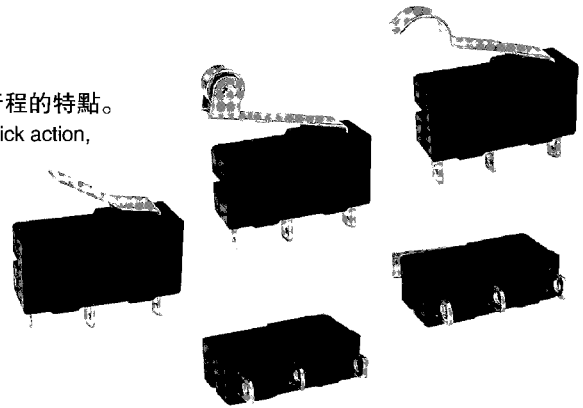


## KW4A(S)型微動開關系列 Micro switch series

### ◆ 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, 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
- ▣ 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 home appliance, electronic equipment, automatic machine, communication equipment, car electron, apparatus and instrument etc.



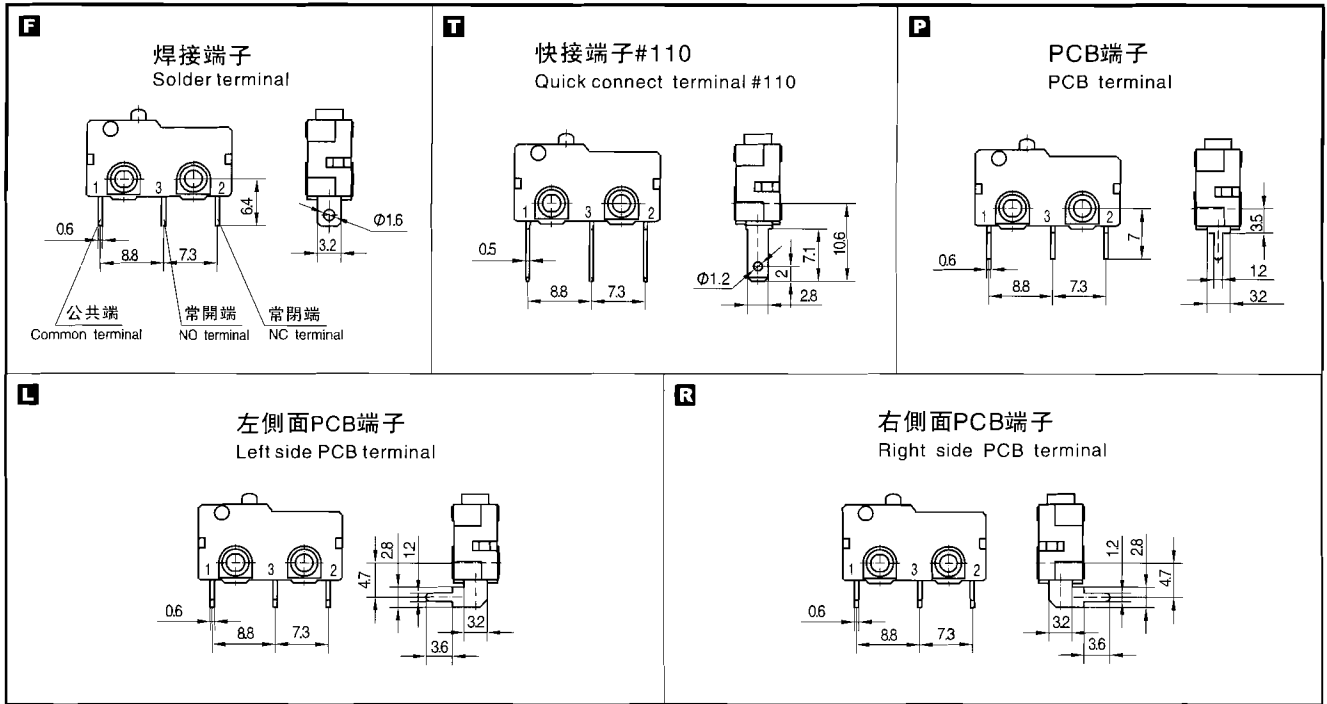
### ◆ 技術特性 Specifications

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		≥ 100MΩ (500VDC)
接觸電阻 Contact resistance		動作力 > 0.5N: ≤ 30mΩ (見注) OF > 0.5N: ≤ 30mΩ (see note) 動作力 ≤ 0.5N: ≤ 50mΩ (見注) OF ≤ 0.5N: ≤ 50mΩ (see note)
耐電壓 Test voltage	同極不相接端子間 Between terminals of the same polarity	AC1000V, 50/60Hz, 1min
	帶電金屬零件與地(外殼)之間、接線端與不帶電金屬件之間 Between current-carrying metal parts and ground(case), and between each terminal and non-current-carrying metal parts.	AC1500V, 50/60Hz, 1min
