

9000 SERIES - SUBMINIATURE MOMENTARY PUSHBUTTON SWITCHES



FEATURES

- Single pole panel and p.c. mounting models.
- Normally open (NO) & normally closed (NC) electrical functions.
- Self-cleaning or butt action contacts.
- Ultra-compact case size.

SPECIFICATIONS

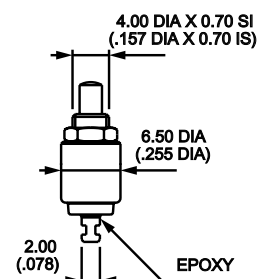
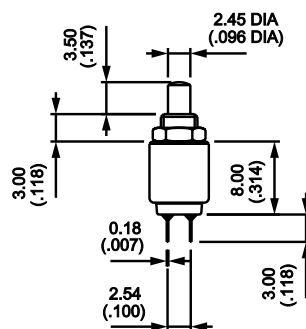
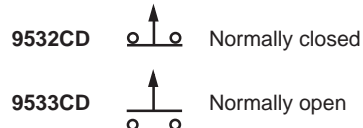
Contact ratings (resistive loads): 100 mA at 30 VDC
Initial contact resistance: 30 milliohms maximum
Insulation resistance: 1000 megohms minimum at 500 VDC
Dielectric strength: 500 V rms min. between terminals. 1000 V rms between terminals & case
Electrical life: 9100, 9200N & 9500N: 250,000 cycles min. 9200 & 9500: 100,000 cycles min.
Operating temperature range: -30°C to +65°C

Travel	9533 & 9233	9532 & 9232	9533N, 9233N & 9133
Total	.062" (1.60mm)	.070" (1.80mm)	.035" (0.9mm)
Pre-	.029" (0.75mm)	.039" (1.00mm)	-
Over-	.027" (0.70mm)	.029" (0.75mm)	-

MATERIALS

Contacts & Terminals: Gold plated brass
Actuator: Polyamide, glass filled
Bracket: Tin plated steel
Case: PPS
Bushing: Nickel plated brass
Terminal seal: Epoxy
Hardware: Threaded bushing models supplied with 1 Hex Nut p/n U544. See drawing - end of section.

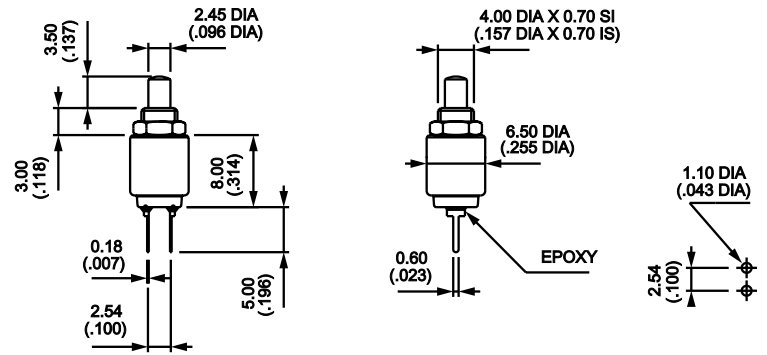
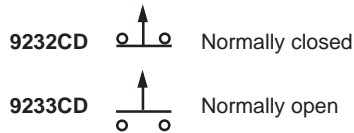
Solder lug terminals - threaded bushing - self-cleaning contacts



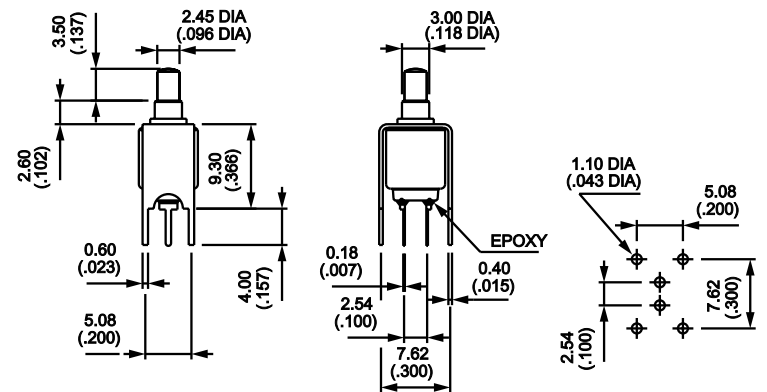
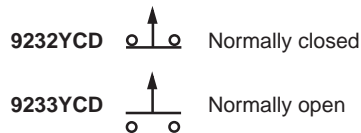
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

