

WS5型防水開關系列 Waterproof switch series

◆ 特點和用途 Characteristics and usage

- 體形小巧，結構緊湊；長行程，防塵，防水。

Small size, compact structure, long travel, dustproof, waterproof.

- 接線端子種類齊全，可配備各種導線。

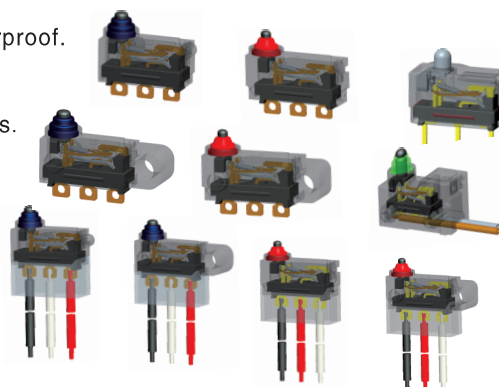
A variety of contact terminals, provide with a variety of wires.

- 配備各種形式動臂

A variety of levers

- 可在汽車、家用電器、工業控制設備等有耐環境性能要求的場合及戶外設備、儀器中使用。

Can be used in environmental resistant requirements application, outdoor equipments such as automobile, home appliances, industrial control equipment etc.



◆ 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 25cycles/min
絕緣電阻 Insulation resistance		$\geq 100M\Omega$ (500VDC)
接觸電阻 Contact resistance		端子型Terminal type $\leq 50m\Omega$ 導線型Wire type $\leq 100m\Omega$ (24#, L $\leq 200mm$)
耐電壓 Test voltage	同極不相接端子間 Between terminals of the same polarity	AC600V, 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.	AC1000V, 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 ² (約100G approx.100G)max 誤動作Wrong action: 300m/s ² (約30G approx.30G)max
防触电保护等级 Electric shock proof protection degree		I 級class
外殼防護等級 Case protection degree		IEC IP67 (端子型的端子部位除外Except terminal part of terminal type) 或其它等級Or other degrees
壽命 life		機械 $\geq 500,000$ 次 Mechanical $\geq 500,000$ cycles 電氣 $\geq 100,000$ 次 Electrical $\geq 100,000$ cycles
安全認證 Safety approvals		UL/CUL、TUV、CE、CQC

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

WS5□-□ □ □-□ □ □-□ □- (□)
1 2 3 4 5 6 7 8 9 10

1 溫度等級 Degree of temperature	無標記No mark: 40T130	7 安裝構造 Mounting construction	A:定位銷(雙面各1) ; dowel pin (each one for double sides); AL:左2定位銷; left 2dowel pin; AR:右2定位銷; right 2dowel pin; AA:雙面各2定位銷 each 2 for double sides dowel pin AC:左1定位銷 left 1 dowel pin AD:右1定位銷 right 1 dowel pin B:M3螺釘固定 M3 screw fixed L:左固定銷 left side fixing pin R:右固定銷 right side fixing pin W:無孔無銷 without hole and pin CL:外形Ⅱ 左固定銷; shapeⅡ left side fixing pin (外形Ⅱ 用于WS5-30 shapeⅡ for WS5-30) CR:外形Ⅱ 右固定銷; shapeⅡ right side fixing pin (外形Ⅱ 用于WS5-30 shapeⅡ for WS5-30) DL:外形Ⅱ 左定位銷; shapeⅡ left dowel pin (外形Ⅱ 用于WS5-30 shapeⅡ for WS5-30) DR:外形Ⅱ 右定位銷; shapeⅡ right dowel pin (外形Ⅱ 用于WS5-30 shapeⅡ for WS5-30) CW:外形Ⅱ 無孔無銷; shapeⅡ without hole and pin (外形Ⅱ 用于WS5-30 shapeⅡ for WS5-30) E:外形Ⅱ M3螺釘固定; shapeⅡ M3 screw fixed (外形Ⅱ 用于WS5-30 shapeⅡ for WS5-30) DD:外形Ⅱ 雙面各2定位銷; shapeⅡ each 2 for double sides(外形Ⅱ 用于WS5-30) (外形Ⅱ 用于WS5-30 shapeⅡ for WS5-30) FL:外形Ⅲ 左固定銷; shapeⅢ left side fixing pin (外形Ⅲ 用于WS5-40 shapeⅢ for WS5-40) 注: 原外形: 長14.7/寬5.4/高6.8; 外形Ⅱ: 長13.3/寬5.3/高6.5; 外形Ⅲ: 長20/寬6.95/高12.3 Note: original shape:Lenth14.7/ width:5.4/ height:6.8 shapeⅡ :Lenth13.3/ width:5.3 /height:6.8 shapeⅢ:Lenth20 /width:6.95 /height:12.3
2 額定值 Ratings	無標記No mark: 0.1A48VDC 125/250VAC; 3A 12VDC		
3 接觸形式 Circuit	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 illustration)		
4 驅動形式 Actuator forms	0:無動臂No lever 3:直動臂Straight lever 6:弧形動臂Arc lever □:非標準動臂not standard lever 注: 1) □ 表示非標準動臂的代號。 2) 若動臂為內安裝式, 則在動臂代號後加注字母N。 Note: 1) □ Indicate not standard lever. 2) If lever is amoundard inside, add letter “N” after the lever code.		
5 端子類型 Terminal types	F:焊接端子(長2.4)Solder terminal(L2.4) FC:長焊接端子(長3.5)Solder terminal (L3.5) P:PCB端子PCB terminal PD:短PCB端子Short PCB terminal PL:左PCB端子Left PCB terminal PR:右PCB端子Right PCB terminal B:底部導綫型Bottom wire type L:左面導綫型(左右的定義見圖示) Left side wire type (definition of right and left is shown in diagram) R:右面導綫型Right side wire type Y:非標準端子Not standard terminal	8 導綫型端子的導綫長度(毫米數) Wire length of wire type terminal (mm)	非導綫型該位置空缺 Vacant for non-wire type
6 動作力(max) Operating force	100: 1.00N 130:1.30N 195:1.95N 220:2.20N 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.	9 防護等級 Protection degree	無標記No mark: IP67 (端子型,端子處除外Except terminal part of terminal type) IP67 (導綫型 Wire leads type) IP□□: 其它等級 Other degrees

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

WS5□-□ □ □-□ □ □-□ □-□
1 2 3 4 5 6 7 8 9 10

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附加規格代號
及導線顏色配
置代號
Additional specs
code and wire
color 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.

