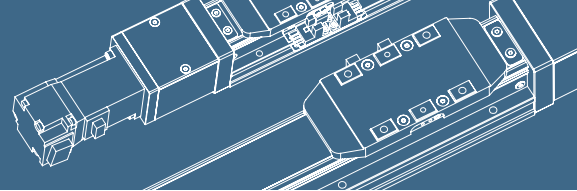


GCH8 单轴 /1-axis

▶ 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 **BTR**

免费服务专线: **0769-88189802**

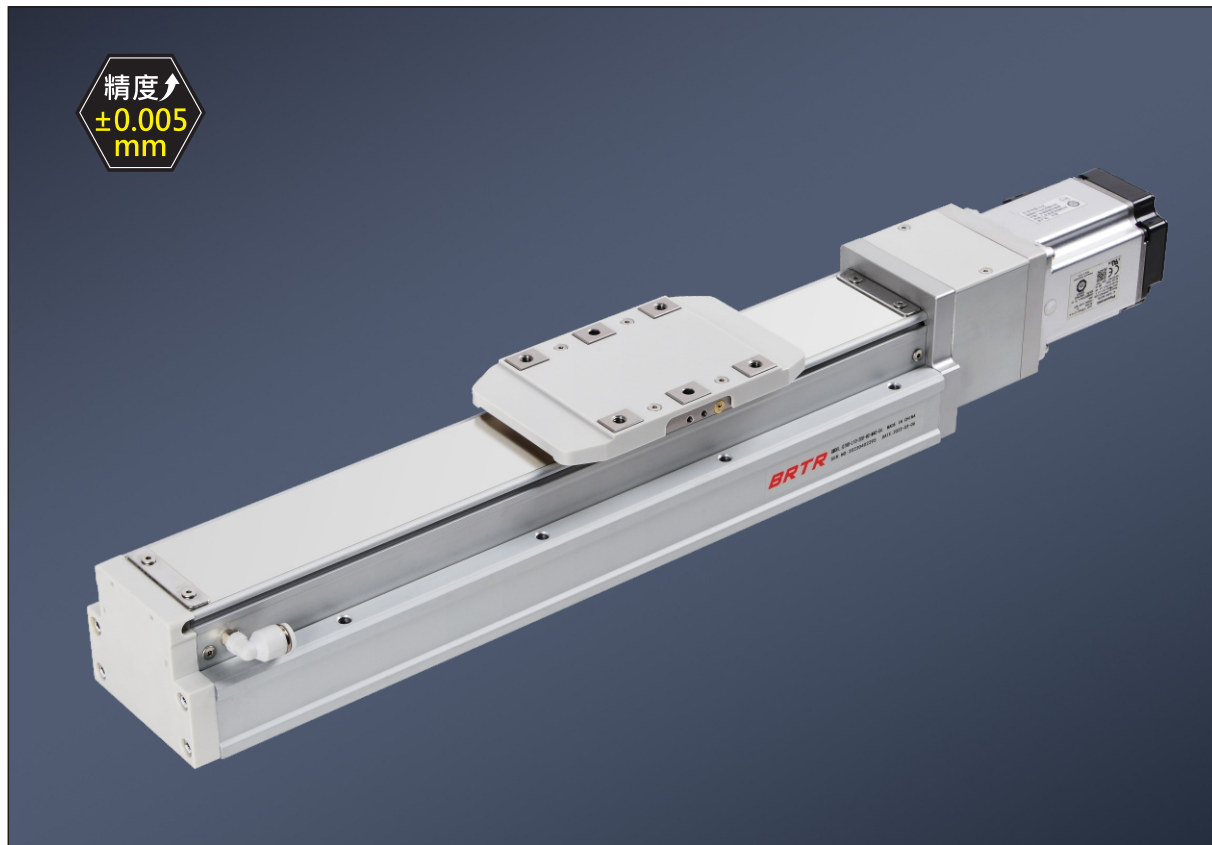
应用列
Application

一般螺杆式样
GCH series

无尘/螺杆式样
GCH

直交连接
XYGT

参考资料
Reference



精度
 ± 0.005 mm

最大行程
Maximum Stroke 1250mm

最高速度
Maximum Speed 1200mm/s

马达容量
Motor Output 200W

最大可搬重量
Max Payload 50kg

型号表示方式 Ordering Method

GCH8 - L 5 - 100 - BC - M20B - 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

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 200W
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 1R 1 Pc
4 2R 2 Pc
无 SENSOR No Sensor
5 无 SENSOR No Sensor

螺杆等级
Ball Screw Accuracy Grade

L 转造级
Rolled Ballscrews
C 研磨级
Ground Ballscrews

*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.

