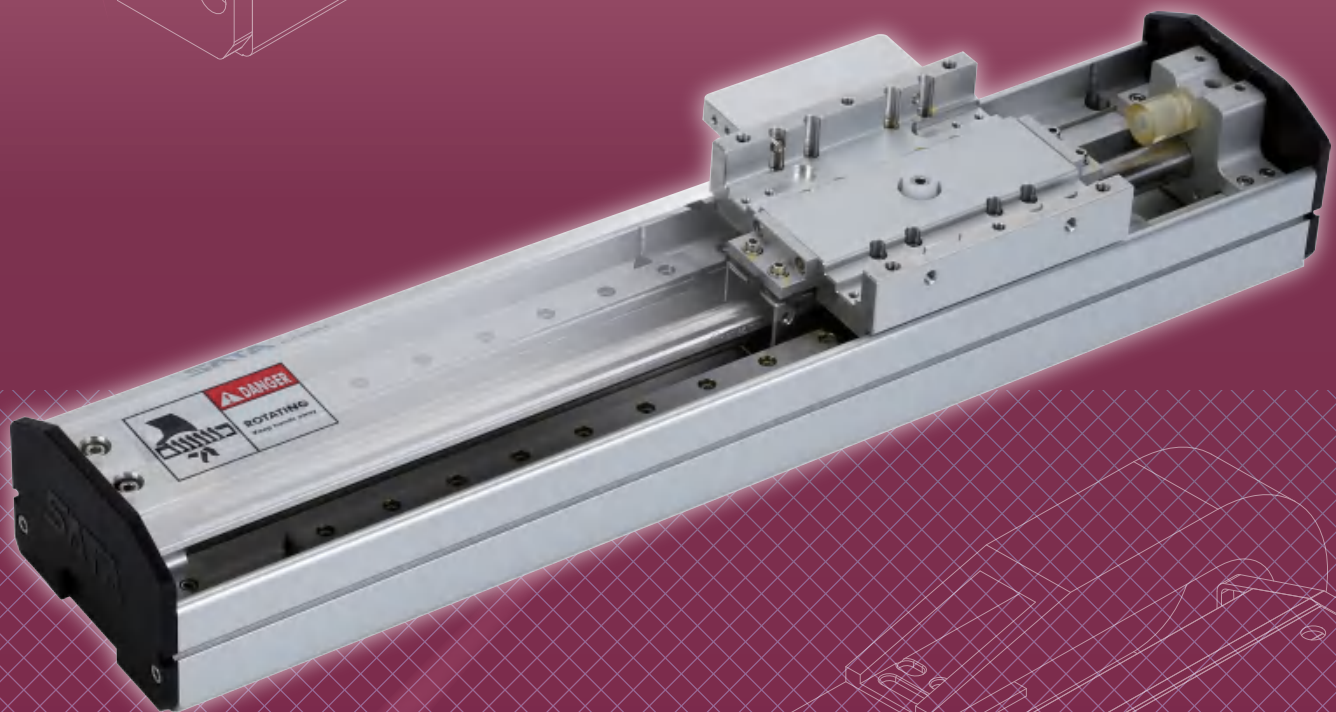


# SATA

## 軸式直線電機 SHAFT MOTOR



# BM100 - S500 - OR - 10 - 05 - 160V - S

型號  
Model

行程  
Stroke

編碼器  
Encoder

解析度  
Resolution

線長  
Wire length

馬達規格  
Motor specifications

驅動器  
Driver

OR 光學尺  
MR 磁性尺

01: 0.1um  
05: 0.5um  
10: 1um

03-3m  
05-5m  
08-8m

\*標配 3m  
\*standard: 3m

C 科普利 - Copley  
D 台達 - Delta  
K 科爾摩根 - Kolmorgen  
P 松下 - Panasonic  
S 高創 - Servotronics

## BM100-160V 規格表 (BM100-160V Specification):

|                                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| 馬達規格 Motor specifications         | 軸心式無鐵芯馬達 160V                                                   |
| 峰值電流 Peak current(A)              | 2.5A                                                            |
| 電機額定推力 Motor rated (N)            | 16N                                                             |
| 持續電流 Continuous current(A)        | 0.6A                                                            |
| 重複定位精度 Repeatability (mm)         | ± 0.003磁柵編碼器<br>以客戶需求編碼器為主 (magnetic ruler, depends on encoder) |
| 最高速度 Maximum speed                | 3000mm/s (在其他要求滿足要求情況下)                                         |
| 電機峰值推力 Peak thrust (N)            | 50.2N                                                           |
| 推力常數 Thrust constant              | 16.7N/Arms                                                      |
| 反向電常數 Inverse electrical constant | 5.4(Ke=Kf/3)                                                    |
| 相間電阻 Phase resistance             | 14ohms                                                          |
| 相間電感 Phase-to-phase inductance    | 8.7mH                                                           |
| 熱阻 thermal resistance             | 13°C/w                                                          |
| 線圈最高溫度 Maximum coil temperature   | 130°C                                                           |
| 極距 polar distance                 | 60mm                                                            |

註:直線電機選型需要根據模組運行時具體參數進行選擇,爲了更好的適用您的方案,請務必與我司工程進行確認選型。

Note: the selection of linear motor shall be based on the specific parameters of the module operation. In order to better apply your scheme, please be sure to confirm the selection with our engineer.

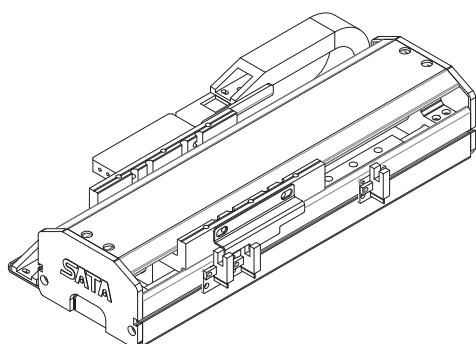
如: 負載, 停頓時間, (加速度, 速度, 行程運行時間, 任意一種), 安裝方式, 配光柵還是磁柵精度若有其他要求請註明

Such as: load, pause time, (acceleration, speed, travel time, any kind), installation method, with optical or magnetic scale, if there are other requirements, please specify

負載計算公式:  $m_{load} = (F_{max} - \mu m_{total}) / a$  -  $m_{load}$  僅做參考  $m_{total}$  - 負載,  $F_{max}$  - 最大推力,  $\mu$  - 摩擦係數,  $m_{total}$  - 總質量,  $a$  - 加速度,  $m_{slip}$  - 滑座質量

Load formula:  $m_{load} = (F_{max} - \mu m_{total}) / a$  -  $m_{load}$  Just for reference

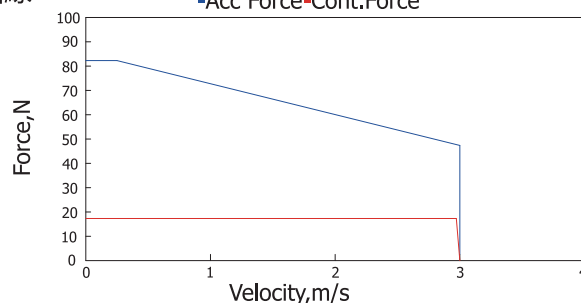
$m_{load}$  - load,  $F_{max}$  - Peak thrust,  $\mu$  - Coefficient of friction,  $m_{total}$  - Total mass,  $a$  - Acceleration,  $m_{slip}$  - Sliding mass



