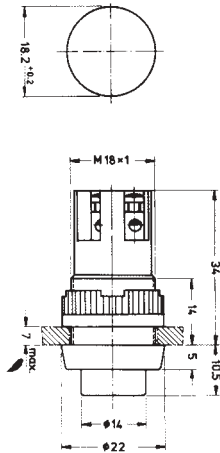




## Momentary Push-button Ø18.2mm, 2Amp

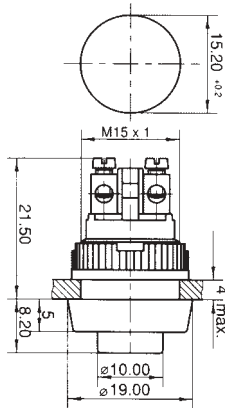


Raised button switches in a black thermoplastic body and black button with screw terminal connections. Momentary action. Supplied with locknut.

Contacts	1 SPNO + 1 SPNC, silver alloy
Contact rating	2A at 250VAC
Mechanical life	10 <sup>5</sup> minimum
Operating force	9.5 Newtons
IP Rating	IP40, (IP65 with transparent sealing boot)
Temperature	-25°C to +85°C
Materials	Thermoplastic case and button (black)
Depth behind panel	34mm
Panel cutout	Ø 18.2mm

Stock No.	Manf Ref <sup>1</sup>	Type	Unit Price		
			1-4	5-9	10-24
9551000	1.01102.011/0104	PUSHBUTTON	4.49	4.27	4.04
9551096	5.52008.061/0100	SEALING BOOT	0.60	0.57	0.54

## Momentary Push-button Ø15.2mm, 0.7Amp

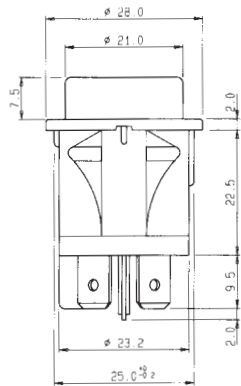


Raised button switches in a black thermoplastic body and red button with screw terminal connections. Momentary action. Supplied with locknut.

Contacts	1 SPNC, silver alloy
Contact rating	0.7A at 250VAC
Mechanical life	5 x 10 <sup>4</sup> minimum
Operating force	7.5 Newtons
IP Rating	IP40, (IP65 with transparent sealing boot)
Temperature	-25°C to +85°C
Materials	Thermoplastic case (black) and button (red)
Depth behind panel	21.5mm
Panel cutout	Ø 15.2mm
Approvals	VDE and others

Stock No.	Manf Ref <sup>1</sup>	Type	Unit Price		
			1-4	5-9	10-24
9551070	1.10001.161/0301	PUSHBUTTON	2.91	2.76	2.62
9551093	5.52008.115	SEALING BOOT	0.60	0.57	0.54

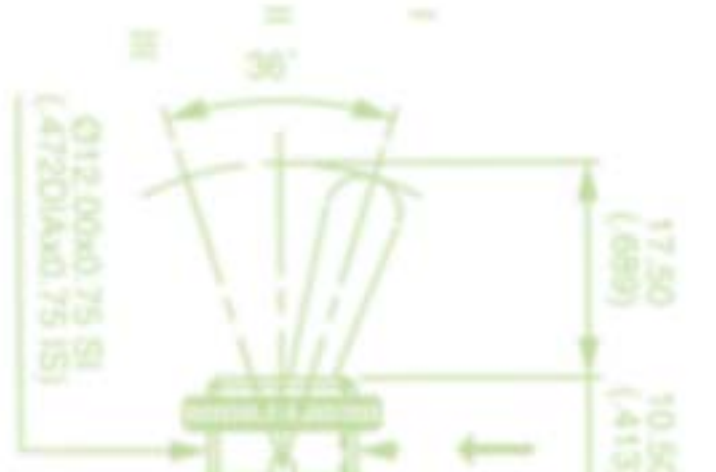
## Push-button Switches Single Pole



Circular panel mounting, non-illuminated, single pole push-button on/off switches with momentary action. Please order switch and coloured cap separately.

