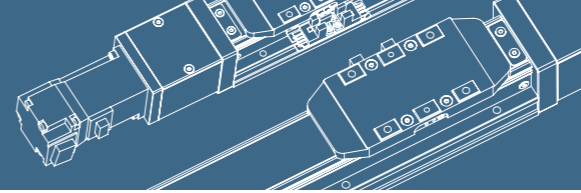


GTH14 单轴 /1-axis

▶ 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

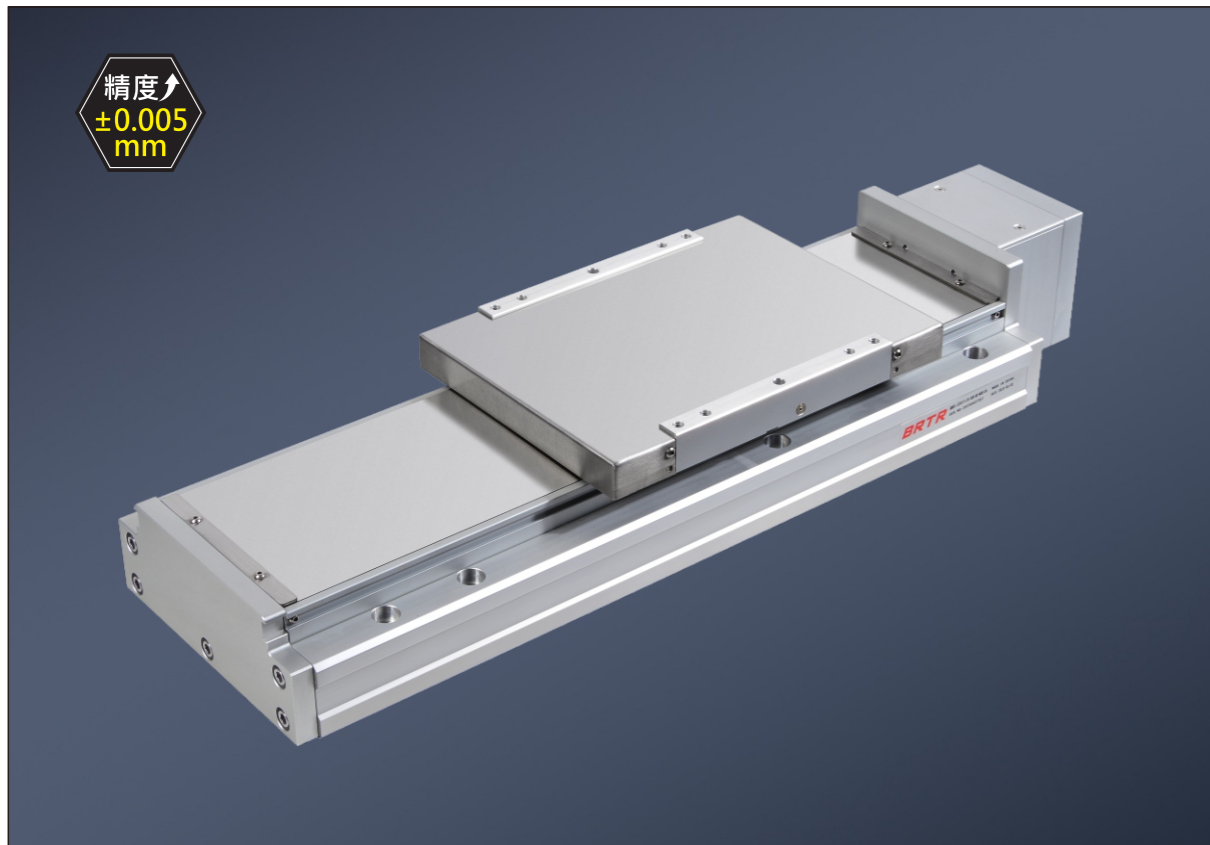
应用列
Application

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

最大行程
Maximum Stroke 1250mm

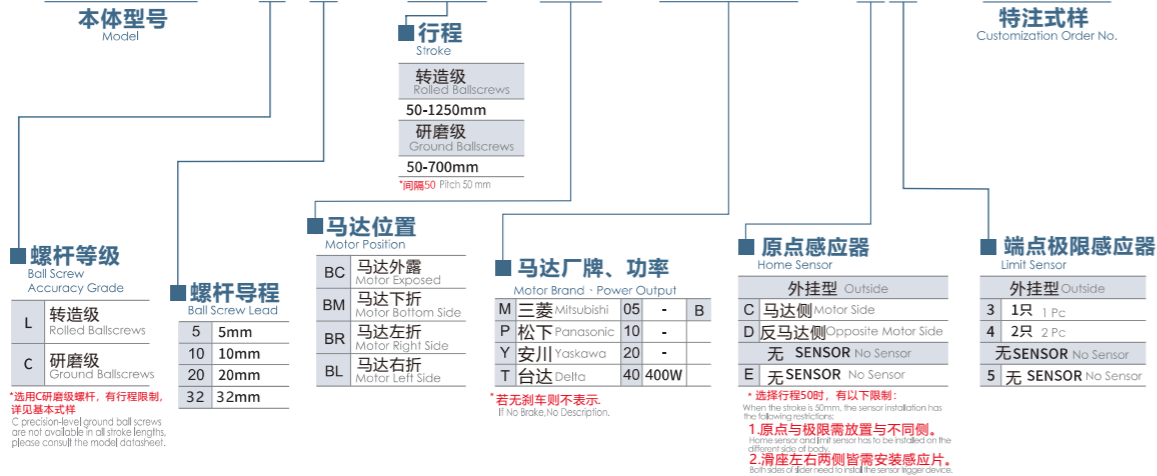
最高速度
Maximum Speed 1920mm/s

马达容量
Motor Output 400W

最大可搬重量
Max Payload 130kg

型号表示方式 Ordering Method

GTH14 - L 5 - 100 - BC - M40B - C4 - 0001

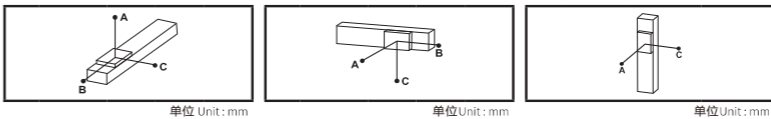


基本式样 Specification

性能	L		C	
	C7 转造 C7 Rolled Ballscrew	C5 研磨 C5 Ground Ballscrew	C7 转造 C7 Rolled Ballscrew	C5 研磨 C5 Ground Ballscrew
螺杆等级代号 Ballscrew Accuracy Grade Code				
螺杆等级 Ballscrew Accuracy Grade				
位置重复精度 Repeatability	mm	± 0.01	±0.005	
标准行程 Stroke (increments)	mm	50-1250mm / 50间隔 (50 increments)	50-700mm / 50间隔 (50 increments)	
螺杆导程 Lead	mm	5 10 20 32		
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 1920
最大可搬重量 Maximum Payload	水平使用 Horizontal	kg	130	100 50 30
	垂直使用 Vertical	kg	33	22 10 8
定格推力 Rated Thrust	N	1388	694	347 218
最大加速度 Maximum acceleration	G	0.3	0.3	0.6 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	—	
AC伺服马达容量 AC Servo Motor Output	W	200		
滚珠螺杆外径 Ball Screw Ø	mm	Ø16		
联轴器 Coupling	mm	10x14/11 ^{※4}		
原点感应器 Home Sensor	外挂 Outside	EE-SX911(NPN)		

