

Application	Standard Ball Screw Type	Standard Belt Type	Cleanroom Ball Screw Type	Cleanroom Belt Type
	GTH / GTY	ETB / M	GCH / ECH	ECB
				Reference



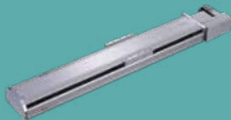
ECB Series

Cleanroom/Belt

CONTENTS

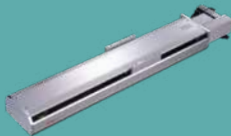
Cleanroom/Belt

MEDIUM
ECB14



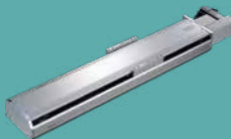
Width 135mm
Max. stroke 3050mm419
Recommended payload 25kg

LARGE
ECB17



Width 170mm
Max. stroke 4050mm425
Recommended payload 45kg

LARGE
ECB22



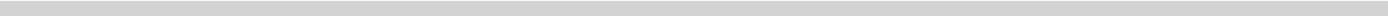
Width 220mm
Max. stroke 3500mm431
Recommended payload 85kg

Spec Index of Electric Actuator

ECB Belt Actuator-Slider Type

Env.	Drive Type	Model No.	Reducer Mechanism	Motor Output (w)	Width (mm)	Repeatability (mm)	Belt Spec		Maximum Payload(kg)		Max. Speed ^{*1} (mm/s)
							Belt Width(mm)	Lead(mm)	Horizontal	Vertical	
Cleanroom Environment	Timing Belt	ECB14	Yes	200W	135	±0.04	22	40	25		2400
		ECB17		400W	170		30	40	45		2400
		ECB22		750W	220		50	40	85		2400

*1: The highest speed is based on the maximum servo motor's rpm (3600).



Stroke(mm) & Maximum Speed (mms) ^{*2}																												Speed		Page
Stroke	50	300	450	600	800	900	1050	1200	1350	1500	1650	1800	1950	2100	2150	2300	2550	2600	2750	3050	3150	3300	3500	3600	3750	3900	4050			
																													3	
														2400															419	
																	2400												425	
																2400													431	

Application	Standard Ball Screw Type
GTH / GTY	Standard Belt Type
ETB / M	Cleanroom Ball Screw Type
GCH / ECH	Cleanroom Belt Type
ECB	Reference



Please consult our company website for a detailed description on selection requirements and nominal life calculations.

Ordering Method

ECB14 - L 40 - 100 - L - M20 - C 4 - 0001

Model

Belt Type

L	Clean belt
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Lead

40	40mm
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Stroke

50-3050mm
50 mm Increments

Motor Position

L	Motor Left Side
LU	Motor Left Upper Side
LD	Motor Left Lower Side
R	Motor Right Side
RU	Motor Right Upper Side
RD	Motor Right Lower Side

Attachment kit for motor

	M	P	Y	T
Mitsubishi	10	-	-	-
Panasonic	20	200W	-	-
Yaskawa	40	-	-	-
Delta	75	-	-	-

Home Sensor

Out Side	
C	Motor Side
D	Opposite Motor Side
No Sensor	
E	No Sensor

Limit Sensor

Out Side	
3	1Pc
4	2Pc
No Sensor	
5	No Sensor

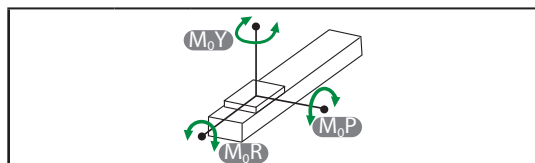
Special Order No.

Specification

	Belt	Lead		mm	40
		Maximum Rotating speed		rpm	3600
		Maximum linear speed		mm/s	2400
		Load factor			1.75
		Tis (Nominal Tension)		N	137
		Timax (Maximum Tension)		N	261
	Linear Guide	Dynamic horizontal	100 Km of travel	N	25832
			1000 Km of travel	N	11991
			10000 Km of travel	N	5565
		Static horizontal		N	58342
	Fixed bearing	Basic dynamic load rating Cr		N	10000
		Static load rating Cor		N	18800
	Common Spec	Repeatability		mm	±0.04
		Allowable input torque		N.m	2.2
		Maximum acceleration		m/s ²	5
		Friction coefficient			0.03
		Stroke (increments)		mm	50-3050 (50 increments)
		Ambient temperature※1		°C	0~+40

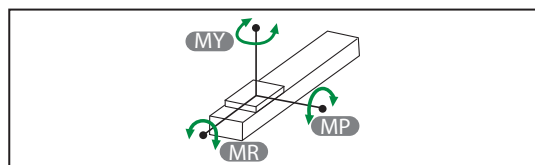
※1 For extreme temperatures: -20°C ~80°C special greases are required.

Static Loading Moment



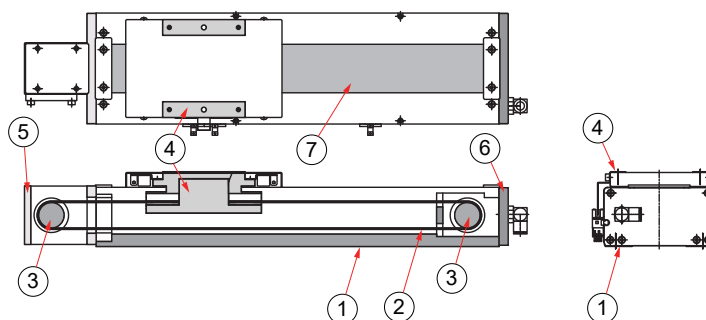
M_{0Y}	N.m	551
M_{0P}	N.m	552
M_{0R}	N.m	485

Dynamic Loading Moment



Travel	km	100	1000	10000
MY	N.m	222.8	103.4	48
MP	N.m	222.8	103.4	48
MR	N.m	221.4	102.8	47.7

Parts list



No.	Part Description	Material
1	Base Extrusion	AL6463
2	Belt	PU
3	Timing pulley	S45C
4	Carriage	AL6463
5	Input pulley support block	AL6463
6	Output pulley support block	AL6061
7	Steel Belt	SUS430

ECB Series

ECB10

ECB14

ECB17

ECB22

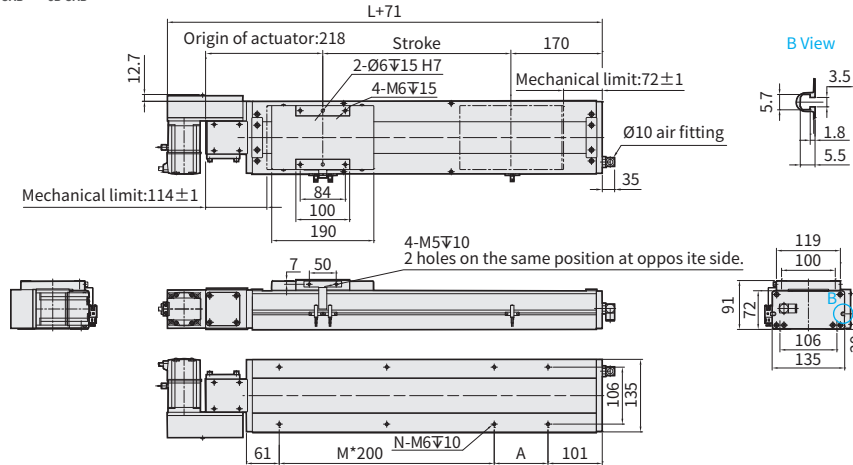


Motor Left Side



Download CAD data at www.toyorobot.com

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	1150	1200	1250	1300	1350	1400	1450	1500	1550
Limit Stroke (±1)	62	112	162	212	262	312	362	412	462	512	562	612	662	712	762	812	862	912	962	1012	1062	1112	1162	1212	1262	1312	1362	1412	1462	1512	1562
L	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538	1588	1638	1688	1738	1788	1838	1888	1938
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	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	8	8	
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	11.2	11.6	12	12.5	13	13.5	14	14.4	15	15.4	16	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9
Linear Speed mm/s	Lead40 2400																														

