

Keyboard Switches and Accessories — continued

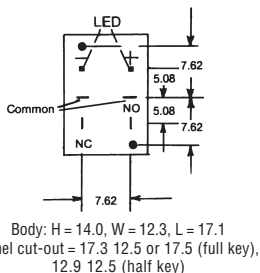
'K' Series, SPDT

10mA @ 24V dc, 20mA @ 20V dc

NSF



- Momentary microswitch action, PCB mountable switches with ABS housing
- Choice of button colours
- Choice of button widths (12.3mm and 17.3mm), buttons are detachable and interchangeable
- Half key version also available, allows panel to be screen printed between the keys yet maintaining maximum packing density
- Full key versions also available with LED indicator
- Gold plated contacts



Switches without LED

Button colour	Order Code
Black = 146-024, Grey = 146-025	
Black = 143-635, Grey = 143-636, Red = 143-637	
Black = 145-213, Grey = 145-214	

Switches with LED

Full Key 12.3 16.7 : Black, red LED = 143-638, Black, green LED = 143-639
Full Key 17.3 16.7 : Grey, red LED = 145-215, Grey, green LED = 145-216

Switch action	Momentary SPDT	LED	
Bounce	<1ms	Forward current I _F (max)	50mA
Operating temperature	-25°C to +85°C	Forward voltage (V _F @ I _F = 20mA)	1.6V
Mechanical life	5,000,000 ops	Power dissipation	100mW
Operating force	1 to 1.5N	Intensity	0.8mcd

Mfrs. List No.

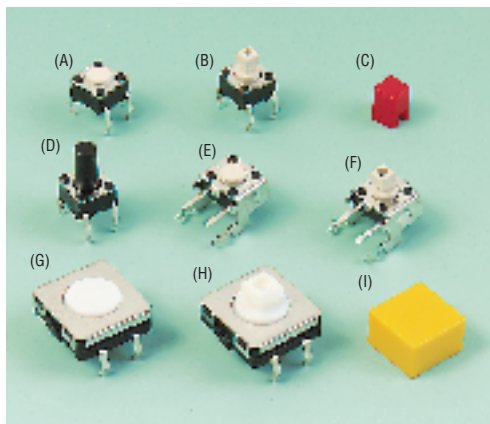
623300-010-000-010 = 146-024, 623300-010-000-030 = 146-025, 623300-000-000-010 = 143-635, 623300-000-000-030 = 143-636, 623300-000-000-060 = 143-637, 623300-001-020-010 = 143-638, 623300-001-060-010 = 143-639, 623300-050-000-010 = 145-213, 623300-050-000-030 = 145-214, 623300-051-020-030 = 145-215, 623300-051-060-030 = 145-216

SW3

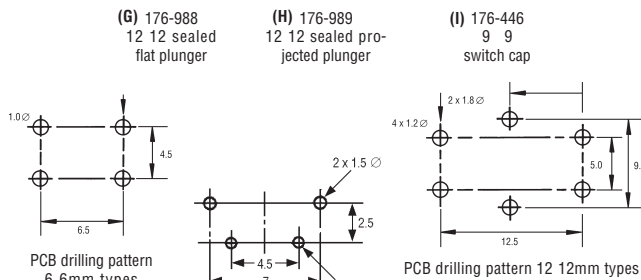
Order Code	Price Each				
	1+	25+	100+	250+	1000+
Without LED	All Order Codes				
With LED	All Order Codes				

PCB Mount, SPNO

B3F/W Series – Sealed and Unsealed, 50mA @ 24V dc



- | | | |
|--|---|--|
| (A) 176-432
6 6 unsealed flat plunger | (B) 176-433
6 6 unsealed projected plunger | (C) 262-419
4 4 switch cap |
| (D) 959-698
6x6 Extended Plunger | (E) 959-704
6x6 Flat Plunger Right Angle | (F) 959-716
6x6 Projected Plunger Right Angle |



