

## KW3A series

**KW3A型微動開關系列 Micro switch series****◆ 安全可靠的基本開關 Safe, reliable basic switch**

■ 外形美觀，結構緊湊。具有微小觸點間隙，快速動作、高靈敏和微小動作行程的特點。

Nice appearance, tight configuration. Characteristic: small contact clearance, quick action, high sensitivity and small operating travel.

■ 長壽命，高可靠。

Long life, high reliability.

■ 接線端子種類齊全

Variety of contact terminals

■ 動作力範圍寬

A variety of models with low operating force to high operating force are available

■ 多種溫度等級

Variety of temperature degrees

■ 配備各種形式動臂

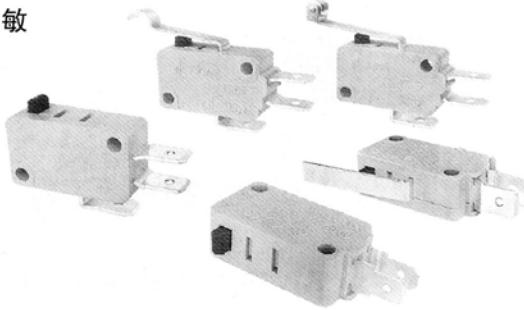
Variety of levers

■ 採用熱固性或熱塑性塑料

Adopt thermosetting plastic or thermoplastic

■ 廣泛應用於各種家用電器、電子設備、自動化設備、通訊設備、汽車電子、儀器儀表、電動工具等領域。

Widely used in appliance, electronic equipment, automatic machine, communication equipment, car electric, apparatus and instrument, electro motion tool etc.

**◆ 技術特性 Specifications**

項目 Item		特性值 Value	
工作速度 Operating speed		0.1mm ~ 1m/s (與驅動方式有關)(Related with actuator forms)	
工作頻率 Operating Frequency		機械 60次/min; 電氣 25次/min Mechanical 60 cycles/min; Electrical 25cycles/min	
絕緣電阻 Insulation resistance		≥100MΩ (500VDC)	
接觸電阻 Contact resistance		≤30mΩ (初始值)(Initial value)	
耐電壓 Test voltage	同極不相接端子間 Between each terminals of the same polarity	AC1000V, 50/60Hz, 1min	
	帶電金屬零件與外殼之間、接線端與易觸及的不帶電金屬件之間 Between current-carrying metal parts and ground, and between each terminal and non-current-carrying metal parts	AC3750V, 50/60Hz, 1min	
抗振動 Vibration resistance		10 ~ 55Hz, 1.5mm 兩倍振幅 Double amplitude	
抗衝擊 Shock resistance		破壞: 動作力>0.5N: 1000m/s <sup>2</sup> (約100G)max 動作力≤0.5N: 400m/s <sup>2</sup> (約40G)max 故障: 動作力>0.5N: 200m/s <sup>2</sup> (約20G)max 動作力≤0.5N: 100m/s <sup>2</sup> (約10G)max Destruction: OF>0.5N: 1000m/s <sup>2</sup> (approx.100G)max OF≤0.5N: 400m/s <sup>2</sup> (approx.40G)max Malfunction: OF>0.5N: 200m/s <sup>2</sup> (approx.20G)max OF≤0.5N: 100m/s <sup>2</sup> (approx.10G)max	
壽命 Life expectancy		機械≥2000000次; Mechanical ≥2000000 cycles 電氣≥50000次 Electrical ≥50000cycles	
質量 Weight		約6.2g(無動臂型)Approx. 6.2g(No lever)	

# MICRO SWITCHES

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### ◆ 型號規格命名及含義 Model numbered legend and meanings

KW3A □- □ □ □ □ □- □ □ □ □ - ( □ )  
 1 2 3 4 5 6 7 8 9 10 11

<b>1</b> 溫度等級 Degrees of temperature	無標記: T85, T105 No mark T: T125 H: 25T150	<b>7</b> 端子類型 Terminal types	A: 250 快接端子 Quick-connect terminal B: 187 快接端子 (厚0.8mm) 187 quick-connect terminal (thick 0.8mm) C: 187 快接端子 (厚0.5mm) 187 quick-connect terminal (thick 0.5mm) D: 焊接/187共用端子 Solder/187 common terminal E: 螺孔端子 Screw terminal F: 焊接端子 Solder terminal L: 左側面PCB端子 Left side PCB terminal R: 右側面PCB端子 Right side PCB terminal Y: 非標準端子 Not standard terminal
<b>2</b> 額定值 Ratings	21:21(4)A250VAC 16:16(4)A250VAC 10:10(3)A250VAC 05:5(2)A250VAC 01:1(0.3)A250VAC		
<b>3</b> 接觸形式 Connect forms	Z: 轉換式 SPDT T: 常開(按通)式 SPST-NO D: 常閉(按斷)式 SPST-NC (見說明圖) (See illuminations)	<b>8</b> 動作力(max) Operating force	015: 0.15N 025: 0.25N 050: 0.5N 100: 1N 150: 1.5N 200: 2N 300: 3N 400: 4N
	O: 無動臂 No lever A1/1: 短動臂 Short lever A2/2: 長動臂 Long lever A3/3: 中動臂 Middle lever A4/4: 短滾輪臂 Short roller A5/5: 長滾輪臂 Long roller A6/6: 弧形動臂 Arc lever A□/□: 非標準動臂 Not standard lever  注: 1) A表示動臂安裝在靠近按鈕位置，無字母A表示動臂安裝在離按鈕較遠位置。 2) □表示非標準動臂的代號，詳見動臂外形尺寸圖。 Note: 1) A indicate the lever near to the plunger, no A indicate the lever far away from the plunger. 2) □ indicate not standard lever, details see outline dimension drawings.		注: 若是非標準動作力，用此動作力上限值表示。 Note: if it is not standard operating force, indicate with the upper limit.
<b>4</b> 驅動形式 Actuator forms		<b>9</b> 按鈕規格 Plunger spec	無標記: 標準按鈕 No mark-standard plunger A: 短按鈕 Short plunger B: 中長按鈕 Middle plunger C: 長按鈕 Long plunger D: 平端按鈕 Flat plunger (見說明圖see illuminations)  注: 若用本表中未列入的非標準按鈕，則用此新增按鈕的規格代號 (本公司確認) 表示。 Note: if adopt other not standard plunger, then indicate with the new spec (confirmed by our company.)
<b>5</b> 外殼材質 Case material	無標記: 熱塑性 No mark: thermoplastic G: 熱固性 Thermosetting	<b>10</b> 觸點間隙 Contact gap	無標記: 0.5mm No mark: 0.5mm X: 1mm Y: 3mm
<b>6</b> 外形特徵 Outline characteristic	無標記: 基本形 No mark: basic form B: 平端形 Flat terminal C: 公共端側面形 Side common terminal	<b>11</b> 附加規格編號和外殼顏色代號，適用於： Additional spec numbers and case color code apply to:	1) 當開關使用了非標準零件如非標準端子時； When used not standard parts such as not standard terminals; 2) 當顧客有特殊動作特性值或其它要求時； When customer has particular operating value or other requirements; 3) 當開關外殼顏色不是默認的灰色時，如黑色用字母B表示。 When the case is not grey, for example, black shows as B. 附加規格編號用兩位阿拉伯數字表示，如 01、02、03……顏色代號位於數字之後。在沒有附加規格編號時，該位置空缺。 Additional spec number shows as 01,02,03……color code after the numbers. If there is no additional numbers, the place is vacant.

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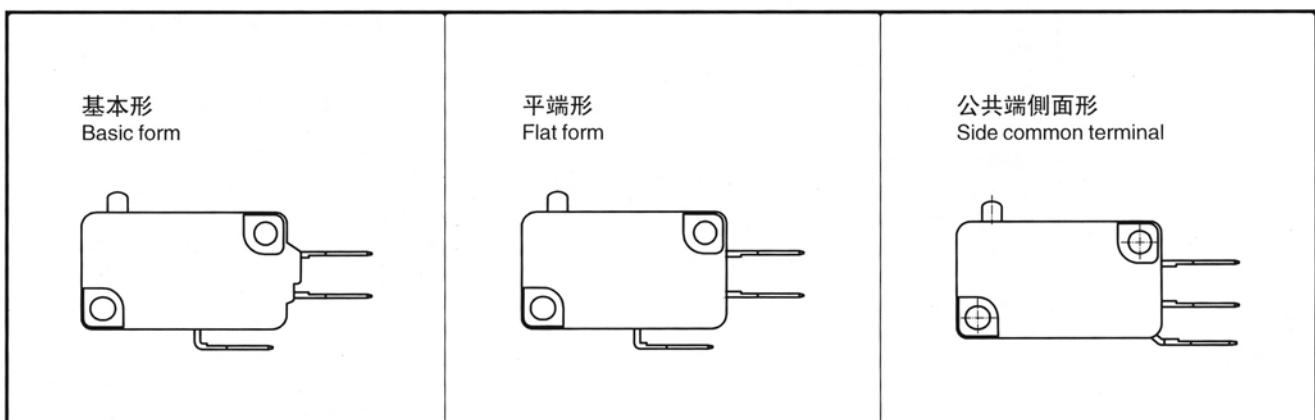
## ◆ 接觸形式說明圖 Connect forms illumination

公共端類型 Common terminal types	轉換式 SPDT	常閉式 SPST-NC	常開式 SPST-NO
公共端在底部 Bottom common terminal			
公共端在側面 Side common terminal			

## ◆ 按鈕規格說明圖 Plunger spec illumination

按鈕標記 Mark on plunger	無標記 No mark	A	B	C	D
按鈕尺寸 Plunger dimension					

## ◆ 外形特征說明圖 Outline characteristic illumination



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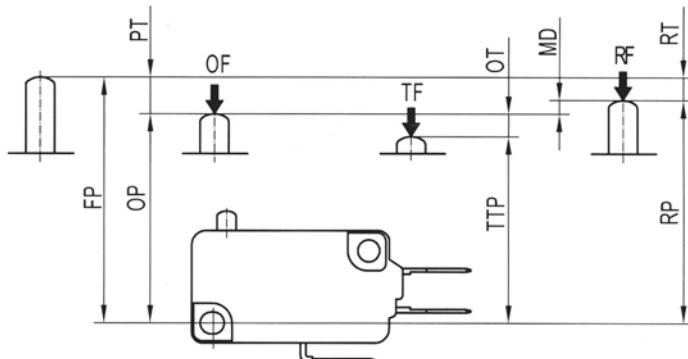
### ◆ 接線端尺寸 Connect terminal dimensions

端子種類 Terminal types	快接端子#250 Quick-connect terminal #250	快接端子#187(t=0.8) Quick-connect terminal #187	快接端子#187(t=0.5) Quick-connect terminal #187	焊接/快接#187共用端子 Solder/Quick-connect terminal #187
下公共端 Bottom common terminal	<b>A</b> 	<b>B</b> 	<b>C</b> 	<b>D</b> 
側公共端 Side common terminal				
端子尺寸 Terminal dimensions				

左側面PCB端子 Left side PCB terminal	右側面PCB端子 Right side PCB terminal	焊接端子 Solder terminal	螺孔端子 Screw terminal
<b>L</b> 	<b>R</b> 	<b>F</b> 	<b>E</b> 

