

5000 series

Miniature toggle switches •
threaded bushing Ø 6.35 mm or plain bushing



DISTINCTIVE FEATURES

17 actuators including toggles, paddle levers and locking levers in different lengths.

Various contact materials for low and high currents.

7 functions including maintained and momentary versions.

1 to 4 pole configurations.

12 terminal types including 9 for PC board mounting.

Other types include quick-connect and wire-wrap.

Several bushing styles.

3 types of finish including military black.

3 approvals (UL - CSA - CECC).

4 types of sealing for terminal or front panel requirements.

Numerous accessories available.



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ELECTRICAL SPECIFICATIONS

- Current/voltage rating with resistive load :

Contact	Maximum	Minimum	Level*
Silver (A)	4 A 30 VDC	50 mA 10 VDC	III and IV
Silver, gold plated (AD)	4 A 30 VDC Gold plating withstands up to 100 mA 30 VDC	10 mA 50 mV 10 µA 5 V	I to IV
Brass, gold plated (CD)	0.4 VA at 20 VAC or DC	10 mA 50 mV 10 µA 5 V	I and II

*For details, see Technical Information on website.

- For inductive, lamp or capacitive load, consult factory.
- Initial contact resistance : 10 mΩ max.
- Insulation resistance : 1,000 MΩ min. at 500 VDC
- Dielectric strength :
1,000 Vrms 50 Hz min. between terminals
1,500 Vrms 50 Hz min. between poles
1,500 Vrms 50 Hz min. between terminals and frame
- Contact bounce : 2 ms max.
- Electrical life at full load :
50,000 cycles for single and double pole
40,000 cycles for 3 pole
30,000 cycles for 4 pole
- Low level or mechanical life : 100,000 cycles



GENERAL SPECIFICATIONS

- Torque : 1.25 Nm (.922 Ft.lb) max. applied to nut
- Panel thickness : 2.5 mm (.098) with 2 nuts - 4 mm (.157) with 1 nut
- Operating temperature : -40 °C to +85 °C (-40 °F to +185 °F)

AGENCY APPROVALS



CECC 96201-007

3 A 250 VAC, 6 A 125 VAC

For VDE, refer to 55000 series.

NATO

Availability : consult factory for details of approved models.

Marking : to order switches marked UL, CSA or CECC, complete appropriate box of ordering format. The preferential list does not appear on the switches.



MATERIALS

- Case : diallylphthalate (DAP) or high temperature plastic material (UL94-V0)
- Actuator : brass, nickel plated
- Paddles : UL94HB polyamide
- Lever caps : vinyl
- Bushing : brass, nickel plated
- Housing : stainless steel or steel tin plated
- Contacts
A : silver
AD : silver, gold plated
CD : brass, gold plated
X814 : for peak currents, see "Special options".
- Terminal seal : epoxy

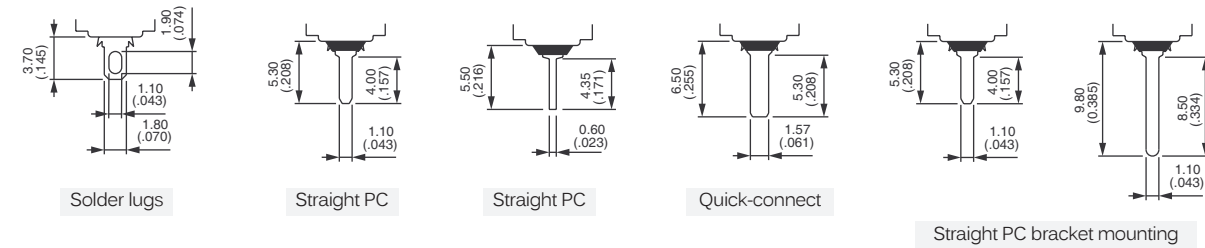
APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.

5000 series

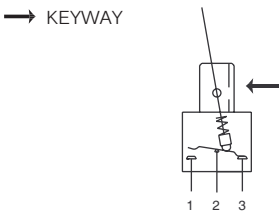
Miniature toggle switches • threaded bushing Ø 6.35 mm or plain bushing



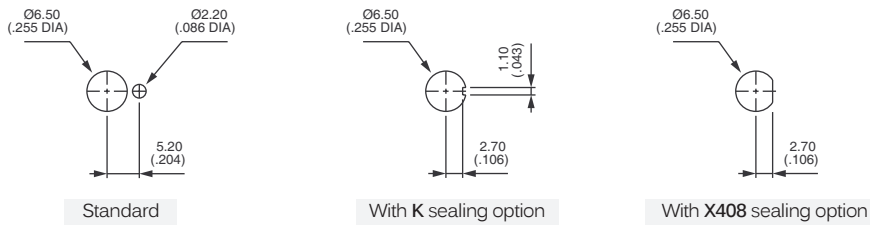
TERMINALS



ELECTRICAL FUNCTION

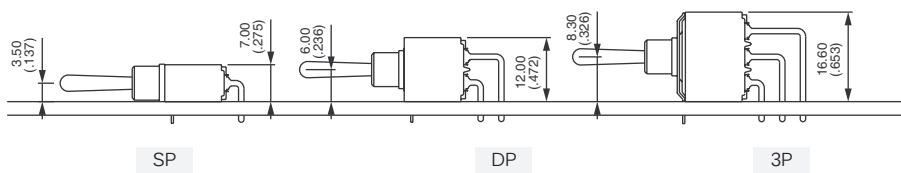


PANEL CUT-OUT

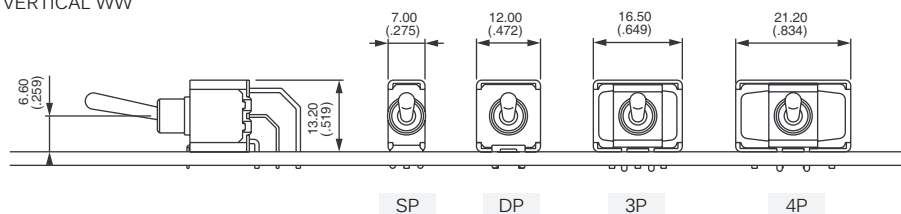


PCB MOUNTING FOR RIGHT ANGLE TERMINAL MODELS

HORIZONTAL W



VERTICAL WW



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BUILD YOUR PART NUMBER

BASIC PART NUMBER

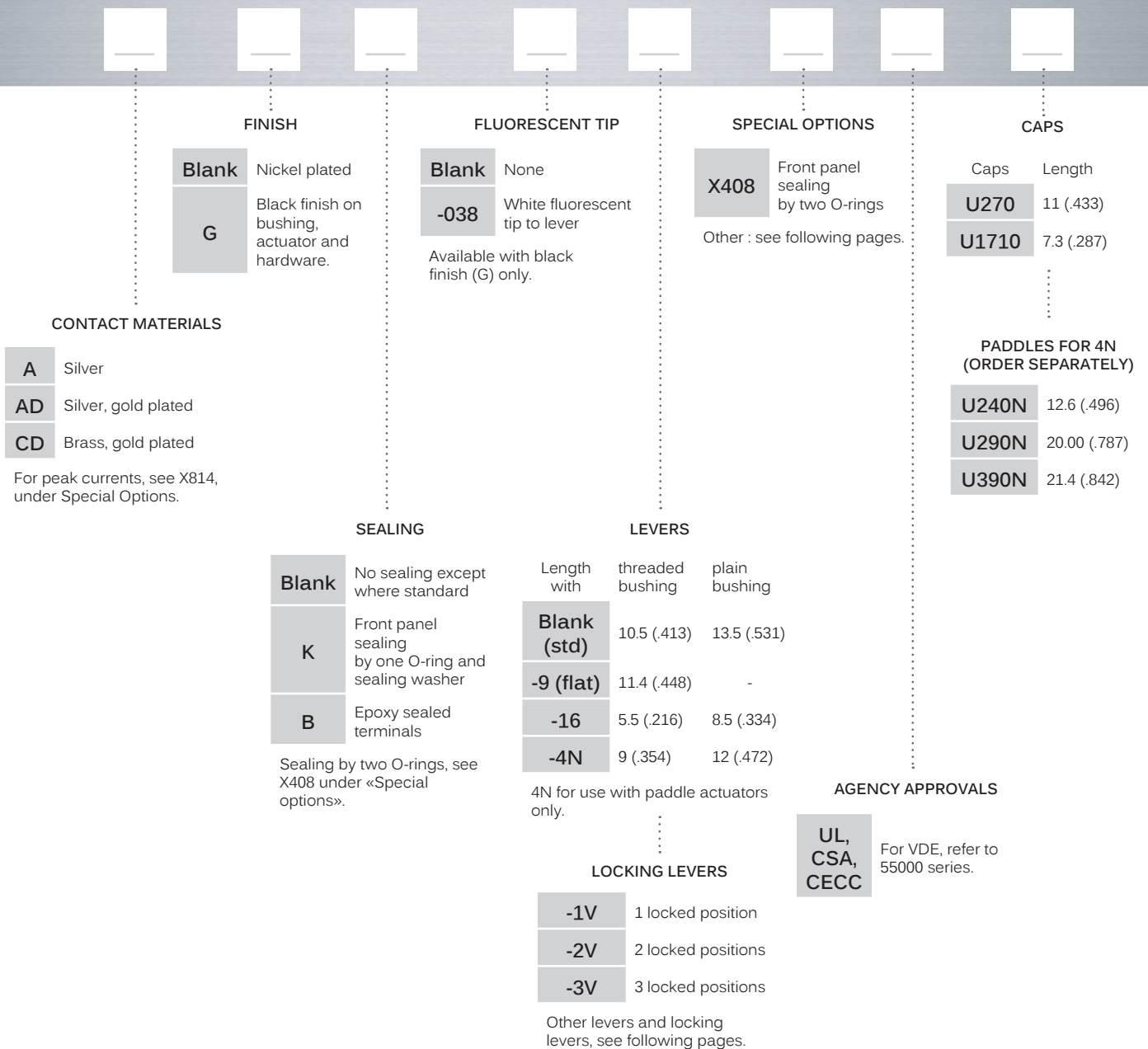
5	—	—	—	—	—	—		
SERIES	NUMBER OF POLES			TERMINALS		MOMENTARY FOR FUNCTION 4		
	3	Single pole	Blank	Solder lugs or straight PC depending on model		1R	ON ON MOM	
	4	Double pole	W	Right angle, horizontal mounting (5200 - 5400 switches)		2R	MOM ON MOM	
	5	Three pole	WW	Right angle, vertical mounting (5200 - 5400 switches)				
	6	Four pole	Y•	Bracket mounting (5200 switches)				
			Z	Quick-connect (5200 - 5900 switches)				
TERMINALS AND BUSHINGS			ELECTRICAL FUNCTIONS			CONNECTIONS FOR FUNCTION 4		
0	Straight PC terminals, 5.08 (.200) terminal spacing		6	ON	-	ON	TH	Standard
2	Straight PC terminals, 4.70 (.185) terminal spacing, right angle or quick-connect		9	ON	OFF	ON	CT	Reversed
4	Straight PC terminals, 4 (.157) terminal spacing or right angle terminals		7	MOM	OFF	MOM	For functions 4, 4-1R, 4-2R (leave blank for all other functions). Wiring diagrams, see Technical information on website.	
6	Solder lug terminals		8	ON	OFF	MOM		
7	Solder lug terminals, with flatted bushing		4	ON	ON	ON		
9	Straight PC or quick-connect terminals, with flatted bushing, 4.70 (.185) terminal spacing			ON	ON	MOM▲		
				MOM	ON	MOM▲		

Bushing Ø 6 (.236) x 0.75 IS also available as standard.