3) 當導線顏色不是默認的配置顏色時。

When the wire color is not the default
color.

■ 附加規格代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.

■ 導線顏色配置代號: 用三個英文字
母按COM、NC、NO順序表示; 若
是常閉式或常閉式開關, 空缺位置用
字母O表示。(顏色代號: 紅-R、白
-W、黑-B、綠-G、藍-L、黃-M、
灰-H、紫-P)。

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附加規格代號
及導線顏色配
置代號
Additional specs
code and wire
color code

Wire color code: indicate with 3
letters, the order is COM、NC、
NO; If NO or NC, vacant place
shows 0. (Color code: red-R,
white-W, black-B, green-G,
blue-L, yellow-Y, grey-H,
purple-P)示例example: BWR ,
BOR , RWO

■ 若同時有附加規格代號和導線顏色
配置代號, 則導線顏色配置代號位于
附加規格代號之後。If there are
append specs code and wire
color code at the same time,
then the wire color code should
be after the append specs code.

示例example: 02BWR

■ 導線型開關的引線顏色默認配置規
定如下Wire color of wire type
switch is as follows:

公共端引線COM: 黑色

Common terminal wire COM: Black

常閉端引線NC: 紅色

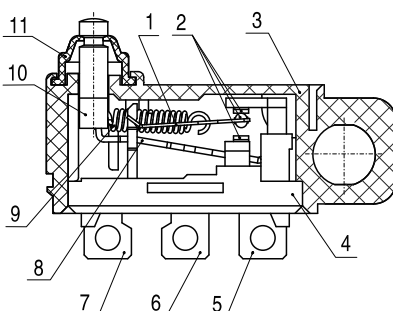
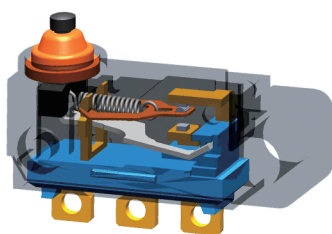
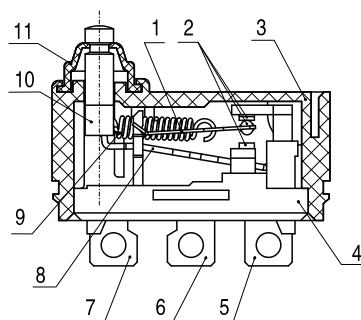
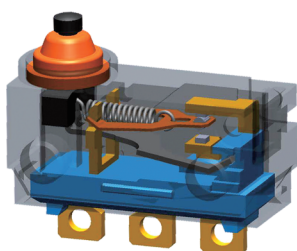
Normally closed terminal wire NC: Red

常開端引線NO: 白色

Normally opened terminal wire

NO: white

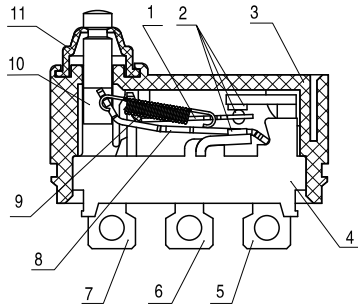
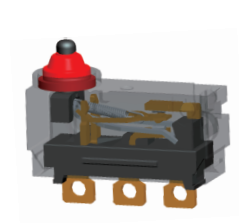
◆ 內部構造圖 Internal configuration drawing



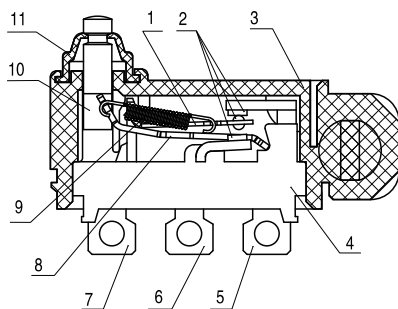
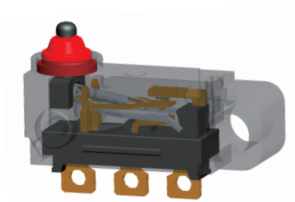
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|---------|---------------|
| 1: 可動片 | Moving piece |
| 2: 電觸點 | Contact |
| 3: 外殼 | Base |
| 4: 底座 | Case |
| 5: 常閉端子 | NC terminal |
| 6: 常開端子 | NO terminal |
| 7: 支架 | Support |
| 8: 杠杆 | Lever |
| 9: 拉簧 | Pull spring |
| 10: 按鈕 | Plunger |
| 11: 密封圈 | Hermetic loop |

WS5

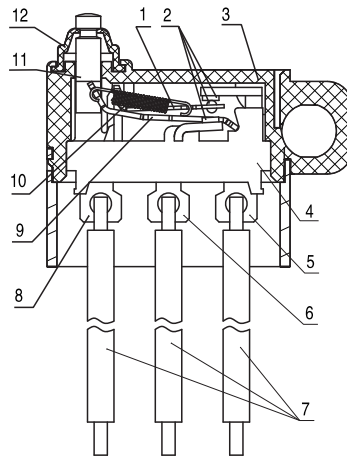
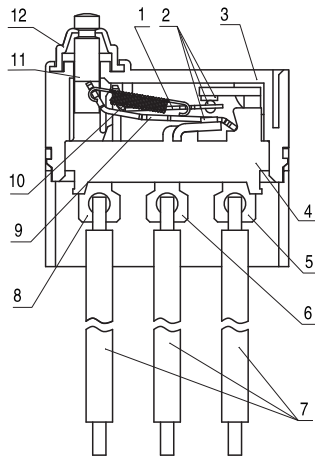
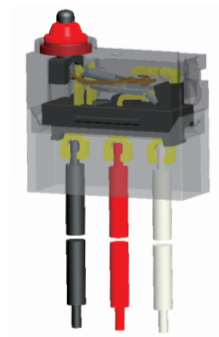
◆ 內部構造圖 Internal configuration drawing



