

GTHA Series

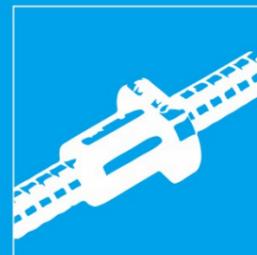
Aluminum-based actuator of track embedded screw



CONTENTS

Clean Room /Ball Screw

Ball Screw Driven



High Accuracy, High Payload

The screw drive actuator is easy to achieve high accuracy, long life and high stability;
 The repositioning accuracy is up to $\pm 0.01 \sim \pm 0.005$ mm;
 5 kg ~ 150 kg extremely wide load adaptability is offered;
 It is widely used in automation equipment and production lines in various industries.

SMALL

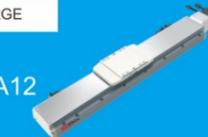
GTHA4



Width: 44mm
 Max.stroke: 800mm...95
 Max.payload: 25kg

LARGE

GTHA12



Width: 120mm
 Max.stroke: 1250mm...115
 Max.payload: 110kg

SMALL

GTHA5



Width: 54mm
 Max.stroke: 800mm...103
 Max.payload: 30kg

SMALL

GTHA5S



Width: 54mm
 Max.stroke: 326mm...119
 Max.payload: 30kg

MEDIUM

GTHA8



Width: 82mm
 Max.stroke: 1100mm...107
 Max.payload: 50kg

MEDIUM

GTHA8S



Width: 82mm
 Max.stroke: 450mm...123
 Max.payload: 50kg

GTHA 1-axis

internal structure

Self Lubricating Structure

1 Rigidity strengthened
The latest design has an integrated slider with guide raceway and transmission raceway, which has stronger rigidity and higher accuracy.

2 Assembly, time-saving and convenient
Without need of disassembling the steel belt, it can be fixed from top to bottom or from bottom to top. The mounting reference surface is added on the side of body for supporting. The PIN hole is set at the bottom of body for positioning.

3 It is not easy to get dusty
The special design with steel belt structure can reduce the dust generation. It can be used in clean room environment.

4 Smaller size
Its width is reduced so that the space required for equipment installation is smaller.

1 Direct supply of lubrication oil to the raceway surface
The self-lubrication actuator has capillary action to store and supply lubrication oil all the time. The self-lubrication slider is installed between the sealed end cover and rolling part, and is in direct contact with the raceway. The lubrication oil is supplied to the raceway, and when the rolling part passes through the raceway, it plays a role of lubricating.

2 It is convenient to refill lubrication oil
The whole series of actuator bases are equipped with oil filling ports on both sides of the body, so that there is no need to remove any parts to complete the lubrication and maintenance.

GTHA
Technical data

GTHA4

GTHA5

GTHA8

GTHA12

GTHA5S

GTHA8S

GTHA
Technical data

GTHA4

GTHA5

GTHA8

GTHA12

GTHA5S

GTHA8S

GTHA Built-in LM Guide Electric Actuator-Slider Type

Environment	Driven Mode	Specification	Motor Output (w)	Width(mm)	Repeatability (mm)	Ball Screw Spec		Maximum Payload(kg)		Maximum Speed*1 (mm/s)	Stroke(mm) & Maximum Speed(mm/s)																				Page																			
						Outer Diameter (mm)	Lead(mm)	Horizontal	Vertical		Speed																																							
											行程 Stroke																																							
											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	1300	1350													
Standard	Ball screw	GTHA4	50W	44	±0.01	12	2	25	8	100																					95																			
							5	20	5	250																																								
							10	12	2	500																																								
		GTHA5	100W				54	±0.01	12	2	30	10	100																																					
										5	30	10	250																																					
										10	15	5	500																																					
	GTHA8	200W	82	±0.01	16	5	50	15	250																																									
						10	30	8	500																																									
						20	18	3	1000																																									
	GTHA12	400W	120	±0.01	16	5	110	24	250																																									
						10	88	16	500																																									
						20	40	8	1000																																									
32						30	5	1600																																										

Written here is the standard stroke and maximum safe speed. If over this speed, it may cause serious vibration.

Dual Carriage Synchronous Movement In Reverse Direction

Environment	Driven Mode	Specification	Motor Output (w)	Width(mm)	Repeatability (mm)	Ball Screw Spec		Maximum Payload(kg)		Maximum Speed*1 (mm/s)	Stroke(mm) & Maximum Speed(mm/s)																				Page
						Outer Diameter (mm)	Lead(mm)	Horizontal	Vertical		Speed																				
											25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575 600 625 650 675																				
Standard	Ball screw	GTHA5S	100W	54	±0.01	12	2	30	10	100																					119
		GTHA8S	200W 400W	82	±0.01	16	5	50	15	250																					123

The highest speed is based on the maximum servo motor's rpm (3000)

Written here is the standard stroke and maximum safe speed. If over this speed, it may cause serious vibration.

GTHA4

Ball Screw Drive

GTHA4



Specification		Sensor Layout		
Repeatability (mm)	±0.01			
Ball Screw Lead (mm)	2	5	10	
Maximum Speed (mm/s) ×1	100	250	500	
Maximum Payload	Horizontal (kg)	25	20	12
	Vertical (kg)	8	5	2
Rated Thrust (N)	424	141	71	
Stroke / Pitch (mm) ×2	50-800m / 50 mm Pitch			
AC Servo Motor Output (W)	50			
Ball Screw Ø (mm)	C7φ12			
Coupling (mm)	7X8			
Home Sensor	Outside	EE-SX674(NPN)		

※1 Acceleration and deceleration value is set 0.2 second.
 ※2 When the stroke is over 550mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances.

Allowable Moment

Horizontal Installation		Wall Installation			Vertical Installation				
Lead	Weight (kg)	A	B	C	Lead	Weight (kg)	A	C	
2	12kg	1000	55	80	2	4kg	200	200	
	18kg	750	35	50		5	8kg	100	100
	25kg	500	23	32			-	-	-
10kg	550	53	70	3kg	200		200		
5	15kg	350	32	45	5	5kg	120	120	
	20kg	250	22	31		-	-	-	
	8kg	305	59	75		1.5kg	350	350	
10	10kg	240	45	57	10	2kg	260	260	
	12kg	195	37	47		-	-	-	

Static Loading Moment

Moment	Value (Unit: mm)
MY	79
MP	79
MR	116

※ The torque value in the chart indicate the center of gravity.
 ※ Operation life is 10,000km when the product is using under the specified conditions.
 ※ Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

Ordering Method

GTHA4 - L 10 - 300 - BC - P5 - C4 - D123

Model Stroke Motor location Motor code Original and limit switch Special Order No.

50-800mm
50 mm Pitch

BC Motor Exposed
BM Motor Bottom Side
BL Motor Left Side
BR Motor Right Side

P Panasonic servo
T It generally refers to Mingzhi, Inovance, HCFA, Delta, Yaskawa, Mitsubishi and other
T Standard stepping motor

5 50W
42 Stepping motor frame number

C4 External 3 NPN photoelectric switches
C4P External 3 PNP photoelectric switches
E5 Without switches, it is equipped with sensing plate and bracket
E0 Without switches, sensing plate and bracket

When choosing the stroke 50, there are following limits:
 1. The origin and limit switches need to be placed on different sides.
 2. The sensing plates shall be mounted at both sides of actuator base.

Accuracy: L Standard accuracy, P Precision-level
 Screw lead: 2mm, 5mm, 10mm

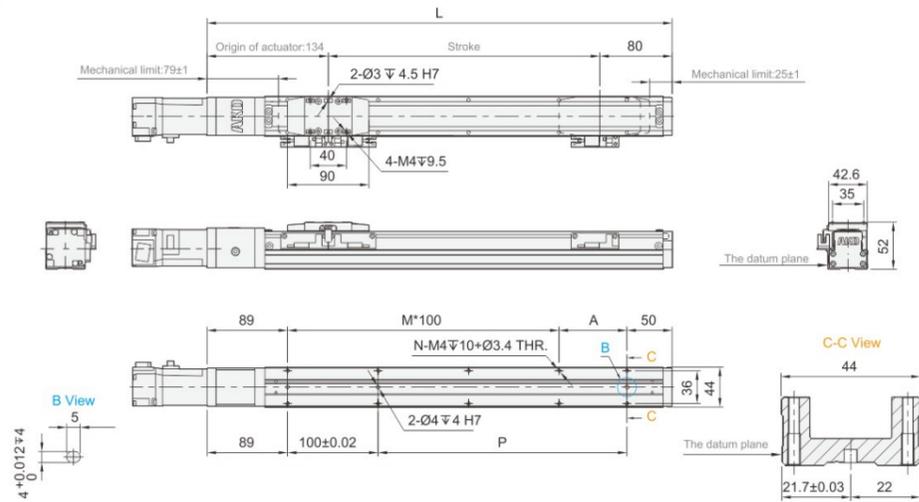
GTHA4

Ball Screw Drive

GTHA4

BC Motor Exposed

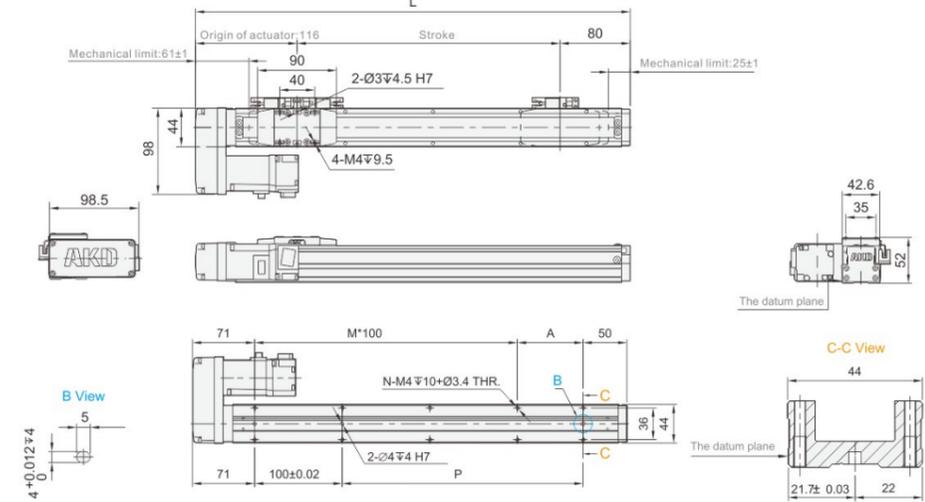
(Unit: mm)



Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	264	314	364	414	464	514	564	614	664	714	764	814	864	914	964	1014
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
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	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	0.95	1.12	1.29	1.47	1.65	1.83	2.01	2.19	2.37	2.55	2.73	2.91	3.09	3.27	3.45	3.63

BL Motor Left Side

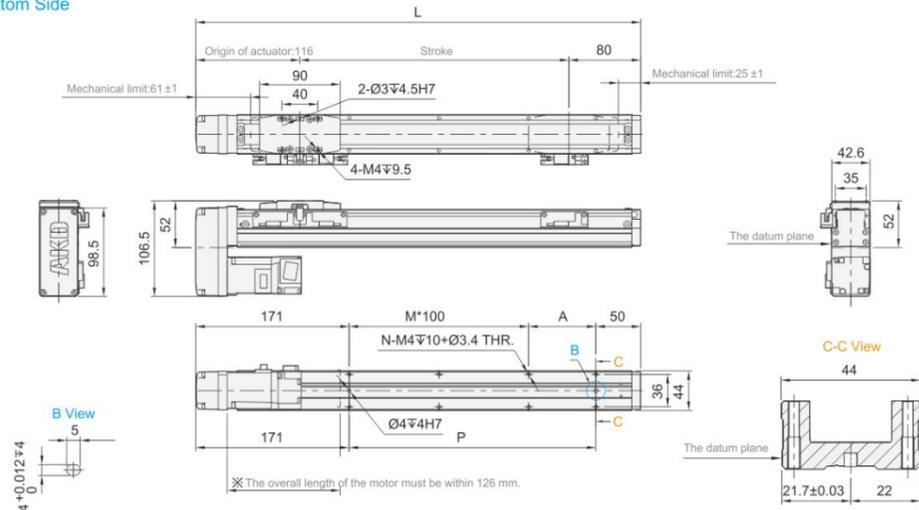
(Unit: mm)



Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
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	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

BM Motor Bottom Side

(Unit: mm)