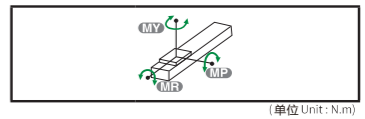
※1 马达加减速设定0.2秒。Acceleration and deceleration value is set 0.2 second.
 ※2 长行程时, 会产生螺杆偏摆, 需将速度调降 (线速度请参阅尺寸图下文表格)
 During in a long stroke, it causes ballscrew deflection, the speed must reduce. (Please refer to the linear velocity from the data sheet below the dimension graph.)
 ※3 使用Panasonic 200W马达时, 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



水平安装 Horizontal Installation		壁挂安装 Wall Installation		垂直安装 Vertical Installation				
行程 Stroke	容许负载力距 Allowable Overhang	A	B	A	C			
导程 5 Lead	60kg	3397	340	465	222k	1600	1600	
	100kg	1972	190	274	80kg	274	184	1972
	130kg	1437	140	197	110kg	197	127	1437
导程 10 Lead	50kg	1907	377	485	30kg	485	478	1907
	80kg	1162	226	292	50kg	292	277	1162
	100kg	887	168	217	88kg	217	146	887
导程 20 Lead	15kg	2443	977	1050	10kg	1050	1235	2443
	30kg	1199	474	512	22kg	512	547	1199
	50kg	669	271	294	40kg	294	289	669
导程 32 Lead	10kg	1454	920	815	15kg	815	527	1454
	20kg	710	443	394	25kg	394	306	710
	30kg	467	289	258	30kg	258	251	467

静额定扭矩 Static Loading Moment



MY	MP	MR
795	795	1565

*力矩表所表示的数据, 代表荷重的重心位置於单一方向容许载出的长度。
 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格, 如有需求请洽销售经理。
 Data information is not for ceiling-mount inverse usage. Contact us for the details if you want to apply ceiling-mount inverse usage.

