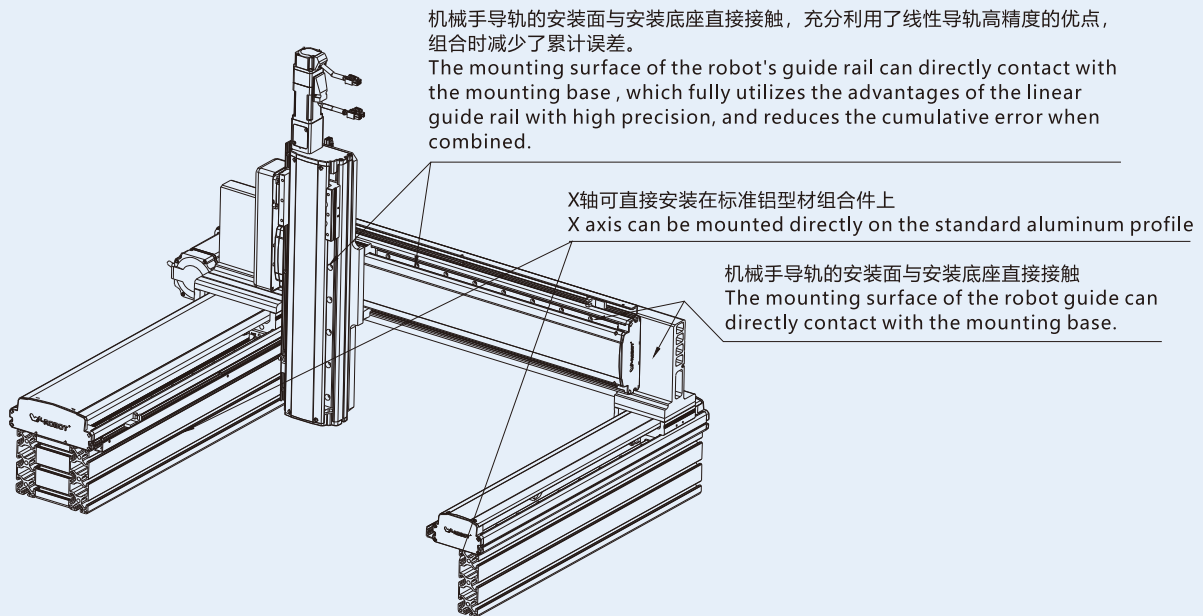


## QF系列模组产品特点 QF Series features

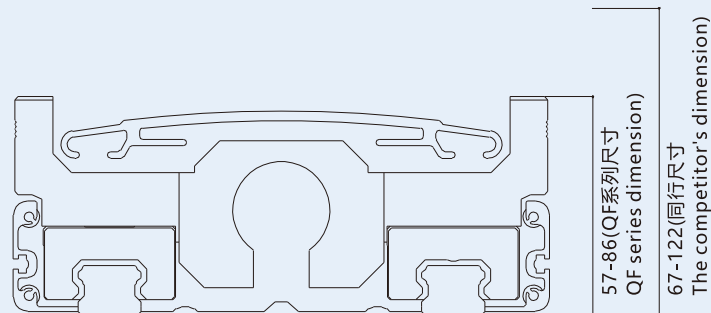
### 组合机械手特点:

### Multi-axis linear actuator combination features:

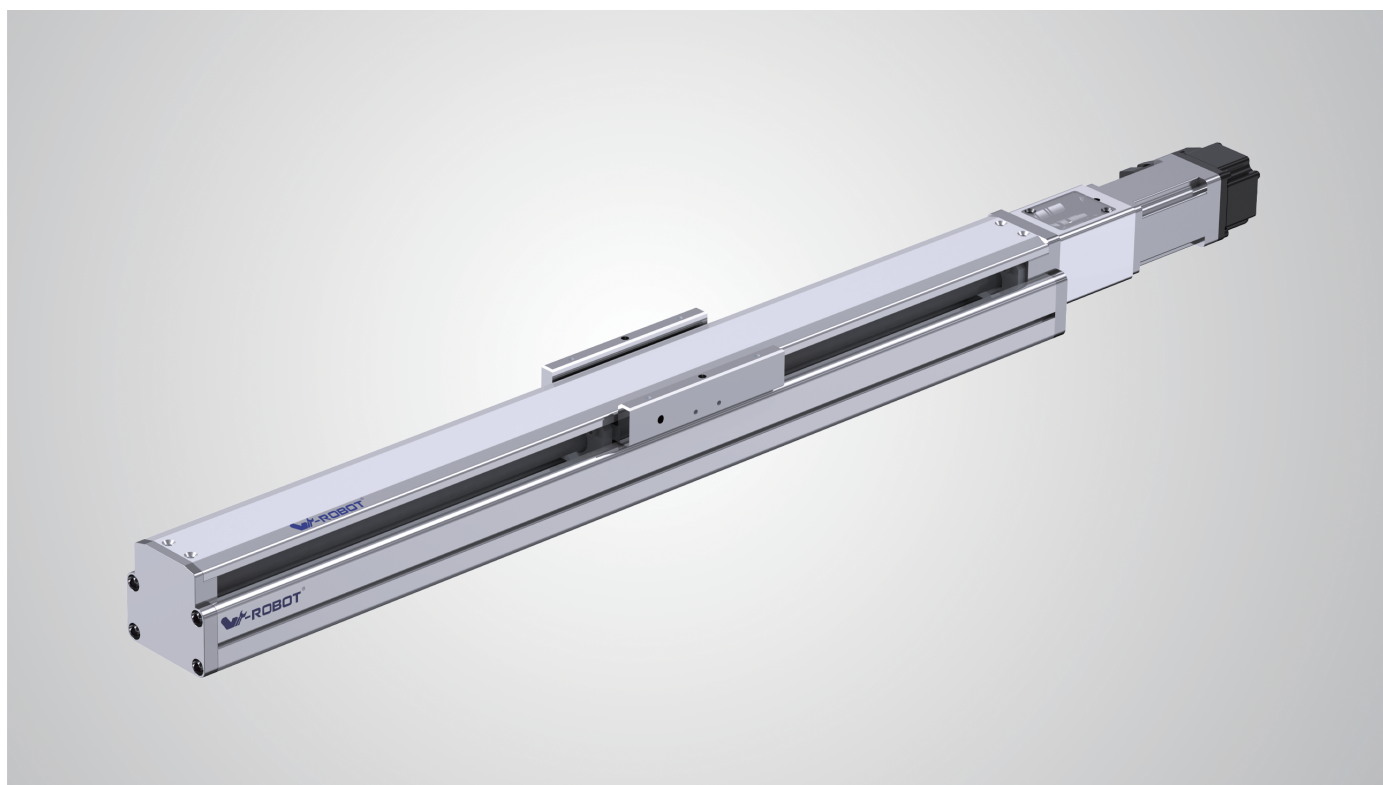


### 单轴机械手特点:

### Single axis linear actuator features:



- 1、尺寸超薄，最大落差足足比同行低了36mm。
- 2、高精度，机械手导轨与安装底座直接接触，最大限度的利用了线性导轨高精度的优点，减少了累计误差。
- 1、Ultra-thin size, the maximum drop size is 36mm lower than the peers.
- 2、High precision- the mounting surface of the robot's guide rail can directly contact with the mounting base, which fully utilizes the advantages of the linear guide rail with high precision, and reduces the cumulative error when combined



同步带传动/无尘环境  
Timing belt drive  
Dust-free environment

同步带传动/一般环境  
Timing belt drive  
General environment

双电机滑台  
Dual motors series

夹持机械手  
Clamp type robot

电动缸  
Electric cylinder

旋转轴  
Rotation axis

电动手抓  
Electric Clamper

小型滑台  
Mini Module

直线电机  
Linear Motor

组合机械手  
Multi-axis actuator

四轴悬臂机器人  
Cantilever 4 axis robot

水平关节机器人  
Scara Robot

六轴机器人  
Six-joint robot

V G 系列  
VG Series

V G T H 系列  
VGTH Series

Q F 6 N 系列  
QF6N Series

## ■ 型号表示方式 Guide for Model Selection

**QF6N - L5 - C - S60 - BC - ZP10B - C 3 P**

| 本体样式 |                                |
|------|--------------------------------|
| Q    | Q系列 Vseries                    |
| F    | 半密封带框架 丝杆驱动结构 Ball Screw Drive |
| 6N   | 本体56mm宽 Body width 56 mm       |

| 丝杆导程 Ball Screw Lead |      |
|----------------------|------|
| L05                  | 5mm  |
| L10                  | 10mm |
| L20                  | 20mm |
| 精度等级 Accuracy class  |      |
| P                    | 精密级  |
| C                    | 普通级  |

| 行程(mm) Stroke(mm) |
|-------------------|
| 60-900 (60间隔)     |

| 马达连接方式 Motor connection |                 |
|-------------------------|-----------------|
| BA                      | 基本型 Basis       |
| BC                      | 直联外置 External   |
| BR                      | 马达右折 Right Side |
| BL                      | 马达左折 Left Side  |

| 马达类型<br>Motor Type                |                 | 马达功率<br>(Motor power) |      |
|-----------------------------------|-----------------|-----------------------|------|
| M                                 | Mitsubishi (三菱) | 10                    | 100W |
| Y                                 | Yaskawa (安川)    |                       |      |
| T                                 | Delta (台达)      |                       |      |
| P                                 | Panasonic (松下)  |                       |      |
| W                                 | W-Robot (威洛博)   |                       |      |
| Z:客户自配电机 (Motor is form cilicent) |                 |                       |      |
| B: 电机带刹车 (Motor with brake)       |                 |                       |      |
| NO: 电机不带刹车 (Motor without brake)  |                 |                       |      |

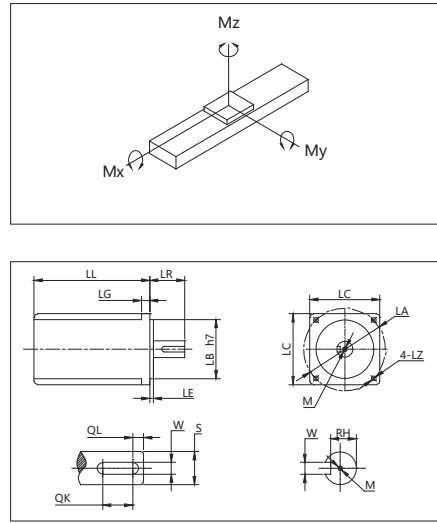
| 感应开关数量 Sensor Switch |      |
|----------------------|------|
| 2                    | 2PCS |
| 3                    | 3PCS |

| 感应器类型 Sensor Type |     |
|-------------------|-----|
| P                 | PNP |
| NO(无)             | NPN |

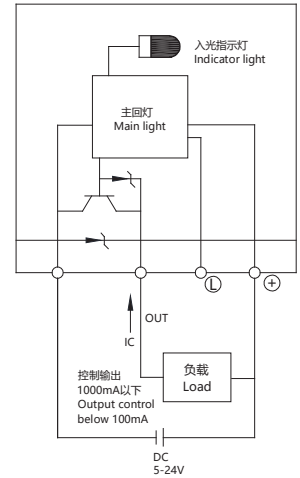
| 原点开关位置 Original sensor position |                         |
|---------------------------------|-------------------------|
| 外置式 (External)                  |                         |
| C                               | 马达侧 Motor side          |
| D                               | 反马达侧 Oppsite motor side |
| E                               | 无(No)                   |

## 基本规格 Specification

|                                        |                        |                         |        |      |
|----------------------------------------|------------------------|-------------------------|--------|------|
| 适配电机 Motor available (W)               |                        | 100                     |        |      |
| 重复定位精度 Repeatability (mm)              |                        | C级 (C7)                 | ±0.01  |      |
|                                        |                        | P级 (C5)                 | ±0.006 |      |
| 导程 Lead (mm)                           |                        | 5                       | 10     | 20   |
| 最大速度 Max speed (mm/s)                  |                        | 250                     | 500    | 1000 |
| 最大搬运重量 (kg)<br>Maximum handling weight | 水平使用<br>Horizontal use | 30                      | 25     | 3    |
|                                        | 垂直使用<br>Vertical use   | 10                      | 7      | 15   |
| 静态允许力矩<br>Static allowable torque      | Mx(N.m)                | 72                      |        |      |
|                                        | My(N.m)                | 54                      |        |      |
|                                        | Mz(N.m)                | 54                      |        |      |
| 标准行程 Range of troke (mm)               |                        | 60-900mm/60间隔(Interval) |        |      |
| 总长 Total lenght (mm)                   |                        | < 1200                  |        |      |
| 丝杆直径 Screw diameter (mm)               |                        | Ø16                     |        |      |
| 联轴器 Coupling (mm)                      |                        | 8×10                    |        |      |
| 原点感应器 Home sensor                      |                        | EE-SX674(NPN)           |        |      |



电机尺寸示意图

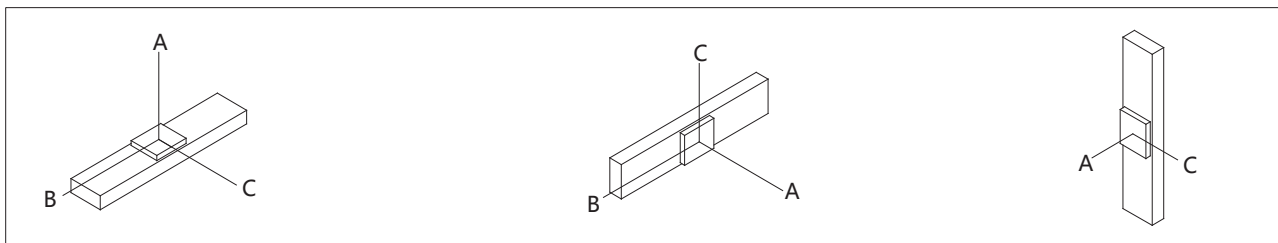


感应开关接线图

## 搭配伺服马达一览表 Servo Motor Matches List

| 功率<br>(W)Power | 品牌<br>Brand      | 型号<br>Type      |                                            | LL   | LL(带刹车)<br>Brake | LA | LE  | LZ  | LC | LG | LW | RH  | W   | LR | S   | LB   | M     | QK | QL |
|----------------|------------------|-----------------|--------------------------------------------|------|------------------|----|-----|-----|----|----|----|-----|-----|----|-----|------|-------|----|----|
| 100W           | 松下<br>Panasonic  | MSMD012G1 _     | V:带刹车 U:无刹车<br>V : With brake U : No brake | 92   | 122              | 45 | 3   | 34  | 38 | 6  | 14 | 6.2 | 3h9 | 25 | 8h6 | 30h7 | M3*6L | -  | -  |
|                | 台达<br>Delta      | ECMA-C20401 _ S | S:带刹车 R:无刹车<br>S : With brake R : No brake | 106  | 136.6            | 46 | 2.5 | 4.5 | 40 | 5  | 16 | 6.2 | 3   | 25 | 8h6 | 30h7 | M3*8L | -  | -  |
|                | 三菱<br>Mitsubishi | HC-KFS12 _ K    | B:带刹车 R:无刹车<br>B : With brake R : No brake | 86.5 | 124.5            | 46 | 2.5 | 4.5 | 4  | 5  | -  | -   | -   | 25 | 8h6 | 30h7 | -     | -  | -  |

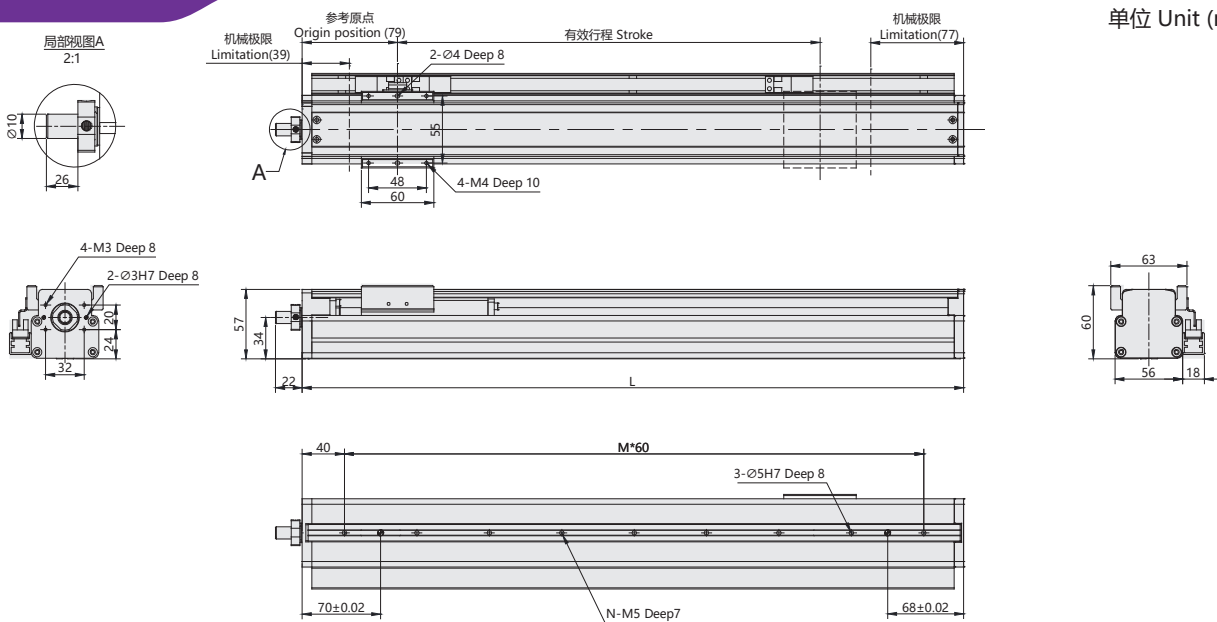
## 容许负载力矩表 Allow Load Torque Table



| 水平安装应用 (单位mm)<br>Horizontal installation (单位mm) |                         |     |     |     |
|-------------------------------------------------|-------------------------|-----|-----|-----|
| 导程 Lead                                         | 承重 (KG)<br>Load bearing | A   | B   | C   |
| 5mm                                             | 15                      | 140 | 120 | 80  |
|                                                 | 20                      | 119 | 91  | 76  |
|                                                 | 30                      | 66  | 47  | 27  |
|                                                 | 10                      | 139 | 114 | 94  |
| 10mm                                            | 15                      | 80  | 61  | 35  |
|                                                 | 25                      | 40  | 15  | 10  |
|                                                 | 5                       | 301 | 150 | 115 |
| 20mm                                            | 10                      | 118 | 105 | 85  |
|                                                 | 15                      | 132 | 95  | 38  |

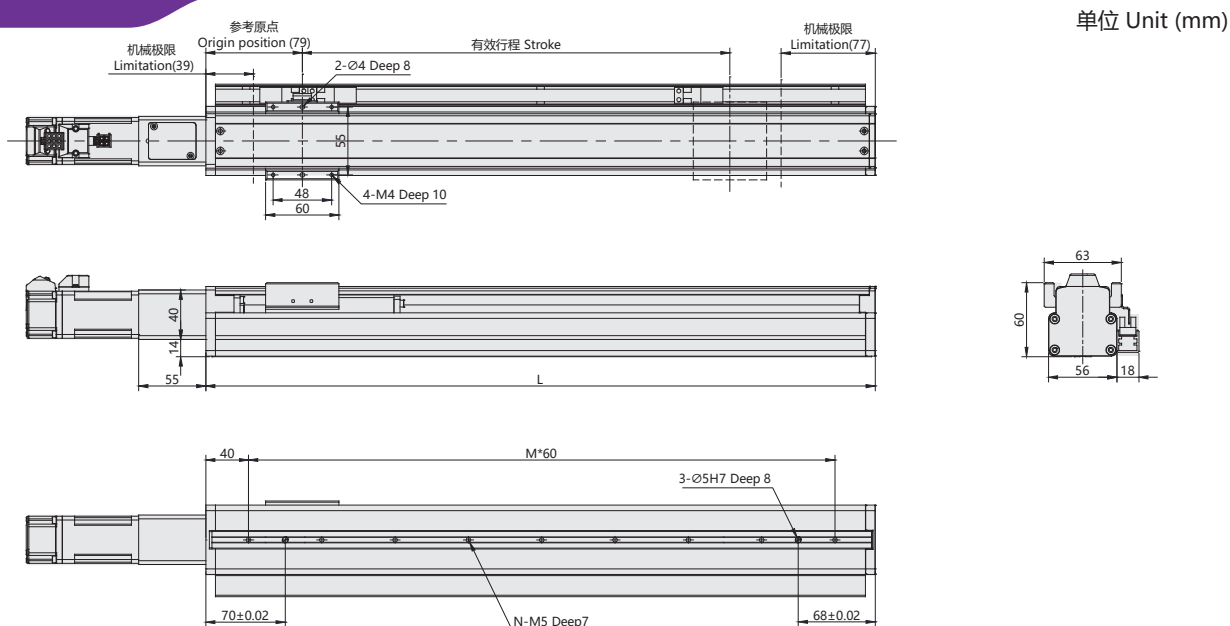
| 墙面安装应用 (单位mm)<br>Wall installation (单位mm) |                         |    |     |     |
|-------------------------------------------|-------------------------|----|-----|-----|
| 导程 Lead                                   | 承重 (KG)<br>Load bearing | A  | B   | C   |
| 5mm                                       | 15                      | 25 | 65  | 130 |
|                                           | 25                      | 15 | 50  | 85  |
|                                           | 30                      | 0  | 0   | 10  |
|                                           | 10                      | 55 | 100 | 150 |
| 10mm                                      | 15                      | 15 | 50  | 70  |
|                                           | 25                      | 0  | 10  | 25  |
|                                           | 5                       | 40 | 50  | 110 |
| 20mm                                      | 10                      | 30 | 15  | 80  |
|                                           | 15                      | 0  | 0   | 20  |

| 竖直安装应用 (单位mm)<br>(Vertical installation) (单位mm) |                         |     |     |
|-------------------------------------------------|-------------------------|-----|-----|
| 导程 Lead                                         | 承重 (KG)<br>Load bearing | A   | C   |
| 5mm                                             | 6                       | 135 | 135 |
|                                                 | 8                       | 100 | 100 |
|                                                 | 10                      | 25  | 25  |
|                                                 | 2                       | 425 | 425 |
| 10mm                                            | 4                       | 270 | 270 |
|                                                 | 7                       | 90  | 90  |
|                                                 |                         |     |     |
| 20mm                                            | 1                       | 205 | 205 |
|                                                 | 2                       | 136 | 136 |



| 有效行程<br>Working stroke (mm) | 60   | 120  | 180 | 240  | 300  | 360  | 420  | 480 | 540  | 600  | 660  | 720  | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 |
|-----------------------------|------|------|-----|------|------|------|------|-----|------|------|------|------|-----|------|------|------|------|------|------|------|
| L                           | 258  | 318  | 378 | 438  | 498  | 558  | 618  | 678 | 738  | 798  | 858  | 918  | 978 | 1038 | 1098 | 1158 | 1218 | 1278 | 1338 | 1398 |
| M                           | 3    | 4    | 5   | 6    | 7    | 8    | 9    | 10  | 11   | 12   | 13   | 14   | 15  | 16   | 17   | 18   | 19   | 20   | 21   | 22   |
| N                           | 4    | 5    | 6   | 7    | 8    | 9    | 10   | 11  | 12   | 13   | 14   | 15   | 16  | 17   | 18   | 19   | 20   | 21   | 22   | 23   |
| 重量 Weight (kg)              | 1.98 | 2.24 | 2.5 | 2.76 | 3.02 | 3.28 | 3.54 | 3.8 | 4.06 | 4.32 | 4.58 | 4.84 | 5.1 | 5.36 | 5.62 | 5.88 | 6.14 | 6.4  | 6.66 | 6.92 |

