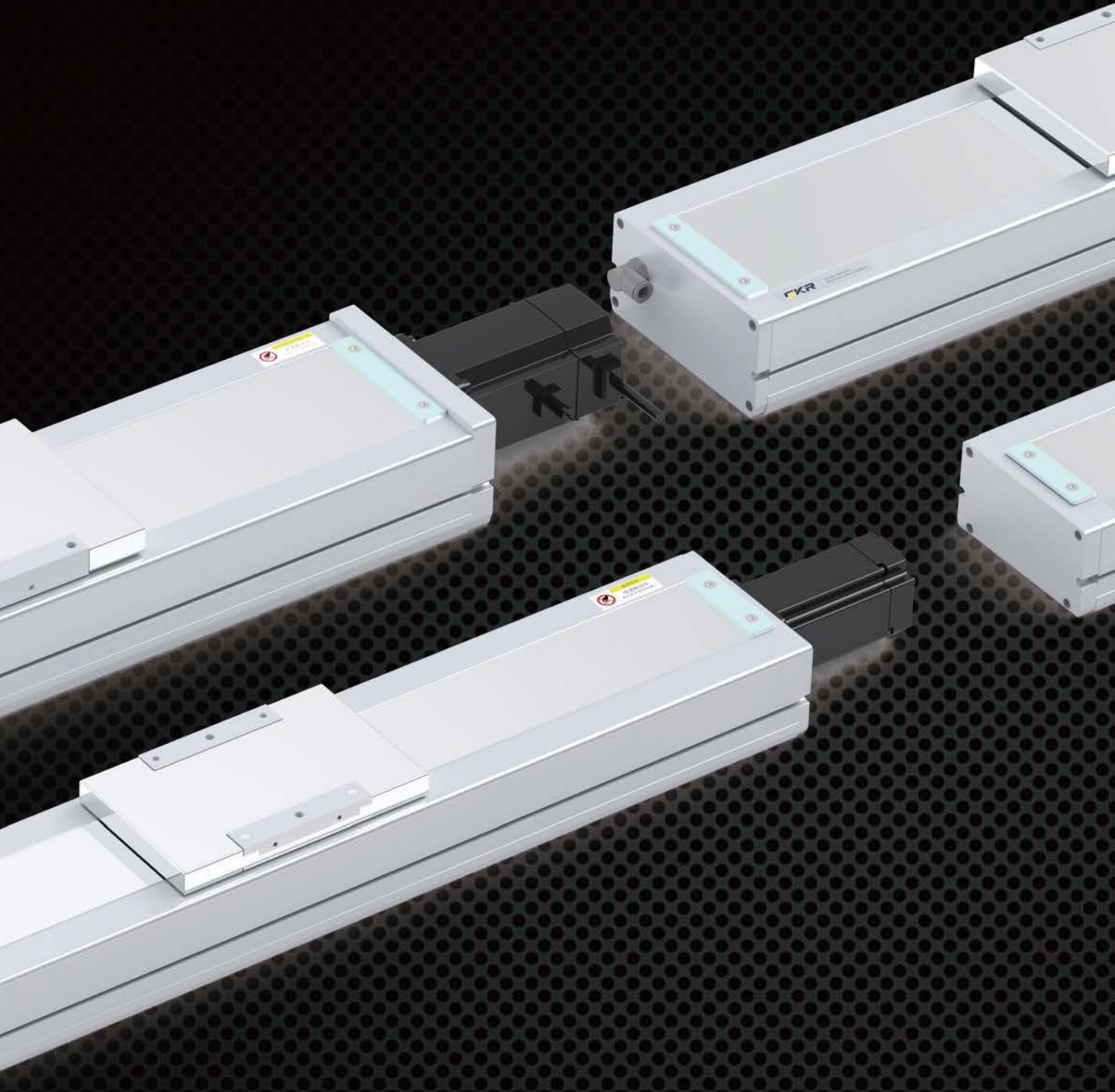


# PSC Series

PRECISION TYPE/BAII SCREW DRIVE/FULLY-ENCLOSED



## 目录

### CONTENTS

#### PSC140



最大行程 1050mm  
最大负载 110KG ..... 105  
本体高度 91mm  
本体宽度 135mm

#### PSC170



最大行程 1250mm  
最大负载 120KG ..... 109  
本体高度 107mm  
本体宽度 170mm

Use Where	Driven Mode	Model	Motor Power (W)	Width (mm)	Positioning Precision (mm)	Ball Screw Spec		Maximum Load Weight *2		Maximum speed *1 (mm/s)
						Diameter (mm)	Lead (mm)	Horizontal (kg)	Vertical (kg)	
Fully-enclosed	Ball Screw	PSC140	400	135	±0.01	16	5	110	33	250
							10	88	22	500
							20	40	8	1000
		PSC170	750	170	±0.01	20	5	120	50	250
							10	120	40	500
							20	83	25	1000
							40	50	10	2000

\*注 Notes:

1. 额定速度为电机额定转速（3000r/min）时的速度，或由滚珠丝杠的容许转速限制的速度。

The rated speed is the speed at the motor's rated rotation (3000 r/min), or the speed limited by the ball screw's permissible rotation.