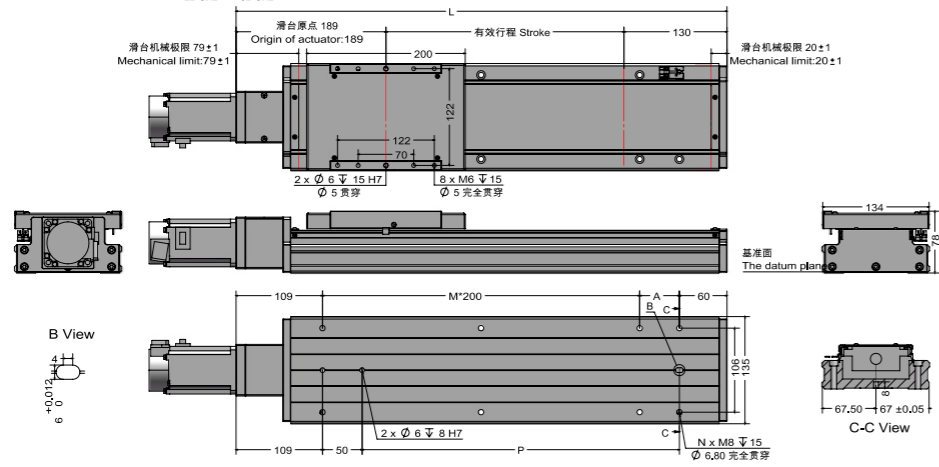
搭配伺服马达一览表 Suitable Motor Brand

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)	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	MSMD042G1U	MBDHT2510
		有刹车 (垂直式样) With Brake (Vertical Type)	400	220	MSMD042G1V	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

BC 马达外露 Motor Exposed

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单位 Unit: mm



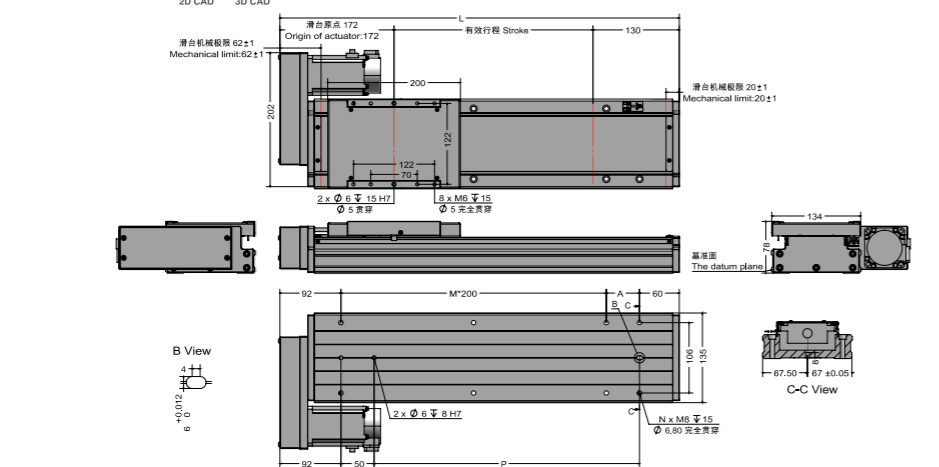
有效行程 Stroke	50 ^{±2}	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
极限行程 Limit Stroke (±1)	70	120	170	220	270	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270
L	369	419	469	519	569	619	669	719	769	819	869	919	969	1019	1069	1119	1169	1219	1269	1319	1369	1419	1469	1519	1569
A	200	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	0	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	14	14	14	14	16	16	16	16	16
P	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
KG	6.6	7.2	7.8	8.4	9	9.6	10.2	10.8	11.4	12	12.6	13.2	13.8	14.4	15	15.6	16.2	16.8	17.4	18	20.6	21.2	21.8	22.4	23
线速度 Linear Speed mm/s	导程 Lead 5	300																							
	导程 Lead 10	600																							
	导程 Lead 20	1200																							
	导程 Lead 32	1920																							

