



1. General

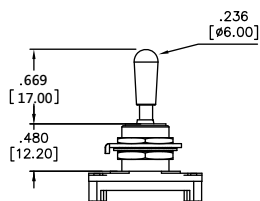
1.1 Standard	UL61058
1.2 Mechanism	Toggle action
1.3 Contact form	Single pole single throw (SPST) Single pole double throw (SPDT) Double pole single throw (DPST) Double pole double throw (DPDT)
1.4 Protective structure	IP68
1.5 Terminal	Screw , Solder ,#250 Quick Connect, Screw Terminal

2. Product Selection

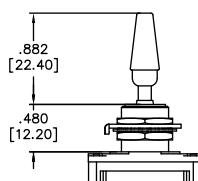
TL - -
 1 **2** **3** **4** **5** **6**

1. ACTUATOR TYPE

_: Metal Actuator



P: Metal Actuator W/Plastic Cover



2. CONTACT TYPES

11: 2P ON-OFF	SPST
12: 3P ON-ON	SPDT
13: 3P ON-OFF-ON	SPDT
21: 4P ON-OFF	DPST
22: 6P ON-ON	DPDT
23: 6P ON-OFF-ON	DPDT

3. TERMINAL TYPES

- A:** SOLDER
- B:** SCREW
- C:** #250 QUICK CONNECT
- B:** SCREW TERMINAL

4. RATING TYPES

- _: 12A 250VAC
- 12A 125VAC
- 1/2 HP 125VAC
- 1 HP 250VAC

5. REST TYPES

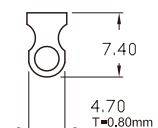
- M1:** (ON)-OFF
- M2:** (ON)-OFF-(ON)