# BM100-160V

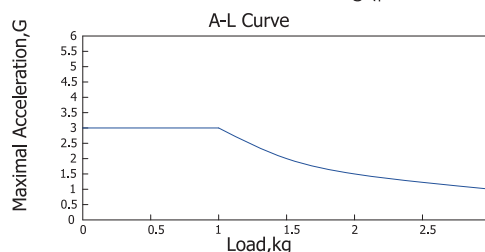
F-V曲線

F-V Curve  
-Acc Force-Cont.Force

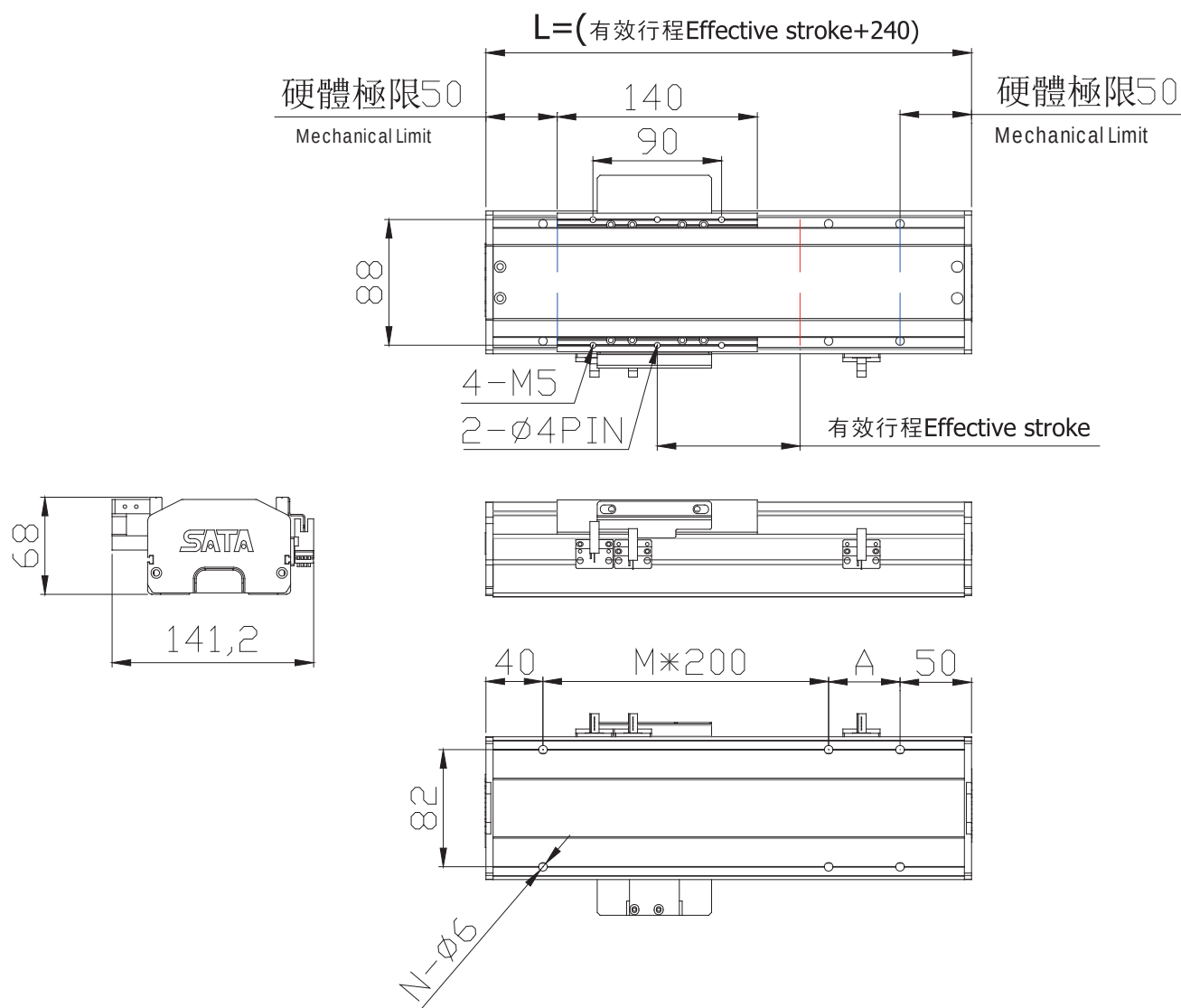


最大加速度與載荷 (停留時間1S)

Maximum acceration and loading (pause time:1s)



## BM100-160V



此款型號可客製成無塵環境式及全罩式規格,有需要請跟SATA聯繫

This model can be customized into clean room type and full cover type specification. Please contact with SATA if necessary

| 行程 Stroke      | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800  | 900  | 1000 | 1100 |
|----------------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|
| L              | 340 | 440 | 540 | 640 | 740 | 840 | 940 | 1040 | 1140 | 1240 | 1340 |
| A              | 50  | 150 | 50  | 150 | 50  | 150 | 50  | 150  | 50   | 150  | 50   |
| N              | 6   | 6   | 8   | 8   | 10  | 10  | 12  | 12   | 14   | 14   | 16   |
| 重量 Weight (kg) | 4.3 | 5.2 | 6.1 | 7   | 7.9 | 8.8 | 9.7 | 10.6 | 11.5 | 12.4 | 13.3 |

※本公司享有變更規格之權益，恕不另行通知 ※Drawings and specifications are subject to change without prior notice.

## BM136 - S500 - OR - 10 - 05 - 160T - S

型號  
Model

行程  
Stroke

編碼器  
Encoder

解析度  
Resolution

線長  
Wire length

馬達規格  
Motor specifications

驅動器  
Driver

OR 光學尺  
Magnetic ruler

01: 0.1um  
05: 0.5um  
10: 1um

03-3m  
05-5m  
08-8m

\*標配3m  
\*standard: 3m

C 科普利 - Copley  
D 台達 - Delta  
K 科爾摩根 - Kollmorgen  
P 松下 - Panasonic  
S 高創 - Servotronics

### BM136-160T 規格表 (BM136-160T Specification):

| 馬達規格 Motor specifications         | 軸心式無鐵芯馬達 160T                                                   |
|-----------------------------------|-----------------------------------------------------------------|
| 峰值電流 Peak current(A)              | 2.5A                                                            |
| 電機額定推力 Motor rated (N)            | 22N                                                             |
| 持續電流 Continuous current(A)        | 0.6A                                                            |
| 重複定位精度 Repeatability (mm)         | ± 0.003磁柵編碼器<br>以客戶需求編碼器為主 (magnetic ruler, depends on encoder) |
| 最高速度 Maximum speed                | 3000mm/s (在其他要求滿足要求情況下)                                         |
| 電機峰值推力 Peak thrust (N)            | 64N                                                             |
| 推力常數 Thrust constant              | 26.7N/Arms                                                      |
| 反向電常數 Inverse electrical constant | 8.1(Ke=Kf/3)                                                    |
| 相間電阻 Phase resistance             | 21ohms                                                          |
| 相間電感 Phase-to-phase inductance    | 8.7mH                                                           |
| 熱阻 thermal resistance             | 13°C/w                                                          |
| 線圈最高溫度 Maximum coil temperature   | 130°C                                                           |
| 極距 polar distance                 | 60mm                                                            |

註:直線電機選型需要根據模組運行時具體參數進行選擇,爲了更好的適用您的方案,請務必與我司工程進行確認選型。

Note: the selection of linear motor shall be based on the specific parameters of the module operation. In order to better apply your scheme, please be sure to confirm the selection with our engineer.

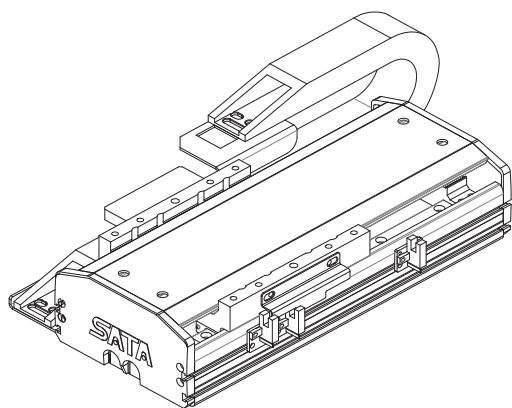
如: 負載, 停頓時間, (加速度, 速度, 行程運行時間, 任意一種), 安裝方式, 配光柵還是磁柵精度若有其他要求請註明

Such as: load, pause time, (acceleration, speed, travel time, any kind), installation method, with optical or magnetic scale, if there are other requirements, please specify

負載計算公式:  $m_{load} = (F_{max} - \mu m_{slip}) / a$  -  $m_{slip}$  僅做參考  $m_{load}$  - 負載,  $F_{max}$  - 最大推力,  $\mu$  - 摩擦係數,  $m_{slip}$  - 總質量,  $a$  - 加速度,  $m_{slip}$  - 滑座質量

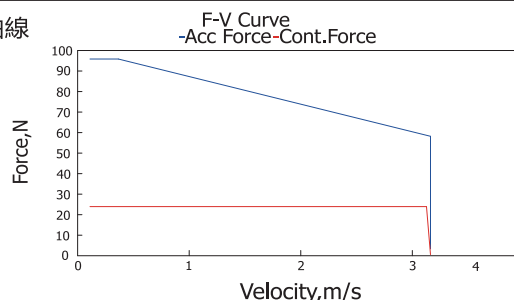
Load formula:  $m_{load} = (F_{max} - \mu m_{slip}) / a$  -  $m_{slip}$  Just for reference

$m_{load}$  - load,  $F_{max}$  - Peak thrust,  $\mu$  - Coefficient of friction,  $m_{total}$  - Total mass,  $a$  - Acceleration,  $m_{slip}$  - Sliding mass