注：如果有特殊行程请与技术人员联系 (In case special stroke please contact technical service)。



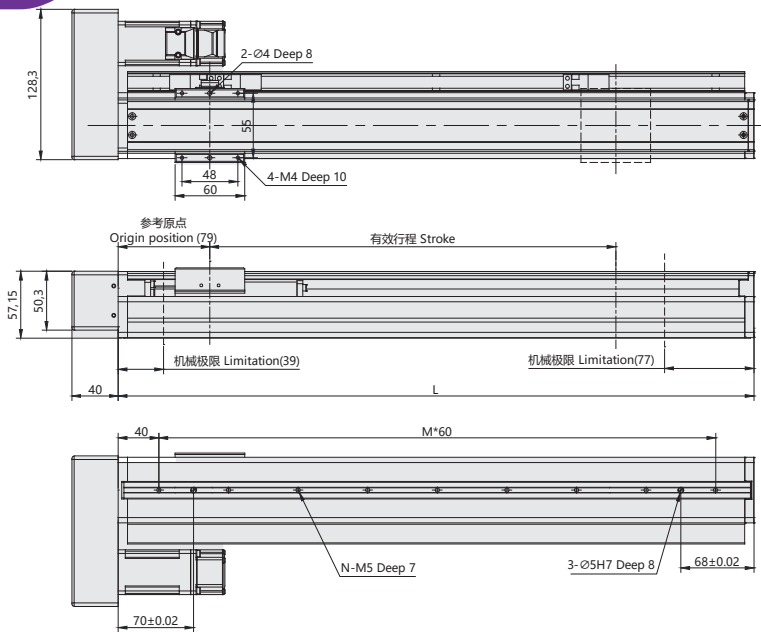
| 有效行程<br>Working stroke (mm) | 60   | 120  | 180  | 240  | 300  | 360  | 420  | 480  | 540  | 600  | 660  | 720  | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L                           | 258  | 318  | 378  | 438  | 498  | 558  | 618  | 678  | 738  | 798  | 858  | 918  | 978  | 1038 | 1098 | 1158 | 1218 | 1278 | 1338 | 1398 |
| M                           | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   |
| N                           | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   |
| 重量 Weight (kg)              | 2.11 | 2.37 | 2.63 | 2.89 | 3.15 | 3.41 | 3.67 | 3.93 | 4.19 | 4.45 | 4.71 | 4.97 | 5.23 | 5.49 | 5.75 | 6.01 | 6.27 | 6.53 | 6.79 | 7.05 |

注：如果有特殊行程请与技术人员联系 (In case special stroke please contact technical service)。



# QF6N

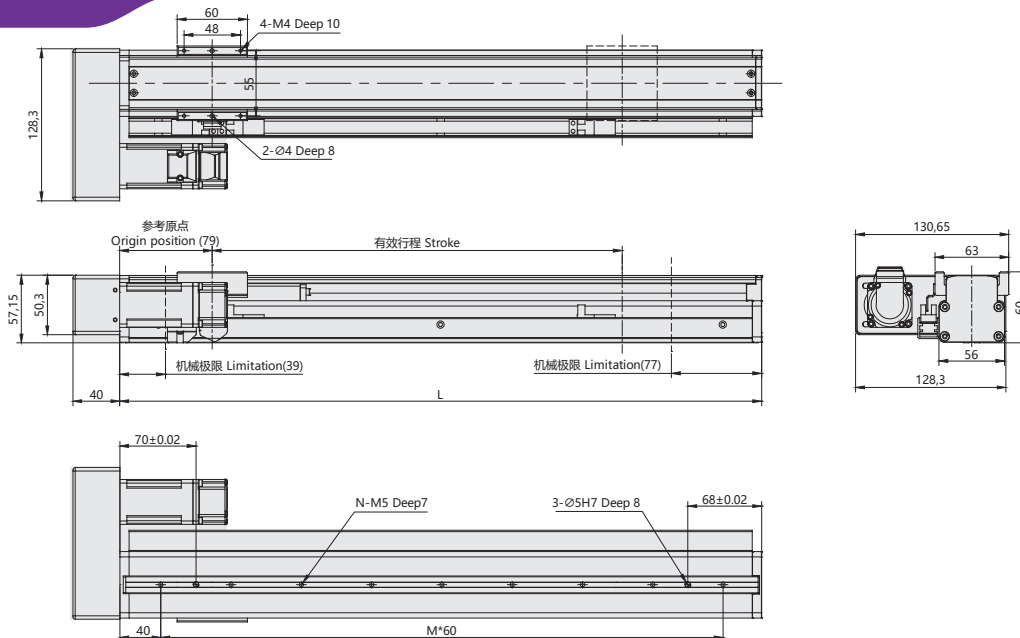
单位 Unit (mm)



| 有效行程<br>Working stroke (mm) | 60   | 120 | 180  | 240  | 300  | 360 | 420  | 480  | 540  | 600  | 660 | 720  | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 |
|-----------------------------|------|-----|------|------|------|-----|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|
| L                           | 258  | 318 | 378  | 438  | 498  | 558 | 618  | 678  | 738  | 798  | 858 | 918  | 978  | 1038 | 1098 | 1158 | 1218 | 1278 | 1338 | 1398 |
| M                           | 3    | 4   | 5    | 6    | 7    | 8   | 9    | 10   | 11   | 12   | 13  | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   |
| N                           | 4    | 5   | 6    | 7    | 8    | 9   | 10   | 11   | 12   | 13   | 14  | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   |
| 重量 Weight (kg)              | 2.34 | 2.6 | 2.86 | 3.12 | 3.34 | 3.6 | 3.86 | 4.12 | 4.38 | 4.64 | 4.9 | 5.16 | 5.42 | 5.68 | 5.94 | 6.2  | 6.46 | 6.72 | 6.98 | 7.24 |

注：如果有特殊行程请与技术人员联系 (In case special stroke please contact technical service)。

单位 Unit (mm)



| 有效行程<br>Working stroke (mm) | 60   | 120 | 180  | 240  | 300  | 360 | 420  | 480  | 540  | 600  | 660 | 720  | 780  | 840  | 900  | 950  | 1020 | 1080 | 1140 | 1200 |
|-----------------------------|------|-----|------|------|------|-----|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|
| L                           | 258  | 318 | 378  | 438  | 498  | 558 | 618  | 678  | 738  | 798  | 858 | 918  | 978  | 1038 | 1098 | 1158 | 1218 | 1278 | 1338 | 1398 |
| M                           | 3    | 4   | 5    | 6    | 7    | 8   | 9    | 10   | 11   | 12   | 13  | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   |
| N                           | 4    | 5   | 6    | 7    | 8    | 9   | 10   | 11   | 12   | 13   | 14  | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   |
| 重量 Weight (kg)              | 2.34 | 2.6 | 2.86 | 3.12 | 3.34 | 3.6 | 3.86 | 4.12 | 4.38 | 4.64 | 4.9 | 5.16 | 5.42 | 5.68 | 5.94 | 6.2  | 6.46 | 6.72 | 6.98 | 7.24 |

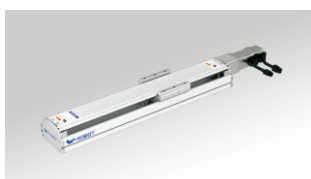
注：如果有特殊行程请与技术人员联系 (In case special stroke please contact technical service)。



## 马达安装方式 Motor direction



BA



BC



BL



BR

## 型号表示方式 Guide for Model Selection

QF8 - L16 - C - S100 - BC - ZP10B - C3 -

| 本体样式<br>Base Style |                                                                  |
|--------------------|------------------------------------------------------------------|
| Q                  | Q系列<br>Q Series                                                  |
| F                  | 半密封带框架<br>Semiclosed with<br>Frame<br>丝杆驱动结构<br>Ball Screw Drive |
| 8                  | 本体86mm宽<br>Body width 86                                         |

| 丝杆导程<br>Ball Screw Lead |      |
|-------------------------|------|
| L5                      | 5mm  |
| L10                     | 10mm |
| L16                     | 16mm |
| L20                     | 20mm |

| 精度等级<br>Accuracy class |                         |
|------------------------|-------------------------|
| C                      | 普通级<br>Common precision |

| 行程(mm)<br>Stroke(mm) |
|----------------------|
| 60-1140              |

| 马达方式<br>Motor way |                    |
|-------------------|--------------------|
| BA                | 基本型<br>Basis       |
| BC                | 直联外置<br>External   |
| BR                | 马达右折<br>Right Side |
| BL                | 马达左折<br>Left Side  |

| 马达类型<br>Motor Type                                       |                  | 马达功率<br>Motor power |                   |
|----------------------------------------------------------|------------------|---------------------|-------------------|
| P                                                        | 松下<br>Panasonic  | 10                  | 100W              |
| M                                                        | 三菱<br>Mitsubishi | 刹车<br>Brakes        |                   |
| Y                                                        | 安川<br>Yaskawa    | 无<br>No             | 无刹车<br>No brake   |
| T                                                        | 台达<br>Delta      | B                   | 带刹车<br>With brake |
| W                                                        | 威洛博<br>W-Robot   |                     |                   |
| *为 Z:<br>代表客户自配电机<br>*For Z:<br>Motor is from<br>clients |                  |                     |                   |

| 原点开关位置<br>Original Sensor<br>position | 极限开关数量<br>Limit Sensor Qty |
|---------------------------------------|----------------------------|
| 外置式:<br>External                      | 外置式:<br>External           |
| C 马达侧<br>Motor side                   | 2 2个 2pcs                  |
| D 反马达侧<br>Opposite motor<br>side      | 3 3个 3pcs                  |
| E 无<br>No                             | 无感应器<br>No sensor          |

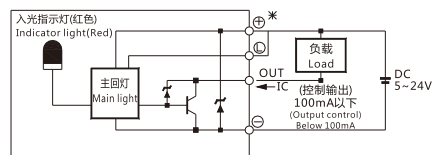
| 感应器类型<br>Sensor type |     |
|----------------------|-----|
| 无<br>No              | NPN |
| P                    | PNP |

| 非标特注<br>Non-standard, d.c., |                                                                          |
|-----------------------------|--------------------------------------------------------------------------|
| 无 NO                        | 标准型 Standard                                                             |
| BL1                         | 详细<br>释义<br>请见<br>P3页<br><br>Detailed<br>information<br>please<br>see P3 |
| B2                          |                                                                          |
| D01                         |                                                                          |
| U01                         |                                                                          |
| UD01                        |                                                                          |
| H01                         |                                                                          |
| HU01                        |                                                                          |
| HD01                        |                                                                          |
| HUD01                       |                                                                          |
| M01                         |                                                                          |
| S01                         |                                                                          |

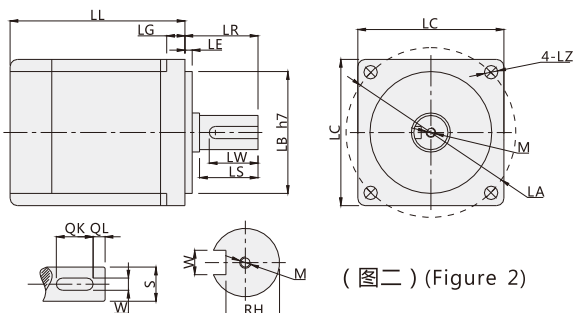
## 基本规格 Specification

|                                  |                    |               |                |      |
|----------------------------------|--------------------|---------------|----------------|------|
| 马达功率 AC (W) Motor power AC (W)   | 100W               |               |                |      |
| 滚珠丝杆驱动-外径 BallScrewφ             | C级 (C7)            | 16            |                |      |
|                                  | P级 (C5)            |               |                |      |
| 重复定位精度 Repeatability             | C级 (C7)            | ±0.01         |                |      |
|                                  | P级 (C5)            |               |                |      |
| 滚珠丝杆导程 BallScrew Lead(mm)        | 5                  | 10            | 16             | 20   |
| 最快速度 MaximumSpeed(mm/sec)        | 250                | 500           | 800            | 1000 |
| 马达转速 3000 Motor Speed(rpm/mim)   | 250                | 500           | 800            | 1000 |
| 额定加速度 Rate acceleration (m/sec2) | 1.5                | 3             | 3              | 3    |
| 最大载重(kg)<br>Maximum Payload(kg)  | 水平使用 Horizontal    | 30            | 25             | 20   |
|                                  | 垂直使用 Vertical      | 10            | 7              | 4    |
| 额定推力(N) RatedThrust(N)           | 330                | 165           | 100            | 85   |
| 直线导轨 Linear Guide (mm)           | 15x12.5 -1         |               |                |      |
| 联轴器 Coupling (mm)                | 8x10               |               |                |      |
| (Motor side) x (Ball Screw Side) |                    |               |                |      |
| 马达功率 Motor Output                | 100W               |               |                |      |
| 原点感应器 Home Sensor                | 外挂 Outside         | EE-SX672(NPN) | EE-SX672P(PNP) |      |
|                                  | 导轨安装 Outside Guide | EE-SX674(NPN) | EE-SX674P(PNP) |      |

感应器接线图 < 原点及端点 >  
Wiring drawing of inductor(original point and endpoint)



(图一) (Figure 1)



(图二) (Figure 2)

\* 以上重复定位精度是300行程范围内所得, 如行程加长, 则重复定位精度适当放大; 行程超过650时会产生丝杆共振, 每增加100行程请将速度降低15%; 更换不同电机时, 请注意图二电机尺寸是否同表一相同, 否则需更换联轴器和马达固定座。

\* Above repeatability is within stroke 300mm, if logner travel needed, it will be lower. In case stroke over 650 will lead to swing of ball screw, please slow down the speed 15%. Please note figure 2 motor size is same with table 1, or needed to replace coupler and motor holder.)

## 搭配伺服马达一览表 Servo Motor Matches List

(表一) (Table1)

| 伺服电机外形尺寸 Servo motor size |               |                 |                                            |                      |       |    |     |     |    |     |    |     |     |    |      |      |        |    |   |
|---------------------------|---------------|-----------------|--------------------------------------------|----------------------|-------|----|-----|-----|----|-----|----|-----|-----|----|------|------|--------|----|---|
| 功率W<br>Power(W)           | 品牌 Brand      | 型号 Type         | LL                                         | LL(刹车)<br>LL(Brakes) | LA    | LE | LZ  | LC  | LG | LW  | RH | W   | LR  | S  | LB   | M    | QK     | QL |   |
| 100W                      | 松下 Panasonic  | MSMD012G1 □     | V: 带刹车 U: 无刹车<br>V: With brake U: No brake | 92                   | 122   | 45 | 3   | 3.4 | 38 | 6   | 14 | 6.2 | 3h9 | 25 | 8h6  | 30h7 | M3x6L  | -  | - |
|                           | 台达 Delta      | ECMA-C20401 □ S | S: 带刹车 R: 无刹车<br>S: With brake R: No brake | 100.6                | 136.6 | 46 | 2.5 | 4.5 | 40 | 5   | 16 | 6.2 | 3   | 25 | 8h6  | 30h7 | M3x8L  | -  | - |
|                           | 三菱 Mitsubishi | HC-KFS12 □ K    | B: 带刹车 □: 无刹车<br>B: With brake □: No brake | 86.5                 | 124.5 | 46 | 2.5 | 4.5 | 42 | 5   | -  | -   | -   | 25 | 8h6  | 30h7 | -      | -  | - |
| 200W                      | 松下 Panasonic  | MSMJ022G1 □     | V: 带刹车 U: 无刹车<br>V: With brake U: No brake | 79.5                 | 115.5 | 70 | 3   | 4.5 | 60 | 6.5 | 20 | 8.5 | 4h9 | 30 | 11h6 | 50h7 | M4x8L  | -  | - |
|                           | 台达 Delta      | ECMA-C20602 □ S | S: 带刹车 R: 无刹车<br>S: With brake R: No brake | 105.5                | 141.5 | 70 | 3   | 5.5 | 60 | 7.5 | 20 | 11  | 5   | 30 | 14h6 | 50h7 | M4x15L | -  | - |
|                           | 三菱 Mitsubishi | HC-KFS23 □ K    | B: 带刹车 □: 无刹车<br>B: With brake □: No brake | 99.5                 | 131.5 | 70 | 3   | 5.8 | 62 | 7   | -  | -   | -   | 30 | 14h6 | 50h7 | -      | -  | - |
| 400W                      | 松下 Panasonic  | MSMJ042G1 □     | V: 带刹车 U: 无刹车<br>V: With brake U: No brake | 99                   | 135   | 70 | 3   | 4.5 | 60 | 6.5 | 20 | 11  | 5h9 | 30 | 14h6 | 50h7 | M5x10L | -  | - |
|                           | 台达 Delta      | ECMA-C20604 □ S | S: 带刹车 R: 无刹车<br>S: With brake R: No brake | 130.7                | 166.6 | 70 | 3   | 5.5 | 60 | 7.5 | 20 | 11  | 5   | 30 | 14h6 | 50h7 | M4x15L | -  | - |
|                           | 台达 Delta      | ECMA-C20804 □ S | S: 带刹车 R: 无刹车<br>S: With brake R: No brake | 112.3                | 152.8 | 90 | 3   | 6.6 | 80 | 8   | 20 | 11  | 5   | 35 | 14h6 | 70h7 | M4x15L | -  | - |
|                           | 三菱 Mitsubishi | HC-KFS43 □ K    | B: 带刹车 □: 无刹车<br>B: With brake □: No brake | 124.5                | 165.5 | 70 | 3   | 5.8 | 62 | 7   | -  | -   | -   | 30 | 14h6 | 50h7 | -      | -  | - |

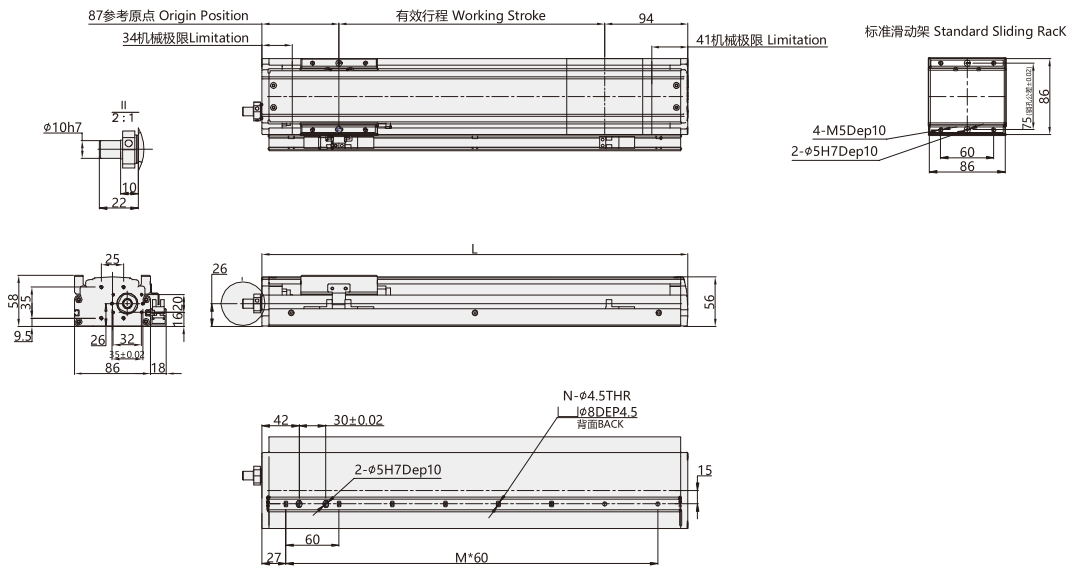
□表示为空 Stand for empty

## 容许负载力矩表 Allow Load Torque Table

| (单位: mm) (Unit: mm)             |     |     |     | (单位: N.m) (Unit: N.m)           |    |     |     |
|---------------------------------|-----|-----|-----|---------------------------------|----|-----|-----|
|                                 |     |     |     |                                 |    |     |     |
| 水平安装<br>Horizontal installation |     |     |     | 墙面安装<br>Wall installation       |    |     |     |
| 导程 5<br>Lead 5                  | A   | B   | C   | 导程 5<br>Lead 5                  | A  | B   | C   |
| 15kg                            | 140 | 120 | 80  | 15kg                            | 25 | 65  | 130 |
| 25kg                            | 119 | 91  | 76  | 25kg                            | 15 | 50  | 85  |
| 30kg                            | 66  | 47  | 27  | 30kg                            | 0  | 0   | 10  |
| 10kg                            | 139 | 114 | 94  | 10kg                            | 55 | 100 | 150 |
| 15kg                            | 80  | 61  | 35  | 15kg                            | 15 | 50  | 70  |
| 25kg                            | 40  | 15  | 10  | 25kg                            | 0  | 10  | 25  |
| 8kg                             | 335 | 29  | 180 | 8kg                             | 85 | 65  | 200 |
| 15kg                            | 236 | 150 | 130 | 15kg                            | 50 | 95  | 135 |
| 20kg                            | 165 | 51  | 42  | 20kg                            | 5  | 25  | 60  |
| 5kg                             | 301 | 150 | 115 | 5kg                             | 40 | 50  | 110 |
| 10kg                            | 188 | 105 | 85  | 10kg                            | 30 | 15  | 80  |
| 15kg                            | 132 | 95  | 38  | 15kg                            | 0  | 0   | 20  |
| 垂直安装<br>Vertical installation   |     |     |     | 最大静态力矩<br>Maximum static torque |    |     |     |
| 导程 5<br>Lead 5                  | A   | C   |     | MY                              | MP | MR  |     |
| 6kg                             | 135 | 135 |     | 54                              |    |     |     |
| 8kg                             | 100 | 100 |     | 54                              |    |     |     |
| 10kg                            | 25  | 25  |     | 72                              |    |     |     |
| 2kg                             | 425 | 425 |     |                                 |    |     |     |
| 4kg                             | 270 | 270 |     |                                 |    |     |     |
| 7kg                             | 90  | 90  |     |                                 |    |     |     |
| 1kg                             | 262 | 262 |     |                                 |    |     |     |
| 3kg                             | 170 | 170 |     |                                 |    |     |     |
| 4kg                             | 100 | 100 |     |                                 |    |     |     |
| -                               | -   | -   |     |                                 |    |     |     |
| 1kg                             | 205 | 205 |     |                                 |    |     |     |
| 2kg                             | 136 | 136 |     |                                 |    |     |     |

BA:基本型(Basis)

单位 Unit (mm)



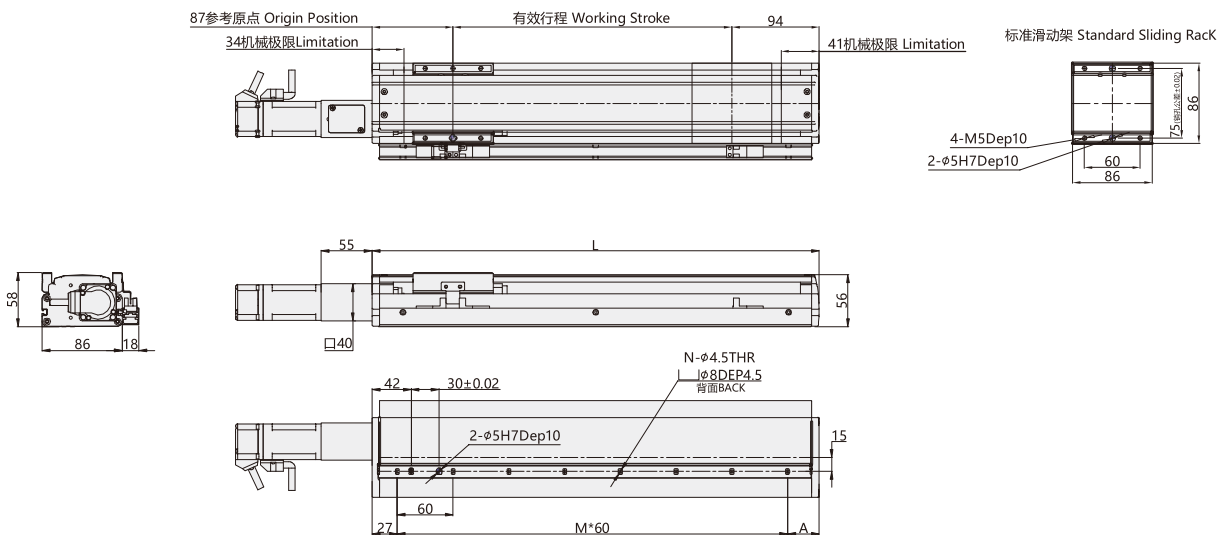
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| L                      | 241 | 301 | 361 | 421 | 481 | 541 | 601 | 661 | 721 | 781 | 841 | 901 | 961 | 1021 | 1081 | 1141 | 1201 | 1261 | 1321 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   |
| N                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   | 19   | 20   | 21   | 22   |
| 重量 KG<br>Weight KG     | 2.0 | 2.3 | 2.6 | 2.9 | 3.2 | 3.5 | 3.8 | 4.1 | 4.4 | 4.7 | 5.0 | 5.3 | 5.6 | 5.9  | 6.2  | 6.5  | 6.8  | 7.1  | 7.4  |

\*带颜色 为常备库产品,可适当缩短交期。\*Products with color are available stock and short lead time.