6. CAP COLOR

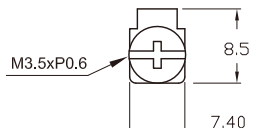
- _: Black
- Y:** Yellow
- For TLP Type

Terminal Dimension

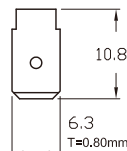
A: SOLDER TYPE



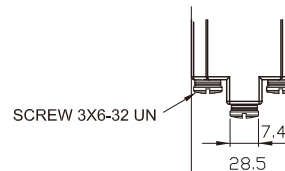
B: SCREW TYPE



C: #250 QUICK CONNECT TYPE



S: Screw Terminal Type



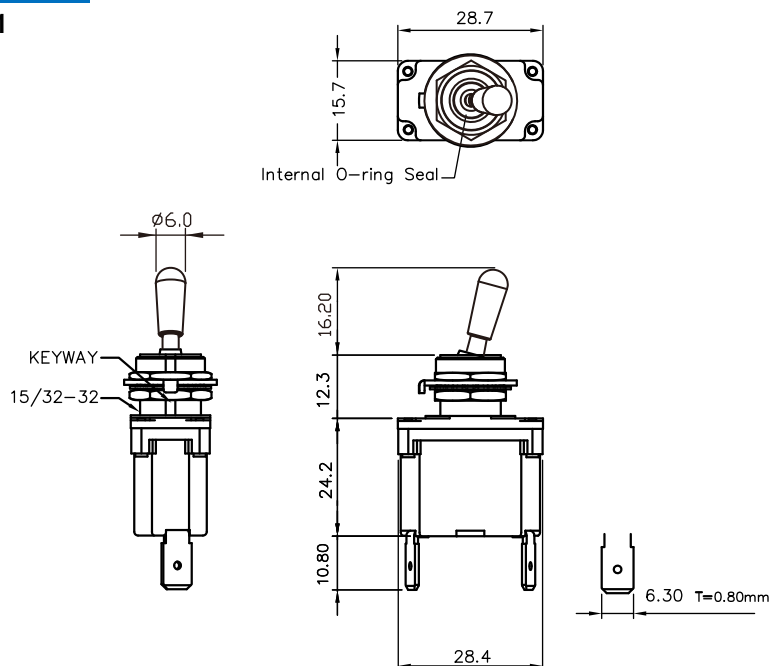
**3. Characteristics**

Item	Specification
Rating	UL61058 : 12A 250V AC /12A 125V AC , 1/2HP 125V AC/ 1HP 250V AC
Contacts Specification	
Shape	Rivet
Material	AgNi +Cu
Electrical characteristics	
Contact resistance	20 mΩ max . (initial)
Insulation resistance	100 MΩ min (at 500V DC)
Dielectric withstanding voltage	AC 1500V (50 or 60Hz) for 1 minute(Between contacts of each terminal)
Mechanical characteristics	
Operating frequency	30 operations / min
Vibration	10 to 55 Hz , 1.5mm double amplitude
Operating life	Electrical : 30,000 cycles Mechanical : 100,000 cycles
Climatic characteristics	
Operating temperature	-30°C~+55°C (humidity of 60% max)UL certification
Temperature rise	55K
Operating humidity	35~85%RH
Degree of protection	IP 68

*regarding to other temperature conditions test data, please contact with the related sales representative .

