

ES40-R Sealed Sub-Miniature Rocker Switches

FEATURES

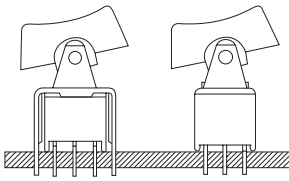
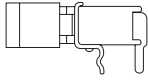
1. Sealed construction - internal actuator o-ring and epoxy terminal seal standard
2. IP67 protection Degree

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	<input type="checkbox"/>	= none
ER-4B	SP on-none-(on)	R2	Std. 5.84	2	(std.) black	R	gold plated	H	= RoHS Compliant
ER-4A	SP on-off-on			3	Red	G	gold over silver		
ER-4H	SP (on)-off-(on)					K	gold / tin		
ER-4I	SP on-off-(on)								
ER-5	DP on-none-on								
ER-5B	DP on-none-(on)								
ER-5A	DP on-off-on								
ER-5H	DP (on)-off-(on)								
ER-5I	DP on-off-(on)								
ER-5C	DP on-on-on								
				Termination		Vertical support Bracket			
				C (std) P.C		(none) A5S A5		(std.) snap-in type straight type	

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

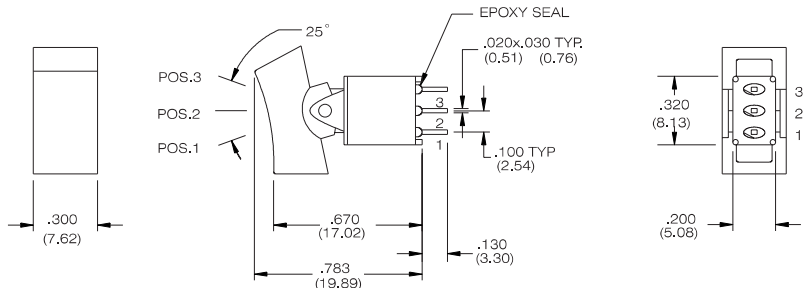
Horizon Right Angle	Vertical Right Angle	Switches Function	Actuator		Actuator Color		Support Bracket	
ER-6	ER-8	SP on-none-on	R1	Std. 7.62	1	white	S	(std.) snap-in type
ER-6B	ER-8B	SP on-none-(on)	R2	Std. 5.84	2	(std.) black	(none)	straight type
ER-6A	ER-8A	SP on-off-on			3	Red		
ER-6H	ER-8H	SP (on)-off-(on)						
ER-6I	ER-8I	SP on-off-(on)						
ER-7	ER-9	DP on-none-on						
ER-7B	ER-9B	DP on-none-(on)						
ER-7A	ER-9A	DP on-off-on						
ER-7H	ER-9H	DP (on)-off-(on)						
ER-7I	ER-9I	DP on-off-(on)						
ER-7C	ER-9C	DP on-on-on						
					Contact Material		RoHS code	
					Q silver plated R gold plated G gold over silver K gold / tin		<input type="checkbox"/> = none H = RoHS Compliant	

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SPDT

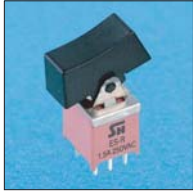


Model No.	Switching position		
ER-4	ON	none	ON
ER-4A	ON	OFF	ON
ER-4B	ON	None	(ON)
ER-4H	(ON)	OFF	(ON)
ER-4I	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1

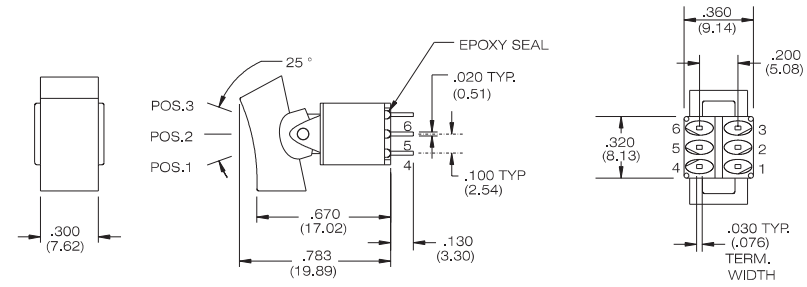


ER-4 - R1-2-CR

DPDT

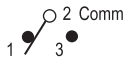
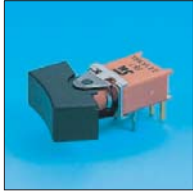