BC:直联外置(External)

单位 Unit (mm)



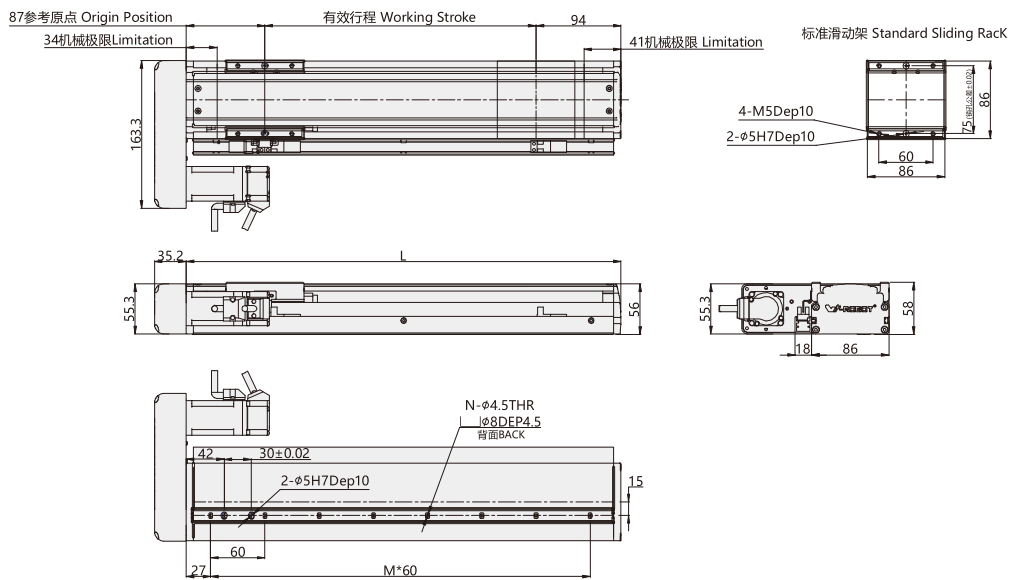
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| L                      | 241 | 301 | 361 | 421 | 481 | 541 | 601 | 661 | 721 | 781 | 841 | 901 | 961 | 1021 | 1081 | 1141 | 1201 | 1261 | 1321 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   |
| N                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   | 19   | 20   | 21   | 22   |
| A                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   | 19   | 20   | 21   | 22   |
| 重量 KG<br>Weight KG     | 2.1 | 2.4 | 2.7 | 3.0 | 3.3 | 3.6 | 3.9 | 4.2 | 4.5 | 4.8 | 5.1 | 5.4 | 5.7 | 6.0  | 6.3  | 6.6  | 6.9  | 7.2  | 7.5  |

\*带颜色 为常备库产品,可适当缩短交期。\*Products with color are available stock and short lead time.

## BL:马达左折(Left Side)

单位 Unit (mm)



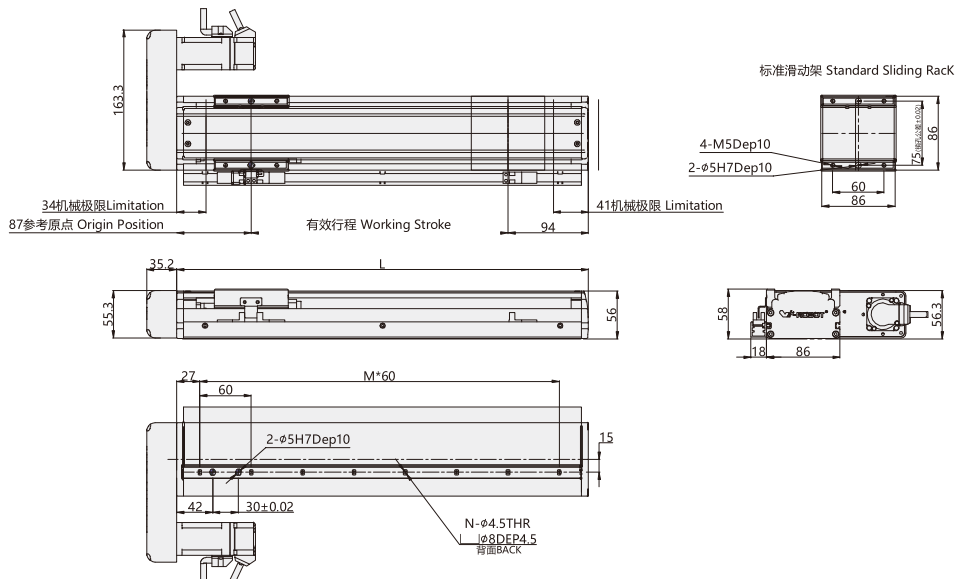
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| L                      | 241 | 301 | 361 | 421 | 481 | 541 | 601 | 661 | 721 | 781 | 841 | 901 | 961 | 1021 | 1081 | 1141 | 1201 | 1261 | 1321 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   |
| N                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   | 19   | 20   | 21   | 22   |
| 重量 KG<br>Weight KG     | 2.7 | 3.0 | 3.3 | 3.6 | 3.9 | 4.2 | 4.5 | 4.8 | 5.1 | 5.4 | 5.7 | 6.0 | 6.3 | 6.6  | 6.9  | 7.2  | 7.5  | 7.8  | 8.1  |

\*带颜色 为常备库产品,可适当缩短交期。\*Products with color are available stock and short lead time.

## BR:马达右折(Right Side)

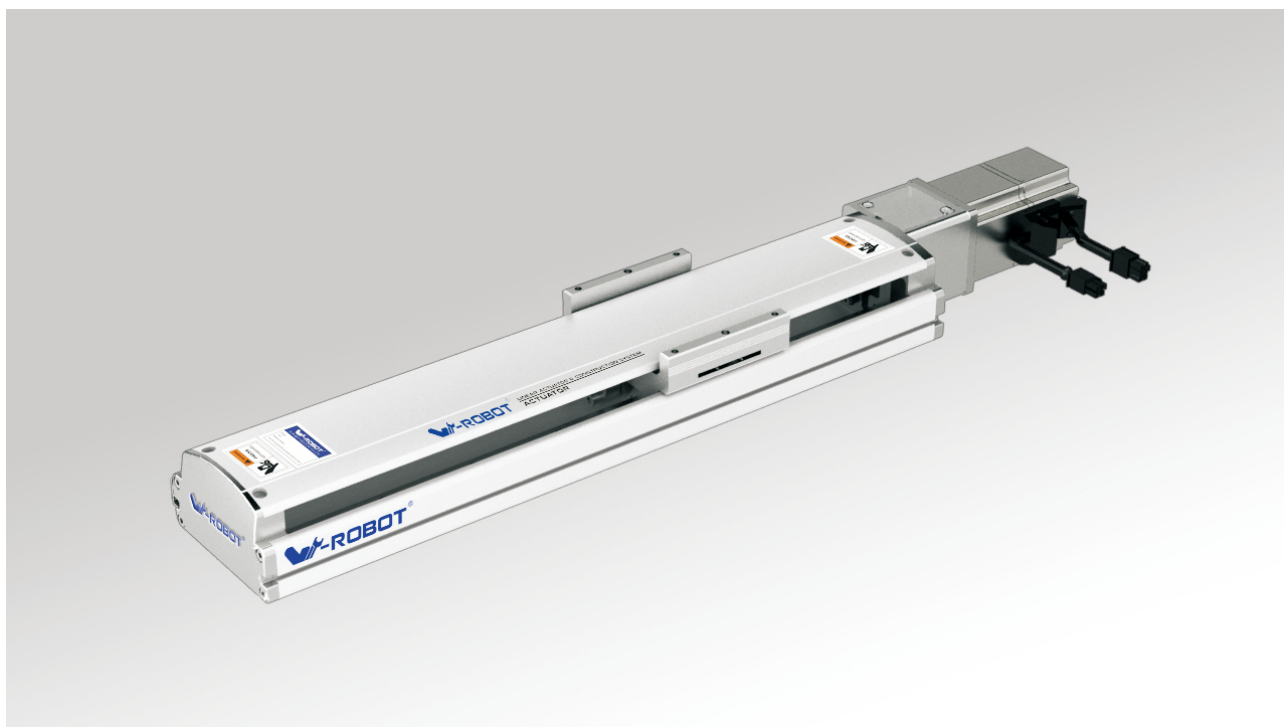
单位 Unit (mm)



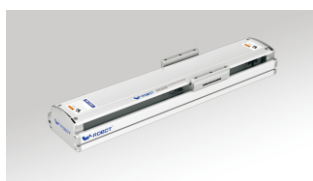
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| L                      | 241 | 301 | 361 | 421 | 481 | 541 | 601 | 661 | 721 | 781 | 841 | 901 | 961 | 1021 | 1081 | 1141 | 1201 | 1261 | 1321 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   |
| N                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   | 19   | 20   | 21   | 22   |
| 重量 KG<br>Weight KG     | 2.7 | 3.0 | 3.3 | 3.6 | 3.9 | 4.2 | 4.5 | 4.8 | 5.1 | 5.4 | 5.7 | 6.0 | 6.3 | 6.6  | 6.9  | 7.2  | 7.5  | 7.8  | 8.1  |

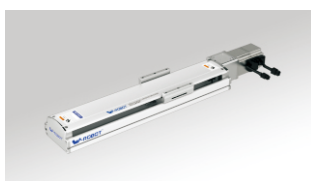
\*带颜色 为常备库产品,可适当缩短交期。\*Products with color are available stock and short lead time.



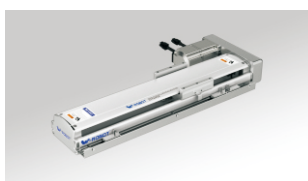
## 马达安装方式 Motor direction



BA



BC



BL



BR

## 型号表示方式 Guide for Model Selection

QF10 - L16 - C - S100 - BC - ZP10B - C3 -

| 本体样式<br>Base Style |                                                                  |
|--------------------|------------------------------------------------------------------|
| Q                  | Q系列<br>Q Series                                                  |
| F                  | 半密封带框架<br>Semiclosed with<br>Frame<br>丝杆驱动结构<br>Ball Screw Drive |
| 10                 | 本体100mm宽<br>Body width100                                        |

| 丝杆导程<br>Ball Screw Lead |      |
|-------------------------|------|
| L5                      | 5mm  |
| L10                     | 10mm |
| L16                     | 16mm |
| L20                     | 20mm |

| 精度等级<br>Accuracy class |                         |
|------------------------|-------------------------|
| C                      | 普通级<br>Common precision |

| 行程(mm)<br>Stroke(mm) |
|----------------------|
| 60-1140              |

| 马达方式<br>Motor way |                    |
|-------------------|--------------------|
| BA                | 基本型<br>Basis       |
| BC                | 直联外置<br>External   |
| BR                | 马达右折<br>Right Side |
| BL                | 马达左折<br>Left Side  |

| 马达类型<br>Motor Type                              | 马达功率<br>Motor power |
|-------------------------------------------------|---------------------|
| P 松下<br>Panasonic                               | 10 100W             |
| M 三菱<br>Mitsubishi                              | 20 200W             |
| Y 安川<br>Yaskawa                                 | 40 400W             |
| T 台达<br>Delta                                   | 57 57-Ø8            |
| W 威洛博<br>W-Robot                                | 57-Ø6.35            |
| *为 Z: 代表客户自配电机<br>*For Z: Motor is from clients |                     |
| 刹车<br>Brakes                                    |                     |
| 无<br>No                                         | 无刹车<br>No brake     |
| B                                               | 带刹车<br>With brake   |

| 原点开关位置<br>Original Sensor position | 极限开关数量<br>Limit Sensor Qty |
|------------------------------------|----------------------------|
| 外置式:<br>External                   | 外置式:<br>External           |
| C 马达侧<br>Motor side                | 2 2个 2pcs                  |
| D 反马达侧<br>Opposite motor side      | 3 3个 3pcs                  |
| E 无<br>No                          | 无感应器<br>No sensor          |

| 感应器类型<br>Sensor type |     |
|----------------------|-----|
| 无<br>No              | NPN |
| P                    | PNP |

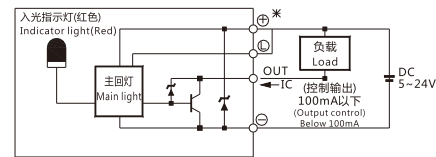
| 非标特注<br>Non-standard, d.c., |                                                                          |
|-----------------------------|--------------------------------------------------------------------------|
| 无 NO                        | 标准型 Standard                                                             |
| BL1                         | 详细<br>释义<br>请见<br>P3页<br><br>Detailed<br>information<br>please<br>see P3 |
| B2                          |                                                                          |
| D01                         |                                                                          |
| U01                         |                                                                          |
| UD01                        |                                                                          |
| H01                         |                                                                          |
| HU01                        |                                                                          |
| HD01                        |                                                                          |
| HUD01                       |                                                                          |
| M01                         |                                                                          |
| S01                         |                                                                          |



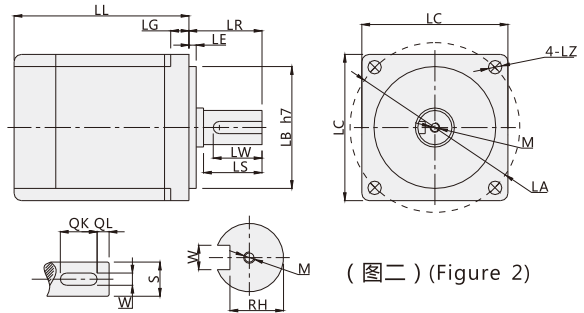
## 基本规格 Specification

|                                  |                 |                                                    |             |             |            |
|----------------------------------|-----------------|----------------------------------------------------|-------------|-------------|------------|
| 马达功率 AC (W) Motor power AC (W)   |                 | 100W/200W/400W                                     |             |             |            |
| 滚珠丝杆驱动-外径 BallScrewØ             |                 | C级 (C7)                                            |             | 16          |            |
|                                  |                 | P级 (C5)                                            |             |             |            |
| 重复定位精度 Repeatability             |                 | C级 (C7)                                            |             | ±0.01       |            |
|                                  |                 | P级 (C5)                                            |             |             |            |
| 滚珠丝杆导程 BallScrew Lead(mm)        |                 | 5                                                  | 10          | 16          | 20         |
| 最快速度 MaximumSpeed(mm/sec)        |                 | 250                                                | 500         | 800         | 1000       |
| 马达转速 3000 Motor Speed(rpm/mim)   |                 |                                                    |             |             |            |
| 额定加速度 Rate acceleration (m/sec2) |                 | 1.5                                                | 3           | 3           | 3          |
| 最大载重(kg)                         | 水平使用 Horizontal | 50/65/65                                           | 30/39/45    | 22/28/33    | 18/20/23   |
|                                  | 垂直使用 Vertical   | 12/15/18                                           | 8/10/12     | 5/6/7       | 3/4/5      |
| 额定推力(N) RatedThrust(N)           |                 | 330/683/1388                                       | 165/341/694 | 100/213/433 | 85/174/347 |
| 直线导轨 Linear Guide (mm)           |                 | 20x15.5 -1                                         |             |             |            |
| 联轴器 Coupling (mm)                |                 |                                                    |             |             |            |
| (Motor side) x (Ball Screw Side) |                 | 8x10                                               | 10x11       | 10x14       | 10x14      |
| 马达功率 Motor Output                |                 | 100W                                               | 200W        | 400W        |            |
| 原点感应器 Home Sensor                |                 | 外挂 Outside<br>EE-SX672(NPN) EE-SX672P(PNP)         |             |             |            |
|                                  |                 | 导轨安装 Outside Guide<br>EE-SX674(NPN) EE-SX674P(PNP) |             |             |            |

感应器接线图 < 原点及端点 >  
Wiring drawing of inductor(original point and endpoint)



(图一) (Figure 1)



(图二) (Figure 2)

- \* 以上重复定位精度是300行程范围内所得, 如行程加长, 则重复定位精度适当放大; 行程超过650时会产生丝杆共振, 每增加100行程请将速度降低15%; 更换不同电机时, 请注意图二电机尺寸是否同表一相同, 否则需更换联轴器和马达固定座。
- \* Above repeatability is within stroke 300mm, if logner travel needed, it will be lower. In case stroke over 650 will lead to swing of ball screw, please slow down the speed 15%. Please note figure 2 motor size is same with table 1, or needed to replace coupler and motor holder.)

## 搭配伺服马达一览表 Servo Motor Matches List

(表一) (Table1)

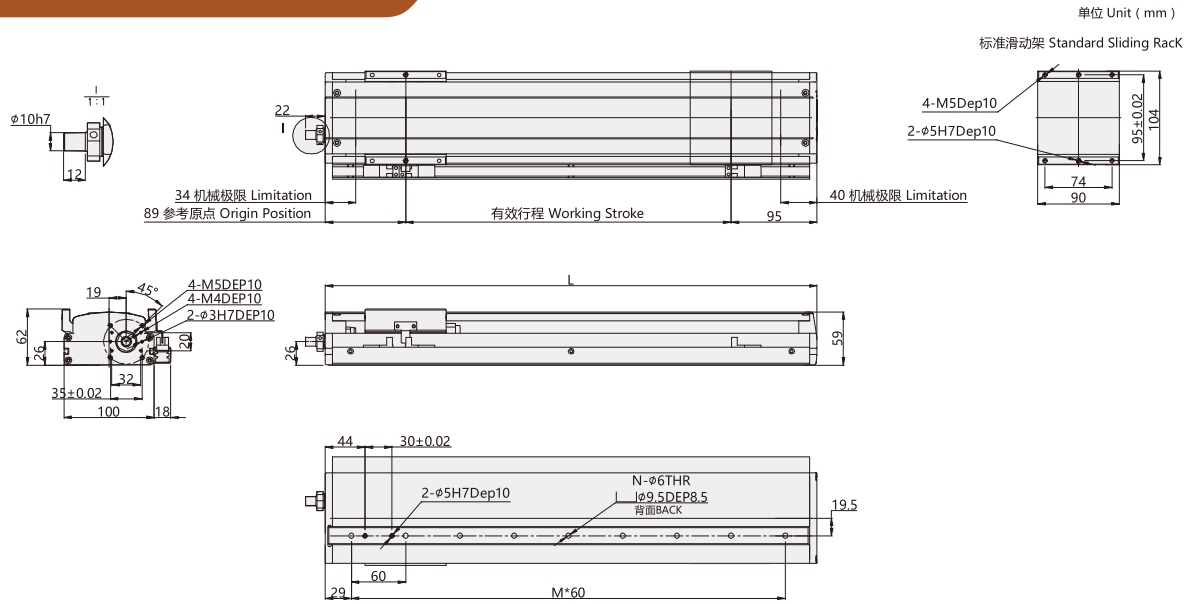
| 伺服电机外形尺寸 Servo motor size |               |               |                                          |                                          |       |       |     |     |     |     |    |     |     |    |      |      |        |    |   |
|---------------------------|---------------|---------------|------------------------------------------|------------------------------------------|-------|-------|-----|-----|-----|-----|----|-----|-----|----|------|------|--------|----|---|
| 功率W<br>Power(W)           | 品牌 Brand      | 型号 Type       | LL                                       | LL(刹车)<br>LL(Brakes)                     | LA    | LE    | LZ  | LC  | LG  | LW  | RH | W   | LR  | S  | LB   | M    | QK     | QL |   |
| 100W                      | 松下 Panasonic  | MSMD012G1□    | V: 带刹车 U:无刹车<br>V:With brake U:No brake  | 92                                       | 122   | 45    | 3   | 3.4 | 38  | 6   | 14 | 6.2 | 3h9 | 25 | 8h6  | 30h7 | M3x6L  | -  | - |
|                           | 台达 Delta      | ECMA-C20401□S | S: 带刹车 R:无刹车<br>S:With brake R:No brake  | 100.6                                    | 136.6 | 46    | 2.5 | 4.5 | 40  | 5   | 16 | 6.2 | 3   | 25 | 8h6  | 30h7 | M3x8L  | -  | - |
|                           | 三菱 Mitsubishi | HC-KFS12□K    | B: 带刹车 □: 无刹车<br>B:With brake □:No brake | 86.5                                     | 124.5 | 46    | 2.5 | 4.5 | 42  | 5   | -  | -   | -   | 25 | 8h6  | 30h7 | -      | -  | - |
| 200W                      | 松下 Panasonic  | MSMJ022G1□    | V: 带刹车 U:无刹车<br>V:With brake U:No brake  | 79.5                                     | 115.5 | 70    | 3   | 4.5 | 60  | 6.5 | 20 | 8.5 | 4h9 | 30 | 11h6 | 50h7 | M4x8L  | -  | - |
|                           | 台达 Delta      | ECMA-C20602□S | S: 带刹车 R:无刹车<br>S:With brake R:No brake  | 105.5                                    | 141.5 | 70    | 3   | 5.5 | 60  | 7.5 | 20 | 11  | 5   | 30 | 14h6 | 50h7 | M4x15L | -  | - |
|                           | 三菱 Mitsubishi | HC-KFS23□K    | B: 带刹车 □: 无刹车<br>B:With brake □:No brake | 99.5                                     | 131.5 | 70    | 3   | 5.8 | 62  | 7   | -  | -   | -   | 30 | 14h6 | 50h7 | -      | -  | - |
| 400W                      | 松下 Panasonic  | MSMJ042G1□    | V: 带刹车 U:无刹车<br>V:With brake U:No brake  | 99                                       | 135   | 70    | 3   | 4.5 | 60  | 6.5 | 20 | 11  | 5h9 | 30 | 14h6 | 50h7 | M5x10L | -  | - |
|                           | 台达 Delta      | ECMA-C20604□S | S: 带刹车 R:无刹车<br>S:With brake R:No brake  | 130.7                                    | 166.6 | 70    | 3   | 5.5 | 60  | 7.5 | 20 | 11  | 5   | 30 | 14h6 | 50h7 | M4x15L | -  | - |
|                           |               | ECMA-C20804□S | S: 带刹车 R:无刹车<br>S:With brake R:No brake  | 112.3                                    | 152.8 | 90    | 3   | 6.6 | 80  | 8   | 20 | 11  | 5   | 35 | 14h6 | 70h7 | M4x15L | -  | - |
|                           |               | 三菱 Mitsubishi | HC-KFS43□K                               | B: 带刹车 □: 无刹车<br>B:With brake □:No brake | 124.5 | 165.5 | 70  | 3   | 5.8 | 62  | 7  | -   | -   | -  | 30   | 14h6 | 50h7   | -  | - |