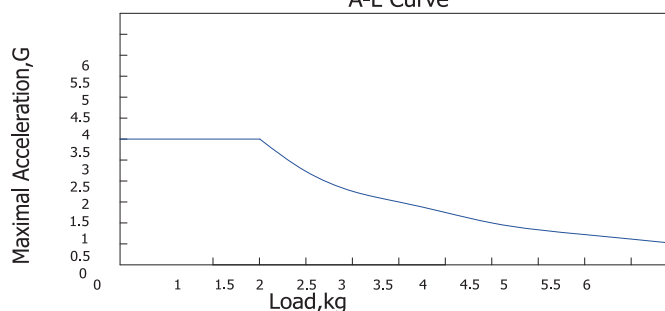
## BM136-160T

### F-V曲線

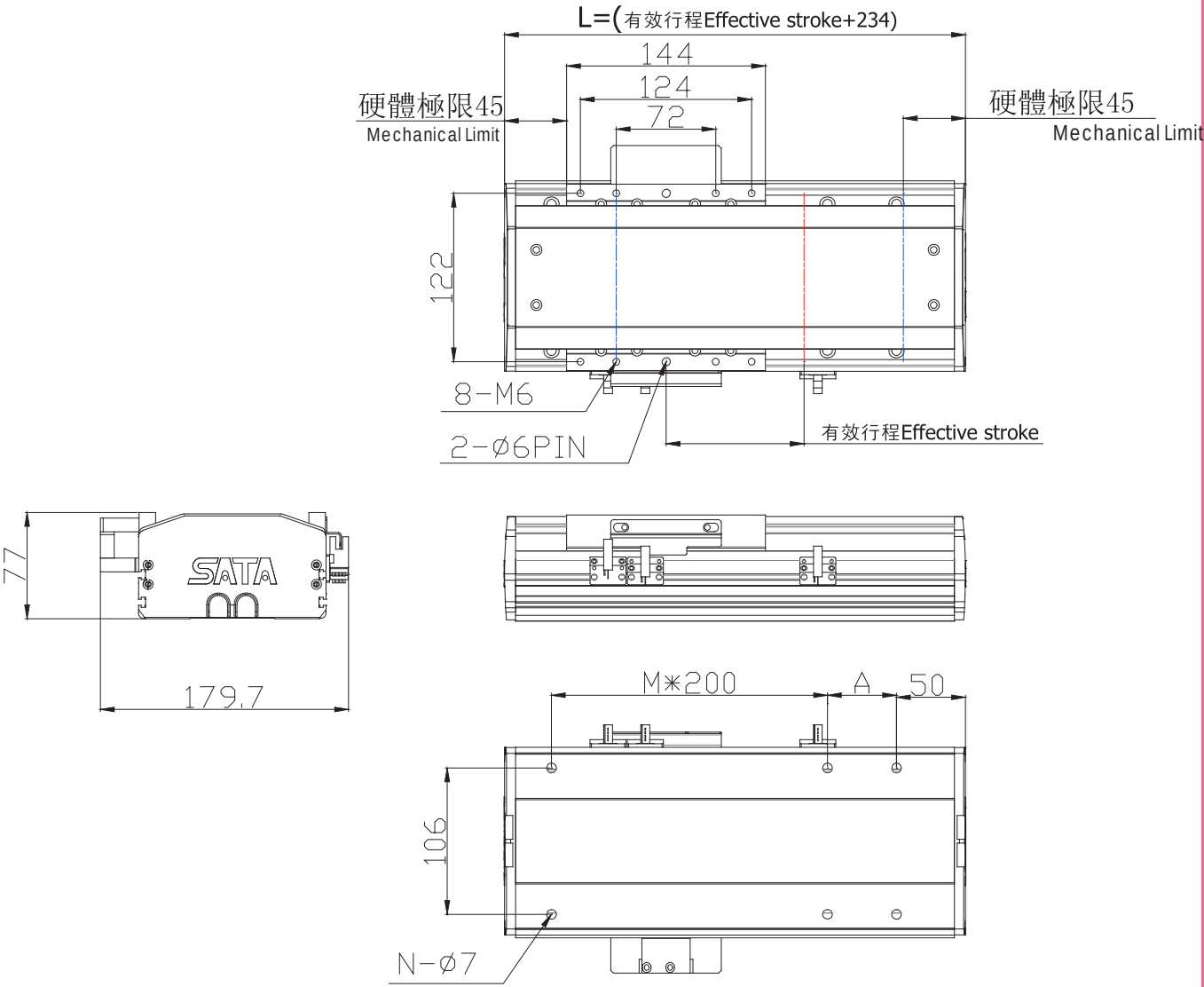


### 最大加速度與載荷 (停留時間1S)

Maximum acceration and loading (pause time:1s)  
A-L Curve



BM136-160T



此款型號可客製成無塵環境式及全罩式規格,有需要請跟SATA聯繫  
This model can be customized into clean room type and full cover type specification. Please contact with SATA if necessary

| 行程 Stroke      | 100 | 200 | 300 | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 |
|----------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| L              | 334 | 434 | 534 | 634  | 734  | 834  | 934  | 1034 | 1134 | 1234 | 1334 | 1434 |
| A              | 50  | 150 | 50  | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  |
| N              | 6   | 6   | 8   | 8    | 10   | 10   | 12   | 12   | 14   | 14   | 16   | 16   |
| 重量 Weight (kg) | 6.6 | 7.9 | 9.2 | 10.5 | 11.8 | 13.1 | 14.4 | 15.7 | 17   | 18.3 | 19.6 | 20.9 |

※本公司享有變更規格之權益，恕不另行通知 ※Drawings and specifications are subject to change without prior notice.

# BM168 - S500 - OR - 10 - 05 - 250T - S

型號  
Model

行程  
Stroke

編碼器  
Encoder

解析度  
Resolution

線長  
Wire length

馬達規格  
Motor specifications

驅動器  
Driver

OR 光學尺  
MR 磁性尺

01: 0.1um  
05: 0.5um  
10: 1um

03-3m  
05-5m  
08-8m  
\*標配 3m  
\*standard: 3m

C 科普利 - Copley  
D 台達 - Delta  
K 科爾摩根 - Kollmorgen  
P 松下 - Panasonic  
S 高創 - Servotronics

## BM168-250T 規格表 (BM168-250T Specification):

| 馬達規格 Motor specifications         | 軸心式無鐵芯馬達 250T                                                   |
|-----------------------------------|-----------------------------------------------------------------|
| 峰值電流 Peak current(A)              | 5.1A                                                            |
| 電機額定推力 Motor rated (N)            | 60N                                                             |
| 持續電流 Continuous current(A)        | 1.5A                                                            |
| 重複定位精度 Repeatability (mm)         | ± 0.003磁柵編碼器<br>以客戶需求編碼器為主 (magnetic ruler, depends on encoder) |
| 最高速度 Maximum speed                | 3000mm/s (在其他要求滿足要求情況下)                                         |
| 電機峰值推力 Peak thrust (N)            | 186N                                                            |
| 推力常數 Thrust constant              | 40N/Arms                                                        |
| 反向電常數 Inverse electrical constant | 15(Ke=Kf/3)                                                     |
| 相間電阻 Phase resistance             | 12.6ohms                                                        |
| 相間電感 Phase-to-phase inductance    | 17mH                                                            |
| 熱阻 thermal resistance             | 5.7°C/w                                                         |
| 線圈最高溫度 Maximum coil temperature   | 130°C                                                           |
| 極距 polar distance                 | 120mm                                                           |

註: 直線電機選型需要根據模組運行時具體參數進行選擇, 爲了更好的適用您的方案, 請務必與我司工程進行確認選型。

Note: the selection of linear motor shall be based on the specific parameters of the module operation. In order to better apply your scheme, please be sure to confirm the selection with our engineer.

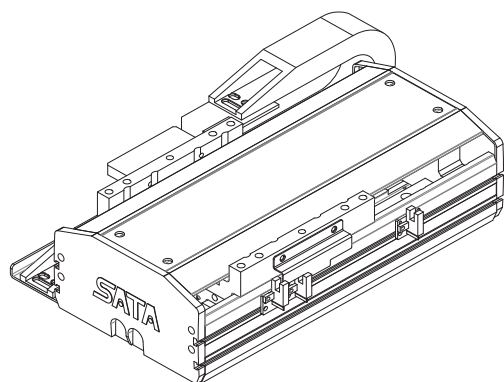
如: 負載, 停頓時間, (加速度, 速度, 行程運行時間, 任意一種), 安裝方式, 配光柵還是磁柵精度若有其他要求請註明

Such as: load, pause time, (acceleration, speed, travel time, any kind), installation method, with optical or magnetic scale, if there are other requirements, please specify

負載計算公式:  $m_{load} = (F_{max} - U \cdot m_{total}) / a - m_{slip}$  僅做參考  $m_{load}$ -負載,  $F_{max}$ -最大推力,  $U$ -摩擦係數,  $m_{total}$ -總質量,  $a$ -加速度,  $m_{slip}$ -滑座質量

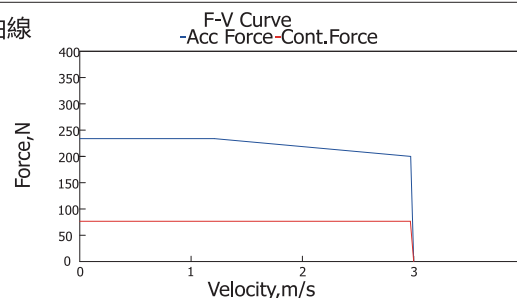
Load formula:  $m_{load} = (F_{max} - U \cdot m_{total}) / a - m_{slip}$  Just for reference