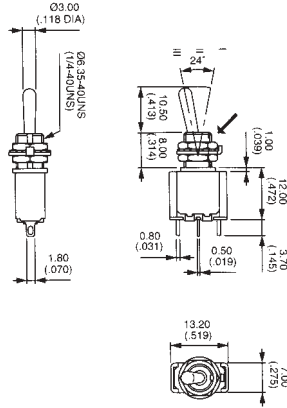
Contact rating	16A at 250 VAC
Terminals	6.3mm push-on
Panel cut-out	25mm
Panel thickness	0.7mm - 2.5mm

Stock No.	Manf Ref <sup>1</sup>	Type	Unit Price		
			1-24	25-99	100+
4501031	SP6014C100000	SWITCH	1.17	1.05	0.94
4501046	0570750	RED CAP	0.24	0.22	0.19
4501049	0570752	WHITE CAP	0.24	0.22	0.19
4501052	0570753	GREEN CAP	0.24	0.22	0.19
4501055	0570754	YELLOW CAP	0.24	0.22	0.19





## Subminiature Toggle Switches, Single Pole



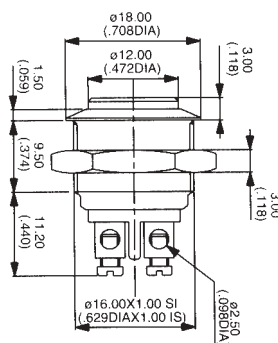
Dimensions for single pole model

Sub-miniature single & double pole toggle switches with pear shaped levers. Typical applications include control panels, test boxes etc. A black neoprene sealing boot with hex nut is also available.

Contact rating max.	3A at 250VAC, 4A at 30VDC
Contact material	Silver
Dielectric strength	1.5KV (contact-frame)
Electrical life	50,000 ops, at rated voltage and current
Mechanical life	100,000 ops
Temperature	-40°C to +85°C
Panel mounting hole	Ø6.5mm
Terminals	1.8mm, solder type

Stock No.	Manf Ref <sup>1</sup>	Type	Unit Price		
			1-24	25-49	50+
2111001	5636A	SPDT ON-ON	3.50	3.33	3.15
2111004	5639A	SPDT ON-OFF-ON	3.50	3.33	3.15
2111007	5637A	SPDT MOM-OFF-MOM	3.50	3.33	3.15
2111010	5632A	SPST MOM-OFF	3.50	3.33	3.15
2111013	5646A	DPDT ON-ON	3.50	3.33	3.15
2111016	U1331	SEALING BOOT	1.40	1.33	1.26

## Anti-Vandal Pushbutton Switches



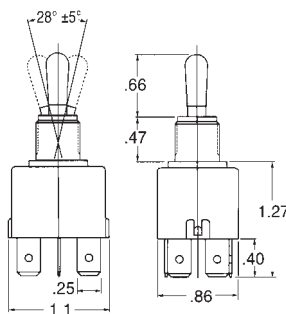
Dimensions for flat actuator model

Security pushbutton switches in stainless steel housings with three choices of button profile (flat, curved or curved actuator with chamfer). Formidable impact resistance is provided by a mechanical stop which protects the contact mechanism.

Contact rating max.	200mA at 48VDC
Contact configuration	Single pole normally open
Contact material	Brass silver plated
Bushing & actuator	Stainless steel
Dielectric strength	2KV (terminals-frame)
Electrical life	50,000 ops, at max. load
Temperature	-20°C to +55°C
Panel mounting hole	Ø16.2mm
Panel thickness	1mm - 6mm
Terminals	Screw type

Stock No.	Manf Ref <sup>1</sup>	Type	Unit Price		
			1-24	25-49	50+
2111019	AVO630C940	16MM FLAT	4.68	4.45	4.21
2111022	AV1630C940	16MM CURVED	5.06	4.81	4.55
2111025	AVO830C940	16MM CHAMFER	5.38	5.11	4.84

## Sealed Toggle Switches IP68



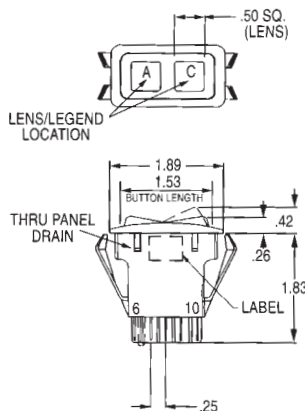
Dimensions for double pole model

Rugged, high performance non-teaseable toggle switches designed for use under severe conditions. Double sealed with 'O' ring and visible bushing to IP68 (waterproof). Rear sealed with potted terminals.

