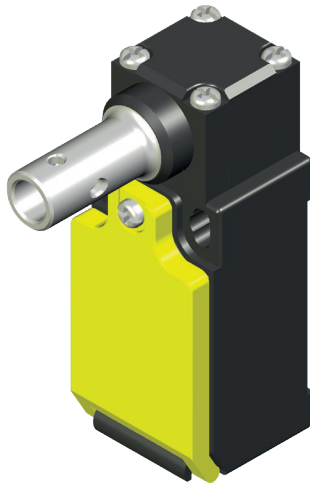




# FTN146...

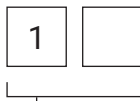


## SAFETY-DOOR HINGE SWITCH

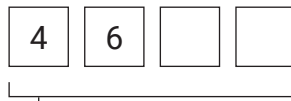
Thermoplastic limit switch  
Angular action  
Adjustable head (90° steps)  
Electrically independent contacts (Zb)  
Enclosure IP rating: IP65  
Compliance: EN 50047, IEC/EN 60947-5-1, UL 508, up to SIL3  
Marking: CE, CCC, UL, EAC, UKCA



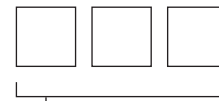
**Series**  
**FTN** thermoplastic  
limit switch



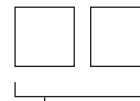
**Type**  
**1** standard



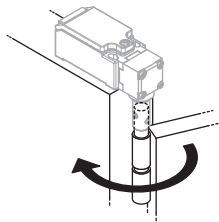
**Head and actuator**  
**46** Safety-door  
hinge switch



**Contact type**  
**X11** 1NO/1NC slow action Zb  
**W02** 2NC slow action Zb



**Lead exit dimension or type**  
blank M16 (standard)  
**M** M20



**W12** 1NO/2NC slow action Zb  
**W03** 3NC slow action Zb

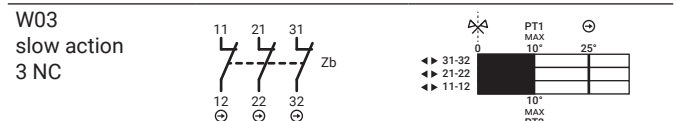
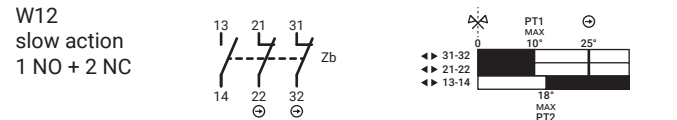
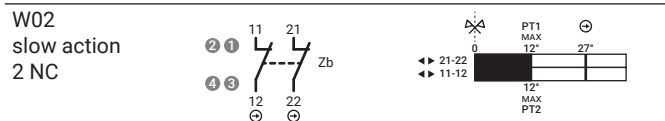
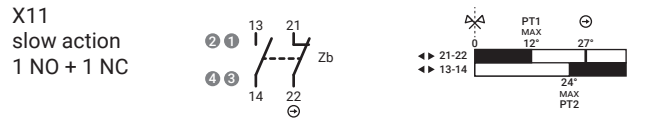
**G3** PG13.5  
**C** 4 poles male code  
"A" M12x1 connector

Positive opening operation		NC contact ⊕
Minimum current		5 mA - 5 V DC
Thermal current	I <sub>th</sub>	10 A
Rated insulation voltage	U <sub>i</sub>	500 V
Rated impulse withstand voltage	U <sub>imp</sub>	6 kV
Insulation resistance	min	100 MΩ (DC 500 V)
Contact resistance	max	25 mΩ (initial)
Enclosure material		glass filled PBT (UL approved)
Enclosure degree of protection		IP65
Operating temperature		-25 ... +80°C (-13 ... +176°F)
Pollution degree		3
Protection against electric shock		class II (double insulation) ▢
Mechanical life expectancy	min	1×10 <sup>7</sup> cycles
Electrical life expectancy	min	150000 cycles
Vibration	IEC 68-2-6	10-55 ±1 Hz
	excursion	0.35 mm, 1 octave/min
Fixing		2 × M4 screws

# FTN146...

Contact types	Categories *	Ratings **	PT1	PT2 / RP	OF	POT ⊖	POF	TT	
X11 1NO 1NC	A600 - Q600	AC15: 400 V - 4 A DC13: 24 V - 6 A	12°	24°	0.06 N·m	27°	0.12 N·m		
W02 2NC			12°	-	0.06 N·m	27°	0.12 N·m		
-			-	-	-	-	-	-	
-			-	-	-	-	-	-	
W12 1NO 2NC	A300 - Q300		10°	18°	0.05 N·m	25°	0.11 N·m		
W03 3NC			10°	-	0.05 N·m	25°	0.11 N·m		

\* UL 508 / CSA C22-2 n° 14 \*\* IEC/EN 60947-1



- PT1 Operating travel
- PT2 Second operating travel (slow action)
- RP Release position (snap action)
- OF Operating force
- POT Positive opening travel ⊖
- POF Positive opening force
- TT Total travel



M12 Connector pin arrangement - on request

- (1) Mounting holes
- (2) 2×M3 grub screws included
- (3) Spring pin (not included)

Dimensions in mm / illustrations NOT in scale

