# Push Button Switches



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



# Push Button

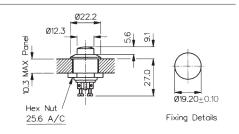


Front Panel Mounting



MP0012/Col

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

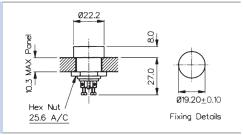






MP0012/1/Col

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

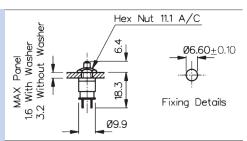


Rear Panel Mounting



MP0016

- S.P. Push to Make
- 000 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:	$>10^4  M\Omega$	$>10^4~\text{M}\Omega$	$>10^4 M\Omega$
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: Body:	Glass Filled Nylon Brass, Brass, Chrome Plated	Glass Filled Nylon Brass, Brass, Chrome Plated	Glass Filled Nylon Brass, 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

# 8300 Series Push Button

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





#### **Key Features**

- Miniature push button
- O 8A Inductive current rating
- Ratings up to 12(12)A, 250V ac (H suffix)
- O Illuminated and nonillumi-
- O Single and double pole
- Latching and momentary
- Slotted actuator for custom buttons

- Industry standard panel cutout
- O 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)

**%1 8** 8350, 8351, 8353, 8354 12A 250Vac DP, 250Vac 1hp, 125Vac 1/2hp

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

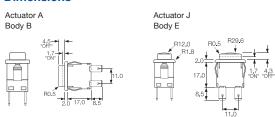
UL 85°C, file E45221, CSA file LR10990

In house test: 10(10)A 250Vac—Indicative rating only 3mm contact gap.

Terminal	Function	Actuator	Body Code	Body Colour
С	1 2 Approvals & ratings vary with function Single pole switches use terminals 1 & 2 (& 3)		Panel cut-out ** Bezel	
6.3 x 0.8	8300 Single Pole ON - OFF	A Standard actuator	B Standard body	<b>B</b> Black
н А	8301 Single Pole ON - OFF (momentary ON)	H Slotted for custom caps	12.9	<b>W</b> White
4.8 x 0.8	8303 Single Pole ON - OFF With Light	Slots for snap-in buttons  C Square actuator	Softline style body with radiused bezel	
	8304 Single Pole ON - OFF (momentary ON) with light	E	Cut-outs must be punched in the direction of insertion	
K	8350 Double pole ON - OFF	Radiused actuator	Dimensions for snap-in fixing Panel thickness Dimension X	
1 5 2.8 x 0.8	8351 Double pole ON - OFF (momentary ON)	F Small round actuator	0.75-1.24 19.1/19.2 1.25-1.99 19.3/19.4 2.00-3.00 19.7/19.8 X and V PCB terminals.	
	8353 Double pole ON - OFF With light	J Smooth curved actuator	Additional dummy terminals may be supplied for extra support.	
2.6 7.0 - 1.5 Solder	8354 Double pole ON - OFF (momentary ON)	M		
	8355 Single pole ON - OFF			
X V 4.5	Isolated light - switched C, E & M actuators only  8356 Single pole	Large round actuator		
(Call sales for mounting dims)	ON - OFF Isolated light - unswitched C, E & M actuators only	All actuators except H available lit		



# **Dimensions**



# **Examples**







⊞ H8353JE - - -⊞ T8353JE - - -



ਚ H8353EB - - -ਚ T8353EB - - -



ਚ H8353CB - - -ਚ T8353CB - - -

Actuator Colour	Lamp Voltage	Legend	Legend Colour	Options
LIT				
A Amber  C Clear  G Green				H 12(12)A 250Vac switch rating Finish Matt finish standard except on J and D actuators which are gloss 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.
R Red	7 12V Filament			Special buttons Some of the many options are shown Call sales for the full range L167 Protective cover
UNLIT	24V Filament			
Black R				Snaps on to switch bodies fitted with "A" or "J" style actuators, this reduces panel thickness by 0.8mm
Red W White				BioCote Antimicrobial Additive Moulded components have antimicrobial properties using BioCote silver ion technology.

# 8200 Series Push Button

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





#### **Key Features**

- O Miniature push button
- 8A Inductive current rating
- Ratings up to 12(12)A, 250V ac (H suffix)
- Without button
- O Sub panel mount
- O 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 \$\mathbb{\text{UL}} \& \text{UL} \& \text{85}^{\circ}\text{C}, \text{file} \& \text{E45221}, \text{CSA} \& \text{file} \& \text{LR10990} \end{array}

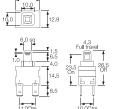
3mm contact gap.