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
Limit Stroke (±1)	1612	1662	1712	1762	1812	1862	1912	1962	2012	2062	2112	2162	2212	2262	2312	2362	2412	2462	2512	2562	2612	2662	2712	2762	2812	2862	2912	2962	3012	3062
L	1988	2038	2088	2138	2188	2238	2288	2338	2388	2438	2488	2538	2588	2638	2688	2738	2788	2838	2888	2938	2988	3038	3088	3138	3188	3238	3288	3338	3388	3438
A	150	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	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.3	35.9	36.5	37.1	37.7	38.3	38.9	39.5	40.1	40.7	41.3	41.9	42.5	43.1	43.7	44.3	44.9
Linear Speed mm/s	Lead40 2400																													

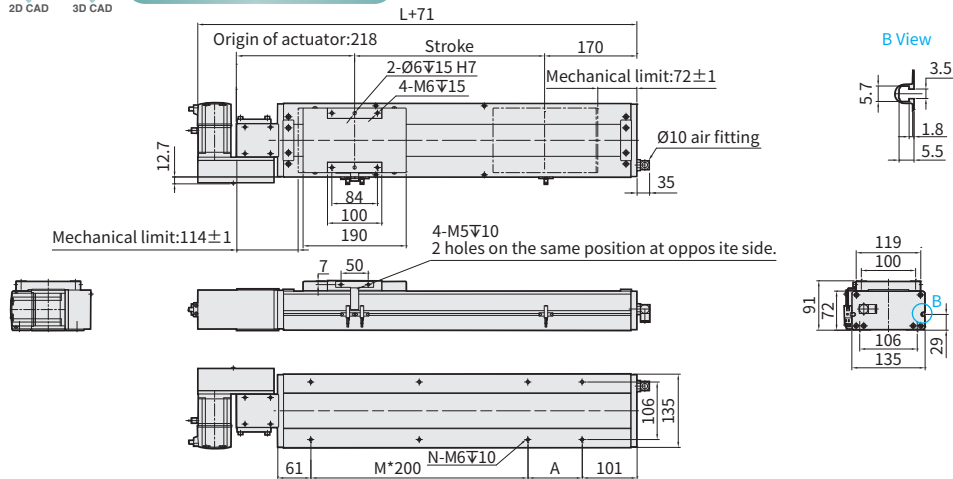


Motor Right Side



Download CAD data at www.toyorobot.com

Unit : mm

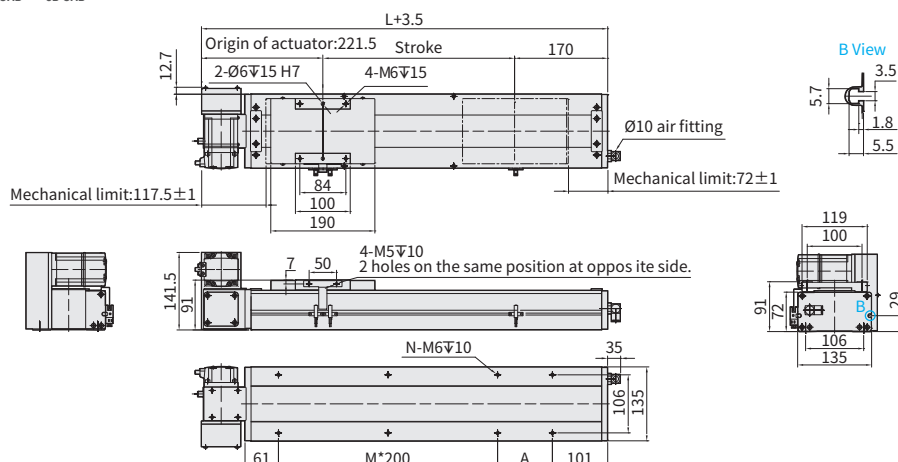


Stroke		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
Limit Stroke (±1)		62	112	162	212	262	312	362	412	462	512	562	612	662	712	762	812	862	912	962	1012	1062	1112	1162	1212	1262	1312	1362	1412	1462	1512	1562
L		438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538	1588	1638	1688	1738	1788	1838	1888	1938
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	50	100	150	200	50	100
M		0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	8	8	
N		4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG		11.2	11.6	12	12.5	13	13.5	14	14.4	15	15.4	16	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9
Linear Speed mm/s	Lead40	2400																														

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
Limit Stroke (±1)	1612	1662	1712	1762	1812	1862	1912	1962	2012	2062	2112	2162	2212	2262	2312	2362	2412	2462	2512	2562	2612	2662	2712	2762	2812	2862	2912	2962	3012	3062
L	1988	2038	2088	2138	2188	2238	2288	2338	2388	2438	2488	2538	2588	2638	2688	2738	2788	2838	2888	2938	2988	3038	3088	3138	3188	3238	3288	3338	3388	3438
A	150	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	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.3	35.9	36.5	37.1	37.7	38.3	38.9	39.5	40.1	40.7	41.3	41.9	42.5	43.1	43.7	44.3	44.9
Linear Speed mm/s	Lead40 2400																													

LU Motor Left Upper Side
[Download CAD data at www.toyo-robot.com](http://www.toyo-robot.com)

Unit : mm

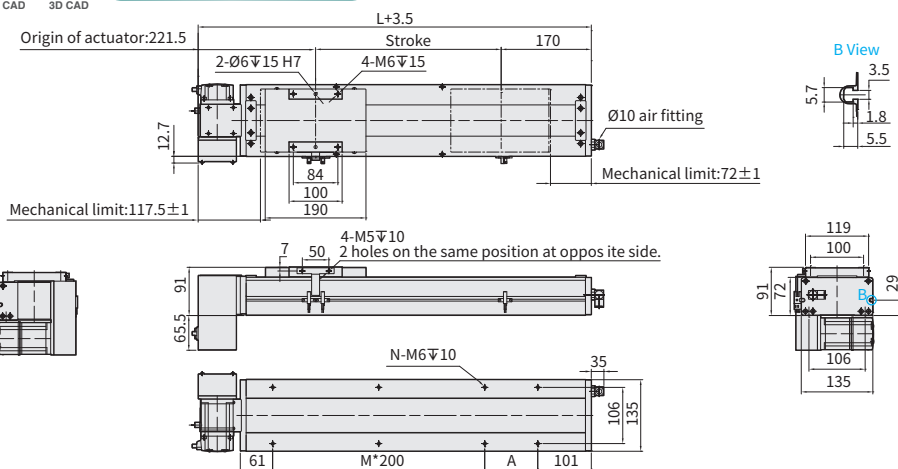


Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
Limit Stroke (±1)	62	112	162	212	262	312	362	412	462	512	562	612	662	712	762	812	862	912	962	1012	1062	1112	1162	1212	1262	1312	1362	1412	1462	1512	1562
L	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538	1588	1638	1688	1738	1788	1838	1888	1938
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	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	8	8	8
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	11.2	11.6	12	12.5	13	13.5	14	14.4	15	15.4	16	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9
Linear Speed mm/s	2400																														
Lead40																															

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
Limit Stroke (±1)	1612	1662	1712	1762	1812	1862	1912	1962	2012	2062	2112	2162	2212	2262	2312	2362	2412	2462	2512	2562	2612	2662	2712	2762	2812	2862	2912	2962	3012	3062
L	1988	2038	2088	2138	2188	2238	2288	2338	2388	2438	2488	2538	2588	2638	2688	2738	2788	2838	2888	2938	2988	3038	3088	3138	3188	3238	3288	3338	3388	3438
A	150	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	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.3	35.9	36.5	37.1	37.7	38.3	38.9	39.5	40.1	40.7	41.3	41.9	42.5	43.1	43.7	44.3	44.9
Linear Speed mm/s	2400																													
Lead40																														

RU Motor Right Upper Side
[Download CAD data at www.toyo-robot.com](http://www.toyo-robot.com)