2. 最大可搬运重量为额定转速下加速度0.3G时（导程5mm或以下时为0.15G）的质量。如果在最大搬运重量的范围内，则与搬运重量无关，可以按此速度搬运。但是，随着重量增加，加速、减速曲线趋缓，如果移动距离较短，则不能达到标注的最高速度。

The maximum load weight is the mass at rated rotation when the acceleration is 0.3G (or 0.15G when the ball screw lead is 5mm or less). If within the range of maximum load weight, it can be transported at this speed, regardless of the load weight. However, as the weight increases, the acceleration and deceleration curves become more gradual. If the movement distance is short, the maximum indicated speed may not be reached.

Stroke (mm) & Maximum Speed (mm/s) *3		speed															Page														
Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850		900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	
250																225	200	175	150	125	100										
500																450	400	350	300	250	200										
1000																900	800	700	600	500	400										
250																		225		200		175		150							
500																		450		400		350		300							
1000																		900		800		700		600							
2000																		1800		1600		1400		1200							

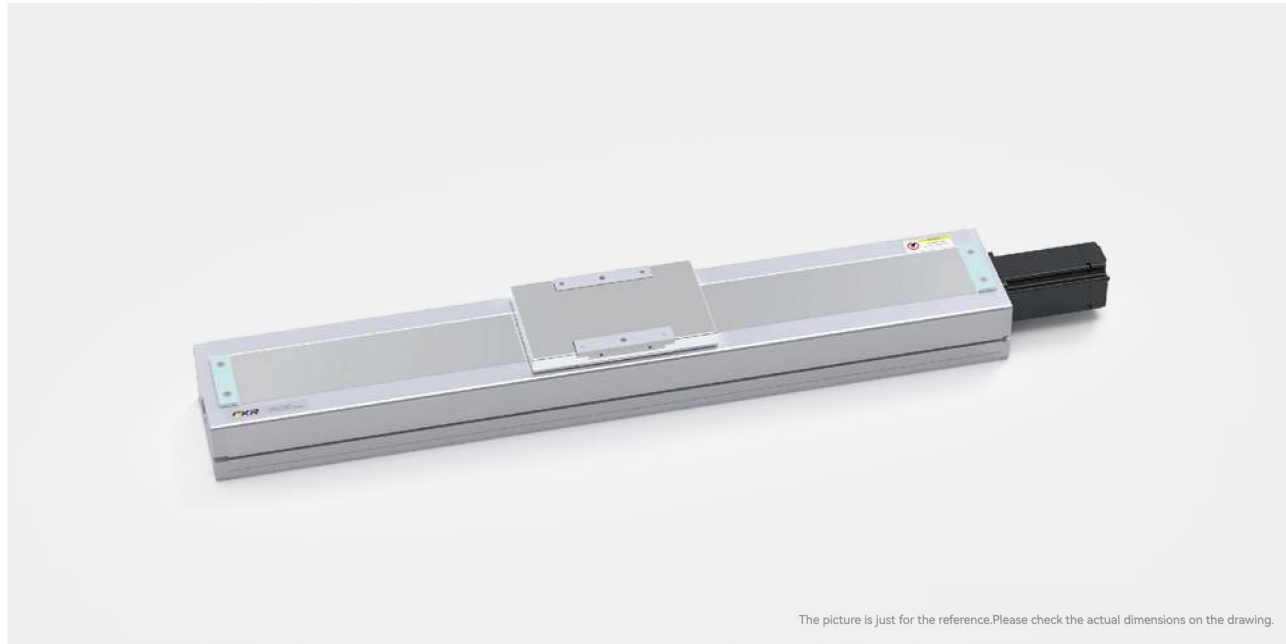
3. 各行程的最高速度为电机转速（3000r/min）时的速度，滚珠螺杆驱动机型的行程较长时，因滚珠丝杆发生共振以最高速度工作时，可能会出现异声、震动等情况。应适当降低运动速度。

The maximum speed for each stroke is the speed when the motor rotation is 3000 r/min. For longer strokes of ball screw driven models, abnormal noise and vibration may occur due to resonance when operating at maximum speed; the movement speed should be appropriately reduced.

4. 行程是指我们标准产品所能达到的最大行程，有特殊要求请咨询销售人员。

Stroke refers to the maximum travel distance that our standard products can achieve. Please consult our sales staff if you have special requirements.