$m_{load}$ -load,  $F_{max}$ -Peak thrust,  $U$ -Coefficient of friction,  $m_{total}$ -Total mass,  $a$ -Acceleration,  $m_{slip}$ -Sliding mass



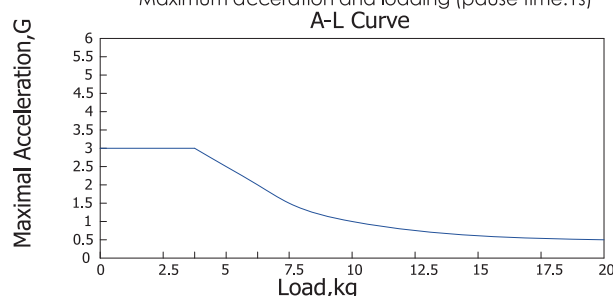
BM168-250T

F-V曲線



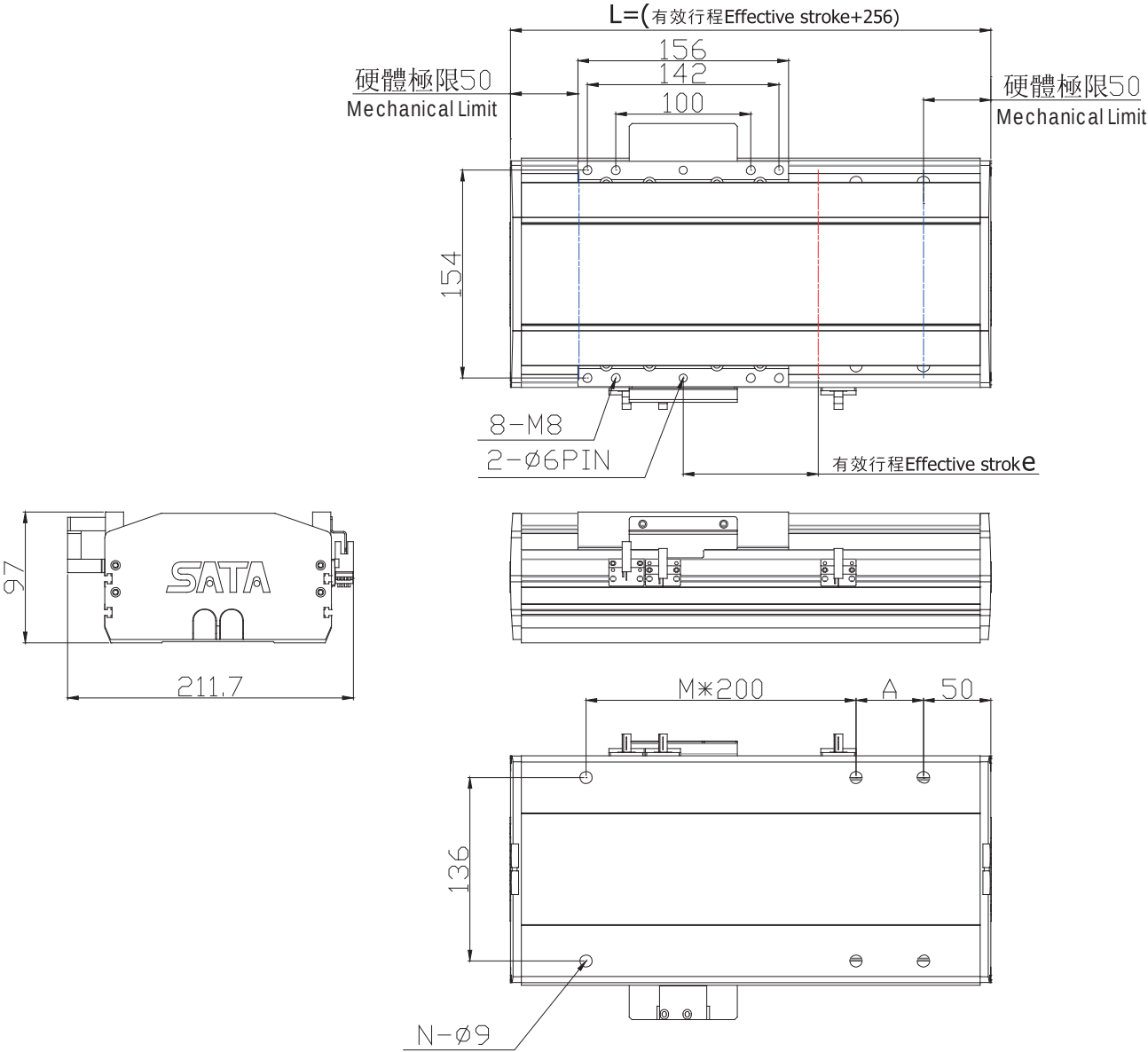
最大加速度與載荷 (停留時間1S)

Maximum acceration and loading (pause time:1s)





BM168-250T



此款型號可客製成無塵環境式及全罩式規格,有需要請跟SATA聯繫  
This model can be customized into clean room type and full cover type specification. Please contact with SATA if necessary

| 行程 Stroke      | 100  | 200  | 300  | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L              | 356  | 456  | 556  | 656  | 756  | 856  | 956  | 1056 | 1156 | 1256 | 1356 | 1456 | 1556 | 1656 | 1756 |
| A              | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   |
| N              | 6    | 6    | 8    | 8    | 10   | 10   | 12   | 12   | 14   | 14   | 16   | 16   | 18   | 18   | 20   |
| 重量 Weight (kg) | 11.7 | 13.4 | 15.1 | 16.8 | 18.5 | 20.2 | 21.9 | 23.6 | 25.3 | 27   | 28.7 | 30.4 | 32.1 | 33.8 | 35.5 |

※本公司享有變更規格之權益，恕不另行通知 ※Drawings and specifications are subject to change without prior notice.

## BM168 - S500 - OR - 10 - 05 - 250Q - S

型號  
Model

行程  
Stroke

編碼器  
Encoder

OR 光學尺  
MR 磁性尺

解析度  
Resolution

01: 0.1um  
05: 0.5um  
10: 1um

線長  
Wire length

03-3m  
05-5m  
08-8m

\*標配 3m  
\*standard: 3m

馬達規格  
Motor specifications

驅動器  
Driver

C 科普利 - Copley  
D 台達 - Delta  
K 科爾摩根 - Kolmogorov  
P 松下 - Panasonic  
S 高耐 - Servotronics

### BM168-250Q規格表 (BM168-250Q Specification):

| 馬達規格 Motor specifications         | 軸心式無鐵芯馬達 250Q                                                  |
|-----------------------------------|----------------------------------------------------------------|
| 最大負載 maximum load                 | 44.8KG                                                         |
| 峰值電流 Peak current(A)              | 5.1A                                                           |
| 電機額定推力 Motor rated (N)            | 80N                                                            |
| 持續電流 Continuous current(A)        | 1.8A                                                           |
| 重複定位精度 Repeatability (mm)         | ±0.003磁柵編碼器<br>以客戶需求編碼器為主 (magnetic ruler, depends on encoder) |
| 最高速度 Maximum speed                | 3000mm/s (在其他要求滿足要求情況下)                                        |
| 電機峰值推力 Peak thrust (N)            | 260N                                                           |
| 推力常數 Thrust constant              | 44.4N/Arms                                                     |
| 反向電常數 Inverse electrical constant | 19(Ke=Kf/3)                                                    |
| 相間電阻 Phase resistance             | 4.1ohms                                                        |
| 相間電感 Phase-to-phase inductance    | 5.7mH                                                          |
| 熱阻 thermal resistance             | 4.3°C/w                                                        |
| 線圈最高溫度 Maximum coil temperature   | 130°C                                                          |
| 極距 polar distance                 | 120mm                                                          |

註:直線電機選型需要根據模組運行時具體參數進行選擇,爲了更好的適用您的方案,請務必與我司工程進行確認選型。

Note: the selection of linear motor shall be based on the specific parameters of the module operation. In order to better apply your scheme, please be sure to confirm the selection with our engineer.

