td>3.5V</td> <td>3.6V</td> <td>2.05V/3.6V</td> <td>2.0V/3.6V</td> <td>3.6V/3.6V</td> </tr> <tr> <td>Forward Current</td> <td>20mA</td> <td>20mA</td> <td>20mA</td> <td>20mA</td> <td>20mA</td> <td>20mA</td> <td>20mA</td> <td>20mA</td> </tr> <tr> <td>Moulding Colour</td> <td>Red</td> <td>Green</td> <td>Amber</td> <td>Blue</td> <td>White</td> <td>Black</td> <td>Black</td> <td>Black</td> </tr> </tbody> </table>	Part No.	/RD	/GN	/AM	/BL	/WH	/D1	/D4	/D5	Colours	Red	Green	Amber	Blue	White	Red/Green	Red/Blue	Green/Blue	Luminous Intensity	900mcd	2500mcd	900mcd	1500mcd	900mcd	2500mcd/5000mcd	2000mcd/850mcd	4000mcd/2000mcd	Forward Voltage	1.85V	3.5V	2.3V	3.5V	3.6V	2.05V/3.6V	2.0V/3.6V	3.6V/3.6V	Forward Current	20mA	20mA	20mA	20mA	20mA	20mA	20mA	20mA	Moulding Colour	Red	Green	Amber	Blue	White	Black	Black	Black
Part No.	/RD	/GN	/AM	/BL	/WH	/D1	/D4	/D5																																															
Colours	Red	Green	Amber	Blue	White	Red/Green	Red/Blue	Green/Blue																																															
Luminous Intensity	900mcd	2500mcd	900mcd	1500mcd	900mcd	2500mcd/5000mcd	2000mcd/850mcd	4000mcd/2000mcd																																															
Forward Voltage	1.85V	3.5V	2.3V	3.5V	3.6V	2.05V/3.6V	2.0V/3.6V	3.6V/3.6V																																															
Forward Current	20mA	20mA	20mA	20mA	20mA	20mA	20mA	20mA																																															
Moulding Colour	Red	Green	Amber	Blue	White	Black	Black	Black																																															

Stainless Steel Illuminated Vandal Resistant

**FRONT PANEL MOUNTING**



- Ring illumination
- 22mm diameter
- Single pole push to make
- 50mA, 24Vdc contact rating
- Red, Green, Amber, Blue, White or dual colour illumination
- Bright daylight LEDs
- Independent LED terminals
- Front panel seal to IP66
- Integral supply resistors
- TVS protection



Specification	MPI002/Termination/Colour/Voltage
Illumination style:	Ring
Terminations:	/28 (2.8mm tabs), /TERM or /TE (screw terminals)
Switching:	Single pole, push to make, tactile (momentary action)
Max. Switch Rating:	50mA, 24Vdc
LEDs (ratings @ 20mA)	
Part No.	/RD /GN /AM /BL /WH /D1 /D4 /D5
Colours	Red Green Amber Blue White Red/Green Red/Blue Green/Blue
Luminous Intensity	900mcd 2500mcd 900mcd 1500mcd 900mcd 2500mcd/5000mcd 2000mcd/850mcd 4000mcd/2000mcd
Forward Voltage	1.85V 3.5V 2.3V 3.5V 3.6V 2.05V/3.6V 2.0V/3.6V 3.6V/3.6V
Forward Current	20mA 20mA 20mA 20mA 20mA 20mA 20mA 20mA
Moulding Colour	Red Green Amber Blue White Black Black Black
Illumination Voltage:	/no suffix No resistor fitted. <b>An appropriate resistor must be series connected by the user.</b> Voltages as above. /6 6Vdc /12 12Vdc /24 24Vdc
Contact Resistance:	<100mΩ
Insulation Resistance:	>10 <sup>3</sup> MΩ
Dielectric Strength:	Contact to Panel >2.0kV Contact to Contact 1500V
Operating Temp. Range:	-30°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP66 EN60529 1992
Operations	
Mechanical:	750,000 (min)
Electrical:	35,000 (min)
Operating Pressure:	12N
Rear Nut Fixing Torque:	0.57Nm
Materials	
Switch assembly:	UL94V-0 rated Polyamide (Nylon)
Tags:	Copper Alloy
Terminals:	Copper Alloy
Switch Body & Button:	Stainless Steel
Lens and Lens Body:	Polycarbonate
O ring:	Nitrile
Internal seal:	Silicone
Contact Plate:	Gold Plated
Thread size:	18.97mm x 26TPI
	ESD Handling precautions must be taken
	Compliant

SWITCHES





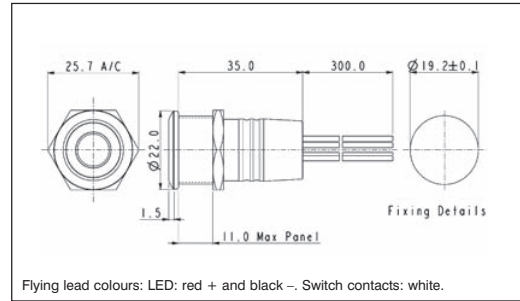
**Stainless Steel Illuminated Vandal Resistant with rear of panel IP66 seal**

**REAR PANEL SEALED - FLYING LEADS**



MPI002/FL/xx/x

- Dot or ring illumination
- 22mm diameter
- Single pole push to make
- 50mA, 24Vdc contact rating
- Red, Green, Amber, Blue & White illumination
- Bright daylight LEDs
- Independent LED terminals
- Front and rear panel seal to IP66
- Flying lead termination
- TVS protection



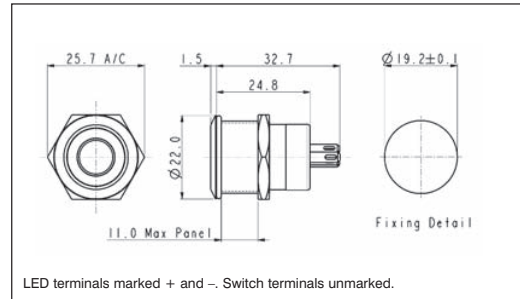
Flying lead colours: LED: red + and black -. Switch contacts: white.

**REAR PANEL SEALED - SOLDER TAG**



MPI001/RP/xx/x

- Dot or ring illumination
- 22mm diameter
- Single pole push to make
- 50mA, 24Vdc contact rating
- Red, Green, Amber, Blue & White illumination
- Bright daylight LEDs
- Independent LED terminals
- Front and rear panel seal to IP66
- Solder tag termination
- TVS protection




LED terminals marked + and -. Switch terminals unmarked.