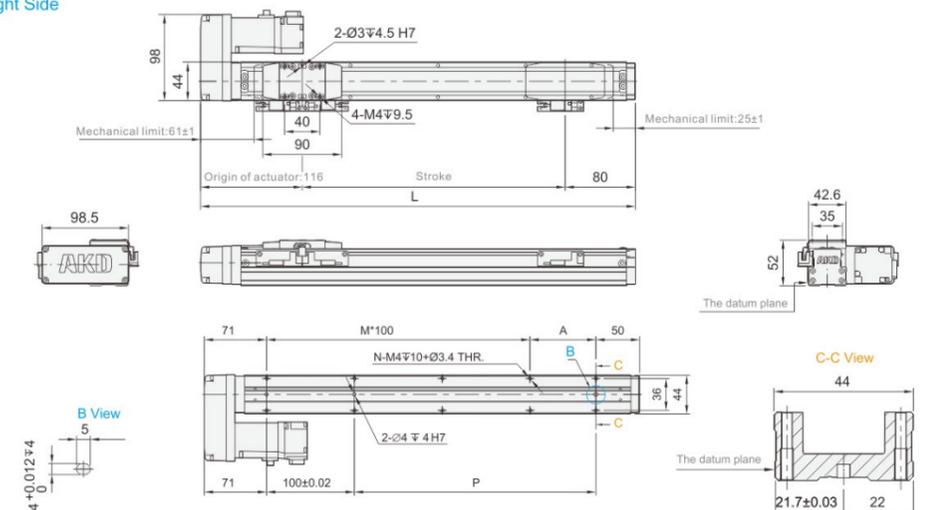


Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

※ When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BR Motor Right Side

(Unit: mm)



Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
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	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

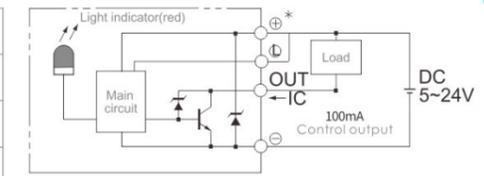
GTHA4

Ball Screw Drive

GTHA4



Specification		Sensor Layout			
Spec	Repeatability (mm)	±0.01			
	Ball Screw Lead (mm)	2	5	10	
	Maximum Speed (mm/s) ×1	100	250	500	
	Maximum Payload	Horizontal (kg)	25	20	12
		Vertical (kg)	8	8	3.5
	Rated Thrust (N)	848	282	142	
Parts	Stroke / Pitch (mm) ×2	50-800m / 50 mm Pitch			
	AC Servo Motor Output (W)	100			
	Ball Screw Ø (mm)	C7φ12			
	Coupling (mm)	7X8			
	Home Sensor	Outside	EE-SX674(NPN)		



※1 Acceleration and deceleration value is set 0.2 second.
 ※2 When the stroke is over 550mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances.

Allowable Moment

Horizontal Installation		Wall Installation			Vertical Installation											
Lead	Weight (kg)	A	B	C	Lead	Weight (kg)	A	B	C	Lead	Weight (kg)	A	B	C		
2	12kg	1000	55	80	2	12kg	80	55	1000	2	4kg	200	200			
	18kg	750	35	50		5	18kg	50	35		750	5	8kg	100	100	
	25kg	500	23	32			10	25kg	32		23		500	10	-	-
10kg	550	53	70	5	10kg			72	52	550	5		4kg		150	150
15kg	350	32	45		10	15kg		45	32	345		10	8kg		75	75
20kg	250	22	31			2	20kg	31	22	250			2	-	-	-
8kg	305	59	75	5			8kg	75	59	300	5			2kg	260	260
10kg	240	45	57		10		10kg	58	45	240		10		3.5kg	150	150
12kg	195	37	47			2	12kg	47	37	190			2	-	-	-

Static Loading Moment

Moment	Value (Unit: mm)
MY	79
MP	79
MR	116

※ The torque value in the chart indicate the center of gravity.
 ※ Operation life is 10,000km when the product is using under the specified conditions.
 ※ Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

Ordering Method

GTHA4 - L 10 - 300 - BC - P10 - C4 - D123

Model: GTHA4, Stroke: 300mm (50-800mm, 50mm Pitch), Motor location: BC (Motor Exposed), Motor code: P10 (Panasonic servo, 100W), Original and limit switch: C4 (External 3 NPN photoelectric switches), Special Order No.: D123

Accuracy	Screw lead	Motor location	Motor code	Original and limit switch
L: Standard accuracy	2mm	BC: Motor Exposed	P: Panasonic servo	C4: External 3 NPN photoelectric switches
P: Precision-level	5mm	BM: Motor Bottom Side	T: It generally refers to Mingzhi, Inovance, HCFA, Delta, Yaskawa, Mitsubishi and other	E5: Without switches, it is equipped with sensing plate and bracket
	10mm	BL: Motor Left Side	T: 10	E0: Without switches, sensing plate and bracket
		BR: Motor Right Side	T: 100W	
			B: Standard stepping motor	

When choosing the stroke 50, there are following limits:
 1. The origin and limit switches need to be placed on different sides.
 2. The sensing plates shall be mounted at both sides of actuator base.

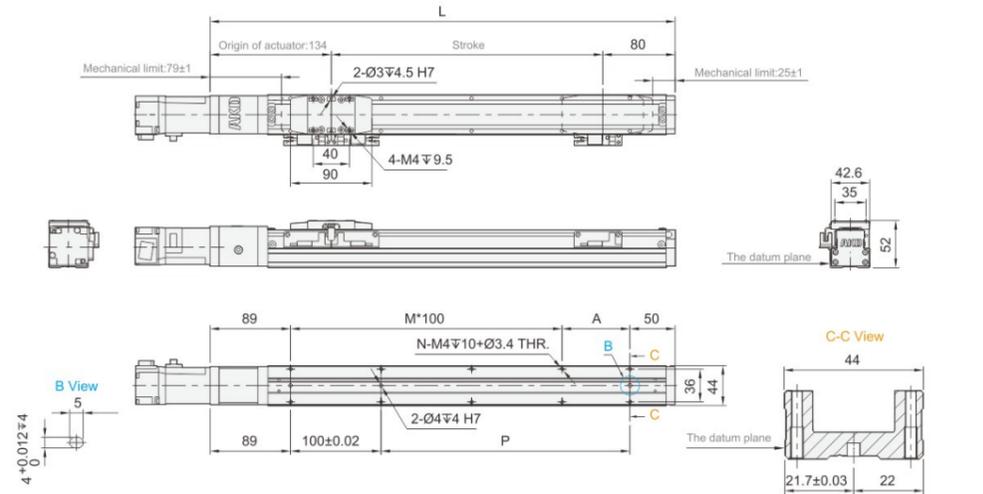
GTHA4

Ball Screw Drive

GTHA4

BC Motor Exposed

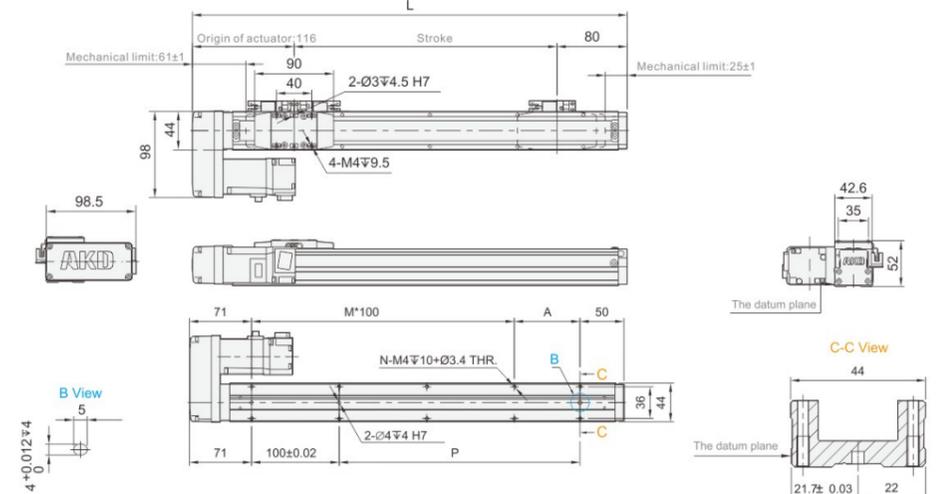
(Unit: mm)



Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	264	314	364	414	464	514	564	614	664	714	764	814	864	914	964	1014
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
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	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	0.95	1.12	1.29	1.47	1.65	1.83	2.01	2.19	2.37	2.55	2.73	2.91	3.09	3.27	3.45	3.63

BL Motor Left Side

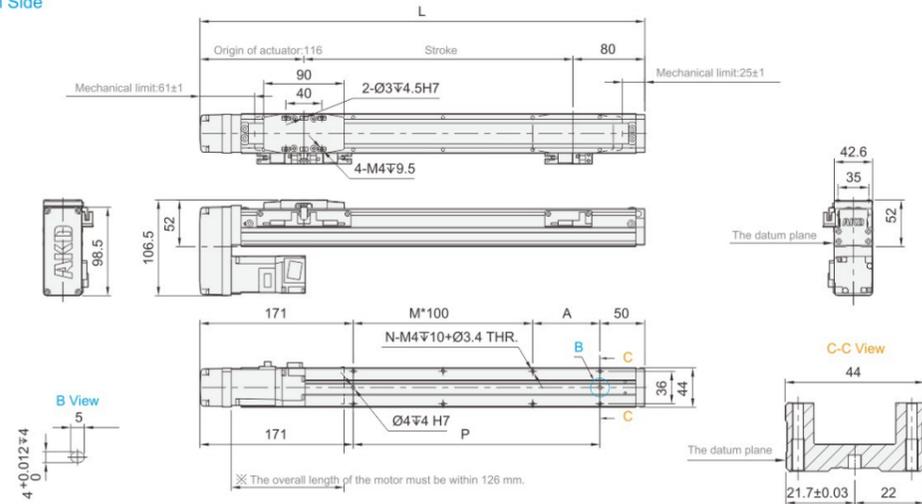
(Unit: mm)



Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
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	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

BM Motor Bottom Side

(Unit: mm)

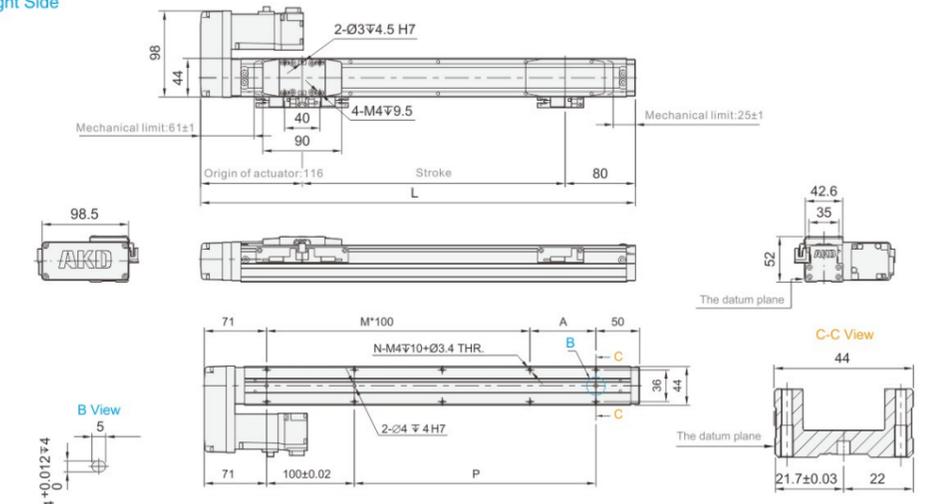


Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

* When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BR Motor Right Side

(Unit: mm)