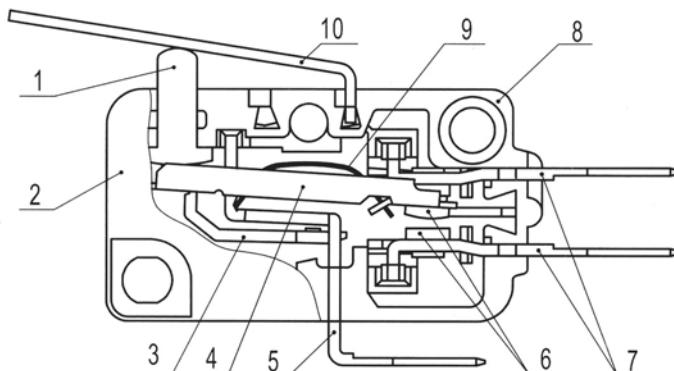
## KW3A series

## ◆ 開關動作特性圖解 Operating characteristic diagrammatize



代號 Code	參數名稱 Name	含義 Meanings
PT	動作行程(預行程) Pretravel	驅動件從自由位置到動作位置間的位移 The displacements of actuator from free position to operating position.
OT	超行程 Overtravel	驅動件從動作位置到全行程位置間的位移 The displacements of actuator from operating position to total travel position.
MD	差動行程 Movement differential travel	驅動件從動作位置到釋放位置或釋放位置到動作位置間的位移 The displacements of actuator from operating position to release poison.
RT	釋放行程 Release travel	驅動件從釋放位置到自由位置間的位移 The displacements of actuator from release position to free position.
OF	動作力 Operating force	驅動件從自由位置移動到動作位置所必須的操作力 The force of displacements of actuator from free position to operating position.
TF	全行程力 Total travel force	驅動件在全行程位置所承受的最小操作力 The smallest force of displacements of actuator on total travel position.
RF	釋放力 Release force	驅動件自正向動作位置返回到釋放位置，操作力必須減小到的數值 The force must be smallest when the actuator moved back to release position from obverse operating position.
TPP	全行程位置 Total travel position	驅動件被止動時所處的位置 The position where the actuator be stopped.
OP	動作位置 Operating position	驅動件在速動機構發生正向動作瞬間所處的位置 The position where the actuator moved obverse on quick-moving parts.
RP	釋放位置 Release position	驅動件在速動機構發生反向動作瞬間所處的位置 The position where the actuator moved reversely on quick-moving parts.
FP	自由位置 Free position	驅動件在不承受操作力以及力不足以引起位移時所處的位置 The position where the actuator lead the displacements when its out of force is not enough.

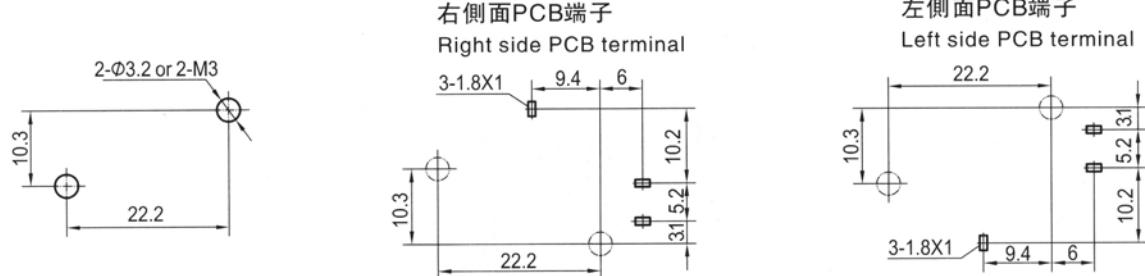
## ◆ 內部構造圖 Internal configuration drawing



1 開關子(按鈕)	Plunger
2 蓋	Cover
3 杠桿	Lever
4 可動片	Moving piece
5 支架	Support
6 電觸點	Contact
7 端子	Terminal
8 基座	Case
9 簾片	Spring sheet
10 動臂	Moving arm

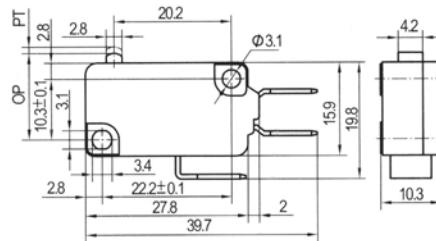
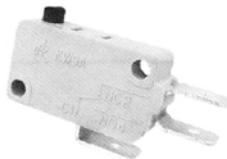
## KW3A series

### ◆ 安裝孔尺寸 Mounting hole dimensions



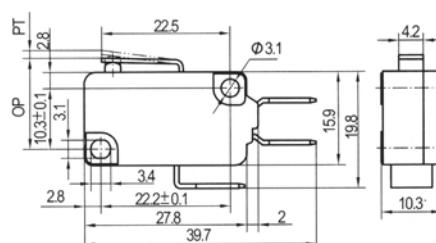
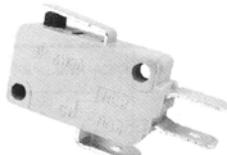
### ◆ 外形尺寸和動作特性 Dimensions and operating characteristics

KW3A-16Z0□-A100  
KW3A-16Z0□-A150  
KW3A-16Z0□-A200  
KW3A-16Z0□-A300



型號 Model	KW3A-16Z0□-A100	KW3A-16Z0□-A150	KW3A-16Z0□-A200	KW3A-16Z0□-A300
OF Max(N)	1	1.5	2	3
RF Min(N)	0.2	0.3	0.5	0.7
PT Max(mm)		1.4		
OT Min(mm)		1		
MD Max(mm)		0.4		
OP(mm)		14.9 ± 0.4		

KW3A-16Z1□-A100  
KW3A-16Z1□-A150  
KW3A-16Z1□-A200  
KW3A-16Z1□-A300

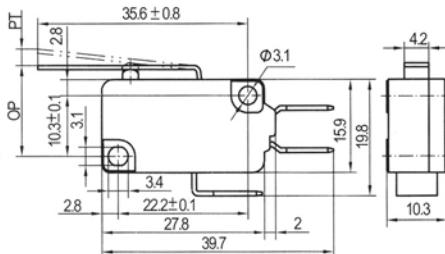
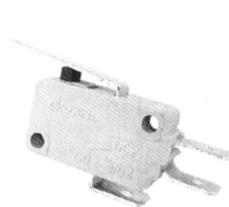


型號 Model	KW3A-16Z1□-A100	KW3A-16Z1□-A150	KW3A-16Z1□-A200	KW3A-16Z1□-A300
OF Max(N)	1	1.5	2	3
RF Min(N)	0.2	0.3	0.5	0.7
PT Max(mm)		1.4		
OT Min(mm)		1		
MD Max(mm)		0.5		
OP(mm)		15.8 ± 0.5		

## KW3A series

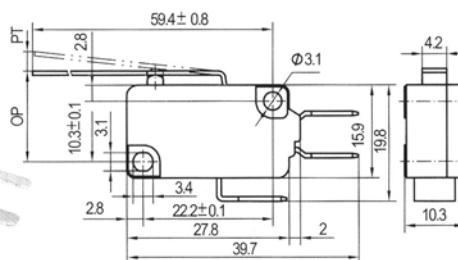
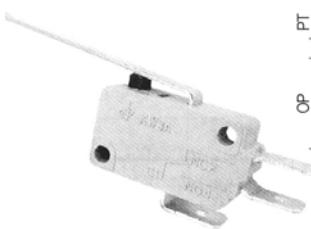
## ◆ 外形尺寸和動作特性 Dimensions and operating characteristics

KW3A-16Z3□-A100  
 KW3A-16Z3□-A150  
 KW3A-16Z3□-A200  
 KW3A-16Z3□-A300



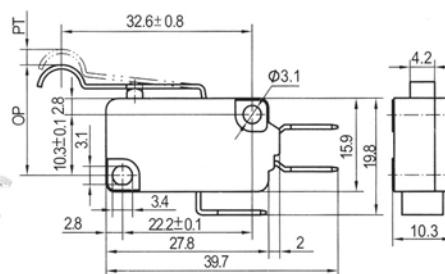
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OF Max(N)	0.5	0.7	0.9	1.3
RF Min(N)	0.1	0.15	0.2	0.3
PT Max(mm)		4		
OT Min(mm)		2		
MD Max(mm)		1		
OP(mm)		16.3 ± 1.2		

KW3A-16Z2□-A100  
 KW3A-16Z2□-A150  
 KW3A-16Z2□-A200  
 KW3A-16Z2□-A300



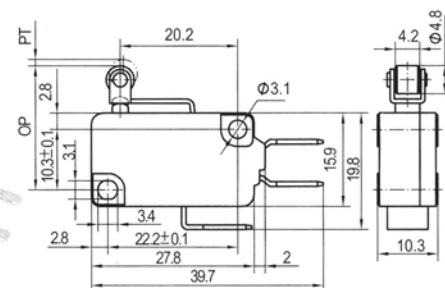
型號 Model	KW3A-16Z2□-A100	KW3A-16Z2□-A150	KW3A-16Z2□-A200	KW3A-16Z2□-A300
OF Max(N)	0.25	0.37	0.5	0.75
RF Min(N)	0.05	0.1	0.15	0.2
PT Max(mm)		8		
OT Min(mm)		4		
MD Max(mm)		2		
OP(mm)		17.2 ± 2.5		

KW3A-16Z6□-A100  
 KW3A-16Z6□-A150  
 KW3A-16Z6□-A200  
 KW3A-16Z6□-A300



型號 Model	KW3A-16Z6□-A100	KW3A-16Z6□-A150	KW3A-16Z6□-A200	KW3A-16Z6□-A300
OF Max(N)	0.54	0.8	1.05	1.6
RF Min(N)	0.1	0.15	0.2	0.3
PT Max(mm)		4		
OT Min(mm)		2		
MD Max(mm)		1		
OP(mm)		19.5 ± 1.2		

KW3A-16Z4□-A100  
 KW3A-16Z4□-A150  
 KW3A-16Z4□-A200  
 KW3A-16Z4□-A300

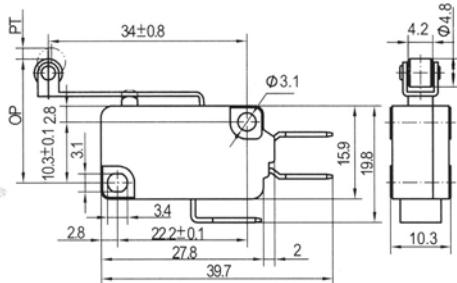
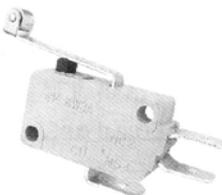


型號 Model	KW3A-16Z4□-A100	KW3A-16Z4□-A150	KW3A-16Z4□-A200	KW3A-16Z4□-A300
OF Max(N)	1.1	1.6	2.2	3.2
RF Min(N)	0.15	0.3	0.4	0.6
PT Max(mm)		1.4		
OT Min(mm)		1		
MD Max(mm)		0.4		
OP(mm)		21.8 ± 0.6		

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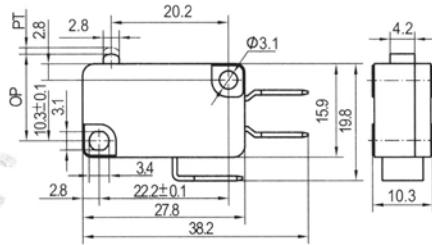
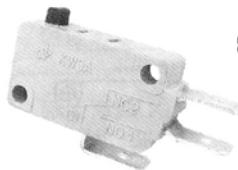
## KW3A series

KW3A-16Z5□-A100  
 KW3A-16Z5□-A150  
 KW3A-16Z5□-A200  
 KW3A-16Z5□-A300



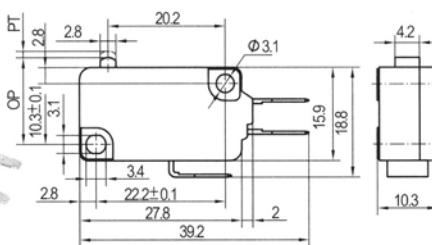
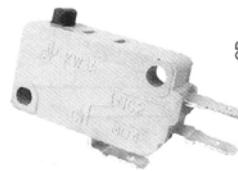
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OF Max(N)	0.5	0.8	1.1	1.6
RF Min(N)	0.1	0.15	0.2	0.3
PT Max(mm)		4		
OT Min(mm)		2		
MD Max(mm)		1		
OP(mm)	21.4 ± 1.2			

