

## MNLS2040PMM-R050

### 內置超微型光學尺

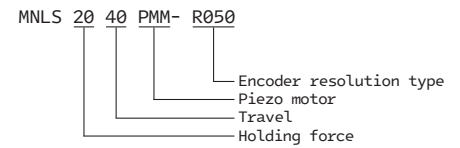
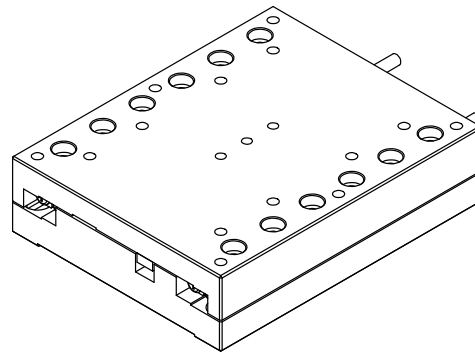
荷重 : 200 N ( 水平放置 )

推力 : 10 N

剎車力 : 20 N

解析度 : 50 nm

行程 : 40 mm

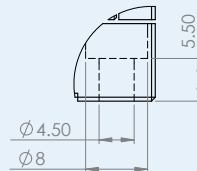
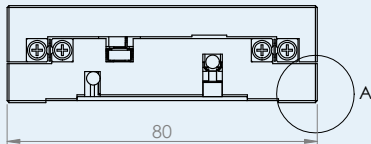
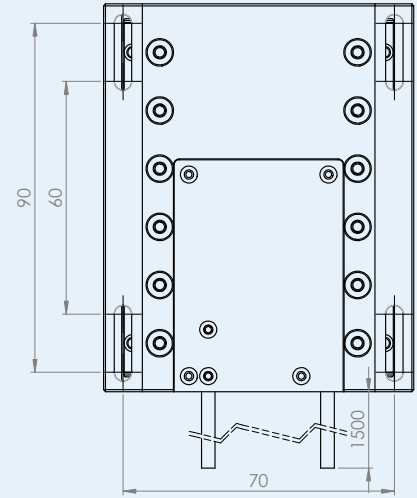
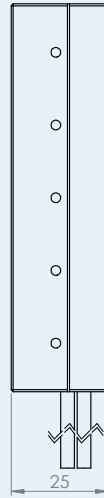
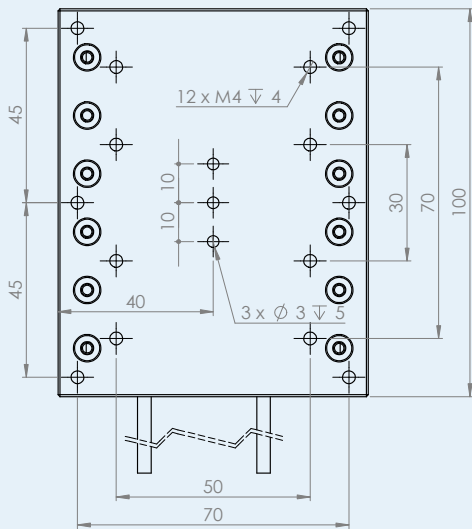


緊湊簡約設計，馬達不外露，便於機構空間配置  
 搭配控制器做速度調整與閉迴路位置控制  
 充分發揮壓電馬達特性，具零背隙效果，高響應加減速，斷電煞車作用  
 另可選配製作更高解析度，更高行程與真空環境版本

Technical Specification		
Size	80*100*20	mm
Travel	40	mm
Holding Force	22	N
Continuous Force	10	N
Loading Force	200	N
Speed	10	mm/sec
Resolution	50	nm
Straightness	±1	µm
Flatness	±2.5	µm
Accuracy	±2.5	µm
Repeatability	±0.1	µm
Pitch	120	µrad
Yaw	80	µrad
Motor	LT2020	
Controller	PMD401	

\*NOTE : Customized specifications in a vacuum environment is available on request.

## Dimensional drawing



細部放大圖 A  
比例 2:1

Scale reduced mm

### Motor Pin Assignment

Connector Type : JST 05SR-3S

Pin	Color	Terminal
1 ▲	Brown	GND
2	Gray	Phase4
3	White	Phase3
4	Green	Phase2
5	Yellow	Phase1

### Encoder Pin Assignment (Single-ended)

Connector Type : JST 06SR-3S

Pin	Color	Terminal
1 ▲	White	Quadrature Index I
2	Brown	GND
3	Red	+5 V (max 200 mA)
4	Blue	Quadrature Signal B+
5	Green	Quadrature Signal A+
6	Gray	NC

### Encoder Pin Assignment (Differential)

Connector Type : JST 10SR-3S

Pin	Color	Terminal
1	Pink	Quadrature Signal B-
2	Black or Brown	GND
3		NC
4	Blue	Quadrature Signal B+
5	Grey	Quadrature Index I-
6		NC
7	Yellow	Quadrature Signal A-
8	White	Quadrature Index I+
9	Green	Quadrature Signal A+
10	Red	+5 V (max 200 mA)

### Encoder Pin Assignment (RENISHAW)

Connector Type : 15-way D-type (D)

Pin	Color	Function	Signal
7.8	Brown	Power	5V
2.9	White	Power	0V
14	Red	Incremental	A+
6	Blue	Incremental	A-
13	Yellow	Incremental	B+
5	Green	Incremental	B-
12	Violet	Reference mark	Z+
4	Grey	Reference mark	Z-
3	Orange	Alarm	E-
1	Clear	Remote CAL	CAL
Case	Screen	Shield	-