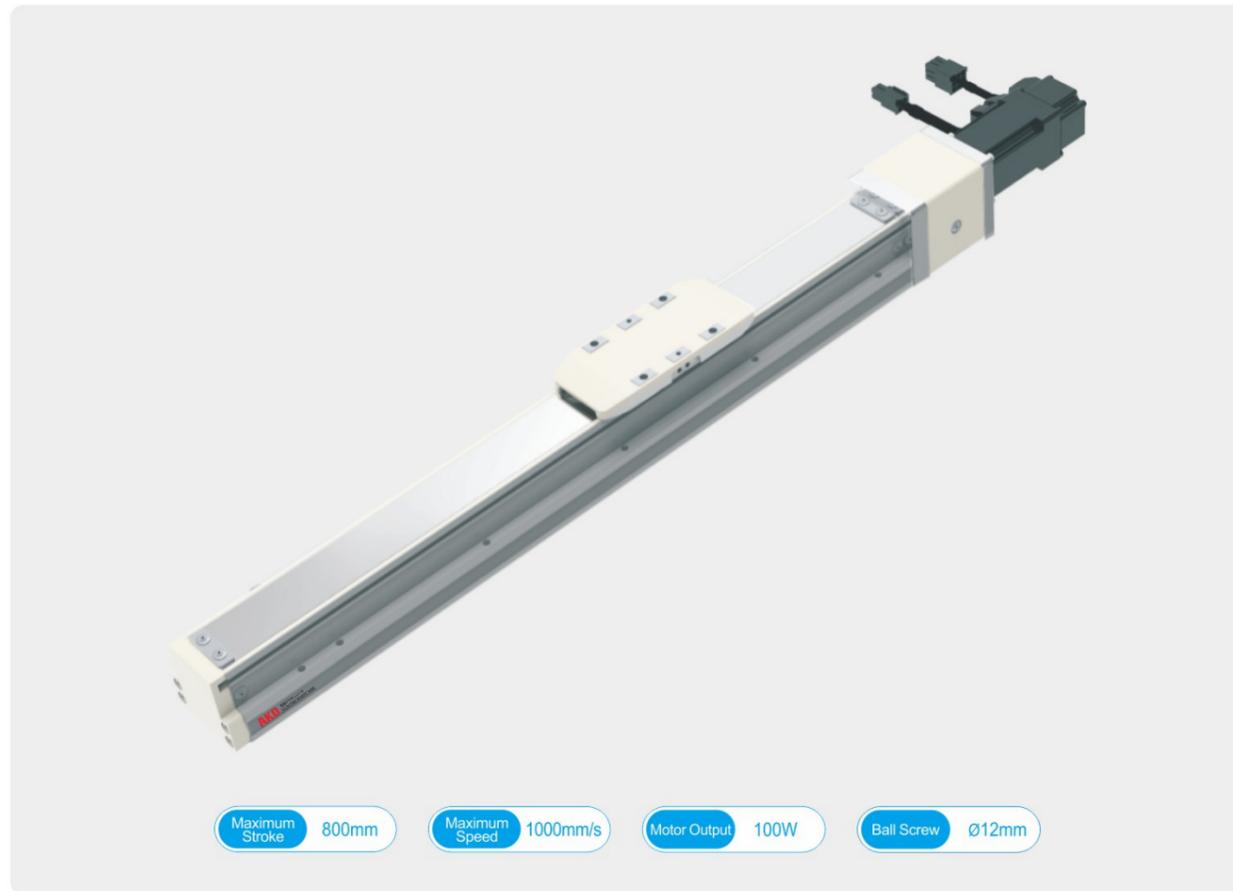


Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	246	296	346	396	446	496	546	596	646	696	746	796	846	896	946	996
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.04	1.22	1.40	1.58	1.76	1.94	2.12	2.30	2.48	2.66	2.84	3.02	3.20	3.38	3.56	3.74

GTHA5

Ball Screw Drive

GTHA5



Specification		Sensor Layout			
Repeatability (mm)	±0.01				
Ball Screw Lead (mm)	2	5	10	20	
Maximum Speed (mm/s) ×1	100	250	500	1000	
Maximum Payload	Horizontal (kg)	30	30	15	10
	Vertical (kg)	10	10	5	2.5
Rated Thrust (N)	854	341	170	85	
Stroke / Pitch (mm) ×2	50-800m / 50 mm Pitch				
AC Servo Motor Output (W)	100				
Ball Screw Ø (mm)	C7φ12				
Coupling (mm)	7X8				
Home Sensor	Outside	EE-SX674(NPN)			

※1 Acceleration and deceleration value is set 0.2 second.
 ※2 When the stroke is over 600mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances.

Allowable Moment		(Unit: mm)			
Horizontal Installation	2 Lead	10kg	900	100	135
	5 Lead	20kg	700	45	60
		30kg	550	25	35
Wall Installation	2 Lead	10kg	650	75	100
	5 Lead	20kg	440	32	45
		30kg	270	19	25
Vertical Installation	10 Lead	5kg	600	145	185
	20 Lead	10kg	370	70	85
		15kg	250	42	52
Wall Installation	10 Lead	5kg	320	120	130
	20 Lead	8kg	220	70	80
		10kg	175	55	60
Vertical Installation	2 Lead	6kg	180	180	
	5 Lead	8kg		135	
		10kg	110	110	
Wall Installation	2 Lead	10kg	135	100	900
	5 Lead	20kg	60	45	700
		30kg	37	27	550
Vertical Installation	5 Lead	6kg	145	145	
	10 Lead	8kg	110	110	
		10kg	90	90	
Wall Installation	10 Lead	1kg	800	800	
	20 Lead	3kg	260	260	
		5kg	155	155	
Vertical Installation	20 Lead	1kg	600	600	
	2.5kg	2kg	300	300	
		2.5kg	250	250	

Ordering Method

GTHA5 - L 10 - 300 - BC - P10 - C4 - D123

Model Stroke Motor location Motor code Original and limit switch Special Order No.

50-800mm
50 mm Pitch

BC Motor Exposed
BM Motor Bottom Side
BL Motor Left Side
BR Motor Right Side

P	Panasonic servo	T	10	100W
T	It generally refers to Mingzhi, Inovance, HCFA, Delta, Yaskawa, Mitsubishi and other			
B	Standard stepping motor	42		Stepping motor frame number

Configuration of original and limit switch
 C4 External 3 NPN photoelectric switches
 C4P External 3 PNP photoelectric switches
 E5 Without switches, it is equipped with sensing plate and bracket
 E0 Without switches, sensing plate and bracket

When choosing the stroke 50, there are following limits:
 1. The origin and limit switches need to be placed on different sides.
 2. The sensing plates shall be mounted at both sides of actuator base.

Accuracy: L Standard accuracy, P Precision-level
 Screw lead: 2mm, 5mm, 10mm, 20mm

Static Loading Moment

MY	103
MP	103
MR	144

(Unit: mm)

※The torque value in the chart indicate the center of gravity.
 ※Operation life is 10,000km when the product is using under the specified conditions.
 ※Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

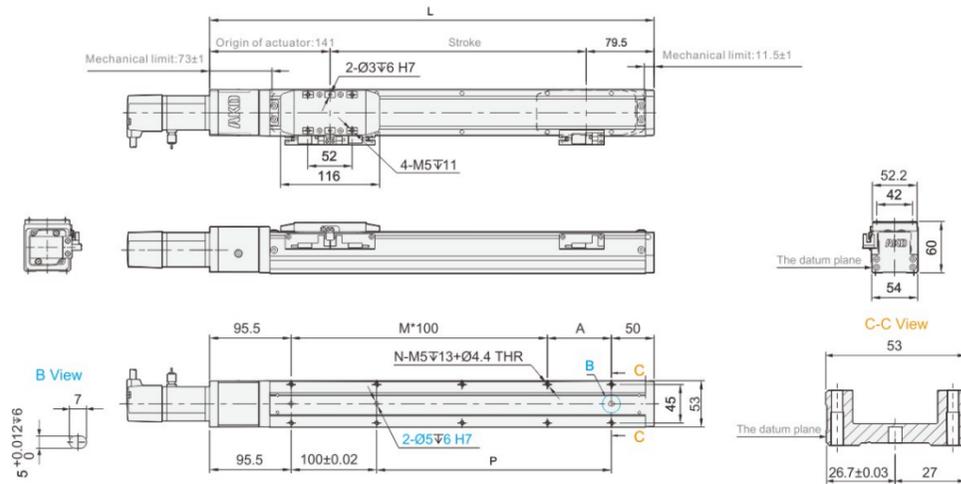
GTHA5

Ball Screw Drive

GTHA5

BC Motor Exposed

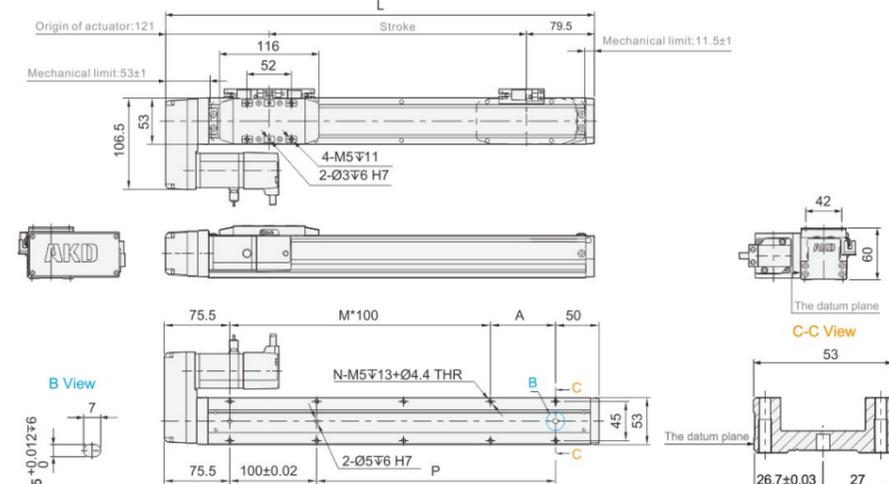
(Unit:mm)



Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	270.5	320.5	370.5	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
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	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.567	1.717	1.867	2.017	2.167	2.317	2.467	2.617	2.767	2.917	3.067	3.217	3.367	3.517	3.667	3.817

BL Motor Left Side

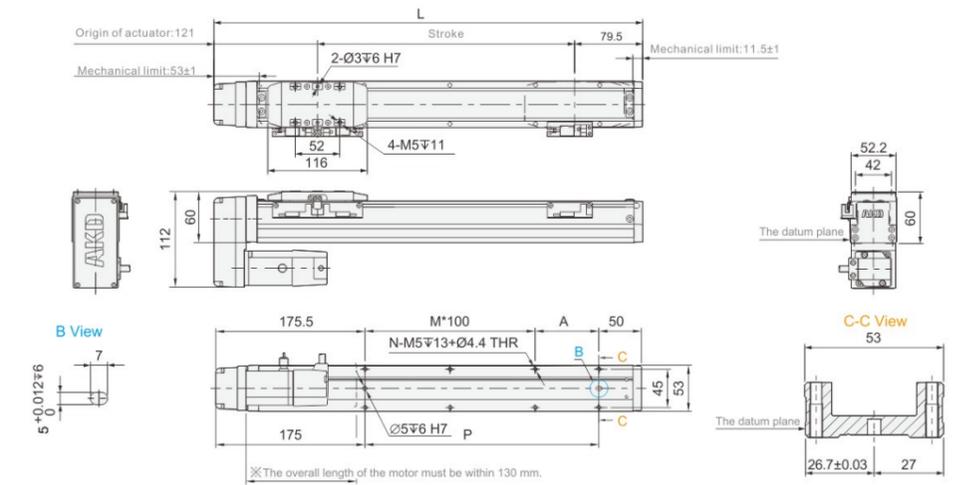
(Unit:mm)



Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250.5	300.5	350.5	400.5	450.5	500.5	550.5	600.5	650.5	700.5	750.5	800.5	850.5	900.5	950.5	1000.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
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	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.595	1.745	1.895	2.045	2.195	2.345	2.495	2.645	2.795	2.945	3.095	3.245	3.395	3.545	3.695	3.845

BM Motor Bottom Side

(Unit:mm)

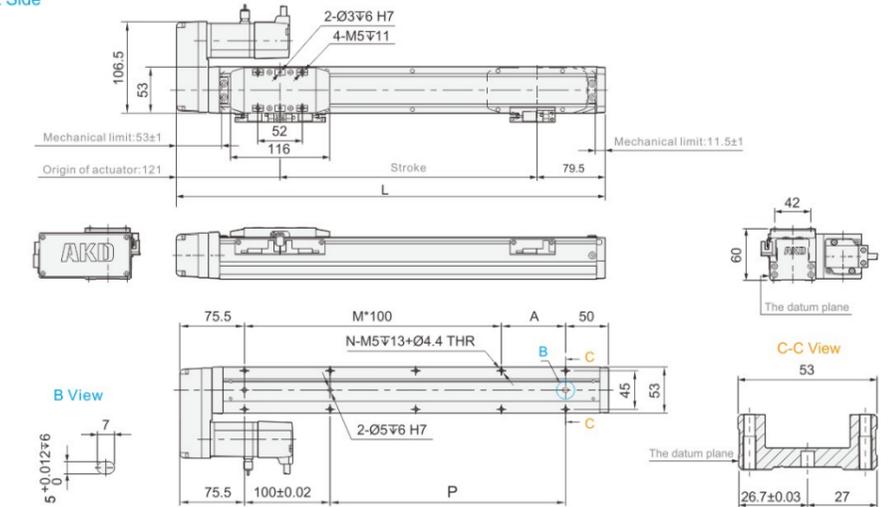


Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250.5	300.5	350.5	400.5	450.5	500.5	550.5	600.5	650.5	700.5	750.5	800.5	850.5	900.5	950.5	1000.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
P	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.595	1.745	1.895	2.045	2.195	2.345	2.495	2.645	2.795	2.945	3.095	3.245	3.395	3.545	3.695	3.845

※ When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BR Motor Right Side

(Unit:mm)



Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	250.5	300.5	350.5	400.5	450.5	500.5	550.5	600.5	650.5	700.5	750.5	800.5	850.5	900.5	950.5	1000.5
A	25	75	25	75	25	75	25	75	25	75	25	75	25	75	25	75
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	25	75	125	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	1.595	1.745	1.895	2.045	2.195	2.345	2.495	2.645	2.795	2.945	3.095	3.245	3.395	3.545	3.695	3.845

GTHA8

Ball Screw Drive

GTHA8



Specification		Sensor Layout		
Repeatability (mm)		±0.01		
Ball Screw Lead (mm)		5	10	20
Maximum Speed (mm/s) ×1		250	500	1000
Spec	Maximum Payload	Horizontal (kg)	50	30
		Vertical (kg)	15	8
Rated Thrust (N)		683	341	174
Stroke / Pitch (mm) ×2		50-1100mm/ 50 mm Pitch		
AC Servo Motor Output (W)		200		
Ball Screw Ø (mm)		C7φ16		
Coupling (mm)		10X14/11(1)		
Home Sensor		Outside	EE-SX674(NPN)	

※1 Acceleration and deceleration value is set 0.2 second.
 ※2 When the stroke is over 750mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances.
 1: Motor (200W) Shaft Diameter: Panasonic: 11mm; Other: 14mm.