KW3A-16Z0B-A100  
 KW3A-16Z0B-A150  
 KW3A-16Z0B-A200  
 KW3A-16Z0B-A300



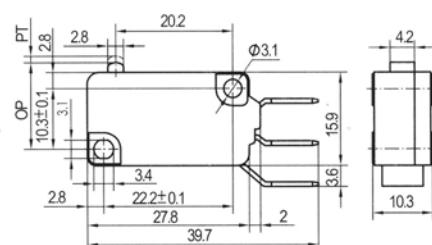
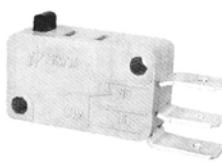
型號 Model	KW3A-16Z0B-A100	KW3A-16Z0B-A150	KW3A-16Z0B-A200	KW3A-16Z0B-A300
OF Max(N)	1	1.5	2	3
RF Min(N)	0.2	0.35	0.5	0.8
PT Max(mm)		1.2		
OT Min(mm)		1		
MD Max(mm)		0.4		
OP(mm)	14.9 ± 0.4			

KW3A-16Z0-C015  
 KW3A-16Z0-C025  
 KW3A-16Z0-C050



型號 Model	KW3A-16Z0-C015	KW3A-16Z0-C025	KW3A-16Z0-C050
OF Max(N)	0.15	0.25	0.5
RF Min(N)	0.04	0.07	0.15
PT Max(mm)		1.4	
OT Min(mm)		1	
MD Max(mm)		0.4	
OP(mm)	14.9 ± 0.4		

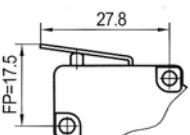
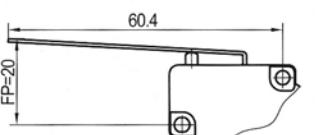
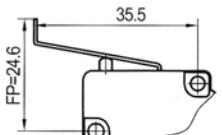
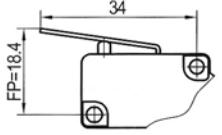
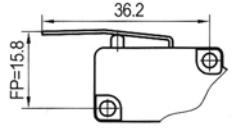
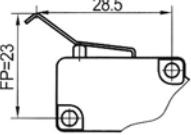
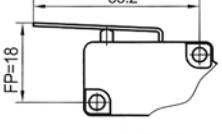
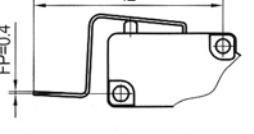
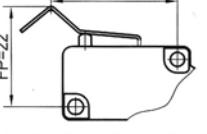
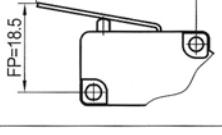
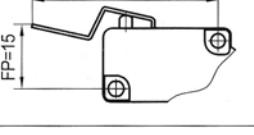
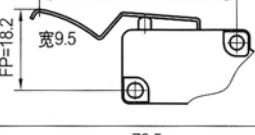
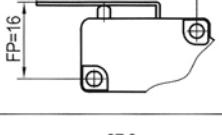
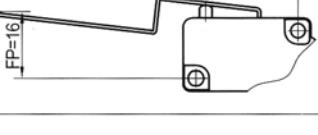
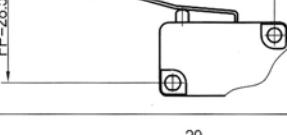
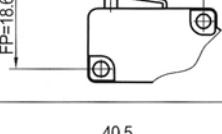
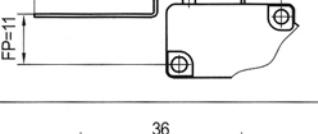
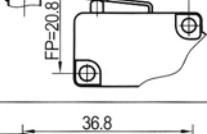
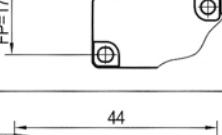
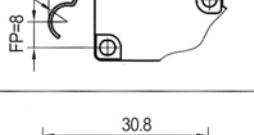
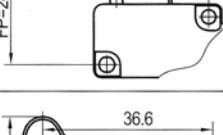
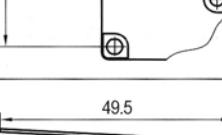
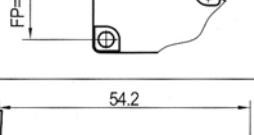
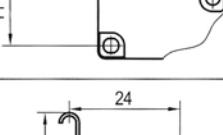
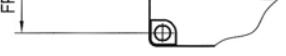
KW3A-16Z0C-A100  
 KW3A-16Z0C-A150  
 KW3A-16Z0C-A200  
 KW3A-16Z0C-A300



型號 Model	KW3A-16Z0C-A100	KW3A-16Z0C-A150	KW3A-16Z0C-A200	KW3A-16Z0C-A300
OF Max(N)	1	1.5	2	3
RF Min(N)	0.2	0.3	0.5	0.7
PT Max(mm)		1.4		
OT Min(mm)		1		
MD Max(mm)		0.4		
OP(mm)	14.9 ± 0.4			

## KW3A series

◆ 可供選擇的非標準動臂代號和外形特征尺寸 Not standard lever for choose and outline characteristic dimensions

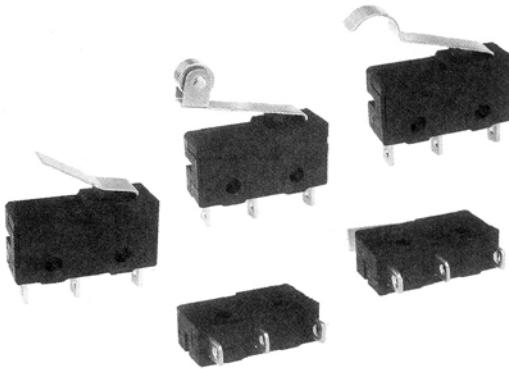
動臂 代號 Lever code	外形特徵尺寸 Outline characteristic dimensions	動臂 代號 Lever code	外形特徵尺寸 Outline characteristic dimensions	動臂 代號 Lever code	外形特徵尺寸 Outline characteristic dimensions
<b>Q2</b>		<b>P2</b>		<b>P5</b>	
<b>R</b>		<b>B3</b>		<b>U</b>	
<b>B4</b>		<b>E2</b>		<b>U3</b>	
<b>H</b>		<b>E3</b>		<b>V</b>	
<b>D</b>		<b>E4</b>		<b>X</b>	
<b>C</b>		<b>I1</b>		<b>Y</b>	
<b>N1</b>		<b>J2</b>		<b>W</b>	
<b>T</b>		<b>O1</b>		<b>M</b>	
<b>N</b>		<b>P3</b>		<b>J4</b>	

## KW4A(S) series

### KW4A(S)型微動開關系列 Micro switch series

#### ◆ 安全可靠的小型開關 Safe, reliable miniature switch

- 結構緊湊。具有微小觸點間隙，快速動作、高靈敏和微小動作行程的特點。  
Nice appearance, tight configuration.  
Characteristic: small contact gap, quickaction, high sensitivity and small operating travel.
- 長壽命，高可靠。  
Long life, high reliability.
- 接線端子種類齊全  
Variety of contact terminals
- 配備各種形式動臂  
Variety of levers
- 廣泛應用於各種家用電器、電子設備、自動化設備、通訊設備、汽車電子、儀器儀表等領域。  
Widely used in appliance, electronic equipment, automatic machine, communication equipment, car electric, apparatus and instrument etc.



#### ◆ 技術特性 Specifications

項目 Item	特性值 Value
工作速度 Operating speed	0.1mm ~ 1m/s (與驅動方式有關) (Related with actuator forms)
工作頻率 Operating frequency	機械 60次/min; 電氣 25次/min Mechanical 60 cycles/min; Electrical 25 cycles/min
絕緣電阻 Insulation resistance	$\geq 100M\Omega$ (500VDC)
接觸電阻 Contact resistance	動作力 $>0.5N$ : $\leq 30m\Omega$ (見注) OF $>0.5N$ : $\leq 30m\Omega$ (see note) 動作力 $\leq 0.5N$ : $\leq 50m\Omega$ (見注) OF $\leq 0.5N$ : $\leq 50m\Omega$ (see note)
耐電壓 Test voltage	同極不相接端子間 Between each terminals of the same polarity AC1000V, 50/60Hz, 1min  帶電金屬零件與外殼之間、接線端與易觸及的不帶電金屬零件之間 Between current-carrying metal parts and ground, and between each terminal and non-current-carrying metal parts AC1500V, 50/60Hz, 1min
抗振動 Vibration resistance	10 ~ 55Hz, 1.5mm兩倍振幅 Double amplitude
抗衝擊 Shock resistance	破壞: 動作力 $>0.5N$ : $1000m/s^2$ (約100G)max 動作力 $\leq 0.5N$ : $500m/s^2$ (約50G)max 故障: 動作力 $>0.5N$ : $300m/s^2$ (約30G)max 動作力 $\leq 0.5N$ : $200m/s^2$ (約20G)max Destruction: OF $>0.5N$ : $1000m/s^2$ (approx.100G)max OF $\leq 0.5N$ : $500m/s^2$ (approx.50G)max Malfunction: OF $>0.5N$ : $300m/s^2$ (approx.30G)max OF $\leq 0.5N$ : $200m/s^2$ (approx.20G)max
壽命 Life expectancy	機械 $\geq 1000000$ 次; Mechanical $\geq 1000000$ cycles 電氣 $\geq 10000$ 次; Electrical $\geq 10000$ cycles
質量 Weight	約1.6g(無動臂型) Approx. 1.6g(No lever)

注：指無動臂時按鈕上的動作力。 Note: Shows the operating force of no lever.

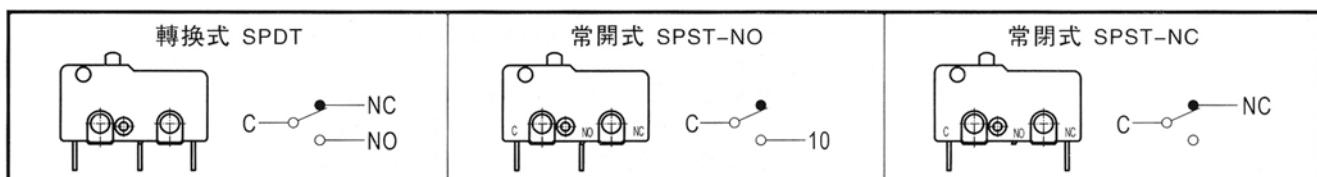
## KW4A(S) series

## ◆ 型號規格命名及含義 Model numbered legend and meanings

KW4A(S) □- □ □ □ □ □ - ( □ )  
 1 2 3 4 5 6 7 8

<b>1</b> 溫度等級 Degrees of temperature	無標記: T85 No mark: T85 T-25T125		
<b>2</b> 額定值 Ratings	無標記: 5A250VAC No mark A: 10A250VAC B: 3A250VAC C: 1A250VAC F: 0.1A250VAC	<b>6</b> 動作力(max) operating force	050: 0.5N 100: 1N 150: 1.5N 200: 2N 300: 3N  注: 若是非標準動作力, 用此動作力上限值表示。 Note: if it is not standard operating force, indicate with the upper limit.
<b>3</b> 接觸形式 Connect forms	Z: 轉換式 SPDT T: 常開(按通)式 SPST-NO D: 常閉(按斷)式 SPST-NC (見說明圖 See illuminations)		無標記: 標準按鈕 No mark: standard plunger A: 短按鈕 Short plunger D: 异形按鈕 Abnormity plunger (見說明圖 see illuminations)
<b>4</b> 驅動形式 Actuator forms	0: 無動臂 No lever 1: 短動臂 Short lever 2: 長動臂 Long lever 3: 中動臂 Middle lever 5: 滾輪臂 Roller 6: 弧形動臂 Arc lever □-非標準動臂 Not standard lever 注: □表示非標準動臂的代號, 詳見動臂外形尺寸圖。	<b>7</b> 按鈕規格 Plunger spec	注: 若採用本表中未列入的非標準按鈕, 則用此新增按鈕的規格代號(本公司確認)表示。 Note: if adopt other not standard plunger, then indicate with the new spec (confirmed by our company.)
<b>5</b> 端子類型 Case material	F: 焊接端子 Solder terminal P: PCB端子 PCB terminal L: 左側面PCB端子 Left side PCB terminal R: 右側面PCB端子 Right side PCB terminal T: 110快接端子 Quick-connect terminal Y: 非標準端子 Not standard terminal	<b>8</b> 附加規格編號 適用於: Additional spec numbers, apply to:	1) 當開關使用了非標準零件如非標準端子時; When used not standard parts such as not standard terminal; 2) 當顧客有特殊動作特性值或其它要求時。 When customer has particular operating value or other requirements. 附加規格編號用兩位阿拉伯數字表示, 如01、02、03……在沒有附加規格編號時, 該位置空缺。 Additional spec number shows as 01, 02, 03..... If there is no additional numbers, the place is vacant.

