

Safety Limit Switches

Description

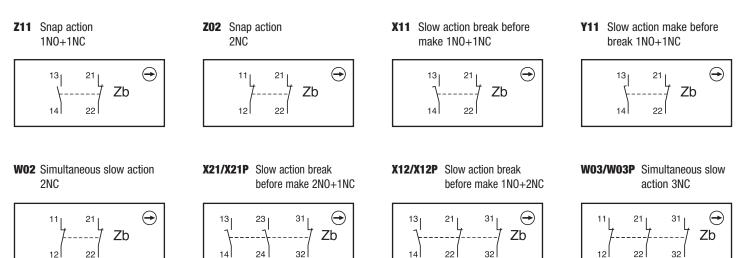
Application

The Comepi limit switches are developed and manufactured according to the rules set out in IEC international publications and EN european standards. **Easy to use, electromechanical limit switches offer specific qualities:**

- Visible operation.
- Able to switch strong currents (10 A conventional thermal current).

- Precise operating points (consistency).
- Immune to electromagnetic disturbances.
- Electrically separated contacts.
- N.C. contacts with positive opening operation (\bigcirc).

Contact Blocks



Main Technical Data

	SP, SBP, SDP series	SM, SBM, SCM, SDM series			
Standards	IEC 947-5-1, EN 60947-5-1, UL 508, CSA C22-2 No 14				
Operating temperature range	-25°C +70°C				
Protection against electrical shocks (acc. to IEC 536)	Class II	Class I			
Protection degree (acc. to IEC 529)	IP65	IP 66			
Rated insulation voltage (acc. to IEC 947-1)	$U_i = 690V$ (SM, SDM series and contacts type X12P, X21P, W03P series: $U_i = 400V$				
Rated impulsed withstand voltage (acc. to IEC 947-1)	U _{imp} = 6kV				
Short-circuit protection	Fuse 10A type gG (gl)				
Power category	A600 - Q600 (SM, SDM series and contacts type X12P, X21P, W03P: A300 - Q300				
Rated operational current (acc. to IEC 947-5-1)	AC-15: 24V-10A; 230V-3,1A; 380V-1,9A DC-13: 24V-2,8A; 250V-0,27A				

Electrical connection

Replace the symbol with the number of the required thread

- 1: PG 13.5
- 2: 1/2" NPT (Through adapter on SP and SDP series)
- 3: PG 11 (Available on SP, SM, SDP and SDM series)
- 4: M16x1,5 (Available on SP, SM, SDP and SDM series)
- 5: M20x1,5



Safety Limit Switches

Limit switches with keys, shaft lever



90° Adjustable head
(replaces K20)

0.00 K10

000 K80 Fully turnable head (replaces K120)

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Zinc plated steel lever

 \square

K72 Stainless steel shaft

Zinc plated steel shaft

		_	_	-	-	-
Contac	t blocks	🕀 K10	🕀 кво	🕀 K71	🔁 K72	🔁 K61
Z11	(1N0+1NC)	SP•K10Z11	SP•K80Z11	SP•K71Z11	SP•K72Z11	SP•K61Z11
Z02	(2NC)	SP•K10Z02	SP•K80Z02	SP•K71Z02	SP•K72Z02	SP•K61Z02
X11	(1NO+1NC)	SP•K10X11	SP•K80X11	SP•K71X11	SP•K72X11	SP•K61X11
Y11	(1N0+1NC)	SP•K10Y11	SP•K80Y11	SP•K71Y11	SP•K72Y11	SP•K61Y11
W02	(2NC)	SP•K10W02	SP•K80W02	SP•K71W02	SP•K72W02	SP•K61W02
X21P	(2NO+1NC)	SP•K10X21P	SP•K80X21P	SP•K71X21P	SP•K72X21P	SP•K61X21P
X12P(1N0+2NC)	SP•K10X12P	SP•K80X12P	SP•K71X12P	SP•K72X12P	SP•K61X12P
W03P	(3NC)	SP•K10W03P	SP•K80W03P	SP•K71W03P	SP•K72W03P	SP•K61W03P