9000 SERIES - SUBMINIATURE MOMENTARY PUSHBUTTON SWITCHES

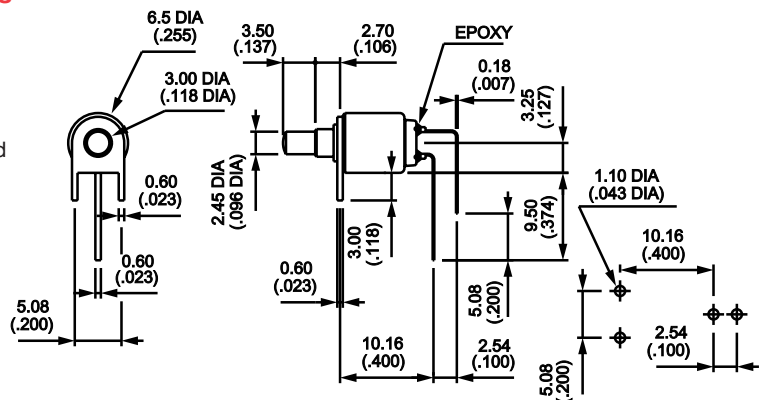
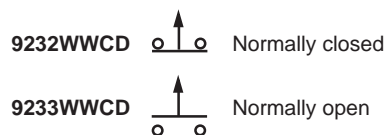
Straight p.c. terminals - threaded bushing - self-cleaning contacts



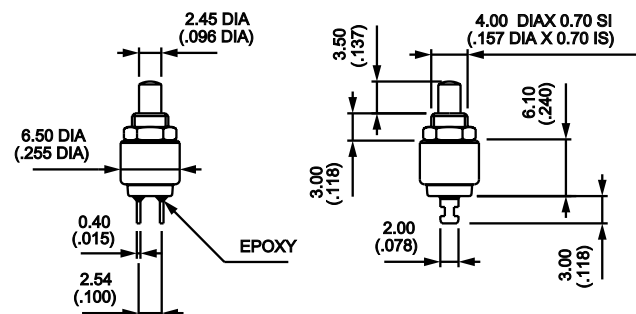
Straight p.c. terminals - bracket mounting - self-cleaning contacts



Right angle p.c. terminals - self-cleaning contacts



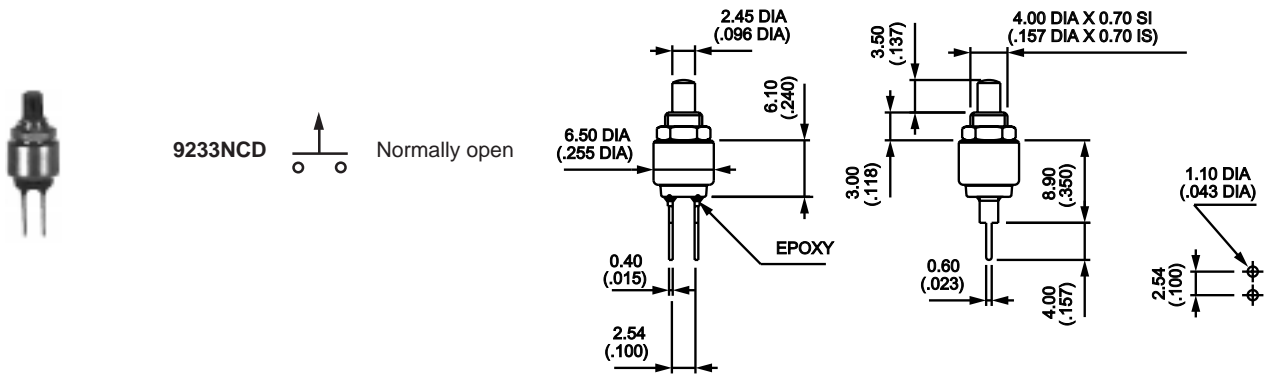
Solder lug terminals - threaded bushing - butt action contacts