抗振動 Vibration resistance		10 ~ 55Hz, 1.5mm雙振幅 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: 500m/s <sup>2</sup> (約50G)max 故障: 動作力 > 0.5N: 300m/s <sup>2</sup> (約30G)max 動作力 ≤ 0.5N: 200m/s <sup>2</sup> (約20G)max Destruction: OF > 0.5N: 1000m/s <sup>2</sup> (approx.100G)max OF ≤ 0.5N: 500m/s <sup>2</sup> (approx.50G)max Malfunction: OF > 0.5N: 300m/s <sup>2</sup> (approx.30G)max OF ≤ 0.5N: 200m/s <sup>2</sup> (approx.20G)max
壽命 Life		機械 ≥ 1,000,000次; Mechanical ≥ 1,000,000 cycles 電氣 ≥ 10,000次; Electrical ≥ 10,000 cycles 電氣 ≥ 50,000次(TUV); Electrical ≥ 50,000 cycles(TUV)
質量 Weight		約1.6g(無動臂型) Approx. 1.6g(No lever)
安全認證 Safety approvals		UL、CUL、VDE、TUV、SEMKO、CE、EK、CQC

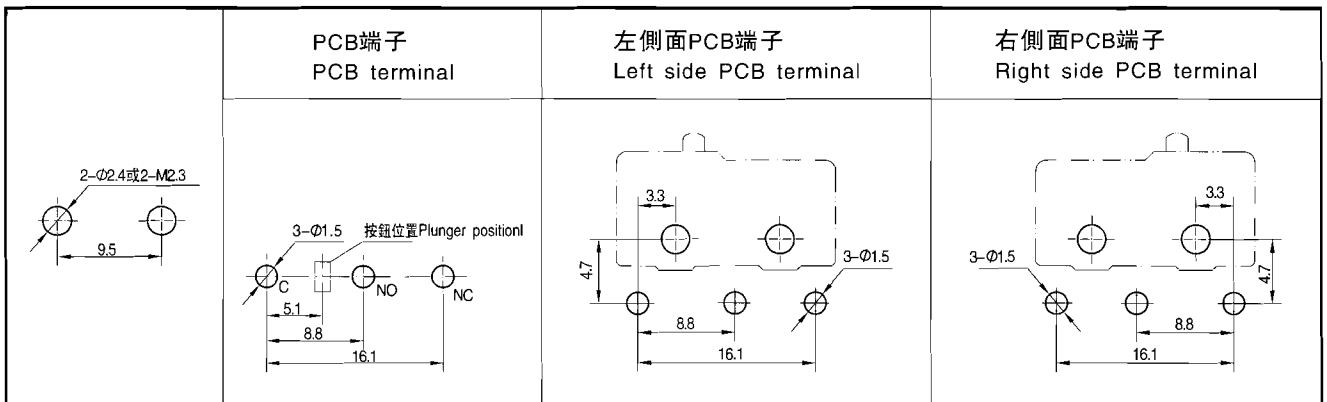
注：指無動臂時按鈕上的動作力。 Note: Refers to the operating force of no lever.