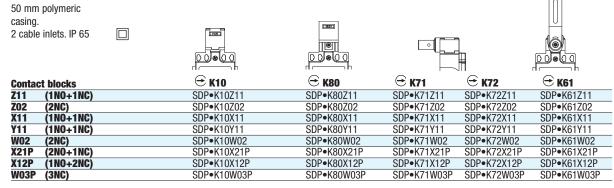


SM_K Series

	metal casing. inlet. IP 66				Ĩ. I.	
Contac	t blocks	€ K10	🕀 кво	⊖ K71	🕀 K72	🕀 K61
Z11	(1N0+1NC)	SM•K10Z11	SM•K80Z11	SM•K71Z11	SM•K72Z11	SM•K61Z11
Z02	(2NC)	SM•K10Z02	SM•K80Z02	SM•K71Z02	SM•K72Z02	SM•K61Z02
X11	(1N0+1NC)	SM•K10X11	SM•K80X11	SM•K71X11	SM•K72X11	SM•K61X11
Y11	(1N0+1NC)	SM•K10Y11	SM•K80Y11	SM•K71Y11	SM•K72Y11	SM•K61Y11
W02	(2NC)	SM•K10W02	SM•K80W02	SM•K71W02	SM•K72W02	SM•K61W02
X21P	(2NO+1NC)	SM•K10X21P	SM•K80X21P	SM•K71X21P	SM•K72X21P	SM•K61X21P
X12P	(1N0+2NC)	SM•K10X12P	SM•K80X12P	SM•K71X12P	SM•K72X12P	SM•K61X12P
W03P	(3NC)	SM•K10W03P	SM•K80W03P	SM•K71W03P	SM•K72W03P	SM•K61W03P



SDP_K Series





SDM_K Series 50 mm metal casing. 3 cable inlets. IP 66

Z11	(1N0+1NC)
Z02	(2NC)
X11	(1N0+1NC)
Y11	(1N0+1NC)
W02	(2NC)
K21P	(2NO+1NC)
K12P	(1N0+2NC)
W03P	(3NC)

			۲. T	
🕀 K10	🔁 K80	⊖ K71	🕀 K72	🔁 K61
SDM•K10Z11	SDM•K80Z11	SDM•K71Z11	SDM•K72Z11	SDM•K61Z11
SDM•K10Z02	SDM•K80Z02	SDM•K71Z02	SDM•K72Z02	SDM•K61Z02
SDM•K10X11	SDM•K80X11	SDM•K71X11	SDM•K72X11	SDM•K61X11
SDM•K10Y11	SDM•K80Y11	SDM•K71Y11	SDM•K72Y11	SDM•K61Y11
SDM•K10W02	SDM•K80W02	SDM•K71W02	SDM•K72W02	SDM•K61W02
SDM•K10X21P	SDM•K80X21P	SDM•K71X21P	SDM•K72X21P	SDM•K61X21P
SDM•K10X12P	SDM•K80X12P	SDM•K71X12P	SDM•K72X12P	SDM•K61X12P
SDM•K10W03P	SDM•K80W03P	SDM•K71W03P	SDM•K72W03P	SDM•K61W03P



Safety Limit Switches

Limit switches with keys

SBM_K Series

40 mm aluminium casing. 1 cable inlet. IP 66





K4000 Key operated 90° adjustable head (replaces K40)

Conta	ct blocks	€ K4000
Z11	(1N0+1NC)	SBM•K4000Z11
Z02	(2NC)	SBM•K4000Z02
X11	(1N0+1NC)	SBM•K4000X11
Y11	(1N0+1NC)	SBM•K4000Y11
W02	(2NC)	SBM•K4000W02
X21	(2NO+1NC)	SBM•K4000X21
X12	(1N0+2NC)	SBM•K4000X12
W03	(3NC)	SBM•K4000W03



