Comepi Safety Tongue 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 (10A conventional thermal current)
- Precise operating points (consistency)
- Immunity to electromagnetic disturbances
- Electrically separated contacts (Zb)
- N.C. contacts with positive opening operation
- Actuation Speed: 0.5 to 0.01 m/s [19.7 to 0.4 in/s]
- Conduit opening – 1/2 in NPT threaded or adapter



SCM2K4000W03



SBM2K4000W03

Please note: $US prices shown
For current $AUD visit www.directautomation.com.au

Safety Tongue Switch Selection Guide

Part Number	Price	Safety Output Type	Monitoring Output Type	Head Type	IP Rating	Cable Entry	Body Material	Drawing
SBM2K4000W02	$36.00	(2) N.C.	-	90° adjustable	IP66	(1) 1/2in NPT	Die-cast aluminum	PDF
SBM2K4000W03	$39.50	(3) N.C.	-	90° adjustable	IP66	(1) 1/2in NPT	Die-cast aluminum	PDF
SBM2K4000X11	$36.00	(1) N.C.	(1) N.O.	90° adjustable	IP66	(1) 1/2in NPT	Die-cast aluminum	PDF
SBM2K4000X12	$39.00	(2) N.C.	(1) N.O.	90° adjustable	IP66	(1) 1/2in NPT	Die-cast aluminum	PDF
SCM2K4000W02	$37.50	(2) N.C.	-	90° adjustable	IP66	(3) 1/2in NPT	Die-cast aluminum	PDF
SCM2K4000W03	$40.50	(3) N.C.	-	90° adjustable	IP66	(3) 1/2in NPT	Die-cast aluminum	PDF
SCM2K4000X11	$37.50	(1) N.C.	(1) N.O.	90° adjustable	IP66	(3) 1/2in NPT	Die-cast aluminum	PDF
SCM2K4000X12	$40.00	(2) N.C.	(1) N.O.	90° adjustable	IP66	(3) 1/2in NPT	Die-cast aluminum	PDF

Note: Purchase actuating tongue (key) separately

Safety Tongue Switch Key Selection Guide

Part Number	Price	Angle	Hole Spacing	Material	Fits
KEY45	$2.25	90°	13mm	316 stainless steel	Comepi SBM2K and SCM2K series safety switches
KEY46	$2.00	Straight	13mm	316 stainless steel	Comepi SBM2K and SCM2K series safety switches
KEY49	$5.25	Flexible	40mm	316 stainless steel	Comepi SBM2K and SCM2K series safety switches



KEY45



KEY46



KEY49

Comepi Safety Tongue Switches

Contacts Configuration Charts

Chart 1

X11 Slow action break before make 1NO+1NC

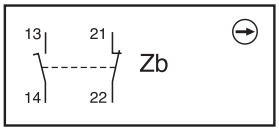


Chart 2

W02 Simultaneous slow action 2NC

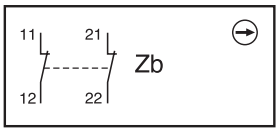


Chart 3

X12 Slow action break before make 1NO+2NC

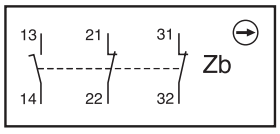
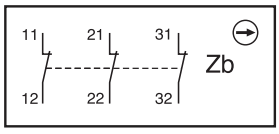


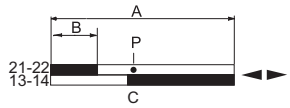
Chart 4

W03 Simultaneous slow action 3NC

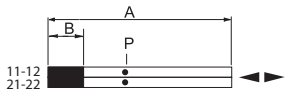


Bar Charts For Tongue (Key) Interlock Switches

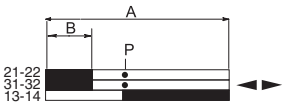
X11



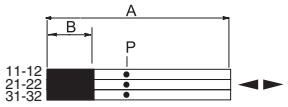
W02



X12



W03



A = Max. travel of the operator inmmor 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

= Contact open

= Contact closed

Part Series	Contact Configuration	Displacement Values (mm [in])			
		A	*B*	*C*	*P*
SBM2K4000 SCM2K4000	X11	26.6 [1.05]	4.4 [0.17]	5.5 [0.22]	5.8 [0.23]
	W02	26.6 [1.05]	3.3 [0.13]	–	4.4 [0.17]
	X12	26.6 [1.05]	3.9 [0.15]	5.0 [0.20]	5.2 [0.20]
	W03	26.6 [1.05]	3.8 [0.15]	–	4.9 [0.19]

Comepi Safety Switches

General Specifications					
		SBM	***SCM***	***SDM***	***SP2***
Environmental					
Degree of Protection		IP66	IP66	IP66	IP65
Temperature Range		-30° to +80 °C [-22° to +176 °F] Minimum temperatures assume that the atmosphere is free of moisture, which could cause moving parts to freeze up.			
Rated Insulation Voltage		500V			
Pollution Degree		Degree 3			
Mechanical Ratings					
Mechanical Life		Cable Pull: 500,000 operations Interlock: 1,000,000 operations			
B10d		Cable Pull: 1,000,000 operations Interlock: 2,000,000 operations			
Enclosure Material		Die-cast aluminum	Die-cast aluminum	Zinc alloy	Fiberglass reinforced plastic V0 class (UL94)
Contact Blocks Rating					
Positive Opening		Yes			
Electrical Ratings	AC15	24 VAC = 10A 120 VAC = 6A 400 VAC = 4A			
	DC13	24 VDC = 6A 125 VDC = 0.55A 250 VDC = 0.4A			
Maximum Switching Frequency		One cycle per second			
Short Circuit Protection		Cartridge fuses, general purpose, gl 10 A-500V 10.3x38 1 100 KA			
Contact Resistance		25 mΩ			
Recommended Minimum Operating Speed		500mm per minute (applies only to slow-action contacts)			
Terminals Marking		According to IEC 60947-5-1			
Wiring Connections		2.08 mm^2 (14 AWG) to 0.82 mm^2 (18AWG)			
Terminal Max Tightening Torque		0.8 N·m			
Wiring Terminal Type		Captive screw with self-lifting pressure plate			
Tools Needed					
Phillips screwdriver, #1 #2 / Hex wrench, 10mm					

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.