

**FEATURES**

1. Sealed construction - internal actuator o-ring and epoxy terminal seal standard
2. IP67 protection Degree

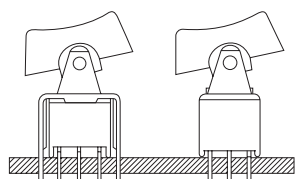
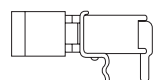


**SPECIFICATIONS**

CONTACT RATING:R- 0.4 VA max @ 20 V AC or DC  
 ELECTRICAL LIFE:30,000 make-and-break cycles at full load  
 CONTACT RESISTANCE: 20 mΩ max. initial @2-4 VDC,100 mA  
 INSULATION RESISTANCE: 1,000 MΩ min.  
 DIELECTRIC STRENGTH: 1,500 V RMS @ sea level.  
 DEGREE OF PROTECTION : IP67  
 OPERATING TEMPERATURE: -30 °C to +85 °C

**MATERIALS**

CASE and BUSHING - glass filled nylon 6/6 ,flame retardant heat stabilized (UL94V-0 )  
 Actuator - Nylon,black standard. Internal o-ring seal standard with all actuator.  
 CONTACT AND TERMINAL - Copper alloy , gold plated  
 SWITCH SUPPORT - Copper alloy , tin-plated  
 TERMINAL SEAL - Epoxy



**How do you build the switches you need!!**

The ER-4 / ER-5 , please see the (A) ;

The ER-6/ER-7/ER-8/ER-9, please see the (B)

(A) **E R** - **4** - **R 2** - **2** - **C** **R** - **A 5 S** -

Switches Function		Actuator		Actuator Color		Contact Material		RoHS code			
ER-4	SP on-none-on	R1	Std. 7.62	1	white	Q	silver plated	H = RoHS Compliant			
ER-4B	SP on-none-(on)	R2	Std. 5.84	2	(std.) black	R	gold plated				
ER-4A	SP on-off-on	A1	7.62	3	Red	G	gold over silver	Vertical support Bracket			
ER-4H	SP (on)-off-(on)	A2	5.84	<b>Marking</b> (none) No marking 1 <table border="1"><tr><td>○</td><td> </td></tr></table> 2 <table border="1"><tr><td>○</td><td>-</td></tr></table>		○				○	-
○											
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ER-4I	SP on-off-(on)	<b>Termination</b> C (std) P.C		<b>Vertical support Bracket</b> (none) (std.) snap-in type A5S straight type A5							
ER-5	DP on-none-on										
ER-5B	DP on-none-(on)	<b>Termination</b> C (std) P.C		<b>Vertical support Bracket</b> (none) (std.) snap-in type A5S straight type A5							
ER-5A	DP on-off-on										
ER-5H	DP (on)-off-(on)	<b>Termination</b> C (std) P.C		<b>Vertical support Bracket</b> (none) (std.) snap-in type A5S straight type A5							
ER-5I	DP on-off-(on)										
ER-5C	DP on-on-on	<b>Termination</b> C (std) P.C		<b>Vertical support Bracket</b> (none) (std.) snap-in type A5S straight type A5							
ER-5C	DP on-on-on										

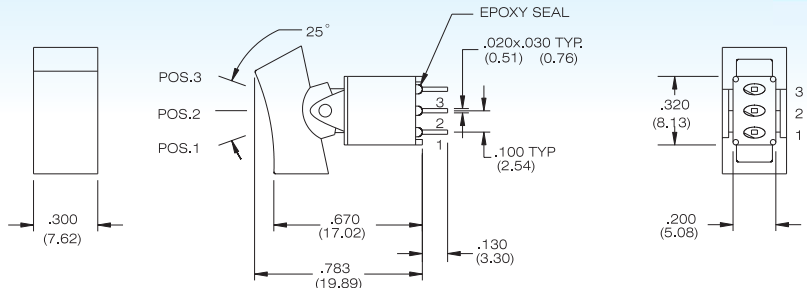
(B) **E R** - **6** - **R 2** - **2** - **R** - **S** -

