

GR Series

Open Gear Rack

CONTENTS

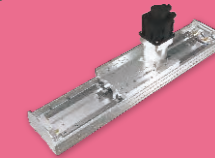
► Rack and pinion series

GR14



Maximum stroke 3500mm
Maximum load 88kg
Body width 135mm

GR22



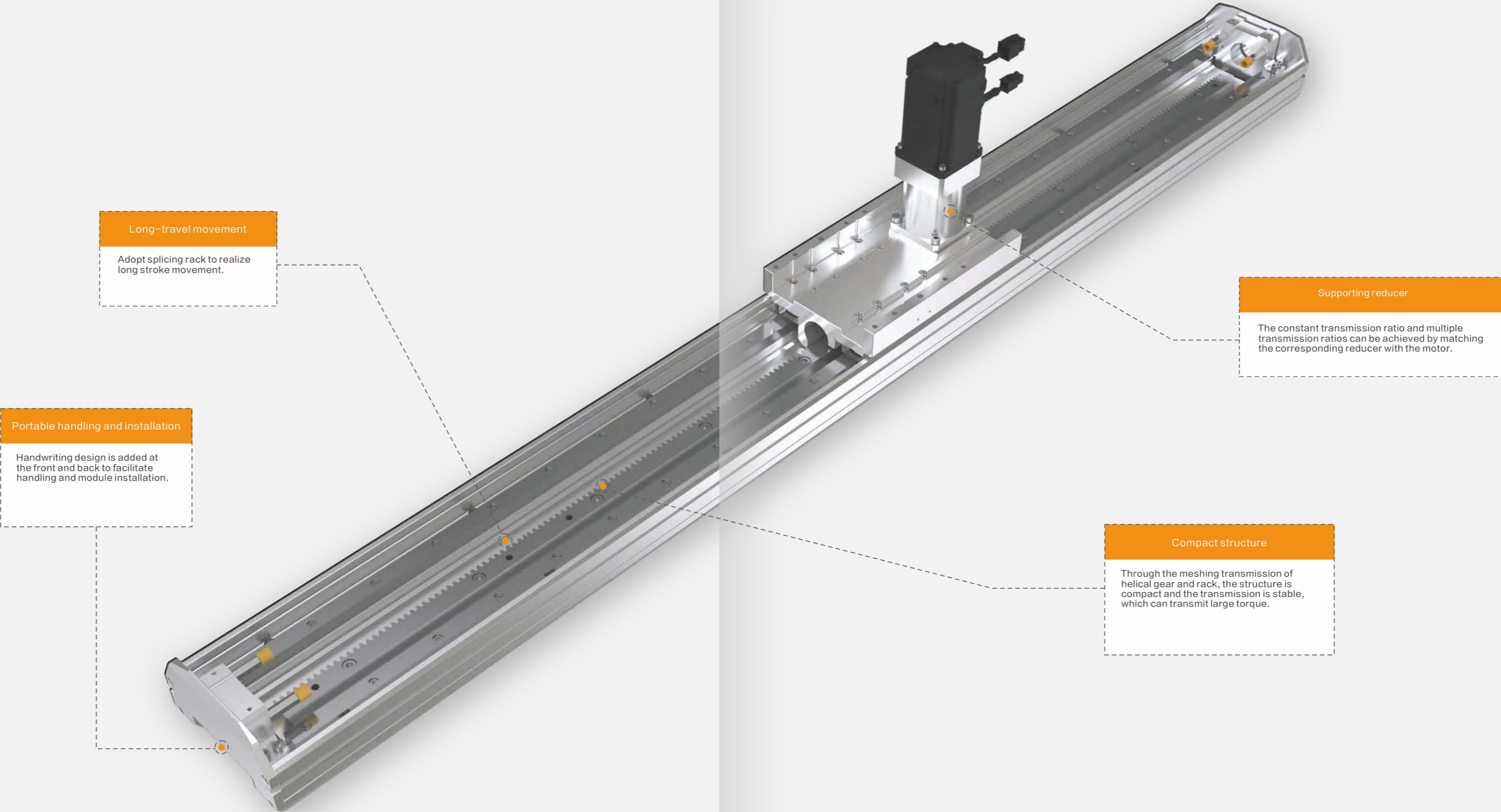
Maximum stroke 3500mm
Maximum load 150kg
Body width 220mm

GR17



Maximum stroke 3500mm
Maximum load 102kg
Body width 170mm

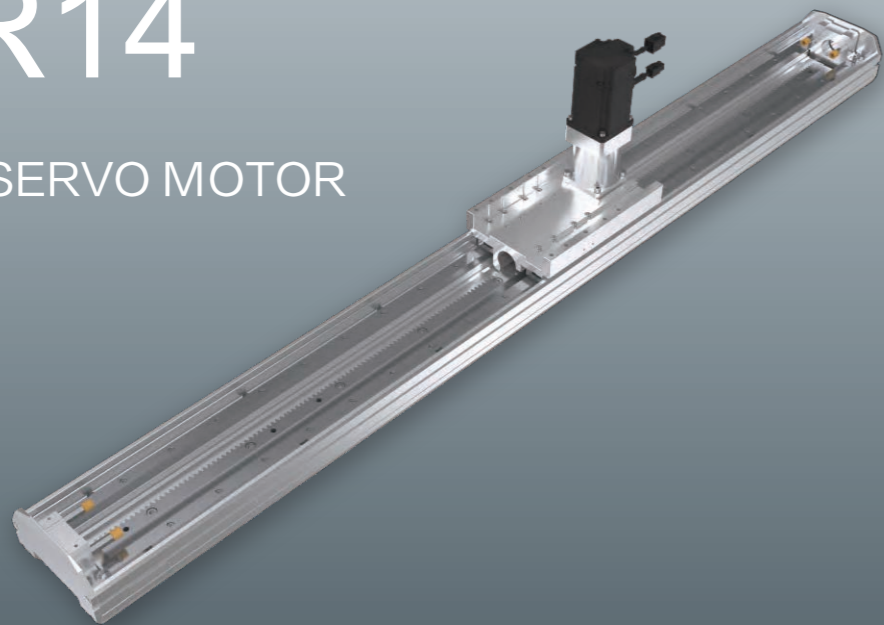
GR rack and pinion series structure diagram



Rack and pinion series

GR14

1-axis
400W SERVO MOTOR



This figure is for reference only, the shipping specifications are detailed in the dimension drawing.

Maximum stroke **3500mm** Maximum speed **1665mm/s** Motor capacity **400W** Rack **M1.5**

⚡ The maximum speed depends on different gear ratio.

Linear Guide **15X12.5-2pc**

Ordering method

GR14 - K3/33.32 - 100 - BC - P40B - C4 - Special

Special Order No.