- | | |
|--------|---------------|
| 1.可動片 | Moving piece |
| 2.電觸點 | Contact |
| 3.外殼 | Base |
| 4.底座 | Case |
| 5.常閉端子 | NC terminal |
| 6.常開端子 | NO terminal |
| 7.支架 | Support |
| 8.杠杆 | Lever |
| 9.拉簧 | Pull spring |
| 10.按鈕 | Plunger |
| 11.密封圈 | Hermetic loop |

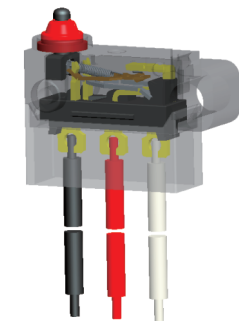


◆ WS5-2055 第二代防水罩灌膠型 Second-generation



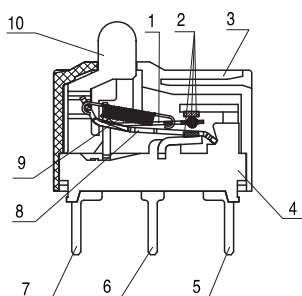
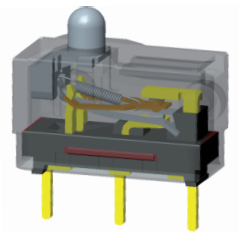
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|--------|--------------|
| 1.可動片 | Moving piece |
| 2.電觸點 | Contact |
| 3.外殼 | Base |
| 4.底座 | Case |
| 5.常閉端子 | NC terminal |
| 6.常開端子 | NO terminal |

- | | |
|--------|---------------|
| 7.導線 | Wire |
| 8.支架 | Support |
| 9.杠杆 | Lever |
| 10.拉簧 | Pull spring |
| 11.按鈕 | Plunger |
| 12.密封圈 | Hermetic loop |



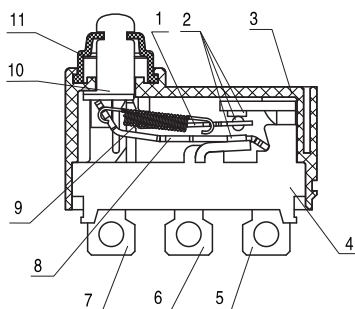
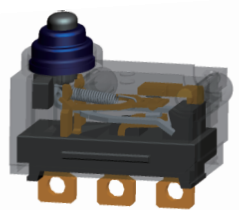
◆ WS5-IP40-2041 第二代IP40不防水型

Second-generation IP40

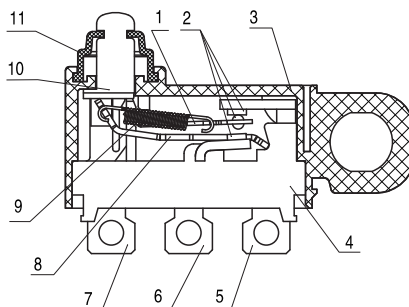
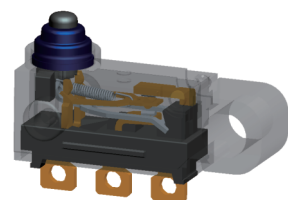


- | | |
|--------|--------------|
| 1.可動片 | Moving piece |
| 2.電觸點 | Contact |
| 3.外殼 | Base |
| 4.底座 | Case |
| 5.常閉端子 | NC terminal |
| 6.常開端子 | NO terminal |
| 7.支架 | Support |
| 8.杠杆 | Lever |
| 9.拉簧 | Pull spring |
| 10.按鈕 | Plunger |

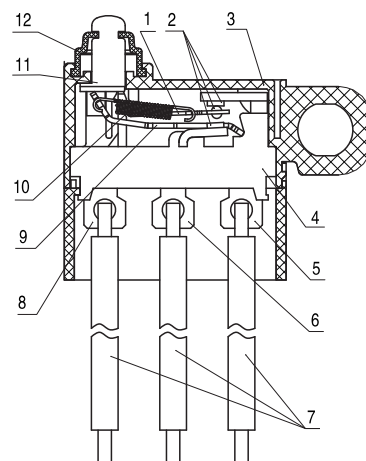
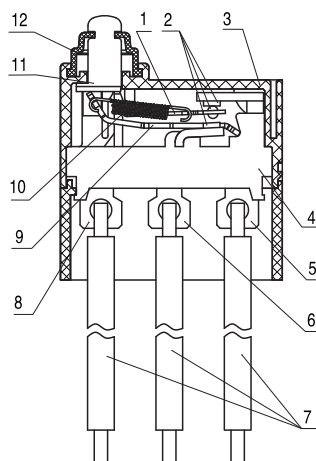
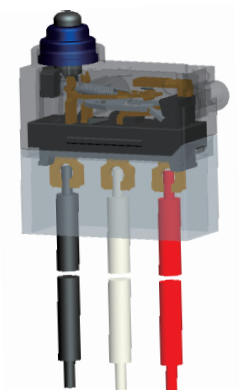
◆ WS5-30 第三代基本型 Third-generation



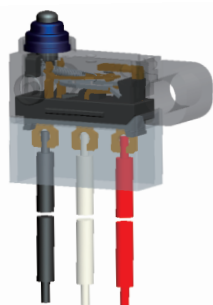
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|--------|---------------|
| 1.可動片 | Moving piece |
| 2.電觸點 | Contact |
| 3.外殼 | Base |
| 4.底座 | Case |
| 5.常閉端子 | NC terminal |
| 6.常開端子 | NO terminal |
| 7.支架 | Support |
| 8.杠杆 | Lever |
| 9.拉簧 | Pull spring |
| 10.按鈕 | Plunger |
| 11.密封圈 | Hermetic loop |



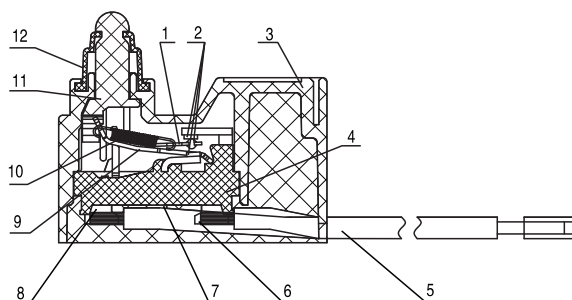
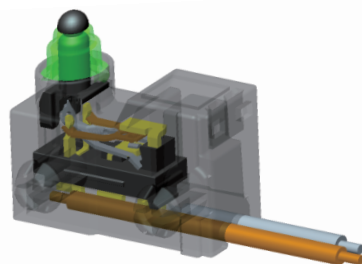
◆ WS5-3055 第三代防水罩灌膠型 Third-generation