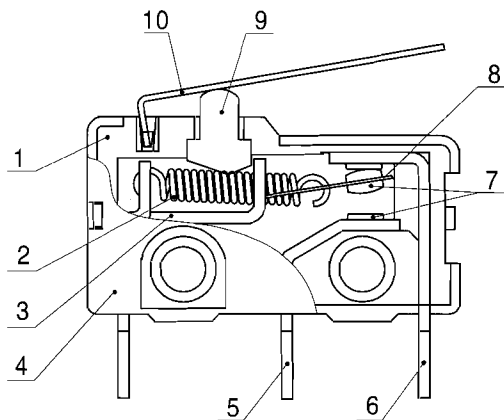
◆ 接線端尺寸 Terminal dimensions



◆ 安裝孔尺寸 Mounting hole dimension



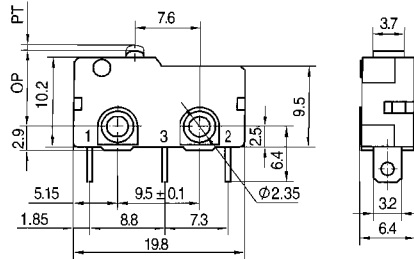
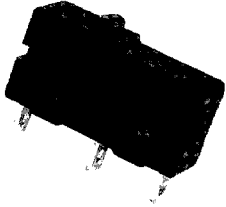
◆ 內部構造圖 Internal configuration drawing



- |           |              |
|-----------|--------------|
| 1:基座      | Case         |
| 2:拉簧      | Pull spring  |
| 3:支架      | Support      |
| 4:蓋       | Cover        |
| 5:常開端子    | NO terminal  |
| 6:常閉端子    | NC terminal  |
| 7:電觸點     | Contact      |
| 8:可動片     | Moving piece |
| 9:開關子(按鈕) | Plunger      |
| 10:動臂     | Lever        |

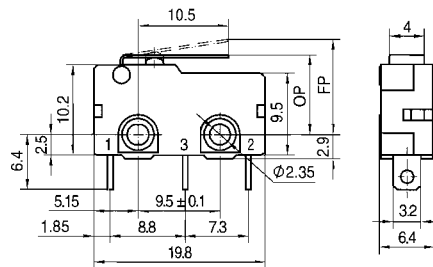
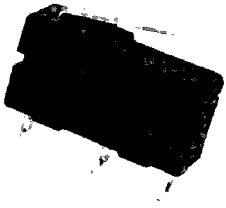
## ◆ 外形尺寸和動作特性 Dimensions and operating characteristics

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



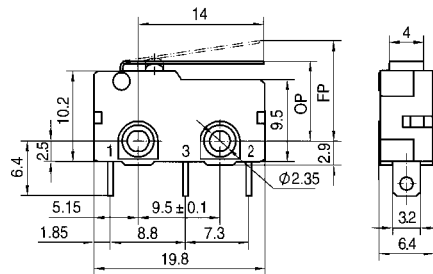
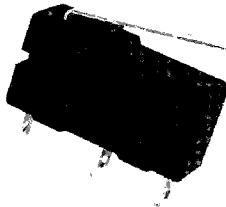
型號 Model	KW4A(S)-Z0F100	KW4A(S)-Z0F150	KW4A(S)-Z0F200	KW4A(S)-Z0F300
OF Max(N)	1.00	1.50	2.00	3.00
RF Min(N)	0.15	0.30	0.50	0.70
PT Max(mm)	0.8			
OT Min(mm)	0.5			
MD Max(mm)	0.2			
OP(mm)	8.6 ± 0.4			

KW4A(S)-Z1F100  
 KW4A(S)-Z1F150  
 KW4A(S)-Z1F200  
 KW4A(S)-Z1F300



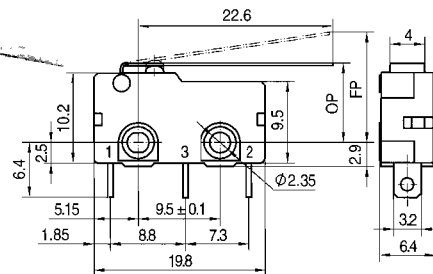
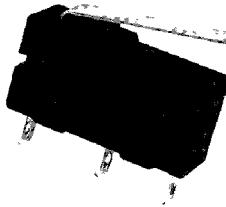
型號 Model	KW4A(S)-Z1F100	KW4A(S)-Z1F150	KW4A(S)-Z1F200	KW4A(S)-Z1F300
OF Max(N)	0.40	0.50	0.60	0.80
RF Min(N)	0.10	0.15	0.20	0.30
OT Min(mm)	1.0			
MD Max(mm)	0.6			
FP Max(mm)	11.5			
OP(mm)	9 ± 0.8			

