

# MAXSEE

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## MAXSEE

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ACW 2019.02.1000CE

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# WIRE CUT



### MAIN STRUCTURE

- Symmetrical structure achieves rigidity & stability and capable of loading heavier work piece.
- FC35 fine grained cast iron and thermal balance feature.
- Stainless work table in square shape design, easy of use and able to load the work piece in any place.
- 1 μm resolution linear scales, reaching high accuracy and closed loop.
- Exclusive dual trace system by linear scales and encoder.
- Key components are using the top quality brands from Japan, Switzerland and Spain.
- Intense labor scraping on casting surface maintains machine's accuracy and life time endurance.

### 機台結構設計

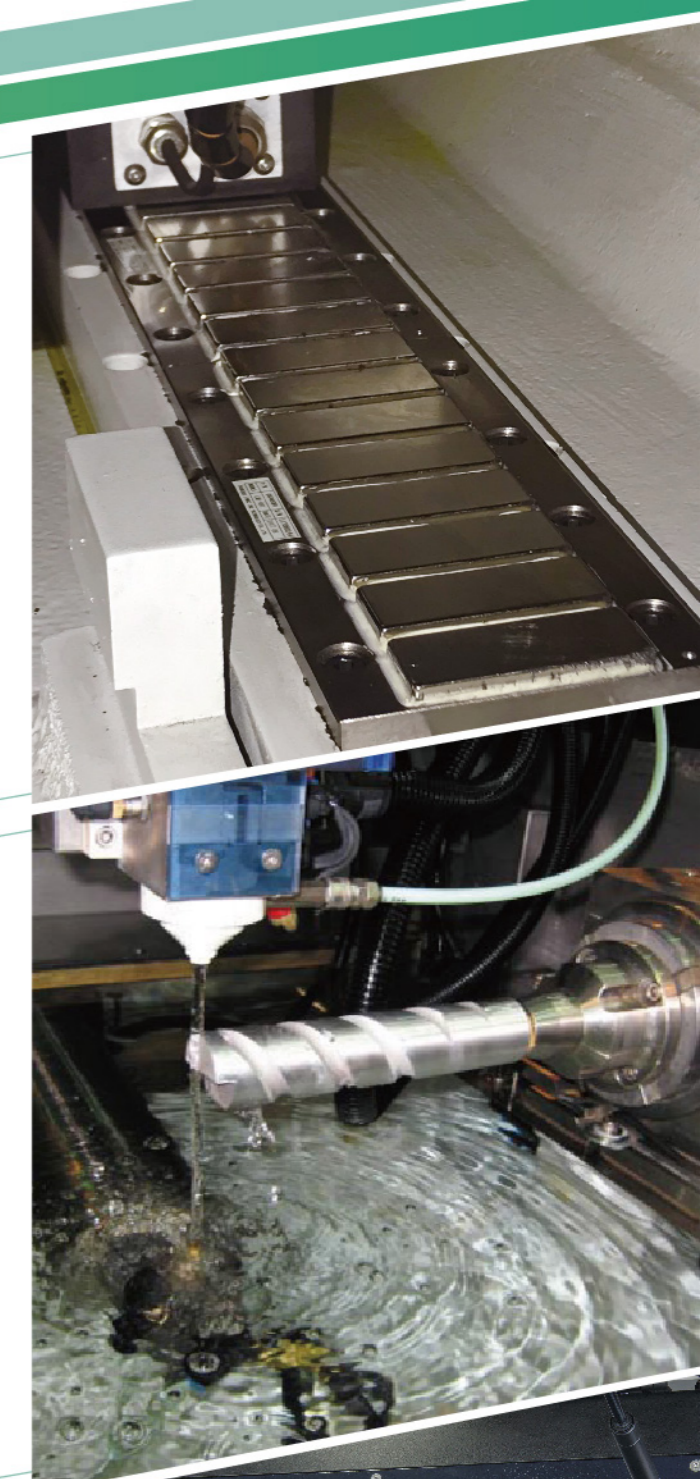
- 對稱性結構，達到高剛性與高穩定性，可承載較重的工件
- 採用 FC35 高級米漢那鑄鐵，具熱平衡特點
- 方型設計的不鏽鋼工作台面，使用便利，工件可裝於工作台之任何一處
- 高精度、全閉迴路的 1 μm 光學尺
- 獨特光學尺編碼器雙回溯系統
- 主要零配件皆採用日本、瑞士、西班牙製的高品質品牌
- 鑄件全面手工鏟花，機器精度佳，壽命長



### Linear Motors 線性馬達 (Optional 選配)

Comparing with tradition ball screw structure wire machine, linear motor has longer time accuracy persistence. Advantage of fast servo feedback, low wear, low gap and no temperature changes, the working efficiency and accuracy is superior. With 0.05μm high resolution optical scales, it will reach the high precision result in fine machining.