# PSC140 1-Axis



<b>最大行程</b> Maximum Stroke	1050mm	<b>最高速度</b> Maximum Speed	1000mm/s	<b>额定扭矩</b> Maximum Static Torque	1.27N·m	<b>滚珠丝杆</b> Ball Screw	ø16mm	<b>直线导轨</b> Linear Guide	15×12.5-2支
<b>电机马达连接方式</b> Motor Connection Style	BC		BL		BR		BM		

## 型号表示方式

Ordering Method

**PSC140-L05-S100-BC-T40B-C1-N**

- 本体型号** Ontology Model
- 滚珠丝杆导程** Ball Screw Lead
  - 05 5mm
  - 10 10mm
  - 20 20mm
- 有效行程** Maximum Stroke
  - 标准范围 100 - 1050mm
  - 行程间隔 50mm Pitch
- 马达连接方式** Motor Position
  - BC 马达直连外置 Motor Direct Connection
  - BM 马达下折 Under Linear Module
  - BL 马达左折 Left Linear Module
  - BR 马达右折 Right Linear Module
- 原点感应器** Origin Sensor
  - 外挂型 Out Side
    - C 1只 pcs
    - D 2只 pcs
    - E 3只 pcs
    - 无 No Sensor
  - 内装型 In Side
    - 无 No Sensor
    - E 无 No Sensor
- 端点极限感应器** Limit Sensor
  - 1 1只 pcs
  - 2 2只 pcs
  - 3 3只 pcs
  - 0 无 No Sensor
- 马达品牌、功率** Motor Brand、Power Output
 

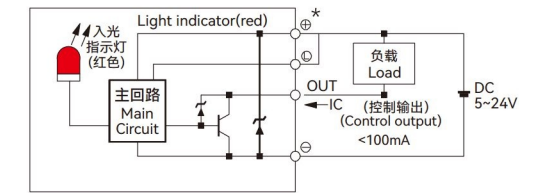
T 台达 (标准) Delta	10 100W	B 有刹车 With Brake *
P 松下 (标准) Panasonic	20 200W	
Y 安川 (标准) Yaskawa	40 400W	
C 客户自配 Customer-provided	75 750W	

注: 若无刹车则不表示; 选用步进电机请咨询销售人员。
- 非标定制** Non-Standard Model

## 基本规格 Specification

Repeatability (mm)	±0.01			
Ball Screw Lead (mm)	5	10	20	
Maximum Speed (mm/s)	250	500	1000	
Maximum Payload	Horizontal(kg)	110	88	40
	Vertical(kg)	33	22	8
Rate Thrust (N)	1388	694	347	
Stroke Pitch (mm)	100~1050mm / 50mm pitch			
AC Servo Motor Output (W)	400			
Ball Screw ø (mm)	C7ø16			
Linear Guide(mm)	W15×H12.5			
Couping(mm)	10×14			
Home Sensor	Outside	EE-SX672(NPN)	EE-SX672(PNP)	
	Built-in	EE-SX674(NPN)	EE-SX674(PNP)	

## 感应器接线图 (原点及端点) Sensor Layout



\*行程超过750时, 会产生滚珠丝杆偏摆, 此时请降低工作速度。  
\*When the stroke is over 750mm, the run-out of the ball screw will occur. We recommend to low down the working speed under this circumstances.

\*马达加减速设定0.2秒。  
\*Acceleration and deceleration value is set 0.2 second.

\*本产品标准行程工作速度请参照P104页应用。  
\*Please refer to page P104 or standard stroke working speed.

## 容许负载力矩表 Allowable Overhang

单位(unit): mm				
Horizontal Installation	A	B	C	
	5 Lead	60kg 2448 316 322	80kg 2197 247 257	110kg 2005 207 219
	10 Lead	30kg 1958 370 490	50kg 1660 370 333	88kg 1725 247 243
20 Lead	10kg 2263 1672 958	20kg 1400 852 535	40kg 1052 448 328	
	单位(unit): mm			
	Wall Installation	A	B	C
5 Lead		60kg 204 112 1394	80kg 130 57 1115	110kg 85 24 895
10 Lead		30kg 414 333 1277	50kg 235 157 929	88kg 129 57 751
20 Lead	10kg 997 1217 1709	20kg 513 555 985	40kg 268 231 640	
	单位(unit): mm			
	Vertical Installation	A	C	
5 Lead		20kg 762 614	25kg 607 489	33kg 498 483
10 Lead		10kg 1365 1101	15kg 901 727	22kg 674 543
20 Lead	4kg 2402 2018	6kg 1701 1366	8kg 1305 1055	

## 静态容许负载惯量 Static Loading Moment

单位(unit): N·m	
Horizontal Installation	
MY	551
MP	552
MR	485

\*力矩所表示的数据, 代表重心。  
\*The torque value in the chart indicate the center of gravity.

\*产品在规范的使用条件下, 使用寿命为10000公里。  
\*Operation life is 10,000km when the product is using under the specified conditions.

\*倒吊使用无法套用标准规范, 如有需求请与我们联系。  
\*Data information is not for ceiling-mount inverse use, contact us for the details if you want to apply ceiling-mount inverse usage.