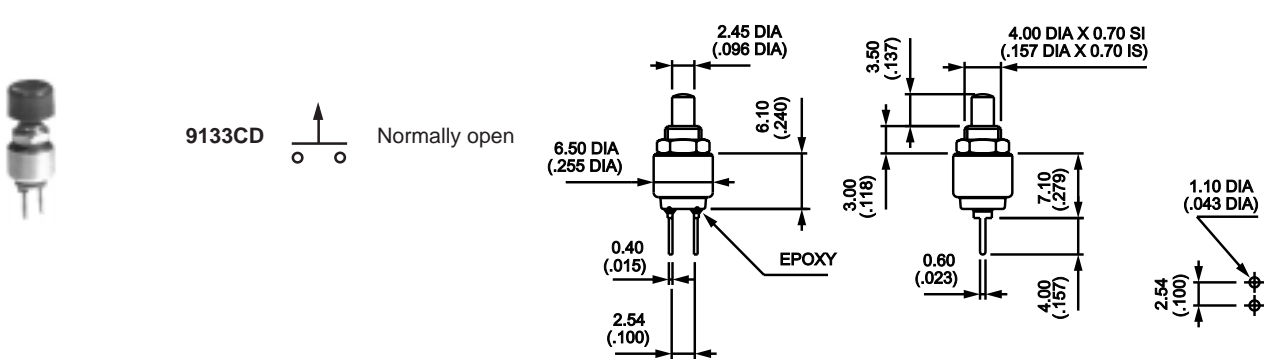
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

9000 SERIES - SUBMINIATURE MOMENTARY PUSHBUTTON SWITCHES

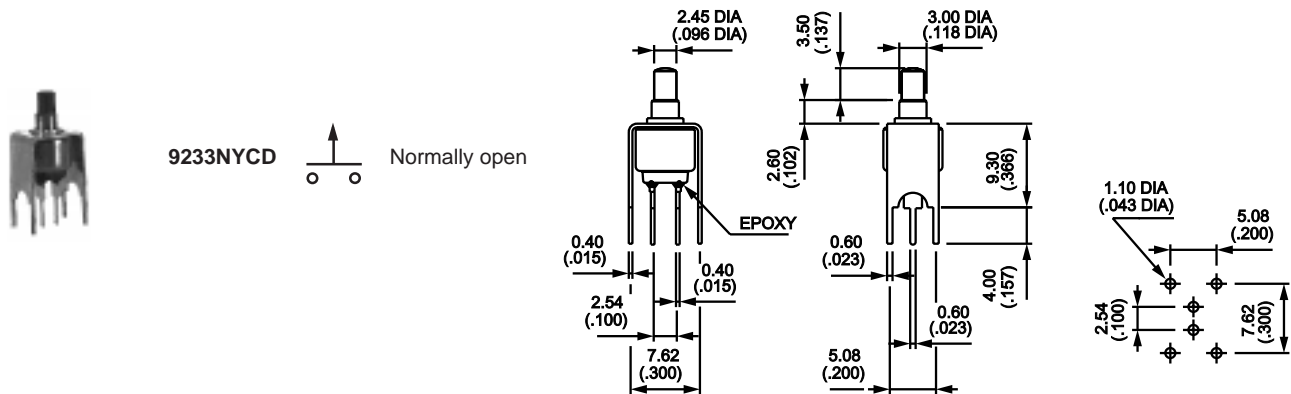
Straight p.c. terminals - threaded bushing - .350" (8.9mm) p.c. to panel - butt action contacts



