

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.

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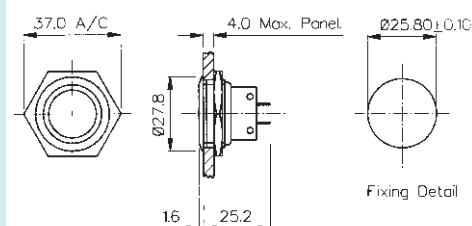


Front Panel Mounting



MP0027

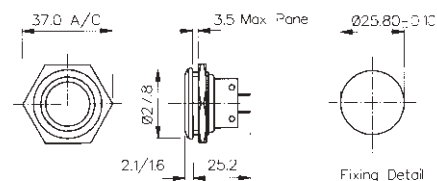
- 28mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac



Front Panel Mounting

MP0038
Sealed to IP66

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

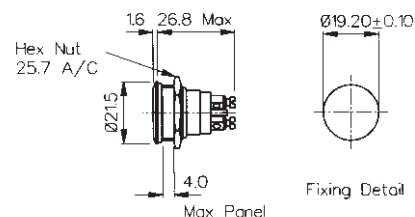


Specifications	MP0027	MP0038
Terminations:	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250Vac 2A, 28Vdc	5A, 250Vac 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10 ³ MΩ	>10 ³ MΩ
Dielectric Strength:	>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 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
Operations		
Mechanical:	1,000,000 (min)	1,000,000 (min)
Electrical:	35,000 (min)	35,000 (min)
Operating Pressure:	7.5N (typ)	12.5N (typ)
Rear Nut Fixing Torque:	2.5Nm	1.13Nm
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:	1.0" x 26TPI	1.0" x 26TPI
RoHS	Compliant	Compliant

Front Panel Mounting


MP0037
 Sealed to IP68

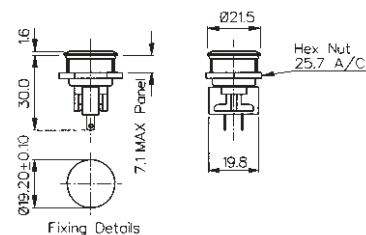
- Front Panel Sealed to IP68
- 21.5mm diameter
- S.P. Push to Make
- 1A, 50Vac/dc
- Industry Standard Size



Front Panel Mounting


MP0031
 Sealed to IP66

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



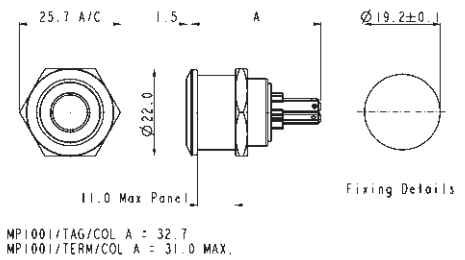
Specifications	MP0037	MP0031
Terminations:	Screw Terminals	Solder Tags
Switching:	S.P. Push to make Momentary action	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	1A, 50Vac/dc	5A, 250Vac 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10 ⁵ MΩ	>10 ³ MΩ
Dielectric Strength:	>1.0kVac	>2.0kVac
Operating Temp. Range:	-20°C to +70°C	-20°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP68 EN 60529:1992+A2:2013 (Micro switch not sealed)	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
IP68 rating 10M for 2 weeks test:	Passed	
Operations		
Mechanical:	1,000,000 (min)	1,000,000 (min)
Electrical:	30,000 (min)	35,000 (min)
Operating Pressure:	7.5N (typ)	4.7N (typ)
Rear Nut Fixing Torque:	0.57Nm	0.57Nm
Materials		
Mouldings:	Glass Filled Nylon	Glass Filled Nylon
Tags/Terminations:	Brass, Silver Plated	Brass, Tin Plated
Switch Body & Button:	Stainless Steel	Stainless Steel
Contacts:	Brass, Silver Plated, Silver	Fine Silver
Thread size:	0.747" x 26TPI	0.747" x 26TPI
RoHS	Compliant	Compliant

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



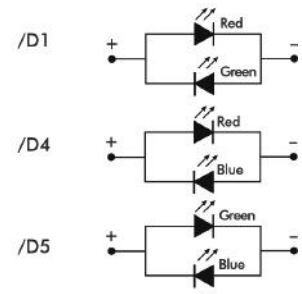
Specifications

MPI001/Termination/Colour/Voltage

Illumination style:	Dot							
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. An appropriate resistor must be series connected by the user. Voltages as above.							
	/6	6Vdc						
	/12	12Vdc						
	/24	24Vdc						
Contact Resistance:	<100m Ω							
Insulation Resistance:	>10 ⁹ M Ω							
Dielectric Strength:	Contact to Panel >2.0kV Contact to Contact 1500							
Operating Temp. Range:	-30°C to +70°C							
Sealing (Front of panel only):	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)							
Operations								
Mechanical:	750,000 (min)							
Electrical:	35,000 (min)							
Operating Pressure:	12N							
Rear Nut Fixing Torque:	0.57Nm							
Screw Terminal Torque	0.2Nm Max							
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

Dual Colour LED Configuration

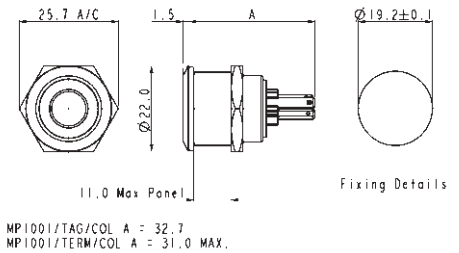


Front Panel Mounting



MPI002- front panel seal to IP66

- 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



Specifications

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	/D6	
Colours	Red	Green	Amber	Blue	White	Red/Green	Red/Blue	Green/Blue	Green/White	
Luminous Intensity	900mcd	2500mcd	900mcd	1500mcd	900mcd	2500mcd/5000mcd	2000mcd/850mcd	4000mcd/2000mcd	178mcd/450mcd	
Forward Voltage	1.85V	3.5V	2.3V	3.5V	3.6V	2.05V/3.6V	2.0V/3.6V	3.6V/3.6V	3.4V/3.2V	
Forward Current	20mA	20mA	20mA	20mA	20mA	20mA	20mA	20mA	20mA	
Moulding Colour	Red	Green	Amber	Blue	White	Black	Black	Black	Black	

Illumination Voltage:	/no suffix No resistor fitted. An appropriate resistor must be series connected by the user. Voltages as above.									
	/6	6Vdc								
	/12	12Vdc								
	/24	24Vdc								
Contact Resistance:	<100mΩ									
Insulation Resistance:	>10 ³ MΩ									
Dielectric Strength:	Contact to Panel >2.0kV									
	Contact to Contact 1500									
Operating Temp. Range:	-30°C to +70°C									
Sealing (Front of panel only):	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)									
Operations										
Mechanical:	750,000 (min)									
Electrical:	35,000 (min)									
Operating Pressure:	12N									
Rear Nut Fixing Torque:	0.57Nm									
Screw Terminal Torque	0.2Nm Max									

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									

Dual Colour LED Configuration

/D1

+

•

Red

Green

/D4

+

•

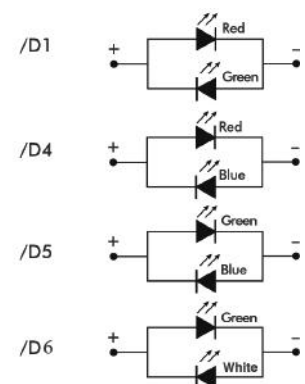
Red

Blue

<

ESD Handling precautions must be taken
 Compliant

Dual Colour LED Configuration

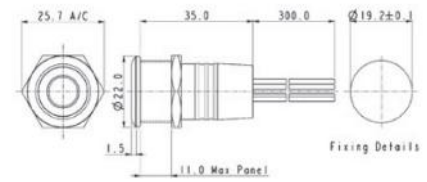


Rear Panel Sealed - Flying Leads



MPI002/FL/xx/x

- 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



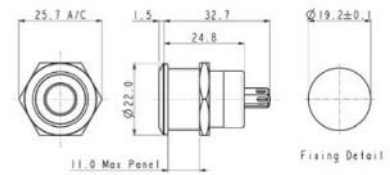
Flying lead colours: LED: red + and black -. Switch contacts: white.

Rear Panel Sealed - Solder Tags



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.

Specifications

MPI001/Termination/Colour/Voltage

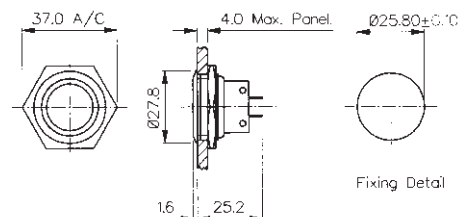
MPI002/Termination/Colour/Voltage

Illumination style: Terminations: Switching: Max. Switch Rating: LEDs (ratings @ 20mA) Part No. Colours Luminous Intensity Forward Voltage Forward Current Moulding Colour	Dot /FL (Flying leads) /RP (Solder tags) Single pole, push to make, tactile (momentary action) 50mA, 24Vdc /RD /GN /AM /BL /WH Red Green Amber Blue White 900mcd 2500mcd 900mcd 1500mcd 900mcd 1.85V 3.5V 2.3V 3.5V 3.6V 20mA 20mA 20mA 20mA 20mA Red Green Amber Blue White	Ring /FL (Flying leads) /RP (Solder tags) Single pole, push to make, tactile (momentary action) 50mA, 24Vdc /RD /GN /AM /BL /WH Red Green Amber Blue White 900mcd 2500mcd 900mcd 1500mcd 900mcd 1.85V 3.5V 2.3V 3.5V 3.6V 20mA 20mA 20mA 20mA 20mA Red Green Amber Blue White
Illumination Voltage: Contact Resistance: Insulation Resistance: Dielectric Strength: Operating Temp. Range: Sealing (Front of panel only): Operations Mechanical: Electrical: Operating Pressure: Rear Nut Fixing Torque: Materials Switch assembly: Tags: Terminals: Switch Body & Button: Lens and Lens Body: O ring: Internal seal: Contact Plate: Thread size:	/no suffix No resistor fitted. An appropriate resistor must be series connected by the user. Voltages as above. /6 6Vdc /12 12Vdc /24 24Vdc <100mΩ >10 ³ MΩ Contact to Panel >2.0kV Contact to Contact 1500 -30°C to +70°C Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed) 750,000 (min) 35,000 (min) 12N 0.57Nm UL94V-0 rated Polyamide (Nylon) Copper Alloy Copper Alloy Stainless Steel Polycarbonate Nitrile Silicone Gold Plated 18.97mm x 26TPI ESD Handling precautions must be taken Compliant	/no suffix No resistor fitted. An appropriate resistor must be series connected by the user. Voltages as above. /6 6Vdc /12 12Vdc /24 24Vdc <100mΩ >10 ³ MΩ Contact to Panel >2.0kV Contact to Contact 1500 -30°C to +70°C Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed) 750,000 (min) 35,000 (min) 12N 0.57Nm UL94V-0 rated Polyamide (Nylon) Copper Alloy Copper Alloy Stainless Steel Polycarbonate Nitrile Silicone Gold Plated 18.97mm x 26TPI ESD Handling precautions must be taken Compliant

Front Panel Mounting


MPB038
 Sealed to IP66

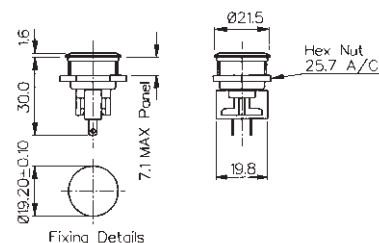
- Front Panel Sealed to IP66
- 28mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac



Front Panel Mounting


MPB031
 Sealed to IP66

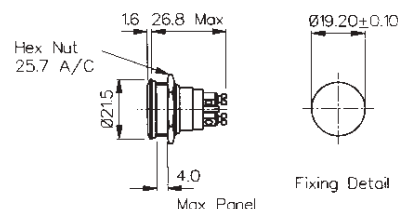
- Front Panel Sealed to IP66
- 21mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac



Front Panel Mounting


MPB037
 Sealed to IP68

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



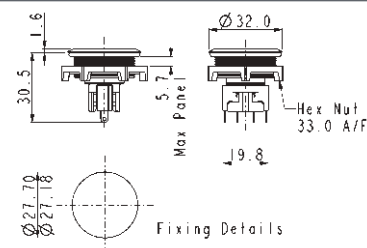
Specifications	MPB038	MPB031	MPB037
Terminations:	Solder Tags	Solder Tags	Screw Terminals
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)	S.P. Push to make Momentary action
Max. Rating:	5A, 250Vac. 2A, 28Vdc	5A, 250Vac. 2A, 28Vdc	1A, 50Vac/dc
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10 ³ MΩ	>10 ³ MΩ	>10 ⁵ 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 EN60529-1:1992 + A2:2013. (Micro switch not sealed)	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)	Protection Classification: IP68 EN60529-1:1992 + A2:2013. (Micro switch not sealed) (10m for 2 weeks)
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, Tin Plated
Switch Body & Button:	Brass	Brass	Brass
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

Front Panel Mounting - Low Profile



MP0050

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

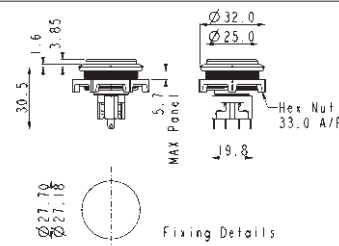


Front Panel Mounting - Protruding Profile



MP0050/2

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



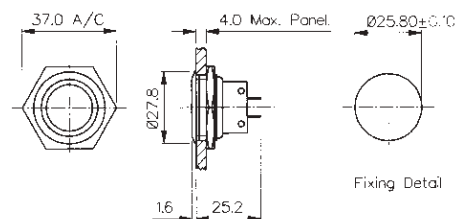
Specifications	MP0050	MP0050/2
Terminations:	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250Vac. 2A, 28Vdc	5A, 250Vac. 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10 ³ MΩ	>10 ³ MΩ
Dielectric 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 EN60529-1:1992 + A2:2013. (Micro switch not sealed)	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (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	4.7N (typ)
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
RoHS	Compliant	Compliant

Front Panel Mounting



MP0027/3

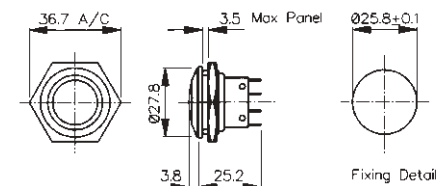
- 28mm diameter
- Domed Profile
- S.P.C.O. Microswitch
- 5A, 250Vac



Front Panel Mounting

MP0038/3
Sealed to IP66

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

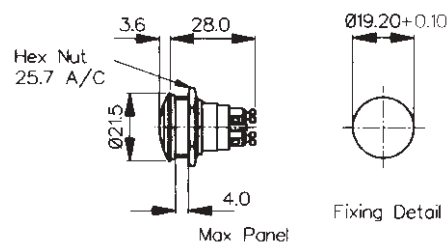


Specifications	MP0027/3	MP0038/3
Terminations:	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250Vac. 2A, 28Vdc	5A, 250Vac. 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10 ³ MΩ	>10 ³ MΩ
Dielectric 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 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
Operations		
Mechanical:	1,000,000 (min)	1,000,000 (min)
Electrical:	35,000 (min)	35,000 (min)
Operating Pressure:	7.5N (typ)	12.5N (typ)
Rear Nut Fixing Torque:	2.5Nm	1.13Nm
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:	1.0" x 26TPI	0.747" x 26TPI
RoHS	Compliant	Compliant

Front Panel Mounting

MP0037/3
Sealed to IP68

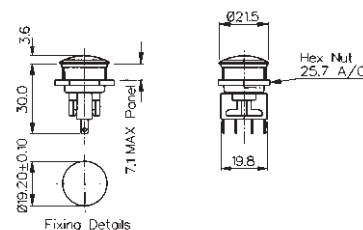
- Front Panel Sealed to IP68
- 21.5mm diameter
- Domed Profile
- S.P. Push to Make
- 1A, 50Vac/dc



Front Panel Mounting

MP0031/3
Sealed to IP66

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



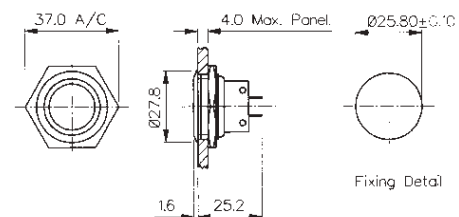
Specifications	MP0037/3	MP0031/3
Terminations:	Screw Terminals	Solder Tags
Switching:	S.P. Push to make Momentary action	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	1A, 50Vac/dc	5A, 250Vac. 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10 ⁵ MΩ	>10 ³ MΩ
Dielectric Strength:	>1.0kVac	>2.0kVac
Operating Temp. Range:	-20°C to +70°C	-20°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP68 EN60529-1:1992 + A2:2013. (Micro switch not sealed) (10m for 2 weeks)	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
Operations		
Mechanical:	1,000,000 (min)	1,000,000 (min)
Electrical:	35,000 (min)	35,000 (min)
Operating Pressure:	7.5N (typ)	4.7N (typ)
Rear Nut Fixing Torque:	2.5Nm	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:	Brass, Silver Plated, Silver	Fine Silver
Thread size:	0.747" x 26TPI	0.747" x 26TPI
RoHS	Compliant	Compliant

Front Panel Mounting



MP0027/2

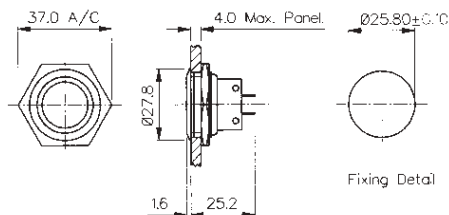
- 28mm diameter
- Prominent Button
- S.P.C.O. Microswitch
- 5A, 250Vac



Front Panel Mounting

MP0038/2
Sealed to IP66

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

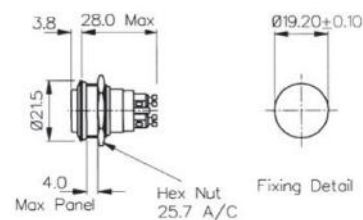


Specifications	MP0027/2	MP0038/2
Terminations:	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250Vac 2A, 28Vdc	5A, 250Vac. 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10 ³ MΩ	>10 ³ MΩ
Dielectric 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 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
Operations		
Mechanical:	1,000,000 (min)	1,000,000 (min)
Electrical:	35,000 (min)	35,000 (min)
Operating Pressure:	7.5N (typ)	12.5N (typ)
Rear Nut Fixing Torque:	2.5Nm	1.13Nm
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:	1.0" x 26TPI	1.0" x 26TPI
RoHS	Compliant	Compliant