Model	Reduction ratio/Lead	Stroke	Motor position	Motor brand, power output	Home sensor	Limit sensor																																																
	<table border="1"> <tr><td>K3</td><td>33.32</td></tr> <tr><td>K5</td><td>19.99</td></tr> <tr><td>K7</td><td>14.28</td></tr> <tr><td>K10</td><td>10.00</td></tr> </table>	K3	33.32	K5	19.99	K7	14.28	K10	10.00	<table border="1"> <tr><td>1000-3500mm</td></tr> <tr><td>100mm Pitch</td></tr> </table>	1000-3500mm	100mm Pitch	<table border="1"> <tr><td>BC</td><td>Motor exposed</td></tr> <tr><td>BL</td><td>Right Angle Reducer</td></tr> </table>	BC	Motor exposed	BL	Right Angle Reducer	<table border="1"> <tr><td>M</td><td>Mitsubishi</td><td>10</td><td>-</td><td>B</td></tr> <tr><td>P</td><td>Panasonic</td><td>20</td><td>-</td><td></td></tr> <tr><td>Y</td><td>Yaskawa</td><td>40</td><td>400W</td><td></td></tr> <tr><td>T</td><td>Delta</td><td>75</td><td>-</td><td></td></tr> </table>	M	Mitsubishi	10	-	B	P	Panasonic	20	-		Y	Yaskawa	40	400W		T	Delta	75	-		<table border="1"> <tr><td>Out side</td></tr> <tr><td>C</td><td>Out side</td></tr> <tr><td>No sensor</td></tr> <tr><td>E</td><td>No sensor</td></tr> </table>	Out side	C	Out side	No sensor	E	No sensor	<table border="1"> <tr><td>Out side</td></tr> <tr><td>3</td><td>1Pc</td></tr> <tr><td>4</td><td>2Pc</td></tr> <tr><td>No sensor</td></tr> <tr><td>5</td><td>No sensor</td></tr> </table>	Out side	3	1Pc	4	2Pc	No sensor	5	No sensor
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If no brake, no description.

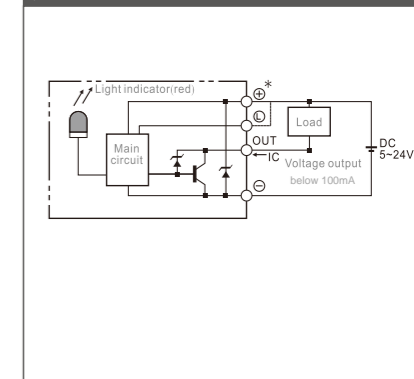
* Both sides of slider need to install the sensor trigger device.

Specification

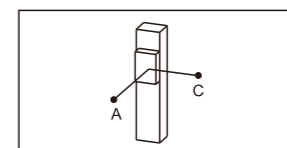
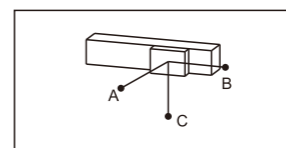
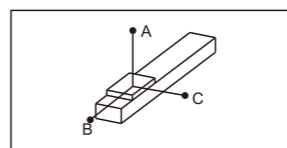
Spec	Repeatability	mm	±0.04				
	Driving Power	w	400				
	Reduction ratio		3:1	5:1	7:1	10:1	
	Gear Lead	mm	33.32	19.99	14.28	10.00	
	Maximum speed	mm/s	1665	1000	715	500	
	Maximum payload	Horizontal	kg	30	40	64	88
		Vertical	kg	8	10	18	22
	Rated thrust	N	218	347	520	694	
	Stroke pitch	mm	1000-3500mm/100 pitch				
	Rotat rotating speed(RPM)		3000				
	Home sensor	Outside		EE-SX672(NPN)/FC-SPX303Z-2M(NPN)			
		Built-In		EE-SX674(NPN)/FC-SPX307Z-2M(NPN)			

* Choose the real motor please according to the motor parameters calculated the above specifications.

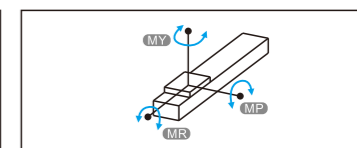
Sensor layout



Allowable overhang



Static loading moment



(Unit:mm)

Horizontal Installation	A	B	C	
3:1	15kg	1033	545	405
	25kg	604	311	233
	30kg	495	251	188
5:1	10kg	2304	1222	1028
	22kg	1443	540	451
	40kg	860	277	233
7:1	20kg	1668	881	729
	36kg	1510	403	346
	64kg	857	205	177
10:1	30kg	2727	470	430
	50kg	1577	266	242
	88kg	854	134	122

(Unit:mm)

Wall Installation	A	B	C	
3:1	15kg	405	545	1033
	30kg	188	251	495
	-	-	-	-
5:1	12kg	854	1019	2552
	20kg	500	596	1588
	40kg	233	277	860
7:1	23kg	608	707	2460
	37kg	359	417	1516
	64kg	178	205	857
10:1	35kg	363	395	2368
	55kg	218	238	1445
	88kg	123	134	854

(Unit:mm)

Vertical Installation	A	C	
3:1	5kg	1503	1503
	8kg	944	944
	-	-	-
5:1	7kg	1700	1700
	10kg	1188	1188
	-	-	-
7:1	8kg	1605	1605
	12kg	1130	1130
	18kg	745	745
10:1	10kg	1500	1500
	14kg	1072	1072
	22kg	682	682

(Unit:N.m)

MY	551
MP	552
MR	485

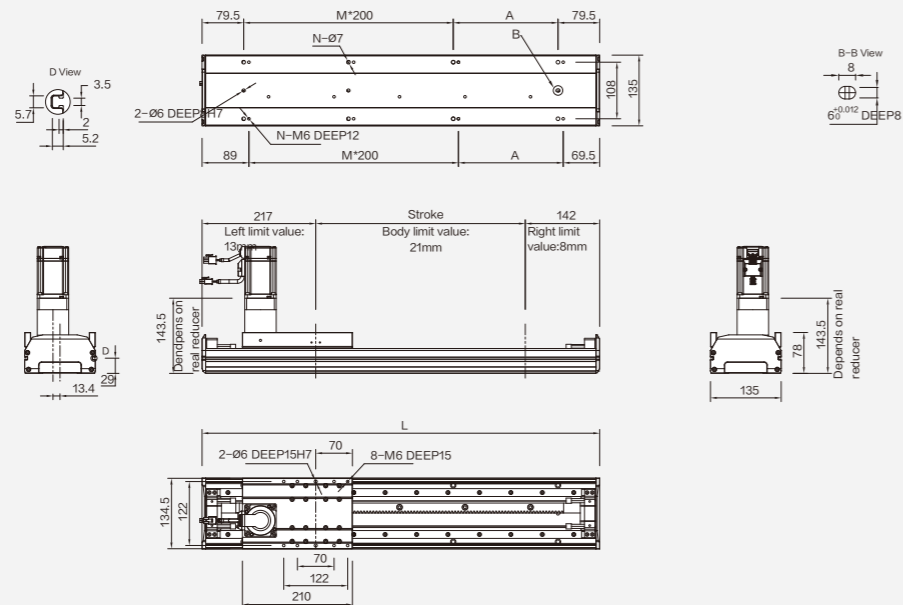
⚡ The torque value in the chart indicate the center of gravity.
 ⚡ Operation life is 10,000km when the product is using under the specified conditions.
 ⚡ Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

Suitable motor brand

Brand	Mark	Brake	Watt	AC-Voltage	Motor model	Driver model
Mitsubishi	M	No brake(Horizontal type)	400	220	HG-KN43J-S100	MR-JE-40A
		With brake(Vertical type)	400	220	HG-KN43BJ-S100	MR-JE-40A
Panasonic	P	No brake(Horizontal type)	400	220	MHMF042L1U2M	MBDLN25SE
		With brake(Vertical type)	400	220	MHMF042L1 V2M	MBDLN25SE
Delta	T	No brake(Horizontal type)	400	220	ECM-B3M-C20604RS1	ASD-B3-0421-L
		With brake(Vertical type)	400	220	ECM-B3M-C20604SS1	ASD-B3-0421-L

Motor exposed

1-axis **GR14**



(Unit:mm)

