

SI-QS75

Non-Locking Plastic Safety Interlock Switches



- Mechanically coded actuators minimize intentional tampering or defeat
- 75 mm flat-pack style switch
- Rotating head requires no tools
- Flat pack and limit switch styles
- Rotating head allows actuator engagement from front or back or either of two top positions

SI-QS75 Flat-Pack Style Switches (kits), 75 mm

Actuator Type	Interlock	Contact(s)	Kit Model*
SI-QS-SSA-4 Rigid In-Line		SI-QS75C	1 NC
SI-QS-SSU Flexible In-Line		SI-QS75C	1 NC
SI-QS-SSA Rigid In-Line & SI-QS-100 High-force Accessory		SI-QS75C	1 NC



Multi-Directional

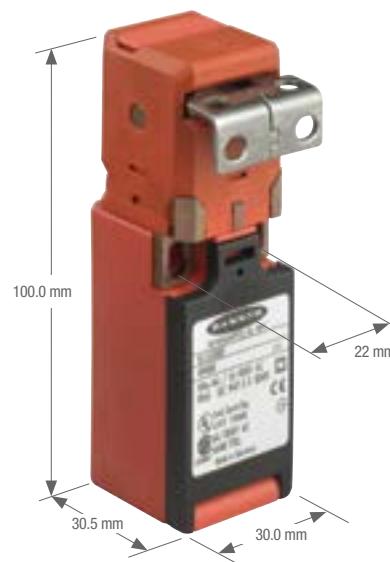
NC = Normally Closed Contact, NO = Normally Open Contact

* A kit contains an interlock and actuator. Individual interlocks (without actuator) are for replacement purposes only. Contact factory for integral quick-disconnect (QD) and pigtail QD options.

Flat-Pack Style Switches



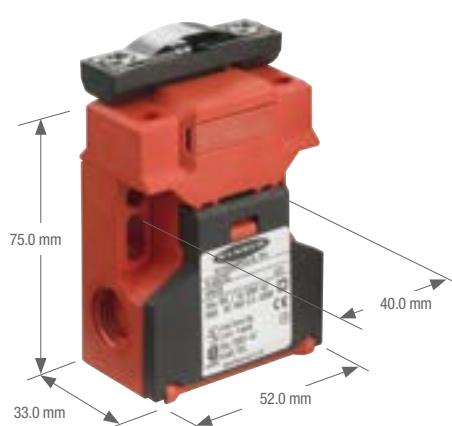
SI-LS83 Models



SI-LS100 Models

(both models shown with right-angle rigid in-line actuator)

Flat-Pack Style Switches



SI-QS75 Models



SI-QS90 Models

(both models shown with rigid in-line actuator)

SI-LS83 and SI-LS100 Plastic Style Switches Specifications

Contact Rating	10A @ 24 V ac, 10A @ 110 V ac, 6A @ 230 V ac, 6A @ 24 V dc 2.5 kV max. transient tolerance NEMA A300 P300													
European Rating	Utilization categories: AC15 and DC13 (IEC 60947-5-1) Switches with 1 & 2 contact pairs: $U_i = 500V$ ac, $I_{th} = 10A$ Switches with 3 contact pairs: $U_i = 400V$ ac, $I_{th} = 5A$	<table border="1"> <caption>40-60 Hz</caption> <thead> <tr> <th>U_i V</th> <th>I_{th}/AC-15 A</th> <th>I_{th}/DC-13 A</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>10</td> <td>6</td> </tr> <tr> <td>110</td> <td>10</td> <td>1</td> </tr> <tr> <td>230</td> <td>6</td> <td>.4</td> </tr> </tbody> </table>	U_i V	I_{th} /AC-15 A	I_{th} /DC-13 A	24	10	6	110	10	1	230	6	.4
U_i V	I_{th} /AC-15 A	I_{th} /DC-13 A												
24	10	6												
110	10	1												
230	6	.4												
Contact Material	Silver-nickel alloy													
Maximum Switching Speed	30 operations per minute													
Maximum Actuator Speed	1 m/second													
Mechanical Life	1 million operations													
Minimum Actuator Engagement Radius	In-line actuators: 150 mm Flexible actuators: 50 mm in all directions													
Actuation Extraction Force	12 N													
Short Circuit Protection	6 amp Slow Blow, 10 amp Fast Blow. Recommended external fusing or overload protection.													
Wire Connections	Stranded and solid: 20 AWG (0.5 mm ²) to 18 AWG (1.0 mm ²) for one wire Stranded: 20 AWG (0.5 mm ²) to 18 AWG (1.0 mm ²) for two wires													
Cable Entry	M20 x 1.5 for SI-LS100 and M16 x 1.5 for SI-LS83 threaded entrance. Adapter supplied to convert to 1/2"- 14 NPT threaded entrance.													
Construction	Glass fiber-reinforced thermoplastic UL94-VO rating													
Environmental Rating	IP65 NOTE: Addition of a No. 3 x 1/4" screw (max) to the wiring access door increases sealing to IP67; NEMA 4X													
Operating Conditions	Temperature: -30 to +80 °C													
Weight	SI-LS83 models: 0.12 kg SI-LS100 models: 0.13 kg													
Certifications	  													
Contact Configuration and Switching Diagrams	SI-LS100 models: SD011 (p. 673) SI-LS83 models: SD012 and SD013 (p. 673)													

