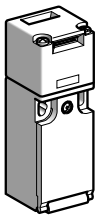
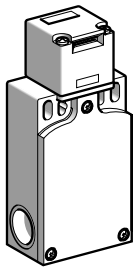
Safety solutions using Preventa

Safety switches
Plastic, turret head (1), types XCS-PA, XCS-TA and XCS-TE
Cable entries tapped for Pg 11 (n° 11) cable gland

Type of switch	Without locking of operating key	
		

References of switches without operating key (⊖ N/C contact with positive opening operation)

2-pole N/C + N/O break before make slow break (2)	**XCS-PA591** ⊖	–
2-pole N/O + N/C make before break slow break (2)	**XCS-PA691** ⊖	–
2-pole N/C + N/C slow break (2)	**XCS-PA791** ⊖	–
3-pole N/C + N/O + N/O (2 N/O staggered) slow break (2)	–	**XCS-TA591** ⊖
3-pole N/C + N/C + N/O (N/O staggered) slow break (2)	–	**XCS-TA791** ⊖
3-pole N/C + N/C + N/C slow break (2)	–	**XCS-TA891** ⊖
Weight (kg)	0.110	0.160

Complementary characteristics not shown under general characteristics (page 32921/3)

Actuation speed	Maximum : 0.5 m/s, minimum : 0.01 m/s
Resistance to forcible key withdrawal	**XCS-PA, XCS-TA :** 10 N (50 N using operating keys **XCS-Z12** or **XCS-Z13** together with guard retaining device **XCS-Z21**) **XCS-TE :** 500 N
Mechanical durability	**XCS-PA, XCS-TA : > 1 million operating cycles** **XCS-TE : 1 million operating cycles**
Maximum operating rate	For maximum durability : 600 operating cycles per hour
Minimum force for positive opening	15 N
Cable entry	**XCS-PA, XCS-TE :** 1 entry tapped for n° 11 cable gland conforming to NF C 68-300 (DIN Pg 11). **XCS-TA:** 2 entries tapped for n° 11 cable gland conforming to NF C 68-300 (DIN Pg 11). Clamping capacity 7 to 10 mm.

References of accessories

XCS-Z91

Description	For use with limit switches	Unit reference	Weight kg
Set of 10 blanking plugs for operating head slot	XCS-PA, XCS-TA, XCS-TE	**XCS-Z28**	0.050
Tool for forced opening of interlocking device (Sold in lots of 10)	XCS-TE	**XCS-Z100**	0.050
Padlocking device to prevent insertion of operating key, for up to 3 padlocks (padlocks not supplied)	XCS-PA, XCS-TA, XCS-TE	**XCS-Z91**	0.053

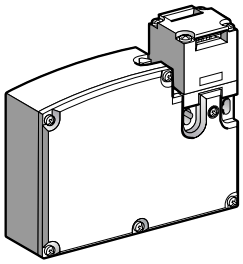
(1) Adjustable throughout 360° in 90° steps. Blanking plug for operating head slot included with switch.
(2) Schematic diagrams shown represent the contact states whilst the operating key is inserted in the head of the switch.

Dimensions: pages 32935/2 and **32935/3** **Schemes:** **page 32935/4**

Safety solutions using Preventa

Safety switches
Plastic, turret head (1), types XCS-PA, XCS-TA and XCS-TE
Cable entries tapped for Pg 11 (n° 11) cable gland

Type of switch	With interlocking, locking by electromagnet		



Type of interlocking	**Locking on de-energisation and unlocking on energisation of electromagnet** (2). To order a limit switch with locking on energisation and unlocking on de-energisation of the electromagnet, replace the 2nd number by **5** in the references shown below. Example : **XCS-TE5311** becomes **XCS-TE5511**.		
Supply voltage of electromagnet	∿ or ⎓ 24 V (50/60 Hz on ∿)	∿ or ⎓ 120 V (50/60 Hz on ∿)	∿ or ⎓ 230 V (50/60 Hz on ∿)

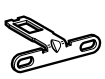
References of switches without operating key (⊖ N/C contact with positive opening operation)

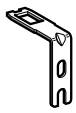
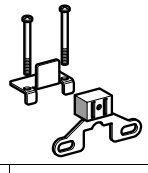
2-pole N/C + N/O break before make slow break (3) 	**XCS-TE5311** ⊖	**XCS-TE5331** ⊖	**XCS-TE5341** ⊖
2-pole N/O + N/C make before break slow break (3) 	**XCS-TE6311** ⊖	**XCS-TE6331** ⊖	**XCS-TE6341** ⊖
2-pole N/C + N/C slow break (3) 	**XCS-TE7311** ⊖	**XCS-TE7331** ⊖	**XCS-TE7341** ⊖
Weight (kg)	0.360	0.360	0.360

Electromagnet characteristics

Load factor	100 %		
Rated operational voltage	**∿ or ⎓ 24 V**	**∿ or ⎓ 120 V**	**∿ or ⎓ 230 V**
Voltage limits	- 20 % + 10 % of the rated operational voltage (including ripple on ⎓) conforming to IEC 947-1		
Service life	20,000 hours		
Consumption	10 VA max.		