## ◆ 接觸形式說明圖 Connect forms illumination



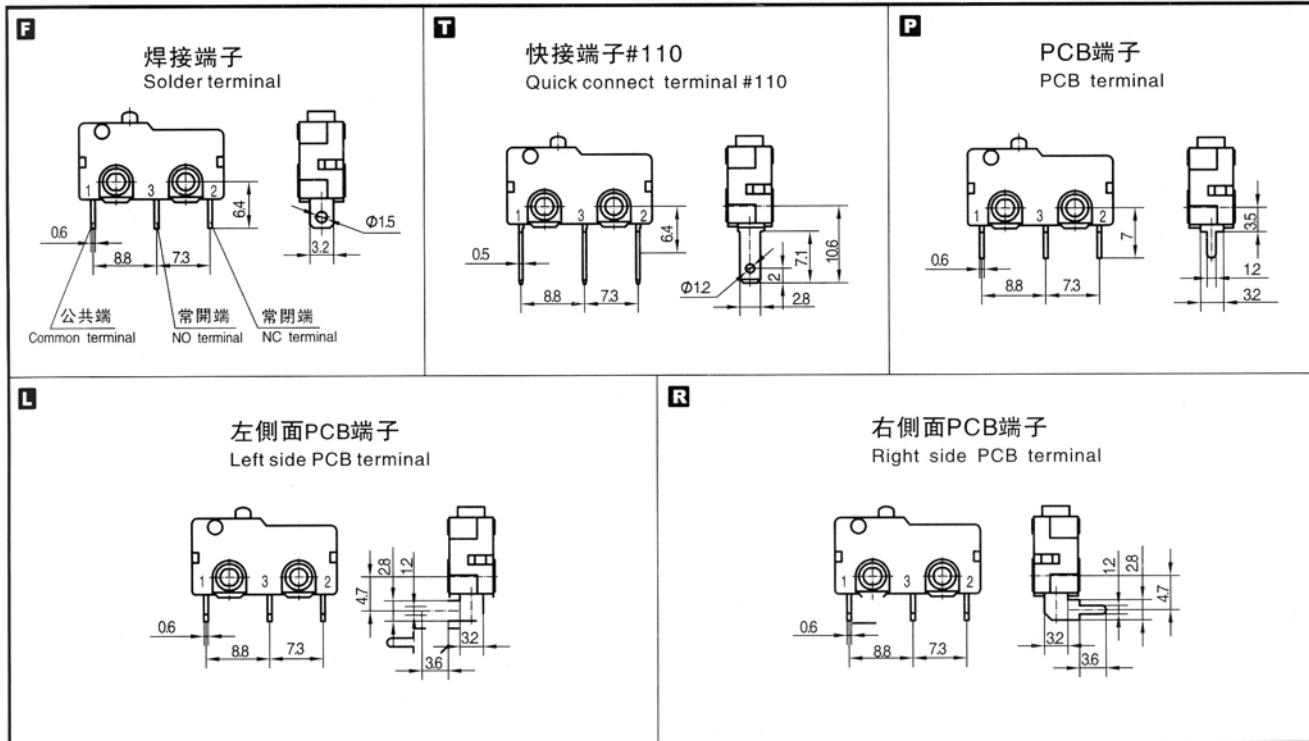
## ◆ 按鈕規格說明圖 Plunger spec illumination

按鈕標記 Mark on plunger	無標記 No mark	A	D
按鈕尺寸 Plunger dimension	1.5	1.3	3.9

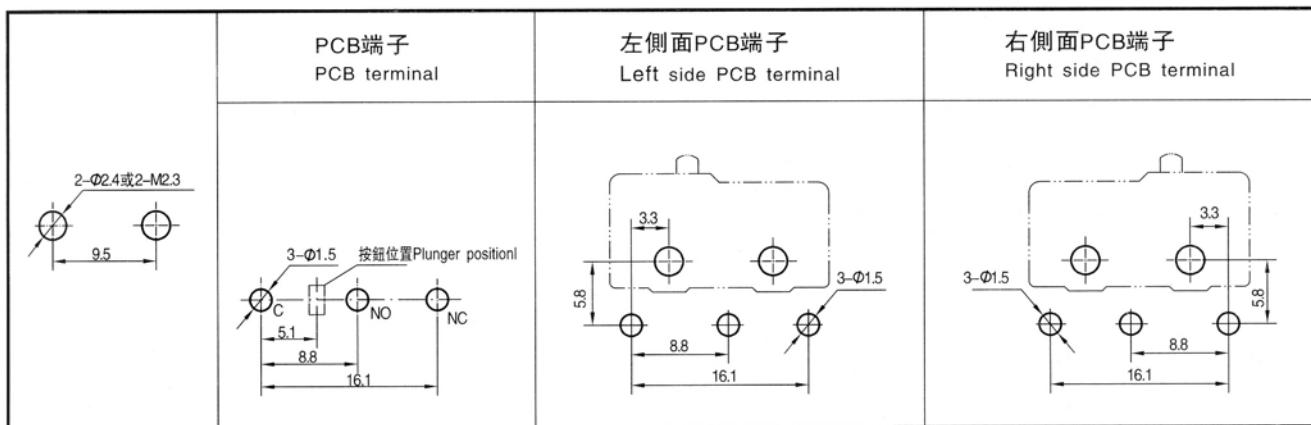
# MICRO SWITCHES

## KW4A(S) series

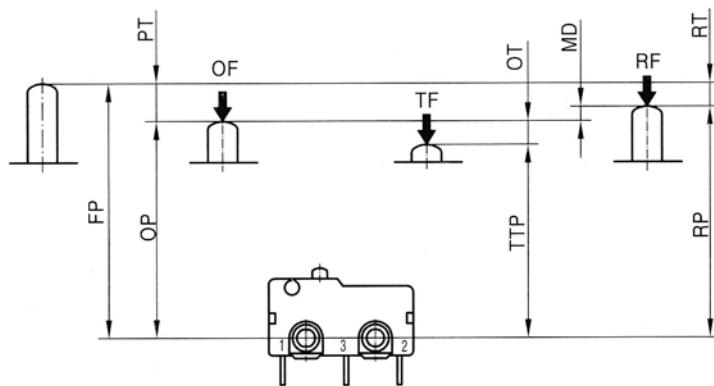
### ◆ 接線端尺寸 Terminal dimensions



### ◆ 安裝孔尺寸 Mounting hole dimension



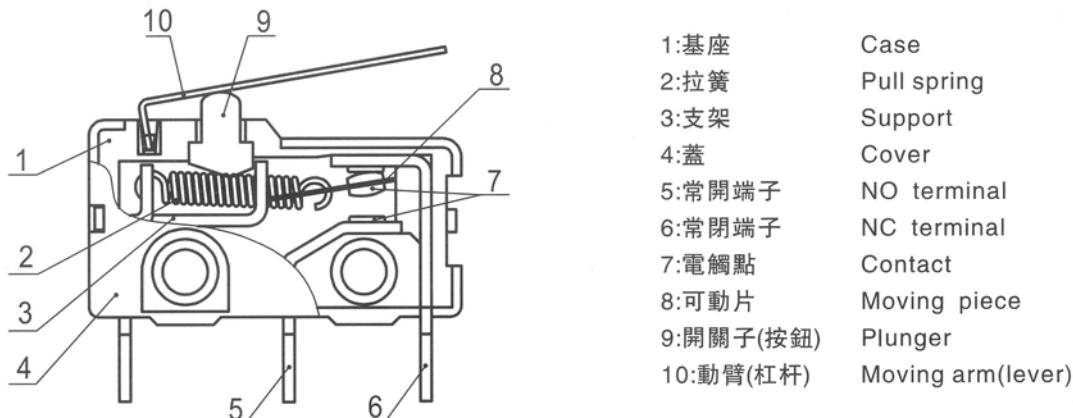
### ◆ 開關動作特性圖解 Operating characteristic diagrammatize



## KW4A(S) series

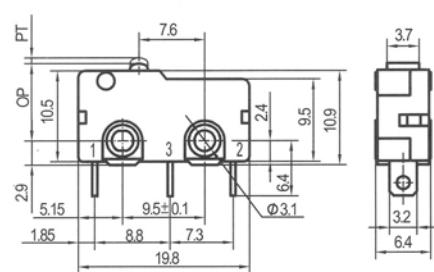
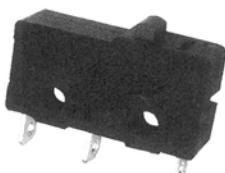
代號 Code	參數名稱 Name	含義 Meanings
PT	動作行程(預行程) Pretravel	驅動件從自由位置到動作位置間的位移 The displacements of actuator from free position to operating position.
OT	超行程 Overtravel	驅動件從動作位置到全行程位置間的位移 The displacements of actuator from operating position to total travel position.
MD	差動行程 Movement differential travel	驅動件從動作位置到釋放位置或釋放位置到動作位置間的位移 The displacements of actuator from operating position to release poison.
RT	釋放行程 Release travel	驅動件從釋放位置到自由位置間的位移 The displacements of actuator from release position to free position.
OF	動作力 Operating force	驅動件從自由位置移動到動作位置所必須的操作力 The force of displacements of actuator from free position to operating position.
TF	全行程力 Total travel force	驅動件在全行程位置所承受的最小操作力 The smallest force of displacements of actuator on total travel position.
RF	釋放力 Release force	驅動件自正向動作位置返回到釋放位置，操作力必須減小到的數值 The force must be smallest when the actuator moved back to release position from obverse operating position.
TPP	全行程位置 Total travel position	驅動件被止動時所處的位置 The position where the actuator be stopped.
OP	動作位置 Operating position	驅動件在速動機構發生正向動作瞬間所處的位置 The position where the actuator moved obverse on quick-moving parts.
RP	釋放位置 Release position	驅動件在速動機構發生反向動作瞬間所處的位置 The position where the actuator moved reversely on quick-moving parts.
FP	自由位置 Free position	驅動件在不承受操作力以及力不足以引起位移時所處的位置 The position where the actuator lead the displacements when its out of force is not enough.