Front Panel Mounting


 MP0037/2
 Sealed to IP68

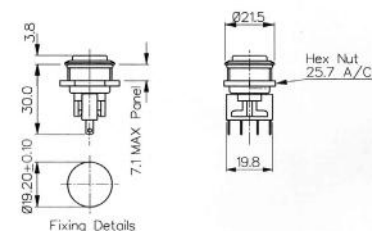
- Front Panel Sealed to IP68
- 21.5mm diameter
- Prominent Button
- S.P. Push to Make
- 1A, 50Vac/dc



Front Panel Mounting


 MP0031/2
 Sealed to IP66

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



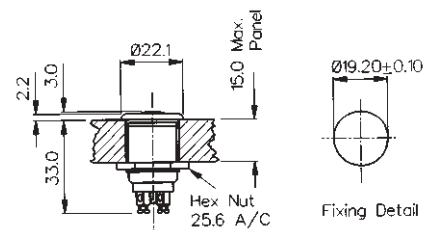
Specifications	MP0037/2	MP0031/2
Terminations:	Screw Terminals	Solder Tags
Switching:	S.P. Push to make Slow momentary action	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	1A, 50Vac/dc	5A, 250Vac. 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10 ⁵ MΩ	>10 ³ MΩ
Dielectric Strength:	>1.0kVac	>2.0kVac
Operating Temp. Range:	-20°C to +70°C	-20°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP68 EN60529-1:1992 + A2:2013. (Micro switch not sealed) (10m for 2 weeks)	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
Operations		
Mechanical:	1,000,000 (min)	1,000,000 (min)
Electrical:	35,000 (min)	35,000 (min)
Operating Pressure:	7.5N (typ)	4.7N (typ)
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:	Brass, Silver Plated, Silver	Fine Silver
Thread size:	0.747" x 26TPI	0.747" x 26TPI
RoHS	Compliant	Compliant

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

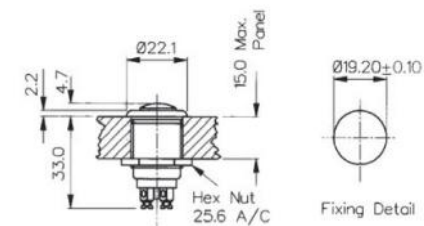


Front Panel Mounting



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



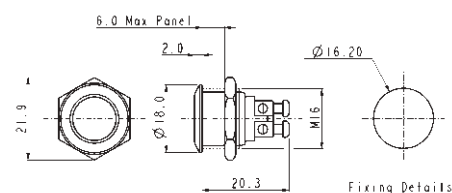
Specifications	MP0013, MP0033	MP0013/2, MP0033/2
Terminations:	Screw Terminals	Screw Terminals
Switching:	S.P. Push to make Slow momentary action	S.P. Push to make Slow momentary action
Max. Rating:	1A, 50Vac/dc	1A, 50Vac/dc
Contact Resistance:	<15mΩ	<15mΩ
Insulation Resistance:	>10 ⁴ MΩ	>10 ⁴ MΩ
Dielectric 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
Thread Size:	0.747" x 26TPI	0.747" x 26TPI
RoHS	Compliant	Compliant

Flush Profile



MP0042/1

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

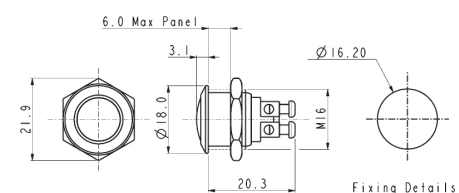


Domed Profile



MP0042/2

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

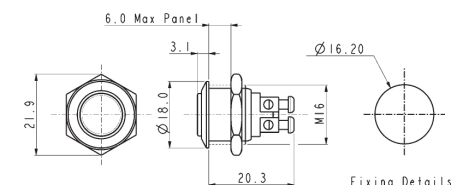


Prominent Button



MP0042/3

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



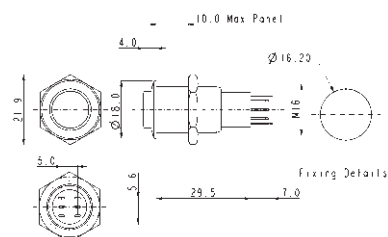
Specifications	MP0042/1	MP0042/2	MP0042/3
Terminations:	Screw Terminals	Screw Terminals	Screw Terminals
Switching:	S.P. Push to make	S.P. Push to make	S.P. Push to make
Max. Rating:	2A, 48Vdc	2A, 48Vdc	2A, 48Vdc
Contact Resistance:	50mΩ at 1A, 2V	50mΩ at 1A, 2V	50mΩ at 1A, 2V
Insulation Resistance:	>10 ³ MΩ @ 500Vdc	>10 ³ MΩ @ 500Vdc	>10 ³ 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
Thread size:	Gold Plated Brass version available	Gold Plated Brass version available	Gold Plated Brass version available
Sealing:	IP65	IP65	IP65
Impact Rating:	IK08	IK08	IK08
RoHS	Compliant	Compliant	Compliant

Low Profile



MP0045/1D

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O
- 250V ac

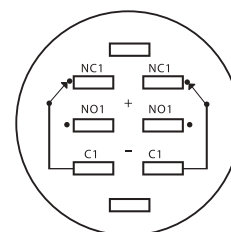
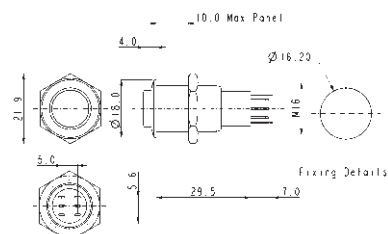


Prominent Button



MP0045/3D

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O
- 250V ac



Contact Layout

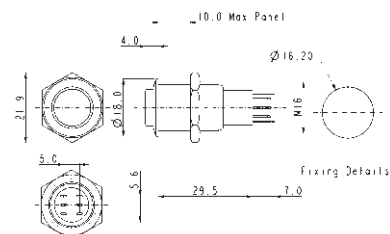
Specifications	MP0045/1D0NN000	MP0045/3D0NN000
Terminations:	Solder tags	Solder tags
Switching:	D.P.C.O Momentary Action	D.P.C.O Momentary Action
Max. Rating:	250V ac	250V ac
Contact Resistance:	50mΩ max. @ 1A, 2V	50mΩ max. @ 1A, 2V
Insulation Resistance:	>10 ³ MΩ @ 500Vdc	>10 ³ MΩ @ 500Vdc
Dielectric 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	12Nm
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

Low Profile



MP0045/1E

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O.
- 250V ac

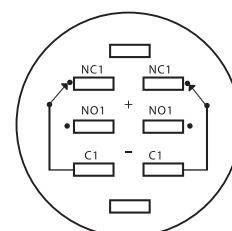
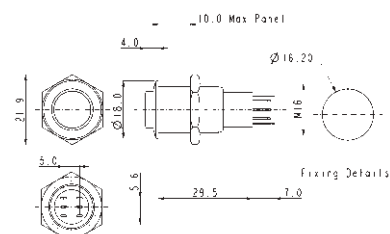


Prominent Button



MP0045/3E

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O.
- 250V ac



Contact Layout

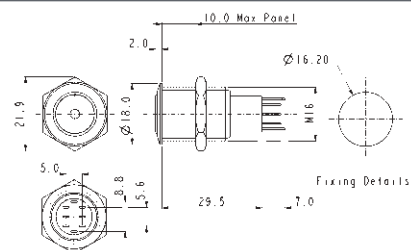
Specifications	MP0045/1E0NN000	MP0045/3E0NN000
Terminations:	Solder Tags	Solder Tags
Switching:	D.P.C.O. - Latching Action	D.P.C.O. - Latching Action
Max. Rating:	250V ac	250V ac
Contact Resistance:	50mΩ max. @ 1A, 2V	50mΩ max. @ 1A, 2V
Insulation Resistance:	>10 ³ MΩ @ 500Vdc	>10 ³ MΩ @ 500Vdc
Dielectric 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	12Nm
Materials		
Mouldings:	Nylon	Nylon
Tags/Terminations:	Brass, Tin Plated	Brass, Tin Plated
Switch Body & Button:	Stainless Steel (Polished)	Stainless Steel (Polished)
Contacts:	Silver	Silver
Thread size:	Nickel Plated Brass version Details on request	Nickel Plated Brass version Details on request
RoHS	Compliant	Compliant

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

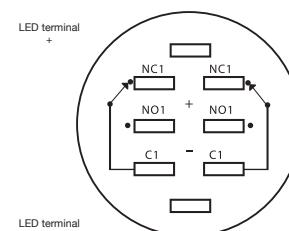
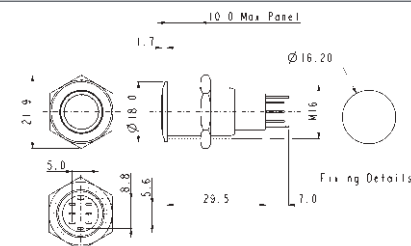


Front Panel Mounting



MP0045/1D2

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



Contact Layout

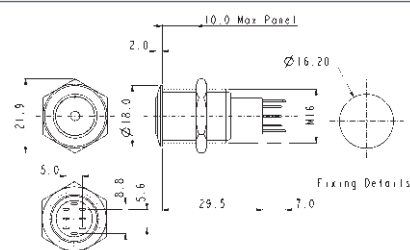
Specifications	MP0045/1D1/Colour/Voltage				MP0045/1D2/Colour/Voltage			
Terminations:	Solder Tags				Solder Tags			
Illumination:	Dot				Ring			
Switching:	D.P.C.O. Momentary Action				D.P.C.O. Momentary Action			
Max. Switch Rating:	3A, 250Vac				3A, 250Vac			
LEDs								
Colours	Red	Green	Amber	Blue	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:	>10³ MΩ @ 500Vac				>10³ 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			
RoHS	Compliant				Compliant			

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

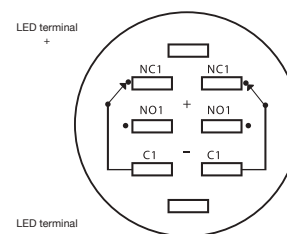
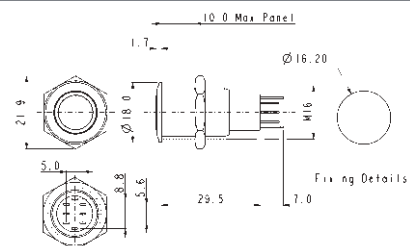


Front Panel Mounting



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

Specifications	MP0045/1E1/Colour/Voltage	MP0045/1E2/Colour/Voltage
Terminations:	Solder Tags	Solder Tags
Illumination:	Ring	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 ³ MΩ @ 500Vac	>10 ³ 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
RoHS	Compliant	Compliant



H8300RP - - -

Key Features

- Momentary or latching action
- Ratings up to 12(12) @ 250Vac
- Single and double pole
- Stainless steel button & bezel
- Vandal resistant construction
- Choice of body styles
- 19.2mm or 22.5mm mounting holes
- Front panel sealed to IP66
- Raised, flat or domed actuator options

Approvals and specifications

16(4)A 250Vac T85, 1E4 (10,000 Operations)
 12(12)A 250Vac T105, 1E4 (10,000 Operations)
 8(8)A 250Vac T105, 5E4 (50,000 Operations)
 6(6)A 250Vac T125, 5E4 (50,000 Operations)

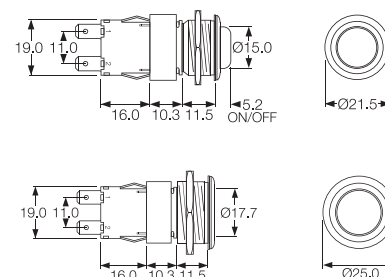
12A 250Vac DP, 13A 250Vac SP
 250Vac 1hp, 125Vac 1/2hp
 UL 85°C, file E45221, CSA file LR10990

In house test:
 10(10)A 250Vac—Indicative rating only

3mm contact gap.
 Technical data on pages 4 & 5 (switches),
 6 (indicators).

Dimensions

8300RP (H terminals shown)



Terminal	Function	Actuator	Body Code
C H 	8300 (alternate) Single pole ON - OFF 	R (for P body only) Raised top (stainless steel) 	
K T 	8301 (momentary ON) Single pole ON - OFF 	V Flat top (stainless steel) 	P (for R actuator only) Stainless steel, Soft profile bezel
V X 	8301 (momentary ON) Single pole ON - OFF 	P Domed top (stainless steel) 	M Stainless steel



C0911VA - - -

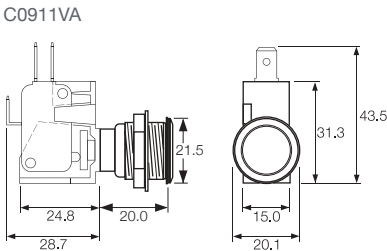
Key Features

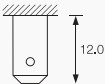


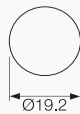
- Snap action switches
- Ratings up to 16A, 250Vac
- Round and rectangular buttons
- Single Pole C/O Switch

Approvals and specifications

- 16(4)A 250Vac 5E4 T85
- 16A 125/250Vac 3/4hp T85 50E3
125V 1/2 HP, 250V 3/4 HP, 0.4A 125Vdc, 0.2A 250Vdc
- Approvals apply to switch mechanism only.
μ contact gap.

Dimensions



Terminal	Function	Actuator	Body Code
	<div>0911</div> <div>(momentary)</div> <div>ON - ON</div> 	<div>V Flat top (stainless steel)</div> 	<div>A</div> <div>Stainless steel</div> <div>Chamfer profile bezel</div>  <div>Panel cut-out</div> <div>Panel thickness up to 8.0mm</div>

Bulgin's broad line of pushbutton switches are available in various sizes and configurations. This includes a variety of illumination and terminal options as well as several with high inductive power ratings suitable for motor driven applications. These switches can be found in many markets including home appliances, commercial, medical, audio and security.

- ⬡ Miniature, round and rectangular push button switches available
- ⬡ Ratings up to 16A, 250V ac
12(12)A 250V ac rating also available
- ⬡ Latching and momentary actions
- ⬡ Choice of actuators
(custom option also available)
- ⬡ Square and Round Mounting Styles

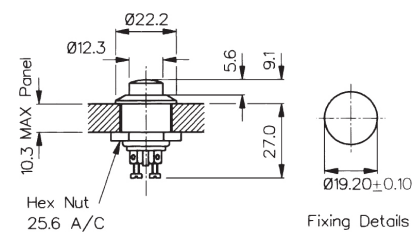


Front Panel Mounting



MP0012/Col

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

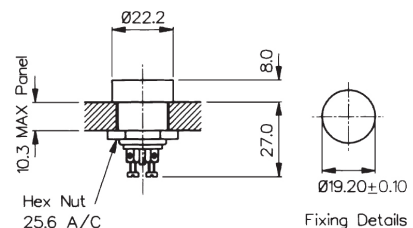


Front Panel Mounting



MP0012/1/Col

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

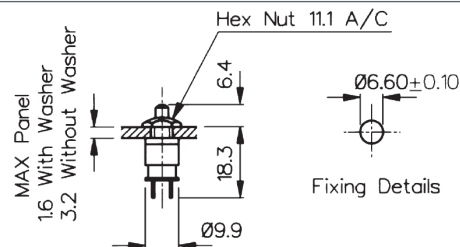


Rear Panel Mounting



MP0016

- S.P. Push to Make
- Solder Tags
- 1A, 28Vac/dc
- Brass Nickel Plated Body, Glass Filled Nylon Button



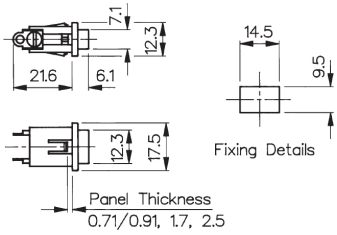
Specifications	MP0012/Colour	MP0012/1/Colour	MP0016/Colour
Terminations:	Screw Terminals	Screw Terminals	Solder Tags
Switching:	S.P. Push to Make Slow Momentary Action	S.P. Push to Make Slow Momentary Action	S.P. Push to Make Slow Momentary Action
Max. Rating:	0.25A. 250Vac, 1A. 110Vac, 2A. 12Vac/dc	0.25A. 250Vac, 1A. 110Vac, 2A. 12Vac/dc	1A 28Vac/dc (non-inductive)
Contact Resistance:	<15mΩ	<15mΩ	<15mΩ
Insulation Resistance:	>10 ⁴ MΩ	>10 ⁴ MΩ	>10 ⁴ 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
Operation Pressure (typ):	9.18 newtons	9.18 newtons	6.22 newtons
Materials			
Moulding:	Glass Filled Nylon Brass,	Glass Filled Nylon Brass,	Glass Filled Nylon Brass,
Body:	Brass, Chrome Plated	Brass, Chrome Plated	Brass, Chrome Plated
Contacts/Terms:	Brass, Silver Plated	Brass, Silver Plated	Brass, Silver Plated
Variant	Button Colour: Standard - Black, /RD (Red)	Button Colour: Standard - Black, /RD (Red)	Button Colour: Standard - Black, /RD (Red)
RoHS	Compliant	Compliant	Compliant

Front Panel Mounting



MP0022/Col

- 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.

Specifications 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 ⁴ 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
Variant	Button Colours: Standard - Black, /WH (White) and /RD (Red). /TERM - (Screw terminals)
RoHS	Compliant

8300 Series Push Button

8(8)A 250Vac & 12(12)A 250Vac



Key Features

- Miniature push button
- 8A Inductive current rating
- Ratings up to 12(12)A, 250V ac (H suffix)
- Illuminated and nonilluminated
- Single and double pole
- Latching and momentary
- Slotted actuator for custom buttons
- Industry standard panel cutout
- BioCote antimicrobial option
- Panel cut out: 19.3 x 12.9

Approvals and specifications

16(4)A 250Vac T85, 1E4 (10,000 Operations)
12(12)A 250Vac T105, 1E4 (10,000 Operations)
8(8)A 250Vac T105, 5E4 (50,000 Operations)
6(6)A 250Vac T125, 5E4 (50,000 Operations)

8350, 8351, 8353, 8354
12A 250Vac DP, 250Vac 1hp, 125Vac 1/2hp

8300, 8301, 8303, 8304
13A 250Vac SP, 250Vac 1hp, 125Vac 1/2hp

UL 85°C, file E45221, CSA file LR10990

In house test:
10(10)A 250Vac—Indicative rating only

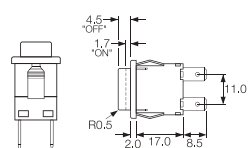
BioCote antimicrobial additive. Independently verified to ISO22196:2007.

3mm contact gap.