Motor exposed	Stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
	L	1359	1459	1559	1659	1759	1859	1959	2059	2159	2259	2359	2459	2559
A	200	100	200	100	200	100	200	100	200	100	200	100	200	
M	5	6	6	7	7	8	8	9	9	10	10	11	11	
N	14	16	16	18	18	20	20	22	22	24	24	26	26	
KG	14.7	15.6	16.5	17.4	18.3	19.2	20.1	21	21.9	22.8	23.7	24.6	25.5	

Motor exposed	Stroke	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500
	L	2659	2759	2859	2959	3059	3159	3259	3359	3459	3559	3659	3759	3859
A	100	200	100	200	100	200	100	200	100	200	100	200	100	
M	12	12	13	13	14	14	15	15	16	16	17	17	18	
N	28	28	30	30	32	32	34	36	36	38	38	40	40	
KG	26.4	27.3	28.2	29.1	30	30.9	31.8	32.7	33.6	34.5	35.4	36.3	37.2	

MEMO

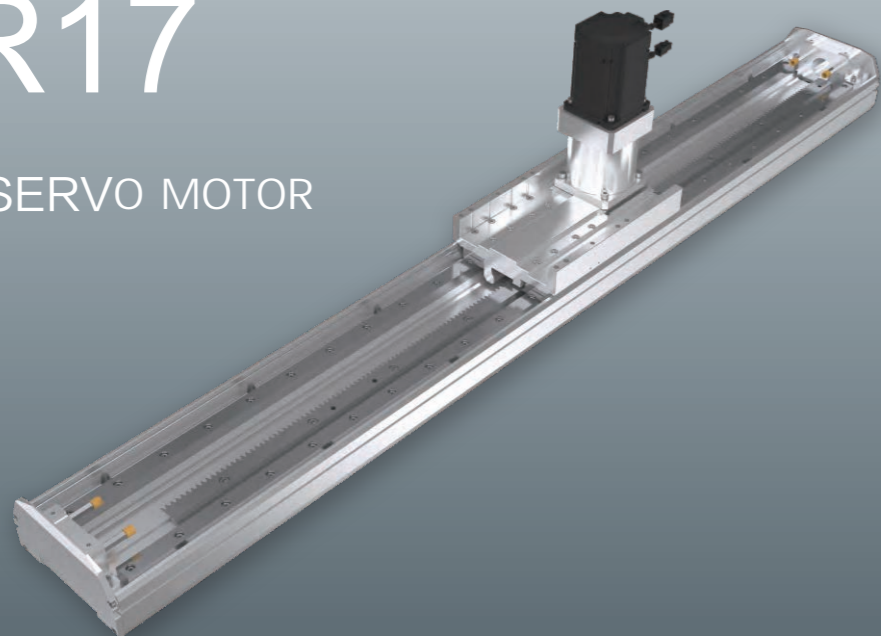
Large empty rectangular area for notes or specifications.

- General/ Inline/ Screw sample
- ATH
- RTH
- General/ Screw sample
- DG
- KTH
- Electric cylinder sample
- DMB
- EMB
- General/Inline /Belt sample
- RTB
- General/ Belt sample
- DB
- KTB
- General/ European/Belt sample
- MB
- Clean/Inline/ Screw sample
- ACH
- RCH
- Clean/ Screw sample
- KCH
- Clean/Inline/ Belt sample
- RCB
- Clean/ Belt sample
- KCB
- General/KKT/ Screw sample
- KKT
- General/ Rack and pinion sample
- General/ Linear motor sample
- LM
- Reference

Rack and pinion series

GR17

1-axis
750W SERVO MOTOR



This figure is for reference only, the shipping specifications are detailed in the dimension drawing.

Maximum stroke **3500mm** Maximum speed **2443mm/s** Motor capacity **750W** Rack **M2**

⚡ The maximum speed depends on different gear ratio.

Linear Guide **20X15-2 pc**

Ordering method

GR17 - K3/48.87 - 100 - BC - P75B - C4 - Special

Special Order No.

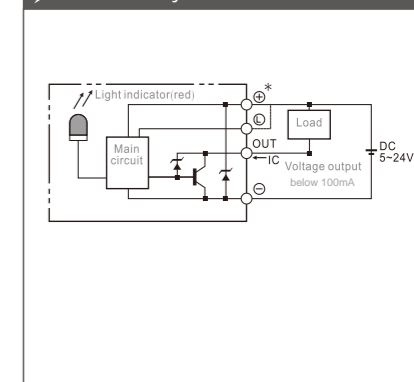
Model	Reduction ratio/Lead	Stroke	Motor position	Motor brand, power output	Home sensor	Limit sensor																																																
	<table border="1"> <tr><td>K3</td><td>48.87</td></tr> <tr><td>K5</td><td>29.32</td></tr> <tr><td>K7</td><td>20.94</td></tr> <tr><td>K10</td><td>14.66</td></tr> </table>	K3	48.87	K5	29.32	K7	20.94	K10	14.66	<table border="1"> <tr><td>1000-3500mm</td></tr> <tr><td>100mm pitch</td></tr> </table>	1000-3500mm	100mm pitch	<table border="1"> <tr><td>BC</td><td>Motor exposed</td></tr> <tr><td>BL</td><td>Right Angle Reducer</td></tr> </table>	BC	Motor exposed	BL	Right Angle Reducer	<table border="1"> <tr><td>M</td><td>Mitsubishi</td><td>10</td><td>-</td><td>B</td></tr> <tr><td>P</td><td>Panasonic</td><td>20</td><td>-</td><td></td></tr> <tr><td>Y</td><td>Yaskawa</td><td>40</td><td>-</td><td></td></tr> <tr><td>T</td><td>Delta</td><td>75</td><td>750W</td><td></td></tr> </table> <p><small>If no brake, no description.</small></p>	M	Mitsubishi	10	-	B	P	Panasonic	20	-		Y	Yaskawa	40	-		T	Delta	75	750W		<table border="1"> <tr><td>Out side</td></tr> <tr><td>C</td><td>Out side</td></tr> <tr><td>No sensor</td></tr> <tr><td>E</td><td>No sensor</td></tr> </table> <p><small>* Both sides of slider need to install the sensor trigger device.</small></p>	Out side	C	Out side	No sensor	E	No sensor	<table border="1"> <tr><td>Out side</td></tr> <tr><td>3</td><td>1Pc</td></tr> <tr><td>4</td><td>2Pc</td></tr> <tr><td>No sensor</td></tr> <tr><td>5</td><td>No sensor</td></tr> </table>	Out side	3	1Pc	4	2Pc	No sensor	5	No sensor
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Specification

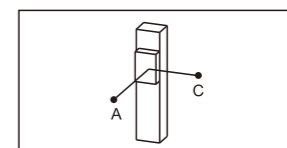
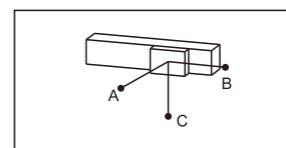
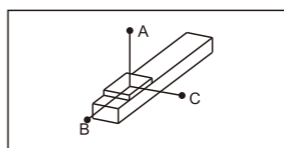
Repeatability	mm	±0.04				
Driving Power	w	750				
Reduction ratio		3:1	5:1	7:1	10:1	
Gear Lead	mm	48.87	29.32	20.94	14.66	
Maximum speed	mm/s	2443	1466	1047	733	
Maximum payload	Horizontal	kg	31	63	83	102
	Vertical	kg	9	18	25	33
Rated thrust	N	240	480	640	961	
Stroke pitch	mm	1000-3500mm/100 pitch				
Rotat rotating speed(RPM)		3000				
Home sensor	Outside	EE-SX672(NPN)/FC-SPX303Z-2M(NPN)				
	Built-In	EE-SX674(NPN)/FC-SPX307Z-2M(NPN)				

⚡ Choose the real motor please according to the motor parameters calculated the above specifications.