Allowable Moment

Horizontal Installation (Unit: mm)			
Lead	Weight	A	B
5	20kg	1560	237
	35kg	890	126
	50kg	550	82
10	10kg	1730	412
	20kg	839	196
	30kg	541	124
20	6kg	1213	493
	9kg	800	323
	18kg	592	238

Wall Installation (Unit: mm)			
Lead	Weight	A	B
5	20kg	214	1435
	35kg	113	845
	50kg	74	506
10	10kg	370	1400
	20kg	176	800
	30kg	112	495
20	6kg	444	760
	9kg	292	650
	18kg	214	544

Vertical Installation (Unit: mm)		
Lead	Weight	A
5	10kg	331
	15kg	220
10	5kg	589
	8kg	368
20	3kg	935
	-	-

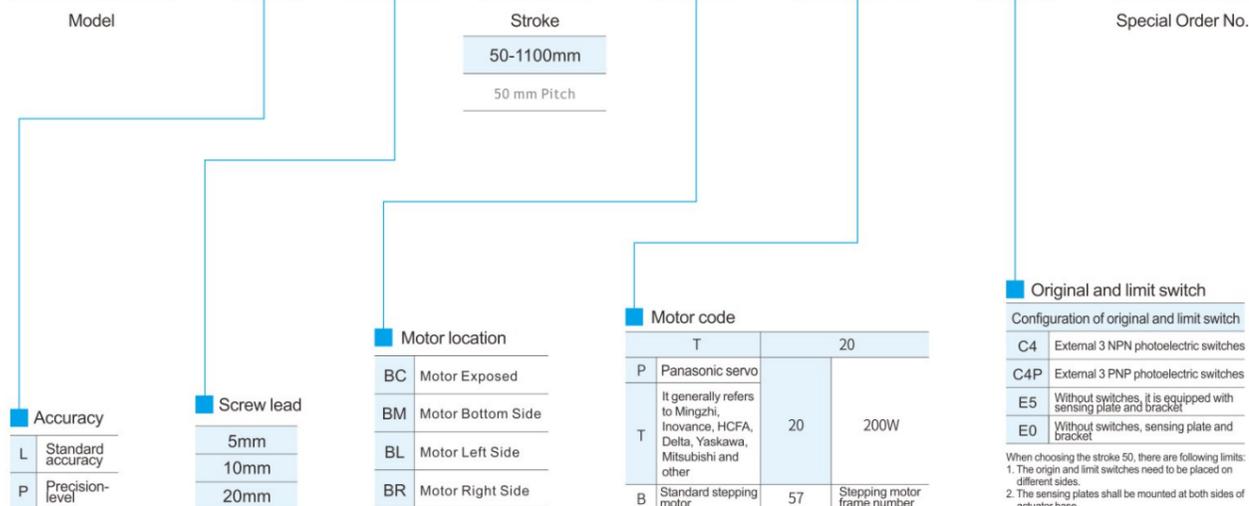
Static Loading Moment

Dimension	Value (Unit: mm)
MY	318
MP	318
MR	626

※ The torque value in the chart indicate the center of gravity.
 ※ Operation life is 10,000km when the product is using under the specified conditions.
 ※ Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

Ordering Method

GTHA8 - L 10 - 300 - BC - P20 - C4 - D123



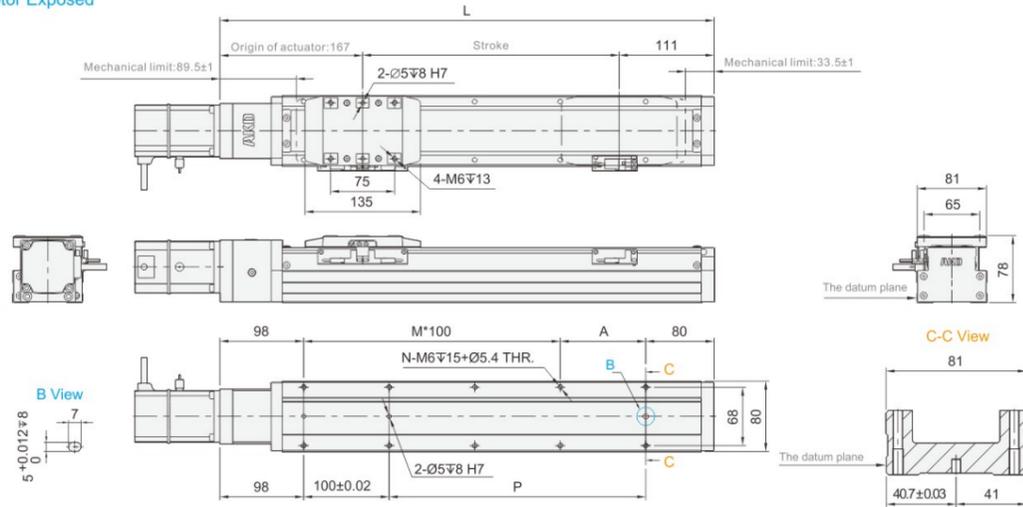
GTHA8

Ball Screw Drive

GTHA8

BC Motor Exposed

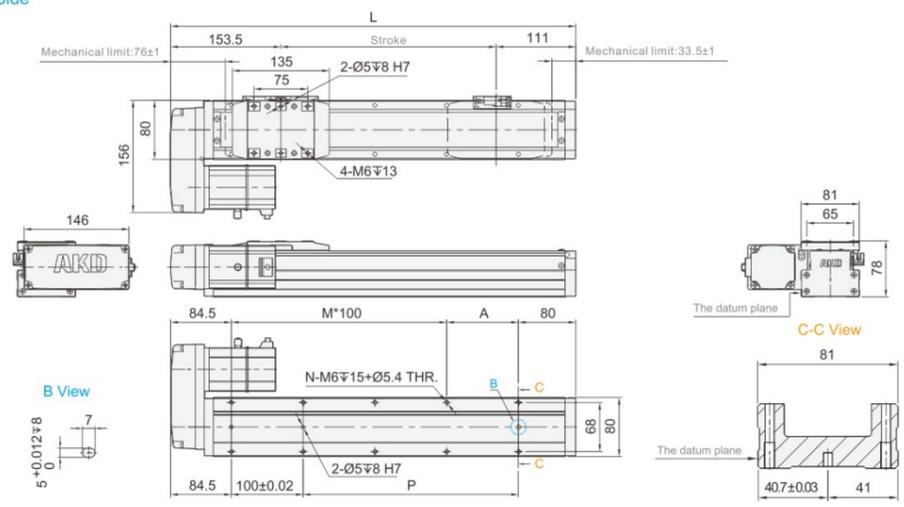
(Unit:mm)



Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
A	50	100	50	100	50	100	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	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.91	4.29	4.70	5.00	5.35	5.68	6.00	6.35	6.64	6.97	7.41	7.71	8.12	8.41	8.65	8.96	9.37	9.62	10.01	10.28	10.70	11.12

BL Motor Left Side

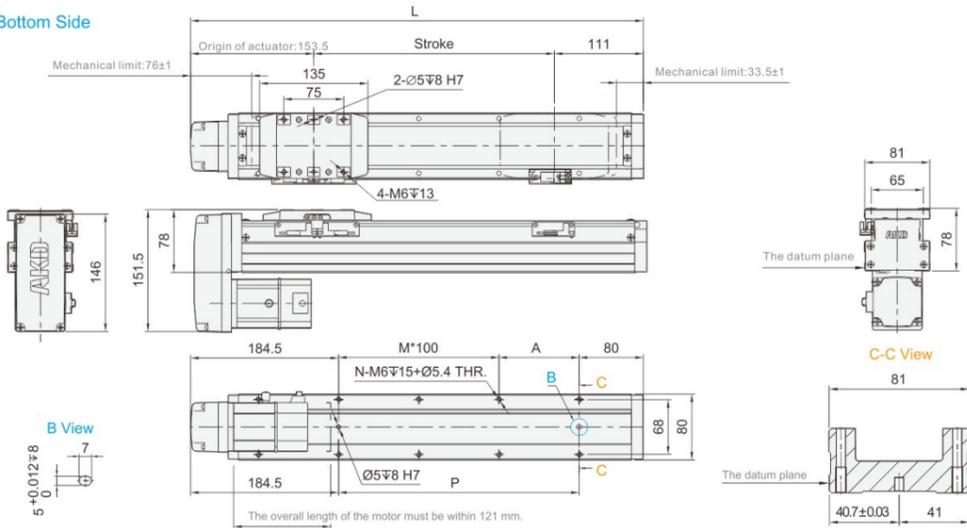
(Unit:mm)



Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	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	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

BM Motor Bottom Side

(Unit:mm)

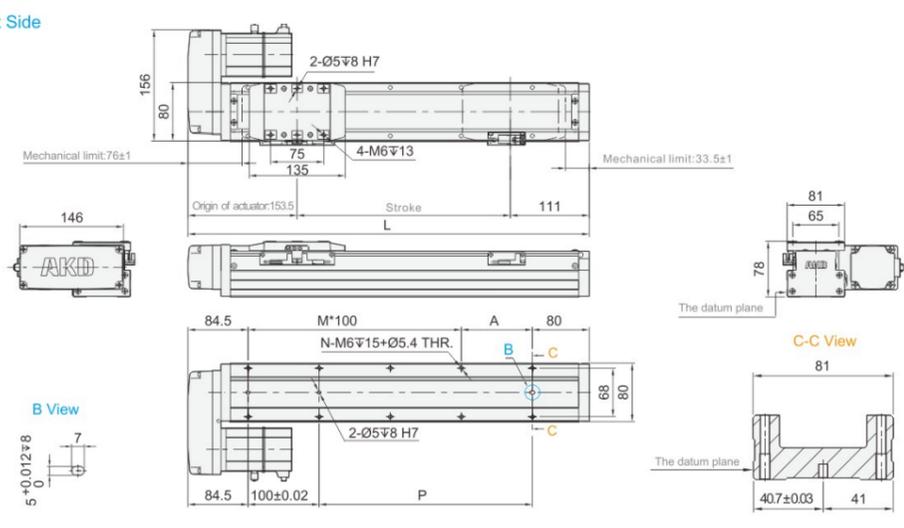


Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

*When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BR Motor Right Side

(Unit:mm)



Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	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	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

GTHA8

Ball Screw Drive

GTHA8



Specification		Sensor Layout		
Repeatability (mm)	±0.01			
Ball Screw Lead (mm)	5	10	20	
Maximum Speed (mm/s) ×1	250	500	1000	
Maximum Payload	Horizontal (kg)	50	30	18
	Vertical (kg)	15	8	3
Rated Thrust (N)	1388	694	347	
Stroke / Pitch (mm) ×2	50-1100mm/50 mm Pitch			
AC Servo Motor Output (W)	400			
Ball Screw Ø (mm)	C7φ16			
Coupling (mm)	10X14			
Home Sensor	Outside	EE-SX674(NPN)		

DC 5~24V
 100mA Control output

※1 Acceleration and deceleration value is set 0.2 second.
 ※2 When the stroke is over 750mm, the run-out of the ballscrew will occur. We recommend to low down the working speed under this circumstances.

Allowable Moment

Horizontal Installation		Wall Installation			Vertical Installation				
Lead	Weight	A	B	C	Lead	Weight	A	C	
5	20kg	1560	153	237	5	20kg	214	1435	
	35kg	890	81	126		10	15kg	220	220
	50kg	550	53	82			-	-	-
10	10kg	1730	286	412	10		5kg	589	589
	20kg	839	136	196		20	8kg	368	368
	30kg	541	86	124			-	-	-
20	6kg	1213	403	493	20		3kg	935	935
	9kg	800	264	323		-	-	-	
	18kg	592	194	238		-	-	-	

Static Loading Moment

Moment	Value (Unit: mm)
MY	318
MP	318
MR	626

※ The torque value in the chart indicate the center of gravity.
 ※ Operation life is 10,000km when the product is using under the specified conditions.
 ※ Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

Ordering Method

GTHA8 - L 10 - 300 - BC - P40 - C4 - D123

Model: GTHA8 - L 10 - 300 - BC - P40 - C4 - D123

Stroke: 50-1100mm (50 mm Pitch)

Motor location: BC (Motor Exposed)

Motor code: T (40) - 400W

Original and limit switch: C4 (External 3 NPN photoelectric switches)

Accuracy: L (Standard accuracy)

Screw lead: 5mm, 10mm, 20mm

Motor code details:

T	40	400W
P	Panasonic servo	
T	It generally refers to Mingzhi, Inovance, HCFA, Delta, Yaskawa, Mitsubishi and other	
B	Standard stepping motor	57 Stepping motor frame number

Original and limit switch details:

C4	External 3 NPN photoelectric switches
C4P	External 3 PNP photoelectric switches
E5	Without switches, it is equipped with sensing plate and bracket
E0	Without switches, sensing plate and bracket

When choosing the stroke 50, there are following limits:
 1. The origin and limit switches need to be placed on different sides.
 2. The sensing plates shall be mounted at both sides of actuator base.

