audio

automotive

aerospace

communication devices

consumer appliances

consumer electronics

datacom

data storage

handheld devices

industrial

industrial equipment

instrumentation

medical

military

mobile phones

portable tools

pumps & motors

security alarms

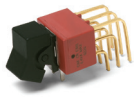
telecom

test equipment

thermostatic controls

rocker

Rockers
Product Selection Guide

Rocker							
Series	**7000**	**E**	**ET**	**T**	**9000**	**DA**	**D**
Switch Type	Miniature	Miniature	Subminiature	Subminiature	Power Rocker & Lever Handle	Miniature Power	Miniature Power
Poles/Throws	SPDT, DPDT, 3PDT, 4PDT	SPDT, DPDT, 3PDT	SPST, SPDT, DPDT	SPST, SPDT, DPDT	DPDT	SPST, SPDT	SPST, SPDT DPST, DPDT
Max. Current	5 Amps	7.5 Amps	3 Amps	3 Amps	10 Amps	16 Amps 10 Amps	4 Amps 10 Amps
Washable		•	•				
Illuminated						•	
Panel Mount Options							
Front Mount	•	•		•	•	Snap-in	Snap-in
Rear Mount	•	•		•	•		
PCB Mount Options							
Vertical	•	•	•	•	•	•	•
Right Angle	•	•	•	•	•	•	•
Surface Mount			•				
Page No.	G–4	G–26	G–40	G–46	G–52	G–57	G–61

Rocker							
Series	**DM**	**DM**	**DF**	**CR**	**SW**	**CG**	**CL**
Switch Type	Miniature 2 Pole Power	Miniature Illuminated Power	Power	Round	Miniature Power	Power	Power
Poles/Throws	DPST, DPDT	SPST, DPST	SPST, SPDT, DPST	SPST, SPDT	SPST, SPDT, DPST	SPST, SPDT	SPST, SPDT
Max. Current	3 Amps, 10 Amps	3 Amps, 10 Amps	16 Amps	10 Amps, 6 Amps	3 A, 6 A, 6.5 A, 10 A, 16 A	10 Amps 16 Amps	10 Amps 16 Amps
Washable							
Illuminated		•		•	•	•	•
Panel Mount Options							
Front Mount	Snap-in	Snap-in	Snap-in	Snap-in	Snap-in	Snap-in	Snap-in
Rear Mount			•				
PCB Mount Options							
Vertical							
Right Angle			•				
Surface Mount							
Page No.	G–66	G–70	G–74	G–78	G–82	G-83	G-87

Rockers
Product Selection Guide

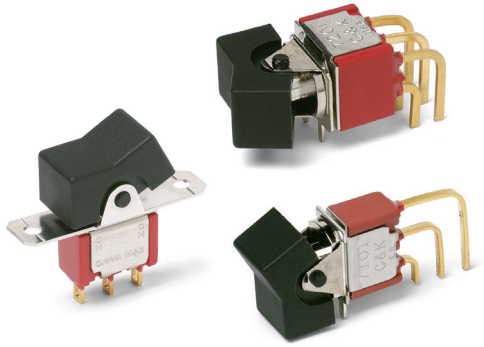
Rocker		
Series	**CM**	**CN**
Switch Type	Power	Power
Poles/Throws	SPDT, DPDT	DPST, DPDT
Max. Current	10 Amps 16 Amps	10 Amps 16 Amps
Washable		
Illuminated	•	•
Panel Mount Options		
Front Mount	Snap-in	Snap-in
Rear Mount		
PCB Mount Options		
Vertical		
Right Angle		
Surface Mount		
Page No.	G–91	G–95

Features/Benefits

- *Multi-pole and multi-position*
- *Wide variety of actuator and termination options*
- *Epoxy terminal-seal compatible with bottom wash cleaning*
- *RoHS compliant*

Typical Applications

- *Telecommunications*
- *Instrumentation*
- *Medical equipment*



Specifications

CONTACT RATING: B contact material: 0.4 VA max. @ 20 V AC or DC max. Q contact material: 5 AMPS @ 120 V AC or 28 V DC; 2 AMPS @ 250 V AC. See page G-20 for additional ratings.

ELECTRICAL LIFE: 7X01 and UX1 models: 100,000 make-and-break cycles at full load. All other models: 40,000 cycles.

CONTACT RESISTANCE: Below 10 m Ω typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.

INSULATION RESISTANCE: 10^9 Ω min.

DIELECTRIC STRENGTH: 1000 Vrms min. @ sea level.

OPERATING TEMPERATURE: –30ºC to 85ºC.

SOLDERABILITY: Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

NOTE: Any models supplied with S, P, R, Q, B or G contact material are RoHS compliant.

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Materials

CASE: Glass filled nylon 6/6, flame retardant, heat stabilized, or diallyl phthalate (DAP) (UL 94V-0).

ACTUATOR: Nylon, black.

FRAME (FRONT MOUNT): Nylon, black.

FRAME (REAR MOUNT): Spring steel, black.

BUSHING: Brass or zinc, nickel plated.

HOUSING: Stainless steel.

SWITCH SUPPORT: Brass or steel, matte-tin plated.

END CONTACTS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Coin silver, silver plated. See page G-20 for additional contact materials.

CENTER CONTACTS & ALL TERMINALS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Copper alloy, silver plated. See page G-20 for additional contact materials.

TERMINAL SEAL: Epoxy. Refer to Soldering and Cleaning in Technical Data Section

HARDWARE: Mounting nuts & screws: Brass. Lockwasher: Stainless steel. Standoff: Nylon standard.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G-4 through G-24 . For additional options not shown in catalog, consult Customer Service Center. All models have epoxy terminal seal and are compatible with all "bottom-wash" PCB cleaning methods.

Switch Function

- **7101** SP On-None-On
- **7103** SP On-Off-On
- **7105** SP Mom.-Off-Mom.
- **7107** SP On-Off-Mom.
- **7108** SP On-None-Mom.
- **7109** SP None-On-Mom.
- **7201** DP On-None-On
- **7203** DP On-Off-On
- **7205** DP Mom.-Off-Mom.
- **7207** DP On-Off-Mom.
- **7208** DP On-None-Mom.
- **7211** DP On-On-On
- **7213** DP On-On-Mom.
- **7215** DP Mom.-On-Mom.
- **7301** 3P On-None-On
- **7303** 3P On-Off-On
- **7401** 4P On-None-On
- **7405** 4P Mom.-Off-Mom.
- **7411** 4P On-On-On

Note: UL models available, see pages G-5 and G-6.

Actuator

- **J1** .531 long rocker
- **J2** Lever
- **J3** .906" long rocker
- **J10** 1.318" long rocker
- **J11** Rocker with frame
- **J15** Rocker, snap-in
- **J16** Rocker with frame, snap-in
- **J19** Rocker with frame
- **J21** Lever with frame
- **J25** Lever, snap-in
- **J26** Lever with frame, snap-in
- **J37** Rocker with frame
- **J50** Rocker
- **J51** Rocker with frame
- **J52** Rocker with frame for LED, snap-in
- **J60** Lever
- **J61** Lever with frame, snap-in
- **J62** Lever with frame for LED, snap-in
- **J90** Lever
- **J91** Lever with frame, snap-in

Terminations

- **A** Right angle, PC thru-hole
- **AV2** Vertical right angle, PC thru-hole
- **C** PC Thru-hole
- **Z** Solder lug
- **A3** Right angle, snap-in, PC thru-hole
- **AV3** Vertical right angle, snap-in, PC thru-hole
- **AW3** Right angle, extended, PC thru-hole
- **V2** .555" high, V-bracket
- **V3** .460" high, V-bracket
- **V4** .630" high, V-bracket
- **V5** Vertical right angle, PC thru-hole
- **V6** .460" high, V-bracket
- **V7** .630" high, V-bracket
- **V8** .953" high, V-bracket
- **V9** 1.150" high, V-bracket
- **V31** .460" high, V-bracket, snap-in
- **V51** Vertical right angle, snap-in
- **V61** .460" high, V-bracket, snap-in
- **W** .750" long, wire wrap
- **W3** .425" long, wire wrap
- **W5** 1.305" long,wire wrap
- **Z3** Quick connect

Contact Material

- **B** Gold
- **P** Gold, matte tin
- **Q** Silver
- **S** Silver, matte-tin
- **G** Gold over silver
- **R** Gold over silver, matte-tin

Seal

- **E** Epoxy
- **I** Epoxy potted base

Actuator Color

- **2** Black
- **1** White
- **3** Red

Frame Color

- **2** Black
- **NONE** No frame color required
- **1** White

Metal Frame Color
(J11, J19, J21 & J37 Actuators)

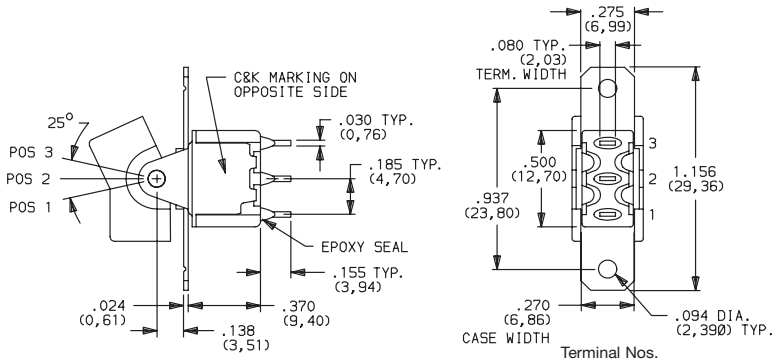
- **2** Black
- **1** White

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

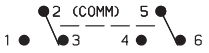
SWITCH FUNCTION

NO. POLES	MODEL NO.	UL** MODEL NO.	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	SWITCH FUNCTION POS. 3	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	CONNECTED TERMINALS POS. 3	SCHEMATIC
			C&K marking on opposite side			C&K marking on opposite side			
SP	7101	U11	ON	NONE	ON	2-3	N/A	2-1	SPDT
	7103	U13	ON	OFF	ON		OPEN		
	7105	U15	MOM.	OFF	MOM.				
	7107	U17	ON	OFF	MOM.				
	7108	U18	ON	NONE	MOM.		N/A		
	7109	U19	NONE	ON	MOM.	N/A	2-3	2-1	
DP	7201	U21	ON	NONE	ON	2-3,5-6	N/A	2-1,5-4	DPDT
	7203	U23	ON	OFF	ON		OPEN		
	7205	U25	MOM.	OFF	MOM.				
	7207	U27	ON	OFF	MOM.				
	7208	U28	ON	NONE	MOM.		N/A		
	7211*	U211*	ON	ON	ON		2-3,5-4		
	7213*	U213*	ON	ON	MOM.				
	7215*	U215*	MOM.	ON	MOM.				

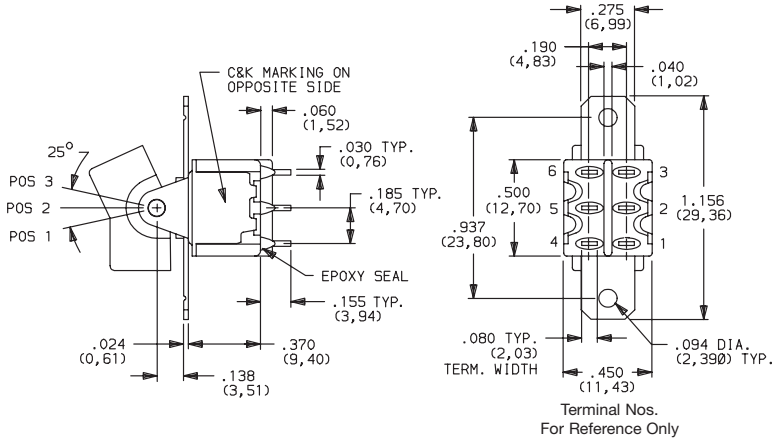
SPDT



Part number shown: 7101J1ZQE2



DPDT



Part number shown: 7201J1ZQE2

MOM. = Momentary

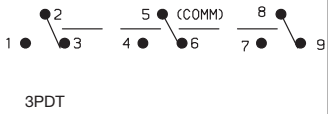
** U11 through U413 model nos. c UL us with all options when ordered with G, Q, R or S contact material.

* Wiring for 3-way switch, see Section N.

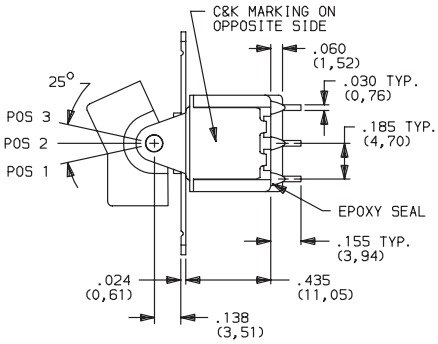
Third Angle Projection

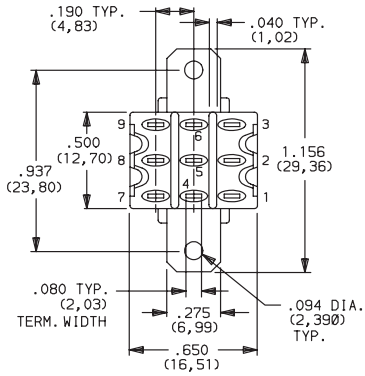
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

SWITCH FUNCTION

NO. POLES	MODEL NO.	UL** MODEL NO.	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	SWITCH FUNCTION POS. 3	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	CONNECTED TERMINALS POS. 3	SCHEMATIC
			C&K marking on opposite side			C&K marking on opposite side			
3P	7301	U31	ON	NONE	ON	2-3,5-6,8-9	N/A	2-1,5-4,8-7	
	7303	U33	ON	OFF	ON		OPEN		3PDT

3PDT



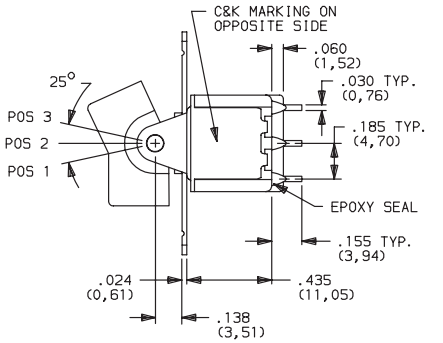


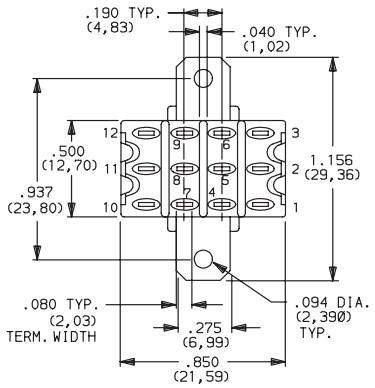
Terminal Nos.
For Reference Only

Part number shown: 7301J1ZQE2

4P	7401	U41	ON	NONE	ON	2-3,5-6,8-9,11-12	N/A	2-1,5-4,8-7,11-10	
	7405	U45	MOM.	OFF	MOM.		OPEN		
	7411*	U411*	ON	ON	ON		2-3,5-4,8-9,11-10		4PDT

4PDT





Terminal Nos.
For Reference Only

Part number shown: 7401J1ZQE2

MOM. = Momentary

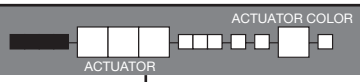
** U11 through U411 model nos. c UL us with all options when ordered with G, Q, R or S contact material.

* Wiring for 3-way switch: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

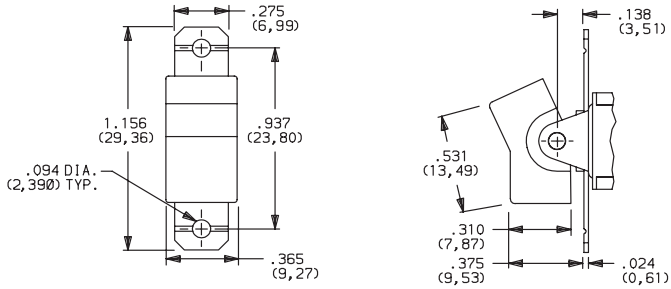
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

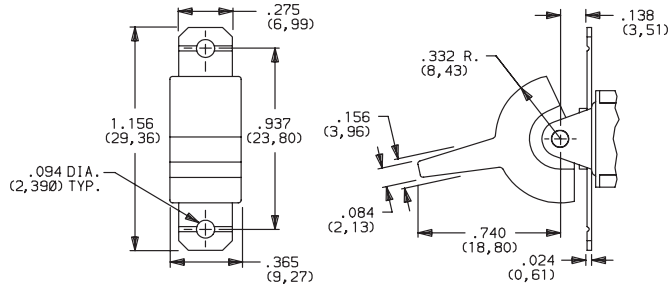
ACTUATOR–PANEL REAR MOUNT



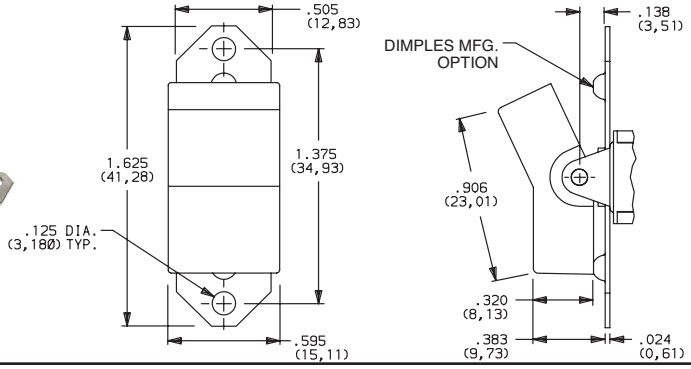
J1 ROCKER



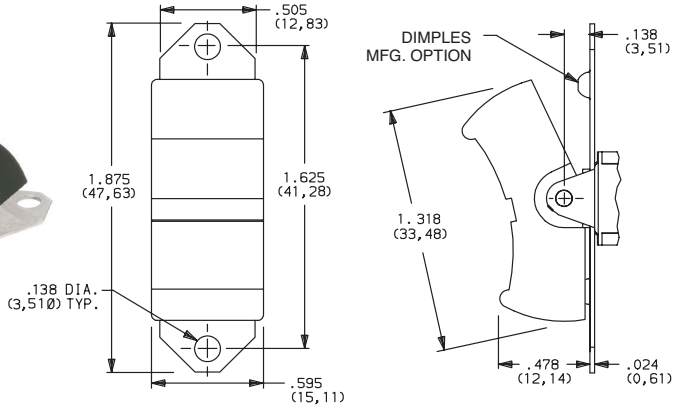
J2 LEVER



J3 ROCKER



J10 ROCKER



OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED

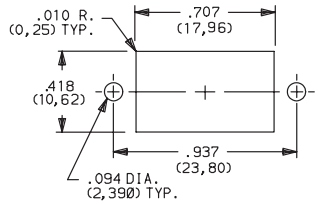
Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

NOTE: Hardware: two each—mounting screws, nuts, lockwashers and standoffs for 1/8 inch thick panel are supplied standard on all switches with panel mounting brackets. Actuators available separately, see page G-21 through G-22. Hardware is available see Technical Data section of this catalog.

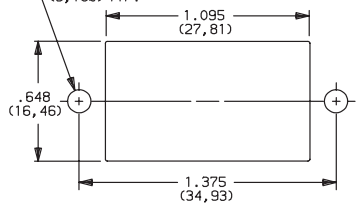
J1, J2, J3 & J10 Actuators available with C, W-W5, Z or Z3 terminations.

PANEL MOUNTING

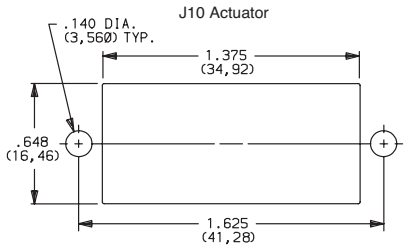
J1 & J2 Actuators

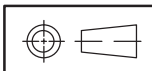


J3 Actuator



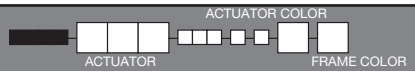
J10 Actuator





Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

ACTUATOR–SNAP-IN FRONT MOUNT



OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED

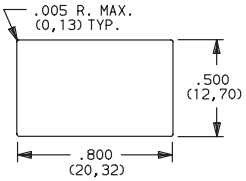
OPTION CODE	FRAME COLOR
2	BLACK
NONE	No Frame Color (J15 or J25options)
1	WHITE

Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

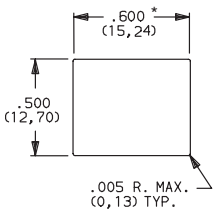
NOTE: Actuators & frames available separately, see pages G-21 through G-22. J15, J16, J25, J26, J50 & J51 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z and Z3 terminations.

PANEL MOUNTING

J15, J16, J25 & J26 Actuators

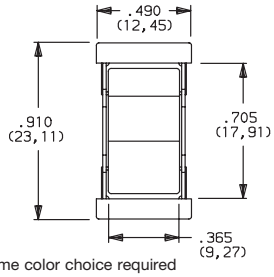


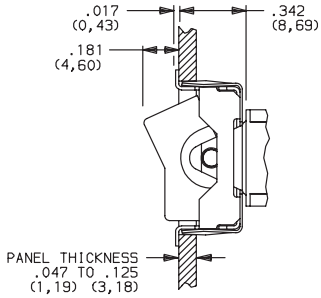
J50 Actuator



* For J50: Increase this dimension to .620/.625 (15,75/15,88) for .091/.125 (2,31/3,18) thk. panels.

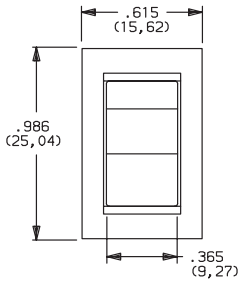
J15 ROCKER, SNAP-IN

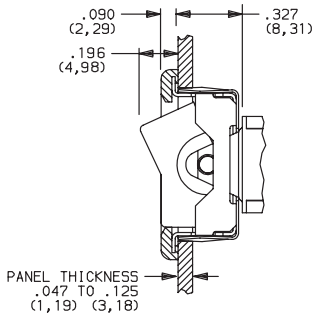




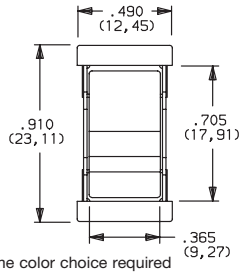
No frame color choice required

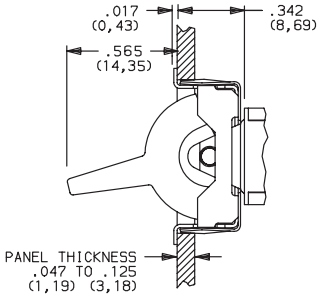
J16 ROCKER WITH FRAME, SNAP-IN





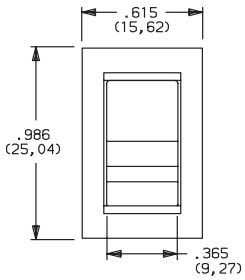
J25 LEVER, SNAP-IN

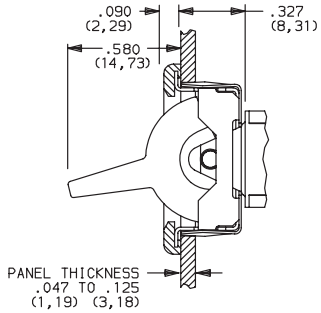




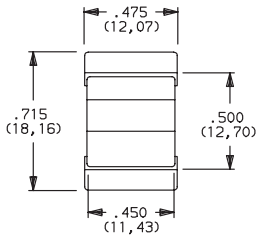
No frame color choice required

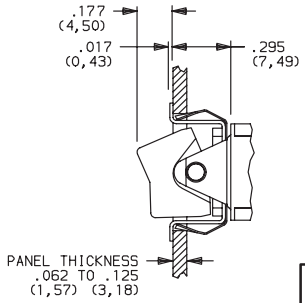
J26 LEVER WITH FRAME, SNAP-IN

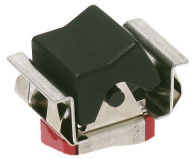




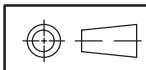
J50 ROCKER, SNAP-IN





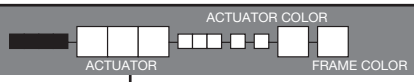


No frame color choice required

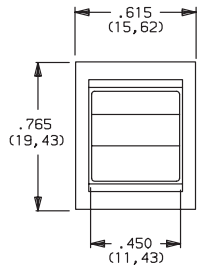

Third Angle Projection

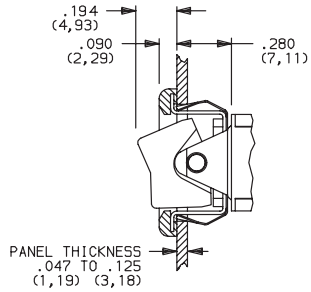
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

ACTUATOR–SNAP-IN FRONT MOUNT



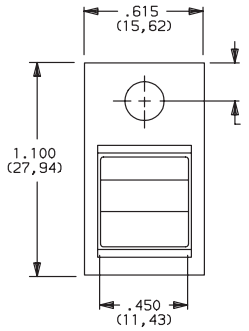
J51 ROCKER WITH FRAME, SNAP-IN

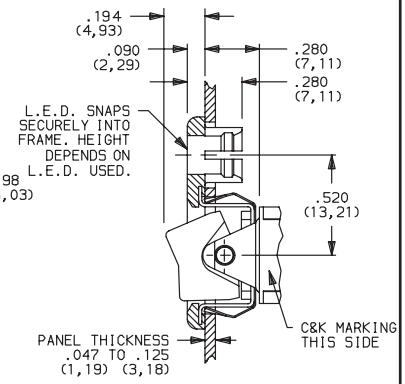




OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED

J52 ROCKER WITH FRAME FOR LED, SNAP-IN





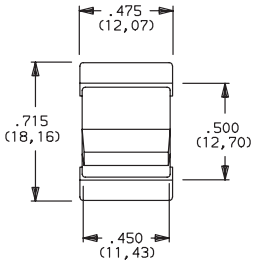
LED not included.
For LED information, see page G-24.

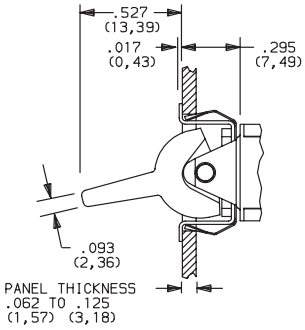
OPTION CODE	FRAME COLOR
2	BLACK
NONE	No Frame Color (J15 or J25 options)
1	WHITE

Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

NOTE: Actuators & frames available separately, see pages G-21 through G-22. J51, J52, J60 & J61 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z and Z3 terminations.

J60 LEVER, SNAP-IN

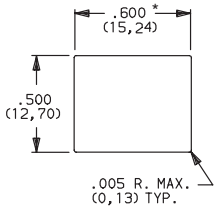




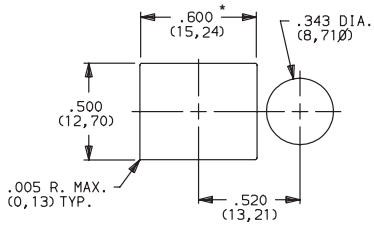
No frame color choice required

PANEL MOUNTING

J51, J60 & J61 Actuators

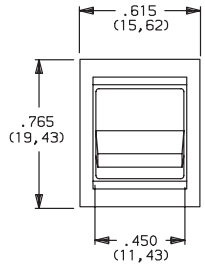


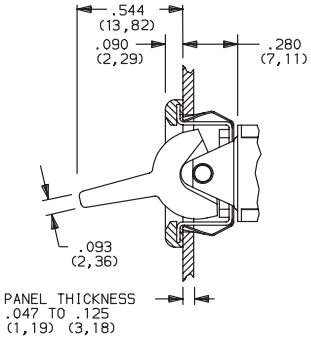
J52 Actuator

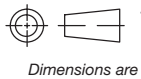


For J51, J52: Increase this dimension to .620/.625 (15,75/15,88) for .060/.125(1,52/3,18) thk. panels.

J61 LEVER WITH FRAME, SNAP-IN

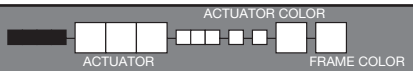





Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

ACTUATOR–SNAP-IN FRONT MOUNT



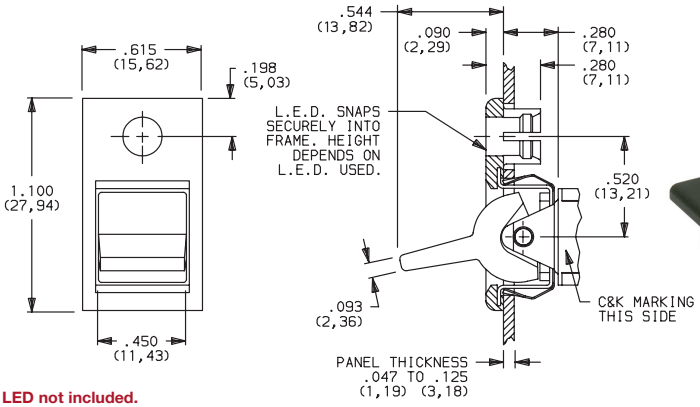
OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED

OPTION CODE	FRAME COLOR
2	BLACK
NONE	No Frame Color (J90 options)
1	WHITE

Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

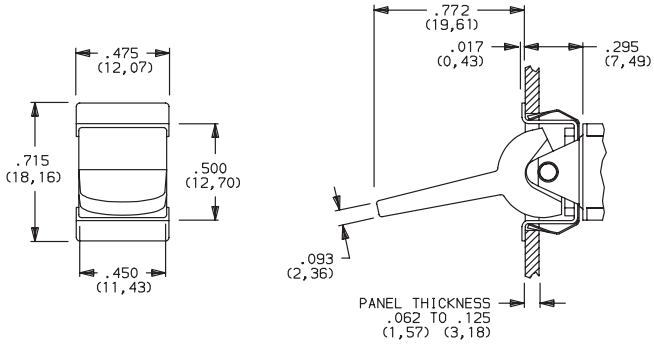
NOTE: Actuators & frames available separately, see pages G-21 through G-22. J62, J90 & J91 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z & Z3 terminations.

J62 LEVER WITH FRAME FOR LED, SNAP-IN



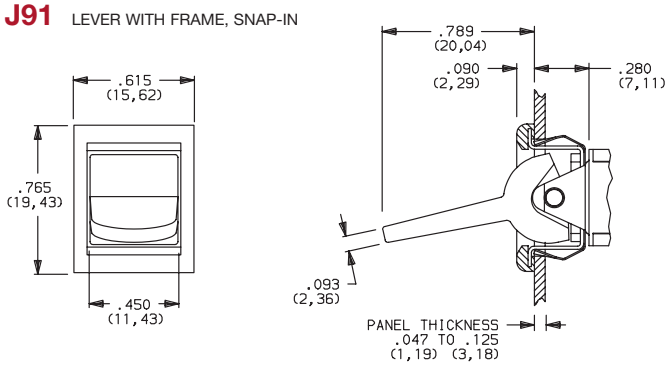
LED not included.
For LED information, see page H-25.

J90 LEVER, SNAP-IN



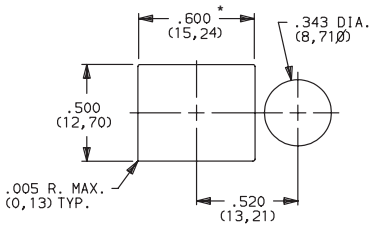
No frame color choice required.

J91 LEVER WITH FRAME, SNAP-IN

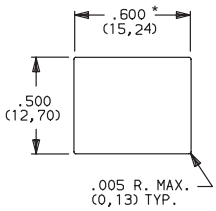


PANEL MOUNTING

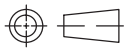
J62 Actuator



J90, J91 & J93 Actuators



* For J90: Increase this dimension to .620/.625 (15,75/15,88) for .091/.125 (2,31/3,18) thk. panels. For J91: Increase this dimension to .620/.625 (15,75/15,88) for .060/.125 (1,52/3,18) thk. panels.



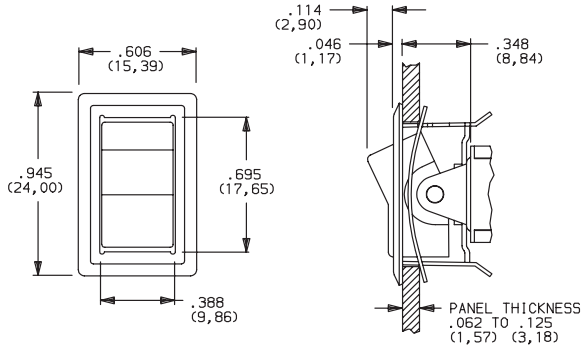
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

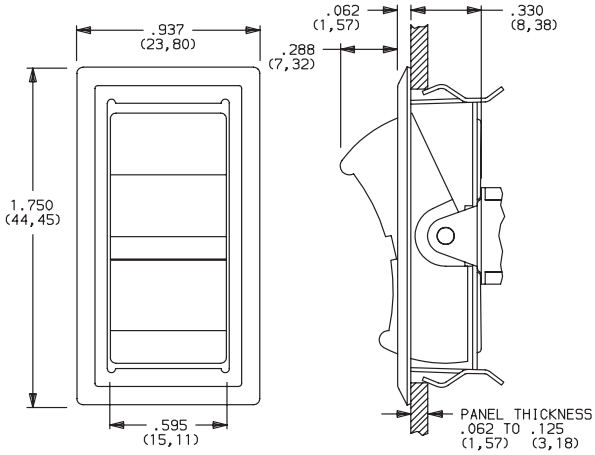
ACTUATOR–REAR MOUNT

ACTUATOR FRAME COLOR

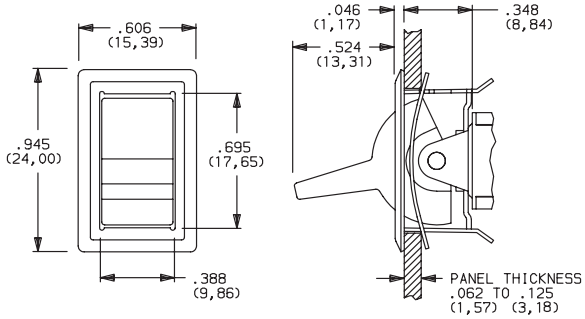
J11 ROCKER WITH FRAME



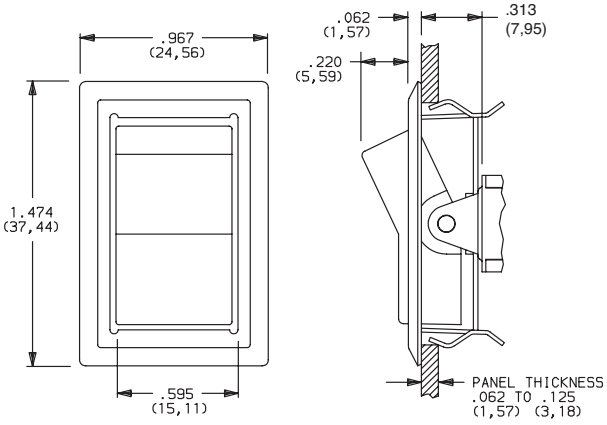
J19 ROCKER WITH FRAME



J21 LEVER WITH FRAME



J37 ROCKER WITH FRAME



OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED

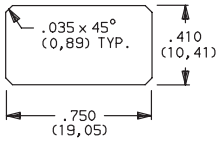
OPTION CODE	FRAME COLOR
2	BLACK
1	WHITE

Actuator finish: Matte. Frame finish: Gloss. Other colors, custom actuator markings and legends available, consult Customer Service Center.

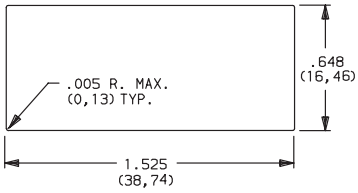
NOTE: Actuators & frames available separately, see pages G-21 through G-22. J11, J19, J21 & J37 Actuators available with C, W-W5, Z & Z3 terminations. J37 offered with Black Frame (2 color option) only.

PANEL MOUNTING

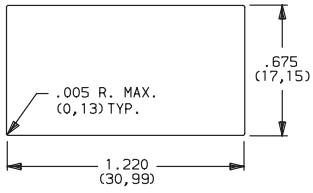
J11 & J21 Actuators

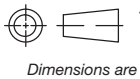


J19 Actuator



J37 Actuator

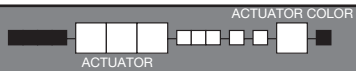




Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

ACTUATOR–PC MOUNT



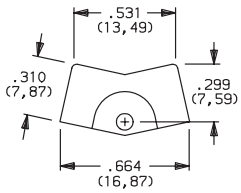
OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED

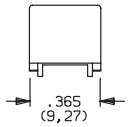
Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

NOTE: Some permissible actuator/termination combinations may lack clearance between actuator and PC board, and care must be exercised to accommodate this condition.

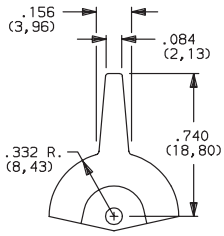
Actuators available separately, see page G-21 through G-22. J1, J2 actuators available with A, A3, AV2, AV3, AW3 & V2 terminations. J3 actuators available with AV2, AV3 & V2-V61 terminations. J50 actuators available with A (DP, 3P models only), A3 (DP, 3P models only), AV2, AV3, AW3 (DP, 3P models only) & V2-V61 terminations.

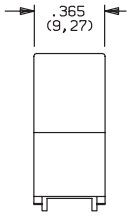
J1 ROCKER



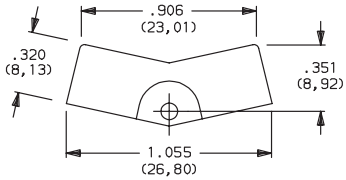


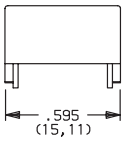
J2 LEVER



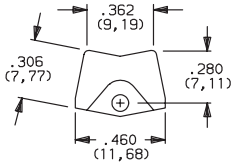


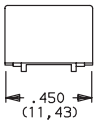
J3 ROCKER

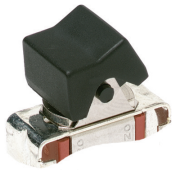


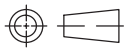


J50 ROCKER





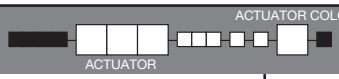




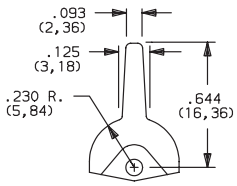
Third Angle Projection

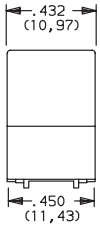
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

ACTUATOR–PC MOUNT

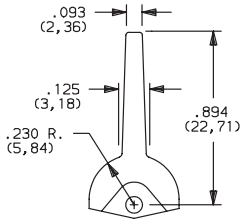


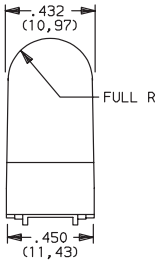
J60 LEVER





J90 LEVER





OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED

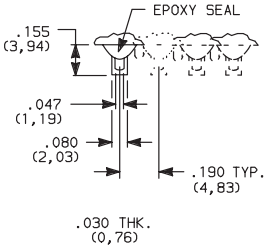
Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

NOTE: Some permissible actuator/termination combinations may lack clearance between actuator and PC board, and care must be exercised to accommodate this condition.

Actuators available separately, see page G-21 through G-22. J60 & J90 actuators available with A (DP, 3P models only), A3 (DP, 3P models only), AV2, AV3, AW3 (DP, 3P models only) & V2-V61 terminations.

TERMINATIONS

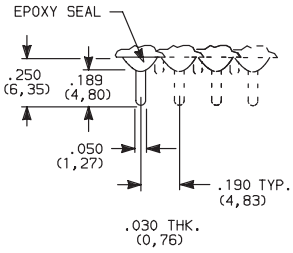
Z SOLDER LUG



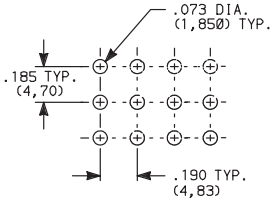
SPDT thru 4PDT

Not available with P, R or S contact materials. Available actuators, see pages G-7 through G-13.

C PC THRU-HOLE



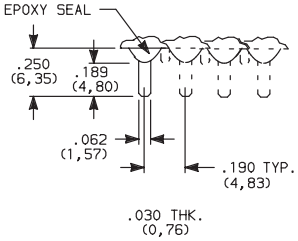
PC MOUNTING



SPDT thru 4PDT

NOTE: Available actuators, see pages G-7 through G-13.