Specification	MPI001/Termination/Colour/Voltage	MPI002/Termination/Colour/Voltage
<b>Illumination style:</b>	Dot	Ring
<b>Terminations:</b>	/FL (Flying leads) /RP (Solder tags)	/FL (Flying leads) /RP (Solder tags)
<b>Switching:</b>	Single pole, push to make, tactile (momentary action)	Single pole, push to make, tactile (momentary action)
<b>Max. Switch Rating:</b>	50mA, 24Vdc	50mA, 24Vdc
<b>LEDs (ratings @ 20mA)</b>		
<b>Part No.</b>	/RD /GN /AM /BL /WH	/RD /GN /AM /BL /WH
<b>Colours</b>	Red Green Amber Blue White	Red Green Amber Blue White
<b>Luminous Intensity</b>	900mcd 2500mcd 900mcd 1500mcd 900mcd	900mcd 2500mcd 900mcd 1500mcd 900mcd
<b>Forward Voltage</b>	1.85V 3.5V 2.3V 3.5V 3.6V	1.85V 3.5V 2.3V 3.5V 3.6V
<b>Forward Current</b>	20mA 20mA 20mA 20mA 20mA	20mA 20mA 20mA 20mA 20mA
<b>Illumination Voltage:</b>	/no suffix No resistor fitted. An appropriate resistor must be series connected by the user. Voltages as above.	/no suffix No resistor fitted. An appropriate resistor must be series connected by the user. Voltages as above.
	/6 6Vdc	/6 6Vdc
	/12 12Vdc	/12 12Vdc
	/24 24Vdc	/24 24Vdc
<b>Contact Resistance:</b>	<100mΩ	<100mΩ
<b>Insulation Resistance:</b>	>10 <sup>3</sup> MΩ.	>10 <sup>3</sup> MΩ.
<b>Dielectric Strength:</b>	Contact to panel >2.0kV Contact to contact 1500V	Contact to panel >2.0kV Contact to contact 1500V
<b>Operating Temp. Range:</b>	-30°C to +70°C	-30°C to +70°C
<b>Sealing</b>		
(Front & rear of panel):	Protection classification: IP66, EN60529 1992	Protection classification: IP66, EN60529 1992
<b>Operations</b>		
<b>Mechanical:</b>	750,000 (min)	750,000 (min)
<b>Electrical:</b>	35,000 (min)	35,000 (min)
<b>Operating Pressure:</b>	12N	12N
<b>Rear Nut Fixing Torque:</b>	0.57Nm	0.57Nm
<b>Materials</b>		
<b>Switch assembly:</b>	UL94V-0 rated Polyamide (Nylon)	UL94V-0 rated Polyamide (Nylon)
<b>Tags:</b>	Copper Alloy	Copper Alloy
<b>Leads:</b>	Tinned, stranded copper conductors	Tinned, stranded copper conductors
<b>Switch Body &amp; Button:</b>	Stainless Steel	Stainless Steel
<b>Lens and Lens Body:</b>	Polycarbonate	Polycarbonate
<b>O ring:</b>	Nitrile	Nitrile
<b>Internal seal:</b>	Silicone	Silicone
<b>Contact Plate:</b>	Gold Plated	Gold Plated
<b>Thread size:</b>	18.97mm x 26TPI	18.97mm x 26TPI
	ESD Handling precautions must be taken	ESD Handling precautions must be taken
	Compliant	Compliant

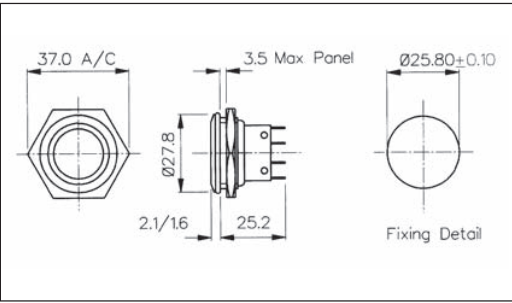
Low Profile Brass Chrome Plated Vandal Resistant

**FRONT PANEL MOUNTING**




**MPB038**  
Sealed to IP66

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

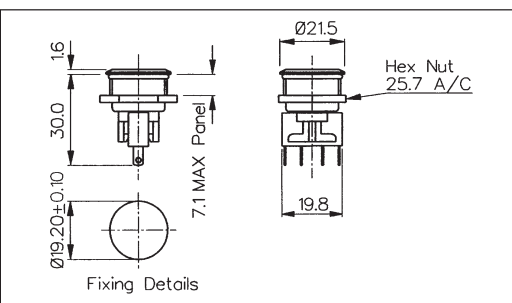


**FRONT PANEL MOUNTING**



**MPB031**  
Sealed to IP66

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

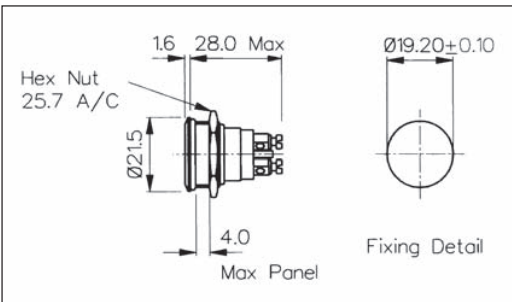


**FRONT PANEL MOUNTING**



**MPB037**  
Sealed to IP68

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



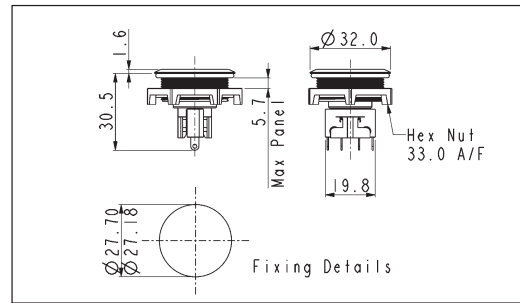
Specification	MPB038	MPB031	MPB037
Terminations:	Solder Tags	Solder Tags	Screw Terminals
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)	S.P. Push to make Momentary action
Max. Rating:	5A, 250Vac. 2A, 28Vdc	5A, 250Vac 2A, 28Vdc	1A, 50Vac/dc
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10 <sup>3</sup> MΩ.	>10 <sup>3</sup> MΩ	>10 <sup>5</sup> MΩ
Dielectric Strength:	>2.0kVac	>2.0kVac	>1.0kVac
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)	Protection Classification: IP68 EN60529 1992 (Terminals not sealed)
Operations			
Mechanical:	1,000,000 (min)	1,000,000 (min)	1,000,000 (min)
Electrical:	35,000 (min)	35,000 (min)	30,000 (min)
Operating Pressure:	12.5N (typ)	4.7N (typ)	7.5N (typ)
Rear Nut Fixing Torque:	1.13Nm	0.57Nm	0.57Nm
Materials			
Mouldings:	Glass Filled Nylon	Glass Filled Nylon	Glass Filled Nylon
Tags/Terminations:	Brass, Tin Plated	Brass, Tin Plated	Brass, Silver Plated
Switch Body & Button:	Brass, Chrome Plated	Brass, Chrome Plated	Brass, Chrome Plated
Contacts:	Fine Silver	Fine Silver	Brass, Silver Plated, Silver
Thread size:	1.0" x 26TPI	0.747" x 26TPI	0.747" x 26TPI
RoHS	Compliant	Compliant	Compliant