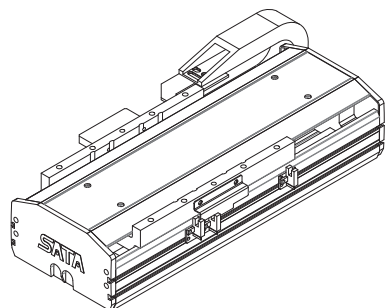
如: 負載, 停頓時間, (加速度, 速度, 行程運行時間, 任意一種), 安裝方式, 配光柵還是磁柵精度若有其他要求請註明

Such as: load, pause time, (acceleration, speed, travel time, any kind), installation method, with optical or magnetic scale, if there are other requirements, please specify

負載計算公式:  $m_{load} = (F_{max} - U \cdot m_{total}) / a - m_{slip}$  僅做參考  $m_{load}$ -負載,  $F_{max}$ -最大推力,  $U$ -摩擦係數,  $m_{total}$ -總質量,  $a$ -加速度,  $m_{slip}$ -滑座質量

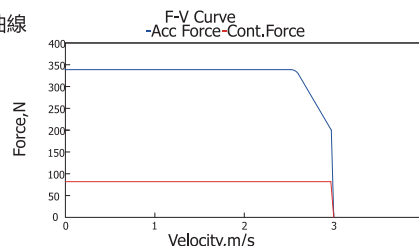
Load formula:  $m_{load} = (F_{max} - U \cdot m_{total}) / a - m_{slip}$  Just for reference

$m_{load}$ -load,  $F_{max}$ -Peak thrust,  $U$ -Coefficient of friction,  $m_{total}$ -Total mass,  $a$ -Acceleration,  $m_{slip}$ -Sliding mass

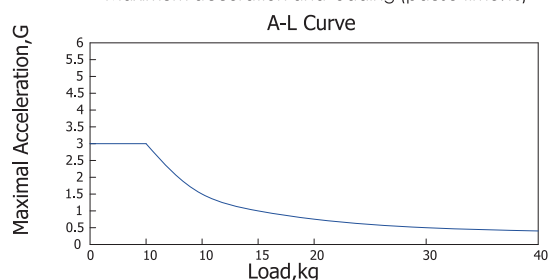


BM168-250Q

F-V曲線

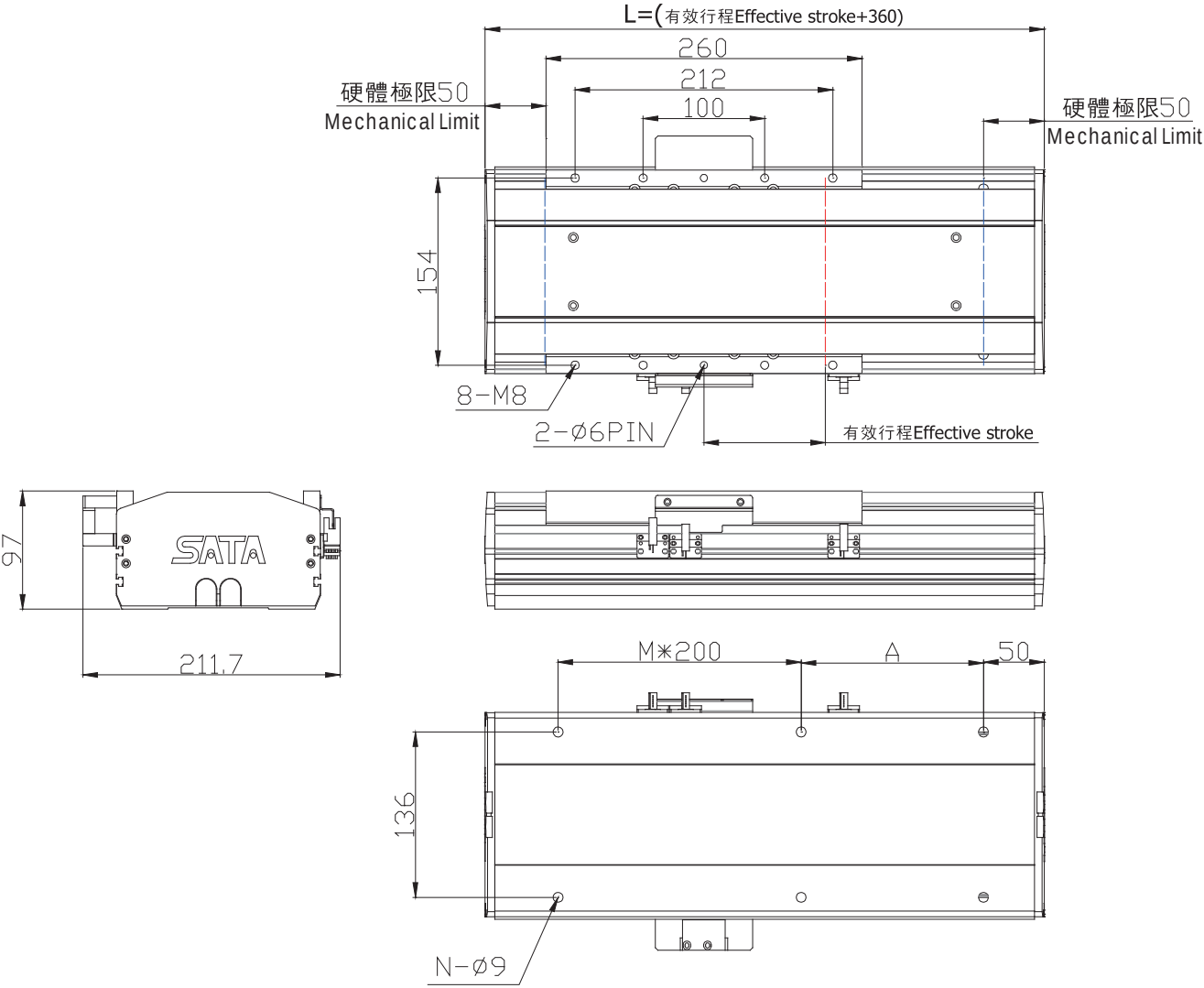


最大加速度與載荷 (停留時間1S)  
Maximum acceration and loading (pause time:1s)





BM168-250Q



此款型號可客製成無塵環境式及全罩式規格,有需要請跟SATA聯繫  
This model can be customized into clean room type and full cover type specification. Please contact with SATA if necessary

| 行程 Stroke      | 100  | 200  | 300 | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
|----------------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| L              | 460  | 560  | 660 | 760  | 860  | 960  | 1060 | 1160 | 1260 | 1360 | 1460 | 1536 | 1660 | 1760 | 1860 |
| A              | 150  | 50   | 150 | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  |
| N              | 6    | 8    | 8   | 10   | 10   | 12   | 12   | 14   | 14   | 16   | 16   | 18   | 18   | 20   | 20   |
| 重量 Weight (kg) | 15.6 | 17.3 | 19  | 20.7 | 22.4 | 24.1 | 25.8 | 27.5 | 29.2 | 30.9 | 32.6 | 34.3 | 36   | 37.7 | 39.4 |

※本公司享有變更規格之權益，恕不另行通知 ※Drawings and specifications are subject to change without prior notice.

# BM202 - S500 - OR - 10 - 05 - 380T - S

型號  
Model

行程  
Stroke

編碼器  
Encoder

解析度  
Resolution

線長  
Wire length

馬達規格  
Motor specifications

驅動器  
Driver

OR 光學尺  
MR 磁性尺

01: 0.1um  
05: 0.5um  
10: 1um

03-3m  
05-5m  
08-8m

\*標配 3m  
\*standard: 3m

C 科普利 - Copley  
D 台達 - Delta  
K 科爾摩根 - Kollmorgen  
P 松下 - Panasonic  
S 高創 - Servotronics

## BM202-380T 規格表 (BM202-380T Specification):

| 馬達規格 Motor specifications         | 軸心式無鐵芯馬達 380T                                                   |
|-----------------------------------|-----------------------------------------------------------------|
| 峰值電流 Peak current(A)              | 6.0A                                                            |
| 電機額定推力 Motor rated (N)            | 104N                                                            |
| 持續電流 Continuous current(A)        | 1.5A                                                            |
| 重複定位精度 Repeatability (mm)         | ± 0.003磁柵編碼器<br>以客戶需求編碼器為主 (magnetic ruler, depends on encoder) |
| 最高速度 Maximum speed                | 3000mm/s (在其他要求滿足要求情況下)                                         |
| 電機峰值推力 Peak thrust (N)            | 360N                                                            |
| 推力常數 Thrust constant              | 69.3N/Arms                                                      |
| 反向電常數 Inverse electrical constant | 23(Ke=Kf/3)                                                     |
| 相間電阻 Phase resistance             | 7.8ohms                                                         |
| 相間電感 Phase-to-phase inductance    | 20mH                                                            |
| 熱阻 thermal resistance             | 2.8°C/w                                                         |
| 線圈最高溫度 Maximum coil temperature   | 130°C                                                           |
| 極距 polar distance                 | 120mm                                                           |

註: 直線電機選型需要根據模組運行時具體參數進行選擇, 爲了更好的適用您的方案, 請務必與我司工程進行確認選型。

Note: the selection of linear motor shall be based on the specific parameters of the module operation. In order to better apply your scheme, please be sure to confirm the selection with our engineer.

