

11

## Basic parameters of switch

Mechanical life	1,000,000 cycles min.
Contact resistance	50mΩ max. initial
Insulation resistance	100 MΩ min.
Electrical strength	1000VAC for 60+/- 5 sec
Shell material	UL 94V-0 Thermoplastic

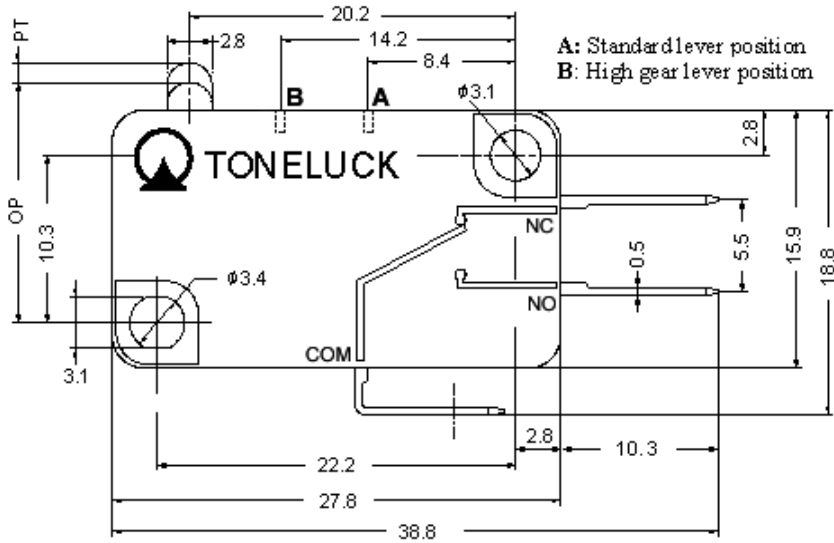


Model	Operating temperature	Rated load	Electrical life(UL)	Electrical life(EN)	Electrical life(CQC)	UL858
E41	[40 T 85]	0.1A 125/250VAC	6,000 cycles	50,000 cycles	50,000 cycles	
E51	[40 T 125]	0.1A 125/250VAC	6,000 cycles	50,000 cycles	50,000 cycles	
E61	[40 T 150]	0.1A 125/250VAC	6,000 cycles	50,000 cycles	50,000 cycles	
E42	[40 T 85]	16(4) A 125/250VAC		50,000 cycles	50,000 cycles	
		16A 125/250VAC	6,000 cycles			
		1/2HP 125VAC	6,000 cycles			
		3/4HP 250VAC	6,000 cycles			
E52	[40 T 125]	10.1A 125VL (Tungsten)	6,000 cycles+6,000 cycles			
		0.4A 125VDC	6,000 cycles			
		0.2A 250VDC	6,000 cycles			
E62	[40 T 150]	16(4)A 125/250VAC		50,000 cycles	50,000 cycles	
		10A 125/250VAC	100,000 cycles			
		1/2HP 125/250VAC	100,000 cycles			
E43	[40 T 85]	1A 30VDC	100,000 cycles			
		22(8)A 125/250VAC		10,000 cycles	10,000 cycles	
		22A 125/250VAC	6,000 cycles			
		1HP 125VAC; 2HP 250VAC	6,000 cycles			
E53	[40 T 125]	15.1A 125/250VAC	100,000 cycles			
		12A, 125VL	6,000 cycles			
E63	[40 T 150]	1A 30VDC	100,000 cycles			
		22(8)A 125/250VAC		10,000 cycles	10,000 cycles	
		22A 125/250VAC	6,000 cycles			
		1HP 125VAC; 2HP 250VAC	6,000 cycles			
E73	200C	15.1A 125/250VAC	100,000 cycles			
		15.1A 125/250VAC	100,000 cycles			
		22A 125/250VAC	6,000 cycles			6,000 cycles+9,400 cycles

