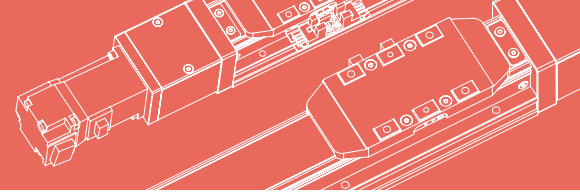


CTH50 单轴 /1-axis

▶ 轨道内嵌
Integrated Linear Bearing
一般环境使用

▶ 螺杆驱动
Ball Screw Drive



2023 综合目录 **BRTR**

免费服务热线: 0769-88189802

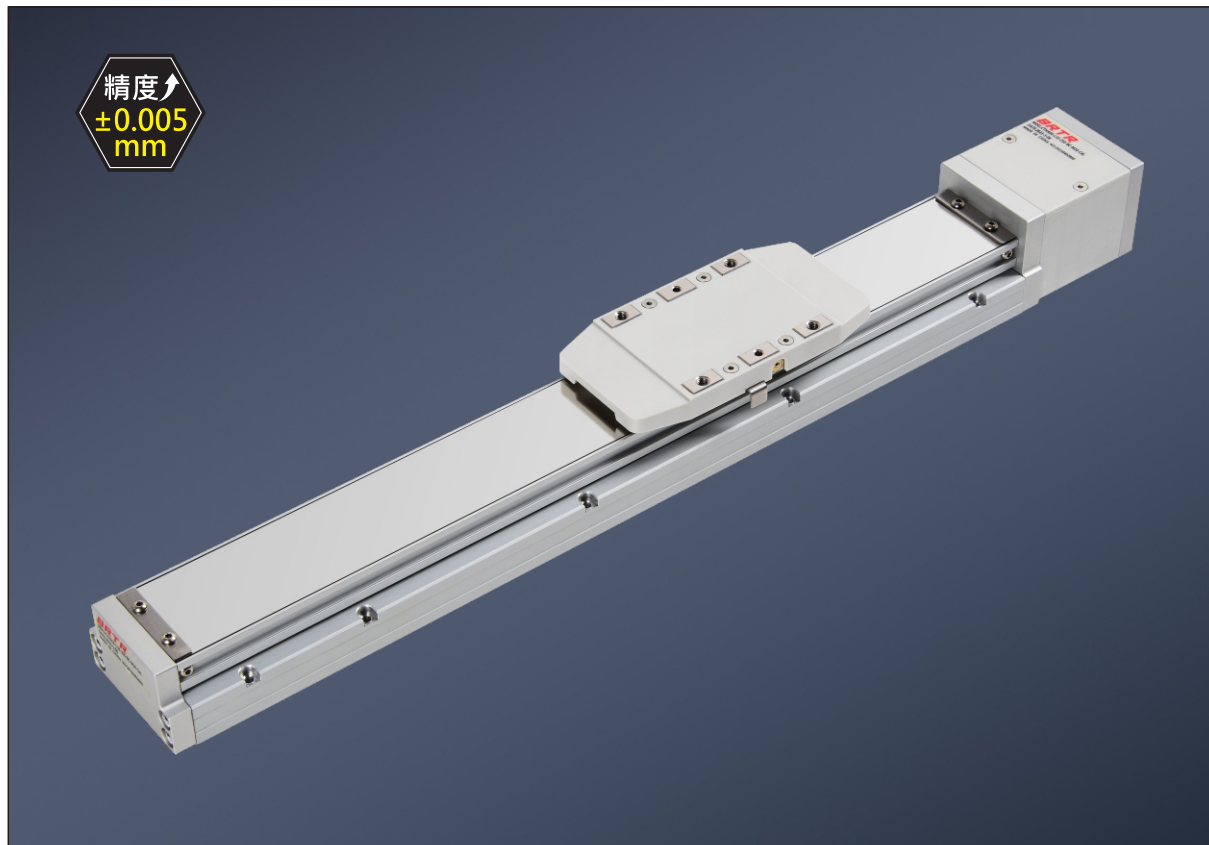
应用列

一般/螺杆式样
CTH series

无尘/螺杆式样
CCH

直交连结
XYGT

参考资料
Reference



精度
±0.005 mm

最大行程
Maximum Stroke **800mm**

最高速度
Maximum Speed **1200mm/s**

马达容量
Motor Output **100W**

最大可搬重量
Max Payload **35kg**

型号表示方式 Ordering Method

CTH50 - L 5 - 100 - BC - M10B - C4R - 0001

本体型号
Model

行程
Stroke

转造级
Rolled Ballscrews
50-800 mm
研磨级
Ground Ballscrews
50-300mm
*间隔50 Pitch 50 mm

马达位置
Motor Position

BC 马达外露
Motor Exposed
BM 马达下折
Motor Bottom Side
BR 马达左折
Motor Right Side
BL 马达右折
Motor Left Side