較傳統滾珠螺桿機台，線性馬達搭載機台有長時間精度保證，具高敏度伺服反應，低磨耗，無背隙，無溫差等優點，加工效率與精度也更加優異。搭配線馬使用 0.05 μm 高解析度光學尺，在細微加工上，更容易達到高精度之加工處理。



### The sixth axis full submerged indexing table 第六軸全浸水數控分度盤 (Optional 選配)

Built-in oil seal standard positive pressure design, water-proof rating up to IP68. With Yaskawa servo motor. The self-locking brake device has no power and can keep the workpiece processing from falling when there is no air pressure source.

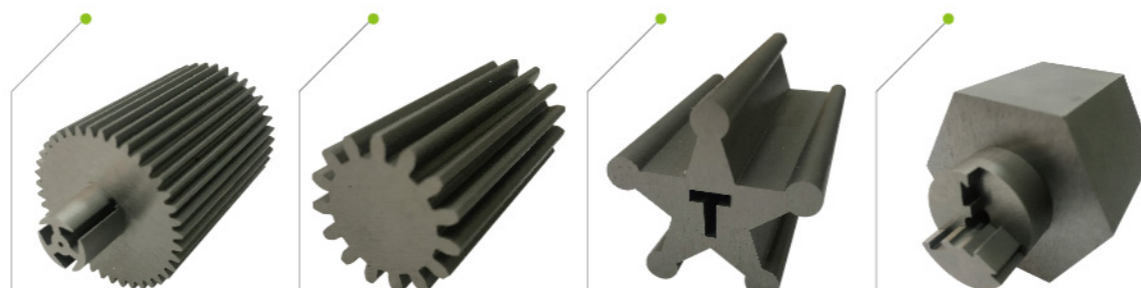
內建油封標準正壓設計，防水等級達IP68。配置安川伺服馬達。自鎖剎車裝置無動力，無氣壓源時能保持工件加工不掉落。



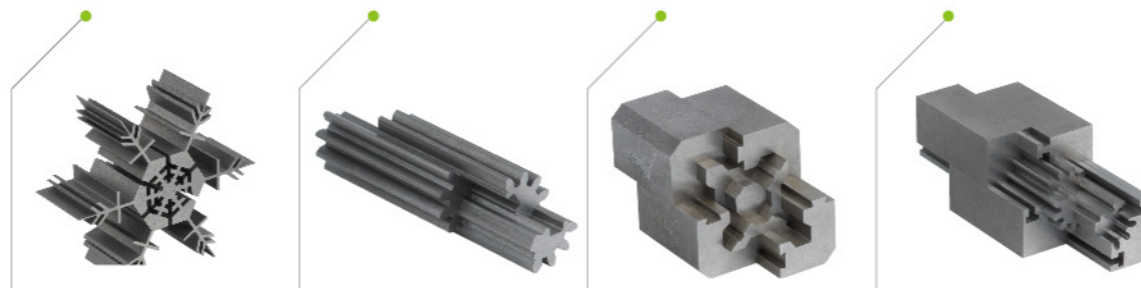
### AWT system 自動穿線 (For BSW series / BSW系列)

Total automation. Threading without emptying work tank's water, save time and cost. Unique threading with water jet and the best solution for thick material. Auto wire threading on break point without going back to home point, creating high productivity and efficiency. Automatic annealing process makes the wire straight and sharp.