## ◆ 内部構造圖 Internal configuration drawing



## ◆ 外形尺寸和動作特性 Dimensions and operating characteristics

KW4A(S)-Z0F100  
KW4A(S)-Z0F150  
KW4A(S)-Z0F200  
KW4A(S)-Z0F300

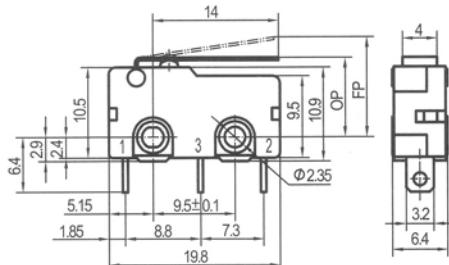
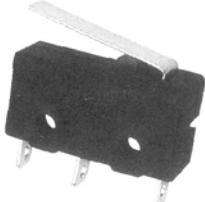


型號 Model	KW4(S)-Z0F100	KW4(S)-Z0F150	KW4(S)-Z0F200	KW4(S)-Z0F300
OF Max(N)	1	1.5	2	3
RF Min(N)	0.15	0.3	0.5	0.7
PT Max(mm)			0.8	
OT Min(mm)			0.5	
MD Max(mm)			0.2	
OP(mm)			9 ± 0.4	

# MICRO SWITCHES

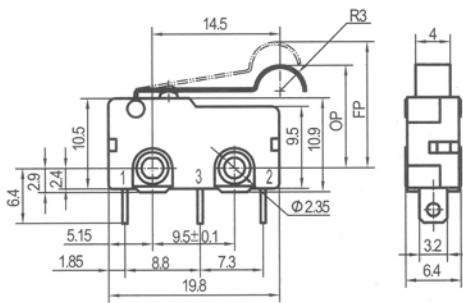
## KW4A(S) series

KW4A(S)-Z3F100  
KW4A(S)-Z3F150  
KW4A(S)-Z3F200  
KW4A(S)-Z3F300



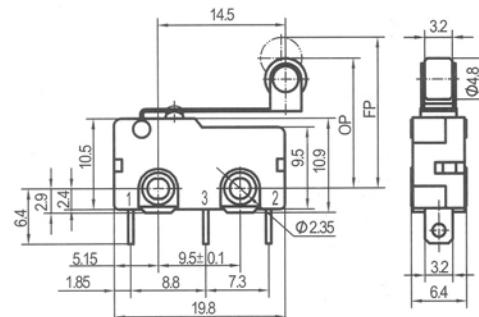
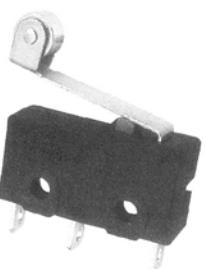
型號 Model	KW4(S)-Z3F100	KW4(S)-Z3F150	KW4(S)-Z3F200	KW4(S)-Z3F300
OF Max(N)	0.25	0.4	0.5	0.8
RF Min(N)	0.04	0.08	0.15	0.2
OT Min(mm)			0.8	
MD Max(mm)			0.8	
FP Max(mm)			12.5	
OP(mm)			8.9 ± 1	

KW4A(S)-Z6F100  
KW4A(S)-Z6F150  
KW4A(S)-Z6F200  
KW4A(S)-Z6F300



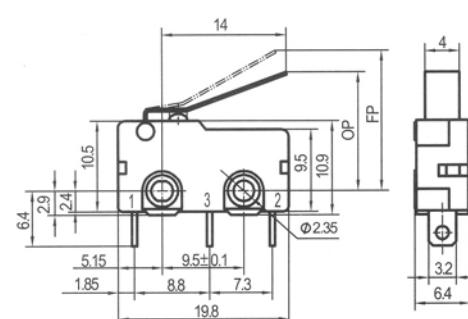
型號 Model	KW4(S)-Z6F100	KW4(S)-Z6F150	KW4(S)-Z6F200	KW4(S)-Z6F300
OF Max(N)	0.25	0.4	0.5	0.8
RF Min(N)	0.04	0.08	0.15	0.2
OT Min(mm)			1.5	
MD Max(mm)			0.8	
FP Max(mm)			16.5	
OP(mm)			13.4 ± 1	

KW4A(S)-Z5F100  
KW4A(S)-Z5F150  
KW4A(S)-Z5F200  
KW4A(S)-Z5F300



型號 Model	KW4(S)-Z5F100	KW4(S)-Z5F150	KW4(S)-Z5F200	KW4(S)-Z5F300
OF Max(N)	0.25	0.4	0.5	0.8
RF Min(N)	0.04	0.08	0.15	0.2
OT Min(mm)			1.2	
MD Max(mm)			0.9	
FP Max(mm)			19	
OP(mm)			15.2 ± 1	

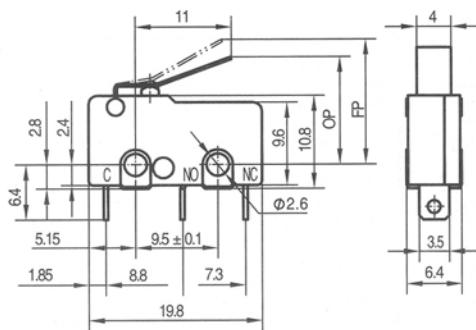
KW4A(S)-ZEF100  
KW4A(S)-ZEF150  
KW4A(S)-ZEF200  
KW4A(S)-ZEF300



型號 Model	KW4(S)-ZEF100	KW4(S)-ZEF150	KW4(S)-ZEF200	KW4(S)-ZEF300
OF Max(N)	0.25	0.4	0.5	0.8
RF Min(N)	0.04	0.08	0.15	0.2
OT Min(mm)			1.2	
MD Max(mm)			0.8	
FP Max(mm)			16.5	
OP(mm)			13 ± 1	

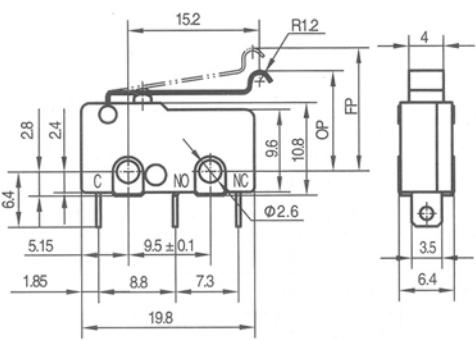
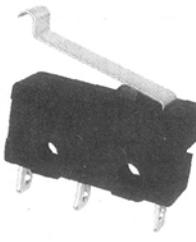
## KW4A(S) series

KW4A(S)-ZQF100  
KW4A(S)-ZQF150  
KW4A(S)-ZQF200  
KW4A(S)-ZQF300



型號 Model	KW4(S)-ZQF100	KW4(S)-ZQF150	KW4(S)-ZQF200	KW4(S)-ZQF300
OF Max(N)	0.32	0.5	0.65	1
RF Min(N)	0.04	0.08	0.15	0.2
OT Min(mm)			1	
MD Max(mm)			0.8	
FP Max(mm)			15	
OP(mm)			12.2±0.8	

KW4A(S)-Z6BF100  
KW4A(S)-Z6BF150  
KW4A(S)-Z6BF200  
KW4A(S)-Z6BF300



型號 Model	KW4(S)-Z6BF100	KW4(S)-ZBFF150	KW4(S)-ZBF200	KW4(S)-ZBFF300
OF Max(N)	0.25	0.4	0.5	0.8
RF Min(N)	0.04	0.08	0.15	0.2
OT Min(mm)			1.2	
MD Max(mm)			0.8	
FP Max(mm)			15.5	
OP(mm)			12±1.2	

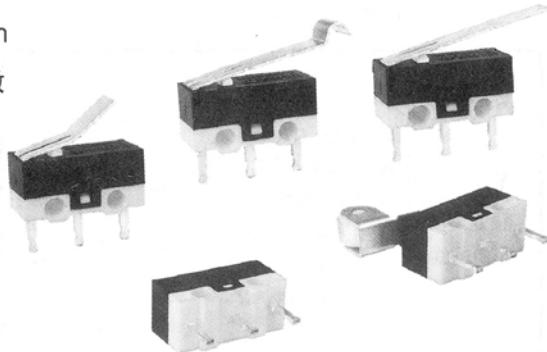
◆ 可供選擇的非標準動臂代號和外形特征尺寸 Not standard lever for choose and outline characteristic dimension

動臂代號 Lever code	外形特徵尺寸 Outline characteristic dimensions	動臂代號 Lever code	外形特徵尺寸 Outline characteristic dimensions	動臂代號 Lever code	外形特徵尺寸 Outline characteristic dimensions
R		J2		6A	
3A		C		6C	
N		H		K	
J		G		Q1	
J1		F1		S1	
5A					

## KW10 series

### KW10型微動開關系列 Micro switch series

- ◆ 動作靈敏的超小型開關 Action sensitive subminiature switch
- 超小型，大電流。具有微小觸點間隙，快速動作、高靈敏和微小動作行程的特點。  
Minitype, big current. Characteristic: small contact gap, quick action, high sensitivity and small operating travel
- 長壽命  
Long life
- 多種接線端子  
Variety of contact terminals
- 多種形式動臂  
Variety of levers
- 適用于家用電器、音視頻設備、計算機、辦公自動化設備及通訊設備等。  
Widely used in appliance, audio video device, computer, office automation equipment, communication equipment, etc.



#### ◆ 技術特性 Specifications

項目 Item	特性值 Value	
工作速度 Operating speed	1mm ~ 500m/s (與驅動方式有關)(Related with actuator forms)	
工作頻率 Operating frequency	機械 60次/min; 電氣 25次/min Mechanical 60 cycles/min; Electrical 25cycles/min	
絕緣電阻 Insulation resistance	$\geq 100M\Omega$ (500VDC)	
接觸電阻 Contact resistance	動作力 $>0.75N$ : $\leq 30m\Omega$ (見注) 動作力 $\leq 0.75N$ : $\leq 50m\Omega$ (見注) OF $>0.75N$ : $\leq 30m\Omega$ (see note) OF $\leq 0.75N$ : $\leq 50m\Omega$ (see note) KW10-D、E、F型: $\leq 100m\Omega$ (見注)	
耐電壓 Test voltage	同極不相接端子間 Between each terminals of the same polarity	AC600V, 50/60Hz, 1min
	帶電金屬零件與外殼之間、接線端與易觸及的不帶電金屬件之間 Between current-carrying metal parts and ground, and between each terminal and non-current-carrying metal parts	AC1000V, 50/60Hz, 1min
抗振動 Vibration resistance	10 ~ 55Hz, 1.5mm 兩倍振幅 Double amplitude	
抗衝擊 Shock resistance	故障: $300m/s^2$ (約30G)max Malfunction: $300m/s^2$ (approx.30G)max	
壽命 Life expectancy	機械 $\geq 1000000$ 次; Mechanical $\geq 1000000$ cycles 電氣 3A: $\geq 10000$ 次 Electrical $\geq 10000$ cycles $\leq 1A$ : $\geq 100000$ 次	
質量 Weight	約0.6g(無動臂型) Approx. 0.6g(No lever)	

注：指無動臂時按鈕上的動作力。 Note: Shows the operating force of no lever.