References of operating keys and guard retaining device

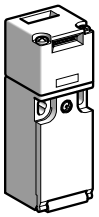
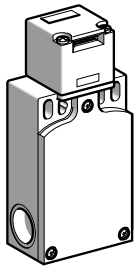
Description	Straight key	Key with wide fixing (5)		Pivoting key	Right-angled key	Guard retaining device (4)
For limit switches XCS-PA, TA, TE	**XCS-Z11**	**XCS-Z12**	**XCS-Z15**	**XCS-Z13**	**XCS-Z14**	**XCS-Z21**
Weight (kg)	0.015	0.015	0.012	0.085	0.025	0.080

(1) Adjustable throughout 360° in 90° steps. Blanking plug for operating head slot included with switch.
(2) A special tool included with the limit switch enables forced opening of the interlocking device, allowing key withdrawal and subsequent opening of the N/C safety contacts.
(3) Schematic diagrams shown represent the contact states whilst the operating key is inserted in the head of the switch.
(4) Only for use with XCS-PA and XCS-TA limit switches used in conjunction with operating keys XCS-Z12, XCS-Z13 and XCS-Z15.
(5) 2 key lengths, XCS-Z12: L = 40 mm, XCS-Z15: L = 29 mm.

Dimensions: pages 32935/2 and 32935/3 **Schemes:** page 32935/4

Limit switches

For safety solutions using Preventa
Plastic, turret head (1), types XCS-PA, XCS-TA and XCS-TE
1 ou 2 cable entries M16 x 1.5 (2)

Type of switch	Without locking of operating key	
		

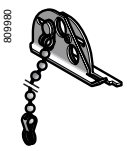
References of switches without operating key (⊖ N/C contact with positive opening operation)

2-pole N/C + N/O break before make slow break (3)	**XCS-PA592** ⊖	–
2-pole N/O + N/C make before break slow break (3)	**XCS-PA692** ⊖	–
2-pole N/C + N/C slow break (3)	**XCS-PA792** ⊖	–
3-pole N/C + N/O + N/O (2 N/O staggered) slow break (3)	–	**XCS-TA592** ⊖
3-pole N/C + N/C + N/O (N/O staggered) slow break (3)	–	**XCS-TA792** ⊖
3-pole N/C + N/C + N/C slow break (3)	–	**XCS-TA892** ⊖
Weight (kg)	0.110	0.160

Complementary characteristics not shown under general characteristics (page 32921/3)

Actuation speed	Maximum : 0.5 m/s, minimum : 0.01 m/s
Resistance to forcible key withdrawal	**XCS-PA, XCS-TA :** 10 N (50 N using operating keys **XCS-Z12** or **XCS-Z13** together with guard retaining device **XCS-Z21**) **XCS-TE :** 500 N
Mechanical durability	**XCS-PA, XCS-TA : > 1 million operating cycles** **XCS-TE : 1 million operating cycles**
Maximum operating rate	For maximum durability : 600 operating cycles per hour
Minimum force for positive opening	15 N
Cable entry	**XCS-PA, XCS-TE :** 1 entry tapped M16 x 1.5 for ISO cable gland **XCS-TA:** 2 entries tapped M16 x 1.5 for ISO cable gland Clamping capacity 7 to 10 mm

References of accessories



809980

XCS-Z91

Description	For use with limit switches	Unit reference	Weight kg
Blanking plugs for operating head slot (Sold in lots of 10)	XCS-PA, XCS-TA, XCS-TE	**XCS-Z28**	0.050
Tool for forced opening of interlocking device (Sold in lots of 10)	XCS-TE	**XCS-Z100**	0.050
Padlocking device to prevent insertion of operating key, for up to 3 padlocks (padlocks not supplied)	XCS-PA, XCS-TA, XCS-TE	**XCS-Z91**	0.053

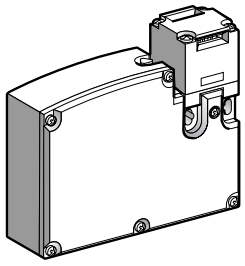
(1) Adjustable throughout 360° in 90° steps. Blanking plug for operating head slot included with switch.
(2) For cable entries tapped for n° 11 (Pg 11) cable gland, replace the last number in the reference by **1** (see page 32934/2).
Example: XCS-PA592 becomes **XCS-PA591**.
(3) Schematic diagrams shown represent the contact states whilst the operating key is inserted in the head of the switch.