马达厂牌、功率
Motor Brand - Power Output

M 三菱 Mitsubishi	05	-	B
P 松下 Panasonic	10	100W	
Y 安川 Yaskawa	20	-	
T 台达 Delta	40	-	

原点感应器
Home Sensor

外挂型 Outside
C 马达侧 Motor Side
D 反马达侧 Opposite Motor Side
无 SENSOR No Sensor
E 无 SENSOR No Sensor

端点极限感应器
Limit Sensor

外挂型 Outside
3 1只 1Pc
4 2只 2Pc
5 无 SENSOR No Sensor

特注式样
Customization Order No.

感应器位置
Sensor location

L 左 Left
R 右 Right

*选用C研磨级螺杆, 有行程限制, 详见基本式样
C precision-level ground ball screws are not available in all stroke lengths, please consult the model datasheet

*若无刹车则表示
If No Brake, No Description.

*选择行程50时, 有以下限制:
When the stroke is 50mm, the sensor installation has the following restrictions:
1. 原点与极限需放置与不同侧。
Home sensor and limit sensor has to be installed on the different side of body.
2. 滑座左右两侧均需安装感应片。
Both sides of slider need to install the sensor trigger device.

基本式样 Specification

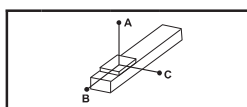
性能	螺杆等级代号 Ballscrew Accuracy Grade Code		L		C		
	螺杆等级 Ballscrew Accuracy Grade	位置重复精度 Repeatability	C7 转造 C7 Rolled Ballscrew	± 0.01	C5 研磨 C5 Ground Ballscrew	±0.005	
性能	标准行程 Stroke (increments)	mm	50-800 mm /50 间隔 (50 increments)	50-300mm /50 间隔 (50 increments)			
性能	螺杆导程 Lead	mm	—	5	10	20	
	最高转速 Maximum Rotating speed	rpm	—	3600	3600	3600	
	最高速度 Maximum linear speed *1 *2	mm/s	—	300	600	1200	
	最大可搬重量 Maximum Payload	水平使用 Horizontal	kg	—	35	20	12
		垂直使用 Vertical	kg	—	10	5	2.5
	定规格推力 Rated Thrust	N	—	341	170	85	
	最大加速度 Maximum acceleration	G	—	0.3	0.3	0.6	
	滚珠螺杆 Ball screw	基本动额定负荷 Basic dynamic load rating Ca	N	—	—	—	—
		基本静额定负荷 Basic static load rating Coa	N	—	—	—	—
	直线滑轨 Linear Guide	动态水平负载 Dynamic horizontal (100km)	N	—			
静态水平负载 Static Horizontal		N	—				
固定侧轴承 Fixed bearing	基本静额定负荷 Basic dynamic load rating Cr	N	—				
	静态容许负荷 Static load rating Cor	N	—				
部品	AC伺服马达容量 AC Servo Motor Output	W	100				
	滚珠螺杆外径 Ball Screw Ø	mm	Ø12				
	联轴器 Coupling	mm	7X8				
	原点感应器 Home Sensor	外挂 Outside	EE-SX911(NPN)				

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

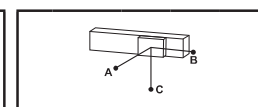
*2 长行程时, 会产生螺杆偏摆, 需将速度调降 (线速度请参阅尺寸图下文表格)

During in a long stroke, it causes ballscrew deflection, the speed must reduce. (Please refer to the linear velocity from the data sheet below the dimension graph.)