**Stainless Steel Large Diameter Vandal Resistant - Momentary**

**FRONT PANEL MOUNTING - LOW PROFILE**



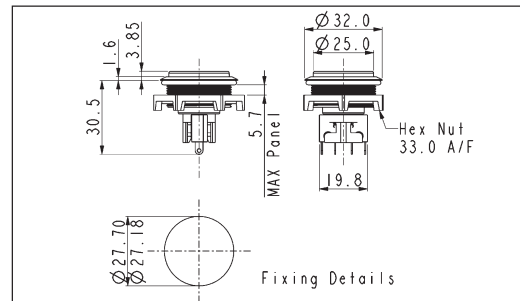
- Front Panel Sealed to IP68
- Flush button
- 32.0mm diameter
- S.P.C.O. switching
- Momentary action
- 5A, 250Vac



**FRONT PANEL MOUNTING - PROTRUDING PROFILE**




- Front Panel Sealed to IP68
- Protruding button
- 32.0mm diameter
- S.P.C.O. switching
- Momentary action
- 5A, 250Vac



Specification	MP0050	MP0050/2
Terminations:	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250Vac. 2A, 28Vdc	5A, 250Vac 2A, 28Vdc
Contact Resistance:	10mΩ	10mΩ
Insulation Resistance:	>10 <sup>3</sup> MΩ	>10 <sup>3</sup> MΩ
Dielectric Strength:	>2.0kVac	>2.0kVac
Operating Temp. Range:	-20°C to +70°C	-20°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP68 EN60529 1992 (Micro switch not sealed)	Protection Classification: IP68 EN60529 1992 (Micro switch not sealed)
Operations		
Mechanical:	1,000,000 (min)	1,000,000 (min)
Electrical:	35,000 (min)	35,000 (min)
Operating pressure:	4.7Nm	4.7Nm
Rear Nut Fixing Torque:	0.57Nm	0.57Nm
Materials		
Mouldings:	Glass Filled Nylon	Glass Filled Nylon
Tags/Terminations:	Brass, Tin Plated	Brass, Tin Plated
Switch Body & Button:	Stainless Steel	Stainless Steel
Contacts:	Fine Silver	Fine Silver
Thread size:	M27 x 1.0-6H	M27 x 1.0-6H
<b>RoHS</b>	Compliant	Compliant

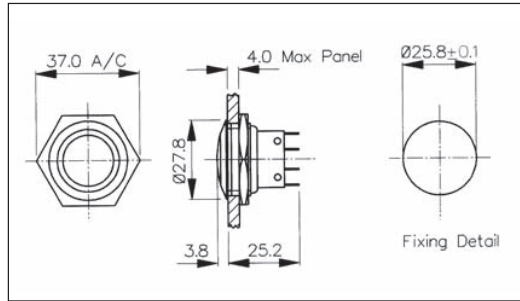
Stainless Steel Domed Vandal Resistant

**FRONT PANEL MOUNTING**



**MP0027/3**

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

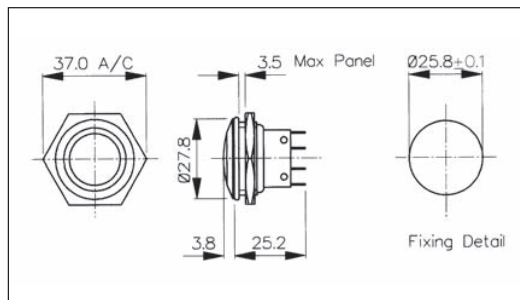


**FRONT PANEL MOUNTING**




**MP0038/3**  
Sealed to IP66

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

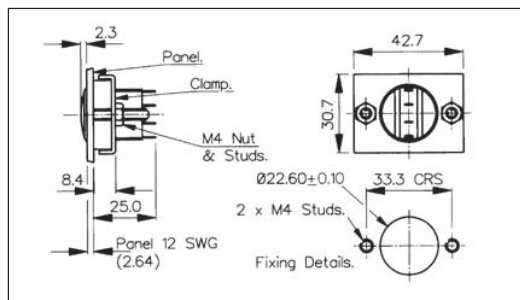


**REAR PANEL MOUNTING**



**MP0025/3**

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



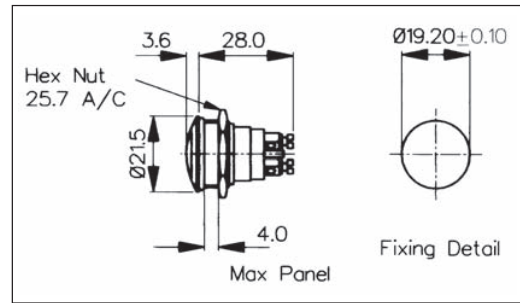
Specification	MP0027/3	MP0038/3	MP0025/3
Terminations:	Solder Tags	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250Vac 2A, 28Vdc	5A, 250Vac 2A, 28Vdc	5A, 250Vac 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10 <sup>3</sup> MΩ	>10 <sup>3</sup> MΩ.	>10 <sup>3</sup> MΩ
Dielectric Strength:	>2.0kVac	>2.0kVac	>2.0kVac
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:	1,000,000 (min)	1,000,000 (min)	1,000,000 (min)
Electrical:	35,000 (min)	35,000 (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:	Glass Filled Nylon	Glass Filled Nylon	Glass Filled Nylon
Tags/Terminations:	Brass, Tin Plated	Brass, Tin Plated	Brass, Tin Plated
Switch Body & Button:	Stainless Steel	Stainless Steel	Stainless Steel
Contacts:	Fine Silver	Fine Silver	Fine Silver
Thread size:	1.0" x 26TPI	1.0" x 26TPI	-
RoHS	Compliant	Compliant	Compliant

**Stainless Steel Domed Vandal Resistant**

**FRONT PANEL MOUNTING**



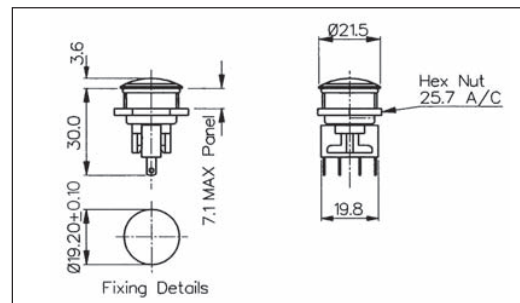
- Front Panel Sealed to IP68
- 21.5mm diameter
- Domed Profile
- S.P. Push to Make
- 1A, 50Vac/dc



**FRONT PANEL MOUNTING**



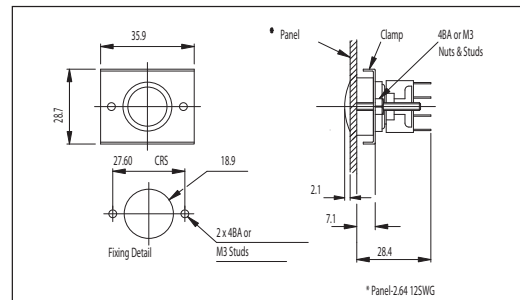
- Front Panel Sealed to IP66
- 21.5mm diameter
- Domed Profile
- S.P.C.O. Microswitch
- 5A, 250Vac