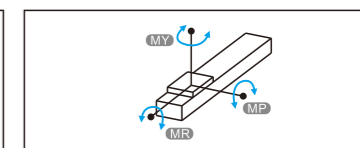
Sensor layout



Allowable overhang



Static loading moment



(Unit:mm)				(Unit:mm)				(Unit:mm)			(Unit:N.m)		
Horizontal Installation	A	B	C	Wall Installation	A	B	C	Vertical Installation	A	C	MY	MP	MR
3:1	10kg	991	837	587	8kg	777	1009	1281	5kg	1215	1215	1032	
	14kg	687	531	398	15kg	389	521	658	9kg	644	644	1034	
	31kg	294	244	188	33kg	188	237	294	-	-	-	908	
5:1	25kg	1396	643	557	21kg	681	790	1689	8kg	1639	1639		
	38kg	892	411	356	36kg	374	430	949	13kg	1083	1083		
	63kg	510	218	193	63kg	193	218	511	18kg	868	868		
7:1	35kg	1666	547	538	30kg	633	644	1961	10kg	1922	1922		
	55kg	1030	331	328	50kg	365	369	1143	14kg	1377	1377		
	83kg	654	206	204	83kg	204	206	656	25kg	769	769		
10:1	50kg	1789	443	456	45kg	521	506	2027	13kg	1770	1770		
	70kg	1238	290	302	65kg	331	218	1349	20kg	1174	1174		
	102kg	827	185	193	102kg	193	185	829	33kg	688	688		

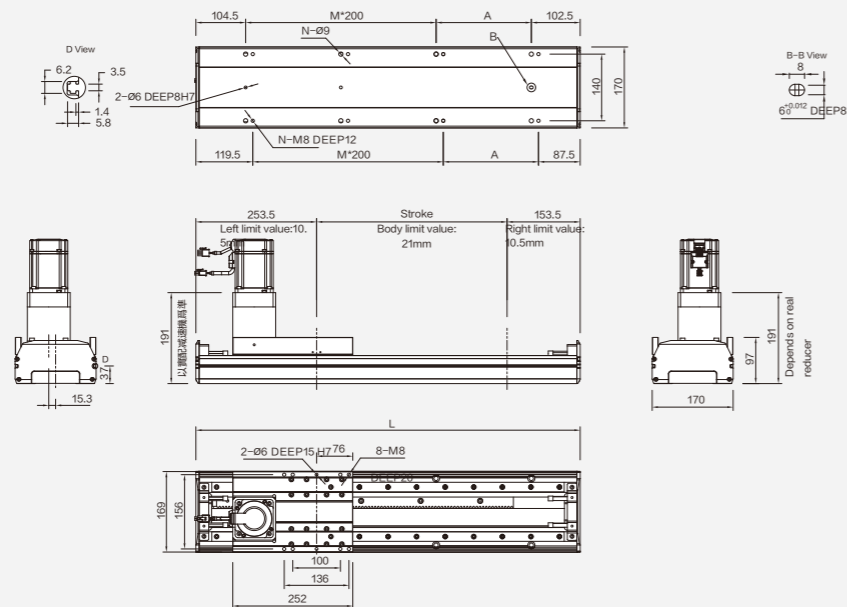
⚡ The torque value in the chart indicate the center of gravity.
 ⚡ Operation life is 10,000km when the product is using under the specified conditions.
 ⚡ Data information is not for ceiling-mount inverse use. Contact us for the details if you want to apply ceiling-mount inverse usage.

Suitable motor brand

Brand	Mark	Brake	Watt	AC-Voltage	Motor model	Driver model
Mitsubishi	M	No brake(Horizontal type)	750	220	HG-KN73J-S100	MR-JE-70A
		With brake(Vertical type)	750	220	HG-KN73BJ-S100	MR-JE-70A
Panasonic	P	No brake(Horizontal type)	750	220	MHMF082L1U2M	MCDLN35SE
		With brake(Vertical type)	750	220	MHMF082L1V2M	MCDLN35SE
Delta	T	No brake(Horizontal type)	750	220	ECM-B3M-C20807RS1	ASD-B3-0721-L
		With brake(Vertical type)	750	220	ECM-B3M-C20807SS1	ASD-B3-0721-L

Motor exposed

1-axis **GR17**



(Unit:mm)

Motor exposed	Stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
	L	1407	1507	1607	1707	1807	1907	2007	2107	2207	2307	2407	2507	2607
A	200	100	200	100	200	100	200	100	200	100	200	100	200	200
M	5	6	6	7	7	8	8	9	9	10	10	11	11	11
N	14	16	16	18	18	20	20	22	22	24	24	26	26	26
KG	31	32.7	34.4	36.1	37.8	39.5	41.2	42.9	44.6	46.3	48	49.7	51.4	51.4

Motor exposed	Stroke	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500
	L	2707	2807	2907	3007	3107	3207	3307	3407	3507	3607	3707	3807	3907
A	100	200	100	200	100	200	100	200	100	200	100	200	100	100
M	12	12	13	13	14	14	15	15	16	16	17	17	18	18
N	28	28	30	30	32	32	34	34	36	36	38	38	40	40
KG	53.1	54.8	56.5	58.2	59.9	61.6	63.3	65	66.7	68.4	70.1	71.8	73.5	73.5

MEMO

General/
Inline/
Screw sample

ATH
RTH

General/
Screw sample

DG
KTH

General/
Electric cylinder
sample
DMB
EMB

General/Inline
/Belt sample

RTB

General/
Belt sample

DB
KTB

General/
European/Belt
sample

MB

Clean/Inline/
Screw sample

ACH
RCH

Clean/
Screw sample

KCH

Clean/Inline/
Belt sample

RCB

Clean/
Belt sample

KCB

General/KKT/
Screw sample

KKT

General/
Rack and
pinion sample

General/
Linear motor
sample

LM

Reference

ATH3
ATH4
ATH5
ATH8
ATH12
ATH15
RTH4
RTH5
RTH8
RTH12
DG60
DG100
DG135
KTH13
KTH14
KTH17
KTH22
KTH27
DMB5
DMB10
DMB20
DMB30
DMB40
EMB5
EMB10
EMB20
RTB5
RTB8
RTB12
RTB15
DB100
DB135
KTB14M
KTB17M
KTB22M
MB65
MB80
MB110
ACH4
ACH5
ACH8
ACH12
ACH15
RCH4
RCH5
RCH8
RCH12
KCH14
KCH17
KCH22
RCB5
RCB8
RCB12
RCB15
KCB14
KCB17
KCB22
KKT50
KKT60
KKT86
GR14

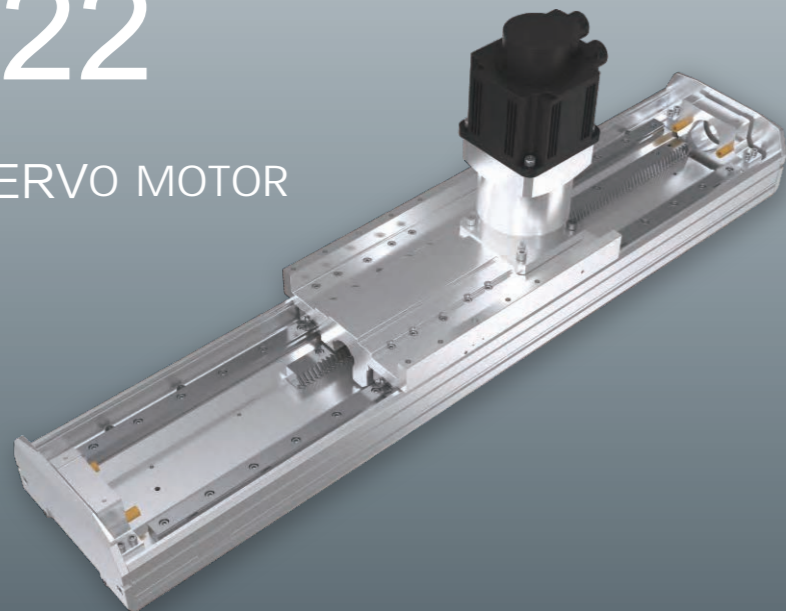
GR17

GR22
LM80
LM140
LM170
LM210

Rack and pinion series

GR22

1-axis
1000W SERVO MOTOR



This figure is for reference only, the shipping specifications are detailed in the dimension drawing.