Horizon Right Angle	Vertical Right Angle	Switches Function	Actuator		Actuator Color		Support Bracket			
ER-6	ER-8	SP on-none-on	R1	Std. 7.62	1	white	S	(std.) snap-in type		
ER-6B		SP on-none-(on)	R2	Std. 5.84	2	(std.) black	(none)	straight type		
ER-6A	ER-8A	SP on-off-on	A1	7.62	3	Red	<b>RoHS code</b> H = RoHS Compliant			
ER-6H	ER-8H	SP (on)-off-(on)	A2	5.84	<b>Marking</b> (none) No marking 1 <table border="1"><tr><td>○</td><td> </td></tr></table> 2 <table border="1"><tr><td>○</td><td>-</td></tr></table>				○	
○										
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ER-6I	ER-8I	SP on-off-(on)	<b>Termination</b> C (std) P.C		<b>Vertical support Bracket</b> (none) (std.) snap-in type A5S straight type A5					
ER-7	ER-9	DP on-none-on								
ER-7B	ER-9B	DP on-none-(on)	<b>Termination</b> C (std) P.C		<b>Vertical support Bracket</b> (none) (std.) snap-in type A5S straight type A5					
ER-7A	ER-9A	DP on-off-on								
ER-7H	ER-9H	DP (on)-off-(on)	<b>Termination</b> C (std) P.C		<b>Vertical support Bracket</b> (none) (std.) snap-in type A5S straight type A5					
ER-7I	ER-9I	DP on-off-(on)								
ER-7C	ER-9C	DP on-on-on	<b>Termination</b> C (std) P.C		<b>Vertical support Bracket</b> (none) (std.) snap-in type A5S straight type A5					
ER-7C	ER-9C	DP on-on-on								

SPDT

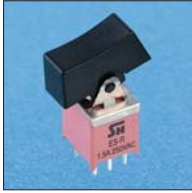


Model No.	Switching position		
ER-4	ON	none	ON
ER-4A	ON	OFF	ON
ER-4B	ON	None	(ON)
ER-4H	(ON)	OFF	(ON)
ER-4I	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1

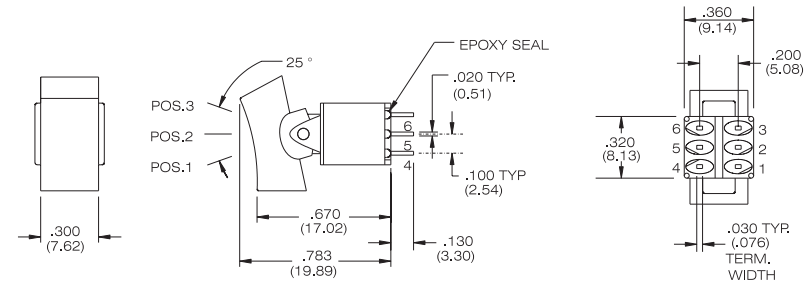


ER-4 - R1-2-CR

DPDT

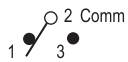
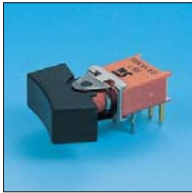


Model No.	Switching position		
ER-5	ON	none	ON
ER-5A	ON	OFF	ON
ER-5B	ON	None	(ON)
ER-5H	(ON)	OFF	(ON)
ER-5I	ON	OFF	(ON)
Term. Comm.	2-3,5-6	open	2-1,5-4
3 way switches (SP3T)			
ER-5C	ON	ON	ON
Term. Comm.	2-3,5-6	2-3,5-4	2-1,5-4

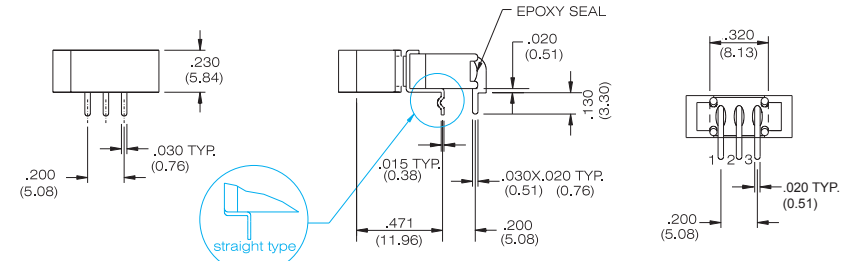


ER-5 - R1-2-CR

SPDT

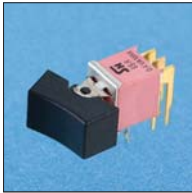


Model No.	Switching position		
ER-6	ON	none	ON
ER-6A	ON	OFF	ON
ER-6B	ON	None	(ON)
ER-6H	(ON)	OFF	(ON)
ER-6I	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1

