



FTNG131...



LIMIT SWITCH WITH Ø9 METAL END PLUNGER

40 mm thermoplastic limit switches for heavy applications
Head and lid fixed by threaded inserts and metric screws
Vertical action
Electrically independent contacts (Zb)
IP rating: IP67
Compliance: EN 50041, IEC/EN 60947-5-1, UL 508, up to SIL3
Marking: CE, CCC, UL, EAC, UKCA

F T N G

Series

FTNG 40 mm thermoplastic limit switches for heavy applications

1

Type

1 standard

3 1

Head and actuator

31 Ø9 metal end plunger

Z 1 1

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

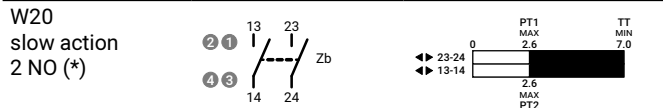
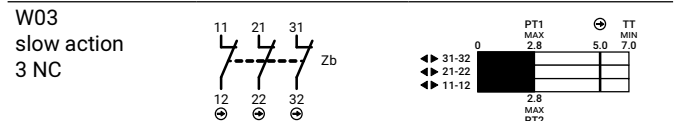
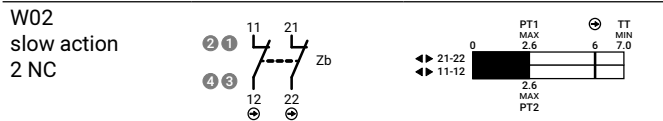
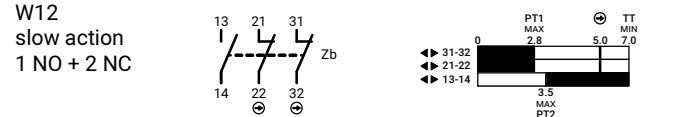
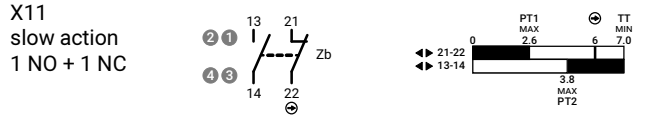
blank M20 (standard)
N 1/2NPT
G3 PG13.5
C male connector

| | | |
|-----------------------------------|------------------|--------------------------------|
| Positive opening operation | | NC contact ☹ |
| Minimum current | | 5 mA - 5 V DC |
| Thermal current | I _{th} | 10 A |
| Rated insulation voltage | U _i | 500 V |
| Rated impulse withstand voltage | U _{imp} | 6 kV |
| Insulation resistance | min | 100 MΩ (DC 500 V) |
| Contact resistance | max | 25 mΩ (initial) |
| Switching speed | max | 250 mm/s |
| Switching frequency | max | 6000 operations per hour |
| Enclosure material | | glass filled PBT (UL approved) |
| Enclosure IP rating | | 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 ⁷ cycles |
| Electrical life expectancy | min | 150000 cycles |
| Vibration | IEC 68-2-6 | 10-55 ±1 Hz |
| | excursion | 0.35 mm, 1 octave/min |
| Fixing | | 4 × M4 screws |

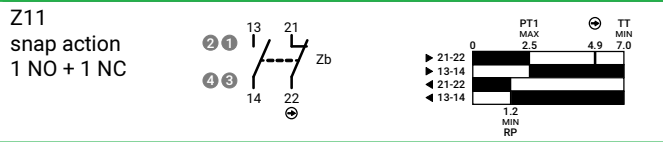
FTNG131...

| Contact types | Categories * | Ratings ** | PT1 | PT2 / RP | OF | POT ⊕ | POF | TT |
|---------------|------------------------------|-------------------|--------|----------|--------|--------|------|--------|
| X11 1NO 1NC | | | 2.6 mm | 3.8 mm | 11.6 N | 6.0 mm | 28 N | |
| W02 2NC | slow action (Zb) A600 - Q600 | | 2.6 mm | - | 11.6 N | 6.0 mm | 28 N | |
| W20 2NO | | AC15: 400 V - 4 A | 2.6 mm | - | 11.4 N | - | - | |
| Z11 1NO 1NC | snap action (Zb) B600 - Q600 | DC13: 24 V - 6 A | 2.5 mm | 1.2 mm | 10.4 N | 4.9 mm | 22 N | 7.0 mm |
| Z02 2NC | | | 2.5 mm | 1.2 mm | 8.6 N | 4.9 mm | 22 N | |
| W12 1NO 2NC | slow action (Zb) A300 - Q300 | | 2.8 mm | 3.5 mm | 9.4 N | 5.0 mm | 10 N | |
| W03 3NC | | | 2.8 mm | - | 9.4 N | 5.0 mm | 10 N | |

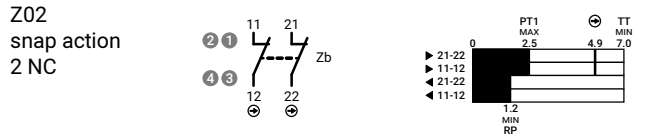
* UL 508 / CSA C22-2 n° 14 ** IEC/EN 60947-1



(*) 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