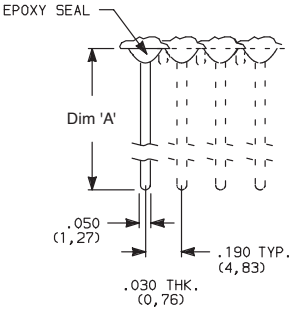
Z3 QUICK CONNECT



Not available with P, R or S contact materials. Available actuators, see pages G-7 through G-13. Mating quick connector available; order part number 530100000, page G-22.

SPDT thru 4PDT

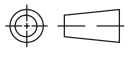
W, W3, W5 WIRE WRAP



OPTION CODE	DIM 'A'
W	.750 (19,05)
W3	.425 (10,80)
W5	1.305 (33,15)

SPDT thru 4PDT

NOTE: Available actuators, see pages G-7 through G-13.

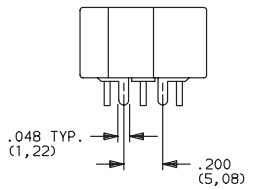


Third Angle Projection

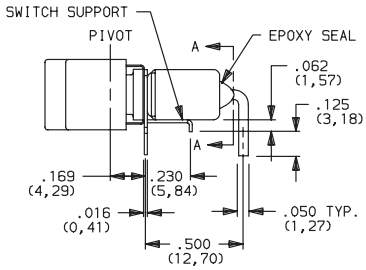
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

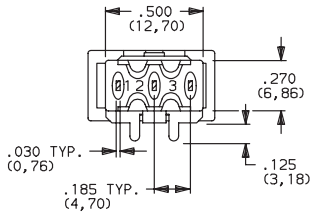
TERMINATIONS

A RIGHT ANGLE, PC THRU-HOLE



Actuator Shown In Pos. 1

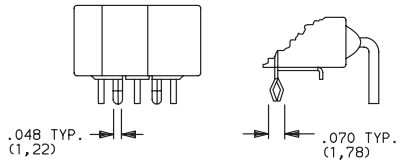




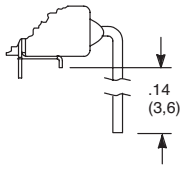
SECTION A-A

7101J1ABE2
Horizontal Actuation
SPDT

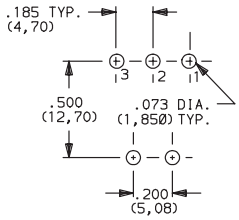
A3 RIGHT ANGLE, SNAP-IN, PC THRU-HOLE



AW3 RIGHT ANGLE, EXTENDED, PC THRU-HOLE



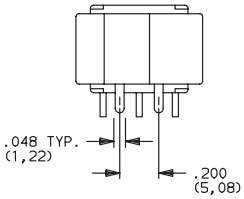
PC MOUNTING



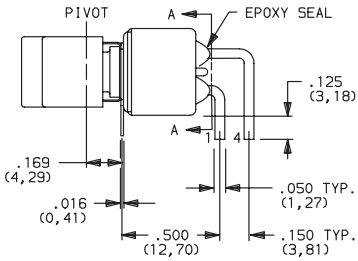
Not available with I seal option. Available actuators, see pages G-6 and G-12.
Terminal bend radii and lead-in manufacturing option.

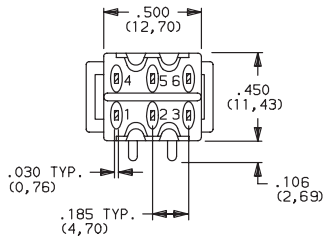
NOTE: PC pattern must clear switch support leg.

A RIGHT ANGLE, PC THRU-HOLE

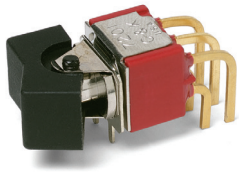


Actuator Shown In Pos. 1



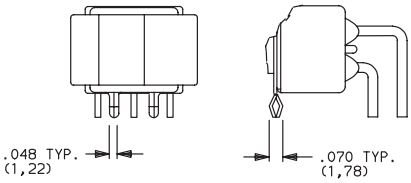


SECTION A-A

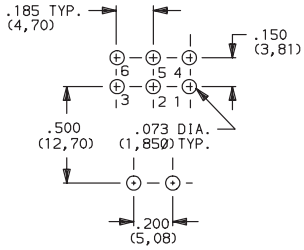


7201J1ABE2
Horizontal Actuation
DPDT

A3 RIGHT ANGLE, SNAP-IN, PC THRU-HOLE



PC MOUNTING



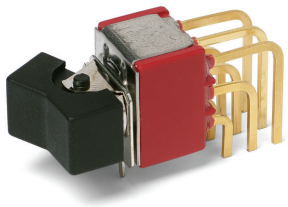
Not available with I seal option. Available actuators, see pages G-6 and G-12.
Terminal bend radii and lead-in manufacturing option.

Third Angle Projection

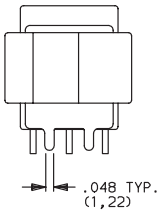
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

TERMINATIONS

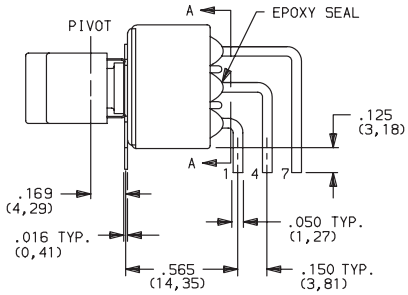
A RIGHT ANGLE, PC THRU-HOLE

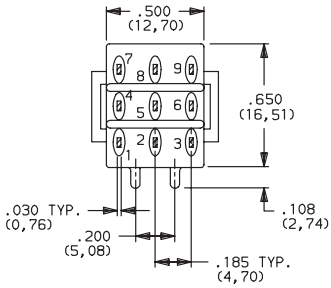


7301J1ABE2
Horizontal Actuation
3PDT



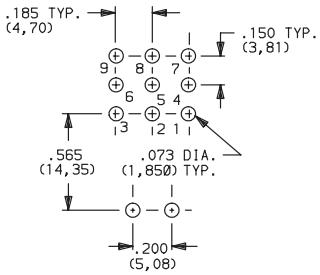
Actuator Shown In Pos. 1





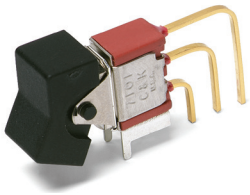
SECTION A-A

PC MOUNTING

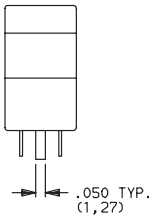


Not available with I seal option. Available actuators, see pages G-6 and G-12.
Terminal bend radii and lead-in manufacturing option.

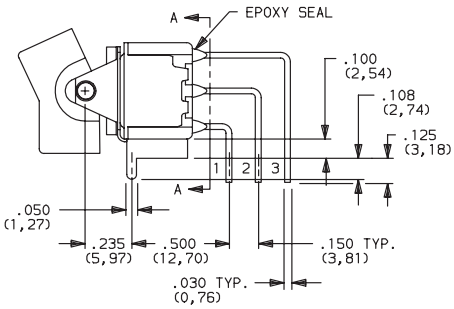
AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH

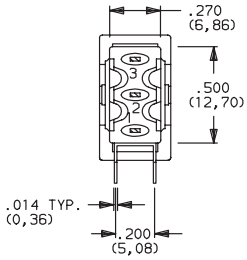


7101J1AV2BE2
Vertical Actuation
SPDT



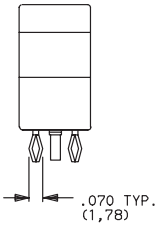
Actuator Shown In Pos. 1

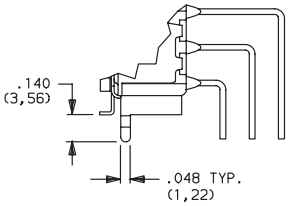




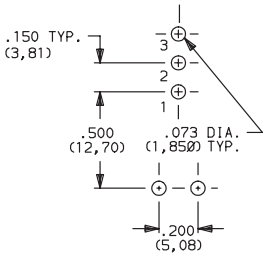
SECTION A-A

AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH





PC MOUNTING



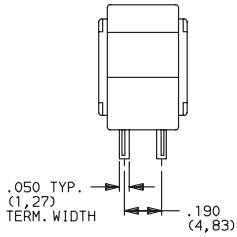
Not available with I seal option. Available actuators, see pages G-6 and G-12.
Terminal bend radii and lead-in manufacturing option.

Third Angle Projection

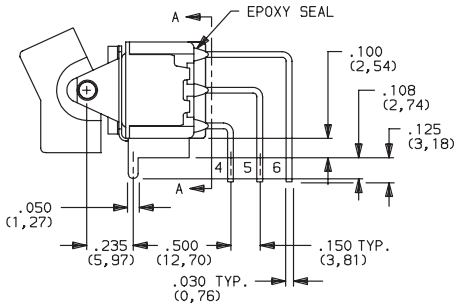
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

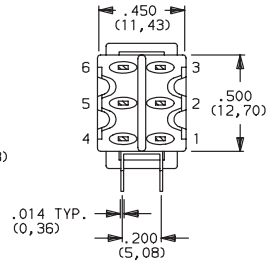
TERMINATIONS

AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH

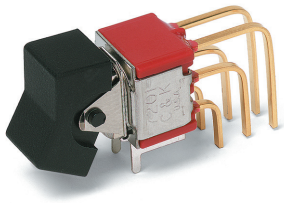


Actuator Shown In Pos. 1



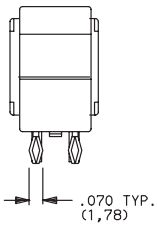


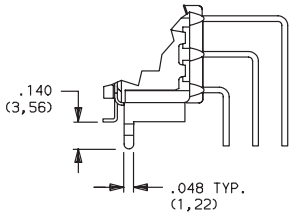
SECTION A-A



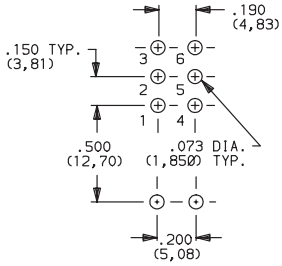
7201J1AV2BE2
Vertical Actuation
DPDT

AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH



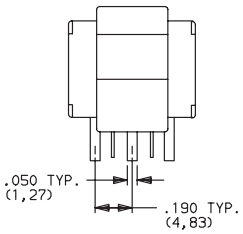


PC MOUNTING

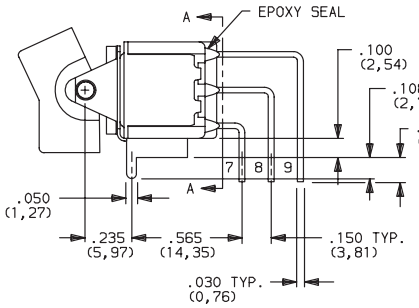


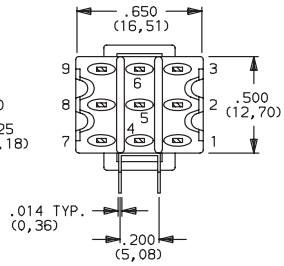
Not available with I seal option. Available actuators, see pages G-6 and G-12.
Terminal bend radii and lead-in manufacturing option.

AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH

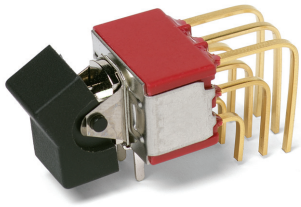


Actuator Shown In Pos. 1



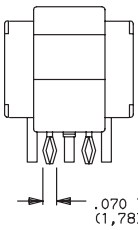


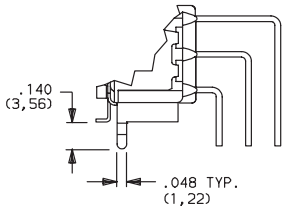
SECTION A-A



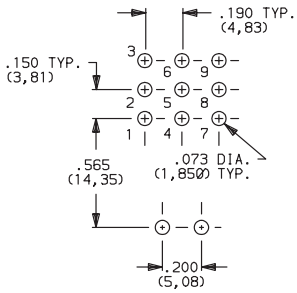
7301J1AV2BE2
Vertical Actuation
3PDT

AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH





PC MOUNTING



Not available with I seal option. Available actuators, see pages G-6 and G-12.
Terminal bend radii and lead-in manufacturing option.

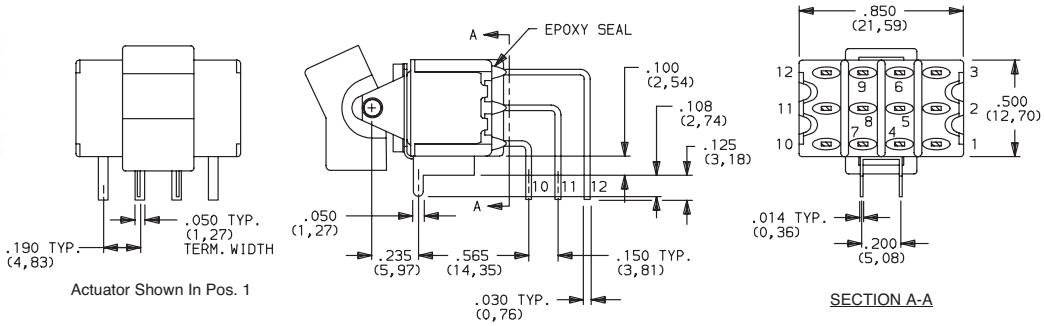
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

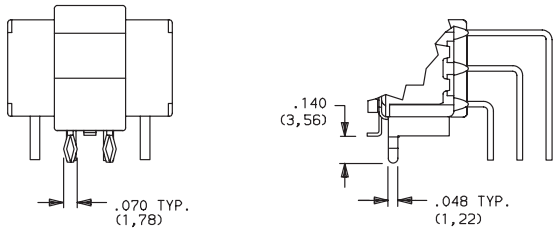
TERMINATIONS

AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH

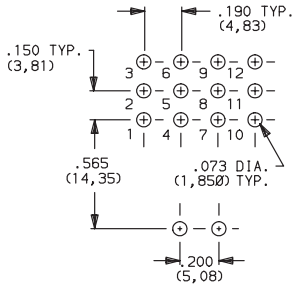
7401J1AV2BE2
Vertical Actuation
4PDT



AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH

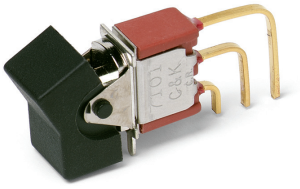


PC MOUNTING

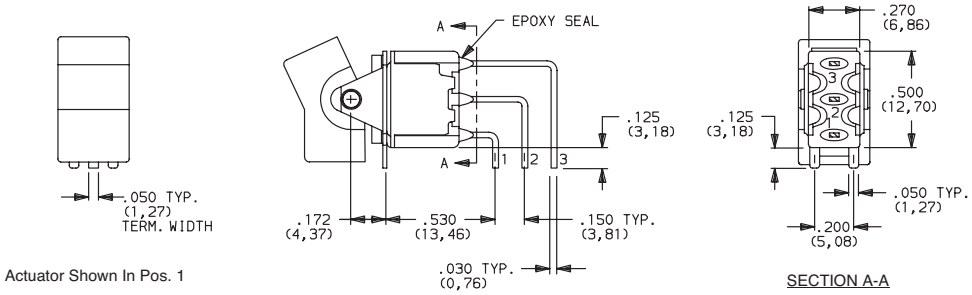


Not available with I seal option. Available actuators, see pages G-6 and G-12.
Terminal bend radii and lead-in manufacturing option.

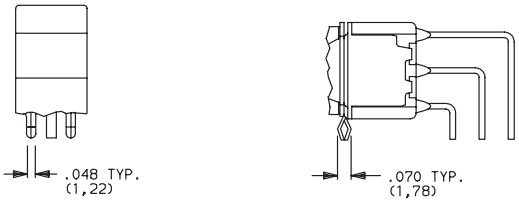
V5 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



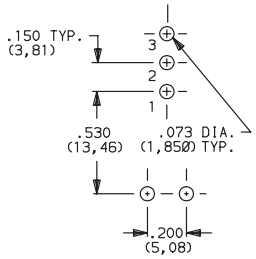
7101J1V5BE2
Vertical Actuation
SPDT



V51 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH



PC MOUNTING



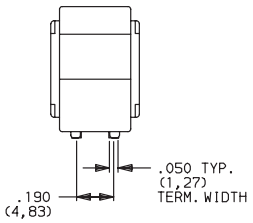
Not available with I seal option. Available actuators, see pages G-6 and G-12.
Terminal bend radii and lead-in manufacturing option.

Third Angle Projection

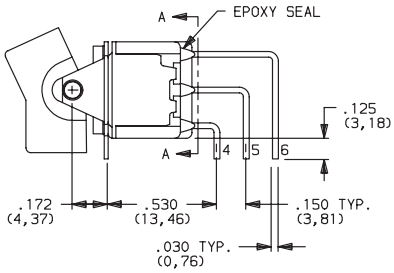
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

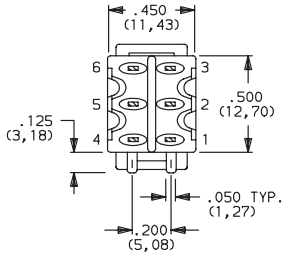
TERMINATIONS

V5 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH

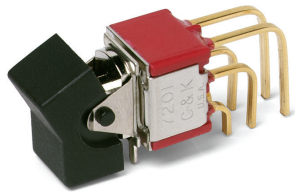


Actuator Shown In Pos. 1



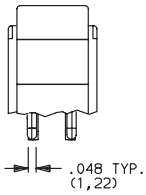


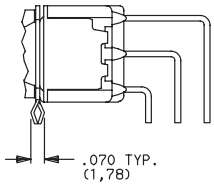
SECTION A-A



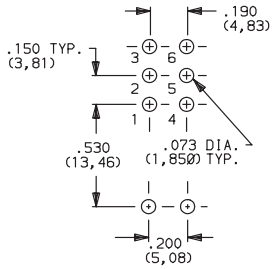
7201J1V5BE2
Vertical Actuation
DPDT

V51 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH





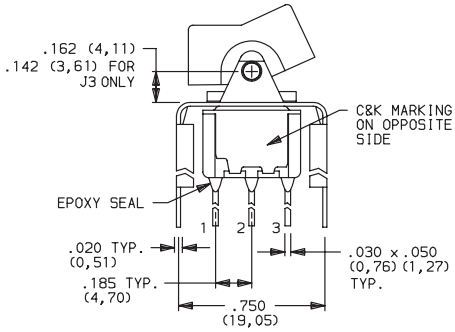
PC MOUNTING



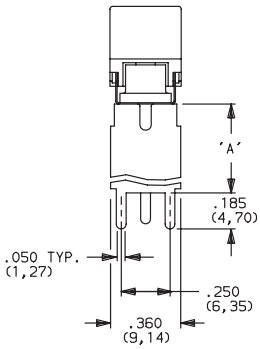
Not available with I seal option. Available actuators, see pages G-6 and G-12.
Terminal bend radii and lead-in manufacturing option.

V2, V6, V7, V8 VERTICAL MOUNT, V-BRACKET

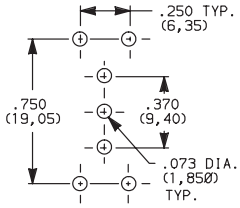
V61 VERTICAL MOUNT, V-BRACKET, SNAP-IN

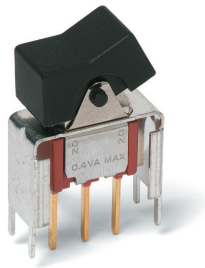


Actuator Shown In Pos. 1



PC MOUNTING





7101J1__BE2
SPDT

OPTION CODE	DIM 'A'
V2, V21	.555 (14,10)
V6, V61	.460 (11,68)
V7	.630 (16,00)
V8	.953 (24,21)

Not available with I seal option.
Available actuators, see pages G-6 and G-12.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

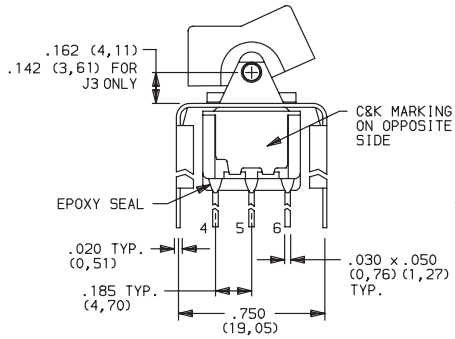
TERMINATIONS

V2, V6, V7, V8 VERTICAL MOUNT, V-BRACKET

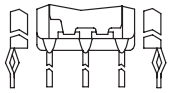
V21, V61 VERTICAL MOUNT, V-BRACKET, SNAP-IN

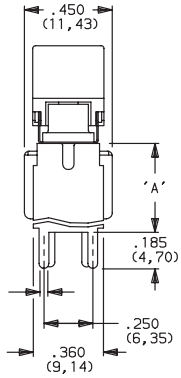
7201J1__BE2

DPDT

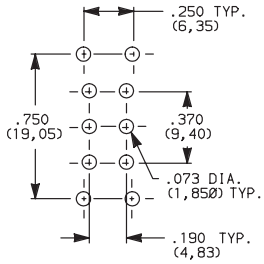


Actuator Shown In Pos. 1





PC MOUNTING



OPTION CODE	DIM 'A'
V2, V21	.555 (14,10)
V6, V61	.460 (11,68)
V7	.630 (16,00)
V8	.953 (24,21)

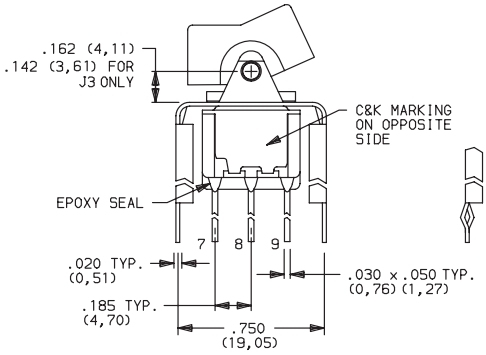
Not available with I seal option.
Available actuators, see pages G-6 and G-12.

V2, V7, V8 VERTICAL MOUNT, V-BRACKET

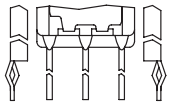
V21 VERTICAL MOUNT, V-BRACKET, SNAP-IN

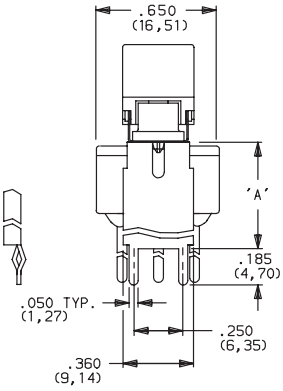
7301J1__BE2

3PDT

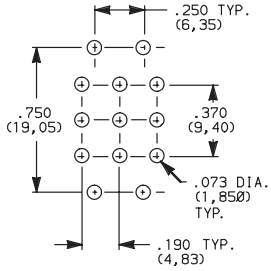


Actuator Shown In Pos. 1





PC MOUNTING

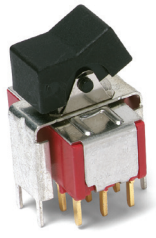


OPTION CODE	DIM 'A'
V2, V21	.555 (14,10)
V7	.630 (16,00)
V8	.953 (24,21)

Not available with I seal option.
Available actuators, see pages G-6 and G-12.

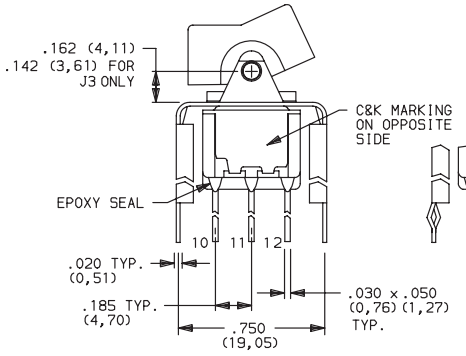
V2, V7, V8 VERTICAL MOUNT, V-BRACKET

V21 VERTICAL MOUNT, V-BRACKET, SNAP-IN

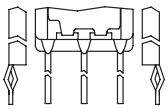


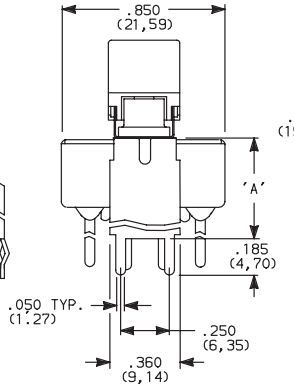
7401J1__BE2

4PDT

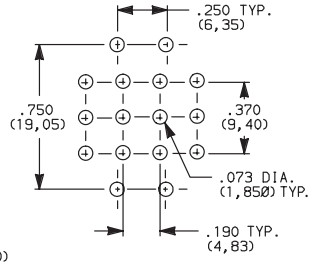


Actuator Shown In Pos. 1



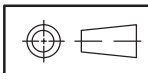


PC MOUNTING



OPTION CODE	DIM 'A'
V2, V21	.555 (14,10)
V7	.630 (16,00)
V8	.953 (24,21)

Not available with I seal option.
Available actuators, see pages G-6 and G-12.



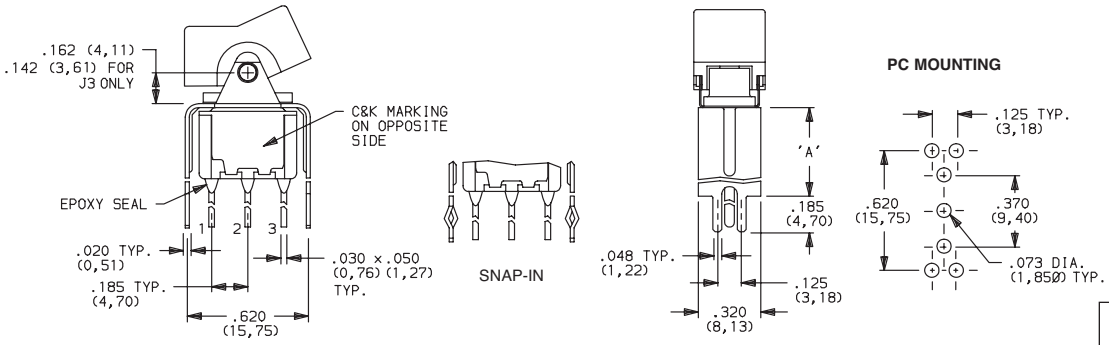
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

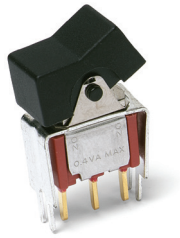
TERMINATIONS

V3, V4, V9 VERTICAL MOUNT, V-BRACKET

V31 VERTICAL MOUNT, V-BRACKET, SNAP-IN



Actuator Shown In Pos. 1



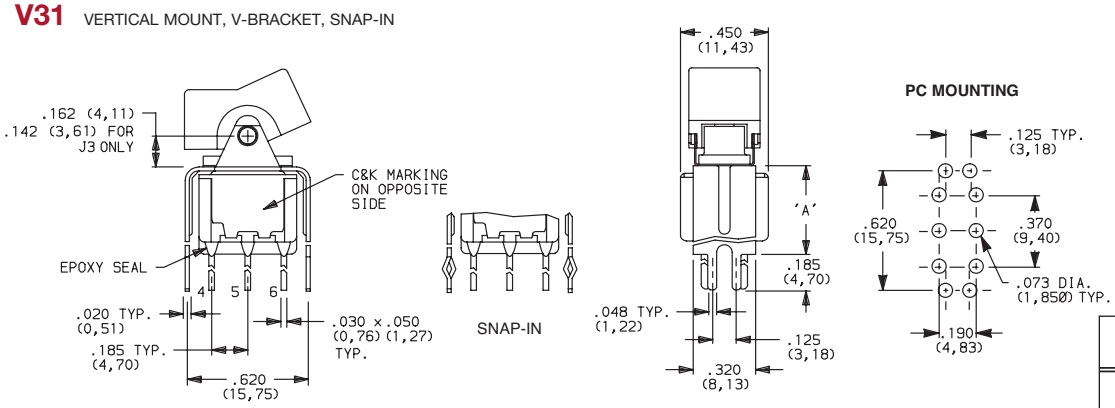
7101J1__BE2
SPDT

OPTION CODE	DIM 'A'
V3, V31	.460 (11,68)
V4	.630 (16,00)
V9	1.150 (29,21)

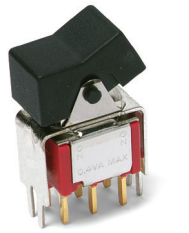
Not available with I seal option.
Available actuators, see pages G-6 and G-12.

V3, V4, V9 VERTICAL MOUNT, V-BRACKET

V31 VERTICAL MOUNT, V-BRACKET, SNAP-IN



Actuator Shown In Pos. 1

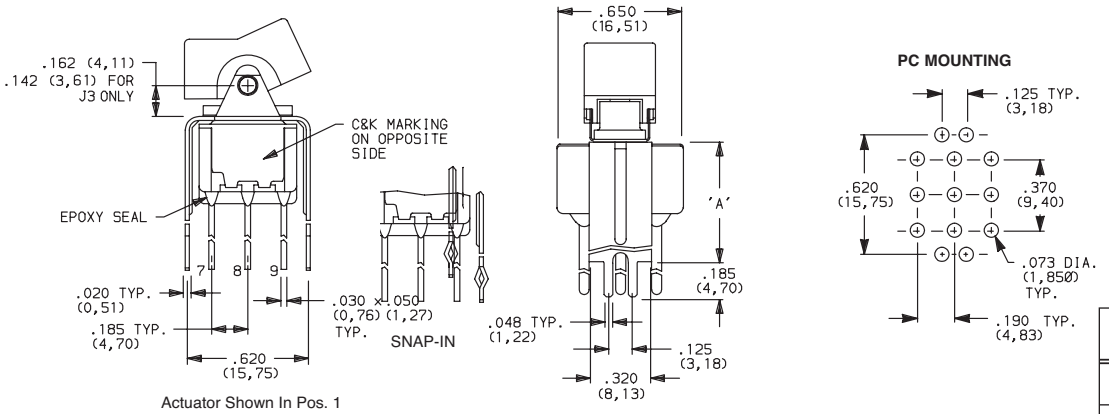


7201J1__BE2
DPDT

OPTION CODE	DIM 'A'
V3, V31	.460 (11,68)
V4	.630 (16,00)
V9	1.150 (29,21)

Not available with I seal option.
Available actuators, see pages G-6 and G-12.

V4, V9 VERTICAL MOUNT, V-BRACKET



Actuator Shown In Pos. 1

7301J1__BE2
3PDT

OPTION CODE	DIM 'A'
V4	.630 (16,00)
V9	1.150 (29,21)

Not available with I seal option.
Available actuators, see pages G-6 and G-12.

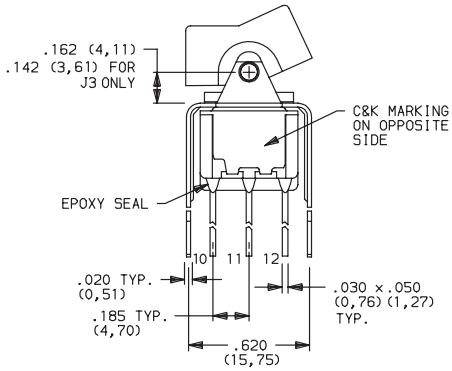
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

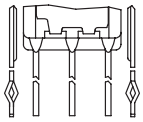
TERMINATIONS

V4, V9 VERTICAL MOUNT, V-BRACKET

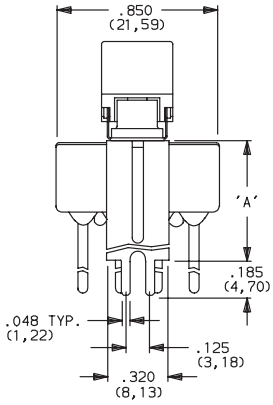
7401J1__BE2
4PDT



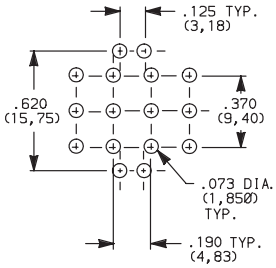
Actuator Shown In Pos. 1



SNAP-IN



PC MOUNTING



OPTION CODE	DIM 'A'
V4	.630 (16,00)
V9	1.150 (29,21)

Not available with I seal option.
Available actuators, see pages G-6 and G-12.

CONTACT MATERIAL

OPTION CODE	CONTACT MATERIAL	TERMINAL PLATING	RATINGS	
B	GOLD [1]	GOLD [1]	LOW LEVEL/ DRY CIRCUIT	0.4 VA MAX. @ 20 V AC OR DC MAX.
P		MATTE-TIN [6]		
Q	SILVER [4,5]	SILVER [5]	POWER	5 AMPS @ 120 V AC OR 28 V DC; 2 AMPS @ 250 V AC.
S		MATTE-TIN [6]		
G	GOLD OVER SILVER [2,3]	GOLD [3]	LOW LEVEL/DRY CIRCUIT OR POWER	0 4 VA MAX @ 20 V AC OR DC MAX OR 5 AMPS @ 120 V AC OR 28 V DC; 2 AMPS @ 250 V AC.
R		MATTE-TIN [6]		

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

[1] CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.
[2] END CONTACTS: Coin silver, with gold plate over nickel plate.
[3] CENTER CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.
[4] END CONTACTS: Coin silver, silver plated.
[5] CENTER CONTACT & ALL TERMINALS: Copper alloy, silver plated.
[6] TERMINALS: Copper alloy, with matte-tin over nickel plate.

U11-U415 model numbers c UL us with all options when ordered with G, Q, S & R contact material.

B contact material standard with all terminations except C, Z & Z3.

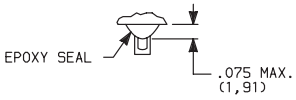
Q contact material standard with C, Z & Z3 terminations.

P, S & R, contact materials not available with Z & Z3 terminations.

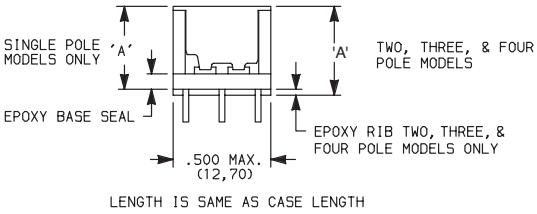
NOTE: Any models supplied with Q, B, G S, P & R contact material are RoHS compliant.

SEAL

E EPOXY SEAL



I EPOXY POTTED BASE



NO. POLES	DIM 'A'
SP	.410 (10,41)
DP	.440 (11,18)
3P	.505 (12,83)
4P	.505 (12,83)

Available with C, W through W5, Z & Z3 terminations.

Third Angle Projection

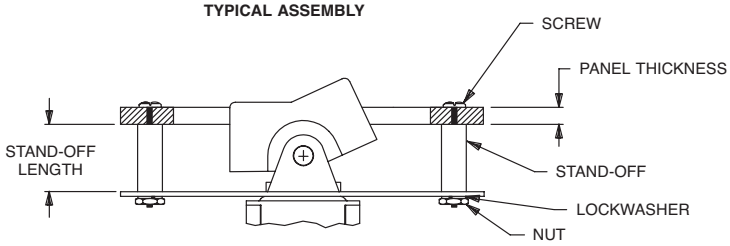
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

AVAILABLE HARDWARE

Panel mounting hardware for rocker and lever handle switches is available separately. Mounting hardware consists of two screws, two nuts, two standoffs and two lockwashers per switch, and is available for panel thicknesses of 1/16, 3/32 and 1/8 inch. See part numbers below.

Qty	Part Number	Description
2	761103000	Standoffs
2	764100000	Mounting screws
2	764200000	Lock washers
2	764300000	Hex nuts

TYPICAL ASSEMBLY



J1 & J2 actuators

PART NO.	PANEL THK.	STANDOFF LENGTH
761103000	1/8 IN. (3,18)	.233 (5,92)

J3 actuators

PART NO.	PANEL THK.	STANDOFF LENGTH
770603000	1/8 IN. (3,18)	.233 (5,92)

J10 actuators

PART NO.	PANEL THK.	STANDOFF LENGTH
770703000	1/8 IN. (3,18)	.233 (5,92)

MATERIAL

Screws, nuts, lockwashers: Stainless steel. Standoffs: Nylon, standard.

J1, J11, J15 & J16 Actuators

PART NO.

776A01000 WHITE
776A02263 BLACK
776A03000 RED

Material: Nylon
Finish: Matte

J2, J21, J25 & J26 Actuators

PART NO.

426D01000 WHITE
426D02263 BLACK
426D03000 RED

Material: Nylon
Finish: Matte

J3 & J37 Actuators

PART NO.

431D01000 WHITE
431D02263 BLACK
431D03000 RED

Material: Nylon
Finish: Matte

J50, J51 & J52 Actuators

PART NO.

775A01000 WHITE
775A02263 BLACK
775A03000 RED

Material: Nylon
Finish: Matte

J60, J61 & J62 Actuators

PART NO.

598101000 WHITE
613802263 BLACK
598103000 RED

Material: Nylon
Finish: Matte

AVAILABLE HARDWARE

J90 & J91 Actuators

PART NO.

598001000 WHITE
598002263 BLACK
598003000 RED

Material: Nylon
Finish: Matte

J10 & J19 Actuators

PART NO.

769501000 WHITE
769502263 BLACK
769503000 RED

Material: Nylon
Finish: Matte

Fits Z3 Termination female connector

PART NO.

530100000

Available in loose pieces.

Frame for J11 & J21 Actuators

PART NO.

764500746 BLACK ENAMEL
764500747 WHITE ENAMEL

764601106 RETAINING SPRING

Material: Spring Steel

Frame for J16 & J26 Actuators

PART NO.

459101000 WHITE
459102000 BLACK
459103000 RED

Material: Nylon
Finish: Matte

Frame for J51, J61 & J91 Actuators

PART NO.

615601000 WHITE
615602263 BLACK
615603000 RED

Material: Nylon
Finish: Matte

Frame for J19 Actuator

PART NO.

781000746 BLACK ENAMEL
781000747 WHITE ENAMEL

Material: Spring Steel

Frame for J37 Actuator

PART NO.

445400746 BLACK ENAMEL

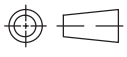
Material: Spring Steel

Frame for J52 & J62 Actuators

PART NO.

613301000 WHITE
613302263 BLACK
613303000 RED

Material: Nylon
Finish: Matte



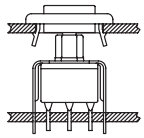
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

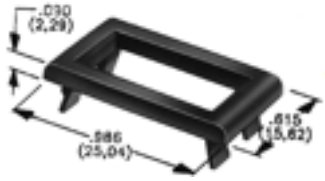
AVAILABLE HARDWARE

Frames snap into panel opening and are independent from switch mounting. Accurate positioning of the PC mounted switch relative to the panel opening is necessary to provide proper clearance between actuator and frame. Available in two basic styles and four panel thicknesses .047-.125 in. Material: Nylon. Finish: Matte.

TYPICAL APPLICATION



J1 & J2 Actuators



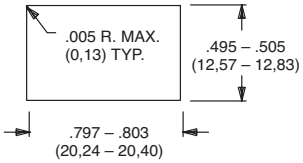
.047" (1,19) PANEL THK.	.062" (1,57) PANEL THK.	.090" (2,29) PANEL THK.	.125" (3,18) PANEL THK.
PART NO.	PART NO.	PART NO.	PART NO.
452902263	452702263	452802263	452602263 BLACK

J50, J60 & J90 Actuators

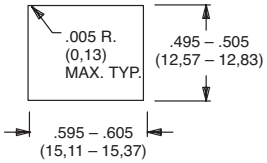
.047" (1,19) PANEL THK.	.062" (1,57) PANEL THK.	.090" (2,29) PANEL THK.	.125" (3,18) PANEL THK.
PART NO.	PART NO.	PART NO.	PART NO.
432502263	432602263	432702263	432802263 BLACK

PANEL MOUNTING

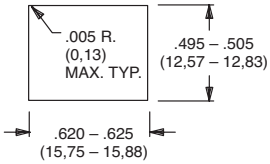
For part numbers
4529xxxxx, 4527xxxxx,
4528xxxxx, 4526xxxxx



For part numbers
4325xxxxx, 4326xxxxx



For part numbers
4327xxxxx, 4328xxxxx



Third Angle Projection

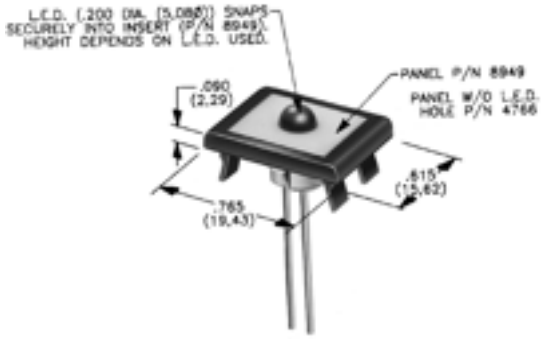
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

AVAILABLE HARDWARE

Panel Inserts

Will fit Separate Snap-in frames for J50, J60 & J90 actuators

Above frames (part nos. 432XXXXXX) are also available with insert which accepts LED for indicator light assembly. Order insert separately from frame. Blank insert panel (without hole for LED) also available. **LED not included.**



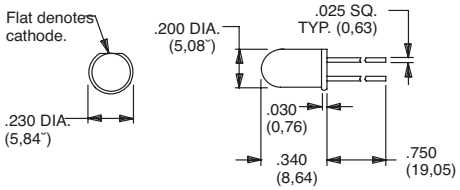
PANEL INSERT WITH HOLE FOR LED	BLANK PANEL INSERT WITHOUT HOLE FOR LED
PART NO.	PART NO.
894902000	476602000 BLACK

NOTE: Special colors, custom markings available, consult Customer Service Center.