螺杆导程
Ball Screw Lead

5 5mm
10 10mm
20 20mm

* 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 ends of body.
2. 滑座左右两侧皆需安装感应片。
Both lateral slider head to install the sensor respectively.

* 若无刹车则不表示。
If No Brake, No Description.

基本式样 Specification

性能	螺杆等级代号	L		C	
	螺杆等级	C7 转造 C7 Rolled Ballscrew		C5 研磨 C5 Ground Ballscrew	
	位置重复精度	mm		mm	
	标准行程	mm		mm	

性能	螺杆导程	mm	5	10	20
	最高转速	rpm	3600	3600	3600
	最高速度	mm/s	300	600	1200
	最大可搬重量	kg	50	30	18
性能	水平使用	kg	15	8	3
	垂直使用	kg	—	—	—
	定格推力	N	683	341	174
	最大加速度	G	0.3	0.3	0.6
部品	滚珠螺杆	基本动额定负荷	N	—	—
	Ball screw	基本静额定负荷	N	—	—
	直线滑轨	动态水平负载	N	—	—
	Linear Guide	静态水平负载	N	—	—
部品	固定侧轴承	基本静额定负荷	N	—	—
	Fixed bearing	静态容许负荷	N	—	—
部品	AC伺服马达容量	W	200		
	滚珠螺杆外径	mm	Ø16		
	连轴器	mm	10x14/11		
	原点感应器	外挂	FF-U674(NPN)		

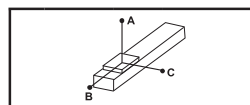
*1 马达加减速设定0.2秒。Acceleration and deceleration value is set 0.2 second.

*2 长行程时，会产生螺杆偏摆，需将速调降（线速度请参阅尺寸图下方表格）

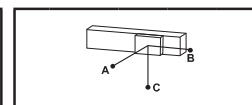
During in a long stroke, it causes ballscrew deflection, the speed must reduce. (Please refer to the linear velocity from the data sheet below the dimension graph.)

*3 使用Panasonic200W马达时，马达轴心为 Ø11；其他厂牌，马达轴心为 Ø14。Motor (200W) Shaft Diameter: Panasonic: 11mm; Other: 14mm.

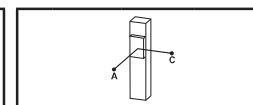
容许负载力距表 Allowable Overhang



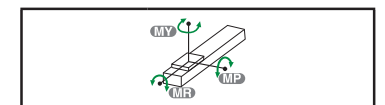
(单位 Unit: mm)



(单位 Unit: mm)



(单位 Unit: mm)



(单位 Unit: N.m)

水平安装 Horizontal Installation		A B C		
		A	B	C
导程 5 Lead	20kg	1275	127	197
	30kg	725	72	112
	50kg	380	38	58
导程 10 Lead	10kg	1269	246	345
	20kg	588	104	148
	30kg	352	58	82
导程 20 Lead	5kg	988	380	440
	10kg	471	174	204
	18kg	248	88	104

壁挂安装 Wall Installation		A B C		
		A	B	C
导程 5 Lead	20kg	197	127	1275
	30kg	112	72	725
	50kg	58	38	380
导程 10 Lead	10kg	345	246	1269
	20kg	148	104	588
	30kg	82	58	352
导程 20 Lead	5kg	440	380	988
	10kg	204	174	471
	18kg	104	88	248

垂直安装 Vertical Installation		A C	
		A	C
导程 5 Lead	5kg	647	647
	10kg	323	323
	15kg	215	215
导程 10 Lead	3kg	937	937
	5kg	561	561
	8kg	351	351
导程 20 Lead	2kg	990	990
	2.5kg	792	792
	3kg	660	660