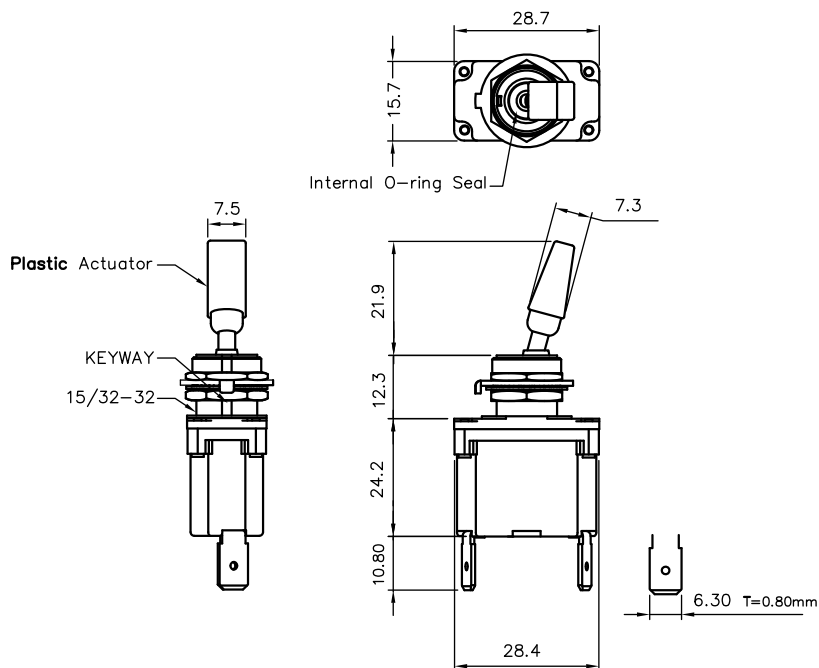
4. Dimension

■ TL-11



ITEM	FUNCTION	
TL-11C	ON-OFF	SPST 2P
TL-11C-M1	(ON)-OFF	SPST 2P

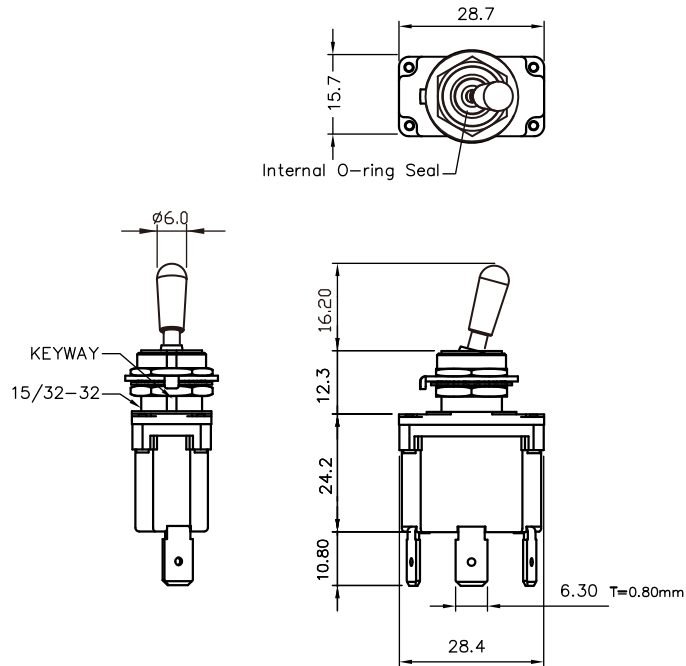
■ TLP-11



ITEM	FUNCTION	
TLP-11C	ON-OFF	SPST 2P
TLP-11C-M1	(ON)-OFF	SPST 2P

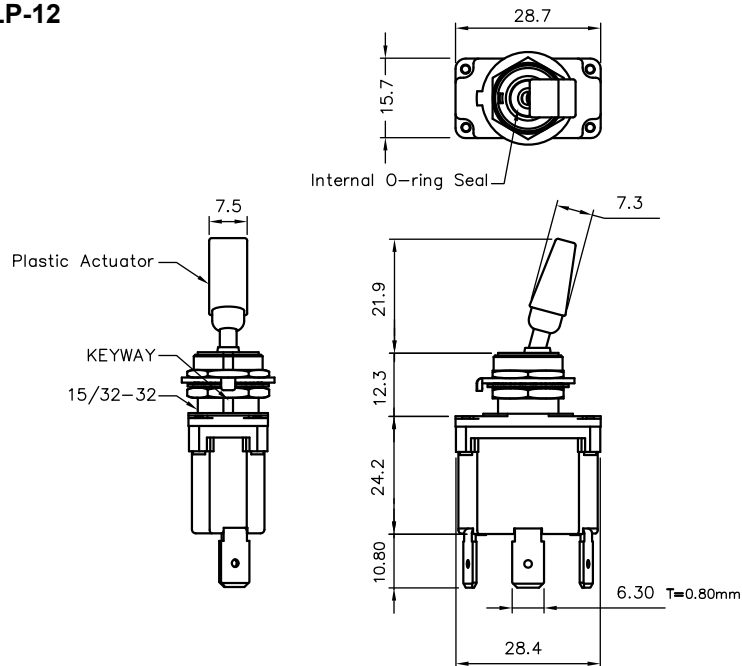
4. Dimension

■ TL-12



ITEM	FUNCTION	
TL-12C	ON-ON	SPDT 3P
TL-12C-M1	ON-(ON)	SPDT 3P