Dimensions: **32935/3** **page 32935/4**
pages 32935/2 and **Schemes:**

Limit switches

For safety solutions using Preventa
Plastic, turret head (1), types XCS-PA, XCS-TA and XCS-TE
1 ou 2 cable entries M16 x 1.5 (2)

Type of switch	With interlocking, locking by electromagnet		



Type of interlocking	**Locking on de-energisation and unlocking on energisation of electromagnet** (3). To order a limit switch with locking on energisation and unlocking on de-energisation of the electromagnet, replace the 2nd number by **5** in the references shown below. Example : **XCS-TE5312** becomes **XCS-TE5512**.		
Supply voltage of electromagnet	∿ or ⎓ 24 V (50/60 Hz on ∿)	∿ or ⎓ 120 V (50/60 Hz on ∿)	∿ or ⎓ 230 V (50/60 Hz on ∿)

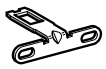
References of switches without operating key (⊖ N/C contact with positive opening operation)

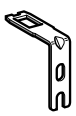
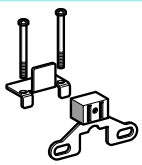
2-pole N/C + N/O break before make slow break (4) 	**XCS-TE5312** ⊖	**XCS-TE5332** ⊖	**XCS-TE5342** ⊖
2-pole N/O + N/C make before break slow break (4) 	**XCS-TE6312** ⊖	**XCS-TE6332** ⊖	**XCS-TE6342** ⊖
2-pole N/C + N/C slow break (4) 	**XCS-TE7312** ⊖	**XCS-TE7332** ⊖	**XCS-TE7342** ⊖
Weight (kg)	0.360	0.360	0.360

Electromagnet characteristics

Load factor	100 %		
Rated operational voltage	**∿ or ⎓ 24 V**	**∿ or ⎓ 120 V**	**∿ or ⎓ 230 V**
Voltage limits	- 20 %, + 10 % of the rated operational voltage (including ripple on ⎓) conforming to IEC 947-1		
Service life	20,000 hours		
Consumption	10 VA max.		

References of operating keys and guard retaining device

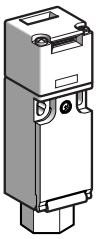
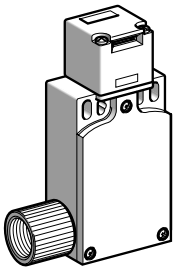
Description	Straight key	Key with wide fixing (5)		Pivoting key	Right-angled key	Guard retaining device (6)
For limit switches XCS-PA, TA, TE	**XCS-Z11**	**XCS-Z12**	**XCS-Z15**	**XCS-Z13**	**XCS-Z14**	**XCS-Z21**
Weight (kg)	0.015	0.015	0.012	0.085	0.025	0.080

(1) Adjustable throughout 360° in 90° steps. Blanking plug for operating head slot included with switch.
(2) For cable entries tapped for n° 11 (Pg 11) cable gland, replace the last number in the reference by **1** (see page 32934/3).
Example: XCS-TE5312 becomes **XCS-TE5311**.
(3) A special tool included with the limit switch enables forced opening of the interlocking device, allowing key withdrawal and subsequent opening of the N/C safety contacts.
(4) Schematic diagrams shown represent the contact states whilst the operating key is inserted in the head of the switch.
(5) 2 key lengths, XCS-Z12: L = 40 mm, XCS-Z15: L = 29 mm.
(6) Only for use with XCS-PA and XCS-TA limit switches used in conjunction with operating keys XCS-Z12, XCS-Z13 and XCS-Z15.

Dimensions: pages 32935/2 and 32935/3 **Schemes:** page 32935/4

Safety solutions using Preventa

Safety switches
Plastic, turret head (1), types XCS-PA, XCS-TA and XCS-TE
Cable entries tapped 1/2" NPT

Type of switch	Without locking of operating key	
		

References of switches without operating key (⊖ N/C contact with positive opening operation)

2-pole N/C + N/O break before make slow break (2)	**XCS-PA593** ⊖	–
2-pole N/O + N/C make before break slow break (2)	**XCS-PA693** ⊖	–
2-pole N/C + N/C slow break (2)	**XCS-PA793** ⊖	–
3-pole N/C + N/O + N/O (2 N/O staggered) slow break (2)	–	**XCS-TA593** ⊖
3-pole N/C + N/C + N/O (N/O staggered) slow break (2)	–	**XCS-TA793** ⊖
3-pole N/C + N/C + N/C slow break (2)	–	**XCS-TA893** ⊖
Weight (kg)	0.110	0.160

Complementary characteristics not shown under general characteristics (page 32921/3)