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



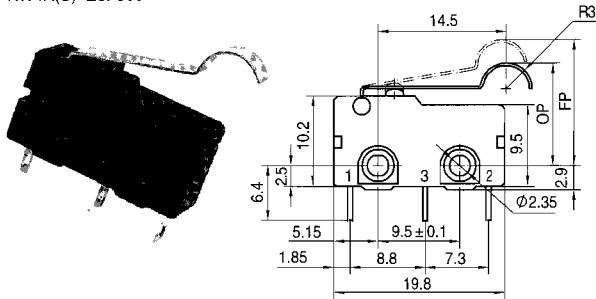
型號 Model	KW4A(S)-Z3F100	KW4A(S)-Z3F150	KW4A(S)-Z3F200	KW4A(S)-Z3F300
OF Max(N)	0.25	0.40	0.50	0.80
RF Min(N)	0.04	0.08	0.15	0.20
OT Min(mm)	0.8			
MD Max(mm)	0.8			
FP Max(mm)	12.5			
OP(mm)	8.9 ± 1			

KW4A(S)-Z2F100  
 KW4A(S)-Z2F150  
 KW4A(S)-Z2F200  
 KW4A(S)-Z2F300



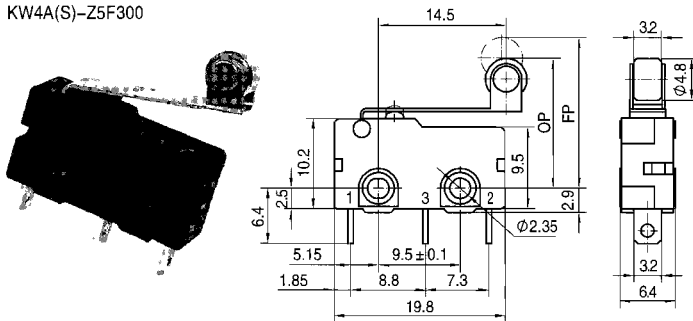
型號 Model	KW4A(S)-Z2F100	KW4A(S)-Z2F150	KW4A(S)-Z2F200	KW4A(S)-Z2F300
OF Max(N)	0.20	0.30	0.35	0.45
RF Min(N)	0.03	0.08	0.10	0.15
OT Min(mm)	1.6			
MD Max(mm)	1.5			
FP Max(mm)	15.0			
OP(mm)	9 ± 1.5			

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



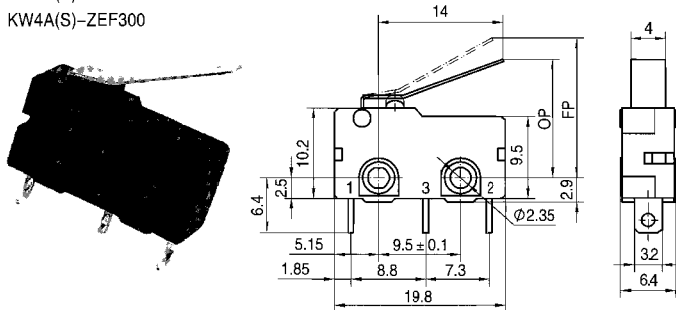
型號 Model	KW4A(S)-Z6F100	KW4A(S)-Z6F150	KW4A(S)-Z6F200	KW4A(S)-Z6F300
OF Max(N)	0.25	0.40	0.50	0.80
RF Min(N)	0.04	0.08	0.15	0.20
OT Min(mm)	1.5			
MD Max(mm)	0.8			
FP Max(mm)	16.5			
OP(mm)	13.4 ± 1			