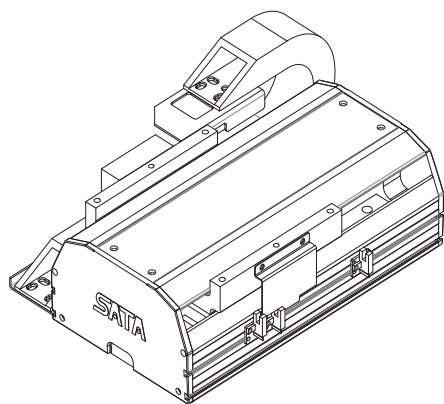
如: 負載, 停頓時間, (加速度, 速度, 行程運行時間, 任意一種), 安裝方式, 配光柵還是磁柵精度若有其他要求請註明

Such as: load, pause time, (acceleration, speed, travel time, any kind), installation method, with optical or magnetic scale, if there are other requirements, please specify

負載計算公式:  $m_{load} = (F_{max} - \mu m_{total}) / (a - m_{slip})$  僅做參考  $m_{total}$ -總質量,  $F_{max}$ -最大推力,  $\mu$ -摩擦係數,  $m_{slip}$ -滑座質量

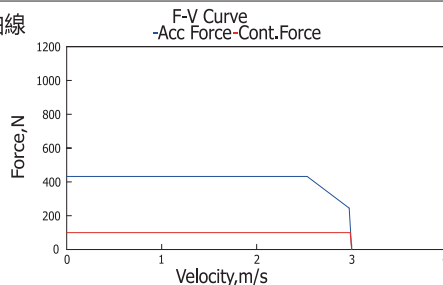
Load formula:  $m_{load} = (F_{max} - \mu m_{total}) / (a - m_{slip})$  Just for reference

$m_{load}$ -load,  $F_{max}$ -Peak thrust,  $\mu$ -Coefficient of friction,  $m_{total}$ -Total mass,  $a$ -Acceleration,  $m_{slip}$ -Sliding mass



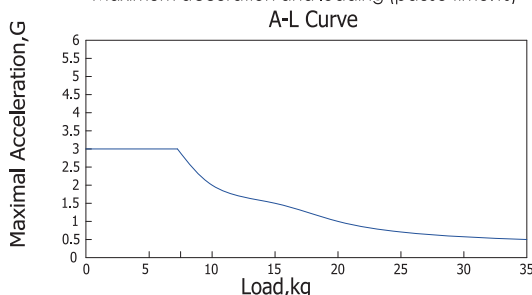
BM202-380T

F-V曲線

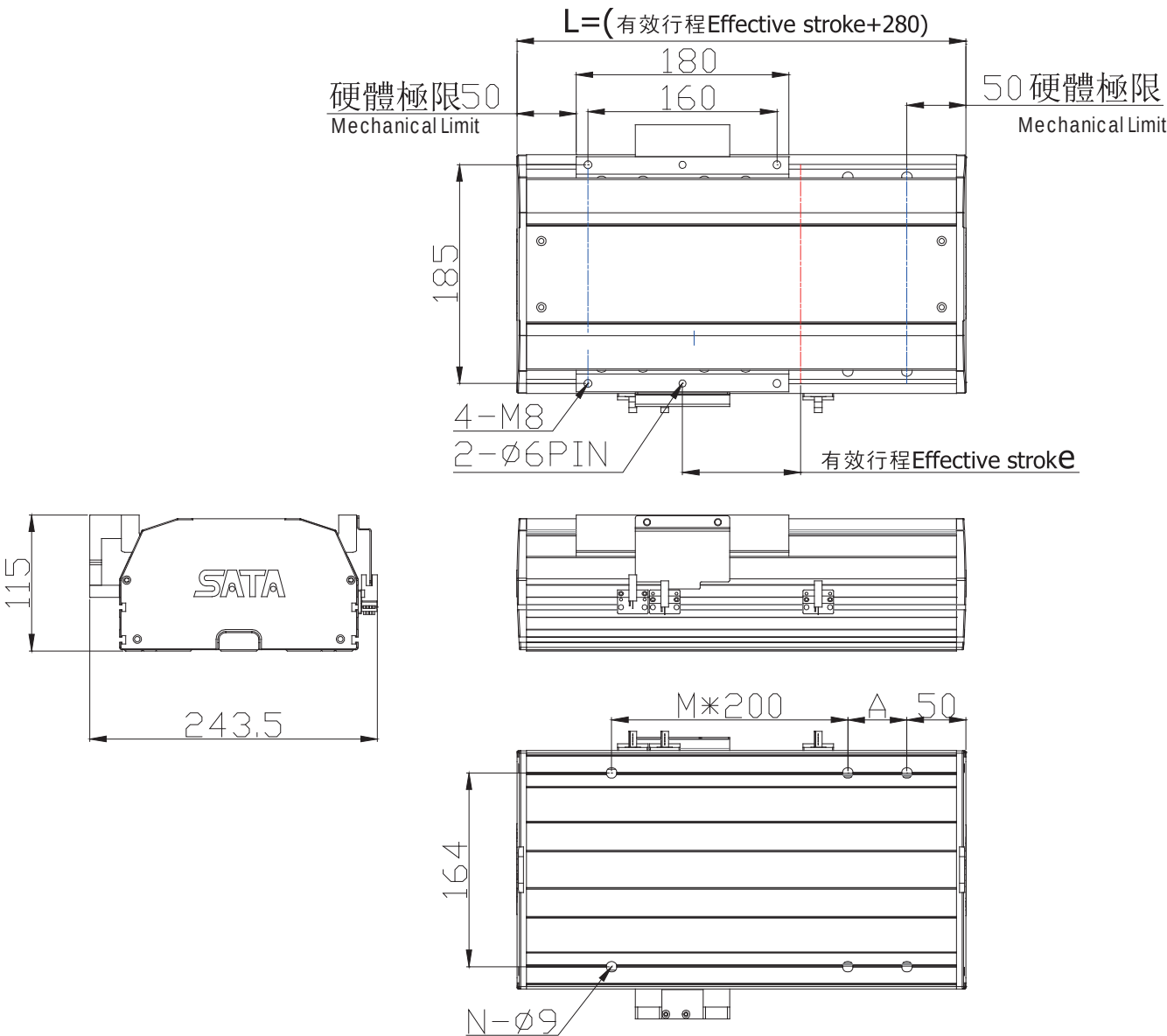


最大加速度與載荷 (停留時間1S)

Maximum acceleration and loading (pause time:1s)



BM202-380T



此款型號可客製成無塵環境式及全罩式規格,有需要請跟SATA聯繫  
This model can be customized into clean room type and full cover type specification. Please contact with SATA if necessary

| 行程 Stroke      | 100  | 200  | 300  | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L              | 380  | 480  | 580  | 680  | 780  | 880  | 980  | 1080 | 1180 | 1280 | 1380 | 1480 | 1580 | 1680 | 1780 | 1880 |
| A              | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  |
| N              | 6    | 6    | 8    | 8    | 10   | 10   | 12   | 12   | 14   | 14   | 16   | 16   | 18   | 18   | 20   | 20   |
| 重量 Weight (kg) | 18.4 | 21.9 | 25.4 | 28.9 | 32.4 | 35.9 | 39.4 | 42.9 | 46.4 | 49.9 | 53.4 | 56.9 | 60.4 | 63.9 | 67.4 | 70.9 |

※本公司享有變更規格之權益，恕不另行通知 ※Drawings and specifications are subject to change without prior notice.

## BM202 - S500 - OR - 10 - 05 - 380Q - S

型號  
Model

行程  
Stroke

編碼器  
Encoder  
OR 光學尺  
MR 磁性尺

解析度  
Resolution  
-01: 0.1um  
-05: 0.5um  
-10: 1um

線長  
Wire length  
-03-3m  
-05-5m  
-08-8m  
\*標配: 3m  
\*standard: 3m

馬達規格  
Motor specifications

驅動器  
Driver  
C 科音利 - Copley  
D 台達 - Delta  
K 科爾摩根 - Kollmorgen  
P 松下 - Panasonic  
S 高創 - Servotronics

### BM202-380Q規格表 (BM202-380Q Specification):

| 馬達規格 Motor specifications         | 軸心式無鐵芯馬達 380Q                                                   |
|-----------------------------------|-----------------------------------------------------------------|
| 峰值電流 Peak current(A)              | 12A                                                             |
| 電機額定推力 Motor rated (N)            | 190N                                                            |
| 持續電流 Continuous current(A)        | 3.0A                                                            |
| 重複定位精度 Repeatability (mm)         | ± 0.003磁柵編碼器<br>以客戶需求編碼器為主 (magnetic ruler, depends on encoder) |
| 最高速度 Maximum speed                | 3000mm/s (在其他要求滿足要求情況下)                                         |
| 電機峰值推力 Peak thrust (N)            | 602N                                                            |
| 推力常數 Thrust constant              | 69.3N/Arms                                                      |
| 反向電常數 Inverse electrical constant | 35(Ke=Kf/3)                                                     |
| 相間電阻 Phase resistance             | 3.9ohms                                                         |
| 相間電感 Phase-to-phase inductance    | 10mH                                                            |
| 熱阻 thermal resistance             | 1.4°C/w                                                         |
| 線圈最高溫度 Maximum coil temperature   | 130°C                                                           |
| 極距 polar distance                 | 120mm                                                           |

註: 直線電機選型需要根據模組運行時具體參數進行選擇, 爲了更好的適用您的方案, 請務必與我司工程進行確認選型。

Note: the selection of linear motor shall be based on the specific parameters of the module operation. In order to better apply your scheme, please be sure to confirm the selection with our engineer.

