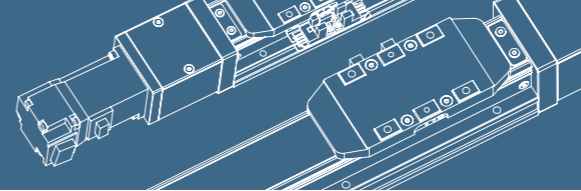


GCH8 单轴 /1-axis

▶ 轨道内嵌
Integrated Linear Bearing
无尘环境使用

▶ 螺杆驱动
Ball Screw Drive



2023 综合目录 **BRTR**

免费服务热线: 0769-88189802

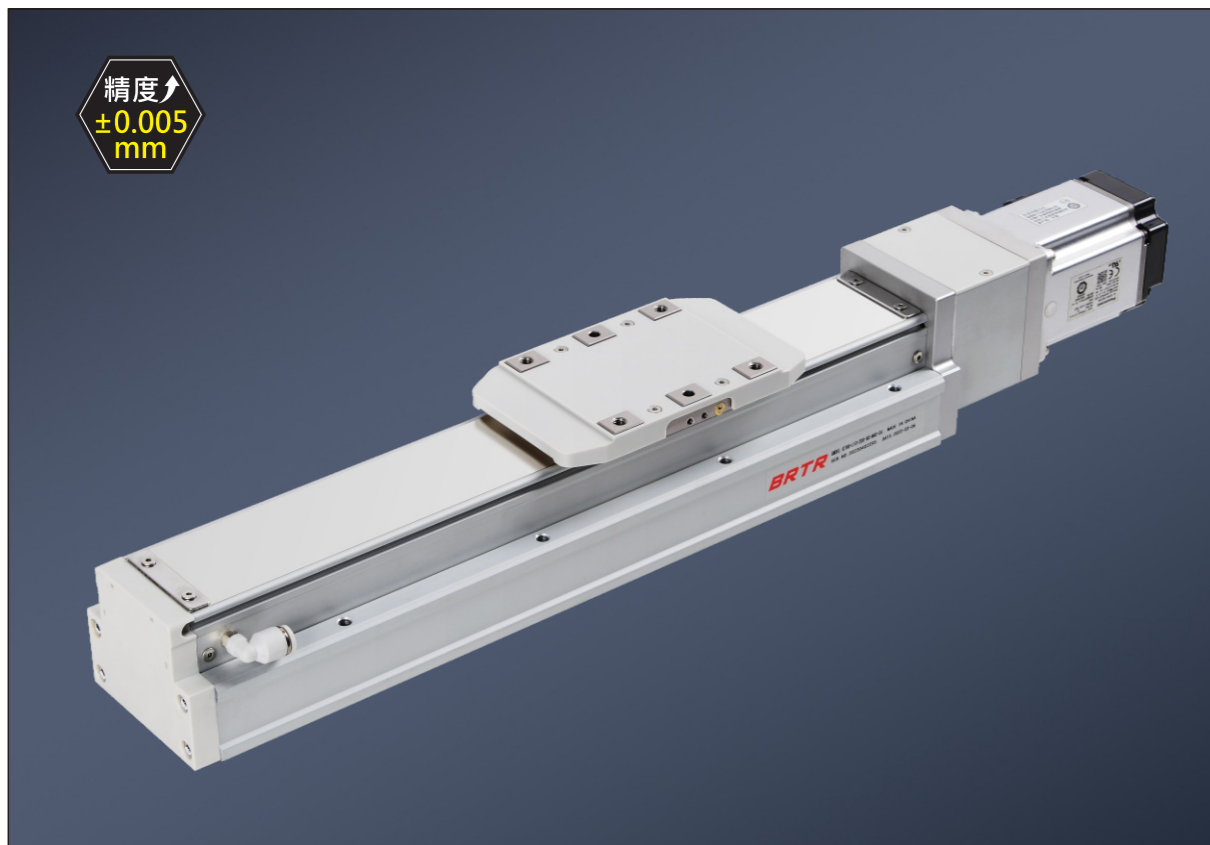
应用列
Application

一般/螺杆式样
GTH series

无尘/螺杆式样
GCH

直交连接
XYGT

参考资料
Reference



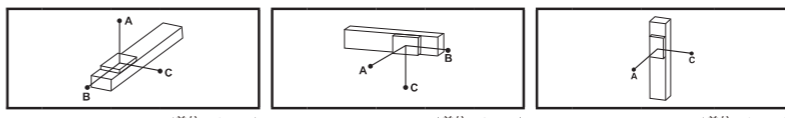
精度
±0.005 mm

基本式样 Specification

		L		C		
性能	螺杆等级代号 Ballscrew Accuracy Grade Code	C7 转造 C7 Rolled Ballscrew		C5 研磨 C5 Ground Ballscrew		
	螺杆等级 Ballscrew Accuracy Grade	± 0.01		±0.005		
	位置重复精度 Repeatability	mm		mm		
	标准行程 Stroke (increments)	50-1250mm / 50 间隔 (50 increments)		50-700mm / 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	50	30	18
		垂直使用 Vertical	kg	15	8	3
	定格推力 Rated Thrust	N	1388	694	347	
	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	基本动额定负荷 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	400			
	滚珠螺杆外径 Ball Screw Ø	mm	Ø16			
	联轴器 Coupling	mm	10X14			
	原点感应器 Home Sensor	外挂 Outside	FF-U674(NPN)			

