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

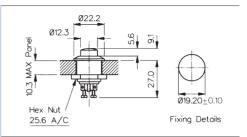


Front Panel Mounting



MP0012/Col

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

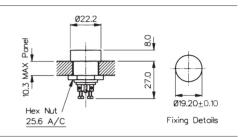


Front Panel Mounting



MP0012/1/Col

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

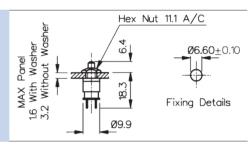


Rear Panel Mounting



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:	$>10^4 M\Omega$	$>10^4 M\Omega$	$>10^4~\text{M}\Omega$
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 nonilluminated
- Single and double Contact
- Latching and momentary
- Slotted actuator for custom buttons

- O Industry standard panel cutout
- O Panel cut out: 19.3 x 12.9

Approvals and specifications

12 A GP, 250 Vac, T85
 13 A GP, 250 Vac, T85
 1 hp, 250 Vac, T85, 6E3/1E4

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

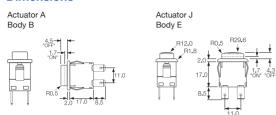
8300, 8301, 8303, 8304 13A 250Vac SP, 250Vac 1hp, 125Vac 1/2hp

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

Terminal		Function	Actuator Body Code		Body Colour
C	yuuuu.	1 Approvals & ratings vary with function Single Contact switches use terminals 1 & 2 (& 3)		Panel cut-out ** Bezel	
	0 T _{10,1}	8300 Single Contact ON - OFF	A Standard actuator	B Standard body	B Black
	ı A	8301 Single Contact ON - OFF (momentary ON)	H Slotted for custom caps	12.9	W White
F	4.8 x 0.8	8303 Single Contact ON - OFF With Light	Slots for snap-in buttons C Square actuator	Softline style body with radiused bezel	
		8304 Single Contact ON - OFF (momentary ON) with light	E	Cut-outs must be punched in the direction of insertion	
K	2.6. 0 8.5	8350 Double Contact ON - OFF	Radiused actuator	Dimensions for snap-in fixing Panel thickness Dimension X	
	15 2.8 × 0.8	8351 Double Contact 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	
		8353 Double Contact ON - OFF With light	J Smooth curved actuator	X and V PCB terminals. Additional dummy terminals may be supplied for extra support.	
T	2.6 7,0 1.5 1,5 Solder	8354 Double Contact ON - OFF (momentary ON)	M		
×	v.	8355 Single Contact ON - OFF Isolated light - switched			
	4.5 To	8356 Single Contact ON - OFF Isolated light - unswitched	Large round actuator		
		C, E & M actuators only	All actuators except H available lit		



Dimensions



Examples







⊞ H8353JE - - -⊞ T8353JE - - -



ш H8353EB - - ш Т8353EB - - -



⊞ H8353CB - - -⊞ T8353CB - - -

Actuator Colour	Lam Volta	p ge	Legend	C
LIT				
A Amber	– None	e		
C Clear	2 125V N	eon		
G Green	3 250V N	eon		
R Red	7 12V Filame			
UNLIT	8 24V Filame			
B Black				
R Red				
W White				

Legend Colour	Options
	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. Special buttons Some of the many options are shown Call sales for the full range L167 Protective cover
	Snaps on to switch bodies fitted with "A" or "J" style actuators, this reduces panel thickness by 0.8mm 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
- Push on, solder or PCB terminals
- Latching and momentary

Approvals and specifications

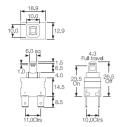
- 12 A GP, 250 Vac, T8513 A GP, 250 Vac, T851 hp, 250 Vac, T85, 6E3/1E4)
- . 12A 250Vac 250Vac 1hp, 125Vac 1/2hp 3mm contact gap.

Terminal	Function	Actuator	Body Code
C 0 10.1 6.3 x 0.8	Approvals & ratings vary with function Single Contact switches use terminals 1 & 2 (& 3) 8200 Single Contact ON - OFF	A Standard actuator for snap-on custom adaptors	A Standard body
A 8 x 0.8 As "H" but right angle 4.8 x 0.8	8201	Flat top actuator	C As standard body but with side support peg for use with M PCB terminals
2.6 \(\frac{1}{15} \) 2.8 \(\times 0.8 \)	8201 Single Contact 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.
7.0 V 2.6 0 7.0	8250 Double Contact ON - OFF	Using a Hinged Actuator	
X 4.5 77.0 PCB 0.8 Sq	8251 Double Contact ON - OFF (momentary ON)		