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OPTIONS



ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

- ⚠ **Notice** : please note that not all combinations of above numbers are available. Refer to the following pages for further information.
- 🔧 **Sealing boots** are available. See "Sealing Boots" section of website.
- 🔧 **Mounting accessories** : standard hardware supplied with all models with Ø 6.35 (1/4) or Ø 6 (.236) threaded bushing : 2 hex nuts 8 mm (.314) across flats, 1 locking ring and 1 lockwasher. Standard and special hardware is presented in the "Hardware" section of website.

5000 series

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SOLDER LUG TERMINALS SINGLE POLE



5636
5639
5637
5638

III	II	I
2-3		1-2
ON	-	ON
ON	OFF	ON
MOM	OFF	MOM
ON	OFF	MOM

SOLDER LUG TERMINALS DOUBLE POLE



5646
5649
5647
5648
5644*
5644 1R*
5644 2R*

III	II	I
2-3		1-2
5-6		4-5
ON	-	ON
ON	OFF	ON
MOM	OFF	MOM
ON	OFF	MOM
ON	ON	ON
ON	ON	MOM
MOM	ON	MOM

SOLDER LUG TERMINALS THREE POLE



5656
5659
5657
5658

III	II	I
2-3		1-2
5-6		4-5
8-9		7-8
ON	-	ON
ON	OFF	ON
MOM	OFF	MOM
ON	OFF	MOM

SOLDER LUG TERMINALS FOUR POLE

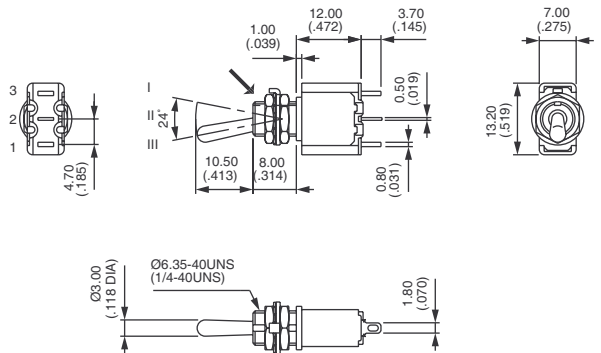


5666
5669
5667
5668
5664*
5664 1R*
5664 2R*

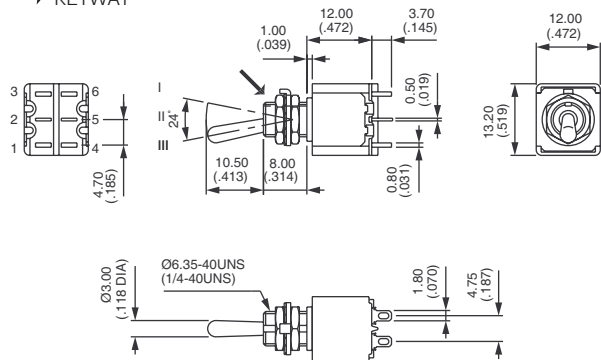
III	II	I
2-3		1-2
5-6		4-5
8-9		7-8
11-12		10-11
ON	-	ON
ON	OFF	ON
MOM	OFF	MOM
ON	OFF	MOM
ON	ON	ON
ON	ON	MOM
MOM	ON	MOM

KEYWAY

Shown with standard lever

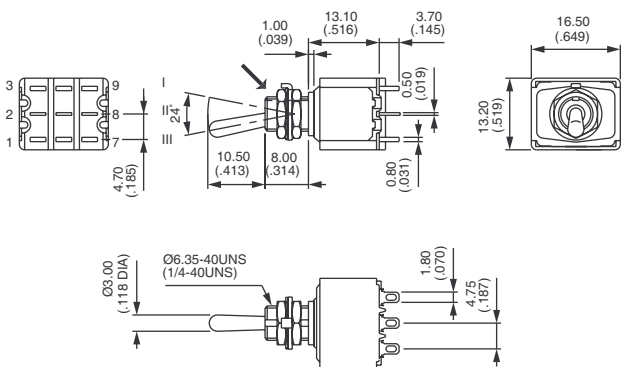


KEYWAY

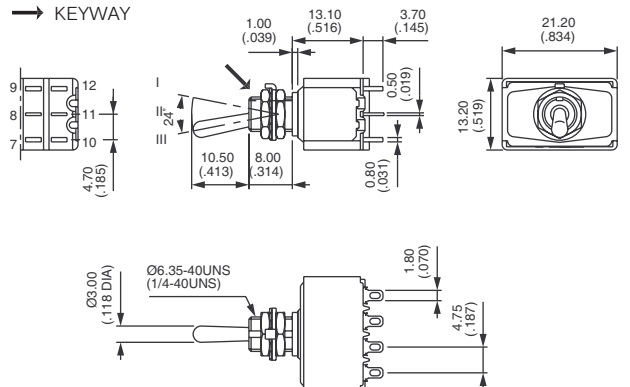


* Function 4 : SP in DP case - specify CT or TH connections.

KEYWAY



KEYWAY



* Function 4 : DP in 4P case - specify CT or TH connections.

All models above also available with flattened bushing : 5700 or with dia. 6 mm x 0.75 SI (.236 x 0.75 IS) : 5500.

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STRAIGHT PC TERMINALS - SPACING 4.7 (.185) SINGLE POLE



5236 B	ON	-	ON
5239 B	ON	OFF	ON
5237 B	MOM	OFF	MOM
5238 B	ON	OFF	MOM

III	II	I
2-3		1-2

STRAIGHT PC TERMINALS - SPACING 4.7 (.185) DOUBLE POLE



5246 B	ON	-	ON
5249 B	ON	OFF	ON
5247 B	MOM	OFF	MOM
5248 B	ON	OFF	MOM
5244 B*	ON	ON	ON
5244 1R B*	ON	ON	MOM
5244 2R B*	MOM	ON	MOM

III	II	I
2-3		1-2
5-6		4-5

STRAIGHT PC TERMINALS - SPACING 4.7 (.185) THREE POLE



5256 B	ON	-	ON
5259 B	ON	OFF	ON
5257 B	MOM	OFF	MOM
5258 B	ON	OFF	MOM

III	II	I
2-3		1-2
5-6		4-5
8-9		7-8

STRAIGHT PC TERMINALS - SPACING 4.7 (.185) FOUR POLE

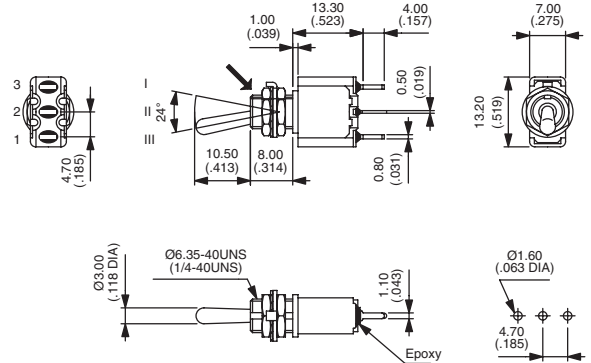


5266 B	ON	-	ON
5269 B	ON	OFF	ON
5267 B	MOM	OFF	MOM
5268 B	ON	OFF	MOM
5264 B*	ON	ON	ON
5264 1R B*	ON	ON	MOM
5264 2R B*	MOM	ON	MOM

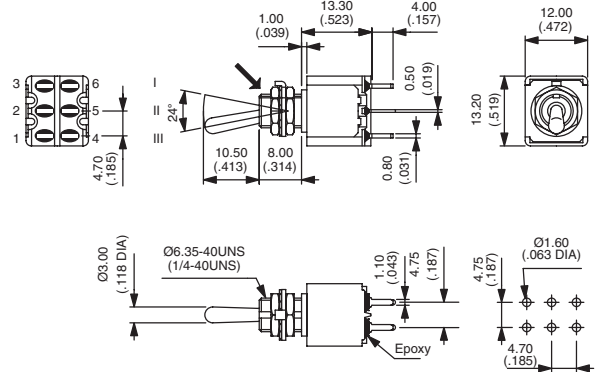
III	II	I
2-3		1-2
5-6		4-5
8-9		7-8
11-12		10-11

KEYWAY

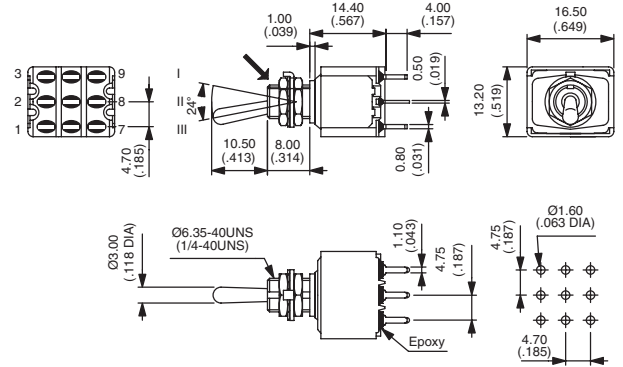
Shown with standard lever



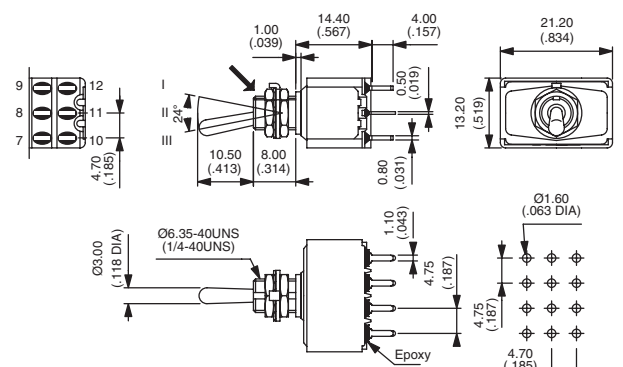
KEYWAY



KEYWAY



KEYWAY



* Function 4 : SP in DP case - specify CT or TH connections.