Contact rating max.	16A at 115VAC, 28VDC, 8A at 240VAC
Contact material	Silver
Dielectric strength	1KV (terminals-frame)
Mechanical life	100,000 ops, minimum
Temperature	-30°C to +85°C
Bushing & toggle handle	Nickel plated brass
Case Material	Thermoplastic
Panel mounting hole	Ø12mm
Terminals	6.3mm push-on

Stock No.	Manf Ref <sup>1</sup>	Type	Unit Price		
			1-9	10-24	25+
3870229	T7111A5	SPST ON-OFF	6.69	6.02	5.69
3870232	T7111B5	SPST ON-ON	6.69	6.02	5.69
3870235	T7212B5	DPDT ON-ON	7.42	6.68	6.31
3870238	T7212D5	DPDT MOM-ON	7.42	6.68	6.31
3870241	T7212E5	DPDT MOM-OFF-MOM	7.42	6.68	6.31
3870244	T7212F5	DPDT ON-OFF-ON	7.42	6.68	6.31
3870247	T7212G5	DPDT MOM-OFF-ON	7.42	6.68	6.31

## Sealed Rocker Switches IP68

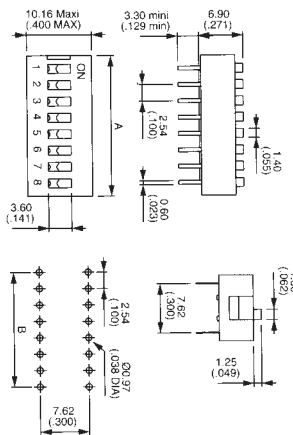
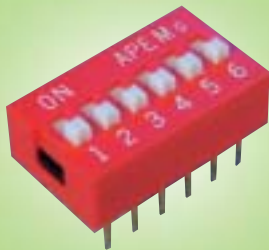


Snap-in double pole panel mount rocker switches sealed to IP68. UV and solvent resistant. Will withstand extreme shock and vibration. Rear sealed with potted terminals. Panel sealing gasket available.

Contact rating max.	20A at 28VAC (resistive), 16A at 110VAC
Contact material	Silver alloy
Dielectric strength	1KV (terminals-frame)
Mechanical life	100,000 ops, minimum
Temperature	-40°C to +85°C
Case/bezel material	Thermoplastic, black
Panel cutout	44mm x 22mm
Terminals	6.3mm push-on

Stock No.	Manf Ref <sup>1</sup>	Type	Unit Price		
			1-9	10-24	25+
3870250	K3AB2AAA	DP ON-OFF	4.55	4.10	3.87
3870253	K3AB2BAA	DP ON-ON	4.55	4.10	3.87
3870256	K3AB2DAA	DP ON-MOM	4.55	4.10	3.87
3870259	K3AB2EAA	DP MOM-OFF-MOM	4.55	4.10	3.87
<b>12VDC LED Models</b>					
3870262	K3AB2ANB-10	DP ON-OFF RED	7.05	6.35	5.99
3870265	K3AB2APB-20	DP ON-OFF GREEN	7.05	6.35	5.99
3870268	807037	SEALING GASKET	0.68	0.61	0.58

**Standard DIP Switches  
Raised Actuator**

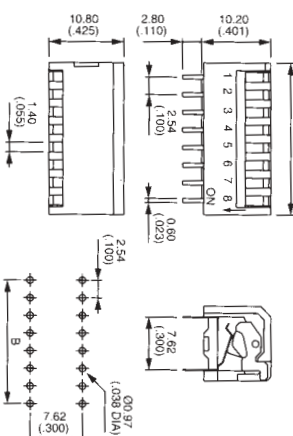
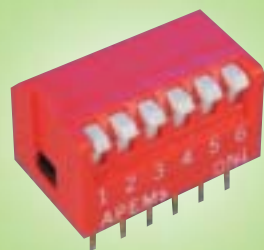


Top actuated DIP switches with standard IC pin spacing. Self-cleaning contact system and gold plated contacts. Tape seal versions available.

Contact rating	100mA at 50VAC (non switching) 25mA at 24VDC (switching)
Contact material	Nickel plated phosphor bronze, gold flashed
Dielectric strength	500VDC for one minute
Mechanical life	5,000 ops
Temperature	-20°C to +70°C
Case material	Glass fibre filled PBT, red
Terminal seal	Epoxy
Tape seal	Polyester film

Stock No.	Manf Ref'	No. of Ways	Unit Price		
			1-24	25-49	50+
2111076	DS02	2	0.36	0.34	0.32
2111079	DS04	4	0.42	0.40	0.38
2111082	DS06	6	0.48	0.46	0.43
2111085	DS08	8	0.54	0.51	0.49
2111088	DS10	10	0.62	0.59	0.56
2111091	DS12	12	0.74	0.70	0.67