B3F/B3W1000 Series L = 6, W = 6, D = 4.3 (7.3 projected plunger, 9.5 extended plunger)
B3F3000 Series L = 7.3, H = 7.4, D = 7.15 (10.15 projected plunger),
B3F/B3W4000 Series L = 12, W = 12, D = 4.3 (7.3 projected plunger)

- Positive tactile switch action through dome design
- Available with flat, projected or extended plunger
- Horizontal or Vertical mounting options available
- Available either unsealed or sealed suitable for immersion cleaning or harsh environments
- Range of coloured caps available suitable for all projected plungers

4 mm caps suitable for all 6 mm switches with projected plunger:
Cream = 176-436, Black = 176-437, Yellow = 176-439, Blue = 176-440,
Red = 262-419, Green = 262-407

9 mm caps suitable for all 12 mm switches with projected plunger:
Cream = 176-443, Black = 176-444, Yellow = 176-446, Blue = 176-447,
Red = 262-432, Green = 262-420

Min. permissible load	1mA @ 5V dc	Mech. +elec. life	
Contact resistance	<100mΩ	B3F1000	1 0 10 ⁶ ops min.
Insulation resistance	100MΩ @ 250V dc	B3F4000	3 0 10 ⁶ ops min.
Dielectric strength	500V ac for 1 min		

Mfrs. List No.

B3F1000 = 176-432, B3F1050 = 176-433, B3F4000 = 176-434, B3F4050 = 176-435,
B3F1070 = 959-698, B3F3100 = 959-704, B3F3150 = 959-716, B3W1000 = 176-986,
B3W1050 = 176-987, B3W4000S = 176-988, B3W4050 = 176-989, B321000 = 176-436,
B321010 = 176-437, B321030 = 176-439, B321040 = 176-440, B321080 = 262-419,
B321050 = 262-407, B321200 = 176-443, B321210 = 176-444, B321230 = 176-446,
B321240 = 176-447, B321250 = 262-420, B321280 = 262-432

SW111

Order Multiple=5

Unsealed Switches – B3F

Order Code	5+	100+	250+
6 6mm, flat	176-432		
6 6mm, projected	176-433		
6 6mm, extended	959-698		
6 6mm, flat right angle	959-704		
6 6mm, projected right angle	959-716		
12 12mm, flat	176-434		
12 12mm, projected	176-435		

Sealed Switches – B3W

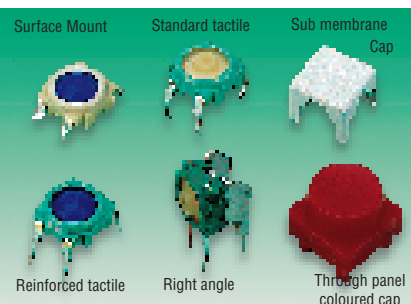
6 6mm, flat	176-986
6 6mm, projected	176-987
12 12mm, flat	176-988
12 12mm, projected	176-989

Caps for projected plungers

All Order Codes

Micro-Cosmos Series, SPNO

Sealed Gold or Silver Contacts



- Tropicalised gold or silver contacts available.
- Surface mount or Auto Insertion through-hole.
- 1 million operations.
- Sealed to withstand wave soldering and solvent immersion cleaning.
- Caps for sub membrane or through panel mounting.
- Positive tactile feel, 3N (std.) or 4.2N (reinforced).

Coloured Round Caps for through panel mounting:

Red = 924-970, Green = 924-982, Yellow = 924-994, Blue = 925-007
Dark grey = 925-019, Light grey = 925-020

Nominal voltage	24V	Contact resistance	<100mΩ (silver)
Max. voltage	50V		<20mΩ (gold)
Min. voltage	100mV (silver)	Dielectric strength	250V RMS at 50Hz
	10mV (gold)	Insulation resistance	>100MΩ @ 100V
Nominal current	20mA	Max. bounce	<5ms
Min. current	10mA (silver)		
	500µA (gold)		