Maximum stroke **3500mm** Maximum speed **1633mm/s** Motor capacity **1000W** Rack **M2**

⚡ The maximum speed depends on different gear ratio.

Linear Guide **23X20-2 pc**

Ordering method

GR22-K3/48.87-100-BC-P1KWB-C4-Special

Special Order No.

Model	Reduction ratio/Lead	Stroke	Motor position	Motor brand, power output	Home sensor	Limit sensor																																																
	<table border="1"> <tr><td>K3</td><td>48.87</td></tr> <tr><td>K5</td><td>29.32</td></tr> <tr><td>K7</td><td>20.94</td></tr> <tr><td>K10</td><td>14.66</td></tr> </table>	K3	48.87	K5	29.32	K7	20.94	K10	14.66	<table border="1"> <tr><td>1000-3500mm</td></tr> <tr><td>100mm Pitch</td></tr> </table>	1000-3500mm	100mm Pitch	<table border="1"> <tr><td>BC</td><td>Motor exposed</td></tr> <tr><td>BL</td><td>Right Angle Reducer</td></tr> </table>	BC	Motor exposed	BL	Right Angle Reducer	<table border="1"> <tr><td>M</td><td>Mitsubishi</td><td>20</td><td>-</td><td>B</td></tr> <tr><td>P</td><td>Panasonic</td><td>40</td><td>-</td><td></td></tr> <tr><td>Y</td><td>Yaskawa</td><td>75</td><td>-</td><td></td></tr> <tr><td>T</td><td>Delta</td><td>1KW</td><td>1000W</td><td></td></tr> </table>	M	Mitsubishi	20	-	B	P	Panasonic	40	-		Y	Yaskawa	75	-		T	Delta	1KW	1000W		<table border="1"> <tr><td>Out side</td></tr> <tr><td>C</td><td>Out side</td></tr> <tr><td>No sensor</td></tr> <tr><td>E</td><td>No sensor</td></tr> </table>	Out side	C	Out side	No sensor	E	No sensor	<table border="1"> <tr><td>Out side</td></tr> <tr><td>3</td><td>1Pc</td></tr> <tr><td>4</td><td>2Pc</td></tr> <tr><td>No sensor</td></tr> <tr><td>5</td><td>No sensor</td></tr> </table>	Out side	3	1Pc	4	2Pc	No sensor	5	No sensor
K3	48.87																																																					
K5	29.32																																																					
K7	20.94																																																					
K10	14.66																																																					
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100mm Pitch																																																						
BC	Motor exposed																																																					
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T	Delta	1KW	1000W																																																			
Out side																																																						
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No sensor																																																						
E	No sensor																																																					
Out side																																																						
3	1Pc																																																					
4	2Pc																																																					
No sensor																																																						
5	No sensor																																																					

If no brake, no description.

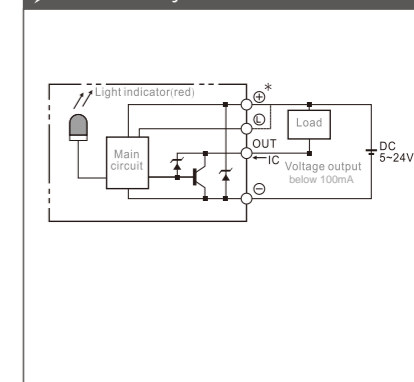
* Both sides of slider need to install the sensor trigger device.

Specification

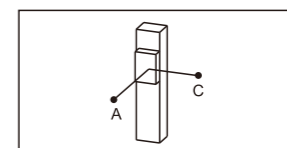
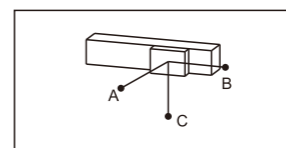
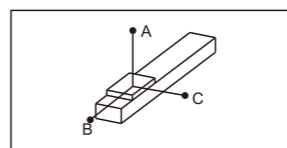
Spec	Repeatability	mm	±0.04				
	Driving Power	w	1000				
	Reduction ratio		3:1	5:1	7:1	10:1	
	Gear Lead	mm	48.87	29.32	20.94	14.66	
	Maximum speed	mm/s	1633	966	700	486	
	Maximum payload	Horizontal	kg	43	105	128	150
		Vertical	kg	12	20	33	45
	Rated thrust	N	320	640	961	1281	
	Stroke pitch	mm	1000-3500mm/100 pitch				
	Rotat rotating speed(RPM)		2000				
	Home sensor	Outside		EE-SX672(NPN)/FC-SPX303Z-2M(NPN)			
		Built-In		EE-SX674(NPN)/FC-SPX307Z-2M(NPN)			

• Choose the real motor please according to the motor parameters calculated the above specifications.

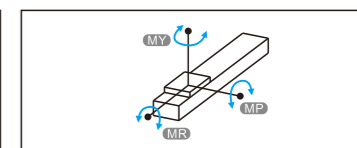
Sensor layout



Allowable overhang



Static loading moment



(Unit:mm)

Horizontal Installation	A	B	C	
3:1	18kg	2445	1616	1052
	30kg	1436	938	613
	43kg	978	630	412
5:1	65kg	1522	614	458
	85kg	1136	451	336
	105kg	893	350	262
7:1	83kg	2071	589	466
	105kg	1845	443	352
	128kg	1503	350	279
10:1	100kg	3220	563	474
	125kg	2554	434	367
	150kg	2113	349	295

(Unit:mm)

Wall Installation	A	B	C	
3:1	15kg	1272	1955	2948
	24kg	778	1190	1813
	43kg	412	630	978
5:1	70kg	420	564	1404
	90kg	315	420	1066
	105kg	262	350	893
7:1	90kg	424	534	2152
	110kg	333	417	1755
	128kg	279	350	1503
10:1	110kg	427	503	2900
	130kg	351	414	2444
	150kg	295	349	2113

(Unit:mm)

Vertical Installation	A	C	
3:1	7kg	3511	3511
	12kg	2055	2055
	-	-	-
5:1	15kg	2711	2711
	20kg	2033	2033
	-	-	-
7:1	20kg	2608	2608
	28kg	1914	1914
	33kg	1511	1511
10:1	25kg	2505	2505
	35kg	1795	1795
	45kg	1396	1396

(Unit:N.m)

MY	2052
MP	2052
MR	1810

• 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.