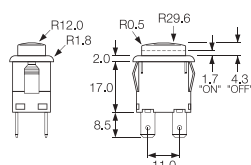
Terminal	Function	Actuator	Body Code	Body Colour
C 6.3 x 0.8 10.1	 4.8 x 0.8 8.5	 4.8 x 0.8 8.5	 4.8 x 0.8 8.5	 4.8 x 0.8 8.5
H 4.8 x 0.8 8.5	A 4.8 x 0.8 8.5	 4.8 x 0.8 8.5	 4.8 x 0.8 8.5	 4.8 x 0.8 8.5
K 2.8 x 0.8 8.5	 2.8 x 0.8 8.5	 2.8 x 0.8 8.5	 2.8 x 0.8 8.5	 2.8 x 0.8 8.5
T 2.8 x 0.8 8.5	 2.8 x 0.8 8.5	 2.8 x 0.8 8.5	 2.8 x 0.8 8.5	 2.8 x 0.8 8.5
X 4.5 7.0 PCB 0.8 Sq	 4.5 7.0 PCB 0.8 Sq	 4.5 7.0 PCB 0.8 Sq	 4.5 7.0 PCB 0.8 Sq	 4.5 7.0 PCB 0.8 Sq
V 3.7 Ctrs 4.3 Dual pin PCB (Call sales for mounting dims)	 3.7 Ctrs 4.3 Dual pin PCB (Call sales for mounting dims)	 3.7 Ctrs 4.3 Dual pin PCB (Call sales for mounting dims)	 3.7 Ctrs 4.3 Dual pin PCB (Call sales for mounting dims)	 3.7 Ctrs 4.3 Dual pin PCB (Call sales for mounting dims)

Dimensions

Actuator A
Body B



Actuator J
Body E



Examples



H8350AB ---
T8350AB ---




H8353JE ---
T8353JE ---



H8353EB ---
T8353EB ---



H8353CB ---
T8353CB ---

Actuator Colour	Lamp Voltage	Legend	Legend Colour	Options	Biocote
LIT					
A Amber	— None			H 12(12)A 250Vac switch rating	B Biocote
C Clear	2 125V Neon			Finish Matt finish standard except on J and D actuators which are gloss	
G Green	3 250V Neon			Colour Call sales for custom colours A full range is available for large orders	
R Red	7 12V Filament			Legend printing Select from the examples or call sales for custom legends.	
UNLIT	8 24V Filament			Special buttons Some of the many options are shown Call sales for the full range	
B Black				L167 Protective cover  Snaps on to switch bodies fitted with "A" or "J" style actuators, this reduces panel thickness by 0.8mm	
R Red				BioCote Antimicrobial Additive Moulded components have antimicrobial properties using BioCote silver ion technology.	
W White					

8200 Series Push Button

8(8)A 250Vac & 12(12)A 250Vac



Key Features

- Miniature push button
- 8A Inductive current rating
- Ratings up to 12(12)A, 250V ac (H suffix)
- Without button
- Sub panel mount
- Push on, solder or PCB terminals
- Latching and momentary

Approvals and specifications

16(4)A 250Vac T85, 1E4 (10,000 Operations)
12(12)A 250Vac T105, 1E4 (10,000 Operations)
8(8)A 250Vac T105, 5E4 (50,000 Operations)
6(6)A 250Vac T125, 5E4 (50,000 Operations)

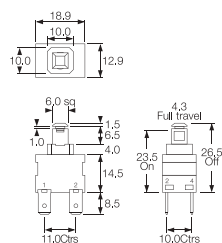
12A 250Vac
250Vac 1hp, 125Vac 1/2hp
UL 85°C, file E45221, CSA file LR10990

3mm contact gap.

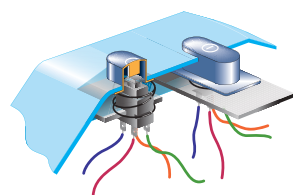
Terminal	Function	Actuator	Body Code
<p>C</p> <p>6.3 x 0.8</p> <p>10.1</p>	<p>Approvals & ratings vary with function Single pole switches use terminals 1 & 2 (& 3)</p> <p>8200 Single Pole ON - OFF</p>	<p>A Standard actuator for snap-on custom adaptors</p> <p>8.0</p> <p>B Flat top actuator</p> <p>5.5</p> <p>C Curved top actuator</p> <p>8.0</p> <p>Examples of possible actuation methods Using a Snap on adaptor</p> <p>Using a Hinged Actuator</p>	<p>A Standard body</p> <p>See dimensioned drawings for details</p> <p>C As standard body but with side support peg for use with M PCB terminals</p> <p>X and V PCB terminals. Additional dummy terminals may be supplied for extra support.</p>
<p>H</p> <p>4.8 x 0.8</p> <p>8.5</p> <p>A</p> <p>7.6</p> <p>As "H" but right angle 4.8 x 0.8</p>	<p>8201 Single Pole ON - OFF (momentary ON)</p>		
<p>K</p> <p>2.6</p> <p>1.5</p> <p>8.5</p> <p>2.8 x 0.8</p> <p>T</p> <p>2.6</p> <p>1.5</p> <p>7.0</p> <p>Solder</p> <p>V</p> <p>3.7 Ctrs</p> <p>4.3</p> <p>Dual pin PCB (Call sales for mounting dims)</p>	<p>8250 Double Pole ON - OFF</p>		
<p>X</p> <p>4.5</p> <p>7.0</p> <p>PCB 0.8 Sq</p>	<p>8251 Double Pole ON - OFF (momentary ON)</p>		

Dimensions

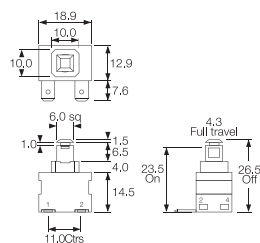
'A' body with 'H' 4.8 terminals



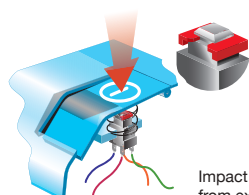
Example of possible mounting styles



'A' body with 'A' right angle 4.8 terminals

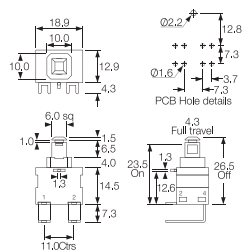


Alternative Actuator



Impact washer resists damage from excessive operator force

'C' body with 'M' right angle PCB terminals



Examples



C8250AA ---
with impact
washer M1226



X8201AA ---



K8200AA ---



A8200AA ---



M8200AC ---



Example of M8200AC

7000 Series Push Button

16A 250Vac



Key Features

- Round and rectangular push button switches
- Ratings up to 16A, 250V ac
- Latching and momentary
- Illuminated & non-illuminated
- Matching indicators
- Low profile version
- Panel cut outs: 25.0 dia 27.2 x 22.3

Approvals and specifications

16(4)A 250Vac T125
8(8)A 250Vac T85

UL CSA 16A Non Ind, 250Vac 1hp, 125Vac 1/2hp
UL 65°C, file no. E45221, CSA file no. LR10990

3mm contact gap.

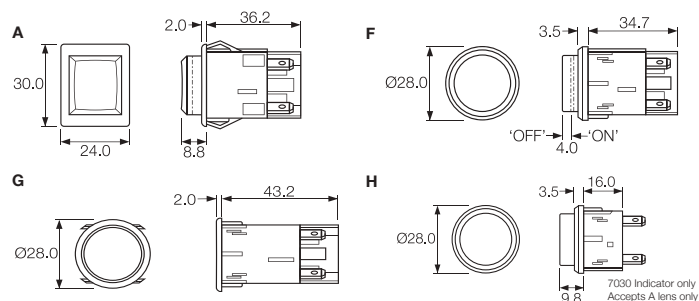
Terminal	Function	Actuator	Body Code
<p>C</p> <p>6.3 x 0.8</p>	<p>Approvals & ratings vary with function Single pole switches use terminals 1 & 2 (& 3)</p> <p>7000 Single Pole ON - OFF</p> <p>7001 Single Pole (momentary) ON - OFF</p> <p>7003 Single Pole (with light) ON - OFF</p> <p>7004 Single Pole (momentary) with light ON - OFF</p> <p>7050 Double Pole ON - OFF</p> <p>7051 Double Pole with light ON - OFF</p> <p>7053 Double pole with light ON - OFF</p> <p>7054 Double pole (momentary ON) with light ON - OFF</p> <p>7030 Indicator UL E63363 CSA LR29381</p>	<p>A Round actuator shown in F body</p> <p>A Round actuator shown in G body</p> <p>B Round actuator - medium shown in F body</p> <p>C Round actuator - long shown in F body</p> <p>D Round actuator - sub panel mount</p> <p>S Rectangular actuator Shown in "A" body N/A for 7030</p>	<p>Panel cut-outs</p> <p>F H G Body types fit either cut-out</p> <p>A</p> <p>27.2 27.3</p> <p>22.3/22.4</p> <p>Cut-outs must be punched in the direction of insertion</p>

Dimensions

Panel thickness:

A - 0.8 - 2.5mm

F, G, H - 0.8 - 5.0mm



Examples



C7000AF ---



C7003AF ---



C7050SA ---



C7053AG ---

Body Colour	Actuator Colour	Lamp Voltage	Legend	Legend Colour	Options
B Black	LIT A Amber	— None			<p>Finish Matt finish is standard on bodies. Gloss finish is standard on actuators.</p> <p>Colour Call sales for custom colours. A full range is available for large orders.</p> <p>Legend printing A wide range is available or call sales for custom legends.</p> <p>Lamp voltage Call sales for details of available voltages.</p> <p>Weatherproof housing (E) Additional housing which fits round body switches with an oversize housing with a clear silicone cover designed to IP65. Mounting hole dia: 38.0mm</p>
W White	C Clear	2 125V Neon			
	G Green	3 250V Neon			
	R Red	7 12V Filament			
		8 24V Filament			
	UNLIT				
	B Black				
	R Red				
	W White				

0911 Push Button Switches

0.5A 250Vac



Key Features

- Snap action switches
- Ratings up to 16A, 250Vac
- Round and rectangular buttons

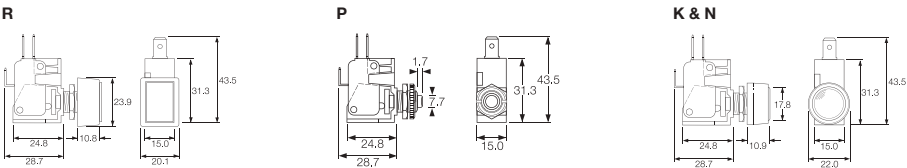
Approvals and specifications

16(4)A 250Vac 5E4 T85

16A 125/250Vac 3/4hp T85 50E3
125V 1/2 HP, 250V 3/4 HP, 0.4A 125Vdc, 0.2A 250Vdc

Approvals apply to switch mechanism only.
μ contact gap.

Dimensions



Terminal	Function	Actuator	Body Code	Options
	0911 (momentary) ON - ON	R Rectangular bezel P Short K with satin chrome bezel N with nylon bezel 	 Panel Cut-out Panel thickness Both nuts 2.5mm No backnut 4.0mm	Call factory for custom colours

0916 - 0920 Push Button Switches

0.5A 250Vac



Key Features

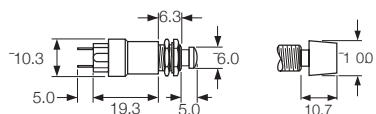
- ⬡ Self wiping contacts
- ⬡ Slow make & break
- ⬡ Momentary action
- ⬡ Choice of switch circuits
- ⬡ Choice of actuators

Approvals and specifications

In house test:
0.5A 250Vac T85 — Indicative rating only

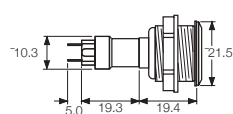
Dimensions

Dimensions (mm) Nylon S and L actuators



Neck thread - 40 TPI Whit. Actuator travel - 2.5 max

Stainless steel V actuator (IP66)



Neck thread - 26 TPI Whit. Actuator travel - 2.5 max

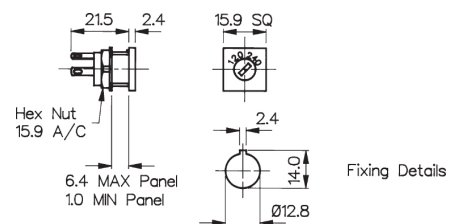
Terminal	Function	Actuator	Body Code	Options
T 	0916 Black base SP ON - OFF (momentary)	S Small Actuator 	 Panel Cut-out (L & S Actuators) Panel thickness Both nuts - 2.5mm No Backnut - 4.0	Finish Gloss finish for L and S actuators. Colour Call sales for custom colours. A full range is available for large orders.
	0917 50V only Brown base SP ON - OFF (momentary 1 side)	L Large Actuator 		
	0918 White base SP ON - OFF (momentary OFF)	V Vandal Resistant IP66 Flattop Stainless Steel 	 Panel Cut-out (Stainless Steel V Actuator) Panel thickness - 8.0mm	
	0919 Black base DP ON - OFF (momentary 1 side)			
	0920 White base DP ON - OFF (momentary ON)			

120/140V Voltage Selector



VS0001

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

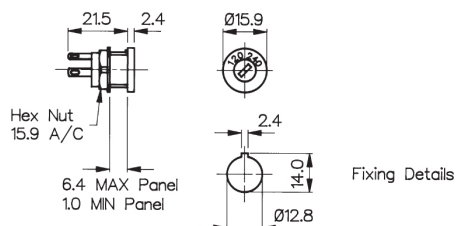


120/140V Voltage Selector

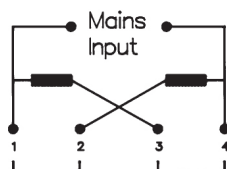


VS0002

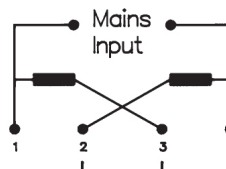
- 2.8 series tabs/Solder tags
- Round Front Bezel
- 6.3A
- CSA & VDE approvals



Connection Parallel 120V





Connection Series 240V



Specifications

VS0001

VS0002

Max. Rating:	6.3A, 120 / 240	6.3A, 120 / 240
Insulation Resistance:	>106 MΩ	>106 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
RoHS		Compliant

Unlike traditional switches **Piezo** switches have **no moving mechanical parts** making them **extremely durable**, withstanding millions of actuations and requiring little to no maintenance.

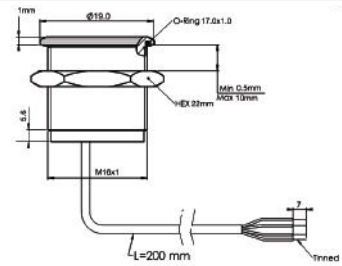


16MM Stainless Steel Non Illuminated



MPZ016

- Non Illuminated
- 20 cm lead
- Flathead or Guided profile



Specification

MPZ016

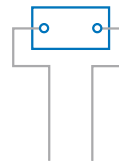
Type	Momentary
Material	Stainless Steel (Aluminium upon request)
Maximum Voltage	24V AC/DC
Switch Resistance “ON“	<1Ω
Switch Resistance “OFF“	5MΩ
Capacitance	100pF
Switching current (momentary)	1A Max
Switching current (prolonged)	300 mA
Switching pulse time (momentary)	up to 0.3 sec
Actuating force, typically	3-5 N
Life cycle	>10 Million

Environmental Specification

Sealing	IP68; IP69K
Operating temperature	-40°C to +85°C
Vibration resistance	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS	Compliant

Circuit Specification

16MM Stainless Steel Non Illuminated



Switch voltage	24V AC/DC
Switch Current	1A Max
Power Supply	24V AC/DC

Piezo Switches

19mm Stainless Steel

Illuminated and Non Illuminated

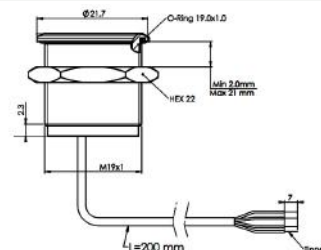


19MM Stainless Steel Illuminated



MPZI019

- Blue Illumination
- 20 cm lead
- Flathead

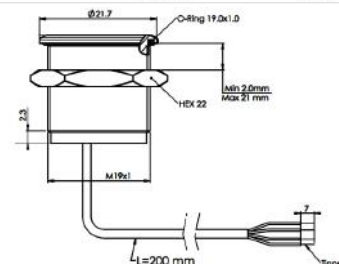


19MM Stainless Steel Non Illuminated



MPZ019

- Non Illumination
- 20 cm lead
- Flathead



Specification

MPZ019, MPZI019

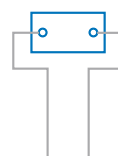
Type	Momentary
Material	Stainless Steel (Aluminium upon request)
Maximum Voltage	24V AC/DC
Switch Resistance "ON"	<1Ω
Switch Resistance "OFF"	5MΩ
Capacitance	100pF
Switching current (momentary)	1A Max
Switching current (prolonged)	300 mA
Switching pulse time (momentary)	up to 0.3 sec
LED Illumination	24V AC/DC
Actuating force, typically	3-5 N
Life cycle	>10 Million

Environmental Specification

Sealing	IP68; IP69K
Operating temperature	-40°C to +85°C
Vibration Resistances	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS	Compliant

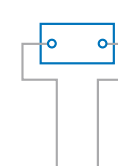
Circuit Specification

19MM Stainless Steel Non Illuminated



Switch voltage	24V AC/DC
Switch Current	1A Max
Power Supply	24V AC/DC

19MM Stainless Steel Illuminated



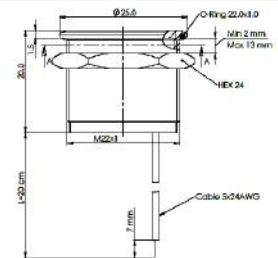
Switch voltage	24 V AC/DC
Switch Current	1A Max
Colour* Illuminated	24V AC/DC
Power Supply	24V AC/DC

22MM Stainless Steel Non Illuminated



MPZ022

- ⬡ Non Illumination
- ⬡ 20 cm lead
- ⬡ Flathead

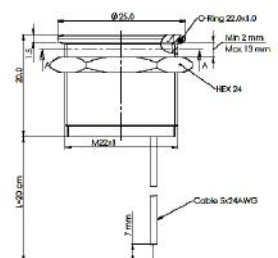


22MM Stainless Steel Illuminated



MPZI022

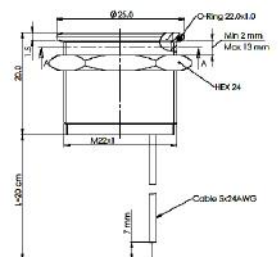
- Red or Green Illumination
- 1 colour
- 20 cm lead
- Flathead