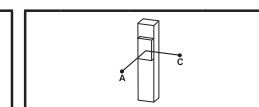
容许负载力距表 Allowable Overhang



(单位 Unit: mm)

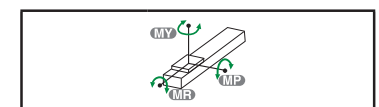


(单位 Unit: mm)



(单位 Unit: mm)

静额定扭矩 Static Loading Moment



(单位 Unit: N.m)

水平安装 Horizontal Installation	导程 Lead	A B C			壁挂安装 Wall Installation	A B C			垂直安装 Vertical Installation	A C					
		15kg	30kg	35kg		15kg	30kg	35kg		6kg	8kg	10kg	1kg	3kg	5kg
5 Lead	5kg	921	177	216	5 Lead	5kg	216	177	921	5 Lead	1kg	979	979		
	10kg	428	80	96		10 Lead	10kg	96	80		428	10 Lead	3kg	326	326
	20kg	202	35	43			20 Lead	20kg	43		35		202	20 Lead	5kg
10 Lead	5kg	344	133	136	10 Lead	5kg		136	133	344	10 Lead	1kg	728		728
	10kg	210	79	82		20 Lead	8kg	82	79	210		20 Lead	2kg	363	363
	20kg	136	51	53			20 Lead	12kg	53	51			136	20 Lead	2.5kg

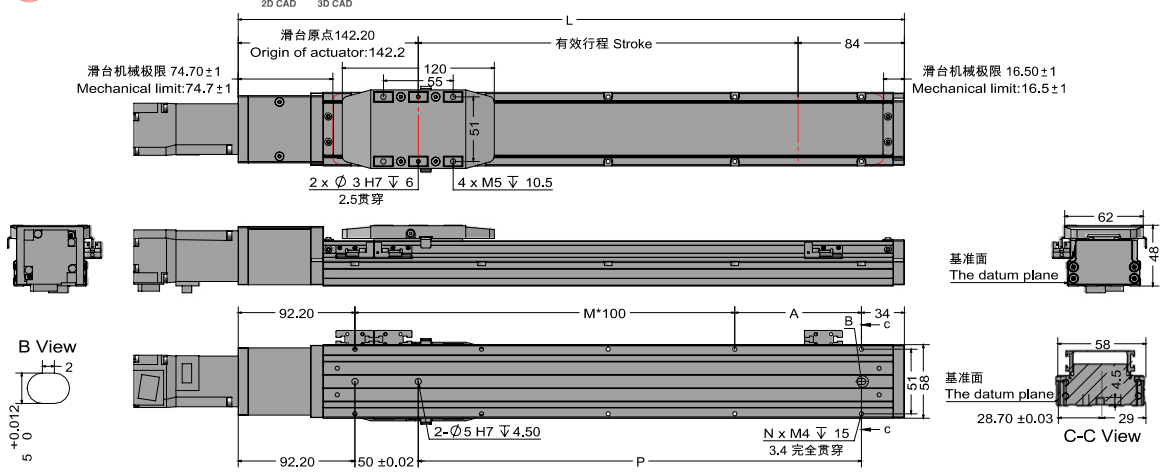
MY	117
MP	117
MR	164

*力矩表所表示的数据, 代表荷重的重心位置单一方向容许悬出的长度。
The data represented by the moment table is the center of gravity of the load. The length of the overhang is allowed in a single direction, *符合型录规范的正常使用时, 保证寿命为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, 如有需求请咨询我司业务。
Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

搭配伺服马达一览表 Suitable Motor Brand

厂牌 Brand	马达记号 Mark	刹车有无 Brake	马达容易 Watt	电源电压 AC-Voltage	伺服马达型号 Motor Model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车 (水平式样) No Brake (Horizontal Type)	100	220	HG-KR13	MR-J4-10A
		有刹车 (垂直式样) With Brake (Vertical Type)	100	220	HG-KR13B	MR-J4-10A
松下 Panasonic	P	无刹车 (水平式样) No Brake (Horizontal Type)	100	220	MSMD012G1U	MADHT1505
		有刹车 (垂直式样) With Brake (Vertical Type)	100	220	MSMD012G1V	MADHT1505
台达 Delta	T	无刹车 (水平式样) No Brake (Horizontal Type)	100	220	ECMA-C20401ES	ASD-B20121-B
		有刹车 (垂直式样) With Brake (Vertical Type)	100	220	ECMA-C20401FS	ASD-B20121-B