**DIP Switches  
Piano Key**

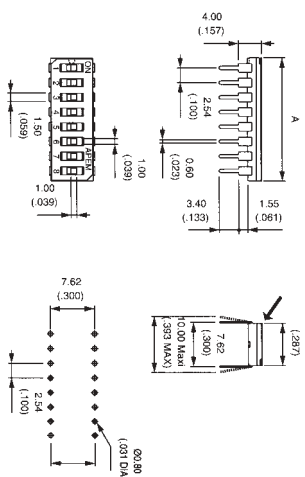
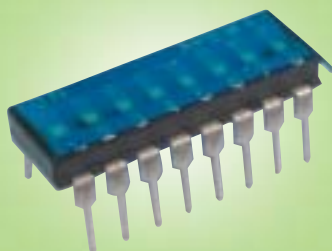


Short actuator piano DIP switches with standard IC pin spacing. Self-cleaning contact system and gold plated contacts. Tape seal versions available.

Contact rating	100mA at 50VAC (non switching) 25mA at 24VDC (switching)
Contact material	Nickel plated phosphor bronze, gold flashed
Dielectric strength	500VDC for one minute
Mechanical life	5,000 ops
Temperature	-20°C to +70°C
Case material	Glass fibre filled PBT, red
Terminal seal	Epoxy
Tape seal	Polyester film

Stock No.	Manf Ref'	No. of Ways	Unit Price		
			1-24	25-49	50+
2111094	DP04	4	0.52	0.49	0.47
2111097	DP06	6	0.58	0.55	0.52
2111100	DP08	8	0.68	0.65	0.61

**Low Profile DIL Switches  
Machine Insertable**



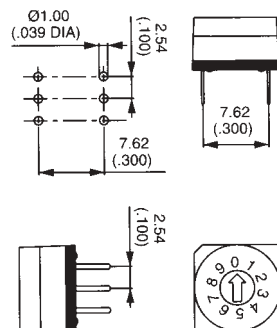
Low profile DIL switches for auto-insertion by machine. Tape sealed to allow for washing.

Contact rating	100mA at 50VDC max.
Contact material	Gold plated, sliding, auto cleaning
Dielectric strength	500VAC 50Hz
Mechanical life	3,000 ops
Temperature	-40°C to +85°C
Case material	Glass fibre filled PBT, black
Terminal seal	Epoxy
Tape seal	Polyester film

Dimension 'A'  
2 way (6mm), 4 way (11.1mm)  
6 way (16.2mm), 8 way (21.3mm)

Stock No.	Manf Ref'	No. of Ways	Unit Price		
			1-24	25-49	50+
2111103	DIR02ST	2	0.80	0.76	0.72
2111106	DIR04ST	4	1.05	1.00	0.95
2111109	DIR06ST	6	1.12	1.06	1.01
2111112	DIR08ST	8	1.14	1.08	1.03

**Rotary DIP Switches**

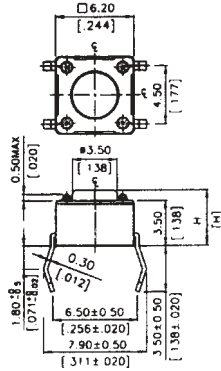


PCB mountable rotary switches with BCD or hexadecimal outputs. The switches are fully sealed to protect against solder fluxes and cleaning solvents. Gold plated contacts for long-life and a stable, low resistance characteristic. Top adjustable with a screwdriver.

Contacts	Nickel plated phosphor bronze/gold plated
Operating voltage	24VDC max.
Switching current	150mA max.
Non switching current	400mA max.
Contact resistance	80m ohm max.
Insulation resistance	100M ohm min.
Mechanical life	10K cycles min.
Temperature	-20°C to +70°C

Stock No.	Manf Ref'	Type	Unit Price		
			1-24	25-49	50+
2111115	CR65101	BCD	1.70	1.62	1.53
2111118	CR65103	HEXADECIMAL	2.20	2.09	1.98

## Tactile Switches 6mm x 6mm



Dimensions for through hole version

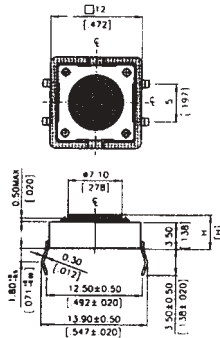
Ultra-miniature (6mm x 6mm) low profile tactile switches for PCB mounting with through hole or surface mount options. Available with a range of actuator lengths. Switches with higher operating forces are available, please consult sales.