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	1150	1200	1250	1300	1350	1400	1450	1500	1550
Limit Stroke (±1)	62	112	162	212	262	312	362	412	462	512	562	612	662	712	762	812	862	912	962	1012	1062	1112	1162	1212	1262	1312	1362	1412	1462	1512	1562
L	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538	1588	1638	1688	1738	1788	1838	1888	1938
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	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	8	8	8
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	11.2	11.6	12	12.5	13	13.5	14	14.4	15	15.4	16	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9
Linear Speed mm/s	Lead40	2400																													
Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	
Limit Stroke (±1)	1612	1662	1712	1762	1812	1862	1912	1962	2012	2062	2112	2162	2212	2262	2312	2362	2412	2462	2512	2562	2612	2662	2712	2762	2812	2862	2912	2962	3012	3062	
L	1988	2038	2088	2138	2188	2238	2288	2338	2388	2438	2488	2538	2588	2638	2688	2738	2788	2838	2888	2938	2988	3038	3088	3138	3188	3238	3288	3338	3388	3438	
A	150	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	50	100	150	200	
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	
KG	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.3	35.9	36.5	37.1	37.7	38.3	38.9	39.5	40.1	40.7	41.3	41.9	42.5	43.1	43.7	44.3	44.9	
Linear Speed mm/s	Lead40	2400																													

ECB Series

ECB10

ECB14M

ECB17M

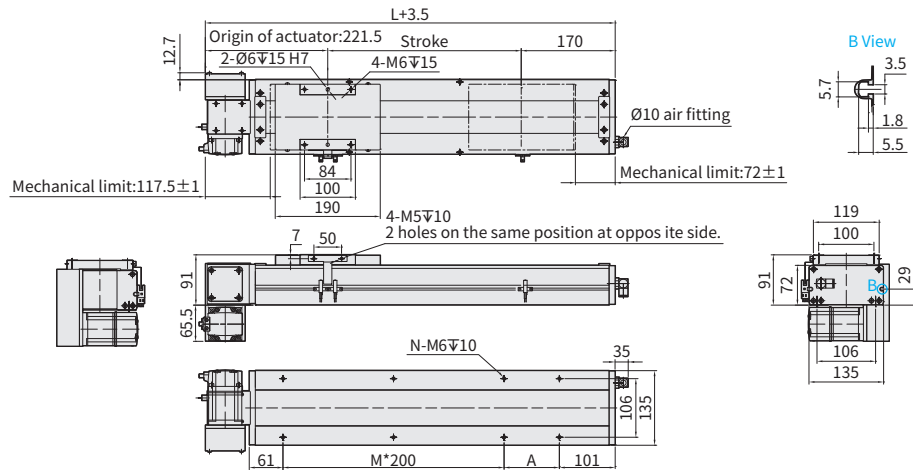
ECB22M

LD Motor Left Lower Side



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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	1150	1200	1250	1300	1350	1400	1450	1500	1550
Limit Stroke (±1)	62	112	162	212	262	312	362	412	462	512	562	612	662	712	762	812	862	912	962	1012	1062	1112	1162	1212	1262	1312	1362	1412	1462	1512	1562
L	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538	1588	1638	1688	1738	1788	1838	1888	1938
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	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	8	8	
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	11.2	11.6	12	12.5	13	13.5	14	14.4	15	15.4	16	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9
Linear Speed mm/s	2400																														
Lead40																															

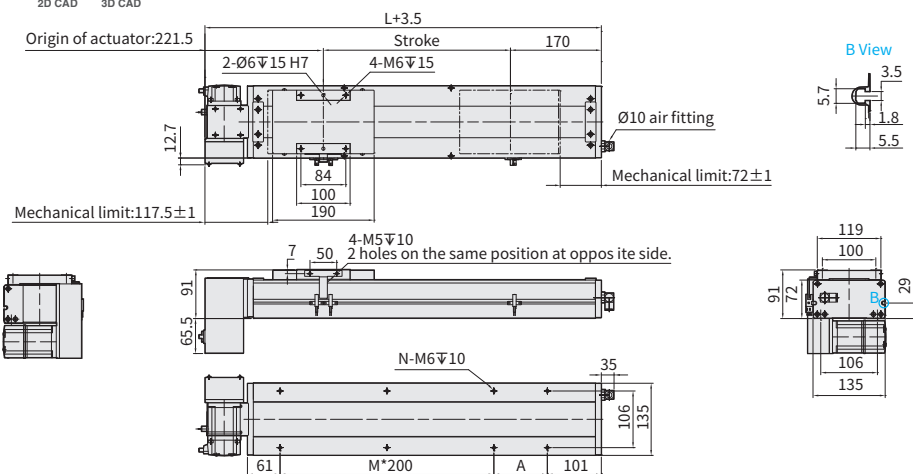
Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	
Limit Stroke (±1)	1612	1662	1712	1762	1812	1862	1912	1962	2012	2062	2112	2162	2212	2262	2312	2362	2412	2462	2512	2562	2612	2662	2712	2762	2812	2862	2912	2962	3012	3062	
L	1988	2038	2088	2138	2188	2238	2288	2338	2388	2438	2488	2538	2588	2638	2688	2738	2788	2838	2888	2938	2988	3038	3088	3138	3188	3238	3288	3338	3388	3438	
A	150	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	50	100	150	200	
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	
KG	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.3	35.9	36.5	37.1	37.7	38.3	38.9	39.5	40.1	40.7	41.3	41.9	42.5	43.1	43.7	44.3	44.9	
Linear Speed mm/s	2400																														
Lead40																															

RD Motor Right Lower Side



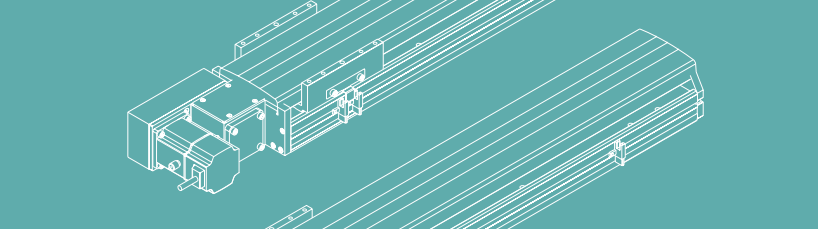
Download CAD data at www.toyorobot.com

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	1150	1200	1250	1300	1350	1400	1450	1500	1550
Limit Stroke (±1)	62	112	162	212	262	312	362	412	462	512	562	612	662	712	762	812	862	912	962	1012	1062	1112	1162	1212	1262	1312	1362	1412	1462	1512	1562
L	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538	1588	1638	1688	1738	1788	1838	1888	1938
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	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	8	8	
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	11.2	11.6	12	12.5	13	13.5	14	14.4	15	15.4	16	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9
Linear Speed mm/s	2400																														
Lead40																															

Stroke		1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
Limit Stroke (±1)		1612	1662	1712	1762	1812	1862	1912	1962	2012	2062	2112	2162	2212	2262	2312	2362	2412	2462	2512	2562	2612	2662	2712	2762	2812	2862	2912	2962	3012	3062
L		1988	2038	2088	2138	2188	2238	2288	2338	2388	2438	2488	2538	2588	2638	2688	2738	2788	2838	2888	2938	2988	3038	3088	3138	3188	3238	3288	3338	3388	3438
A		150	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	50	100	150	200
M		8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N		20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34
KG		27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.3	35.9	36.5	37.1	37.7	38.3	38.9	39.5	40.1	40.7	41.3	41.9	42.5	43.1	43.7	44.3	44.9
Linear Speed (mm/min)	Lead40	2400																													



Memo

Application
Standard Ball Screw Type GTH / GTY
Standard Belt Type ETB / M
Cleanroom Ball Screw Type GCH / ECH
Cleanroom Belt Type ECB
Reference

ECB Series
ECB10
ECB14M
ECB17M
ECB22M



Please consult our company website for a detailed description on selection requirements and nominal life calculations.

Ordering Method

ECB17 - L 40 - 50 - L - M40 - C 4 - 0001

Model

Belt Type

L	Clean belt
---	------------

Stroke

50-4050mm
50 mm Increments

Motor Position

L	Motor Left Side
LU	Motor Left Upper Side
LD	Motor Left Lower Side
R	Motor Right Side
RU	Motor Right Upper Side
RD	Motor Right Lower Side

Lead

40	40mm
----	------

Attachment kit for motor

M	Mitsubishi	10	-
P	Panasonic	20	-
Y	Yaskawa	40	400W
T	Delta	75	-

Home Sensor

Out Side	
C	Motor Side
D	Opposite Motor Side
No Sensor	
E	No Sensor

Limit Sensor

Out Side	
3	1Pc
4	2Pc
No Sensor	
5	No Sensor

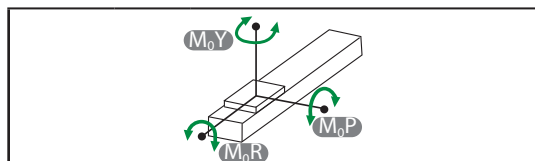
Special Order No.