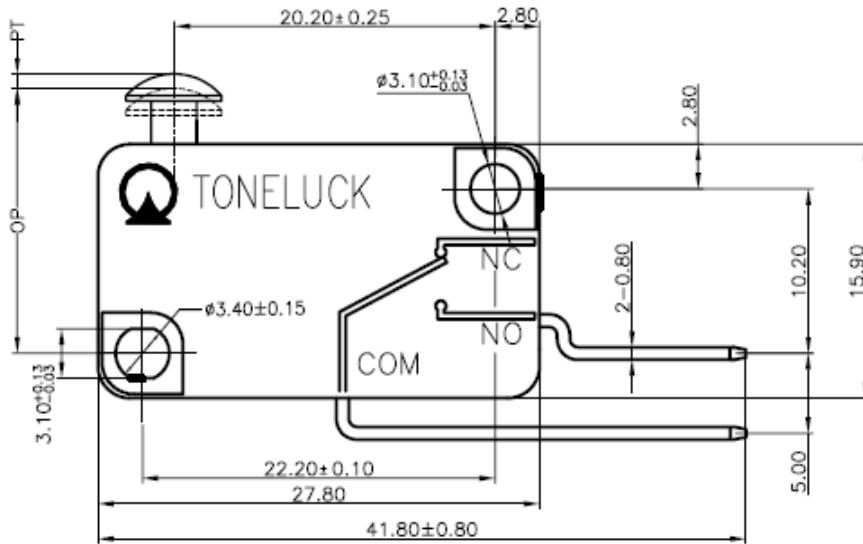
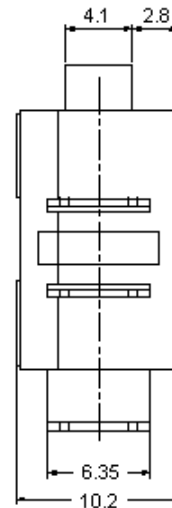
## Switch Selection

Product Type	E41	A	M	-	A	A	00	AG	-	01
E41 ~ E73										
Circuit	A= SPDT    B= SPST-NC    C= SPST-NO									
Operational force	K, L, M, N, P (Ref. to table)									
Quick connect terminal	A, B, C ... (Ref. to table)									
Lever Position	A= Standard Position    N= Pin Plunger, No External Lever B= High Gear Position    P= Mushroom plunger (E4, E5 only)									
Leverage Type	01, 02, 03 ...    00 = No Lever									
Contact material	AG: Silver Contact, Non-serrated    A1: Silver Contact, Serrated									
Version	01 = Standard									

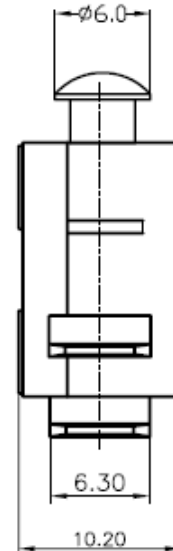
● Switch installation dimensions and precautions



Standard 250# Terminal



Mushroom plunger

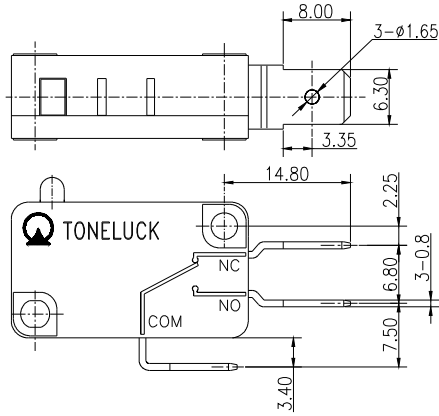


Operating force description

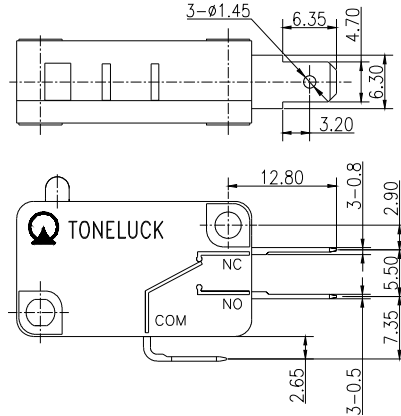
Type	Operating Force	Swith type avilable	RF (min)
K	55 +/- 15gf	All Except 22A Sw	10 ~ 50gf
L	100 +/- 25gf	All Except 22A Sw	20 ~ 90gf
M	160 +/- 30gf	All Switches	50 ~ 140gf
N	200 +/- 30gf	All Switches	55 ~ 160gf
P	350 +/- 50gf	All Switches	80 ~ 300gf