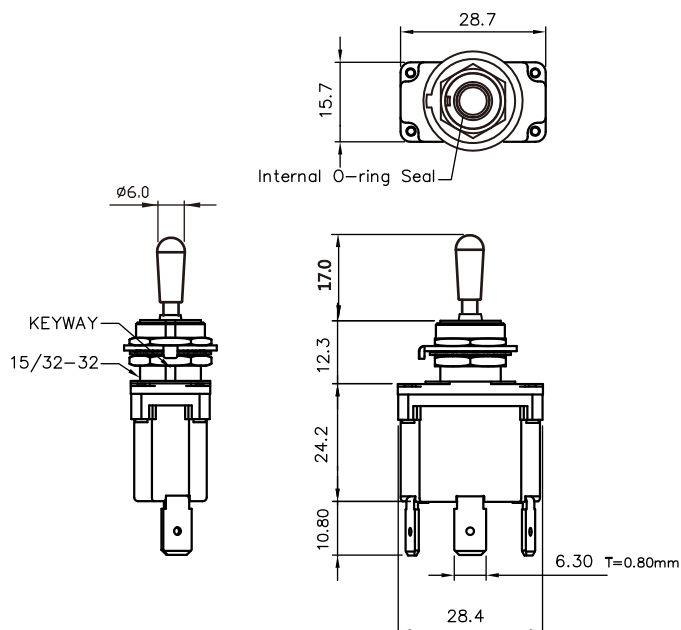
■ TLP-12



ITEM	FUNCTION	
TLP-12C	ON-ON	SPDT 3P
TLP-12C-M1	ON-(ON)	SPDT 3P

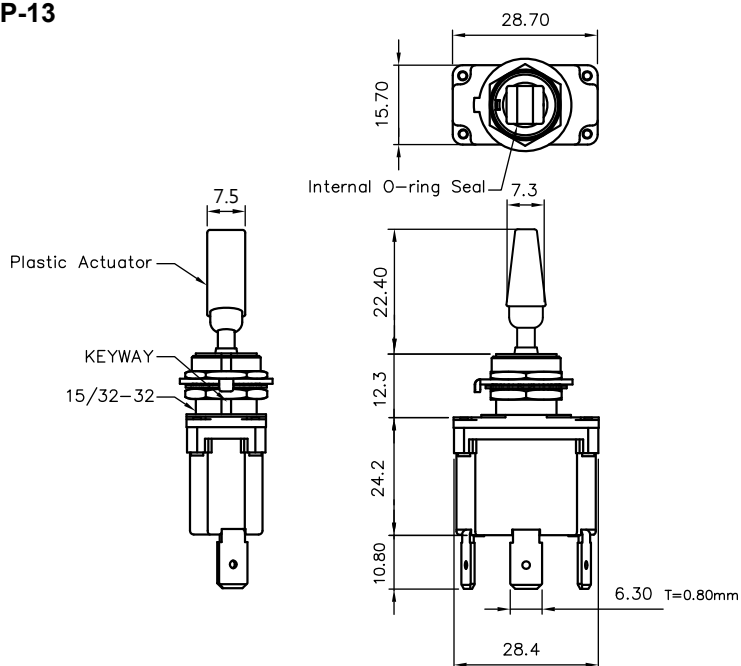
4. Dimension

■ TLP-13



ITEM	FUNCTION	
TL-13C	ON-ON	SPDT 3P
TL-13C-M1	ON-(ON)	SPDT 3P
TL-13C-M2	(ON)-OFF-(ON)	SPDT 3P

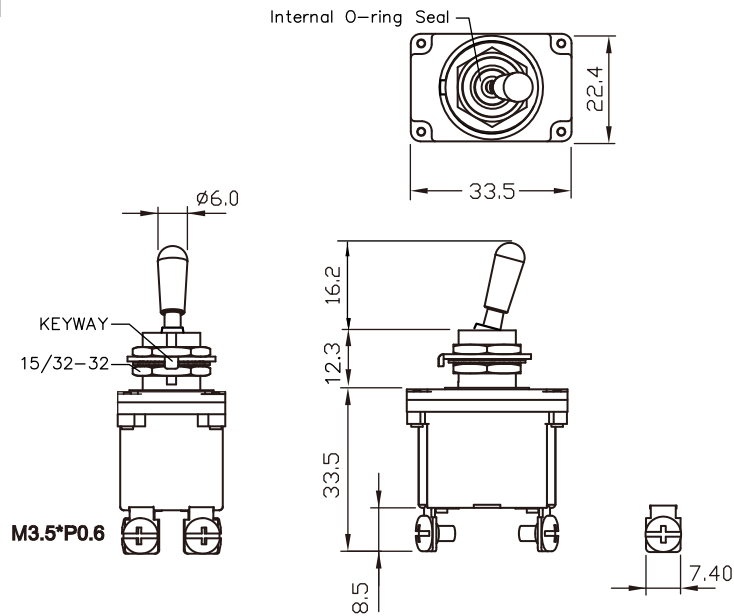
■ TLP-13



ITEM	FUNCTION	
TLP-13C	ON-OFF-ON	SPDT 3P