Specification

	Belt	Lead		mm	40
		Maximum Rotating speed		rpm	3600
		Maximum linear speed		mm/s	2400
		Load factor			1.75
		Tis (Nominal Tension)		N	220
		Timax (Maximum Tension)		N	391
	Linear Guide	Dynamic horizontal	100 Km of travel	N	40407
			1000 Km of travel	N	18755
			10000 Km of travel	N	8706
		Static horizontal		N	86491
	Fixed bearing	Basic dynamic load rating Cr		N	10000
		Static load rating Cor		N	18800
	Common Spec	Repeatability		mm	±0.04
		Allowable input torque		N.m	4.5
		Maximum acceleration		m/s ²	5
		Friction coefficient			0.03
		Stroke (increments)		mm	50-4050 (50 increments)
		Ambient temperature※1		°C	0~+40

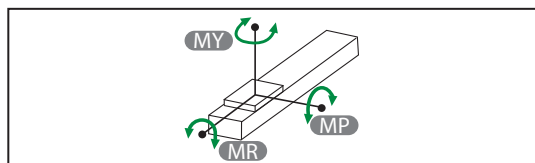
※1 For extreme temperatures: -20°C ~80°C special greases are required.

Static Loading Moment



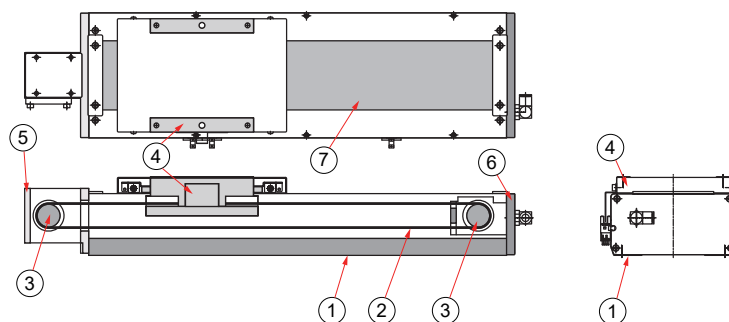
M_{0Y}	N.m	1032
M_{0P}	N.m	1034
M_{0R}	N.m	908

Dynamic Loading Moment



Travel	km	100	1000	10000
MY	N.m	365.9	169.8	78.8
MP	N.m	365.9	169.8	78.8
MR	N.m	448.6	208.2	96.7

Parts list



No.	Part Description	Material
1	Base Extrusion	AL6463
2	Belt	PU
3	Timing pulley	S45C
4	Carriage	AL6463
5	Input pulley support block	AL6463
6	Output pulley support block	AL6061
7	Steel Belt	SUS430

ECB Series

ECB10

ECB14

ECB17

ECB22

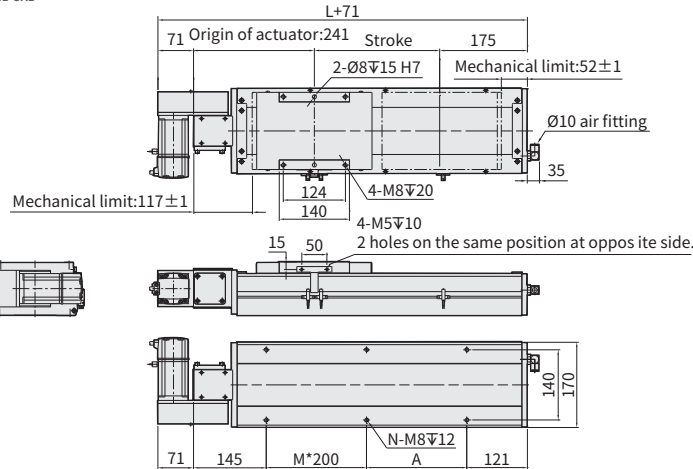
L

Motor Left Side



Download CAD data at www.toyorobot.com

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	1150	1200	1250	1300	1350	1400	1450	1500	1550
Limit Stroke (±1)	67	117	167	217	267	317	367	417	467	517	567	617	667	717	767	817	867	917	967	1017	1067	1117	1167	1217	1267	1317	1367	1417	1467	1517	1567
L	466	516	566	616	666	716	766	816	866	916	966	1016	1066	1116	1166	1216	1266	1316	1366	1416	1466	1516	1566	1616	1666	1716	1766	1816	1866	1916	1966
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	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	8	8	
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	13.2	15	16.8	17.6	18.4	19.1	19.9	20.7	21.5	22.2	23	23.8	24.6	25.3	26.1	26.9	27.7	28.4	29.2	30	30.8	31.6	32.4	33.2	34	34.8	35.6	36.4	37.2	38	38.8
Linear Speed mm/s	2400																														
Lead40																															

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	
Limit Stroke (±1)	1617	1667	1717	1767	1817	1867	1917	1967	2017	2067	2117	2167	2217	2267	2317	2367	2417	2467	2517	2567	2617	2667	2717	2767	2817	2867	2917	2967	3017	3067	
L	2016	2066	2116	2166	2216	2266	2316	2366	2416	2466	2516	2566	2616	2666	2716	2766	2816	2866	2916	2966	3016	3066	3116	3166	3216	3266	3316	3366	3416	3466	
A	150	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	50	100	150	200	
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	
KG	39.6	40.4	41.2	42	42.8	43.6	44.4	45.2	46	46.8	47.6	48.4	49.2	50	50.8	51.6	52.4	53.2	54	54.8	55.6	56.4	57.2	58	58.8	59.6	60.4	61.2	62	62.8	
Linear Speed mm/s	2400																														
Lead40																															

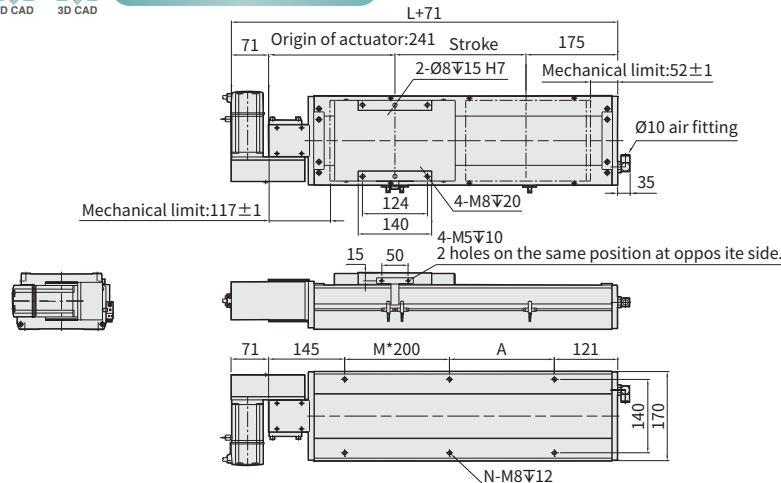
R

Motor Right Side



Download CAD data at www.toyorobot.com

Unit : mm

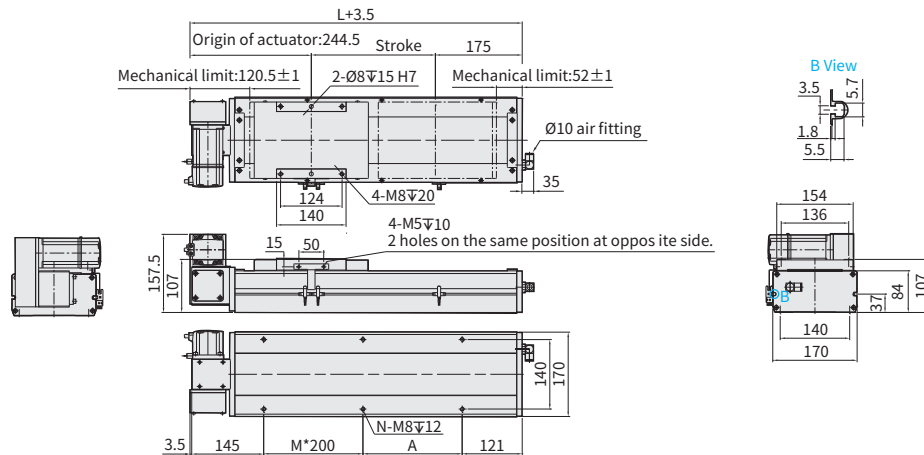


Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
Limit Stroke (±1)	67	117	167	217	267	317	367	417	467	517	567	617	667	717	767	817	867	917	967	1017	1067	1117	1167	1217	1267	1317	1367	1417	1467	1517	1567
L	466	516	566	616	666	716	766	816	866	916	966	1016	1066	1116	1166	1216	1266	1316	1366	1416	1466	1516	1566	1616	1666	1716	1766	1816	1866	1916	1966
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	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	8	8	
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	13.2	15	16.8	17.6	18.4	19.1	19.9	20.7	21.5	22.2	23	23.8	24.6	25.3	26.1	26.9	27.7	28.4	29.2	30	30.8	31.6	32.4	33.2	34	34.8	35.6	36.4	37.2	38	38.8
Linear Speed mm/s	2400																														
Lead40																															