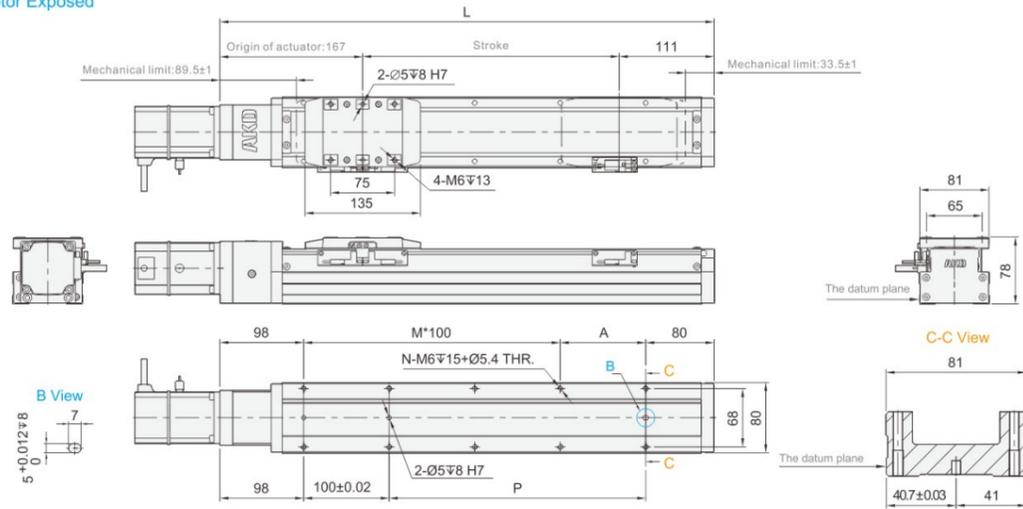
GTHA8

Ball Screw Drive

GTHA8

BC Motor Exposed

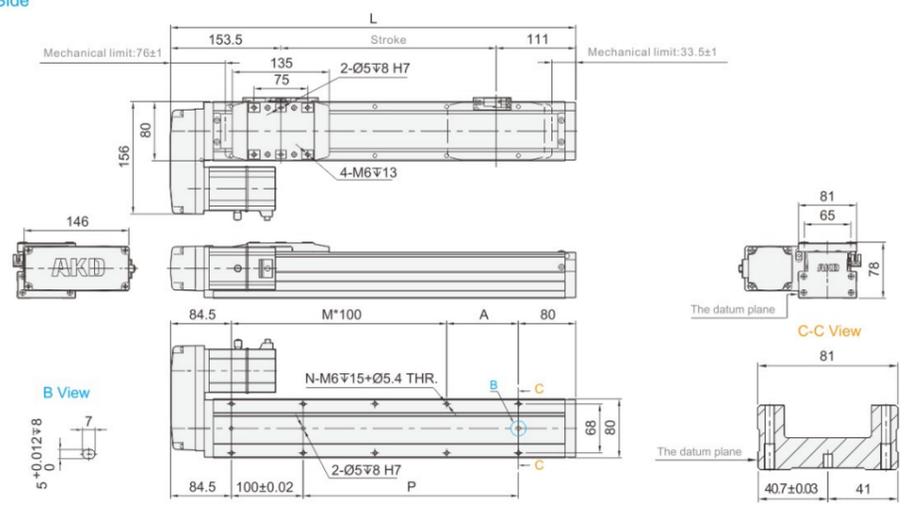
(Unit: mm)



Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
A	50	100	50	100	50	100	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	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.91	4.29	4.70	5.00	5.35	5.68	6.00	6.35	6.64	6.97	7.41	7.71	8.12	8.41	8.65	8.96	9.37	9.62	10.01	10.28	10.70	11.12

BL Motor Left Side

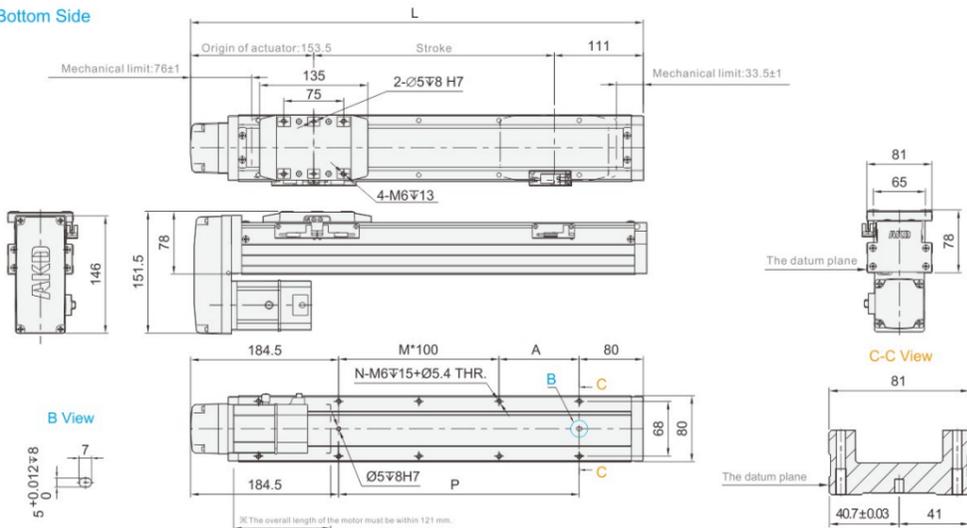
(Unit: mm)



Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	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	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

BM Motor Bottom Side

(Unit: mm)

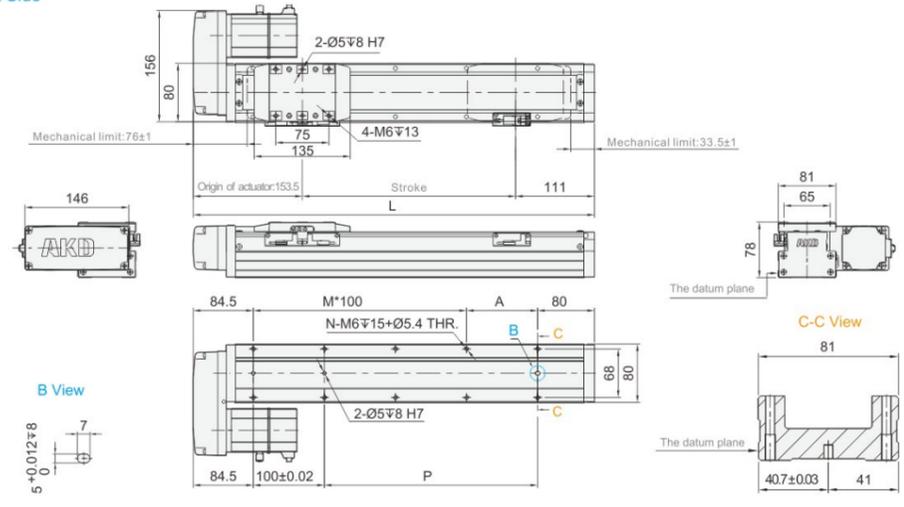


Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
N	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

*When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BR Motor Right Side

(Unit: mm)



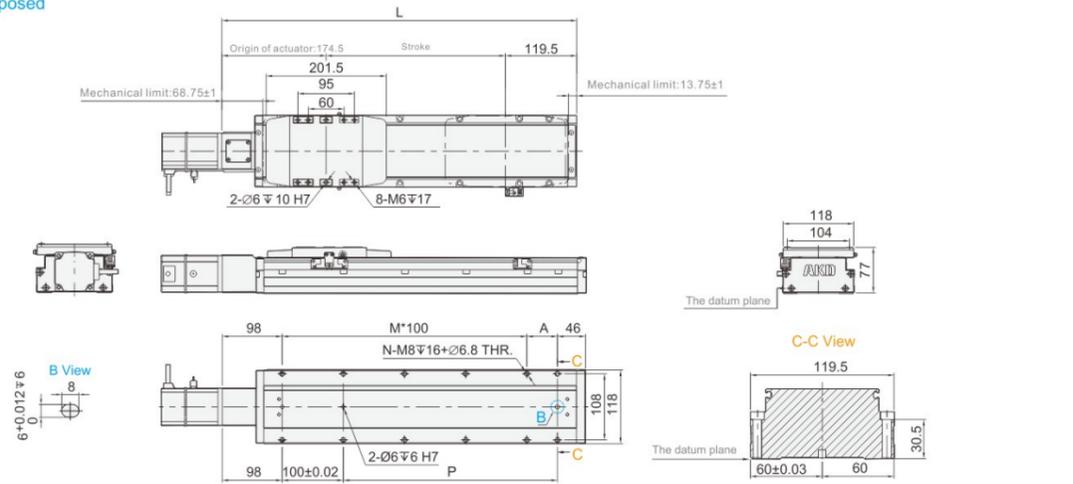
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5	1364.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
P	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
KG	3.95	4.33	4.74	5.09	5.39	5.72	6.04	6.39	6.68	7.01	7.45	7.75	8.16	8.45	8.69	9.00	9.41	9.66	10.08	10.32	10.74	11.16

GTHA12

Ball Screw Drive

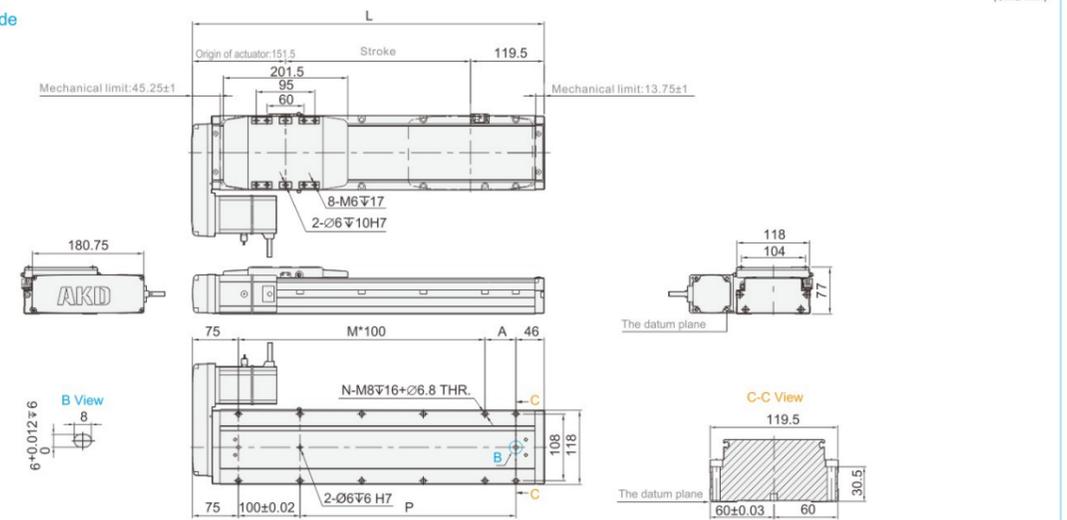
GTHA12

BC Motor Exposed



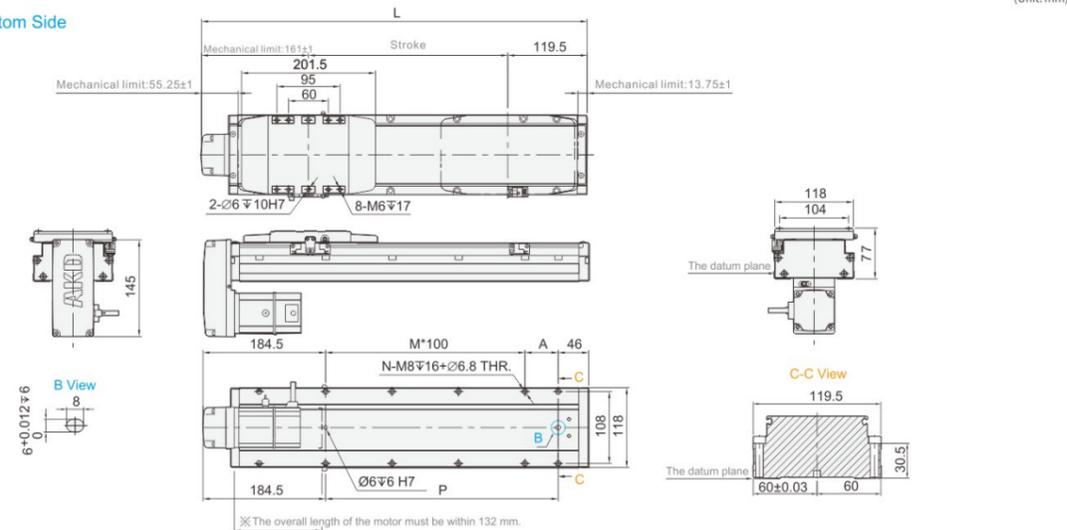
Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	344	394	444	494	544	594	644	694	744	794	844	894	944	994	1044	1094	1144	1194	1244	1294	1344	1394	1444	1494	1544
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	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
KG	5.05	5.4	5.75	6.1	6.45	6.8	7.15	7.5	7.85	8.2	8.55	8.9	9.25	9.6	9.95	10.3	10.65	11	11.35	11.7	12.05	12.4	12.75	13.1	13.45

