



# FTN148...



## LIMIT SWITCH WITH Ø8 SHORT METAL END PLUNGER

Thermoplastic limit switch  
Vertical action  
Electrically independent contacts (Zb)  
Enclosure degree of protection: IP67  
Compliance: EN 50047, IEC/EN 60947-5-1, UL 508, up to SIL3  
Marking: CE, CCC, UL, EAC, UKCA

F T N

**Series**  
FTN thermoplastic limit switch

1

**Type**  
1 standard

4 8

**Head and actuator**  
48 Ø8 short metal end plunger

W 0 2

**Contact type**  
X11 1NO/1NC slow action Zb  
**W02 2NC slow action Zb**  
W20 2NO slow action Zb  
Z11 1NO/1NC snap action Zb  
Z02 2NC snap action Zb  
W12 1NO/2NC slow action Zb  
W03 3NC slow action Zb

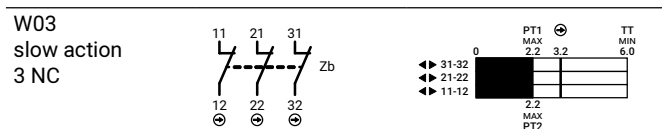
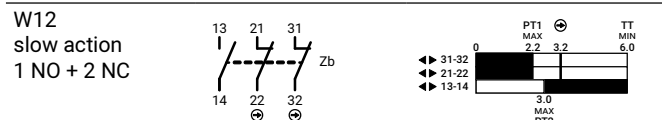
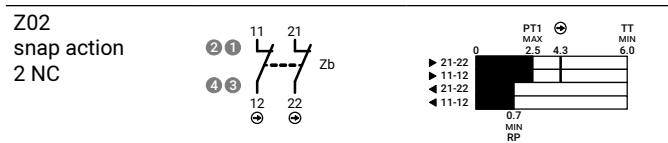
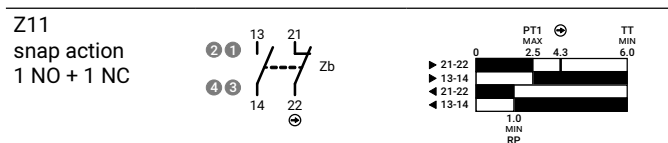
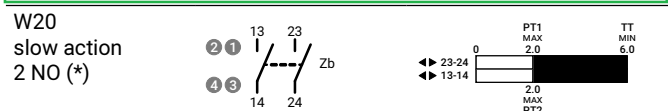
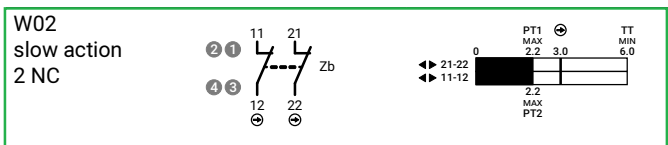
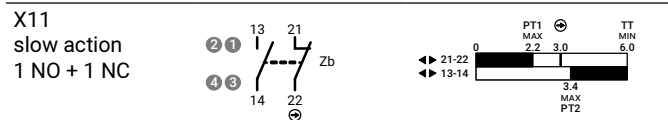
**Lead exit dimension or type**  
blank M16 (standard)  
M M20  
  
G3 PG13.5  
C 4 poles male code "A" M12×1 connector

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		IP67
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 excursion	10-55 ±1 Hz 0.35 mm, 1 octave/min
Fixing		2 × M4 screws

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Contact types	Categories *	Rateds **	PT1	PT2 / RP	OF	POT ⊕	POF	TT
X11 1NO 1NC			2.2 mm	3.4 mm	12 N	3.0 mm	22 N	
W02 2NC	slow action (Zb) A600 - Q600		2.2 mm	-	6.8 N	3.0 mm	22 N	
W20 2NO		AC15: 400 V - 4 A	2.0 mm	-	8.3 N	-	-	
Z11 1NO 1NC	snap action (Zb) B600 - Q600	DC13: 24 V - 6 A	2.5 mm	1.0 mm	6.8 N	4.3 mm	16.3 N	6.0 mm
Z02 2NC			2.5 mm	0.7 mm	6.5 N	4.3 mm	16.3 N	
W12 1NO 2NC	slow action (Zb) A300 - Q300		2.2 mm	3.0 mm	6.5 N	3.2 mm	23 N	
W03 3NC			2.2 mm	-	6.0 N	3.2 mm	23 N	

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



(\*) Not suitable for safety applications.

- 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

Dimensions in mm / illustrations NOT in scale