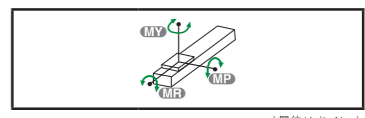
※1 马达加速设定0.2秒, Acceleration and deceleration value is set 0.2 second.
 ※2 长行程时, 会产生螺杆偏摆, 需将速调降 (线速度请参阅尺寸图下方表格)
 During a long stroke, it causes ballscrew deflection, the speed must reduce. (Please refer to the linear velocity from the data sheet below the dimension graph.)

容许负载力距表 Allowable Overhang



水平安装 Horizontal Installation				壁挂安装 Wall Installation				垂直安装 Vertical Installation			
导程 Lead	重量 Weight	A	B	重量 Weight	A	B	C	重量 Weight	A	C	
5	20kg	1275	127	197	20kg	197	127	1275	5kg	647	647
	30kg	725	72	112	30kg	112	72	725	10kg	323	323
	50kg	380	38	58	50kg	58	38	380	15kg	215	215
10	10kg	1269	246	345	10kg	345	246	1269	3kg	937	937
	20kg	588	104	148	20kg	148	104	588	5kg	561	561
	30kg	352	58	82	30kg	82	58	352	8kg	351	351
20	5kg	988	380	440	5kg	440	380	988	2kg	990	990
	10kg	471	174	204	10kg	204	174	471	2.5kg	792	792
	18kg	248	88	104	18kg	104	88	248	3kg	660	660

静额定扭矩 Static Loading Moment



MY	MP	MR
318	318	626

*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	马达容量 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)	400	220	HG-KR43	MR-J4-40A
		有刹车 (垂直式样) With Brake (Vertical Type)	400	220	HG-KR43B	MR-J4-40A
松下 Panasonic	P	无刹车 (水平式样) No Brake (Horizontal Type)	400	220	MHMD042G1U	MBDHT2510
		有刹车 (垂直式样) With Brake (Vertical Type)	400	220	MHMD042G1V	MBDHT2510
台达 Delta	T	无刹车 (水平式样) No Brake (Horizontal Type)	400	220	ECMA-C20604ES	ASD-B20421-B
		有刹车 (垂直式样) With Brake (Vertical Type)	400	220	ECMA-C20604FS	ASD-B20421-B

最大行程 Maximum Stroke 1250mm
 最高速度 Maximum Speed 1200mm/s
 马达容量 Motor Output 400W
 最大可搬重量 Max Payload 50kg

型号表示方式 Ordering Method

GCH8 - L 5 - 100 - BC - M40B - C 4 - 0001

本体型号 Model

行程 Stroke
 转造级 Rolled Ballscrews 50-1250mm
 研磨级 Ground Ballscrews 50-700mm
 *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

螺杆等级 Ball Screw Accuracy Grade
 L 转造级 Rolled Ballscrews
 C 研磨级 Ground Ballscrews

螺杆导程 Ball Screw Lead
 5 5mm
 10 10mm
 20 20mm

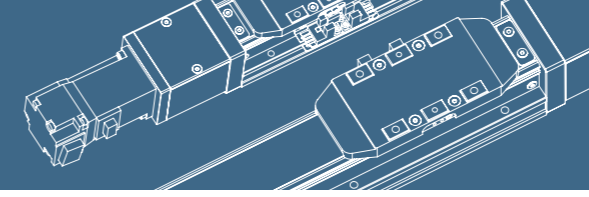
马达厂牌、功率 Motor Brand · Power Output
 M 三菱 Mitsubishi 05 - B
 P 松下 Panasonic 10 -
 Y 安川 Yaskawa 20 -
 T 台达 Delta 40 400W

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 1 Pc
 4 2只 2 Pc
 无 SENSOR No Sensor
 5 无 SENSOR No Sensor

*若无刹车则不表示。 If No Brake, No Description.
 *选择行程50时, 有以下限制: When this 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. 底座左右两侧均需安装感应片。 Both sides of base need to install the sensor trigger device.