Terminal	Function	Actuator	Body Code
C 10.1	Approvals & ratings vary with function Single pole switches use terminals 1 & 2 (& 3)  8200 Single Pole ON - OFF	A Standard actuator for snap-on custom adaptors	A Standard body
A		Flat top actuator	C  As standard body but with side support peg for use with M PCB terminals
2.6 1.5 2.8 × 0.8	8201 Single Pole ON - OFF (momentary ON)	Examples of possible actuation methods Using a Snap on adaptor	X and V PCB terminals. Additional dummy terminals may be supplied for extra support.
T V  2.6	8250 Double Pole ON - OFF	Using a Hinged Actuator	
4.5 7.0 PCB 0.8 Sq	8251 Double Pole ON - OFF (momentary ON)		



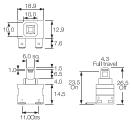
# **Dimensions**

'A' body with 'H' 4.8 terminals

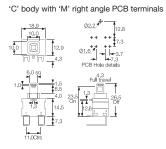


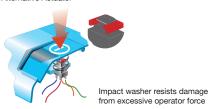


'A' body with 'A' right angle 4.8 terminals



Alternative Actuator





# **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
- O 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

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

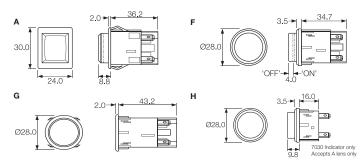
3mm contact gap.

		25.0 dia 27.2 x 22.3	3	
Terminal	Function		Actuator	Body Code
C  (6.3 x 0.8)  H  (	7003 Single Pole (with light) ON - OFF  7004 Single Pole (momentary) with light ON - OFF  7050 Double Pole ON - OFF  7051 Double Pole with light ON - OFF  7053 Double pole with light ON - OFF  7054 Double pole (momentary ON) with light ON - OFF	2 1 1 4 3 3 2 1 1 4 2 2 1 1	A Round actuator shown in F body  A Round actuator - medium shown in G body  C Round actuator - one gatom in F body  D Round actuator - sub panel mount  S Rectangular actuator Shown in "A" body NA for 7030	Panel cut-outs  F H G  Body types fit either cut-out  25.0/25.2  A  27.3  22.3/22.4  Cut-outs must be punched in the direction of insertion
	CSA LR29381			



#### **Dimensions**

Panel thickness: A - 0.8 - 2.5mm F, G, H - 0.8 - 5.0mm



# **Examples**









© C7000AF - - -

C7050SA - - -

C7053AG - - -

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

# 0911 Push Button Switches 0.5A 250Vac





# **Key Features**

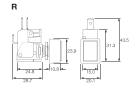
- Snap action switches
- Ratings up to 16A, 250Vac
- O Round and rectangular buttons

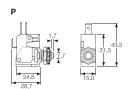
# **Approvals and specifications**

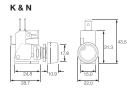
**%** 16A 125/250Vac 3/4hp T85 50E3 125V 1/2 HP, 250V 3/4 HP, 0.4A 125Vdc, 0.2A 250Vdc

Approvals apply to switch mechanism only. μ contact gap.

#### **Dimensions**







Terminal	Function	Actuator	Body Code	Options
12.0	0911 (momentary) ON - ON	R Rectangular bezel  P Short  K with satin chrome bezel	Panel Cut-out Panel thickness Both nuts 2.5mm No backnut 4.0mm	Call factory for custom colours
		N with nylon bezel		







# **Key Features**

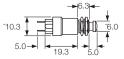
- O Self wiping contacts
- O Slow make & break
- Momentary action
- Choice of switch circuits
- Choice of actuators

# **Approvals and specifications**

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

#### **Dimensions**

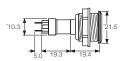
Dimensions (mm) Nylon S and L actuators





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
3.3 5.0 5.0 1.2 Solder	O916  Black base SP ON - OFF (momentary)  O917 50V only  Brown base SP ON - OFF (momentary 1 side)  O918  O918  White base SP ON - OFF (momentary OFF)  O919  Black base DP ON - OFF (momentary 1 side)  O920  White base DP ON - OFF (momentary 1 side)  O920  White base DP ON - OFF (momentary 1 side)	S Small Actuator  L Large Actuator  V V Vandal Resistant IP66 Flattop Stainless Steel	Panel Cut-out (L & S Actuators)  Panel thickness Both nuts - 2.5mm No Backnut - 4.0  Panel Cut-out (Stainles Steel V Actuator) Panel thickness - 8.0mm	Finish Gloss finish for L and S actuators.  Colour Call sales for custom colours. A full range is available for large orders.

# Voltage Selectors

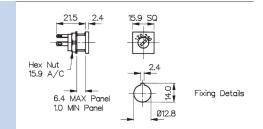


120/140V Voltage Selector



VS0001

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

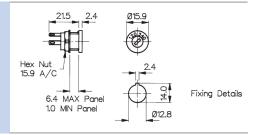


120/140V Voltage Selector

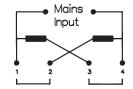


VS0002

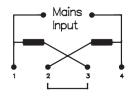
- O 2.8 series tabs/Solder tags
- O Roun
  O 6.3A Round Front Bezel
- CSA & VDE approvals



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: Tags:	Glass Filled Nylon UL94V-1 Brass, Silver Plated	Glass Filled Nylon UL94V-1 Brass, Silver Plated
Contacts:	Copper Silver Alloy	Copper Silver Alloy
Approvals:	<b>®</b>	<b>⚠ ⑤</b>
Variants:	Other markings, details on request	Other markings, details on request
RoHS		Compliant