Limit switches
Osiswitch® Universal, **Osi**concept®

Design		*Miniature **Osi**concept*	*Compact **Osi**concept*		
					
Enclosure		Metal		Plastic, double insulated	
Features		Fixing by the body or by the head			
Osiconcept modularity		Head, body and connection modularity			Head and body modularity
CENELEC conformity		–	EN 50047		EN 50047 compatible
Body dimensions (w x h x d) in mm		30 x 50 x 16	31 x 65 x 30		58 x 51 x 30
Head		Linear movement (plunger) Rotary movement (lever) Rotary movement, multi-directional Same heads for ranges XCM D, XCK D, XCK P and XCK T			
Contact blocks	**2 snap action contacts with positive opening operation**	**N/C + N/O**; **N/C + N/C**			**N/C + N/O**
	3 snap action contacts with positive opening operation	**N/C + N/C + N/O**	**N/C + N/C + N/O**; **N/C + N/O + N/O**		–
	4 snap action contacts with positive opening operation	**N/C + N/C + N/O + N/O**	–		
	2 slow break contacts with positive opening operation	**N/C + N/O** break before make	**N/C + N/O** break before make; **N/O + N/C** make before break; **N/C + N/C** simultaneous		
	2 slow break contacts	–	**N/O + N/O** simultaneous		
	3 slow break contacts with positive opening operation	**N/C + N/C + N/O** break before make	**N/C + N/C + N/O** break before make; **N/C + N/O + N/O** break before make		–
Insulation voltage (Ui) / thermal current (Ithe)		Pre-cabled 2 contacts: 400 V/6 A 3 contacts: 400 V/4 A 4 contacts: 400 V/3 A	Screw terminal 2 contacts: 500 V/10 A 3 contacts: 400 V/6 A		Screw terminal 2 contacts: 500 V/10 A
		Connector Integral M12, 4-pin: 250 V/3 A Integral M12, 5-pin: 60 V/4 A Remote 7/8” 16UN: 250 V/6 A	Connector Integral M12, 5-pin: 60 V/4 A	Connector Integral M12, 4-pin: 250 V/3 A	–
Degree of protection IP/IK		IP 66, IP 67, IP 68, IK 06	IP 66, IP 67, IK 06	IP 66, IP 67, IK 04	
Connection	**Screw terminals**	–	1 entry for ISO M16 or M20, Pg 11, Pg 13 cable gland or 1/2” NPT, PF 1/2		2 entries for ISO M16 or Pg 11 cable gland or 1/2” NPT (using adaptor)
	Pre-cabled	Yes	–		
	Connector	Integral or remote M12 or remote 7/8” 16UN	Integral M12		–
Type reference		**XCM D**	**XCK D**	**XCK P**	**XCK T**
Page(s)		37604/4	37606/2 and 37607/2	37608/2 and 37609/2	37610/2

Limit switches
Osiswitch® Optimum and Application

Miniature Optimum	*Compact Optimum*	*Compact Application: with manual reset*		
				
Plastic, double insulated		Metal	Plastic, double insulated	
Fixing by the body or by the head		Fixing by the body		
–				
–	EN 50047	–		
30 x 50 x 16	31 x 65 x 30			58 x 51 x 30
Linear movement (plunger) Rotary movement (lever) Rotary movement, multi-directional		Linear movement (plunger) Rotary movement (lever) Same heads for ranges XC DR, XC PR and XC TR		
N/C + N/O				
–				
–				
–	–	**N/C + N/O** break before make		
–	–	–		
–				
Screw terminal 2 contacts: 400 V/6 A	Screw terminal 2 contacts: 500 V/10 A			
–				
IP 65, IK 04		IP 66, IP 67, IK 04		
–	1 entry for ISO M20 or Pg 11 cable gland	1 entry for ISO M20 or Pg 13 cable gland or 1/2” NPT		2 entries for ISO M16 or Pg 11 cable gland or 1/2” NPT (using adaptor)
Yes	–			
–				
XCM N	**XCK N**	**XCD R**	**XCP R**	**XCT R**
37603/2	37611/2	37613/2	37614/2	37615/2