静额定扭矩 Static Loading Moment

MY	318
MP	318
MR	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最长的长度。
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.
* 符合型录规格的正常使用时，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

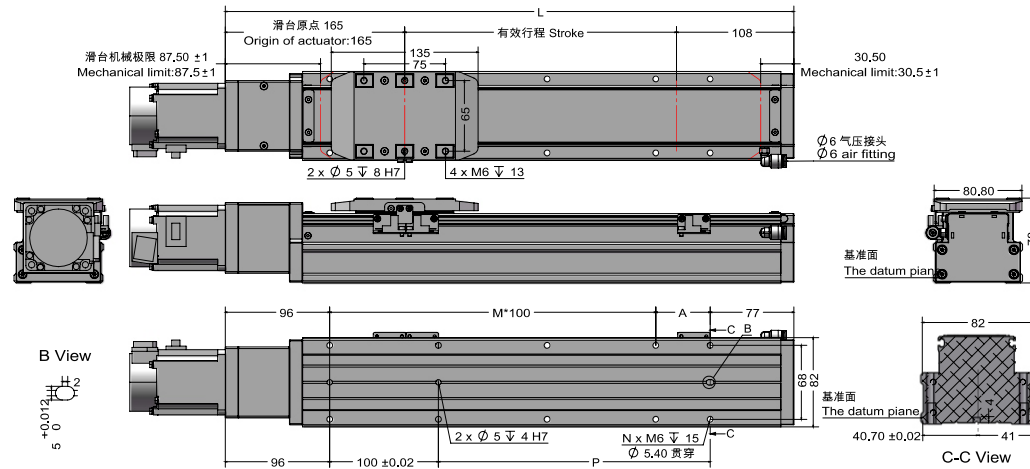
厂牌 Brand	马达记号 Mark	刹车有无 Brake	马达容易 Watt	电源电压 AC-Voltage	伺服马达型号 Motor Model	驱动器型号 Driver Model
三菱 Mitsubishi	M	无刹车 (水平式样) No Brake (Horizontal Type)	200	220	HG-KR23	MR-J4-20A
		有刹车 (垂直式样) With Brake (Vertical Type)	200	220	HG-KR23B	MR-J4-20A
松下 Panasonic	P	无刹车 (水平式样) No Brake (Horizontal Type)	200	220	MHMD022G1U	MADHT1507
		有刹车 (垂直式样) With Brake (Vertical Type)	200	220	MHMD022G1V	MADHT1507
台达 Delta	T	无刹车 (水平式样) No Brake (Horizontal Type)	200	220	ECMA-C20602ES	ASD-B20221-B
		有刹车 (垂直式样) With Brake (Vertical Type)	200	220	ECMA-C20602FS	ASD-B20221-B

BC 马达外露 Motor Exposed



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单位 Unit: 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	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																								
	导程 Lead 10																								
	导程 Lead 20																								

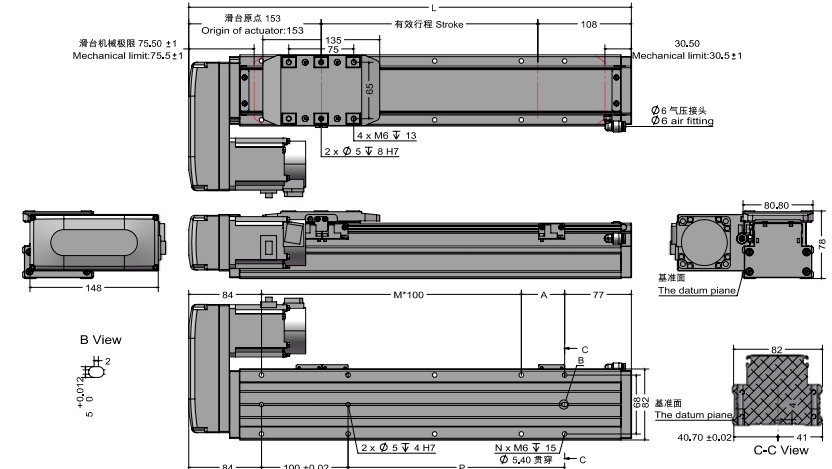
* 2行程50时, 因本体上锁式固定孔会被滑座遮挡, 仅能使用4支螺丝固定。建议客户本体用下锁式固定孔锁附。When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix as a result, suggest that fixing actuator body from the bottom to the top.
若光电选用D4时(原点SENSOR 置于抱持端时)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