All models above : Epoxy sealed terminals standard (B).

All models above : 5900 or with flattened bushing : 5900 or with terminal spacing 4mm (.157) : 5400.

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Miniature toggle switches • threaded bushing Ø 6.35 mm or plain bushing

STRAIGHT PC TERMINALS SPACING 5.08 (.200)



	Single pole	Double pole	III 2-3 5-6	II -	I 1-2 4-5
	5036 B	5046 B	ON	-	ON
	5039 B	5049 B	ON	OFF	ON
	5037 B	5047 B	MOM	OFF	MOM
	5038 B	5048 B	ON	OFF	MOM
		5044* B	ON	ON	ON
		5044 1R* B	ON	ON	MOM
		5044 2R* B	MOM	ON	MOM

Epoxy sealed terminals standard (B).

QUICK-CONNECT TERMINALS SINGLE POLE



	III 2-3	II -	I 1-2
5236Z B	ON	-	ON
5239Z B	ON	OFF	ON
5237Z B	MOM	OFF	MOM
5238Z B	ON	OFF	MOM

Single and double pole models also available with flatted bushing : 5900Z.
Epoxy sealed terminals standard (B).

QUICK-CONNECT TERMINALS DOUBLE POLE



	III 2-3 5-6	II -	I 1-2 4-5
5246Z B	ON	-	ON
5249Z B	ON	OFF	ON
5247Z B	MOM	OFF	MOM
5248Z B	ON	OFF	MOM
5244Z* B	ON	ON	ON
5244Z 1R* B	ON	ON	MOM
5244Z 2R* B	MOM	ON	MOM

Epoxy sealed terminals standard (B).

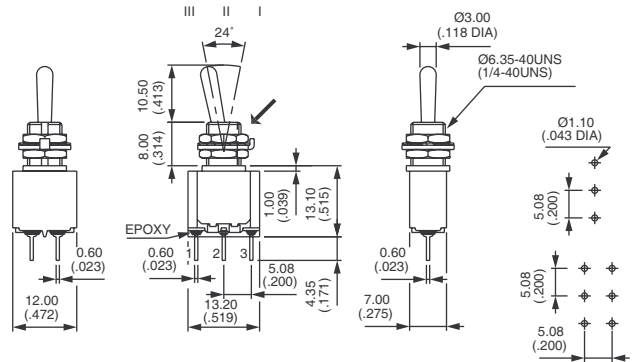
RIGHT ANGLE TERMINALS - HORIZONTAL SINGLE POLE



	III 2-3	II -	I 1-2
5236W	ON	-	ON
5239W	ON	OFF	ON
5237W	MOM	OFF	MOM
5238W	ON	OFF	MOM

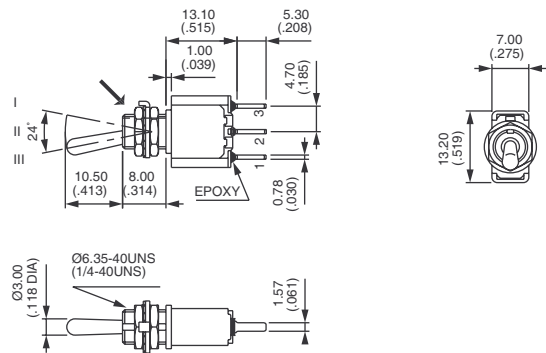
Also available with terminal spacing 4 mm (.157) instead of 4.7 (.185) : 5400W.

→ KEYWAY

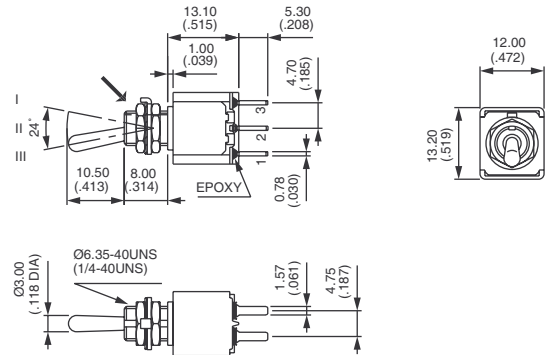


* Function 4 : SP in DP case - specify CT or TH connections.

→ KEYWAY

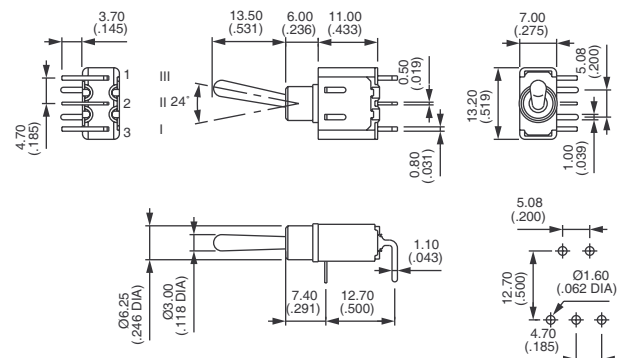


→ KEYWAY



* Function 4 : SP in DP case - specify CT or TH connections.

→ KEYWAY



5000 series

Miniature toggle switches • plain bushing

RIGHT ANGLE TERMINALS - HORIZONTAL DOUBLE POLE



5246W	ON	-	ON
5249W	ON	OFF	ON
5247W	MOM	OFF	MOM
5248W	ON	OFF	MOM
5244W*	ON	ON	ON
5244W 1R*	ON	ON	MOM
5244W 2R*	MOM	ON	MOM

Also available with terminal spacing 4 mm (.157) instead of 4.7 (.185) : 5400W.

RIGHT ANGLE TERMINALS - HORIZONTAL THREE POLE



5256W	ON	-	ON
5259W	ON	OFF	ON
5257W	MOM	OFF	MOM
5258W	ON	OFF	MOM

RIGHT ANGLE TERMINALS - VERTICAL SINGLE POLE



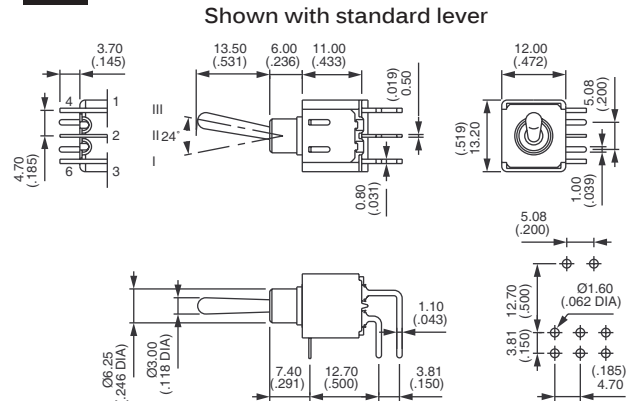
5236WW	ON	-	ON
5239WW	ON	OFF	ON
5237WW	MOM	OFF	MOM
5238WW**	ON	OFF	MOM

RIGHT ANGLE TERMINALS - VERTICAL DOUBLE POLE

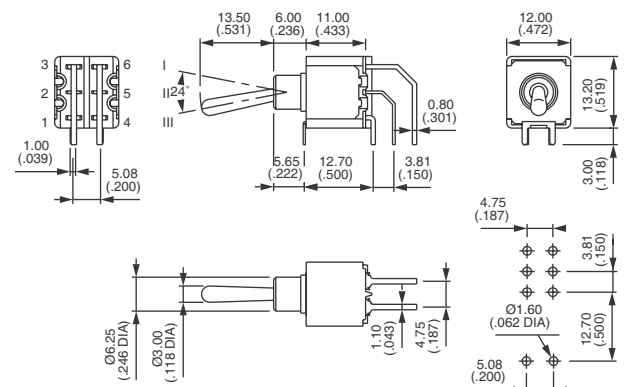
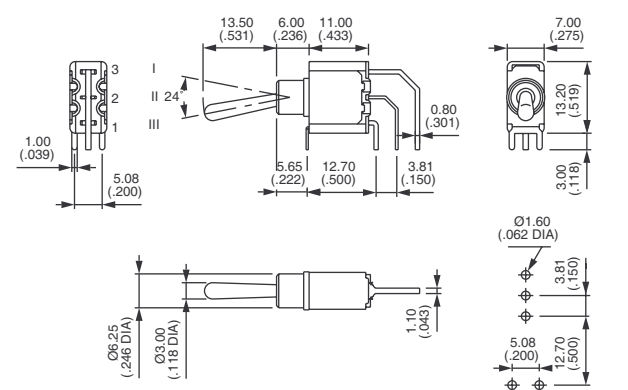
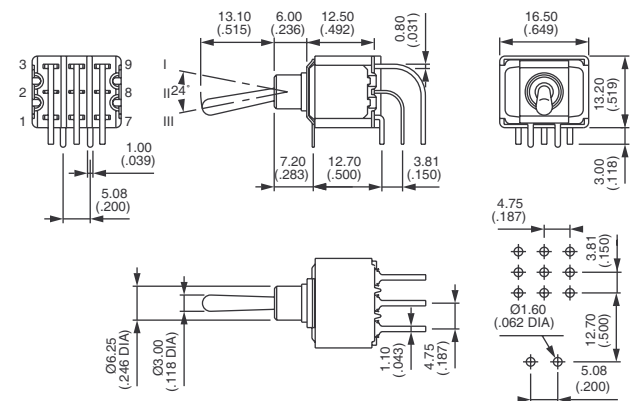


5246WW	ON	-	ON
5249WW	ON	OFF	ON
5247WW	MOM	OFF	MOM
5248WW**	ON	OFF	MOM
5244WW*	ON	ON	ON
5244WW 1R*	ON	ON	MOM
5244WW 2R*	MOM	ON	MOM

Vertical right angle models above : * Function 4 : SP in DP case, DP in 4P case - specify CT or TH connections.