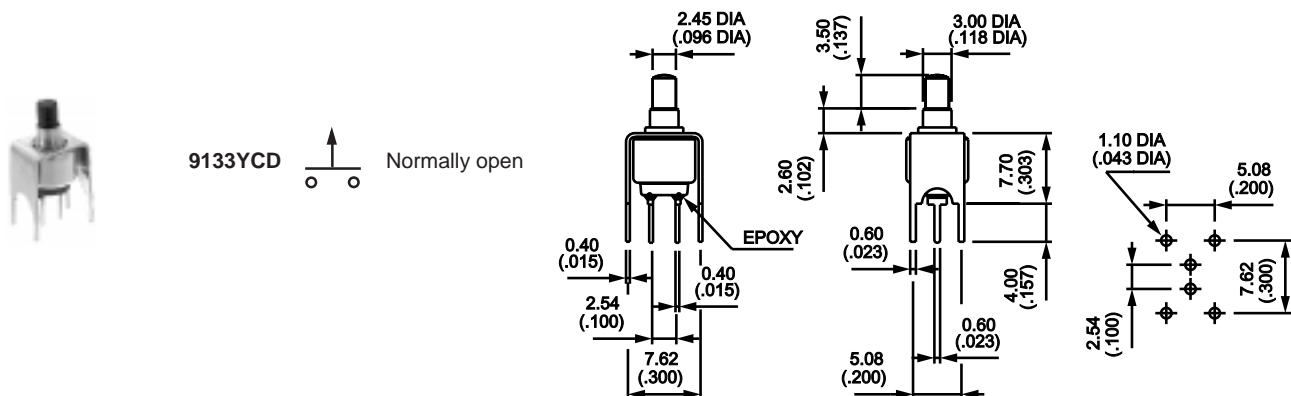
Straight p.c. terminals - threaded bushing - .279" (7.1mm) p.c. to panel - butt action contacts



Straight p.c. terminals - tall bracket mounting - butt action contacts



Straight p.c. terminals - short bracket mounting - butt action contacts



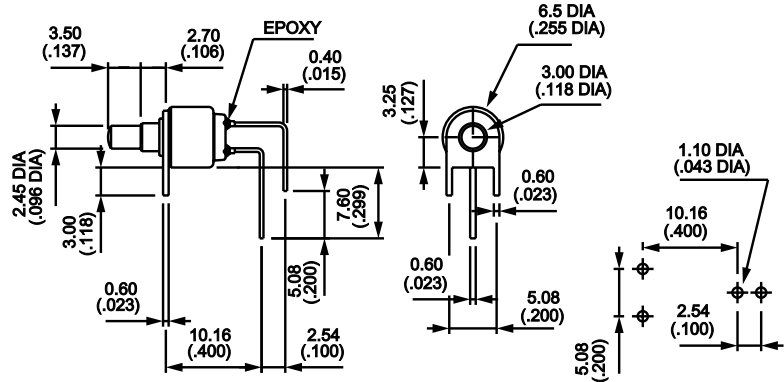
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

9000 SERIES - SUBMINIATURE MOMENTARY PUSHBUTTON SWITCHES

Right angle p.c. terminals - butt action contacts



9133WWCD
Normally open



Additional ordering information: Commonly ordered models are shown above with complete model numbers and specifications. Below is an order format that enables you to 'build your own switch' and specify the correct switch model number by simply selecting from all available options shown and filling in the boxes.

'BUILD YOUR OWN SWITCH' ORDER FORMAT

Fill in boxes with selections shown for **Model Structure**, then add **Options** selections for complete model number. (Allowable options are shown under each respective box).
Note: 'NONE' indicates box may be left empty.

Model Structure:

Series	Terminals case height	Number of poles	Electrical function	Bracket/terminals
9		3		
		Single pole	2 Normally closed (NC) 3 Normally open (NO)	
<p>Case height: .314" (8mm)</p> <p>2.....Straight p.c. terminals, threaded bushing.....(NONE)</p> <p>2.....Straight p.c. terminals, tall bracket, smooth bushing.....Y</p> <p>2.....Right angle p.c. terminals, bracket, smooth bushing.....W W</p> <p>5.....Solder lug terminals, threaded bushing.....(NONE)</p> <p>Case height .240" (6.1mm)</p> <p>1.....Straight p.c. terminals, threaded bushing .279" (7.1mm) to panel....(NONE)</p> <p>1.....Straight p.c. terminals, short bracket, smooth bushing.....Y</p> <p>1.....Right angle p.c. terminals, bracket, smooth bushing.....W W</p> <p>2.....Straight p.c. terminals, threaded bushing, .350" (8.9mm) to panel...N</p> <p>2.....Straight p.c. terminals, tall bracket, smooth bushing.....N Y</p> <p>5.....Solder lug terminals, threaded bushing.....N</p>				

Although most combinations of options are available, some may result in incompatibilities. Consult factory if there is any question.