Conta	ct blocks	↔ K4000
Z11	(1NO+1NC)	SCM•K4000Z11
ZO2	(2NC)	SCM•K4000Z02
X11	(1NO+1NC)	SCM•K4000X11
Y11	(1N0+1NC)	SCM•K4000Y11
W02	(2NC)	SCM•K4000W02
X21	(2NO+1NC)	SCM•K4000X21
X12	(1N0+2NC)	SCM•K4000X12
W03	(3NC)	SCM•K4000W03

K4000

Key operated

90° adjustable head

(replaces K40)

SBP_K Ser	es
40 mm polym	neric
casing.	
1 apple inlet	

1 cable inlet. IP 65



K3000 Key operated 90° adjustable head (replaces K30)

Electrical connection

Replace the symbol with the number of the required thread

SCM_K Series

3 cable inlets. IP 66

60 mm aluminium casing.

- 1: PG 13.5
- 2: 1/2" NPT (Through adapter on SP and SDP series)
- 3: PG 11 (Available on SP, SM, SDP and SDM series)
- 4: M16x1,5 (Available on SP, SM, SDP and SDM series)
- 5: M20x1,5

FE

Conta	ct blocks	🕀 КЗООО
Z11	(1N0+1NC)	SBP•K3000Z11
Z02	(2NC)	SBP•K3000Z02
X11	(1NO+1NC)	SBP•K3000X11
Y11	(1N0+1NC)	SBP•K3000Y11
W02	(2NC)	SBP•K3000W02
X21	(2NO+1NC)	SBP•K3000X21
X12	(1N0+2NC)	SBP•K3000X12
W03	(3NC)	SBP•K3000W03

Operating keys (to be ordered separately)

Description	Bent key	Flat key	Bent key	Flat key	Shock absorbing bent key	Shock absorbing flat key	Adjustable joint key
Centre distance fixing holes (mm)	22	22	13	13	15	15	40
	Code	Code	Code	Code	Code	Code	Code
For operating heads K10 and K80	3	4	5	6	7	8	9
			Code	Code			Code
For operating heads K3000 and K	(4000		45	46			49





SM K series

1 cable inlet - IP66

SDM_K series Metal casing. 50 mm width.

SBM_K series

Metal casing. 30 mm width.

Limit switches Pull wire safety switches



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K96

Pull wire

without reset

for simple stop



Contact	elements	🕀 K96	🔁 K9000	🔁 K9300	🔁 K9800	🔁 K9200
X11	(1N0+1NC)	SM•K96X11	SM•K9000X11	SM•K9300X11	SM•K9800X11	SM•K9200X11
W02	(2NC)	SM•K96W02	SM•K9000W02	SM•K9300W02	SM•K9800W02	SM•K9200W02
X12P	(1N0+2NC)	SM•K96X21P	SM•K9000X21P	SM•K9300X21P	SM•K9800X21P	SM•K9200X21P
X21P	(2N0+1NC)	SM•K96X12P	SM•K9000X12P	SM•K9300X12P	SM•K9800X12P	SM•K9200X12P
W03P	(3NC)	SM•K96W03P	SM•K9000W03P	SM•K9300W03P	SM•K9800W03P	SM•K9200W03P

K9300

Pull wire

with reset for

emergency stop

0.

D-D

K9000

Pull wire

without reset

for simple stop

K9200

Pull wire

with reset for

emergency stop

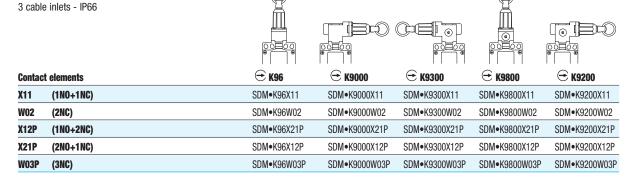
0.