* Function 4 : SP in DP case - specify CT or TH connections.



5000 series

Miniature toggle switches • plain bushing

RIGHT ANGLE TERMINALS - VERTICAL THREE POLE



	III	II	I
	2-3		1-2
	5-6		4-5
	8-9		7-8
5256WW	ON	-	ON
5259WW	ON	OFF	ON
5257WW	MOM	OFF	MOM
5258WW**	ON	OFF	MOM

** Function 8 : reversed connection available, consult factory.

RIGHT ANGLE TERMINALS - VERTICAL FOUR POLE



	III	II	I
	2-3		1-2
	5-6		4-5
	8-9		7-8
	11-12		10-11
5266WW	ON	-	ON
5269WW	ON	OFF	ON
5267WW	MOM	OFF	MOM
5268WW**	ON	OFF	MOM
5264WW*	ON	ON	ON
5264WW 1R*	ON	ON	MOM
5264WW 2R*	MOM	ON	MOM

Vertical right angle models above also available with terminal spacing 2.54 mm (.100) instead of 3.81 mm (.150) : 5400WW.

SHORT BRACKET - WIDTH 15.75 (.620) SINGLE POLE



	III	II	I
	2-3		1-2
5236Y B	ON	-	ON
5239Y B	ON	OFF	ON
5237Y B	MOM	OFF	MOM
5238Y B	ON	OFF	MOM

Epoxy sealed terminals standard (B).

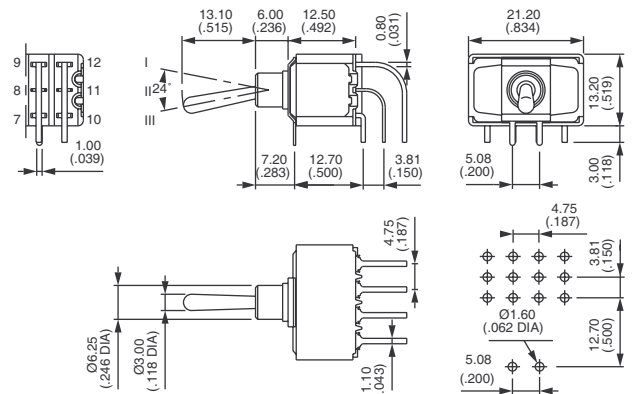
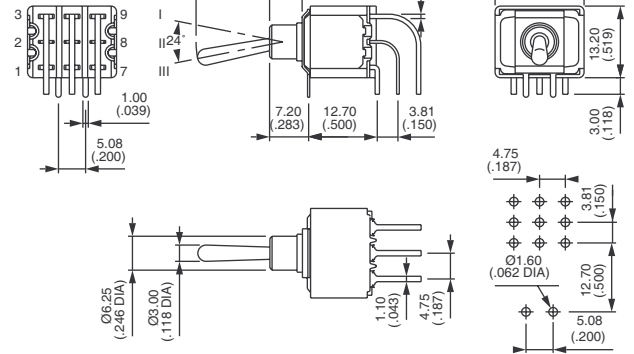
SHORT BRACKET - WIDTH 15.75 (.620) DOUBLE POLE



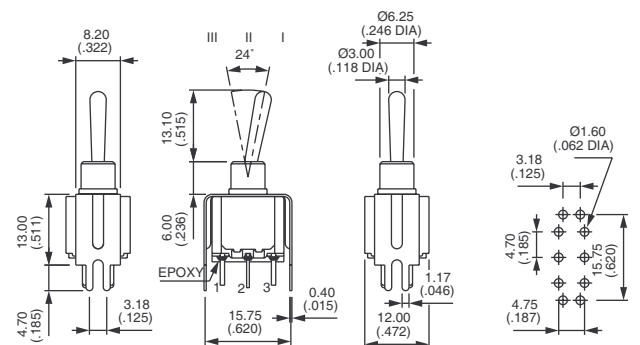
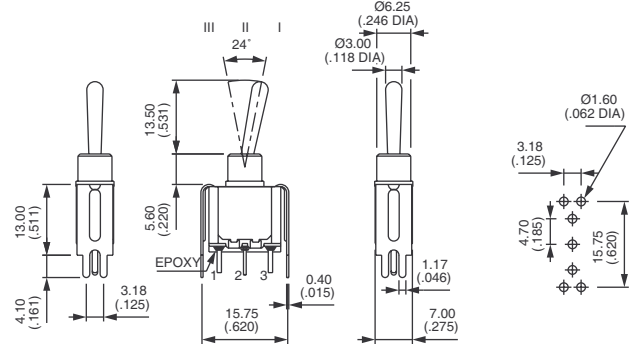
	III	II	I
	2-3		1-2
	5-6		4-5
5246Y B	ON	-	ON
5249Y B	ON	OFF	ON
5247Y B	MOM	OFF	MOM
5248Y B	ON	OFF	MOM
5244Y B*	ON	ON	ON
5244Y 1R B*	ON	ON	MOM
5244Y 2R B*	MOM	ON	MOM

Epoxy sealed terminals standard (B).

Shown with standard lever



* Function 4 : SP in DP case, DP in 4P case - specify CT or TH connections.



*Function 4 : SP in DP case - specify CT or TH connections.

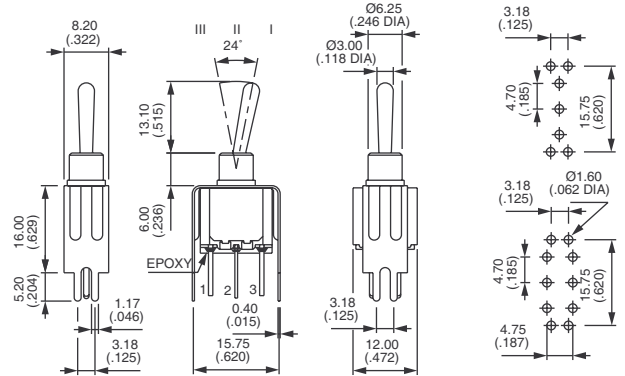
5000 series

Miniature toggle switches • plain bushing

TALL BRACKET - WIDTH 15.75 (.620)



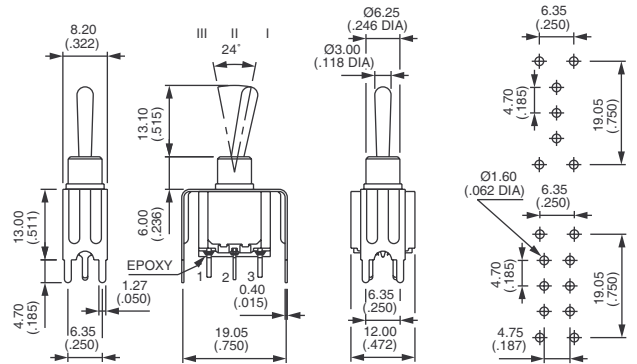
Single pole	Double pole	III	II	I
5236Y4 B	5246Y4 B	2-3	-	1-2
5239Y4 B	5249Y4 B	5-6	-	4-5
5237Y4 B	5247Y4 B	ON	OFF	ON
5238Y4 B	5248Y4 B	MOM	OFF	MOM
	5244Y4 B*	ON	ON	ON
	5244Y4 1R B*	ON	ON	MOM
	5244Y4 2R B*	MOM	ON	MOM



SHORT BRACKET - WIDTH 19.05 (.750)



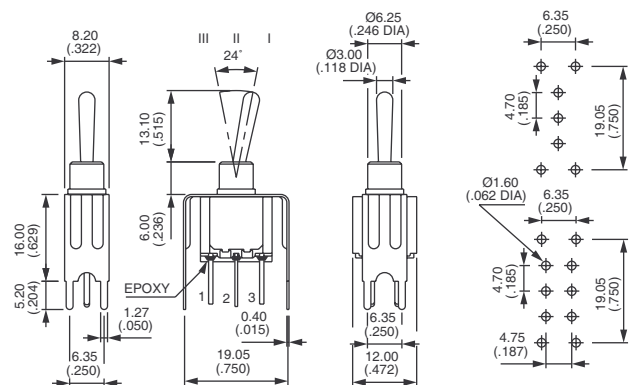
Single pole	Double pole	III	II	I
5236Y6 B	5246Y6 B	2-3	-	1-2
5239Y6 B	5249Y6 B	5-6	-	4-5
5237Y6 B	5247Y6 B	ON	OFF	ON
5238Y6 B	5248Y6 B	MOM	OFF	MOM
	5244Y6 B*	ON	ON	ON
	5244Y6 1R B*	ON	ON	MOM
	5244Y6 2R B*	MOM	ON	MOM



TALL BRACKET - WIDTH 19.05 (.750)



Single pole	Double pole	III	II	I
5236Y7 B	5246Y7 B	2-3	-	1-2
5239Y7 B	5249Y7 B	5-6	-	4-5
5237Y7 B	5247Y7 B	ON	OFF	ON
5238Y7 B	5248Y7 B	MOM	OFF	MOM
	5244Y7 B*	ON	ON	ON
	5244Y7 1R B*	ON	ON	MOM
	5244Y7 2R B*	MOM	ON	MOM



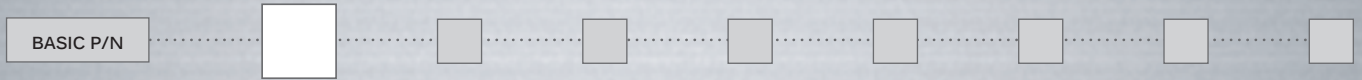
Epoxy sealed terminals standard (B).