BL Motor Left Side



Stroke	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
L	321	371	421	471	521	571	621	671	721	771	821	871	921	971	1021	1071	1121	1171	1221	1271	1321	1371	1421	1471	1521
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	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
KG	5.25	5.6	5.95	6.3	6.65	7	7.35	7.7	8.05	8.4	8.75	9.1	9.45	9.8	10.15	10.85	11.2	11.55	11.9	12.25	12.6	12.56	12.91	13.26	13.61

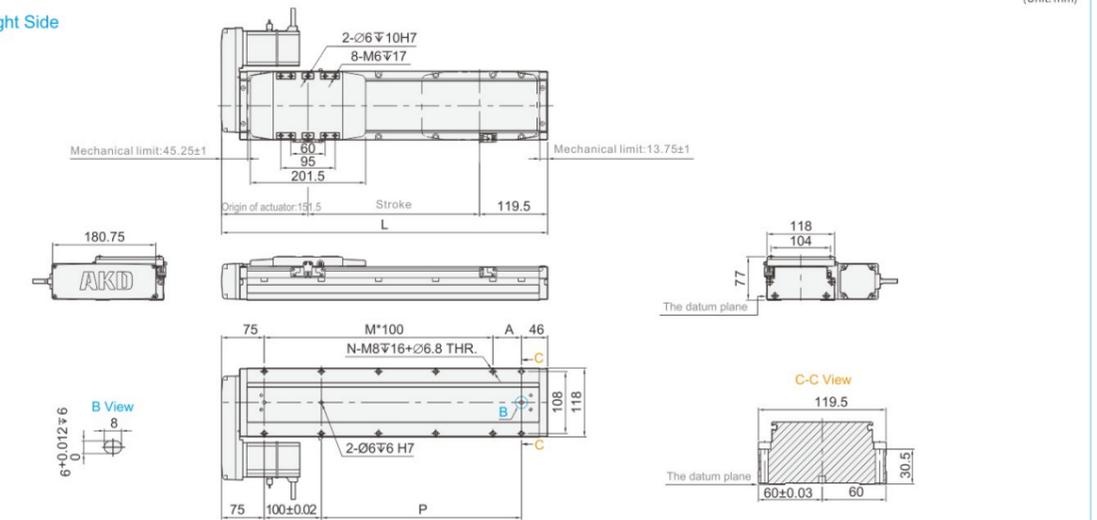
BM Motor Bottom Side



Stroke	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
L	330.5	380.5	430.5	480.5	530.5	580.5	630.5	680.5	730.5	780.5	830.5	880.5	930.5	980.5	1030.5	1080.5	1130.5	1180.5	1230.5	1280.5	1330.5	1380.5	1430.5	1480.5	1530.5
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12
N	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28
P	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
KG	5.21	5.56	5.91	6.26	6.61	6.96	7.31	7.66	8.01	8.36	8.71	9.06	9.41	9.76	10.11	10.46	10.81	11.16	11.51	11.86	12.21	12.56	12.91	13.26	13.61

※ When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BR Motor Right Side

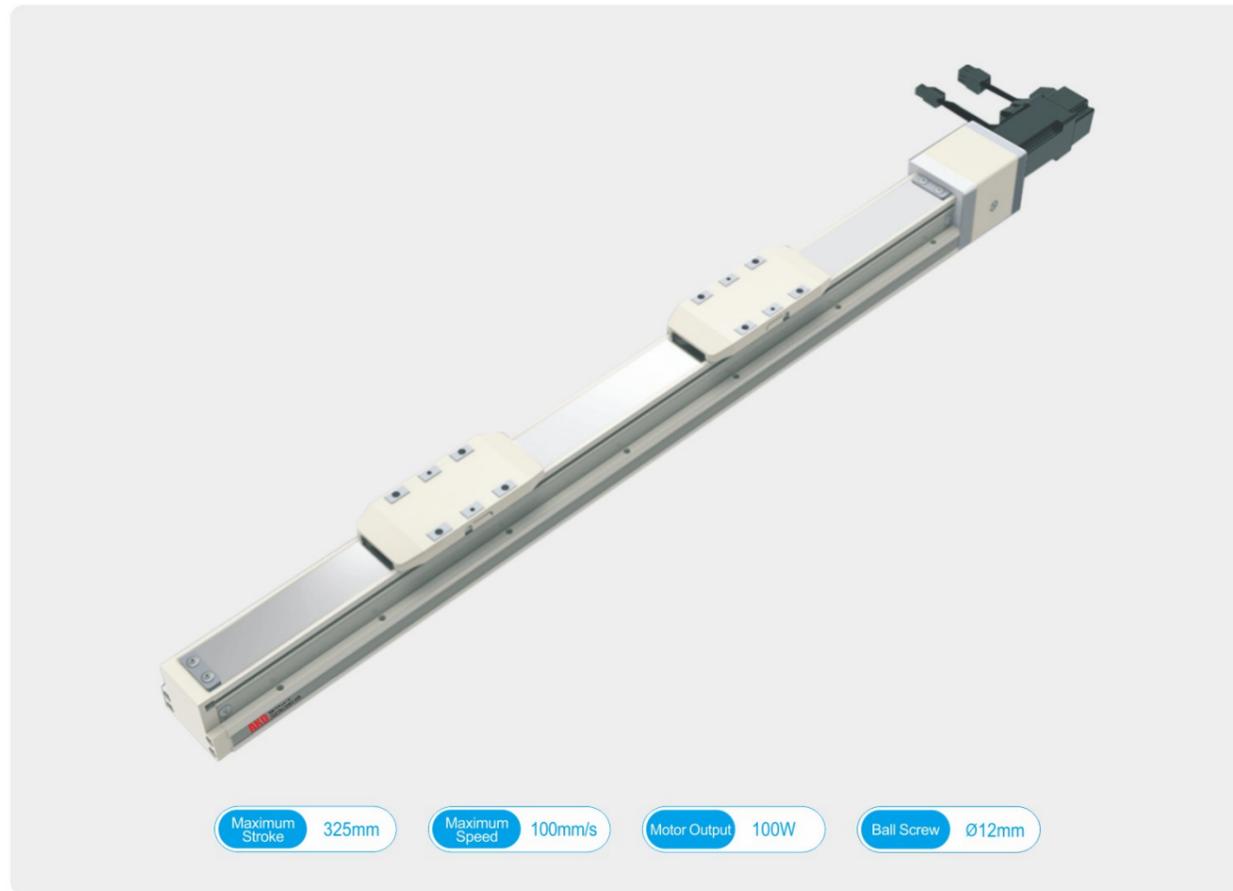


Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
L	321	371	421	471	521	571	621	671	721	771	821	871	921	971	1021	1071	1121	1171	1221	1271	1321	1371	1421	1471	1521
A	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
P	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
KG	5.25	5.6	5.95	6.3	6.65	7	7.35	7.7	8.05	8.4	8.75	9.1	9.45	9.8	10.15	10.85	11.2	11.55	11.9	12.25	12.6	12.56	12.91	13.26	13.61

GTHA5S

Ball Screw Drive

GTHA5S



Specification		Sensor Layout	
Repeatability (mm)	±0.01		
Ball Screw Lead (mm)	2		
Maximum Speed (mm/s) ※1	100		
Maximum Payload	Horizontal (kg)		30 (Dual carriage)
	Vertical (kg)		10 (Dual carriage)
Rated Thrust (N)	854		
Stroke / Pitch (mm) ※2	25-325mm/ 50 mm Pitch		
AC Servo Motor Output (W)	100		
Ball Screw Ø (mm)	C7φ12		
Coupling (mm)	7X8		
Home Sensor	Outside	EE-SX674(NPN)	

※1 Acceleration and deceleration value is set 0.2 second.
 ※2 Available lead please consult our salesman.

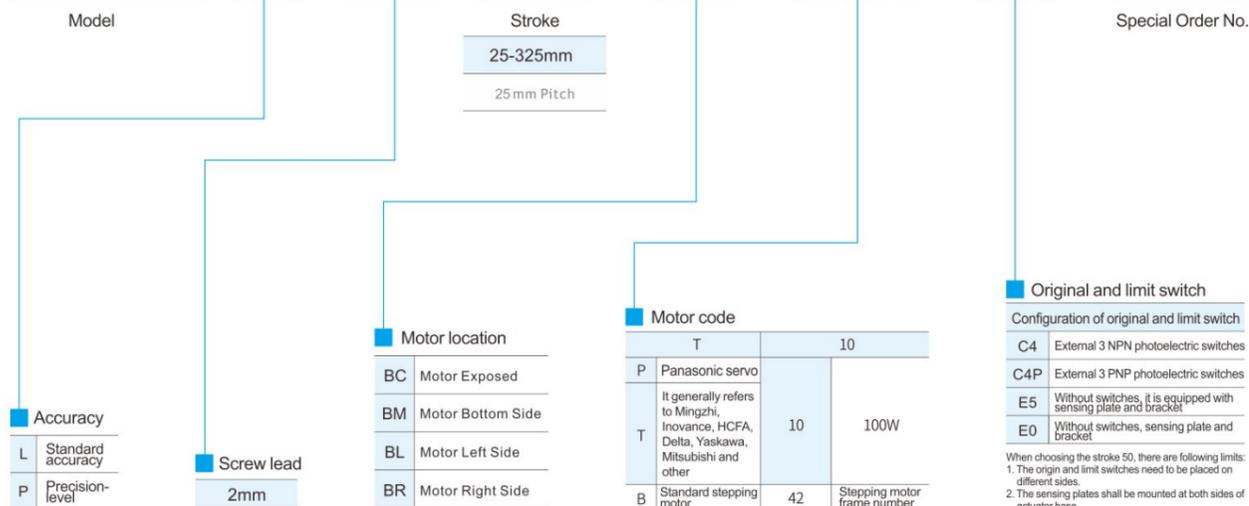
Allowable Moment					
	(Unit: mm)				
	Horizontal Installation	A	B	C	
	2 Lead	10kg	900	100	135
		20kg	700	45	60
30kg		550	25	35	
	(Unit: mm)				
	Wall Installation	A	B	C	
	2 Lead	10kg	135	100	900
		20kg	60	45	700
30kg		37	27	550	
	(Unit: mm)				
	Vertical Installation	A	C		
	2 Lead	6kg	180	180	
		8kg	135	135	
10kg		110	110		

Static Loading Moment		
	(Unit: mm)	
	MY	103
	MP	103
MR	144	

※The torque value in the chart indicate the center of gravity.
 ※ Operation life is 10,000km when the product is using under the specified conditions.
 ※ Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