**REAR PANEL MOUNTING**



- Rear Panel Mounting
- 19mm diameter
- Domed Profile
- S.P.C.O. Microswitch
- 5A, 250Vac



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, 50Vac/dc	5A, 250Vac 2A, 28Vdc	5A, 250Vac 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10 <sup>5</sup> MΩ	>10 <sup>3</sup> MΩ.	>10 <sup>3</sup> MΩ
Dielectric Strength:	>1.0kVac	>2.0kVac	>2.0kVac
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:	1,000,000 (min)	1,000,000 (min)	250,000 (min)
Electrical:	30,000 (min)	35,000 (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:	Glass Filled Nylon	Glass Filled Nylon	Glass Filled Nylon
Tags/Terminations:	Brass, Silver Plated	Brass, Tin Plated	Brass, Tin Plated
Switch Body & Button:	Stainless Steel	Stainless Steel	Stainless Steel
Contacts:	Brass, Silver Plated, Silver	Fine Silver	Fine Silver
Thread size:	0.747" x 26TPI	0.747" x 26TPI	-
<b>RoHS</b>	Compliant	Compliant	Compliant

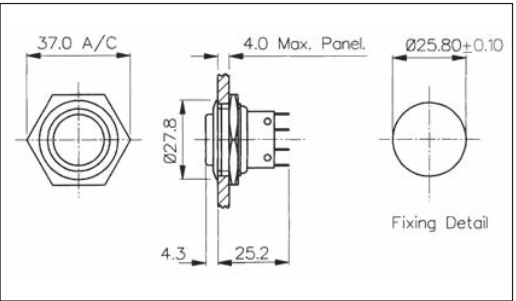
Stainless Steel Prominent Button Vandal Resistant

**FRONT PANEL MOUNTING**



**MP0027/2**

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

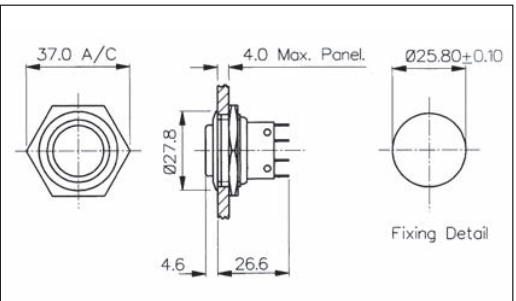


**FRONT PANEL MOUNTING**



**MP0038/2**  
Sealed to IP66

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

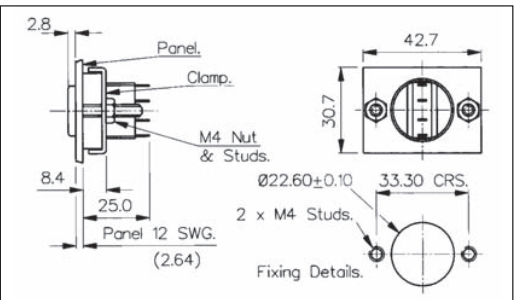


**REAR PANEL MOUNTING**



**MP0025/2**

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



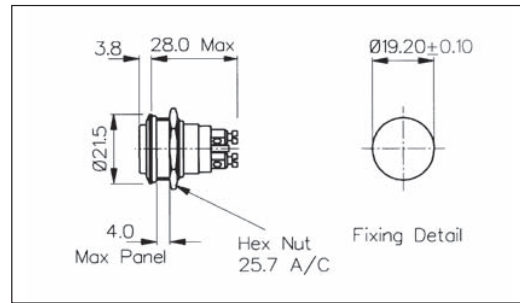
Specification	MP0027/2	MP0038/2	MP0025/2
Terminations:	Solder Tags	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250Vac 2A, 28Vdc	5A, 250Vac 2A, 28Vdc	5A, 250Vac 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10 <sup>3</sup> MΩ	>10 <sup>3</sup> MΩ.	>10 <sup>3</sup> MΩ
Dielectric Strength:	>2.0kVac	>2.0kVac	>2.0kVac
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:	1,000,000 (min)	1,000,000 (min)	1,000,000 (min)
Electrical:	35,000 (min)	35,000 (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:	Glass Filled Nylon	Glass Filled Nylon	Glass Filled Nylon
Tags/Terminations:	Brass, Tin Plated	Brass, Tin Plated	Brass, Tin Plated
Switch Body & Button:	Stainless Steel	Stainless Steel	Stainless Steel
Contacts:	Fine Silver	Fine Silver	Fine Silver
Thread size:	1.0" x 26TPI	1.0" x 26TPI	-
RoHS	Compliant	Compliant	Compliant

**Stainless Steel Prominent Button Vandal Resistant**

**FRONT PANEL MOUNTING**



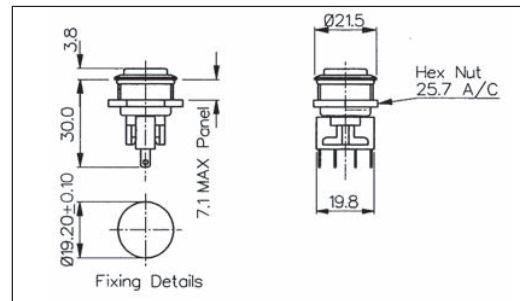
- Front Panel Sealed to IP68
- 21.5mm diameter
- Prominent Button
- S.P. Push to Make
- 1A, 50Vac/dc



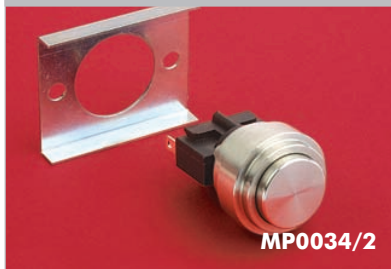
**FRONT PANEL MOUNTING**



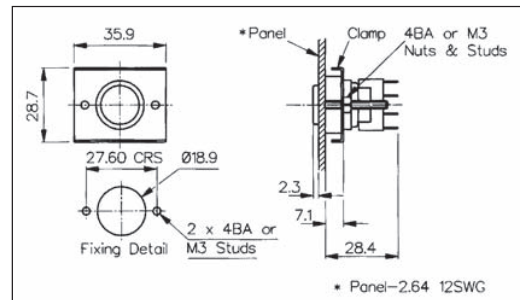
- Front Panel Sealed to IP66
- 21.5mm diameter
- Prominent Button
- S.P.C.O. Microswitch
- 5A, 250Vac



