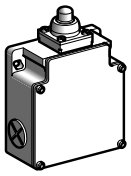
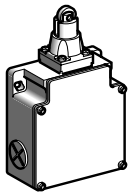
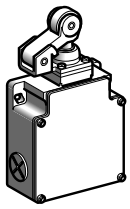
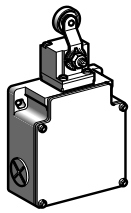
Limit switches

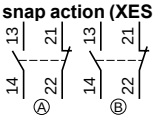
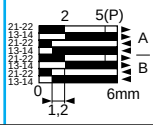
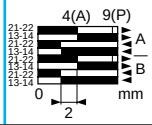
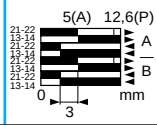
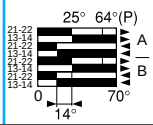
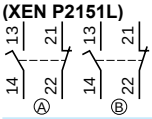
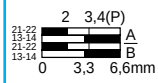
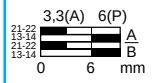
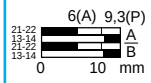
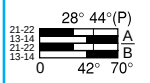
Osiswitch® Classic

Metal, 2 x 2-pole contacts, type XCK ML
Complete switches with 3 ISO M20 x 1.5 or Pg 13 cable entries

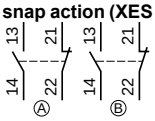
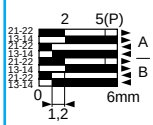
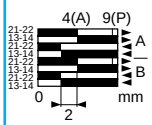
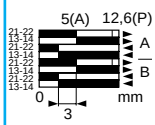
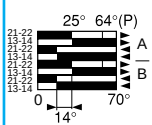
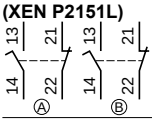
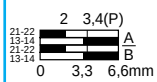
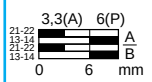
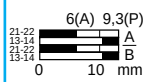
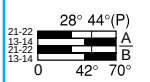
Type of head	Plunger (fixing by the body)			Rotary (fixing by the body)
				
Type of operator	Metal end plunger	Steel roller plunger	Thermoplastic roller lever plunger, horizontal actuation in 1 direction	Thermoplastic roller lever *(1)*

References *(2)*

Switches with 3 entries tapped ISO M20 x 1.5

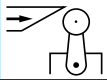
2 x 2-pole N/C + N/O snap action (XES P2151L) 	**XCK ML110H29** ⊖ 	**XCK ML102H29** ⊖ 	**XCK ML121H29** ⊖ 	**XCK ML115H29** ⊖ 
2 x 2-pole N/C + N/O break before make, slow break (XEN P2151L) 	**XCK ML510H29** ⊖ 	**XCK ML502H29** ⊖ 	**XCK ML521H29** ⊖ 	**XCK ML515H29** ⊖ 

Switches with 3 entries tapped for Pg 13 cable gland

2 x 2-pole N/C + N/O snap action (XES P2151L) 	**XCK ML110** ⊖ 	**XCK ML102** ⊖ 	**XCK ML121** ⊖ 	**XCK ML115** ⊖ 
2 x 2-pole N/C + N/O break before make, slow break (XEN P2151L) 	**XCK ML510** ⊖ 	**XCK ML502** ⊖ 	**XCK ML521** ⊖ 	**XCK ML515** ⊖ 
Weight (kg)	0.400	0.405	0.450	0.430

Contact operation
- ■ *contact closed*
- □ *contact open*
- *(A) = cam displacement*
- *(P) = positive opening point*
- ⊖ *N/C contact with positive opening operation*

Characteristics

Switch actuation		On end	By 30° cam		
Type of actuation					
Maximum actuation speed		0.5 m/s		1.5 m/s	
Mechanical durability		3 million operating cycles			
Minimum force	For tripping	15 N	12 N	8 N	0.2 N.m
	For positive opening	60 N	50 N	50 N	0.5 N.m
Cable entry		3 entries tapped ISO M20 x 1.5, clamping capacity 7 to 13 mm, or 3 entries tapped for n° 13 cable gland conforming to NF C 68-300 (DIN Pg 13.5), clamping capacity 9 to 12 mm.			

(1) Adjustable throughout 360° in 5° steps, or in 90° steps by reversing the notched washer.
(2) Switches available with other 2-pole slow break contact blocks: N/O + N/C make before break, N/C + N/C simultaneous (with positive opening operation), N/C + N/C simultaneous, please consult your Regional Sales Office.

