

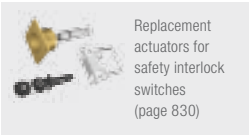
SI-QS90

Non-Locking Plastic Safety Interlock Switches

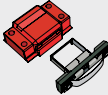

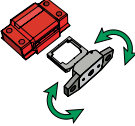
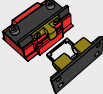
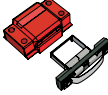

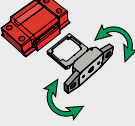
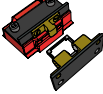


- Mechanically coded actuators minimize intentional tampering or defeat
- 90 mm flat-pack style switch
- Rotating head requires no tools
- Rotating head allows actuator engagement from front or back or either of two top positions

SI-QS90 Flat-Pack Style Switches(kits), 90 mm



Replacement actuators for safety interlock switches (page 830)

Actuator Type		Interlock	Contact(s)	Kit Model*
SI-QS-SSA-4 Rigid In-Line		SI-QS90D	1 NC & 1 NO	SI-QS90MD
 SI-QS-SSU Flexible In-Line		SI-QS90D	1 NC & 1 NO	SI-QS90MFD
SI-QS-SSA Rigid In-Line & SI-QS-100 High-force Accessory		SI-QS90D	1 NC & 1 NO	SI-QS90MD-100 (High-Force)
SI-QS-SSA-4 Rigid In-Line		SI-QS90E	2 NC	SI-QS90ME
 SI-QS-SSU Flexible In-Line		SI-QS90E	2 NC	SI-QS90MFE
SI-QS-SSA Rigid In-Line & SI-QS-100 High-force Accessory		SI-QS90E	2 NC	SI-QS90ME-100 (High-Force)

SI-QS90 Flat-Pack Style Switches(kits), 90 mm

Actuator Type		Interlock	Contact(s)	Kit Model*
SI-QS-SSA-4 Rigid In-Line		SI-QS90F	2 NC & 1 NO	SI-QS90MF
 SI-QS-SSU Flexible In-Line		SI-QS90F	2 NC & 1 NO	SI-QS90MFF
SI-QS-SSA Rigid In-Line & SI-QS-100 High-force Accessory		SI-QS90F	2 NC & 1 NO	SI-QS90MF-100 (High-Force)



Multi-Directional

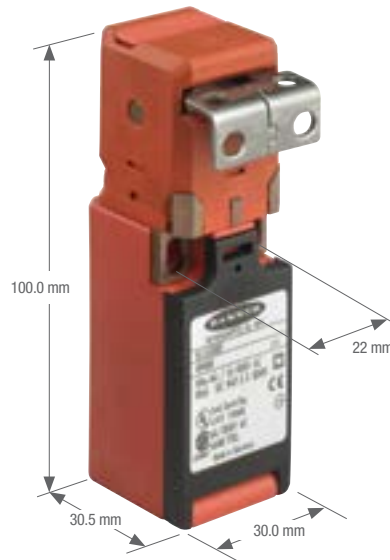
NC = Normally Closed Contact, NO = Normally Open Contact

* 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-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"> <thead> <tr> <th colspan="3">40-60 Hz</th></tr> <tr> <th>U_g V</th><th>$I_g/AC-15$ A</th><th>$I_g/DC-13$ 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>	40-60 Hz			U_g V	$I_g/AC-15$ A	$I_g/DC-13$ A	24	10	6	110	10	1	230	6	.4
40-60 Hz																	
U_g V	$I_g/AC-15$ A	$I_g/DC-13$ 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	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 ½" - 14 NPT threaded entrance.																
Construction	Glass fiber-reinforced thermoplastic UL94-VO rating																
Environmental Rating	IP65 NOTE: Addition of a No. 3 x ¼" 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 ½" - 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)																