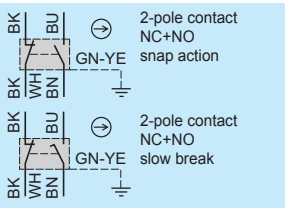
Limit switches

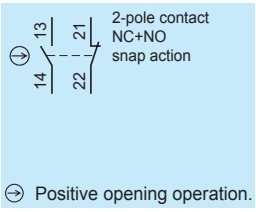
Compact and miniature, complete switches

(variable composition, see pages 8–9)

XCMD



XCKT

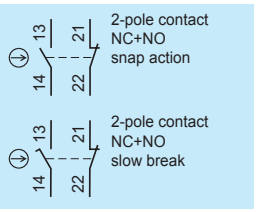




Miniature XCMD metal, precabled; mounting by the body or by the head

Type of operator		Metal end plunger	Steel roller plunger	Thermoplastic roller lever	Steel roller lever	Variable length thermoplastic roller lever	M12 head metal end plunger
Mechanical durability (millions of operating cycles) *(5)*		10	10	10	10	10	10
Actuation speed (m/s)		0.5	0.5	1.5	1.5	1.5	0.5
Switches conforming to standard IEC 947-5-1 section 3		⊖	⊖	⊖	⊖	⊖	⊖
Product certification		CE, UL, CSA, CCC					
Degree of protection conforming to IEC 60529		IP66 and IP67					
Rated operational characteristics (conforming to EN IEC 60947-5-1)		AC-15; B300 (Ue = 240 V, Ie = 1.5 A) / DC-13; R300 (Ue = 250 V, Ie = 0.1 A)					
Mounting centers: mm (in.)		20 (0.79)					M12 x 1
Body dimensions, W x D x H: mm (in.)		30 x 16 x 50 (1.18 x 0.63 x 1.97)					
Connection	Cable	Precabled, adjustable direction, 1 m (other lengths available on request)					
Complete switch	2-pole NC+NO snap action	**XCMD2110L1**	**XCMD2102L1**	**XCMD2115L1**	**XCMD2116L1**	**XCMD2145L1**	**XCMD21F0L1**
	2-pole NC+NO break before make, slow break	**XCMD2510L1**	**XCMD2502L1**	**XCMD2515L1**	**XCMD2516L1**	**XCMD2545L1**	**XCMD25F0L1**
	Connector	M12					
Complete switch	NC+NO snap action (M12-5 pins)	**XCMD2110C12**	**XCMD2102C12**	**XCMD2115C12**	**XCMD2116C12**	**XCMD2145C12**	**XCMD21F0C12**
	1C/O snap action (M12-4 pins) *(1)*	**XCMD2110M12**	**XCMD2102M12**	**XCMD2115M12**	**XCMD2116M12**	**XCMD2145M12**	**XCMD21F0M12**

XCKP/XCKD



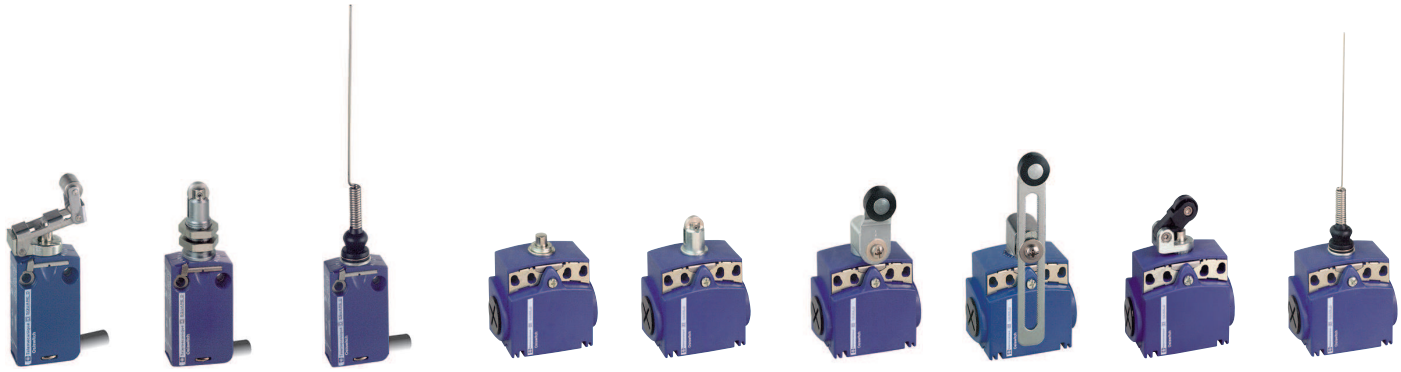
⊖ Positive opening operation.