● Quick connect terminal

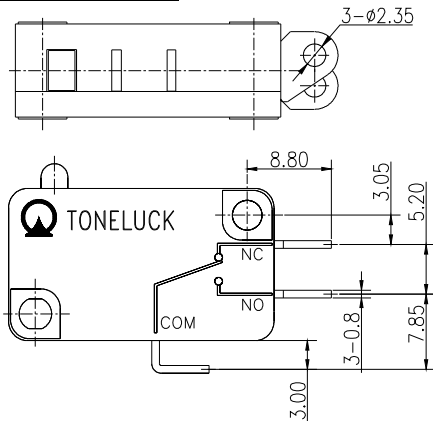
Type A: Quick connect Terminal



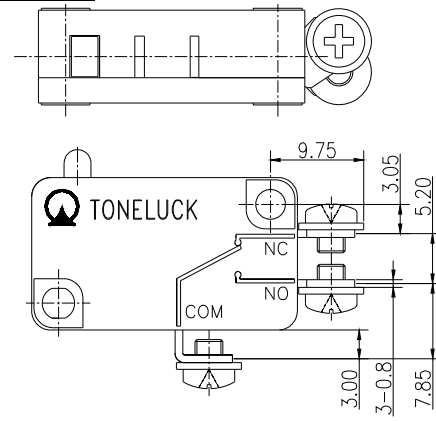
Type B: Quick connect Terminal



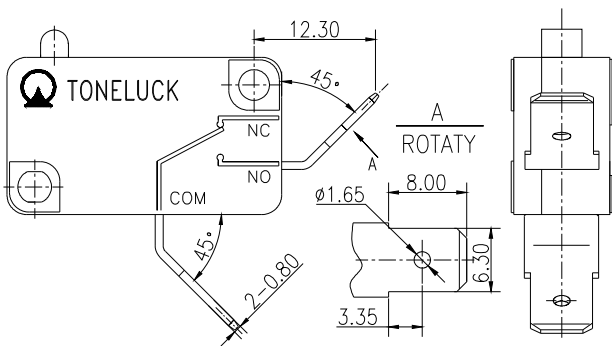
Type C: Solder Terminal



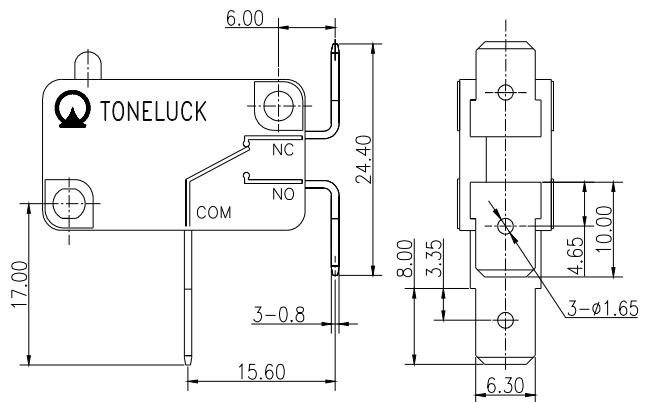
Type D: Screw Terminal



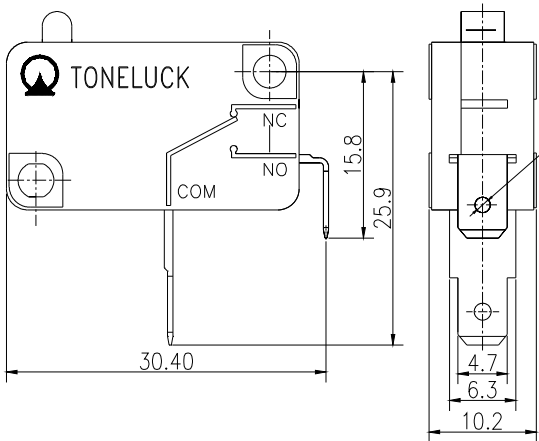
Type E: Quick connect Terminal



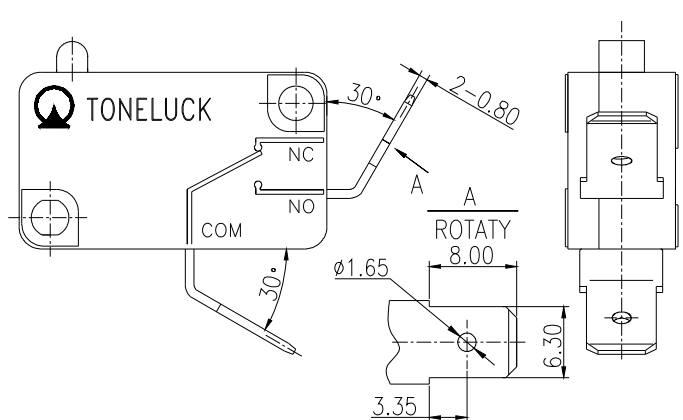
Type F: Quick connect Terminal



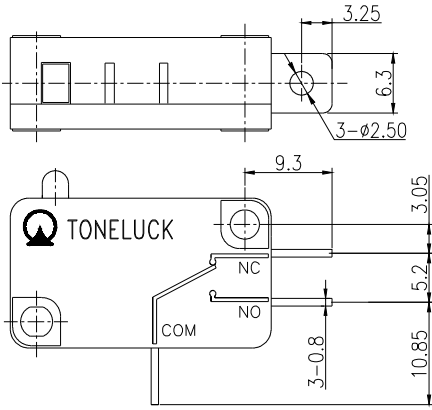
Type G: Quick connect Terminal



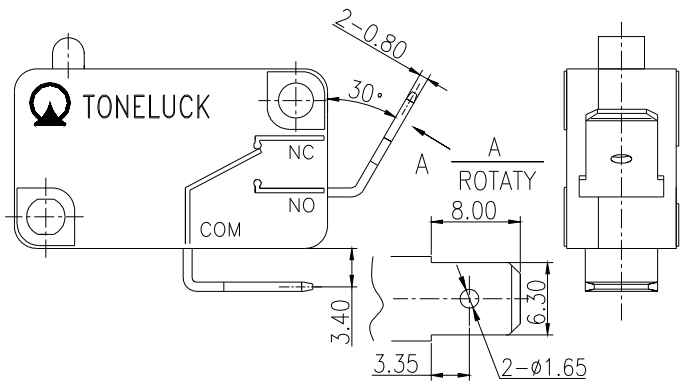
Type H: Quick connect Terminal



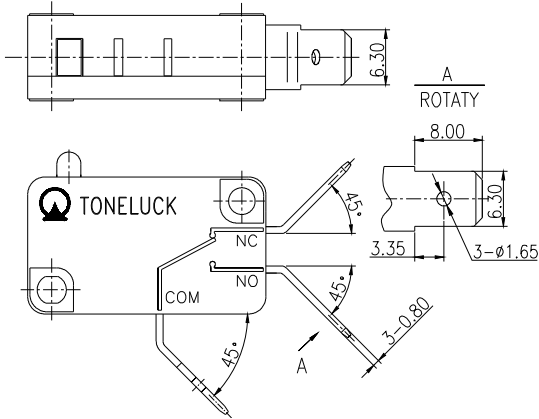
Type I: Quick connect Terminal



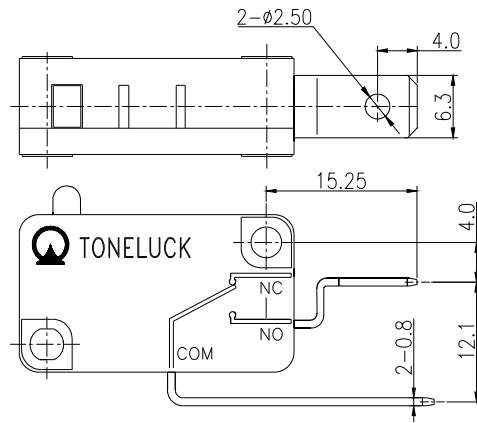
Type J: Quick connect Terminal



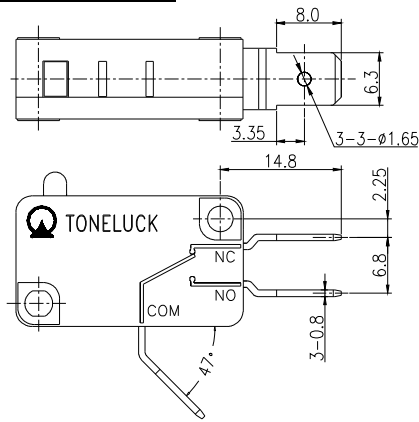
Type K: Quick connect Terminal



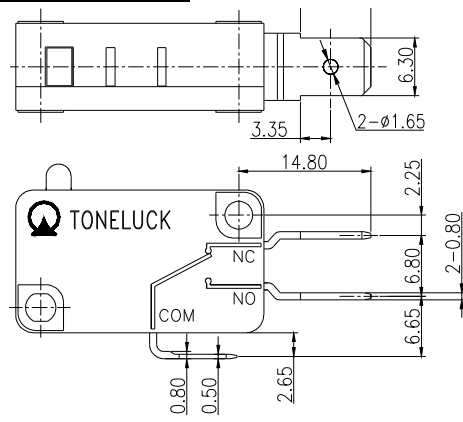
Type L: Quick connect Terminal



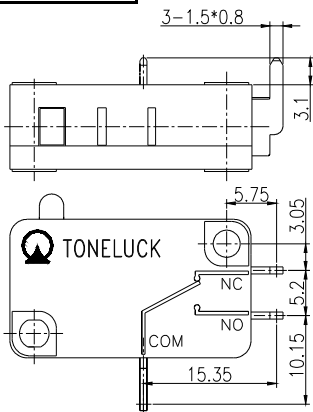
Type M: Quick connect Terminal



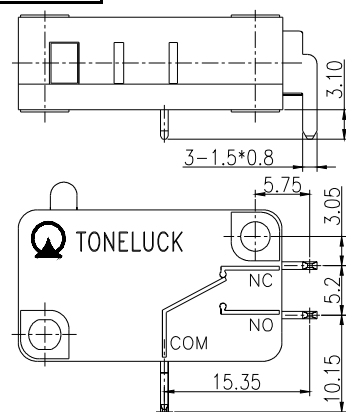
Type N: Quick connect Terminal



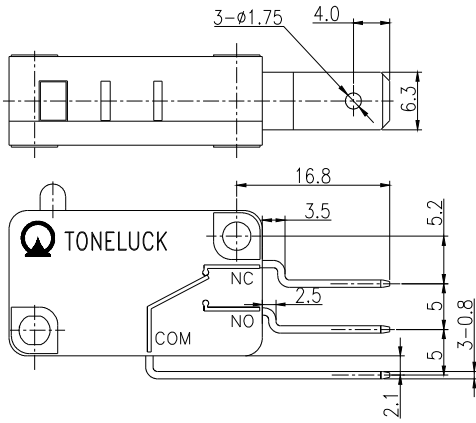
Type P: PCB Terminal-Right



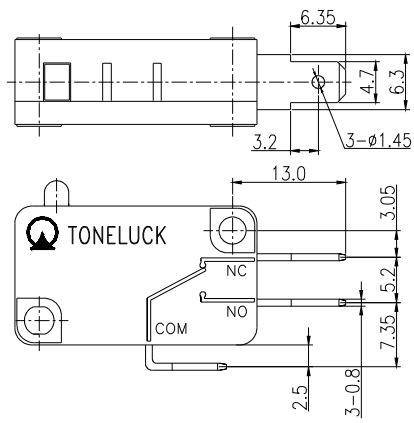
Type Q: PCB Terminal-Right



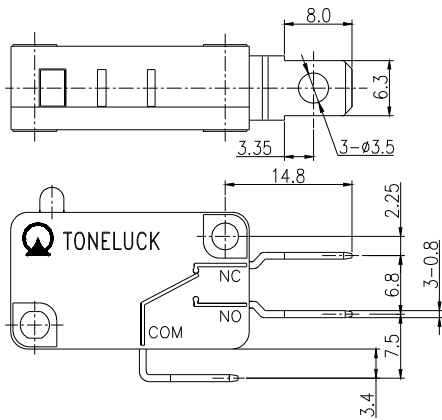
Type R: Quick connect Terminal



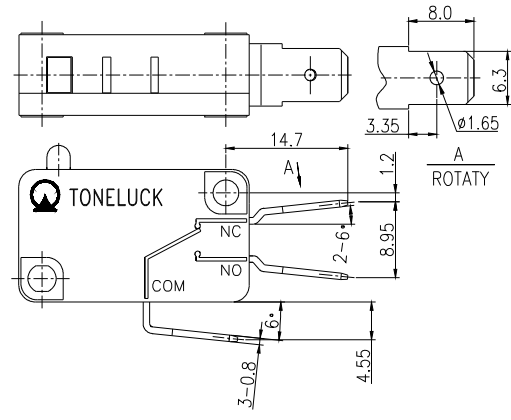
Type S: Quick connect Terminal



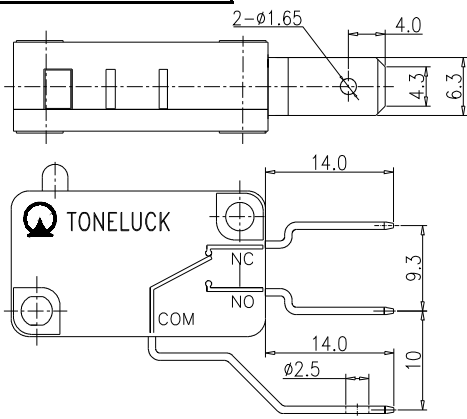
Type T: Quick connect Terminal



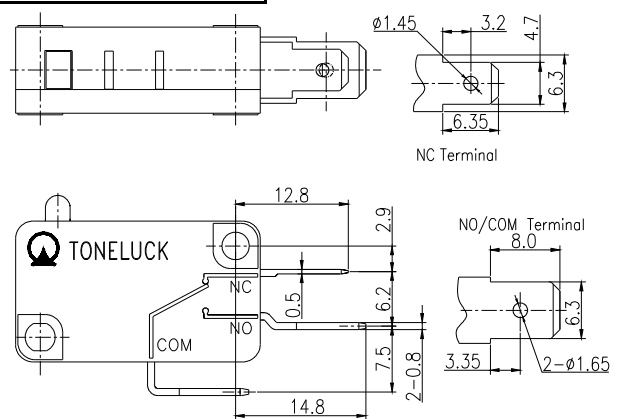
Type U: Quick connect Terminal



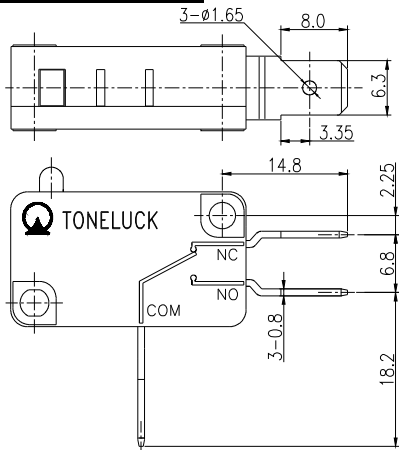