Limit switches
Osiswitch® Classic

Design		*Classic*		
				
Enclosure		Metal		
Features		–		Fixed or plug-in body, - 40 °C or + 120 °C versions
Variable composition switches		Head + Body + Operator		
CENELEC or DIN conformity		–		EN 50041
Body dimensions (w x h x d) in mm		63 x 64 x 30	52 x 72 x 30	40 x 77 x 44 42.5 x 84 x 36
Head		Linear movement (plunger) Rotary movement (lever) Rotary movement, multi-directional		
Contact blocks	**2 snap action contacts with positive opening operation**	**N/C + N/O; N/C + N/C**	**N/C + N/O**	**N/C + N/O; N/C + N/C**
	3 snap action contacts with positive opening operation	**N/C + N/C + N/O; N/C + N/O + N/O**		
	C/O snap action contacts	–		**2 C/O**
	C/O slow break contacts	–		
	2 slow break contacts with positive opening operation	**N/C + N/O** break before make **N/O + N/C** make before break **N/C + N/C** simultaneous		
	2 slow break contacts	**N/O + N/O** simultaneous		
	3 slow break contacts with positive opening operation	**N/C + N/C + N/O** break before make; **N/C + N/O + N/O** break before make		
Insulation voltage (Ui) / thermal current (Ithe)		Screw terminal 2 contacts: 500 V/10 A 3 contacts: 400 V/6 A		
		–		Connector Integral M12, 5-pin: 60 V/4 A Integral 7/8” 16UN: 250 V/6 A
Degree of protection IP/IK		IP 66, IK 06		IP 66, IK 07
Connection	**Screw terminals (entry for cable gland)**	3 entries for ISO M20 or Pg 11 cable gland or 1/2” NPT	1 entry incorporating cable gland or tapped 1/2” NPT	1 entry for ISO M20 or Pg 13 cable gland or 1/2” NPT
	Connector	–	–	Integral M12 or 7/8” 16UN
Type reference		**XCK M**	**XCK L**	**XCK J**
Page(s)		32100/2	32100/2	32400/2

Limit switches
Osiswitch® Classic, Application and Miniature snap switches

Classic	*Application: for installations requiring electrical redundancy*	*Application: for lifting and materials handling equipment or very severe applications*	*Sub-miniature, miniature: applications requiring high precision and a low operating force*	*Applications: safety (1)*	
					
Plastic, double insulated	Metal	Metal or polyester	Plastic	Metal or plastic	Plastic
–	2 sets of contacts	–	Depending on type		
Head + Body + Operator		Fixed composition	Depending on type, fixed composition or contact and operator	–	
EN 50041	–			EN 50041 or EN 50047	–
40 x 72.5 x 36	72 x 81 x 36	Depending on type	DIN 41635, depending on type	Depending on type	16 x 51 x7 25 x 88 x 13 Ø 30, L 38.5
Linear movement (plunger) Rotary movement (lever) Rotary movement, multi-directional	Linear movement (plunger) Rotary movement (lever)		Linear movement (plunger)	Linear movement (plunger) Rotary movement (lever) Actuator operated Spindle operated	–
N/C + N/O; N/C + N/C	2 x **N/C + N/O** contact blocks	Depending on type	–	Depending on type: 2-pole, 3-pole or 4-pole contact blocks	Independent Reed type contacts operated by coded magnet. Must be used with a Preventa safety module. Depending on type: N/C + N/O (N/C staggered) N/O + N/O (1 N/O staggered) N/C + N/C + N/O (1 N/C staggered) N/C + N/O + N/O (1 N/O staggered) N/C + N/O (N/O staggered) N/O + N/O (1 N/O staggered)
N/C + N/C + N/O; **N/C + N/O + N/O**	–				
2 C/O	–	Depending on type	1 single-pole contact		
–		Depending on type	–		
N/C + N/O break before make **N/O + N/C** make before break **N/C + N/C** simultaneous	2 x **N/C + N/O** break before make contact blocks	Depending on type	–		
N/O + N/O simultaneous	–				
N/C + N/C + N/O break before make **N/C + N/O + N/O** break before make	–				
Screw terminal 2 contacts: 500 V/10 A 3 contacts: 400 V/6 A	Screw terminal 2 contacts: 500 V/10 A		Depending on type		
–					
IP 65, IK 03	IP 66, IK 06	Depending on type: IP 66, IK 05, IP 65, IK 05 or IP 54, IK 05	Depending on type		Depending on type: IP 66 and IP 67 or IP 67
1 entry for ISO M20 or Pg 13 cable gland	3 entries for ISO M20 or Pg 13 cable gland	Depending on type: 1 or 3 entries for ISO M20 or Pg 13 cable gland	Depending on type: by tags or pre-wired	Depending on type: entry for cable gland or pre-cabled	Depending on type: pre-cabled or with connector on flying lead
–					
XCK S	**XCK ML**	**XCR, XCK MR, XC1 AC, XC2 J**	**XEP**	**XCS ●**	**XCS DMC XCS DMP XCS DMR**
32300/2	32100/2	32600/2, 32602/2 and 32500/2	37621/2	37616/2	32942/2 and 32942/3

(1) For further information, please refer to our "Safety solutions using Preventa" catalogue.