Suitable motor brand

Brand	Mark	Brake	Watt	AC-Voltage	Motor model	Driver model
Mitsubishi	M	No brake(Horizontal type)	1000	220	HG-SN102J-S100	MR-JE-100A
		With brake(Vertical type)	1000	220	HG-SN102BJ-S100	MR-JE-100A
Panasonic	P	No brake(Horizontal type)	1000	220	MDMF102L1G6M	MDDL45SE
		With brake(Vertical type)	1000	220	MDMF102L1H6M	MDDL45SE
Delta	T	No brake(Horizontal type)	1000	220	ECM-B3M-E21310RS1	ASD-B3-1021-L
		With brake(Vertical type)	1000	220	ECM-B3M-E21310SS1	ASD-B3-1021-L

ATH3
ATH4
ATH5
ATH8
ATH12
ATH15
RTH4
RTH5
RTH8
RTH12
DG60
DG100
DG135
KTH13
KTH14
KTH17
KTH22
KTH27
DMB5
DMB10
DMB20
DMB30
DMB40
EMB5
EMB10
EMB20
RTB5
RTB8
RTB12
RTB15
DB100
DB135
KTB14M
KTB17M
KTB22M
MB65
MB80
MB110
ACH4
ACH5
ACH8
ACH12
ACH15
RCH4
RCH5
RCH8
RCH12
KCH14
KCH17
KCH22
RCB5
RCB8
RCB12
RCB15
KCB14
KCB17
KCB22
KKT50
KKT60
KKT86
GR14
GR17

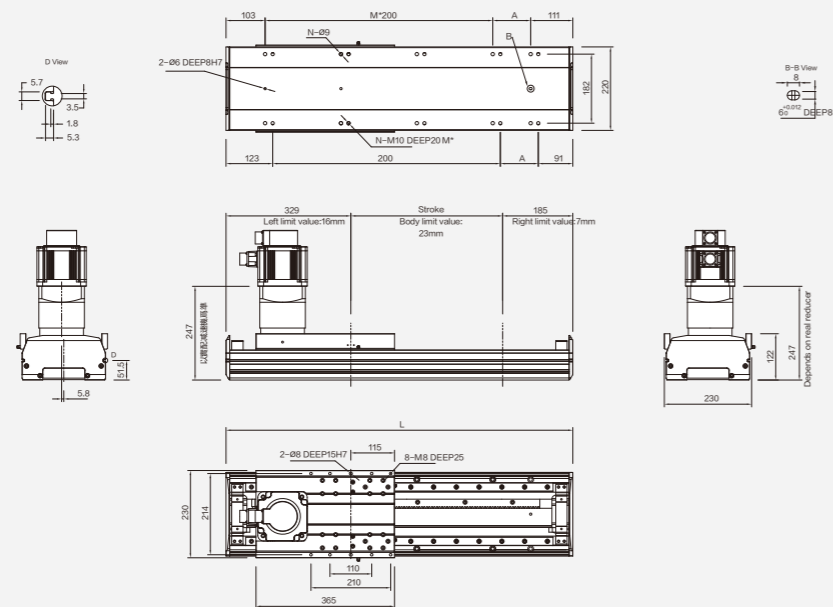
GR22

LM80
LM140
LM170
LM210

General/ Inline/ Screw sample
ATH
RTH
General/ Screw sample
DG
KTH
General/ Electric cylinder sample
DMB
EMB
General/ Inline/ Belt sample
RTB
General/ Belt sample
DB
KTB
General/ European/Belt sample
MB
Clean/ Inline/ Screw sample
ACH
RCH
Clean/ Screw sample
KCH
Clean/ Inline/ Belt sample
RCB
Clean/ Belt sample
KCB
General/ KKT/ Screw sample
KKT
General/ Rack and pinion sample
GR
General/ Linear motor sample
LM
Reference

Motor exposed

1-axis GR22



(Unit:mm)

Motor exposed	Stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
	L	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514	2614	2714
A	100	200	100	200	100	200	100	200	100	200	100	200	100	200
M	6	6	7	7	8	8	9	9	10	10	11	11	12	12
N	16	16	18	18	20	20	22	22	24	24	26	26	28	28
KG	51.6	53.8	56	58.2	60.4	62.6	64.8	67	69.2	71.4	73.6	75.8	78	78

Motor exposed	Stroke	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500
	L	2814	2914	3014	3114	3214	3314	3414	3514	3614	3714	3814	3914	4014
A	200	100	200	100	200	100	200	100	200	100	200	100	200	200
M	12	13	13	14	14	15	15	16	16	17	17	18	18	18
N	28	30	30	32	32	34	34	36	36	38	38	40	40	40
KG	80.2	82.4	84.6	86.8	89	91.2	93.4	95.6	97.8	100	102.2	104.4	106.6	106.6

MEMO

General/
In-line/
Screw sample

ATH
RTH

General/
Screw sample

DG
KTH

General/
Electric cylinder
sample

DMB
EMB

General/In-line
/Belt sample

RTB

General/
Belt sample

DB
KTB

General/
European/Belt
sample

MB

Clean/In-line/
Screw sample

ACH
RCH

Clean/
Screw sample

KCH

Clean/In-line/
Belt sample

RCB

Clean/
Belt sample

KCB

General/KKT/
Screw sample

KKT

General/
Rack and
pinion sample

General/
Linear motor
sample

LM

Reference

ATH3
ATH4
ATH5
ATH8
ATH12
ATH15
RTH4
RTH5
RTH8
RTH12
DG60
DG100
DG135
KTH13
KTH14
KTH17
KTH22
KTH27
DMB5
DMB10
DMB20
DMB30
DMB40
EMB5
EMB10
EMB20
RTB5
RTB8
RTB12
RTB15
DB100
DB135
KTB14M
KTB17M
KTB22M
MB65
MB80
MB110
ACH4
ACH5
ACH8
ACH12
ACH15
RCH4
RCH5
RCH8
RCH12
KCH14
KCH17
KCH22
RCB5
RCB8
RCB12
RCB15
KCB14
KCB17
KCB22
KKT50
KKT60
KKT86
GR14
GR17

GR22

LM80
LM140
LM170
LM210

Various combinations



Various combinations



Motor mounting size

Motor mounting size						
Motor size	□ 38	□ 60	□ 60	□ 80	□ 42.3	□ 86
Shaft diameter	Ø8	Ø11	Ø14	Ø19	Ø5	Ø14
Capacity w	100W	200W	400W	750W	42 Stepping motor	86 Stepping motor
Flange code	A	C	E	G	I	K
Motor mounting size						
Motor size	□ 40	□ 60	□ 60	□ 80	□ 56.4	□ 86
Shaft diameter	Ø8	Ø14	Ø14	Ø19	Ø8	Ø12.7
Capacity w	100W	200W	400W	750W	57 Stepping motor	86 Stepping motor
Flange code	B	D	F	H	J	L

Note: This table is for reference only, subject to actual size.

Purchase Guide

Ball screw drive/General environment

RTH Series

Built-in self-lubricating series

RTH5		RTH5	
	Maximum stroke 850mm Maximum load 25kg Body width 44mm		Maximum stroke 850mm Maximum load 30kg Body width 54mm

RTH8		RTH12	
	Maximum stroke 1100mm Maximum load 50kg Body width 82mm		Maximum stroke 1300mm Maximum load 110kg Body width 120mm



KTH Series

General screw series

KTH13		KTH14		KTH17	
	Maximum stroke 1050mm Maximum load 70kg Body width 135mm		Maximum stroke 1050mm Maximum load 110kg Body width 135mm		Maximum stroke 1250mm Maximum load 120kg Body width 170mm

KTH22		KTH27	
	Maximum stroke 1500mm Maximum load 150kg Body width 220mm		Maximum stroke 1500mm Maximum load 350kg Body width 270mm



Ball screw drive/General environment

KKT Series

KKT series

KKT50		KKT60		KKT86	
	Maximum track length 300mm Basic dynamic rated load 1813N Basic static load rating 2910N Body width 50mm		Maximum track length 600mm Basic dynamic rated load 3377N Basic static load rating 5625N Body width 60mm		Maximum track length 940mm Basic dynamic rated load 6429N Basic static load rating 11387N Body width 86mm



Rack and pinion/General environment

GR Series

Rack and pinion series

GR14		GR17		GR22	
	Maximum stroke 3500mm Maximum load 88kg Body width 135mm		Maximum stroke 3500mm Maximum load 102kg Body width 170mm		Maximum stroke 3500mm Maximum load 150kg Body width 220mm







Purchase Guide

RTB Series

RTB series:
1. 1.50mm shorter than ATB series
2. Compact size for limited installation space.