Compact XCKD metal and XCKP plastic conforming to standard EN 50047

Type of operator		Metal end plunger	Steel roller plunger	Thermoplastic roller lever plunger, horizontal actuation in 1 direction	M18 head metal end plunger	M18 head steel roller plunger
Mechanical durability (millions of operating cycles) *(5)*		15	10	15	10	10
Actuation speed (m/s)		0.5	0.5	1	0.5	0.5
Switches conforming to standard IEC 947-5-1 section 3		⊖	⊖	⊖	⊖	⊖
Product certification		CE, CSA, CCC, GOST				
Degree of protection conforming to IEC 60529		IP66 and IP67				
Rated operational characteristics (conforming to EN IEC 60947-5-1)		AC-15; A300 (Ue = 240 V, Ie = 3 A) / DC-13; Q300 (Ue = 250 V, Ie = 0.27 A)				
Cable entry		1 tapped entry for 1/2"-14 NPT conduit *(3)* or M12 connector				
Mounting centers: mm (in.)		20 (0.79)	20 (0.79)	20 (0.79)	M18 x 1	M18 x 1
Body dimensions, W x D x H: mm (in.)		31 x 30 x 65 (1.22 x 1.18 x 2.56)				
Metal switches						
Complete switch	2-pole NC+NO snap action	**XCKD2110N12**	**XCKD2102N12**	**XCKD2121N12**	**XCKD21H0N12**	**XCKD21H2N12**
	2-pole NC+NO break before make, slow break	**XCKD2510N12**	**XCKD2502N12**	**XCKD2521N12**	**XCKD25H0N12**	**XCKD25H2N12**
	2-pole NC+NO snap action (M12-5 pins)	**XCKD2110M12**	**XCKD2102M12**	**XCKD2121M12**	**XCKD21H0M12**	**XCKD21H2M12**
Plastic, double insulated switches						
Complete switch	2-pole NC+NO snap action	**XCKP2110N12**	**XCKP2102N12**	**XCKP2121N12**	**XCKP21H0N12**	**XCKP21H2N12**
	2-pole NC+NO break before make, slow break	**XCKP2510N12**	**XCKP2502N12**	**XCKP2521N12**	**XCKP25H0N12**	**XCKP25H2N12**
	2-pole NC+NO snap action (M12-4 pins)	**XCKP2110M12**	**XCKP2102M12**	**XCKP2121M12**	**XCKP21H0M12**	**XCKP21H2M12**

(1) Although their design is identical to the precabled switches, the switches incorporating an M12 4-pin connector cannot be marked with the ⊖ symbol because they are single-pole C/O.
(2) For ISO M16 x 1.5 cable entries, replace **N12** with **P16**. Example: XCKT2110**N12** becomes XCKT2110**P16**.
(3) For Pg 11 cable entries, replace **N12** with **G11**. Example: XCKD2110**N12** becomes XCKD2110**G11**. For other cable entries, see "Customized assembly" on page 8.
(4) For Pg 13.5 cable entries, replace **N12** with **G13**. Example: XCDR2110**N12** becomes XCDR2110**G13**. For other cable entries, see "Customized assembly" on page 9.
(5) Depending on the application.