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	
Limit Stroke (±1)	1617	1667	1717	1767	1817	1867	1917	1967	2017	2067	2117	2167	2217	2267	2317	2367	2417	2467	2517	2567	2617	2667	2717	2767	2817	2867	2917	2967	3017	3067	
L	2016	2066	2116	2166	2216	2266	2316	2366	2416	2466	2516	2566	2616	2666	2716	2766	2816	2866	2916	2966	3016	3066	3116	3166	3216	3266	3316	3366	3416	3466	
A	150	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	50	100	150	200	
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	
KG	39.6	40.4	41.2	42	42.8	43.6	44.4	45.2	46	46.8	47.6	48.4	49.2	50	50.8	51.6	52.4	53.2	54	54.8	55.6	56.4	57.2	58	58.8	59.6	60.4	61.2	62	62.8	
Linear Speed mm/s	2400																														
Lead40																															

LU Motor Left Upper Side
[Download CAD data at www.toyorobot.com](http://www.toyorobot.com)

Unit : mm

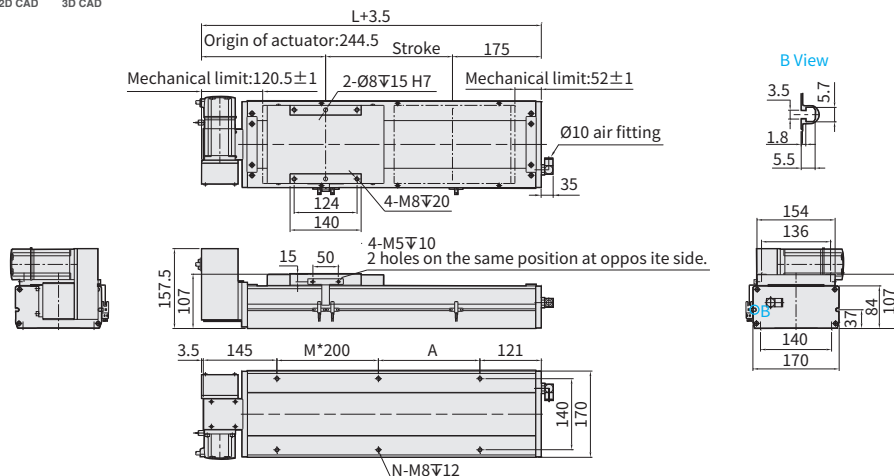


Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550
Limit Stroke (±1)	67	117	167	217	267	317	367	417	467	517	567	617	667	717	767	817	867	917	967	1017	1067	1117	1167	1217	1267	1317	1367	1417	1467	1517	1567
L	466	516	566	616	666	716	766	816	866	916	966	1016	1066	1116	1166	1216	1266	1316	1366	1416	1466	1516	1566	1616	1666	1716	1766	1816	1866	1916	1966
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	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	8	8	8
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	13.2	15	16.8	17.6	18.4	19.1	19.9	20.7	21.5	22.2	23	23.8	24.6	25.3	26.1	26.9	27.7	28.4	29.2	30	30.8	31.6	32.4	33.2	34	34.8	35.6	36.4	37.2	38	38.8
Linear Speed mm/s	2400																														
Lead40																															

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
Limit Stroke (±1)	1617	1667	1717	1767	1817	1867	1917	1967	2017	2067	2117	2167	2217	2267	2317	2367	2417	2467	2517	2567	2617	2667	2717	2767	2817	2867	2917	2967	3017	3067
L	2016	2066	2116	2166	2216	2266	2316	2366	2416	2466	2516	2566	2616	2666	2716	2766	2816	2866	2916	2966	3016	3066	3116	3166	3216	3266	3316	3366	3416	3466
A	150	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	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	34
KG	39.6	40.4	41.2	42	42.8	43.6	44.4	45.2	46	46.8	47.6	48.4	49.2	50	50.8	51.6	52.4	53.2	54	54.8	55.6	56.4	57.2	58	58.8	59.6	60.4	61.2	62	62.8
Linear Speed mm/s	2400																													
Lead40																														

RU Motor Right Upper Side
[Download CAD data at www.toyorobot.com](http://www.toyorobot.com)

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	1150	1200	1250	1300	1350	1400	1450	1500	1550
Limit Stroke (±1)	67	117	167	217	267	317	367	417	467	517	567	617	667	717	767	817	867	917	967	1017	1067	1117	1167	1217	1267	1317	1367	1417	1467	1517	1567
L	466	516	566	616	666	716	766	816	866	916	966	1016	1066	1116	1166	1216	1266	1316	1366	1416	1466	1516	1566	1616	1666	1716	1766	1816	1866	1916	1966
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	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	8	8	
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	13.2	15	16.8	17.6	18.4	19.1	19.9	20.7	21.5	22.2	23	23.8	24.6	25.3	26.1	26.9	27.7	28.4	29.2	30	30.8	31.6	32.4	33.2	34	34.8	35.6	36.4	37.2	38	38.8
Linear Speed mm/s	2400																														
Lead40																															

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050
Limit Stroke (±1)	1617	1667	1717	1767	1817	1867	1917	1967	2017	2067	2117	2167	2217	2267	2317	2367	2417	2467	2517	2567	2617	2667	2717	2767	2817	2867	2917	2967	3017	3067
L	2016	2066	2116	2166	2216	2266	2316	2366	2416	2466	2516	2566	2616	2666	2716	2766	2816	2866	2916	2966	3016	3066	3116	3166	3216	3266	3316	3366	3416	3466
A	150	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	50	100	150	200
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15
N	20	20	22	22	22	22	24	24	24	24	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	34
KG	39.6	40.4	41.2	42	42.8	43.6	44.4	45.2	46	46.8	47.6	48.4	49.2	50	50.8	51.6	52.4	53.2	54	54.8	55.6	56.4	57.2	58	58.8	59.6	60.4	61.2	62	62.8
Linear Speed mm/s	2400																													
Lead40																														

ECB Series

ECB10

ECB14M

ECB17M

ECB22M

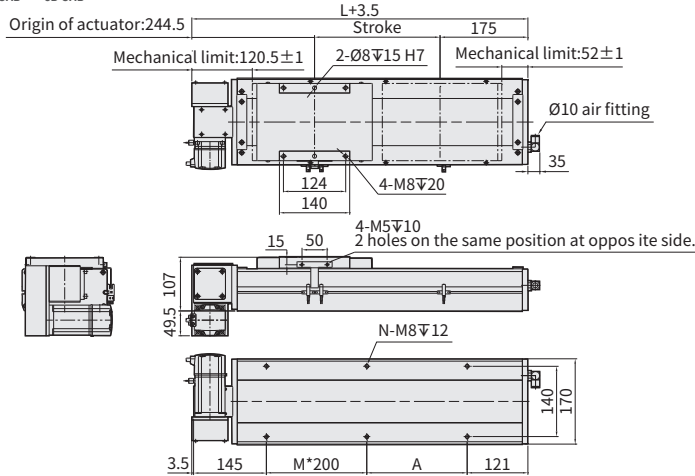
LD

Motor Left Lower Side



Download CAD data at www.toyorobot.com

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	1150	1200	1250	1300	1350	1400	1450	1500	1550
Limit Stroke (±1)	67	117	167	217	267	317	367	417	467	517	567	617	667	717	767	817	867	917	967	1017	1067	1117	1167	1217	1267	1317	1367	1417	1467	1517	1567
L	466	516	566	616	666	716	766	816	866	916	966	1016	1066	1116	1166	1216	1266	1316	1366	1416	1466	1516	1566	1616	1666	1716	1766	1816	1866	1916	1966
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	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	8	8	
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	13.2	15	16.8	17.6	18.4	19.1	19.9	20.7	21.5	22.2	23	23.8	24.6	25.3	26.1	26.9	27.7	28.4	29.2	30	30.8	31.6	32.4	33.2	34	34.8	35.6	36.4	37.2	38	38.8
Linear Speed mm/s	Lead40	2400																													

