



# Data Sheet

## RISH Cam Spring Return Series



Rishabh's New Rish cam Spring Return Switches offers a complete range of switches for control, making and breaking circuit, isolation of power circuit.

- Rish Cam Spring Return 16 A
- Rish Cam Spring Return 25 A



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## Cam Spring Return (CSR) Switch



### Product Features

- Compact Design
- 60 & 90 Degree Angle of Throw
- Flag Type Knob Handle
- Spring Loaded Mechanism
- Standard Mounting Plate
- IP 20 (16A)

### Operation

Spring Return Switches provide contacts that are held closed only when the switch is turned against the mechanism spring. The mechanism returning the contacts to their original state upon release of the actuator.

This type of switches are known as "Momentary switches".

### Application

- Industrial Panel
- Generator Controls
- Motor Controls
- Mains Switching
- Coolant Pumps

Spring return switches are used to energise contactors for controlling motor operation. It offers unique alternative to multiple "Push Botton Stations" when one switch controls instead of many push buttons.

A focused range of Rish Cam Spring Return Series switches cover most of applications with different contact designs, contact materials and terminal allow their use as control switches as well as in electronic circuitry and in aggressive environment according to IEC/EN 60947-1,3 & 5



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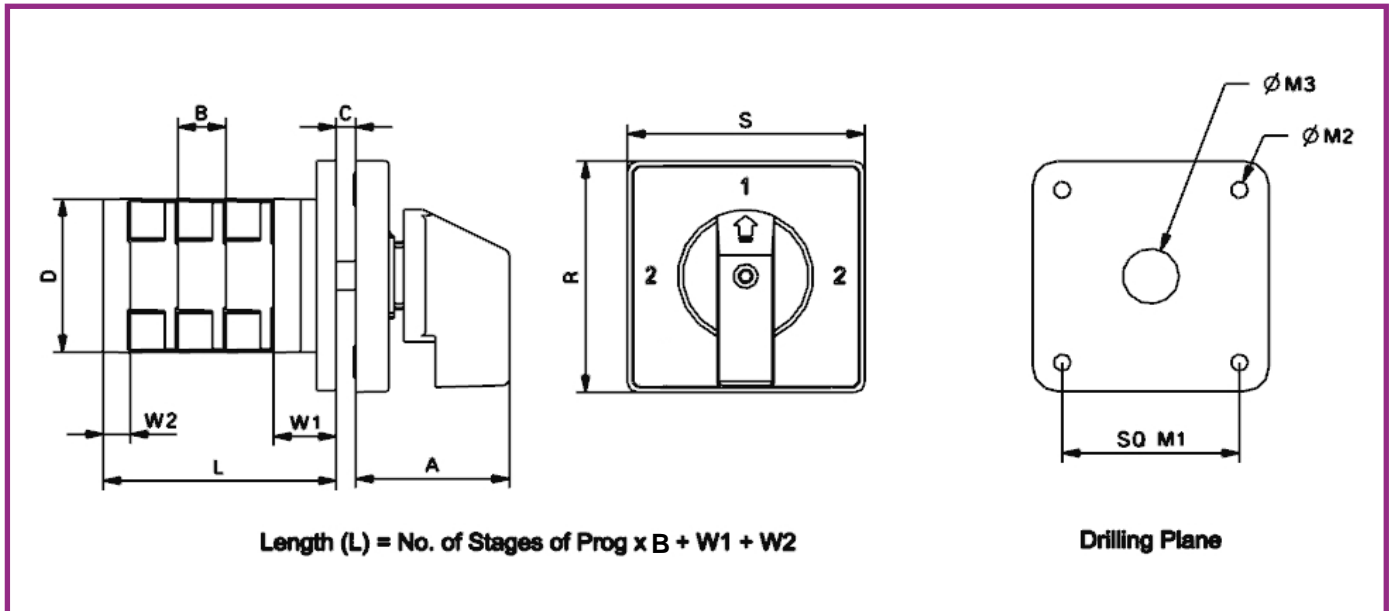


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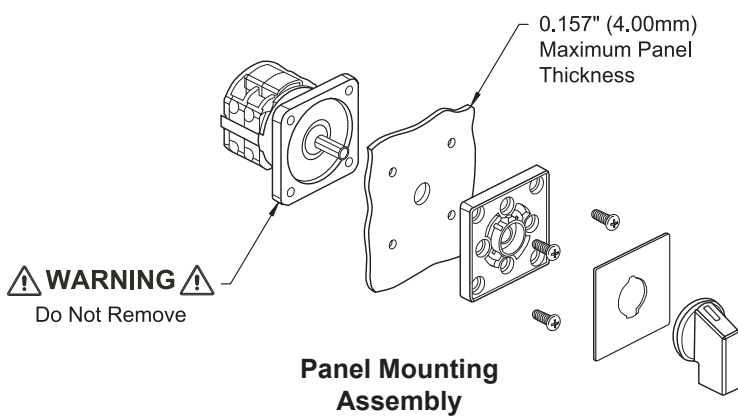


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### Rotary Cam Switches Dimensional Details



Type	A	B	C <sub>(Max.)</sub>	D	M1	M2	M3	R	S	W1	W2
Rish Cam 16A	29	9.5	4	43	36	4	7	60	48	19	5
Rish Cam 25A	34	14.3	4	53	48	4	12	64	64	24	6.2



### AC Duty Ratings

Category	Typical AC Application
AC-1	Non-Inductive or slightly inductive loads, Resistance furnaces
AC-3	Squirrel-cage motors: starting switching off motors during running
AC-15	Control of AC electromagnetic loads.
AC-21-A	Switching of resistive loads, including moderate overloads (frequent switching)
AC-23-A	Switching of motor loads or other highly inductive loads (frequent switching)