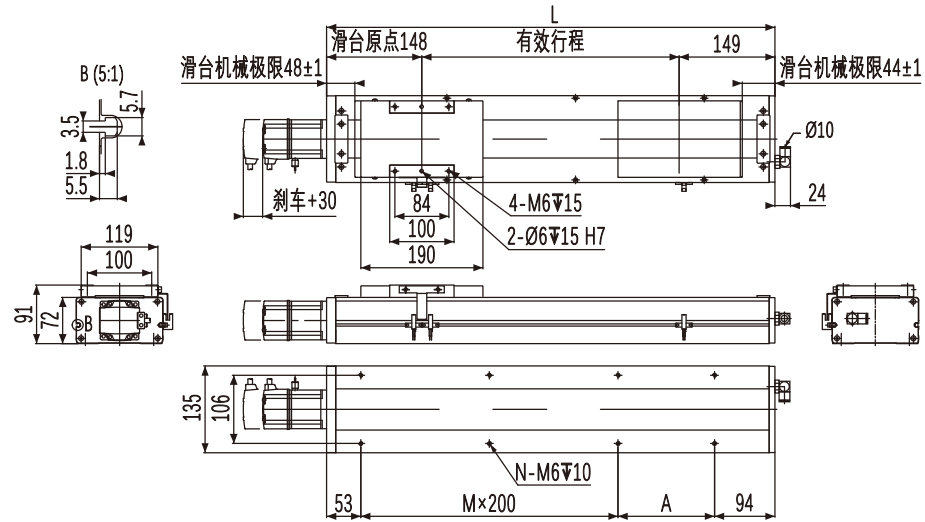
## 推荐搭配伺服电机一览表 Recommended Motor Table

Brand	Coding	Whether With Brake	Motor Power (AC-voltage)	Motor Model	Motor Model
Delta	T	Without Brake(Horizontal Type)	400W 220V	ECMA-C20604RS	ASD-B2-0421-B
		With Brake(Vertical Type)	400W 220V	ECMA-C20604SS	ASD-B2-0421-B
Panasonic	P	Without Brake(Horizontal Type)	400W 220V	MHMF042L1U2M	MBDLN25SG
		With Brake(Vertical Type)	400W 220V	MHMF042L1V2M	MBDLN25SG
Yaskawa	Y	Without Brake(Horizontal Type)	400W 220V	SGM7J04AFC6S	SGD7S2R8A00A002
		With Brake(Vertical Type)	400W 220V	SGM7J04AFC6E	SGD7S2R8A00A002

# PSC140 1-Axis

## BC 马达直连 Motor Direct Connection

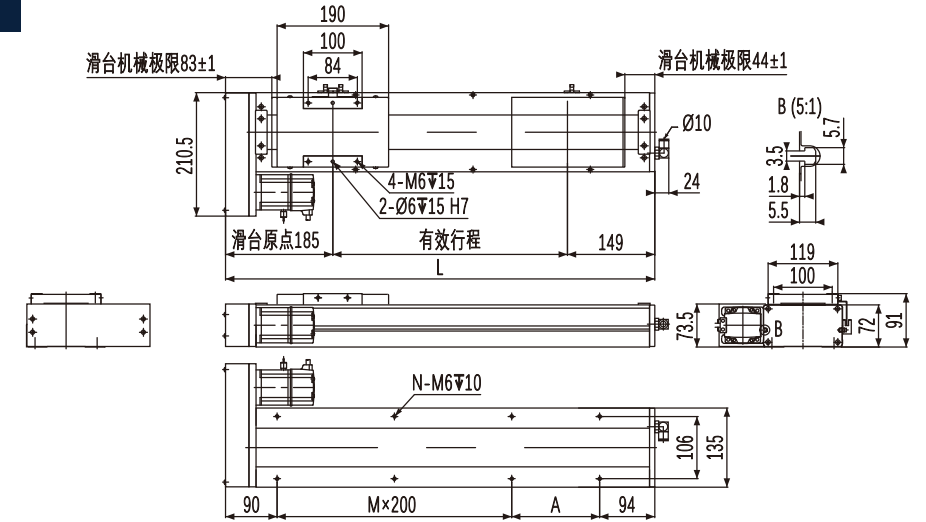
单位(Unit):mm



有效行程	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	397	447	497	547	597	647	697	747	797	847	897	947	997	1047	1097	1147	1197	1247	1297	1347
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
KG	10.6	11	11.5	12	12.5	13	13.4	14	14.4	15	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.3	19.9

## BL 马达左折 Left Linear Module

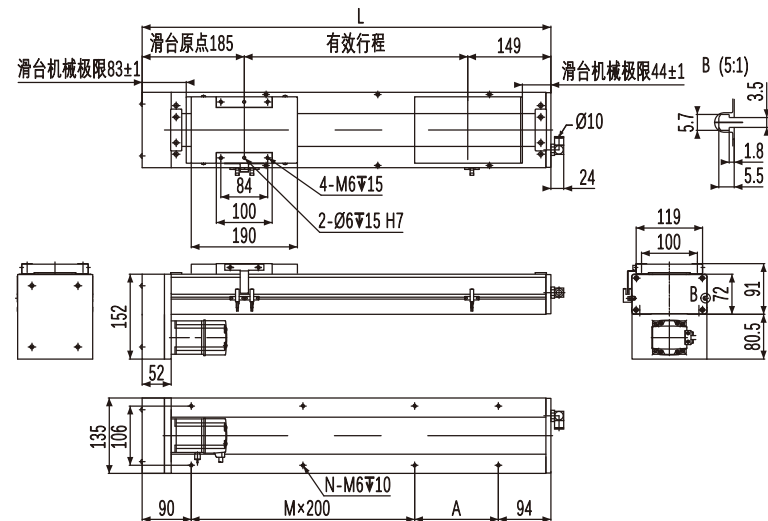
单位(Unit):mm



有效行程	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134	1184	1234	1284	1334	1384
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
KG	10.6	11	11.5	12	12.5	13	13.4	14	14.4	15	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.3	19.9

