Comepi Safety Cable Pull Switches ⒞ COMEPI

These safety cable pull 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

Safety Cable Pull Selection Guide

Part Number	Price	Max Length for Cable Pull	Safety Output Type	Monitoring Output Type	Cable Entry	Body Material	Drawing
SBM2K9900W02	$27.00	25m [82ft]	(2) N.C.	-	(1) 1/2in NPT	Die-cast aluminum	PDF
SBM2K9900W03	$30.00	25m [82ft]	(3) N.C.	-	(1) 1/2in NPT	Die-cast aluminum	PDF
SBM2K9900X11	$27.00	25m [82ft]	(1) N.C.	(1) N.O.	(1) 1/2in NPT	Die-cast aluminum	PDF
SBM2K9900X12	$29.50	25m [82ft]	(2) N.C.	(1) N.O.	(1) 1/2in NPT	Die-cast aluminum	PDF
SCM2K9900W02	$28.00	25m [82ft]	(2) N.C.	-	(3) 1/2in NPT	Die-cast aluminum	PDF
SCM2K9900W03	$31.00	25m [82ft]	(3) N.C.	-	(3) 1/2in NPT	Die-cast aluminum	PDF
SCM2K9900X11	$28.00	25m [82ft]	(1) N.C.	(1) N.O.	(3) 1/2in NPT	Die-cast aluminum	PDF
SCM2K9900X12	$30.50	25m [82ft]	(2) N.C.	(1) N.O.	(3) 1/2in NPT	Die-cast aluminum	PDF
SDM2K9800W02	$28.50	15m [49ft]	(2) N.C.	-	(3) 1/2in NPT	Zinc alloy	PDF
SDM2K9800X11	$28.50	15m [49ft]	(1) N.C.	(1) N.O.	(3) 1/2in NPT	Zinc alloy	PDF

SBM2K9900W03

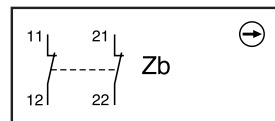SCM2K9900W03

SDM2K9800W02

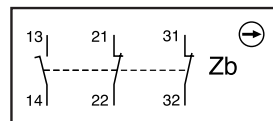## Contacts Configuration Charts

Chart 1

X11 Slow action
1NO+1NC

13 21   ⊖→
14 22   Zb
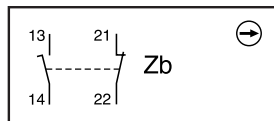
Chart 2

W02 Simultaneous slow action
2NC

11 21   ⊖→
12 22   Zb

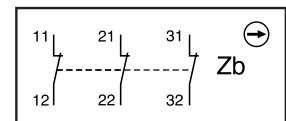### Chart 3

X12 Slow action
1NO+2NC

13 21 31   ⊖→
14 22 32 Zb

Chart 4

W03 Simultaneous slow action
3NC

11 21 31   ⊖→
12 22 32 Zb

Safety Electrical Components tESC-145

Comepi Safety Cable Pull Switches ⓒⓒ COMEPI

Bar Charts For Cable Pulls

X11
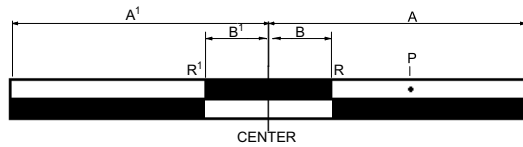
X12
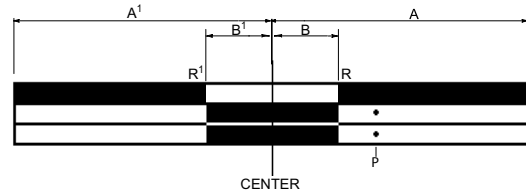
W02
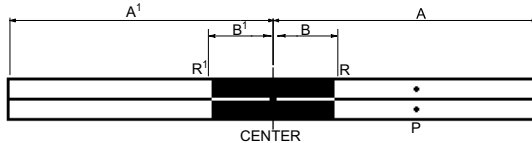
W03
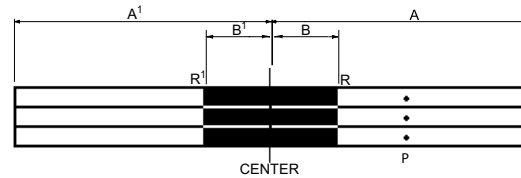
Pull Tension from Center

A = Max. travel of the operator in mm

B = Tripping travel

P = Point from which positive opening is assured

R = Reset latch activates

Lax Tension from Center

A^1 = Max. travel of the operator in mm

B^1 = Tripping travel

R^1 = Reset latch activates

☐ = Contact open

■ = Contact closed

Part Series	Contact Configuration	Displacement Values mm[in]							
		A1	B1	R1	Center*	B	R	P	A
SBM2K9900 SCM2K9900 SDM2K9800	X11	5.6 [0.22]	3.0 [0.12]	3.0 [0.12]	0 [0]	3.0 [0.12]	3.0 [0.12]	3.7 [0.15]	4.0 [0.16]
	W02								
	X12								
	W03								

Note:

*At center line, green ring on switch will be visible.

