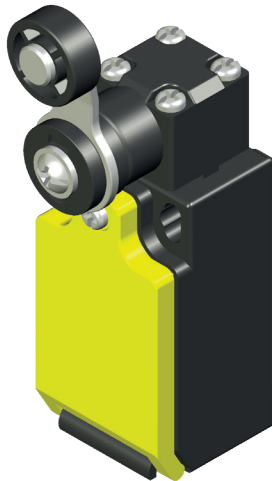




# FTN138...



## LIMIT SWITCH WITH Ø18 PA ROLLER LEVER

|  |
|--|
| Thermoplastic limit switch                                 |
| Horizontal action  |
| Adjustable head (90° steps)                                |
| Adjustable lever (18° steps)                               |
| Electrically independent contacts (Zb)                     |
| Enclosure IP rating: 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

3 8

**Head and actuator**  
38 Ø18 PA roller lever

**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  
N 1/2NPT  
G1 PG11  
G3 PG13.5  
C 4 poles male code "A" M12x1 connector

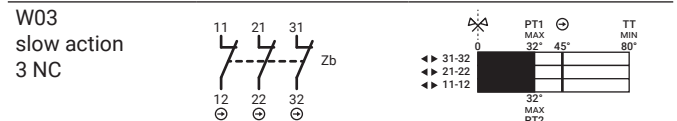
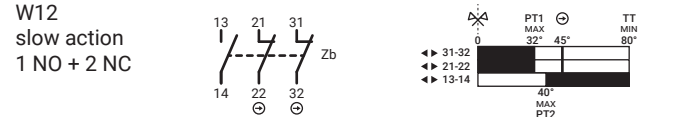
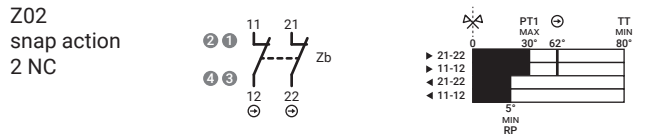
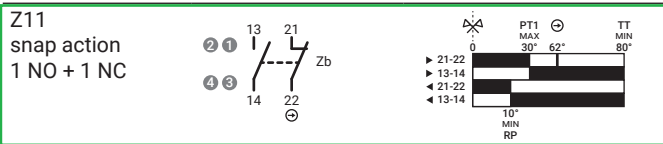
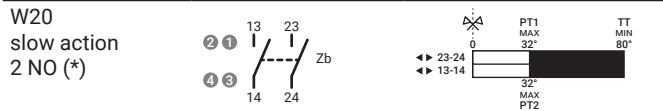
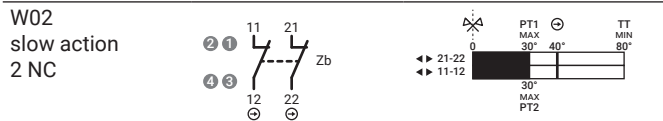
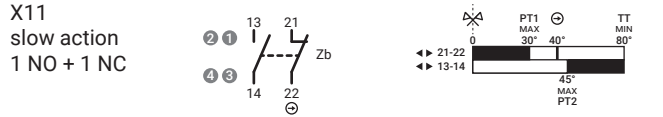


|                                   |                      |                                      |
|-----------------------------------|----------------------|--------------------------------------|
| Positive opening operation        |                      | NC contact ⊖                         |
| 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    |                      | 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<br>0.35 mm, 1 octave/min |
| Fixing                            |                      | 2 × M4 screws                        |

# FTN138...

| Contact types | Categories * | Ratings **        | PT1 | PT2 / RP | OF    | POT ⊖ | POF   | TT  |
|---------------|--------------|-------------------|-----|----------|-------|-------|-------|-----|
| X11 1NO 1NC   | A600 - Q600  | AC15: 400 V - 4 A | 30° | 45°      | 6.5 N | 40°   | 6 N   |     |
| W02 2NC       |              |                   | 30° | -        | 6.5 N | 40°   | 6 N   |     |
| W20 2NO       | B600 - Q600  | DC13: 24 V - 6 A  | 32° | -        | 6.5 N | -     | -     |     |
| Z11 1NO 1NC   |              |                   | 30° | 10°      | 2.1 N | 62°   | 5.5 N | 80° |
| Z02 2NC       | A300 - Q300  |                   | 30° | 5°       | 2.1 N | 62°   | 5.5 N |     |
| W12 1NO 2NC   |              |                   | 32° | 40°      | 6.5 N | 45°   | 5.4 N |     |
| W03 3NC       |              |                   | 32° | -        | 6.5 N | 45°   | 5.4 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
- (2) Plastic roller

Dimensions in mm / illustrations NOT in scale