## BM 马达下折 Under Linear Module

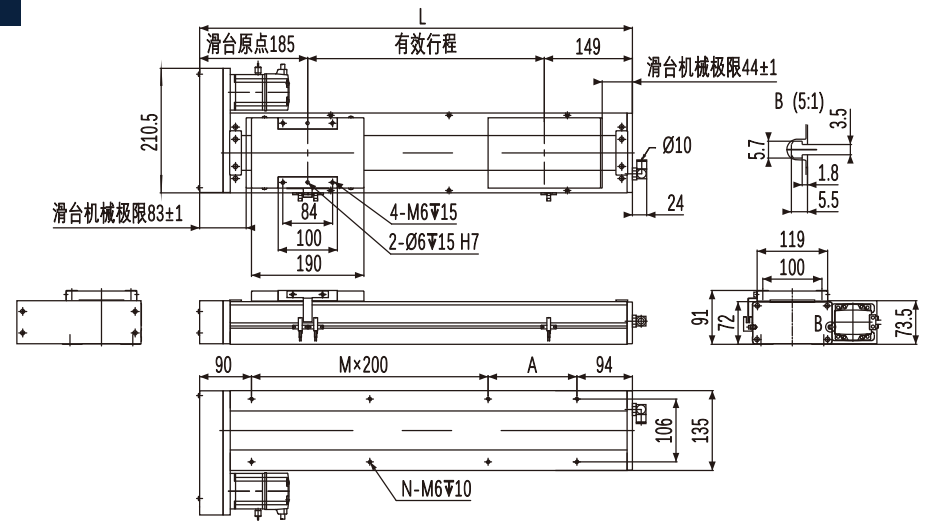
单位(Unit):mm



有效行程	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134	1184	1234	1284	1334	1384
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
KG	10.6	11	11.5	12	12.5	13	13.4	14	14.4	15	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.3	19.9

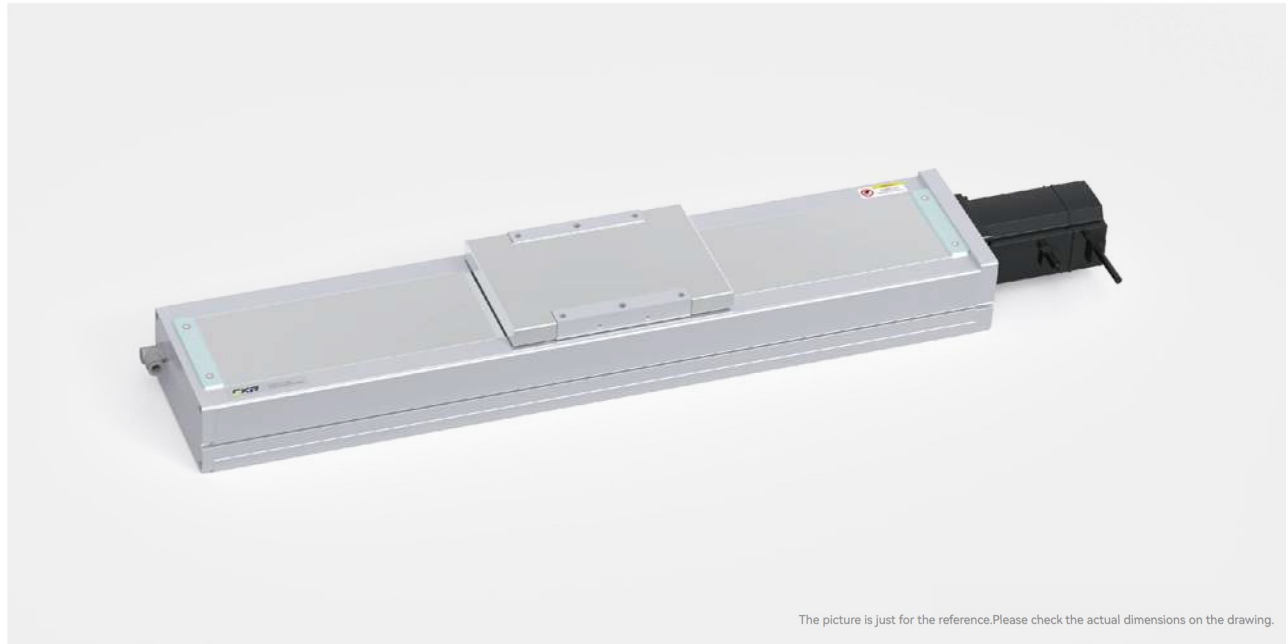
## BR 马达右折 Right Linear Module

单位(Unit):mm



有效行程	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
L	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134	1184	1234	1284	1334	1384
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14
KG	10.6	11	11.5	12	12.5	13	13.4	14	14.4	15	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.3	19.9

# PSC170 1-Axis



The picture is just for the reference. Please check the actual dimensions on the drawing.