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	
Limit Stroke (±1)	1617	1667	1717	1767	1817	1867	1917	1967	2017	2067	2117	2167	2217	2267	2317	2367	2417	2467	2517	2567	2617	2667	2717	2767	2817	2867	2917	2967	3017	3067	
L	2016	2066	2116	2166	2216	2266	2316	2366	2416	2466	2516	2566	2616	2666	2716	2766	2816	2866	2916	2966	3016	3066	3116	3166	3216	3266	3316	3366	3416	3466	
A	150	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	50	100	150	200	
M	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	
KG	39.6	40.4	41.2	42	42.8	43.6	44.4	45.2	46	46.8	47.6	48.4	49.2	50	50.8	51.6	52.4	53.2	54	54.8	55.6	56.4	57.2	58	58.8	59.6	60.4	61.2	62	62.8	
Linear Speed mm/s	Lead40	2400																													

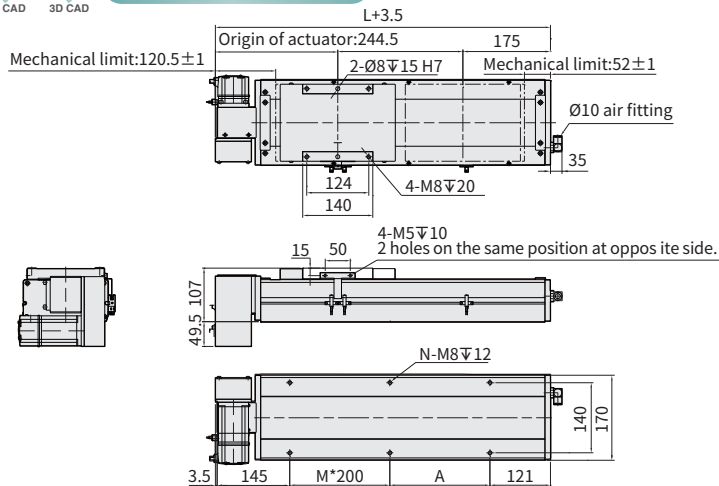
RD

Motor Right Lower Side



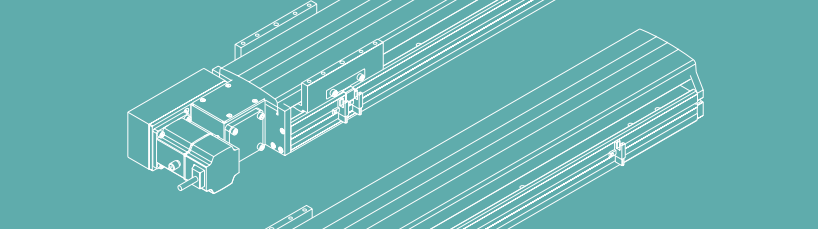
Download CAD data at www.toyorobot.com

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	1150	1200	1250	1300	1350	1400	1450	1500	1550
Limit Stroke (±1)	67	117	167	217	267	317	367	417	467	517	567	617	667	717	767	817	867	917	967	1017	1067	1117	1167	1217	1267	1317	1367	1417	1467	1517	1567
L	466	516	566	616	666	716	766	816	866	916	966	1016	1066	1116	1166	1216	1266	1316	1366	1416	1466	1516	1566	1616	1666	1716	1766	1816	1866	1916	1966
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	50	100	150	200	50	100
M	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	8	8	
N	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
KG	13.2	15	16.8	17.6	18.4	19.1	19.9	20.7	21.5	22.2	23	23.8	24.6	25.3	26.1	26.9	27.7	28.4	29.2	30	30.8	31.6	32.4	33.2	34	34.8	35.6	36.4	37.2	38	38.8
Linear Speed mm/s	Lead40	2400																													

Stroke	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	
Limit Stroke (±1)	1617	1667	1717	1767	1817	1867	1917	1967	2017	2067	2117	2167	2217	2267	2317	2367	2417	2467	2517	2567	2617	2667	2717	2767	2817	2867	2917	2967	3017	3067	
L	2016	2066	2116	2166	2216	2266	2316	2366	2416	2466	2516	2566	2616	2666	2716	2766	2816	2866	2916	2966	3016	3066	3116	3166	3216	3266	3316	3366	3416	3466	
A	150	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	50	100	150	200	
M	8	8	9	9	9	9	10	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	
N	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	
KG	39.6	40.4	41.2	42	42.8	43.6	44.4	45.2	46	46.8	47.6	48.4	49.2	50	50.8	51.6	52.4	53.2	54	54.8	55.6	56.4	57.2	58	58.8	59.6	60.4	61.2	62	62.8	
Linear Speed mm/s	Lead40	2400																													



Memo

Application	Standard Ball Screw Type GTH / GTY	Standard Belt Type ETB / M	Cleanroom Ball Screw Type GCH / ECH	Cleanroom Belt Type ECB	Reference
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ECB Series	
ECB10	
ECB14M	
ECB17M	
ECB22M	



Please consult our company website for a detailed description on selection requirements and nominal life calculations.

Ordering Method

ECB22 - L 40 - 50 - L - M75 - C 4 - 0001

Model

Stroke

50-3500mm

50 mm Increments

Motor Position

L	Motor Left Side
LU	Motor Left Upper Side
LD	Motor Left Lower Side
R	Motor Right Side
RU	Motor Right Upper Side
RD	Motor Right Lower Side

Attachment kit for motor

M	Mitsubishi	10	-
P	Panasonic	20	-
Y	Yaskawa	40	-
T	Delta	75	750W

Home Sensor

Out Side	
C	Motor Side
D	Opposite Motor Side
No Sensor	
E	No Sensor

Limit Sensor

Out Side	
3	1Pc
4	2Pc
No Sensor	
5	No Sensor

Belt Type

L	Clean belt
---	------------

Lead

40	40mm
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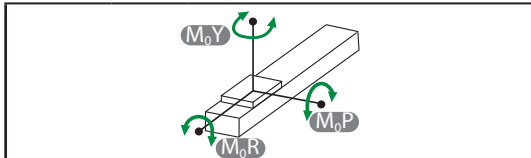
Special Order No.

Specification

	Belt	Lead		mm	40
		Maximum Rotating speed		rpm	3600
		Maximum linear speed		mm/s	2400
		Load factor			1.75
		Tis (Nominal Tension)		N	376
		Timax (Maximum Tension)		N	651
	Linear Guide	Dynamic horizontal	100 Km of travel	N	55747
			1000 Km of travel	N	25876
			10000 Km of travel	N	12010
		Static horizontal		N	119837
	Fixed bearing	Basic dynamic load rating Cr		N	20000
		Static load rating Cor		N	37600
	Common Spec	Repeatability		mm	±0.04
		Allowable input torque		N.m	8.4
		Maximum acceleration		m/s ²	5
		Friction coefficient			0.03
		Stroke (increments)		mm	50-3500 (50 increments)
		Ambient temperature※1		°C	0~+40

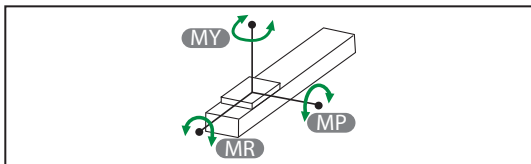
※1 For extreme temperatures: -20°C ~80°C special greases are required.

