

## MS3型微動開關系列 Micro switch series

### ◆ 特點和用途 Characteristics and usage

- 帶保護功能  
Has protection function.
- 可在排水泵及類似設備上使用  
Can be used in drainage pump and such similar equipments.



### ◆ 技術特性 Technical Characteristics

項目 Item		特性值 Value
工作速度 Operating speed		0.1mm ~ 1m/s (無動臂時 No lever)
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		≤50mΩ
耐電壓 Test voltage	同極不相接端子間 Between not connect terminals of the same polarity	AC1000V,50/60Hz, 1min
	帶電金屬零件與地(外殼)之間、接綫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.	AC2000V , 50/60Hz, 1min
抗振動 Vibration resistance		10 ~ 55Hz, 1.5mm雙振幅 Double amplitude
抗衝擊 Shock resistance		耐久 endurance: 1000m/S <sup>2</sup> (約100G approx.100G)max 誤動作 Wrong action:300m/S <sup>2</sup> (約30G approx.30G)max
防觸電保護等級 Electric shock proof protection grade		II 級 class
壽命 Life		機械 ≥ 500,000 次; Mechanical ≥ 500,000 cycles 電氣 ≥ 50,000 次; Electrical ≥ 50,000 cycles
安全認證 Safety approvals		UL、CUL、ENEC、DEMKO、EK、CQC

#### 微動開關系列 MICRO SWITCH SERIES

KW3A

KW4A

KW4A(S)

KW10

MS1

MS2

**MS3**

MS5

MS10

#### 防水開關系列 WATERPROOF SWITCH SERIES

WS1

WS1L

WS2

WS3

WS4

WS5

WS6

WS7

#### 電源開關系列 POWER SWITCH SERIES

KDC-A11

KDC-A04

PS4

PS5

PS6

RS1

RS2

RS3

#### 其他開關系列 OTHER SWITCH SERIES

SP02

KXZ2

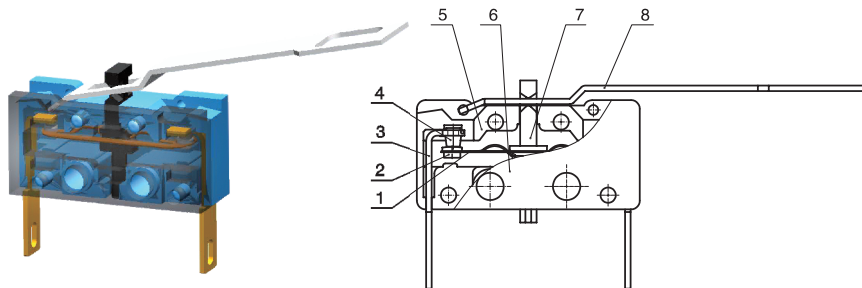
PRS1

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

MS3 □-□□□□-□□□-□  
1 2 3 4 5 6 7 8 9

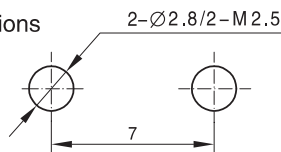
<b>1</b> 溫度等級 Degree of temperature	無標記 No mark: T85	<b>6</b> 端子類型 Terminal types	T:快接端子 Quick-connect terminal Y:非標準端子 Not standard terminal
<b>2</b> 額定值 Ratings	無標記 No mark: 6A125V/250VAC 6GPA125/250VAC 6(3)A125/250VAC 6RA125/250VAC 1/4hp250VAC 1/8hp125VAC	<b>7</b> 動作力(max) Operating force	50: 0.5N 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> 接觸形式 Circuit	D:常閉(按斷)式 SPST-NC	<b>8</b> 按鈕規格 Plunger specs	無標記 No mark: 標準按鈕 standard lever
<b>4</b> 驅動形式 Actuator forms	0:無動臂 No lever 1:標準動臂 Short lever □非標準動臂 Not standard lever 注: □表示非標準動臂的代號, B表示動臂安裝在離按鈕的遠端。 Note: □ Indicate not standard lever, B indicate the lever far away from the plunger	<b>9</b> 附加規格代號 Append specs code	適用於 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. ■ 附加規格代號用阿拉伯數字表示, 在沒有附加規格編號時, 該位置空缺。 Additional specs number shows by Arabic numerals. If there is no additional numbers, the place is vacant.
<b>5</b> 端子位置 Terminal position	A:下面 Below		

◆ 內部構造圖 Internal configuration drawing



- 1: 可動片 Moving piece
- 2: 電觸點 Contact
- 3: 常開端子 NO terminal
- 4: 電觸點 Contact
- 5: 基座 Case
- 6: 蓋 Cover
- 7: 按鈕 Plunger
- 8: 動臂(杠杆) Lever