LED INFORMATION

Process Information: Soldering to LED leads must be completed within 5 seconds at 500° F (260°C) maximum.

LEDs are not supplied with J52, J62 options. LED snaps into switch frame surrounding actuator and is wired externally.



Suggested LED for J52 & J62 options.
Dimensions for reference only.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

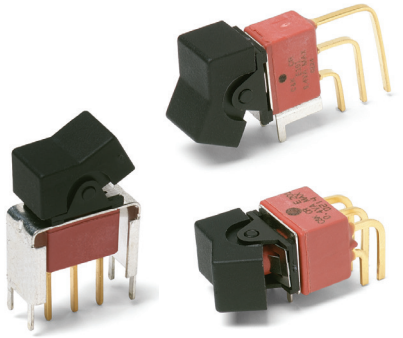
Sealed Miniature Rocker and Lever Handle Switches

Features/Benefits

- ***Sealed against solder and cleaning process contaminants***
- ***ESD Resistance—all actuator options***
- ***Rocker, case & bushing UL 94V-0***
- ***RoHS compliant***

Typical Applications

- ***Telecommunications***
- ***Instrumentation***
- ***Computers & peripherals***



Specifications

CONTACT RATING: B contact material: 0.4 VA max. @ 20 V AC or DC max. Q contact material (E1XX & E2XX Models): 7.5 AMPS @125 V AC or 28 V DC; 3 AMPS @ 250 V AC. (E3XX Models): 5 AMPS @ 125 V AC or 28 V DC; 2 AMPS @ 250 V AC. See page G-36 for additional ratings.

ELECTRICAL LIFE: E1XX and E2XX models: 40,000 make-and-break cycles at full load. E3XX models: 30,000 cycles.

CONTACT RESISTANCE: Below 10 m Ω typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.

INSULATION RESISTANCE: 10^9 Ω min.

ELECTROSTATIC DISCHARGE (ESD) OPTION: All actuator options: 15,000 V DC max. @ sea level, actuator to terminals.

DIELECTRIC STRENGTH: 1000 Vrms min. @ sea level.

OPERATING TEMPERATURE: –30ºC to 85ºC.

SOLDERABILITY: Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

Materials

CASE & BUSHING: Glass filled nylon 6/6, flame retardant, heat stabilized (UL 94V-0).

ACTUATOR: Nylon, black standard, internal o-ring seal standard with all actuators.

FRAME: Spring steel, black standard.

SWITCH SUPPORT: Brass or steel, matte-tin plated.

ACTUATOR PIVOT & MOUNTING BRACKET: Nylon.

ACTUATOR PIVOT RETAINER: Stainless steel.

CONTACTS & TERMINALS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Copper alloy, silver plated. See page G-36 for additional contact materials.

TERMINAL SEAL: Epoxy.

HARDWARE: Nut, Screw & Lockwasher: Stainless steel. Standoff: Nylon standard, aluminum available, consult Customer Service Center.

NOTE: Any models supplied with Q, B, G, S, P & R contact material are RoHS compliant.

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G-26 through G-38. For additional options not shown in catalog, consult Customer Service Center. All models are process sealed to withstand machine soldering temperatures and pressure wash cleaning methods.

Switch Function
- **E101** SP On-None-On
- **E103** SP On-Off-On
- **E105** SP Mom.-Off-Mom.
- **E107** SP On-Off-Mom.
- **E108** SP On-None-Mom.
- **E201** DP On-None-On
- **E203** DP On-Off-On
- **E205** DP Mom.-Off-Mom.
- **E207** DP On-Off-Mom.
- **E208** DP On-None-Mom.
- **E211** DP On-On-On
- **E213** DP On-On-Mom.
- **E215** DP Mom.-On-Mom.
- **E301** 3P On-None-On

Actuator
- **J1** .531 long rocker
- **J2** Lever
- **J3** .906" long rocker
- **J11** Rocker with frame
- **J21** Lever with frame
- **J50** .362" long rocker
- **J60** Lever
- **J90** Lever

Terminations
- **A** Right angle, PC thru-hole
- **AV2** Vertical right angle, PC thru-hole
- **C** PC Thru-hole
- **Z** Solder lug
- **A3** Right angle, snap-in, PC thru-hole
- **AV3** Vertical right angle, snap-in, PC thru-hole
- **V3** .460" high, V-bracket
- **V4** .630" high, V-bracket
- **V5** Vertical right angle, PC thru-hole
- **V6** .460" high, V-bracket
- **V7** .630" high, V-bracket
- **V8** .953" high, V-bracket
- **V21** .555" high, V-bracket, snap-in
- **V31** .460" high, V-bracket, snap-in

Contact Material
- **B** Gold
- **P** Gold, matte tin
- **Q** Silver
- **S** Silver, matte-tin
- **G** Gold over silver
- **R** Gold over silver, matte-tin

Seal
- **E** Epoxy

Actuator Color
- **2** Black
- **3** Red

Frame Color
- **2** Black
- **NONE** No frame color required

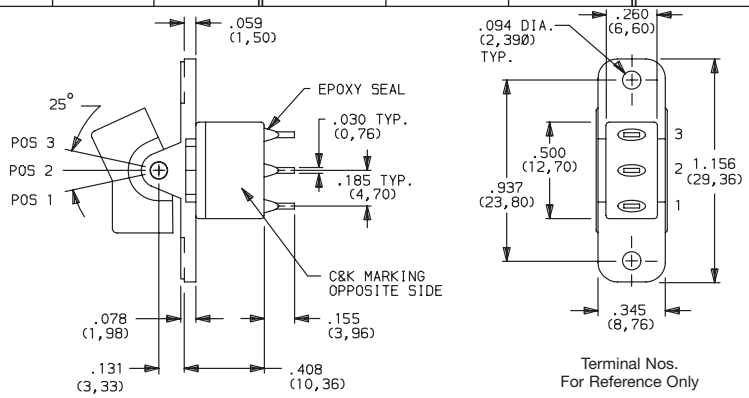
Metal Frame Color
(J11, J21 Actuators)
- **2** Black

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION POS. 1 (C&K marking on opposite side)	SWITCH FUNCTION POS. 2	SWITCH FUNCTION POS. 3	CONNECTED TERMINALS POS. 1 (C&K marking on opposite side)	CONNECTED TERMINALS POS. 2	CONNECTED TERMINALS POS. 3	SCHEMATIC
SP	E101	ON	NONE	ON	2-3	N/A	2-1	SPDT
	E103	ON	OFF	ON		OPEN		
	E105	MOM.	OFF	MOM.				
	E107	ON	OFF	MOM.				
	E108	ON	NONE	MOM.		N/A		

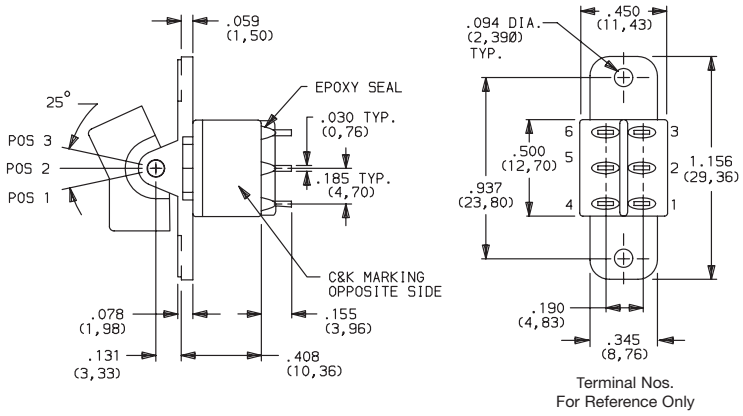
SPDT



Part number shown: E101J1ZBE2

NO. POLES	MODEL NO.	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	SWITCH FUNCTION POS. 3	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	CONNECTED TERMINALS POS. 3	SCHEMATIC
DP	E201	ON	NONE	ON	2-3,5-6	N/A	2-1,5-4	DPDT
	E203	ON	OFF	ON		OPEN		
	E205	MOM.	OFF	MOM.				
	E207	ON	OFF	MOM.				
	E208	ON	NONE	MOM.		N/A		
	E211**	ON	ON	ON		2-3,5-4		
	E213**	ON	ON	MOM.				
	E215**	MOM.	ON	MOM.				

DPDT



Part number shown: E201J1ZBE2

MOM. = Momentary

All models with all options when ordered with G, Q, R or S contact material.

** Wiring for 3-way switch, Hardware available seperately, see Technical Data section of this catalog.

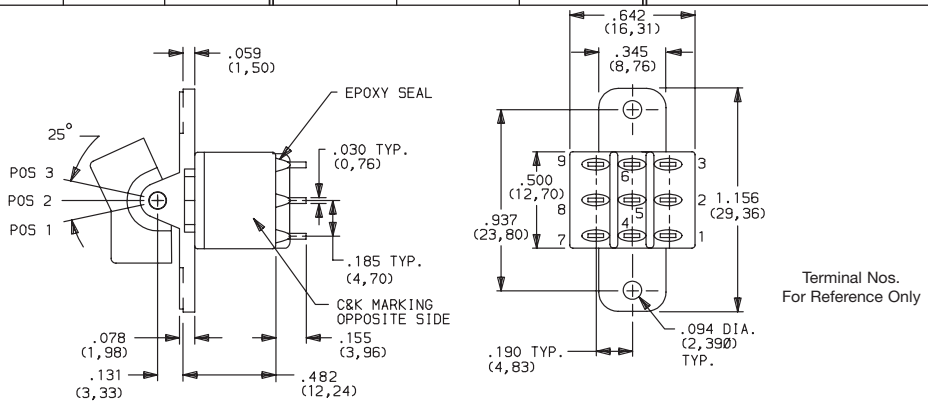
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	SWITCH FUNCTION POS. 3	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	CONNECTED TERMINALS POS. 3	SCHEMATIC
		C&K marking on opposite side			C&K marking on opposite side			
3P	E301	ON	NONE	ON	2-3,5-6,8-9	N/A	2-1,5-4,8-7	3PDT

3PDT



Part number shown: E301J1ZBE2

MOM. = Momentary

** Wiring for 3-way switch, see Technical Data section of this catalog.

All models with all options when ordered with G, Q, R and S contact material.

ACTUATOR–PANEL REAR MOUNT

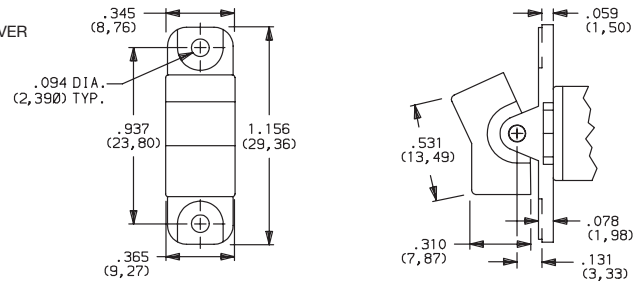
ACTUATOR COLOR
ACTUATOR

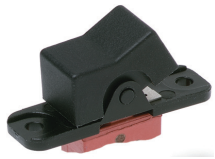
OPTION CODE	ACTUATOR COLOR
2	BLACK
3	RED

Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

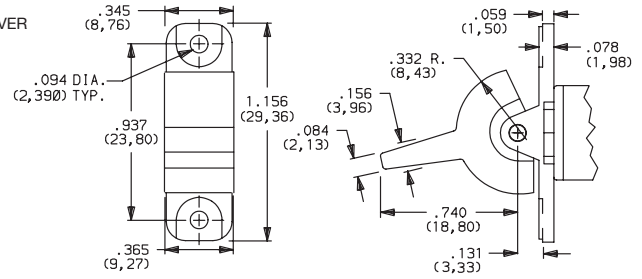
NOTE: Hardware: two each—mounting screws, nuts, lockwashers and standoffs for 1/8 inch thick panel are supplied standard on switches with panel mounting bracket. Internal o-ring actuator seal standard. Actuators available separately, see page G-36. Hardware available seperately, see Technical Data section of this catalog. J1, J2 actuators available with C, Z or Z3 terminations.

J1 LEVER



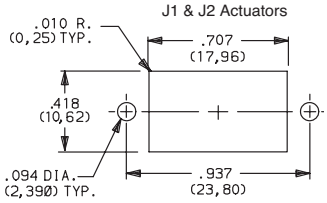


J2 LEVER



PANEL MOUNTING

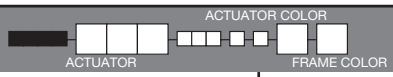
J1 & J2 Actuators



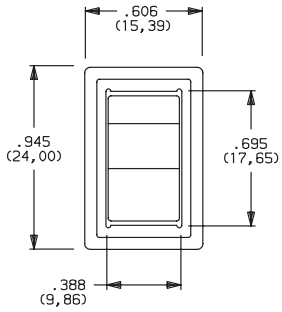
Third Angle Projection

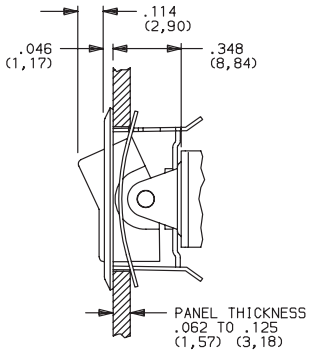
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

ACTUATOR–REAR MOUNT



J11 ROCKER WITH FRAME



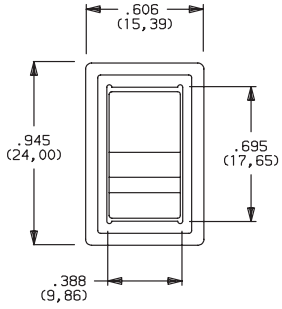


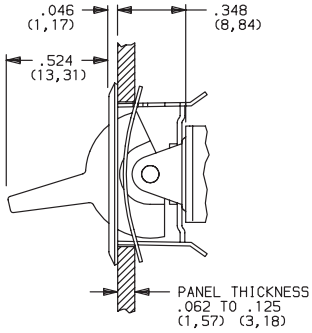
NOTE: This option has reduced anti-static capability.

OPTION CODE	ACTUATOR COLOR
2	BLACK
3	RED

OPTION CODE	FRAME COLOR
2	BLACK

J21 LEVER WITH FRAME



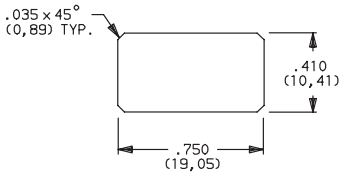


NOTE: This option has reduced anti-static capability.

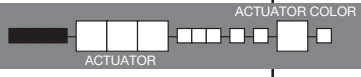
Actuator finish: Matte, frame finish: gloss. Other colors, custom actuator markings and legends available, consult Customer Service Center.

NOTE: Internal o-ring actuator seal standard. Actuators & frames available separately, see page G-36. Hardware available seperately, see Technical Data section of this catalog. N. J11 & J21 actuators available with C, Z & Z3 terminations.

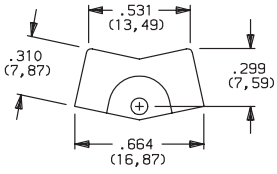
PANEL MOUNTING

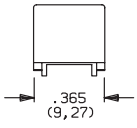


ACTUATOR–PC MOUNT



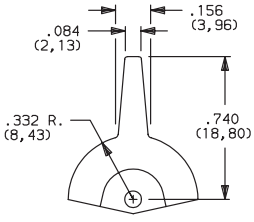
J1 ROCKER

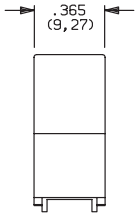




OPTION CODE	ACTUATOR COLOR
2	BLACK
3	RED

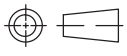
J2 LEVER





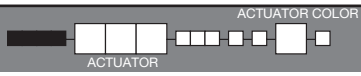
Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

NOTE: Hardware: two each—mounting screws, nuts, lockwashers and standoffs for 1/8 inch thick panel are supplied standard on switches with panel mounting bracket. Internal o-ring actuator seal standard. Actuators available separately, see page G-36. Hardware available seperately, see Technical Data section of this catalog. J1, J2 actuators available with A, A3, AV2, AV3, V2-V61 terminations.


Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

ACTUATOR–PC MOUNT



OPTION CODE	ACTUATOR COLOR
2	BLACK
3	RED

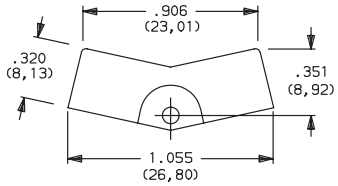
Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

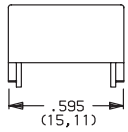
NOTE: Hardware: two each—mounting screws, nuts, lockwashers and standoffs for 1/8 inch thick panel are supplied standard on switches with panel mounting bracket. Internal o-ring actuator seal standard. Actuators available separately, see page G-36. Hardware available seperately, see Technical Data section of this catalog.

J3 actuators available with AV2, AV3 & V2-V61 terminations. Some permissible actuator/termination combinations may lack clearance between actuator and PC board, and care must be exercised to accommodate this condition.

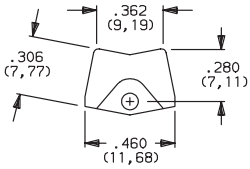
J50, J60 & J90 actuators available with A, AV2, AV3, V2 – V61 terminations.

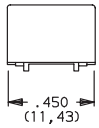
J3 ROCKER



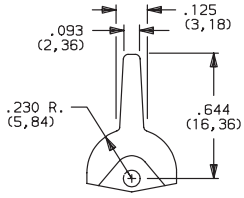


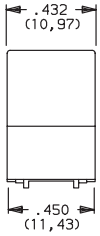
J50 ROCKER



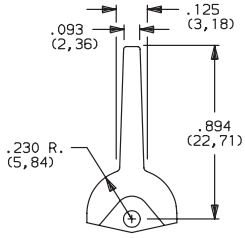


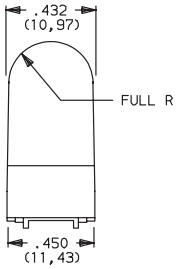
J60 LEVER





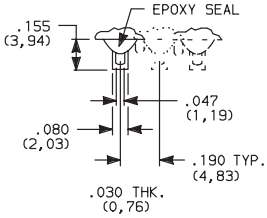
J90 LEVER





TERMINATIONS

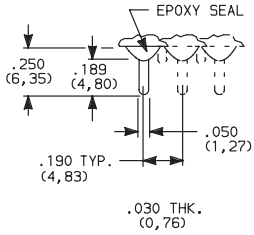
Z SOLDER LUG



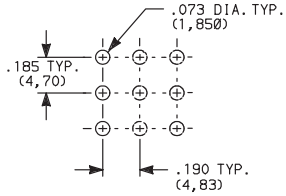
SPDT thru 3PDT

Not available with P, S, & R contact materials.
Available actuators, see page G-27-28.

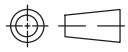
C PC THRU-HOLE



PC MOUNTING



SPDT thru 3PDT

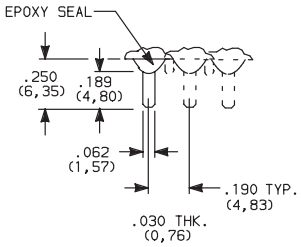


Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

TERMINATIONS

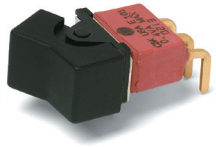
Z3 QUICK CONNECT



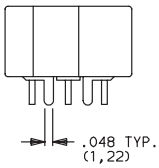
SPDT thru 3PDT

Not available with P, S, & R contact materials. Available actuators, see pages G-27 thru G-28. Mating quick connector available; order part number 530100000, page G-37.

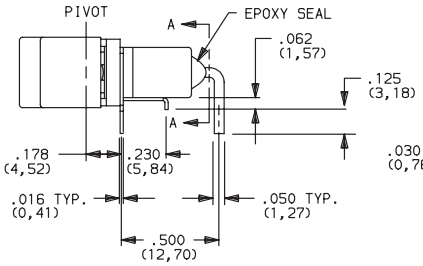
A RIGHT ANGLE, PC THRU-HOLE

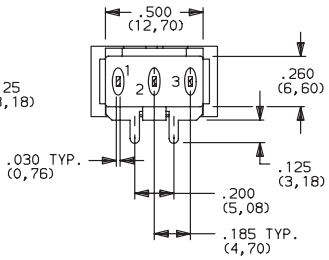


E101J1ABE2
Horizontal Actuation
SPDT



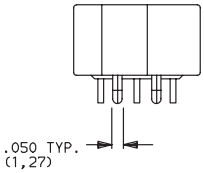
Actuator Shown In Pos. 1

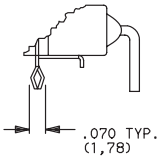




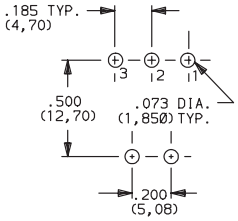
SECTION A-A

A3 RIGHT ANGLE, SNAP-IN, PC THRU-HOLE





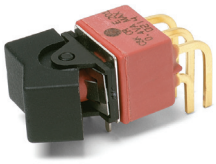
PC MOUNTING



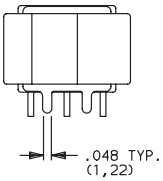
NOTE: Not available with J3, J50, J60 and J90 actuators.
Available actuators, see pages G-27 thru G-29.
Terminal bend radii and lead-in manufacturing option.

NOTE: PC mounting pattern must clear switch support leg.

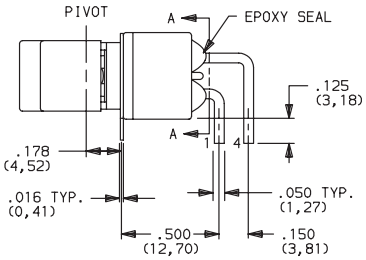
A RIGHT ANGLE, PC THRU-HOLE

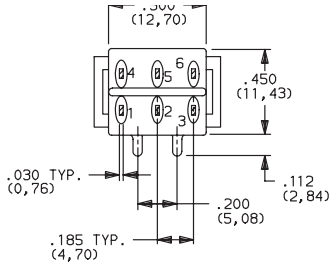


E201J1ABE2
Horizontal Actuation
DPDT



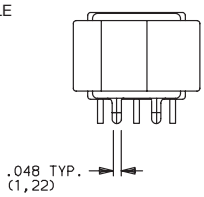
Actuator Shown In Pos. 1

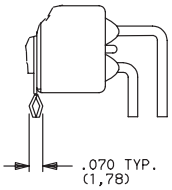




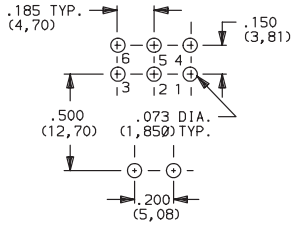
SECTION A-A

A3 RIGHT ANGLE, SNAP-IN, PC THRU-HOLE





PC MOUNTING



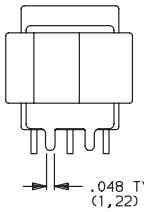
NOTE: Not available with J3 actuator.
Available actuators, see pages G-27 thru G-29.
Terminal bend radii and lead-in manufacturing option.

Third Angle Projection

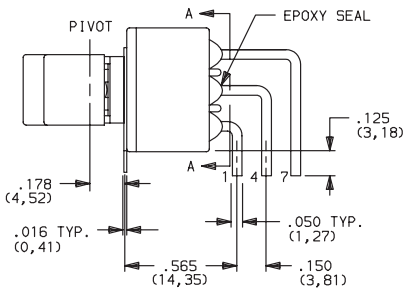
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

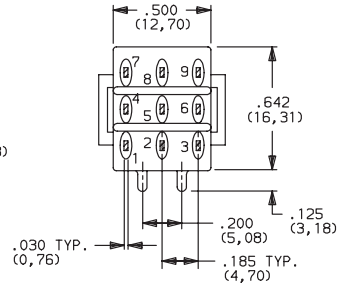
TERMINATIONS

A RIGHT ANGLE, PC THRU-HOLE



Actuator Shown In Pos. 1

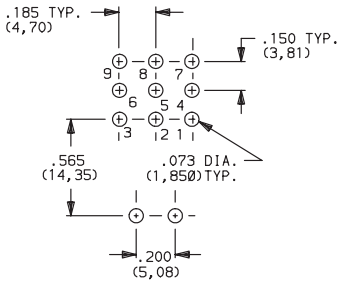




SECTION A-A

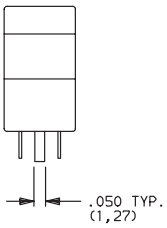
E301J1ABE2
Horizontal Actuation
3PDT

PC MOUNTING

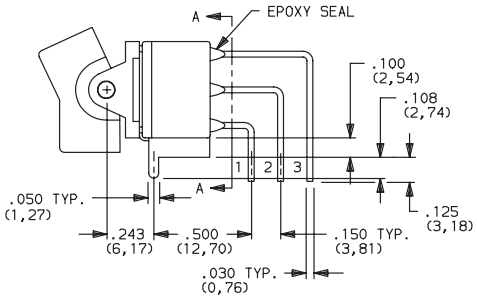


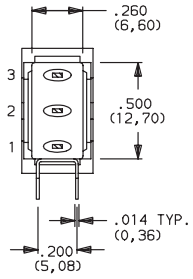
NOTE: Terminal bend radii and lead-in manufacturing option.
Available actuators, see pages G-27 thru G-29.

AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH

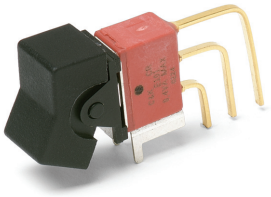


Actuator Shown In Pos. 1



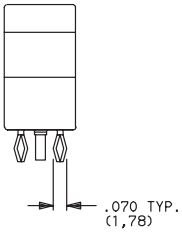


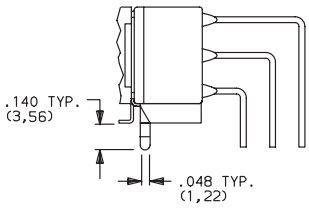
SECTION A-A



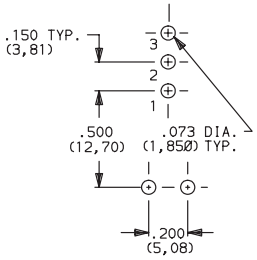
E101J1AV2BE2
Vertical Actuation
SPDT

AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH





PC MOUNTING



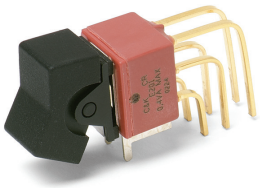
NOTE: Terminal bend radii and lead-in manufacturing option.
Available actuators, see pages G-27 thru G-29.

Third Angle Projection

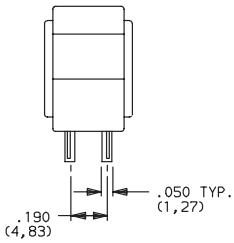
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

TERMINATIONS

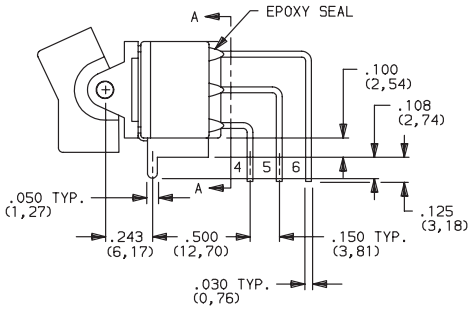
AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH

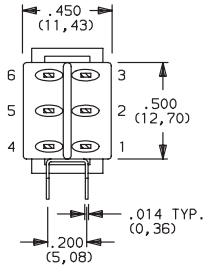


E201J1AV2BE2
Vertical Actuation
DPDT



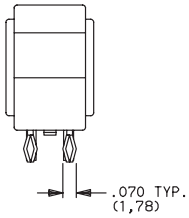
Actuator Shown In Pos. 1

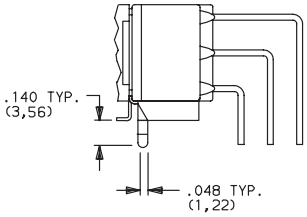




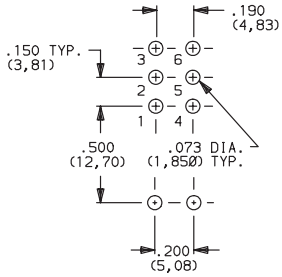
SECTION A-A

AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH



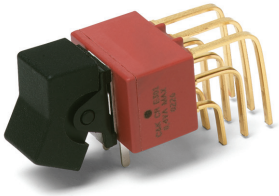


PC MOUNTING

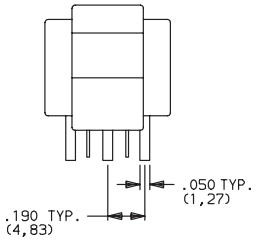


NOTE: Terminal bend radii and lead-in manufacturing option.
Available actuators, see pages G-27 thru G-29.

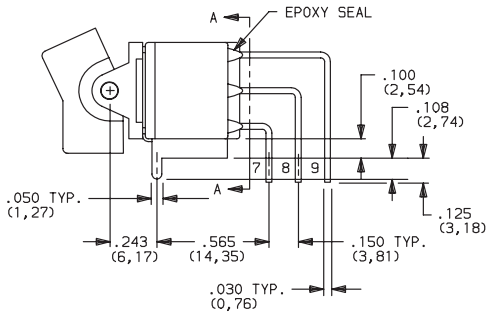
AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH

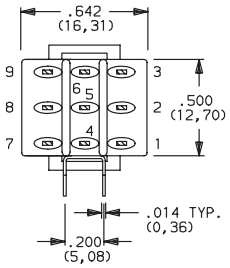


E301J1AV2BE2
Vertical Actuation
3PDT



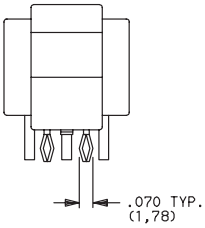
Actuator Shown In Pos. 1

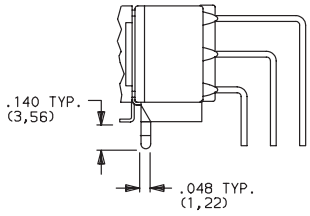




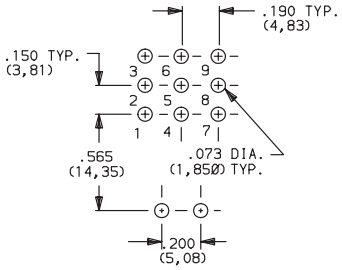
SECTION A-A

AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH

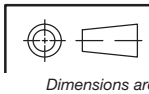




PC MOUNTING



NOTE: Terminal bend radii and lead-in manufacturing option.
Available actuators, see pages G-27 thru G-29.

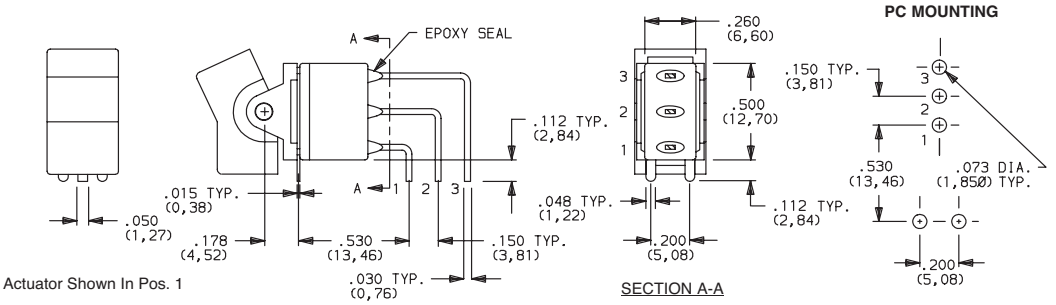


Third Angle Projection

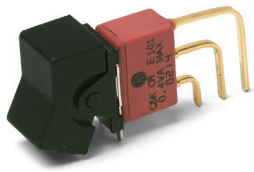
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

TERMINATIONS

V5 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



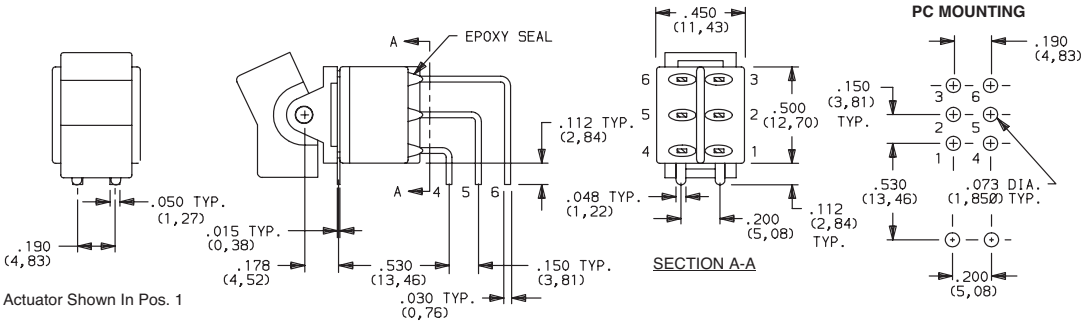
Actuator Shown In Pos. 1



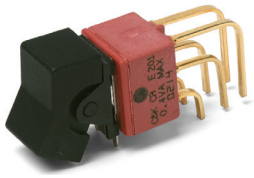
E101J1V5BE2
Vertical Actuation
SPDT

NOTE: Terminal bend radii and lead-in manufacturing option.
Available actuators, see pages G-27 thru G-29.

V5 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



Actuator Shown In Pos. 1



E201J1V5BE2
Vertical Actuation
DPDT

NOTE: Terminal bend radii and lead-in manufacturing option.
Available actuators, see pages G-27 thru G-29.

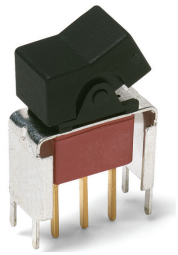
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

TERMINATIONS

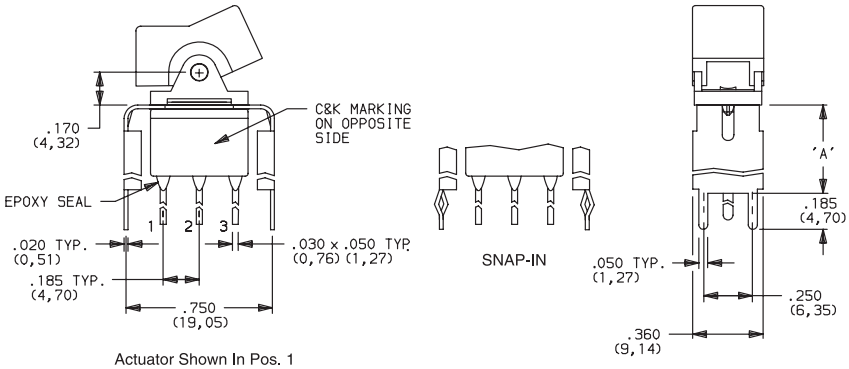
V6, V7, V8 VERTICAL MOUNT, V-BRACKET

V21 VERTICAL MOUNT, V-BRACKET, SNAP-IN



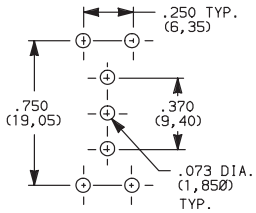
E101J1__BE2

SPDT



Actuator Shown In Pos. 1

PC MOUNTING

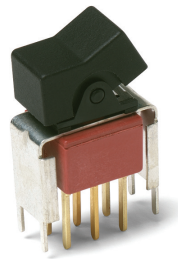


OPTION CODE	DIM 'A'
V21	.555 (14, 10)
V6	.460 (11, 68)
V7	.630 (16, 00)
V8	.953 (24, 21)

NOTE: Available actuators, see pages G-27 thru G-29.

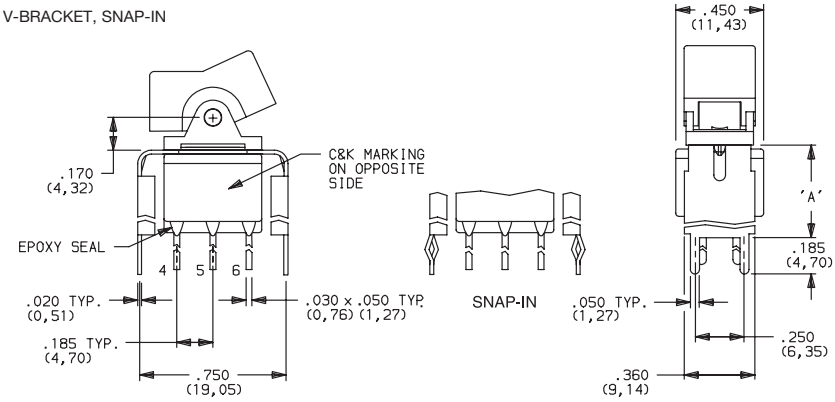
V6, V7, V8 VERTICAL MOUNT, V-BRACKET

V21 VERTICAL MOUNT, V-BRACKET, SNAP-IN



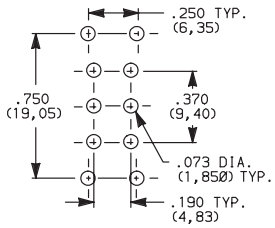
E201J1__BE2

DPDT



Actuator Shown In Pos. 1

PC MOUNTING

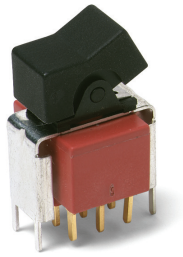


OPTION CODE	DIM 'A'
V21	.555 (14, 10)
V6	.460 (11, 68)
V7	.630 (16, 00)
V8	.953 (24, 21)

NOTE: Available actuators, see pages G-27 thru G-29.

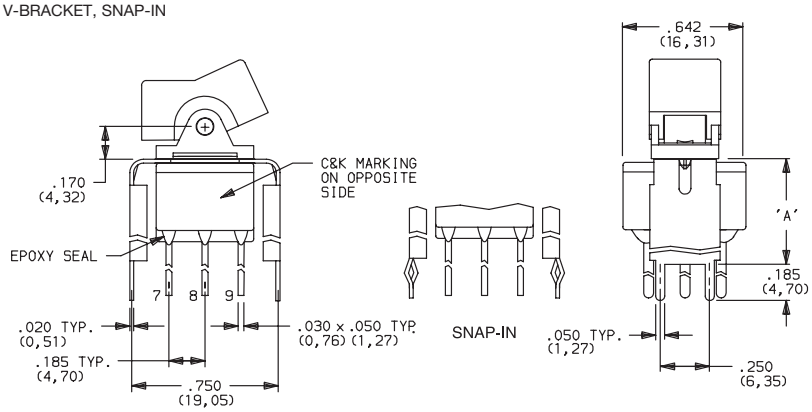
V7, V8 VERTICAL MOUNT, V-BRACKET

V21 VERTICAL MOUNT, V-BRACKET, SNAP-IN



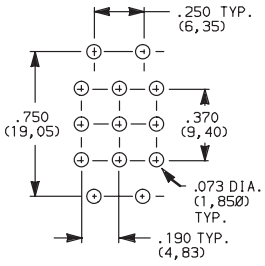
E301J1__BE2

3PDT



Actuator Shown In Pos. 1

PC MOUNTING



OPTION CODE	DIM 'A'
V21	.555 (14, 10)
V7	.630 (16, 00)
V8	.953 (24, 21)

NOTE: Available actuators, see pages G-27 thru G-29.