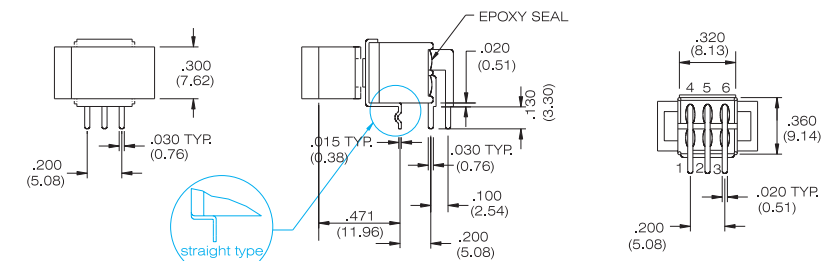


ER-6 - R2-R-S / ER-6-R2-R

DPDT

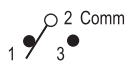
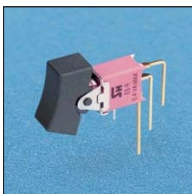


Model No.	Switching position		
ER-7	ON	none	ON
ER-7A	ON	OFF	ON
ER-7B	ON	None	(ON)
ER-7H	(ON)	OFF	(ON)
ER-7I	ON	OFF	(ON)
Term. Comm.	2-3,5-6	open	2-1,5-4
3 way switches (SP3T)			
ER-7C	ON	ON	ON
Term. Comm.	2-3,5-6	2-3,5-4	2-1,5-4

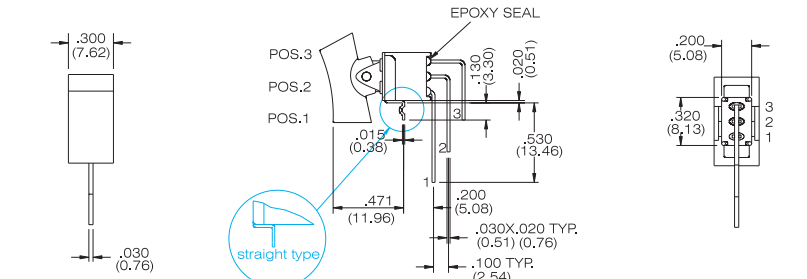


ER-7 - R1-2-R-S / ER-7-R1-2-R

SPDT

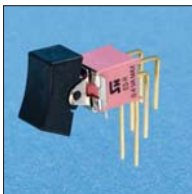


Model No.	Switching position		
ER-8	ON	none	ON
ER-8A	ON	OFF	ON
ER-8B	ON	None	(ON)
ER-8H	(ON)	OFF	(ON)
ER-8I	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1