◆ 安裝孔尺寸 Mounting hole dimensions



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MICRO SWITCH SERIES
- KW3A
- KW4A
- KW4A(S)
- KW10
- MS1
- MS2
- MS3**
- MS5
- MS10

- 防水開關系列  
WATERPROOF SWITCH SERIES
- WS1
- WS1L
- WS2
- WS3
- WS4
- WS5
- WS6
- WS7

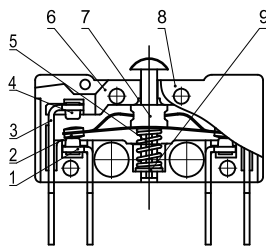
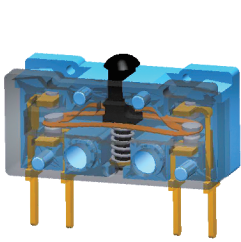
- 電源開關系列  
POWER SWITCH SERIES
- KDC-A11
- KDC-A04

- PS4
- PS5
- PS6
- RS1
- RS2
- RS3

- 其他開關系列  
OTHER SWITCH SERIES
- SP02
- KXZ2
- PRS1

Since 1995, we focus on switches

◆ 內部構造圖 Internal configuration drawing

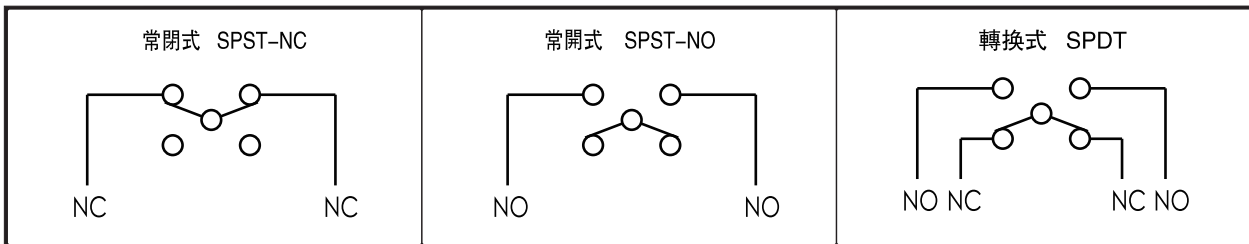


- |         |              |
|---------|--------------|
| 1: 常閉端子 | NC terminal  |
| 2: 電觸點  | Contact      |
| 3: 常開端子 | NO terminal  |
| 4: 電觸點  | Contact      |
| 5: 彈簧   | Spring       |
| 6: 基座   | Case         |
| 7: 按鈕   | Plunger      |
| 8: 蓋    | Cover        |
| 9: 墊圈   | Cushion ring |

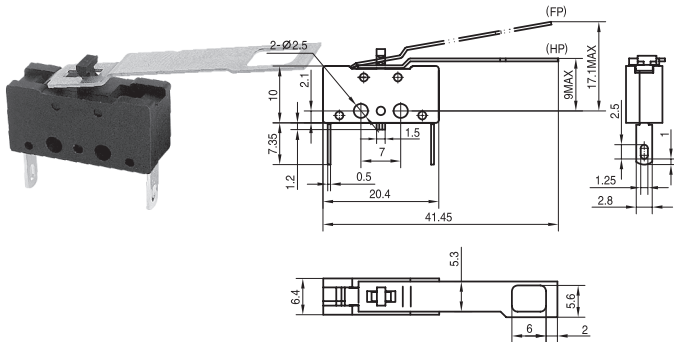
◆ 接線端配置及尺寸 Connect terminals collocation and dimensions

P PCB端子 PCB terminal	T 快接端子 Quick connect terminal

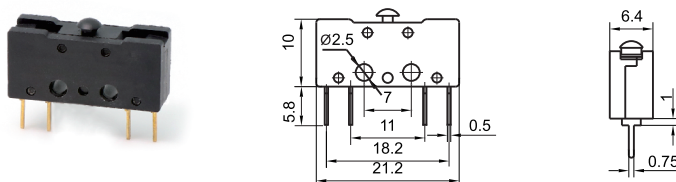
◆ 接觸形式說明圖 Circuit illustration



MS3-D1A-T050



MS3-Z0A-P160B



型號 Model	MS3-D1A-T050
正向動作力 Positive direction operating force	0.10N MAX
反向動作力 Negative direction operating force	0.07N MAX
正向行程 Positive direction travel	7mm MAX
反向行程 Negative direction travel	5.5mm MAX
正向自由位置 Positive direction free position	17.1mm MAX
反向自由位置 Negative direction free position	9mm MAX
正向動作位置 Positive direction operating position	10.1 ± 0.3mm
反向動作位置 Negative direction operating position	13.5 ± 0.3mm

型號 Model	MS3-Z0A-P160B
OF MAX(N)	1.60
RF MIN(N)	0.40
PT MAX(mm)	1.0
OP(mm)	8.4 ± 0.4

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