

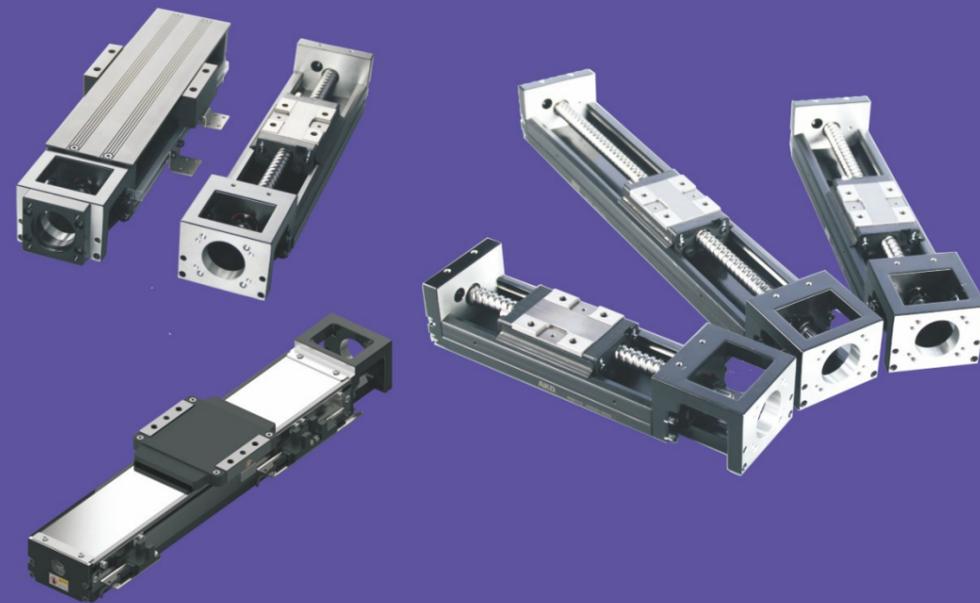
KKR Series

Integrated Guide/Ball Screw Steel Actuator



CONTENTS

Standard/Ball Screw Type



Standard

KKR20



Width: 20mm
Max.stroke: 112mm...24

Light-Load

KKR60-S



Width: 60mm
Max.stroke: 535mm... 48

Standard

KKR30



Width: 30mm
Max.stroke: 156mm...25

Standard

KKR86



Width: 86mm
Max.stroke: 810mm... 57

Standard

KKR40



Width: 40mm
Max.stroke: 136mm...26

Light-Load

KKR86-S



Width: 86mm
Max.stroke: 846mm... 66

Standard

KKR50



Width: 50mm
Max.stroke: 220mm... 30

Standard

KKR100



Width: 100mm
Max.stroke: 1228mm... 75

Standard

KKR60



Width: 60mm
Max.stroke: 510mm...39

Standard

KKR130



Width: 130mm
Max.stroke: 1511mm... 84

Structural Diagram

1 Integrated design of guide and U-shaped body

It integrates the functions of ball screw and ball guide, while avoiding the disadvantages of traditional applications such as complex model selection, installation and debugging, and large space occupation.

2 Four-way equal load capacity

The guide and bearing system is composed of hardened steel balls and Gothic double arc raceways on both sides. The contact angle between the steel ball and raceway is 45°, ensuring the same load capacity in four directions.



3 High rigidity

The body adopts a U-shaped cross-section, which is optimized by finite element analysis so that the product has the characteristics of high rigidity, compact structure and light weight.



Industrial robot

Comprehensive Explanation

Precautions

This KKR series product is a mechanical and electrical equipment. To maintain the safety of users, please make sure to read the relevant catalogs and the following precautions carefully and use them according to the instructions before selecting the model and actually operating this product. If this product is not used in accordance with these precautions, resulting in abnormal function, damage or other accidents, our company will not bear any responsibilities.

Personal Safety

This product is for industrial use and cannot be used on safety components directly related to human life or well-being.