22MM Stainless Steel Illuminated



- Red and Green Illumination
- (2 colour)
- 20 cm lead
- Flathead



Specification

MPZ022, MPZI022

Type	Momentary
Material	Stainless Steel (Aluminium upon request)
Maximum Voltage	24V AC/DC
Switch Resistance “ON“	<1Ω
Switch Resistance “OFF“	5MΩ
Capacitance	100pF
Switching current (momentary)	1A Max
Switching current (prolonged)	300 mA
Switching pulse time (momentary)	up to 0.3 sec
LED Illumination	24V AC/DC
Actuating force, typically	3-5 N
Life cycle	>10 Million

Environmental Specification

Sealing	IP68; IP69K
Operating temperature	-40°C to +85°C
Vibration Resistances	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS	Compliant

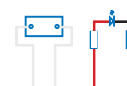
Circuit Specification

22MM Stainless Steel Non Illuminated



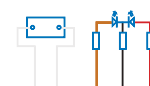
Switch Voltage	24 AC/DC
Switch Current	1A Max
Power Supply	24V AC/DC

22MM Stainless Steel Illuminated 1 colour



Switch Voltage	24V AC/DC
Switch Current	1A Max
Color* Illuminated	24V AC/DC
Power Supply	24 AC/DC

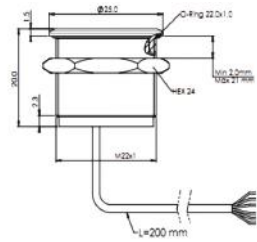
22MM Stainless Steel Illuminated 2 colour



Switch Voltage	24V AC/DC
Switch Current	1 A Max
Color* Illuminated	24V AC/DC
Power Supply	24 AC/DC



- Blue Illumination
- 1 colour
- 20 cm lead

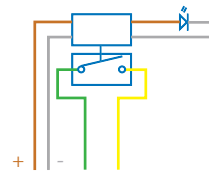


MPZI022/L

Type	Latching Toggle
Material	Stainless Steel (Aluminium upon request)
Power Supply	24V AC/DC
Switching voltage	48V AC peak/DC
Switch Resistance “ON“	<0.7Ω
Switch Resistance “OFF“	>1000MΩ
Capacitance	<90pF
Switching current	1A Max
LED Illumination	24V AC/DC
Actuating force, typically	3-5 N
Life cycle	>10 Million

Sealing	IP68; IP69K
Operating temperature	-40°C to +85°C
Vibration Resistances	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS	Compliant

22MM Stainless Steel Latching Toggle Illuminated



Power Supply	24V AC/DC
Switch Voltage	48V AC peak/ DC
Switch Current Max	1A Max
Colour* Illuminated	24V AC/DC

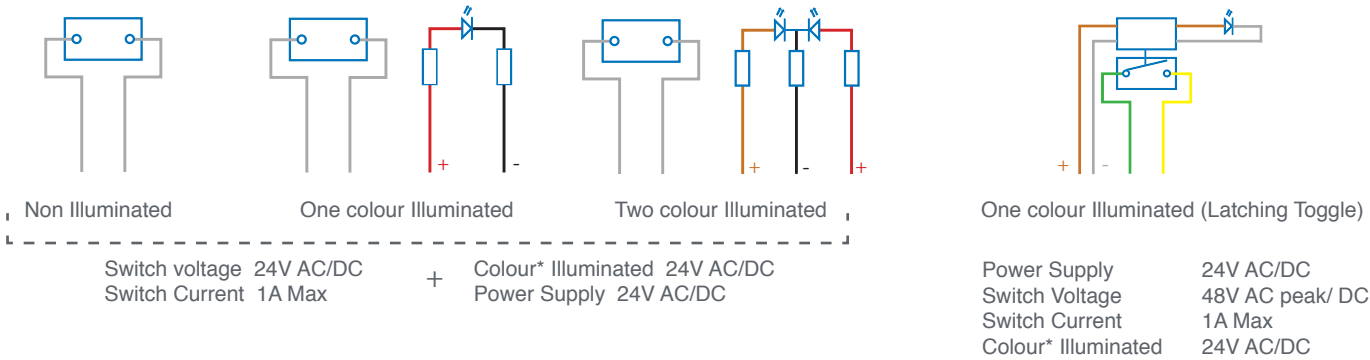
Part No System

MPZ	/	016	/	X	/	XX	/	X	/	X
Series MPZ - Non Illuminated MPZI- Illuminated		Body Diameter 016 = 16mm 019 = 19mm 022 = 22mm		Profile F = Flat Head G = Guided Profile		Colour BL = Blue RD = Red GN = Green D1 = Red and green		Led Voltage 24v		Type L = Latching Toggle (No Suffix= Momentary)

Examples:

MPZ022/F = Non Illuminated Piezo, 22mm, Flathead
MPZI022/F/RD/24 = Illuminated Piezo, 22mm, Flathead, Red Illumination, 24 volt
MPZI022/G/BL/24/L = Illuminated Piezo, 22mm, Guided Profile, Blue Illumination, 24 volt, Latching Toggle

Circuit Specifications



Other switches are available upon request*

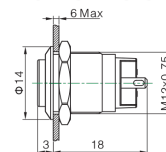
MAV0120



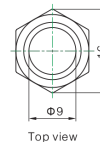
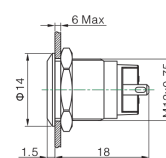
MAV0120

- Prominent and Flush Profile
- 12mm Diameter
- 2A, 36 dc
- IP67 (Front of Panel Only)

Prominent Profile



Flush Profile

**Specification****MAV0120/3****MAV0120/1**

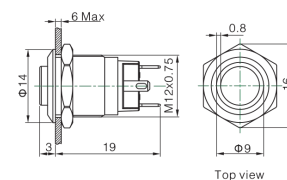
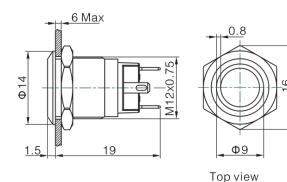
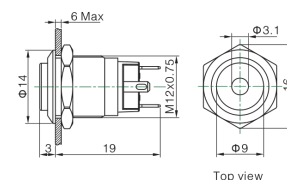
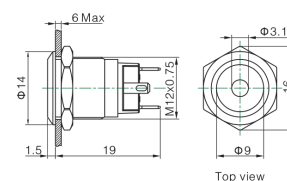
Terminations:	P - Solder Tabs	P - Solder Tabs
Switching:	S.P. Push to make	S.P. Push to make
Max Rating:	2A, 36Vdc	2A, 36Vdc
Contact Resistance:	≥50MΩ	≥50MΩ
Insulation Resistance:	≥1000MΩ	≥1000MΩ
Dielectric Strength:	1500V, AC 50Hz, 5 Secs	1500V, AC 50Hz, 5 Secs
Operating Temp Range:	*-25°C ~ +55°C	*-25°C ~ +55°C
Operations		
Mechanical:	500,000 (min)	500,000 (min)
Electrical:	200,000 (min)	200,000 (min)
Sealing (Front of Panel Only)	IP67	IP67
Shock Resistance	IK08	IK08
Rear Nut Fixing Torque:	0.6Nm	0.6Nm
Materials		
Mouldings:	PA	PA
Tags/Terminations:	Copper, Gold Plated	Copper, Gold Plated
Switch Body & Button:	Stainless Steel	Stainless Steel
Contacts:	Silver Alloy	Silver Alloy
Thread size:	M12x0.75	M12x0.75
RoHS	Compliant	Compliant

MAV0120



MAV0120

- Dot and Ring Illumination
- Prominent and Flush Profile
- 12mm Diameter
- 2A, 36 dc
- Bright daylight LEDs
- IP67 (Front of Panel Only)

**Specification****MAV0120**

Terminations:	P - Solder Tabs				
Switching:	S.P. Push to make				
Max Rating:	2A, 36Vdc				
Profile:	Prominent /3 Flush /1				
Illumination Type	/1	Dot			
	/2	Ring			
LED Ratings					
Part No.					
Colours	/RD	/GN	/BL	/OR	/AM
Luminous Intensity	Red	Green	Blue	Orange	Yellow
Forward Voltage	1.8V	2.8V	2.8V	1.8V	1.8V
Forward Current					
Moulding Current	15mA	15mA	15mA	15mA	15mA
Illumination Voltage	/no suffix - No resistor fitted. An Appropriate resistor must be series connected by the user. Voltages as above				
	/12	12V			
	/24	24V			
Contact Resistance:	≥50MΩ				
Insulation Resistance:	≥1000MΩ				
Dielectric Strength:	1500V, AC 50Hz, 5 Secs				
Operating Temp. Range:	*-25°C ~ +55°C				
Operations					
Mechanical:	500,000 (min)				
Electrical:	200,000 (min)				
Sealing (Front of Panel Only)	IP67				
Shock Resistance	IK08				
Rear Nut Fixing Torque:	0.6Nm				
Materials					
Mouldings:	PA				
Tags/Terminations:	Copper, Gold Plated				
Switch Body & Button:	Stainless Steel				
Contacts:	Silver Alloy				
Thread size:	M12x0.75				
RoHS	Compliant				

12mm Switches

Miniature Domed Metal Vandal Resistant

None Illuminated - Metal Dome

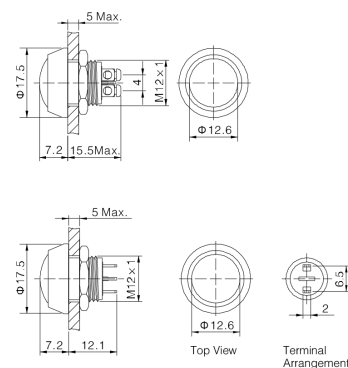


MMP0120



MMP0120

- Raised Domed Profile
- 12mm Diameter
- 2A, 36Vac
- IP65 or IP67 (Front of Panel Only)



Specification	MMP0120/S	MMP0120/N
Terminations:	P - Solder Tabs S - Screw Terminal	P - Solder Tabs S - Screw Terminal
Switching:	S.P. Push to make	S.P. Push to make
Max Rating:	2A, 36Vdc	2A, 36Vdc
Contact Resistance:	≥50MΩ	≥50MΩ
Insulation Resistance:	≥1000MΩ	≥1000MΩ
Dielectric Strength:	1500V, AC 50Hz, 5 Secs	1500V, AC 50Hz, 5 Secs
Operating Temp Range:	*-25°C ~ +55°C	*-25°C ~ +55°C
Operations		
Mechanical:	500,000 (min)	500,000 (min)
Electrical:	200,000 (min)	200,000 (min)
Sealing (Front of Panel Only)	IP65 or IP67	IP65 or IP67
Shock Resistance	IK08	IK08
Rear Nut Fixing Torque:	0.3Nm	0.3Nm
Materials		
Mouldings:	PBT	PBT
Tags/Terminations:	Brass, Silver Plated	Brass, Silver Plated
Switch Body & Button:	/SS Stainless Steel	/N - Nickel Plated Brass
Contacts:	Silver Alloy	Silver Alloy
Thread size:	M12x1	M12x1
RoHS	Compliant	Compliant

12mm Switches

Miniature Domed PBT Pushbutton

Non Illuminated - PBT

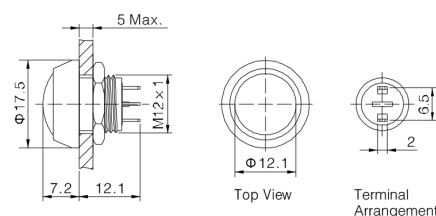
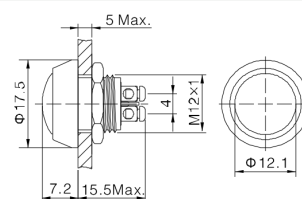


MMP0120/A



MMP0120/A

- Raised Domed Profile
- PBT Material
- 12mm Diameter
- 2A, 36Vac
- IP65 or IP67 (Front of Panel Only)



Specification

MMP0120/A

Terminations:	P - Solder Tabs S - Screw Terminal
Switching:	S.P. Push to make
Max Rating:	2A, 36Vdc
Contact Resistance:	$\geq 50\text{M}\Omega$
Insulation Resistance:	$\geq 1000\text{M}\Omega$
Dielectric Strength:	1500V, AC 50Hz, 5 Secs
Operating Temp Range:	*-25°C ~ +55°C
Operations	
Mechanical:	1,000,000 (min)
Electrical:	200,000 (min)
Sealing (Front of Panel Only)	IP65 or IP67
Shock Resistance	IK08
Rear Nut Fixing Torque:	0.3Nm
Materials	
Mouldings:	PBT
Tags/Terminations:	Brass, Silver Plated
Switch Body	/A Black Anodised
Switch Button:	/NB Nickel Plated Brass /RD RED PBT /GN GREEN PBT /BL BLUE PBT /BK BLACK PBT
Contacts:	Silver Alloy
Thread size:	M12x1
RoHS	Compliant

12mm Switches
Miniature Domed Illuminated Pushbutton
 Stainless Steel and PBT

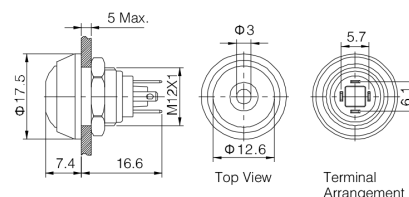


MMPI0120



MMPI0120

- Raised Domed Profile
- Dot Illumination
- Bright daylight LEDs
- 12mm Diameter
- 2A, 36Vac
- IP65 (Front of Panel Only)



Specification

MMPI0120

Terminations:	P - Solder Tabs				
Switching:	S.P. Push to make				
Max Rating:	2A, 36Vdc				
LED Ratings					
Part No.	SS-RD	SS-GN	NN-RD	ABK-RD	AG-RD
Colours	Red	Green	Red	Red	Red
Luminous Intensity					
Forward Voltage	1.8V	2.8V	1.8V	1.8V	1.8V
Forward Current					
Moulding Current	15mA	15mA	15mA	15mA	15mA
Illumination Voltage	/no suffix - No resistor fitted. An Appropriate resistor must be series connected by the user. Voltages as above /12				
Contact Resistance:	≥50MΩ				
Insulation Resistance:	≥1000MΩ				
Dielectric Strength:	1500V, AC 50Hz, 5 Secs				
Operating Temp. Range:	*-25°C ~ +55°C				
Operations					
Mechanical:	1,000,000 (min)				
Electrical:	200,000 (min)				
Sealing (Front of Panel Only)	IP65				
Shock Resistance	IK08				
Rear Nut Fixing Torque:	0.3Nm				
Materials					
Mouldings:	PBT				
Tags/Terminations:	Brass, Silver Plated				
Switch Body & Button:	Stainless Steel	Stainless Steel	Nickel Plated Brass	Black Anodized Body, Black PBT Button	Black Anodized Body, Green PBT Button
Contacts:	Silver Alloy				
Thread size:	M12x1				
RoHS	Compliant				

12mm Miniature Vandal Resistant Stainless Steel Switch

MAV0120 / X / X / X / X / X						
Series	Button	Switching Type	Type of Illumination	Illumination Colour	Lamp Voltage	
MAV0120	1 = Flush 3 = Prominent	D = Momentary	Blank = None 1 = Dot 2 = Ring	Blank = None RD = RED GN = GREEN BL = BLUE AM = AMBER/YELLOW OR = ORANGE	Blank = None 012 = 12V 024 = 24V	

Examples:

MAV0120/3D = 12mm Prominent Actuator, Momentary, Non Illuminated
 MAV0120/3D1BL024 = 12mm Prominent Actuator, Momentary, Blue Dot Illuminated, 24V
 MAV0120/3D2GN012 = 12mm Prominent Actuator, Momentary, Green Ring Illuminated, 12V

12mm Miniature Metal/Plastic Domed Pushbutton Switch

MMPXXX / X / X / X / X / X / X						
Series	Body Material	Button Material & Colour	Sealing	Illumination Colour	Lamp Voltage	Termination
MMP0120 = Non Illuminated MMP10120 = Illuminated	S = Stainless Steel N = Nickel Plated Brass A = Black Anodized	SS = Nickel Plated Brass RD = RED PBT GN = GREEN PBT BL = BLUE PBT BK = BLACK PBT	Blank = IP65 67 = IP67 IP67 (non-illuminated only)	Blank = None RD = RED GN = GREEN BL = BLUE AM = AMBER/YELLOW OR = ORANGE	Blank = None 012 = 12V 024 = 24V Other voltages require external resistor	S = Screw Terminals P = Solder Terminals (2.0mm x 0.5mm)

Examples:

MMP0120/SSSS = 12mm, Non Illuminated, All Stainless Steel, IP65, Screw Terminals
 MMP0120/ARD67/S = 12mm, Non Illuminated, Black anodized body, Red PBT button, IP67, screw terminals
 MMP10120/NNBRD012P = 12mm, Illuminated, All Nickel Plated Brass with 12V Red Dot illumination, IP65, Pin Terminals

Bulgin's range of **high quality rocker switches** includes a huge choice of **single** and **double pole** options available in various sizes, colours, terminations, actuator types and **ratings up to 16A, 250Vac**, allowing for virtually any design configuration.

- Available types: Ultra-thin, Miniature, Twin unit, Miniature round and Standard
- Rating from 10A, 250V ac up to 20A, 277V ac
- Single & double pole variants available
- Push-on, solder & PCB terminals
- Illuminated and non-illuminated options
- High in-rush (ON-OFF types)
- Matching Indicators
- Splash resistant options
- Choice of bezel styles and sizes, panel cut-outs and actuators
- Choice of switching circuits including 3 position



8800 Thinline Rocker Switches

10A 250Vac



Key Features

- Ultra thin rocker switch
- Ratings up to 15A, 250Vac
- Single and twin gang
- Panel cut out:
Single 19.3 x 6.8
Twin 19.3 x 13.4

Approvals and specifications

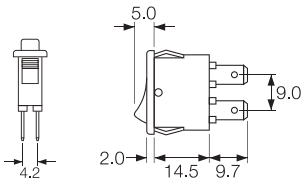
- 10(6)A 250Vac T100 1E4 (10,000 Operations)
6(2)A 250Vac T100 5E4 (50,000 Operations)
Inrush rating 10/50A 1E4 (10,000 Operations)
- UL CSA 15A 250Vac (Twin unit is 10A 250Vac)
UL CSA 125Vac 1/2hp
UL 100°C, file E45221, CSA file LR10990

3mm contact gap.

