# **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 (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: 0.5 to 0.01 m/s [19.7 to 0.4 in/s]
- Conduit opening 1/2" NPT threaded or adapter





SDM2K10W02

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Safety Tongue Switch Selection Guide									
Part Number	Price	Safety Output Type	Monitoring Output Type	Head Type	IP Rating	Cable Entry	Body Material	Drawing	
SDM2K10W02	\$23.00	(2) N.C.	-	90-degree adjustable	IP66	(3) 1/2in NPT	Zinc alloy	PDF	
SDM2K10X11	\$23.00	(1) N.C.	(1) N.O.	90-degree adjustable	IP66	(3) 1/2in NPT	Zinc alloy	<u>PDF</u>	
SDM2K80W02	\$26.50	(2) N.C.	-	360-degree adjustable	IP66	(3) 1/2in NPT	Zinc alloy	<u>PDF</u>	
SDM2K80X11	\$26.50	(1) N.C.	(1) N.O.	360-degree adjustable	IP66	(3) 1/2in NPT	Zinc alloy	<u>PDF</u>	
<u>SP2K10W02</u>	\$18.50	(2) N.C.	-	90-degree adjustable	IP65	(1) PG11 with 1/2in NPT adapter	Thermoplastic	<u>PDF</u>	
<u>SP2K10X11</u>	\$18.50	(1) N.C.	(1) N.O.	90-degree adjustable	IP65	(1) PG11 with 1/2in NPT adapter	Thermoplastic	PDF	
SP2K80W02	\$22.50	(2) N.C.	-	360-degree adjustable	IP65	(1) PG11 with 1/2in NPT adapter	Thermoplastic	<u>PDF</u>	
SP2K80X11	\$22.50	(1) N.C.	(1) N.O.	360-degree adjustable	IP65	(1) PG11 with 1/2in NPT adapter	Thermoplastic	<u>PDF</u>	

Note: Purchase actuating tongue (key) separately

Safety Tongue Switch Key Selection Guide									
Part Number	Price	Angle	Hole Spacing	Material	Fits				
KEY3	\$1.50	90 degree	22mm	316 stainless steel	Comepi SP2K and SDM2K series safety switches				
KEY4	\$1.50	straight	22mm	316 stainless steel	Comepi SP2K and SDM2K series safety switches				
KEY5	\$1.50	90 degree	13mm	316 stainless steel	Comepi SP2K and SDM2K series safety switches				
KEY6	\$1.25	straight	13mm	316 stainless steel	Comepi SP2K and SDM2K series safety switches				
KEY7	\$3.25	90 degree	15mm	316 stainless steel	Comepi SP2K and SDM2K series safety switches				
KEY8	\$3.00	straight	15mm	316 stainless steel	Comepi SP2K and SDM2K series safety switches				
KEY9	\$4.00	flexible	40mm	316 stainless steel	Comepi SP2K and SDM2K series safety switches				



KEY3



KEY4



KEY5



KEY6







KEY8

KEY9

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# **Comepi Safety Tongue Switches**



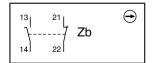
## **Contacts Configuration Charts**

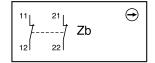
#### Chart 1

Chart 2

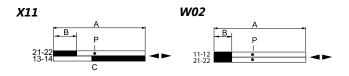
X11 Slow action break before make 1NO+1NC

W02 Simultaneous slow action 2NC





### **Bar Charts For Tongue (Key) Interlock Switches**



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 = Contact open
= Contact closed

Part Series	Contact	Displacement Values mm[in]				
rait selles	Configuration	A	В	С	P	
SDM2K10 SDM2K80	X11	21.5 [0.85]	2.7 [0.11]	3.8 [0.15]	4.1 [0.16]	
SP2K10 SP2K80	W02	21.5 [0.85]	3.5 [0.14]	ı	4.6 [0.18]	

# **Comepi Safety Switches**



General Specifications								
		SBM	SCM	SDM	SP2			
Environmental En								
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 Volta	age	500V						
Pollution Degree			Degr	ree 3				
		Mechanic	eal Ratings					
Mechanical Life			Cable Pull: 500 Interlock: 1,000					
B10d			Cable Pull: 1,000 Interlock: 2,000					
Enclosure Material		Die-cast aluminum	Die-cast aluminum	Zinc alloy	Fiberglass reinforced plastic V0 class (UL94)			
Contact Blocks Rating								
Positive Opening		Yes						
	AC15	24VAC = 10A 120VAC = 6A 400VAC = 4A						
Electrical Ratings	DC13	24VDC = 6A 125VDC = 0.55 A 250VDC = 0.4 A						
Maximum Switching	Frequency	one cycle per second						
Short Circuit Protection		Cartridge fuses, general purpose, gl 10A-500V 10.3x38 1 100KA						
Contact Resistance		25 mΩ						
Recommended Minimum Operating Speed		500 mm per minute (applies only to slow-action contacts)						
Terminals Marking		According to IEC 60947-5-1						
Wiring Connections		2.08 mm <sup>2</sup> (14AWG) to 0.82 mm <sup>2</sup> (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.