Part Series	Contact Configuration	Force Values N [lbf]							
		A1	B1	R1	Center	B	R	P	A
SBM2K9900 SCM2K9900	X11	0 [0]	80 [17.98]	80 [17.98]	120 [26.98]	160 [35.97]	160 [35.97]	170 [38.22]	170 [38.22]
	W02								
	X12								
	W03								
SDM2K9800	X11	40 [8.99]	80 [17.98]	80 [17.98]	120 [26.98]	160 [35.97]	160 [35.97]	170 [38.22]	170 [38.22]
	W02								

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	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^2 (14AWG) 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				

Comepi Safety Switches Accessories

OCC08

M8 X 1.25mm
11.0 [0.43]
24.0 [0.94]
56.0 [2.20]

6.5 [0.26]
83.0 [3.27]
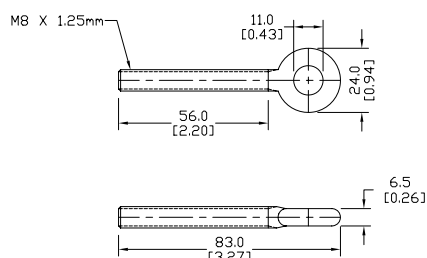
Safety Limit Switches Cable Pull Accessories

Part Number	Price	Description	Weight (lb)
OCC08	$1.00	Eye bolt	0.2
MOR05	$1.00	Cable Clamp	0.1
RED05	$1.00	Eye thimble	0.0
FUN05M015	$15.50	15 meter length steel cable 5 mm diameter, Red	2.0
FUN05M025	$23.50	25 meter length steel cable, 5 mm diameter, Red	3.3

MOR05

M5 X 0.8mm
24.0 [0.94]
22.0 [0.87]
11.0 [0.43]

RED05

29.0 [1.14]
19.3 [0.76]
16.0 [0.63]
42.0 [1.65]
9.0 [0.35]
6.0 [0.24]
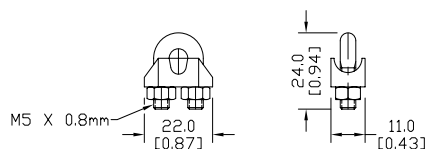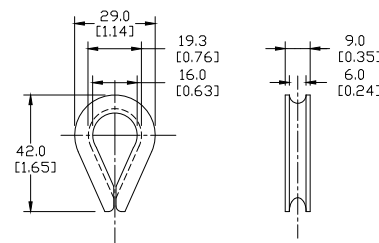
All dimensions are in mm [in].

FUN05M025

Installation example

SM, SDM series: 6m max
SBM, SCM series: 16m max

SM, SDM series: 15m max
SBM, SCM series: 25m max

MOR05

RED05

OCC08

SM, SDM series
SBM, SCM series

3m max
3-5m max

3m max
3-5m max

3m max
3-5m max

3m max
3-5m max

3m max
3-5m max

FUN05M025
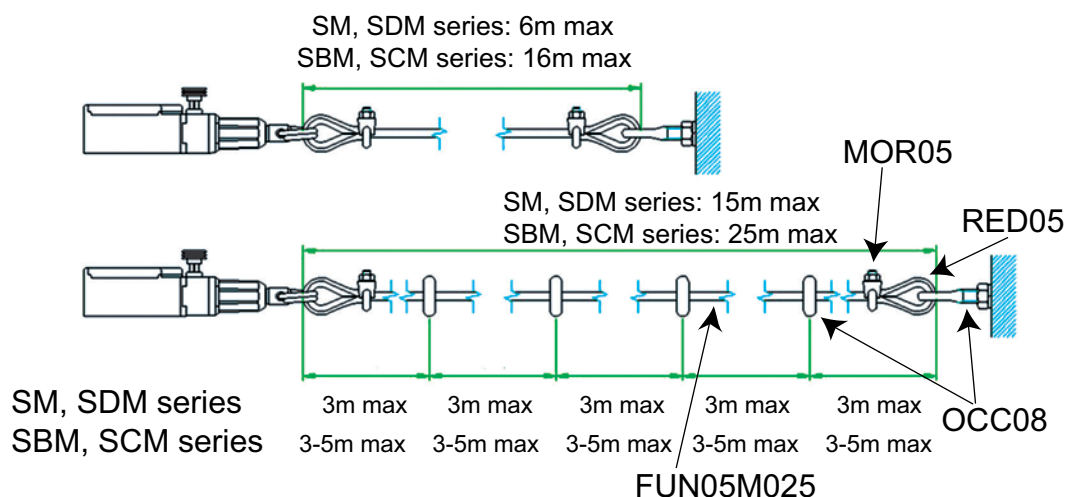
Safety Products

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.