□表示为空 Stand for empty

## 容许负载力矩表 Allow Load Torque Table

| (单位: mm) (Unit: mm)             |      |     |     | (单位: N.m) (Unit: N.m)         |      |     |                                 |
|---------------------------------|------|-----|-----|-------------------------------|------|-----|---------------------------------|
|                                 |      |     |     |                               |      |     |                                 |
| 水平安装<br>Horizontal installation | A    | B   | C   | 垂直安装<br>Vertical installation | A    | C   | 最大静态力矩<br>Maximum static torque |
| 导程 5<br>Lead 5                  | 30kg | 424 | 24  | 25                            | 5kg  | 100 | 145                             |
|                                 | 50kg | 0   | 0   | 0                             | 10kg | 50  | 90                              |
|                                 | -    | -   | -   | -                             | 12kg | 23  | 63                              |
| 导程 10<br>Lead 10                | 15kg | 394 | 76  | 79                            | 4kg  | 335 | 375                             |
|                                 | 25kg | 184 | 22  | 25                            | 6kg  | 140 | 180                             |
|                                 | 30kg | 111 | -   | -                             | 8kg  | 100 | 140                             |
| 导程 16<br>Lead 16                | 5kg  | 937 | 282 | 259                           | 1kg  | 620 | 620                             |
|                                 | 10kg | 487 | 121 | 116                           | 2kg  | 680 | 680                             |
|                                 | 22kg | 236 | 40  | 44                            | 5kg  | 310 | 350                             |
| 导程 20<br>Lead 20                | 5kg  | 940 | 285 | 264                           | 1kg  | 580 | 580                             |
|                                 | 10kg | 490 | 125 | 120                           | 2kg  | 645 | 645                             |
|                                 | 15kg | 240 | 45  | 48                            | 3kg  | 310 | 350                             |

## BA:基本型(Basis)

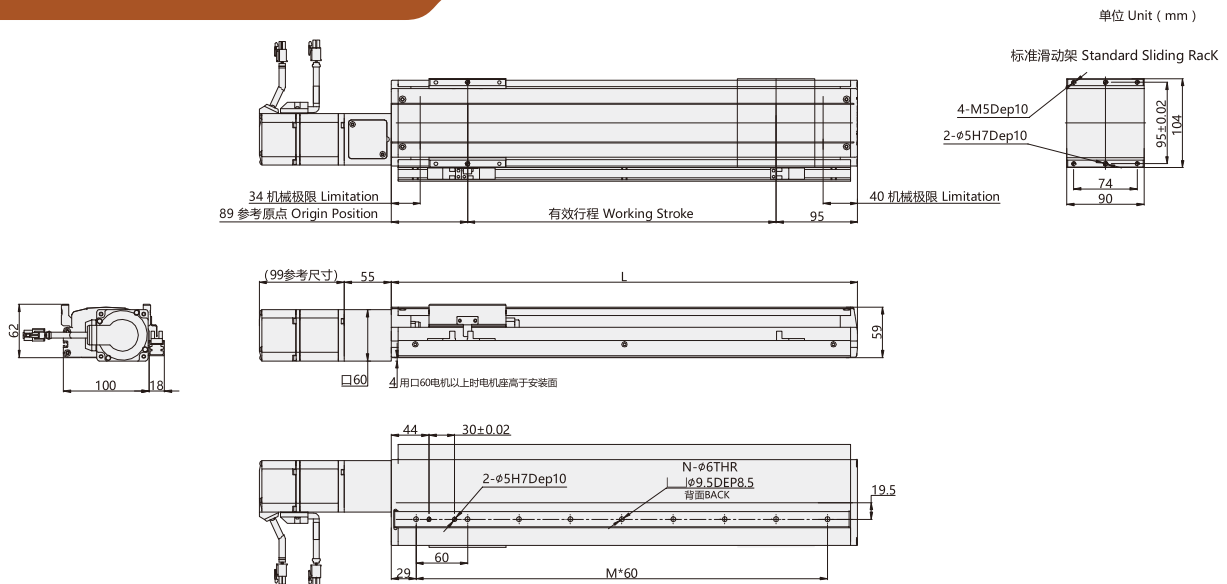


注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| L                      | 244 | 304 | 364 | 424 | 484 | 544 | 604 | 664 | 724 | 784 | 844 | 904 | 964 | 1024 | 1084 | 1144 | 1204 | 1264 | 1324 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   |
| N                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   | 19   | 20   | 21   | 22   |
| 重量 KG<br>Weight KG     | 2.7 | 3.0 | 3.3 | 3.6 | 3.9 | 4.2 | 4.5 | 4.8 | 5.1 | 5.4 | 5.7 | 6.0 | 6.3 | 6.6  | 6.9  | 7.2  | 7.5  | 7.8  | 8.1  |

\*带颜色 为常备库产品,可适当缩短交期。\*Products with color are available stock and short lead time.

## BC:直联外置(External)



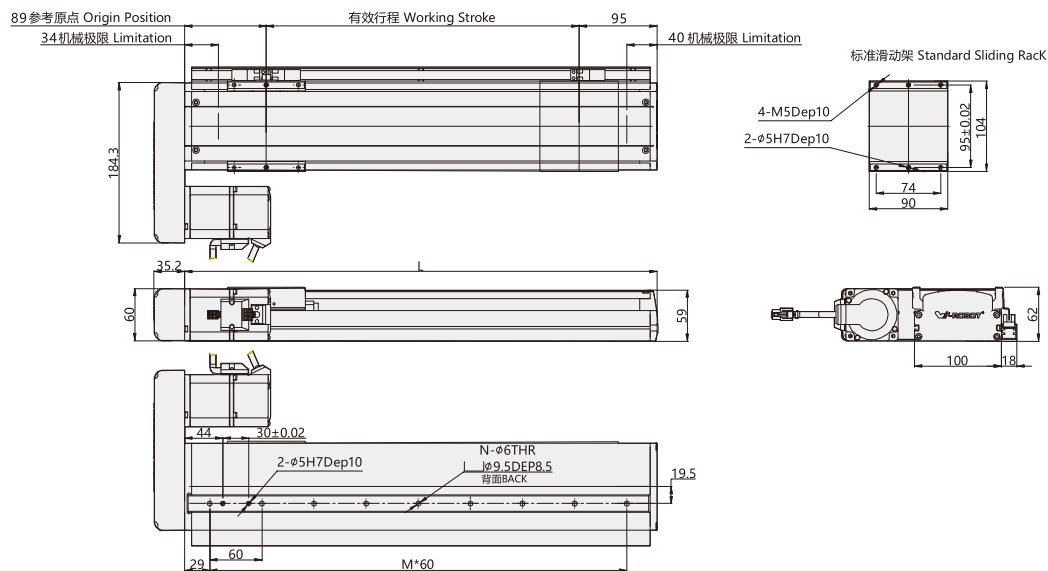
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| L                      | 244 | 304 | 364 | 424 | 484 | 544 | 604 | 664 | 724 | 784 | 844 | 904 | 964 | 1024 | 1084 | 1144 | 1204 | 1264 | 1324 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   |
| N                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   | 19   | 20   | 21   | 22   |
| 重量 KG<br>Weight KG     | 2.9 | 3.2 | 3.5 | 3.8 | 4.1 | 4.4 | 4.7 | 5.0 | 5.3 | 5.6 | 5.9 | 6.2 | 6.5 | 6.8  | 7.1  | 7.4  | 7.7  | 8.0  | 8.3  |

\*带颜色 为常备库产品,可适当缩短交期。\*Products with color are available stock and short lead time.

## BL:马达左折(Left Side)

单位 Unit ( mm )



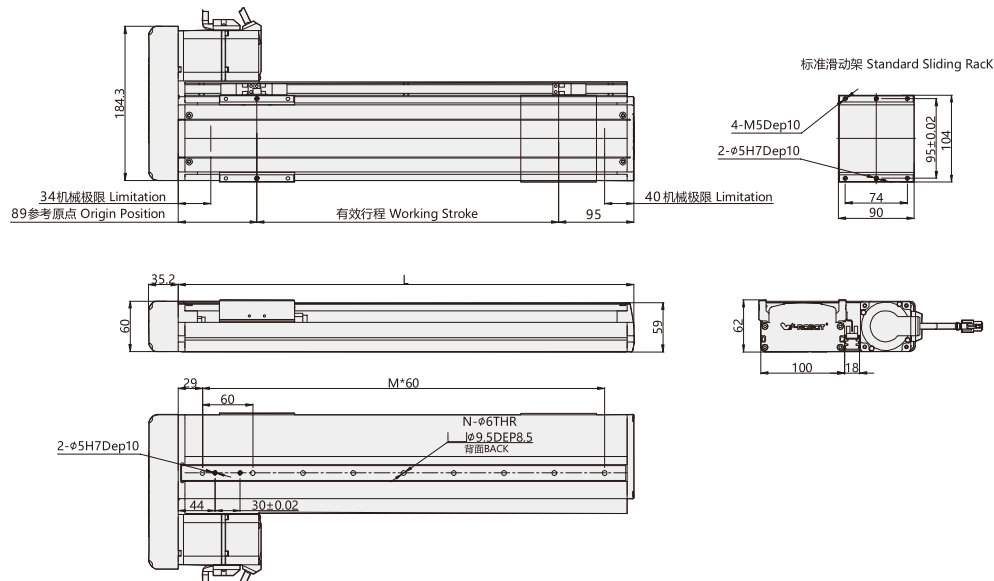
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| L                      | 244 | 304 | 364 | 424 | 484 | 544 | 604 | 664 | 724 | 784 | 844 | 904 | 964 | 1024 | 1084 | 1144 | 1204 | 1264 | 1324 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   |
| N                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   | 19   | 20   | 21   | 22   |
| 重量 KG<br>Weight KG     | 3.6 | 3.9 | 4.2 | 4.5 | 4.8 | 5.1 | 5.4 | 5.7 | 6.0 | 6.3 | 6.6 | 6.9 | 7.2 | 7.5  | 7.8  | 8.1  | 8.4  | 8.7  | 9.0  |

\*带颜色 为常备库产品,可适当缩短交期。\*Products with color are available stock and short lead time.

## BR:马达右折(Right Side)

单位 Unit ( mm )



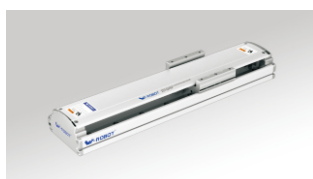
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| L                      | 244 | 304 | 364 | 424 | 484 | 544 | 604 | 664 | 724 | 784 | 844 | 904 | 964 | 1024 | 1084 | 1144 | 1204 | 1264 | 1324 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   |
| N                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   | 19   | 20   | 21   | 22   |
| 重量 KG<br>Weight KG     | 3.6 | 3.9 | 4.2 | 4.5 | 4.8 | 5.1 | 5.4 | 5.7 | 6.0 | 6.3 | 6.6 | 6.9 | 7.2 | 7.5  | 7.8  | 8.1  | 8.4  | 8.7  | 9.0  |

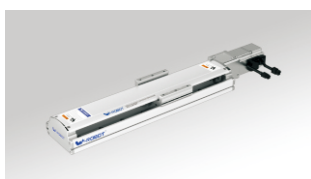
\*带颜色 为常备库产品,可适当缩短交期。\*Products with color are available stock and short lead time.



## 马达安装方式 Motor direction



BA



BC



BL



BR

## 型号表示方式 Guide for Model Selection

QF12 - L16 - C - S100 - BC - ZP20B - C3 -

| 本体样式<br>Base Style |                                                                  |
|--------------------|------------------------------------------------------------------|
| Q                  | Q系列<br>Q Series                                                  |
| F                  | 半密封带框架<br>Semiclosed with<br>Frame<br>丝杆驱动结构<br>Ball Screw Drive |
| 12                 | 本体120mm宽<br>Body width 120                                       |

| 丝杆导程<br>Ball Screw Lead |      |
|-------------------------|------|
| L5                      | 5mm  |
| L10                     | 10mm |
| L16                     | 16mm |
| L20                     | 20mm |

| 精度等级<br>Accuracy class |                         |
|------------------------|-------------------------|
| C                      | 普通级<br>Common precision |

| 行程(mm)<br>Stroke(mm) |                    |
|----------------------|--------------------|
| 60-1140              |                    |
| 马达方式<br>Motor way    |                    |
| BA                   | 基本型<br>Basis       |
| BC                   | 直联外置<br>External   |
| BR                   | 马达右折<br>Right Side |
| BL                   | 马达左折<br>Left Side  |

| 马达类型<br>Motor Type                                       |                  | 马达功率<br>Motor power |                   |
|----------------------------------------------------------|------------------|---------------------|-------------------|
| P                                                        | 松下<br>Panasonic  | 20                  | 200W              |
| M                                                        | 三菱<br>Mitsubishi | 40                  | 400W              |
| Y                                                        | 安川<br>Yaskawa    | 57                  | 57-Ø8             |
| T                                                        | 台达<br>Delta      | 57                  | 57-Ø6.35          |
| W                                                        | 威洛博<br>W-Robot   | 刹车<br>Brakes        |                   |
| *为 Z:<br>代表客户自配电机<br>*For Z:<br>Motor is from<br>clients |                  | 无<br>No             | 无刹车<br>No brake   |
|                                                          |                  | B                   | 带刹车<br>With brake |

| 原点开关位置<br>Original Sensor position |                             | 极限开关数量<br>Limit Sensor Qty |         |
|------------------------------------|-----------------------------|----------------------------|---------|
| 外置式:<br>External                   |                             | 外置式:<br>External           |         |
| C                                  | 马达侧<br>Motor side           | 2                          | 2个 2pcs |
| D                                  | 反马达侧<br>Opposite motor side | 3                          | 3个 3pcs |
| E                                  | 无<br>No                     | 无感应器<br>No sensor          |         |

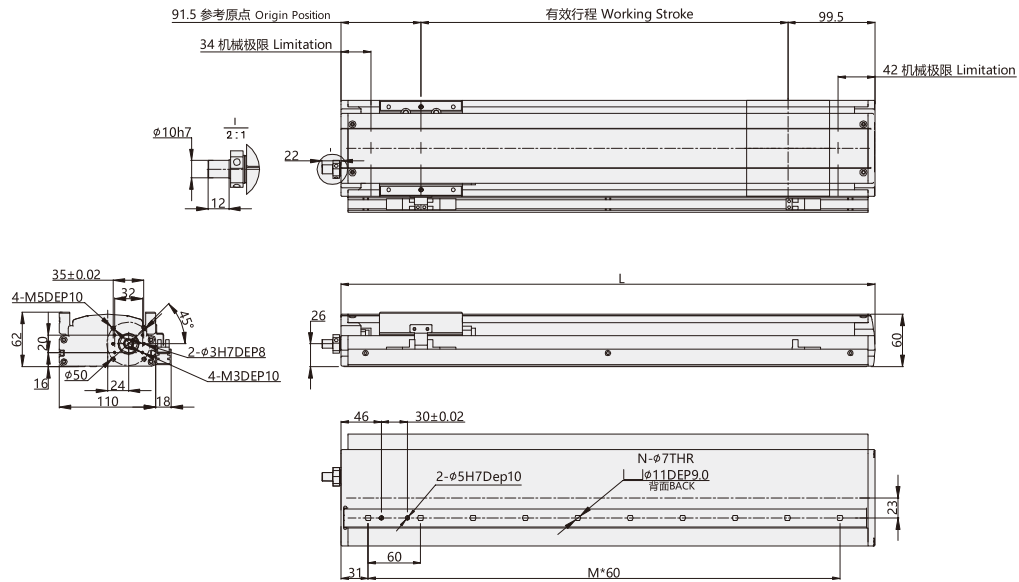
| 感应器类型<br>Sensor type |     |
|----------------------|-----|
| 无<br>No              | NPN |
| P                    | PNP |

| 非标特注<br>Non-standard, d.c., |                                                                          |
|-----------------------------|--------------------------------------------------------------------------|
| 无 NO                        | 标准型 Standard                                                             |
| BL1                         | 详细<br>释义<br>请见<br>P3页<br><br>Detailed<br>information<br>please<br>see P3 |
| B2                          |                                                                          |
| D01                         |                                                                          |
| U01                         |                                                                          |
| UD01                        |                                                                          |
| H01                         |                                                                          |
| HU01                        |                                                                          |
| HD01                        |                                                                          |
| HUD01                       |                                                                          |
| M01                         |                                                                          |
| S01                         |                                                                          |



## BA:基本型(Basis)

单位 Unit (mm)



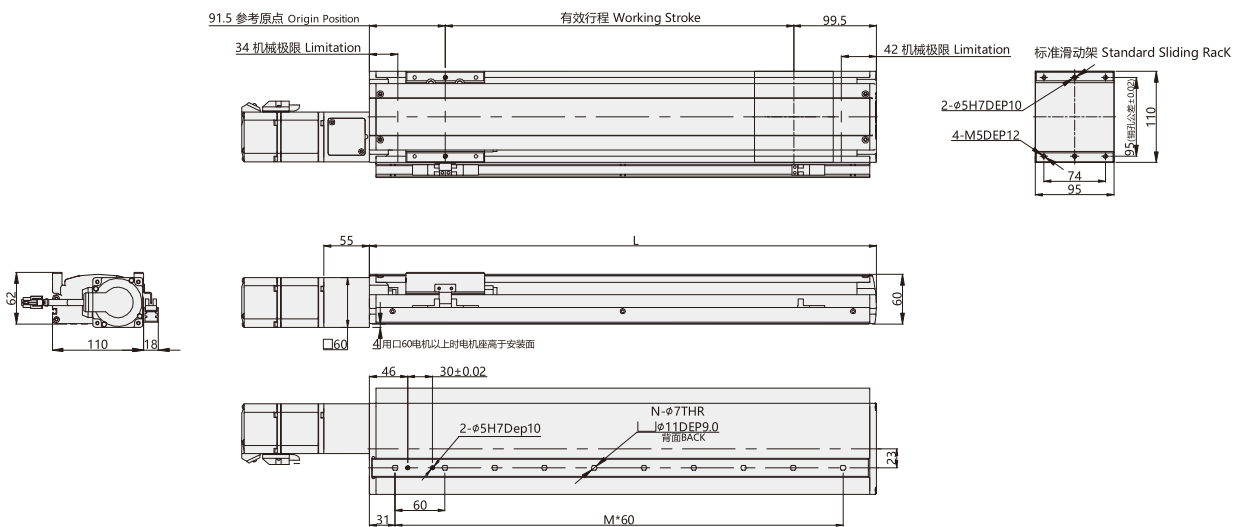
注以下不含电机重量, 如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| L                      | 251 | 311 | 371 | 431 | 491 | 551 | 611 | 671 | 731 | 791 | 851 | 911 | 971 | 1031 | 1091 | 1151 | 1211 | 1271 | 1331 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   |
| N                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   | 19   | 20   | 21   | 22   |
| 重量 KG<br>Weight KG     | 3.5 | 3.8 | 4.1 | 4.4 | 4.7 | 5.0 | 5.3 | 5.6 | 5.9 | 6.2 | 6.5 | 6.8 | 7.1 | 7.4  | 7.7  | 8.0  | 8.3  | 8.6  | 8.9  |

\*带颜色 为常备库产品, 可适当缩短交期。\*Products with color are available stock and short lead time.

## BC:直联外置(External)

单位 Unit (mm)



注以下不含电机重量, 如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

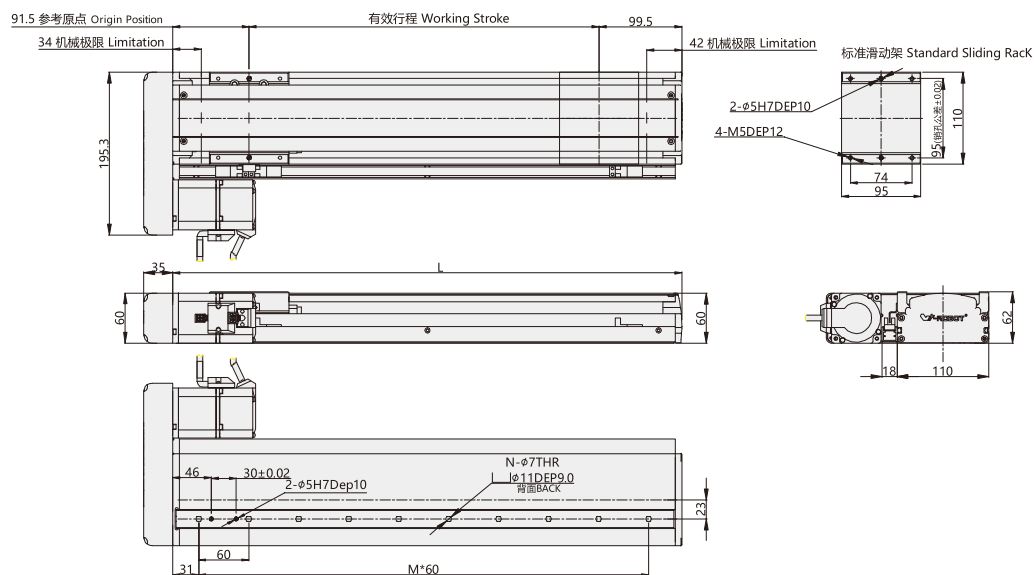
| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| L                      | 251 | 311 | 371 | 431 | 491 | 551 | 611 | 671 | 731 | 791 | 851 | 911 | 971 | 1031 | 1091 | 1151 | 1211 | 1271 | 1331 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   |
| N                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   | 19   | 20   | 21   | 22   |
| 重量 KG<br>Weight KG     | 3.7 | 4.0 | 4.3 | 4.6 | 4.9 | 5.2 | 5.5 | 5.8 | 6.1 | 6.4 | 6.7 | 7.0 | 7.3 | 7.6  | 7.9  | 8.2  | 8.5  | 8.8  | 9.1  |

\*带颜色 为常备库产品, 可适当缩短交期。\*Products with color are available stock and short lead time.