<b>最大行程</b> Maximum Stroke	1250mm	<b>最高速度</b> Maximum Speed	2000mm/s	<b>额定扭矩</b> Maximum Static Torque	2.39N·m	<b>滚珠丝杆</b> Ball Screw	ø20mm	<b>直线导轨</b> Linear Guide	20×15-2支
<b>电机马达连接方式</b> Motor Connection Style	BC		BL		BR				BM

## 型号表示方式

Ordering Method

**PSC170-L05-S100-BC-T75B-C1-N**

- 本体型号** Ontology Model
- 滚珠丝杆导程** Ball Screw Lead
  - 05 5mm
  - 10 10mm
  - 20 20mm
  - 40 40mm
- 有效行程** Maximum Stroke
  - 标准范围 100 - 1250mm
  - 行程间隔 50mm Pitch
- 马达连接方式** Motor Position
  - BC 马达直连外置 Motor Direct Connection
  - BM 马达下折 Under Linear Module
  - BL 马达左折 Left Linear Module
  - BR 马达右折 Right Linear Module
- 原点感应器** Origin Sensor
  - 外挂型 Out Side
    - C 1只 pcs
    - D 2只 pcs
    - E 3只 pcs
    - 无 No Sensor
  - 内挂型 In Side
    - 无 No Sensor
    - E 无 No Sensor
- 端点极限感应器** Limit Sensor
  - 1 1只 pcs
  - 2 2只 pcs
  - 3 3只 pcs
  - 0 无 No Sensor
- 马达品牌、功率** Motor Brand、Power Output
 

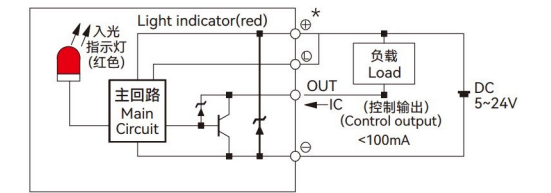
T 台达 (标准) Delta	10 100w	B 有刹车 With Brake *
P 松下 (标准) Panasonic	20 200w	
Y 安川 (标准) Yaskawa	40 400w	
C 客户自配 Customer-provided	75 750w	

注: 若无刹车则不表示; 选用步进电机请咨询销售人员。
- 非标定制** Non-Standard Model

## 基本规格 Specification

Repeatability (mm)	±0.01				
Ball Screw Lead (mm)	5	10	20	40	
Maximum Speed (mm/s)	250	500	1000	2000	
Maximum Payload	Horizontal(kg)	120	120	83	43
	Vertical(kg)	40	30	14	12
Rate Thrust (N)	2563	1281	640	320	
Stroke Pitch (mm)	100~1250mm / 50mm pitch				
AC Servo Motor Output (W)	750				
Ball Screw ø (mm)	C7ø20				
Linear Guide(mm)	W20×H15				
Couping(mm)	12×19				
Home Sensor	Outside	EE-SX672(NPN)	EE-SX672(PNP)		
	Built-in	EE-SX674(NPN)	EE-SX674(PNP)		

## 感应器接线图 (原点及端点) Sensor Layout



\*行程超过850时, 会产生滚珠丝杆偏摆, 此时请降低工作速度。  
\*When the stroke is over 850mm, the run-out of the ball screw will occur. We recommend to low down the working speed under this circumstances.  
\*马达加速设定0.2秒。  
\*Acceleration and deceleration value is set 0.2 second.  
\*本产品标准行程工作速度请参照P104页应用。  
\*Please refer to page P104 for standard stroke working speed.

## 容许负载力矩表 Allowable Overhang

单位(unit): mm			
Horizontal Installation	A	B	C
5 Lead	70kg	3235	349 408
	90kg	2482	263 306
	120kg	1861	187 218
10 Lead	65kg	1911	338 373
	85kg	1445	248 276
	120kg	1000	164 182
20 Lead	35kg	1666	547 538
	55kg	1030	331 328
	83kg	654	206 204
40 Lead	15kg	1126	740 577
	22kg	755	491 384
	43kg	366	231 183

单位(unit): mm			
Wall Installation	A	B	C
5 Lead	75kg	377	322 2988
	95kg	288	246 2333
	120kg	218	187 1850
10 Lead	65kg	408	368 2092
	80kg	296	266 1554
	120kg	182	164 1002
20 Lead	30kg	633	644 1961
	50kg	365	369 1143
	83kg	204	206 656
40 Lead	12kg	729	936 1417
	22kg	384	491 755
	43kg	183	231 366