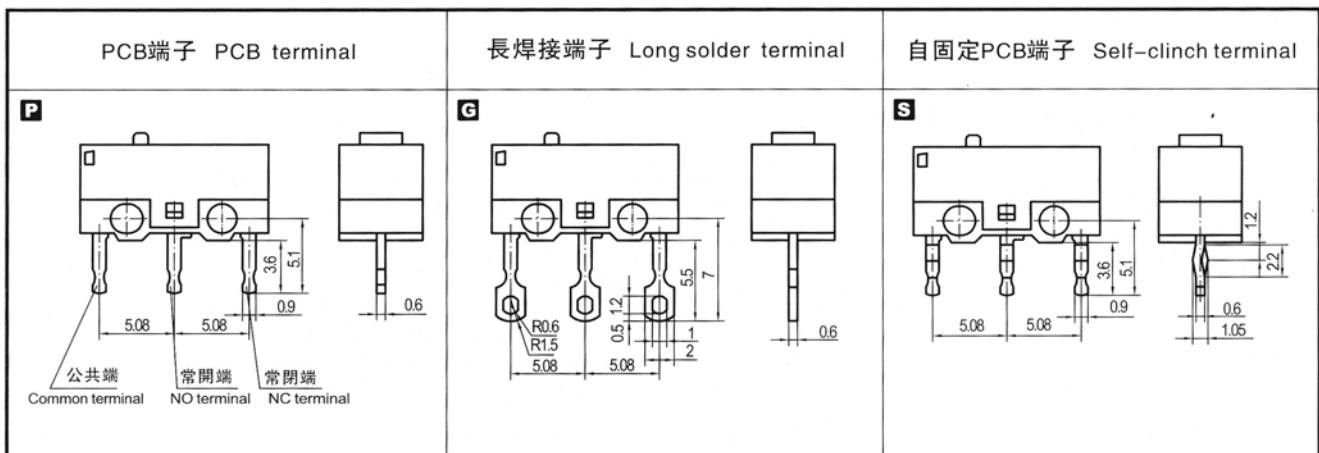
## KW10 series

## ◆ 型號規格命名及含義 Model numbered legend and meanings

KW10 - □ □ □ □ □ - ( □ )  
 1 2 3 4 5 6

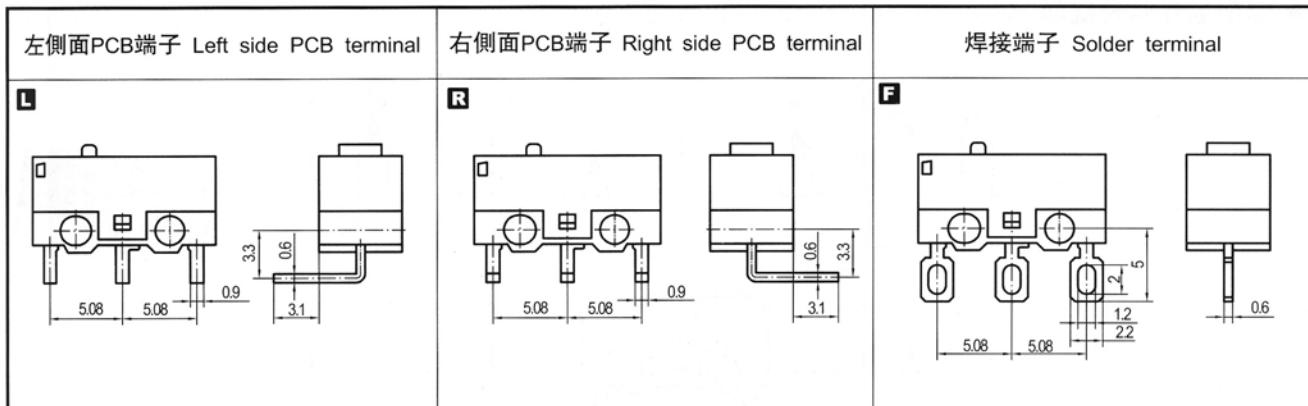
<b>1</b> 額定值 Ratings	無標記: 3A No mark C: 1A 125VAC D: 0.5A 125VAC E: 0.3A 125VAC F: 0.1A 125VAC	<b>4</b> 端子類型 Terminal types	F : 焊接端子 Solder terminal G : 長焊接端子 Long solder terminal P : PCB端子 PCB terminal L : 左側面PCB端子 Left side PCB terminal R : 右側面PCB端子 Right side PCB terminal S : 自固定PCB端子 Self-clinching PCB terminal Y : 非標準端子 Not standard terminal
<b>2</b> 接觸形式 Connect forms	Z: 轉換式 SPDT T: 常開(按通)式 SPST-NO D: 常閉(按斷)式 SPST-NC	<b>5</b> 動作力(max) Operating force	045 : 0.45N 075 : 0.75N 150 : 1.5N 250 : 2.5N 注: 若是非標準動作力, 用此動作力上限值表示。 Note: If it is not standard operating force, indicate with the upper limit.
<b>3</b> 驅動形式 Actuator forms	0: 無動臂 No lever 1: 短動臂 Short lever 2: 長動臂 Long lever 3: 中動臂 Middle lever 5: 滾輪臂 Roller 6: 長弧形動臂 Long arc lever 8: 短弧形動臂 Short arclever □: 非標準動臂 Not standard lever 注: □表示非標準動臂的代號 Indicate not standard lever,	<b>6</b> 附加規格編號, 適用于: Additional spec numbers, apply to:	1) 當開關使用了非標準零件如非標準端子等時; When used not standard parts such as not standard terminal; 2) 當顧客有特殊動作特性值或其它要求時。 When customer has particular operating value or other requirements. 附加規格編號用兩位阿拉伯數字表示, 如01、02、03……在沒有附加規格編號時, 該位置空缺。 Additional spec number shows as 01, 02, 03……If there is no additional numbers, the place is vacant.

## ◆ 接線端尺寸 Terminal dimensions

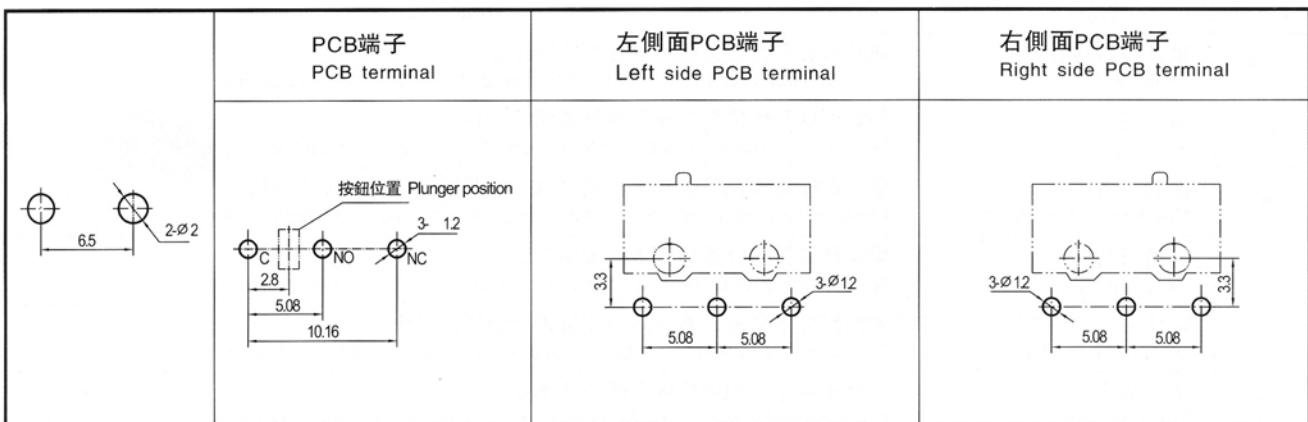


# MICRO SWITCHES

## KW10 series



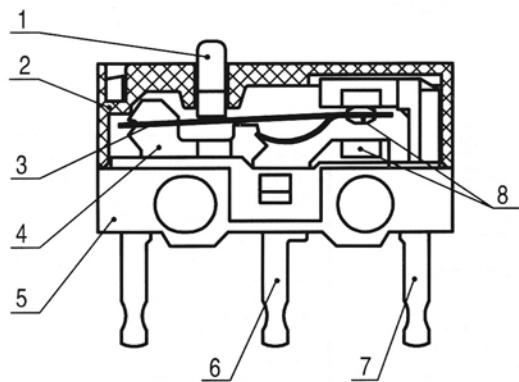
◆ 安裝孔尺寸 Mounting hole dimensions



◆ 接觸形式(轉換式) Connect forms(SPDT)



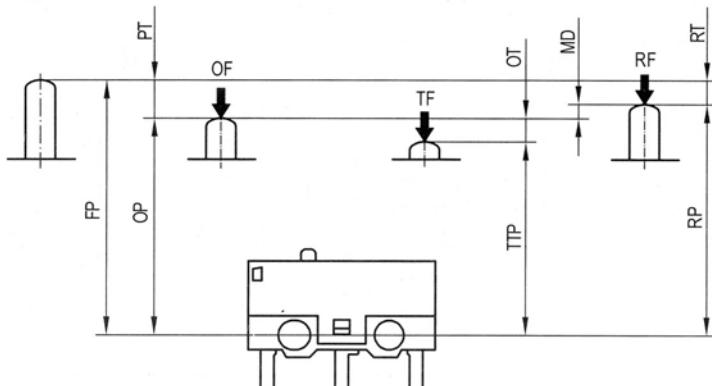
◆ 内部構造圖 Internal configuration drawing



- |            |              |
|------------|--------------|
| 1: 開關子(按鈕) | Plunger      |
| 2: 蓋       | Cover        |
| 3: 可動片     | Moving piece |
| 4: 支架      | Support      |
| 5: 基座      | Case         |
| 6: 常開端子    | NO terminal  |
| 7: 常閉端子    | NC terminal  |
| 8: 電觸點     | Contact      |

## KW10 series

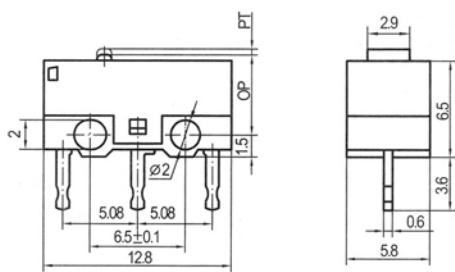
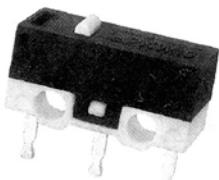
## ◆ 開關動作特性圖解 Operating characteristic diagrammatize



代號 Code	參數名稱 Name	含義 Meanings
PT	動作行程(預行程) Pretravel	驅動件從自由位置到動作位置間的位移 The displacements of actuator from free position to operating position.
OT	超行程 Overtravel	驅動件從動作位置到全行程位置間的位移 The displacements of actuator from operating position to total travel position.
MD	差動行程 Movement differential travel	驅動件從動作位置到釋放位置或釋放位置到動作位置間的位移 The displacements of actuator from operating position to release poison.
RT	釋放行程 Release travel	驅動件從釋放位置到自由位置間的位移 The displacements of actuator from release position to free position.
OF	動作力 Operating force	驅動件從自由位置移動到動作位置所必須的操作力 The force of displacements of actuator from free position to operating position.
TF	全行程力 Total travel force	驅動件在全行程位置所承受的最小操作力 The smallest force of displacements of actuator on total travel position.
RF	釋放力 Release force	驅動件自向動作位置返回到釋放位置，操作力必須減小到的數值 The force must be smallest when the actuator moved back to release position from obverse operating position.
TPP	全行程位置 Total travel position	驅動件被止動時所處的位置 The position where the actuator be stopped.
OP	動作位置 Operating position	驅動件在速動機構發生正向動作瞬間所處的位置 The position where the actuator moved obverse on quick-moving parts.
RP	釋放位置 Release position	驅動件在速動機構發生反向動作瞬間所處的位置 The position where the actuator moved reversely on quick-moving parts.
FP	自由位置 Free position	驅動件在不承受操作力以及力不足以引起位移時所處的位置 The position where the actuator lead the displacements when its out of force is not enough.