K9800

Pull wire

with reset for

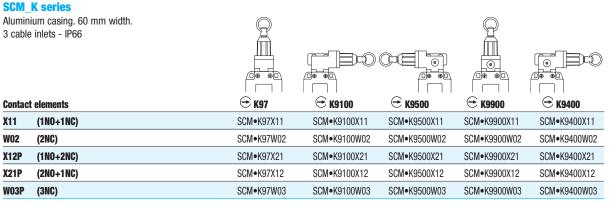
emergency stop





Aluminium casing. 40 mm width. 1 cable inlet - IP66 ∃⊨N) (0) Цo **€ K9100 € K9400** 🕀 K97 **K9500 E** K9900 **Contact elements** SBM•K97X11 SBM•K9100X11 SBM•K9500X11 SBM•K9900X11 SBM•K9400X11 X11 (1N0+1NC) W02 (2NC) SBM•K97W02 SBM•K9100W02 SBM•K9500W02 SBM•K9900W02 SBM•K9400W02 (1N0+2NC) X12P SBM•K97X21 SBM•K9100X21 SBM•K9500X21 SBM•K9900X21 SBM•K9400X21 X21P (2N0+1NC) SBM•K97X12 SBM•K9100X12 SBM•K9500X12 SBM•K9900X12 SBM•K9400X12 W03P (3NC) SBM•K97W03 SBM•K9100W03 SBM•K9500W03 SBM•K9900W03 SBM•K9400W03