Ordering Method

GTHA5S - L 2 - 300 - BC - P10 - C4 - D123



- GTHA Technical data
- GTHA4
- GTHA5
- GTHA8
- GTHA12
- GTHA5S**
- GTHA8S

- GTHA Technical data
- GTHA4
- GTHA5
- GTHA8
- GTHA12
- GTHA5S**
- GTHA8S

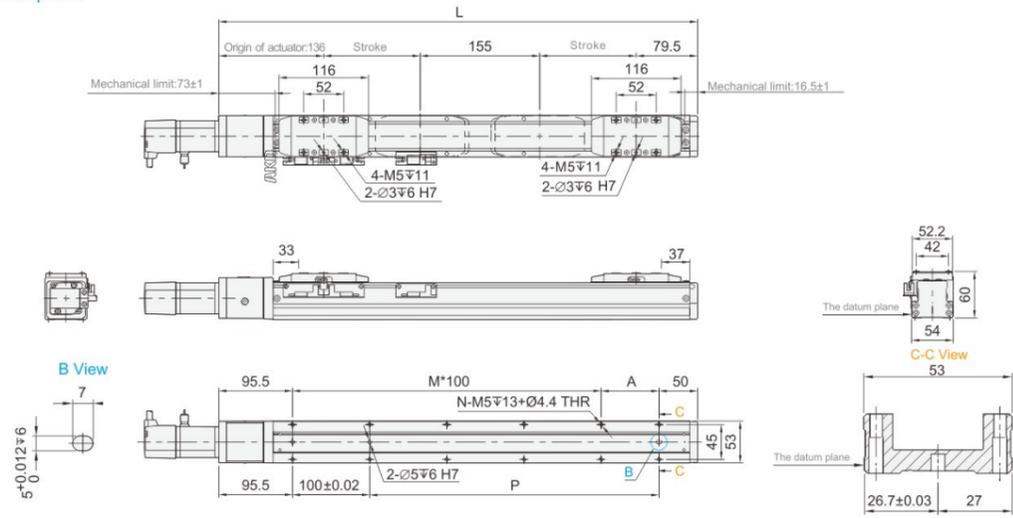
GTHA5S

Ball Screw Drive

GTHA5S

BC Motor Exposed

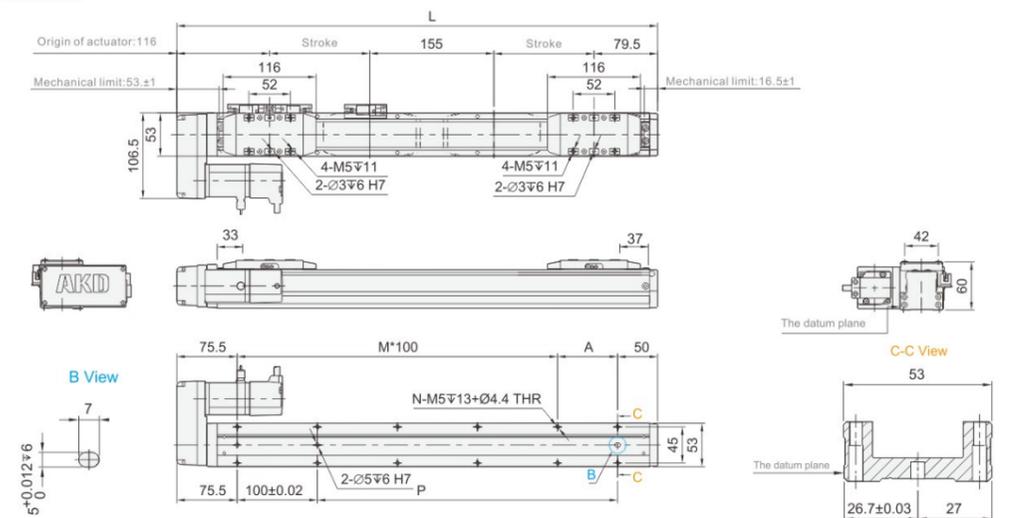
(Unit: mm)



Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325
L	420.5	470.5	520.5	570.5	620.5	670.5	720.5	770.5	820.5	870.5	920.5	970.5	1020.5
A	75	25	75	25	75	25	75	25	75	25	75	25	75
M	2	3	3	4	4	5	5	6	6	7	7	8	8
N	8	10	10	12	12	14	14	16	16	18	18	20	20
P	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.82	3.01	3.21	3.41	3.6	3.8	4	4.19	4.39	4.59	4.78	4.98	5.18

BL Motor Left Side

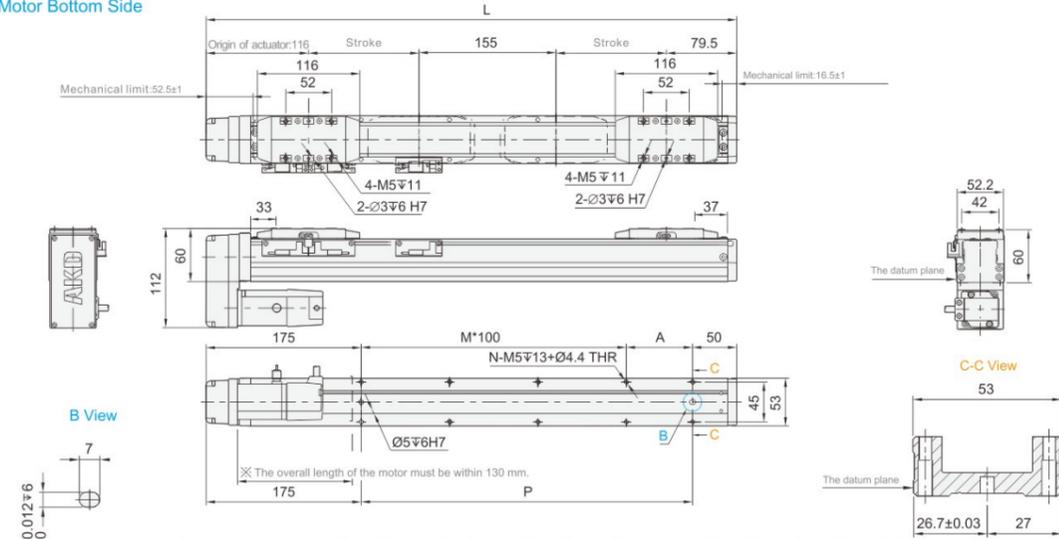
(Unit: mm)



Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325
L	400.5	450.5	500.5	550.5	600.5	650.5	700.5	750.5	800.5	850.5	900.5	950.5	1000.5
A	75	25	75	25	75	25	75	25	75	25	75	25	75
M	2	3	3	4	4	5	5	6	6	7	7	8	8
N	8	10	10	12	12	14	14	16	16	18	18	20	20
P	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.99	3.18	3.38	3.58	3.77	3.97	4.17	4.36	4.56	4.76	4.95	5.15	5.35

BM Motor Bottom Side

(Unit: mm)

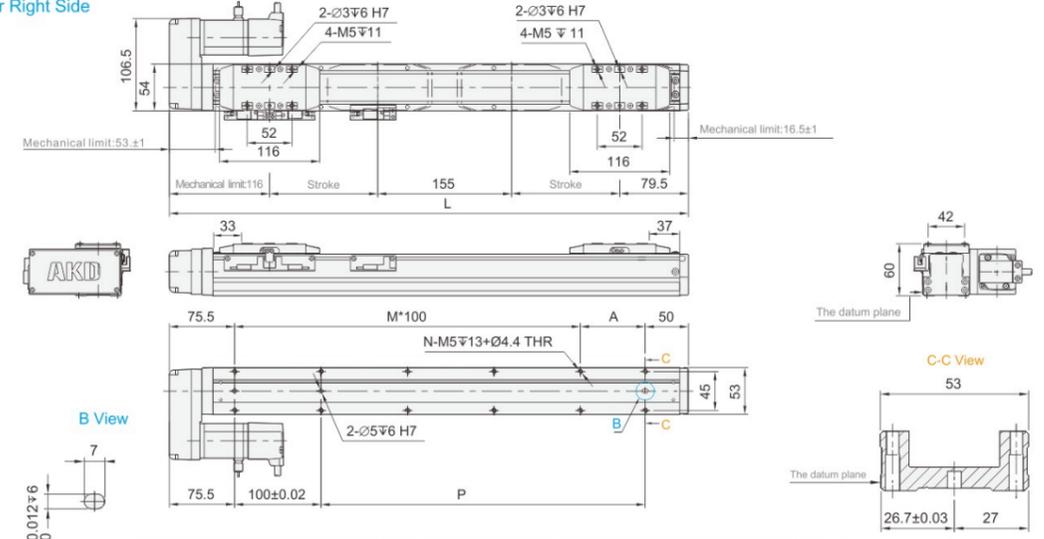


Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325
L	400.5	450.5	500.5	550.5	600.5	650.5	700.5	750.5	800.5	850.5	900.5	950.5	1000.5
A	75	25	75	25	75	25	75	25	75	25	75	25	75
M	1	2	2	3	3	4	4	5	5	6	6	7	7
N	6	8	8	10	10	12	12	14	14	16	16	18	18
P	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.99	3.18	3.38	3.58	3.77	3.97	4.17	4.36	4.56	4.76	4.95	5.15	5.35

※ When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BR Motor Right Side

(Unit: mm)

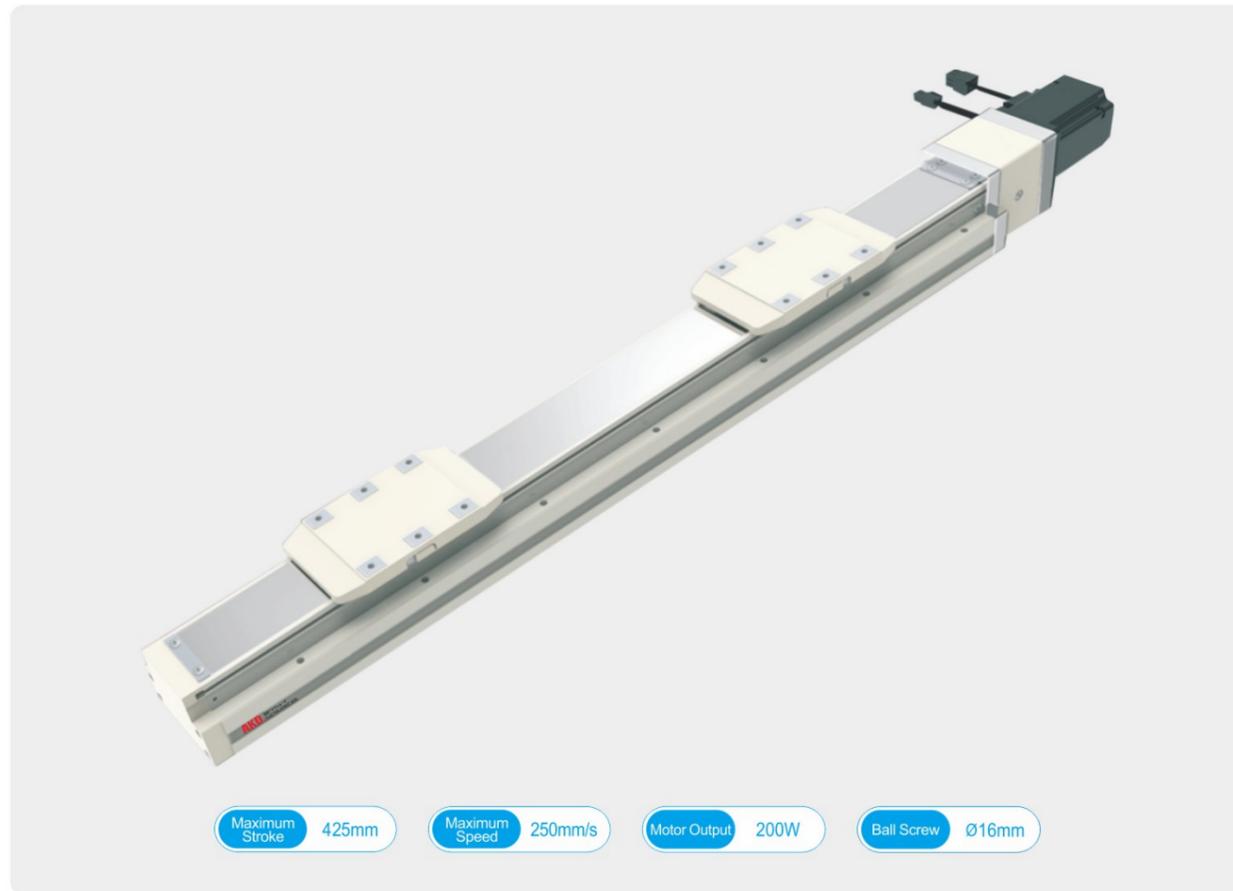


Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325
L	400.5	450.5	500.5	550.5	600.5	650.5	700.5	750.5	800.5	850.5	900.5	950.5	1000.5
A	75	25	75	25	75	25	75	25	75	25	75	25	75
M	2	3	3	4	4	5	5	6	6	7	7	8	8
N	8	10	10	12	12	14	14	16	16	18	18	20	20
P	175	225	275	325	375	425	475	525	575	625	675	725	775
KG	2.99	3.18	3.38	3.58	3.77	3.97	4.17	4.36	4.56	4.76	4.95	5.15	5.35

GTHA8S

Ball Screw Drive

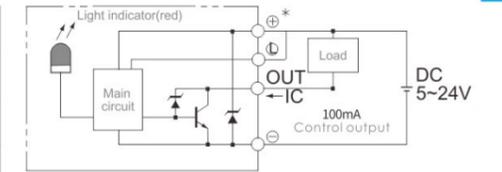
GTHA8S



Specification

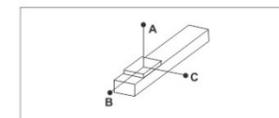
Spec	Repeatability (mm)	±0.01	
	Ball Screw Lead (mm)	5	
	Maximum Speed (mm/s) ※1	250	
	Maximum Payload	Horizontal (kg)	50 (Dual carriage)
		Vertical (kg)	15 (Dual carriage)
Parts	Rated Thrust (N)	683	
	Stroke / Pitch (mm) ※2	25-450mm/ 25 mm Pitch	
	AC Servo Motor Output (W)	200	
	Ball Screw Ø (mm)	C7φ16	
	Coupling (mm)	10x14/11(1)	
Home Sensor	Outside	EE-SX674(NPN)	

Sensor Layout

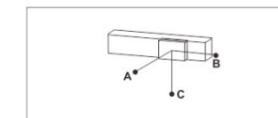


※1 Acceleration and deceleration value is set 0.2 second.
 ※2 Available lead please consult our salesman.
 1: Motor (200W) Shaft Diameter: Panasonic: 11mm; Other: 14mm.