Note: replacement parts
*The heads of limit switches type XCK ML are the same as those for types XCK M and XCK L (see heads **ZCK D10**, **ZCK D02**, **ZCK D21** and **ZCK D15** on page 32103/2).*

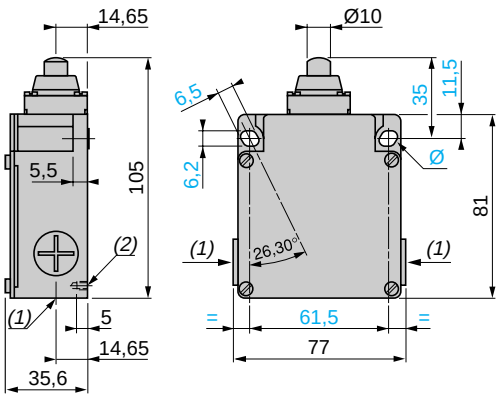
Limit switches

Osiswitch® Classic

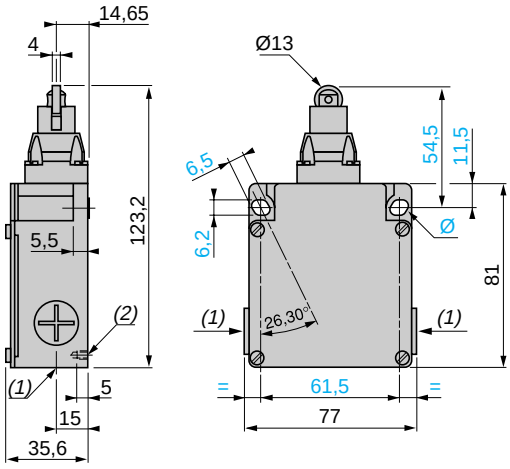
Metal, 2 x 2-pole contacts, type XCK ML

Complete switches with 3 ISO M20 x 1.5 or Pg 13 cable entries

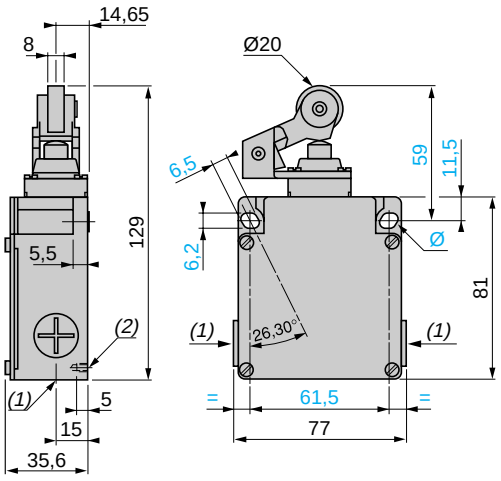
XCK ML110H29, XCK ML510H29, XCK ML110, XCK ML510



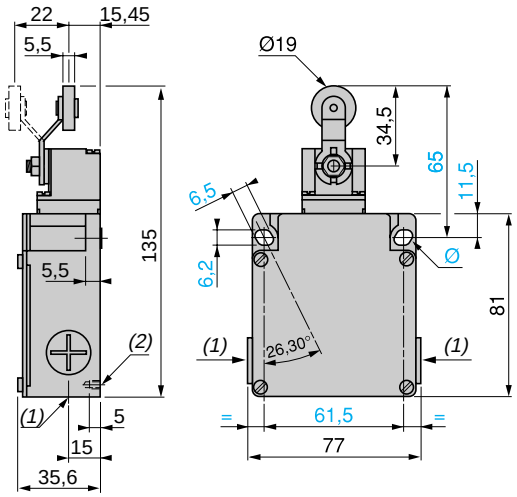
XCK ML102H29, XCK ML502H29, XCK ML102, XCK ML502



XCK ML121H29, XCK ML521H29, XCK ML121, XCK ML521



XCK ML115H29, XCK ML515H29, XCK ML115, XCK ML515



*(1) **XCK ML●●●H29**: 3 entries tapped M20 x 1.5. **XCK ML●●●**: 3 entries tapped for n° 13 cable gland.*
(2) 2 centering holes Ø 3.9 ± 0.2, cover fixing holes axis.
Ø: 2 elongated holes 6.2 x 6.5, inclined at 26°30' to the vertical axis, for M5 screws.