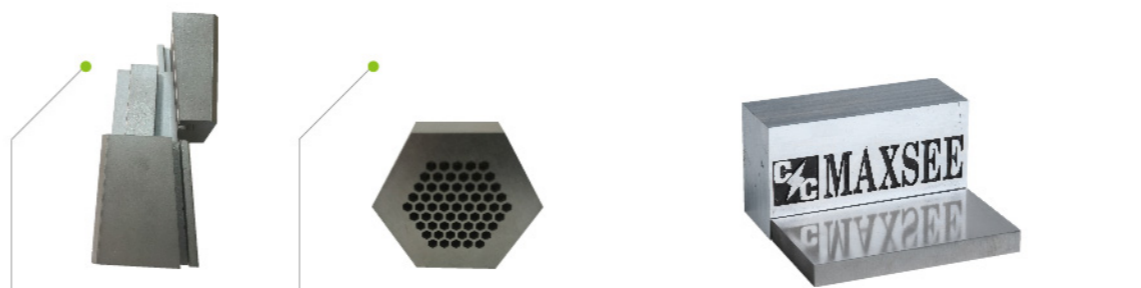
全自動系統。穿線時不需淨空水槽內的水、省時省成本。水柱穿線可穿高厚度工件。可於斷線點自動穿線，不需回原點，創造高產能與效率。自動淬火系統，線不彎曲，提高斷線點穿線成功率。



Wire size 銅線尺寸	0.25mm	0.25mm	0.25mm	0.25mm
Workpiece Material工作材質	Steel 鋼 HRC58	Steel 鋼 HRC58	Steel 鋼 HRC58	Steel 鋼 HRC58
Cutting number切割數	3 cuts 割一修二	3 cuts 割一修二	4 cuts 割一修三	3 cuts 割一修二
Cutting Time加工時間	4 hours 小時	4 hours 小時	3 hours 小時 40 min 分	6 hours 小時



Wire size 銅線尺寸	0.15mm	0.2mm	0.2mm	0.15mm
Workpiece Material工作材質	SUS304	SKD11	SKD11	SKD11
Cutting number切割數	3 cuts 割一修二	3 cuts 割一修二	4 cuts 割一修三	4 cuts 割一修三
Cutting Time加工時間	8 hours 小時 20 min 分	6 hours 小時 20 min 分	6 hours 小時 40 min 分	3 hours 小時



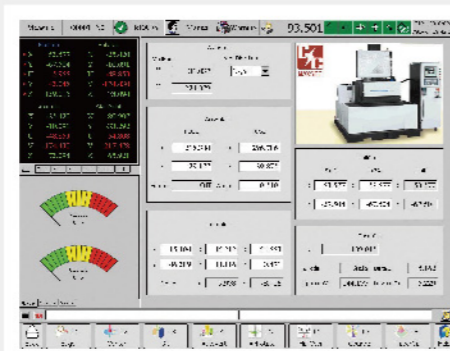
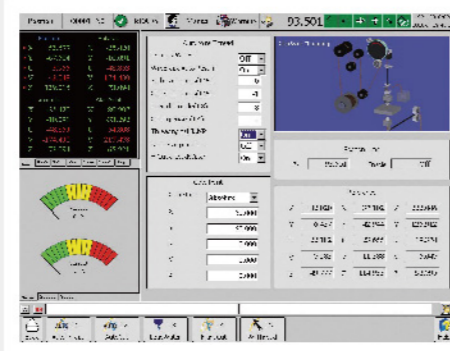
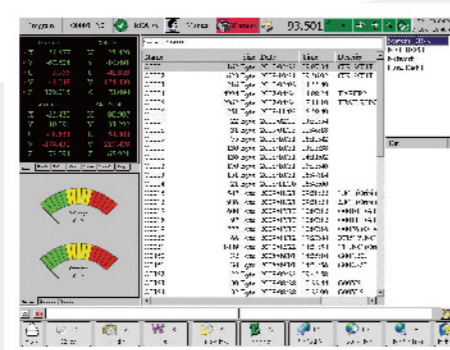
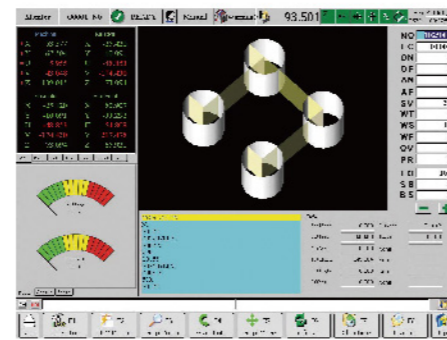
Wire size 銅線尺寸	0.25mm	0.25mm	Workpiece Material工作材質: SKD11
Workpiece Material工作材質	Steel 鋼 HRC58	Steel 鋼 HRC58	Thickness厚度: 100mm
Cutting number切割數	3 cuts 割一修二	Chipless cutting 無屑切割	Roughness表粗度: Ra 0.2μm
Cutting Time加工時間	5 hours 小時	6 hours 小時	