GCH Series
 GCH4
 GCH5
 GCH8
 GCH12



BC 马达外露 Motor Exposed

单位 Unit: mm

滑台原点: 165 Origin of actuator: 165
滑台机械极限: 87.50 ± 1 Mechanical limit: 87.5 ± 1
有效行程 Stroke: 108
基准面 The datum plane

有效行程 Stroke	50 ^{±2}	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
极限行程 Limit Stroke (±1)	70	120	170	220	270	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270
L	323	373	423	473	523	573	623	673	723	773	823	873	923	973	1023	1073	1123	1173	1223	1273	1323	1373	1423	1473	1523
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
KG	4.21	4.59	5	5.3	5.65	5.98	6.3	6.65	6.94	7.27	7.71	8.01	8.42	8.71	8.95	9.26	9.67	9.92	10.31	10.58	11	11.42	11.84	12.26	12.68
线速度 Linear Speed mm/s	导程 Lead 5	300																							
	导程 Lead 10	600																							
	导程 Lead 20	1200																							

※ 2 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 建议客户本体用下锁式固定孔锁附。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.
若光电选用D4时(原点SENSOR 置于抱持端时)负压安装于侧。When sensor select is D4(Origin sensor is placed at Holder end), vacuum pressure connector is installed on opposite side.

BL 马达左折 Motor Left Side

单位 Unit: mm

滑台原点: 153 Origin of actuator: 153
滑台机械极限: 75.50 ± 1 Mechanical limit: 75.5 ± 1
有效行程 Stroke: 108
基准面 The datum plane

有效行程 Stroke	50 ^{±2}	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
极限行程 Limit Stroke (±1)	70	120	170	220	270	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270
L	311	361	411	461	511	561	611	661	711	761	811	861	911	961	1011	1061	1111	1161	1211	1261	1311	1361	1411	1461	1511
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
KG	4.25	4.63	5.04	5.39	5.69	6.02	6.34	6.69	6.98	7.31	7.75	8.05	8.46	8.75	8.99	9.3	9.71	9.96	10.38	10.62	11.04	11.46	11.88	12.3	12.72
线速度 Linear Speed mm/s	导程 Lead 5	300																							
	导程 Lead 10	600																							
	导程 Lead 20	1200																							

※ 2 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 建议客户本体用下锁式固定孔锁附。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.
若光电选用D4时(原点SENSOR 置于抱持端时)负压安装于侧。When sensor select is D4(Origin sensor is placed at Holder end), vacuum pressure connector is installed on opposite side.

BM 马达下折 Motor Bottom Side

单位 Unit: mm

滑台原点: 153 Origin of actuator: 153
滑台机械极限: 75.50 ± 1 Mechanical limit: 75.5 ± 1
有效行程 Stroke: 108
基准面 The datum plane

※ 马达总长限制于121以内
The overall length of the motor must be within 121 mm

有效行程 Stroke	50 ^{±2}	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
极限行程 Limit Stroke (±1)	70	120	170	220	270	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270
L	311	361	411	461	511	561	611	661	711	761	811	861	911	961	1011	1061	1111	1161	1211	1261	1311	1361	1411	1461	1511
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	0	0	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	13
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
KG	4.25	4.63	5.04	5.39	5.69	6.02	6.34	6.69	6.98	7.31	7.75	8.05	8.46	8.75	8.99	9.3	9.71	9.96	10.38	10.62	11.04	11.46	11.88	12.3	12.72
线速度 Linear Speed mm/s	导程 Lead 5	300																							
	导程 Lead 10	600																							
	导程 Lead 20	1200																							

※ 1 马达下折时, 若选用刹车马达, 或是超出马达总长限制时 无法套用标准PIN孔, 如有需求 请联系我司业务。When motor with brake assembled on lower side, or the total lenGCH over than spec limit, it may not use standard pinHole. Please contact our sales department if you need more information & requirement.
※ 2 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 建议客户本体用下锁式固定孔锁附。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.
若光电选用D4时(原点SENSOR 置于抱持端时)负压安装于侧。When sensor select is D4(Origin sensor is placed at Holder end), vacuum pressure connector is installed on opposite side.

BR 马达右折 Motor Right Side

单位 Unit: mm

滑台原点: 153 Origin of actuator: 153
滑台机械极限: 75.50 ± 1 Mechanical limit: 75.5 ± 1
有效行程 Stroke: 108
基准面 The datum plane

有效行程 Stroke	50 ^{±2}	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
极限行程 Limit Stroke (±1)	70	120	170	220	270	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270
L	311	361	411	461	511	561	611	661	711	761	811	861	911	961	1011	1061	1111	1161	1211	1261	1311	1361	1411	1461	1511
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
KG	4.25	4.63	5.04	5.39	5.69	6.02	6.34	6.69	6.98	7.31	7.75	8.05	8.46	8.75	8.99	9.3	9.71	9.96	10.38	10.62	11.04	11.46	11.88	12.3	12.72
线速度 Linear Speed mm/s	导程 Lead 5	300																							
	导程 Lead 10	600																							
	导程 Lead 20	1200																							

※ 2 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 建议客户本体用下锁式固定孔锁附。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.
若光电选用D4时(原点SENSOR 置于抱持端时)负压安装于侧。When sensor select is D4(Origin sensor is placed at Holder end), vacuum pressure connector is installed on opposite side.