**REAR PANEL MOUNTING**



- 19mm diameter
- Prominent Button
- S.P.C.O. Microswitch
- 5A, 250Vac



Specification	MP0037/2	MP0031/2	MP0034/2
Terminations:	Screw Terminals	Solder Tags	Solder Tags
Switching:	S.P. Push to make Slow momentary action	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	1A, 50Vac/dc	5A, 250Vac 2A, 28Vdc	5A, 250Vac 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10 <sup>5</sup> MΩ	>10 <sup>3</sup> MΩ.	>10 <sup>3</sup> MΩ
Dielectric Strength:	>1.0kVac	>2.0kVac	>2.0kVac
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:	1,000,000 (min)	1,000,000 (min)	250,000 (min)
Electrical:	30,000 (min)	35,000 (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:	Glass Filled Nylon	Glass Filled Nylon	Glass Filled Nylon
Tags/Terminations:	Brass, Silver Plated	Brass, Tin Plated	Brass, Tin Plated
Switch Body & Button:	Stainless Steel	Stainless Steel	Stainless Steel
Contacts:	Brass, Silver Plated, Silver	Fine Silver	Fine Silver
Thread size:	0.747" x 26TPI	0.747" x 26TPI	-
<b>RoHS</b>	Compliant	Compliant	Compliant

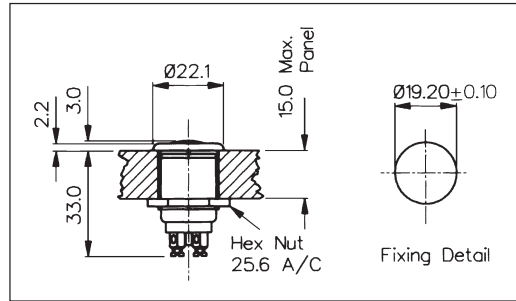
Push Button

**FRONT PANEL MOUNTING**



**MP0013  
MP0033**

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

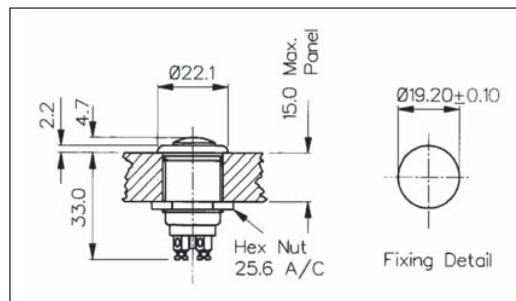


**FRONT PANEL MOUNTING**



**MP0013/2  
MP0033/2**

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



Specification	MP0013, MP0033	MP0013/2, MP0033/2
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, 50Vac	1A, 50Vac
Contact Resistance:	<15mΩ	<15mΩ
Insulation Resistance:	>10 <sup>4</sup> MΩ	>10 <sup>4</sup> MΩ
Dielectric Strength:	>2.5kVac	>2.5kVac
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:	Glass Filled Nylon	Glass Filled Nylon
Tags/Terminations:	Brass, Silver Plated	Brass, Silver Plated
Switch Body & Button:	Body: Brass, Chrome Plated Button: Stainless Steel	Body: Brass, Chrome Plated Button: Stainless Steel
Contacts:	Copper, Silver Plated	Copper, Silver Plated
<b>RoHS</b>	Compliant	Compliant

SWITCHES

Downloaded from [Elcodis.com](http://Elcodis.com) electronic components distributor

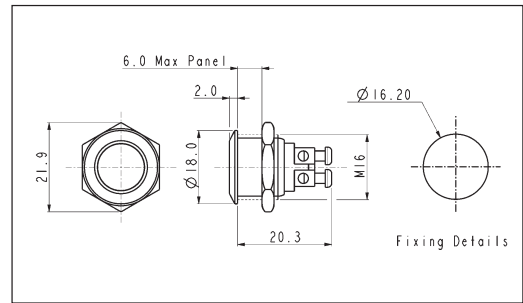


**Stainless Steel - Momentary**

**FLUSH PROFILE**



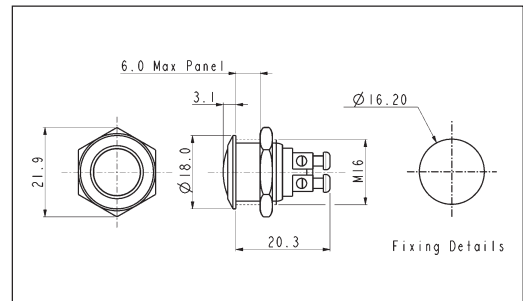
- 18mm bezel diameter
- 16mm panel hole
- S.P. Push to make
- Polished finish
- 2A, 48Vdc



**DOMED PROFILE**



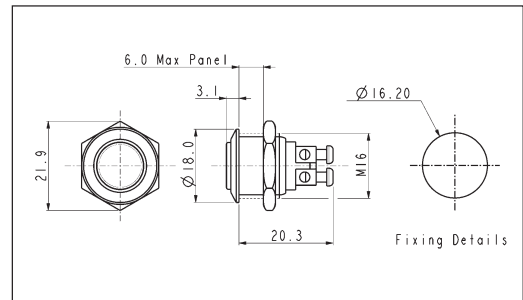
- 18mm bezel diameter
- 16mm panel hole
- S.P. Push to make
- Polished finish
- 2A, 48Vdc



**PROMINENT BUTTON**




- 18mm bezel diameter
- 16mm panel hole
- S.P. Push to make
- Polished finish
- 2A, 48Vdc



Specification	MP0042/1	MP0042/2	MP0042/3
Terminations:	Screw Terminals	Screw Terminals	Screw Terminals
Switching:	S.P. Push to Make	S.P. Push to Make	S.P. Push to Make
Max. Rating:	2A, 48Vdc	2A, 48Vdc	2A, 48Vdc
Contact Resistance:	50mΩ at 1A, 2V	50mΩ at 1A, 2V	50mΩ at 1A, 2V
Insulation Resistance:	>10 <sup>3</sup> MΩ @ 500Vdc	>10 <sup>3</sup> MΩ @ 500Vdc	>10 <sup>3</sup> MΩ @ 500Vdc
Dielectric Strength:	>2.0kVac	>2.0kVac	>2.0kVac
Operating Temp. Range:	-20°C to +55°C	-20°C to +55°C	-20°C to +55°C
Operations			
Mechanical:	1,000,000 (min)	1,000,000 (min)	1,000,000 (min)
Electrical:	100,000 (min)	100,000 (min)	100,000 (min)
Rear Nut Fixing Torque:	12Nm	12Nm	12Nm
Materials			
Mouldings:	Nylon	Nylon	Nylon
Tags/Terminations:	Brass, Silver Plated	Brass, Silver Plated	Brass, Silver Plated
Switch Body & Button:	Stainless Steel (Polished)	Stainless Steel (Polished)	Stainless Steel (Polished)
Contacts:	Silver	Silver	Silver
Variants:	Gold Plated Brass version available	Gold Plated Brass version available	Gold Plated Brass version available
<b>RoHS</b>	Compliant	Compliant	Compliant