### CNC CONTROL SYSTEM

- 6 axes CNC controlled with 5 axes (X,U,Z,U,V) work simultaneously
- User friendly interface with Window base operating system
- 15" LCD touch panel. Simply zoom, rotate and move the graphics by finger tips
- Multiple outputs via USB, RS-232, Ethernet, Keyboard
- Energy saving and environment friendly design
- Comprehensive functions on operating system, NC program, correct molds, editing and instant aid
- Taper cutting in sharp corner taper, corner taper and radius taper with auto-compensation
- Modular design: quick diagnosis and simple maintenance

### CNC 數控系統

- CNC 六軸控制與操作介面 5 軸同動加工 (X,Y,Z,U,V)
- 人性化 Windows 操作系統
- 15 吋全彩觸控螢幕，方便即時放大、縮小、旋轉並移動圖像
- 輸出界面: USB、RS-232、乙太網路與鍵盤
- 節能環保迴路設計
- 操作系統功能豐富且完整，可用 NC 編碼程式加工、校正模型、編輯並提供即時協助
- 尖型錐度、轉角錐度與環狀錐度之加工，全自動補償
- 模組設計: 快速自行診斷，方便維護



### SPECIALIZED FUNCTIONS

- Corner aid control
- Inches and metrics convertible
- 2D / 3D graphic display
- Limit protection
- Instant alarm system
- Short circuit back up
- Absolute / Incremental modes
- Linear and circular interpolation (XY-UV)
- G / M code

### 主要控制器功能

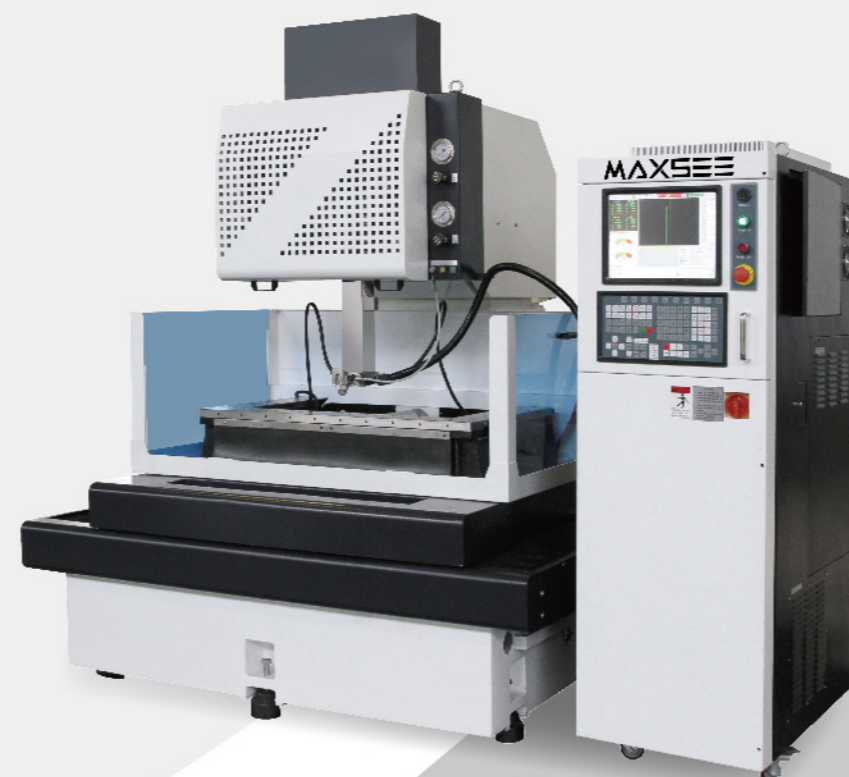
- 轉角控制
- 英制/公制轉換
- 2D / 3D 圖面顯示
- 極限保護
- 即時警報系統
- 緊急斷電保護系統
- 絕對 / 相對模式
- 線性與環狀加工(XY-UV)
- G / M 碼