TLP-13C-M1	ON-OFF-(ON)	SPDT 3P
TLP-13C-M2	(ON)-OFF-(ON)	SPDT 3P

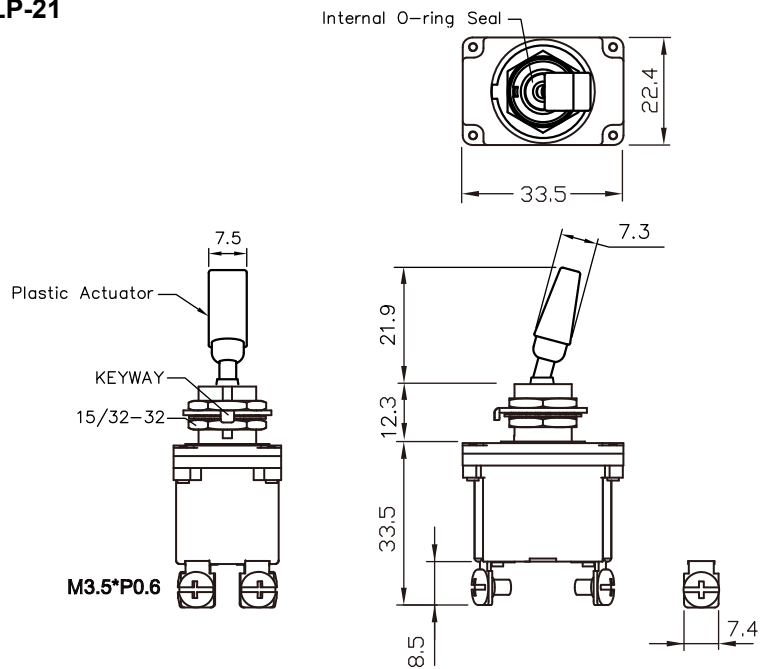
4. Dimension

■ TL-21



ITEM	FUNCTION	
TL-21B	ON-OFF	SPDT 4P
TL-21B-M1	(ON)-OFF	SPDT 4P

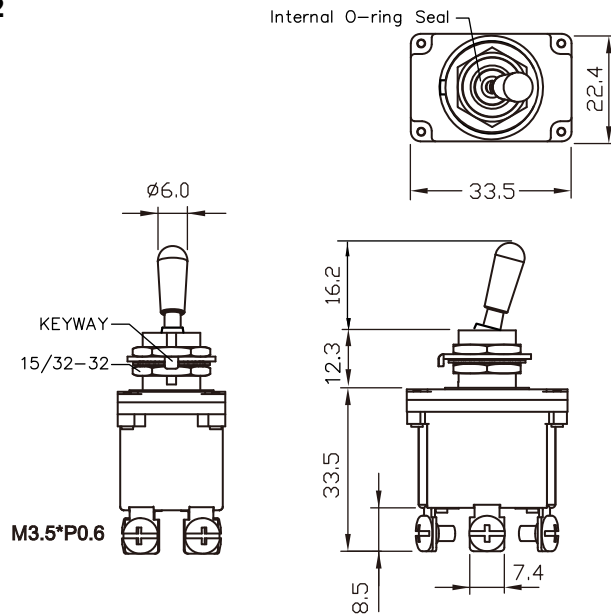
■ TLP-21



ITEM	FUNCTION	
TLP-21B	ON-OFF	SPDT 4P
TLP-21B-M1	(ON)-OFF	SPDT 4P

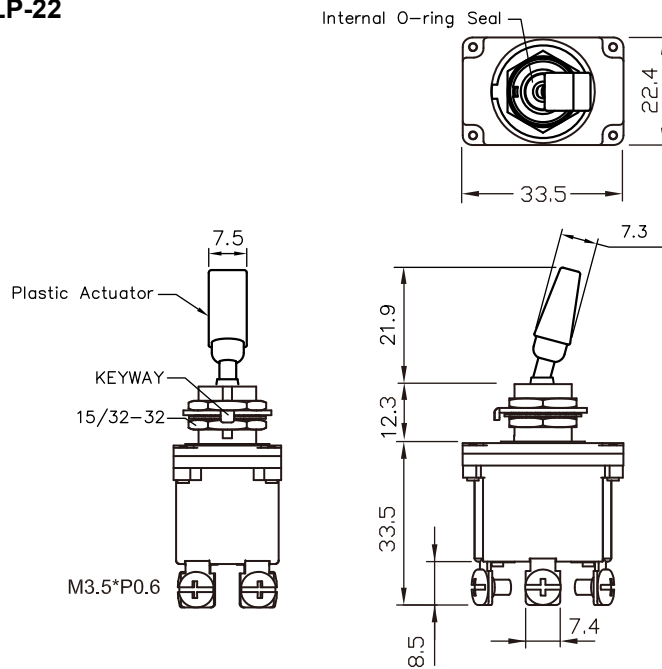
4. Dimension