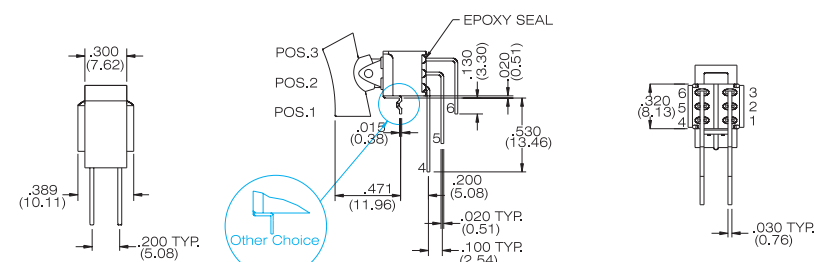


ER-8 - R1-2-R-S / ER-8-R1-2-R

DPDT

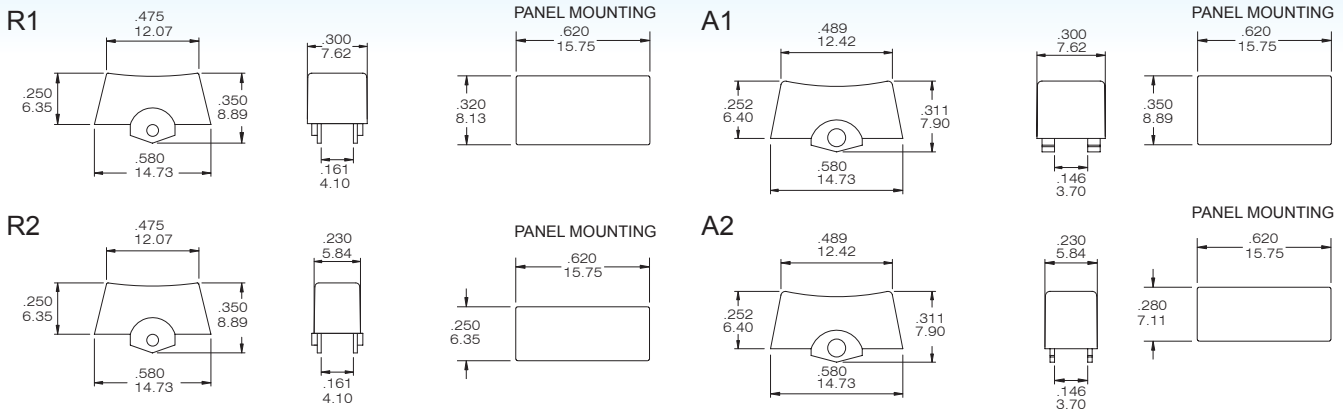


Model No.	Switching position		
ER-9	ON	none	ON
ER-9A	ON	OFF	ON
ER-9B	ON	None	(ON)
ER-9H	(ON)	OFF	(ON)
ER-9I	ON	OFF	(ON)
Term. Comm.	2-3,5-6	open	2-1,5-4
3 way switches (SP3T)			
ER-9C	ON	ON	ON
Term. Comm.	2-3,5-6	2-3,5-4	2-1,5-4



ER-9 - R1-2-R-S / ER-9-R1-2-R

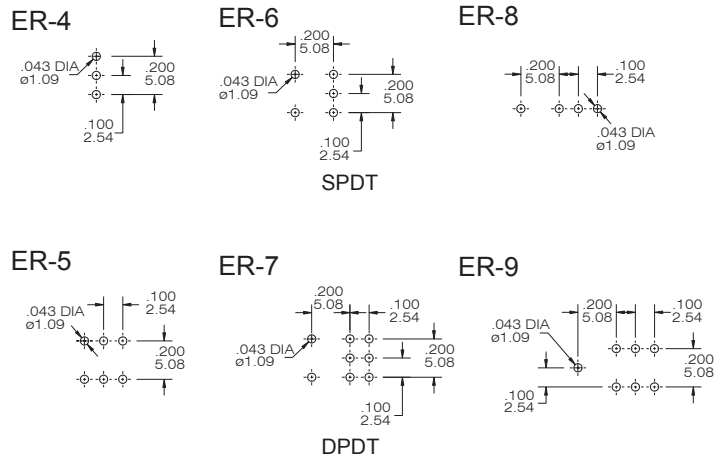
Actuator Option



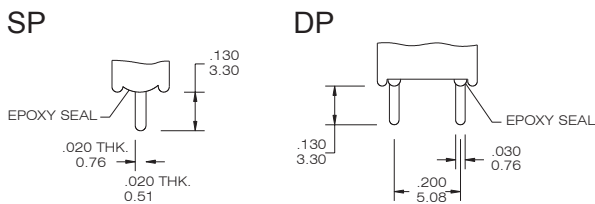
Actuator Color Option

Code	Color
1	white
2	Black(std.)
3	Red

THE P.C.B MOUNTING



TERMINAL OPTION (ER-4 / ER-5)



CONTACT MATERIAL OPTIONS

CODE	CONTACT MATERIAL	TERMINAL MATERIAL	RATING
Q	Silver plated	Silver plated	3 A @ 120V AC or 28 V DC; 1.5 A @ 250 VAC
R	Gold plated over nickel plated	Gold plated over nickel plated	0.4VA MAX @ 20 V AC or DC MAX
G	Gold plate over silver plated	Gold plated over silver plated	0.4 VA MAX @ 20 V AC or DC MAX or 3 A @ 120V AC or 28 V DC; 1.5 A @ 250 VAC
K	Gold plated over nickel plated	Tin over nickel plated	0.4VA MAX @ 20 V AC or DC MAX

\* THE K option is only for some special item. Please inquire first when you need the "K" option

VERTICAL SUPPORT BRACKET OPTION