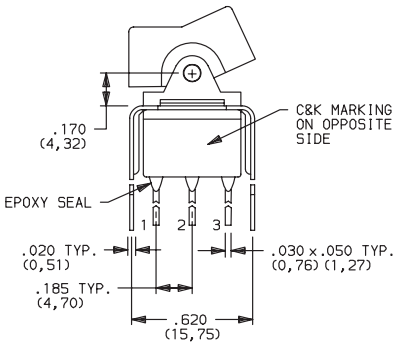
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

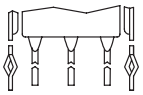
TERMINATIONS

V3, V4 VERTICAL MOUNT, V-BRACKET

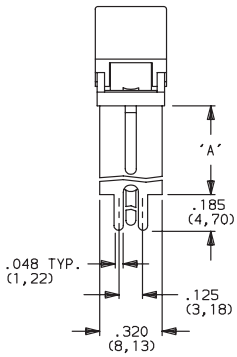
V31 VERTICAL MOUNT, V-BRACKET, SNAP-IN



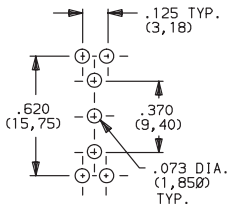
Actuator Shown In Pos. 1

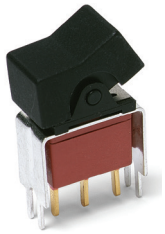


SNAP-IN



PC MOUNTING





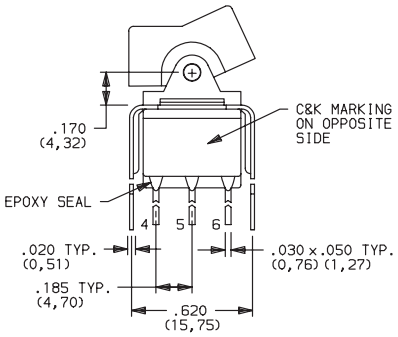
E101J1__BE2
SPDT

OPTION CODE	DIM 'A'
V3, V31	.460 (11,68)
V4	.630 (16,00)

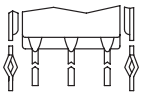
NOTE: Available actuators, see pages G-27 thru G-29.

V3, V4 VERTICAL MOUNT, V-BRACKET

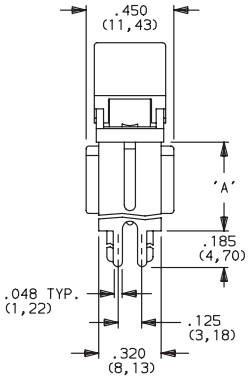
V31 VERTICAL MOUNT, V-BRACKET, SNAP-IN



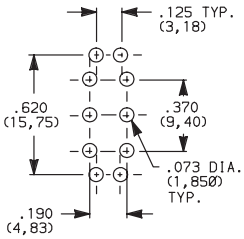
Actuator Shown In Pos. 1

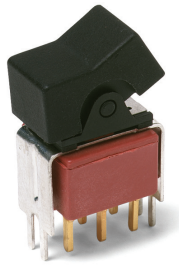


SNAP-IN



PC MOUNTING





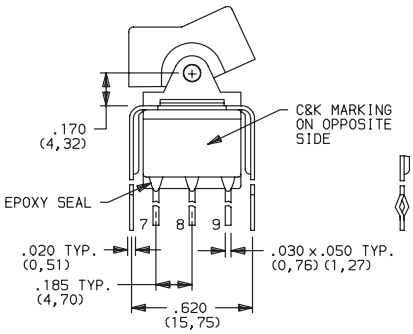
E201J1__BE2
DPDT

OPTION CODE	DIM 'A'
V3, V31	.460 (11,68)
V4	.630 (16,00)

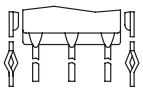
NOTE: Available actuators, see pages G-27 thru G-29.

V4 VERTICAL MOUNT, V-BRACKET

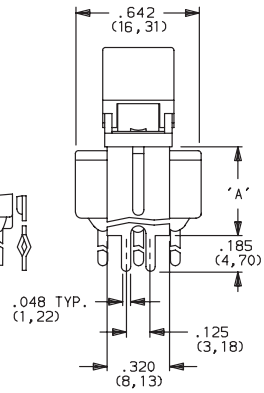
VERTICAL MOUNT, V-BRACKET, SNAP-IN



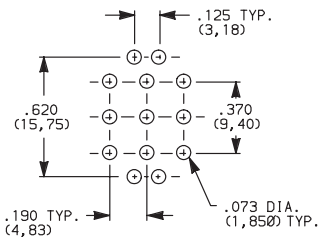
Actuator Shown In Pos. 1

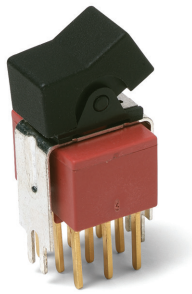


SNAP-IN



PC MOUNTING

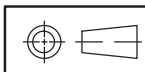




E301J1__BE2
3PDT

OPTION CODE	DIM 'A'
V41	.630 (16,00)

NOTE: Available actuators, see pages G-27 thru G-29.



Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

CONTACT MATERIAL

OPTION CODE	CONTACT MATERIAL	TERMINAL PLATING	RATINGS	
B	GOLD [1]	GOLD [1]	LOW LEVEL/ DRY CIRCUIT	0.4 VA MAX. @ 20 V AC OR DC MAX.
P		MATTE-TIN [7]		
Q	SILVER [4,5]	SILVER [5]	POWER	E1XX & E2XX MODELS: 7.5 AMPS @125 V AC OR 28 V DC; 3 AMPS @250 V AC. E3XX MODELS: 5 AMPS @ 125 V AC OR 28 V DC; 2 AMPS @ 250 V AC.
S		MATTE-TIN [6]		
G	GOLD OVER SILVER [2,3]	GOLD [3]	LOW LEVEL/DRY CIRCUIT OR POWER	E1XX AND E2XX MODELS: 0.4 VA MAX @20 V AC OR DC MAX. OR 7.5 AMPS @125 V AC OR 28 V DC; 3 AMPS @ 250 V AC. DC E3XX MODELS: 0.4 VA MAX. @ 20 V AC OR DC MAX. OR 5 AMPS @ 125 V AC OR 28 V DC; 2 AMPS @ 250 V AC.
R		MATTE-TIN [6]		

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

[1] CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.

[2] END CONTACTS: Coin silver, with gold plate over nickel plate.

[3] CENTER CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.

[4] END CONTACTS: Coin silver, silver plated.

[5] CENTER CONTACT & ALL TERMINALS: Copper alloy, with gold flash over silver plate. Or copper alloy, silver plated.

[6] TERMINALS: Copper alloy, with matte-tin over nickel plate.

NOTE: Any models supplied with Q, B, G, S P & R contact material are RoHS compliant.

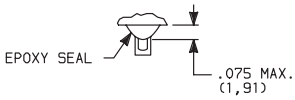
All models with all options when ordered with G, Q, S & R contact material.

B contact material standard with all terminations.

P R & S contact materials not available with Z terminations.

SEAL

E EPOXY SEAL



AVAILABLE HARDWARE

J2, J21 Actuators

PART NO.
760502263 BLACK
760503000 RED

Material: Nylon
Finish: Matte

J3 Actuator

PART NO.
766602263 BLACK
766603000 RED

Material: Nylon
Finish: Matte

J1, J11 Actuators

PART NO.
776A02263 BLACK
776A03000 RED

Material: Nylon
Finish: Matte

J50 Actuator

PART NO.
775A02263 BLACK
775A03000 RED

Material: Nylon
Finish: Matte

J60 Actuator

PART NO.
613802263 BLACK
598103000 RED

Material: Nylon
Finish: Matte

J90 Actuator

PART NO.
598002263 BLACK
598003000 RED

Material: Nylon
Finish: Matte

NOTE: Additional nuts, screws and lockwashers available separately, see Technical Data section of this catalog.
Other colors available, consult Customer Service Center.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

AVAILABLE HARDWARE

Fits Z3 Termination female connector

PART NO.
530100000

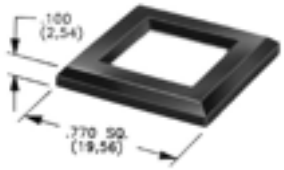
Available in loose pieces.

Frame for J11, J21 Actuators

PART NO.
764500746 **BLACK ENAMEL**
764601106 **RETAINING SPRING**

Material: Spring Steel

J50, J60 & J90 Actuators



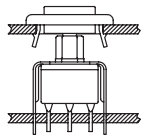
MATTE	GLOSS
PART NO.	PART NO.
486702000	486802000 BLACK

Material: Nylon
Finish: Matte or Gloss

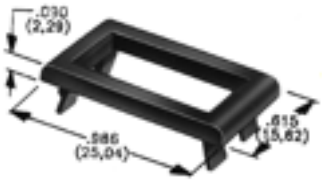
NOTE: Additional nuts, screws and lockwashers available separately, see Technical Data section of this catalog. Other colors available, consult Customer Service Center.

Frames snap into panel opening and are independent from switch mounting. Accurate positioning of the PC mounted switch relative to the panel opening is necessary to provide proper clearance between actuator and frame. Available in two basic styles and four panel thicknesses .047-.125 in. Material: Nylon. Finish: Matte.

TYPICAL APPLICATION



J1 & J2 Actuators



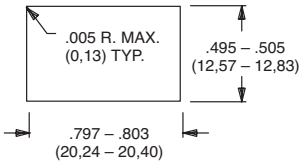
.047" (1,19) PANEL THK.	.062" (1,57) PANEL THK.	.090" (2,29) PANEL THK.	.125" (3,18) PANEL THK.
PART NO.	PART NO.	PART NO.	PART NO.
452902263	452702263	452802263	452602263 BLACK
452903000	452703000	452803000	452603000 RED

J50, J60 & J90 Actuators

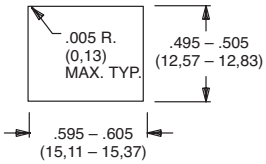
.047" (1,19) PANEL THK.	.062" (1,57) PANEL THK.	.090" (2,29) PANEL THK.	.125" (3,18) PANEL THK.
PART NO.	PART NO.	PART NO.	PART NO.
432502263	432602263	432702263	432802263 BLACK
432503000	432603000	432703000	432803000 RED

PANEL MOUNTING

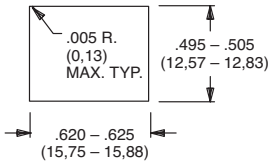
For part numbers
4529xxxxx, 4527xxxxx,
4528xxxxx, 4526xxxxx

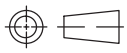


For part numbers
4325xxxxx, 4326xxxxx



For part numbers
4327xxxxx, 4328xxxxx




Third Angle Projection

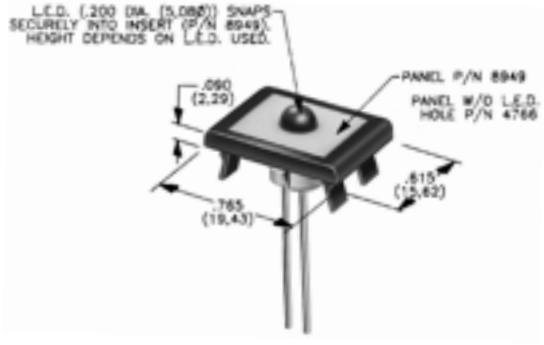
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

AVAILABLE HARDWARE

Panel Inserts

Will fit separate snap-in frames for J50, J60, J90 actuators.

Above frames (part nos. 432XXXXXX) are also available with insert which accepts LED for indicator light assembly. Order insert separately from frame. Blank insert panel (without hole for LED) also available. **LED not included.**



PANEL INSERT WITH HOLE FOR LED	BLANK PANEL INSERT WITHOUT HOLE FOR LED	
PART NO.	PART NO.	
894902000	476602000	BLACK
894903000	476603000	RED

NOTE: Special colors, custom markings available, consult Customer Service Center.

Third Angle Projection

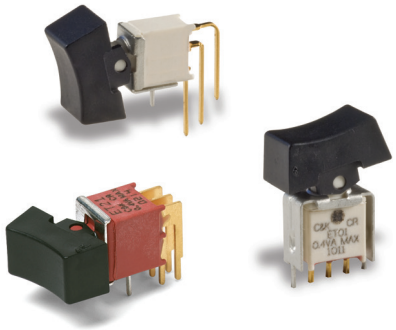
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

Features/Benefits

- *Sealed against solder and cleaning process contaminants*
- *Rocker, bushing & case—UL 94V-0*
- *Small footprint—saves space*
- *RoHS compliant*

Typical Applications

- *Telecommunications*
- *Instrumentation*
- *Computers & peripherals*



Specifications

CONTACT RATING: B contact material: 0.4 VA max. @ 20 V AC or DC max. Q contact material: Copper alloy, silver plated. See page G-43 for additional ratings.

ELECTRICAL LIFE: ETX1 models: 60,000 make-and-break cycles at full load. All other models: 30,000 cycles.

CONTACT RESISTANCE: Below 20 m Ω typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.

INSULATION RESISTANCE: 10^9 Ω min.

DIELECTRIC STRENGTH: 1000 Vrms min. @ sea level.

OPERATING TEMPERATURE: –30°C to 85°C.

SOLDERABILITY: Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

PACKAGING: Surface mount switches standard in tape and reel packaging, see page G-45 for drawings and reel information.

Materials

CASE & BUSHING: Glass filled nylon 6/6, flame retardant, heat stabilized (UL 94V-0) or glass filled 4/6 nylon, flame retardant, heat stabilized (UL 94V-0).

ACTUATOR: Nylon, black standard. Internal o-ring seal standard with all actuators. SA surface mount: High temperature material, glass filled 46 nylon, flame retardant, heat stabilized (UL 94V-0).

SWITCH SUPPORT: Brass, matte-tin plated.

CONTACTS & TERMINALS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Copper alloy, silver plated. See page G-43 for additional contact materials.

TERMINAL SEAL: Epoxy.

NOTE: Any models supplied with Q, B, G, S, P & R contact material are RoHS compliant.

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G-40 thru G-44. For additional options not shown in catalog, consult Customer Service Center. All models are process sealed to withstand machine soldering temperatures and pressure wash cleaning methods.

Switch Function
- **ET01** SP On-None-On
- **ET02** SP Off-None-On
- **ET03** SP On-Off-On
- **ET05** SP Mom.-Off-Mom.
- **ET07** SP On-Off-Mom.
- **ET08** SP On-None-Mom.
- **ET21** DP On-None-On
- **ET27** DP On-Off-Mom.
- **ET28** DP On-None-Mom.

Actuator
- **J1** Rocker
- **J6** Rocker

Terminations
- **A** Right angle, PC thru-hole
- **AV** Vertical Right angle, PC thru-hole
- **C** PC Thru-hole
- **V3** V-bracket
- **AV2** Vertical Right angle, PC thru-hole
- **SA** Right Angle Surface mount

Contact Material
- **B** Gold
- **P** Gold, matte tin
- **Q** Silver
- **S** Silver, matte-tin
- **G** Gold over silver
- **R** Gold over silver, matte-tin

Seal
- **E** Epoxy

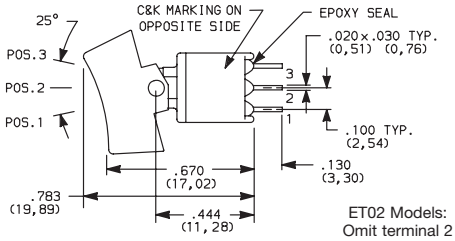
Actuator Color
- **2** Black
- **1** White
- **3** Red

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

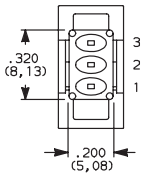
SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	SWITCH FUNCTION POS. 3	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	CONNECTED TERMINALS POS. 3	SCHEMATIC
SP	ET01	ON	NONE	ON	2-3	N/A	2-1	SPDT
	ET03	ON	OFF	ON		OPEN		
	ET05	MOM.	OFF	MOM.				
	ET07	ON	OFF	MOM.				
	ET08	ON	NONE	MOM.		N/A		
	ET02	OFF	NONE	ON	OPEN	N/A	3-1	SPST
DP	ET21	ON	NONE	ON	2-3,5-6	N/A	2-1,5-4	DPDT
	ET27	ON	OFF	MOM.		OPEN		
	ET28	ON	NONE	MOM.		N/A		

SPDT



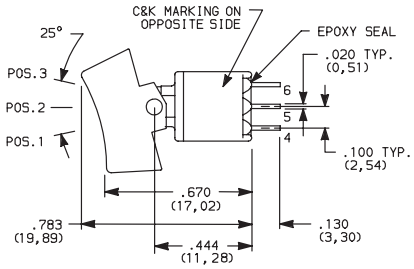
ET02 Models: Omit terminal 2

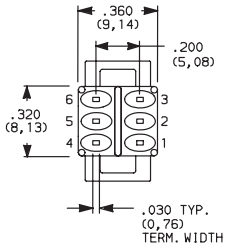


Terminal Nos. For Reference Only

Part number shown: ET01J6CBE2

DPDT





Terminal Nos. For Reference Only

Part number shown: ET21J6CBE2

MOM. = Momentary

All models cULus with all options when ordered with G, S, R or Q contact material.

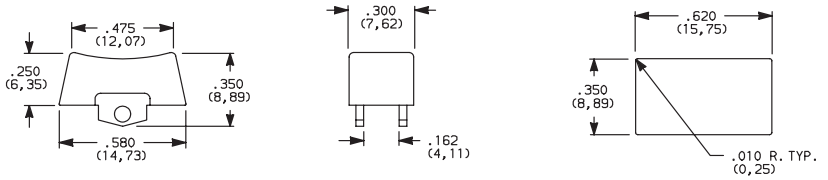
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

ACTUATOR

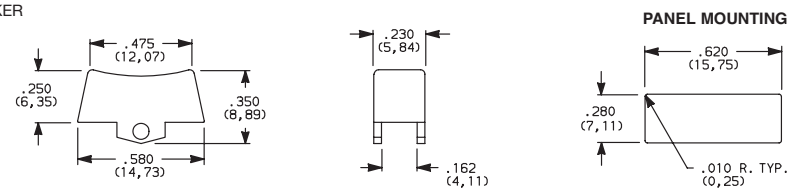
ACTUATOR COLOR
ACTUATOR

J1 ROCKER



Available with all models except ET0X with A & SA & SA1 terminations.

J6 ROCKER



Standard with ET0X model with A & SA & SA1 terminations.

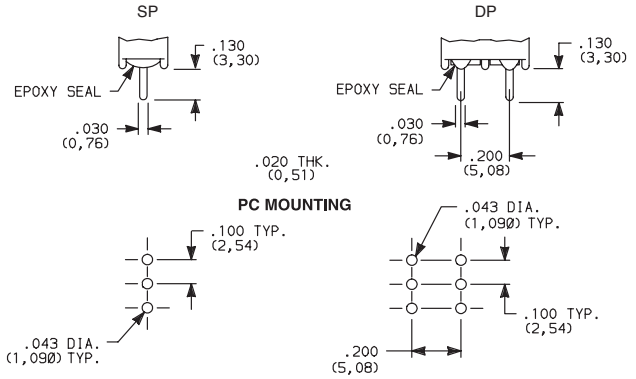
OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED

Actuators available separately, see page G-45. Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

NOTE: Internal o-ring actuator seal standard.

TERMINATIONS

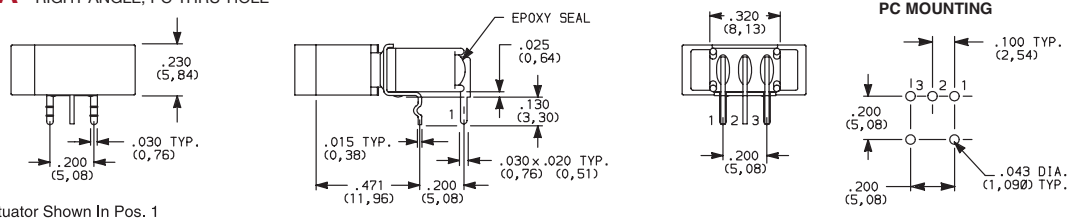
C PC THRU-HOLE



ET02 Models: Omit center hole.

SP & DP

A RIGHT ANGLE, PC THRU-HOLE

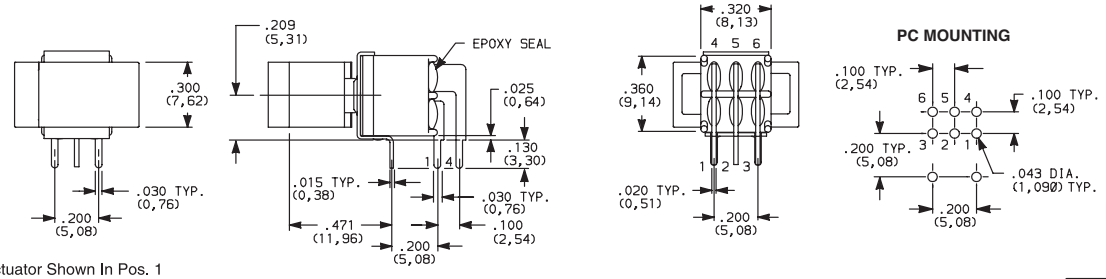


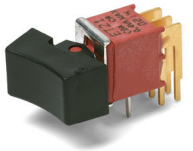
ET01J6ABE2
Horizontal Actuation
SPDT

Actuator Shown In Pos. 1

Not available with ET02 model.
J6 actuator std. only on ET0X models with A terminations.

A RIGHT ANGLE, PC THRU-HOLE





ET21J1ABE2
Horizontal Actuation
DPDT

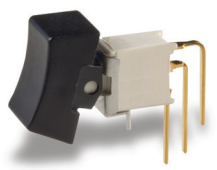
Actuator Shown In Pos. 1

Third Angle Projection

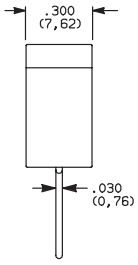
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

TERMINATIONS

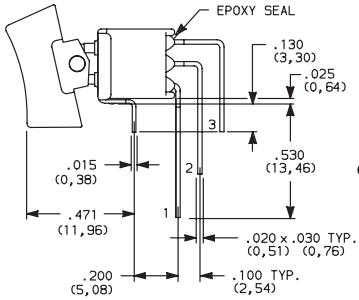
AV VERTICAL RIGHT ANGLE, PC THRU-HOLE

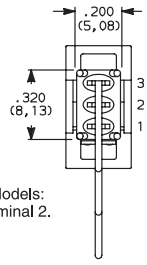


ET01J1AVBE2
Vertical Actuation
SPDT



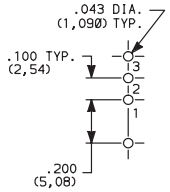
Actuator Shown In Pos. 1





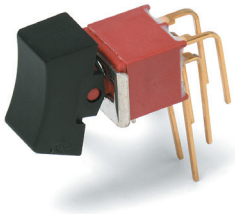
ET02 Models:
Omit terminal 2.

PC MOUNTING

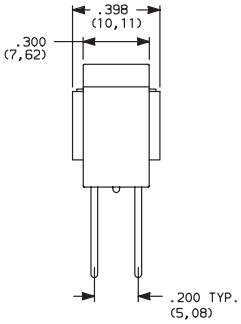


NOTE: Terminal bend radii and lead-in manufacturing option.

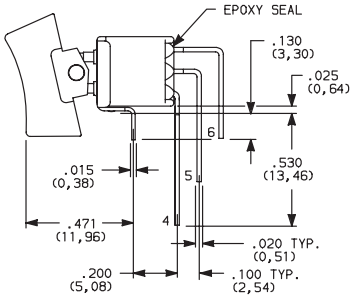
AV VERTICAL RIGHT ANGLE, PC THRU-HOLE

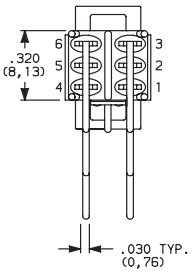


ET21J1AVBE2
Vertical Actuation
DPDT

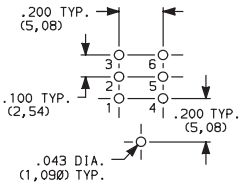


Actuator Shown In Pos. 1



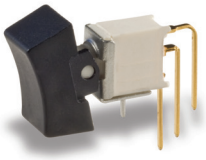


PC MOUNTING

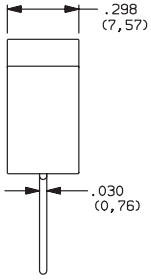


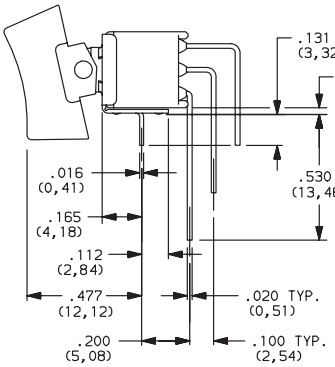
NOTE: Terminal bend radii and lead-in manufacturing option.

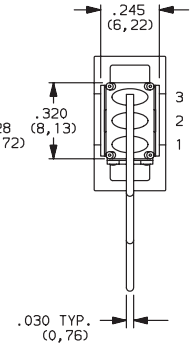
AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE



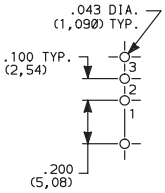
ET01J1AV2BE2
Vertical Actuation
SPDT







PC MOUNTING

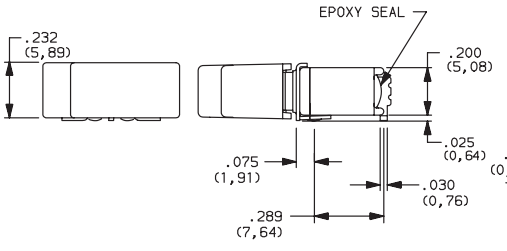


Third Angle Projection

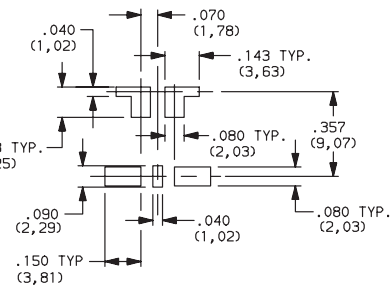
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

TERMINATIONS

SA RIGHT ANGLE, SURFACE MOUNT



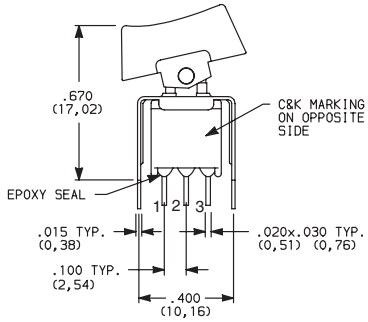
PANEL MOUNTING



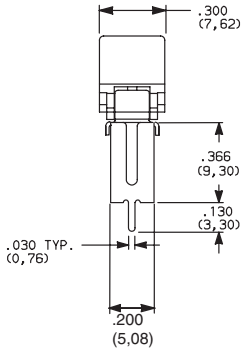
ET01J6SAPE2
Horizontal Actuation
SPDT

NOTE: Standard with tape & reel packaging, see page G-44.
Available with P contact material only.

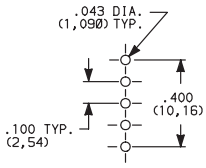
V3 VERTICAL MOUNT, V-BRACKET



Actuator shown in Pos. 1

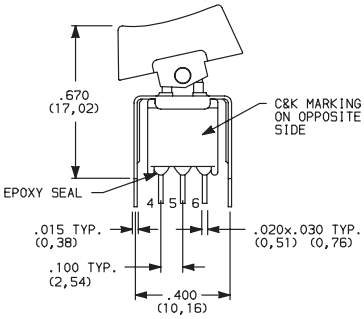


PC MOUNTING

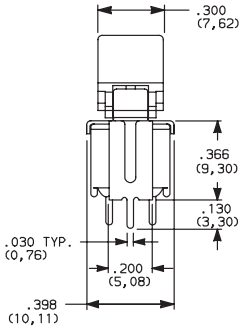


ET01J1V3BE2
SPDT

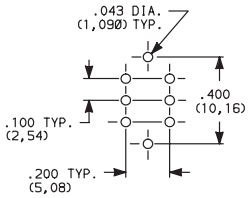
V3 VERTICAL MOUNT, V-BRACKET

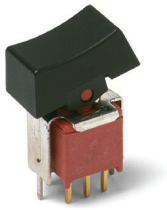


Actuator shown in Pos. 1



PC MOUNTING





ET21J1V3BE2
DPDT

CONTACT MATERIAL

OPTION CODE	CONTACT MATERIAL	TERMINAL PLATING	RATINGS	
B	GOLD [1]	GOLD [1]	LOW LEVEL/ DRY CIRCUIT	0.4 VA MAX. @ 20 V AC OR DC MAX.
P		MATTE-TIN [6]		
Q	SILVER [4,5]	SILVER [5]	POWER	ETX1 MODELS: 3 AMPS @ 120 V AC OR 28 V DC. ALL OTHER MODELS: 2 AMPS @ 120 V AC OR 28 V DC.
S		MATTE-TIN [6]		
G	GOLD OVER SILVER [2,3]	GOLD [3]	LOW LEVEL/DRY CIRCUIT OR POWER	ETX1 MODELS: 0.4 VA MAX @ 20 V AC OR DC MAX. OR 3 AMPS @120 V AC OR 28 V DC. ALL OTHER MODELS: 0.4 VA MAX @ 20 V AC OR DC MAX. OR 2 AMPS @ 120 V AC OR 28 V DC.
R		MATTE-TIN [6]		

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

[1] CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.

[2] END CONTACTS: Coin silver, with gold plate over nickel plate.

[3] CENTER CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.

[4] END CONTACTS: Coin silver, silver plated.

[5] CENTER CONTACT & ALL TERMINALS: Copper alloy, silver plated.

[6] TERMINALS: Copper alloy, with matte-tin over nickel plate.

NOTE: Any models supplied with Q, B, G, S, P & R contact material are RoHS compliant.

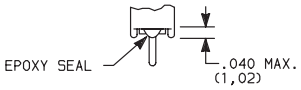
All models c UL us with all options when ordered with G, Q, S & R contact material.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

SEAL

E EPOXY SEAL



AVAILABLE HARDWARE

J1 Actuator

PART NO.

261A01000 WHITE
261A02263 BLACK
261A03000 RED

Material: Nylon
Finish: Matte

NOT AVAILABLE WITH A, SA, SA1

J6 Actuator

PART NO.

621C01000 WHITE
621C02263 BLACK
621C03000 RED

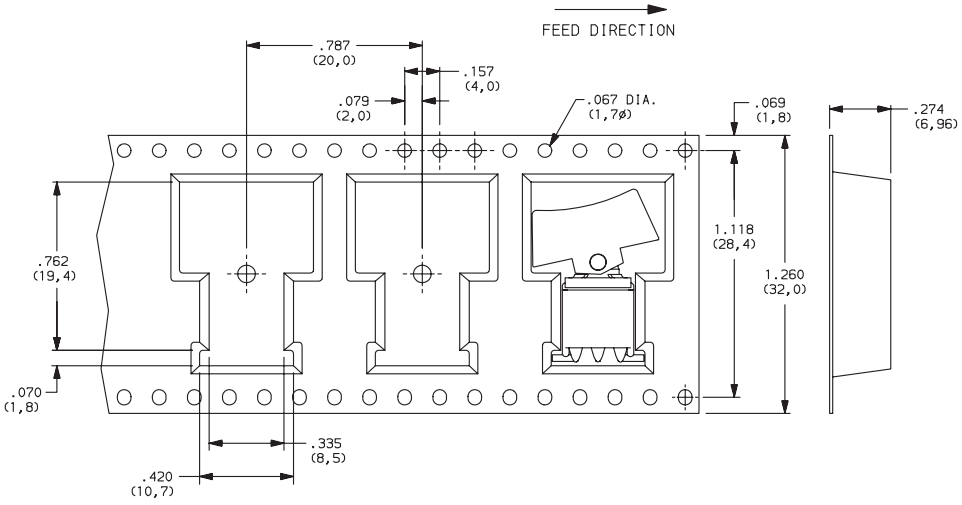
Material: Nylon
Finish: Matte
For Hi Temp, Consult Factory

NOTE: Other colors available, consult Customer Service Center.

TAPE & REEL SA TERMINATION

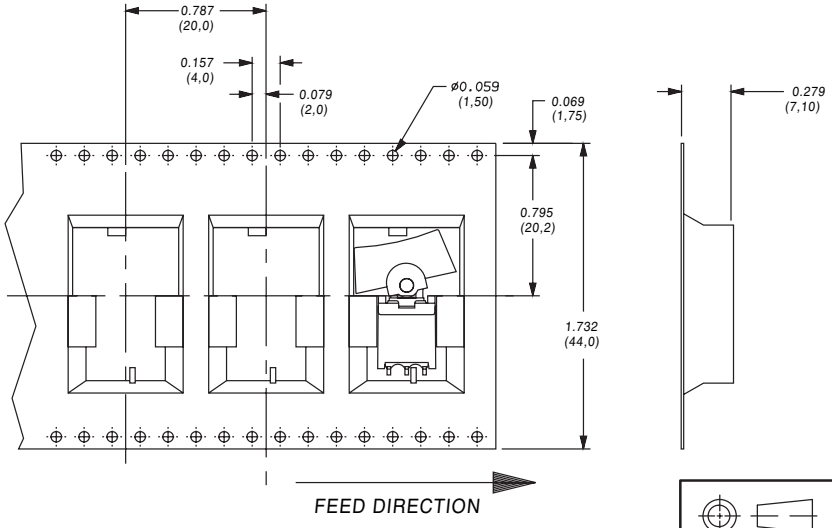
ET01J6SABE (SHOWN)

REEL INFORMATION	
OUTSIDE DIAMETER	13.00 (330,0)
PILOT HOLE	.512 (13,0)
QUANTITY PER REEL	500



ET01J6SA1BE (SHOWN)

REEL INFORMATION	
OUTSIDE DIAMETER	13.00 (330,0)
PILOT HOLE	.795 (20,20)
QUANTITY PER REEL	450



Third Angle Projection

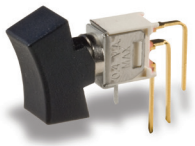
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

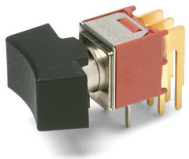
Features/Benefits

- *Compact size—small footprint*
- *Single and double pole models*
- *PC and panel mounting options available*
- *RoHS compliant*

Typical Applications

- *Telecommunications*
- *Instrumentation*
- *Medical Equipment*





Models Available

Specifications

CONTACT RATING: Q contact material (TX01 models): 3 AMPS @ 120 V AC or 28 V DC. All other models: 2 AMPS @ 120 V AC or 28 V DC. See page G-49 for additional ratings.

ELECTRICAL LIFE: TX01 models: 60,000 make-and-break cycles at full load. All other models: 30,000 cycles.

CONTACT RESISTANCE: Below 20 m Ω typ. initial @ 2–4 V DC, 100 mA, for both silver and gold plated contacts.

INSULATION RESISTANCE: 10^9 Ω min.

DIELECTRIC STRENGTH: 1000 Vrms min. @ sea level.

OPERATING TEMPERATURE: –30°C to 85°C.

SOLDERABILITY: Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

NOTE: Any models supplied with B, G, P, Q or R contact material are RoHS compliant.

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Materials

CASE: Glass filled nylon 6/6, flame retardant, heat stabilized or diallyl phthalate (DAP), (UL 94V-0) or glass filled nylon 4/6, flame retardant, heat stabilized.

ACTUATOR: Nylon, black standard.

BUSHING: Brass, nickel plated.

HOUSING: Stainless steel.

SWITCH SUPPORT: Brass, matte-tin plated.

MOUNTING BRACKET: Stainless steel.

END CONTACTS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Coin silver, silver plated. See page G-49 for additional contact materials.

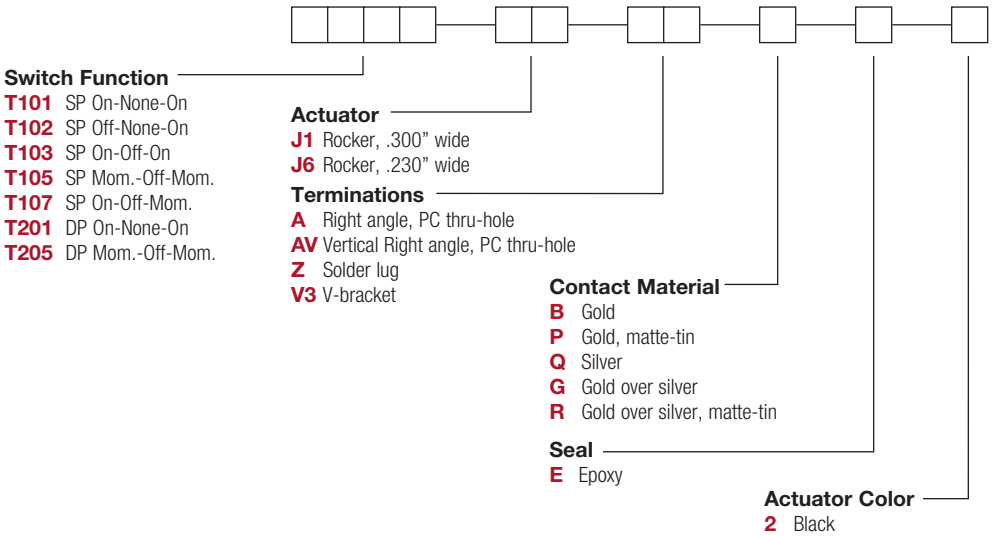
CENTER CONTACTS & TERMINALS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Copper alloy, silver plated. See page G-49 for additional contact materials.

TERMINAL SEAL: Epoxy.

HARDWARE: Nut, Screws & Lockwasher: Stainless steel. Standoff: Nylon standard.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G-46 through G-50. For additional options not shown in catalog, consult Customer Service Center. All models have epoxy terminal seal and are compatible with all “bottom-wash” PCB cleaning methods.



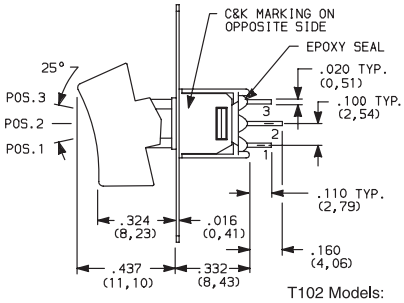
T Series
Subminiature Rocker Switches

SWITCH FUNCTION

ACTUATOR COLOR

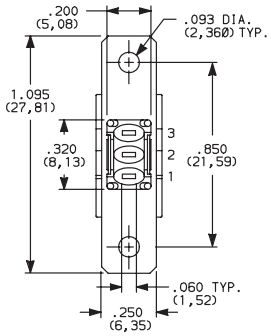
NO. POLES	MODEL NO.	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	SWITCH FUNCTION POS. 3	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	CONNECTED TERMINALS POS. 3	SCHEMATIC
		C&K marking on opposite side			C&K marking on opposite side			
SP	T101	ON	NONE	ON	2-3	N/A	2-1	SPDT
	T103	ON	OFF	ON		OPEN		
	T105	MOM.	OFF	MOM.				
	T107	ON	OFF	MOM.				
	T102	OFF	NONE	ON	OPEN	N/A	3-1	SPST

SPDT



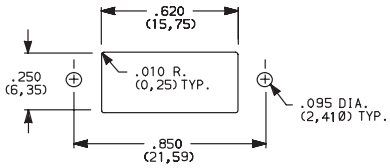
T102 Models: Omit terminal 2

Part number shown: T101J6ZBE2

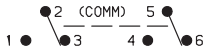


Terminal Nos. For Reference Only

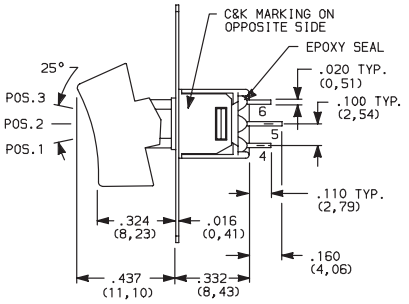
PANEL MOUNTING



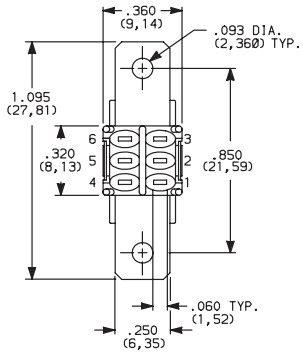
NO. POLES	MODEL NO.	POS. 1	POS. 2	POS. 3	POS. 1	POS. 2	POS. 3	SCHEMATIC
DP	T201	ON	NONE	ON	2-3,5-6	N/A	2-1,5-4	DPDT
	T205	MOM.	OFF	MOM.		OPEN		



DPDT

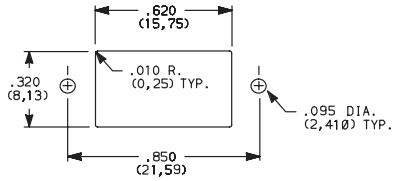


Part number shown: T201J1ZBE2



Terminal Nos. For Reference Only

PANEL MOUNTING



MOM. = Momentary

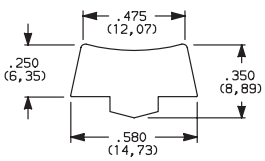
All models ® with all options when ordered with G, Q or R contact material.