■ **WS5-40 第四代灌膠型** Fourth-generation



- | | | | |
|--------|--------------|--------|---------------|
| 1.可動片 | Moving piece | 7.導綫 | Wire |
| 2.電觸點 | Contact | 8.支架 | Support |
| 3.外殼 | Base | 9.杠杆 | Lever |
| 4.底座 | Case | 10.拉簧 | Pull spring |
| 5.常閉端子 | NC terminal | 11.按鈕 | Plunger |
| 6.常開端子 | NO terminal | 12.密封圈 | Hermetic loop |



- | | | | |
|--------|--------------|--------|---------------|
| 1.可動片 | Moving piece | 7.常開端子 | NO terminal |
| 2.電觸點 | Contact | 8.支架 | Support |
| 3.外殼 | Base | 9.杠杆 | Lever |
| 4.底座 | Case | 10.拉簧 | Pull spring |
| 5.導綫 | Wire | 11.按鈕 | Plunger |
| 6.常開端子 | NO terminal | 12.密封圈 | Hermetic loop |

F: 焊接端子(L2.4) F:Solder terminal(L2.4)	FC: 長焊接端子(L3.5) FC:Long Solder terminal(L3.5)	FW: 焊接端子(無孔) FW:Solder terminal(without hole)	
P: PCB端子(L4.2) P:PCB terminal(L4.2)	PD: 短PCB端子(L3.1) PD:Short PCB terminal(L3.1)	PL: 左PCB端子 PL:Left side PCB terminal	PR: 右PCB端子 P:Right side PCB terminal

◆ 接線端尺寸 Terminal dimensions

B:底部導線型 B:Bottom wire type	L:左面導線型 L:Left side wire type	R:右面導線型 R:Right side wire type

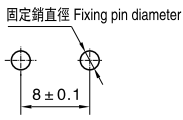
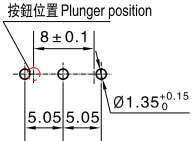
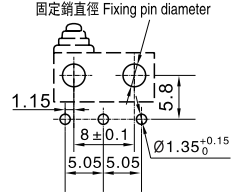
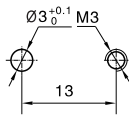
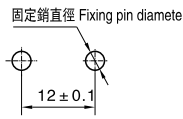
◆ 接觸形式說明圖 Circuit illustration

	Z:轉換式 SPDT	T:常開式 SPST-NO	D:常閉式 SPST-NC

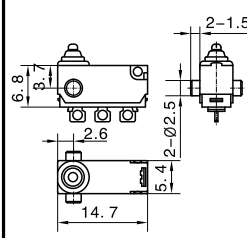
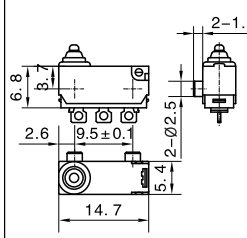
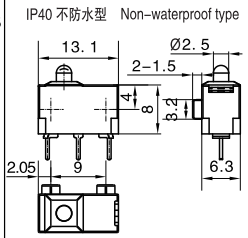
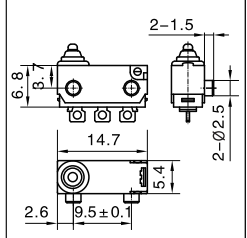
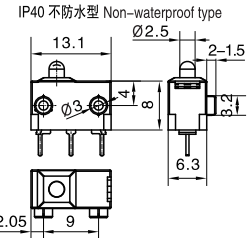
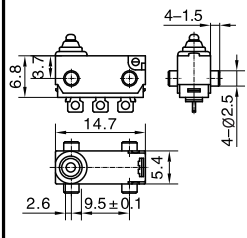
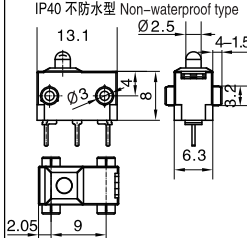
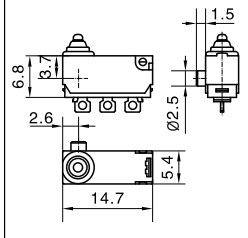
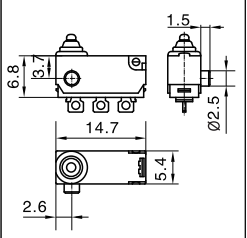
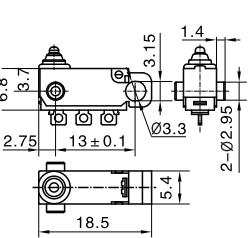
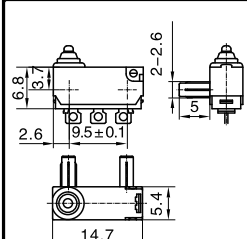
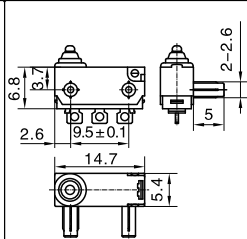
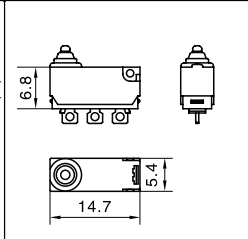
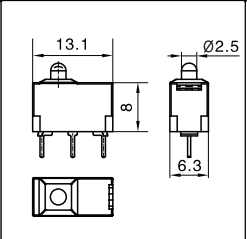
◆ 安裝孔尺寸 Mounting hole dimension

	定位銷/固定銷間距 Dowel pin / fixing pin distance	直PCB端子安裝孔 Straight PCB terminal mounting hole	左右PCB端子安裝孔 Left and right PCB terminal mounting hole	M3螺釘安裝孔 M3 screw mounting hole
WS5 WS5-20				
WS5-IP40 -2041				