※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

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单位 Unit: mm



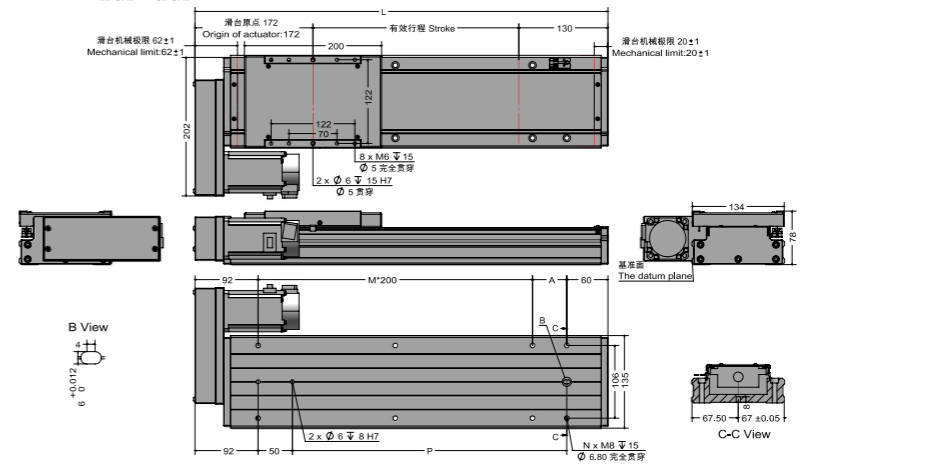
有效行程 Stroke	50 ^{±2}	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
极限行程 Limit Stroke (±1)	70	120	170	220	270	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270
L	352	402	452	502	552	602	652	702	752	802	852	902	952	1002	1052	1102	1152	1202	1252	1302	1352	1402	1452	1502	1552
A	200	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	0	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	14	14	14	14	16	16	16	16	16
P	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
KG	6.7	7.3	7.9	8.5	9.1	9.7	10.3	10.9	11.5	12.1	12.7	13.3	13.9	14.5	15.1	15.7	16.3	16.9	17.5	18.1	18.7	19.3	19.9	20.5	26.5
线速度 Linear Speed mm/s	导程 Lead 5	300																							
	导程 Lead 10	600																							
	导程 Lead 20	1200																							
	导程 Lead 32	1920																							

※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

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单位 Unit: mm



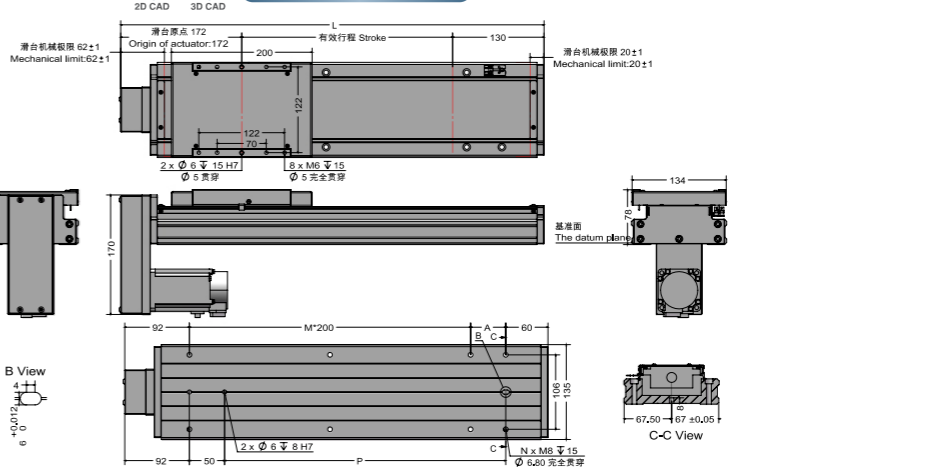
有效行程 Stroke	50 ^{±2}	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
极限行程 Limit Stroke (±1)	70	120	170	220	270	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270
L	352	402	452	502	552	602	652	702	752	802	852	902	952	1002	1052	1102	1152	1202	1252	1302	1352	1402	1452	1502	1552
A	200	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	0	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	14	14	14	14	16	16	16	16	16
P	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
KG	6.7	7.3	7.9	8.5	9.1	9.7	10.3	10.9	11.5	12.1	12.7	13.3	13.9	14.5	15.1	15.7	16.3	16.9	17.5	18.1	18.7	19.3	19.9	20.5	26.5
线速度 Linear Speed mm/s	导程 Lead 5	300																							
	导程 Lead 10	600																							
	导程 Lead 20	1200																							
	导程 Lead 32	1920																							

※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

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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	352	402	452	502	552	602	652	702	752	802	852	902	952	1002	1052	1102	1152	1202	1252	1302	1352	1402	1452	1502	1552
A	200	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	0	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	6
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	14	14	14	14	16	16	16	16	16
P	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
KG	6.7	7.3	7.9	8.5	9.1	9.7	10.3	10.9	11.5	12.1	12.7	13.3	13.9	14.5	15.1	15.7	16.3	16.9	17.5	18.1	18.7	19.3	19.9	20.5	26.5
线速度 Linear Speed mm/s	导程 Lead 5	300																							
	导程 Lead 10	600																							
	导程 Lead 20	1200																							
	导程 Lead 32	1920																							

※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.