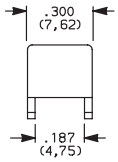
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

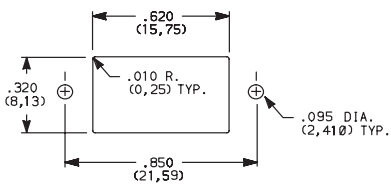
ACTUATOR

J1 ROCKER, .300 WIDE



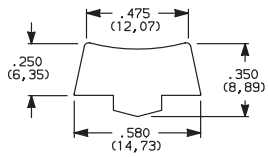


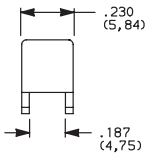
PANEL MOUNTING



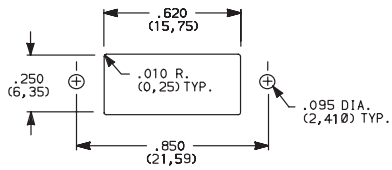
Standard with all models except T10X with A terminations.

J6 ROCKER, .230 WIDE





PANEL MOUNTING



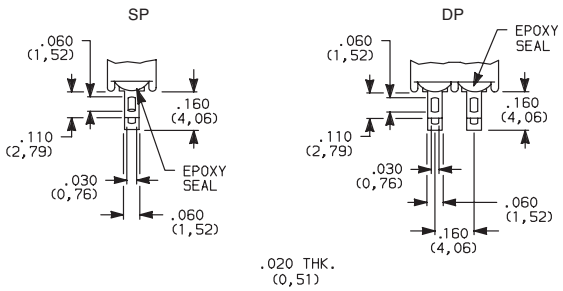
Standard with T10X model with A terminations.

OPTION CODE	ACTUATOR COLOR
2	BLACK

Actuators available separately, see page G 50. Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

TERMINATIONS

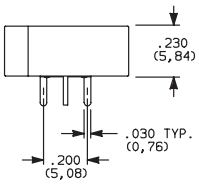
Z SOLDER LUG



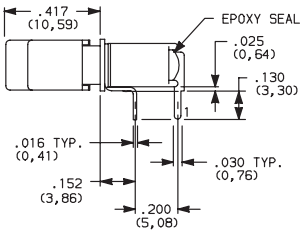
SP and DP

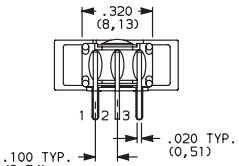
Not available with P or R contact material.

A RIGHT ANGLE, PC THRU-HOLE

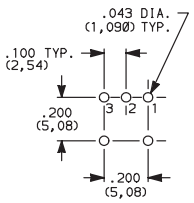


Actuator Shown In Pos. 1





PC MOUNTING



T101J6ABE2
Horizontal Actuation
SPDT

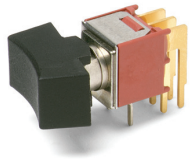
Not available with T102 model. J6 actuator standard only on T10X models with A terminations.

Third Angle Projection

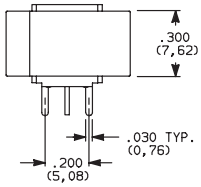
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

TERMINATIONS

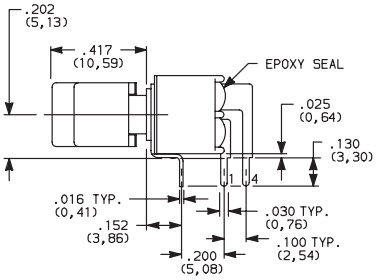
A RIGHT ANGLE, PC THRU-HOLE

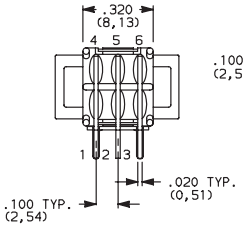


T201J1ABE2
Horizontal Actuation
DPDT

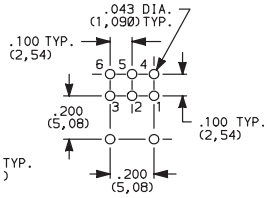


Actuator Shown In Pos. 1

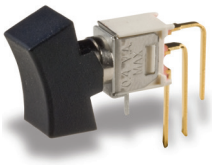




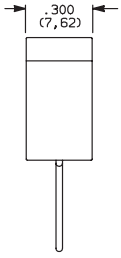
PC MOUNTING



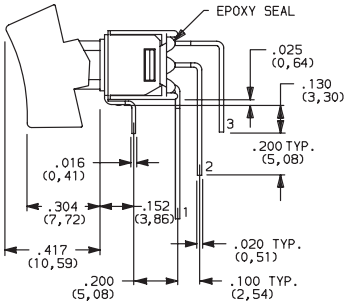
AV VERTICAL RIGHT ANGLE, PC THRU-HOLE

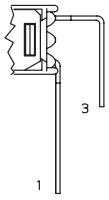


T101J1AVBE2
Vertical Actuation
SPDT

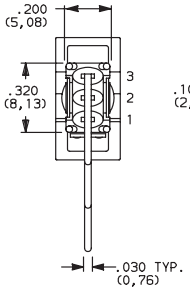


Actuator Shown In Pos. 1

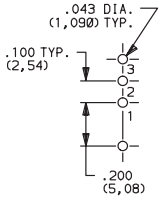




T102 models:
Omit terminal 2.



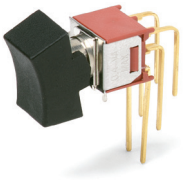
PC MOUNTING



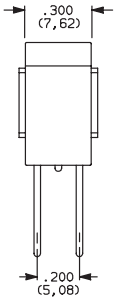
T102 models:
Omit hole 2.

NOTE: Terminal bend radii and lead-in manufacturing option.

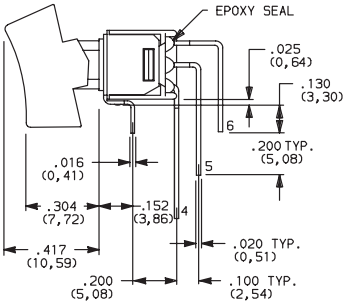
AV VERTICAL RIGHT ANGLE, PC THRU-HOLE

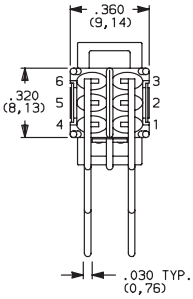


T201J1AVBE2
Vertical Actuation
DPDT

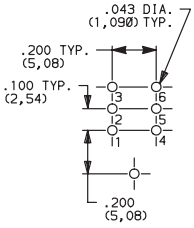


Actuator Shown In Pos. 1



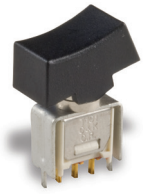


PC MOUNTING

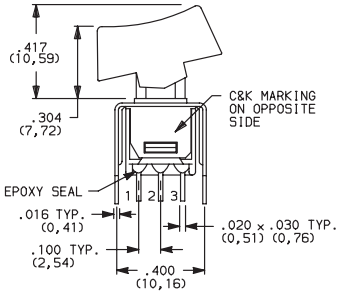


NOTE: Terminal bend radii and lead-in manufacturing option.

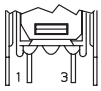
V3 VERTICAL MOUNT, V-BRACKET



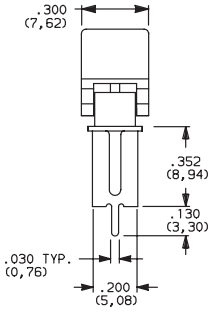
T101J1V3BE2
SPDT



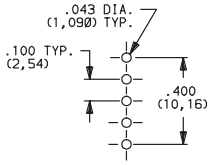
Actuator Shown In Pos. 1



T102 models:
Omit terminal 2.



PC MOUNTING



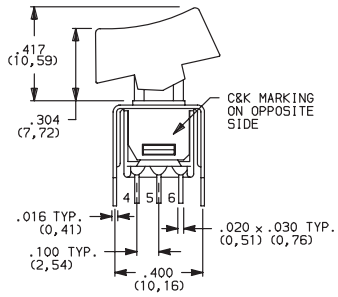
T102 models:
Omit center hole.

Third Angle Projection

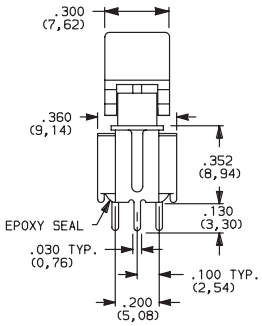
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

TERMINATIONS

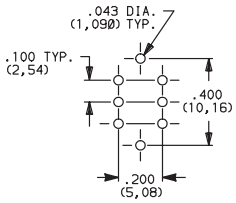
V3 VERTICAL MOUNT, V-BRACKET

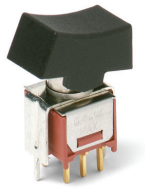


Actuator Shown In Pos. 1



PC MOUNTING





T201J1V3BE2
DPDT

CONTACT MATERIAL

OPTION CODE	CONTACT MATERIAL	TERMINAL PLATING	RATINGS	
B	GOLD [3]	GOLD [1]	LOW LEVEL/ DRY CIRCUIT	0.4 VA MAX. @ 20 V AC OR DC MAX.
P		MATTE-TIN [6]		
Q	SILVER [4,5]	SILVER [5]	POWER	TX01 MODELS: 3 AMPS @ 120 V AC OR 28 V DC. ALL OTHER MODELS: 2 AMPS @ 120 V AC OR 28 V DC.
G	GOLD OVER SILVER [2,3]	GOLD [3]	LOW LEVEL/DRY CIRCUIT OR POWER	TX01 MODELS: 0.4 VA MAX @ 20 V AC OR DC MAX. OR 3 AMPS @ 120 V AC OR 28 V DC. ALL OTHER MODELS: 0.4 VA MAX @ 20 V AC OR DC MAX. OR 2 AMPS @ 120 V AC OR 28 V DC.
R		MATTE-TIN [6]		

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

[1] CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.
[2] END CONTACTS: Coin silver, with gold plate over nickel plate.
[3] CENTER CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.
[4] END CONTACTS: Coin silver, silver plated.
[5] CENTER CONTACT & ALL TERMINALS: Copper alloy, silver plated.
[6] TERMINALS: Copper alloy, with matte-tin over nickel plate.

NOTE: Any models supplied with B, G, P, Q & R contact material are RoHS compliant.

All models ® with all options when ordered with G, Q, or R contact material.

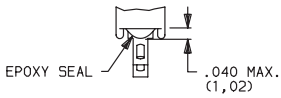
B contact material standard with A, AV, V3 terminations.

Q contact material standard with C & Z terminations.

P & R contact materials not available with Z terminations.

SEAL

E EPOXY SEAL



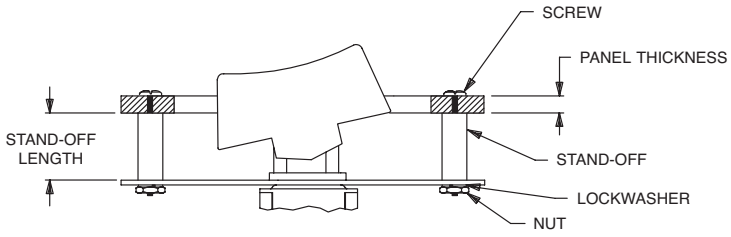
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

AVAILABLE HARDWARE

Panel mounting hardware for rocker and lever handle switches is available separately. Mounting hardware consists of two screws, two nuts, two standoffs and two lockwashers per switch, and is available for panel thicknesses of 1/16, 3/32 and 1/8 inch. See part numbers below.

TYPICAL ASSEMBLY



PART NO.	PANEL THK.	STANDOFF LENGTH
761101000	1/16 IN. (1,59)	.295 (7,49)
761102000	3/32 IN. (2,38)	.264 (6,71)
761103000	1/8 IN. (3,18)	.233 (5,92)

NOTE: Additional nuts, screws and lockwashers available separately, see Technical Data section of this catalog.

J1 Actuator

PART NO.
468002263 **BLACK**

Material: Nylon
Finish: Matte

J6 Actuator

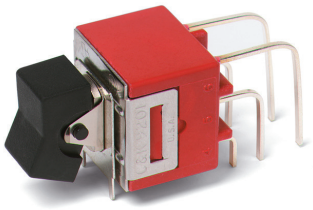
PART NO.
468102263 **BLACK**

Material: Nylon
Finish: Matte

NOTE: Other colors, custom actuator markings and legends available, consult Customer Service Center.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change



Features/Benefits

- *Thermoset UL 94V-0 housing*
- *Rugged construction*
- *Variety of actuator and termination options*
- *RoHS compliant*

Typical Applications

- *Small equipment*
- *Shut-off switch*

UL 61058-1

Specifications

CONTACT RATING:

9201 Model:

GP (general purpose)
6 AMPS 125 VAC 50/60 Hz T85 10,000 cycles (10E3)

3 AMPS 250 VAC 50/60 Hz T85 10,000 cycles

R (resistive)

6 AMPS 30 VDC T85 10,000 cycles

9221 Model:

GP (general purpose)

10 AMPS 125 VAC 50/60 Hz T85 10,000 cycles

5 AMPS 250 VAC 50/60 Hz T85 10,000 cycles

R (resistive)

10 AMPS 30 VDC T85 10,000 cycles

ELECTRICAL LIFE: 25,000 make-and-break cycles at full load.

CONTACT RESISTANCE: Below 10 m Ω typ. initial @ 2–4 V DC, 100 mA.

INSULATION RESISTANCE: 10^9 Ω min.

DIELECTRIC STRENGTH: 2,500 Vrms min. @ sea level.

OPERATING TEMPERATURE: –30°C to 85°C.

SOLDERABILITY: Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

Materials

CASE: Diallyl phthalate (DAP) (UL 94V-0).

ACTUATOR: Nylon, black standard.

FRAME-REAR MOUNT OPTIONS: Spring steel, black.

BUSHING: Brass, nickel plated.

HOUSING: Stainless steel.

SWITCH SUPPORT: Brass or steel, matte-tin plated.

MOUNTING BRACKET: Stainless steel.

END CONTACTS: 9201 Model: Coin silver, silver plated.
9221 Model: Silver cadmium oxide.

CENTER CONTACTS: Copper alloy, silver plated

ALL TERMINALS: 9201 Model: Copper alloy, silver plated.
9221 Model: Copper alloy, matte-tin plated.

TERMINAL SEAL: Epoxy.

HARDWARE: Nut, Screw & Lockwasher: Stainless steel. Standoff: Nylon standard, aluminum available, consult Customer Service Center.

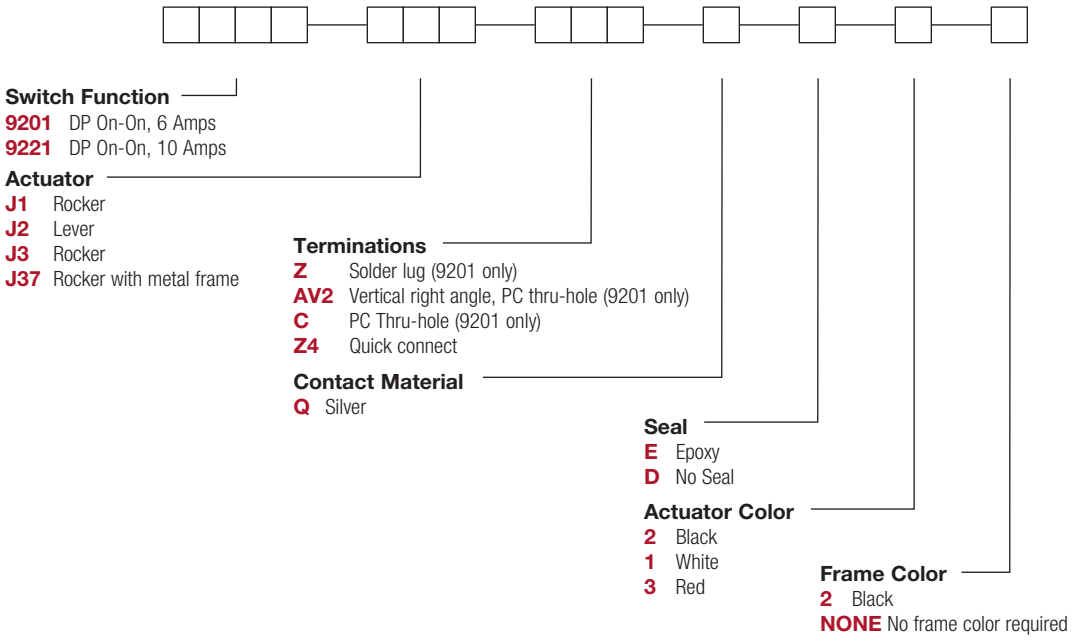
*Cadmium used in electrical contacts is acceptable for RoHS.

NOTE: Any models supplied with Q contact material are RoHS compliant.

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G-52 through G-55. For additional options not shown in catalog, consult Customer Service Center.



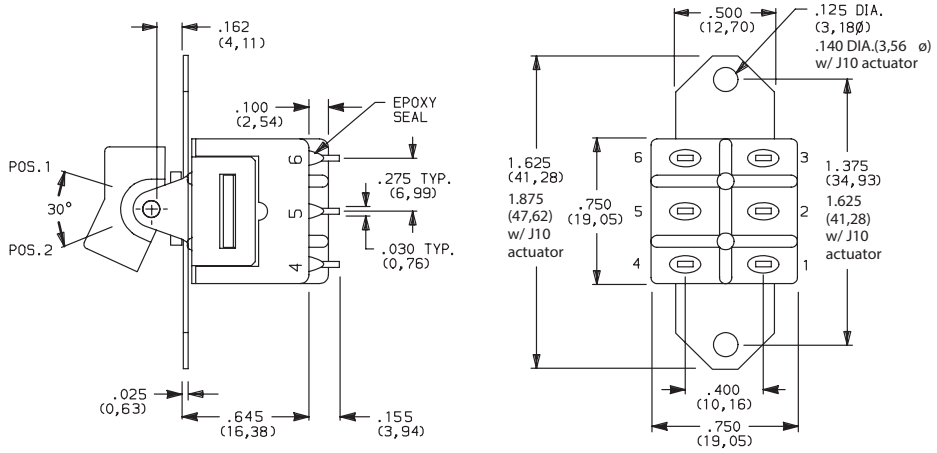
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

9000 Series
Power Rocker and Lever Handle Switches

SWITCH FUNCTION

NO. POLES	MODEL NO.	RATING*	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	SCHEMATIC
DP	9201	6 AMPS	ON	ON	2-3,5-6	2-1,5-4	DPDT
	9221	10 AMPS	ON	ON			

DPDT



Part number shown: 9201J1ZQE2

All 9000 Series models meet international dimensional and electrical requirements.

* See CONTACT MATERIAL, page G-54, for complete ratings.

9221 model must be ordered with Z4 terminations and D seal option.

ACTUATOR–PANEL MOUNT

ACTUATOR COLOR

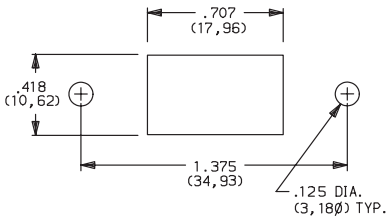
ACTUATOR

OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED

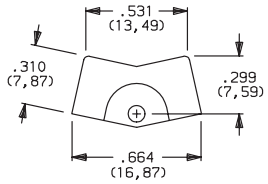
Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

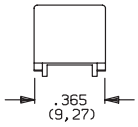
NOTE: Hardware: two each—mounting screws, nuts, lockwashers and standoffs for 1/8 inch thick panel are supplied standard on all switches with panel mounting brackets. Actuators available separately, see page G-55. Hardware available separately, see Technical Data section of this catalog.

PANEL MOUNTING

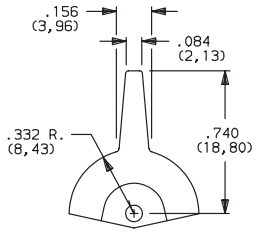


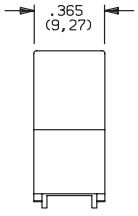
J1 ROCKER

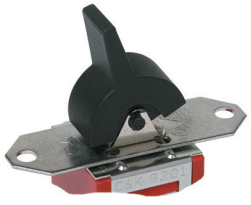




J2 LEVER



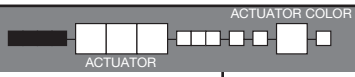




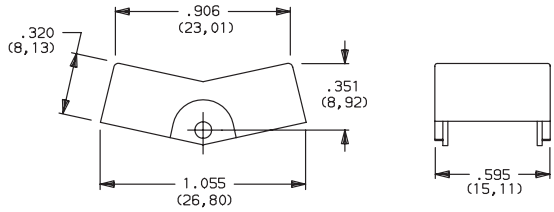
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

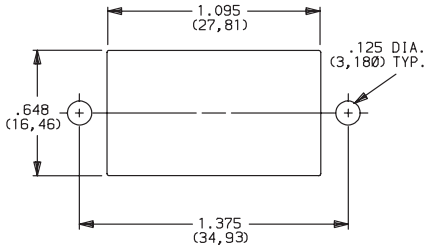
ACTUATOR–PANEL MOUNT



J3 ROCKER



PANEL MOUNTING

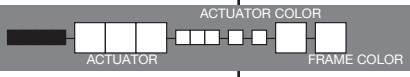


OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED

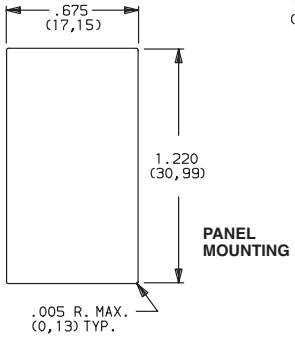
Actuator finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

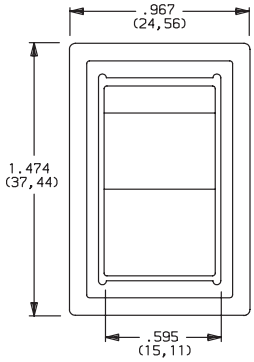
NOTE: Actuators available separately, see page G–55. Hardware: two each—mounting screws, nuts, lockwashers and standoffs for 1/8 inch thick panel are supplied standard on all switches with panel mounting brackets. Hardware available separately, see Technical Data section of this catalog.

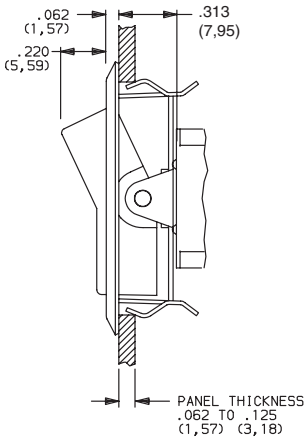
ACTUATOR–REAR MOUNT



J37 ROCKER WITH METAL FRAME







Not available with AV2 termination.

OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED

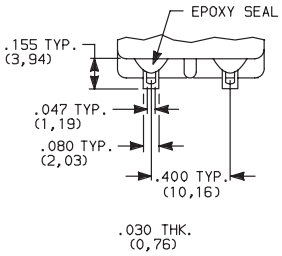
OPTION CODE	FRAME COLOR
2	BLACK

Actuator finish: Matte. Frame finish: Gloss. Other colors, custom actuator markings and legends available, consult Customer Service Center.

NOTE: Actuators & frames available separately, see page G-55. Hardware: two each—mounting screws, nuts, lockwashers and standoffs for 1/8 inch thick panel are supplied standard on all switches with panel mounting brackets. Hardware available separately, see Technical Data section of this catalog.

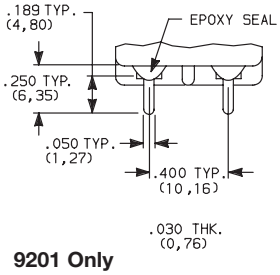
TERMINATIONS

Z SOLDER LUG

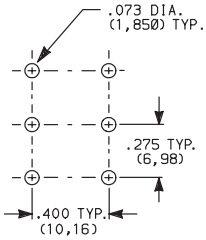


9201 Only

C PC THRU-HOLE

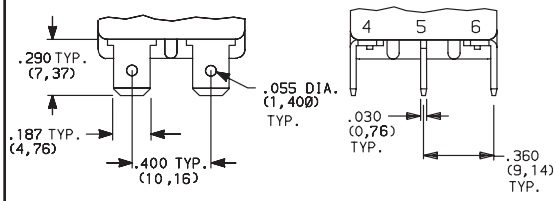


PC MOUNTING



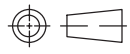
9201 Only

Z4 QUICK CONNECT



9201 and 9221

NOTE: Only termination available with 9221 model. Must be ordered with D seal option. Mating terminal standard Nema .187" quick connect.

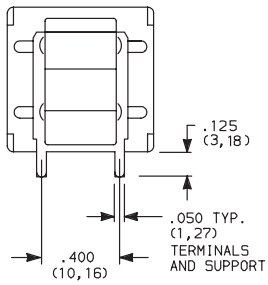


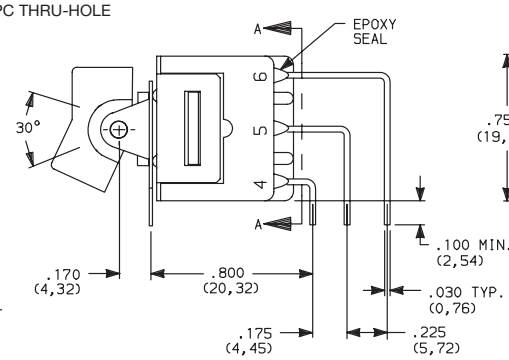
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

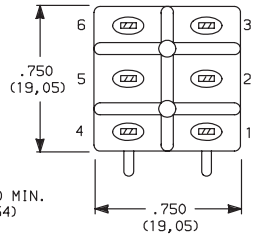
TERMINATIONS

AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE



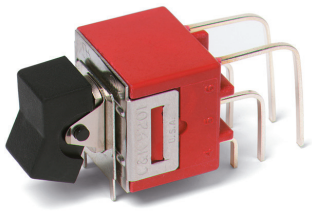


Actuator Shown In Pos. 1



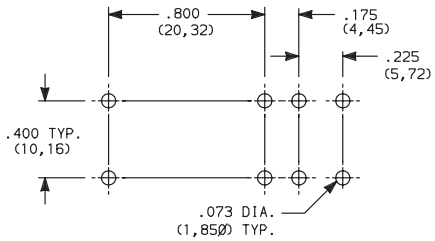
SECTION A-A

Terminal Nos. Molded On Side of Case



9201J1AV2QE2
Vertical Actuation
DPDT

PC MOUNTING



9201 Only

NOTE: Terminal bend radii and lead-in manufacturing option.
Terminal spacing greater than 3mm at all points.

CONTACT MATERIAL

OPTION CODE	MODEL	CONTACT MATERIAL	TERMINAL PLATING	RATINGS
Q	9201	SILVER [1,2]	SILVER OR TIN [2,5]	GP (general purpose) 6 AMPS 125 VAC 50/60 Hz T85 10,000 cycles (10E3) 3 AMPS 250 VAC 50/60 Hz T85 10,000 cycles R (resistive) 6 AMPS 30 VDC T85 10,000 cycles
	9221	SILVER CADMIUM OXIDE [3,4,6]	TIN [5]	GP (general purpose) 10 AMPS 125 VAC 50/60 Hz T85 10,000 cycles 5 AMPS 250 VAC 50/60 Hz T85 10,000 cycles R (resistive) 10 AMPS 30 VDC T85 10,000 cycles

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

[1] END CONTACTS: Coin silver, silver plated.
[2] CENTER CONTACTS & ALL TERMINALS: Copper alloy, silver plated.
[3] END CONTACTS: Silver cadmium oxide.
[4] CENTER CONTACTS: Copper alloy, silver plated.
[5] Z4 TERMINALS ONLY: Copper alloy, tin plated.
[6] Cadmium used for electrical contacts is acceptable for RoHS.

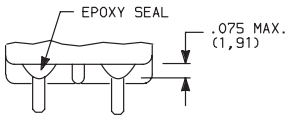
NOTE: Any models supplied with Q contact material is RoHS compliant.

9221 model must be ordered with Z4 terminations and D seal option.

All 9000 Series models meet international dimensional and electrical requirements.

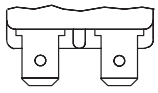
SEAL

E EPOXY SEAL



Not available with 9221 model or Z4 terminations.

D NO EPOXY SEAL



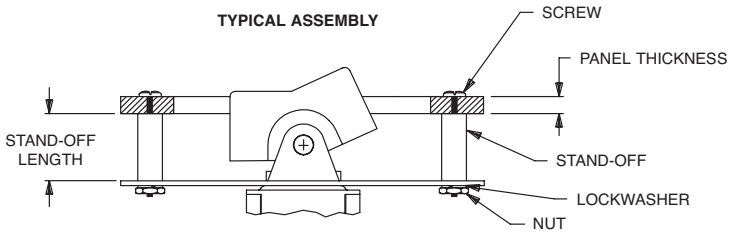
Must be ordered with 9221 model and Z4 termination.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

AVAILABLE HARDWARE

Panel mounting hardware for rocker and lever handle switches is available separately. Mounting hardware consists of two screws, two nuts, two standoffs and two lockwashers per switch, and is available for panel thicknesses of 1/16, 3/32 and 1/8 inch. See part numbers below.



J1 & J2 actuators

PART NO.	PANEL THK.	STANDOFF LENGTH
761101000	1/16 IN. (1,59)	.295 (7,49)
761102000	3/32 IN. (2,38)	.264 (6,71)
761103000	1/8 IN. (3,18)	.233 (5,92)

J1 Actuator

PART NO.

776A01000 WHITE
776A02263 BLACK
776A03000 RED

Material: Nylon
Finish: Matte

J2 Actuator

PART NO.

760501000 WHITE
760502263 BLACK
760503000 RED

Material: Nylon
Finish: Matte

J3, J37 Actuators

PART NO.

766601000 WHITE
766602263 BLACK
766603000 RED

Material: Nylon
Finish: Matte

Frame for J37 Actuators

PART NO.

445400746 BLACK ENAMEL

Material: Spring Steel

NOTE: Additional nuts, screws and lockwashers available separately, see Technical Data section of this catalog.

Other colors available, consult Customer Service Center.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

DA Series
Miniature Single Pole Rocker Switches

Features/Benefits

- ***Nice actuator styling with multiple options***
- ***Guards to prevent accidental actuation***
- ***Momentary and maintained functions***
- ***IP54 splash proof rubber boot option***
- ***RoHS compliant***

Typical Applications

- ***Small appliances***
- ***Computers and peripherals***
- ***Medical instrumentation***

UL 61058-1

Specifications

CONTACT RATING:
16 AMPS @ 125 VAC, 1/3 HP;
10 AMPS @ 250 VAC, 1/2 HP.
10 AMPS @ 125 VAC, 6 AMPS @ 250 VAC.
ELECTRICAL LIFE: 10,000 make and break cycles at full load.
INSULATION RESISTANCE: 10^8 Ω min.
DIELECTRIC STRENGTH: 1,500 VRMS @ sea level.
OPERATING TEMPERATURE: -20°C to +85°C

Materials

HOUSING AND ACTUATOR: 6/6 nylon (UL94V-2), black, matte finish.
ILLUMINATED ACTUATOR: Polycarbonate, matte finish.
CENTER CONTACTS: Silver plated, copper alloy.
END CONTACTS: Silver plated.
ALL TERMINALS: Silver plated, copper alloy.

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G-57 through G-60. For additional options not shown in catalog, consult Customer Service Center.

Switch Function
DA101 SPDT On-None-On
DA102 SPST On-None-Off
DA103 SPDT On-Off-On

Actuator
J1 Rocker
J2 Two-tone rocker
***, **J3** Illuminated rocker
**** J4** Circle, illuminated rocker
**** J5** Oval, illuminated rocker

Actuator Color
1-5 See Chart on Page G-59
***R** Red, illuminated
***A** Amber, illuminated
***G** Green, illuminated

* Actuator "J3" illuminated switches are not available with actuator markings

** Actuator "J3", "J4" and "J5" are not available with Termination option "17" solder lug

Mounting Style/Color
S2 Snap-in, black
S1 Snap-in, white
B2 Recessed snap-in bracket, black
G2 Guard, black

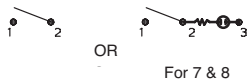
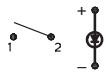
Termination
15 .187" quick connect
17 Solder lug
02 Thru-hole
A Right angle

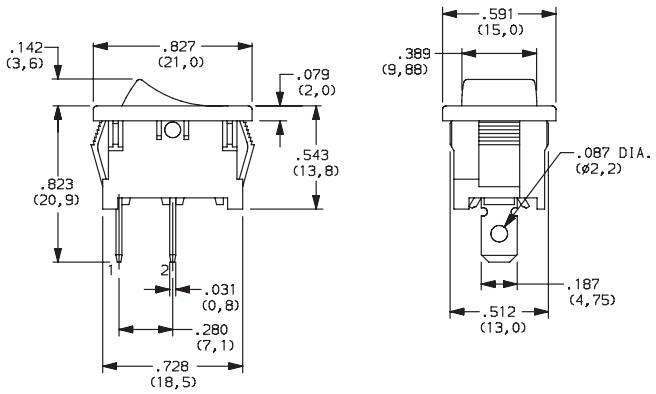
Actuator Marking
(NONE) No marking
D ON-OFF
H "O I" - international ON-OFF
N Large dot
P "O -" international ON-OFF

Contact Rating
QF Silver

Lamp Rating
(NONE) No lamp
6 LED
7 125 VAC neon
8 250 VAC neon

SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION (C&K marking on opposite side)			CONNECTED TERMINALS (C&K marking on opposite side)			SCHEMATIC
SP	DA101	ON	NONE	ON	2-3	N/A	2-1	
	DA102	ON	NONE	OFF				 OR For 7 & 8 Illuminated Versions Only
	DA103	ON	OFF	ON				 For 6 Illuminated Versions Only

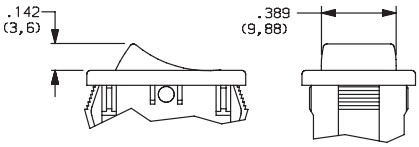


Shown in Pos. 1

ACTUATOR

J1 ROCKER

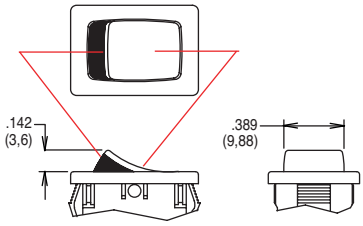
***J3** ILLUMINATED ROCKER



NOTE: J3 actuator available with DA102 switch functions, 7&8 lamp ratings and not available with O2 and A termination options.

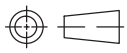
* J3 actuator not available with markings or Termination option "17" solder lug

J2 TWO-TONE ROCKER



NOTE:

1. Available with DA102 switch function only.
2. Available with None or P actuator marking options only.

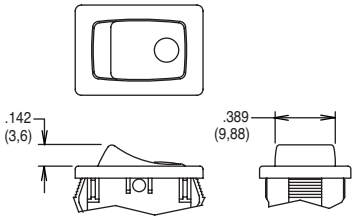

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

DA Series
Miniature Single Pole Rocker Switches

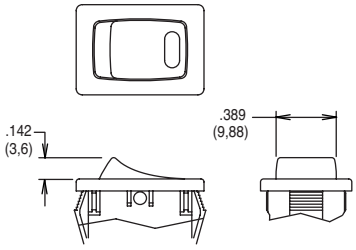
ACTUATOR

J4 CIRCLE, ILLUMINATED ROCKER



NOTE: Available with DA102 switch function and
7 & 8 lamp ratings combinations only. Not available with O2 and A termination options.
* J4 actuator not available with Termination option "17" solder lug

J5 OVAL, ILLUMINATED ROCKER

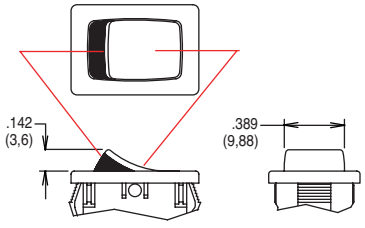


NOTE: Available with DA102 switch function and
6 lamp rating combinations only. Not available with O2 and A termination options.
* J5 actuator not available with Termination option "17" solder lug

ACTUATOR COLOR

	OPTION CODE	ACTUATOR COLOR
J1 only	2	BLACK
	1	WHITE
	3	RED
J3, J4, J5 only	R	RED, ILLUMINATED
	A	AMBER, ILLUMINATED
	G	GREEN, ILLUMINATED

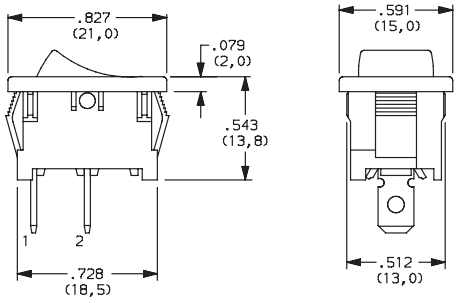
	OPTION CODE	ACTUATOR COLOR TOP	ACTUATOR COLOR BOTTOM
J2 only	1	WHITE	RED
	2	WHITE	BLACK
	3	RED	WHITE
	4	BLACK	WHTE
	5	BLACK	RED



MOUNTING STYLE/COLOR

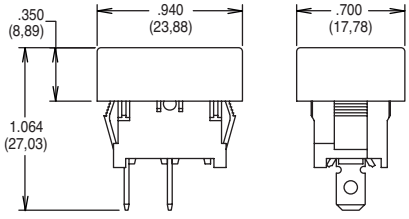
S2 SNAP-IN, BLACK

S1 SNAP-IN, WHITE



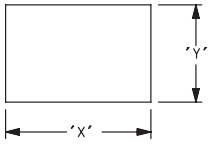
Actuator shown in Pos. 1

G2 GUARD, BLACK



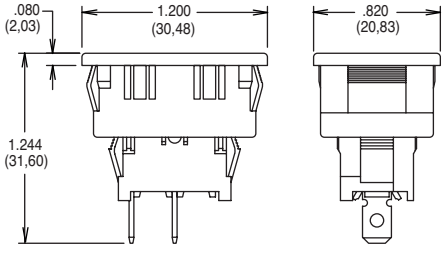
NOTE: Available with DA10X switch functions only.

S2, S1 & G2 PANEL MOUNTING



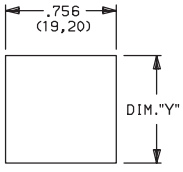
PANEL THICKNESS	"X"	"Y"
0.030-0.049 (0,75-1,25)	0.756-.004 (19,2-0,1)	0.512+.004 (13,0+0,1)
0.049-0.079 (1,25-2,0)	0.764-.004 (19,4-0,1)	0.512+.004 (13,0+0,1)
0.079-0.118 (2,0-3,0)	0.779-.004 (19,8-0,1)	0.512+.004 (13,0+0,1)

B2 RECESSED SNAP-IN BRACKET, BLACK



NOTE: Available with DA10X switch functions only.