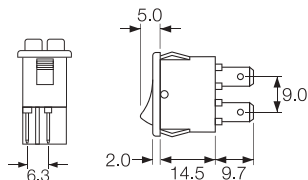
Terminal	Function	Rocker	Body	Body Colour	Rocker Colour
H 	 Switches are ON when pressed over terminal 1 8800 ON - OFF Single pole		A. Single pole *Optional profile for orientation	B Black R Red W White	B Black R Red W White
T 	 Switches are ON when pressed over terminal 1 or 3 8800 ON - OFF Twin pole		B. Single pole - Twin *Optional profile for orientation Panel thickness Dim X 0.75-1.2 19.1/19.2 1.25-1.99 19.3/19.4 2.00-3.00 19.7/19.8		
X 	 Switches are ON when pressed over terminal 1 or 3 8800 ON - OFF Twin pole		Cut-outs must be punched in the direction of insertion		

Dimensions

8800VA (H terminals shown)



8800V/8800VA (H terminals shown)



Legend	Legend Colour	Options
<div><div></div><div>Blank</div></div> <div>132</div>	<div><div></div><div>Blank</div></div> <div>B</div> <div>Black</div> <div>W</div> <div>White</div>	<div>Finish</div> <div>Matt finish only.</div> <div>Colour</div> <div>Call sales for custom colours.</div> <div>A full range is available for large orders.</div> <div>Legend printing</div> <div>Select from the examples or call sales for custom legends.</div>

Examples



▮ X8800VA



▮ X8800VA
▮ T8800VA - - -



▮ X8800VA
▮ T8800VA - - -



▮ H8800V/H8800VA
▮ T8800V/T8800VA



▮ H8800V/H8800VA
▮ T8800V/T8800VA

8500 Rocker Switches - Miniature

10A 250Vac Single & Double Pole



Key Features

- Miniature rocker switch
- Ratings up to 15A, 250Vac
- Single & double pole in same body size
- Illuminated & non-illuminated
- Matching indicators
- Industry standard panel cut-out
- Rotary and push button actuator options
- BioCote antimicrobial option
- Panel cut out: 19.3 x 12.9

Approvals and specifications

10(6)A 250Vac T125 IE4 (non lit types)
6(4)A 250Vac T125 5E4 (50,000 Operations)
10(6)A 250Vac T100 (lit types)

UL CSA 15A Non Ind 250Vac, 14A Ind 250Vac, 10A 277Vac
UL CSA 250Vac 1/2hp, 125Vac 1/4hp
UL 105°C, (non lit) file E45221, CSA file LR10990

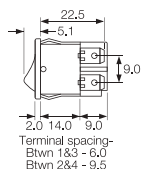
BioCote antimicrobial additive. Independently verified to ISO22196:2007.

3mm contact gap.

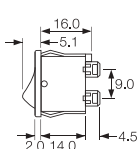
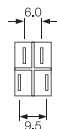
Terminal	Function	Rocker	Body	Body Colour	Rocker Colour
H 	 ON OFF Switches are ON when pressed over terminal 1	H Slotted for custom caps 	B Standard body with terminal barrier 	B Black	B Black
K 	8500 ON - OFF Single pole (Uses terminals 1a & 2a)	R Semi-rotary (not lit) 	BC Body without terminal barrier 	R Red	R Red
L 	8503 ON (lit) - OFF Single pole	D Paddle lever (not lit) 	Dimensions for snap-in fixing Panel thickness 0.75-1.25 1.25-2.00 2.00-3.00 Dim X 19.1/19.2 19.3/19.4 19.7/19.8	W White	W White
L Right angle version of K terminal available on 8500 only 	8550 ON - OFF Double pole	V Curved (not lit) 	Cut-outs must be punched in the direction of insertion		
R 	8553 ON (lit) - OFF Double pole	X Two colour (not lit) 			
T 	8580 Available with H terminals only Indicator UL/CSA E83363	A Softline lens 			
T Solder	P Push button operation (8500 only) See drawing opposite	P			

Dimensions

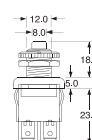
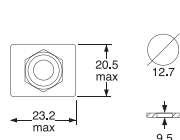
“B” body with barrier for H, T and K terminals




“BC” body w/o barrier primarily for L or R terminals (can be used for all terminals)



‘PO’ Actuator and body - push button function (8500 only)



Insert Colour	Lamp Voltage	Legend	Legend Colour	Options	Biocote
X Rocker Only	Blank	Blank	Blank	Finish Matt finish only.	B Biocote
R Red	2 125V Neon	076	B Black	Colour Call sales for custom colours. A full range is available for large orders.	
W White	3 250V Neon		W White	Legend printing Select from the examples or call sales for custom legends.	
Leave blank for other Rocker types	7 12V Filament			Lamp voltage Call sales for details of available voltages.	
	8 24V Filament			Protective cover L167 Snaps on to bodies with V or X style rockers and A lens. This reduces panel thickness by 0.8mm.	
					
				BioCote Antimicrobial Additive Moulded components have antimicrobial properties using BioCote silver ion technology.	

Examples



▮ H8500VB ---
▮ T8500VB ---



▮ H8550VB ---
▮ T8550VB ---



▮ H8550HB ---
▮ T8550HB ---



▮ H8550XB ---
▮ T8550XB ---



H8550RB Semi-rotary
A splash proofing option



▮ H8500PO ---
Pushbutton option



▮ H8553VB ---
▮ T8553VB ---



▮ H8580AB ---

8600 Rocker Switches - Miniature

10A 250Vac Single & Double Pole



Key Features

- ⬡ Miniature rocker switch
- ⬡ Ratings up to 16A, 250Vac
- ⬡ Single & double pole
- ⬡ ON/OFF, C/O, biased and centre off switching
- ⬡ Push on, solder and PCB terminals
- ⬡ Illuminated and non illuminated
- ⬡ Matching indicators
- ⬡ Panel cut out single: 19.3 x 12.9 double: 19.3 x 21.9

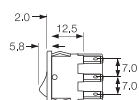
Approvals and specifications

- UL 10(4)A 250Vac T90 (unless noted below)
- UL CSA See ratings below
UL 65°C, file E45221, CSA file LR10990
- 3mm contact gap except where marked μ .

Terminal	Function		Rocker	Body	Body Colour
H 	Approvals & ratings vary with function 	ON OFF Switches are ON when pressed over terminal 3 	V Curved 	B Single pole 	B Black
T 	8600 10(4)A 16A 250V, 10A 277V 1/2HP 277V, 1/4HP 125V ON - OFF	8650 10(4)A 10A 277V 1/2HP 277V, 1/4HP 125V ON - OFF	V Curved (lit) 	Panel thickness 0.75-1.25 1.25-1.99 2.00-3.00	R Red
X 	8601 6(1)A 16A 250V, 6A 277V ON - OFF (momentary ON)	8651 6(1)A 6A 277V ON - OFF (momentary ON)	H Slotted for actuator (8600 and 8610 only) 	B (Double Pole) with terminal barrier 	W White
N/A ON - OFF Lit	8602 10A 6A 277V ON - OFF (momentary OFF)	8652 10(4)A 6A 277V ON - OFF (momentary OFF)	F Flat Indicator only (Single pole) 	BC (Double Pole) w/o terminal barrier 	
PCB 0.85sq	8610 6(1)A 10A 277V 1/2HP 277V, 1/4HP 125V ON - ON	8660 6(1)A 10A 277V 1/2HP 277V, 1/4HP 125V ON - ON		Double Pole dimensions for snap-in fixing Panel thickness 0.75-1.24 1.25-1.99 2.00-3.00	
Double Pole switches with "X" terminals are supplied without terminal barriers	8611 6A 277V ON - ON (momentary 1 side)	8661 6A 277V ON - ON (momentary 1 side)		Dim X 19.1/19.2 19.3/19.4 19.7/19.8	
	8620 μ ON - OFF - ON	8670 μ ON - OFF - ON		Cut-outs must be punched in the direction of insertion	
	8630 6(1)A UL E63363 CSA LR29381 KEMA-KUER Indicators	N/A			

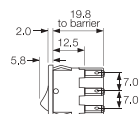
Dimensions

Single pole




Terminals shown are "H" 4.8 push on type

Double pole



Terminal spacing 10.2 between pole centres

Rocker Colour	Lamp Voltage	Legend	Legend Colour	Options
Lit (DP)				
A Amber	Blank	Blank	Blank	<p>Finish Matt finish only.</p> <p>Colour Call sales for custom colours. A full range is available for large orders.</p> <p>Legend printing Select from the examples or call sales for custom legend.</p> <p>Lamp voltage Call sales for details of available voltages.</p> <p>Blanking plate A8634FB Dummy unit to fill unused panel holes. Single pole size only.</p> <p>Protective covers L167 for SP L180 for DP Snap on to bodies with V rocker or F lens. This reduces panel thickness by 2.2mm.</p>  <p>Single Pole options Most switches shown can have single pole switching in double pole bodies.</p>
C Clear	2 125V Neon	076	B Black	
G Green	3 250V Neon		W White	
R Red	7 12V Filament			
	8 24V Filament			
Lit (DP)				
B Black				
R Red				
W White				

Examples



H8600VB ---
T8600VB ---



H8600VB ---
T8600VB ---



H8630FB ---
T8630FB ---



H8650VB ---
T8650VB ---



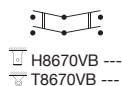
H8660VB ---
T8660VB ---



H8653VB ---
T8653VB ---

8620 & 8670 Rocker Switches

3 Positions - 10A 250Vac



Key Features

- 3 position miniature rocker switch
- Panel cut out: single: 19.3 x 12.9 double: 19.3 x 21.9
- Ratings up to 15A, 250Vac
- Single & double pole
- Centre off switching
- Push on, solder and PCB terminals
- Matching indicators

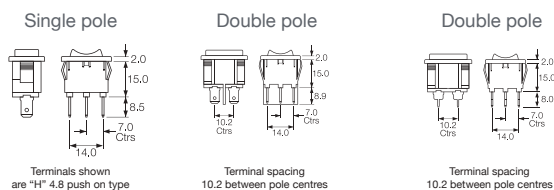
Approvals and specifications


- 10(4)A 250Vac T90
- UL CSA 15A 277Vac (Single pole)
- UL CSA 250Vac 1/2hp (Single pole)
- UL CSA 125Vac 1/4hp (Single pole)
- UL CSA 10A 277Vac (Double pole)
- UL CSA 277Vac 1/2hp (Single & Double pole)
- UL 90°C, file E45221, CSA file LR10990
- μ contact gap.

Terminal	Function	Rocker	Body	Body Colour	Rocker Colour
H 4.8 x 0.8	 8620 ON - OFF - ON Single pole	V Curved	B Single pole Panel thickness 0.75-1.24 1.25-1.99 2.00-3.00 Dim X 19.1/19.2 19.3/19.4 19.7/19.8	B Black R Red W White	Lit (DP) A Amber C Clear G Green R Red Lit (DP) B Black R Red W White
T Solder	 8670 ON - OFF - ON Double pole	H Slotted for actuator (8620 only)	B Single pole - Twin Panel thickness 0.75-1.24 1.25-1.99 2.00-3.00 Dim X 19.1/19.2 19.3/19.4 19.7/19.8		

Cut-outs must be punched in the direction of insertion

Dimensions



Lamp Voltage	Legend	Legend Colour	Options
Blank	Blank	Blank	<p>Finish Matt finish only.</p> <p>Colour Call sales for custom colours. A full range is available for large orders.</p> <p>Legend printing Select from the examples or call sales for custom legend.</p> <p>Lamp voltage Call sales for details of available voltages.</p> <p>Blanking plate A8634FB Dummy unit to fill unused panel holes. Single pole size only.</p> <p>Protective covers L167 for SP L180 for DP Snap on to bodies with V rocker or F lens. This reduces panel thickness by 2.2mm.</p>  <p>Single Pole options Most switches shown can have single pole switching in double pole bodies.</p>
2 125V Neon	076	B Black	
3 250V Neon		W White	
7 12V Filament			
8 24V Filament			

1250 Rocker Switches

10A 250Vac



Key Features

- Standard rocker switch
- Double pole in single pole body
- Snap in or sub panel mount
- Integral terminal barrier
- Push on or PCB terminals
- Panel cut out: 27.2 x 12.4 (snap in) 26.3 x 12.4 (sub panel mount)

Terminal	Function	Rocker	Body	Body Colour	Rocker Colour
C 6.3 x 0.8	 On when pressed over terminal 1 1250 ON - OFF Double pole Poles are 9.0mm between centres.	A Curved Shown in N body	N Panel cut-out Panel thickness 0.75-1.24 1.25-1.99 2.00-3.00 Dim X 26.1/26.2 26.3/26.4 26.7/26.8	B Black W White	B Black W White
X 5.2 x 9.0 PCB 0.8sq (N body only)	 On when pressed over terminal 1 1250SP ON - OFF Single pole	 Shown in P body	P Panel cut out Panel thickness 0.75-3.00 Cut-outs must be punched in the direction of insertion		G Grey

Approvals and specifications



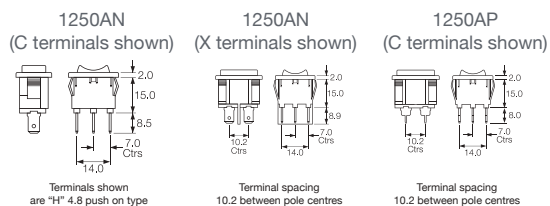
10(6)A 250Vac T100
6A 400Vac T100
1A 30Vdc



UL CSA 10A 250Vac
UL CSA 16A 250Vac Resistive
UL CSA 125Vac 1/2hp
UL CSA 1A 30Vdc
UL 100°C, file E45221, CSA file LR10990

3mm contact gap

Dimensions



Legend	Legend Colour	Options
Blank	Blank	<p>Finish Matt finish only.</p> <p>Colour Call sales for custom colours. A full range is available for large orders.</p> <p>Legend printing Select from the examples or call sales for custom legend.</p>
085	B Black	
	W White	

6000 SP Splash Resistant Rocker Switches

16A 250Vac



Key Features

- Ratings up to 20A, 277Vac
- Positive switch action
- Distinctive styling
- Illuminated & nonilluminated
- Single pole
- Panel cut out: 30.1 x 11.1mm

Approvals and specifications

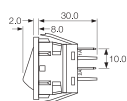
European 16(4)A 250Vac T125, 10A 400Vac T125

UL = 20A 277Vac, 1 1/2HP 250Vac 1HP 125Vac
CSA = 20A 277Vac, 1HP 125Vac, 1/2HP 125Vac

3mm contact gap with Positive Break switching.
Call factory for IP details.

Terminal	Function	Rocker	Body	Body Colour	Rocker Colour	Lamp Voltage
C 6.3 x 0.8	6000 ON - OFF 6001 ON - OFF (momentary ON)	A Softline Matt 	L Panel cut-out ** Bezel 30.0/30.1 11.0/11.1 31.5 14.0 R2.0 Cut-outs must be punched in the direction of insertion	B Black W White	Lit (DP) A Amber C Clear G Green R Red Lit (DP) B Black R Red W White	Blank 2 125V Neon 3 250V Neon 5 12Vdc LED (P Rocker) 6 24Vdc LED (P Rocker) 7 12V Filament 8 24Vdc Filament
H 4.8 x 0.8	6002 ON - OFF (momentary OFF) 6003 ON - OFF Lit	A Softline Matt 				
S 9.7 Screw & Clamp N/A for assemblies with 3 terminals	6008 ON - OFF Lit (Unswitched neutral) 6009 ON - OFF (momentary ON) Lit (Unswitched neutral) 6010 ON - ON 6011 ON - ON (momentary 1 side)	P Lit window Matt 				

Dimensions




Panel thickness
L 0.75 to 2.5mm
** For cut-out details
on momentary switches
call sales

Integral Splash Resistance



Current carrying parts are protected from moisture. Droplets which may enter the switch are channelled out through ports in the switch body.
For IP65 see options below

Legend	Legend Colour	Options
Blank	Blank	G74 Protective Cover
1223	B Black	<p>Finish Matt is standard.</p> <p>Colour Call sales for custom colours. A full range is available for large orders.</p> <p>Legend printing Select from the examples or call sales for custom legends.</p> <p>Lamp voltage Call sales for details.</p> <p>Protective cover A snap on cover is available (add G after body code), this reduces panel thickness by 2mm.</p>  <p>Panel sealing washer W46 is available, this reduces panel thickness by 1.2mm.</p> <p>Covers are not suitable for momentary types. For all options call the factory</p>
	W White	

Examples



C6000AL - - -



C6000AL - - -



C6010AL - - -



C6003AL - - -



C6003PL - - -



C6030AL - - -

6050 DP Splash Resistant Switches

& Twin Switches - 16A 250Vac



Key Features

- Ratings up to 20A, 277V ac
- BioCote antimicrobial option (Double pole only)
- Positive switch action
- DC LED Illumination Available
- Distinctive styling
- Panel cut out: 30.1 x 22.2mm
- Illuminated & non-illuminated
- Double pole

Approvals and specifications

European 16(4)A 250Vac T125, 10A 400Vac T125

UL CSA (except 6054 & 6055 Switches)
20A 277Vac, 250Vac 11/2hp, 125Vac 1hp

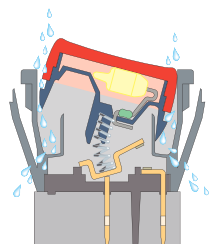
UL 100°C, file E45221, CSA file LR10990

BioCote antimicrobial additive.
Independently verified to ISO22196:2007.

3mm contact gap with Positive Break switching.

Terminal	Function	Rocker	Body	Body Colour
C 6.3 x 0.8	6050 ON - OFF (momentary ON)	A Softline Matt 	L Double Pole Panel cut-out ** Bezel 	Lit (DP) A Amber
H 4.8 x 0.8	6051 ON - OFF (momentary ON)	A Softline Matt 	L Twin units Contact sales for information on splash resistance and IP ratings 	C Clear
S 9.7 Screw & Clamp N/A for assemblies with 3 terminals	6052 ON - OFF (momentary OFF)	P Lit window Matt 	L Twin units Contact sales for information on splash resistance and IP ratings 	G Green
	6053 ON - OFF Lit	P Lit window Matt 	L Twin units Contact sales for information on splash resistance and IP ratings 	R Red
	6054 ON - OFF (momentary ON) Lit	P Lit window Matt 	L Twin units Contact sales for information on splash resistance and IP ratings 	Un-Lit (DP)
	6055 ON - OFF (momentary ON) Lit	P Lit window Matt 	L Twin units Contact sales for information on splash resistance and IP ratings 	B Black
	6056 ON - OFF (single pole) isolated light	P Lit window Matt 	L Twin units Contact sales for information on splash resistance and IP ratings 	R Red
	6057 ON - OFF isolated light	P Lit window Matt 	L Twin units Contact sales for information on splash resistance and IP ratings 	W White
	6058 ON - OFF (single pole) Lit	P Lit window Matt 	L Twin units Contact sales for information on splash resistance and IP ratings 	

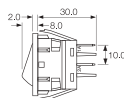
Integral Splash Resistance



Current carrying parts are protected from moisture. Droplets which may enter the switch are channelled out through ports in the switch body.