When this product is operating and rotating, the personnel shall stay outside the range of mechanical movement to avoid pinching or other industrial safety accidents.

When this product is connected to a motor and powered on, people with pacemakers shall maintain a distance of one meter to avoid interference.

The product shall not be installed near to fire sources, flammable materials, or flammable gases to prevent fire.

Storage and Installation

Avoid falling or collision during handling.

When storing this product, it is recommended to lay it flat and properly package it to avoid exposure to high temperature, low temperature and humid environments.

Do not disassemble or modify this product by yourself to prevent foreign objects from entering or damaging the product, causing abnormal functions or safety accidents.

When installing, the product shall be locked to prevent loosening due to vibration.

When installing the coupling and motor, please select appropriate components, and pay attention to aligning the shaft center line before locking the screws. Do not force the installation.

Operation and use

During operation, the rated conditions stated in the catalog must be followed, such as the maximum speed, load, etc., to avoid functional damage or safety accidents.

Prevent foreign objects such as dust and chips from entering the ball circulation system, causing damage, shortening life or abnormal function.

The operating ambient temperature shall be 80°C below. If you need products used in a high temperature place, please consult with AKD Business Department. In special environments, such as strong vibration, vacuum chamber, clean room, corrosive chemicals, organic solvents or reagents, extremely high or low temperature, moisture splashing, oil droplets and oil mist, high salinity, heavy load, vertical or cantilever installation, etc., please contact AKD Business Department firstly to confirm the applicable conditions of this product.

When installed vertically, the load is at the risk of falling. It is recommended to install an appropriate brake and check the brake function before use.

Maintenance

Before using for the first time, please fill up the lubrication oil first. Pay attention to the type of oil, and different lubrication oils cannot be mixed.

Under normal use, it is recommended to check the operation state every 100km of travel, remove accumulated dirt, and refill lubrication oil. Both the actuator rail and screw shall be lubricated.

The specification shall be subject to change without prior notice, and the final product description shall prevail