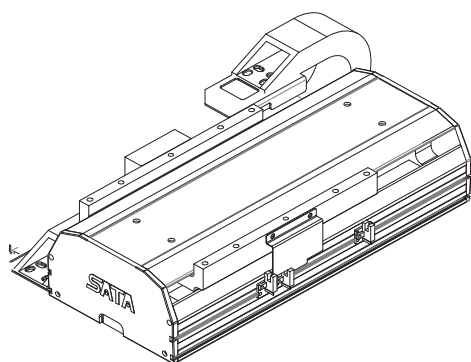
如: 負載, 停頓時間, (加速度, 速度, 行程運行時間, 任意一種), 安裝方式, 配光柵還是磁柵精度若有其他要求請註明

Such as: load, pause time, (acceleration, speed, travel time, any kind), installation method, with optical or magnetic scale, if there are other requirements, please specify

負載計算公式:  $m_{load} = (F_{max} - \mu m_{total}) / a - m_{slip}$  僅做參考  $m_{load}$ -負載,  $F_{max}$ -最大推力,  $\mu$ -摩擦係數,  $m_{total}$ -總質量,  $a$ -加速度,  $m_{slip}$ -滑座質量

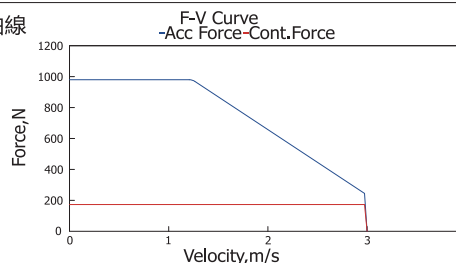
Load formula:  $m_{load} = (F_{max} - \mu m_{total}) / a - m_{slip}$  Just for reference

$m_{load}$ -load,  $F_{max}$ -Peak thrust,  $\mu$ -Coefficient of friction,  $m_{total}$ -Total mass,  $a$ -Acceleration,  $m_{slip}$ -Sliding mass



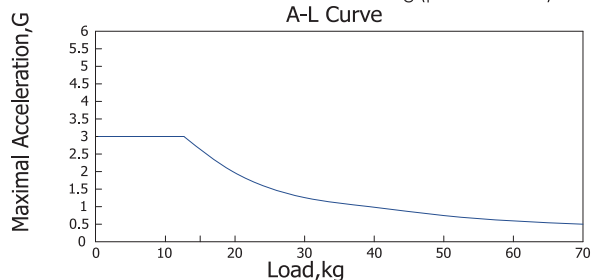
BM202-380Q

F-V曲線

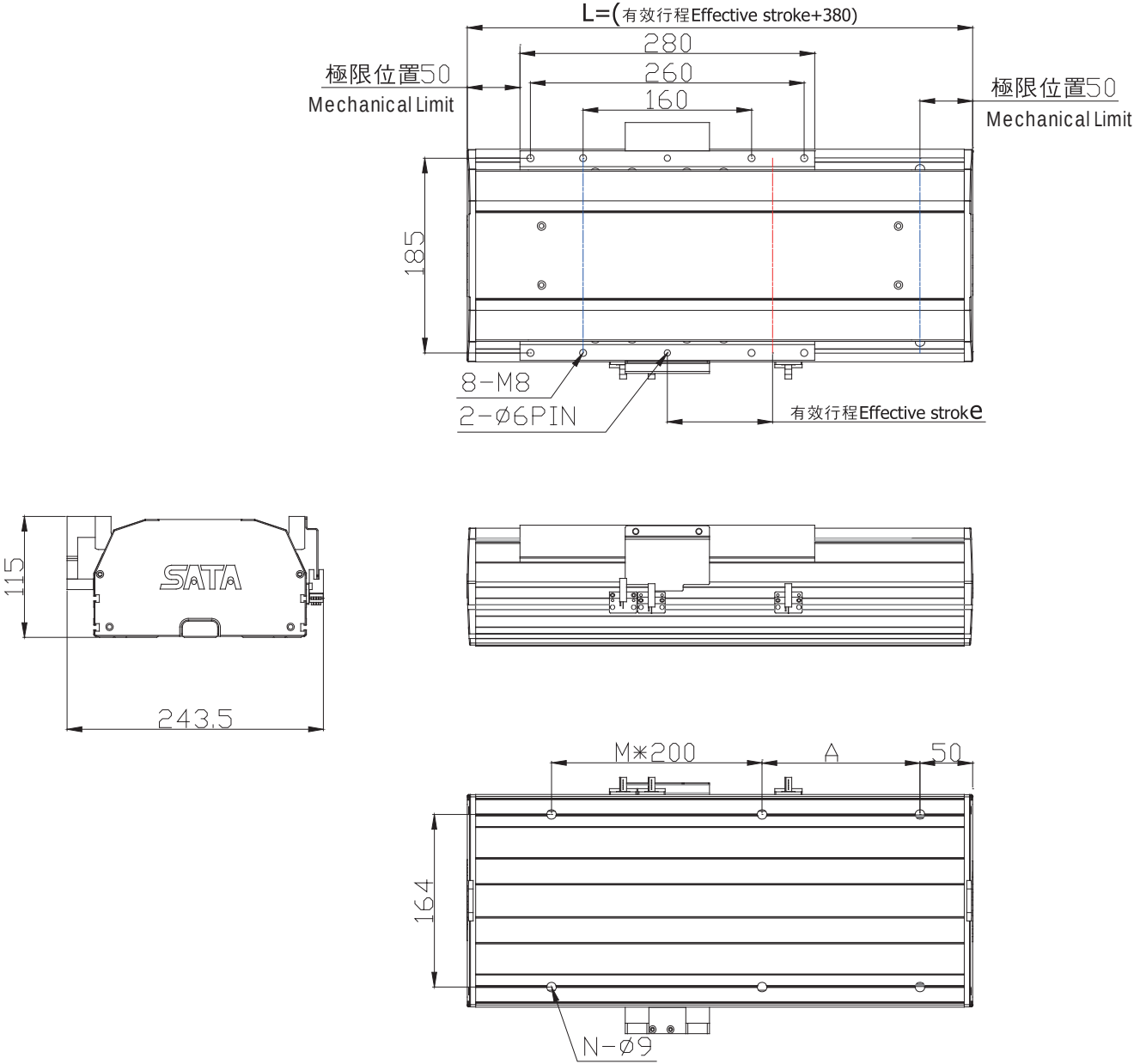


最大加速度與載荷 (停留時間1S)

Maximum acceleration and loading (pause time: 1s)



BM202-380Q



此款型號可客製成無塵環境式及全罩式規格,有需要請跟SATA聯繫  
This model can be customized into clean room type and full cover type specification. Please contact with SATA if necessary

| 行程 Stroke      | 100  | 200  | 300  | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L              | 480  | 580  | 680  | 780  | 880  | 980  | 1080 | 1180 | 1280 | 1380 | 1480 | 1580 | 1680 | 1780 | 1880 |
| A              | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  |
| N              | 6    | 8    | 8    | 10   | 10   | 12   | 12   | 14   | 14   | 16   | 16   | 18   | 18   | 20   | 20   |
| 重量 Weight (kg) | 28.2 | 31.7 | 35.2 | 38.7 | 42.2 | 45.7 | 49.2 | 52.7 | 56.2 | 59.7 | 63.2 | 66.7 | 70.2 | 73.7 | 77.2 |

※本公司享有變更規格之權益，恕不另行通知 ※Drawings and specifications are subject to change without prior notice.