## ◆ 外形尺寸和動作特性 Dimensions and operating characteristics

KW10-ZOP075  
KW10-ZOP150  
KW10-ZOP250

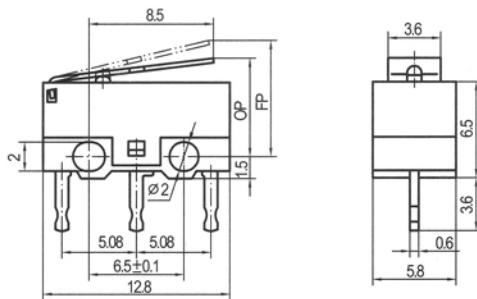
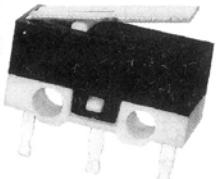


型 號 Model	KW10-ZOP075	KW10-ZOP150	KW10-ZOP250
OF Max(N)	0.75	1.5	2.5
RF Min(N)	0.05	0.08	0.4
PT Max(mm)		0.5	
OT Min(mm)		0.2	
MD Max(mm)		0.2	
OP(mm)	5.5±0.3		

# MICRO SWITCHES

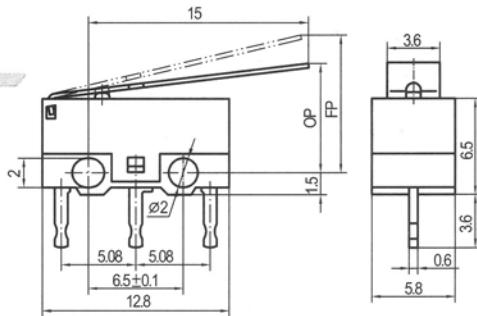
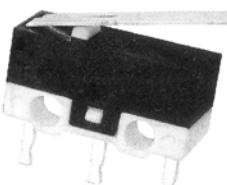
## KW10 series

KW10-Z1P075  
KW10-Z1P150  
KW10-Z1P250



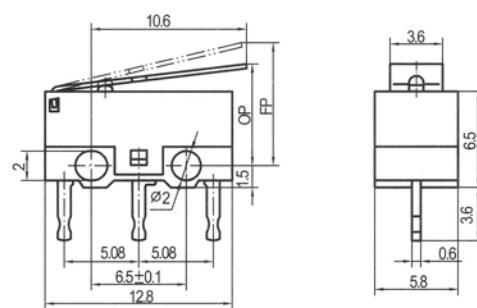
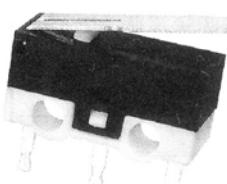
型號 Model	KW10-Z1P075	KW10-Z1P150	KW10-Z1P250
OF Max(N)	0.26	0.53	0.9
RF Min(N)	0.04	0.08	0.15
OT Min(mm)		0.6	
MD Max(mm)		0.6	
FP Max(mm)		9	
OP(mm)		6.7 ± 1	

KW10-Z2P075  
KW10-Z2P150  
KW10-Z2P250



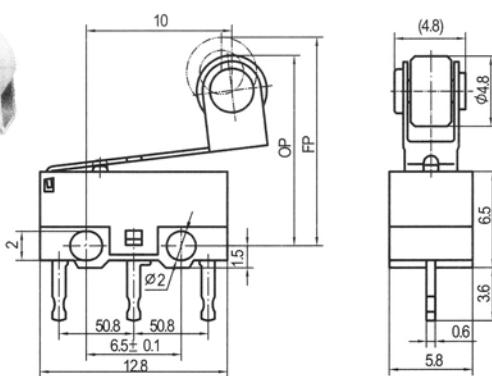
型號 Model	KW10-Z2P075	KW10-Z2P150	KW10-Z2P250
OF Max(N)	0.17	0.33	0.55
RF Min(N)	0.02	0.04	0.08
OT Min(mm)		1	
MD Max(mm)		1	
FP Max(mm)		10	
OP(mm)		7.6 ± 1.5	

KW10-Z3P075  
KW10-Z3P150  
KW10-Z3P250



型號 Model	KW10-Z3P075	KW10-Z3P150	KW10-Z3P250
OF Max(N)	0.23	0.45	0.75
RF Min(N)	0.03	0.06	0.12
OT Min(mm)		0.7	
MD Max(mm)		0.7	
FP Max(mm)		9.5	
OP(mm)		7 ± 1.2	

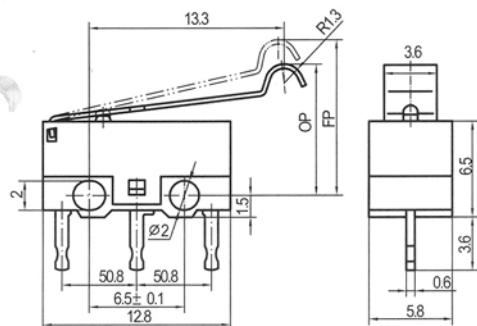
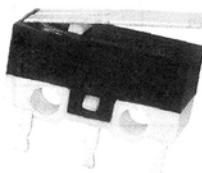
KW10-Z5P075  
KW10-Z5P150  
KW10-Z5P250



型號 Model	KW10-Z5P075	KW10-Z5P150	KW10-Z5P250
OF Max(N)	0.23	0.46	0.77
RF Min(N)	0.02	0.05	0.1
OT Min(mm)		0.7	
MD Max(mm)		0.7	
FP Max(mm)		16.5	
OP(mm)		13 ± 1.5	

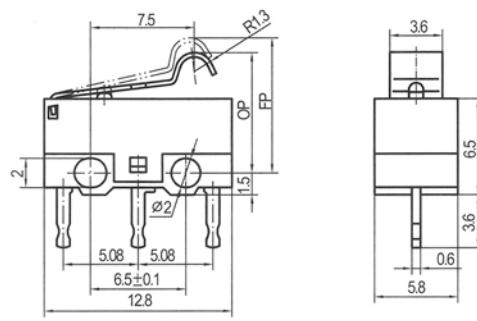
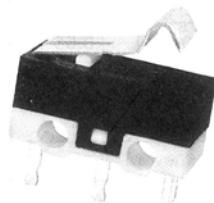
## KW10 series

KW10-Z6P075  
KW10-Z6P150  
KW10-Z6P250



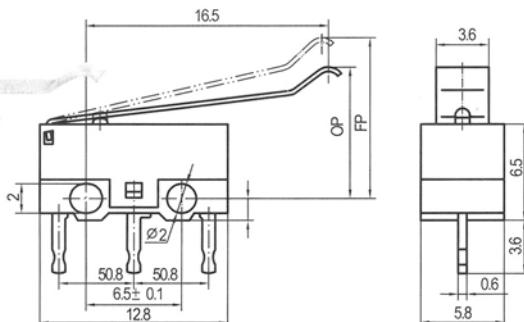
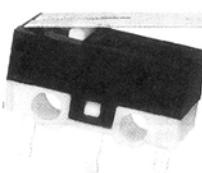
型號 Model	KW10-Z6P075	KW10-Z6P150	KW10-Z6P250
OF Max(N)	0.18	0.36	0.6
RF Min(N)	0.02	0.05	0.1
OT Min(mm)		0.9	
MD Max(mm)		0.9	
FP Max(mm)		11.5	
OP(mm)		8.8±1.5	

KW10-Z8P075  
KW10-Z8P150  
KW10-Z8P250



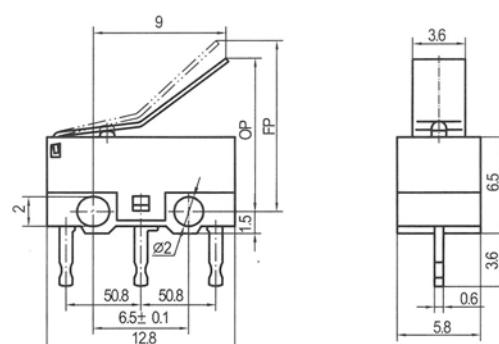
型號 Model	KW10-Z8P075	KW10-Z8P150	KW10-Z8P250
OF Max(N)	0.3	0.6	1
RF Min(N)	0.03	0.06	0.12
OT Min(mm)		0.6	
MD Max(mm)		0.6	
FP Max(mm)		10.5	
OP(mm)		7±1.5	

KW10-ZEP075  
KW10-ZEP150  
KW10-ZEP250



型號 Model	KW10-ZEP075	KW10-ZEP150	KW10-ZEP250
OF Max(N)	0.15	0.3	0.5
RF Min(N)	0.02	0.05	0.1
OT Min(mm)		1.1	
MD Max(mm)		1	
FP Max(mm)		11.5	
OP(mm)		8.5±1.5	

KW10-ZBP075  
KW10-ZBP150  
KW10-ZBP250



型號 Model	KW10-ZBP075	KW10-ZBP150	KW10-ZBP250
OF Max(N)	0.25	0.5	0.8
RF Min(N)	0.02	0.05	0.1
OT Min(mm)		0.6	
MD Max(mm)		0.6	
FP Max(mm)		12.5	
OP(mm)		10.5±1.5	

# MICRO SWITCHES

## X3 series

### Features

Exceptional repeat accuracy provided by precision snap-action mechanism.

Long electrical life due to high contact pressure in conjunction with wiping serrated contacts.

Wide range of levers made from C Ni stainless steel which can be fitted in two different positions.

### Applications

The switches of the X3-series are suitable for temperatures ranging between  $-40^{\circ}\text{C}$  and  $+125^{\circ}\text{C}$

**8 mm creepage and clearance on the actuator**

Recom. max. electrical ratings X3			
	Voltage VAC	Resistive load A	Motor load A
X3 M	250	16	6
X3 C	250	10	3
X3 L	250	21	8

The breaking capacities in the tables refer to

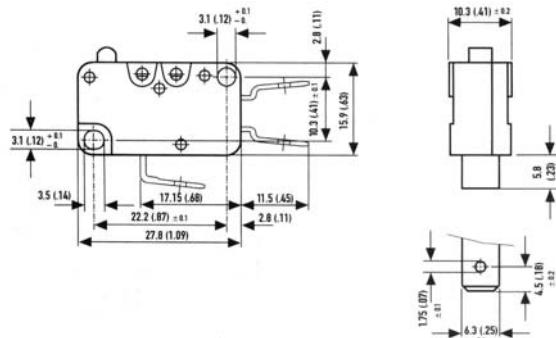
Ag/Ag/Ni contacts



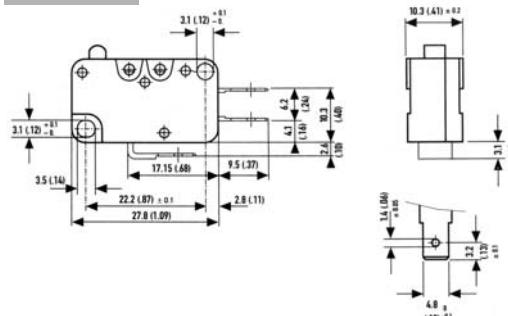
UL. CSA. ENEC

### Dimensions

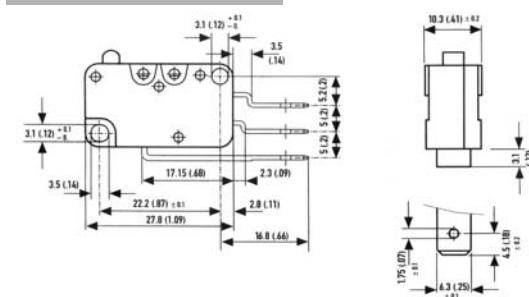
X3..02...



X3..06...



X3..15...(RAST 5)



**Product Range****Operating Characteristics**

Actuator	Reference	Actuating Force Max. N(ozf)	Release Force Min. N(ozf)	Free Position Max. mm(in)	Operating Position mm(in)	Movement Differential Max. mm(in)	Full Over-Travel Position mm(in)
Plunger	X3C3	0.8 (2.877)	0.05 (0.179)	15.75 (0.62)	14.7+0.2/0.4 (0.578+0.008/-0.016)	0.25 (0.009)	13.2 (0.52)
	X3M3	1.6 (5.755)	0.20 (0.719)	15.75 (0.62)	14.7+0.2/0.4 (0.578+0.008/-0.016)	0.25 (0.009)	13.2 (0.52)
J02 Lever	X3C3..J02	0.8 (2.877)	0.045 (0.161)	16.5 (0.649)	15.1±0.5 (0.59±0.02)	0.35 (0.014)	14.0 (0.55)
	X3M3..J02	2.0 (7.193)	0.18 (0.647)	16.5 (0.649)	15.1±0.5 (0.59±0.02)	0.35 (0.014)	14.0 (0.55)
M02 Lever	X3C3..M02	0.5 (1.798)	0.04 (0.143)	19.2 (0.755)	17.5±0.7 (0.69±0.028)	0.35 (0.014)	16.4 (0.65)
	X3M3..M02	1.65 (5.934)	0.16 (0.575)	19.2 (0.755)	17.5±0.7 (0.69±0.028)	0.35 (0.014)	16.4 (0.65)
L02 Lever	X3C3..L02	0.8 (2.877)	0.045 (0.161)	21.8 (0.858)	20.5±0.6 (0.81±0.024)	0.35 (0.014)	19.5 (0.76)
	X3M3..L02	2.0 (7.193)	0.19 (0.683)	21.8 (0.858)	20.5±0.6 (0.81±0.024)	0.3 (0.011)	19.5 (0.76)
T02 Lever	X3C3..T02	0.8 (2.877)	0.045 (0.161)	21.8 (0.858)	20.2±0.7 (0.79±0.028)	0.35 (0.014)	19.3 (0.76)
	X3M3..T02	2.0 (7.193)	0.19 (0.683)	21.8 (0.858)	20.2±0.7 (0.79±0.028)	0.35 (0.014)	19.3 (0.76)

# MICRO SWITCHES

## X4 series

### Features

Wide range of solder, faston or PCB terminals.  
Various operating actuators may be specified.  
Lever may be clipped on later.  
Versions with maximum electrical rating of 12A at 250AC  
Actuating forces between 60 and 300 cN.