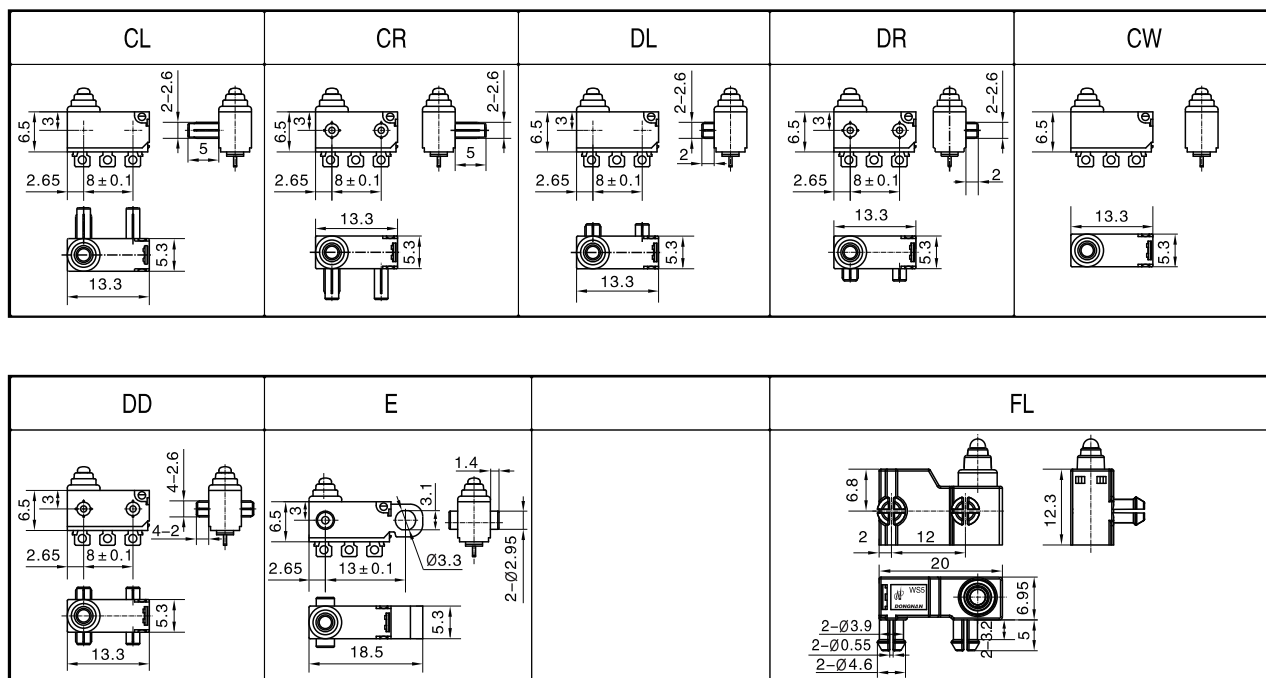
◆ 安裝孔尺寸 Mounting hole dimension

	定位銷/固定銷間距 Dowel pin / fixing pin distance	直PCB端子安裝孔 Straight PCB terminal mounting hole	左右PCB端子安裝孔 Left and right PCB terminal mounting hole	M3螺釘安裝孔 M3 screw mounting hole
WS5 WS5-20				
WS5-IP40 -2041				

◆ 安裝構造說明圖 Mounting construction illustration

A	AL		AR	
		IP40 不防水型 Non-waterproof type 		IP40 不防水型 Non-waterproof type 
AA	AC	AD	B	
	IP40 不防水型 Non-waterproof type 			
L	R	W		
				

◆ 安裝構造說明圖 Mounting construction illustration

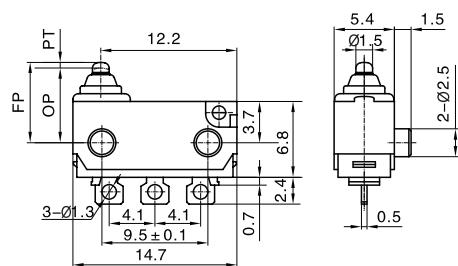
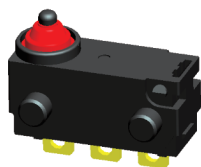


◆ 外形尺寸和動作特性 Dimensions and operating characteristics

WS5 第一代和WS5-20 第二代 WS5 first-generation and WS5-20 second-generation

定位銷型 Dowel pin type

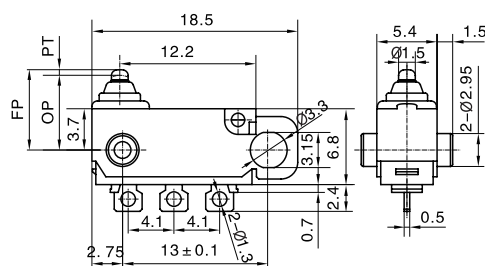
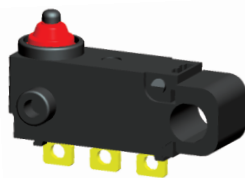
WS5-Z0-□130□-□□



型號 Model	安裝柱型 with posts
FP Max(mm)	7.35
OP (mm)	6.75 ± 0.2
PT Max(mm)	0.8
OT Min(mm)	0.8
MD Max(mm)	0.2
OF Max(N)	1.30
RF Min(N)	0.13

M3螺釘固定型 M3 screw fixed type

WS5-Z0-□130B-□□

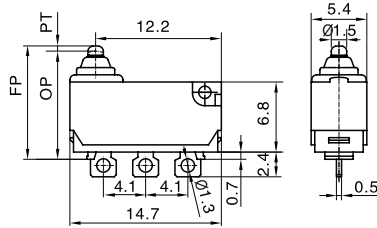
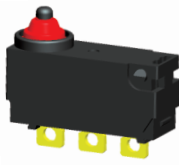


型號 Model	M3螺釘固定型M3 screw fixed
FP Max(mm)	7.35
OP (mm)	6.75 ± 0.2
PT Max(mm)	0.8
OT Min(mm)	0.8
MD Max(mm)	0.2
OF Max(N)	1.30
RF Min(N)	0.13

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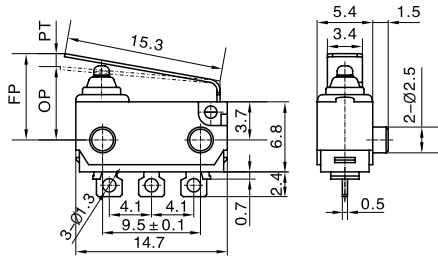
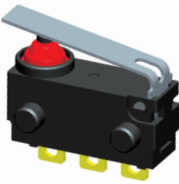
◆ 外形尺寸和動作特性 Dimensions and operating characteristics