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单位 Unit: 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	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																								
	导程 Lead 10																								
	导程 Lead 20																								

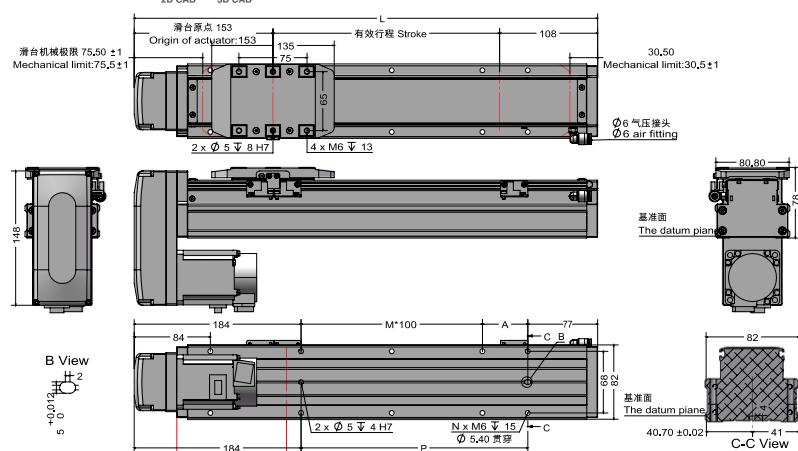
* 2行程50时, 因本体上锁式固定孔会被滑座遮挡, 仅能使用4支螺丝固定。建议客户本体用下锁式固定孔锁附。When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix as a result, suggest that fixing actuator body from the bottom to the top.
若光电选用D4时(原点SENSOR 置于抱持端时)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



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单位 Unit: 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	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																								
	导程 Lead 10																								
	导程 Lead 20																								

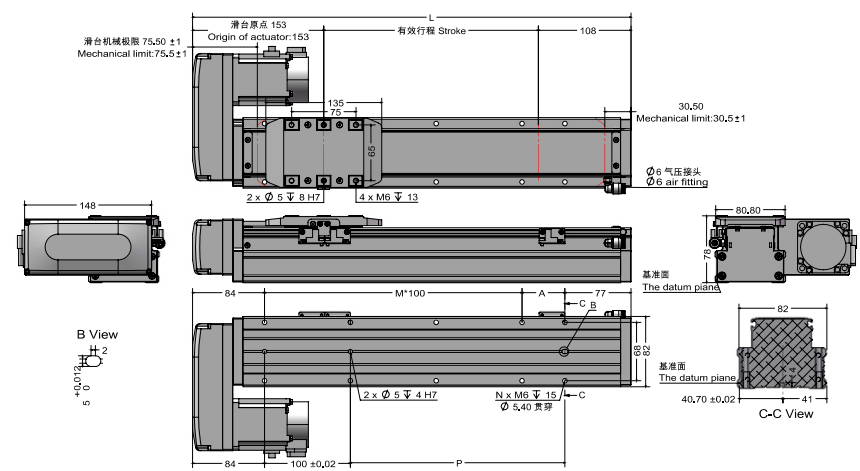
* 2行程50时, 因本体上锁式固定孔会被滑座遮挡, 仅能使用4支螺丝固定。建议客户本体用下锁式固定孔锁附。When the stroke is 50mm, if fixing the body from the top to the bottom, the fixing hole will be blocked by slider and only can be uses 4 screws to fix as a result, suggest that fixing actuator body from the bottom to the top.
若光电选用D4时(原点SENSOR 置于抱持端时)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



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单位 Unit: 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	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																								
	导程 Lead 10																								
	导程 Lead 20																								

* 2行程50时, 因本体上锁式固定孔会被滑座遮挡, 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.
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