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



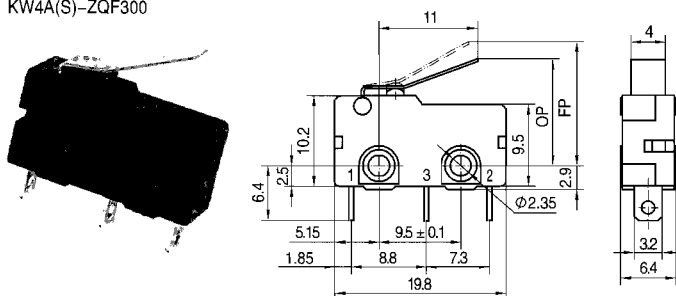
型號 Model	KW4A(S)-Z5F100	KW4A(S)-Z5F150	KW4A(S)-Z5F200	KW4A(S)-Z5F300
OF Max(N)	0.25	0.40	0.50	0.80
RF Min(N)	0.04	0.08	0.15	0.20
OT Min(mm)	1.2			
MD Max(mm)	0.9			
FP Max(mm)	19.0			
OP(mm)	15.2 ± 1			

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



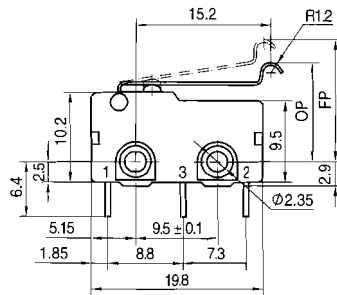
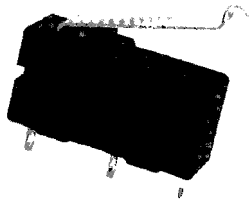
型號 Model	KW4A(S)-ZEF100	KW4A(S)-ZEF150	KW4A(S)-ZEF200	KW4A(S)-ZEF300
OF Max(N)	0.25	0.40	0.50	0.80
RF Min(N)	0.04	0.08	0.15	0.20
OT Min(mm)	1.2			
MD Max(mm)	0.8			
FP Max(mm)	16.5			
OP(mm)	13 ± 1			

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



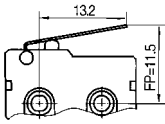
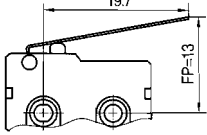
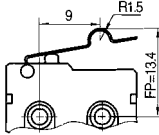
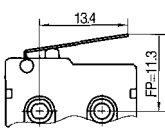
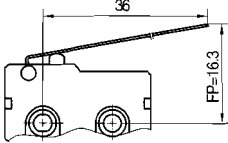
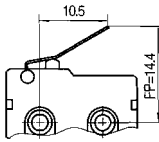
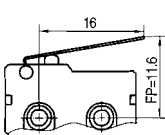
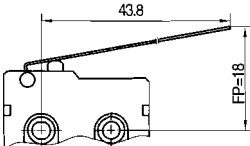
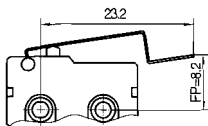
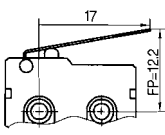
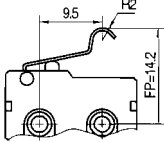
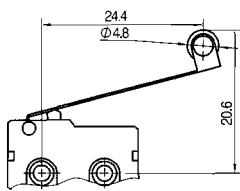
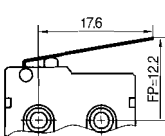
型號 Model	KW4A(S)-ZQF100	KW4A(S)-ZQF150	KW4A(S)-ZQF200	KW4A(S)-ZQF300
OF Max(N)	0.32	0.50	0.65	1.00
RF Min(N)	0.04	0.08	0.15	0.20
OT Min(mm)	1.0			
MD Max(mm)	0.8			
FP Max(mm)	15.0			
OP(mm)	12.2 ± 0.8			

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



型號 Model	KW4A(S)-Z6BF100	KW4A(S)-Z6BF150	KW4A(S)-Z6BF200	KW4A(S)-Z6BF300
OF Max(N)	0.25	0.40	0.50	0.80
RF Min(N)	0.04	0.08	0.15	0.20
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 levers for choose and outline characteristic dimension

動臂代號 Lever code	外形特征尺寸 Outline characteristic dimensions	動臂代號 Lever code	外形特征尺寸 Outline characteristic dimensions	動臂代號 Lever code	外形特征尺寸 Outline characteristic dimensions
<b>3A</b>		<b>C</b>		<b>K</b>	
<b>N</b>		<b>G</b>		<b>Q1</b>	
<b>J</b>		<b>F1</b>		<b>S1</b>	
<b>J1</b>		<b>6A</b>		<b>5A</b>	
<b>J2</b>		<b>6C</b>	