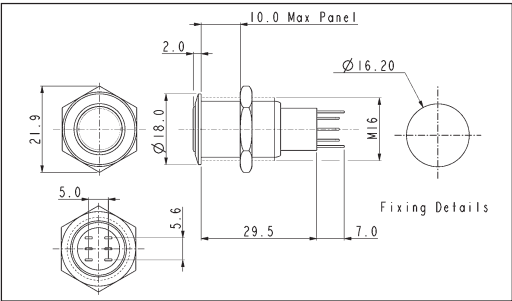
Stainless Steel - Momentary

**LOW PROFILE**




**MP0045/1D**

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O
- 3A, 250V

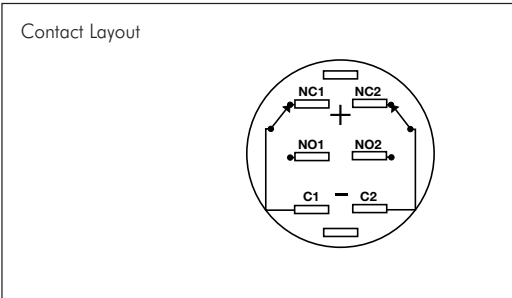
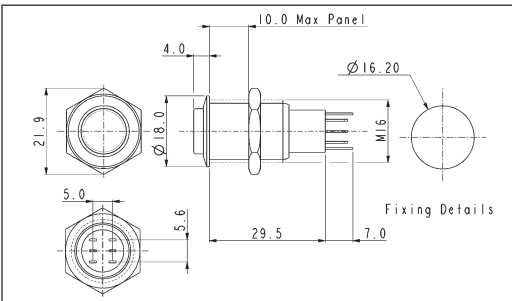


**PROMINENT BUTTON**



**MP0045/3D**

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O
- 3A, 250V



Specification	MP0045/1D0NN000	MP0045/3D0NN000
Terminations:	Solder tags	Solder Tags
Switching:	D.P.C.O Momentary Action	D.P.C.O Momentary Action
Max. Rating:	3A, 250V	3A, 250V
Contact Resistance:	50mΩ max. @ 1A, 2V	50mΩ max. @ 1A, 2V
Insulation Resistance:	>10 <sup>3</sup> MΩ @ 500Vdc	>10 <sup>3</sup> MΩ @ 500Vdc
Dielectric Strength:	> 2.0kVac	> 2.0kVac
Operating Temp. Range:	-20°C to +55°C	-20°C to +55°C
Operations		
Mechanical:	200,000 (min)	200,000 (min)
Electrical:	30,000 (min)	30,000 (min)
Rear Nut Fixing Torque:	12Nm max.	12Nm max.
Materials		
Mouldings:	Nylon	Nylon
Tags/Terminations:	Brass, Silver Plated	Brass, Silver Plated
Switch Body & Button:	Stainless Steel	Stainless Steel
Contacts:	Silver	Silver
Variants:	Nickel Plated Brass version available details on request	Nickel Plated Brass version available details on request
RoHS	Compliant	Compliant

SWITCHES

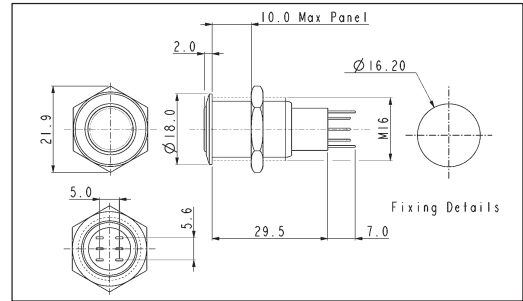
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**Stainless Steel - Latching**

**LOW PROFILE**



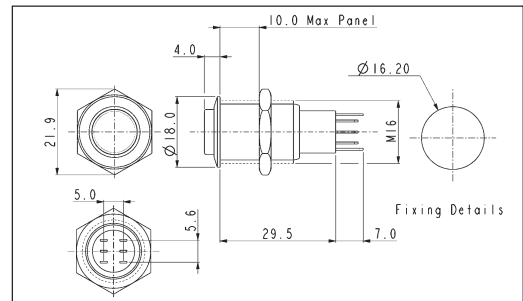
- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O.
- 3A, 250Vac



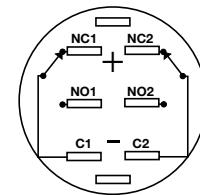
**PROMINENT BUTTON**



- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O.
- 3A, 250Vac



Contact Layout



Specification	MP0045/1E0NN00	MP0045/3E0NN00
Terminations:	Solder Tags	Solder Tags
Switching:	D.P.C.O. - Latching Action	D.P.C.O. - Latching Action
Max. Rating:	3A, 250V	3A, 250V
Contact Resistance:	50mΩ max. @ 1A, 2V	50mΩ max. @ 1A, 2V
Insulation Resistance:	>10 <sup>3</sup> MΩ @ 500Vdc	>10 <sup>3</sup> MΩ @ 500Vdc
Dielectric Strength:	>2.0kVac	>2.0kVac
Operating Temp. Range:	-20°C to +55°C	-20°C to +55°C
Operations		
Mechanical:	200,000 (min)	200,000 (min)
Electrical:	30,000 (min)	30,000 (min)
Rear Nut Fixing Torque:	12Nm max.	12Nm max.
Materials		
Mouldings:	Nylon	Nylon
Tags/Terminations:	Brass, Tin Plated	Brass, Tin Plated
Switch Body & Button:	Stainless Steel (Polished)	Stainless Steel (Polished)
Contacts:	Silver	Silver
Variants:	Nickel Plated Brass version details on request	Nickel Plated Brass version details on request
<b>RoHS</b>	Compliant	Compliant

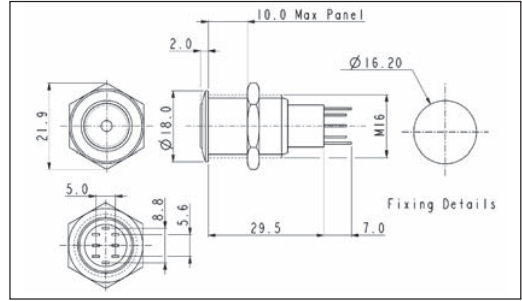
Stainless Steel Illuminated Momentary

**FRONT PANEL MOUNTING**



**MP0045/1D1**

- Dot Illuminated
- 18mm bezel diameter
- D.P.C.O.
- 3A, 250V ac
- Red, Green, Amber or Blue Illumination
- Separate LED Terminals