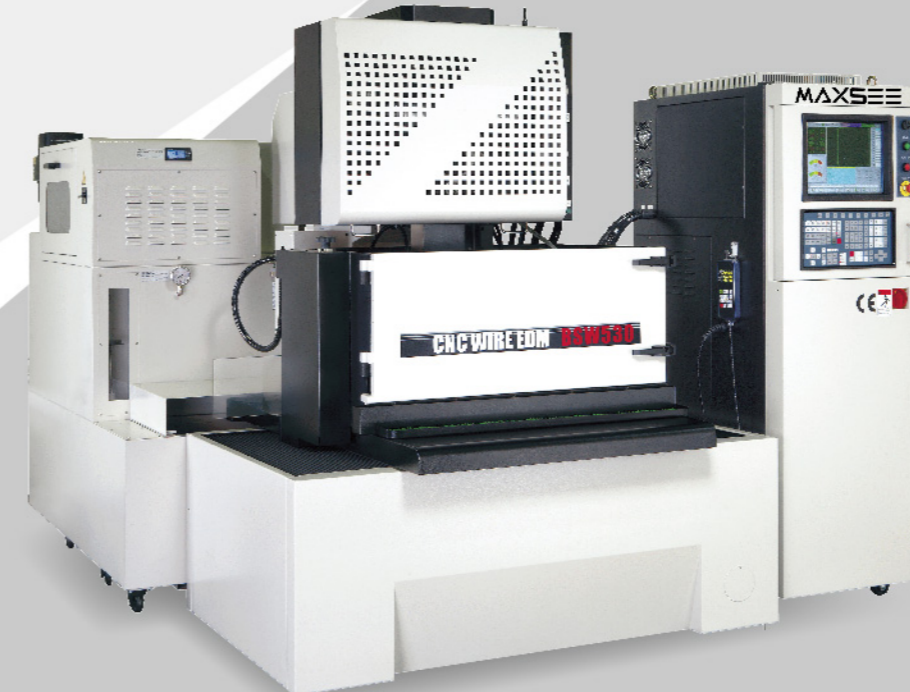
SW325/BSW325



SW1270/BSW1270



FW840



SW530/BSW530



SW645/BSW645

MODEL 項目	UNIT 單位	BSW325/SW325	BSW530/SW530	BSW645/SW645	BSW1270/SW1270	FW325	FW530	FW645	FW845	FW1270
Submerge/Flush 浸水式/沖水式		Submerge	Submerge	Submerge	Submerge	Flush	Flush	Flush	Flush	Flush
XY Travel XY 軸行程	mm	350/250	500/300	600/450	1200/700	350/250	500/300	600/450	800/450	1200/700
U/V/Z Travel U/V/Z 軸行程	mm	50/50/200	80/80/250	100/100/300	150/150/350	50/50/200	80/80/250	100/100/300	100/100/300	150/150/350
Max. work piece dimension (L×W×H) 最大工件(長×寬×高)	mm	700x450x180	850x500x200	1100x800x250	1600x1000x310	800x550x200	850x550x250	1250x850x300	1350x850x300	1600x1000x350
Max. work piece weight 最大工件重	kg	350	350	500	1500	350	350	600	600	1500
Work table size (L×W) 工軀台尺寸(長×寬)	mm	560x410	710x460	868x668	1530x970	560x410	710x460	868x668	1068x670	1530x970
XY Feed rate XY 軸進給速度	mm/min	800	800	800	800	800	800	800	800	800
wire diameter 線徑	mm	Ø0.15-0.3	Ø0.15-0.3	Ø0.15-0.3	Ø0.15-0.3	Ø0.15-0.3	Ø0.15-0.3	Ø0.15-0.3	Ø0.15-0.3	Ø0.15-0.3
Wire tension 線張力	gf	2000	2000	2000	2000	2000	2000	2000	2000	2000
Wire spool weight 線軸荷重	kg	5/8/16(Option)	5/8/16(Option)	5/8/16(Option)	5/8/16(Option)	5/8/16(Option)	5/8/16(Option)	5/8/16(Option)	5/8/16(Option)	5/8/16(Option)
Max taper angel / workpiece thickness 最大加工錐度/工件厚度	mm	±15/60	±15/60	±15/60	±15/60	±15/60	±15/60	±15/60	±15/60	±15/60
Max write feed rate 最大線速	mm/sec	400	400	400	400	400	400	400	400	400
Machine dimension 機器尺寸	mm	2800x2800x2400	2800x2800x2500	3400x3500x2500	5300x5000x2800	3100x2400x2400	3300x2700x2400	3200x3500x2500	3800x3500x2500	3100x4500x2300
Machine weight 機器重量	kg	2000	2800	3800	7000	1800	2500	3600	4000	6500
<b>FLUID SUPPLY UNIT 循環系統</b>										
Filler element 過濾器		Paper	Paper	Paper	Paper	Paper	Paper	Paper	Paper	Paper
Ion exchange resin 離子交換樹脂量	L	10	10	10	10	10	10	10	10	10
Conductivity control 水質控制		Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto
Fluid Temperature control 加工液溫度控制		Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto
Tank Capacity 水箱容量	L	630	770	1450	4800	420	420	420	420	580