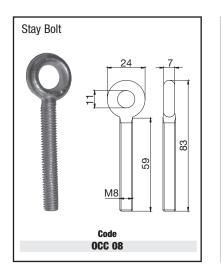


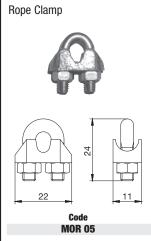


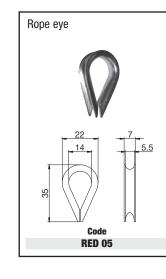
Safety Limit Switches



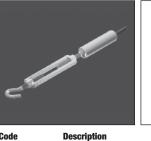
Accessories





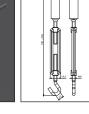






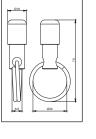
Hook stay bolt

Code SLS-FX1





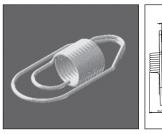
Description Code SLS-FX2 Fixing clamp





Code SLS-FX3

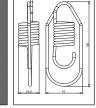




Code Description SLS-M1 Spring for SM, SDM series

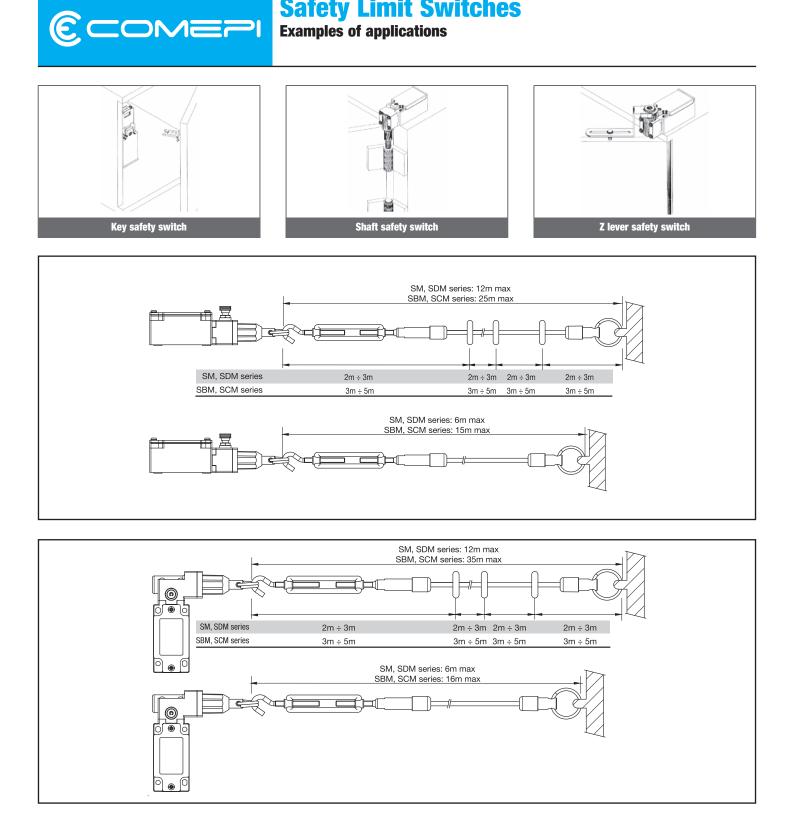


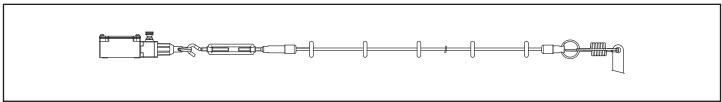
Code Description SLS-M2



Spring for SBM, SCM series

Safety Limit Switches Examples of applications







Safety Limit Switches Limit switches with pull button reset

AP_R series 30 mm. polymeric limit switches - IP 65 □ EN 50047 - 1 cables entry



Cable inlets	
AP1: PG 13.5	
AP2: 1/2" NPT	
(with adapter)	
AP3: PG 11	
AP4: M 16 x 1,5	
AP5: M 20 x 1,5	II II
	Steel plunger



with reset

Steel plunger

with reset







Steel plunger Steel plunger with nylon roller with nylon roller with nylon roller with reset with reset

Lever with nylon roller with reset

Contac	st blocks	⊖ R11	⊖ R13	⊖ R31	→ R32	⊖ R41
Z11	(1NA+1NC)	AP•R11Z11	AP•R13Z11	AP•R31Z11	AP•R32Z11	AP•R41Z11
Z02	(2NC)	AP•R11Z02	AP•R13Z02	AP•R31Z02	AP•R32Z02	AP•R41Z02
X11	(1NA+1NC)	AP•R11X11	AP•R13X11	AP•R31X11	AP•R32X11	AP•R41X11
W02	(2NC)	AP•R11W02	AP•R13W02	AP•R31W02	AP•R32W02	AP•R41W02
X21P	(2NA+1NC)	AP•R11X21P	AP•R13X21P	AP•R31X21P	AP•R32X21P	AP•R41X21P
X12P	(1NA+2NC)	AP•R11X12P	AP•R13X12P	AP•R31X12P	AP•R32X12P	AP•R41X12P
W03P	(3NC)	AP•R11W03P	AP•R13W03P	AP•R31W03P	AP•R32W03P	AP•R41W03P

Other versions available on request

AM_R series 30 mm. metal limit switches - with polymeric working heads - IP 66 1 cables entry



AM1: PG 13.5 AM2: 1/2" NPT	
AM2: 1/2" NPT	
AM3: PG 11	
AM4: M 16 x 1,5	
AM5: M 20 x 1,5	











Steel plunger with reset

Steel plunger with reset

Steel plunger Steel plunger with nylon roller with nylon roller with nylon roller with reset with reset

Lever with nylon roller with reset

Contact blocks		⊖ R11	🔁 R13	🔁 R31	⊖ R32	⊖ R41
Z11	(1NA+1NC)	AM•R11Z11	AM•R13Z11	AM•R31Z11	AM•R32Z11	AM•R41Z11
Z02	(2NC)	AM•R11Z02	AM•R13Z02	AM•R31Z02	AM•R32Z02	AM•R41Z02
X11	(1NA+1NC)	AM•R11X11	AM•R13X11	AM•R31X11	AM•R32X11	AM•R41X11
W02	(2NC)	AM•R11W02	AM•R13W02	AM•R31W02	AM•R32W02	AM•R41W02
X21P	(2NA+1NC)	AM•R11X21P	AM•R13X21P	AM•R31X21P	AM•R32X21P	AM•R41X21P
X12P	(1NA+2NC)	AM•R11X12P	AM•R13X12P	AM•R31X12P	AM•R32X12P	AM•R41X12P
W03P	(3NC)	AM•R11W03P	AM•R13W03P	AM•R31W03P	AM•R32W03P	AM•R41W03P