# BM202 - S500 - OR - 10 - 05 - 380X - S

型號  
Model

行程  
Stroke

編碼器  
Encoder  
OR 光學尺  
MR 磁性尺

解析度  
Resolution  
01: 0.1um  
05: 0.5um  
10: 1um

線長  
Wire length  
05-3m  
05-5m  
05-8m  
\*標配 3m  
\*standard: 3m

馬達規格  
Motor specifications

驅動器  
Driver  
C 科普利 - Copley  
D 台達 - Delta  
K 科爾摩根 - Kolmogorov  
P 松下 - Panasonic  
S 高創 - Servotronics

## BM202-380X 規格表 (BM202-380X Specification):

|                                   |                                                                |
|-----------------------------------|----------------------------------------------------------------|
| 馬達規格 Motor specifications         | 軸心式無鐵芯馬達 380X                                                  |
| 峰值電流 Peak current(A)              | 20A                                                            |
| 電機額定推力 Motor rated (N)            | 350N                                                           |
| 持續電流 Continuous current(A)        | 5.0A                                                           |
| 重複定位精度 Repeatability (mm)         | ±0.003磁柵編碼器<br>以客戶需求編碼器為主 (magnetic ruler, depends on encoder) |
| 最高速度 Maximum speed                | 3000mm/s (在其他要求滿足要求情況下)                                        |
| 電機峰值推力 Peak thrust (N)            | 1100N                                                          |
| 推力常數 Thrust constant              | 70N/Arms                                                       |
| 反向電常數 Inverse electrical constant | 23(Ke=Kf/3)                                                    |
| 相間電阻 Phase resistance             | 2.6ohms                                                        |
| 相間電感 Phase-to-phase inductance    | 6.7mH                                                          |
| 熱阻 thermal resistance             | 0.7°C/w                                                        |
| 線圈最高溫度 Maximum coil temperature   | 130°C                                                          |
| 極距 polar distance                 | 120mm                                                          |

註:直線電機選型需要根據模組運行時具體參數進行選擇, 爲了更好的適用您的方案, 請務必與我司工程進行確認選型。

Note: the selection of linear motor shall be based on the specific parameters of the module operation. In order to better apply your scheme, please be sure to confirm the selection with our engineer.

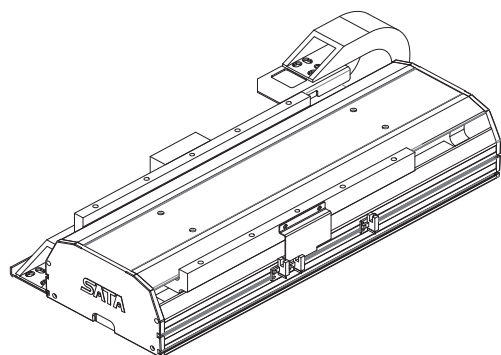
如: 負載, 停頓時間, (加速度, 速度, 行程運行時間, 任意一種), 安裝方式, 配光柵還是磁柵精度若有其他要求請註明

Such as: load, pause time, (acceleration, speed, travel time, any kind), installation method, with optical or magnetic scale, if there are other requirements, please specify

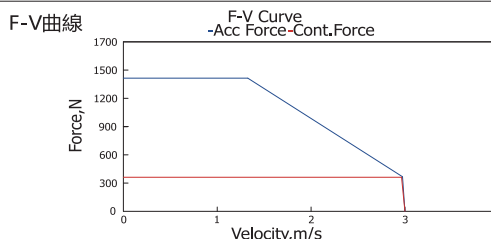
負載計算公式:  $m_{load} = (F_{max} - \mu m_{total}) / a - m_{slip}$  僅做參考  $m_{load}$ -負載,  $F_{max}$ -最大推力,  $\mu$ -摩擦係數,  $m_{total}$ -總質量,  $a$ -加速度,  $m_{slip}$ -滑座質量

Load formula:  $m_{load} = (F_{max} - \mu m_{total}) / a - m_{slip}$  Just for reference

$m_{load}$ -load,  $F_{max}$ -Peak thrust,  $\mu$ -Coefficient of friction,  $m_{total}$ -Total mass,  $a$ -Acceleration,  $m_{slip}$ -Sliding mass

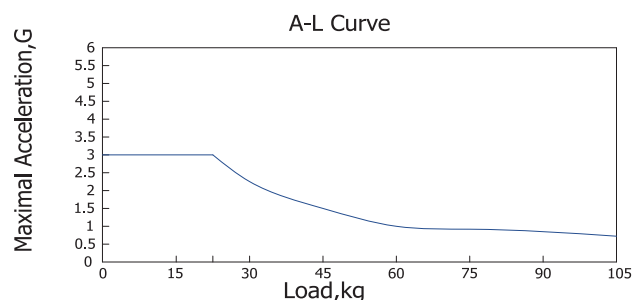


### BM202-380X



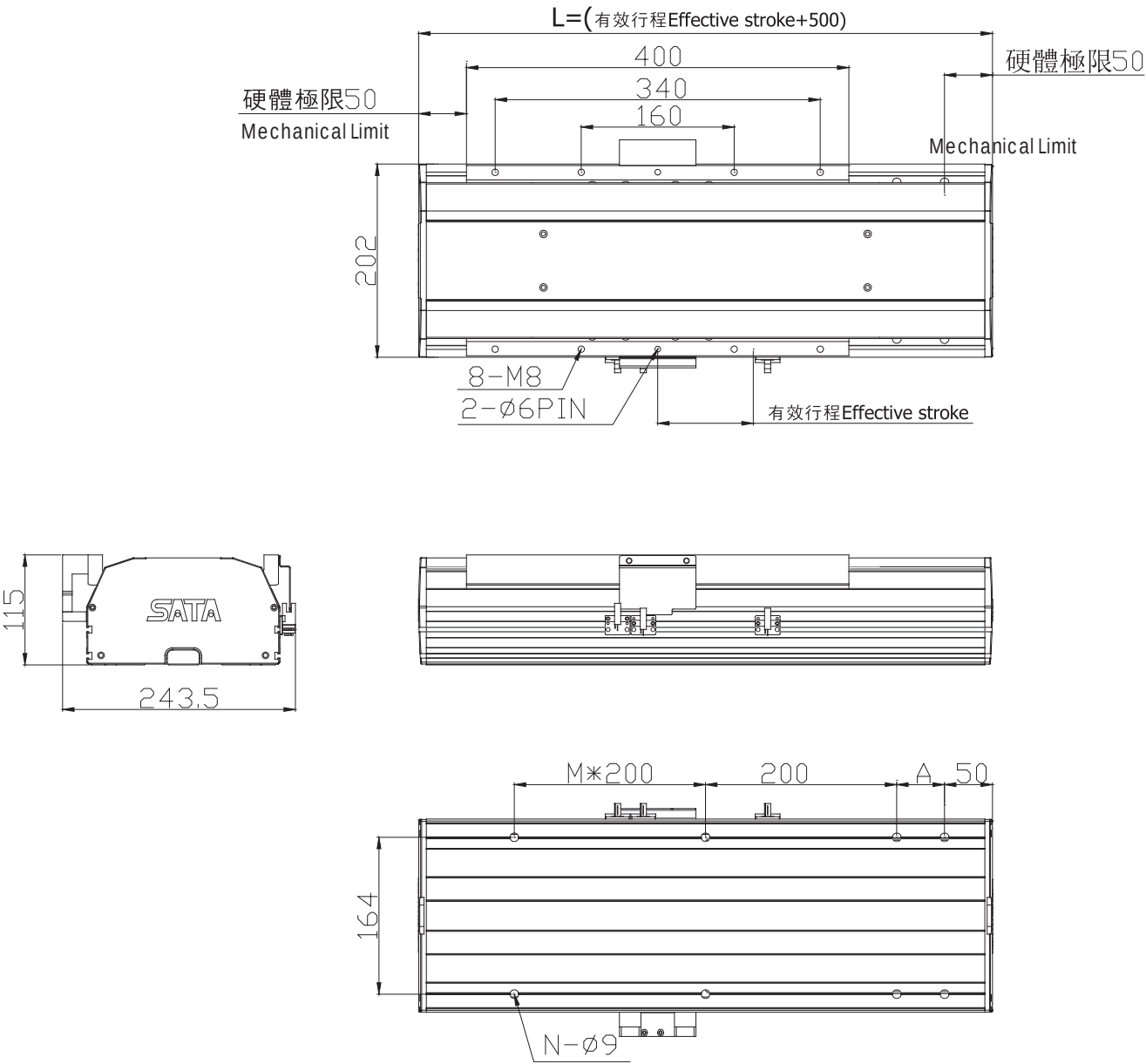
### 最大加速度與載荷 (停留時間1S)

Maximum acceleration and loading (pause time:1s)





BM202-380X



此款型號可客製成無塵環境式及全罩式規格,有需要請跟SATA聯繫  
This model can be customized into clean room type and full cover type specification. Please contact with SATA if necessary

| 行程 Stroke      | 100  | 200  | 300  | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L              | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 |
| A              | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  | 50   | 150  |
| N              | 8    | 8    | 10   | 10   | 12   | 12   | 14   | 14   | 16   | 16   | 18   | 18   | 20   | 20   |
| 重量 Weight (kg) | 34.7 | 38.2 | 41.7 | 45.2 | 48.7 | 52.2 | 55.7 | 59.2 | 62.7 | 66.2 | 69.7 | 73.2 | 76.7 | 80.2 |

※本公司享有變更規格之權益，恕不另行通知 ※Drawings and specifications are subject to change without prior notice.