Inline belt series	
RTB5  Maximum stroke 850mm Maximum load 5kg Body width 54mm	RTB8  Maximum stroke 1750mm Maximum load 15kg Body width 82mm

RTB12  Maximum stroke 1750mm Maximum load 25kg Body width 120mm	RTB15  Maximum stroke 1750mm Maximum load 45kg Body width 155mm
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KTB Series

General belt series		
KTB14M  Maximum stroke 3050mm Maximum load 25kg Body width 135mm	KTB17M  Maximum stroke 3050mm Maximum load 45kg Body width 170mm	KTB22M  Maximum stroke 3400mm Maximum load 85kg Body width 220mm

MB Series

European belt series		
MB65  Maximum stroke 5500mm Maximum load 60kg Body width 65mm	MB80  Maximum stroke 5500mm Maximum load 100kg Body width 80mm	MB110  Maximum stroke 5500mm Maximum load 200kg Body width 110mm



Belt drive/General environment

Simple Selection Table–Single Axis Series

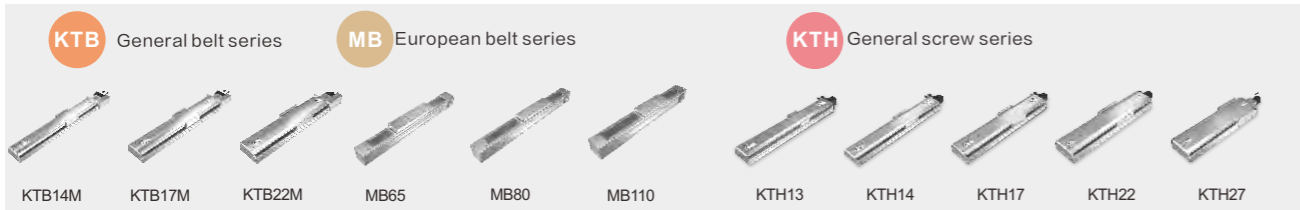


Model Specification	ATH3	ATH4	ATH5	ATH8	ATH12	ATH15		
Motor Output (W)	50	100	100	200/400	400	400	750	
Repeatability (mm)	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005		
Ball Screw Lead (mm)	1/2/5	2/5/10	5/10/20	5/10/20	5/10/20/32	5/10/20/40		
Maximum speed (mm/s)	50/100/300	100/250/500	250/500/1000	250/500/1000	250/500/1000/1600	250/500/1000/2000		
Maximum payload (kg)	Horizontal	5/5/3	25/20/12	30/15/10	50/30/18	110/88/40/30	120/110/75/22	120/120/83/43
	Vertical	3/2/0.8	8/8/3.5	10/5/2.5	15/8/3	33/22/10/8	40/30/14/7	50/40/25/12
Stroke (mm)	10-200	50-800	50-800	50-1050	50-1250	50-1250		

Model Specification	RTH4	RTH5	RTH8	RTH12	
Motor Output (W)	100	100	200/400	400	
Repeatability (mm)	± 0.005	± 0.005	± 0.005	± 0.005	
Ball Screw Lead (mm)	2/5/10	5/10/20	5/10/20	5/10/20/32	
Maximum speed (mm/s)	100/250/500	250/500/1000	250/500/1000	250/500/1000/1600	
Maximum payload (kg)	Horizontal	25/20/12	30/15/10	50/30/18	110/88/40/30
	Vertical	8/8/3.5	10/5/2.5	15/8/3	33/22/10/8
Stroke (mm)	50-850	50-850	50-1100	50-1300	



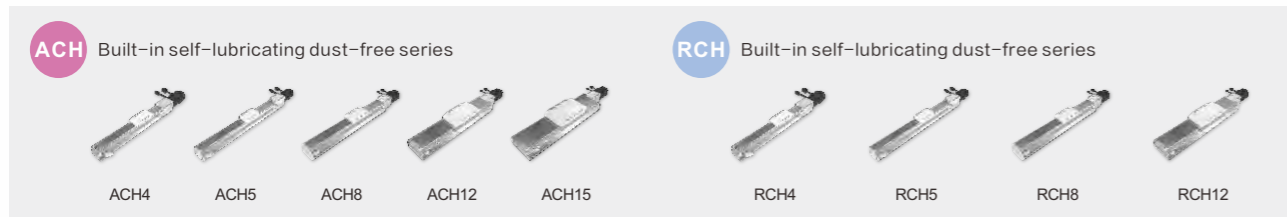
Model Specification	RTB5	RTB8	RTB12	RTB15	
Motor Output (W)	100	200	200	400	
Repeatability (mm)	± 0.04	± 0.04	± 0.04	± 0.04	
Ball Screw Lead (mm)	30/60	33/66	36/72	42/84	
Maximum speed (mm/s)	1500/3000	1650/3300	1800/3600	2100/4200	
Maximum payload (kg)	Horizontal	5	15	25	45
	Vertical	-	-	-	-
Stroke (mm)	50-850	50-1750	50-1750	50-1750	



Model Specification	KTB14M	KTB17M	KTB22M	MB65	MB80	MB110	
Motor Output (W)	200	400	750	400	400/750	750	
Repeatability (mm)	± 0.04	± 0.04	± 0.04	± 0.1	± 0.1	± 0.1	
Ball Screw Lead (mm)	40	40	40	130	200	280	
Gearbox Ratio	-	-	-	3:1/5:1/7:1/10: 1	5:1/7:1/10:1	10:1/15:1/20:1	
Maximum speed (mm/s)	2000	2000	2000	2166/1300/928/650	2000/1428/1000	1400/933/700	
Maximum payload (kg)	Horizontal	25	45	85	30/45/55/60	40/60/100	100/150/200
	Vertical	-	-	-	9/15/16/17	14/21/24	23/36/50
Stroke (mm)	50-3050	50-3050	50-3400	100-5500	100-5500	100-5500	

Model Specification	KTH13	KTH14		KTH17		KTH22	KTH27		
Motor Output (W)	200/400	200	400	400	750	750	750	1000	
Repeatability (mm)	± 0.005	± 0.005		± 0.005		± 0.005	± 0.005		
Ball Screw Lead (mm)	5/10/20/32	5/10/20/32		5/10/20/40		5/10/25/32	5/10/20/32		
Maximum speed (mm/s)	250/500/1000/1600	250/500/1000/1600		250/500/1000/2000		250/500/1250/1600	250/500/1000/1600		
Maximum payload (kg)	Horizontal	70/47/24/13	95/75/35/15	110/88/40/30	120/110/75/22	120/120/83/43	150/150/105/60	250/200/100/50	350/300/200/100
	Vertical	17/12/6/-	27/18/7/-	33/22/10/8	40/30/14/7	50/40/25/12	55/45/20/20	100/80/40/20	140/120/80/40
Stroke (mm)	50-1050	50-1050		50-1250		50-1500	100-1500		