Other versions available on request

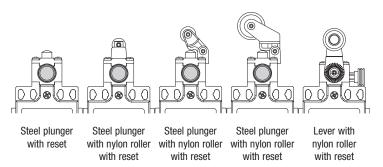


Safety Limit Switches Limit switches with pull button reset

DP_R series 50 mm. polymeric limit switches - IP 65 □ 2 cables entries



Cable inlets	
DP1: PG 13.5	
DP2: 1/2" NPT	
(with adapter)	
DP3: PG 11	
DP4: M 16 x 1,5	
DP5: M 20 x 1,5	



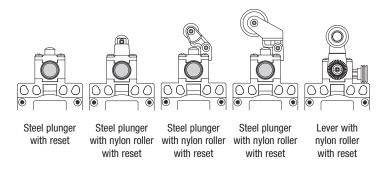
Contac	t blocks	⊖ R11	🕀 R13	⊖ R31	🔁 R38	🔁 R41
Z11	(1NA+1NC)	DP•R11Z11	DP•R13Z11	DP•R31Z11	DP•R38Z11	DP•R41Z11
Z02	(2NC)	DP•R11Z02	DP•R13Z02	DP•R31Z02	DP•R38Z02	DP•R41Z02
X11	(1NA+1NC)	DP•R11X11	DP•R13X11	DP•R31X11	DP•R38X11	DP•R41X11
W02	(2NC)	DP•R11W02	DP•R13W02	DP•R31W02	DP•R38W02	DP•R41W02
X21P	(2NA+1NC)	DP•R11X21P	DP•R13X21P	DP•R31X21P	DP•R38X21P	DP•R41X21P
X12P	(1NA+2NC)	DP•R11X12P	DP•R13X12P	DP•R31X12P	DP•R38X12P	DP•R41X12P
W03P	(3NC)	DP•R11W03P	DP•R13W03P	DP•R31W03P	DP•R38W03P	DP•R41W03P

Other versions available on request

DM_R series 50 mm. metal limit switches - with polymeric working heads - IP 66 3 cables entries



Cable	inlets
DM1: F	G 13.5
DM2: 1	/2" NPT
DM3: F	G 11
DM4: N	1 16 x 1,5
DM5: N	1 20 x 1,5



Contac	t blocks	⊖ R11	🔁 R13	🔁 R31	🔁 R38	🔁 R41
Z11	(1NA+1NC)	DM•R11Z11	DM•R13Z11	DM•R31Z11	DM•R38Z11	DM•R41Z11
Z02	(2NC)	DM•R11Z02	DM•R13Z02	DM•R31Z02	DM•R38Z02	DM•R41Z02
X11	(1NA+1NC)	DM•R11X11	DM•R13X11	DM•R31X11	DM•R38X11	DM•R41X11
W02	(2NC)	DM•R11W02	DM•R13W02	DM•R31W02	DM•R38W02	DM•R41W02
X21P	(2NA+1NC)	DM•R11X21P	DM•R13X21P	DM•R31X21P	DM•R38X21P	DM•R41X21P
X12P	(1NA+2NC)	DM•R11X12P	DM•R13X12P	DM•R31X12P	DM•R38X12P	DM•R41X12P
W03P	(3NC)	DM•R11W03P	DM•R13W03P	DM•R31W03P	DM•R38W03P	DM•R41W03P

Other versions available on request



NOTES