無孔無銷型 Without hole and pin type
WS5-Z0-□130W-□□



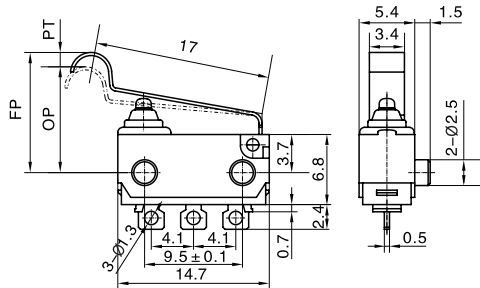
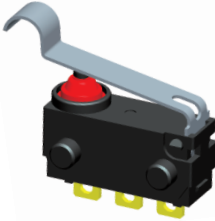
型號 Model	無安裝柱型 without posts
FP Max(mm)	11.2
OP (mm)	10.55 ± 0.2
PT Max(mm)	0.8
OT Min(mm)	0.8
MD Max(mm)	0.2
OF Max(N)	1.30
RF Min(N)	0.13

3N動臂型 Models with 3N Lever
WS5-Z3N-□130□-□□



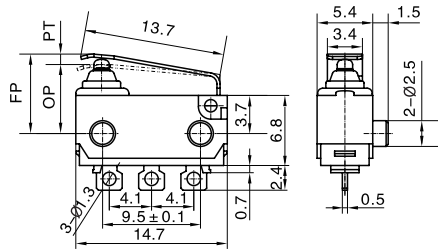
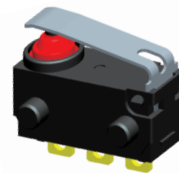
型號 Model	安裝柱型 with posts	M3螺釘固定型 M3 screw fixed	無安裝柱型 without posts
FP Max(mm)	10.5		14.3
OP (mm)	7.4 ± 0.6		11.2 ± 0.6
PT Max(mm)	3.5		
OT Min(mm)	1.35		
MD Max(mm)	0.6		
OF Max(N)	1.95		
RF Min(N)	0.25		

6N動臂型 Models with 6N Lever
WS5-Z6N-□130□-□□



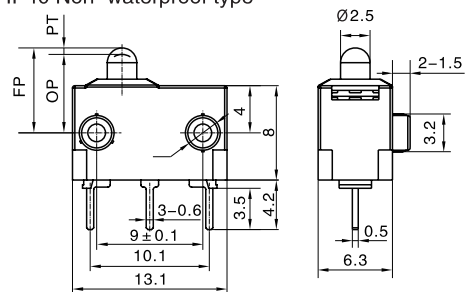
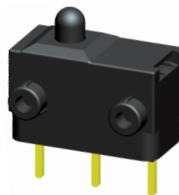
型號 Model	安裝柱型 with posts	M3螺釘固定型 M3 screw fixed	無安裝柱型 without posts
FP Max(mm)	13.5		17.3
OP (mm)	10.7 ± 0.7		14.5 ± 0.7
PT Max(mm)	3.8		
OT Min(mm)	1.5		
MD Max(mm)	0.7		
OF Max(N)	1.8		
RF Min(N)	0.2		

AN動臂型 Models with AN Lever
WS5-ZAN-□130□-□□



型號 Model	安裝柱型 with posts	M3螺釘固定型 M3 screw fixed	無安裝柱型 without posts
FP Max(mm)	9.4		13.2
OP (mm)	7.1 ± 0.5		10.9 ± 0.5
PT Max(mm)	3.0		
OT Min(mm)	0.8		
MD Max(mm)	0.5		
OF Max(N)	2.20		
RF Min(N)	0.30		

WS5-20 第二代IP40不防水型
Second-generation IP40 Non-waterproof type
定位銷型 Dowel pin type
WS5-Z0-□100□-IP40-2041-□

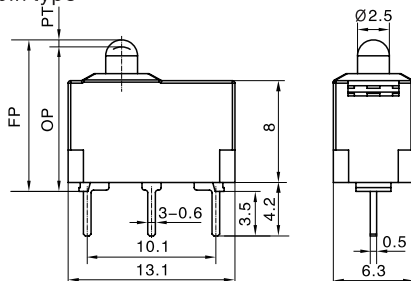
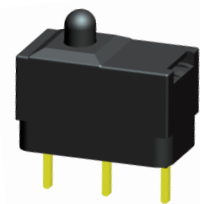


型號 Model	安裝柱型 with posts
FP Max(mm)	7.3
OP (mm)	6.2 ± 0.3
PT Max(mm)	1.5
OT Min(mm)	0.5
MD Max(mm)	0.25
OF Max(N)	1.00
RF Min(N)	0.08

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

無孔無銷型 Without hole and pin type

WS5-Z0-□100W-IP40-2041-□

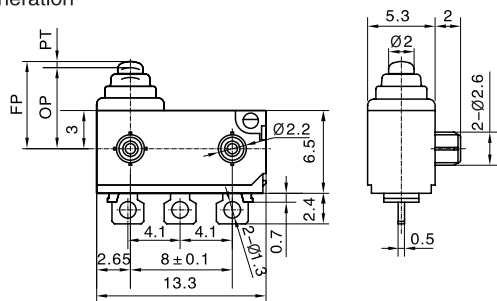
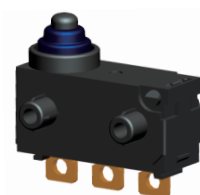


型號 Model	無安裝柱型 without posts
FP Max(mm)	12.0
OP (mm)	10.9 ± 0.3
PT Max(mm)	1.5
OT Min(mm)	0.5
MD Max(mm)	0.25
OF Max(N)	1.00
RF Min(N)	0.08

