

Enabling Switch S834





Enabling switch S834

The S834 enabling switch is typically used in automatic handling machines and robotics. When installed in such devices, the S834 greatly increases the safety of the operator in the working area.

Application:

During operation of the machine the enabling switch must be held in the working position to maintain closure of the circuit. In case of emergency, the operator merely has to release the pressure on the button for the machine to stop immediately. The same is true for panic reaction, where the increased application of pressure will stop the machine.

Function:

To summarise, our S834 enabling switch only closes in the working position. In the rest and final positions the switch contacts are open. Contacts are not activated as the switch reverts to the rest position from the final position.

Technical data



Figure S834 enlarged

Conventional thermal current (I _p)	2.5A
Rated insulation voltage (U _i)	250 V
Rated impulse withstand voltage (U _{inp}) at contamination degree	1.5 kV 1
Contacts	Ag Cu3
Contact gap	1.2 mm min.
Operating force Operating force to operating position Holding force in operating position Operating force to final position Positive opening force	≤ 3 N < 3 N > 5 N ≤ 21 N
Positive opening travel	4.5 mm
External fuse	1A slow blow, acc. to IEC 127-2/5
Switching categories DC-12; U = 48VDC; I = 1A DC-13; U = 48VDC; I = 0.3A	max. voltage 600V max. voltage 14kV
Mechanical life Operations to working position Operations to final position	> 300 000 operations > 70 000 operations
Electrical life at 48VDC, 1A, resistive load	> 200 000 operations
Temperature range	0°C to 55°C
Mounting manual by soldering iron mechanical by soldering machine	400°C (5 seconds max.) 250°C (6 seconds max.)
Protection degree Contacts / Terminals	IP 50 / IP 00
Terminals	Pins for Printed Circuit Board
Weight	4.1 g ± 0.5 g
Mounting position	any

Ordering code: S834



Design features

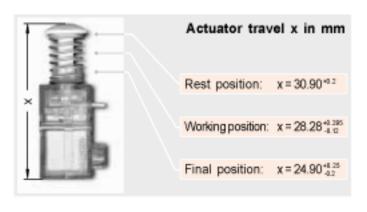
The enabling switch S 834 is distinguished by the following important features:

- Normally open contact, momentary contact type, three actuating states
- Self-cleaning contact points by wiping action
- Low transfer resistance (typical 6 mΩ)
- Soldering pins for PCB mounting
- Transparent green housing allows the contact condition to be viewed easily
- Return to rest position guaranteed even after spring failure

Standards

- Electrical and mechanical features for low voltage switch gear according to EN60947-5-1, IEC 947-5-1, VDE 0660 part 200
- Protection degree according to EN 60947-1 (7-92), terminals IP00, contacts IP50
- Plastics flame retardant according to UL 94V-0
- TÜV certificate in addition to IEC 947-5-1

Actuator travel



Mode of functions

- Rest position → Working position:
 Contact closed, if operator is holding the button manually in working position
- Working position → Final position:
 Contact open, if the operator presses the button to the lower final position
- Final position → Rest position:
 Contact open, no contact during release from final position to rest position

Device outline

12.8 ±0.1 ø8.5 ±0.1 R8 ±0.11 22.5 +0.1/-0.05 2.5 +0.45/-0.35 +0.15 ±0.1 Hole in the PCB ø5.0 ±0.05 9 14.84 50.1 1.5 ±0.05 16.5 ±0.05 2.5 ±0.42 Dimensions in mm

Application



Mounting instructions:

Please ensure protection against contact.



Electrical Components and Systems for Transportation and Industrial Applications

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Snap-action switches	 Snap-action switches with positive opening operation Snap-action switches with self-cleaning contacts Special switches to suit customer requirements
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