BL:马达左折(Left Side)

單位 Unit ( mm )



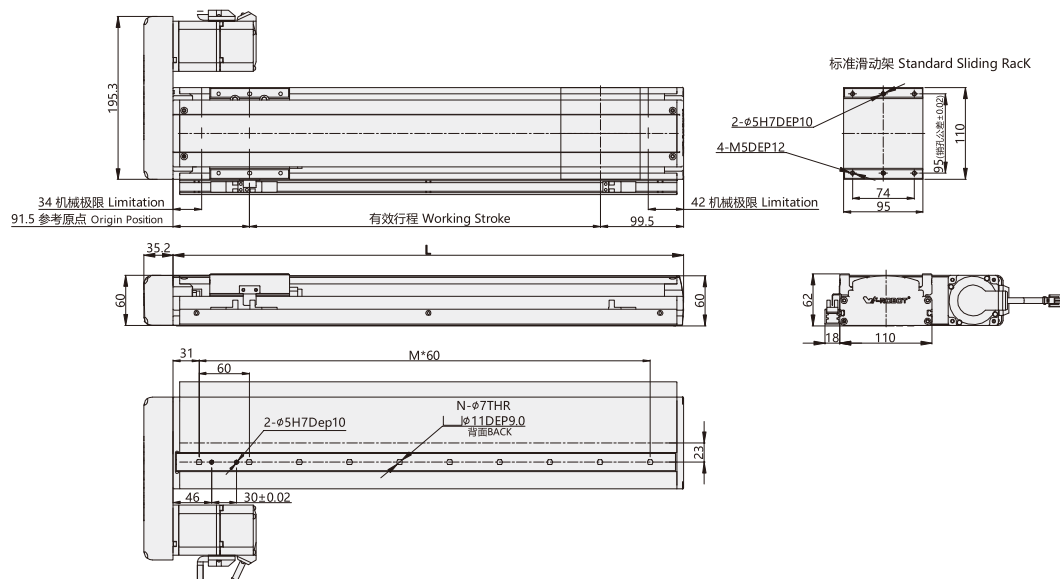
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

|                        |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 |
| L                      | 251 | 311 | 371 | 431 | 491 | 551 | 611 | 671 | 731 | 791 | 851 | 911 | 971 | 1031 | 1091 | 1151 | 1211 | 1271 | 1331 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   |
| N                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   | 19   | 20   | 21   | 22   |
| 重量 KG<br>Weight kg     | 4.4 | 4.7 | 5.0 | 5.3 | 5.6 | 5.9 | 6.2 | 6.5 | 6.8 | 7.1 | 7.4 | 7.7 | 8.0 | 8.3  | 8.6  | 8.9  | 9.2  | 9.5  | 9.8  |

\*带颜色 为常备库产品，可适当缩短交期。\*Products with color are available stock and short lead time.

## BR:马达右折(Right Side)

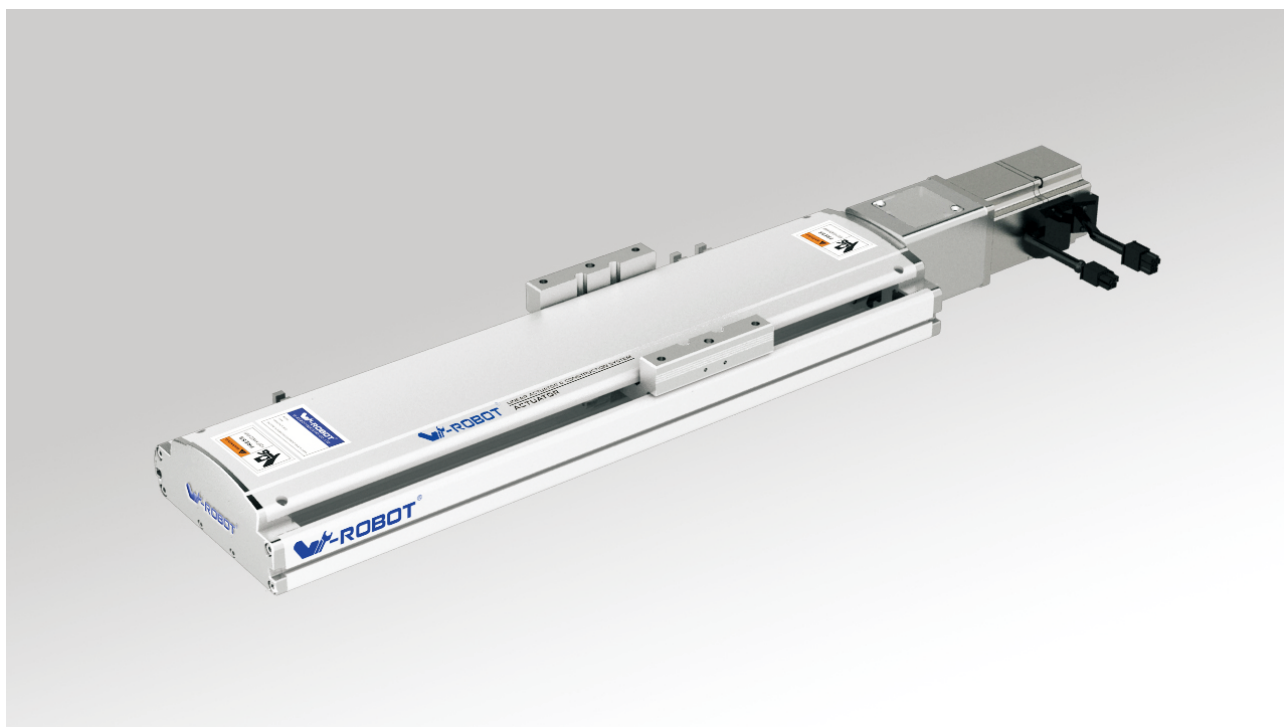
單位 Unit ( mm )



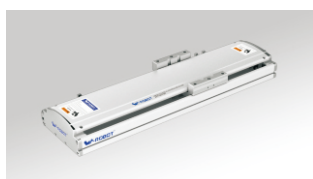
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

|                        |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 |
| L                      | 251 | 311 | 371 | 431 | 491 | 551 | 611 | 671 | 731 | 791 | 851 | 911 | 971 | 1031 | 1091 | 1151 | 1211 | 1271 | 1331 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   |
| N                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17   | 18   | 19   | 20   | 21   | 22   |
| 重量<br>Weight KG        | 4.4 | 4.7 | 5.0 | 5.3 | 5.6 | 5.9 | 6.2 | 6.5 | 6.8 | 7.1 | 7.4 | 7.7 | 8.0 | 8.3  | 8.6  | 8.9  | 9.2  | 9.5  | 9.8  |

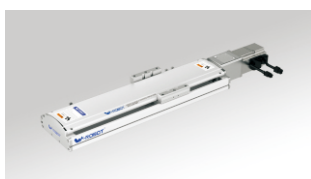
\*带颜色 为常备库产品，可适当缩短交期。\*Products with color are available stock and short lead time.



## 马达安装方式 Motor direction



BA



BC



BL



BR

## 型号表示方式 Guide for Model Selection

QF13 - L20 - C - S100 - BC - ZP20B - C3 -

| 本体样式<br>Base Style |                                                                  |
|--------------------|------------------------------------------------------------------|
| Q                  | Q系列<br>Q Series                                                  |
| F                  | 半密封带框架<br>Semiclosed with<br>Frame<br>丝杆驱动结构<br>Ball Screw Drive |
| 13                 | 本体135mm宽<br>Body width135                                        |

| 丝杆导程<br>Ball Screw Lead |      |
|-------------------------|------|
| L5                      | 5mm  |
| L10                     | 10mm |
| L16                     | 16mm |
| L20                     | 20mm |

| 精度等级<br>Accuracy class |                         |
|------------------------|-------------------------|
| C                      | 普通级<br>Common precision |

| 行程(mm)<br>Stroke(mm) |  |
|----------------------|--|
| 100-1500             |  |

| 马达方式<br>Motor way |                    |
|-------------------|--------------------|
| BA                | 基本型<br>Basis       |
| BC                | 直联外置<br>External   |
| BR                | 马达右折<br>Right Side |
| BL                | 马达左折<br>Left Side  |

| 马达类型<br>Motor Type |                  | 马达功率<br>Motor power |                   |
|--------------------|------------------|---------------------|-------------------|
| P                  | 松下<br>Panasonic  | 20                  | 200W              |
| M                  | 三菱<br>Mitsubishi | 40                  | 400W              |
| Y                  | 安川<br>Yaskawa    | 刹车<br>Brakes        |                   |
| T                  | 台达<br>Delta      | 无<br>No             | 无刹车<br>No brake   |
| W                  | 威洛博<br>W-Robot   | B                   | 带刹车<br>With brake |

\*为 Z:  
代表客户自配电机  
\*For Z:  
Motor is from  
clients

| 原点开关位置<br>Original Sensor<br>position |                               | 极限开关数量<br>Limit Sensor Qty |         |
|---------------------------------------|-------------------------------|----------------------------|---------|
| 外置式:<br>External                      |                               | 外置式:<br>External           |         |
| C                                     | 马达侧<br>Motor side             | 2                          | 2个 2pcs |
| D                                     | 反马达侧<br>Oppsite motor<br>side | 3                          | 3个 3pcs |
| E                                     | 无<br>No                       | 无感应器<br>No sensor          |         |

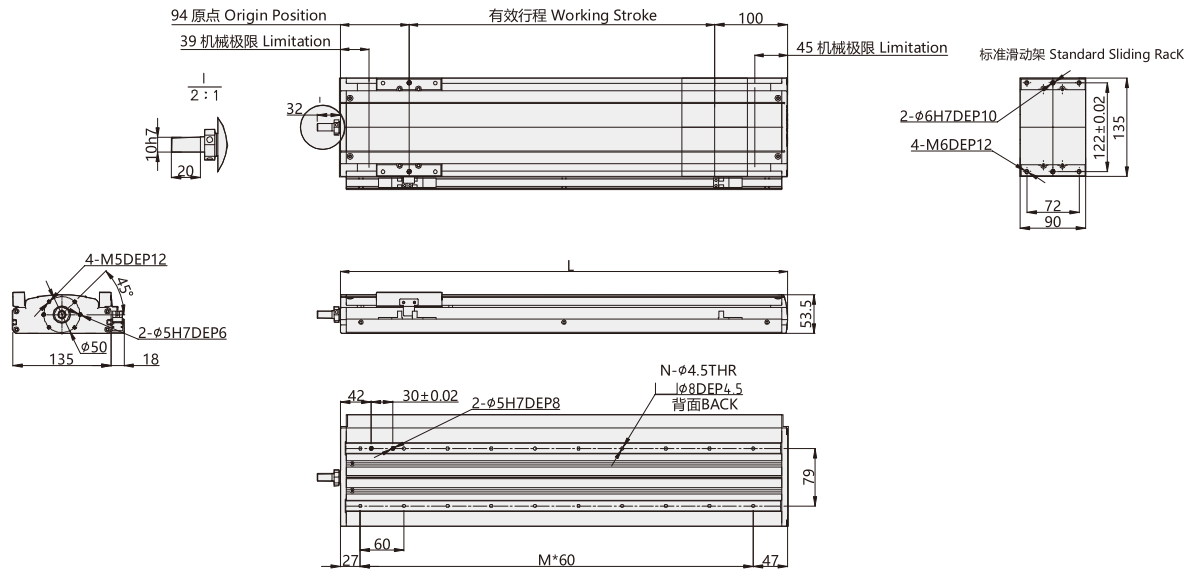
| 感应器类型<br>Sensor type |     |
|----------------------|-----|
| 无<br>No              | NPN |
| P                    | PNP |

| 非标特注<br>Non-standard, d.c., |                                                                          |
|-----------------------------|--------------------------------------------------------------------------|
| 无 NO                        | 标准型 Standard                                                             |
| BL1                         | 详细<br>释义<br>请见<br>P3页<br><br>Detailed<br>information<br>please<br>see P3 |
| B2                          |                                                                          |
| D01                         |                                                                          |
| U01                         |                                                                          |
| UD01                        |                                                                          |
| H01                         |                                                                          |
| HU01                        |                                                                          |
| HD01                        |                                                                          |
| HUD01                       |                                                                          |
| M01                         |                                                                          |
| S01                         |                                                                          |



## BA:基本型(Basis)

单位 Unit ( mm )



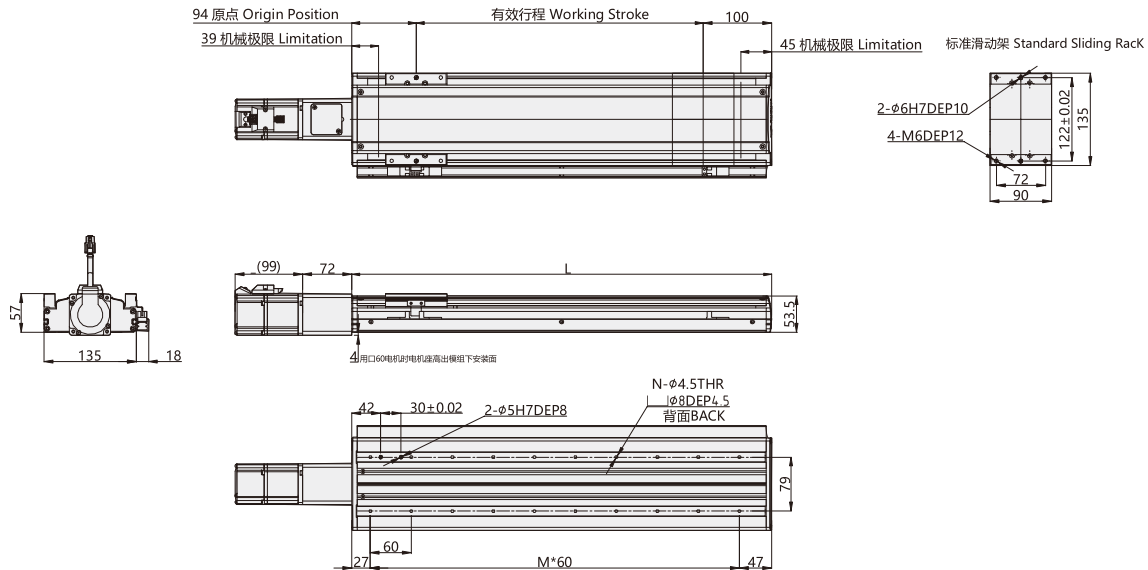
注:以下不含电机重量, 如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| L                      | 254 | 314 | 374 | 434 | 494 | 554 | 614 | 674 | 734 | 794 | 854 | 914 | 974 | 1034 | 1094 | 1154 | 1214 | 1274 | 1334 | 1394 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   | 22   |
| N                      | 8   | 10  | 12  | 14  | 16  | 18  | 20  | 22  | 24  | 26  | 28  | 30  | 32  | 34   | 36   | 38   | 40   | 42   | 44   | 46   |
| 重量 KG<br>Weight KG     | 3.4 | 3.8 | 4.2 | 4.6 | 5.0 | 5.4 | 5.8 | 6.2 | 6.6 | 7.0 | 7.4 | 7.8 | 8.2 | 8.6  | 9.0  | 9.4  | 9.8  | 10.2 | 10.6 | 11.0 |

\*带颜色 为常备库产品, 可适当缩短交期。\*Products with color are available stock and short lead time.

## BC:直联外置(External)

单位 Unit ( mm )



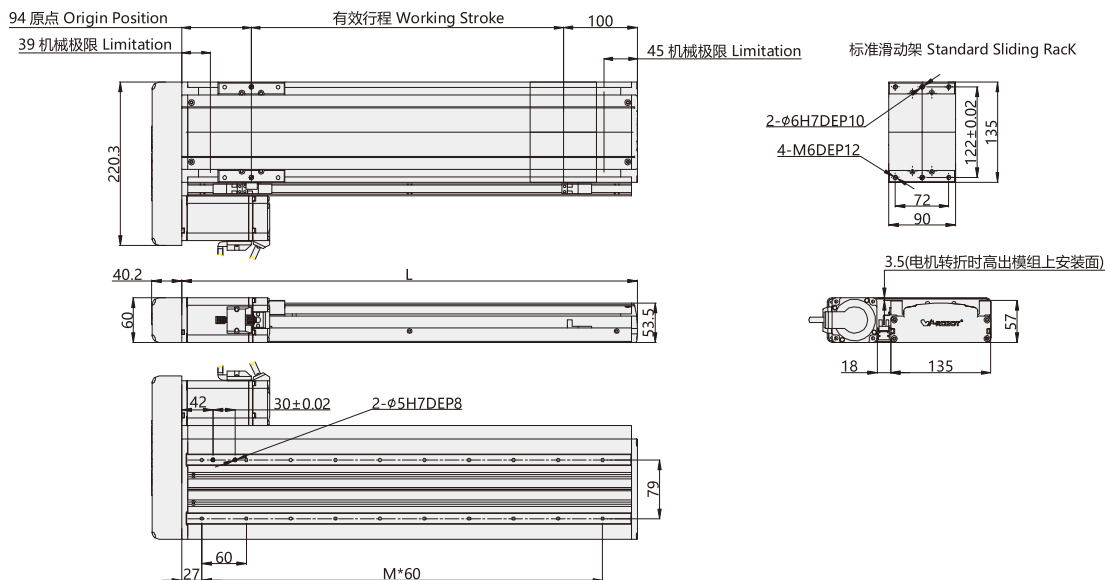
注:以下不含电机重量, 如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| L                      | 254 | 314 | 374 | 434 | 494 | 554 | 614 | 674 | 734 | 794 | 854 | 914 | 974 | 1034 | 1094 | 1154 | 1214 | 1274 | 1334 | 1394 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   | 22   |
| N                      | 8   | 10  | 12  | 14  | 16  | 18  | 20  | 22  | 24  | 26  | 28  | 30  | 32  | 34   | 36   | 38   | 40   | 42   | 44   | 46   |
| 重量 KG<br>Weight KG     | 3.6 | 4.0 | 4.4 | 4.8 | 5.2 | 5.6 | 6.0 | 6.4 | 6.8 | 7.2 | 7.6 | 8.0 | 8.4 | 8.8  | 9.2  | 9.6  | 10   | 10.4 | 10.8 | 11.2 |

\*带颜色 为常备库产品, 可适当缩短交期。\*Products with color are available stock and short lead time.

## BL:马达左折(Left Side)

单位 Unit ( mm )



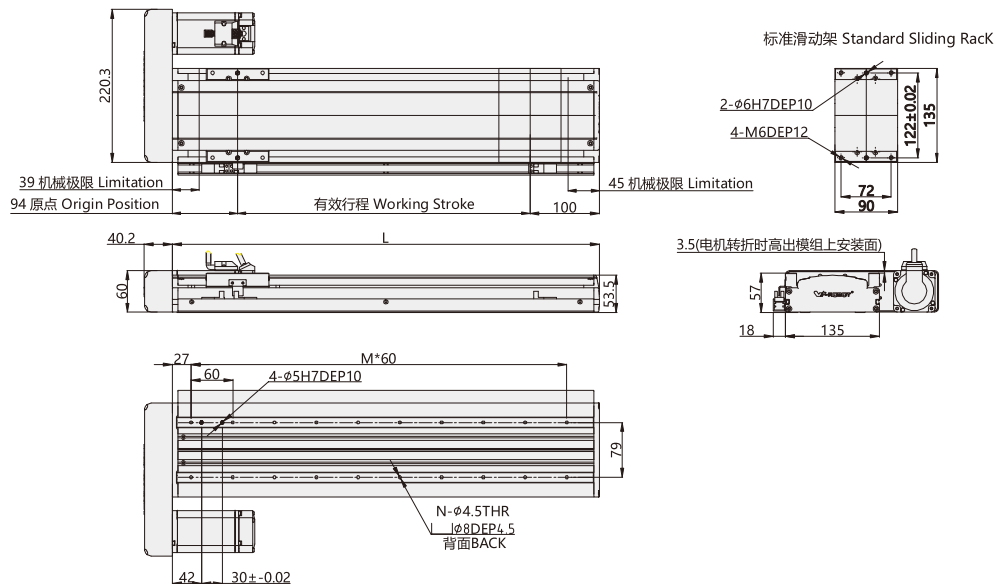
注:以下不含电机重量, 如有特殊行程请先与技术人员联系。 Note: Not including motor weight, in case special stroke please contact technical services. .

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| L                      | 254 | 314 | 374 | 434 | 494 | 554 | 614 | 674 | 734 | 794 | 854 | 914 | 974 | 1034 | 1094 | 1154 | 1214 | 1274 | 1334 | 1394 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   | 22   |
| N                      | 8   | 10  | 12  | 14  | 16  | 18  | 20  | 22  | 24  | 26  | 28  | 30  | 32  | 34   | 36   | 38   | 40   | 42   | 44   | 46   |
| 重量 KG<br>Weight KG     | 4.3 | 4.7 | 5.1 | 5.5 | 5.9 | 6.3 | 6.7 | 7.1 | 7.5 | 7.9 | 8.3 | 8.7 | 9.1 | 9.5  | 9.9  | 10.3 | 10.7 | 11.1 | 11.5 | 11.9 |

\*带颜色 为常备库产品, 可适当缩短交期。 \*Products with color are available stock and short lead time.

## BR:马达右折(Right Side)

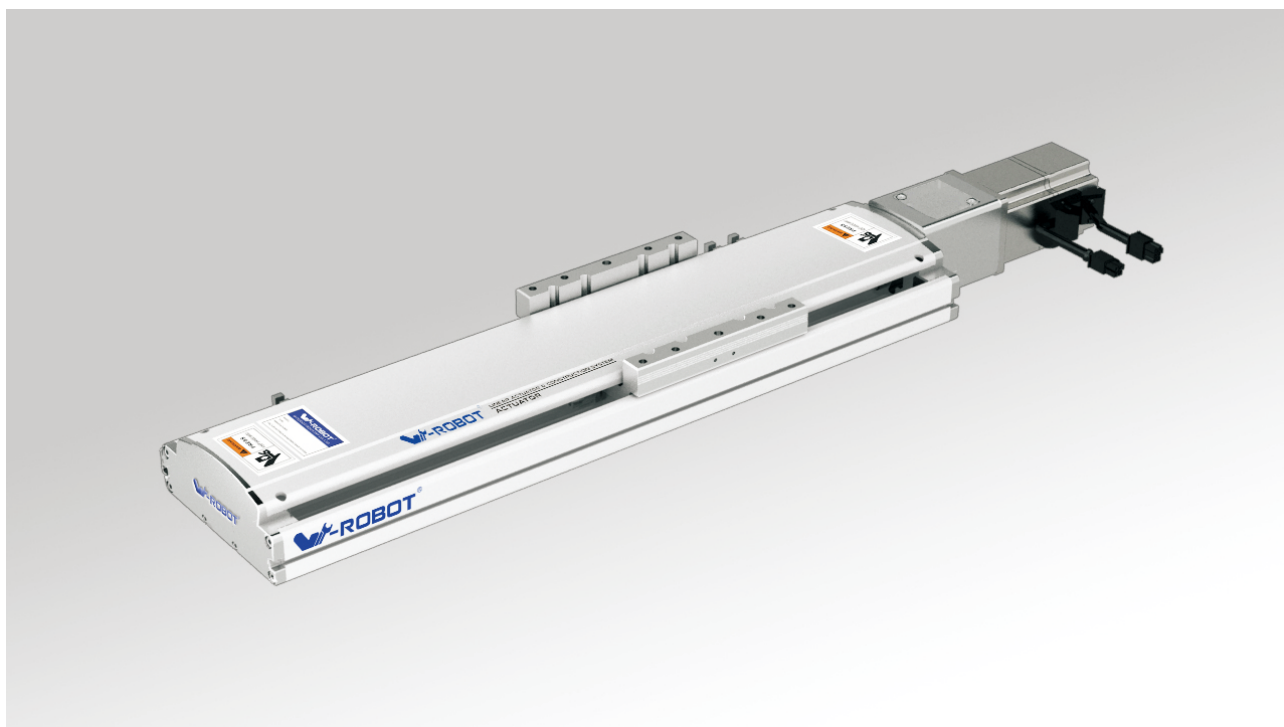
单位 Unit ( mm )



注:以下不含电机重量, 如有特殊行程请先与技术人员联系。 Note: Not including motor weight, in case special stroke please contact technical services. .

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| L                      | 254 | 314 | 374 | 434 | 494 | 554 | 614 | 674 | 734 | 794 | 854 | 914 | 974 | 1034 | 1094 | 1154 | 1214 | 1274 | 1334 | 1394 |
| M                      | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   | 22   |
| N                      | 8   | 10  | 12  | 14  | 16  | 18  | 20  | 22  | 24  | 26  | 28  | 30  | 32  | 34   | 36   | 38   | 40   | 42   | 44   | 46   |
| 重量 KG<br>Weight KG     | 4.3 | 4.7 | 5.1 | 5.5 | 5.9 | 6.3 | 6.7 | 7.1 | 7.5 | 7.9 | 8.3 | 8.7 | 9.1 | 9.5  | 9.9  | 10.3 | 10.7 | 11.1 | 11.5 | 11.9 |

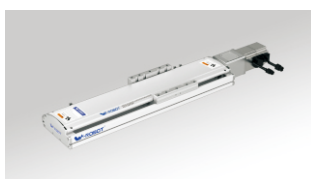
\*带颜色 为常备库产品, 可适当缩短交期。 \*Products with color are available stock and short lead time.