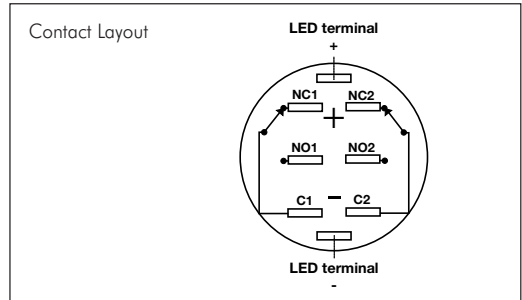
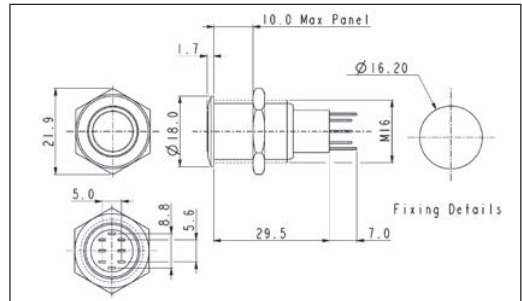


**FRONT PANEL MOUNTING**



**MP0045/1D2**

- Ring Illuminated
- 18mm bezel diameter
- D.P.C.O.
- 3A, 250V ac
- Red, Green, Amber or Blue Illumination
- Separate LED Terminals



Specification	MP0045/1D1/Colour/Voltage	MP0045/1D2/Colour/Voltage
Terminations:	Solder Tags	Solder Tags
Illumination:	Dot	Ring
Switching:	D.P.C.O. Momentary Action	D.P.C.O. Momentary Action
Max. Switch Rating:	3A, 250Vac	3A, 250Vac
LEDs		
Colours	Red      Green      Amber      Blue	Red      Green      Amber      Blue
Part No.	/RD      /GN      /AM      /BL	/RD      /GN      /AM      /BL
Voltage	12Vdc    220Vdc	12Vdc    220Vdc
Part No.	/012    /220	/012    /220
Contact Resistance:	50mΩ max. @ 1A, 2Vdc	50mΩ max. @ 1A, 2Vdc
Insulation Resistance:	>10 <sup>3</sup> MΩ @ 500Vac	>10 <sup>3</sup> MΩ @ 500Vac
Dielectric Strength:	>2.0kVac	>2.0kVac
Operating Temp. Range:	-20°C to +55°C	-20°C to +55°C
Operations		
Mechanical:	200,000 (min)	200,000 (min)
Electrical:	30,000 (min)	30,000 (min)
Rear Nut Fixing Torque:	12Nm	12Nm
Materials		
Mouldings:	Nylon	Nylon
Tags:	Brass, Silver Plated	Brass, Silver Plated
Switch Body & Button:	Stainless Steel (Polished)	Stainless Steel (Polished)
Variants	Prominent Button, details on request	Prominent Button, details on request
<b>RoHS</b>	Compliant	Compliant

SWITCHES

Downloaded from [Elcodis.com](http://Elcodis.com) electronic components distributor

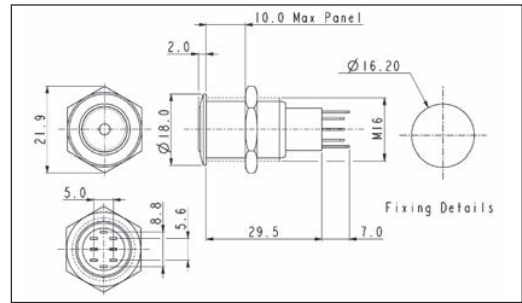
**Stainless Steel Illuminated Latching**

**FRONT PANEL MOUNTING**



**MP0045/1E1**

- Dot Illuminated
- 18mm bezel diameter
- D.P.C.O.
- 3A, 250V ac
- Red, Green, Amber or Blue Illumination
- Separate LED Terminals

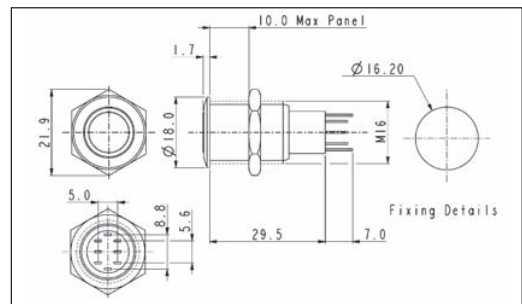


**FRONT PANEL MOUNTING**

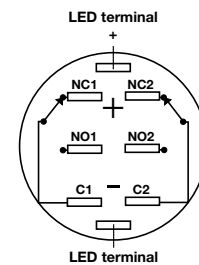


**MP0045/1E2**

- Ring Illuminated
- 18mm bezel diameter
- D.P.C.O.
- 3A, 250V ac
- Red, Green, Amber or Blue Illumination
- Separate LED Terminals



**Contact Layout**



Specification	MP0045/1E1/Colour/Voltage	MP0045/1E2/Colour/Voltage
Terminations:	Solder Tags	Solder Tags
Illumination:	Dot	Ring
Switching:	D.P.C.O. Latching Action	D.P.C.O. Latching Action
Max. Switch Rating:	3A, 250Vac	3A, 250Vac
LEDs		
Colours	Red Green Amber Blue	Red Green Amber Blue
Part No.	/RD /GN /AM /BL	/RD /GN /AM /BL
Voltage	12Vdc 220Vdc	12Vdc 220Vdc
Part No.	/012 /220	/012 /220
Contact Resistance:	50mΩ max. @ 1A, 2Vdc	50mΩ max. @ 1A, 2Vdc
Insulation Resistance:	>10 <sup>3</sup> MΩ @ 500Vac	>10 <sup>3</sup> MΩ @ 500Vac
Dielectric Strength:	>2.0kVac	>2.0kVac
Operating Temp. Range:	-20°C to +55°C	-20°C to +55°C
Operations		
Mechanical:	200,000 (min)	200,000 (min)
Electrical:	30,000 (min)	30,000 (min)
Rear Nut Fixing Torque:	12Nm	12Nm
Materials		
Mouldings:	Nylon	Nylon
Tags:	Brass, Silver Plated	Brass, Silver Plated
Switch Body & Button:	Stainless Steel (Polished)	Stainless Steel (Polished)
Variants	Prominent Button, details on request	Prominent Button, details on request
<b>RoHS</b>	Compliant	Compliant