Static Loading Moment



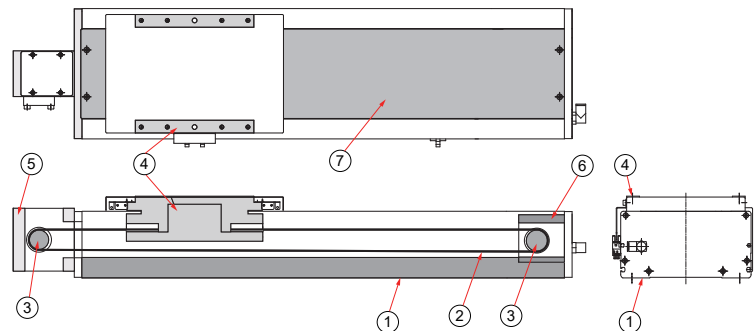
M_{0Y}	N.m	2052
M_{0P}	N.m	2052
M_{0R}	N.m	1810

Dynamic Loading Moment



Travel	km	100	1000	10000
MY	N.m	883.4	410	190.3
MP	N.m	883.4	410	190.3
MR	N.m	847.3	393.3	182.5

Parts list



No.	Part Description	Material
1	Base Extrusion	AL6463
2	Belt	PU
3	Timing pulley	S45C
4	Carriage	AL6463
5	Input pulley support block	AL6463
6	Output pulley support block	AL6061
7	Steel Belt	SUS430

ECB Series

ECB10

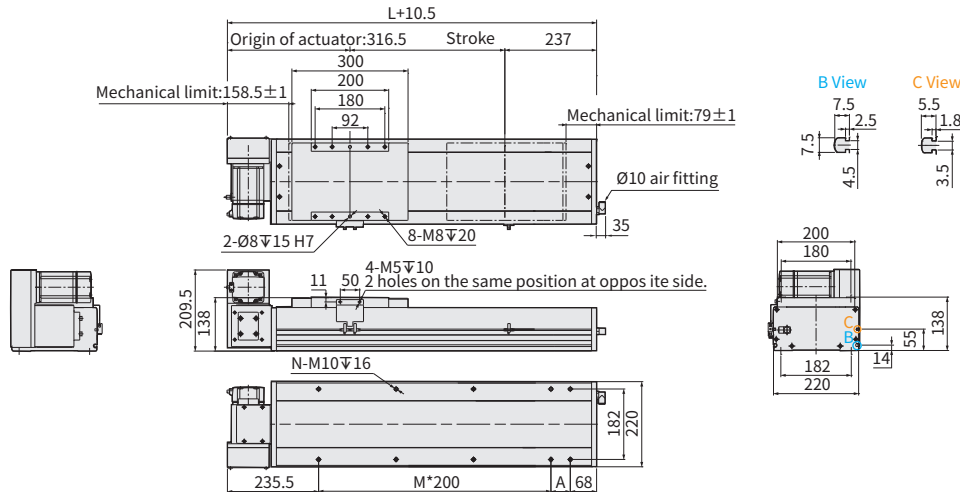
ECB14M

ECB17M

ECB22M

LU Motor Left Upper Side
[Download CAD data at www.toyorobot.com](http://www.toyorobot.com)

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	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	
Limit Stroke (±1)	66	116	166	216	266	316	366	416	466	516	566	616	666	716	766	816	866	916	966	1016	1066	1116	1166	1216	1266	1316	1366	1416	1466	1516	1566	1616	1666	1716	
L	593	643	693	743	793	843	893	943	993	1043	1093	1143	1193	1243	1293	1343	1393	1443	1493	1543	1593	1643	1693	1743	1793	1843	1893	1943	1993	2043	2093	2143	2193	2243	
A	100	150	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	50	100	150	200	50	100	150	200
M	1	1	1	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	7	7	7	7	8	8	8	9	9	9	9	
N	6	6	6	8	8	8	8	10	10	10	10	10	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	22	22	22	22	
KG	31.8	33	34.2	35.4	36.6	37.8	39	40.2	41.4	42.6	43.8	45	46.2	47.4	48.6	49.8	51	52.2	53.4	54.6	55.8	57	58.2	59.4	60.6	61.8	63	64.2	65.4	66.6	67.8	69	70.2	71.4	

Linear Speed mm/s

Lead40

2400

Stroke	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	3100	3150	3200	3250	3300	3350	3400
Limit Stroke (±1)	1766	1816	1866	1916	1966	2016	2066	2116	2166	2216	2266	2316	2366	2416	2466	2516	2566	2616	2666	2716	2766	2816	2866	2916	2966	3016	3066	3116	3166	3216	3266	3316	3366	3416
L	2293	2343	2393	2443	2493	2543	2593	2643	2693	2743	2793	2843	2893	2943	2993	3043	3093	3143	3193	3243	3293	3343	3393	3443	3493	3543	3593	3643	3693	3743	3793	3843	3893	3943
A	200	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	1400	1450	1500	1550	1600	1650
M	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	16	16	17	17	17	17	18
N	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36	36	36	36	38	38	38	38	40
KG	72.6	73.8	75	76.2	77.4	78.6	79.8	81	82.2	83.4	84.6	85.8	87	88.2	89.4	90.6	91.8	93	94.2	95.4	96.6	97.8	99	100.2	101.4	102.6	103.8	105	106.2	107.4	108.6	109.8	111	112.2

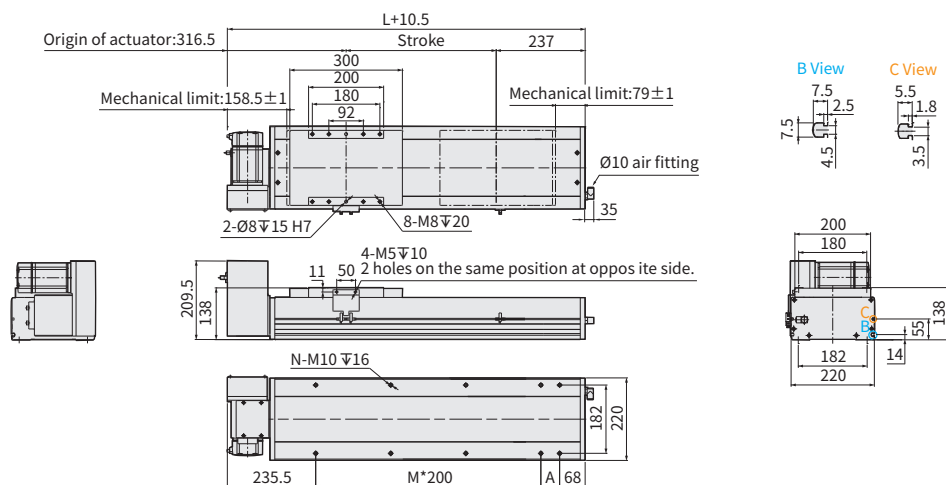
Linear Speed mm/s

Lead40

2400

RU Motor Right Upper Side
[Download CAD data at www.toyorobot.com](http://www.toyorobot.com)

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	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700
Limit Stroke (±1)	66	116	166	216	266	316	366	416	466	516	566	616	666	716	766	816	866	916	966	1016	1066	1116	1166	1216	1266	1316	1366	1416	1466	1516	1566	1616	1666	1716
L	593	643	693	743	793	843	893	943	993	1043	1093	1143	1193	1243	1293	1343	1393	1443	1493	1543	1593	1643	1693	1743	1793	1843	1893	1943	1993	2043	2093	2143	2193	2243
A	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	1400	1450	1500	1550	1600	1650	1700	
M	1	1	1	2	2	2	2	3	3	3	3	3	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	9	9	9	
N	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	22	22	22	
KG	31.8	33	34.2	35.4	36.6	37.8	39	40.2	41.4	42.6	43.8	45	46.2	47.4	48.6	49.8	51	52.2	53.4	54.6	55.8	57	58.2	59.4	60.6	61.8	63	64.2	65.4	66.6	67.8	69	70.2	71.4