Model No.	Switching position		
ER-5	ON	none	ON
ER-5A	ON	OFF	ON
ER-5B	ON	None	(ON)
ER-5H	(ON)	OFF	(ON)
ER-5I	ON	OFF	(ON)
Term. Comm.	2-3,5-6	open	2-1,5-4
3 way switches (SP3T)			
ER-5C	ON	ON	ON
Term. Comm.	2-3,5-6	2-3,5-4	2-1,5-4

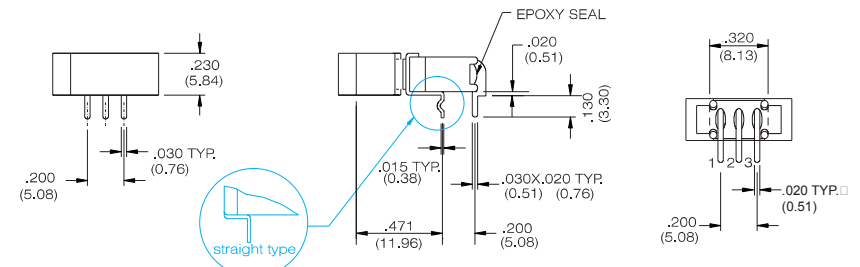


ER-5 - R1-2-CR

SPDT

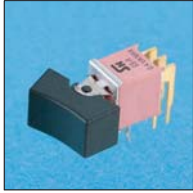


Model No.	Switching position		
ER-6	ON	none	ON
ER-6A	ON	OFF	ON
ER-6B	ON	None	(ON)
ER-6H	(ON)	OFF	(ON)
ER-6I	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1

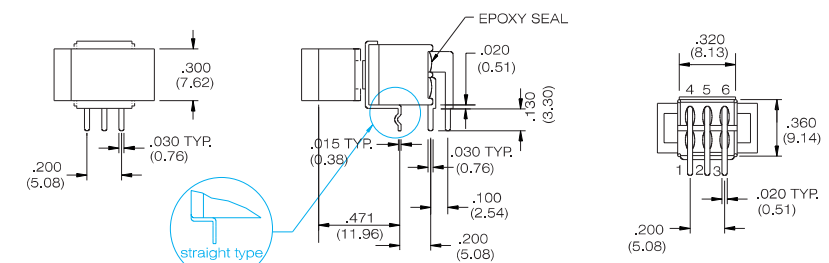


ER-6 - R2-R-S / ER-6-R2-R

DPDT

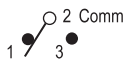
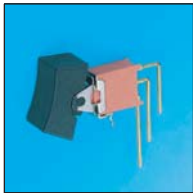


Model No.	Switching position		
ER-7	ON	none	ON
ER-7A	ON	OFF	ON
ER-7B	ON	None	(ON)
ER-7H	(ON)	OFF	(ON)
ER-7I	ON	OFF	(ON)
Term. Comm.	2-3,5-6	open	2-1,5-4
3 way switches (SP3T)			
ER-7C	ON	ON	ON
Term. Comm.	2-3,5-6	2-3,5-4	2-1,5-4

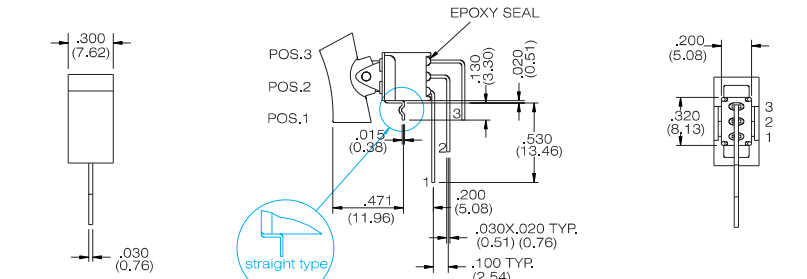


ER-7 - R1-2-R-S / ER-7-R1-2-R

SPDT

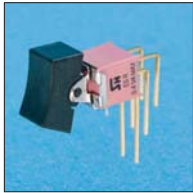


Model No.	Switching position		
ER-8	ON	none	ON
ER-8A	ON	OFF	ON
ER-8B	ON	None	(ON)
ER-8H	(ON)	OFF	(ON)
ER-8I	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1