■ TL-22



ITEM	FUNCTION	
TL-22B	ON-ON	DPDT 6P
TL-22B-M1	ON-(ON)	DPDT 6P

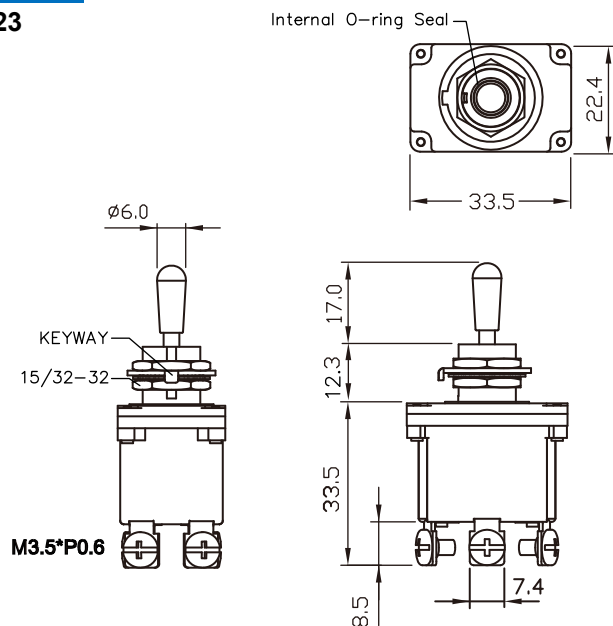
■ TLP-22



ITEM	FUNCTION	
TLP-22B	ON-ON	DPDT 6P
TLP-22B-M1	ON-(ON)	DPDT 6P

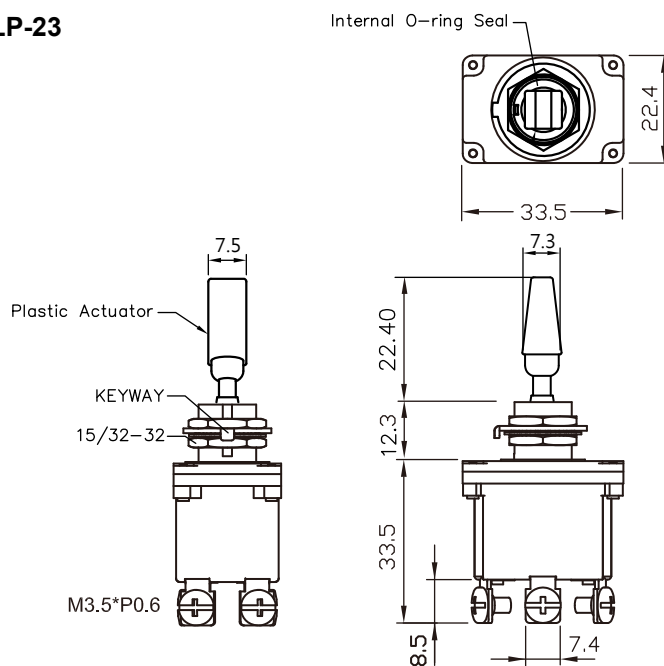
4. Dimension

■ TLP-23



ITEM	FUNCTION	
TL-23B	ON-ON	DPDT 6P
TL-23B-M1	ON-(ON)	DPDT 6P
TL-23B-M2	(ON)-OFF-(ON)	DPDT 6P

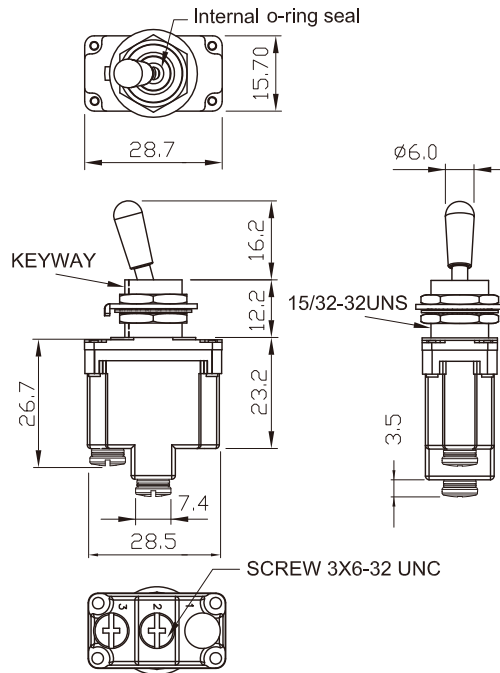