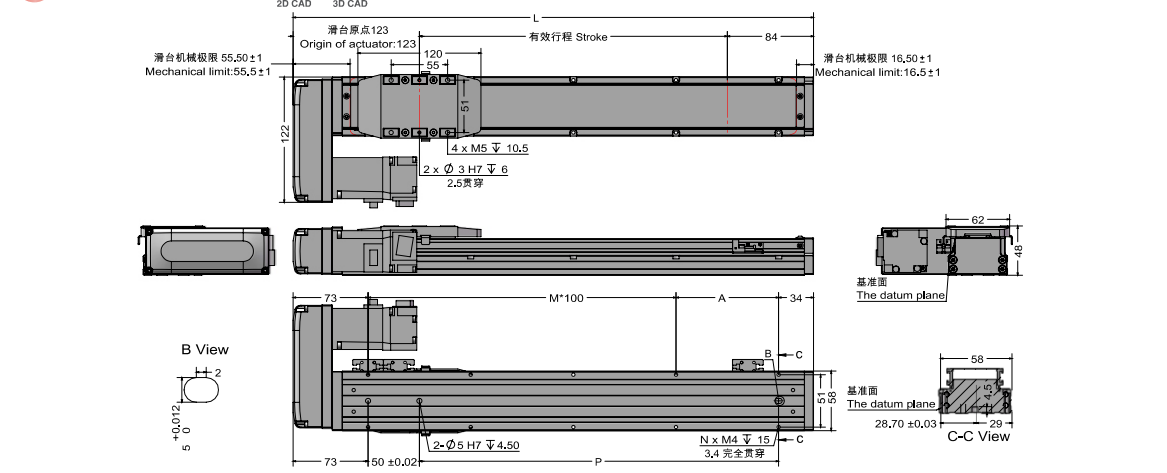
BC 马达外露 Motor Exposed



有效行程 Stroke	50 ^{±2}	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800		
极限行程 Limit Stroke (±1)	60	110	160	210	260	310	360	410	460	510	560	610	660	710	760	810		
L	276.2	326.2	376.2	426.2	476.2	526.2	576.2	626.2	676.2	726.2	776.2	826.2	876.2	926.2	976.2	1026.2		
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100		
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8		
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20		
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850		
KG	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5		
线速度 Linear Speed mm/s	导程 Lead 5	300										292	250	225	200	175	150	
	导程 Lead 10	600										583	500	450	400	350	300	
	导程 Lead 20	1200										1167	1000	900	800	700	600	

※行程50时, 因本体上锁式固定孔会被滑座遮住 仅能使用4支螺丝固定 建议客户本体下锁式固定孔锁附。When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix, as a result, suggest that fixing actuator body from the bottom to the top.

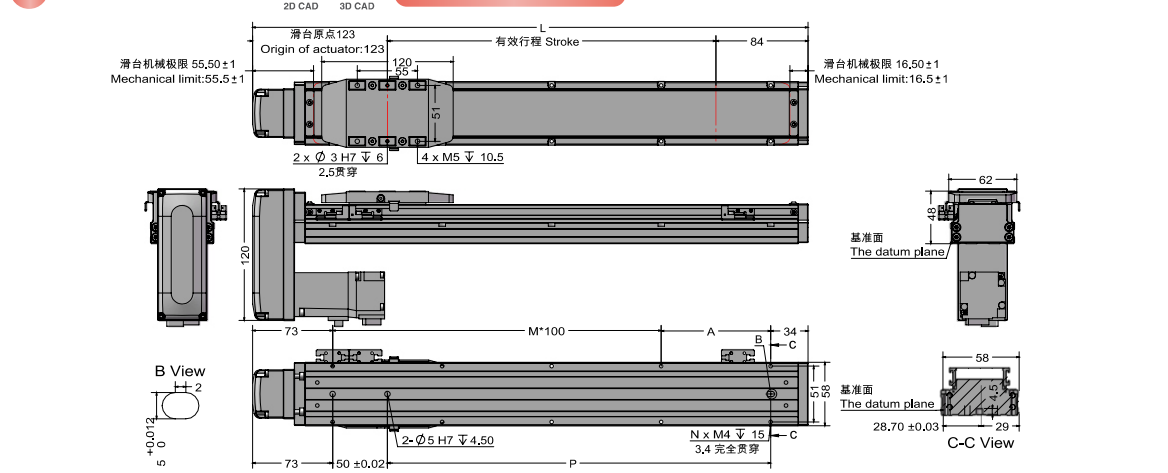
BL 马达左折 Motor Left Side



有效行程 Stroke	50 ^{±2}	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800		
极限行程 Limit Stroke (±1)	60	110	160	210	260	310	360	410	460	510	560	610	660	710	760	810		
L	257	307	357	407	457	507	557	607	657	707	757	807	857	907	957	1007		
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100		
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8		
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20		
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850		
KG	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5		
线速度 Linear Speed mm/s	导程 Lead 5	300										292	250	225	200	175	150	
	导程 Lead 10	600										583	500	450	400	350	300	
	导程 Lead 20	1200										1167	1000	900	800	700	600	