* Function 4 : SP in DP case - specify CT or TH connections.

5000 series

Miniature toggle switches •
threaded bushing Ø 6.35 mm or plain bushing

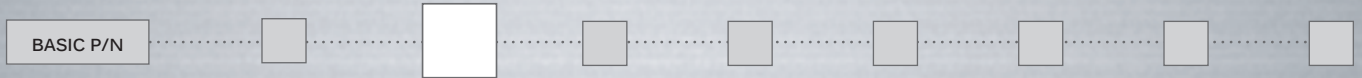
CONTACT MATERIALS



- A Silver
AD Silver, gold plated
CD Brass, gold plated

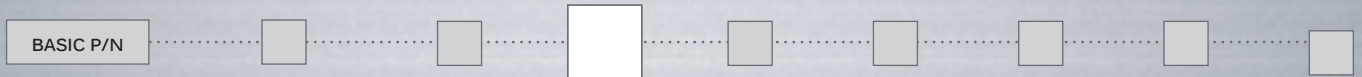
Special contacts for peak currents : see X814, under "Special Options".

FINISH



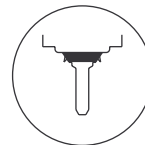
- Blank Nickel plated
G Black finish on bushing, actuator and hardware

SEALING



- Blank • For 5000 and 5200Z models : epoxy sealed terminals standard
• Other models : no sealing required

OPTION B

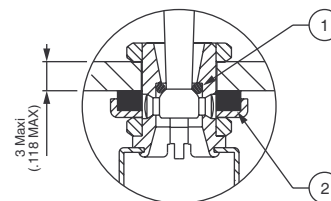


- K Front panel sealing by one O-ring and sealing washer. Protects the switch against water and dust. Panel seal withstands 1 bar pressure and remains sealed even when switch is operated.

⚠ Available on models with Ø 6.35 (1/4) **threaded bushing only.**

Not available with levers 8, 9, 12, 22, 23.

OPTION K



- ① O-ring
② Sealing washer

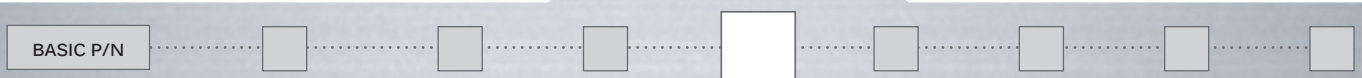
- B Epoxy sealed terminals
KB Combined sealings

Sealing by two O-rings, see X408 under "Special options".

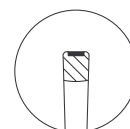
K with Ø 6.35 (1/4)
keyway bushing
includes washer **U360**

K with Ø 6.35 (1/4)
flatted bushing
includes washer **U5141**

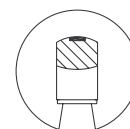
FLUORESCENT TIP



- Blank None
-038 White fluorescent tip.
Becomes luminous when submitted to ultraviolet rays.
⚠ Available with black finish (option G) only.
Consult factory for levers available with this option.



-19
Standard lever



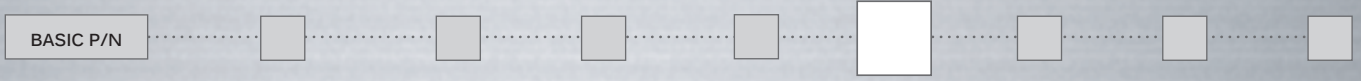
Locking lever

Same dimensions as standard actuator on next page.

5000 series

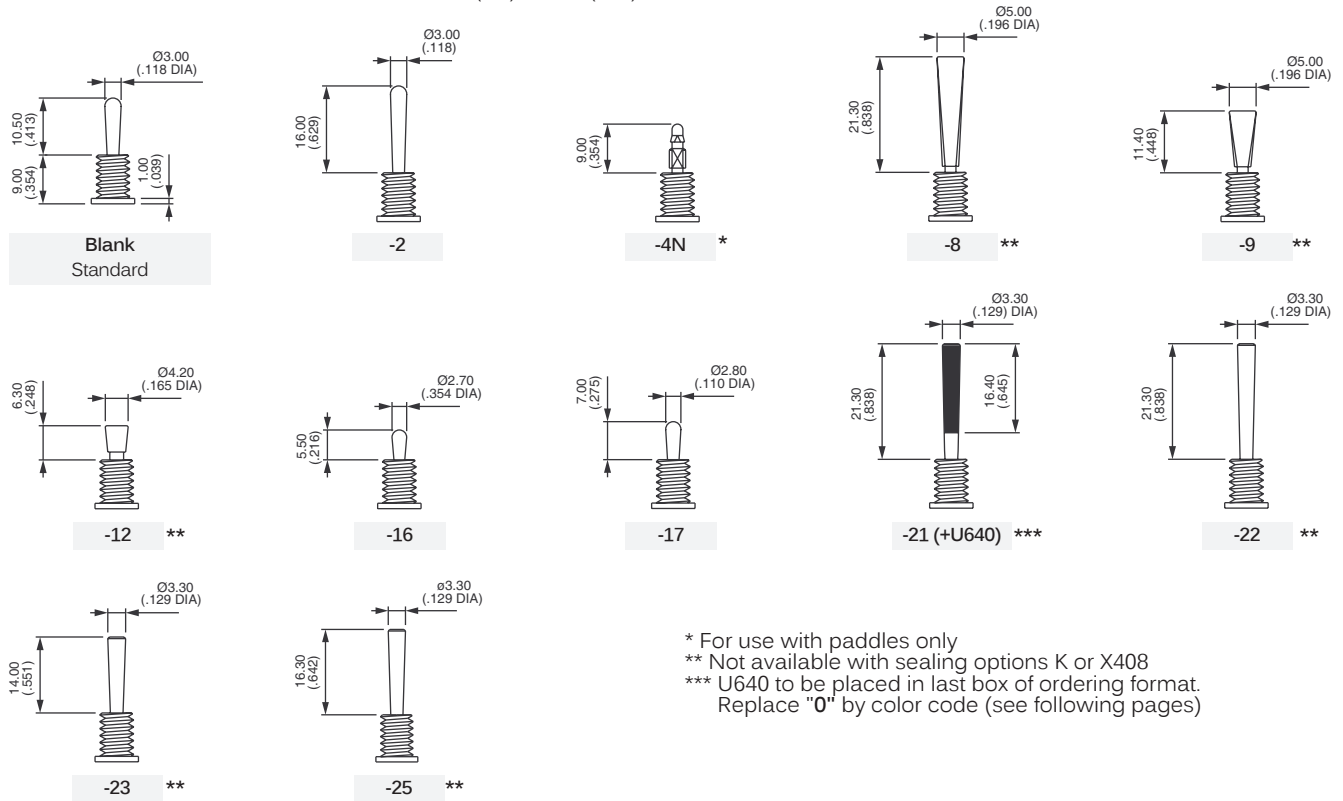
Miniature toggle switches • threaded bushing Ø 6.35 mm or plain bushing

ACTUATORS



Dash compulsory before lever code.

LEVERS FOR THREADED BUSHING MODELS Ø 6,35 (1/4) OR Ø 6 (.236)

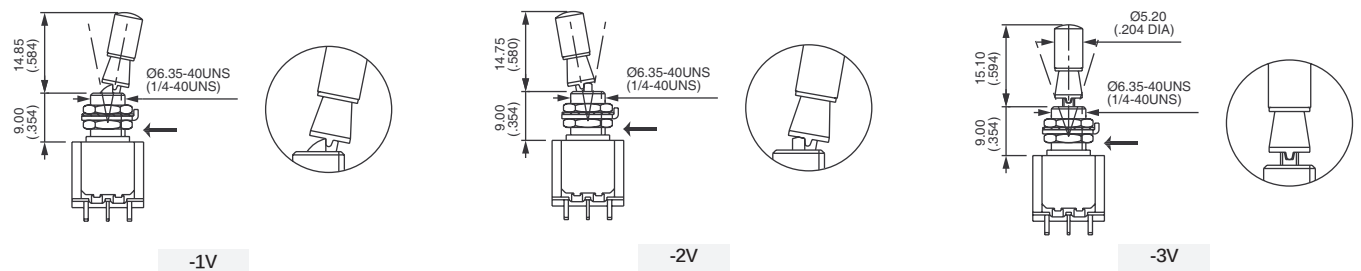


* For use with paddles only
 ** Not available with sealing options K or X408
 *** U640 to be placed in last box of ordering format. Replace "0" by color code (see following pages)

LOCKING LEVERS FOR THREADED BUSHING MODELS Ø 6,35 (1/4)

- 1V 1 locked position (function 6)
- 2V 2 locked position (function 6)
- 3V 3 locked positions (functions 9 and 4)

KEYWAY



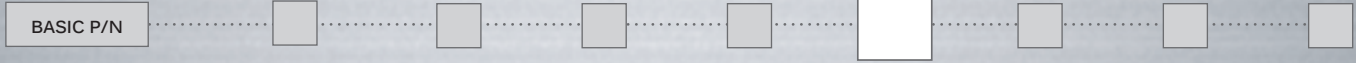
Consult factory for other locking lever options.

For plain bushing models, see X386 or X916 under "Special options" on the following pages.