WS5-30 第三代 Third-generation

固定銷型 Models with posts

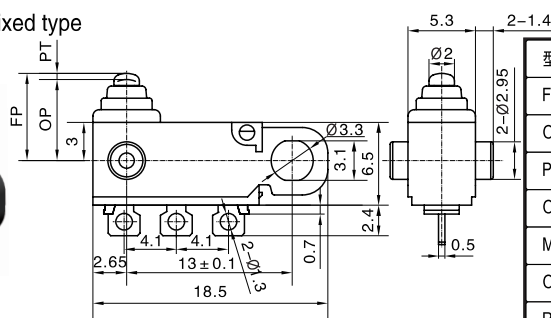
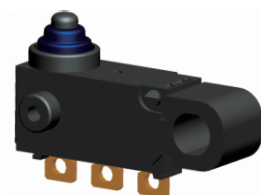
WS5-Z0-□130□-□-30□



型號 Model	安裝柱型 with posts
FP Max(mm)	7.2
OP (mm)	6.4 ± 0.2
PT Max(mm)	1.0
OT Min(mm)	0.8
MD Max(mm)	0.25
OF Max(N)	1.30
RF Min(N)	0.13

M3螺釘固定型 M3 screw fixed type

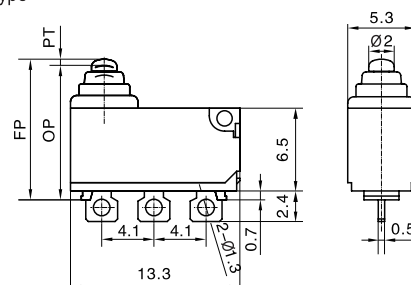
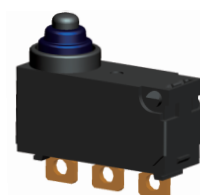
WS5-Z0-□130E-□-30□



型號 Model	M3螺釘固定型M3 screw fixed
FP Max(mm)	7.2
OP (mm)	6.4 ± 0.2
PT Max(mm)	1.0
OT Min(mm)	0.8
MD Max(mm)	0.25
OF Max(N)	1.30
RF Min(N)	0.13

無孔無銷型 Without hole and pin type

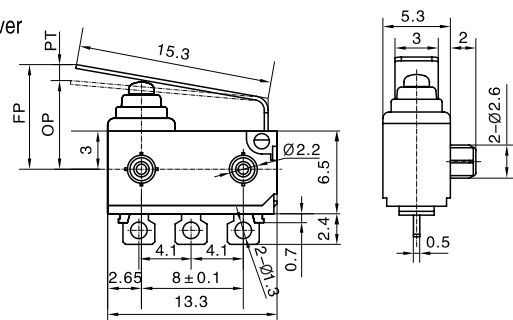
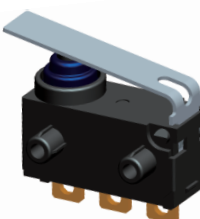
WS5-Z0-□130CW-□-30□



型號 Model	無安裝柱型 without posts
FP Max(mm)	11.4
OP (mm)	10.6 ± 0.2
PT Max(mm)	1.0
OT Min(mm)	0.8
MD Max(mm)	0.25
OF Max(N)	1.30
RF Min(N)	0.13

3N動臂型 Models with 3N Lever

WS5-Z0-□130□-□-30□

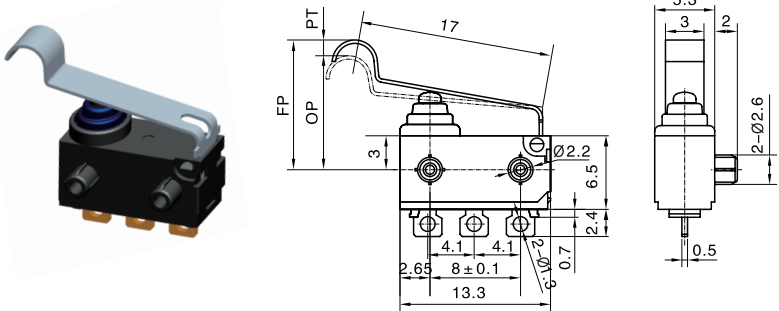


型號 Model	安裝柱型 with posts	M3螺釘固定型 M3 screw fixed	無安裝柱型 without posts
FP Max(mm)	10.0		14.2
OP (mm)	7.3 ± 0.6		11.5 ± 0.6
PT Max(mm)	3.5		
OT Min(mm)	1.35		
MD Max(mm)	0.6		
OF Max(N)	1.95		
RF Min(N)	0.25		

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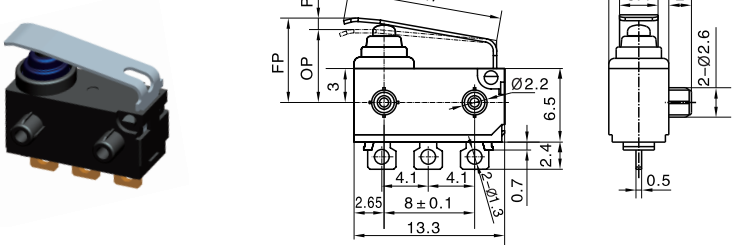
◆ 外形尺寸和動作特性 Dimensions and operating characteristics

6N動臂型 Models with 6N Lever
WS5-Z6N-□130□-□-30□



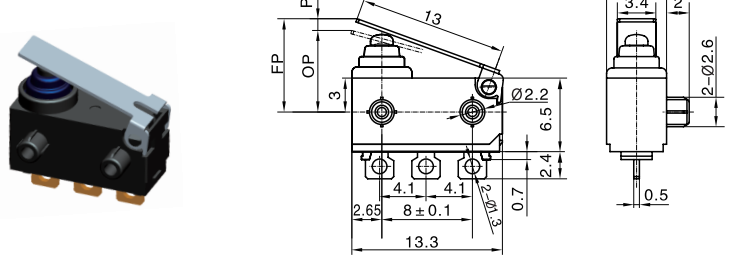
型號 Model	安裝柱型 with posts	M3螺釘固定型 M3 screw fixed	無安裝柱型 without posts
FP Max(mm)	12.8		17.0
OP (mm)	10.6 ± 0.7		14.8 ± 0.7
PT Max(mm)	3.8		
OT Min(mm)	1.5		
MD Max(mm)	0.7		
OF Max(N)	1.8		
RF Min(N)	0.2		