※行程50时, 因本体上锁式固定孔会被滑座遮住 仅能使用4支螺丝固定 建议客户本体下锁式固定孔锁附。When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix, as a result, suggest that fixing actuator body from the bottom to the top.

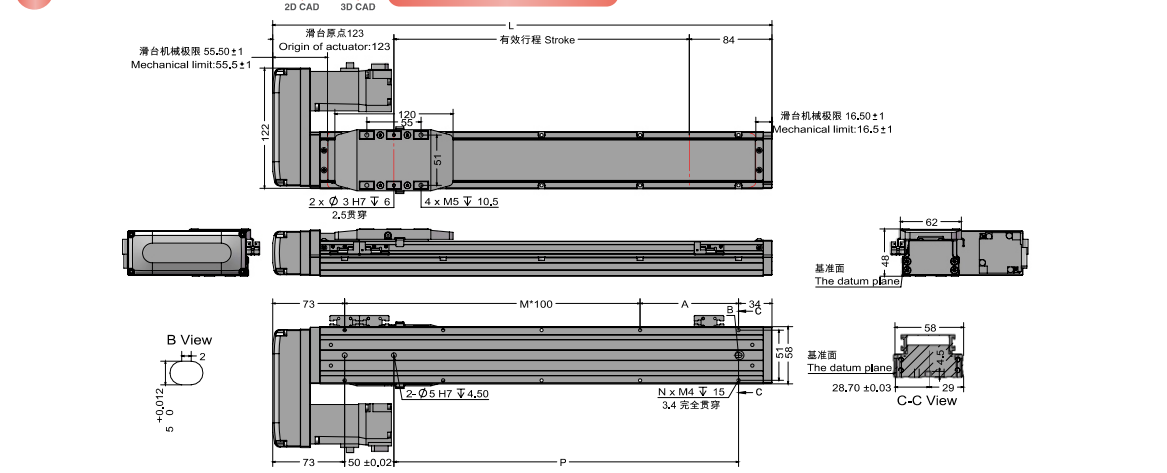
BM 马达下折 Motor Bottom Side



有效行程 Stroke	50 ^{±2}	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800		
极限行程 Limit Stroke (±1)	60	110	160	210	260	310	360	410	460	510	560	610	660	710	760	810		
L	257	307	357	407	457	507	557	607	657	707	757	807	857	907	957	1007		
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100		
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8		
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20		
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850		
KG	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5		
线速度 Linear Speed mm/s	导程 Lead 5	300										292	250	225	200	175	150	
	导程 Lead 10	600										583	500	450	400	350	300	
	导程 Lead 20	1200										1167	1000	900	800	700	600	

※行程50时, 因本体上锁式固定孔会被滑座遮住 仅能使用4支螺丝固定 建议客户本体下锁式固定孔锁附。When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix, as a result, suggest that fixing actuator body from the bottom to the top.

BR 马达右折 Motor Right Side



有效行程 Stroke	50 ^{±2}	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800		
极限行程 Limit Stroke (±1)	60	110	160	210	260	310	360	410	460	510	560	610	660	710	760	810		
L	257	307	357	407	457	507	557	607	657	707	757	807	857	907	957	1007		
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100		
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8		
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20		
P	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850		
KG	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5		
线速度 Linear Speed mm/s	导程 Lead 5	300										292	250	225	200	175	150	
	导程 Lead 10	600										583	500	450	400	350	300	
	导程 Lead 20	1200										1167	1000	900	800	700	600	

※行程50时, 因本体上锁式固定孔会被滑座遮住 仅能使用4支螺丝固定 建议客户本体下锁式固定孔锁附。When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix, as a result, suggest that fixing actuator body from the bottom to the top.