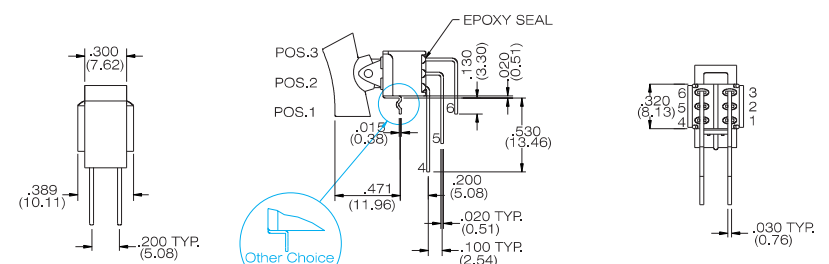


ER-8 - R1-2-R-S / ER-8-R1-2-R

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

INDEX

TOGGLE

ROCKER

SLIDE

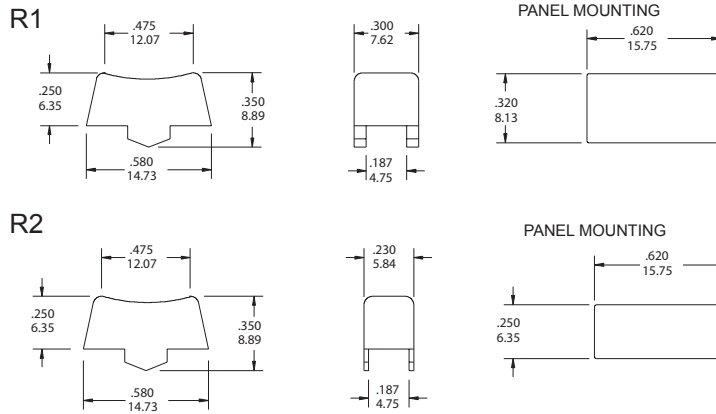
PUSHBUTTON

DIP

TACT

ES40-R Sealed Rocker Switches

Actuator Option

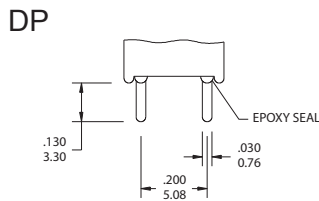
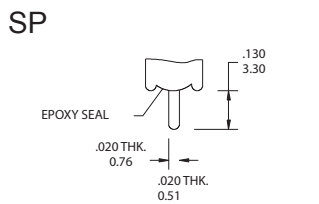


Actuator Color Option

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

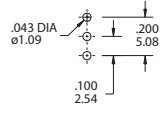
Other colors. custom actuator marking available consult factory.

TERMINAL OPTION (ER-4 / ER-5)

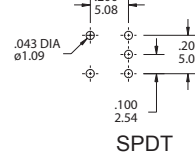


THE P.C.B MOUNTING

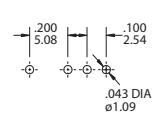
ER-4



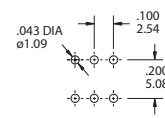
ER-6



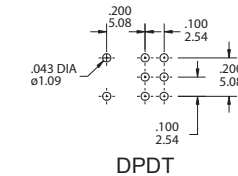
ER-8



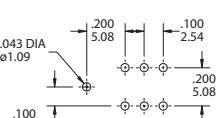
ER-5



ER-7



ER-9

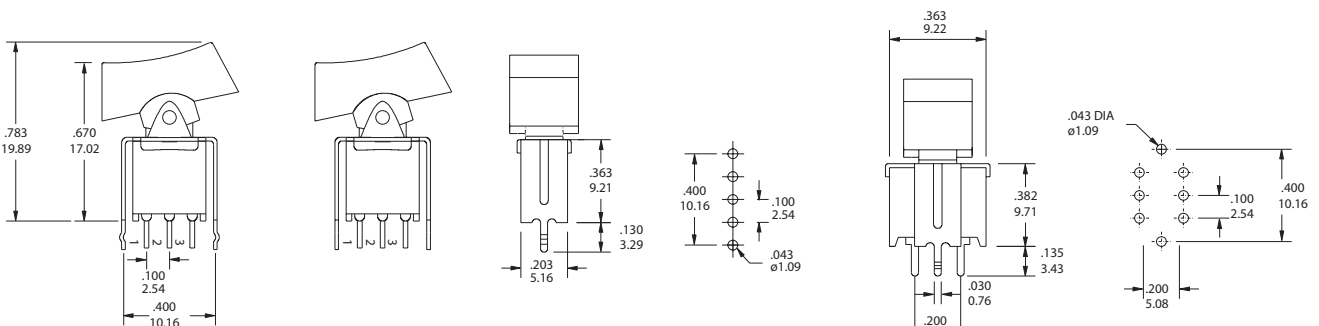


CONTACT MATERIAL OPTIONS

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



A5S (std.) snap-in type

A5 straight type

ER-4-R1-2-CQ-A5S

ER-5-R1-2-CQ-A5S