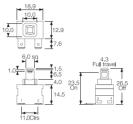
Dimensions

'A' body with 'H' 4.8 terminals



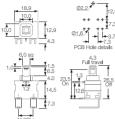
Example of possible mounting styles

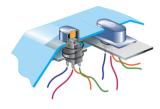
'A' body with 'A' right angle 4.8 terminals

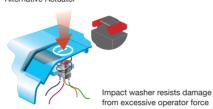


Alternative Actuator

'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
- O Illuminated & non-illuminated
- Matching indicators
- Low profile version
- O Panel cut outs: 25.0 dia 27.2 x 22.3

Approvals and specifications

- 46(4)A 250Vac T85/55 8(8)A 250Vac T85/55 (pending)
- **.91...** UL CSA 16A Non Ind, 250Vac 1hp, 125Vac 1/2hp UL 65°C, file no. E45221

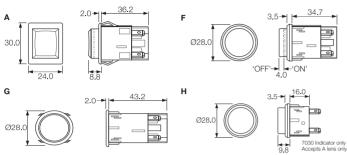
3mm contact gap.

Terminal	Function	Actuator	Body Code
6.3 x 0.8	7000 Single Contact ON - OFF 7001 Single Contact (momentary) ON - OFF 7004 Single Contact (with light) ON - OFF 7004 Single Contact (momentary) ON - OFF	A Round actuator shown in F body A Round actuator shown in G body B Round actuator - medium shown in F body C Round actuator - long shown in F body	Panel cut-outs F H G Body types fit either cut-out 25.0/25.2 023.5/23.7 1.7 1.9 21.0 025.0/25.2
H 4.8 x 0.8	7050 Double Contact ON - OFF 7051 Double Contact with light ON - OFF 7053 Double Contact with light ON - OFF 7054 Double Contact (momentary ON) with light ON - OFF 7056 7030 Indicator TN® UL E63363 CSA LR29381	Round actuator - sub panel mount S Rectangular actuator Shown in "A" body N/A for 7030 19.5 8.8	Cut-outs must be punched in the direction of insertion



Dimensions

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



Examples









☑ C7000AF

⊙ C7003AF - - -

C7050SA - - -

C7053AG - - -

<u>-</u>				g	9.8 Accepts A lens only
Body Colour	Actuator Colour	Lamp Voltage	Legend	Legend Colour	Options
В	LIT A				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	C Clear	2 125V Neon			Legend printing A wide range is available or call sales for custom legends. Lamp voltage Call sales for details of available voltages.
	R R Red	250V Neon 7 12V Filament			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
	UNLIT	8 24V Filament			
	B Black				
	R Red				
	W White				

0911 Push Button Switches

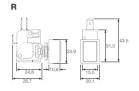


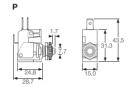


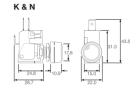
Key Features

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

Dimensions







Terminal	Function	Actuator	Body Code	Options
12.0	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







Key Features

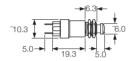
- Self wiping contacts
- O Slow make & break
- O Momentary action
- Choice of switch circuits
- Choice of actuators

Approvals and specifications

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

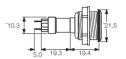
Dimensions

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 Dlack base SP ON - OFF (momentary) O917 50V only Brown base SP ON - OFF (momentary 1 side) O918 White base SP ON - OFF (momentary OFF) O919 Dlack base DP ON - OFF (momentary 1 side) O920 White base DP ON - OFF (momentary 1 side)	S Small Actuator L Large Actuator 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.

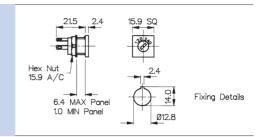
Voltage Selectors



120/140V Voltage Selector



- 2.8 series tabs/solder tags Square Front Bezel6.3A

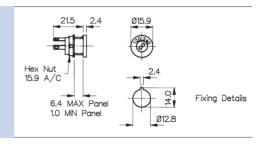


120/240V Voltage Selector

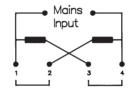


VS0002

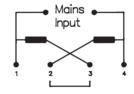
- 2.8 series tabs/Solder tags
- Round Front Bezel
- 6.3A



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
Variants:	Other markings, details on request	Other markings, details on request
RoHS		Compliant

Mouser Electronics

Authorized Distributor

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Bulgin:

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        MP0042/2
        MP0045/1E2BL012
        MP0045/3E0NN000
        MP0012/RD
        MP0016/WH
        MP0012/1/RD
        MP0012/1
        MP0045/1A2GN012
        MP0045/1B1GN012
        MP0045/1B1GN012
        MP0045/1B1GN012
        MP0045/1B1RD012
        MP0045/1B1RD012
        MP0045/1B0NN000
        MP0045/1B1GN012
        MP0045/1B2GN012
        MP0045/1A1GN020
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