5000 series

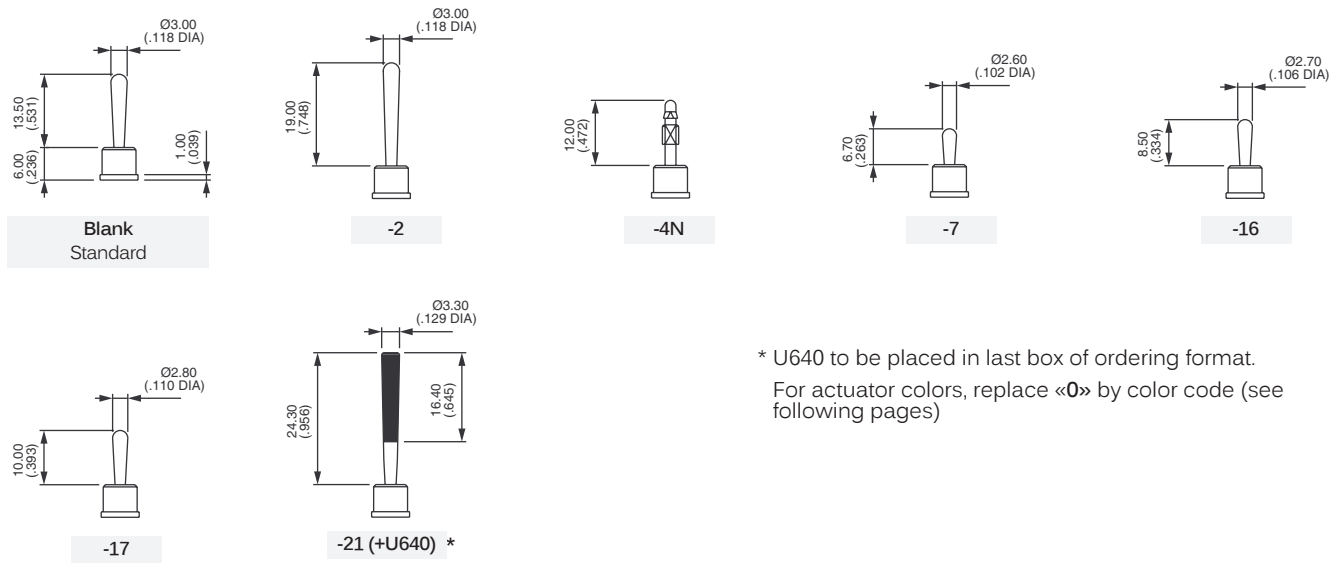
Miniature toggle switches •
threaded bushing Ø 6.35 mm or plain bushing

ACTUATORS (CONTINUED)



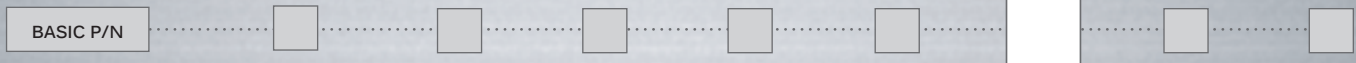
LEVERS FOR PLAIN BUSHING MODELS : W - WW AND Y

Lever length : With bracket or mounting plate lever length will be reduced by 0.4 mm (.015) as a rule. Please refer to switch technical drawings of basic models pages for details.

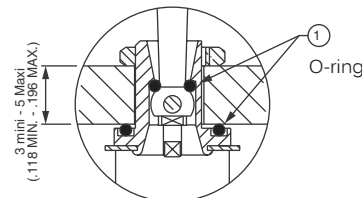


* U640 to be placed in last box of ordering format.
For actuator colors, replace «0» by color code (see following pages)

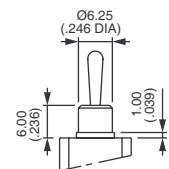
SPECIAL OPTIONS



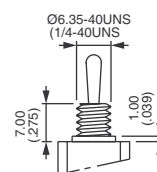
- Blank** No special requirement
- X408** Front panel sealing by two O-rings. Flatted bushing for precise orientation. Protects the switch against water and dust. Panel seal withstands 1 bar pressure and remains sealed even when switch is operated. Includes sealed terminals (option B).
⚠ Available only on models with threaded bushing.
Not available with levers 8, 9, 12, 22, 23.
- X371** Plain bushing Ø 6.25 mm (.246) (instead of standard threaded bushing).
- X372** Threaded bushing Ø 6.35 (1/4). **Height 7 mm (.274).**
- X386** Threaded bushing Ø 6.35 mm (1/4) to replace plain bushing on models W - WW and Y.



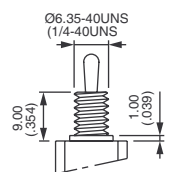
X408



X371



X372

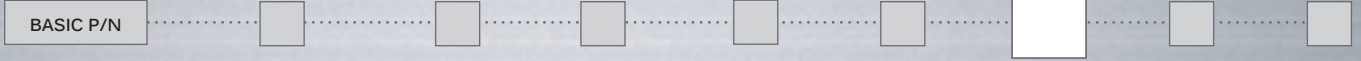


X386

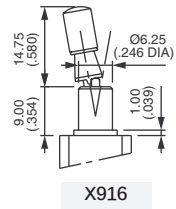
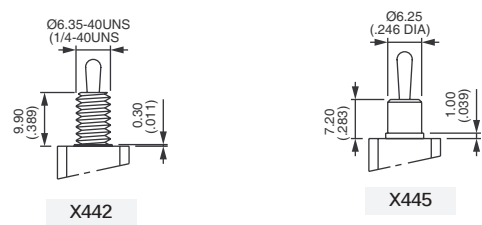
5000 series

Miniature toggle switches • threaded bushing Ø 6.35 mm or plain bushing

SPECIAL OPTIONS
(CONTINUED)

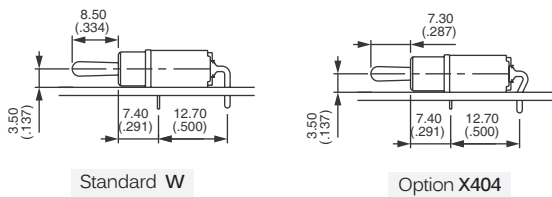


- X442** Threaded bushing Ø 6.35 mm (1/4) - Height 9.9 mm (.389).
- X445** Plain bushing. Height 7.2 mm (.283) - for W, WW and Y models.
Available with the same levers, insulating cap and paddles as X404.
- X601** **Silver plated brass contacts.**
Current/voltage rating for an electrical life of 20,000 cycles : 0.5 A 30 VDC. Minimum quantity : 5,000 pieces per model and shipment.
- X681** **Satin chrome actuator**
- X814** **Switches for peak currents** - single and double pole.
On request.
- X902** Plain bushing Ø 6.25 mm (.246) - Height 9 mm (.354) (not available with K sealing option).
- X916** Locking lever on model with plain bushing.
- X404** **Horizontal right angle (W) with reduced overall dimensions** (shown with lever -16)

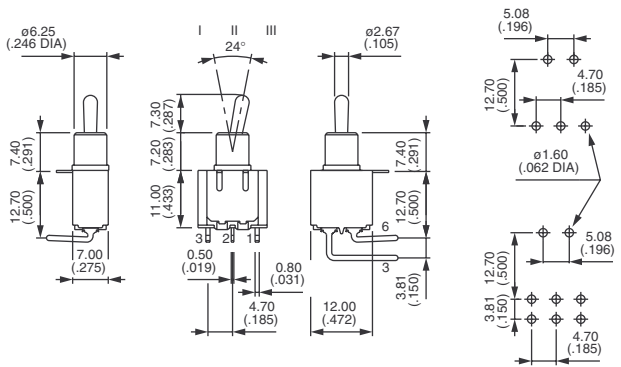


⚠ With options X372, X386, X442 and X445, the lever lengths indicated on previous pages will be modified.

OPTION X404



	III	II	I
Single pole	2-3		1-2
Double pole	5-6		4-5
5236W X404	ON	-	ON
5239W X404	ON	OFF	ON
5237W X404	MOM	OFF	MOM
5238W X404	ON	OFF	MOM
5244W X404*	ON	ON	ON
5244W 1R X404*	ON	ON	MOM
5244W 2R X404*	MOM	ON	MOM

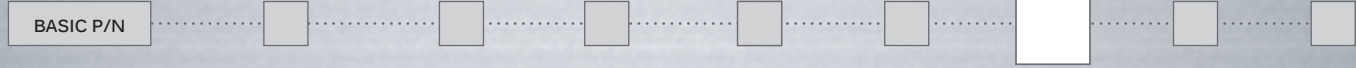


* Function 4 : SP in DP case - specify CT or TH connections

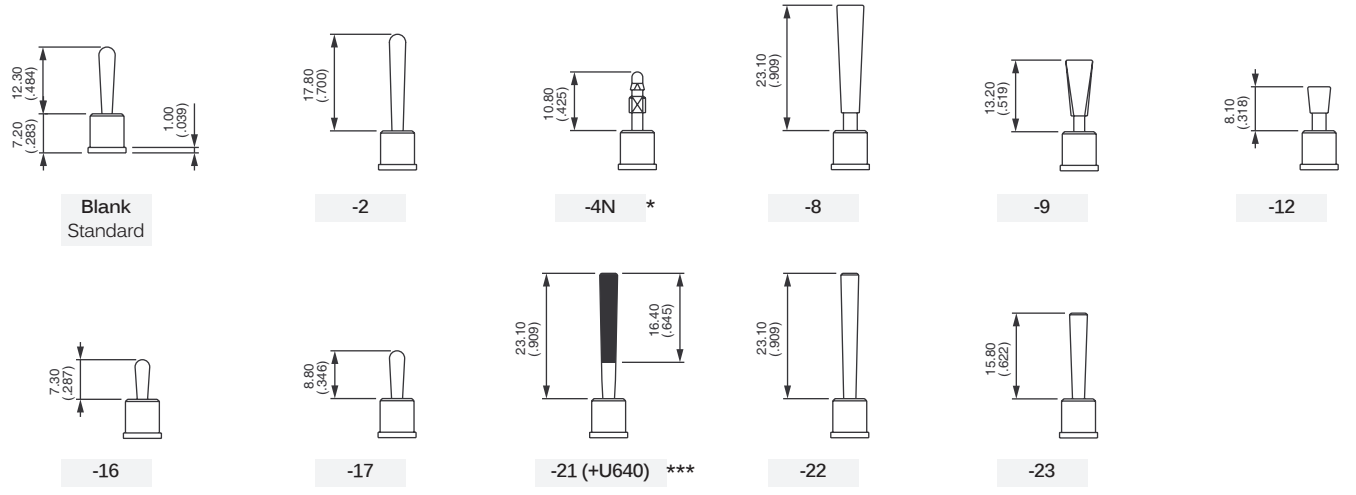
5000 series

Miniature toggle switches •
threaded bushing Ø 6.35 mm or plain bushing

SPECIAL OPTIONS (CONTINUED)



OPTION X404 (CONTINUED)
LEVERS LENGTHS FOR X404 (ALSO AVAILABLE WITH X445 OPTION)

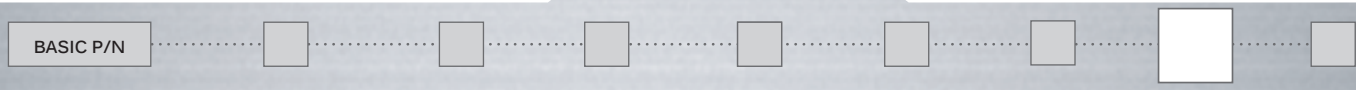


* For paddles
*** U640 to be placed in last box of ordering format. Replace "0" with color code.