单位(unit): mm			
Vertical Installation	A	C	
5 Lead	20kg	1368	1368
	30kg	911	911
	40kg	546	546
10 Lead	15kg	1618	1618
	25kg	970	970
	30kg	607	607
20 Lead	5kg	1922	1922
	10kg	1377	1377
	14kg	769	769
40 Lead	7kg	1356	1356
	12kg	790	790
	-	-	-

## 静态容许负载惯量 Static Loading Moment

单位(unit): N·m	
Horizontal Installation	
MY	1032
MP	1034
MR	908

\*力矩所表示的数据, 代表重心。  
\*The torque value in the chart indicate the center of gravity.  
\*产品在规范的使用条件下, 使用寿命为10000公里。  
\*Operation life is 10,000km when the product is using under the specified conditions.  
\*倒吊使用无法套用标准规范, 如有需求请与我们联系。  
\*Data information is not for ceiling-mount inverse use, contact us for the details if you want to apply ceiling-mount inverse usage.

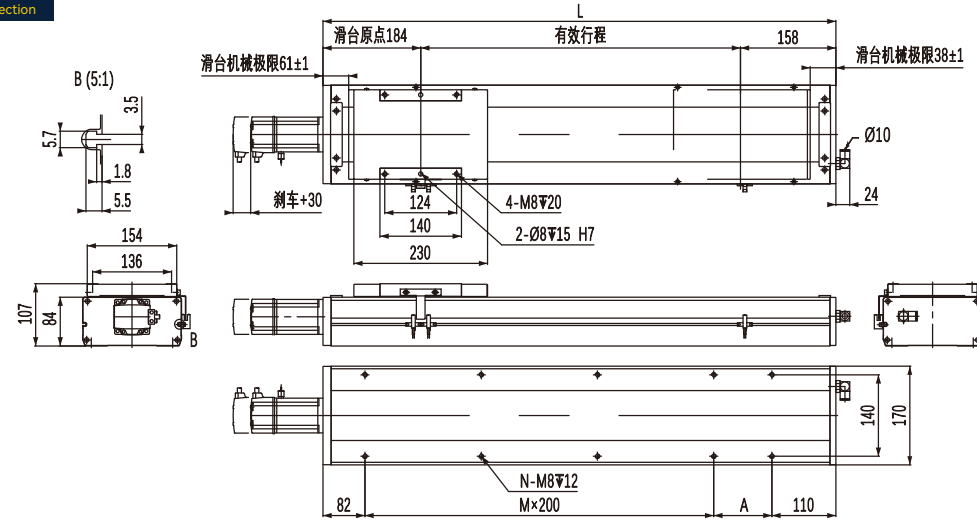
## 推荐搭配伺服电机一览表 Recommended Motor Table

Brand	Coding	Whether With Brake	Motor Power (AC-voltage)	Motor Model	Motor Model
Delta	T	Without Brake(Horizontal Type)	750W 220V	ECMA-C20807RS	ASD-B2-0721-B
		With Brake(Vertical Type)	750W 220V	ECMA-C20807SS	ASD-B2-0721-B
Panasonic	P	Without Brake(Horizontal Type)	750W 220V	MHMF082L1U2M	MCDLN35SG
		With Brake(Vertical Type)	750W 220V	MHMF082L1V2M	MCDLN35SG
Yaskawa	Y	Without Brake(Horizontal Type)	750W 220V	SGM7J08AFC6S	SGD7S5R5A00A002
		With Brake(Vertical Type)	750W 220V	SGM7J08AFC6E	SGD7S5R5A00A002

# PSC170 1-Axis

## BC 马达直连 Motor Direct Connection

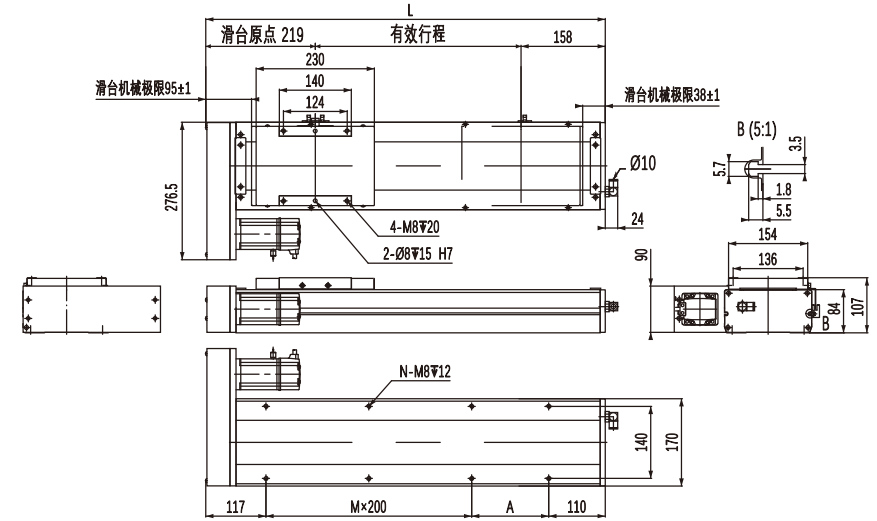
单位(Unit):mm



有效行程	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	442	492	542	592	642	692	742	792	842	892	942	992	1042	1092	1142	1192	1242	1292	1342	1392	1442	1492	1542	1592
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
KG	14.8	15.6	16.4	17.2	17.9	18.7	19.5	20.3	21	21.8	22.6	23.4	24.1	24.9	25.7	26.5	27.2	28	28.8	29.6	30.4	31.2	32	32.8