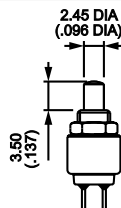
Options:

Contact materials	Sealing	Actuator
C D		
Gold plated brass (standard)	(NONE) Epoxy sealed terminals (standard) K Front panel sealing with two 'o'-rings	(NONE) Standard 0 Flush 4 Long

Caps available separately - see option drawings

Example of completely specified model number: **9233YCD**

ACTUATOR OPTIONS



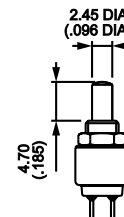
(NONE) Standard



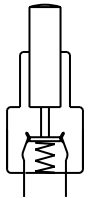
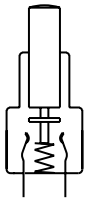
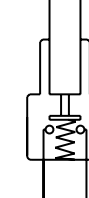
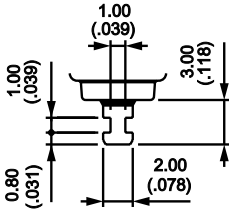
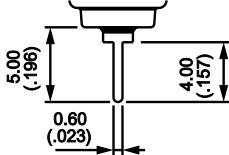
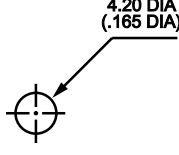
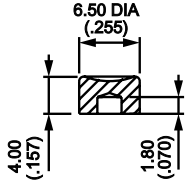
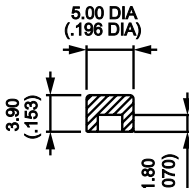
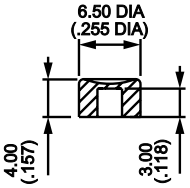
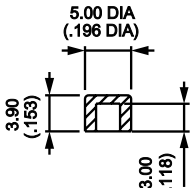
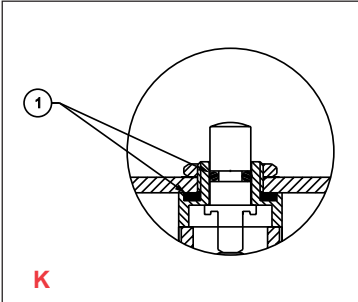
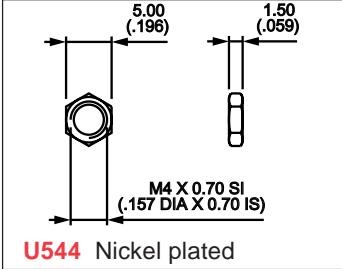
0 Flush



4 Long



9000 SERIES - SUBMINIATURE MOMENTARY PUSHBUTTON SWITCHES

MISCELLANEOUS																						
SWITCH ACTION		TERMINAL OUTLINES		PANEL CUT-OUT																		
 Function 2 (NC) Self-cleaning contacts	 Function 3 (NO) Self-cleaning contacts	 Function 3 (NO) butt action contacts	 Solder lug	 Straight p.c.	 4.20 DIA (.165 DIA)																	
OPTION DRAWINGS																						
CAPS Note: replace last '0' in p/n with color code. (order separately)																						
 U570 Standard For standard actuator	 U3600 For standard actuator	Below caps have deeper engagement and provide better retention		 U4310 For 4 actuator only	 U4320 For 4 actuator only																	
<table border="1" style="margin: auto;"> <thead> <tr> <th colspan="2">Colors</th> </tr> </thead> <tbody> <tr><td>1</td><td>blue</td></tr> <tr><td>2</td><td>black</td></tr> <tr><td>3</td><td>green</td></tr> <tr><td>4</td><td>grey</td></tr> <tr><td>5</td><td>yellow</td></tr> <tr><td>6</td><td>red</td></tr> <tr><td>7/1</td><td>white</td></tr> <tr><td>9</td><td>orange</td></tr> </tbody> </table>					Colors		1	blue	2	black	3	green	4	grey	5	yellow	6	red	7/1	white	9	orange
Colors																						
1	blue																					
2	black																					
3	green																					
4	grey																					
5	yellow																					
6	red																					
7/1	white																					
9	orange																					
SEALING OPTIONS																						
(NONE) Epoxy sealed terminals standard.		 K																				
K Front panel sealing with 2 'O'-rings (1) provides protection against water and dust. Panel seal withstands 0.1bar pressure																						
HEX NUT Supplied with threaded bushing models																						
 U544 Nickel plated																						

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE