

## ROTARY SWITCHES ANL SERIES



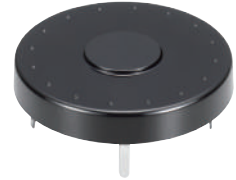
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## ROTARY SWITCHES ANO SERIES



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## ROTARY SWITCHES ANM SERIES



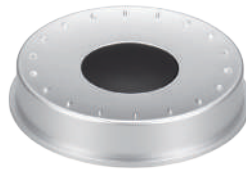
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## ROTARY SWITCHES ANQ SERIES



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## ROTARY SWITCHES KC SERIES



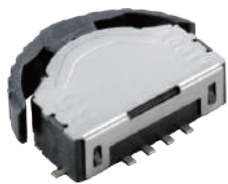
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## ROTARY SWITCHES KCL SERIES



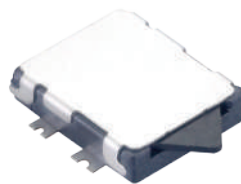
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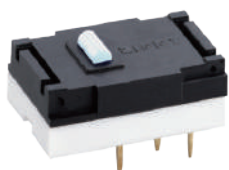
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# PUSH SWITCHES



## P1 SERIES

### SPECIFICATIONS

**Insulation Resistance (at 500VDC/minute)**

Min. 100MΩ

**Operating Temperature Range**

0°C to 55°C

**Vibration**

10 ~ 55 Hz, displacement 0.75 mm (p-p)

**Electrical Service Life**

Min. 10,000 operations

**Electrical Operating Frequency**

10 operations per minute

**Mechanical Service Life**

Min. 100,000 operations

**Mechanical Operating Frequency**

30 operations per minute

**Travel**

Pre travel Max.1.5mm,

Total travel 2.5±0.5mm

### RATING

0.1A 30VDC

### APPLICATIONS

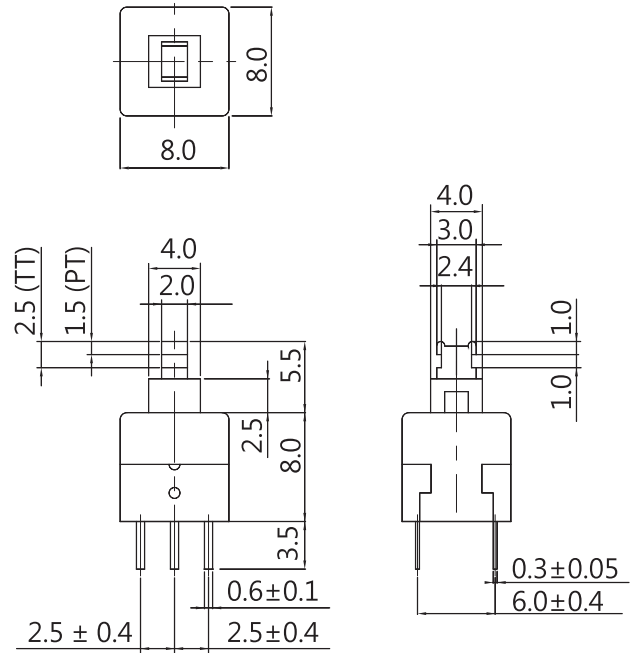
Telephone, Computer, Tester, Automotive, Apparatus

### ORDERING INFORMATION

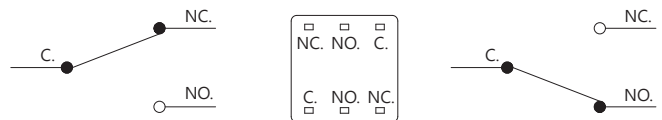
P	1	1	S	—	Z	NO-TOP BUTTON					
P	1	1	S	—	1	L	—			Z	
SERIES PREFIX		CODE	TYPE	CODE	OPERATING FORCE	CODE	TOP BUTTON TYPE	CODE	TOP BUTTON COLOR		ROHS CODE
		0	NON LOCK	L	LIGHT	1	7 x 7 x 8 mm	R	RED	W	WHITE
		1	LOCK	S	STANDARD	3	∅7x 8 mm	L	BLUE	E	GREEN
		2	NON LOCK CLICK					B	BLACK	Y	YELLOW

### DIMENSIONS

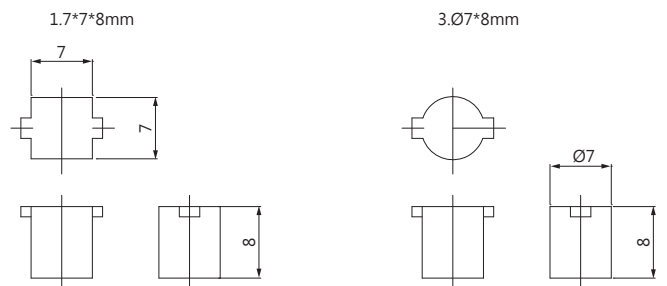
Unless otherwise specified, a tolerance of ±0.4mm applies to all dimensions.



### CONTACT CONFIGURATION



### TOP BUTTON DIMENSIONS



### OPERATING FORCE

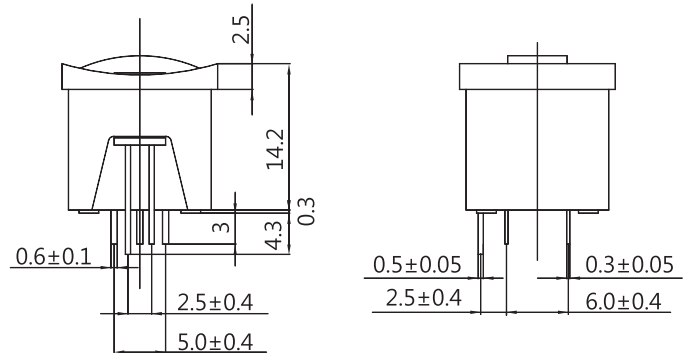
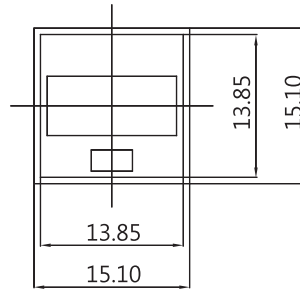
FORCE/TYPE	NON LOCK	LOCK
L	90 ± 30 gf	130 ± 50 gf
S	150 ± 50 gf	180 ± 50 gf

# PUSH SWITCHES



## DIMENSIONS

Unless otherwise specified, a tolerance of  $\pm 0.4\text{mm}$  applies to all dimensions.



## P2 SERIES

### SPECIFICATIONS

#### Insulation Resistance (at 500VDC/minute)

Min. 100M $\Omega$

#### Operating Temperature Range

0°C to 55°C

#### Vibration

10 ~ 55 Hz, displacement 0.75 mm (p-p)

#### Electrical Service Life

Min. 10,000 operations.

#### Electrical Operating Frequency

10 operations per minute

#### LED Rating

Max. 20mA

#### Mechanical Service Life

Min. 100,000 operations.

#### Mechanical Operating Frequency

30 operations per minute

#### Travel

Pre travel Max. 1.5mm

Total travel  $2.5 \pm 0.5\text{mm}$

### RATING

0.1A 30VDC

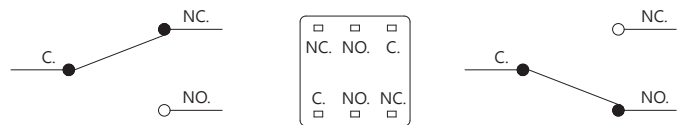
### APPLICATIONS

Computer, Alarm, Coin-op phone, Auto garage door

### ORDERING INFORMATION

P	2	0	S	L	G	R	Z					
SERIES PREFIX	CODE	TYPE	CODE	OPERATING FORCE	CODE	TOP BUTTON COLOR	CODE	CASE COLOR	CODE	LED COLOR	ROHS CODE	
	0	NON LOCK		NON LOCK 150±50g		R	RED					
	1	LOCK	S	LOCK 180±50g		L	BLUE	G		R	RED	
	2	NON LOCK CLICK				E	GREEN	B		E	GREEN	
						Y	YELLOW			Y	YELLOW	
						N	BROWN				WITHOUT LED	
						O	ORANGE					
						B	BLACK					
						G	GRAY					

### CONTACT CONFIGURATION



# PUSH SWITCHES



## P3 SERIES

### SPECIFICATIONS

#### Contact Resistance (initial)

Max. 300mΩ

Measured by ohm meter –open voltage <1VDC, driver current -100mA

#### Insulation Resistance (at 500VDC/minute)

Min. 100MΩ

#### Dielectric Strength

Min. 1,500VAC(50-60HZ)/minute between Live parts.

Min. 3,000VAC(50-60HZ)/minute between Live parts and dead metal parts

#### Operating Temperature Range

-40°C to 125°C ( with no icing )

#### Vibration

10~55Hz, displacement 0.75 mm (p-p)

#### Electrical Service Life

8(8)A - Min. 50,000 operations

Other ratings - Min. 10,000 operations

#### Electrical Operating Frequency

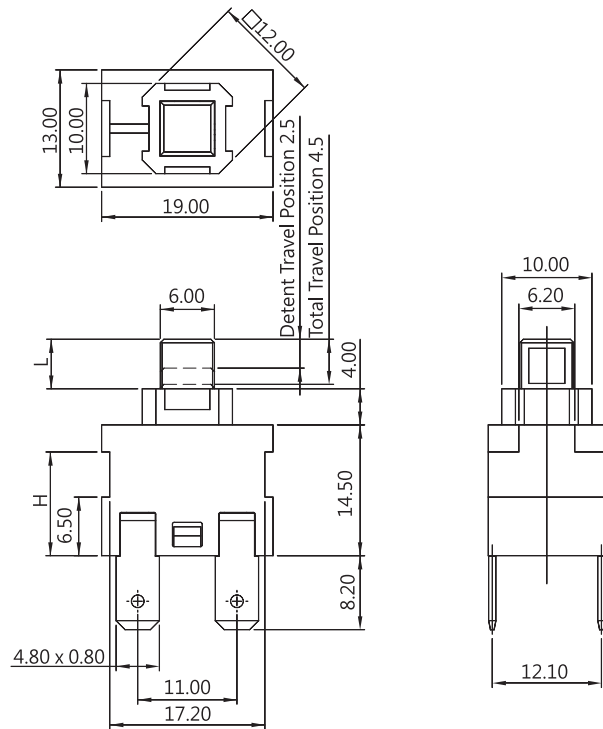
10~30 operations per minute

### APPLICATIONS

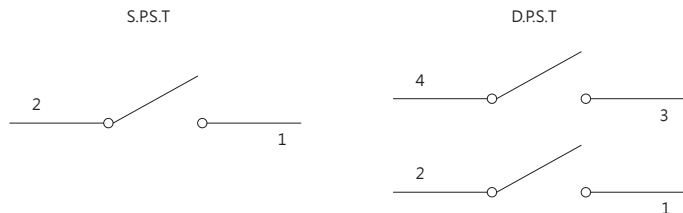
Vacuum Cleaner, Refrigerator, Espresso Machine

### DIMENSIONS

Unless otherwise specified, a tolerance of ±0.4mm applies to all dimensions.



### CONTACT CONFIGURATION



### CERTIFICATE INFORMATION

Model Name	UL,cUL	ENEC
P3-10	10A 125/250 VAC T125 1E4 1/2HP 125/250 VAC T55 1E4	10(4)A 125/250 VAC T125 1E4
P3-16	16A 125/250 VAC T125 1E4 3/4HP 125/250 VAC T85 1E4	16.1(4)A 125/250VAC T125 1E4 8(8)A 125/250VAC T125 5E4

### ORDERING INFORMATION

SERIES PREFIX	C O D E	RATING CURRENT	C O D E	OPERATING FORCE	CIRCUIT ARRANGEMENT	C O D E	BUTTON TYPE	C O D E	COVER TYPE	C O D E	TERMINAL TYPE	ROHS CODE
P3	10	10A 1/2HP 125/250VAC 10(4)A 125/250VAC	S1	S.P.S.T. OF: Max. 1100gf	S	1	A L=5.5mm+LOCK	1	H=11.50mm	D	#187 TERMINAL	Z
	16	16A 3/4HP 125/250VAC 16.1(4)A 125/250VAC 8(8)A 125/250VAC	S2	D.P.S.T. OF: Max. 1600gf		B L=5.5mm+NON LOCK	2	H=12.25mm	H	#187 TERMINAL		
			L1	S.P.S.T. OF: Max. 600gf		C L=8.0mm+LOCK						
			L2	D.P.S.T. OF: Max. 1100gf		D L=8.0mm+NON LOCK						

# PUSH SWITCHES



## P8 SERIES

### SPECIFICATIONS

#### Contact Resistance (initial)

Max. 50mΩ

Measured by ohm meter –open voltage <1VDC, driver current -100mA

#### Insulation Resistance (at 500VDC/minute)

Min. 100MΩ

#### Dielectric Strength

Min. 1,000VAC(50-60HZ)/minute between Live parts.

Min. 3,000VAC(50-60HZ)/minute between Live parts and dead metal parts

#### Operating Temperature Range

-40°C to 85°C ( with no icing )

#### Vibration

10~55HZ, displacement 0.75 mm (p-p)

#### Electrical Service Life

Min. 10,000 operations

#### Electrical Operating Frequency

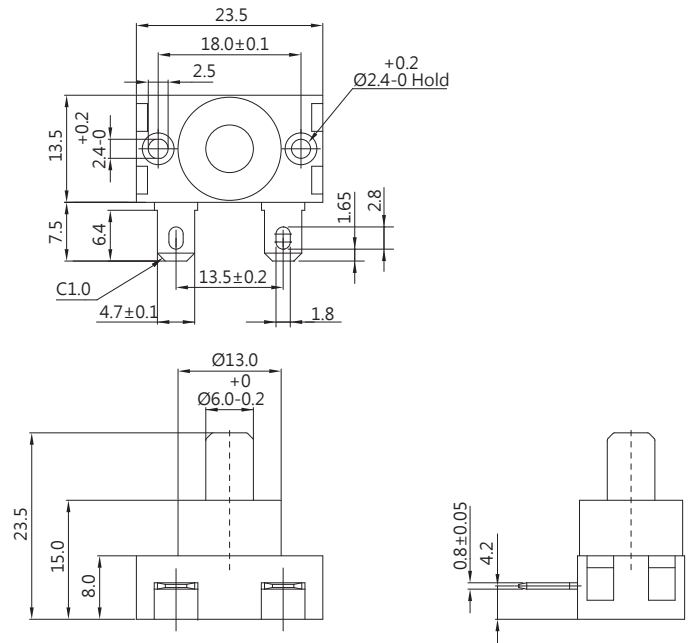
10~30 operations per minute

### APPLICATIONS

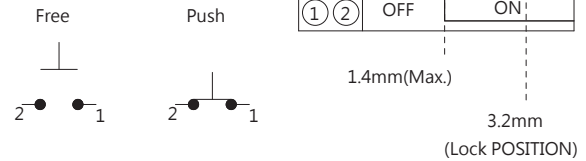
Juice Maker, Blender, Food processor

### DIMENSIONS

Unless otherwise specified, a tolerance of ±0.4mm applies to all dimensions.



### CONTACT CONFIGURATION

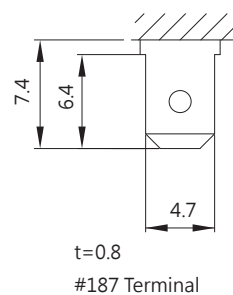


### CERTIFICATE INFORMATION

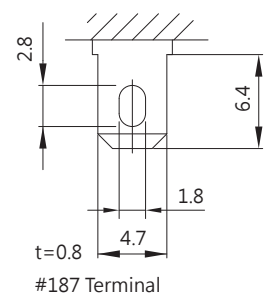
Model Name	UL, cUL	ENEC
P8-10S	6A 250VAC 10A 125VAC (Temp85°C) Min. 6,000 operations	7(4)A 250VAC,μT85/551E4

### TERMINAL TYPES

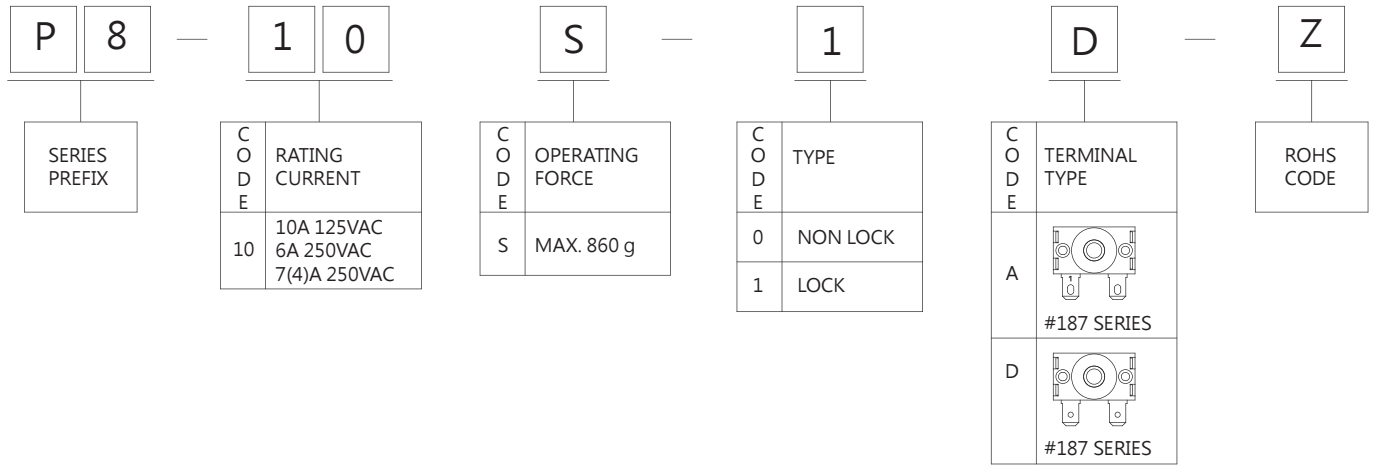
#### D TYPE



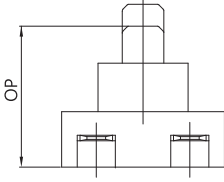
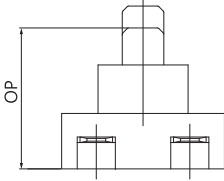
#### A TYPE



ORDERING INFORMATION



OPERATING CHARACTERISTICS

SWITCH TYPE	PART SUFFIX	OF Max (gf)	FULL TRAVEL (mm)	LOCK TRAVEL (mm)
P8-10S-0 □ -Z		860gf	4.0±0.5mm	---
P8-10S-1 □ -Z		860gf	4.0±0.5mm	2.0±0.5mm