Insulating caps and paddles for X404 :

Insulating cap U1710 available with lever style 16.
Paddles U240N, U290N and U390N available with lever style 4N. See details on next page..

AGENCY APPROVALS



- Blank No agency approval required.
- UL All standard models
- CSA
- CECC Standard models 5600 - 5200

Availability : consult factory for details of approved combinations or options.

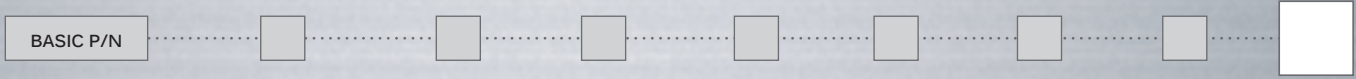
Marking : to order switches marked UL, CSA or CECC, complete above box with desired approvals, in this order & without space (ex. : ULCSACECC). **VDE (with UL & CSA) :** Refer to 55000 series.

Preferential lists : see specifications.

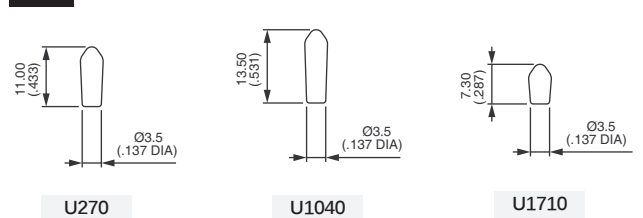
5000 series

Miniature toggle switches • threaded bushing Ø 6.35 mm or plain bushing

INSULATING CAPS



- U270** For standard lever & threaded bushing only
- U1040** For standard lever & plain bushing only
- U1710** For lever 17 and threaded bushing
For lever 7 and plain bushing

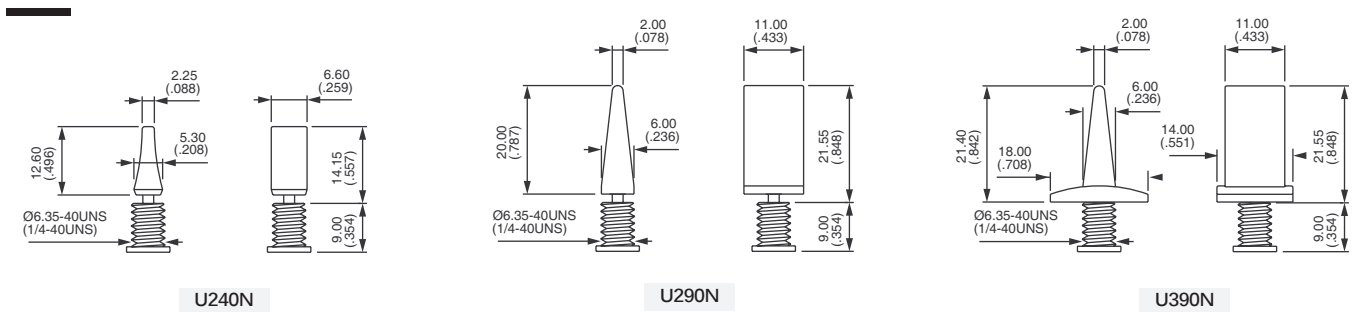


For cap colors, replace "0" with number :

- 1 Blue
- 1/4 Dark blue
- 2 Black
- 3 Green
- 4 Grey
- 5 Yellow
- 6 Red
- 7/1 White
- 9 Orange

PADDLES

For use with lever 4N only. Shown with standard threaded bushing. Order separately.



For cap colors, replace "0" with number :

- 1 Blue
- 1/4 Dark blue
- 2 Black
- 3 Green
- 4 Grey
- 5 Yellow
- 6 Red
- 7 Ivory
- 7/1 White
- 9 Orange

5000M series

Miniature toggle switches •
threaded bushing Ø 11.9 mm



DISTINCTIVE FEATURES

Bushing Ø 11.9 (15/32)

Panel mounting and PCB terminal combination available

1 to 4 pole configurations

UL and CSA approved



ELECTRICAL SPECIFICATIONS

- Current/voltage rating with resistive load :

Contact	Maximum	Minimum	Level*
Silver (A)	4 A 30 VDC	50 mA 10 VDC	III and IV
Silver, gold plated (AD)	4 A 30 VDC Gold plating withstands up to 100 mA 30 VDC	10 mA 50 mV 10 µA 5 V	I to IV
Brass, gold plated (CD)	0.4 VA at 20 VAC or DC	10 mA 50 mV 10 µA 5 V	I and II

*For details, see Technical Information on website.

- For inductive, lamp or capacitive load, consult factory.
- Initial contact resistance : 10 mΩ max.
- Insulation resistance : 1,000 MΩ min. at 500 VDC
- Dielectric strength :
1,000 Vrms 50 Hz min. between terminals
1,500 Vrms 50 Hz min. between poles
1,500 Vrms 50 Hz min. between terminals and frame
- Contact bounce : 2 ms max.
- Electrical life at full load :
50,000 cycles for single and double pole
40,000 cycles for 3 pole
30,000 cycles for 4 pole
- Low level or mechanical life : 100,000 cycles



GENERAL SPECIFICATIONS

- Torque : 1.25 Nm (.922 Ft.lb) max. applied to nut
- Panel thickness : up to 6 mm (.236)
- Operating temperature : -40 °C to +85 °C (-40 °F to +185 °F)

The company reserves the right to change specifications without notice.



5000M series

Miniature toggle switches •
threaded bushing Ø 11.9 mm



MATERIALS

- Case : diallyphthalate (DAP) or high temperature plastic material (UL94-V0)
- Actuator : brass, nickel plated
- Bushing : brass, nickel plated
- Housing : stainless steel or steel tin plated
- Contacts
 - A : silver
 - AD : silver, gold plated
 - CD : brass, gold plated
 - X814 : for peak currents, see "Special options".
- Terminal seal : epoxy

AGENCY APPROVALS



3 A 250 VAC, 6 A 125 VAC

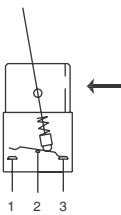
Availability : consult factory for details of approved models.

Marking : to order switches marked UL or CSA, complete appropriate box of ordering format. The preferential list does not appear on the switches.

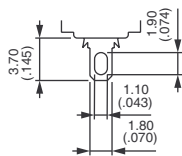


ELECTRICAL FUNCTION

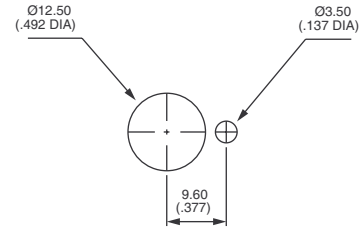
→ KEYWAY



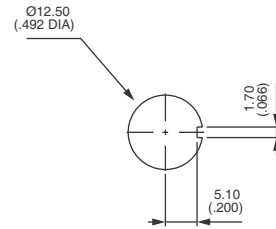
TERMINALS



PANEL CUT-OUT



Standard



With K sealing option

5000M series

Miniature toggle switches • threaded bushing Ø 11.9 mm



BUILD YOUR PART NUMBER

BASIC PART NUMBER

<div style="border: 1px solid black; padding: 5px; width: 40px; margin: 0 auto;">5</div> <p>SERIES</p>	<div style="border: 1px solid black; padding: 5px; width: 40px; margin: 0 auto;">—</div> <p>TERMINALS</p>	<div style="border: 1px solid black; padding: 5px; width: 40px; margin: 0 auto;">—</div> <p>NUMBER OF POLES</p>	<div style="border: 1px solid black; padding: 5px; width: 40px; margin: 0 auto;">—</div> <p>TERMINALS</p>	<div style="border: 1px solid black; padding: 5px; width: 40px; margin: 0 auto;">—</div> <p>MOMENTARY FOR FUNCTION 4</p>										
<p>2 Straight PC terminals, 4.70 (.185) terminal spacing - On request.</p> <p>6 Solder lug terminals</p>	<p>3 Single pole</p> <p>4 Double pole</p> <p>5 Three pole</p> <p>6 Four pole</p>	<p>M Solder lugs with Ø 11.9 (15/32) bushing</p>	<p>1R ON ON MOM</p> <p>2R MOM ON MOM</p> <p>Leave blank for other functions.</p>											
<p>ELECTRICAL FUNCTIONS</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 25%;">6 ON - ON</td> <td style="width: 25%;">8 ON OFF MOM</td> </tr> <tr> <td>9 ON OFF ON</td> <td>2 ON - MOM</td> </tr> <tr> <td>7 MOM OFF MOM</td> <td>4 ON ON ON MOM ▲ ON ON MOM ▲</td> </tr> </table>		6 ON - ON	8 ON OFF MOM	9 ON OFF ON	2 ON - MOM	7 MOM OFF MOM	4 ON ON ON MOM ▲ ON ON MOM ▲	<p>CONNECTIONS FOR FUNCTION 4</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 20%;">TH Standard</td> <td></td> </tr> <tr> <td>CT Reversed</td> <td></td> </tr> </table> <p>For functions 4, 4-1R, 4-2R (leave blank for all other functions). Wiring diagrams, see Technical information on website.</p>			TH Standard		CT Reversed	
6 ON - ON	8 ON OFF MOM													
9 ON OFF ON	2 ON - MOM													
7 MOM OFF MOM	4 ON ON ON MOM ▲ ON ON MOM ▲													
TH Standard														
CT Reversed														
<p>Function 4 ▲ Must not have blank in «momentary» box. Wiring diagrams, see Technical information, on website.</p>														

OPTIONS

<div style="border: 1px solid black; padding: 5px; width: 40px; margin: 0 auto;">—</div> <p>CONTACT MATERIALS</p>	<div style="border: 1px solid black; padding: 5px; width: 40px; margin: 0 auto;">—</div> <p>FINISH</p>	<div style="border: 1px solid black; padding: 5px; width: 40px; margin: 0 auto;">—</div> <p>SEALING</p>	<div style="border: 1px solid black; padding: 5px; width: 40px; margin: 0 auto;">—</div> <p>LEVERS</p>	<div style="border: 1px solid black; padding: 5px; width: 40px; margin: 0 auto;">—</div> <p>AGENCY APPROVALS</p>
<p>A Silver</p> <p>AD Silver, gold plated</p> <p>CD Brass, gold plated</p>	<p>Blank Nickel plated</p> <p>G Black finish on bushing, actuator and hardware.</p>	<p>Blank No sealing</p> <p>K Front panel sealing by one O-ring and sealing washer</p> <p>B Epoxy sealed terminals</p>	<p>Blank (std) Length 17.5 (.688)</p> <p>-27 Length 11.7 (.460)</p>	<p>UL, CSA Availability : Consult factory for details of approved models.</p>



ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

⚠ **Notice:** please note that not all combinations of above numbers are available. Refer to the following pages for further information.