## 马达安装方式 Motor direction



BA



BC



BL



BR

## 型号表示方式 Guide for Model Selection

QF14 - L20 - C - S60 - BC - ZP20B - C3 -

| 本体样式<br>Base Style |                                                                  |
|--------------------|------------------------------------------------------------------|
| Q                  | Q系列<br>Q Series                                                  |
| F                  | 半密封带框架<br>Semiclosed with<br>Frame<br>丝杆驱动结构<br>Ball Screw Drive |
| 14                 | 本体135mm宽<br>Body width135                                        |

| 丝杆导程<br>Ball Screw Lead |      |
|-------------------------|------|
| L5                      | 5mm  |
| L10                     | 10mm |
| L16                     | 16mm |
| L20                     | 20mm |

| 精度等级<br>Accuracy class |                         |
|------------------------|-------------------------|
| C                      | 普通级<br>Common precision |

| 行程(mm)<br>Stroke(mm) |  |
|----------------------|--|
| 60-1080              |  |

| 马达方式<br>Motor way |                    |
|-------------------|--------------------|
| BA                | 基本型<br>Basis       |
| BC                | 直联外置<br>External   |
| BR                | 马达右折<br>Right Side |
| BL                | 马达左折<br>Left Side  |

| 马达类型<br>Motor Type |                  | 马达功率<br>Motor power |                   |
|--------------------|------------------|---------------------|-------------------|
| P                  | 松下<br>Panasonic  | 20                  | 200W              |
| M                  | 三菱<br>Mitsubishi | 40                  | 400W              |
| Y                  | 安川<br>Yaskawa    | 刹车<br>Brakes        |                   |
| T                  | 台达<br>Delta      | 无<br>No             | 无刹车<br>No brake   |
| W                  | 威洛博<br>W-Robot   | B                   | 带刹车<br>With brake |

\*为 Z:  
代表客户自配电机  
\*For Z:  
Motor is from  
clients

| 原点开关位置<br>Original Sensor position |                             | 极限开关数量<br>Limit Sensor Qty |         |
|------------------------------------|-----------------------------|----------------------------|---------|
| 外置式:<br>External                   |                             | 外置式:<br>External           |         |
| C                                  | 马达侧<br>Motor side           | 2                          | 2个 2pcs |
| D                                  | 反马达侧<br>Opposite motor side | 3                          | 3个 3pcs |
| E                                  | 无<br>No                     | 无感应器<br>No sensor          |         |

| 感应器类型<br>Sensor type |     |
|----------------------|-----|
| 无<br>No              | NPN |
| P                    | PNP |

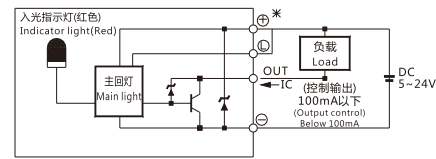
| 非标特注<br>Non-standard, d.c., |                                                                          |
|-----------------------------|--------------------------------------------------------------------------|
| 无 NO                        | 标准型 Standard                                                             |
| BL1                         | 详细<br>释义<br>请见<br>P3页<br><br>Detailed<br>information<br>please<br>see P3 |
| B2                          |                                                                          |
| D01                         |                                                                          |
| U01                         |                                                                          |
| UD01                        |                                                                          |
| H01                         |                                                                          |
| HU01                        |                                                                          |
| HD01                        |                                                                          |
| HUD01                       |                                                                          |
| M01                         |                                                                          |
| S01                         |                                                                          |



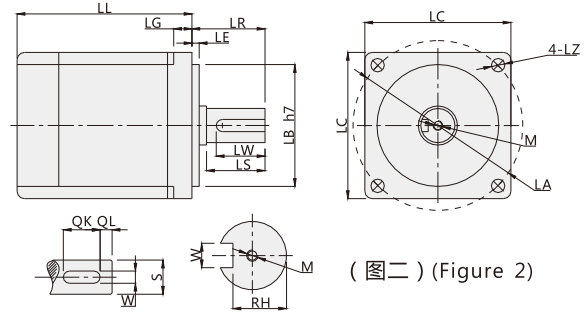
## 基本规格 Specification

|                                  |                    |                              |     |      |
|----------------------------------|--------------------|------------------------------|-----|------|
| 马达功率 AC (W) Motor power AC (W)   | 400W               |                              |     |      |
| 滚珠丝杆驱动-外径 BallScrew              | C级 (C7)            | 16                           |     |      |
|                                  | P级 (C5)            |                              |     |      |
| 重复定位精度 Repeatability             | C级 (C7)            | ±0.01                        |     |      |
|                                  | P级 (C5)            |                              |     |      |
| 滚珠丝杆导程 BallScrew Lead(mm)        | 5                  | 10                           | 16  | 20   |
| 最快速度 MaximumSpeed(mm/sec)        | 250                | 500                          | 800 | 1000 |
| 马达转速 3000 Motor Speed(rpm/mim)   | 250                | 500                          | 800 | 1000 |
| 额定加速度 Rate acceleration (m/sec2) | 1.5                | 3                            | 3   | 3    |
| 最大载重(kg) Maximum Payload(kg)     | 水平使用 Horizontal    | 110                          | 88  | 48   |
|                                  | 垂直使用 Vertical      | 33                           | 22  | 10   |
| 额定推力(N) Rated Thrust(N)          | 1388               | 694                          | 347 | 170  |
| 直线导轨 Linear Guide (mm)           | 15x12.5-2          |                              |     |      |
| 联轴器 Coupling (mm)                | 10x14              |                              |     |      |
| 马达功率 Motor Output                | 400W               |                              |     |      |
| 原点感应器 Home Sensor                | 外挂 Outside         | EE-SX672(PNP) EE-SX672P(PNP) |     |      |
|                                  | 导轨安装 Outside Guide | EE-SX674(NPN) EE-SX674P(PNP) |     |      |

感应器接线图 < 原点及端点 >  
Wiring drawing of inductor(original point and endpoint)



(图一) (Figure 1)



(图二) (Figure 2)

- \* 以上重复定位精度是300行程范围内所得，如行程加长，则重复定位精度适当放大；行程超过650时会产生丝杆共振，每增加100行程请将速度降低15%；更换不同电机时，请注意图二电机尺寸是否同表一相同，否则需更换联轴器和马达固定座。
- \* Above repeatability is within stroke 300mm,if logner travel needed,it willbe lower.In case stroke over 650 will lead to swing of ball screw,please slow down the speed 15%.Please note figure 2 motor size is same with table 1, or needed to replace coupler and motor holder.)

## 搭配伺服马达一览表 Servo Motor Matches List

(表一) (Table1)

| 伺服电机外形尺寸 Servo motor size |               |                 |                                            |                   |       |     |    |     |    |     |    |      |     |    |      |      |        |    |   |
|---------------------------|---------------|-----------------|--------------------------------------------|-------------------|-------|-----|----|-----|----|-----|----|------|-----|----|------|------|--------|----|---|
| 功率W Power(W)              | 品牌 Brand      | 型号 Type         | LL                                         | LL(刹车) LL(Brakes) | LA    | LE  | LZ | LC  | LG | LW  | RH | W    | LR  | S  | LB   | M    | QK     | QL |   |
| 200W                      | 松下 Panasonic  | MSMJ022G1 □     | V: 带刹车 U: 无刹车<br>V: With brake U: No brake | 79.5              | 115.5 | 70  | 3  | 4.5 | 60 | 6.5 | 20 | 8.5  | 4h9 | 30 | 11h6 | 50h7 | M4x8L  | -  | - |
|                           | 台达 Delta      | ECMA-C20602 □ S | S: 带刹车 R: 无刹车<br>S: With brake R: No brake | 105.5             | 141.5 | 70  | 3  | 5.5 | 60 | 7.5 | 20 | 11   | 5   | 30 | 14h6 | 50h7 | M4x15L | -  | - |
|                           | 三菱 Mitsubishi | HC-KFS23 □ K    | B: 带刹车 □: 无刹车<br>B: With brake □: No brake | 99.5              | 131.5 | 70  | 3  | 5.8 | 62 | 7   | -  | -    | -   | 30 | 14h6 | 50h7 | -      | -  | - |
| 400W                      | 松下 Panasonic  | MSMJ042G1 □     | V: 带刹车 U: 无刹车<br>V: With brake U: No brake | 99                | 135   | 70  | 3  | 4.5 | 60 | 6.5 | 20 | 11   | 5h9 | 30 | 14h6 | 50h7 | M5x10L | -  | - |
|                           | 台达 Delta      | ECMA-C20604 □ S | S: 带刹车 R: 无刹车<br>S: With brake R: No brake | 130.7             | 166.6 | 70  | 3  | 5.5 | 60 | 7.5 | 20 | 11   | 5   | 30 | 14h6 | 50h7 | M4x15L | -  | - |
|                           |               | ECMA-C20804 □ S | S: 带刹车 R: 无刹车<br>S: With brake R: No brake | 112.3             | 152.8 | 90  | 3  | 6.6 | 80 | 8   | 20 | 11   | 5   | 35 | 14h6 | 70h7 | M4x15L | -  | - |
|                           | 三菱 Mitsubishi | HC-KFS43 □ K    | B: 带刹车 □: 无刹车<br>B: With brake □: No brake | 124.5             | 165.5 | 70  | 3  | 5.8 | 62 | 7   | -  | -    | -   | 30 | 14h6 | 50h7 | -      | -  | - |
| 750W                      | 松下 Panasonic  | MSMJ082G1 □     | V: 带刹车 U: 无刹车<br>V: With brake U: No brake | 122               | 149   | 90  | 3  | 6   | 80 | 8   | 25 | 15.5 | 6h9 | 35 | 19h6 | 70h7 | M5x10L | -  | - |
|                           | 台达 Delta      | ECMA-C20807 □ S | S: 带刹车 R: 无刹车<br>S: With brake R: No brake | 138.3             | 178   | 90  | 3  | 6.6 | 80 | 8   | 25 | 15.5 | 6   | 35 | 19h6 | 70h7 | M6x20L | -  | - |
|                           |               | ECMA-C20907 □ S | S: 带刹车 R: 无刹车<br>S: With brake R: No brake | 130.2             | 161.3 | 100 | 3  | 6.6 | 86 | 8   | 20 | 13   | 5   | 35 | 16h6 | 80h7 | M5x15L | -  | - |
|                           | 三菱 Mitsubishi | HC-KFS73 □ K    | B: 带刹车 □: 无刹车<br>B: With brake □: No brake | 142               | 177.5 | 90  | 3  | 6.6 | 82 | 8   | -  | -    | -   | 40 | 19h6 | 70h7 | -      | -  | - |

□表示为空 Stand for empty

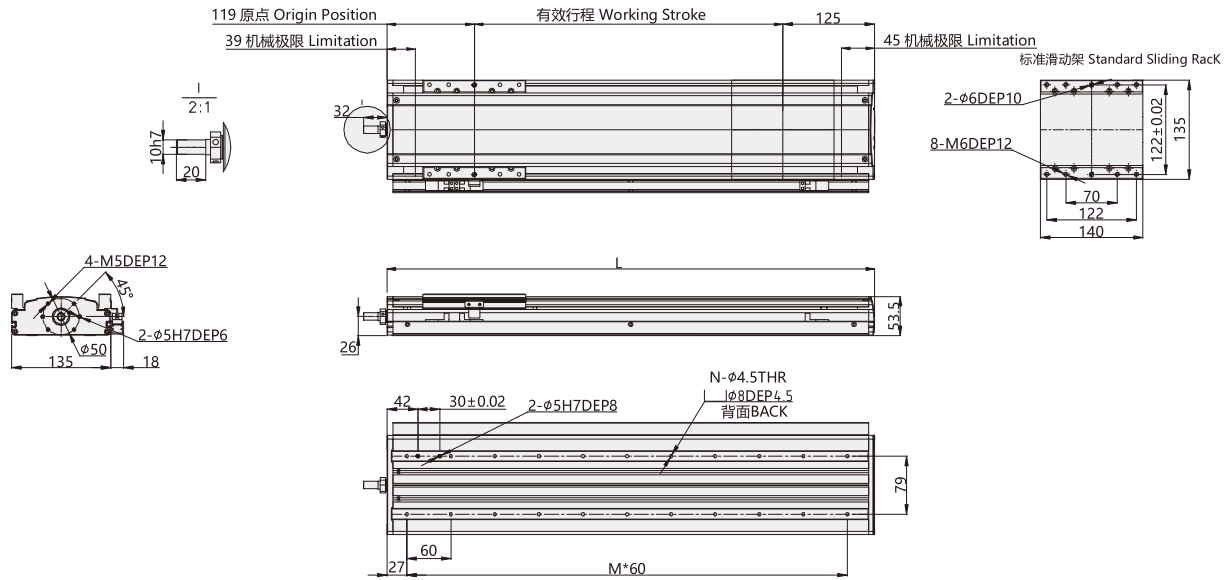
## 容许负载力矩表 Allow Load Torque Table

| (单位: mm) (Unit: mm)          |       |      |      | (单位: N.m) (Unit: N.m)        |      |      |      |
|------------------------------|-------|------|------|------------------------------|------|------|------|
|                              |       |      |      |                              |      |      |      |
| 水平安装 Horizontal installation | A     | B    | C    | 水平安装 Horizontal installation | A    | B    | C    |
| 导程 5 Lead 5                  | 60kg  | 2448 | 316  | 20kg                         | 204  | 112  | 1394 |
|                              | 80kg  | 2197 | 247  | 25kg                         | 130  | 57   | 1115 |
|                              | 110kg | 2005 | 207  | 33kg                         | 85   | 24   | 895  |
| 导程 10 Lead 10                | 30kg  | 1958 | 370  | 10kg                         | 414  | 333  | 1277 |
|                              | 50kg  | 1660 | 370  | 50kg                         | 235  | 157  | 929  |
|                              | 88kg  | 1725 | 247  | 88kg                         | 129  | 57   | 751  |
| 导程 16 Lead 16                | 10kg  | 2265 | 1674 | 10kg                         | 461  | 372  | 1410 |
|                              | 20kg  | 1402 | 855  | 20kg                         | 264  | 178  | 1027 |
|                              | 48kg  | 1047 | 445  | 48kg                         | 148  | 69   | 830  |
| 导程 20 Lead 20                | 10kg  | 2000 | 1670 | 10kg                         | 997  | 1217 | 1709 |
|                              | 20kg  | 1400 | 850  | 20kg                         | 513  | 555  | 985  |
|                              | 40kg  | 1050 | 445  | 40kg                         | 268  | 231  | 640  |
| 垂直安装 Vertical installation   | A     | C    |      | 垂直安装 Vertical installation   | A    | C    |      |
| 导程 5 Lead 5                  | 20kg  | 762  | 614  | 导程 5 Lead 5                  | 20kg | 762  | 614  |
|                              | 25kg  | 607  | 489  |                              | 25kg | 607  | 489  |
|                              | 33kg  | 498  | 483  |                              | 33kg | 498  | 483  |
| 导程 10 Lead 10                | 10kg  | 1365 | 1101 | 导程 10 Lead 10                | 10kg | 1365 | 1101 |
|                              | 25kg  | 901  | 727  |                              | 25kg | 901  | 727  |
|                              | 22kg  | 674  | 543  |                              | 22kg | 674  | 543  |
| 导程 16 Lead 16                | 2kg   | 1067 | 1217 | 导程 16 Lead 16                | 2kg  | 1067 | 1217 |
|                              | 4kg   | 997  | 805  |                              | 4kg  | 997  | 805  |
|                              | 10kg  | 747  | 600  |                              | 10kg | 747  | 600  |
| 导程 20 Lead 20                | 2kg   | 1050 | 1200 | 导程 20 Lead 20                | 2kg  | 1050 | 1200 |
|                              | 4kg   | 980  | 800  |                              | 4kg  | 980  | 800  |
|                              | 8kg   | 700  | 590  |                              | 8kg  | 700  | 590  |
| 最大静态力矩 Maximum static torque |       |      |      | 最大静态力矩 Maximum static torque |      |      |      |
| MY                           |       |      |      | MY                           |      |      |      |
| MP                           |       |      |      | MP                           |      |      |      |
| MR                           |       |      |      | MR                           |      |      |      |



## BA:基本型(Basis)

单位 Unit ( mm )



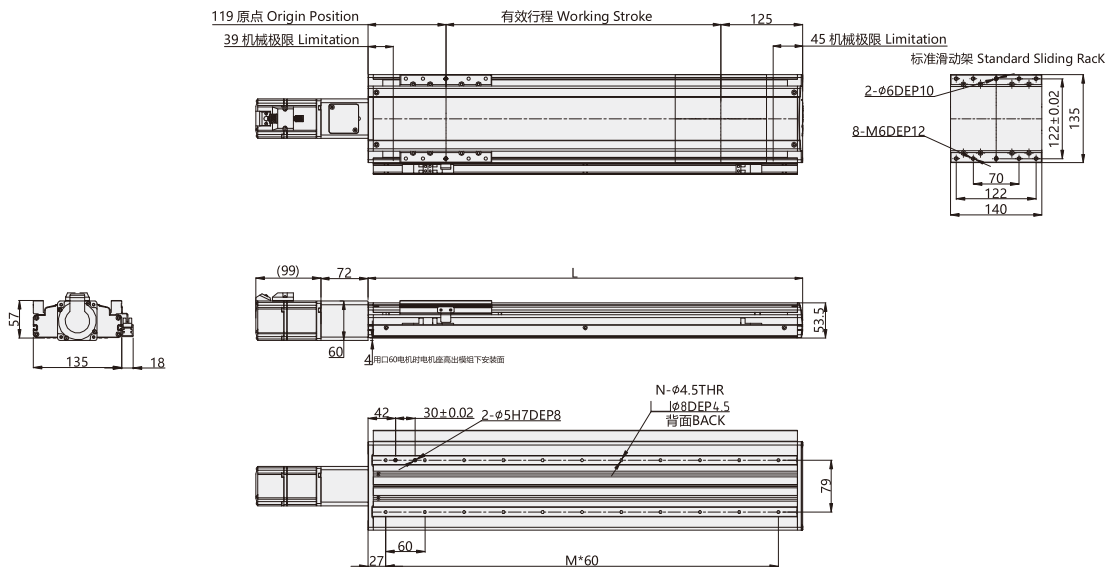
注:以下不含电机重量, 如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| L                      | 304 | 364 | 424 | 484 | 544 | 604 | 664 | 724 | 784 | 844 | 904 | 964 | 1024 | 1084 | 1144 | 1204 | 1264 | 1324 | 1384 | 1444 |
| M                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   |
| N                      | 10  | 12  | 14  | 16  | 18  | 20  | 22  | 24  | 26  | 28  | 30  | 32  | 34   | 36   | 38   | 40   | 42   | 44   | 46   | 48   |
| 重量 KG<br>Weight KG     | 4.3 | 4.7 | 5.1 | 5.5 | 5.9 | 6.3 | 6.7 | 7.1 | 7.5 | 7.9 | 8.3 | 8.7 | 9.1  | 9.5  | 9.9  | 10.3 | 10.7 | 11.1 | 11.5 | 11.9 |

\*带颜色 为常备库产品, 可适当缩短交期。\*Products with color are available stock and short lead time.

## BC:直联外置(External)

单位 Unit ( mm )



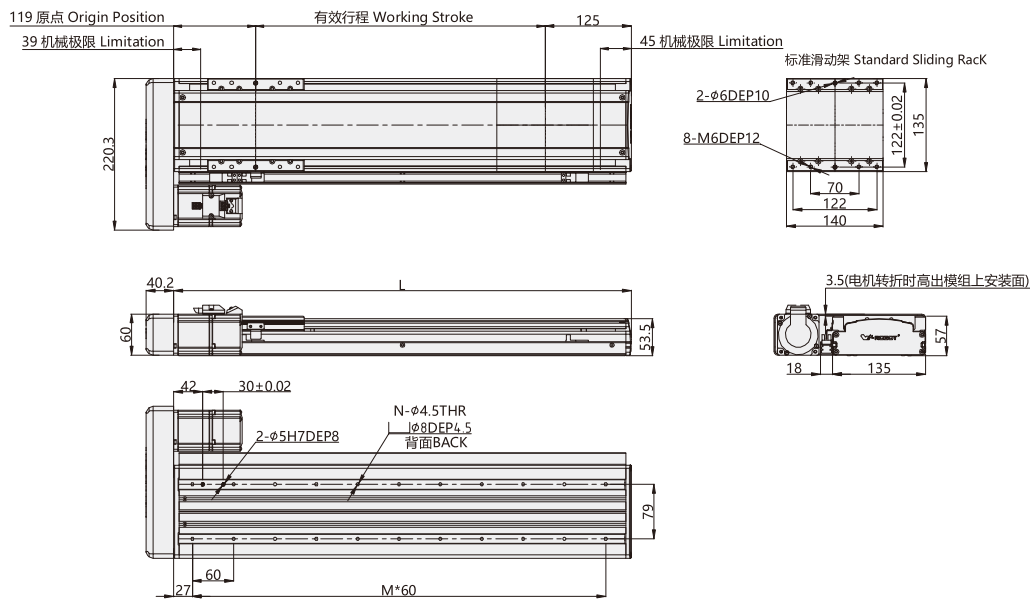
注:以下不含电机重量, 如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| L                      | 304 | 364 | 424 | 484 | 544 | 604 | 664 | 724 | 784 | 844 | 904 | 964 | 1024 | 1084 | 1144 | 1204 | 1264 | 1324 | 1384 | 1444 |
| M                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   |
| N                      | 10  | 12  | 14  | 16  | 18  | 20  | 22  | 24  | 26  | 28  | 30  | 32  | 34   | 36   | 38   | 40   | 42   | 44   | 46   | 48   |
| 重量 KG<br>Weight KG     | 4.6 | 5.0 | 5.4 | 5.8 | 6.2 | 6.6 | 7.0 | 7.4 | 7.8 | 8.2 | 8.6 | 9.0 | 9.4  | 9.8  | 10.2 | 10.6 | 11.0 | 11.4 | 11.8 | 12.2 |

\*带颜色 为常备库产品, 可适当缩短交期。\*Products with color are available stock and short lead time.