B2 PANEL MOUNTING



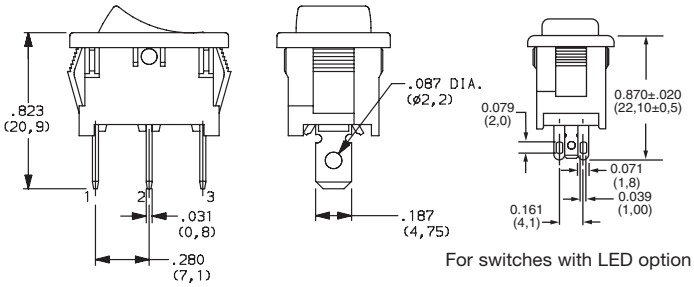
PANEL THICKNESS	"Y"
0.030-0.049 (0,75-0,25)	1.068 (27,13)
0.049-0.079 (1,25-2,0)	1.076 (27,33)
0.079-0.118 (2,0-3,0)	1.092 (27,74)

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

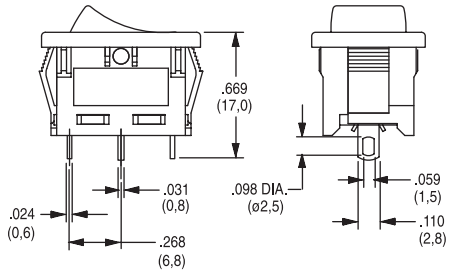
TERMINATION

15 .187" QUICK CONNECT

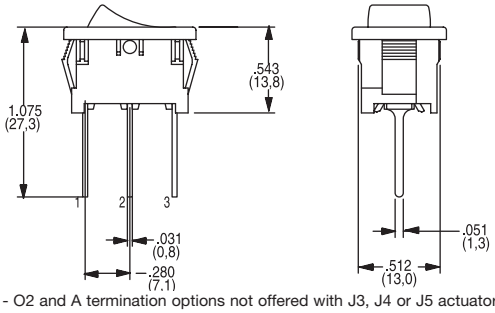


For switches with LED option

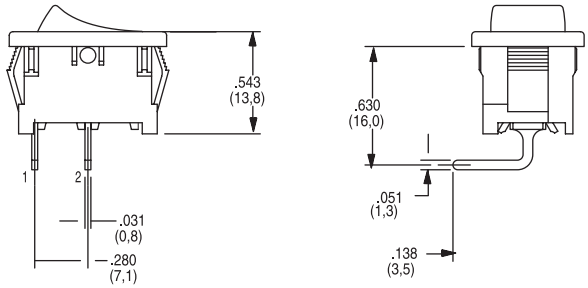
17 SOLDER LUG



02* THRU-HOLE



A* RIGHT ANGLE

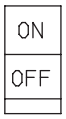


* NOTE - O2 and A termination options not offered with J3, J4 or J5 actuator options.

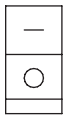
ACTUATOR MARKING

NONE NO MARKING

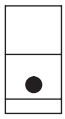
D ON-OFF



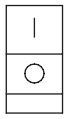
H O I



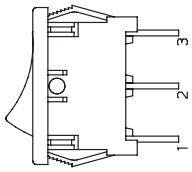
N LARGE DOT



P O -



All models shown in Pos. 1
Markings not available with J3 actuator



NOTE: Orientation of actuator marking and terminals.

CONTACT MATERIAL

OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATINGS	
QF	SILVER	POWER	16 AMPS @ 125 VAC; 1/3 HP; 10 AMPS @ 250 VAC; 1/2 10 AMPS @ 125 VAC, 6 AMPS @ 250 VAC

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

LAMP RATING

(NONE) NO LAMP

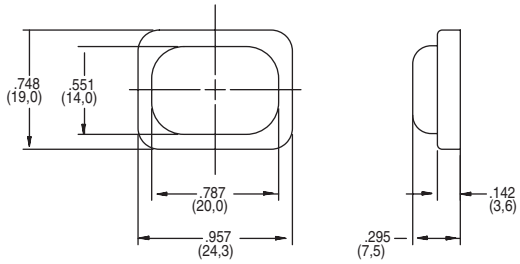
6 LED RATING @ 10 mA V_f=1.85V

7 125 VAC 33kΩ NEON

8 250 VAC 150kΩ NEON

ACCESSORIES

216C00000 IP54 SPLASH PROOF RUBBER BOOT



Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

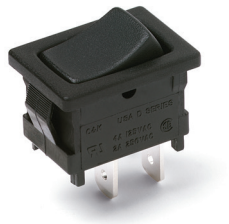
D Series
Miniature Snap-in Power Rocker Switches

Features/Benefits

- ***Momentary and maintained models***
- ***PC and quick connect terminals***
- ***Recessed bracket available — prevents accidental actuation***
- ***RoHS compliant***
- ***Gold plated options available***

Typical Applications

- ***Small appliances***
- ***Computers and peripherals***
- ***Medical instrumentation***



UL 61058-1

Specifications

CONTACT RATING:

D101, D102, D103, D105, D108, D201, D202, D203

GP (general purpose)
4 AMPS 125 VAC 50/60 Hz T85 10,000 cycles
2 AMPS 250 VAC 50/60 Hz T85 10,000 cycles

R (resistive)
4 AMPS 30 VDC T85 10,000 cycles

D501, D502, D503, D508, D601, D602, D608

GP (general purpose)
10 AMPS 125 VAC 50/60 Hz T85 10,000 cycles
5 AMPS 250 VAC 50/60 Hz T85 10,000 cycles

R (resistive)
10 AMPS 30 VDC T85 10,000 cycles

0.4VA @ 20V AC/DC (gold plating) available upon request

ELECTRICAL LIFE: 10,000 make-and-break cycles at full load.

INSULATION RESISTANCE: 10^9 Ω min.

DIELECTRIC STRENGTH: 1,000 Vrms min. @ sea level.

Materials

ACTUATOR & HOUSING: 6/6 nylon (UL 94V-2), color black, finish: matte.

MOVABLE CONTACTS: D10X and D20X Models: Copper, silver plated. D50X and D60X Models: Coin silver, silver plated.

STATIONARY CONTACTS AND TERMINALS: Copper or brass, silver plated. Gold plating available.

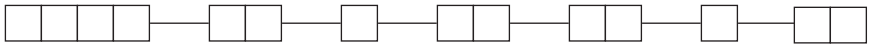
CONTACT SPRING: Music wire or stainless steel.

OPERATING TEMPERATURE: -30ºC to +65ºC

NOTE: Specifications and materials listed above are for standard switches. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G–61 through G–65. For additional options not shown in catalog, consult Customer Service Center.



Switch Function
- **D101** SPDT, On-None-On
- **D102** SPST, On-None-Off
- **D103** SPDT, On-Off-On
- **D105** SPDT, Mom.-Off-Mom.
- **D108** SPDT, Mom.-None-On
- **D201** DPDT, On-None-On
- **D202** DPST, On-None-Off
- **D203** DPDT, On-Off-On
- **D501** SPDT, On-None-On
- **D502** SPST, On-None-Off
- **D503** SPDT, On-Off-On
- **D508** SPDT, Mom.-None-On
- **D601** DPDT, On-None-On
- **D602** DPST, On-None-Off
- **D608** DPDT, Mom.-None-On

Actuator
- **J1** Rocker
- **J5** Lever

Actuator Color
- **2** Black
- **1** White
- **3** Red

Mounting Style/Color
- **S2** Snap-in, black
- **B2** Recessed snap-in actuator guard, black
- **G2** Actuator guard, black
- **S1** Snap-in, white

Terminations
- **15** Quick connect
- **A** Right angle, PC thru-hole
- **02** PC Thru-hole
- **05** Twisted quick connect
- **06** Extended PC thru-hole
- **17** Wirable quick connect

Actuator Markings
- **NONE** No marking
- **D** ON-OFF
- **H** O I
- **N** Large dot
- **P** O –
- **R** Red rectangle on end
- **U** Large dot on end

Contact Material
- **QA** Silver

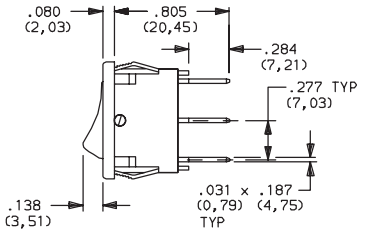
Gold plating options available contact Customer Service

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

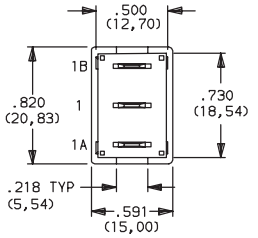
SWITCH FUNCTION

NO. POLES	MODEL NO.	AMP RATING*	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	SWITCH FUNCTION POS. 3	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	CONNECTED TERMINALS POS. 3	SCHEMATIC
SP	D102 D502	4 10	ON	NONE	OFF	1-1A	N/A	OPEN	SPST
	D101 D501	4 10	ON	NONE	ON			1-1B	SPDT
	D103 D503	4 10		OFF			OPEN		
	D105	4	MOM.	OFF	MOM.				
	D108 D508	4 10	MOM.	NONE	ON		N/A		

SPDT



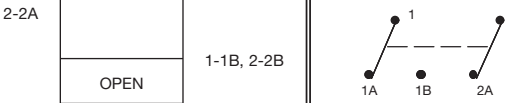
ACTUATOR SHOWN IN POSITION 1



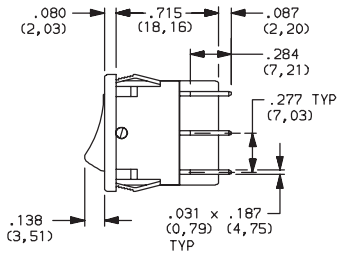
TERMINAL NOS.
FOR REF. ONLY

Part number shown: D101J12S215QA

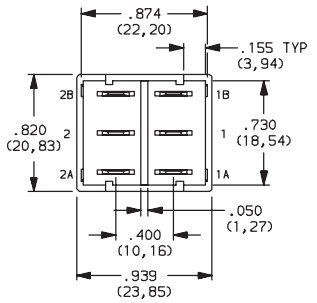
DP	D202 D602	4 10	ON	NONE	OFF	1-1A, 2-2A	N/A	OPEN	DPST
	D201 D601	4 10	ON	NONE	ON			1-1B, 2-2B	DPDT
	D203	4		OFF			OPEN		
	D608	10	MOM.	NONE			N/A		



DPDT



ACTUATOR SHOWN IN POSITION 1



TERMINAL NOS.
FOR REF. ONLY

Part number shown: D201J12S215QA

MOM. = Momentary

*AMP RATING: see G-60

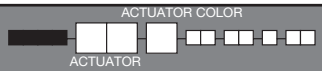
See CONTACT MATERIALS, page G-64.

Third Angle Projection

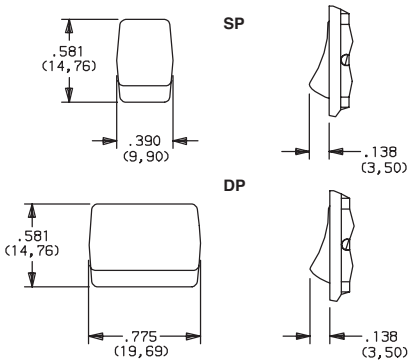
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

D Series
Miniature Snap-in Power Rocker Switches

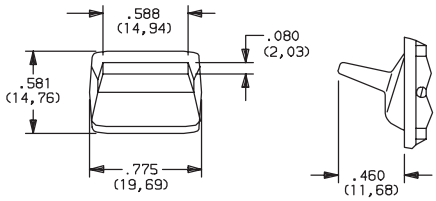
ACTUATOR



J1 ROCKER



J5 LEVER

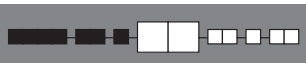


OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED

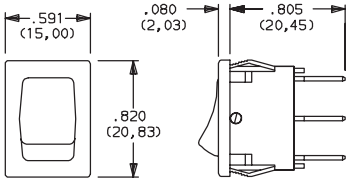
NOTE: Actuator finish: matte. Other colors available, consult Customer Service Center.

'J5' actuator available only with DP models D201, D202, D601 and D602.

MOUNTING STYLE/COLOR



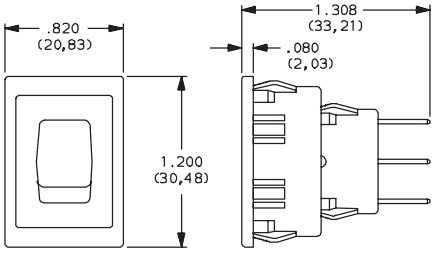
S SNAP-IN



OPTION CODE	HOUSING COLOR
2	(STD.) BLACK
1	WHITE

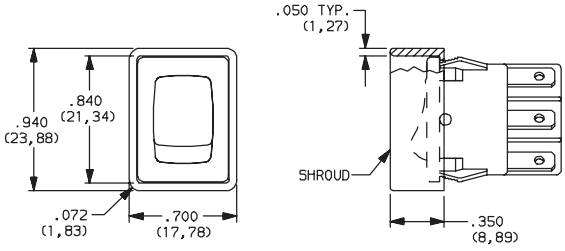
NOTE: Frame finish on housing: matte. Other colors available, consult Customer Service Center.

B2 RECESSED SNAP-IN ACTUATOR GUARD, BLACK



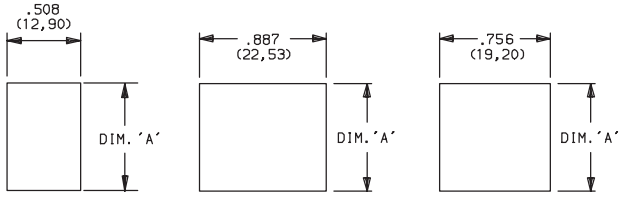
NOTE: Vertical mount, SP models only.

G2 ACTUATOR GUARD, BLACK



NOTE: Vertical mount, SP models only.

PANEL MOUNTING



SP MODELS 'S' & 'G2' mounting styles | **DP MODELS 'S' mounting style** | **SP MODELS 'B2' mounting style**

PANEL THICKNESS	DIM 'A' SP & DP MODELS 'S' MOUNTING STYLE	DIM 'A' WITH 'G2" OPTION SP MODELS ONLY	DIM 'A' SP MODELS 'B' MOUNTING STYLE
.030–.049 (0,76) (1,24)	.756 (19,20)	.764 (19,41)	1.068 (27,13)
.049–.079 (1,24) (2,01)	.764 (19,41)	.780 (19,81)	1.076 (27,33)
.079–.118 (2,01) (3,00)	.780 (19,81)	n/a	1.092 (27,74)

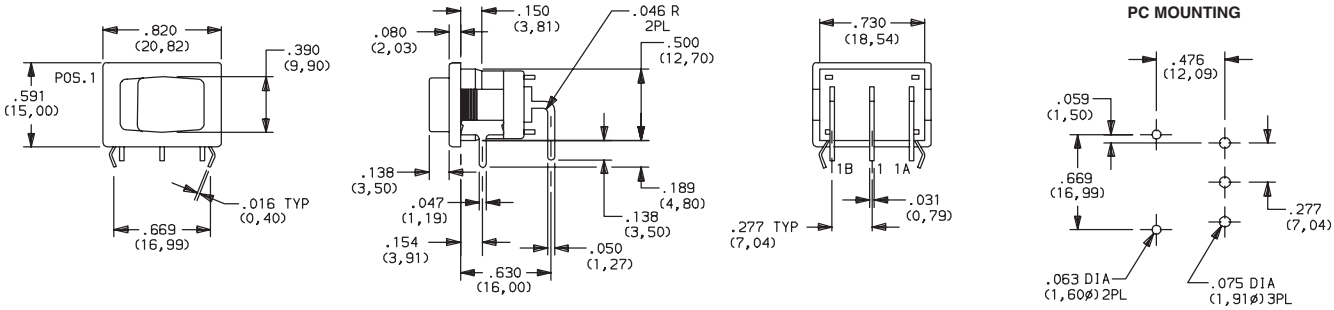
NOTE: Blank insert available for SP models only, see page G-64.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

TERMINATIONS

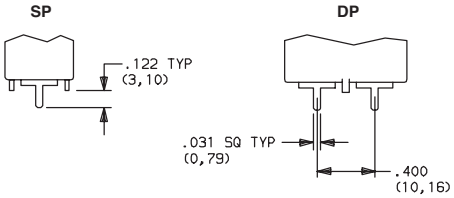
A RIGHT ANGLE, PC THRU-HOLE



Available with D101, D102, D501, D502 SP models only.

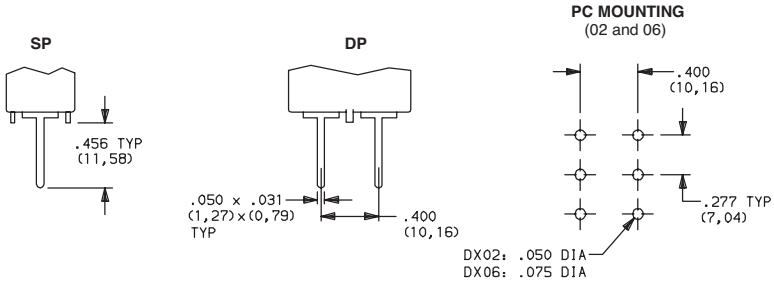
TERMINATIONS

02 PC THRU-HOLE



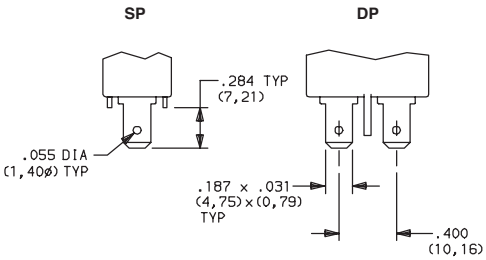
Available with DX01 and DX02 models only.

06 EXTENDED PC THRU-HOLE



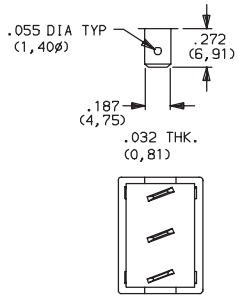
Available with DX01 and DX02 models only.

15 QUICK CONNECT



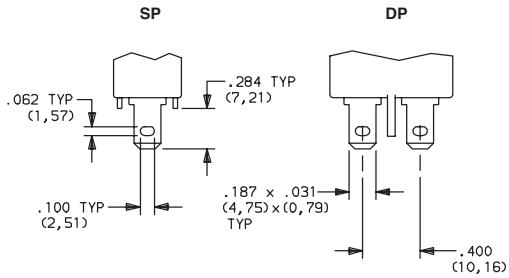
Available with DX01 and DX02 models only.

05 TWISTED QUICK CONNECT



NOTE: Terminals are twisted.

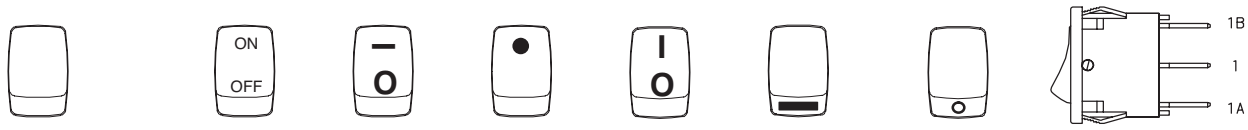
17 WIRABLE QUICK CONNECT



Available with DX01 and DX02 models only.

ACTUATORS

NONE NO MARKING **D** ON-OFF **H** O | **N** LARGE DOT **P** O – **R** RED RECTANGLE ON END **U** LARGE DOT ON END



'D, H, P & U' marking options: marking color white, standard for all actuator colors except white. Black marking color, standard for white actuators. 'R & N' marking option: red marking color, standard. Consult Customer Service Center for other available marking colors.

NOTE: Orientation of actuator markings and terminals.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

CONTACT MATERIAL

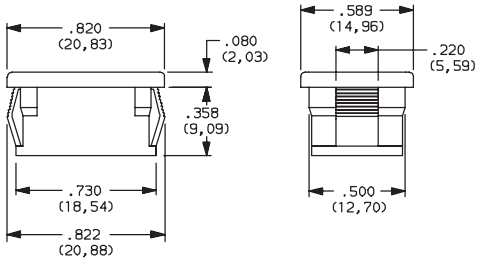
OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATINGS	
QA	SILVER [1]	D101, D102, D103, D105, D108, D201, D202, D203	
		GP (general purpose)	4 AMPS 125 VAC 50/60 Hz T85 10,000 cycles
			2 AMPS 250 VAC 50/60 Hz T85 10,000 cycles
		R (resistive)	4 AMPS 30 VDC T85 10,000 cycles
		D501, D502, D503, D508, D601, D602, D608	
		GP (general purpose)	10 AMPS 125 VAC 50/60 Hz T85 10,000 cycles
			5 AMPS 250 VAC 50/60 Hz T85 10,000 cycles
		R (resistive)	10 AMPS 30 VDC T85 10,000 cycles

[1]MOVABLE CONTACT: D10X and D20X MODELS: Copper, silver plated.
D50X and D60X MODELS: Coin silver, silver plated.
STATIONARY CONTACTS & TERMINALS: Copper or brass, silver plated.

0.4VA @ 20V AC/DC Gold plated options avilable contact Customer Service.

AVAILABLE HARDWARE

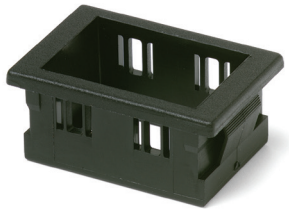
Insert
SP Only



PART NO.
057190200 BLACK

Material: Nylon 6/6
Finish: Matte

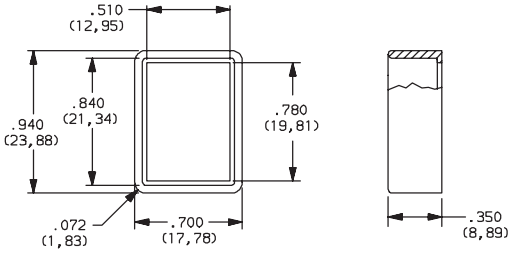
Recessed Actuator Guard,
SP Only



599D02000 BLACK

Material: 6/6 Nylon
Finish: Matte

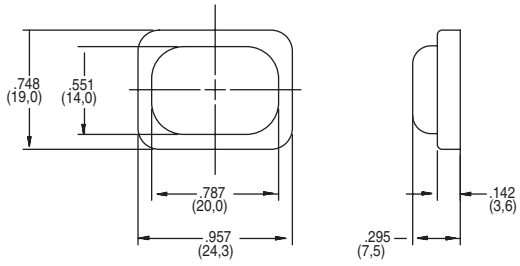
Actuator Guard



PART NO.
104C22000

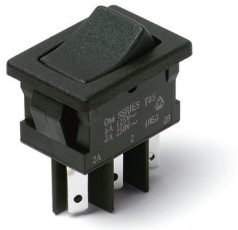
Material: PBT thermoplastic
Finish: Matte

PART NO.
216C00000 IP54 SPLASH PROOF RUBBER BOOT



Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change



Features/Benefits

- *3 AMPS to 10 AMPS*
- *Quick connect terminals*
- *Double pole in miniature size*
- *Recessed bracket available—prevents accidental actuation*
- *RoHS compliant*

Typical Applications

- *Computers*
- *Appliances*
- *Electric tools*

UL 61058-1

Specifications

CONTACT RATING:

DM21, DM22:

GP (general purpose)
3 AMPS 125 VAC 50/60 Hz T85 10,000 cycles
2 AMPS 250 VAC 50/60 Hz T85 10,000 cycles

R (resistive)
3 AMPS 30 VDC T85 10,000 cycles

DM61, DM62:

GP (general purpose)
10 AMPS 125 VAC 50/60 Hz T85 10,000 cycles
5 AMPS 250 VAC 50/60 Hz T85 10,000 cycles

R (resistive)
10 AMPS 30 VDC T85 10,000 cycles

ELECTRICAL LIFE: 10,000 make-and-break cycles at full load.

INSULATION RESISTANCE: 10^9 Ω min.

DIELECTRIC STRENGTH: 1,000 Vrms min. @ sea level.

OPERATING TEMPERATURE: -20°C to +65°C

Materials

HOUSING & ACTUATOR: 6/6 nylon (UL94V-2), black.

MOVABLE CONTACTS: DM2X Models: Copper, silver plated.
DM6X Models: Coin silver, silver plated.

STATIONARY CONTACTS & TERMINALS: Copper or brass, silver plated.

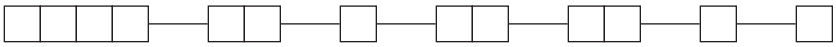
CONTACT SPRING: Music wire or stainless steel.

NOTE: Any models supplied with Q contact material are RoHS compliant.

NOTE: Specifications and materials listed above are for standard switches.
For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G–66 and G–69. For additional options not shown in catalog, consult Customer Service Center.



Switch Function
DM21 DPDT, On-On
DM22 DPST, On-Off
DM61 (STD.) DPDT, On-On
DM62 (STD.) DPST, On-Off

Actuator
J1 Rocker

Actuator Color
2 Black
1 White

Housing Style/Color
S2 Snap-in, black
B2 Recessed snap-in actuator guard, black
G2 Actuator guard, black

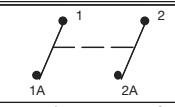
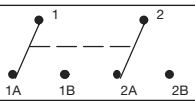
Terminations
05 Quick connect

Actuator Markings
NONE No marking
D ON-OFF
H O I
P O –

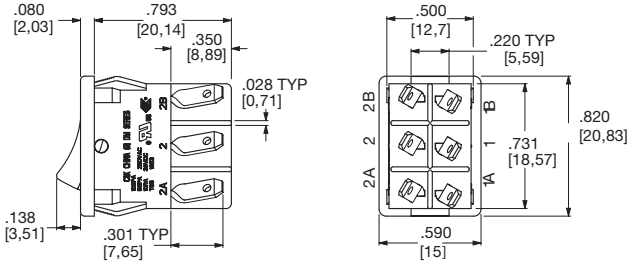
Contact Material
Q Silver

DM Series
Miniature 2 Pole Power Rocker Switches

SWITCH FUNCTION

NO. POLES	MODEL NO.	AMP RATING*	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	SCHEMATIC
DP	DM22 DM62	3 10	ON	OFF	1-1A, 2-2A	OPEN	DPST 
	DM21 DM61	3 10	ON	ON	1-1A, 2-2A	1-1B, 2-2B	DPDT 

DPDT



PART NUMBER SHOWN: DM21J1XS205Q

NOTES 1. ACTUATOR SHOWN IN POSITION 1-'ON' POSITION

RATINGS: See page G-65 for complete ratings.

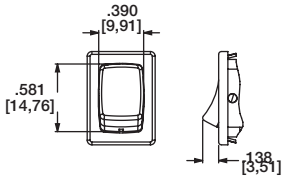
UL 61058-1 tested to 30C temperature rise @ 6,000 cycles.

ACTUATOR

ACTUATOR COLOR

ACTUATOR

J1 ROCKER

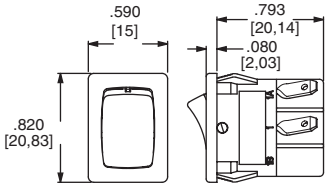


OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE

NOTE: Actuator finish: matte. Other colors available, consult Customer Service Center.

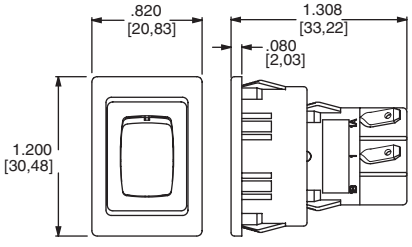
HOUSING STYLE/COLOR

S2 SNAP-IN, BLACK



NOTE: Housing finish: matte. Other colors available, consult Customer Service Center.

B2 RECESSED SNAP-IN ACTUATOR GUARD, BLACK

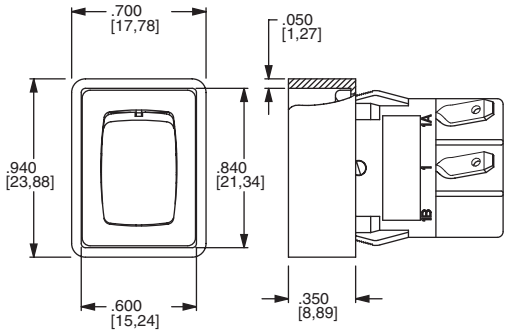


Third Angle Projection

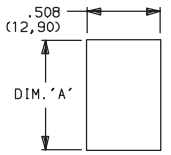
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

HOUSING STYLE/COLOR

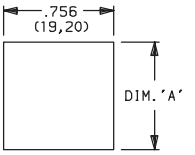
G2 ACTUATOR GUARD, BLACK



PANEL MOUNTING



'S2' & 'G2' housing styles



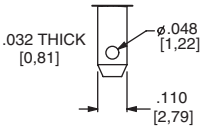
'B2' housing style

NOTE: Blank insert available for SP models only, see page H–76.

PANEL THICKNESS	DIM 'A' 'S2' & 'G2' HOUSING STYLES	DIM 'A' 'G2' OPTION SP MODELS ONLY	DIM 'A' 'B2' HOUSING STYLES
.030–.049 (0,76) (1,24)	.756 (19,20)	0.764 (19,41)	1.068 (27,13)
.049–.079 (1,24) (2,01)	.764 (19,41)	0.780 (19,81)	1.076 (27,33)
.079–.118 (2,01) (3,00)	.780 (19,81)	n/a	1.092 (27,74)

TERMINATIONS

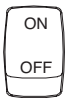
05 QUICK CONNECT



ACTUATOR MARKINGS

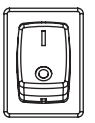
NONE NO MARKING

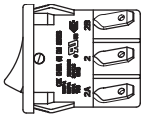
D ON-OFF



H O I

P O –





NOTE: Orientation of actuator markings and terminals.

'D & P' marking options: marking color white, standard for all actuator colors except white actuators. Black marking color standard for white actuators. Consult Customer Service Center for other available marking colors.

CONTACT MATERIAL

OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATINGS		
Q	SILVER [1,2]	DM21, DM22:	GP (general purpose)	3 AMPS 125 VAC 50/60 Hz T85 10,000 cycles
				2 AMPS 250 VAC 50/60 Hz T85 10,000 cycles
			R (resistive)	3 AMPS 30 VDC T85 10,000 cycles
		DM61, DM62:	GP (general purpose)	10 AMPS 125 VAC 50/60 Hz T85 10,000 cycles
				5 AMPS 250 VAC 50/60 Hz T85 10,000 cycles
			R (resistive)	10 AMPS 30 VDC T85 10,000 cycles

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

[1] MOVABLE CONTACT: DM2X Models: Copper, silver plated.
DM6X Models: Coin silver, silver plated.

[2] STATIONARY CONTACTS & TERMINALS: Copper or brass, silver plated.

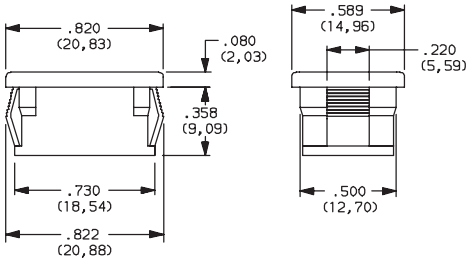
NOTE: Any models supplied with Q contact material are RoHS compliant.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

AVAILABLE HARDWARE

Insert

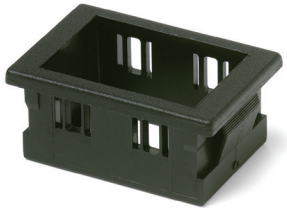


PART NO.

057190200

Material: Nylon 6/6
Finish: Matte

Recessed Actuator Guard

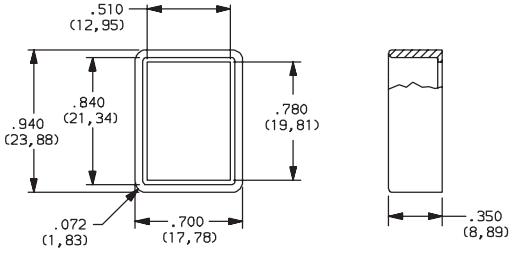


PART NO.

599D02000

Material: 6/6 Nylon
Finish: Matte

Actuator Guard



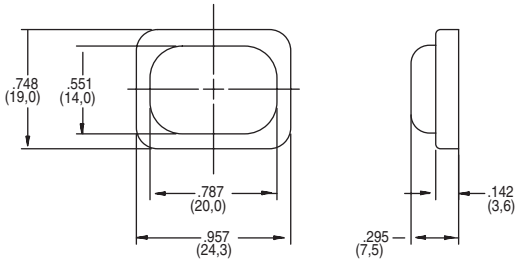
PART NO.

104C22000

Material: PBT thermoplastic
Finish: Matte

PART NO.

216C00000 IP54 SPLASH PROOF RUBBER BOOT



Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

Features/Benefits

- *3 AMPS to 10 AMPS*
- *Illuminated LED*
- *Positive detent*
- *RoHS compliant*

Typical Applications

- *Instrumentation*
- *Industrial*
- *Office machines*

UL 61058-1

Specifications

CONTACT RATING:

DM14 and DM24 Models:

GP (general purpose)
3 AMPS @ 125 V AC; 2 AMPS @ 250 V AC.

R (resistive)
3 AMPS 30 VDC 10,000 cycles

DM54 and DM64 Models:

GP (general purpose)
10 AMPS @ 125 V AC; 5 AMPS @ 250 V AC (UL).

R (resistive)
10 AMPS 30 VDC 10,000 cycles

ELECTRICAL LIFE: 10,000 make-and-break cycles at full load.

INSULATION RESISTANCE: 10^9 Ω min.

DIELECTRIC STRENGTH: 1,000 Vrms min. @ sea level.

Materials

HOUSING: 6/6 nylon (UL94V-2), black.

ACTUATOR: 6/6 nylon (UL94V-2), black.

MOVABLE CONTACTS: DM14 and DM24 Models: Copper, silver plated. DM54 and DM64 Models: Coin silver, silver plated.

STATIONARY CONTACTS & TERMINALS: Copper or brass, silver plated.

LED TERMINALS: Brass, unplated.

CONTACT SPRING: Music wire or stainless steel.

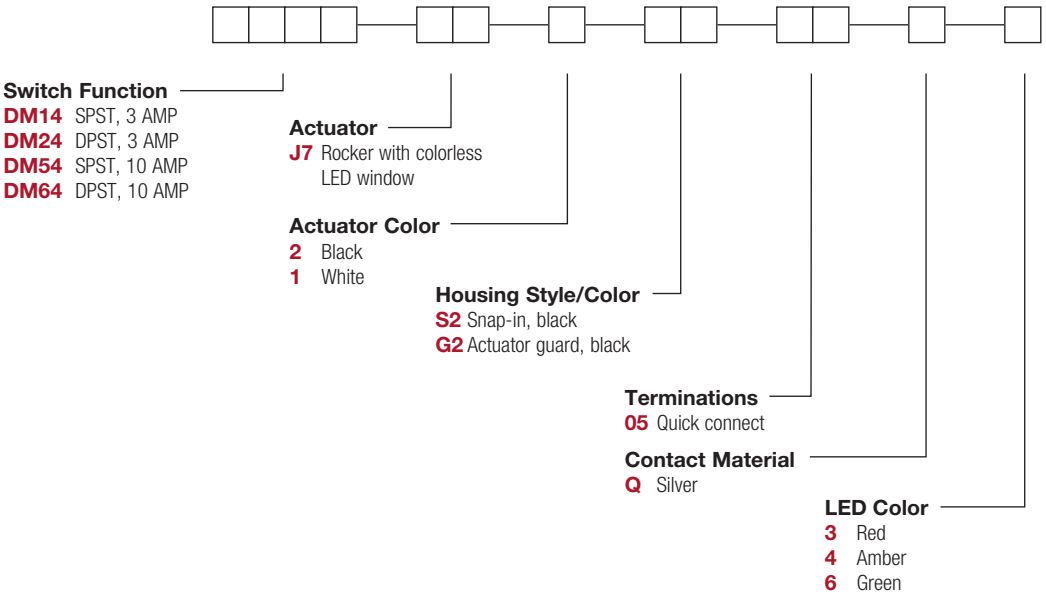
OPERATING TEMPERATURE: -20ºC to +65ºC

NOTE: Any models supplied with Q contact material are RoHS compliant.

NOTE: Specification and materials listed above are for standard switches.
For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

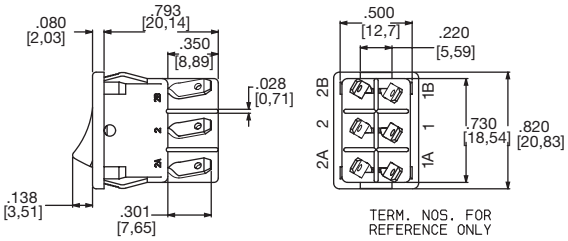
To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G–70 and G–73. For additional options not shown in catalog, consult Customer Service Center.



SWITCH FUNCTION

NO. POLES	MODEL NO.	AMP RATING*	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	SCHEMATIC
SP	**DM14** **DM54**	3 10	ON	OFF	1-1A	OPEN	SPST
DP	**DM24** **DM64**	3 10	ON	OFF	1-1A, 2-2A	OPEN	DPST

DPDT



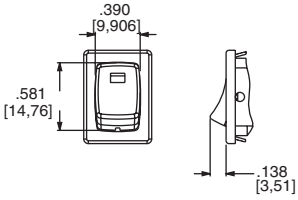
Actuator shown in pos. 1 – 'ON' position.
SPST MODELS (D M14 & DM54) OMIT TERM INALS 2 & 2A.

Part number shown: DM24J72S205Q3

* RATINGS: see page G-69.

ACTUATOR

J7 ROCKER WITH COLORLESS LED WINDOW

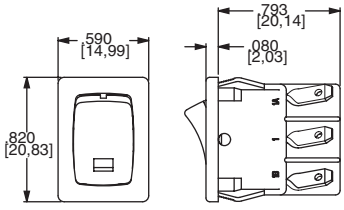


OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE

NOTE: Other colors available, consult Customer Service Center.

HOUSING STYLE/COLOR

S2 SNAP-IN, BLACK



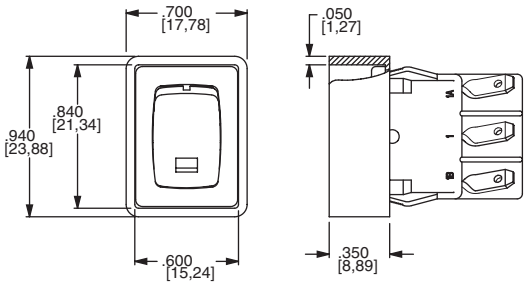
NOTE: Housing finish: matte. Other colors available, consult Customer Service Center.

Third Angle Projection

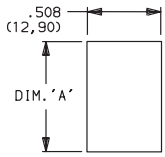
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

HOUSING STYLE/COLOR

G2 ACTUATOR GUARD, BLACK



PANEL MOUNTING



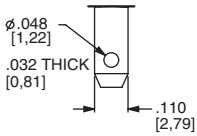
'S2' & 'G2' housing style

NOTE: Blank insert available for SP models only, see page H-80.

PANEL THICKNESS	DIM 'A' 'S2' & 'G2' HOUSING STYLES	DIM 'A' with 'G2' option SP MODELS ONLY
.030–.049 (0,76) (1,24)	0.756 (19,20)	0.764 (19,41)
.049–.079 (1,24) (2,01)	0.764 (19,41)	0.780 (19,81)
.079–.118 (2,01) (3,00)	.780 (19,81)	n/a

TERMINATIONS

05 QUICK CONNECT



CONTACT MATERIAL

OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATINGS			
Q	SILVER [1,2]	POWER	DM14, DM24:	GP (general purpose)	3 AMPS @ 125 V AC; 2 AMPS @ 250 V AC.
				R (resistive)	3 AMPS 30 VDC 10,000 cycles
			DM54, DM64:	GP (general purpose)	10 AMPS @ 125 V AC; 5 AMPS @ 250 V AC.
				R (resistive)	10 AMPS 30 VDC 10,000 cycles

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

[1] MOVABLE CONTACTS: DM14 and DM24 models: Copper, silver plated.
DM54 and DM64 models: Coin silver, silver plated.

[2] STATIONARY CONTACTS & TERMINALS: Copper or brass, silver plated.

NOTE: Any models supplied with Q contact material are RoHS compliant.

LED COLOR

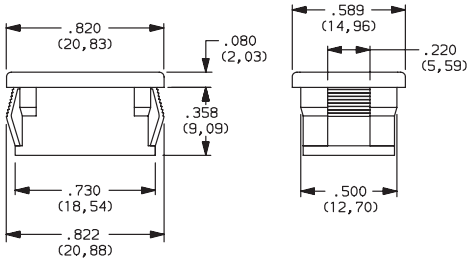
OPTION CODE	LED COLOR	FORWARD V_{FD}	CURRENT L_{LED}	REVERSE V_R	INTENSITY M_{CD}	RECOMMENDED RESISTOR @ VOLTAGE		
						5V	12V	24V
3	Red	2.1	10	4V	1.6 typ.	270	1K	2.2K
4	Amber	2.2	20	4V	2.5 typ.	150	510	1.2K
6	Green	2.1	20	4V	2.0 typ.	150	510	1.2K

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

AVAILABLE HARDWARE

Blank Insert

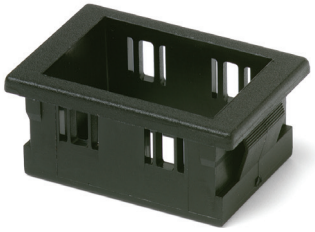


PART NO.

057190200

Material: Zinc nylon 6/6
Finish: Matte

Recessed Bracket

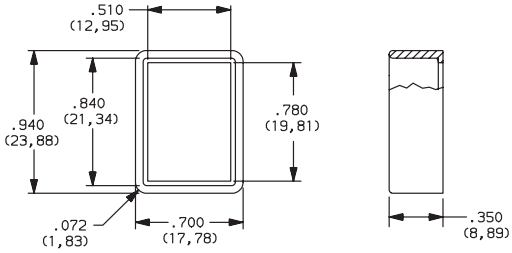


PART NO.