■ TLP-23



ITEM	FUNCTION	
TLP-23B	ON-OFF-ON	DPDT 6P
TLP-23B-M1	ON-OFF-(ON)	DPDT 6P
TLP-23B-M2	(ON)-OFF-(ON)	DPDT 6P

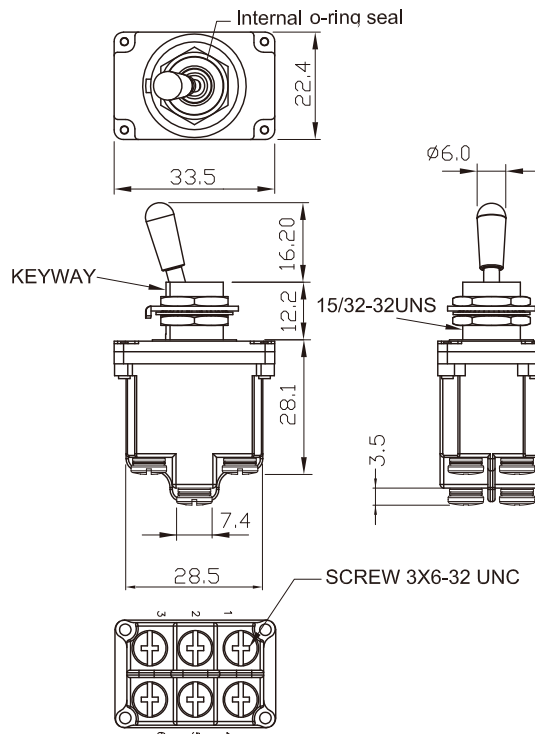
4. Dimension

■ TL-11



ITEM	FUNCTION	
TL-11S	ON-OFF	SPST 2P
TL-11S-M1	(ON)-OFF	SPST 2P

■ TL-23



ITEM	FUNCTION	
TL-23S	ON-OFF-ON	DPDT 6P
TL-23S-M1	ON-OFF-(ON)	DPDT 6P
TL-23S-M2	(ON)-OFF-(ON)	DPDT 6P