🔧 Mounting accessories : standard hardware supplied with all models : 2 hex nuts 14 mm (.551) across flats and 1 locking ring. Standard and special hardware is presented in the "Hardware" section of website.

5000M series

Miniature toggle switches • threaded bushing Ø 11.9 mm

SOLDER LUG TERMINALS SINGLE POLE



5636M	III	-	I
5639M	2-3	II	1-2
5637M	ON	OFF	ON
5638M	MOM	OFF	MOM

SOLDER LUG TERMINALS DOUBLE POLE



5646M	III	-	I
5649M	2-3	II	1-2
5647M	5-6	OFF	ON
5648M	ON	OFF	MOM
5644 M*	MOM	OFF	MOM
5644M 1R*	ON	ON	ON
5644M 2R*	ON	ON	MOM
5644M 2R*	MOM	ON	MOM

SOLDER LUG TERMINALS THREE POLE



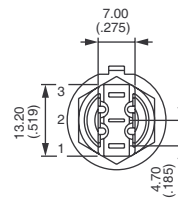
5656M	III	-	I
5659M	2-3	II	1-2
5657M	5-6	OFF	ON
5658M	8-9	OFF	MOM
5658M	ON	OFF	MOM

SOLDER LUG TERMINALS FOUR POLE

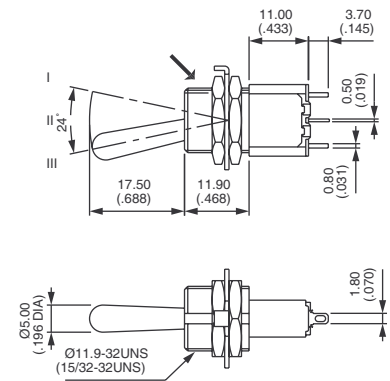


5666M	III	-	I
5669M	2-3	II	1-2
5667M	5-6	OFF	ON
5668M	8-9	OFF	MOM
5664 M*	11-12	ON	ON
5664M 1R*	ON	ON	MOM
5664M 2R*	MOM	ON	MOM

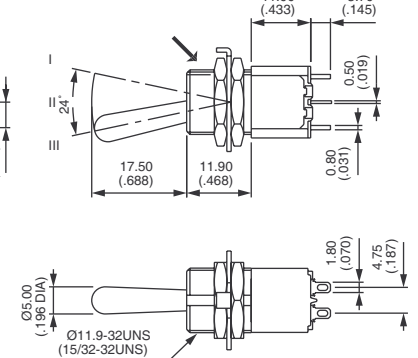
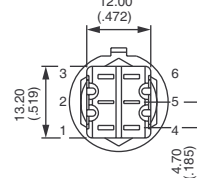
KEYWAY



Shown with standard lever

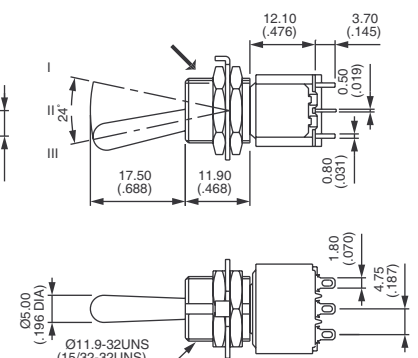
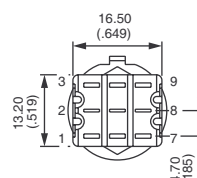


KEYWAY

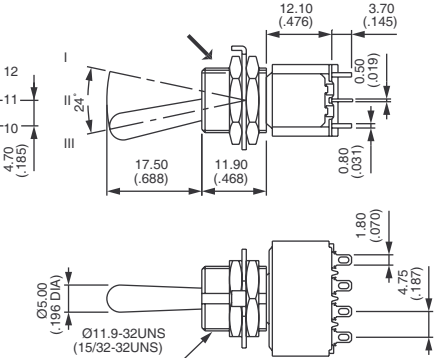
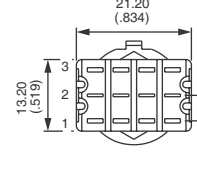


*Function 4 : DP in 4P case - specify CT or TH connections, see "Technical information" on website.

KEYWAY



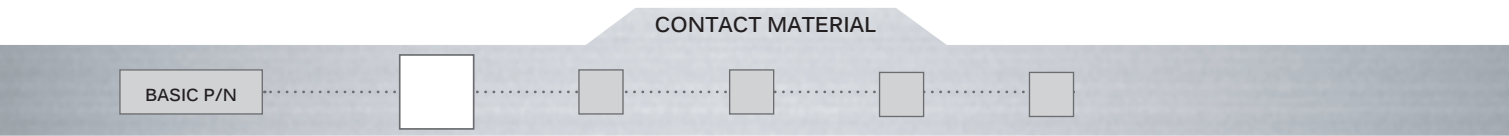
KEYWAY



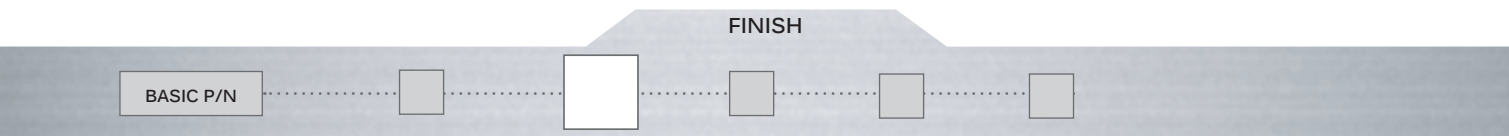
*Function 4 : DP in 4P case - specify CT or TH connections, see "Technical information" on website.

5000M series

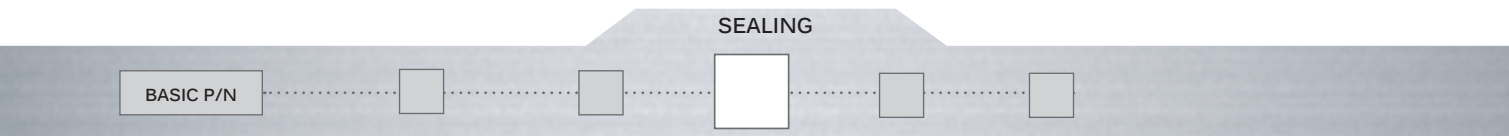
Miniature toggle switches • threaded bushing Ø 11.9 mm



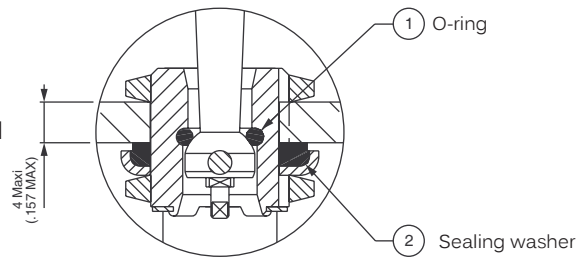
- A Silver
- AD Silver, gold plated
- CD Brass, gold plated



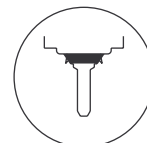
- Blank Nickel plated
- G Black finish on bushing, actuator and hardware



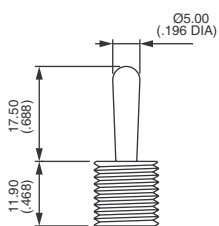
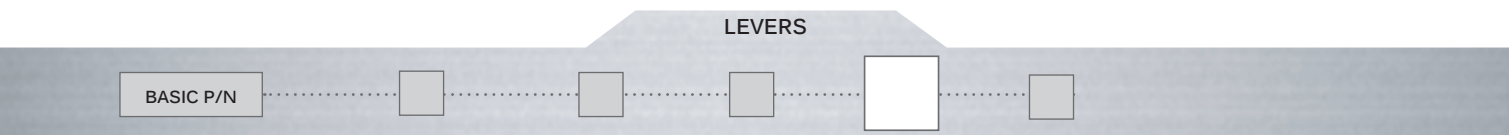
- Blank No sealing required
- K Keyway bushing, Includes washer U60
Front panel sealing by one O-ring and sealing washer.
Protects the switch against water and dust.
Panel seal withstands 1 bar pressure and remains sealed even when switch is operated.
- B Epoxy sealed terminals
- KB Combined sealings



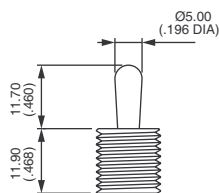
K



B



Blank
Standard

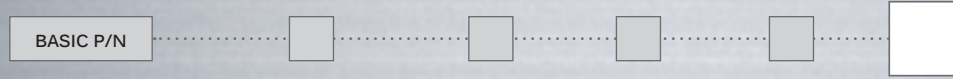


-27

5000M series

Miniature toggle switches • threaded bushing Ø 11.9 mm

AGENCY APPROVALS



UL
 CSA
 Blank No agency approval required.

Availability : consult factory for details of approved combinations or options.

Marking : to order switches marked UL or CSA, complete above box with desired approvals, in this order & without space (ex. : ULCSA).