For IP65 see options below

Dimensions





Panel thickness

L 0.75 to 2.5mm

** For cut-out details on momentary switches call sales

Terminal spacing - Poles 10.5 between centres

Rocker Colour	Lamp Voltage	Legend	Legend Colour	Options	BioCote
B Black	Blank	Blank	Blank	G74 Protective Cover Finish Matt is standard. Colour Call sales for custom colours. A full range is available for large orders. Legend printing Select from the examples or call sales for custom legends. Protective cover The 6050 series is a water through design. For a higher level of sealing, a snap on cover is available (add G after body code). This reduces panel thickness by 1mm.  Panel sealing washer W42 is available. This reduces panel thickness by 1.00mm. Covers are not suitable for momentary types. IP Ratings Call the sales for details. Terminal Link P1067 connects the poles of a double pole switch or twin unit. # Mounting orientation may affect IP rating. BioCote Antimicrobial Additive  Moulded components have antimicrobial properties using BioCote silver ion technology. For all options call sales.	B BioCote
R Red	2 125V Neon	1223	B Black		
W White	3 250V Neon		W White		
	5 12Vdc LED (P Rocker)				
	6 24Vdc LED (P Rocker)				
	7 12V Filament				
	8 24Vdc Filament				

Examples



C6050AL - - -



C6053AL - - -



C6053PL - - -



C6000A/C6000AL



C6003P/C6003PL



C6003P/C6030AL

1500 Standard & 1300 High Inrush Switches

150A to EN61058-1 and 16A 250Vac



Key Features

- Standard rocker switch
- Non-illuminated
- 150A inrush
- Choice of switching circuits including 3 position
- Choice of bezel styles
- Choice of panel cut outs
- Matching indicator
- Single pole
- Splash resistant option
- BioCote antimicrobial option
- DC LED Illumination Available for "P" Rocker
- Panel cut out 'A' style: 27.3 x 12.3mm

Approvals and specifications

1500 Series 16(4)A 250Vac T125

UL CSA 16A Non Ind 250Vac, (2 posn) 250Vac 1hp, 125Vac 1/2hp, (3 posn) 250Vac 1/2hp, 125Vac 1/4hp
 1330 36Vdc 14A
 1350 72 Vdc 7A
 1500 & 1510 14 Vdc 10A
 UL 85°C, file E45221, CSA file LR10990

In house test:
 10A 24Vdc—Indicative rating only

1300 series 16(6)A 250Vac T125 5E4 (50,000 Ops.)
 150A Inrush to EN61058-1

Terminal	Function	Rocker	Body	Finish	Body Colour	Rocker Colour
C 6.3 x 0.8	Standard 1500 ON - OFF	A Softline Matt	Panel cut-out Cut-outs must be punched in the direction of insertion A 12.2/12.3 27.2 27.3 30.2 14.0 Gloss or Matt	M Matt	B Black	Un-Lit
H 4.8 x 0.8*	1501 HP rating N/A ON - OFF (momentary ON)	B Splash resistant (with Arcshield) Matt	B 11.0/11.1 30.0 30.1 33.4 14.0 Matt only	G Gloss	R Red	B Black
K 2.8 x 0.8*	1502 HP rating N/A ON - OFF (momentary OFF)	H Slotted (for custom Adaptors) not momentary	B 11.0/11.1 30.0 30.1 33.4 14.0 Matt only	Applies to both Rocker & Body	W White	R Red
T 2.8 x 0.8*	1510 µ HP rating N/A ON - ON	V Curved Matt or gloss	L 11.0/11.1 30.0 30.1 32.0 14.0 Matt only			Lit
T 2.8 x 0.8*	1511 µ HP rating N/A ON - ON (momentary 1 side)	W Splash resistant (with Arcshield) Matt	Q 11.5/11.6 28.2 28.3 30.2 14.0 Gloss or matt			A Amber
T 2.8 x 0.8*	1520 µ 125V & 250V 1/2 HP H terminal rated T100 only ON - OFF - ON	X Two colour Matt ON - OFF only (not momentary)	R 14.0/14.1 28.5 28.6 31.5 17.0 Matt only			C Clear
U 2.8 x 0.8*	1521 µ HP rating N/A H terminal rated T100 only ON - OFF - ON (momentary 1 side)	F Flat lens Gloss (0430 only)	T 11.5/11.6 28.2 28.3 30.2 14.0 Matt only			G Green
U 2.8 x 0.8*	1522 µ HP rating N/A H terminal rated T100 only ON - OFF - ON (momentary 2 sides)	A Softline lens Matt (0430 only) as F but with raised profile				R Red
X 2.8 x 0.8*	0430 HP rating N/A H terminal rated T100 only High Inrush 1300 ON - OFF					

Dimensions

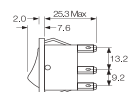
UL CSA 20A 250Vac 1hp, 125Vac 1/2hp
UL 85°C, file E45221, CSA file LR10990

In house test:

20A 24Vdc — Indicative rating only

BioCote antimicrobial additive. Independently verified to ISO22196:2007.

3mm contact gap except if marked μ .



Panel thickness

A, Q 0.75 to 3.3mm
L, B, T 0.75 to 2.5mm
R 0.75 to 3.0mm

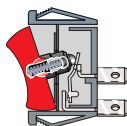
* For cut-out details on momentary switches call sales

Splash Resistance

1500 W and B splash resistant options


Feather edge seals and a close fitting collar protect current carrying parts from moisture.

B option has Hytrel collar/seals for enhanced protection.



1300 High inrush, positive break switching

The 1300 series mechanism ensures contact welds formed at switch-on are positively separated by the plunger tube acting directly on the step in the moving contact.

Lamp Voltage	Insert Colour	Legend	Legend Colour	Options	Biocote
Blank	Blank	Blank	Blank	<p>Finish Matt is standard.</p> <p>Colour Call sales for custom colours. A full range is available for large orders.</p> <p>Legend printing Select from the examples or call sales for custom legends.</p> <p>Lamp voltage Call sales for details.</p> <p>Blanking plates A0434 - - Dummy units to fill unused panel holes.</p> <p>Protective cover Snaps on to A, L, Q or T bodies (add G after body code in cat no.), this reduces panel thickness by 1mm.</p>  <p>Panel sealing washer W46 is available for the same body sizes, this reduces panel thickness by a further 0.8mm. Covers are not suitable for momentary types.</p> <p>BioCote Antimicrobial Additive Moulded components have antimicrobial properties using BioCote silver ion technology.</p> <p>For all options call sales.</p>	B BioCote
2 125V Neon	R Red	602A	B Black		
3 250V Neon	W White		W White		
7 12V Filament					
8 24Vdc Filament					

Examples



C1500AR - - -
T1500AR - - -



C1500AL - - -
T1500AL - - -



C1500XL - - -
T1500XL - - -



C1510AL - - -
T1510AL - - -



C1520AL - - -
T1520AL - - -



C0430AL - - -
T0430AL - - -

5500 Lit Rocker Series

10A 250Vac



Key Features

- Standard rocker switch
- Illuminated
- Choice of switching circuits
- Choice of bezel styles
- Choice of panel cut outs
- Matching indicator
- Single pole
- Splash resistant option
- Panel cut out 'A' style:

Approvals and specifications

16(4)A 250Vac T85
10(3)A 250Vac T100, (12A 250Vac T125 for P rocker only)

UL CSA 15A 250Vac, CSA 16A Non Ind 250Vac
UL CSA 250Vac 1hp, 125Vac 1/2hp
UL 85°C, file E45221, CSA file LR10990

μ contact gap.

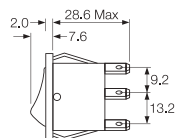
For Twin units repeat the order details for both the left and right sides.

Terminal	Function	Rocker	Body	Body Colour	Rocker Colour
C 6.3 x 0.8	Approvals & ratings vary with function ON OFF Switches - ON when pressed over terminal 3 	A Softline (Matt only) 	A Panel Cut - outs B L Q R T 	B Black W White	Un-Lit B Black R Red W White Lit A Amber C Clear G Green R Red
H 4.8 x 0.8	5500 μ 	P Lit window (Matt only) 			
T Ø2.1 Solder	5503 μ 				
	5508 μ 				

Dimensions

Panel thickness

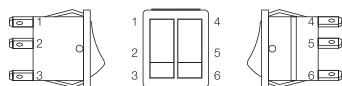
A, Q 0.75 to 3.3mm
L, B, T 0.75 to 2.5mm
R 0.75 to 3.0mm



Twin units


Two single switches or a switch and an indicator light can be assembled side by side in one double pole body.

For 5500 range panel cut-out details (L, B and T) call sales.



Terminal spacing -
Poles 10.8 between centres (twin units)

For twin units the first set of order format details refer to the left hand unit, when looking at the front of the assembly.
(This has terminal numbers 1, 2 & 3)

Lamp Voltage	Legend	Legend Colour	Options
Blank 2 125V Neon	Blank 602A	Blank B Black W White	<p>Finish Matt is standard.</p> <p>Colour Call factory for custom colours. A full range is available for large orders.</p> <p>Legend printing Select from the examples or call factory for custom legends.</p> <p>Lamp voltage Call factory for details.</p> <p>Blanking plate A0434 - - (SP) A0494 - - (DP) Dummy units to fill unused panel holes.</p> <p>Protective cover Snaps on to A, L, Q or T bodies (add G after body in cat no.), this reduces panel thickness by 1.00mm.</p>  <p>Panel sealing washers W46 (Single Pole) and W42 (Double Pole) are available for these body types, this reduces panel thickness by 2mm.</p> <p>For all options call the factory.</p>
3 250V Neon			
5 12Vdc LED (P Rocker)			
6 24Vdc LED (P Rocker)			
7 12V Filament			
8 24Vdc Filament			

Examples



C5503AL - - -



C5500AL - - -



C5503PL - - -



C5503A/
C5430AL



C5503A/C5503AL



C5503P/C5503PL

1500 Twin Units Switches and Indicators

16A 250Vac



Key Features

- Twin unit rocker switch
- Choice of switching circuits including 3 position
- Push-on, solder and PCB terminals
- Choice of bezel styles
- Choice of panel cut outs
- Matching indicator
- Single pole switches
- Splash resistant option
- Panel cut out 'A' style: 27.2 x 22.3mm

Approvals and Specifications

16(4)A 250Vac T125

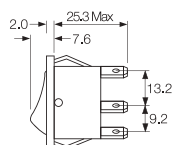
UL CSA 16A 250Vac
UL CSA (2 posn) 250Vac 1hp, 125Vac
1/2hp, (3 posn) 250 Vac
1/2hp, 125Vac 1/4hp
UL 85°C, file E45221, CSA file LR10990

For versions with High Inrush or for 50,000 operations,
3mm contact gap except where marked μ .

Terminal	Function	Rocker	Body	Finish	Body Colour	Rocker Colour
C 6.3 x 0.8	Approvals & ratings vary with function ON OFF Switches - ON when pressed over terminal 1 or 4 	A Softline (Matt only) 	Panel Cut - outs Bezel A Gloss or Matt	M Matt	B Black	Un-Lit B Black
H 4.8 x 0.8	1500 ON - OFF	B Softline (Matt only) 	B Matt only	G Gloss	W White	R Red
T Solder	1510 μ ON - ON	W Softline (Matt only) 	L Matt only	Applies to both Rocker & Body		W White
K 2.0	1520 μ ON - OFF - ON	X Softline (Matt only) 	Q Gloss or matt			Lit
X 4.0	0430 Indicator	A Softline (Matt only) 	R Matt only			A Amber
			T Matt only			C Clear
						G Green
						R Red

Dimensions

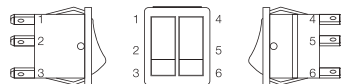
Panel thickness
A,Q 0.75 to 3.3mm
L,B,T 0.75 to 2.5mm
R 0.75 to 3.0mm



Call sales for terminal spacing details

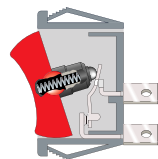
Twin units

Two single switches or a switch and an indicator light can be assembled side by side in one double pole body.



For twin units the first set of order format details refer to the left hand unit, when looking at the front of the assembly.
 (This has terminal numbers 1, 2 & 3)

Splash Resistant



Feather edge seals and a close fitting collar protect current carrying parts from moisture.

B option has Hytrel collar/seals for enhanced protection.

Insert Colour	Lamp Voltage	Legend	Legend Colour	Options	Biocote
Blank	Blank	Blank	Blank	<p>Finish Matt is standard.</p> <p>Colour Call factory for custom colours. A full range is available for large orders.</p> <p>Legend printing Select from the examples or call factory for custom legends.</p> <p>Lamp voltage Call factory for details.</p>	B Biocote
R Red	2 125V Neon	602A	B Black		
W White	3 250V Neon		W White		
	5 12Vdc LED (P Rocker)				
	6 24Vdc LED (P Rocker)				
	7 12V Filament				
	8 24Vdc Filament				

Examples



C1500A/C1500AL



C1500A/C0430AL



C1500X/C1500XL



C1520A/C1510AL



C1500A/C1520AL



C0430A/C0430AL

1550 Standard and 1350 High Inrush

150A to EN61058-1 and 16A 250Vac



Key Features

- Standard rocker switch
- 1350/53 high inrush
- Choice of switching circuits including 3 position
- Push-on, solder and PCB terminals
- Choice of bezel styles
- Choice of panel cut outs
- Matching indicator
- Double pole
- Splash resistant option
- BioCote antimicrobial option
- Panel cut out 'A' style: 27.2 x 22.3mm

Approvals and specifications

1550 Series 16(4)A 250Vac T125

UL CSA 16A 250Vac, (2 posn) 250Vac 1hp, 125Vac 1/2hp, 1350 72 Vdc 7A
(3 posn) 250 Vac 1/2hp, 125Vac 1/4hp.
UL 85°C, file E45221, CSA file LR10990.

In house test:

10A 24Vdc—Indicative rating only

1350 series 16(4)A 250Vac T85 1E4 (10,000 Ops.)
1330 series 16(6)A 250Vac T125 5E4 (50,000 Ops.)
150A Inrush to EN61058-1.

Terminal	Function		Rocker	Body
C 6.3 x 0.8	Standard 1550 ON - OFF	0480 X terminal N/A	A Softline Matt 	Panel cut-out Bezel Cut-outs must be punched in the direction of insertion
H 4.8 x 0.8*	1551 HP rating N/A ON - OFF (momentary ON)	High Inrush 1350 Not W, X or B rocker ON - OFF	B Splash resistant Softline 	A Gloss or Matt
K 2.8 x 0.8*	1552 HP rating N/A ON - OFF (momentary OFF)	1353 Not W, X or B rocker ON - OFF Lit	V Curved Matt or Gloss 	B Matt only
T 2.8 x 0.8*	1553 Not W, X or B rocker ON - OFF Lit	1353 Not W, X or B rocker ON - OFF Lit	W Splash resistant Curved 	L Matt only
T 2.8 x 0.8*	1560 μ ON - ON	1353 Not W, X or B rocker ON - OFF Lit	P Lit window Matt Lit (not momentary)	Q Gloss or matt
T 2.8 x 0.8*	1561 μ HP rating N/A ON - ON (Momentary 1 Side)	1353 Not W, X or B rocker ON - OFF Lit	X Two colour Matt (ON OFF only - not momentary)	Q Gloss or matt
T 2.8 x 0.8*	1562 μ In house tests only 2 Circuit ON - ON	1353 Not W, X or B rocker ON - OFF Lit	R Round 	R Matt only
U 2.8 x 0.8*	1570 μ 125V & 250V 1/2 HP H terminal rated T100 only ON - OFF - ON	1353 Not W, X or B rocker ON - OFF Lit	F Flat Lens Gloss (0480) 	T Matt only
U 2.8 x 0.8*	1571 μ HP rating N/A H terminal rated T100 only ON - OFF (momentary 1 side)	1353 Not W, X or B rocker ON - OFF Lit	A Softline lens Matt (0480 only) as F but with raised profile 	T Matt only
X 2.8 x 0.8*	1572 μ HP rating N/A H terminal rated T100 only ON - OFF - ON (momentary 2 sides)	1353 Not W, X or B rocker ON - OFF Lit		

Approvals and specifications (continued)

UL CSA 20A 250Vac 1hp, 125Vac 1/2hp.
UL 72Vdc 7A, 36Vdc 14A.
UL 85°C, file E45221, CSA file LR10990.

In house test:
20A 24Vdc—Indicative rating only

BioCote antimicrobial additive. Independently verified to ISO22196:2007.

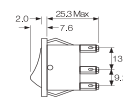
3mm contact gap except if marked µ.

Splash Resistance



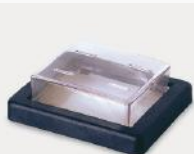
1300 High inrush, positive break switching
The 1300 series mechanism ensures contact welds formed at switch-on are positively separated by the plunger tube acting directly on the step in the moving contact.

Dimensions



Panel thickness
A,Q 0.75 to 3.3mm
L,B,T 0.75 to 2.5mm
R 0.75 to 3.0mm

* For cut-out details on momentary switches call sales

Finish	Body Colour	Rocker Colour	Insert Colour	Lamp Voltage	Legend	Legend Colour	Options
<div>M Matt</div> <div>G Gloss</div> <div>Applies to both Rocker & Body</div>	<div>B Black</div> <div>W White</div>	<div>Un-Lit</div> <div>B Black</div> <div>R Red</div> <div>W White</div> <div>Lit</div> <div>A Amber</div> <div>G Green</div> <div>C Clear</div> <div>R Red</div>	<div>Blank</div> <div>R Red</div> <div>W White</div>	<div>Blank</div> <div>2 125V Neon</div> <div>3 250V Neon</div> <div>5 12Vdc LED (P Rocker)</div> <div>6 24Vdc LED (P Rocker)</div> <div>7 12V Filament</div> <div>8 24Vdc Filament</div>	<div>Blank</div> <div>602A</div>	<div>Blank</div> <div>B Black</div> <div>W White</div>	<div>Finish</div> <div>Matt is standard.</div> <div>Colour</div> <div>Call sales for custom colours. A full range is available for large orders.</div> <div>Legend printing</div> <div>Select from the examples or call sales for custom legends.</div> <div>Lamp voltage</div> <div>Call sales for details.</div> <div>Blanking plates A0494</div> <div>Dummy units to fill unused panel holes.</div> <div>Protective cover</div> <div>Snaps on to A, L, Q or T bodies (add G after body in cat no). This reduces panel thickness by 1mm.</div> <div></div>
<div>Examples</div>							

Examples



□ C1350AL ---



□ C1550XL ---



□ C1553PL ---



□ C1553RA ---
Shown with M614
bezel cover



Optional snap-in
M441 barrier



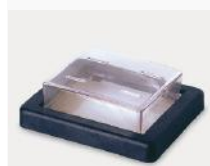
C1553AA with M616
guard Cut-out
22.0/22.1 x 29.4/29.5
Guard accepts "A"
body only



□ C0480RA ---
Shown with
M614 bezel
cover



□ C0480AL ---



Panel sealing washer W42 is available for the above body sizes. This reduces panel thickness by a further 1.00mm.
Covers are not suitable for momentary types.