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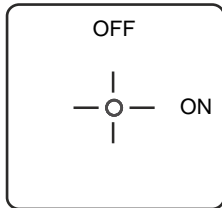


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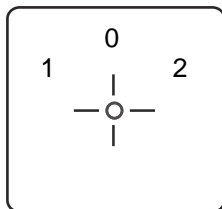


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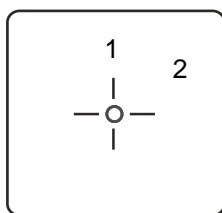
### RISH Cam Spring Return Switches



ON-OFF Spring Return Switches	Current Rating	
	Description	16A
ON OFF SPRING RETURN 90D 1P OFF	*	*
ON OFF SPRING RETURN 90D 2P OFF	*	*
ON OFF SPRING RETURN 90D 3P OFF	*	*
ON OFF SPRING RETURN 90D 4P OFF	*	*



DOUBLE THROW with OFF	Current Rating	
	Description	16A
DOUBLE SPRING RETURN 60D 1P 2W with OFF	*	*
DOUBLE SPRING RETURN 60D 2P 2W with OFF	*	*
DOUBLE SPRING RETURN 60D 3P 2W with OFF	*	*



Spring Return Switches without OFF	Current Rating	
	Description	16A
SPRING RETURN 60D 1P 2W W/OFF	*	*
SPRING RETURN 60D 2P 2W W/OFF	*	*
SPRING RETURN 60D 3P 2W W/OFF	*	*



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### Technical Data

Conformance to standards :		Operating Conditions :		Switch Life :	
European : IEC 60947-1 IEC 60947-3 CE IEC 60947-5 Indian : IS 13947-1/3/5		Frequency : 50/60 Hz Operating Temp. : -25°C to 60°C Over voltage category : III Storage : -40°C to 80°C Max. Altitude : 2000 m IP: 50 Front		Mechanical Life : 1 Lac operations @ 300 Cycles/hr Electrical Life : 10,000 operations @ 100% Rated duty at 120 cycles/hr Contacts : Double break type AgNi Double break type AgCdO	
Parameter		Unit	16A	25A	
Rated operational voltage (Ue)		V	690	690	
Rated Insulation voltage (Ui)		V	690	690	
Rated operational current (Ie)		A	16	25	
Conventional free air thermal current (Ith)		A	20	32	
Rated short time withstand current (Icw)	(1s- Current)	A	192*	300	
Rated Impulse withstand voltage (Uimp)		KV	4	6	
Rated Fuse short circuit current		KA	5	10	
Fuse size (Type gG /gM)		A	16	25	
AC23A 3phase	220-240V	KW	3	4.7	
	380-440V	KW	5.5	7.5	
	500V	KW	5.5	11	
	660-690V	KW	5.5	11	
AC23A 1phase	110V	KW	0.55	1.5	
	220-240V	KW	1.5	3	
	380-440V	KW	2.2	5.5	
AC3 3phase	220-240V	KW	3	4.7	
	380-440V	KW	5.5	7.5	
	500V	KW	5.5	11	
	600-690V	KW	5.5	11	
AC3 1phase	110V	KW	0.55	1.5	
	220-240V	KW	1.5	3	
	380-440V	KW	2.5	5.5	
AC21A/AC1		A	16	25	
AC15	220-240V	A	5	8	
	380-440V	A	4	5	
Terminal cross -section					
Single / Multiple	Min	mm <sup>2</sup>	1.5	2.5	
	Max	mm <sup>2</sup>	4	4	
Fine strand with sleeve	Min	mm <sup>2</sup>	1	1.5	
	Max	mm <sup>2</sup>	2.5	4	
Terminal screw		Metric	M3	M4	
Terminal tightening torque		Nm	0.8	1.2	

\* Rated short time withstand current (0.5s- current)



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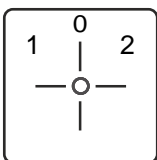
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### Ordering Information :

<b>CSRX</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>XX</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>XX</b>	<b>XX</b>
CSR1: ON-OFF (16A) CSR2: Double throw (16A) CSR3: SR without OFF (16A) CSR5: ON-OFF (25A) CSR6: Double throw (25A) CSR7: SR without OFF (25A)										
<b>Ampere Code</b> A : 16 A B : 25 A	A B									
<b>Type</b> 1 : ON-OFF Spring Return Switch 2 : Double throw with Spring Return Switch 3 : Spring Return Switch without OFF		1 2 3								
<b>No. Of Pole</b> 1 : 1 Pole 2 : 2 Pole 3 : 3 Pole 4 : 4 Pole			1 2 3 4							
<b>MAX. No. of Ways</b> XX : No ways 01 : 2 ways 02 : 4 ways				XX 01 02						
<b>OFF/W</b> w : without OFF O : with OFF				w O						
<b>Angle</b> 6 : 60 Degree 9 : 90 Degree					6 9					
<b>knob shape</b> F : Flang Shape						F				
<b>Front plate colour</b> A : Silvar Sheet & Black B : Yellow sheet & Red							A B			
<b>Blank</b>									00	
<b>Customer Specification</b>										00



Sr. No.	Ordering Code	Description
1	CSR6-B2102O6FA0000	DOUBLE THROW SPRI RETURN 25A 60D 1P 2W OFF
2	CSR2-A2102O6FA0000	DOUBLE THROW SPRI RETURN 16A 60D 1P 2W OFF



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