## BL:马达左折(Left Side)

单位 Unit ( mm )



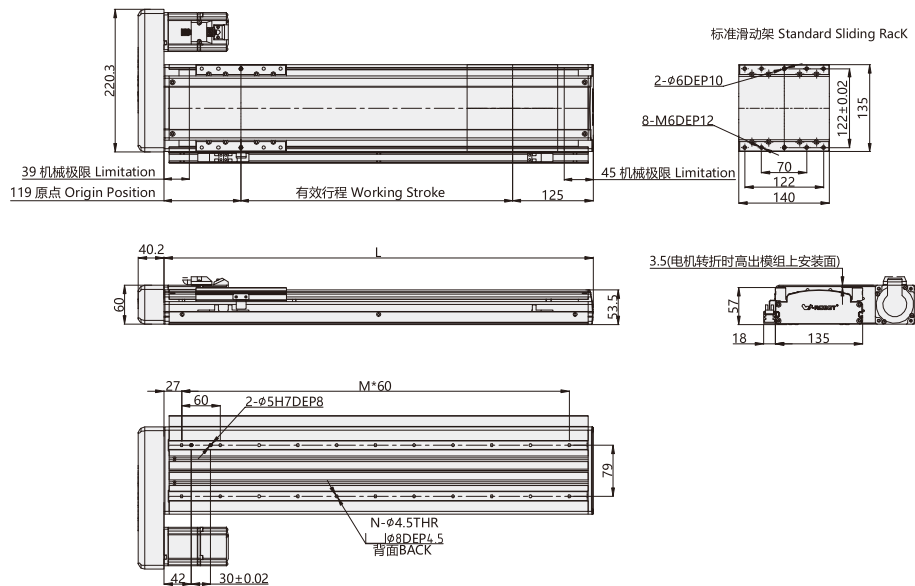
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| L                      | 304 | 364 | 424 | 484 | 544 | 604 | 664 | 724 | 784 | 844 | 904 | 964 | 1024 | 1084 | 1144 | 1204 | 1264 | 1324 | 1384 | 1444 |
| M                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   |
| N                      | 10  | 12  | 14  | 16  | 18  | 20  | 22  | 24  | 26  | 28  | 30  | 32  | 34   | 36   | 38   | 40   | 42   | 44   | 46   | 48   |
| 重量 KG<br>Weight KG     | 5.3 | 5.7 | 6.1 | 6.5 | 6.9 | 7.3 | 7.7 | 8.1 | 8.5 | 8.9 | 9.3 | 9.7 | 10.1 | 10.5 | 10.9 | 11.3 | 11.7 | 12.1 | 12.5 | 12.9 |

\*带颜色 为常备库产品,可适当缩短交期。\*Products with color are available stock and short lead time.

## BR:马达右折(Right Side)

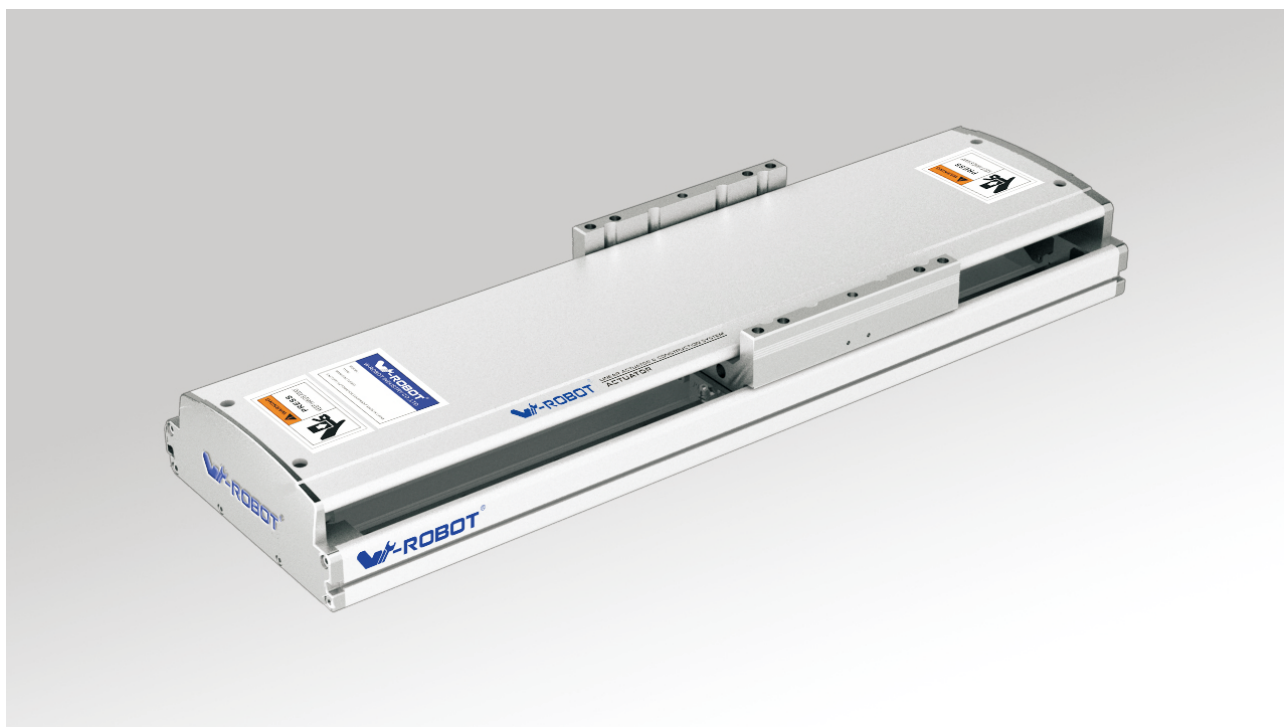
单位 Unit ( mm )



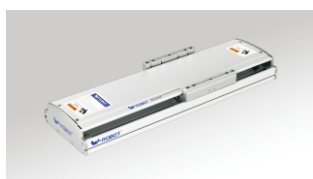
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| L                      | 304 | 364 | 424 | 484 | 544 | 604 | 664 | 724 | 784 | 844 | 904 | 964 | 1024 | 1084 | 1144 | 1204 | 1264 | 1324 | 1384 | 1444 |
| M                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   |
| N                      | 10  | 12  | 14  | 16  | 18  | 20  | 22  | 24  | 26  | 28  | 30  | 32  | 34   | 36   | 38   | 40   | 42   | 44   | 46   | 48   |
| 重量 KG<br>Weight KG     | 5.3 | 5.7 | 6.1 | 6.5 | 6.9 | 7.3 | 7.7 | 8.1 | 8.5 | 8.9 | 9.3 | 9.7 | 10.1 | 10.5 | 10.9 | 11.3 | 11.7 | 12.1 | 12.5 | 12.9 |

\*带颜色 为常备库产品,可适当缩短交期。\*Products with color are available stock and short lead time.



## 马达安装方式 Motor direction



BA



BC



BL



BR

## 型号表示方式 Guide for Model Selection

QF17 - L20 - C - S60 - BC - ZP75B - C3 -

| 本体样式<br>Base Style |                                                                  |
|--------------------|------------------------------------------------------------------|
| Q                  | Q系列<br>Q Series                                                  |
| F                  | 半密封带框架<br>Semiclosed with<br>Frame<br>丝杆驱动结构<br>Ball Screw Drive |
| 17                 | 本体170mm宽<br>Body width170                                        |

| 丝杆导程<br>Ball Screw Lead |      |
|-------------------------|------|
| L5                      | 5mm  |
| L10                     | 10mm |
| L20                     | 20mm |
| L40                     | 40mm |

| 精度等级<br>Accuracy class |                         |
|------------------------|-------------------------|
| C                      | 普通级<br>Common precision |

| 行程(mm)<br>Stroke(mm) |                    |
|----------------------|--------------------|
| 60-1500              |                    |
| 马达方式<br>Motor way    |                    |
| BA                   | 基本型<br>Basis       |
| BC                   | 直联外置<br>External   |
| BR                   | 马达右折<br>Right Side |
| BL                   | 马达左折<br>Left Side  |

| 马达类型<br>Motor Type                                       |                  | 马达功率<br>Motor power |                   |
|----------------------------------------------------------|------------------|---------------------|-------------------|
| P                                                        | 松下<br>Panasonic  | 40                  | 400W              |
| M                                                        | 三菱<br>Mitsubishi | 75                  | 750W              |
| Y                                                        | 安川<br>Yaskawa    | 刹车<br>Brakes        |                   |
| T                                                        | 台达<br>Delta      | 无<br>No             | 无刹车<br>No brake   |
| W                                                        | 威洛博<br>W-Robot   | B                   | 带刹车<br>With brake |
| *为 Z:<br>代表客户自配电机<br>*For Z:<br>Motor is from<br>clients |                  |                     |                   |

| 原点开关位置<br>Original Sensor position |                             | 极限开关数量<br>Limit Sensor Qty |         |
|------------------------------------|-----------------------------|----------------------------|---------|
| 外置式:<br>External                   |                             | 外置式:<br>External           |         |
| C                                  | 马达侧<br>Motor side           | 2                          | 2个 2pcs |
| D                                  | 反马达侧<br>Opposite motor side | 3                          | 3个 3pcs |
| E                                  | 无<br>No                     | 无感应器<br>No sensor          |         |

| 感应器类型<br>Sensor type |     |
|----------------------|-----|
| 无<br>No              | NPN |
| P                    | PNP |

| 非标特注<br>Non-standard, d.c., |                                                                          |
|-----------------------------|--------------------------------------------------------------------------|
| 无 NO                        | 标准型 Standard                                                             |
| BL1                         | 详细<br>释义<br>请见<br>P3页<br><br>Detailed<br>information<br>please<br>see P3 |
| B2                          |                                                                          |
| D01                         |                                                                          |
| U01                         |                                                                          |
| UD01                        |                                                                          |
| H01                         |                                                                          |
| HU01                        |                                                                          |
| HD01                        |                                                                          |
| HUD01                       |                                                                          |
| M01                         |                                                                          |
| S01                         |                                                                          |



單位 Unit ( mm )



|                        |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480  | 540  | 600  | 660  | 720  | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 |
| L                      | 323 | 383 | 443 | 503 | 563 | 623 | 683 | 743  | 803  | 863  | 923  | 983  | 1043 | 1103 | 1163 | 1223 | 1283 | 1343 | 1403 | 1463 | 1523 | 1583 | 1643 | 1703 | 1763 |
| M                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   | 24   | 25   | 26   | 27   | 28   |
| N                      | 10  | 12  | 14  | 16  | 18  | 20  | 22  | 24   | 26   | 28   | 30   | 32   | 34   | 36   | 38   | 40   | 42   | 44   | 46   | 48   | 50   | 52   | 54   | 56   | 58   |
| 重量KG                   | 7.3 | 7.7 | 8.1 | 8.5 | 8.9 | 9.3 | 9.7 | 10.1 | 10.5 | 10.9 | 11.3 | 11.7 | 12.1 | 12.5 | 12.9 | 13.3 | 13.7 | 14.1 | 14.5 | 14.9 | 15.3 | 15.7 | 16.1 | 16.5 | 16.9 |

\*带颜色 为常备库产品，可适当缩短交期。\*Products with color are available stock and short lead time.

## 单位 Unit ( mm )

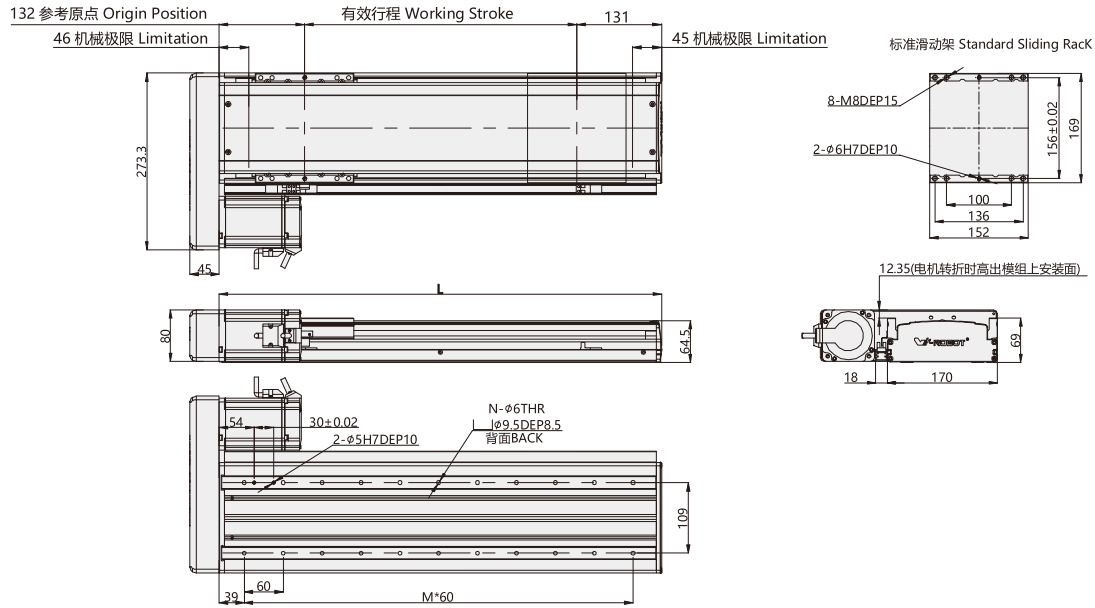


|                        |     |     |     |     |     |     |     |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360 | 420 | 480  | 540  | 600  | 660  | 720 | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 |
| L                      | 323 | 383 | 443 | 503 | 563 | 623 | 683 | 743  | 803  | 863  | 923  | 983 | 1043 | 1103 | 1163 | 1223 | 1283 | 1343 | 1403 | 1463 | 1523 | 1583 | 1643 | 1703 | 1763 |
| M                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11   | 12   | 13   | 14   | 15  | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   | 24   | 25   | 26   | 27   | 28   |
| N                      | 10  | 12  | 14  | 16  | 18  | 20  | 22  | 24   | 26   | 28   | 30   | 32  | 34   | 36   | 38   | 40   | 42   | 44   | 46   | 48   | 50   | 52   | 54   | 56   | 58   |
| 重量KG<br>Weight         | 7.6 | 8.0 | 8.4 | 8.8 | 9.2 | 9.6 | 10  | 10.4 | 10.8 | 11.2 | 11.6 | 12  | 12.4 | 12.8 | 13.2 | 13.6 | 14   | 14.4 | 14.8 | 15.2 | 15.6 | 16   | 16.4 | 16.8 | 17.2 |

\*带颜色 为常备库产品，可适当缩短交期。\*Products with color are available stock and short lead time.

## BL:马达左折(Left Side)

单位 Unit ( mm )



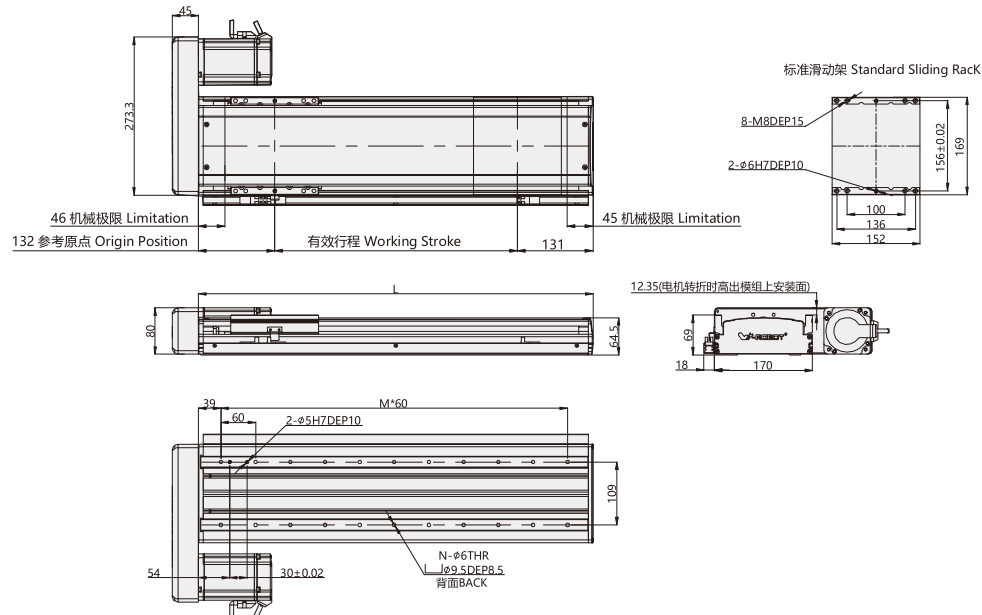
注:以下不含电机重量, 如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360  | 420  | 480  | 540  | 600  | 660  | 720  | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 |
|------------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L                      | 323 | 383 | 443 | 503 | 563 | 623  | 683  | 743  | 803  | 863  | 923  | 983  | 1043 | 1103 | 1163 | 1223 | 1283 | 1343 | 1403 | 1463 | 1523 | 1583 | 1643 | 1703 | 1763 |
| M                      | 4   | 5   | 6   | 7   | 8   | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   | 24   | 25   | 26   | 27   | 28   |
| N                      | 10  | 12  | 14  | 16  | 18  | 20   | 22   | 24   | 26   | 28   | 30   | 32   | 34   | 36   | 38   | 40   | 42   | 44   | 46   | 48   | 50   | 52   | 54   | 56   | 58   |
| 重量 KG<br>Weight KG     | 8.3 | 8.7 | 9.1 | 9.5 | 9.9 | 10.3 | 10.7 | 11.1 | 11.5 | 11.9 | 12.3 | 12.7 | 13.1 | 13.5 | 13.9 | 14.3 | 14.7 | 15.1 | 15.5 | 15.9 | 16.3 | 16.7 | 17.1 | 17.5 | 17.9 |

\*带颜色 为常备库产品, 可适当缩短交期。\*Products with color are available stock and short lead time.

## BR:马达右折(Right Side)

单位 Unit ( mm )

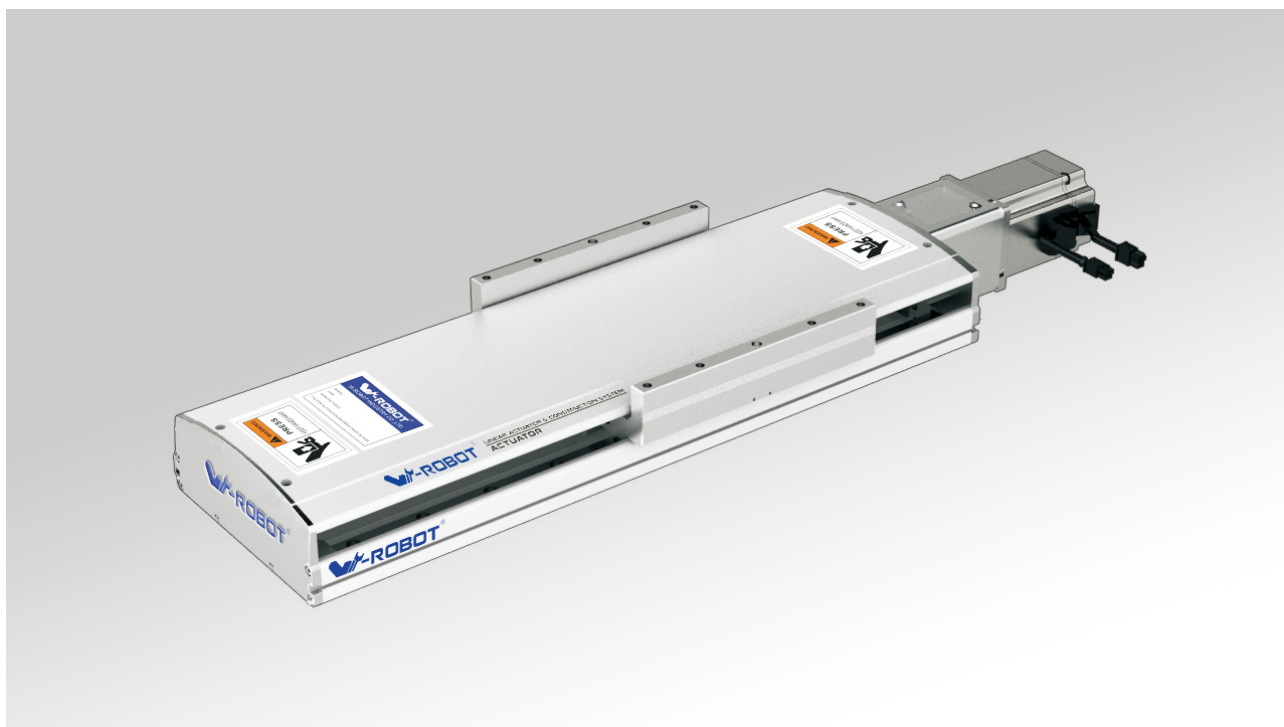


注:以下不含电机重量, 如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

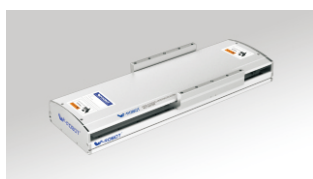
| 有效行程<br>Working Stroke | 60  | 120 | 180 | 240 | 300 | 360  | 420  | 480  | 540  | 600  | 660  | 720  | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 |
|------------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L                      | 323 | 383 | 443 | 503 | 563 | 623  | 683  | 743  | 803  | 863  | 923  | 983  | 1043 | 1103 | 1163 | 1223 | 1283 | 1343 | 1403 | 1463 | 1523 | 1583 | 1643 | 1703 | 1763 |
| M                      | 4   | 5   | 6   | 7   | 8   | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   | 24   | 25   | 26   | 27   | 28   |
| N                      | 10  | 12  | 14  | 16  | 18  | 20   | 22   | 24   | 26   | 28   | 30   | 32   | 34   | 36   | 38   | 40   | 42   | 44   | 46   | 48   | 50   | 52   | 54   | 56   | 58   |
| 重量 KG<br>Weight KG     | 8.3 | 8.7 | 9.1 | 9.5 | 9.9 | 10.3 | 10.7 | 11.1 | 11.5 | 11.9 | 12.3 | 12.7 | 13.1 | 13.5 | 13.9 | 14.3 | 14.7 | 15.1 | 15.5 | 15.9 | 16.3 | 16.7 | 17.1 | 17.5 | 17.9 |

\*带颜色 为常备库产品, 可适当缩短交期。\*Products with color are available stock and short lead time.