BioCote Antimicrobial Additive

Moulded components have antimicrobial properties using BioCote silver ion technology.

For all options call sales.

1550 Standard & 1350 High Inrush Switches

150A to EN61058-1 and 16A 250Vac/250Vdc



Key Features

- Standard rocker switch
- 1350/53 high inrush
- Choice of switching circuits including 3 position
- Push-on, solder and PCB terminals
- Choice of bezel styles
- Choice of panel cut outs
- Matching indicator
- Double pole
- Option with guard & cover
- DC LED Illumination Available for "P" Rocker
- Bezel size 'G' style 32.0 x 25.0

Approvals and specifications

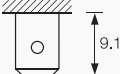



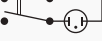








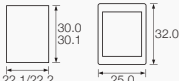

1550 Series 16(4)A 250Vac T125

UL CSA 16A 250Vac, (2 posn) 250Vac 1hp, 125Vac 1/2hp, (3 posn) 250 Vac 1/2hp, 125Vac 1/4hp. UL 85°C, file E45221, CSA file LR10990.

In house test:
10A 24Vdc—Indicative rating only

1350 Series

UL CSA 20A 250Vac 1hp, 125Vac 1/2hp. UL 72Vdc 7A, 36Vdc 14A, UL 85°C, file E45221, CSA file LR10990.

Terminal	Function	Rocker	Body	Finish	Body Colour	Rocker Colour
<div>C</div> <div></div> <div>6.3 x 0.8</div>	<div>Standard</div> <div>1550</div> <div>HP rating N/A</div> <div>1551</div> <div>HP rating N/A</div> <div>1552</div> <div>HP rating N/A</div> <div>1553</div> <div>Not W, X or B rocker</div> <div>1560 μ</div> <div>1561 μ</div> <div>HP rating N/A</div> <div>1562 μ</div> <div>In house tests only</div> <div>1570 μ</div> <div>125V & 250V 1/2 HP H terminal rated T100 only H terminal rated T100 only</div> <div>1571 μ</div> <div>HP rating N/A H terminal rated T100 only</div> <div>1572 μ</div> <div>HP rating N/A H terminal rated T100 only</div> <div>High Inrush</div> <div>1350</div> <div>Not W, X or B rocker</div> <div>1353</div> <div>Not W, X or B rocker</div> <div>PCB 0.8Sq* *Contact sales for details on 1350 series</div>	<div><div>A</div><div>Softline Matt</div><div></div></div> <div><div>B</div><div>ON - OFF</div><div></div><div>ON - OFF (momentary ON)</div><div><div>C</div><div>ON - OFF (momentary OFF)</div><div></div><div>ON - OFF Lit</div><div><div>D</div><div>ON - ON</div><div></div><div>ON - ON (Momentary 1 Side)</div><div><div>E</div><div>ON - ON 2 Circuit</div><div></div></div><div><div>F</div><div>ON - ON</div><div></div></div><div><div>G</div><div>ON - OFF - ON</div><div></div><div>ON - OFF - ON (momentary 1 side)</div><div><div>H</div><div>ON - OFF - ON (momentary 2 sides)</div><div></div></div><div><div>I</div><div>ON - OFF</div><div></div></div><div><div>J</div><div>ON - OFF Lit</div><div></div></div></div><div><div>V</div><div>Curved</div><div></div><div>Matt or Gloss</div><div>Gloss only</div><div>Lit (not momentary)</div></div><div><div>P</div><div>Lit window Matt</div><div></div><div>Lit (not momentary)</div></div></div></div></div>	<div>Panel cut-out</div> <div>Bezel</div> <div>Cut-outs must be punched in the direction of insertion</div> <div>B</div> <div></div> <div>22.1/22.2</div> <div>30.0</div> <div>30.1</div> <div>32.0</div> <div>Matt only</div> <div>L</div> <div></div> <div>22.1/22.2</div> <div>28.2</div> <div>28.3</div> <div>32.0</div> <div>Matt only</div>	<div>M</div> <div>Matt</div> <div>G</div> <div>Gloss</div> <div>Applies to both Rocker & Body</div>	<div>B</div> <div>Black</div> <div>W</div> <div>White</div>	<div>Un-Lit</div> <div>B</div> <div>Black</div> <div>R</div> <div>Red</div> <div>W</div> <div>White</div> <div>Lit</div> <div>A</div> <div>Amber</div> <div>G</div> <div>Green</div> <div>C</div> <div>Clear</div> <div>R</div> <div>Red</div>

Splash Resistance



In house test:

20A 24Vdc—Indicative rating only

BioCote antimicrobial additive. Independently verified to ISO22196:2007.

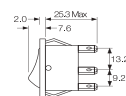
3mm contact gap except if marked μ .



1350 High inrush, positive break switching

The 1350 series mechanism ensures contact welds formed at switch-on are positively separated by the plunger tube acting directly on the step in the moving contact.

Dimensions




Panel thickness

G, H 0.75 to 2.5mm

Terminal spacing - Poles 10.2 between centres

* For cut-out details on momentary switches call sales

Insert Colour	Lamp Voltage	Legend	Legend Colour	Options	Biocote
Blank	Blank	Blank	Blank	Finish Matt is standard.	B Biocote
R Red	2 125V Neon	602A	B Black	Colour Call sales for custom colours. A full range is available for large orders.	
W White	3 250V Neon		W White	Legend printing Select from the examples or call sales for custom legends.	
	5 12Vdc LED (P Rocker)			Lamp voltage Call sales for details.	
	6 24Vdc LED (P Rocker)			BioCote Antimicrobial Additive 	
	7 12V Filament			Moulded components have antimicrobial properties using BioCote silver ion technology.	
	8 24Vdc Filament				

Examples



C1553AH - - -



C1550AH - - -

R13 Round Rocker Switches

10A 250Vac



Key Features

- ⬡ Miniature round rocker switch
- ⬡ Ratings up to 10A, 250Vac
- ⬡ Single & double pole
- ⬡ Illuminated & nonilluminated, neon and LED
- ⬡ Choice of actuators
- ⬡ Matching indicator
- ⬡ Panel cut out: 20.2 dia.

Approvals and specifications

⚡ SP 10(4)A 250Vac T85 1E4

⚡ DP 10(4)A 250Vac T85 1E4

UL CSA SP 16A 125Vac & 10A 250Vac
UL CSA DP 16A 125Vac, 10A 250Vac, 10A 28Vdc
UL 85°C, file E67774(S), CSA file LR45128

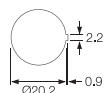
RoHS compliant

Single pole has μ contact gap.

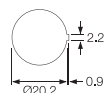
Special products

Are made to order and can be supplied with a range of body and rocker / lens colours, print & lamp voltage.

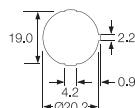
Dimensions



Snap fixing into panel thickness up to 3.0

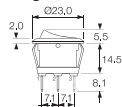


Snap fixing into 2.0 to 3.0mm panels

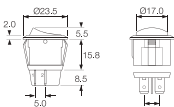


Snap fixing into 0.7 to 3.0mm panels

Single Pole



Double Pole



Protective cover L188



Snap on to bodies (not R13 211 or R13 112LP), this reduces maximum acceptable panel thickness to 2.4mm.

Examples



⚡ R13 112B NAA



⚡ R13 112A AAA



⚡ R13 112A2 ---

R13 / 112 / A / B / B / 3 / 2 / 602A / W / L188

Series

Type

Function

Body Colour

Rocker Colour

Insert Colour

Lamp Voltage

Legend

Legend Colour

Legend Colour

Product details



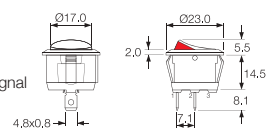
1 2
SP ON - OFF μ
Cat no.
R13 112A AAA



1 2 3
SP ON - OFF μ
Lit 230V
Cat no.
R13 112B NAC



1 2
SP ON - OFF μ
Bright colour ON signal
Cat no.
R13 112A2 - -



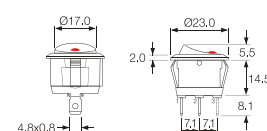
1 2
SP ON - OFF μ
Cat no.
R13 112A AAB



1 2 3
SP ON - ON μ
Cat no.
R13 112C AAA



1 2 3
SP ON - OFF μ
Lit Window
Cat no.
R13 112B2 - -



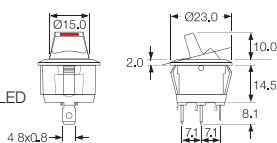
1 2 3
SP ON - OFF μ
Lit 230V
Cat no.
R13 112B NAA



1 2 3
SP ON - OFF - ON μ
Cat no.
R13 112D AAA



12 3- 3+
SP ON - OFF μ
Paddle tip has red LED
Cat no.
R13 112LP - -



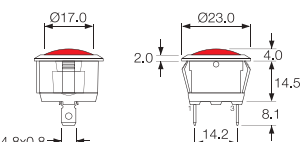
1 2 3
SP ON - OFF μ
Lit 230V
Cat no.
R13 112B NAB



SP ON - OFF μ
(Momentary ON)
Cat no.
R13 208F AAA*



1 3
Indicator light
Cat no.
R9 92B - - -



1 2
DP ON - OFF
Cat no.
R13 244A AAA

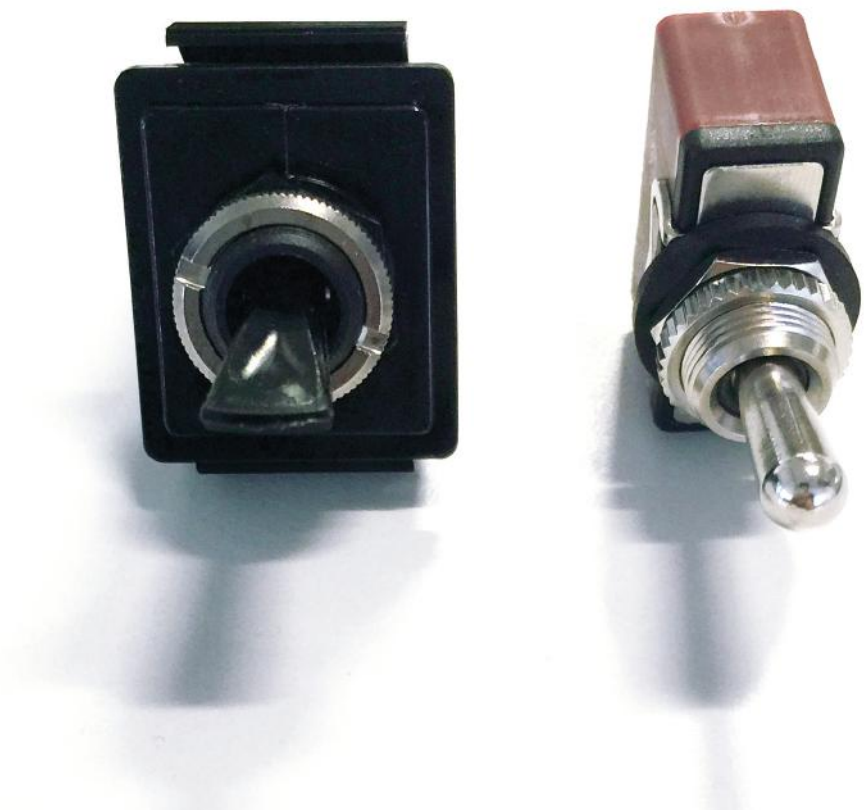


DP ON - OFF
Lit 230V
Cat no.
R13 244B NAA

Toggle Switches

Well known for their quality and reliability, **Bulgin's toggle switches** are **cost effective** solutions to many existing applications. These switches offer features at an attractive price point often well below that of the existing competition.

- ⬢ Nylon and Metal switch variants
- ⬢ Multiple Lever Options
- ⬢ Ratings up to 20A, 250V ac - 277V ac
- ⬢ IP67 panel seal versions, supplied complete with gaskets (3900 Series – All Variants)
- ⬢ Single and double pole
- ⬢ Choice of circuit options including 3 position and momentary
- ⬢ Mounting hole: 12.7mm diameter.
- ⬢ Sealing accessories available
- ⬢ Quick Connect, Solder, Screw and PCB Termination Options



3900 Metal Toggle Switches

16A 250Vac - IP67 Sealed Versions



Key Features

- Metal toggle switches
- Ratings up to 20A, 277V ac
- Single and double pole
- Choice of circuits including 3 position and momentary
- Sealed version supplied complete with gaskets
- Panel seal version to IP67
- 6.3mm terminals
- Guard option

Terminal	Function	Actuator	Body	Options	
<div>C 4.8 x 0.8</div>	<div> Single Pole 3900 ON - OFF </div> <div>3901 ON - OFF (momentary ON) </div> <div>3902 ON - OFF (momentary OFF) </div> <div>3910 ON - ON </div> <div>3911 ON - ON (momentary 1 side) </div> <div>3920 ON - OFF - ON μ </div> <div>3921 ON - OFF - ON μ (momentary 1 side) </div> <div>3922 ON - OFF - ON μ (momentary 2 sides) </div>	<div> Double Pole 3950 ON - OFF </div> <div>3951 ON - OFF (momentary ON) </div> <div>3952 ON - OFF (momentary OFF) </div> <div>3960 ON - ON </div> <div>3961 ON - ON (momentary 1 side) </div> <div>3970 ON - OFF - ON μ </div> <div>3971 ON - OFF - ON μ (momentary 1 side) </div> <div>3972 ON - OFF - ON μ (momentary 2 sides) </div>	<div>A Metal Metal toggle finish is nickel plate</div> <div>B Metal Metal toggle finish is nickel plate</div> <div>D 25.4</div> <div>E Metal toggle finish is nickel plate</div> <div>F Metal toggle finish is nickel plate</div>	<div>A Single pole Thread: 15/32" x 32TPI Keyway 17.5 10.5 17.0</div> <div>E Panel sealed, single pole Thread: 15/32" x 32TPI Keyway Panel Seal 17.5 10.5 17.0</div> <div>A Double pole, without barrier Thread: 15/32" x 32TPI Keyway 17.5 10.0 30.6</div> <div>B Double pole, with barrier Thread: 15/32" x 32TPI Keyway 17.5 10.0 30.6</div> <div>F Panel sealed, double pole, with terminal barrier Thread: 15/32" x 32TPI Keyway Panel Seal 17.5 10.0 31.1 Switches with F toggles have double pole bodies, regardless of circuit</div> <div>G Panel sealed, double pole, without terminal barrier Thread: 15/32" x 32TPI Keyway Panel Seal 17.5 10.0 31.1</div>	<div>Neck Seal M539 Actuator is visible </div> <div>Cover M1080 Covers have internal nylon nuts</div> <div>M1080-2 Covers have internal metal hex nuts</div> <div>Fixing nuts Nickel plated brass are supplied </div> <div>Knurled Front nut Panel thickness 4.0 with backnut</div> <div>Plate P236 Plate SP or DP </div>

Approvals and specifications

UL/CSA Ratings 3901, 3902, 3920, 3921, 3922
16A, 277Vac
1 HP, 250Vac

7A, 72Vdc
14A, 36Vdc

3910, 3901, 3952, 3960, 3961, 3970, 3971, 3972
16A, 277Vac
1 HP, 250Vac
1/2 HP, 125Vac
7A, 72Vdc
14A, 36Vdc

3900, 3950
20A, 277Vac
1 HP, 250Vac
1/2 HP, 125Vac
7A, 72Vdc
14A, 36Vdc

ENEC Ratings
3900, 3901, 3902, 3950, 3952, 3960, 3961
16(4)A 250Vac

3910, 3911, 3920, 3921, 3922, 3951, 3970, 3972
10 4)A 250Vac

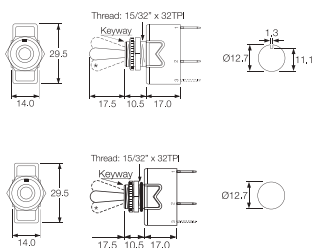
Approvals and ratings vary with function.
3mm contact gap except where marked μ .

* CSA approval for A and B bodies only

Dimensions mm) * Indicates ON position (for ON - OFF switches)

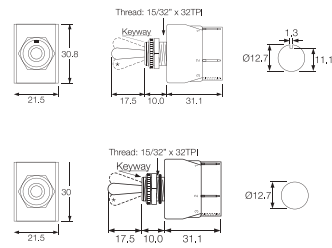
Single pole

(C terminals shown)



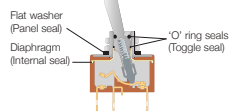
Double pole

(C terminals shown with barrier)



Toggle Switch - sealed version

BE and BF types



Guard TG1-RED



Examples



C3900BE - - -



C3920BA - - -



C3950BF - - -



C3972BB - - -



Key Features

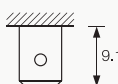





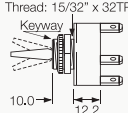

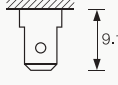


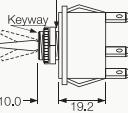

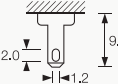




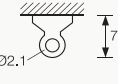









- Nylon toggle switches
- Ratings up to 20A, 250V ac
- Single and double pole
- Wide choice of terminals
- Choice of circuit options including 3 position
- Flat & round actuator options

Approvals and specifications

16(4)A 250Vac T85

UL 20A 250Vac Non Ind (Single pole)
UL 16A 250Vac Non Ind (Double pole)
UL CSA (2 pos types) 250Vac 1hp, 125Vac 1/2hp
UL CSA (3 pos types) 250Vac 1/2hp, 125Vac 1/4hp
CSA 16A 250Vac Non Ind
UL 85°C, file E45221, CSA file LR10990
UL and CSA N/A on momentary types

Selective "A, B, C" and "OFF, A, A+B" circuits at 5 amp also available.
3mm contact gap except where marked μ .