Type W: Quick connect Terminal



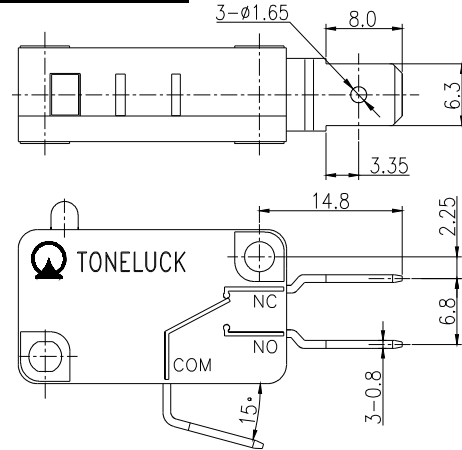
Type X: Quick connect Terminal



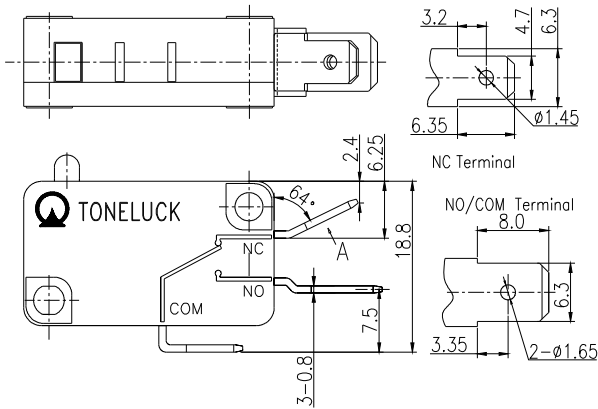
Type Y: Quick connect Terminal



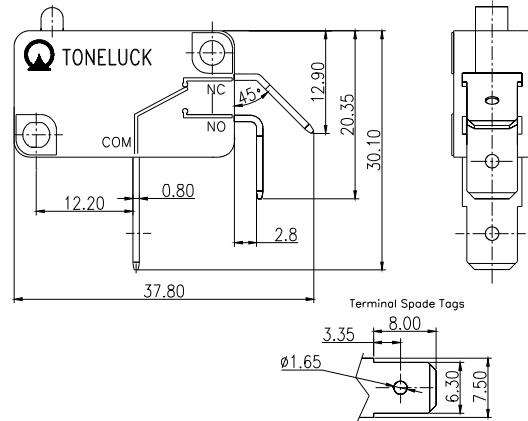
Type Z: Quick connect Terminal



Type 01: Quick connect Terminal

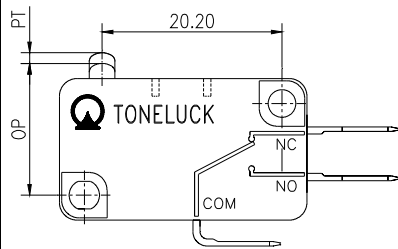


Type 02: Quick connect Terminal

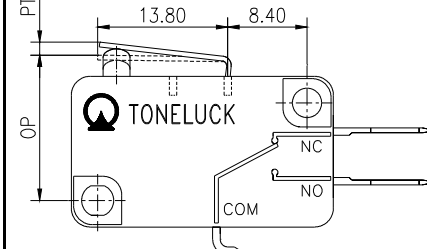


● Quick connect terminal

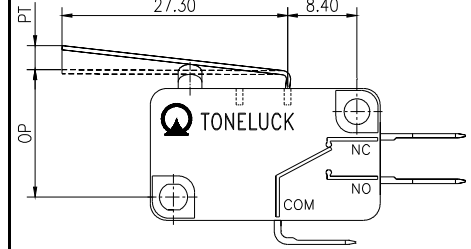
Lever Type= 00



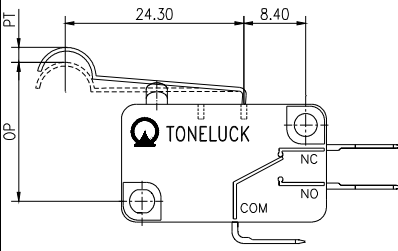
Lever Type= 01



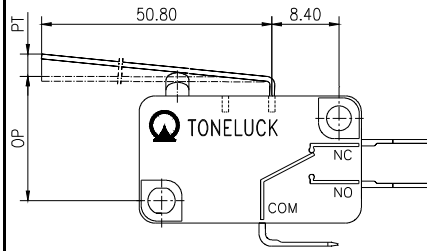
Lever Type= 02



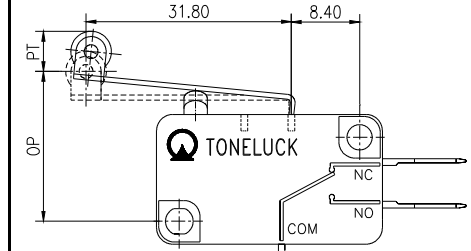
Lever Type= 03



Lever Type= 04



Lever Type= 05



● Correct use of the switch and precautions

**Correct use of switches**

The rated load value indicated above refers to the life that can be achieved when using actual equipment under standard test conditions (ambient temperature: 5~35°C, relative humidity: 45~85%RH, atmospheric pressure: 86~106KPa). Please confirm that not only the load conditions are the same when using, but also the conditions of the environment and the state of use must be the same;

**Correct selection of switches**

Please select the appropriate switch according to the use environment and load conditions;  
Please select the appropriate switch in the catalog according to the rated current, voltage, operating force, return force, terminal type, and lever type;  
Using a smaller current switch instead of a larger current switch will result in insufficient switch life and serious damage to electrical equipment; using a larger current switch instead of a smaller current switch;

**Correct installation**

When tightening the switch, it is recommended to use a torque-grade screwdriver and tighten it with a torque of 4~6Kg.cm (the screw is M3 specification). Too much torque will cause the shell to deform or damage, the switch performance will decrease, and in severe cases, the switch function will fail;

**Storage of switches**

Please avoid polluted gases, places where organic gases are produced, dust, humid environments, etc. The switch housing is not sealed. The above environment may cause the switch contact surface to be contaminated or corroded, and the switch performance will be reduced;