Contacts	Silver plated phosphor bronze
Function	Off-momentary on
Operating force	160grams (through hole), 260grams (surface)
Contact rating	50mA at 12VDC max.
Insulation resistance	100M ohm min. 500VDC
Electrical life	500K operations
Through hole dim.	6.5mm x 4.5mm, 4 holes Ø1mm

Supplied in packs of 20

Stock No.	Manf Ref <sup>1</sup>	Actuator Height	Price per Pack		
			1-4	5-9	10-24
2111028	DTS61N	4.3MM THROUGH	3.80	3.61	3.42
2111031	DTS62N	5.0MM THROUGH	3.80	3.61	3.42
2111034	DTS63N	7.0MM THROUGH	3.80	3.61	3.42
2111037	DTS644N	7.3MM THROUGH	3.80	3.61	3.42
2111040	DTS648N	9.5MM THROUGH	3.80	3.61	3.42
2111043	DTSMW69R	3.8MM SURFACE	3.80	3.61	3.42

## Tactile Switches 12mm x 12mm



Dimensions for through hole version

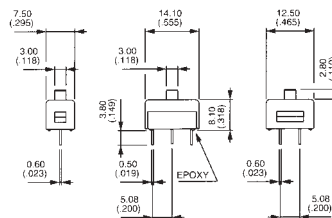
Miniature (12mm x 12mm) low profile tactile switches with a positive click feel for through hole PCB mounting. Available in 2 actuator lengths. Switches with higher operating forces are available, please consult sales.

Contacts	Silver plated phosphor bronze
Function	Off-momentary on
Operating force	160grams
Contact rating	50mA at 12VDC max.
Insulation resistance	100M ohm min. 500VDC
Electrical life	500K operations
Through hole dim.	12.5mm x 5mm, 4 holes Ø1.2mm

Supplied in packs of 10

Stock No.	Manf Ref <sup>1</sup>	Actuator Height	Price per Pack		
			1-4	5-9	10-24
2111046	DTS21N	4.3MM THROUGH	3.00	2.85	2.70
2111049	DTS24N	7.3MM THROUGH	3.00	2.85	2.70

## PCB Slide Switches

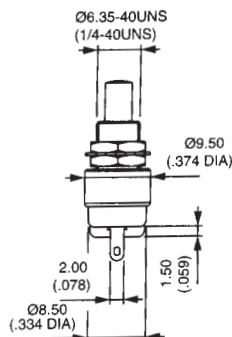


Sub-miniature single pole snap action slide switches with a 3mm high top actuator. They have sealed terminals for DIP and flow soldering assembly. Will withstand flux ingress and solvent cleaning in accordance with MIL STD 202, method 215.

Contact rating	2A at 250VAC, 1A at 30VDC
Contact material	Silver
Dielectric strength	2kV (term-frame), 1kV (term-term)
Mechanical life	20,000 ops
Temperature	-40°C to +85°C
Case material	PBT, red
Terminal spacing	5.08mm
Terminal seal	Epoxy

Stock No.	Manf Ref <sup>1</sup>	Type	Unit Price		
			1-24	25-49	50+
2111052	25136NAH	ON-ON	1.42	1.35	1.28
2111055	25139NAH	ON-OFF-ON	2.10	2.00	1.89

## Subminiature Pushbutton Switches



Subminiature momentary pushbutton switches for panel mounting. Ø10mm coloured buttons are sold separately. A protective sealing boot is also available.

Contact rating	100mA at 30VDC
Contacts	Gold plated brass
Insulation resistance	1000M ohm min. 500VDC
Electrical life	250k operations
Terminals	Solder lug
Dielectric strength	1000Vrms 50Hz between terminals
Temperature	-30°C to +65°C
Button diameter	10mm
Panel mounting hole	6.5mm

Stock No.	Manf Ref <sup>1</sup>	Type	Unit Price		
			1-24	25-49	50+
2111058	9633NCD	OFF-MOM	2.60	2.47	2.34
2111061	9635CD	ON-MOM ON	3.10	2.95	2.79
2111064	U482	BLACK BUTTON	0.16	0.15	0.14
2111067	U483	GREEN BUTTON	0.16	0.15	0.14
2111070	U486	RED BUTTON	0.16	0.15	0.14
2111073	U1318	SEALING BOOT	1.50	1.43	1.35