Linear Speed mm/s

Lead40

2400

Stroke	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	3100	3150	3200	3250	3300	3350	3400
Limit Stroke (±1)	1766	1816	1866	1916	1966	2016	2066	2116	2166	2216	2266	2316	2366	2416	2466	2516	2566	2616	2666	2716	2766	2816	2866	2916	2966	3016	3066	3116	3166	3216	3266	3316	3366	3416
L	2293	2343	2393	2443	2493	2543	2593	2643	2693	2743	2793	2843	2893	2943	2993	3043	3093	3143	3193	3243	3293	3343	3393	3443	3493	3543	3593	3643	3693	3743	3793	3843	3893	3943
A	200	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	1400	1450	1500	1550	1600	1650
M	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	16	16	17	17	17	17	18
N	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36	36	36	36	38	38	38	38	40
KG	72.6	73.8	75	76.2	77.4	78.6	79.8	81	82.2	83.4	84.6	85.8	87	88.2	89.4	90.6	91.8	93	94.2	95.4	96.6	97.8	99	100.2	101.4	102.6	103.8	105	106.2	107.4	108.6	109.8	111	112.2

Linear Speed mm/s

Lead40

2400

ECB Series

ECB10

ECB14M

ECB17M

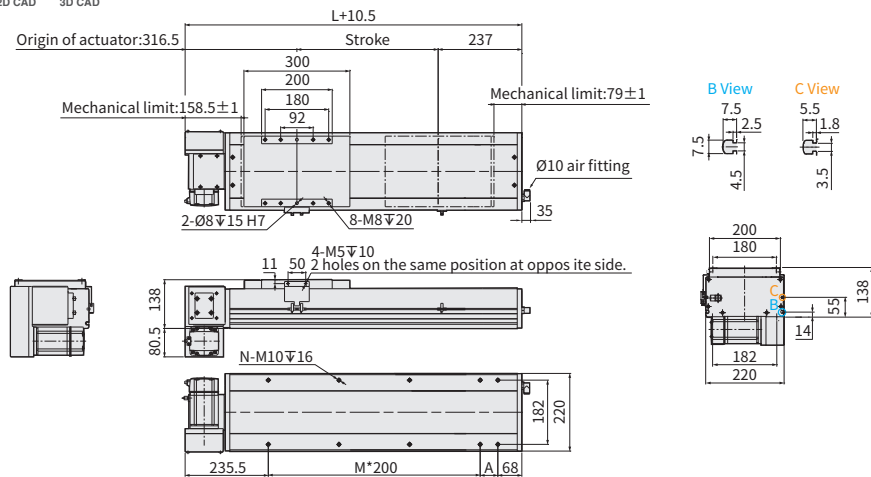
ECB22M

LD

Motor Left Lower Side


[Download CAD data at www.toyorobot.com](http://www.toyorobot.com)

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	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700
Limit Stroke (±1)	66	116	166	216	266	316	366	416	466	516	566	616	666	716	766	816	866	916	966	1016	1066	1116	1166	1216	1266	1316	1366	1416	1466	1516	1566	1616	1666	1716
L	593	643	693	743	793	843	893	943	993	1043	1093	1143	1193	1243	1293	1343	1393	1443	1493	1543	1593	1643	1693	1743	1793	1843	1893	1943	1993	2043	2093	2143	2193	2243
A	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	1400	1450	1500	1550	1600	1650	1700	
M	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9
N	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22	22	22
KG	31.8	33	34.2	35.4	36.6	37.8	39	40.2	41.4	42.6	43.8	45	46.2	47.4	48.6	49.8	51	52.2	53.4	54.6	55.8	57	58.2	59.4	60.6	61.8	63	64.2	65.4	66.6	67.8	69	70.2	71.4
Linear Speed mm/s	Lead40																																	
	2400																																	

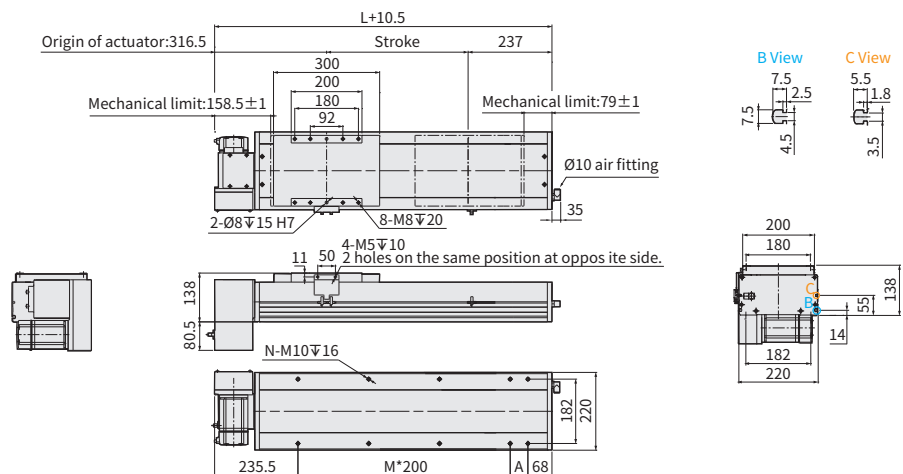
Stroke	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	3100	3150	3200	3250	3300	3350	3400
Limit Stroke (±1)	1766	1816	1866	1916	1966	2016	2066	2116	2166	2216	2266	2316	2366	2416	2466	2516	2566	2616	2666	2716	2766	2816	2866	2916	2966	3016	3066	3116	3166	3216	3266	3316	3366	3416
L	2293	2343	2393	2443	2493	2543	2593	2643	2693	2743	2793	2843	2893	2943	2993	3043	3093	3143	3193	3243	3293	3343	3393	3443	3493	3543	3593	3643	3693	3743	3793	3843	3893	3943
A	200	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	1400	1450	1500	1550	1600	1650
M	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	16	16	17	17	17	17	18
N	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36	36	36	36	38	38	38	38	40
KG	72.6	73.8	75	76.2	77.4	78.6	79.8	81	82.2	83.4	84.6	85.8	87	88.2	89.4	90.6	91.8	93	94.2	95.4	96.6	97.8	99	100.2	101.4	102.6	103.8	105	106.2	107.4	108.6	109.8	111	112.2
Linear Speed mm/s	Lead40																																	
	2400																																	

RD

Motor Right Lower Side


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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	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	
Limit Stroke (±1)	66	116	166	216	266	316	366	416	466	516	566	616	666	716	766	816	866	916	966	1016	1066	1116	1166	1216	1266	1316	1366	1416	1466	1516	1566	1616	1666	1716	
L	593	643	693	743	793	843	893	943	993	1043	1093	1143	1193	1243	1293	1343	1393	1443	1493	1543	1593	1643	1693	1743	1793	1843	1893	1943	1993	2043	2093	2143	2193	2243	
A	100	150	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	50	100	150	200	50	100	150	
M	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9
N	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22	22	22	
KG	31.8	33	34.2	35.4	36.6	37.8	38	39	40.2	41.4	42.6	43.8	45	46.2	47.4	48.6	49.8	51	52.2	53.4	54.6	55.8	57	58.2	59.4	60.6	61.8	63	64.2	65.4	66.6	67.8	69	70.2	71.4
Linear Speed mm/	Lead40																																		
	2400																																		

Stroke	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	3100	3150	3200	3250	3300	3350	3400
Limit Stroke (±1)	1766	1816	1866	1916	1966	2016	2066	2116	2166	2216	2266	2316	2366	2416	2466	2516	2566	2616	2666	2716	2766	2816	2866	2916	2966	3016	3066	3116	3166	3216	3266	3316	3366	3416
L	2293	2343	2393	2443	2493	2543	2593	2643	2693	2743	2793	2843	2893	2943	2993	3043	3093	3143	3193	3243	3293	3343	3393	3443	3493	3543	3593	3643	3693	3743	3793	3843	3893	3943
A	200	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	1400	1450	1500	1550	1600	1650
M	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	16	16	17	17	17	17	18
N	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36	36	36	36	38	38	38	38	40
KG	72.6	73.8	75	76.2	77.4	78.6	79.8	81	82.2	83.4	84.6	85.8	87	88.2	89.4	90.6	91.8	93	94.2	95.4	96.6	97.8	99	100.2	101.4	102.6	103.8	105	106.2	107.4	108.6	109.8	111	112.2
Linear Speed mm/s	Lead40																																	
	2400																																	