Compact XCKT plastic, 2 cable entries

Retractable steel roller lever plunger	M12 head steel roller plunger	Cat's whisker	Metal end plunger	Steel roller plunger	Thermoplastic roller lever	Thermoplastic roller lever plunger, horizontal actuation	Cat's whisker	Cat's whisker
10	10	5	15	10	10	15	5	5
0.5	0.1	1	0.5	0.5	1.5	1	1	1
⊖	⊖	–	⊖	⊖	⊖	⊖	–	–
			CE, CSA, CCC, GOST					
			IP66 and IP67					
			AC-15; A300 (Ue = 240 V, Ie = 3 A) / DC-13; Q300 (Ue = 250 V, Ie = 0.27 A)					
20 (0.79)	M12 x 1	20 (0.79)	20 (0.79) or 40 (1.58)					
			58 x 30 x 51 (2.28 x 1.18 x 2.01)					
			3 entries tapped ISO Pg 11, supplied with one conduit adapter DE9RA1012, Pg 11 to 1/2"-14 NPT *(2)*					
XCMD2124L1	**XCMD21F2L1**	**XCMD2106L1**	**XCKT2110N12**	**XCKT2102N12**	**XCKT2118N12**	**XCKT2145N12**	**XCKT2121N12**	**XCKT2106N12**
XCMD2524L1	**XCMD25F2L1**	**XCMD2506L1**	**–**	**–**	**–**	**–**	**–**	**–**
XCMD2124C12	**XCMD21F2C12**	**XCMD2106C12**	**–**	**–**	**–**	**–**	**–**	**–**
XCMD2124M12	**XCMD21F2M12**	**XCMD2106M12**	**–**	**–**	**–**	**–**	**–**	**–**



Application—XCPR and XCDR with manual reset

Thermoplastic roller lever	Variable length Thermoplastic roller lever	Thermoplastic roller lever Ø 50 mm	Cat's whisker	Metal end plunger	Steel roller plunger	Thermoplastic roller lever plunger, horizontal actuation in 1 direction	Thermoplastic roller lever plunger, vertical actuation in 1 direction	Thermoplastic roller lever
10	10	10	5	1	1	1	1	1
1.5	1.5	1.5	1	0.5	0.5	1	1	1.5
⊖	⊖	⊖	–	⊖	⊖	⊖	⊖	⊖
				CE, CSA, CCC, GOST				
				IP66 and IP67				
				AC-15; A300 (Ue = 240 V, Ie = 3 A) / DC-13; Q300 (Ue = 250 V, Ie = 0.27 A)				
				1 tapped entry for 1/2"-14 NPT conduit *(4)*				
20 (0.79)	20 (0.79)	20 (0.79)	20 (0.79)	20 (0.79)	20 (0.79)	20 (0.79)	20 (0.79)	20 (0.79)
				31 x 30 x 95 (1.22 x 1.18 x 3.74)				
XCKD2118N12	**XCKD2145N12**	**XCKD2139N12**	**XCKD2106N12**	**XCDR2110N12**	**XCDR2102N12**	**XCDR2121N12**	**XCDR2127N12**	**XCDR2118N12**
XCKD2518N12	**XCKD2545N12**	**XCKD2539N12**	**XCKD2506N12**	**XCDR2510N12**	**XCDR2502N12**	**XCDR2521N12**	**XCDR2527N12**	**XCDR2518N12**
XCKD2118M12	**XCKD2145M12**	**XCKD2139M12**	**XCKD2106M12**	**–**	**–**	**–**	**–**	**–**
XCKP2118N12	**XCKP2145N12**	**XCKP2139N12**	**XCKP2106N12**	**XCPR2110N12**	**XCPR2102N12**	**XCPR2121N12**	**XCPR2127N12**	**XCPR2118N12**
XCKP2518N12	**XCKP2545N12**	**XCKP2539N12**	**XCKP2506N12**	**XCPR2510N12**	**XCPR2502N12**	**XCPR2521N12**	**XCPR2527N12**	**XCPR2518N12**
XCKP2118M12	**XCKP2145M12**	**XCKP2139M12**	**XCKP2106M12**	**–**	**–**	**–**	**–**	**–**