BSW: Suberge type with AWT / SW: Suberge type / FW: Flush type    BSW 系列: 浸水式含自動穿線 / SW系列: 浸水式 / FW系列: 沖水式

CNC UNIT 規格	ENVIRONMENT CONDITIONS 環境條件	STANDARD ACCESSORIES 標準配備	OPTIONS ACCESSORIES 選擇配備
Power Input 電源輸入 3 Phase 3相, 220V/380V/15KVA	<b>Surroundings 環境要求</b> <ul style="list-style-type: none"> <li>Within 20± 1°C is recommended / 建議機器處於 20± 1°C 的室溫下</li> <li>Keep machine away from direct sunlight / 避免機器直接日曬</li> <li>Humidity below 75% RH / 濕度低於 75% RH</li> <li>Clean and low dust environment / 整潔且乾燥的環境</li> <li>Maintain minimum floor vibration / 避免地面震動</li> </ul>	<ul style="list-style-type: none"> <li>Auto vertical alightment JIG / 自動垂直校正器 JIG 1 set 1 set / 組</li> <li>Diamond wire guides 0.25mm / 0.25mm 鑽石眼模 1 set / 組</li> <li>Remote controller / 遙控器 1 set / 組</li> <li>Operation manual / 操作手冊 1 pc / 本</li> <li>Tool box / 工具箱 1 set / 組</li> <li>Brass Wire(0.25mm, 5kg) / 銅線(0.25mm, 5kg) 1 pc / 卷</li> <li>Paper filter / 過濾網 2 pcs / 個</li> <li>Upper and lower flushing nozzle / 上下噴嘴 1 set / 組</li> <li>Energizing plates / 導電板 2 pcs / 個</li> <li>Clamping tool / 夾具 1 set / 組</li> <li>Transformer / 變壓器 1 set / 組</li> <li>Chiller / 冷卻器 1 set / 組</li> </ul>	<ul style="list-style-type: none"> <li>Rotary B axis / 第六軸</li> <li>Voltage regulator(20 KVA) / 穩壓器(20 KVA)</li> <li>0.05µm linear scales / 0.05µm 光學尺</li> <li>8 / 16 kgs wire feeder / 8 / 16 公斤大線軸</li> </ul>
Circuit System 迴路系統 30 Amp / 30 安培			
Operation System 操作系統 Window CE			
Data Input 輸入介面 Keyboard, USB, Ethernet, RS-232 鍵盤, USB, 網路, RS-232			
Display 螢幕 15" LCD, Full color touch screen 15" 全彩觸控液晶螢幕			
Control Axis 控制軸 X,Y,U,V,Z(5 AXIS軸)			
Memory Capacity 記憶體 512 MB			
Min. Command Unit 最小指令單位 0.001mm	<b>Groundings 接地需求</b> <ul style="list-style-type: none"> <li>Ground resistance 10Ω or less / 接地電阻為 10Ω 以下</li> <li>Use a 14mm<sup>2</sup> ground wire / 使用一條 14mm<sup>2</sup> 的接地線</li> <li>An independent ground / 獨立接地</li> </ul>		
Max. Command Value 最大指令單位 ±9999.999 mm			
Off time select / Off time 選項 1-50			

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