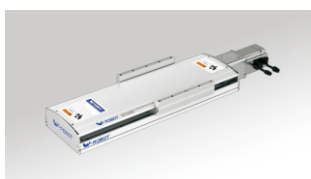




## 马达安装方式 Motor direction



BA



BC



BL



BR

## 型号表示方式 Guide for Model Selection

QF20 - L25 - C - S60 - BC - ZP75B - C3 -

| 本体样式<br>Base Style |                                                                  |
|--------------------|------------------------------------------------------------------|
| Q                  | Q系列<br>Q Series                                                  |
| F                  | 半密封带框架<br>Semiclosed with<br>Frame<br>丝杆驱动结构<br>Ball Screw Drive |
| 20                 | 本体200mm宽<br>Body width 200                                       |

| 丝杆导程<br>Ball Screw Lead |      |
|-------------------------|------|
| L5                      | 5mm  |
| L10                     | 10mm |
| L25                     | 25mm |

| 精度等级<br>Accuracy class |                         |
|------------------------|-------------------------|
| C                      | 普通级<br>Common precision |

| 行程(mm)<br>Stroke(mm) |  |
|----------------------|--|
| 60-1500              |  |

| 马达方式<br>Motor way |                    |
|-------------------|--------------------|
| BA                | 基本型<br>Basis       |
| BC                | 直联外置<br>External   |
| BR                | 马达右折<br>Right Side |
| BL                | 马达左折<br>Left Side  |

| 马达类型<br>Motor Type                                       |                  | 马达功率<br>Motor power |                   |
|----------------------------------------------------------|------------------|---------------------|-------------------|
| P                                                        | 松下<br>Panasonic  | 75                  | 750W              |
| M                                                        | 三菱<br>Mitsubishi | 刹车<br>Brakes        |                   |
| Y                                                        | 安川<br>Yaskawa    | 无<br>No             | 无刹车<br>No brake   |
| T                                                        | 台达<br>Delta      | B                   | 带刹车<br>With brake |
| W                                                        | 威洛博<br>W-Robot   |                     |                   |
| *为 Z:<br>代表客户自配电机<br>*For Z:<br>Motor is from<br>clients |                  |                     |                   |

| 原点开关位置<br>Original Sensor<br>position |                                | 极限开关数量<br>Limit Sensor Qty |         |
|---------------------------------------|--------------------------------|----------------------------|---------|
| 外置式:<br>External                      |                                | 外置式:<br>External           |         |
| C                                     | 马达侧<br>Motor side              | 2                          | 2个 2pcs |
| D                                     | 反马达侧<br>Opposite motor<br>side | 3                          | 3个 3pcs |
| E                                     | 无<br>No                        | 无感应器<br>No sensor          |         |

| 感应器类型<br>Sensor type |     |
|----------------------|-----|
| 无<br>No              | NPN |
| P                    | PNP |

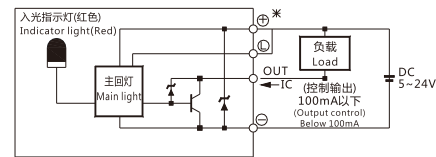
| 非标特注<br>Non-standard, d.c., |                                                                          |
|-----------------------------|--------------------------------------------------------------------------|
| 无 NO                        | 标准型 Standard                                                             |
| BL1                         | 详细<br>释义<br>请见<br>P3页<br><br>Detailed<br>information<br>please<br>see P3 |
| B2                          |                                                                          |
| D01                         |                                                                          |
| U01                         |                                                                          |
| UD01                        |                                                                          |
| H01                         |                                                                          |
| HU01                        |                                                                          |
| HD01                        |                                                                          |
| HUD01                       |                                                                          |
| M01                         |                                                                          |
| S01                         |                                                                          |

## 基本规格 Specification

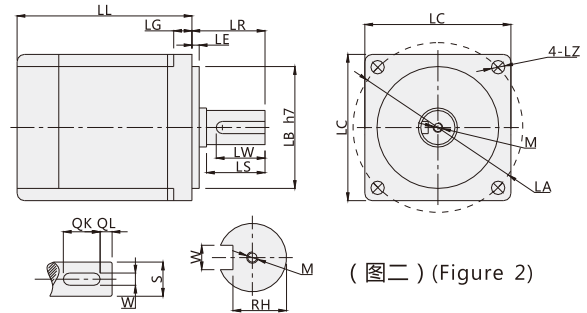
|                                               |                    |               |               |
|-----------------------------------------------|--------------------|---------------|---------------|
| 马达功率 AC (W) Motor power AC (W)                | 750W               |               |               |
| 滚珠丝杆驱动-外径 BallScrewØ                          | C级 (C7)            | 25            |               |
|                                               | P级 (C5)            |               |               |
| 重复定位精度 Repeatability                          | C级 (C7)            | ±0.01         |               |
|                                               | P级 (C5)            |               |               |
| 滚珠丝杆导程 BallScrew Lead(mm)                     | 5                  | 10            | 25            |
| 最快速度 MaximumSpeed(mm/sec)                     | 250                | 500           | 1250          |
| 马达转速 3000 Motor Speed(rpm/min)                | 250                | 500           | 1250          |
| 额定加速度 Rate acceleration (m/sec <sup>2</sup> ) | 1.5                | 3             | 3             |
| 最大载重(kg) Maximum Payload(kg)                  | 水平使用 Horizontal    | 150           | 140           |
|                                               | 垂直使用 Vertical      | 65            | 54            |
| 额定推力(N) Rated Thrust(N)                       | 2100               | 1050          | 420           |
| 直线导轨 Linear Guide (mm)                        | 23x18-2            |               |               |
| 联轴器 Coupling (mm)                             | 19x15              |               |               |
| (Motor side) x (Ball Screw Side)              |                    |               |               |
| 马达功率 Motor Output                             | 750W               |               |               |
| 原点感应器 Home Sensor                             | 外挂 Outside         | EE-SX672(NPN) | EE-SX672(PNP) |
|                                               | 导轨安装 Outside Guide | EE-SX674(NPN) | EE-SX674(PNP) |

感应器接线图 < 原点及端点 >

Wiring drawing of inductor(original point and endpoint)



(图一) (Figure 1)



(图二) (Figure 2)

- \* 以上重复定位精度是300行程范围内所得，如行程加长，则重复定位精度适当放大；行程超过650时会产生丝杆共振，每增加100行程请将速度降低15%；更换不同电机时，请注意图二电机尺寸是否同表一相同，否则需更换联轴器和马达固定座。
- \* Above repeatability is within stroke 300mm, if longer travel needed, it will be lower. In case stroke over 650 will lead to swing of ball screw, please slow down the speed 15%. Please note figure 2 motor size is same with table 1, or needed to replace coupler and motor holder.)

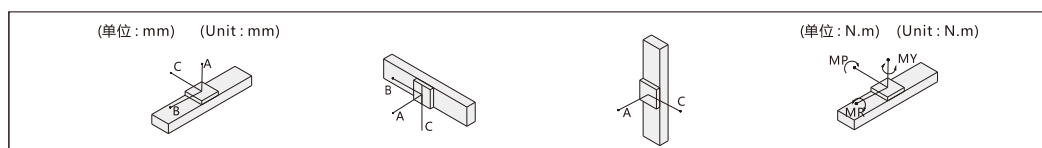
## 搭配伺服马达一览表 Servo Motor Matches List

(表一) (Table1)

| 伺服电机外形尺寸 Servo motor size |               |                 |                                              |                   |       |     |    |     |    |    |    |      |     |    |      |      |        |    |
|---------------------------|---------------|-----------------|----------------------------------------------|-------------------|-------|-----|----|-----|----|----|----|------|-----|----|------|------|--------|----|
| 功率W Power(W)              | 品牌 Brand      | 型号 Type         | LL                                           | LL(刹车) LL(Brakes) | LA    | LE  | LZ | LC  | LG | LW | RH | W    | LR  | S  | LB   | M    | QK     | QL |
| 750W                      | 松下 Panasonic  | MSMJ082G1 □     | V : 带刹车 U: 无刹车<br>V: With brake U: No brake  | 122               | 149   | 90  | 3  | 6   | 80 | 8  | 25 | 15.5 | 6h9 | 35 | 19h6 | 70h7 | M5x10L | -  |
|                           | 台达 Delta      | ECMA-C20807 □ S | S : 带刹车 R: 无刹车<br>S: With brake R: No brake  | 138.3             | 178   | 90  | 3  | 6.6 | 80 | 8  | 25 | 15.5 | 6   | 35 | 19h6 | 70h7 | M6x20L | -  |
|                           |               | ECMA-C20907 □ S | S : 带刹车 R: 无刹车<br>S: With brake R: No brake  | 130.2             | 161.3 | 100 | 3  | 6.6 | 86 | 8  | 20 | 13   | 5   | 35 | 16h6 | 80h7 | M5x15L | -  |
|                           | 三菱 Mitsubishi | HC-KFS73 □ K    | B : 带刹车 □ : 无刹车<br>B: With brake □: No brake | 142               | 177.5 | 90  | 3  | 6.6 | 82 | 8  | -  | -    | -   | 40 | 19h6 | 70h7 | -      | -  |

□表示为空 Stand for empty

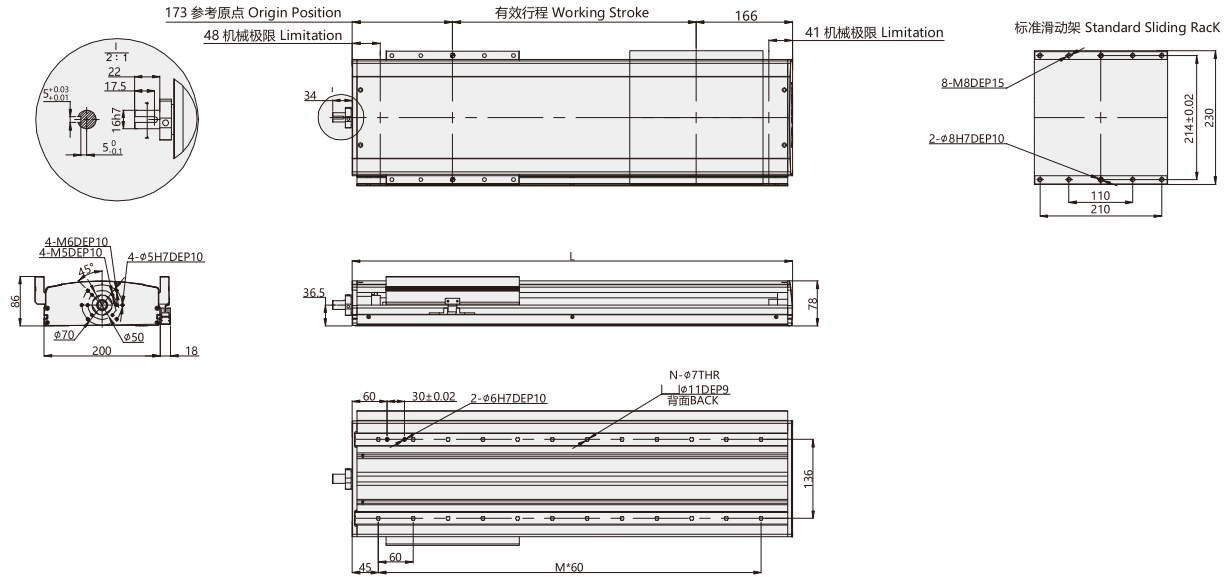
## 容许负载力矩表 Allow Load Torque Table



| 水平安装<br>Horizontal installation |       |      |     | 墙面安装<br>Wall installation |                  |       |      | 垂直安装<br>Vertical installation |      |                  |      | 最大静力矩<br>Maximum static torque |      |    |      |
|---------------------------------|-------|------|-----|---------------------------|------------------|-------|------|-------------------------------|------|------------------|------|--------------------------------|------|----|------|
|                                 | A     | B    | C   |                           | A                | B     | C    |                               | A    | C                |      |                                |      |    |      |
| 导程 5<br>Lead 5                  | 60kg  | 3672 | 653 | 866                       | 导程 5<br>Lead 5   | 60kg  | 795  | 525                           | 3657 | 导程 5<br>Lead 5   | 30kg | 2688                           | 2688 | MY | 2052 |
|                                 | 100kg | 3000 | 370 | 497                       |                  | 100kg | 416  | 248                           | 2993 |                  | 50kg | 1893                           | 1893 | MP | 2052 |
|                                 | 150kg | 2493 | 273 | 363                       |                  | 150kg | 290  | 159                           | 2479 |                  | 70kg | 1640                           | 1640 | MR | 1810 |
| 导程 10<br>Lead 10                | 60kg  | 2652 | 899 | 994                       | 导程 10<br>Lead 10 | 60kg  | 982  | 815                           | 2573 | 导程 10<br>Lead 10 | 20kg | 2297                           | 2297 |    |      |
|                                 | 100kg | 1775 | 526 | 593                       |                  | 100kg | 569  | 442                           | 1680 |                  | 30kg | 1518                           | 1518 |    |      |
|                                 | 150kg | 1396 | 317 | 267                       |                  | 150kg | 337  | 232                           | 1258 |                  | 45kg | 999                            | 999  |    |      |
| 导程 25<br>Lead 25                | 50kg  | 2862 | 956 | 1191                      | 导程 25<br>Lead 25 | 50kg  | 1207 | 879                           | 2862 | 导程 25<br>Lead 25 | 15kg | 2767                           | 2767 |    |      |
|                                 | 80kg  | 2412 | 581 | 773                       |                  | 80kg  | 779  | 504                           | 2412 |                  | 20kg | 2100                           | 2100 |    |      |
|                                 | 120kg | 2025 | 373 | 556                       |                  | 120kg | 515  | 295                           | 2025 |                  | 25kg | 1702                           | 1702 |    |      |

## BA:基本型(Basis)

单位 Unit (mm)



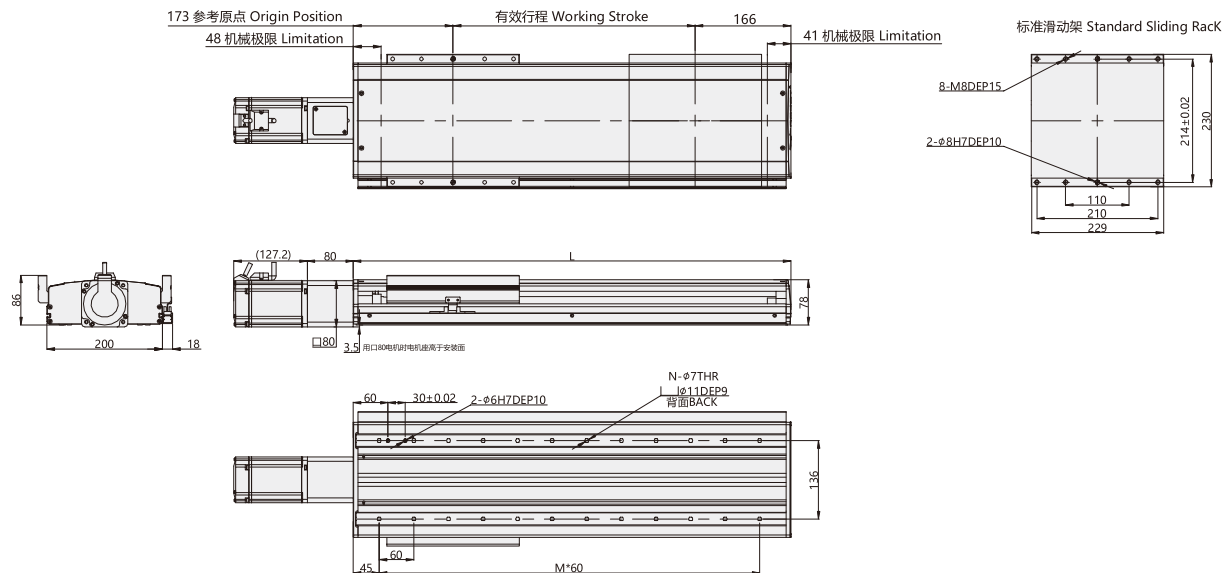
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60   | 120  | 180  | 240  | 300 | 360  | 420  | 480  | 540  | 600  | 660  | 720  | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 |
|------------------------|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L                      | 399  | 459  | 519  | 579  | 639 | 699  | 759  | 819  | 879  | 939  | 999  | 1059 | 1119 | 1179 | 1239 | 1299 | 1359 | 1419 | 1479 | 1539 | 1599 | 1659 | 1719 | 1779 | 1839 |
| M                      | 5    | 6    | 7    | 8    | 9   | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   | 24   | 25   | 26   | 27   | 28   | 29   |
| N                      | 12   | 14   | 16   | 18   | 20  | 22   | 24   | 26   | 28   | 30   | 32   | 34   | 36   | 38   | 40   | 42   | 44   | 46   | 48   | 50   | 52   | 54   | 56   | 58   | 60   |
| 重量 KG<br>Weight KG     | 14.6 | 15.2 | 15.8 | 16.4 | 17  | 17.6 | 18.2 | 18.8 | 19.4 | 20.0 | 20.6 | 21.2 | 21.8 | 22.4 | 23.0 | 23.6 | 24.2 | 24.8 | 25.4 | 26   | 26.6 | 27.2 | 27.8 | 28.4 | 29   |

\*带颜色 为常备库产品,可适当缩短交期。\*Products with color are available stock and short lead time.

## BC:直联外置(External)

单位 Unit (mm)



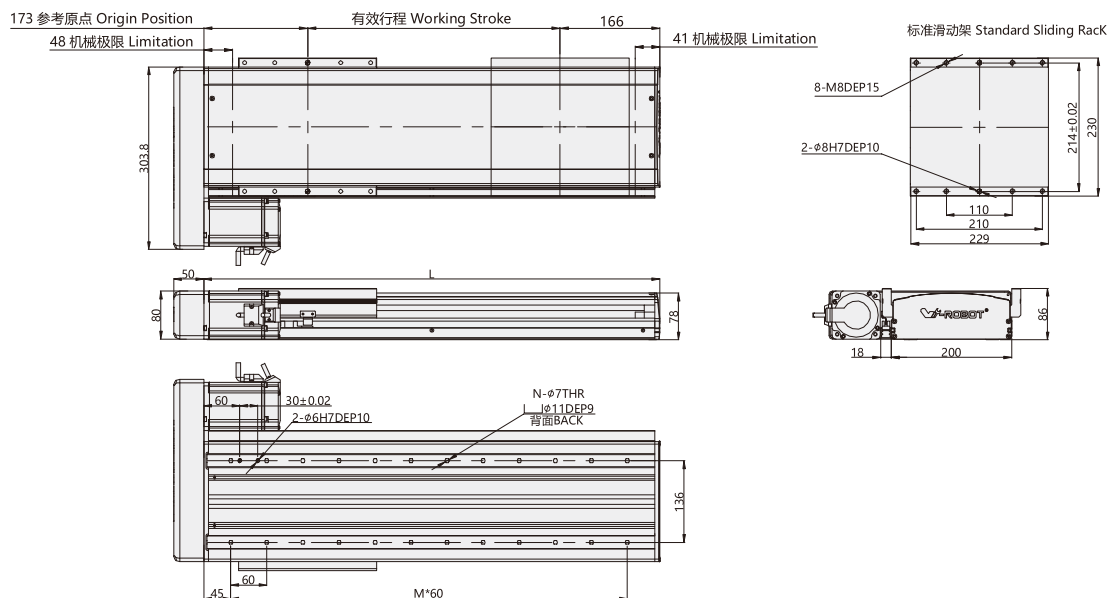
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight, in case special stroke please contact technical services.

| 有效行程<br>Working Stroke | 60   | 120  | 180  | 240  | 300  | 360  | 420  | 480  | 540  | 600  | 660  | 720  | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L                      | 399  | 459  | 519  | 579  | 639  | 699  | 759  | 819  | 879  | 939  | 999  | 1059 | 1119 | 1179 | 1239 | 1299 | 1359 | 1419 | 1479 | 1539 | 1599 | 1659 | 1719 | 1779 | 1839 |
| M                      | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   | 24   | 25   | 26   | 27   | 28   | 29   |
| N                      | 12   | 14   | 16   | 18   | 20   | 22   | 24   | 26   | 28   | 30   | 32   | 34   | 36   | 38   | 40   | 42   | 44   | 46   | 48   | 50   | 52   | 54   | 56   | 58   | 60   |
| 重量 KG<br>Weight KG     | 14.9 | 15.5 | 16.1 | 16.7 | 17.3 | 17.9 | 18.5 | 19.1 | 19.7 | 20.3 | 20.9 | 21.5 | 22.1 | 22.7 | 23.3 | 23.9 | 24.5 | 25.1 | 25.7 | 26.3 | 26.9 | 27.5 | 28.1 | 28.7 | 29.3 |

\*带颜色 为常备库产品,可适当缩短交期。\*Products with color are available stock and short lead time.

## BL:马达左折(Left Side)

单位 Unit ( mm )



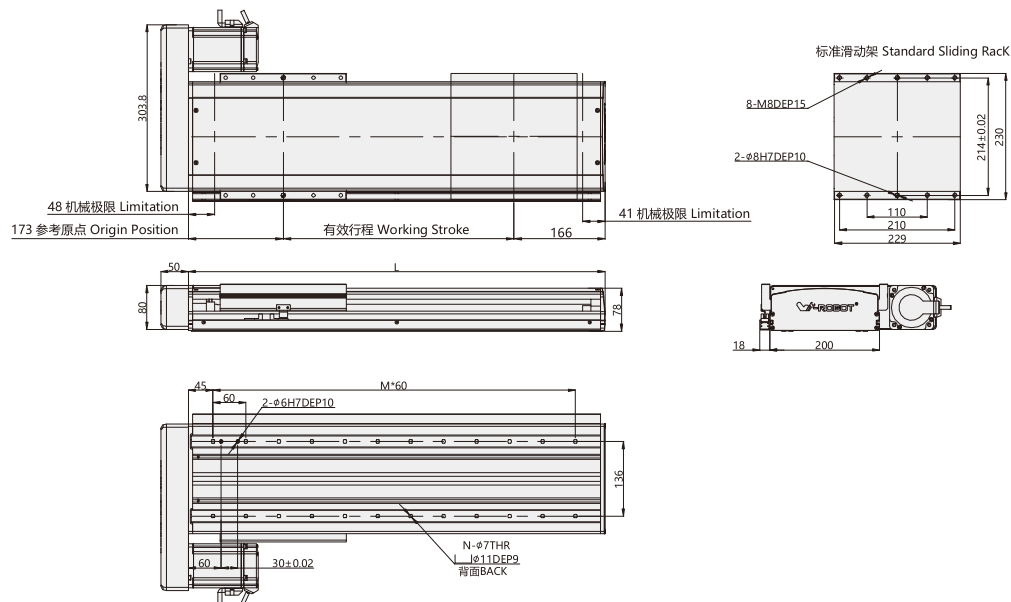
注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight , in case special stroke please contact technical services .

| 有效行程<br>Working Stroke | 60   | 120  | 180  | 240  | 300 | 360  | 420  | 480  | 540  | 600 | 660  | 720  | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 |
|------------------------|------|------|------|------|-----|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L                      | 399  | 459  | 519  | 579  | 639 | 699  | 759  | 819  | 879  | 939 | 999  | 1059 | 1119 | 1179 | 1239 | 1299 | 1359 | 1419 | 1479 | 1539 | 1599 | 1659 | 1719 | 1779 | 1839 |
| M                      | 5    | 6    | 7    | 8    | 9   | 10   | 11   | 12   | 13   | 14  | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   | 24   | 25   | 26   | 27   | 28   | 29   |
| N                      | 12   | 14   | 16   | 18   | 20  | 22   | 24   | 26   | 28   | 30  | 32   | 34   | 36   | 38   | 40   | 42   | 44   | 46   | 48   | 50   | 52   | 54   | 56   | 58   | 60   |
| 重量 KG<br>Weight KG     | 15.6 | 16.2 | 16.8 | 17.4 | 18  | 18.6 | 19.2 | 19.8 | 20.4 | 21  | 21.6 | 22.2 | 22.8 | 23.4 | 24   | 24.6 | 25.2 | 25.8 | 26.4 | 27   | 27.6 | 28.2 | 28.8 | 29.4 | 30   |

\*带颜色 为常备库产品, 可适当缩短交期。\*Products with color are available stock and short lead time.

## BR:马达右折(Right Side)

单位 Unit ( mm )



注:以下不含电机重量,如有特殊行程请先与技术人员联系。Note: Not including motor weight , in case special stroke please contact technical services .

| 有效行程<br>Working Stroke | 60   | 120  | 180  | 240  | 300 | 360  | 420  | 480  | 540  | 600 | 660  | 720  | 780  | 840  | 900  | 960  | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 |
|------------------------|------|------|------|------|-----|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L                      | 399  | 459  | 519  | 579  | 639 | 699  | 759  | 819  | 879  | 939 | 999  | 1059 | 1119 | 1179 | 1239 | 1299 | 1359 | 1419 | 1479 | 1539 | 1599 | 1659 | 1719 | 1779 | 1839 |
| M                      | 5    | 6    | 7    | 8    | 9   | 10   | 11   | 12   | 13   | 14  | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   | 24   | 25   | 26   | 27   | 28   | 29   |
| N                      | 12   | 14   | 16   | 18   | 20  | 22   | 24   | 26   | 28   | 30  | 32   | 34   | 36   | 38   | 40   | 42   | 44   | 46   | 48   | 50   | 52   | 54   | 56   | 58   | 60   |
| 重量 KG<br>Weight KG     | 15.6 | 16.2 | 16.8 | 17.4 | 18  | 18.6 | 19.2 | 19.8 | 20.4 | 21  | 21.6 | 22.2 | 22.8 | 23.4 | 24   | 24.6 | 25.2 | 25.8 | 26.4 | 27   | 27.6 | 28.2 | 28.8 | 29.4 | 30   |

\*带颜色 为常备库产品, 可适当缩短交期。\*Products with color are available stock and short lead time.