599D02000

Material: 6/6 Nylon
Finish: Matte

Actuator Guard



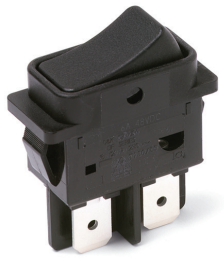
PART NO.

104C22000

Material: PBT thermoplastic
Finish: Matte

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change



Features/Benefits

- *Power switching up to 16 AMPS*
- *Sub-panel and Front-panel mounting*
- *PC and quick connect terminals*
- *Multi-position and multi-pole function*
- *RoHS compliant*

Typical Applications

- *Computers*
- *Power supplies*
- *Appliances*
- *Fitness equipment*
- *Off-road vehicles*

Specifications

CONTACT RATING: 16 AMPS @ 125, 250 V AC; 1/4 HP @ 125 V AC; 1/2 HP @ 250 V AC; 6 AMPS @ 48 V DC, 2 AMPS @ 60 V DC, 11 AMPS @ 30 V DC

ELECTRICAL LIFE: 10,000 make-and-break cycles at full load.

INSULATION RESISTANCE: 10^9 Ω min.

DIELECTRIC STRENGTH: 1,000 Vrms min. @ sea level.

OPERATING TEMPERATURE: -20ºC to +85ºC

Materials

HOUSING & ACTUATOR: 6/6 nylon (UL 94V-2), black, finish: matte.

CONTACTS: Fine silver, silver plated.

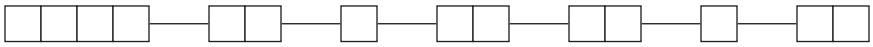
TERMINALS: Copper, silver plated.

CONTACT SPRING: Music wire or stainless steel.

NOTE: Specifications and materials listed above are for standard switches. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G–74 thru G–76. For additional options not shown in catalog, consult Customer Service Center.



Switch Function
DF52 SPST, Off-On
DF62 DPST, Off-On
DF72 SPDT, Off-On-On

Actuator
J1 Rocker

Actuator Color
2 Black
1 White

Housing Style/Color
S2 Sub-panel, black
G2 Actuator guard, black
P2 Panel, black
S1 Sub-panel, white

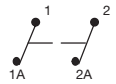
Terminations
15 Quick connect
A Right angle, PC thru-hole

Actuator Markings
NONE No marking
D ON-OFF
H 0 I
P 0 –

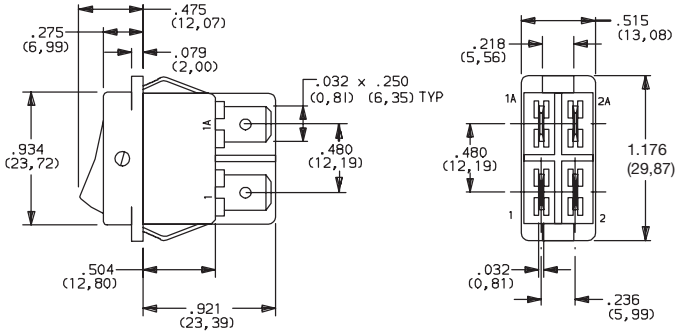
Contact Material
QA Silver

DF Series
Power Rocker Switches

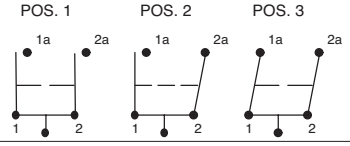
SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	SCHEMATIC
SP	**DF52**	OFF	ON	OPEN	1-1A	SPST
DP	**DF62**	OFF	ON	OPEN	1-1A, 2-2A	DPST 

Part Number shown DF62J12S215QA



Actuator shown in Pos. 1

NO. POLES	MODEL NO.	POS. 1	POS. 2	POS. 3	POS. 1	POS. 2	POS. 3	SCHEMATIC
SP	**DF72**	OFF	ON	ON	OPEN	1 / 2-2A	1 / 2-1A 1 / 2-2A	

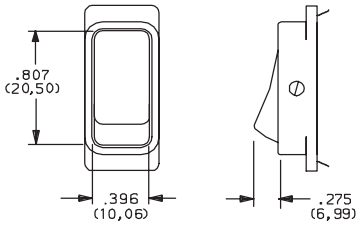
All models

ACTUATOR

ACTUATOR COLOR

ACTUATOR

J1 ROCKER



OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE

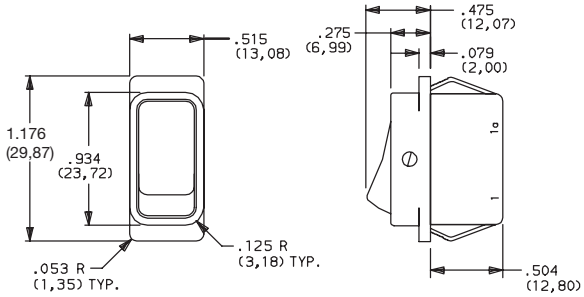
NOTE: Actuator finish: matte. Other colors available, consult Customer Service Center.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

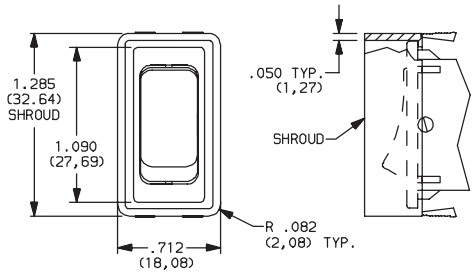
HOUSING STYLE/COLOR

S SUB-PANEL



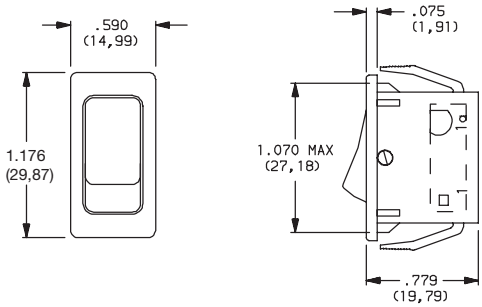
NOTE: DF52 & DF62 models only.

G2 ACTUATOR GUARD



NOTE: Not available with 'A' termination.
Available in black only.

P PANEL



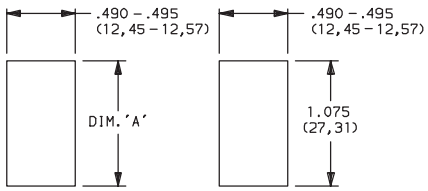
NOTE: Not available with 'A' termination.
Available in black only.

OPTION CODE	HOUSING COLOR
2	(STD.) BLACK
1	WHITE

NOTE: Housing finish: matte. Other colors available, consult Customer Service Center.

PANEL THICKNESS	DIM 'A'
.029–.048 (0,74) (1,22)	1.021 (25,93)
.048–.078 (1,22) (1,98)	1.029 (26,14)
.078–.117 (1,98) (2,97)	1.045 (26,54)
.075–.140 (1,91) (3,56)	1.075 (27,31)

PANEL MOUNTING

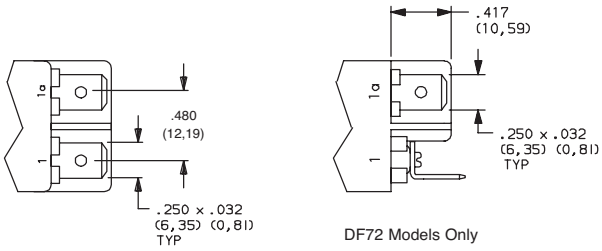


DF52 & DF62 Models with 'S' housing style

DF52, DF62 & DF72 Models with 'P2' & 'G2' housing style

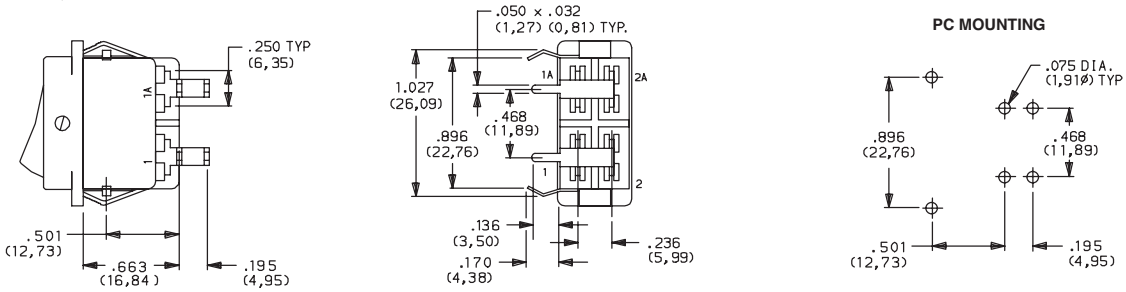
TERMINATIONS

15 QUICK CONNECT



DF72 Models Only

A RIGHT ANGLE, PC THRU-HOLE



Actuator shown in Pos. 1

NOTE: DF52 and DF62 Models Only

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

DF Series
Power Rocker Switches

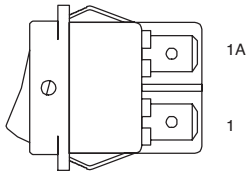
ACTUATOR MARKINGS

NONE NO MARKING

D ON-OFF

H O |

P O –



NOTE: Orientation of actuator markings and terminals.

'D, H, & P' marking options: marking color white, standard for all actuator colors except white.
Marking color black, standard for white actuators. Consult Customer Service Center for other available marking colors.

CONTACT MATERIAL

OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATINGS	
QA	SILVER [1,2]	POWER	16 AMPS @ 125, 250 V AC; 1/4 HP @ 125 V AC; 1/2 HP @ 250 V AC; 6 AMPS @ 48 V DC (UL), 2 AMPS @ 60 V DC, 11 AMPS @ 30 V DC
			16 AMPS @ 125, 250 V AC; 1/4 HP @ 125 V AC; 1/2 HP @ 250 V AC (UL)

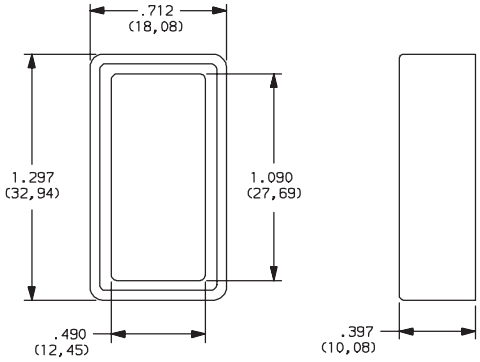
* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

[1] CONTACTS: Fine silver, silver plated.
[2] TERMINALS: Copper, silver plated.

All models

AVAILABLE HARDWARE

Actuator Guard



PART NO.
285B02000

Material: Nylon 6/6
Finish: Matte

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

Features/Benefits

- *Round actuator and body*
- *Nice styling*
- *Multiple illuminated versions available*
- *IP65 splash proof rubber boot option*

Typical Applications

- *Appliances, small and large*
- *Office equipment*
- *Computers and peripherals*
- *Audio/Video equipment*
- *RoHS compliant*

UL 61058-1

Specifications

CONTACT RATING:
16 AMPS @ 125 VAC, 10 AMPS @ 250 VAC.
16 AMPS @ 125 VAC, 10 AMPS @ 250 VAC.
ELECTRICAL LIFE: 10,000 make and break cycles at full load.
INSULATION RESISTANCE: 10^8 Ω min.
DIELECTRIC STRENGTH: 1,500 VRMS @ sea level.
OPERATING TEMPERATURE: -20ºC to + 85ºC

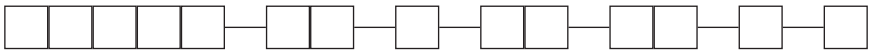
Materials

HOUSING AND ACTUATOR: 6/6 nylon (UL94V-2), matte finish.
ILLUMINATED ACTUATOR: Polycarbonate, matte finish.
CENTER CONTACTS: Silver plated, copper alloy.
END CONTACTS: Silver plated $AgSn0_2In0_3$.
ALL TERMINALS: Silver plated, copper alloy.

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G–78 through G–80. For additional options not shown in catalog, consult Customer Service Center.



Switch Function
CR101 SPDT On-None-On
CR102 SPST On-None-Off

Actuator
J1 Rocker
J2* Two-tone rocker
J3 Illuminated rocker
J4** Circle, illuminated rocker
J5 Oval, illuminated rocker
JN Paddle, rocker
JP Paddle, illuminated rocker

Actuator Color
2 Black
1 White
3 Red
R Red, illuminated
A Amber, illuminated
G Green, illuminated

Mounting Style/Color
S2 Snap-in, black
S1 Snap-in, white

Termination
15 .187" quick connect

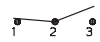
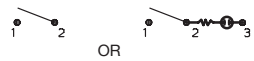
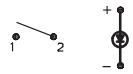
Contact Rating
QF Silver

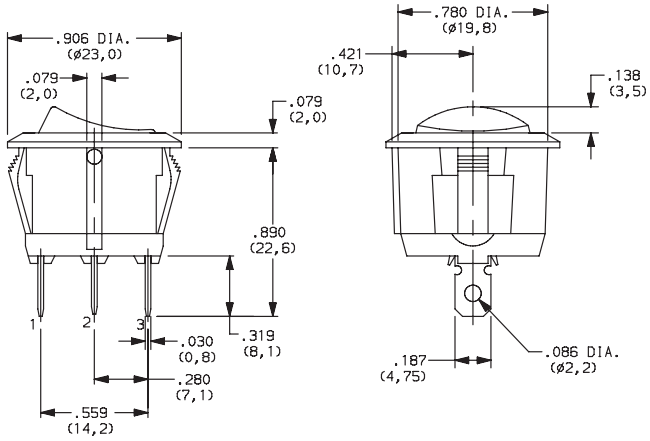
Lamp Rating
(NONE) No lamp
6 LED
7 125 VAC neon
8 250 VAC neon

* Refer to table on page G-79 for actuator options.

CR Series
Round Single Pole Specialty Rocker Switches

SWITCH FUNCTION

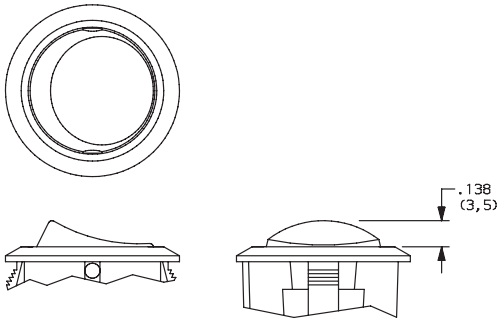
NO. POLES	MODEL NO.	SWITCH FUNCTION Pos. 1	SWITCH FUNCTION Pos. 2	SWITCH FUNCTION Pos. 3	CONNECTED TERMINALS Pos. 1	CONNECTED TERMINALS Pos. 2	CONNECTED TERMINALS Pos. 3	SCHEMATIC
		C&K marking on opposite side			C&K marking on opposite side			
SP	CR101	ON	NONE	ON	2-3	N/A	2-1	
	CR102	ON	NONE	OFF				 OR For 7 & 8 Illuminated Versions 



ACTUATOR

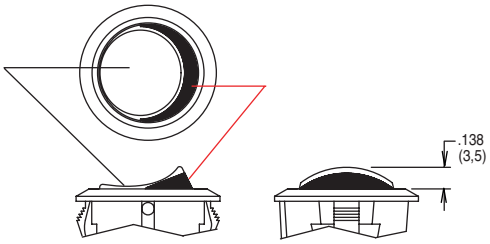
J1 ROCKER

J3 ILLUMINATED ROCKER



NOTE: J3 actuator available with the combination of 7 & 8 lamp ratings and CR102 switch function only.

J2 TWO-TONE ROCKER

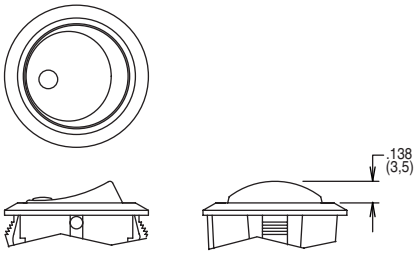


Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

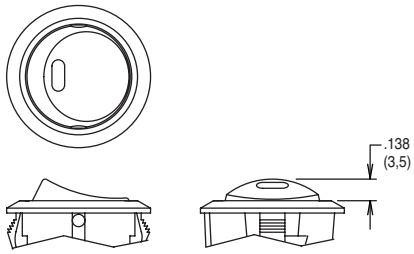
ACTUATOR

J4 CIRCLE, ILLUMINATED ROCKER



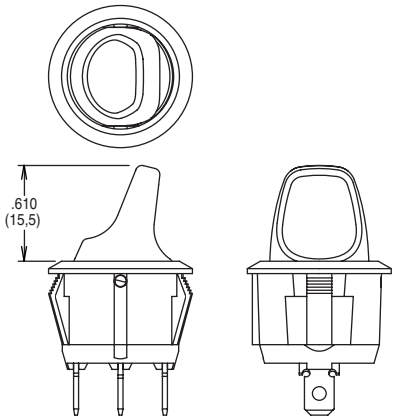
NOTE: Available with the combination of CR102 switch function and 7 & 8 lamp ratings only.

J5 OVAL, ILLUMINATED ROCKER



NOTE: Available with the combination of CR102 switch function and 6 lamp rating only.

JN PADDLE, ROCKER
JP PADDLE, ILLUMINATED ROCKER



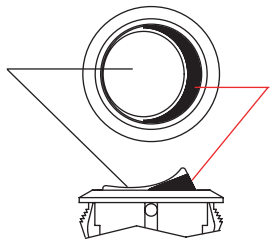
NOTE: JP actuator available with the combination of CR102 switch function and 7 & 8 lamp ratings only.

ACTUATOR COLOR

ACTUATOR	OPTION CODE	ACTUATOR COLOR
J1	2	BLACK
	1	WHITE
	3	RED
J3, J4 J5, JP	R	RED, ILLUMINATED
	A	AMBER, ILLUMINATED
	G	GREEN, ILLUMINATED

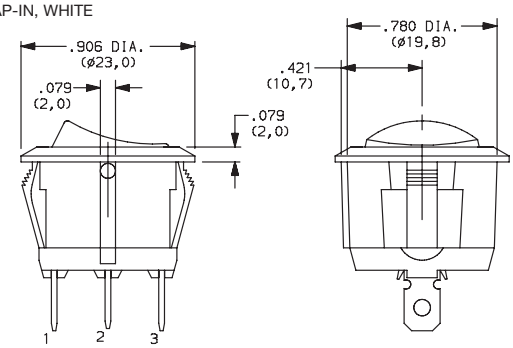
ACTUATOR	OPTION CODE	ACTUATOR COLOR TOP	BOTTOM
J2	1	WHITE	RED
	2	WHITE	BLACK
	3	RED	WHITE
	4	BLACK	WHTE
	5	BLACK	RED

J2 actuator only

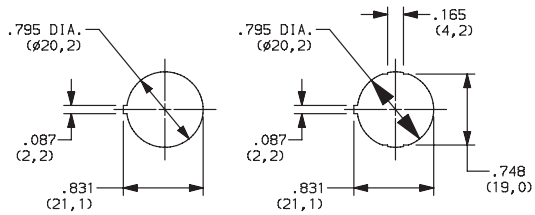


MOUNTING STYLE/COLOR

S2 SNAP-IN, BLACK
S1 SNAP-IN, WHITE

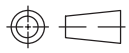


PANEL MOUNTING



Panel thickness:
2.0 - 3.0 mm

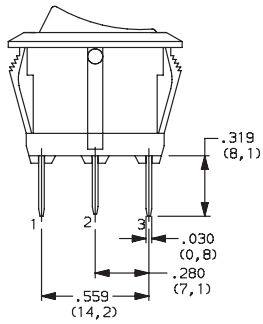
Panel thickness:
0.7 - 3.0 mm

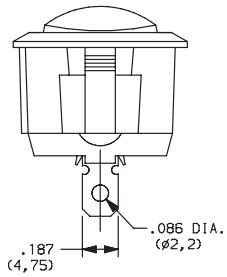

Third Angle Projection

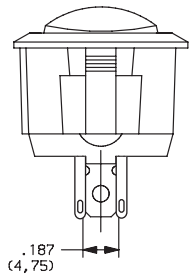
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

TERMINATION

15 .187" QUICK CONNECT







For switches with LED option

CONTACT MATERIAL

OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATINGS	
QF	SILVER	POWER	16 AMPS @ 125 VAC; 10 AMPS @ 250 VAC

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

LAMP RATING

(NONE) NO LAMP

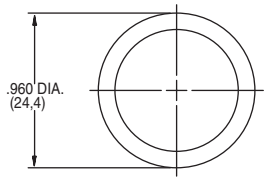
6 LED RATING @ 10 mA V_f=1.85V

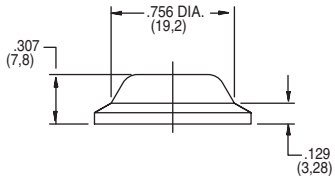
7 125 VAC 33kΩ NEON

8 250 VAC 150kΩ NEON

ACCESSORIES

377C00000 IP65 SPLASH PROOF RUBBER BOOT





Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

Features/Benefits

- ***Various designs up to 16 amps***
- ***Heavy duty and extended life cycles***
- ***SPST, SPDT and DPST options***
- ***Different symbols available***

Typical Applications

- ***Household appliances***
- ***Industrial equipment***
- ***Audio & visual equipment***
- ***Telecommunication***
- ***Office equipment***

Specifications

CONTACT RATING: 6.5 Amps @ 125 VAC
ELECTRICAL LIFE: 6,000 cycles at full load.
INITIAL CONTACT RESISTANCE: 100m Ω min.
INSULATION RESISTANCE: 100M Ω min.
DIELECTRIC STRENGTH: 1,500 VAC (50-60 Hz)
OPERATING FORCE: ON_OFF: 250 ± 100 gf
OFF_ON: 700 ± 250 gf
PACKAGING: 300 pieces per bag (5 trays)
2,400 pieces per box

Environmental

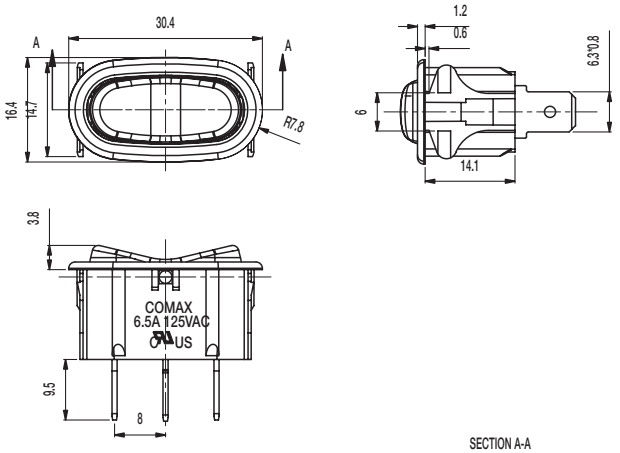
OPERATING TEMPERATURE: 0ºC to 65ºC

Materials

HOUSING: PA (UL 94V-2).
KNOB: PA (UL 94V-2).
CONTACTS: Silver plated.

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

PART NUMBER	HOUSING COLOR
SW-13A65N-A01	White
SW-13A65N-A01 BK	Black
SW-11A06N-A02	Black
SW-11A06N-A03 AP	Black
SW-11A06N-B02	Black
SW-11A06N-B02 AP	Black
SW-11A06N-CR02	Black
SW-12A06N-B02	Black
SW-12A06N-F01	Black
SW-12B03N	Black
SW-13A65N-A01 AK	Almond
SW-13A65N-A01 BI	Biscuit



Recommended hole size 0.8/1.0mm panel assembly.
PIERCING PLAN

SPDT
ON-OFF-ON
Circuit

CG Series
Single Pole Power Rocker Switches

Features/Benefits

- ***Bevelled frame***
- ***Illuminated versions available***
- ***Easy panel mount installation***

Typical Applications

- ***Computers and peripherals***
- ***Small appliances***
- ***Instrument panels***
- ***Industrial controls***
- ***RoHS compliant***

UL 61058-1

Specifications

CONTACT RATING:
16 AMPS @ 125 VAC, 10 AMPS @ 250 VAC.
10 AMPS @ 250 VAC, 6 AMPS @ 250 VAC.
ELECTRICAL LIFE: 10,000 make and break cycles at full load.
INSULATION RESISTANCE: 10^8 Ω min.
DIELECTRIC STRENGTH: 1,500 VRMS @ sea level.
OPERATING TEMPERATURE: -20ºC to +85ºC

Materials

HOUSING AND ACTUATOR: 6/6 nylon (UL94V-2), black, matte finish.
ILLUMINATED ACTUATOR: Polycarbonate, matte finish.
CENTER CONTACTS: Silver plated, copper alloy.
END CONTACTS: Silver plated.
ALL TERMINALS: Silver plated, copper alloy.

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G–87 through G–89. For additional options not shown in catalog, consult Customer Service Center.

Switch Function
CG101 SPDT On-None-On
CG102 SPST On-None-Off
CG103 SPDT On-Off-On
CG105 SPDT Mom-Off-Mom
CG12 * SPST On-None-Off

Actuator
J1 Rocker
J2 **Two-tone rocker
J3 Illuminated rocker

Actuator Color
2 Black
1 White
3 Red
R Red, illuminated
A Amber, illuminated
G Green, illuminated

Mounting Style/Color
S2 Snap-in, black
S1 Snap-in, white

Termination
05 .250" quick connect

Actuator Marking
(NONE) No marking
D ON-OFF
H "O I" - international ON-OFF
P "O -" international ON-OFF

Contact Rating
QF Silver

Lamp Rating
(NONE) No lamp
7 125 VAC neon
8 250 VAC neon

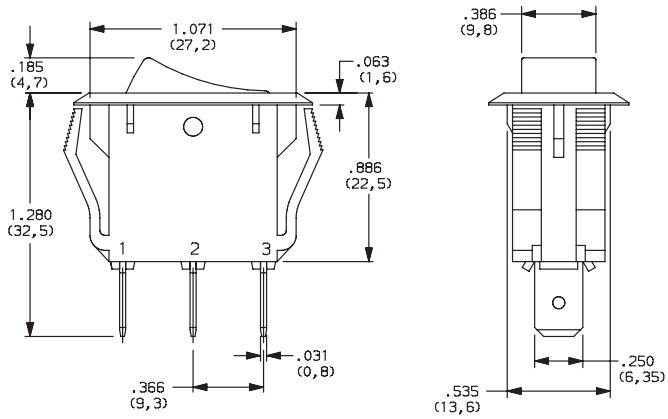
* CG12 — for switches with both marking and illumination

** J2 — refer to table on next page for actuator options

SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION Pos. 1	SWITCH FUNCTION Pos. 2	SWITCH FUNCTION Pos. 3	CONNECTED TERMINALS Pos. 1	CONNECTED TERMINALS Pos. 2	CONNECTED TERMINALS Pos. 3	SCHEMATIC
		C&K marking on opposite side			C&K marking on opposite side			
SP	CG101	ON	NONE	ON	1-2	N/A	2-3	
	CG102	ON	NONE	OFF	1-2		OPEN	OR For Illuminated Version
	CG103	ON	OFF	ON	1-2	OPEN	2-3	
	CG105	MOM	OFF	MOM	1-2	OPEN	2-3	
	CG12 *	ON	NONE	OFF	1-2	N/A	OPEN	

* CG12 - for switches with both marking and illumination

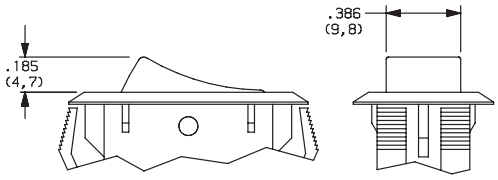


Shown in Pos. 1

ACTUATOR

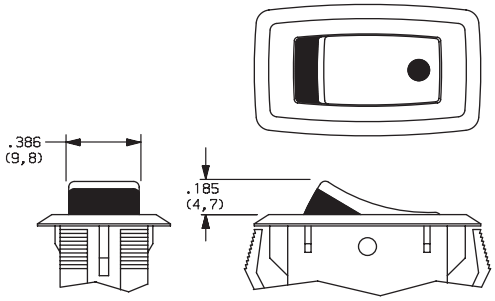
J1 ROCKER

J3 ILLUMINATED ROCKER



NOTE: J3 actuator available with CG102 switch function only.

J2 TWO-TONE ROCKER



NOTE: Available with CG102 switch function only.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

CG Series
Single Pole Power Rocker Switches

ACTUATOR COLOR

ACTUATOR	OPTION CODE	ACTUATOR COLOR
J1	2	BLACK
	1	WHITE
	3	RED
J3	R	RED, ILLUMINATED
	A	AMBER, ILLUMINATED
	G	GREEN, ILLUMINATED

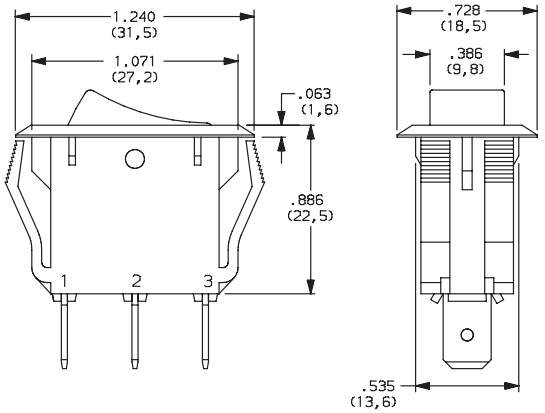
OPTION CODE	ACTUATOR COLOR TOP	BOTTOM
1	WHITE	RED
2	WHITE	BLACK
3	RED	WHITE
4	BLACK	WHTE
5	BLACK	RED

J2 actuator only

MOUNTING STYLE/COLOR

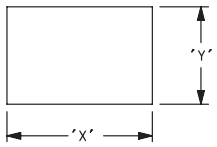
S2 SNAP-IN, BLACK

S1 SNAP-IN, WHITE



Shown in Pos. 1

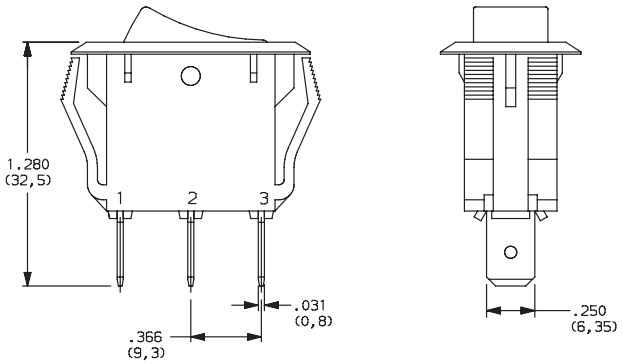
PANEL MOUNTING



PANEL THICKNESS	"X"	"Y"
0.030-0.049 (0,75-1,25)	1.087-.004 (27,6-0,1)	0.543+.004 (13,8+0,1)
0.049-0.079 (1,25-2,0)	1.094-.004 (27,8-0,1)	0.543+.004 (13,8+0,1)
0.079-0.118 (2,0-3,0)	1.102-.004 (28,0-0,1)	0.543+.004 (13,8+0,1)

TERMINATION

05 .250" QUICK CONNECT

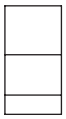


Shown in Pos. 1

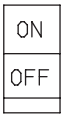
Third Angle Projection

ACTUATOR MARKING

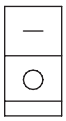
NONE NO MARKING



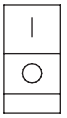
D ON-OFF

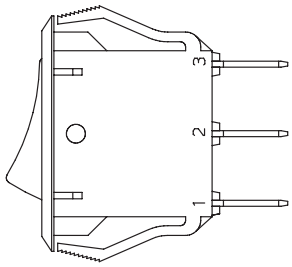


H O I



P O -





NOTE: Orientation of actuator marking and terminals.

Shown in Pos. 1

CONTACT MATERIAL

OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATINGS	
QF	SILVER	POWER	16 AMPS @ 125 VAC; 10 AMPS @ 250 VAC 10 AMPS @ 250 VAC

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

LAMP RATING

(NONE) NO LAMP

7 125 VAC 33kΩ NEON

8 250 VAC 150kΩ NEON

NOTE: Lamp rating for J3 actuator option.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

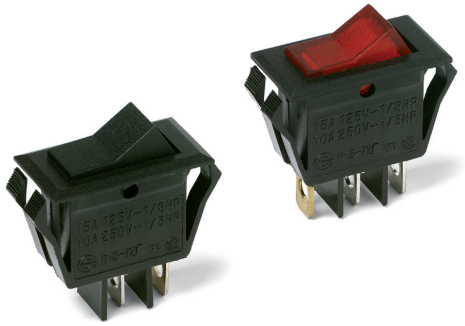
CL Series
Single Pole Power Rocker Switches

Features/Benefits

- ***Illuminated versions available***
- ***Positive detent***
- ***Snap-in mounting***

Typical Applications

- ***Floor care products***
- ***Power outlet strips***
- ***HVAC units***
- ***RoHS compliant***



Specifications

CONTACT RATING:
16 AMPS @ 125 VAC, 1/3 HP;
10 AMPS @ 250 VAC, 1/2 HP.
ELECTRICAL LIFE: 10,000 make and break cycles at full load.
INSULATION RESISTANCE: 10^8 Ω min.
DIELECTRIC STRENGTH: 1,500 VRMS @ sea level.
OPERATING TEMPERATURE: -20°C to +80°C

Materials

HOUSING AND ACTUATOR: 6/6 nylon (UL94V-2), black, matte finish.
ILLUMINATED ACTUATOR: Polycarbonate, matte finish.
CENTER CONTACTS: Silver plated, copper alloy.
END CONTACTS: Silver plated.
ALL TERMINALS: Silver plated, copper alloy.

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G–91 through G–93. For additional options not shown in catalog, consult Customer Service Center.

Switch Function
CL101 SPDT On-None-On
CL102 SPST On-None-Off
CL12 * SPST On-None-Off

Actuator
J7 Rocker
J9 Illuminated rocker

Actuator Color
2 Black
1 White
3 Red
R Red, illuminated
A Amber, illuminated
G Green, illuminated

Mounting Style/Color
S2 Snap-in, black
S1 Snap-in, white

Termination
05 .250" quick connect

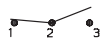
Actuator Marking
(NONE) No marking
D ON-OFF
H "O I" - international ON-OFF
P "O -" international ON-OFF

Contact Rating
QA Silver

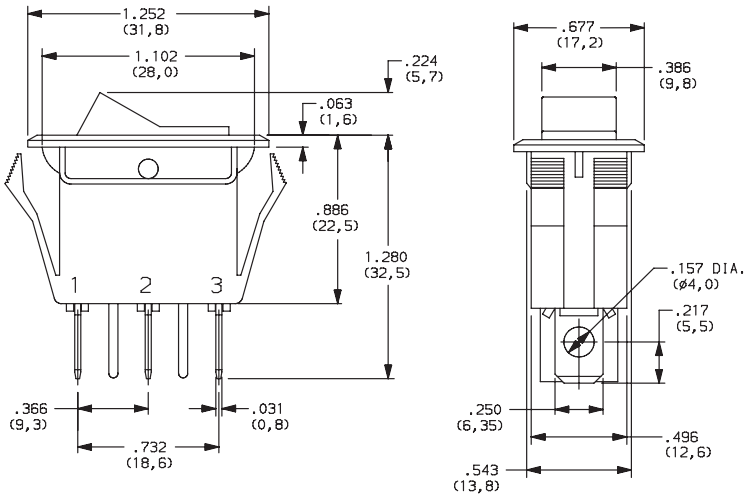
Lamp Rating
(NONE) No lamp
7 125 VAC neon
8 250 VAC neon

* CL12 - for switches with both marking and illumination

SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION Pos. 1	SWITCH FUNCTION Pos. 2	SWITCH FUNCTION Pos. 3	CONNECTED TERMINALS Pos. 1	CONNECTED TERMINALS Pos. 2	CONNECTED TERMINALS Pos. 3	SCHEMATIC
		C&K marking on opposite side			C&K marking on opposite side			
SP	CL101	ON	NONE	ON	2-1	N/A	2-3	
	CL102	ON	NONE	OFF	2-1		OPEN	OR For Illuminated Version
	CL12 *	ON	NONE	OFF				

* CL12 - for switches with both marking and illumination

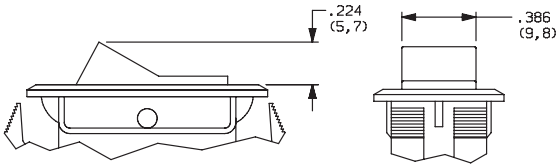


Shown in Pos. 1

ACTUATOR

J7 ROCKER

J9 ILLUMINATED ROCKER



NOTE: J9 actuator available with CL102 & CL12 switch function only.

ACTUATOR COLOR

OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED
R	RED, ILLUMINATED
A	AMBER, ILLUMINATED
G	GREEN, ILLUMINATED

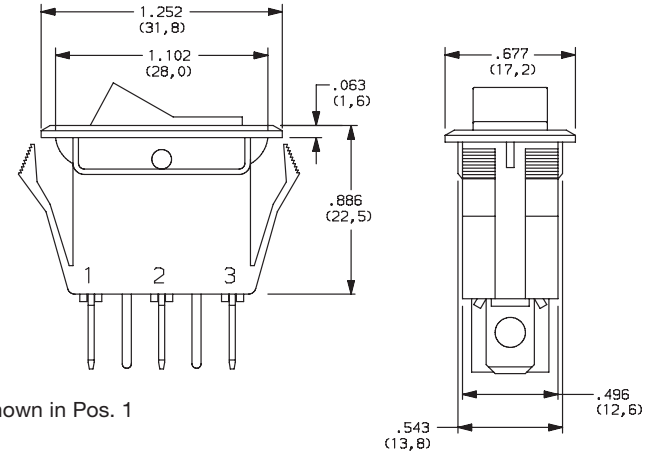
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

MOUNTING STYLE/COLOR

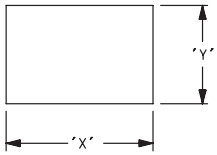
S2 SNAP-IN, BLACK

S1 SNAP-IN, WHITE



Shown in Pos. 1

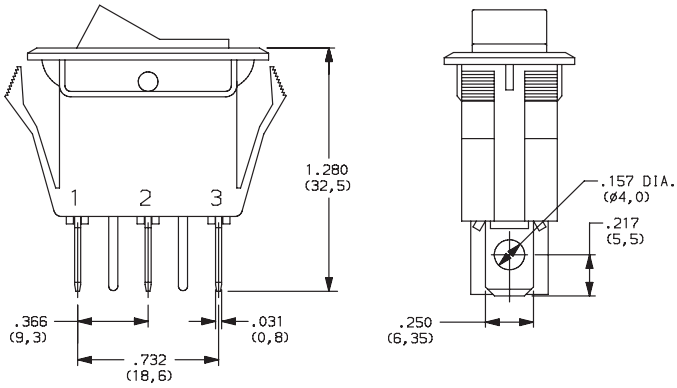
PANEL MOUNTING



PANEL THICKNESS	"X"	"Y"
0.030-0.049 (0,75-1,25)	1.126-.004 (28,6-0,1)	0.551+.004 (14,0+0,1)
0.049-0.079 (1,25-2,0)	1.134-.004 (28,8-0,1)	0.551+.004 (14,0+0,1)
0.079-0.118 (2,0-3,0)	1.150-.004 (29,2-0,1)	0.551+.004 (14,0+0,1)

TERMINATION

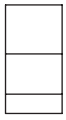
05 .250" QUICK CONNECT



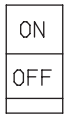
Shown in Pos. 1

ACTUATOR MARKING

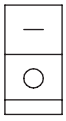
NONE NO MARKING



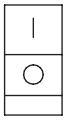
D ON-OFF

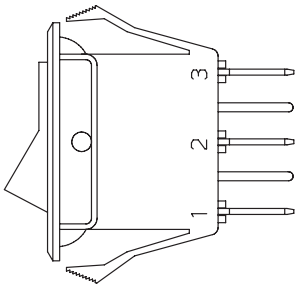


H O I



P O -





NOTE: Orientation of actuator marking and terminals.

Shown in Pos. 1

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

CONTACT MATERIAL

OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATINGS	
QA	SILVER	POWER	16 AMPS @ 125 VAC; 1/3 HP; 10 AMPS @ 250 VAC, 1/2 HP

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

LAMP RATING

(NONE) NO LAMP

7 125 VAC 33kΩ NEON

8 250 VAC 150kΩ NEON

NOTE: Lamp rating for J9 actuator option.