SI-QS75 and SI-QS90 Flat-Pack Style Switches Specifications

Contact Rating	10A @ 24V ac, 10A @ 110V ac, 6A @ 230V ac, 6A @ 24V dc 2.5 kV max. transient tolerance NEMA A300 P300																		
European Rating	Utilization categories: AC15 and DC13 (IEC 60947-5-1) Switches with 1 & 2 contact pairs: $U_i = 500V$ ac, $I_{th} = 10A$ Switches with 3 contact pairs: $U_i = 400V$ ac, $I_{th} = 5A$																		
	<table border="1"> <caption>40-60 Hz</caption> <thead> <tr> <th>U_e</th> <th>$I_e/AC-15$</th> <th>$I_e/DC-13$</th> </tr> <tr> <th>V</th> <th>A</th> <th>A</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>10</td> <td>6</td> </tr> <tr> <td>110</td> <td>10</td> <td>1</td> </tr> <tr> <td>230</td> <td>6</td> <td>.4</td> </tr> </tbody> </table>				U_e	$I_e/AC-15$	$I_e/DC-13$	V	A	A	24	10	6	110	10	1	230	6	.4
U_e	$I_e/AC-15$	$I_e/DC-13$																	
V	A	A																	
24	10	6																	
110	10	1																	
230	6	.4																	
Contact Material	Silver-nickel alloy																		
Maximum Switching Speed	30 operations per minute																		
Maximum Actuator Speed	1 m/second																		
Mechanical Life	1 million operations																		
Minimum Actuator Engagement Radius	In-line actuators: 150 mm Flexible actuators: 50 mm in all directions																		
Actuation Extraction Force	High-Force models: adjustable from 50-100 N		All others: 10 N																
Short Circuit Protection	6 amp Slow Blow, 10 amp Fast Blow. Recommended external fusing or overload protection.																		
Wire Connections	Screw terminals with pressure plates accept the following wire sizes – For switches with one or two contacts: Stranded and solid: 20 AWG (0.5 mm ²) to 16 AWG (1.5 mm ²) for one wire Stranded: 20 AWG (0.5 mm ²) to 18 AWG (1.0 mm ²) for two wires For switches with three contacts: Stranded and solid: 20 AWG (0.5 mm ²) to 18 AWG (1.0 mm ²) for one wire Stranded: 20 AWG (0.5 mm ²) to 18 AWG (1.0 mm ²) for two wires																		
Cable Entry	M20 x 1.5 for SI-QS90 and M16 x 1.5 for SI-QS75 threaded entrance. Adapter supplied to convert to 1/2" - 14 NPT threaded entrance.																		
Construction	Glass fiber-reinforced thermoplastic UL94-VO rating																		
Environmental Rating	IP65 NOTE: Addition of a No. 3 x 1/4" screw (max) to the wiring access door increases sealing to IEC IP67; NEMA 4X																		
Operating Conditions	Temperature: -30 to +80 °C																		
Weight	SI-QS75 models: 0.11 kg SI-QS90 models: 0.13 kg																		
Application Notes	Models with one and two contacts have three cable entry locations (bottom and two sides); models with three contacts have two cable entry locations (two sides). All entry locations are sealed with knockouts. To remove knockouts, thread the supplied M16 x 1.5 or M20 x 1.5 to 1/2" - 14 NPT conduit adapter or optional M16 x 1.5 or M20 x 1.5 cable gland into one of the threaded entry locations. The knockout will break open just before the adapter or cable gland bottoms out.																		
Certifications	 																		
Contact Configuration and Switching Diagrams	SI-QS75 models: SD014 (p. 674) SI-QS90 models: SD015, SD016 and SD017 (p. 674)																		