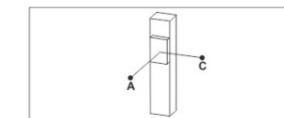
Allowable Moment



(Unit: mm)			
Horizontal Installation	A	B	C
5 Lead	20kg	1560	237
	35kg	890	126
	50kg	550	82

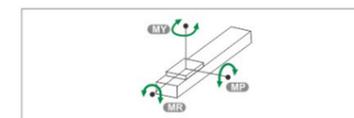


(Unit: mm)			
Wall Installation	A	B	C
5 Lead	20kg	214	1435
	35kg	113	845
	50kg	74	506



(Unit: mm)		
Vertical Installation	A	C
5 Lead	10kg	331
	15kg	220
	-	-

Static Loading Moment



(Unit: mm)	
MY	318
MP	318
MR	626

※The torque value in the chart indicate the center of gravity.
 ※ Operation life is 10,000km when the product is using under the specified conditions.
 ※ Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

Ordering Method

GTHA8S - L 5 - 300 - BC - P20 - C4 - D123

Model: GTHA8S - L Stroke: 5 - 300 - 25mm Pitch Motor location: BC - P20 Original and limit switch: C4 - D123 Special Order No.

Accuracy	Screw lead	Motor code	Original and limit switch
L Standard accuracy	5mm	T 20 200W	C4 External 3 NPN photoelectric switches
P Precision-level		P Panasonic servo	C4P External 3 PNP photoelectric switches
		BL Motor Left Side	E5 Without switches, it is equipped with sensing plate and bracket
		BR Motor Right Side	E0 Without switches, sensing plate and bracket

When choosing the stroke 50, there are following limits:
 1. The origin and limit switches need to be placed on different sides.
 2. The sensing plates shall be mounted at both sides of actuator base.

GTHA8S

Ball Screw Drive

GTHA8S

BC Motor Exposed (Unit: mm)

Stroke: 25, 50, 75, 100, 125, 150, 175, 200, 225, 250, 275, 300, 325, 350, 375, 400, 425

Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425
L	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
KG	6.64	7.00	7.37	7.73	8.10	8.46	8.83	9.19	9.56	9.92	10.29	10.65	11.02	11.38	11.75	12.11	12.48

BL Motor Left Side (Unit: mm)

Stroke: 25, 50, 75, 100, 125, 150, 175, 200, 225, 250, 275, 300, 325, 350, 375, 400, 425

Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48

BM Motor Bottom Side (Unit: mm)

Stroke: 25, 50, 75, 100, 125, 150, 175, 200, 225, 250, 275, 300, 325, 350, 375, 400, 425

Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48

※The overall length of the motor must be within 121 mm.

※When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BR Motor Right Side (Unit: mm)

Stroke: 25, 50, 75, 100, 125, 150, 175, 200, 225, 250, 275, 300, 325, 350, 375, 400, 425

Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425
L	514.5	564.5	615.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48

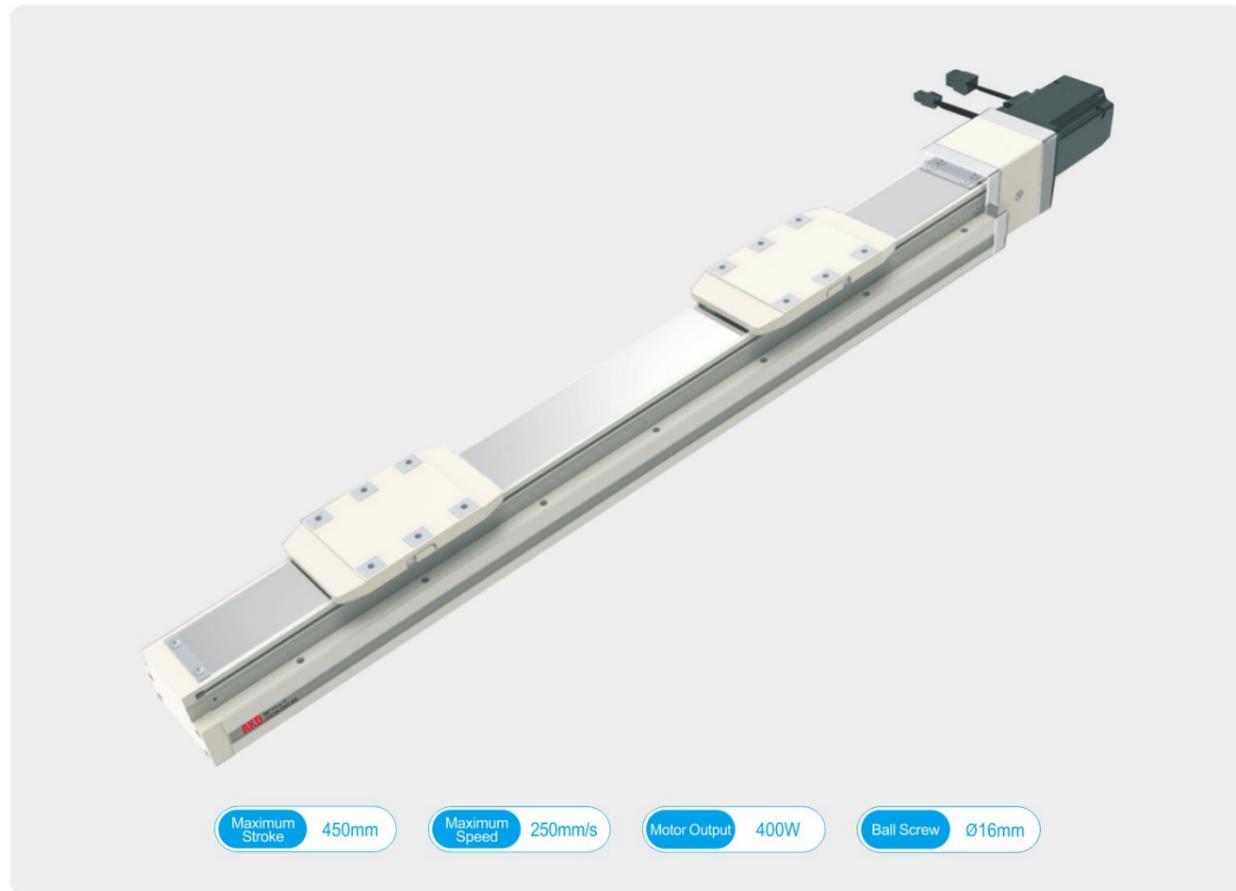
GTHA
Technical data
GTHA4
GTHA5
GTHA8
GTHA12
GTHA5S
GTHA8S

GTHA
Technical data
GTHA4
GTHA5
GTHA8
GTHA12
GTHA5S
GTHA8S

GTHA8S

Ball Screw Drive

GTHA8S



Specification		Sensor Layout	
Repeatability (mm)	±0.01		
Ball Screw Lead (mm)	5		
Maximum Speed (mm/s) ※1	250		
Maximum Payload	Horizontal (kg)	50 (Dual carriage)	
	Vertical (kg)	15 (Dual carriage)	
Rated Thrust (N)	1388		
Stroke / Pitch (mm) ※2	25-450mm/25 mm Pitch		
AC Servo Motor Output (W)	400		
Ball Screw Ø (mm)	C7φ16		
Coupling (mm)	10x14		
Home Sensor	Outside	EE-SX674(NPN)	

※1 Acceleration and deceleration value is set 0.2 second.
 ※2 Available lead please consult our salesman.

Allowable Moment				
(Unit: mm)				
Horizontal Installation	A	B	C	
	20kg	1560	153	237
	35kg	890	81	126
50kg	550	53	82	
(Unit: mm)				
Wall Installation	A	B	C	
	20kg	214	153	1435
	35kg	113	81	845
50kg	74	53	506	
(Unit: mm)				
Vertical Installation	A	C		
	10kg	331	331	
	15kg	220	220	
-	-	-		

Static Loading Moment	
MY	318
MP	318
MR	626

※The torque value in the chart indicate the center of gravity.
 ※ Operation life is 10,000km when the product is using under the specified conditions.
 ※Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

Ordering Method

GTHA8S - L 5 - 300 - BC - P40 - C4 - D123

Model Stroke Motor location Motor code Original and limit switch Special Order No.

Standard accuracy 25-450mm BC Motor Exposed T Configuration of original and limit switch C4 External 3 NPN photoelectric switches

Precision-level 25 mm Pitch BM Motor Bottom Side P Panasonic servo C4P External 3 PNP photoelectric switches

5mm BL Motor Left Side T It generally refers to Mingzhi, Inovance, HCFA, Delta, Yaskawa, Mitsubishi and other E5 Without switches, it is equipped with sensing plate and bracket

400W BR Motor Right Side B Standard stepping motor E0 Without switches, sensing plate and bracket

40 400W When choosing the stroke 50, there are following limits:
 1. The origin and limit switches need to be placed on different sides.
 2. The sensing plates shall be mounted at both sides of actuator base.

GTHA8S

Ball Screw Drive

GTHA8S

BC Motor Exposed (Unit: mm)

Mechanical limit: 89.5±1

Mechanical limit: 33.5±1

Origin of actuator: 162

Stroke: 210

Stroke: 106

4-M6 ∇ 13

2- \varnothing 5 ∇ 8 H7

135

75

44

46

81

65

78

The datum plane

C-C View

81

The datum plane

98

M*100

A

80

68

80

N-M6 ∇ 15+ \varnothing 5.4 THR.

B

C

2- \varnothing 5 ∇ 8 H7

P

98

100±0.02

5^{+0.012 ∇ 8}₀

7

407±0.03

41

Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425
L	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
KG	6.64	7.00	7.37	7.73	8.10	8.46	8.83	9.19	9.56	9.92	10.29	10.65	11.02	11.38	11.75	12.11	12.48

BL Motor Left Side (Unit: mm)

Mechanical limit: 76±1

Mechanical limit: 33.5±1

Origin of actuator: 148.5

Stroke: 210

Stroke: 106

4-M6 ∇ 13

2- \varnothing 5 ∇ 8 H7

135

75

44

46

81

65

78

The datum plane

C-C View

81

The datum plane

84.5

M*100

A

80

68

80

N-M6 ∇ 15+ \varnothing 5.4 THR.

B

C

2- \varnothing 5 ∇ 8 H7

P

84.5

100±0.02

5^{+0.012 ∇ 8}₀

7

407±0.03

41

Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48

BM Motor Bottom Side (Unit: mm)

Mechanical limit: 76±1

Mechanical limit: 33.5±1

Origin of actuator: 148.5

Stroke: 210

Stroke: 106

4-M6 ∇ 13

2- \varnothing 5 ∇ 8 H7

135

75

44

46

81

65

78

The datum plane

C-C View

81

The datum plane

151.5

78

146

184.5

M*100

A

80

68

80

N-M6 ∇ 15+ \varnothing 5.4 THR.

B

C

2- \varnothing 5 ∇ 8 H7

P

184.5

100±0.02

5^{+0.012 ∇ 8}₀

7

407±0.03

41

※The overall length of the motor must be within 121 mm.

Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425
L	514.5	564.5	614.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	24	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48

※When motor with brake assembled on lower side, or the total length over than spec limit, it may not use standard pinhole. Please contact our sales department if you need more information & requirement.

BR Motor Right Side (Unit: mm)

Mechanical limit: 76±1

Mechanical limit: 33.5±1

Origin of actuator: 148.5

Stroke: 210

Stroke: 106

4-M6 ∇ 13

2- \varnothing 5 ∇ 8 H7

135

75

44

46

81

65

78

The datum plane

C-C View

81

The datum plane

84.5

M*100

A

80

68

80

N-M6 ∇ 15+ \varnothing 5.4 THR.

B

C

2- \varnothing 5 ∇ 8 H7

P

84.5

100±0.02

5^{+0.012 ∇ 8}₀

7

407±0.03

41

Stroke	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425
L	514.5	564.5	615.5	664.5	714.5	764.5	814.5	864.5	914.5	964.5	1014.5	1064.5	1114.5	1164.5	1214.5	1264.5	1314.5
A	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11
N	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
P	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
KG	7.16	7.68	8.2	8.72	9.24	9.76	10.28	10.8	11.32	11.84	12.36	12.88	13.4	13.92	14.44	14.96	15.48