Simple Selection Table-Single Axis Series



Model Specification	ACH4	ACH5	ACH8	ACH12	ACH15	
Motor Output (W)	100	100	200/400	400	400	750
Repeatability (mm)	±0.005	±0.005	±0.005	±0.005	±0.005	
Ball Screw Lead (mm)	2/5/10	5/10/20	5/10/20	5/10/20/32	5/10/20/40	
Maximum speed (mm/s)	100/250/500	250/500/1000	250/500/1000	250/500/1000/1600	250/500/1000/2000	
Maximum payload (kg)	Horizontal	25/20/12	30/15/10	50/30/18	110/88/40/30	120/110/75/22 120/120/83/43
	Vertical	8/8/3.5	10/5/2.5	15/8/3	33/22/10/8	40/30/14/7 50/40/25/12
Stroke (mm)	50-800	50-800	50-1050	50-1250	50-1250	

Model Specification	RCH4	RCH5	RCH8	RCH12
Motor Output (W)	100	100	200/400	400
Repeatability (mm)	±0.005	±0.005	±0.005	±0.005
Ball Screw Lead (mm)	2/5/10	5/10/20	5/10/20	5/10/20/32
Maximum speed (mm/s)	100/250/500	250/500/1000	250/500/1000	250/500/1000/1600
Maximum payload (kg)	Horizontal	25/20/12	30/15/10	50/30/18 110/88/40/30
	Vertical	8/8/3.5	10/5/2.5	15/8/3 33/22/10/8
Stroke (mm)	50-850	50-850	50-1100	50-1300



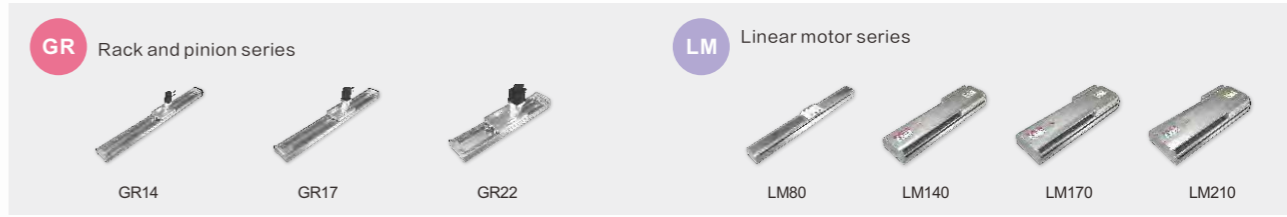
Model Specification	KCH14		KCH17		KCH22
Motor Output (W)	200	400	400	750	750
Repeatability (mm)	±0.005		±0.005		±0.005
Ball Screw Lead (mm)	5/10/20/32		5/10/20/40		5/10/25/32
Maximum speed (mm/s)	250/500/1000/1600		250/500/1000/2000		250/500/1250/1600
Maximum payload (kg)	Horizontal	95/75/35/15	110/88/40/30	120/110/75/22	120/120/83/43 150/150/105/60
	Vertical	27/18/7/-	33/22/10/8	40/30/14/7	50/40/25/12 55/45/20/20
Stroke (mm)	50-1050		50-1250		50-1500

Model Specification	RCB5	RCB8	RCB12	RCB15
Motor Output (W)	100	200	200	400
Repeatability (mm)	±0.04	±0.04	±0.04	±0.04
Ball Screw Lead (mm)	30/60	33/66	36/72	42/84
Maximum speed (mm/s)	1500/3000	1650/3300	1800/3600	2100/4200
Maximum payload (kg)	Horizontal	5	15	25 45
	Vertical	-	-	-
Stroke (mm)	50-850	50-1750	50-1750	50-1750



Model Specification	KCB14	KCB17	KCB22	
Motor Output (W)	200	400	750	
Repeatability (mm)	±0.04	±0.04	±0.04	
Ball Screw Lead (mm)	40	40	40	
Maximum speed (mm/s)	2000	2000	2000	
Maximum payload (kg)	Horizontal	25	45	85
	Vertical	-	-	-
Stroke (mm)	50-3050	50-3050	50-3400	

Model Specification	KKT50	KKT60	KKT86	
Motor Output (W)	100	100	100/200	
Repeatability (mm)	±0.01	±0.01	±0.01	
Ball Screw Lead (mm)	2	5/10	10/20	
Maximum speed (mm/s)	270	390/790	520/1050	
load	Dynamic load rating(N)	1813	3377/2107	6429/4175
	Rated static load(N)	2910	5625/3234	11387/6889
Lehgth (mm)	150/200/250/300	150/200/300/400/500/600	340/440/540/640/740/940	



Model Specification	GR14	GR17	GR22	
Motor Output (W)	400	750	750	
Repeatability (mm)	±0.04	±0.04	±0.04	
Gearbox Ratio	3:1/5:1/7:1/10:1	3:1/5:1/7:1/10:1	3:1/5:1/7:1/10:1	
Gear lead (mm)	33.32/19.99/14.28/10.00	48.87/29.32/20.94/14.66	48.87/29.32/20.94/14.66	
Maximum speed (mm/s)	1665/1000/715/500	2443/1466/1047/733	1633/966/700/486	
Maximum payload (kg)	Horizontal	30/40/64/88	31/63/83/102	43/105/128/150
	Vertical	8/10/18/22	9/18/25/33	12/20/33/45
Stroke (mm)	1000-3500	1000-3500	1000-3500	

Model Specification	LM80	LM140			LM170			LM210			
Standard thrust	82	81	152	218	122	230	330	161	302	435	
Repeatability (mm)	MG±0.005 /RG±0.003	MG±0.005/RG±0.003			MG±0.005/RG±0.003			MG±0.005/RG±0.003			
Maximum speed (mm/s)	4000	3000			3000			3000			
Thrust	Continuous thrust (N)	82	81	152	218	233	230	330	161	302	435
	Peak thrust (N)	256.7	265	534	791	417	840	1241	568	1146	1700
Stroke (mm)	100-1900	72-3816	82-3730	96-3648	72-5832	85-5746	96-5664	72-3816	82-3730	96-3648	

Lim-Tec[®]

Feb.25,2016 Lim-tec successfully landed on NEEQ with the code 836388, leading the new height of linear motion development in China.

Ever since 2005, Joint Venture Enterprise Lim-tec (Beijing) Transmission Equipment Co.,Ltd was set up by Limtec Group and Beijing Reloh International Trade Co., Ltd to introduce European most advanced linear motion technology and the concept of modular combination design, guide the new direction of development for domestic screw jack, electric actuator and slide industry.

Based in Beijing China, we have more than 10 offices distributed throughout the country to provide high-quality products, full range of technical support and prompt after-sales service at home and abroad.Up to now, there were more than 100000 sets of products successful used in automobile equipment, automation assembly, metallurgical industry,aerospace industry,port machinery and other industries.

Established automation assembly department in the year of 2008,Lim-tec has researched and developed six-DOF platform,servo pressure system, simulator and some other non-standard automation equipment.

With the gradual popularization of industry strategy 4.0 and the development of industry 5.0,green and sustainable products lead the tread in society.As the essential components supplier for industry automation robot,Lim-tec products will get considerable development.It's just a starting for Lim-tec second take-off on NEEQ,80 millions RMB have been re-invested to bring in advanced processing equipment and expand production capacity to more than 50 thousand sets per year,to build Lim-tec the world's most competitive and professional linear actuator/screw jack/servo actuator /electric slide manufacturing base.