Actuation speed	Maximum : 0.5 m/s, minimum : 0.01 m/s
Resistance to forcible key withdrawal	**XCS-PA, XCS-TA :** 10 N (50 N using operating keys **XCS-Z12** or **XCS-Z13** together with guard retaining device **XCS-Z21**) **XCS-TE :** 500 N
Mechanical durability	**XCS-PA, XCS-TA : > 1 million operating cycles** **XCS-TE : 1 million operating cycles**
Maximum operating rate	For maximum durability : 600 operating cycles per hour
Minimum force for positive opening	15 N
Cable entry	**XCS-PA :** 1 entry tapped for 1/2" NPT (USAS B2-1) conduit. **XCS-TE :** 1 entry tapped 11 mm and fitted with metal adaptor DE9-RA1012 for 1/2" NPT (USAS B2-1) conduit. **XCS-TA :** 2 entries tapped 11 mm, 1 fitted with metal adaptor DE9-RA1012 for 1/2" NPT (USAS B2-1) conduit. Second entry fitted with blanking plug.

References of accessories

XCS-Z91

Description	For use with limit switches	Unit reference	Weight kg
Blanking plugs for operating head slot (Sold in lots of 10)	XCS-PA, XCS-TA, XCS-TE	**XCS-Z28**	0.050
Tool for forced opening of interlocking device (Sold in lots of 10)	XCS-TE	**XCS-Z100**	0.050
Padlocking device to prevent insertion of operating key, for up to 3 padlocks (padlocks not supplied)	XCS-PA, XCS-TA, XCS-TE	**XCS-Z91**	0.053

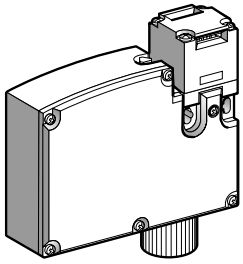
(1) Adjustable throughout 360° in 90° steps. Blanking plug for operating head slot included with switch.
(2) Schematic diagrams shown represent the contact states whilst the operating key is inserted in the head of the switch.

Dimensions: **32935/3** **page 32935/4**
pages 32935/2 and **Schemes:**

Safety solutions using Preventa

Safety switches
Plastic, turret head (1), types XCS-PA, XCS-TA and XCS-TE
Cable entries tapped 1/2" NPT

Type of switch	With interlocking, locking by electromagnet



Type of interlocking	**Locking on de-energisation and unlocking on energisation of electromagnet** (2). To order a limit switch with locking on energisation and unlocking on de-energisation of the electromagnet, replace the 2nd number by **5** in the references shown below. Example : **XCS-TE5313** becomes **XCS-TE5513**.	
Supply voltage of electromagnet	∿ or ⎓ 24 V (50/60 Hz on ∿)	∿ or ⎓ 120 V (50/60 Hz on ∿)

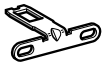
References of switches without operating key (⊖ N/C contact with positive opening operation)

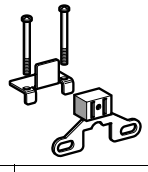
2-pole N/C + N/O break before make slow break (3) 	**XCS-TE5313** ⊖	**XCS-TE5333** ⊖
2-pole N/O + N/C make before break slow break (3) 	**XCS-TE6313** ⊖	–
2-pole N/C + N/C slow break (3) 	**XCS-TE7313** ⊖	**XCS-TE7333** ⊖
Weight (kg)	0.360	0.360

Electromagnet characteristics

Load factor	100 %	
Rated operational voltage	∿ **or** ⎓ **24 V**	∿ **or** ⎓ **120 V**
Voltage limits	- 20 %, + 10 % of the rated operational voltage (including ripple on ⎓) conforming to IEC 947-1	
Service life	20,000 hours	
Consumption	10 VA max.	

References of operating keys and guard retaining device

Description	Straight key	Key with wide fixing (5)		Pivoting key	Right-angled key	Guard retaining device (4)
For limit switches XCS-PA, TA, TE	**XCS-Z11**	**XCS-Z12**	**XCS-Z15**	**XCS-Z13**	**XCS-Z14**	**XCS-Z21**
Weight (kg)	0.015	0.015	0.012	0.085	0.025	0.080

(1) Adjustable throughout 360° in 90° steps. Blanking plug for operating head slot included with switch.
(2) A special tool included with the limit switch enables forced opening of the interlocking device, allowing key withdrawal and subsequent opening of the N/C safety contacts.
(3) Schematic diagrams shown represent the contact states whilst the operating key is inserted in the head of the switch.
(4) Only for use with XCS-PA and XCS-TA limit switches used in conjunction with operating keys XCS-Z12, XCS-Z13 and XCS-Z15.
(5) 2 key lengths, XCS-Z12: L = 40 mm, XCS-Z15: L = 29 mm.

Dimensions: **pages 32935/2 and** **32935/3** **Schemes:** **page 32935/4**