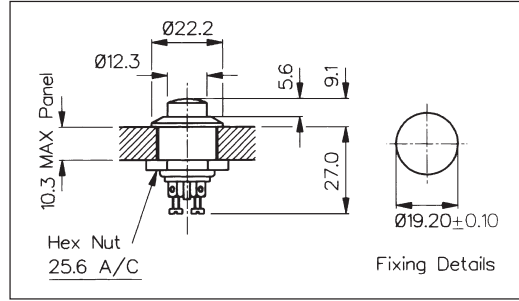
Push Button

**FRONT PANEL MOUNTING**



**MP0012/Col**

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

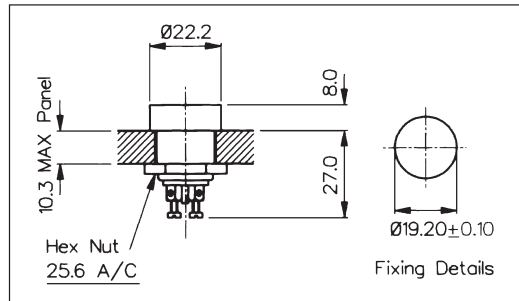


**FRONT PANEL MOUNTING**




**MP0012/1/Col**

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

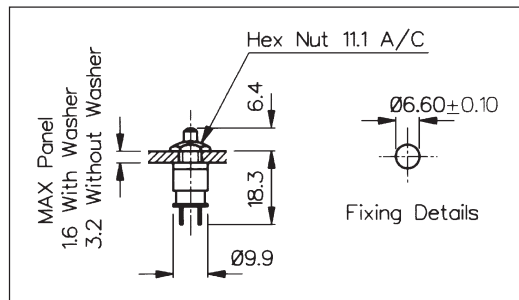


**REAR PANEL MOUNTING**



**MP0016**

- S.P. Push to Make
- Solder Tags
- 1A, 28Vac/dc
- 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	S.P. Push to Make Slow Momentary Action	S.P. Push to Make Slow Momentary Action
Max. Rating:	0.25A. 250Vac, 1A. 110Vac, 2A. 12Vac/dc	0.25A. 250Vac, 1A. 110Vac, 2A. 12Vac/dc	1A 28Vac/dc (non-inductive)
Contact Resistance:	<15mΩ	<15mΩ	<15mΩ
Insulation Resistance:	>10 <sup>4</sup> MΩ	>10 <sup>4</sup> MΩ.	>10 <sup>4</sup> MΩ
Dielectric Strength:	>2.5kVac	>2.5kVac	>2.0kVac
Operating Temp. Range:	-20°C to +85°C	-20°C to +85°C	-20°C to +85°C
Operating Pressure (typ):	936gms (33ozs)	936gms (33ozs)	634gms (22ozs)
Materials:			
Moulding:	Glass Filled Nylon	Glass Filled Nylon	Glass Filled Nylon
Body:	Brass, Chrome Plated	Brass, Chrome Plated	Brass, Chrome Plated
Contacts/Terms:	Brass, Silver Plated	Brass, Silver Plated	Brass, Silver Plated
Variants:	Button Colour: Standard - Black, /RD (Red)	Button Colour: Standard - Black, /RD (Red)	Button Colour: Standard - Black, /RD (Red)
<b>RoHS</b>	Compliant	Compliant	Compliant

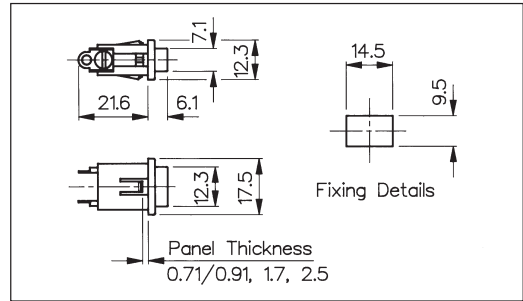
SWITCHES

Push Button

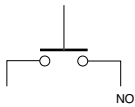
FRONT PANEL MOUNTING



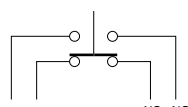
- S.P. Push to Make
- Solder Tags
- Nylon Body & Button



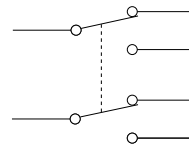
SWITCH CONTACT OPERATION



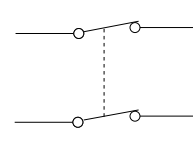
S.P. Push to Make  
S.P.M.B.



S.P.C.O.



D.P.C.O.




D.P.M.B.

Specification	MP0022/Colour
Terminations:	Solder Tags
Switching:	S.P. Push to Make Slow Momentary Action
Max. Rating:	0.25A. 250Vac, 0.5A. 110Vac, 1A. 0.1 to 28Vac/dc
Contact Resistance:	<15mΩ
Insulation Resistance:	>10 <sup>4</sup> MΩ
Dielectric Strength:	>2.5kVac
Operating Temp. Range:	-20°C to +70°C
Sealing:	
Materials:	
Moulding:	Nylon
Tags:	Brass, Silver Plated
Body:	Nylon
Contacts/Terms:	Brass, Silver Plated
Variants:	Button Colours: Standard - Black, /WH (White) and /RD (Red). /TERM - (Screw terminals)
<b>RoHS</b>	Compliant

SWITCHES

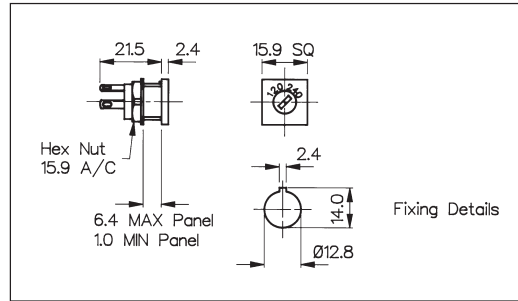
Voltage Selectors

**120/240V VOLTAGE SELECTOR**




**VS0001**

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

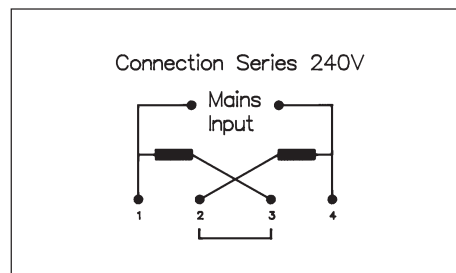
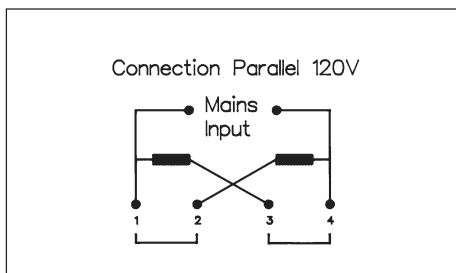
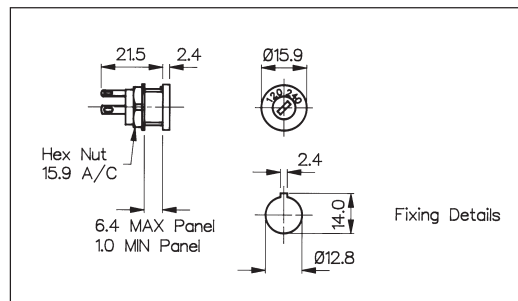




**120/240V VOLTAGE SELECTOR**



**VS0002**

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



Specification	VS0001	VS0002
Max. Rating:	6.3A, 120/240V	6.3A, 120/240V
Insulation Resistance:	>10 <sup>6</sup> MΩ	>10 <sup>6</sup> MΩ.
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:	Glass Filled Nylon UL94V-1	Glass Filled Nylon UL94V-1
Tags:	Brass, Silver Plated	Brass, Silver Plated
Contacts:	Copper Silver Alloy	Copper Silver Alloy
Approvals:		
Variants:	Other markings, details on request	Other markings, details on request
	<b>RoHS</b>	Compliant

SWITCHES