### Applications

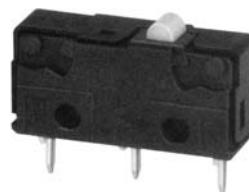
Small domestic appliances  
Telecommunications  
Recreational items  
Automotive industry

### Decisive Advantages

High degree of switching accuracy.  
Its greater precision ensures greater functional safety.  
The crosspoint contacts are ideal for low current/voltage applications.

Recom. max. electrical ratings X4			
	Voltage VAC	Resistive load A	Motor load A
X4 F	250	12	6
X4 G	250	6	3
X4 C	250	3	2

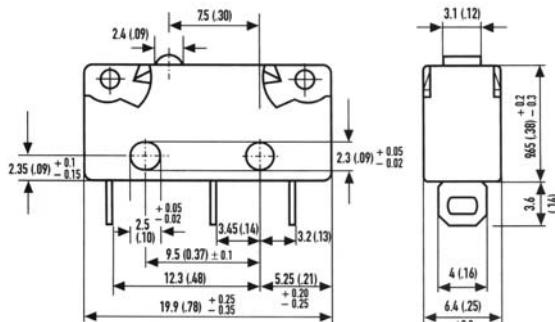
The breaking capacities in the tables refer to silver contacts



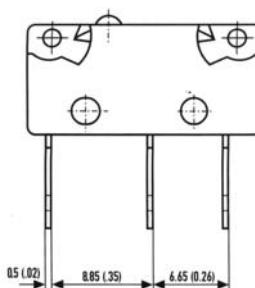
UL, CSA, ENEC

### Dimensions

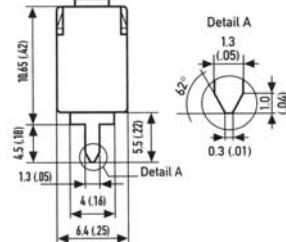
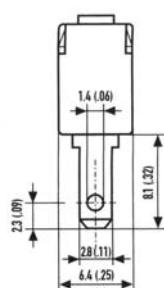
X4..03...



X4..04...



X4..08...



**X4 series****Product Range****Operating Characteristics**

Actuator	Reference	Actuating Force Max. N(ozf)	Release Force Min. N(ozf)	Free Position Max. mm(in)	Operating Position mm(in)	Movement Differential Max. mm(in)	Full Over-Travel Pos Mar mm(in)
Plunger	X4F	3.3 (11.869)	0.05 (1.978)	8.8 (0.35)	8.4±0.1/-0.3 (0.33±0.004/-0.01)	0.2 (0.008)	7.7 (0.30)
	X4G	2.0 (7.193)	0.35 (1.258)	8.8 (0.35)	8.4±0.1/-0.3 (0.33±0.004/-0.01)	0.2 (0.008)	7.7 (0.30)
	X4C	0.75 (2.697)	0.13 (0.467)	8.8 (0.35)	8.4±0.1/-0.3 (0.33±0.004/-0.01)	0.2 (0.008)	7.7 (0.30)
J11-Lever  Width of lever 4mm (0.16)	X4F..J11	1.16 (4.172)	0.18 (0.647)	12.2 (0.48)	10.2±1 (0.40±0.039)	0.6 (0.024)	8.4 (0.33)
	X4G..J11	0.7 (2.517)	0.094 (0.338)	12.2 (0.48)	10.2±0.9 (0.40±0.035)	0.5 (0.02)	8.5 (0.33)
	X4C..J11	0.28 (1.007)	0.031 (0.107)	12.2 (0.48)	10.3±0.9 (0.40±0.035)	0.4 (0.016)	8.7 (0.34)
L11-Lever  Width of lever 4mm (0.16)	X4F..L11	1.21 (4.352)	0.19 (0.683)	17.6 (0.69)	15.6±1.1 (0.61±0.043)	0.6 (0.024)	14.0 (0.55)
	X4G..L11	0.82 (2.949)	0.11 (0.395)	17.6 (0.69)	15.6±1 (0.61±0.039)	0.5 (0.02)	14.1 (0.56)
	X4C..L11	0.29 (1.043)	0.033 (0.118)	17.6 (0.69)	15.7±1 (0.61±0.039)	0.4 (0.016)	14.3 (0.56)
S11-Lever  Width of lever 4mm (0.16)	X4F..S11	1.21 (4.352)	0.19 (0.683)	17.6 (0.69)	15.6±1.2 (0.61±0.047)	0.6 (0.024)	14.1 (0.56)
	X4G..S11	0.82 (2.949)	0.11 (0.395)	17.6 (0.69)	15.6±1.1 (0.61±0.043)	0.5 (0.02)	14.2 (0.56)
	X4C..S11	0.29 (1.043)	0.036 (0.129)	17.6 (0.69)	15.7±1.1 (0.62±0.043)	0.4 (0.016)	14.4 (0.57)

# **MICRO SWITCHES**

## **SSM series**

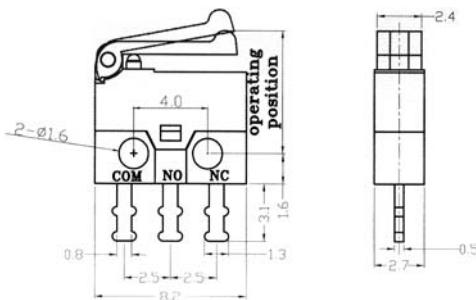
## Specifications

Rating	30VDC 500mA
Operating Force	50gf (Max)
Life	300,000 cycles Min
Operating Position	$6.7 \pm 0.5$ mm
Contact Resistance	$100m\Omega$ Max (initial)
Insulation Resistance	$100M\Omega$ Min (at 250VDC)
Dielectric Withstanding Voltage	500VAC 1 minute
Operating Temperature	- 25°C ~ + 70°C
Ambient Humidity	35% ~ 85% RH
Malfunction Durability	10 to 55Hz 1.5mm double amplitude during 2 hours

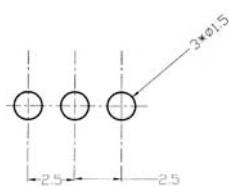
## Material

- 1.Terminal:BRASS SILVER PLATED
  - 2.Body:PBT
  - 3.Cover:POM
  - 4.Level:POM
  - 5.Pin:POM
  - 6.Connect:BeCu
  - 7.Contact:Silver

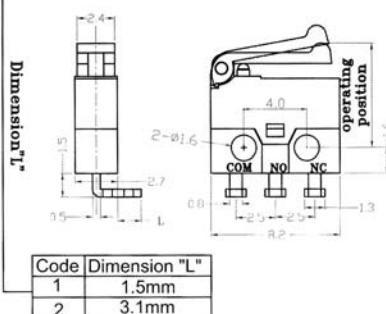
SSM-001



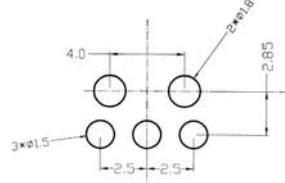
## P.C.B. Land Pattern



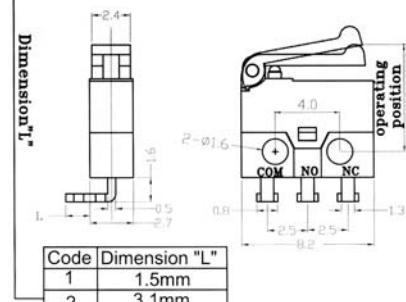
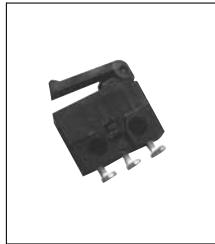
SSM-001-R



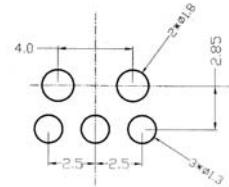
## P.C.B. Land Pattern



SSM-001L



P.C.B. Land Pattern

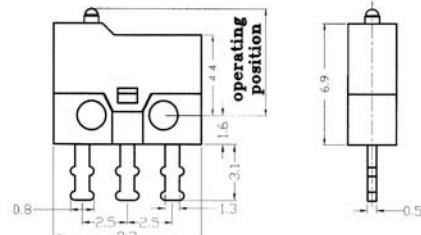
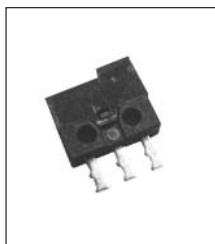


**SSM series****Specifications**

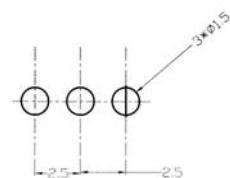
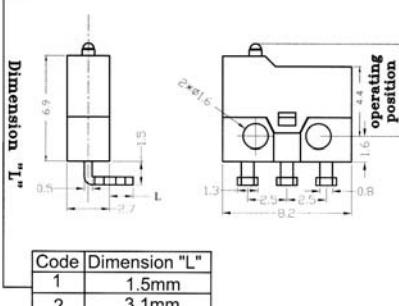
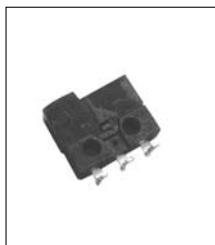
Rating	30VDC 500mA
Operating Force	120gf (Max)
Life	300,000 cycles Min
Operating Position	$5.6 \pm 0.15$ mm
Contact Resistance	100mΩ Max (initial)
Insulation Resistance	100MΩ Min (at 250VDC)
Dielectric Withstanding Voltage	500VAC 1 minute
Operating Temperature	- 25°C ~ + 70°C
Ambient Humidity	35% ~ 85% RH
Malfunction Durability	10 to 55Hz 1.5mm double amplitude during 2 hours

**Material**

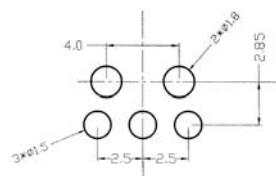
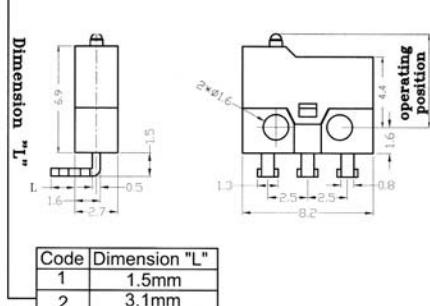
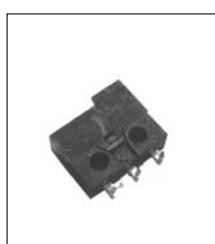
- 1.Terminal:BRASS SILVER PLATED
- 2.Body:PBT
- 3.Cover:PBT
- 4.Pin:POM
- 5.Connect:BeCu
- 6.Contact:Silver

**SSM-002**

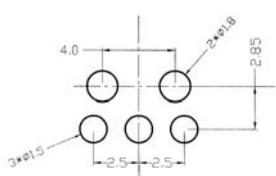
P.C.B. Land Pattern

**SSM-002-R**

P.C.B. Land Pattern

**SSM-002L**

P.C.B. Land Pattern



# MICRO SWITCHES

## MFS series

### Specifications

Operating Force	12gf Max.
Electrical Rating	6A 250V AC 1/4 HP T125
Contact Type	Single Pole, Normally Open. Double Break Push To Reset.
Dimensions Are In	Millimeters.
Release Force	10 Grams Max.
Safety Approved.	

### Dimension

Order Number:MFS-01