## BL 马达左折 Left Linear Module

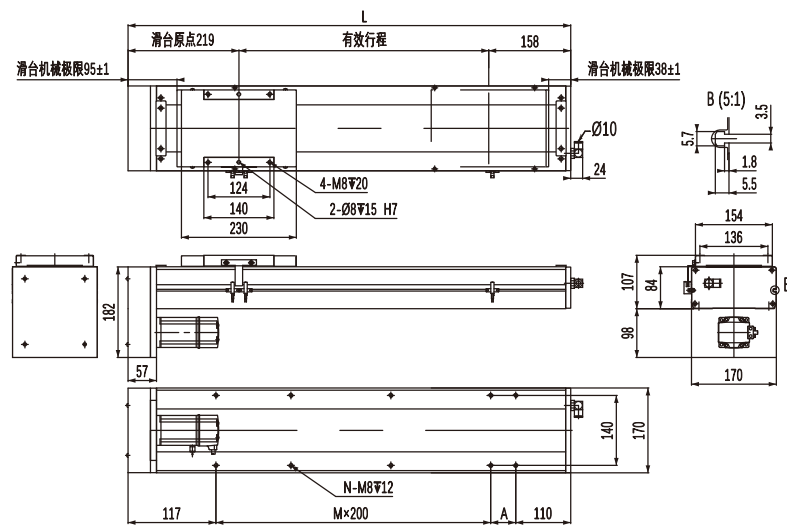
单位(Unit):mm



有效行程	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	477	527	577	627	677	727	777	827	877	927	977	1027	1077	1127	1177	1227	1277	1327	1377	1427	1477	1527	1577	1627
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
KG	14.8	15.6	16.4	17.2	17.9	18.7	19.5	20.3	21	21.8	22.6	23.4	24.1	24.9	25.7	26.5	27.2	28	28.8	29.6	30.4	31.2	32	32.8

## BM 马达下折 Under Linear Module

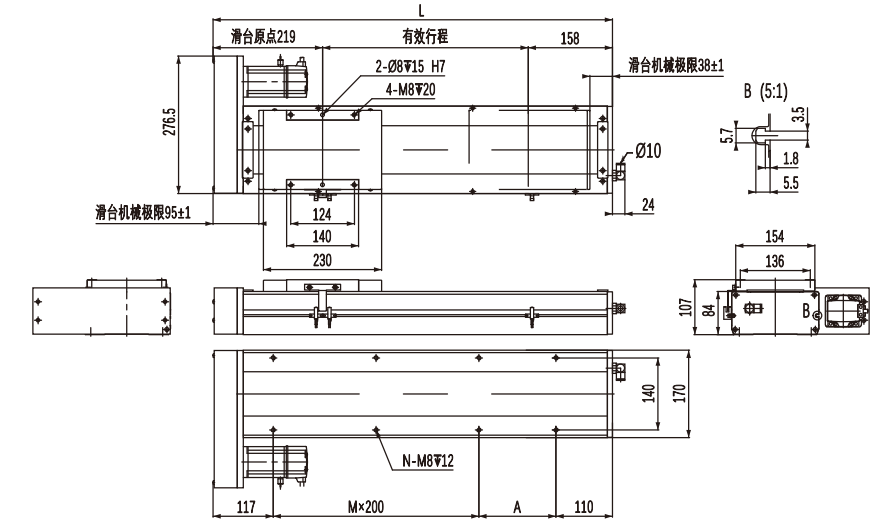
单位(Unit):mm



有效行程	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	477	527	577	627	677	727	777	827	877	927	977	1027	1077	1127	1177	1227	1277	1327	1377	1427	1477	1527	1577	1627
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
KG	14.8	15.6	16.4	17.2	17.9	18.7	19.5	20.3	21	21.8	22.6	23.4	24.1	24.9	25.7	26.5	27.2	28	28.8	29.6	30.4	31.2	32	32.8

## BR 马达右折 Right Linear Module

单位(Unit):mm



有效行程	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	477	527	577	627	677	727	777	827	877	927	977	1027	1077	1127	1177	1227	1277	1327	1377	1427	1477	1527	1577	1627
A	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
M	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
N	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16
KG	14.8	15.6	16.4	17.2	17.9	18.7	19.5	20.3	21	21.8	22.6	23.4	24.1	24.9	25.7	26.5	27.2	28	28.8	29.6	30.4	31.2	32	32.8