AN動臂型 Models with AN Lever
WS5-ZAN-□130□-□-30□



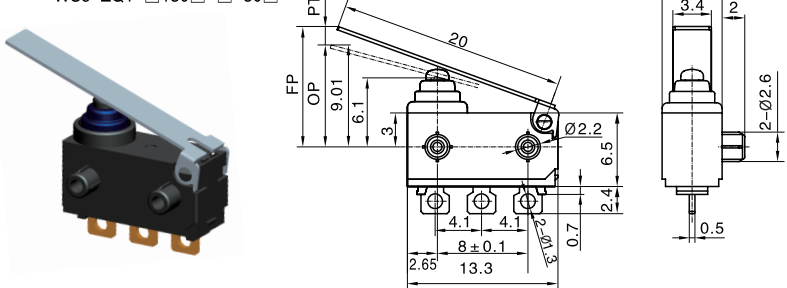
型號 Model	安裝柱型 with posts	M3螺釘固定型 M3 screw fixed	無安裝柱型 without posts
FP Max(mm)	8.6		12.8
OP (mm)	7.0 ± 0.5		11.2 ± 0.5
PT Max(mm)	3.0		
OT Min(mm)	0.8		
MD Max(mm)	0.5		
OF Max(N)	2.20		
RF Min(N)	0.30		

Q動臂型 Models with Q Lever
WS5-ZQ-□130□-□-30□



型號 Model	安裝柱型 with posts	M3螺釘固定型 M3 screw fixed	無安裝柱型 without posts
FP Max(mm)	8.8		13.0
OP (mm)	7.5 ± 0.5		11.7 ± 0.5
PT Max(mm)	1.8		
OT Min(mm)	0.8		
MD Max(mm)	0.5		
OF Max(N)	1.3		
RF Min(N)	0.13		

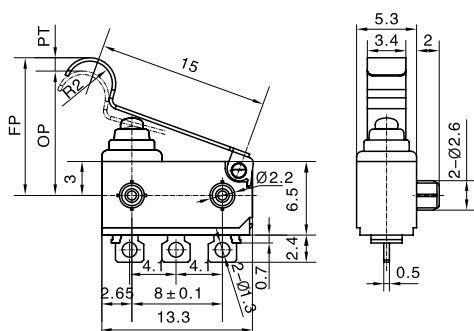
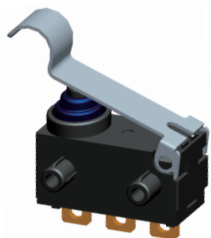
Q1動臂型 Models with Q1 Lever
WS5-ZQ1-□130□-□-30□



型號 Model	安裝柱型 with posts	M3螺釘固定型 M3 screw fixed	無安裝柱型 without posts
FP Max(mm)	11.5		15.7
OP (mm)	9.3 ± 0.8		13.5 ± 0.8
PT Max(mm)	3.0		
OT Min(mm)	1.5		
MD Max(mm)	0.8		
OF Max(N)	0.7		
RF Min(N)	0.05		

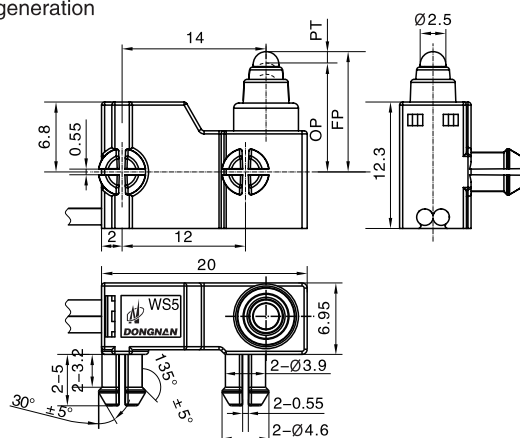
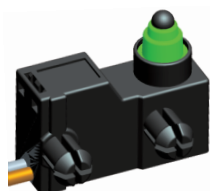
◆ 外形尺寸和動作特性 Dimensions and operating characteristics

R 動臂型 Models with R Lever
WS5-ZR-□130□-□-30□



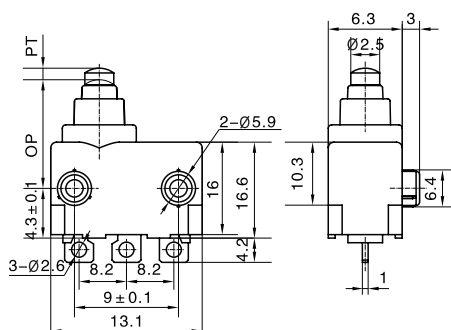
型號 Model	安裝柱型 with posts	M3螺釘固定型 M3 screw fixed	無安裝柱型 without posts
FP Max(mm)	12.5		16.7
OP (mm)	11.2 ± 0.5		15.4 ± 0.5
PT Max(mm)	2.0		
OT Min(mm)	1.0		
MD Max(mm)	0.5		
OF Max(N)	1.0		
RF Min(N)	0.8		

WS5-40 第四代 Forth-generation
固定銷型 Dowel pin type
WS5-D0-□195FL-□-40□



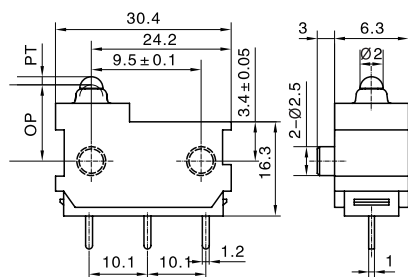
型號 Model	安裝柱型 with posts
FP Max(mm)	12.5
OP (mm)	10.6 ± 0.4
PT Max(mm)	1.5
OT Min(mm)	0.7
MD Max(mm)	0.6
OF Max(N)	1.95
RF Min(N)	0.25

WS5 特殊外型 Special type
WS5-Z0-F100AR-□



型號 Model	WS5-Z0-F100-X
OF Max(N)	1.5
RF Min(N)	0.3
PT Max(mm)	1.5
OT Min(mm)	0.7
MD Max(mm)	0.25
OP (mm)	9.4 ± 0.3

WS5-Z0-P100AL-□



型號 Model	WS5-Z0-P100-X
OF Max(N)	1.00
RF Min(N)	0.13
PT Max(mm)	0.8
OT Min(mm)	0.8
MD Max(mm)	0.2
OP (mm)	6.8 ± 0.2