Comepi Safety Switches

These safety switches are developed and manufactured according to IEC and EN European standards.

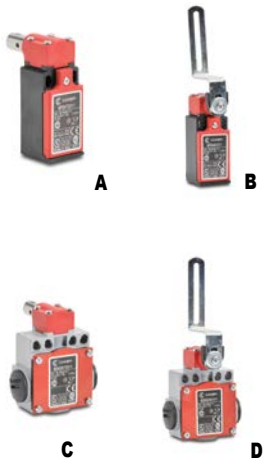
Easy to use, electromechanical safety switches provide:

- Visible operation
- Ability to switch large currents (10 A conventional thermal current)
- Precise operating points (consistency)
- Immunity to electromagnetic disturbances
- Electrically separated contacts (Zb)
- N.C. contacts with positive opening operation
- Actuation Speed: Max. - 0.5 m/s; Min. - 0.01 m/s
- Conduit opening - 1/2" NPT threaded or adapter

Note: Purchase actuating tongue (key) separately.

Safety Limit Switches

Part Number	Price	Actuator Type	No. of Conduit Holes	Min Torque	Positive Opening Force	B10d	Dimensions Body / Head	Contact Config. Diagram	Weight (lb)	Photo
SP2K72X11	$27.50	90° adjustable head, shaft hinge interlock	One	0.12 Nm	0.60 Nm	2 million operations	Figures 1, 3	1	0.2	A
SP2K72W02	$27.50		One				Figures 1, 3	2	0.2	A
SP2K61X11	$18.50	90° adjustable head, lever hinge interlock	One				Figures 1, 4	1	0.2	B
SP2K61W02	$18.50		One				Figures 1, 4	2	0.2	B
SDM2K72X11	$32.00	90° adjustable head. shaft hinge interlock	Three	0.12 Nm	0.60 Nm		Figures 2, 3	1	0.6	C
SDM2K72W02	$32.00		Three				Figures 2, 3	2	0.6	C
SDM2K61X11	$23.50	90° adjustable head. lever hinge interlock	Three				Figures 2, 4	1	0.6	D
SDM2K61W02	$23.50		Three				Figures 2, 4	2	0.6	D



Dimensions

mm [in]

Figure 1: SP2K body

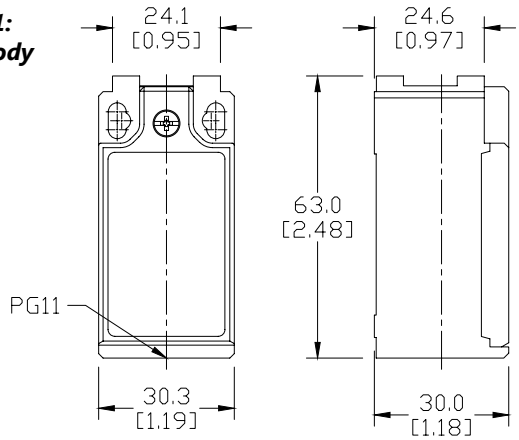
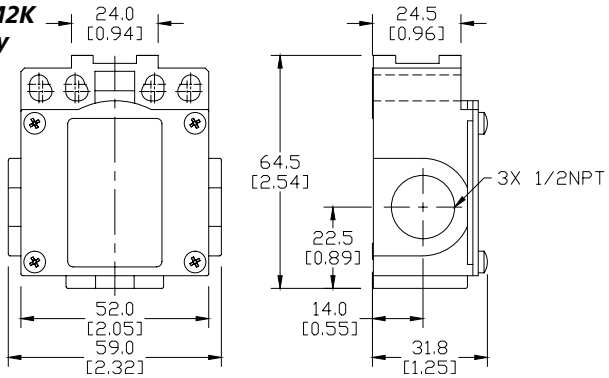


Figure 2: SDM2K body



Actuator Dimensions

mm [in]

Figure 3: 90° adjustable head with shaft hinge interlock - SP2K72, SDM2K72 models

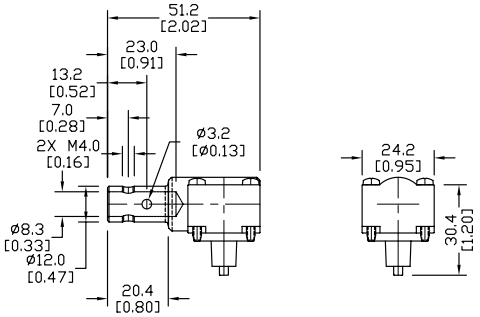
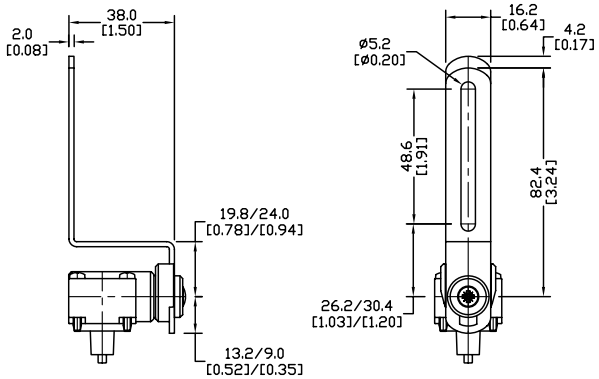