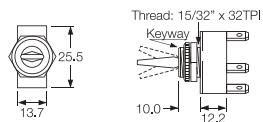
Terminal	Function	Actuator	Body	Options	
C 	 Single Pole 1700 ON - OFF 	 Double Pole 1750 ON - OFF 	H 	O Single pole Thread: 15/32" x 32TPI 	Neck Seal M539 Material - Nitrile (H & R Actuators) Actuator visible 
H 	1710 μ ON - ON 	1760 μ ON - ON 		O Double Pole Thread: 15/32" x 32TPI 	Cover M1080 Material - EPDM (R Actuator only) 
K 	1720 μ ON - OFF - ON 	1770 μ ON - OFF - ON 	R 	Panel hole (all types) Panel thickness (Max) Both nuts - 3.5mm Less backnut - 6.5mm	Cover M531 Material - PVC (R Actuator only) Covers have internal nylon nuts 
T 	1720 μ ON - OFF - ON 	1770 μ ON - OFF - ON 			Fixing nuts (Standard is M506 & T92) T5 Hex brass M506 Hex nylon 
X 	1721 μ ON - OFF - ON μ (momentary 1 side) 				T92 Knurled brass - slotted 
	1722 ON - OFF - ON μ (momentary 2 sides) 		The switch is on between centre terminals (2 & 5) and the terminals over which the lever is positioned.		M279 Knurled nylon 
					Plate P236 Plate SP or DP 

Dimensions

mm) * Indicates ON position (for ON - OFF switches)

Single pole

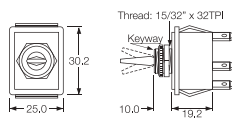
(C terminals shown)



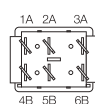
Optional
F00232PAAA
plate SP or DP

Double pole

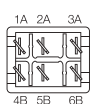
(C terminals shown)



Without barrier



With barrier



Examples



C1700R --



C1700H --



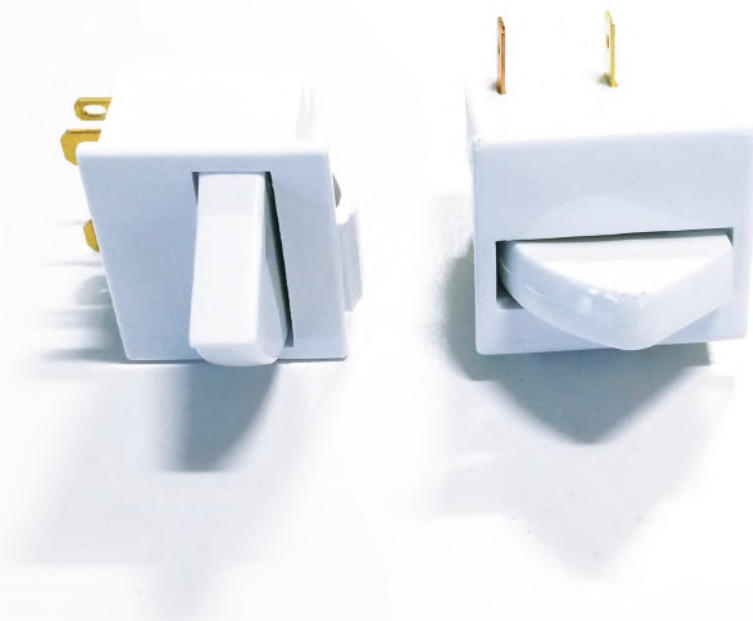
C1760R --



C1750H --

Long recognised as a leader in refrigerator door switches, Bulgin's wide range of types and configurations will suit almost any need. With both double pole and single pole options, our switches are not only ideal for traditional refrigerator and freezer applications but can and have been used in a variety of door applications as well.

- ⬡ Door switches
- ⬡ Switch rating from 0.2A, 250V ac up to 5A, 250Vac
- ⬡ Splash resistant variants
- ⬡ Choice of actuators
- ⬡ Momentary on and momentary off switching



0055 Door Switches



Key Features

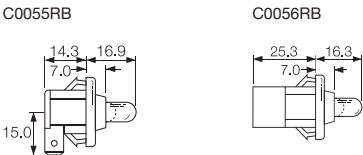
- ⬡ Ratings up to 0.2A, 250V ac
- ⬡ High temperature rating up to 125°C
- ⬡ Long overtravel
- ⬡ Choice of terminal orientation

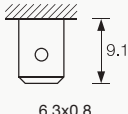
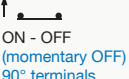


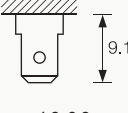
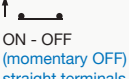
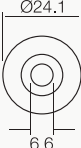
Approvals and specifications

⚡ 0055 & 0056
0.2(0.2)A 250Vac 25T125 5E4
(50,000 operations)

μ contact gap

Dimensions and Properties



Terminal	Function	Actuator	Body	Options
C  6.3x0.8	0055  ON - OFF (momentary OFF) 90° terminals	R 	B Panel cut - out  Panel thickness 0055 1.0 - 1.6 0056 1.0 - 2.6	Finish Gloss finish only Colour White or black Call sales for custom colours.
H  4.8x0.8	0056  ON - OFF (momentary OFF) straight terminals		Flange 	

3005 Refrigerator Door Switches

Splash Resistant



C3005BL - - -

C3005CB - - -

Key Features

- Door switches
- Momentary on and momentary off switching
- Splash resistant
- Choice of terminal orientation
- Choice of actuators

Approvals and specifications

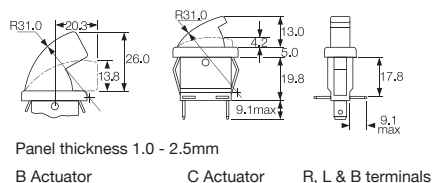
3005 25W 25T85 5E4 (50,000 Operations) 250Vac
3006 65W 25T85 5E4 (50,000 Operations) 250Vac

UL 0.3A 250Vac (Black Versions Only)
UL 0.2A 125Vac (Black Versions Only)

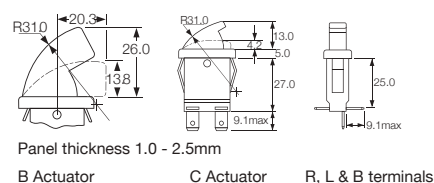
μ contact gap

Dimensions and Properties

3005



3006



Terminal	Function	Actuator	Body	Options
C 6.3x0.8	3005 ON - OFF (momentary OFF) 1mm max travel to OFF position	B 26.0	R L B Terminal direction (viewed from hinge end) Panel cut - out Bezel Bezel Profile 12.1/12.2 14.0 5.0	Finish Gloss finish only Colour White or black Call sales for custom colours. A full range is available for large orders.
H 4.8x0.8	3006 ON - OFF (momentary ON) 3mm min travel to ON position	C 13.0		

3100 Refrigerator Door Switches

Splash resistant



Key Features

- Door switches
- Ratings up to 5A, 250V ac
- Splash resistant
- Changeover, momentary ON and momentary OFF
- Choice of actuators

Approvals and specifications

5A 250Vac 25T85 5E4 (50,000 Operations)

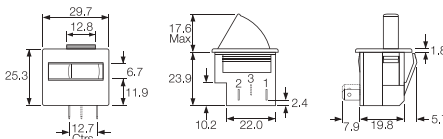
UL CSA 5A 250Vac
UL 85°C, file E45221, CSA file LR10990

μ contact gap.
Sealed terminals option available.

Dimensions and Properties

3101 uses terminals 1,2
3102 uses terminals 1,2
3111 uses terminals 1,2,3

For details of actuator travel and switching angles call sales.



Terminal	Function	Actuator	Body	Colour	Options
E 4.8x0.5 QC 7.9	 3101 ON - OFF (momentary OFF)	A 17.6 max	A 	W White	Finish Gloss finish only Colour White or black Call sales for custom colours. A full range is available for large orders.
	3102 ON - OFF (momentary OFF)	B 15.6 max		B Black	
	3111 ON - ON (momentary 1 side)	C 23.0 max		PW Polar White	
		D 17.1 max			

3140 Refrigerator Door Switches

Splash resistant



HK3141AA ---



H3145AA ---

Key Features

- Door switches
- Ratings up to 5A, 250V ac
- Splash resistant
- Momentary action
- Choice of actuators
- 2 circuit switch

Approvals and specifications

5A 250Vac 25T85 5E4 (50,000 Operations)

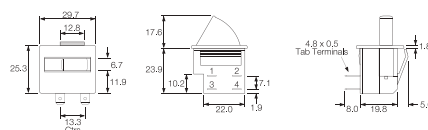
UL CSA 5A 250Vac
UL 85°C, file E45221, CSA file LR10990

3141, μ contact gap.
3145 and 3146, 3mm contact gap.

Sealed terminals option available.

Dimensions and Properties

3141 uses terminals 1,2,3,4
3145 uses terminals 3,4
3146 uses terminals 1,2



Terminal	Function	Actuator	Body	Colour	Options
H 4.8x0.8	 3141 ON - OFF (momentary)	A B C D 	A Optional cut-out for orientation	W White B Black PW Polar White	Finish Gloss finish only Colour White or black Call sales for custom colours. A full range is available for large orders. Order as: 3151 (3141 type) 3155 (3145 type) 3156 (3146 type)
K 2.8x0.8	3145 ON - OFF (momentary OFF)				
Standard format is H terminals in positions 1 & 2 and K terminals in positions 3 & 4 For sealed terminals call sales	3146 ON - ON (momentary ON)				

0305 Combined Switch / Lampholder for Freezers



C0305RT ---
C0305LT ---

Key Features

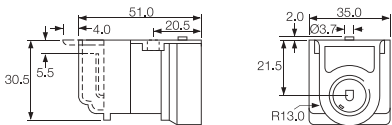
- E12 and E14 lamps
- Switch rating up to 0.06A, 250V ac
- Auto switching
- Mercury free
- Available with right or left hand orientation
- Available as lampholder only

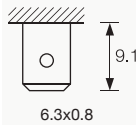


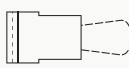
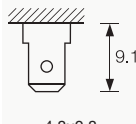



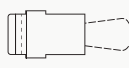
Approvals and specifications

- 0.06A 250Vac 25 T 85 (0305 only)
- UL 15W 125/250Vac (0305 only)
UL 65°C, file E116391 (0305 only)
- Switched units have μ contact gap.

Dimensions and Properties

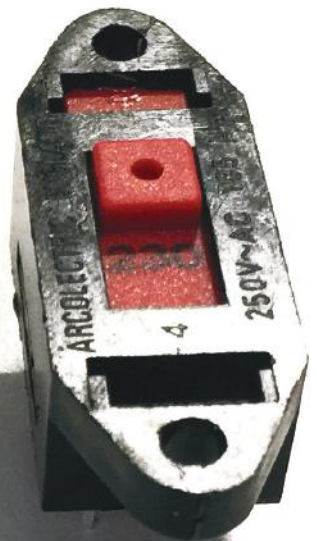
The mechanism of this switch/lampholder does not contain mercury and may be safely used in food storage equipment. When fitted to the lid of a freezer storage cabinet, the switch will operate the lamp when the lid is opened to the angle of tilt shown in the drawing.



Terminal	Function	Mounting	Body	Options
C 	0305 (E14)  ON - OFF Switch and Lampholder	L (View from the bulb end) For Left hinged lid for 0305/0306 switches, not for 0307 lampholder 	T Body without flange for 0305/0306 switches 	Colour Call sales for colours. A full range is available for large orders.
H 	0306 (E12)  Lampholder only (No Switch) 0307 (E14)  ON - OFF Switch and Lampholder	R (View from the bulb end) For Right hinged lid for 0307 lampholder or 0305/0306 switches 	S Body with rear flange for 0307 lampholder and for 0305/0306 switches 	

With up to 5 switching positions as well as multiple terminal, circuit and slider options, Bulgin's board mounted power slide switches can be configured to suit your needs. We also offer a wide range of voltage selector types that can be either snapped into a panel or flange mounted.

- Ratings up to 16A, 250V ac
- PCB and solder terminals
- Voltage Selector Models
- Snap in and flange mounting
- 2, 3, 4 and 5 position
- Choice of circuits
- Choice of actuators



2000 Slide Switches - up to 5 position

10A 250Vac



Key Features

- Slide switches
- Ratings up to 16A, 250V ac
- PCB and solder terminals
- 2, 3, 4 and 5 position
- Choice of circuits
- Choice of actuators

Approvals and specifications

CE 10A 250Vac T85
6(3)A 250Vac T85

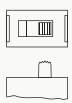

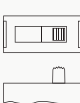
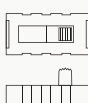
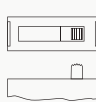
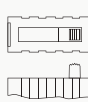
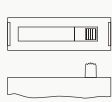
UL CSA 16A 250Vac Non Inductive
UL CSA 4A 300Vac
UL 65°C, file no. E45221, CSA file no. LR10990

μ contact gap
Please specify: Standard action (SP116) or Light action (SP118).
2000 series lubrication is inorganic and does not degrade plastics.

Terminal	Series	Position	Circuit	Slider			
<div>K 2.8 x 0.8</div>	2	2 Switching positions	10 	0 	6 	D 	L
<div>R 2.8 x 0.8</div>			20 				
<div>T Solder</div>		3 Switching positions	30 				
<div>X PCB 0.8 Sq.</div>			40 				
<div>Y PCB 0.8 Sq. For mounting stability switches have extra "support" terminals * Nominal - Dimension varies with body type. For exact figure call sales</div>		4 Switching positions	10 	1 	7 	E 	N
	20 						
	30 						
	40 						
	5 Switching positions	10 	2 	9 	G 	P 	
		20 					
		30 					
		40 					
		10 	3 	A 	H 	R 	
	20 						
	30 						
	40 						
		10 	4 	B 	J 	S 	
	20 						
	30 						
	40 						
		10 	5 	C 	K 	T 	
	20 						
	30 						
	40 						

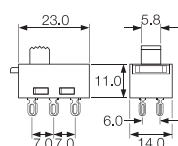
Examples



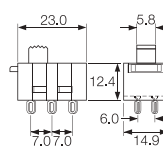
Body		Options
C 2 positions 	H 2 positions 	<p>Colour Call sales for custom colours. A full range is available for large orders.</p> <p>Legend printing A wide range is available. For all options call sales</p>
A 3 positions 	H 3 positions 	
A 4 positions 	H 4 positions 	
A 5 positions 		

Dimensions

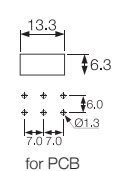
C 2 positions



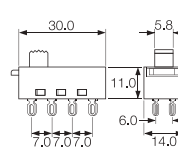
H 2 positions



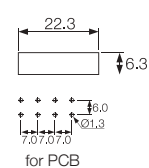
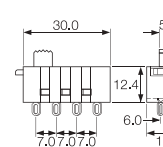
Cut-out /PCB Matrix



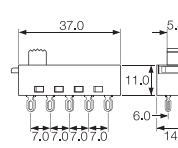
A 3 positions



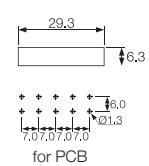
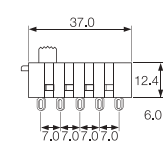
H 3 positions



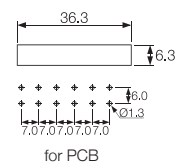
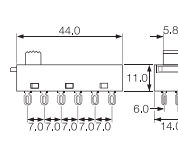
A 4 positions



H 4 positions

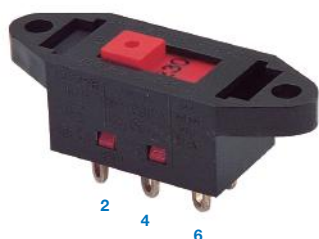


A 5 positions



2000 Slide Switches - Snap fit and panel mount

10A 250Vac



115/230 is preferred legend

Key Features

- 2 way 'voltage selector'
- Ratings up to 16A, 250V ac
- Snap fit and panel mount
- PCB & solder terminals
- 2 and 3 position
- Choice of circuits
- Choice of actuators

Approvals and specifications

10A 250Vac T85
6(3)A 250Vac T85

UL CSA 16A 250Vac Non Inductive
UL CSA 4A 300Vac
UL 65°C, file no. E45221, CSA file no. LR10990

μ contact gap
Please specify: Standard action (SP116) or Light action (SP118).
2000 series lubrication is inorganic and does not degrade plastics.

Terminal	Series	Position	Circuit	Slider			
<div>K 2.8 x 0.8</div>	2	2 Switching positions	10 	0 	6 	C 	L
<div>R 2.8 x 0.8</div>			20 	2 	7 	D 	M
<div>T Solder</div>			30 	3 	8 	E 	N
<div>X PCB 0.8 Sq. For mounting stability switches have extra "support" terminals * Nominal - Dimension varies with body type. For exact figure call sales</div>			40 	4 	9 	H 	P
	3 Switching positions	3 Switching positions	10 	5 	A 	K 	R
			20 	S 	T 		
			30 				
			40 				

Examples



T22208E ---



T22308E ---



T2230MF ---







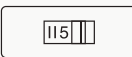
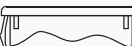
T22205B ---



T22305B ---

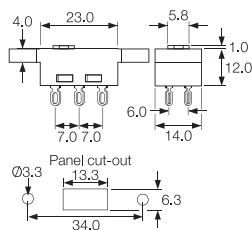


T23204B ---

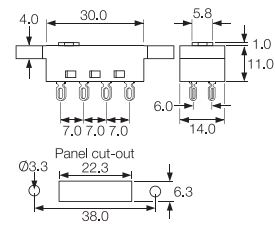
Body	Options
<p>B</p> <p>With mounting holes</p>  	<p>Colour</p> <p>Call sales for custom colours. A full range is available for large orders. Standard body colour is black.</p>
<p>E</p> <p>Snap fit</p>  	
<p>F</p> <p>Snap fit (single pole ON OFF only)</p>  	

Dimensions

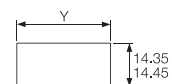
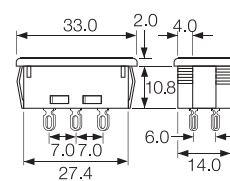
2 Pos B



3 Pos B

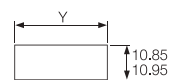
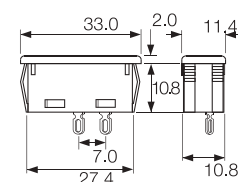


2 Pos E



Panel thickness	Dim. Y
0.8-1.2	29.75/29.85
1.63	30.15/30.25
2.0	30.35/30.45
2.5	30.55/30.65

2 Pos F



Panel thickness	Dim. Y
0.8-1.2	29.75/29.85
1.63	30.15/30.25
2.0	30.35/30.45
2.5	30.55/30.65