CM Series
Single Pole Power Rocker Switches

Features/Benefits

- ***Illuminated versions available***
- ***Easy to install snap-in design***
- ***Multiple actuator and termination styles to choose from***

Typical Applications

- ***Computers and peripherals***
- ***Power supplies***
- ***Industrial equipment***
- ***Small appliances***
- ***RoHS compliant***

c UL us

Specifications

CONTACT RATING:
16 AMPS @ 125 VAC, 1/8 HP;
10 AMPS @ 250 VAC, 1/3 HP.
ELECTRICAL LIFE: 10,000 make and break cycles at full load.
INSULATION RESISTANCE: 10^8 Ω min.
DIELECTRIC STRENGTH: 1,500 VRMS @ sea level.
OPERATING TEMPERATURE: -20ºC to +80ºC

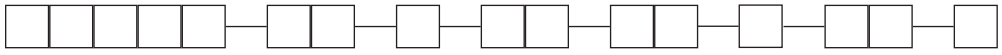
Materials

HOUSING AND ACTUATOR: 6/6 nylon (UL94V-2), black, gloss or matte finish.
ILLUMINATED ACTUATOR: Polycarbonate, gloss or matte finish.
CENTER CONTACTS: Silver plated, copper alloy.
END CONTACTS: Silver plated.
ALL TERMINALS: Silver plated, copper alloy.

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G–95 through G–97. For additional options not shown in catalog, consult Customer Service Center.



Switch Function
CM101 SPDT On-None-On
CM102 SPST On-None-Off
CM103 SPDT On-Off-On
CM107 SPDT On-Off-Mom.
CM12 * SPST On-None-Off

Actuator
J1 Rocker
J3 Illuminated rocker

Actuator Color
2 Black
1 White
3 Red
R Red, illuminated
A Amber, illuminated
G Green, illuminated

Mounting Style/Color
S2 Snap-in, black
S4 Snap-in, black
S1 Snap-in, white
S3 Snap-in, white

Termination
05 .250" quick connect
07 Solder lug

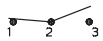
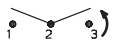
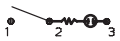
Actuator Marking
(NONE) No marking
D ON-OFF
H "O I" - international ON-OFF
P "O -" international ON-OFF

Contact Rating
QA Silver

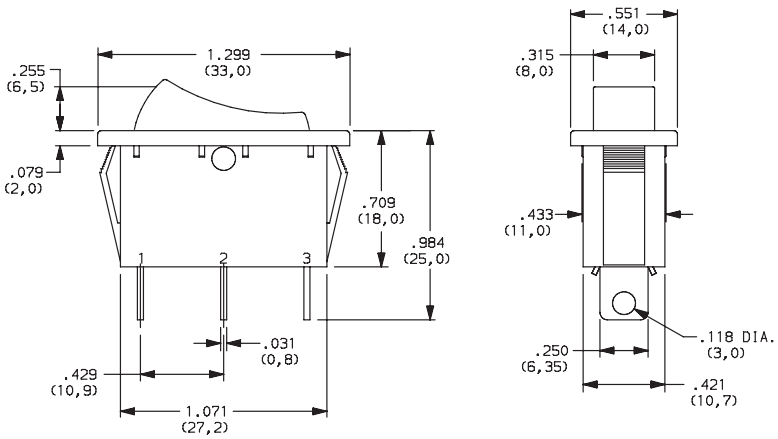
Lamp Rating
(NONE) No lamp
7 125 VAC neon
8 250 VAC neon

* CM12 - for switches with both marking and illumination

SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION Pos. 1	SWITCH FUNCTION Pos. 2	SWITCH FUNCTION Pos. 3	CONNECTED TERMINALS Pos. 1	CONNECTED TERMINALS Pos. 2	CONNECTED TERMINALS Pos. 3	SCHEMATIC
		C&K marking on opposite side			C&K marking on opposite side			
SP	CM101	ON	NONE	ON	2-1	N/A	2-3	
	CM102	ON	NONE	OFF			OPEN	OR For Illuminated Version
	CM103	ON	OFF	ON		OPEN	2-3	
	CM107	ON	OFF	MOM.				
	CM12 *	ON	NONE	OFF		N/A	OPEN	

* CM12 - for switches with both marking and illumination

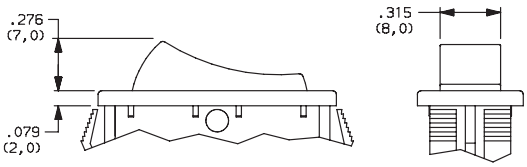


Shown in Pos. 1

ACTUATOR

J1 ROCKER

J3 ILLUMINATED ROCKER



NOTE: J3 actuator available with CM102 & CM12 switch function only.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

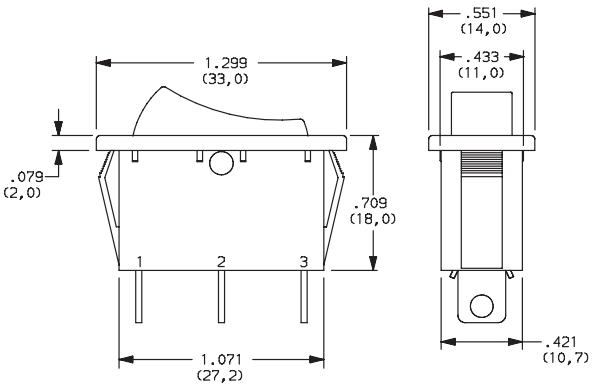
ACTUATOR COLOR

OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED
R	RED, ILLUMINATED
A	AMBER, ILLUMINATED
G	GREEN, ILLUMINATED

MOUNTING STYLE/COLOR

S2 SNAP-IN, BLACK

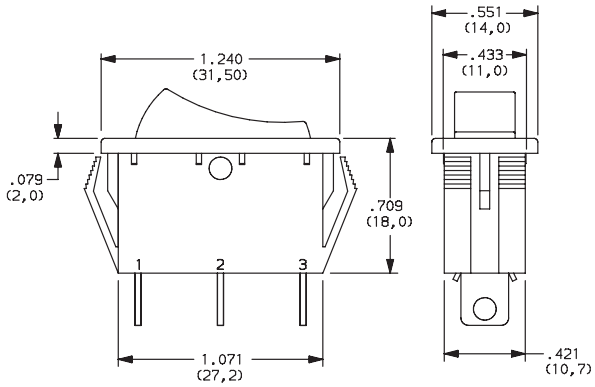
S1 SNAP-IN, WHITE



Shown in Pos. 1

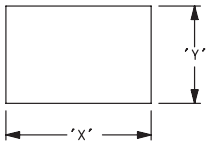
S4 SNAP-IN, BLACK (SHORT FRAME)

S3 SNAP-IN, WHITE



Shown in Pos. 1

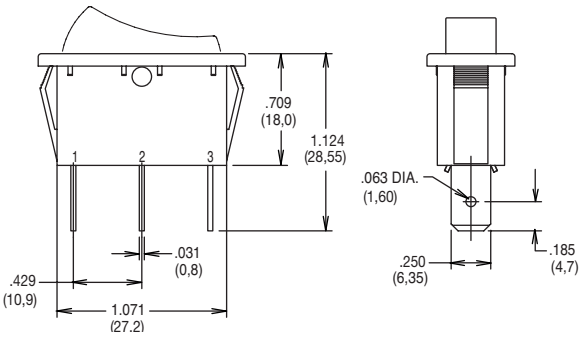
PANEL MOUNTING



PANEL THICKNESS	"X"	"Y"
0.030-0.049 (0,75-1,25)	1.189-.004 (30,2-0,1)	0.441+.004 (11,2+0,1)
0.049-0.079 (1,25-2,0)	1.197-.004 (30,4-0,1)	0.441+.004 (11,2+0,1)
0.079-0.118 (2,0-3,0)	1.212-.004 (30,8-0,1)	0.441+.004 (11,2+0,1)

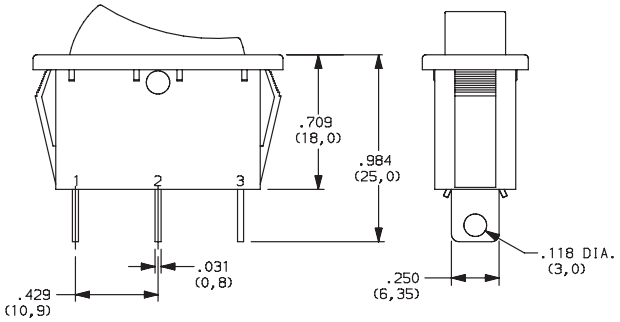
TERMINATION

05 .250 QUICK CONNECT



Shown in Pos. 1

07 SOLDER LUG



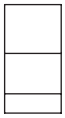
NOTE: Available with CM101 & CM102 switch functions only.

Third Angle Projection

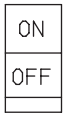
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

ACTUATOR MARKING

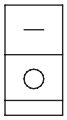
NONE NO MARKING



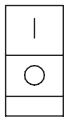
D ON-OFF

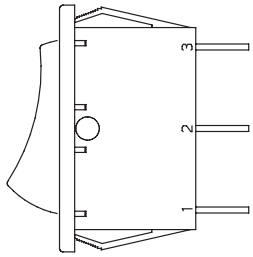


H O I



P O -





NOTE: Orientation of actuator marking and terminals.

Shown in Pos. 1

CONTACT MATERIAL

OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATINGS	
QA	SILVER	POWER	16 AMPS @ 125 VAC; 1/8 HP 10 AMPS @ 250 VAC, 1/3 HP

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

LAMP RATING

(NONE) NO LAMP

7 125 VAC 33kΩ NEON

8 250 VAC 150kΩ NEON

NOTE: Lamp rating for J3 & J8 actuator option.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

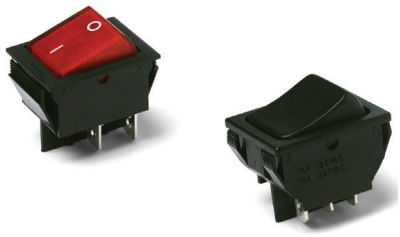
CN Series
Double Pole Power Rocker Switches

Features/Benefits

- ***Illuminated versions available***
- ***Multiple actuator and termination styles***
- ***Robust design***
- ***Custom version upon request***
- ***RoHS compliant***

Typical Applications

- ***Appliances***
- ***Office equipment***
- ***Computers and peripherals***
- ***Off-road vehicles***
- ***Industrial machines***
- ***HVAC units***
- ***Transportation***



Specifications

CONTACT RATING:
See table for Q and QA ratings on the last page of this series.
ELECTRICAL LIFE: 10,000 make and break cycles at full load.
INSULATION RESISTANCE: 10^8 Ω min.
DIELECTRIC STRENGTH: 1,500 VRMS @ sea level.
OPERATING TEMPERATURE: -20ºC to +85ºC

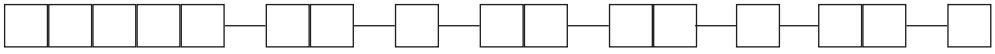
Materials

HOUSING AND ACTUATOR: 6/6 nylon (UL94V-2), black, matte finish.
ILLUMINATED ACTUATOR: Polycarbonate, matte finish.
CENTER CONTACTS: Silver plated, copper alloy.
END CONTACTS: Silver plated $AgSu0_2In0_3$.
ALL TERMINALS: Silver plated, copper alloy.

Note: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G–99 through G–101. For additional options not shown in catalog, consult Customer Service Center.



Switch Function
CN201 DPDT On-None-On
CN202 DPST On-None-Off
CN22 * DPST On-None-Off

Actuator
J1 Rocker
J3 Illuminated rocker
J6 Rocker
J8 Illuminated rocker

Actuator Color
2 Black
1 White
3 Red
R Red, illuminated
A Amber, illuminated
G Green, illuminated

Mounting Style/Color
S2 Snap-in, black
S4 Snap-in, black
S1 Snap-in, white
S3 Snap-in, white

Termination
15 .187" quick connect
05 .250" quick connect

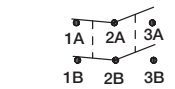
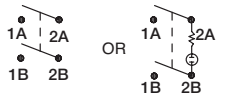
Actuator Marking
(NONE) No marking
D ON-OFF
H "O I" - international ON-OFF
P "O -" international ON-OFF

Contact Rating
Q Silver
QA Silver (with HP rating)

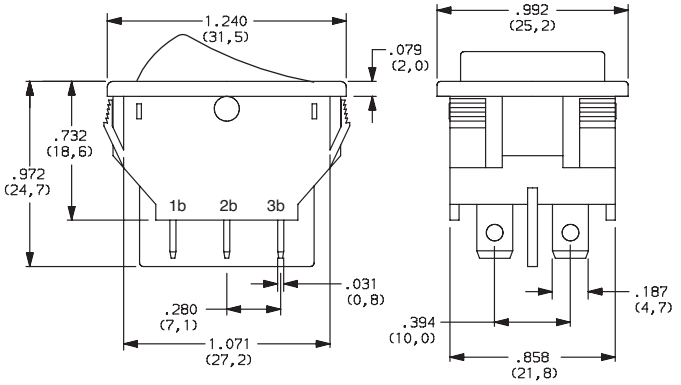
Lamp Rating
(NONE) No lamp
7 125 VAC neon
8 250 VAC neon

* CN22 - for switches with both marking and illumination

SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION Pos. 1	SWITCH FUNCTION Pos. 2	SWITCH FUNCTION Pos. 3	CONNECTED TERMINALS Pos. 1	CONNECTED TERMINALS Pos. 2	CONNECTED TERMINALS Pos. 3	SCHEMATIC
		C&K marking on opposite side			C&K marking on opposite side			
DP	CN201	ON	NONE	ON	2-1 4-5	N/A	2-3 6-5	
	CN202	ON	NONE	OFF			OPEN	 For Illuminated Version
	CN22 *	ON	NONE	OFF				

* CN22 - for switches with both marking and illumination

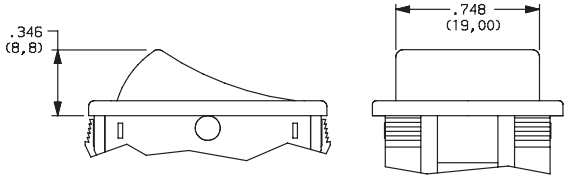


Shown in Pos. 1

ACTUATOR

J1 ROCKER

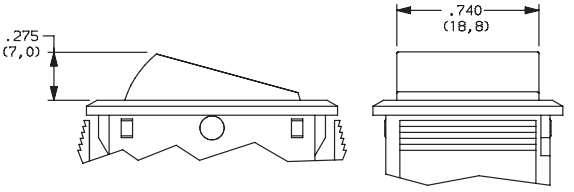
J3 ILLUMINATED ROCKER



NOTE: J1 & J3 actuators available with Q contact rating only. J3 actuator available with CN202 & CN22 switch function only.

J6 ROCKER

J8 ILLUMINATED ROCKER



NOTE: J6 & J8 actuators available with QA contact rating only. J6 actuator available with CN201 & CN202 switch functions, J8 actuator available with CN202 & CN22 switch function only.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

CN Series
Double Pole Power Rocker Switches

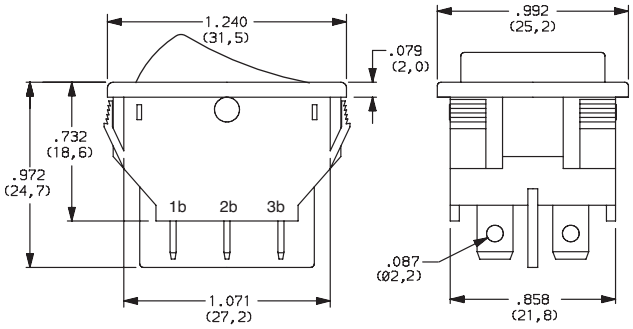
ACTUATOR COLOR

OPTION CODE	ACTUATOR COLOR
2	BLACK
1	WHITE
3	RED
R	RED, ILLUMINATED
A	AMBER, ILLUMINATED
G	GREEN, ILLUMINATED

MOUNTING STYLE/COLOR

S2 SNAP-IN, BLACK

S1 SNAP-IN, WHITE

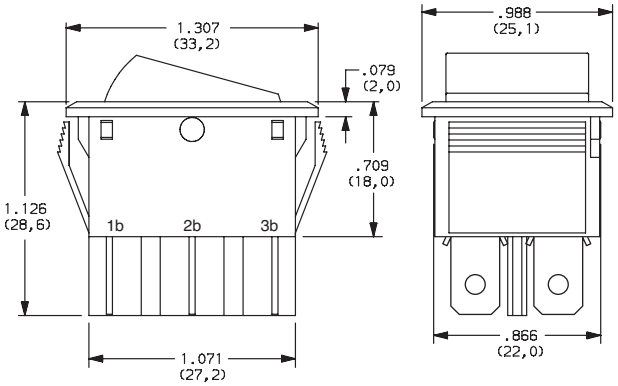


NOTE: Available with 15 termination and Q contact rating only.

Shown in Pos. 1

S4 SNAP-IN, BLACK

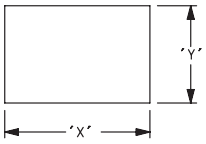
S3 SNAP-IN, WHITE



NOTE: Available with 05 termination and QA contact rating only.

Shown in Pos. 1

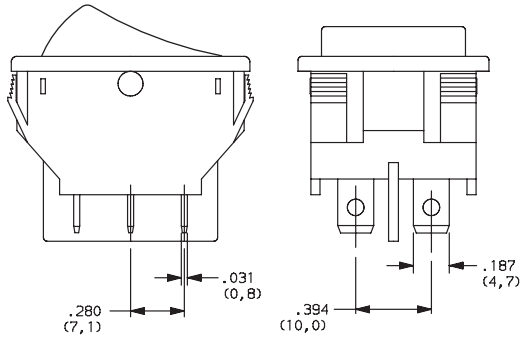
PANEL MOUNTING



PANEL THICKNESS	"X"	"Y"
0.030-0.049 (0,75-1,25)	1.190-.004 (30,2-0,1)	0.874+.004 (22,2+0,1)
0.049-0.079 (1,25-2,0)	1.197-.004 (30,4-0,1)	0.874+.004 (22,2+0,1)
0.079-0.118 (2,0-3,0)	1.213-.004 (30,8-0,1)	0.874+.004 (22,2+0,1)

TERMINATION

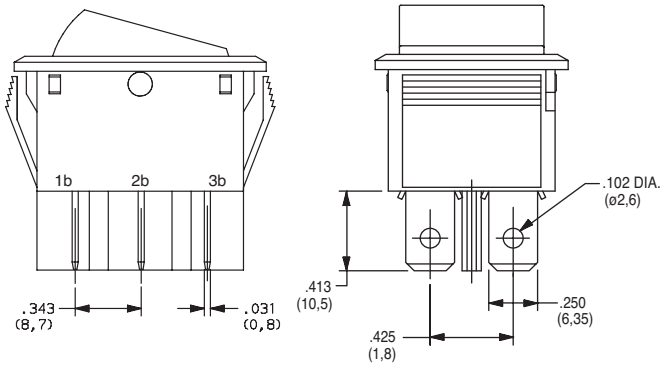
15 .187" QUICK CONNECT



NOTE: Available with S1 & S2 mounting style and Q contact rating only.

Shown in Pos. 1

05 .250" QUICK CONNECT



NOTE: Available with S3 & S4 mounting styles and QA contact rating, CN201 & CN202 switch functions only.

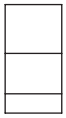
Shown in Pos. 1

Third Angle Projection

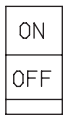
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

ACTUATOR MARKING

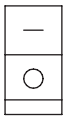
NONE NO MARKING



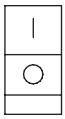
D ON-OFF

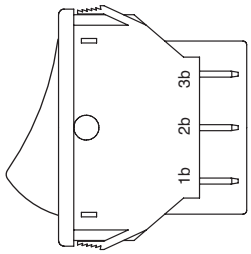


H O I



P O -





NOTE: Orientation of actuator marking and terminals.

Shown in Pos. 1

CONTACT MATERIAL

OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATINGS	
Q	SILVER	POWER	16A @ 125C 1/3 HP @ 125 V AC 10A @ 250 V AC 1/2HP @ 250 V AC
QA			16A @ 125 VAC, 1/8 HP @ 125 V AC; 10 A @ 250 VAC, 1/3 HP @ 250 V AC

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

LAMP RATING

(NONE) NO LAMP

7 125 VAC 33kΩ NEON

8 250 VAC 150kΩ NEON

NOTE: Lamp rating for J3 & J8 actuator options.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

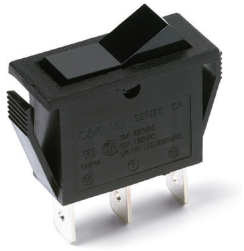
CA Series
Power Rocker Switches

Features/Benefits

- ***15 AMPS @ 125 V AC***
- ***Cosmetic slimline detail***
- ***Positive detent***

Typical Applications

- ***Hair dryers and other small appliances***
- ***HVAC and other large appliances***
- ***RoHS compliant***



Specifications

CONTACT RATING: 15 AMPS @ 125 V AC;
10 AMPS @ 250 V AC;
1/4 HP @ 125 V AC or 250 V AC

ELECTRICAL LIFE: 10,000 make-and-break cycles at full load.

INSULATION RESISTANCE: 10^9 Ω min.

DIELECTRIC STRENGTH: 1,000 Vrms min. @ sea level.

OPERATING TEMPERATURE: -30°C to +65°C

Materials

HOUSING: 6/6 nylon (UL 94V-2), black.

ACTUATOR: Polycarbonate (UL 94V-2), black.

CONTACTS: Coin silver, silver plated.

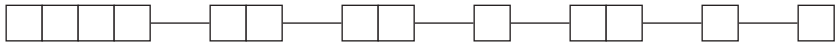
TERMINALS: Copper, silver plated.

CONTACT SPRING: Music wire.

NOTE: Specifications and material listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G–106 through G–108. For additional options not shown in catalog, consult Customer Service Center.



Switch Function
CA01 SPDT, On-On
CA02 SPST, On-Off
CA21 DPDT, On-On
CA22 DPST, On-Off

Actuator
J1 Rocker with gloss finish
J7 Curved rocker with matte finish

Actuator Color
2 Black
1 White
3 Red
6 Green

Housing Color
2 Black

Terminations
07 Quick connect

Actuator Markings
NONE No marking
D ON-OFF
H O |
P O –

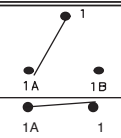
Contact Material
Q Silver

Third Angle Projection

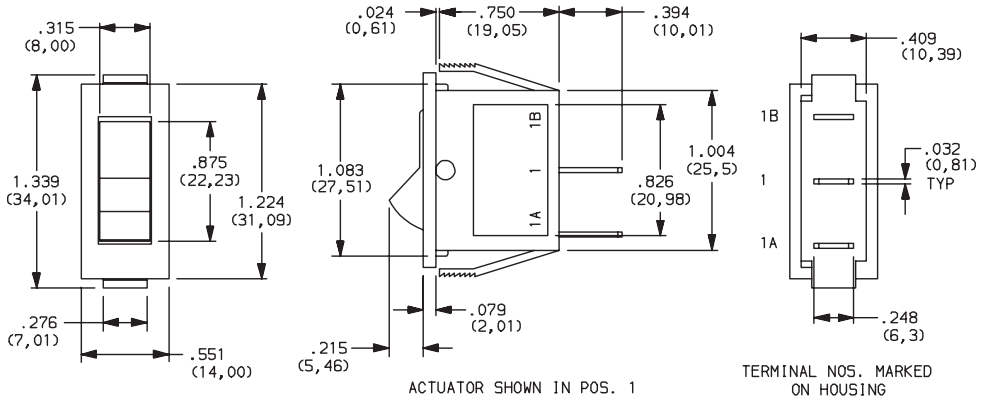
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	SCHEMATIC
SP	CA01	ON	ON	1-1A	1-1B	SPDT
	CA02	ON	OFF	1-1A	OPEN	SPST

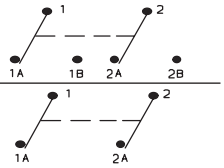


SPST

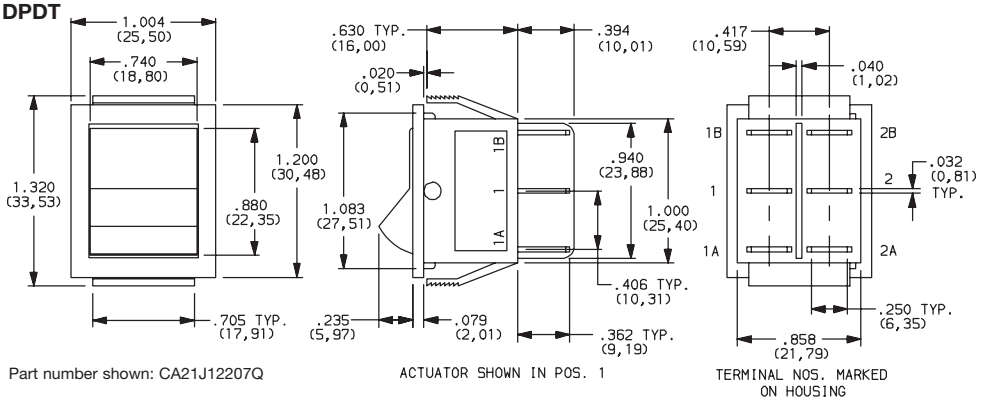


Part number shown: CA02J12207Q

DP	CA21	ON	ON	1-1A, 2-2A	1-1B, 2-2B	DPDT
	CA22	ON	OFF	1-1A, 2-2A	OPEN	DPST



DPDT



Part number shown: CA21J12207Q

For complete contact ratings and agency approvals, see CONTACT MATERIAL section, page G–108.
Contacts make on side opposite actuator thrown.

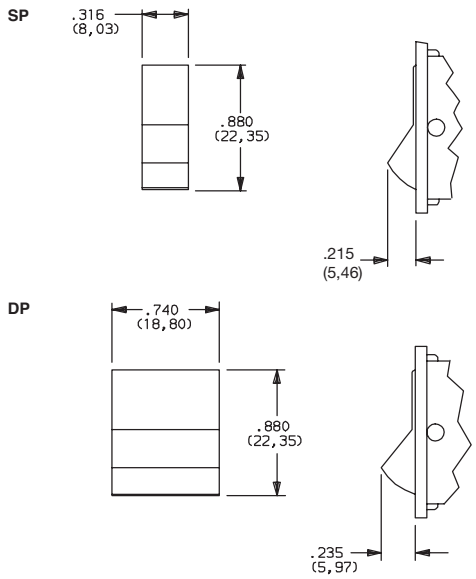
All models cULus with all options.

Third Angle Projection

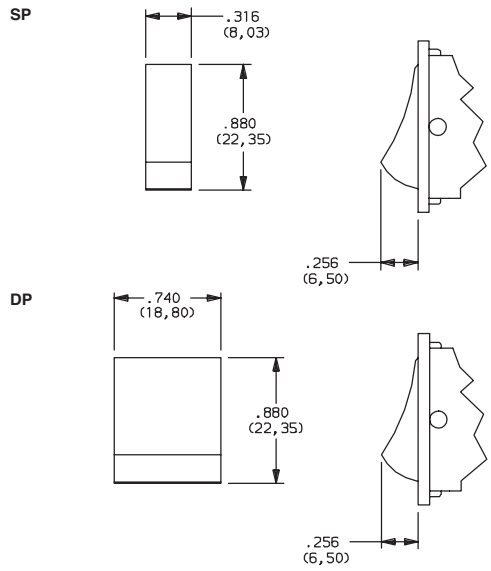
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

ACTUATOR

J1 ROCKER WITH GLOSS FINISH



J7 CURVED ROCKER WITH MATTE FINISH



ACTUATOR COLOR

OPTION CODE	OPAQUE ACTUATOR COLOR
1	WHITE
2	BLACK
3	RED
6	GREEN

NOTE: Actuator finish: matte. Special colors available, consult Customer Service Center.

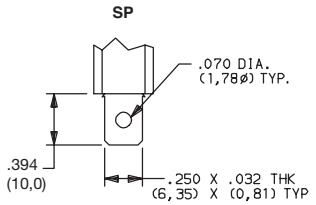
HOUSING COLOR

OPTION CODE	HOUSING COLOR
2	BLACK

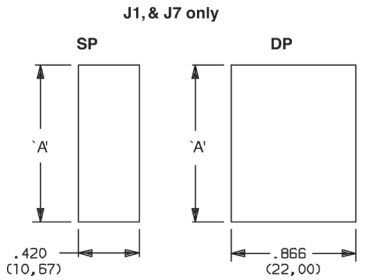
NOTE: Housing frame finish: matte.

TERMINATIONS

07 QUICK CONNECT



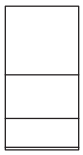
PANEL MOUNTING



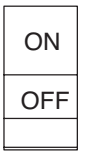
PANEL THICKNESS	DIM 'A'
.059–.078 (1,50) (2,00)	1.102 (28,00)
.078–.118 (2,00) (3,00)	1.110 (28,20)
.118–.177 (3,00) (4,50)	1.126 (28,60)

ACTUATOR MARKINGS

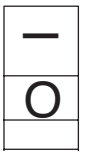
NONE NO MARKING



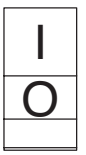
D ON-OFF

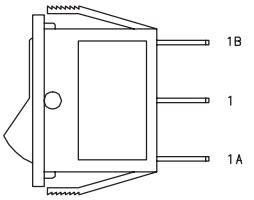


H O |



P O –





NOTE: Orientation of actuator markings and terminals

Marking color white, standard for all actuator colors except white and yellow. Marking color black, standard for white and yellow actuators. Consult Customer Service Center for other available markings and colors.

CONTACT MATERIAL

OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATINGS		
Q	SILVER[1]	POWER	10 AMPS @ 250 VAC 15 AMPS @ 125 VAC 1/4 HP 125/250 VAC	c UL us

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

[1] CONTACTS: Coin silver, silver plated.
TERMINALS: Copper, silver plated.

All models c UL us with all options.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

CA Series
Illuminated Power Rocker Switches

Features/Benefits

- ***15 AMPS @ 125 V AC***
- ***Illuminated actuator***
- ***Various actuator styles***

Typical Applications

- ***Power outlet strips***
- ***Appliances***
- ***Handling and packaging machines***
- ***RoHS compliant***

Specifications

CONTACT RATING: 15 AMPS @ 125 V AC; 10 AMPS @ 250 V AC; 1/4 HP @ 125 V AC or 250 V AC.

ELECTRICAL LIFE: 10,000 make-and-break cycles at full load.

LAMP LIFE: 20,000 hours typ.

INSULATION RESISTANCE: 10^9 Ω min.

DIELECTRIC STRENGTH: 1,000 Vrms min. @ sea level.

Materials

HOUSING: 6/6 nylon (UL 94V-2), black.

ACTUATOR: Polycarbonate (UL 94V-2), red.

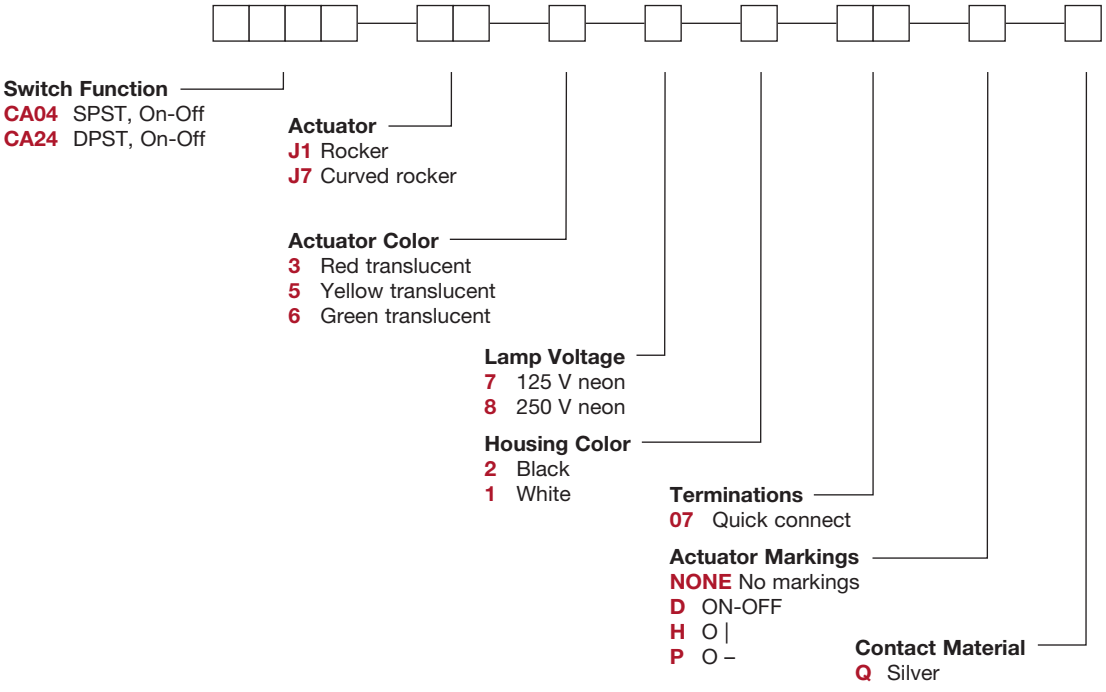
CONTACTS: Coin silver, silver plated.

OPERATING TEMPERATURE: -30°C to +65°C

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G–103 through G–105. For additional options not shown in catalog, consult Customer Service Center.

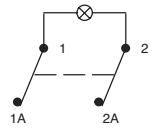


Third Angle Projection

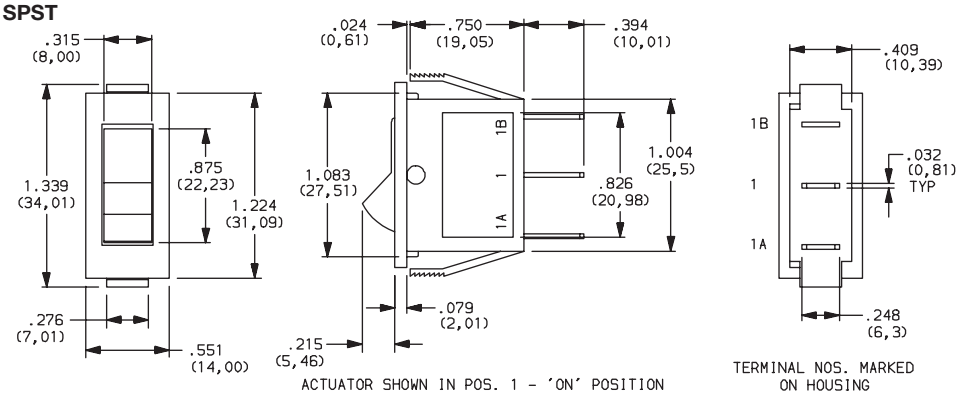
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	SCHEMATIC
SP	CA04	ON	OFF	1-1A	OPEN	SPST



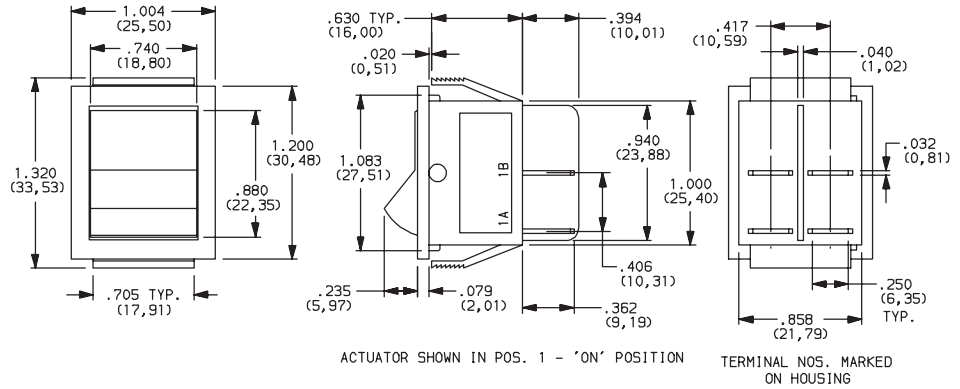
SPST



Part number shown: CA04J137207Q

DPST

DP	CA24	ON	OFF	1-1A, 2-2A	OPEN	DPST



Part number shown: CA24J137207Q

See CONTACT MATERIAL section, page G–105, for complete contact ratings and agency approvals.
Contacts make on side opposite actuator thrown.

All models cULus with all options.

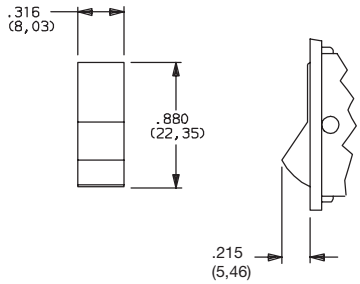
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

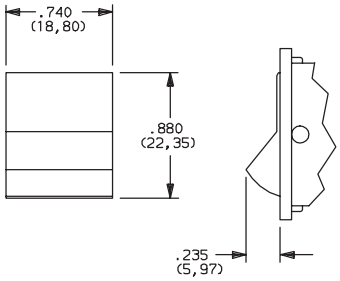
ACTUATOR

J1 ROCKER

SP

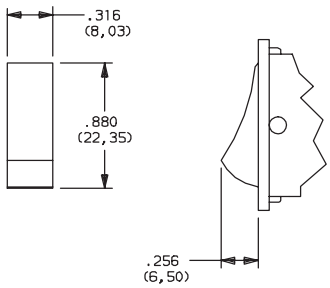


DP

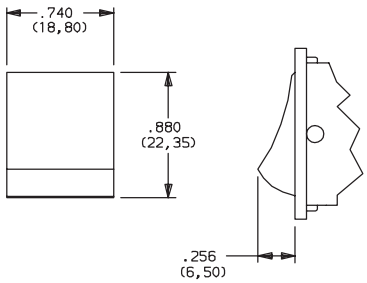


J7 CURVED ROCKER

SP



DP



ACTUATOR COLOR

OPTION CODE	ACTUATOR COLOR
3	RED TRANSLUCENT
5	YELLOW
6	GREEN

NOTE: Special colors available, consult Customer Service Center.

NEON LAMP VOLTAGE

7 125 V NEON

8 250 V NEON

HOUSING COLOR

OPTION CODE	HOUSING COLOR
2	BLACK
1	WHITE

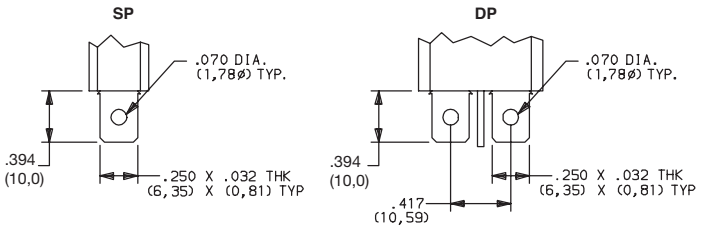
NOTE: Housing frame finish: matte. Special colors available, consult Customer Service Center.

Third Angle Projection

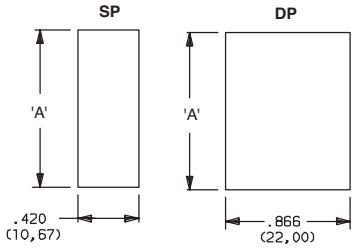
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

TERMINATIONS

07 QUICK CONNECT



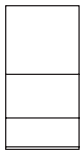
PANEL MOUNTING



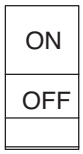
PANEL THICKNESS	DIM 'A'
.059–.078 (1,50) (2,00)	1.102 (28,00)
.078–.118 (2,00) (3,00)	1.110 (28,20)
.118–.177 (3,00) (4,50)	1.126 (28,60)

ACTUATOR MARKINGS

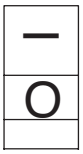
NONE NO MARKING



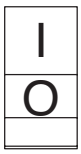
D ON-OFF

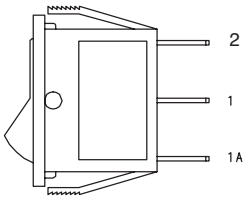


H O I



P O –





NOTE: Orientation of actuator markings and terminals

Marking color white, standard for all actuator colors except yellow. Marking color black, standard for yellow actuators. Consult Customer Service Center for other available markings and colors.

CONTACT MATERIAL

OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATINGS		
Q	SILVER[1]	POWER	10 AMPS @ 250 VAC 15 AMPS @ 125 VAC 1/4 HP 125/250 VAC	c UL us

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

[1] CONTACTS: Coin silver, silver plated.
TERMINALS: Copper, silver plated.

All models c UL us with all options.

Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

C&K Switches:

764601106 770703000 775A01000