Figure 4: 90° adjustable head with lever hinge interlock - SP2K61, SDM2K61 models



Comepi Safety Switches

Contacts Configuration Charts

Chart 1

X11 Slow action break before make 1NO+1NC

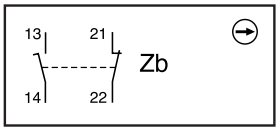
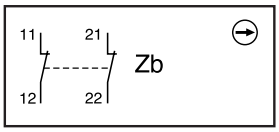


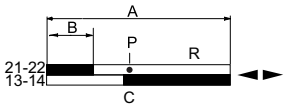
Chart 2

W02 Simultaneous slow action 2NC

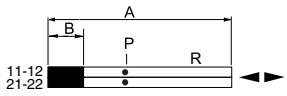


Bar charts for shaft levers and limit switches

X11



W02



A = Max. travel of the operator in mm or degrees
B = Tripping travel of the N.C. contact
C = Tripping travel of the N.O. contact
P = Point from which positive opening is assured
R = Reset latch activates

= Contact open

= Contact closed

Part Series	Contact Configuration	Displacement Values mm[in] or degrees			
		A	*B*	*C*	*P*
SP2K72, SP2K61, SDM2K72, SDM2K61	X11	±90°	±6°	±15°	±31°
	W02	±90°	±5°	–	±30°

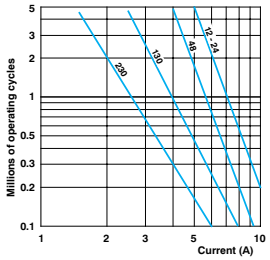
Comepi Safety Switches

General Technical Specifications		
Environmental		
Approvals		All: IEC 947-5-1, EN 60947-5-1, UL 508, CSA C22.2 No 14, RoHS
Degree of Protection		Plastic models: IP65 according to IEC 529 Aluminum and ZAMAK (zinc alloy) models: IP66 according to IEC 529
Temperature Range		Plastic models: storage: -30° to 80°C (-22° to 176°F) operating: -25° to 70°C (-13° to 158°F) Aluminum and ZAMAK (zinc alloy)models: storage: -30° to 80°C (-22° to 176°F) operating: --25° to 70°C (-13° to 158°F); minimum temperatures assume that the atmosphere is free of moisture, which could cause moving parts to freeze up.
Rated Insulation Voltage		SDM:400V, All others 500V; (degree of pollution - 3)
Mechanical Ratings		
Mechanical Life		1 million operations. Pull wire models - 25,000 operations
Enclosure Material		Plastic models: fiberglass-reinforced plastic-V0 class (UL94); aluminum models: die-cast aluminum; ZAMAK models: zinc alloy
Contact Blocks Rating		
Positive Opening		Yes, all models
Electrical Ratings	AC15	Make: 60A@120VAC; 30A @ 240VAC; 18A @ 400VAC Break:10A @ 24VAC; 6.5A @130VAC; 3.1A @ 230VAC; 1.8A @ 400VAC
	DC13	2.8A @ 24VDC; 0.5A @ 110VDC
Maximum Switching Frequency		Contact blocks: all one cycle per second
Repeat Accuracy		0.01mm on the operating points at 1 million operations
Short-Circuit Protection		Cartridge fuses, general purpose, gl 10A-500V 10.3x38 1 100KA
Contact Resistance		25 milli q
Recommended Minimum Operating Speed		With slow-action contacts: 500 mm per minute*
Rated Insulation Voltage		660V
Terminals Marking		According to CENELEC EN 50013
Wiring Connections		2 x 2.5mm^2 (AWG14) to 2 x 0.5mm^2 (AWG18)
Wiring Terminal Type		Captive screw with self-lifting pressure plate
Wiring Terminal Markings		According to CENELEC EN50013
User Protection		Double insulation (plastic models only)
Contact Blocks Performance		
Operation Frequency		3600 ops/h
Electrical Durability (according to IEC 947-5-1)		Utilization categories AC-15 and DC-13; load factor of 0.5. See table and curves below.
Tools Needed		
Phillips screwdriver, #1 #2 / Hex wrench, 10mm		

***Note: Slow-action contacts must not be operated at very low speeds because of the tendency to maintain the arc if contacts are not rapidly separated.**

Electrical Durability (according to IEC 947-5-1)

AC-15 Slow Action



DC-13	Slow Action
	Power breaking for a durability of 5 million cycles
24 Volts	12W
48 Volts	9W
110 Volts	6W

Safety Products

Warning: Safety products sold by AutomationDirect are Safety components only. The purchaser/installer is solely responsible for the application of these components and ensuring all necessary steps have been taken to assure each application and use meets all performance and applicable safety requirements and/or local, national and/or international safety codes as required by the application. AutomationDirect cannot certify that our products, used solely or in conjunction with other AutomationDirect or other vendors' products, will assure safety for any application. Any person using or applying any products sold by AutomationDirect is responsible for learning the safety requirements for their individual application and applying them, and therefore assumes all risks, and accepts full and complete responsibility, for the selection and suitability of the product for their respective application.

AutomationDirect does not provide design or consulting services, and cannot advise whether any specific application or use of our products would ensure compliance with the safety requirements for any application.