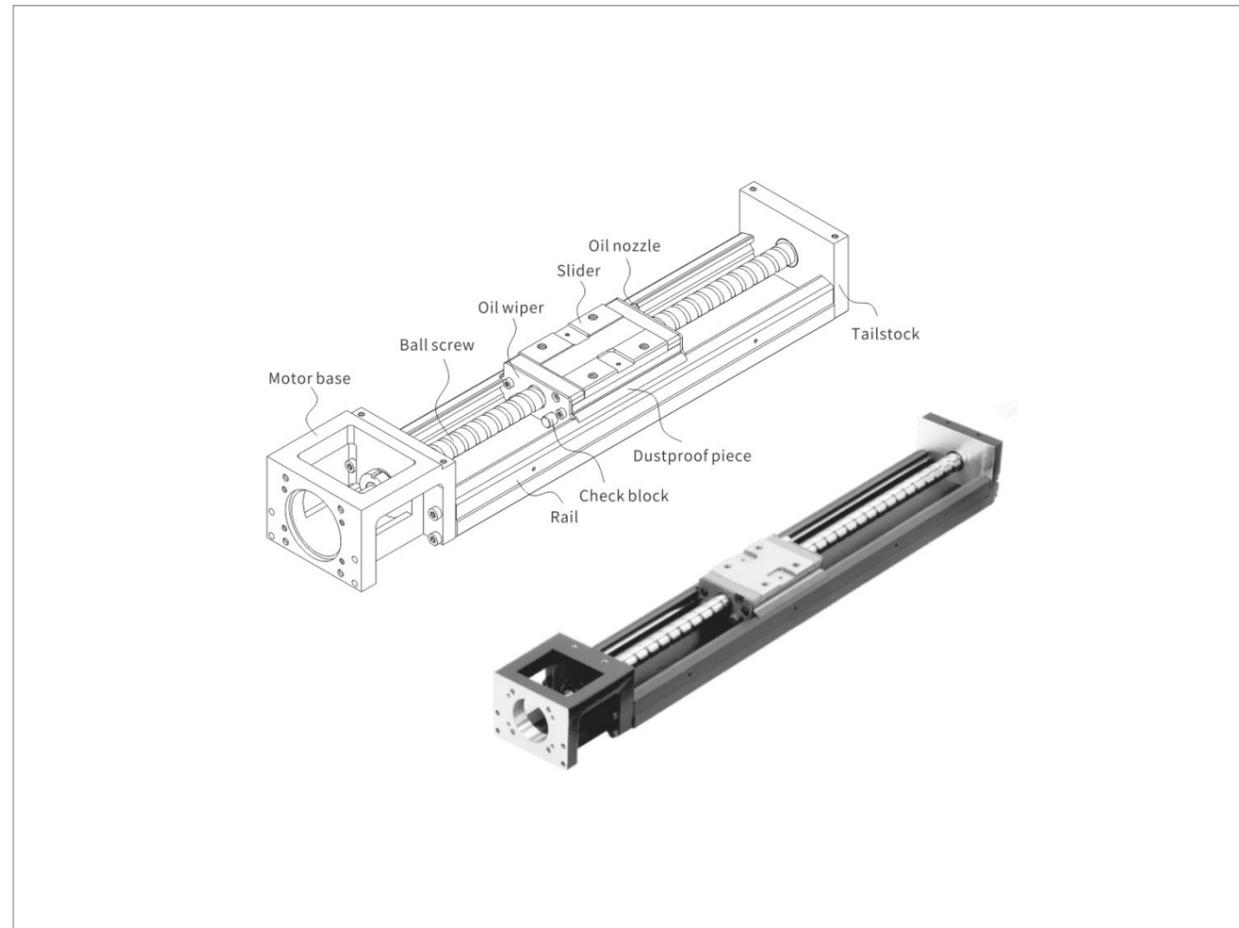
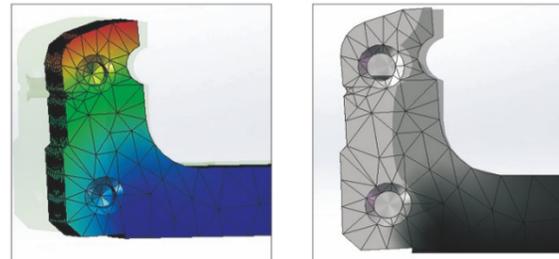
KKR

KKR industrial robots mainly integrate ball screws and linear actuator rails through modular design so that they can provide features such as: high accuracy, fast installation, selection, high rigidity, small size and space saving. The high accuracy ball screws are used as the transmission mechanism, and cooperating with the optimally designed U-shaped track as the guiding mechanism, the requirements of accuracy and rigidity are ensured.

1.1 Characteristics

- Simple design and installation
- Small size and light weight
- High accuracy
- High rigidity
- Complete configuration
- Optimal design

The track structure is obtained by finite element analysis to obtain the optimal rigidity and weight. The analysis is as described in right figure:



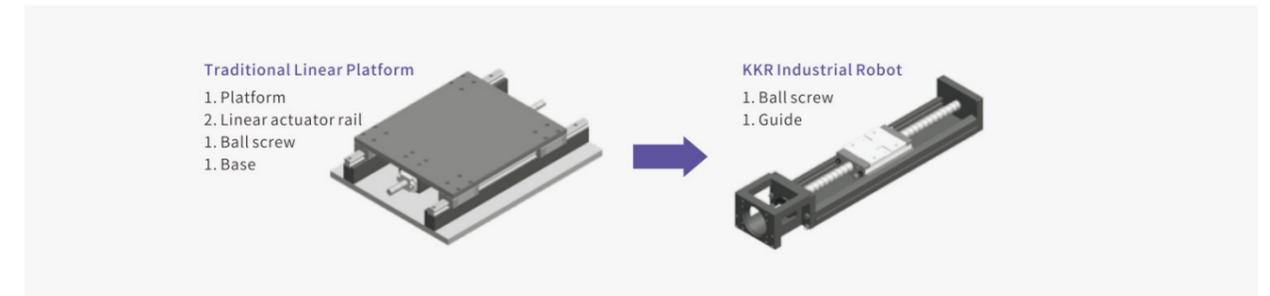
KKR Technical data

KKR20
KKR30
KKR40
KKR50
KKR60
KKR86
KKR100
KKR130

Motor seat and motor connecting flange

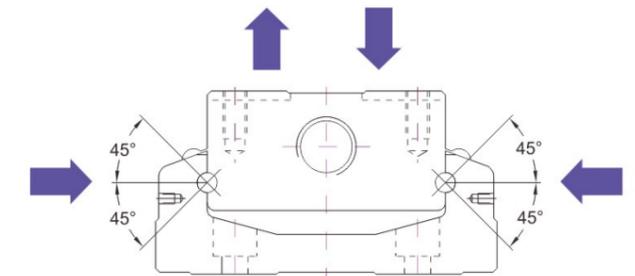
1.1.1 Modular

KKR industrial robot integrates the ball screws and linear actuator rail through the modular design, which can save the disadvantages of traditional motion platforms such as the need to select, install and verify guides and drive components, large size, and space occupation. Therefore, KKR industrial robot can provide the fast selection, installation, compact size, high rigidity and other characteristics, which can greatly reduce the customer's use of space and time.



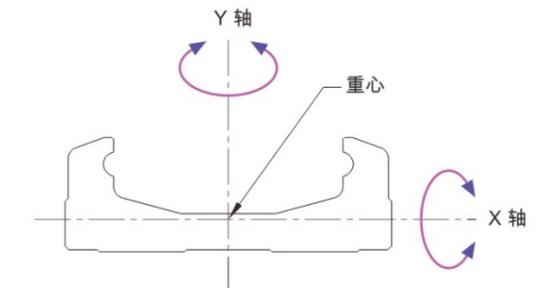
1.1.2 Four-way Equal Load

For the reflux system between the track and slider, a 2-row Gothic tooth type design is adopted for contact surface between the ball and ball groove, which has the characteristics of a 45-degree contact angle. This design enables the KKR industrial robot to withstand four-way equal load capacity.



1.1.3 High Rigidity

The track structure adopts a U-shaped cross-section, and through the design of finite element analysis software, a balance point is reached between volume and rigidity, so that the track has the characteristics of high rigidity, compact size and light weight.



Moment of Inertia

Unit: mm⁴

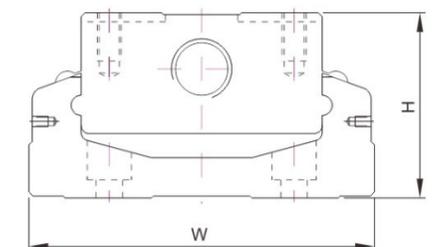
Model	I _x	I _y
KKR40	3.533 x 10 ³	5.317 x 10 ⁴
KKR50	9.6 x 10 ³	1.34 x 10 ⁵
KKR60	2.056 x 10 ⁴	2.802 x 10 ⁵
KKR86	7.445 x 10 ⁴	1.134 x 10 ⁶
KKR100	1.296 x 10 ⁵	2.035 x 10 ⁶
KKR130	2.546 x 10 ⁵	5.073 x 10 ⁶

I_x: moment of inertia along the X shaft
I_y: moment of inertia along the Y shaft

1.1.4 Diversified Specifications

To address various usage needs, the following KKR industrial robots have been developed to provide customers with choices according to usage needs, space and load.

Model	W	H
KKR20	20	10
KKR30	30	15
KKR40	40	20
KKR50	50	26
KKR60	60	33
KKR86	86	46
KKR100	100	55
KKR130	130	65



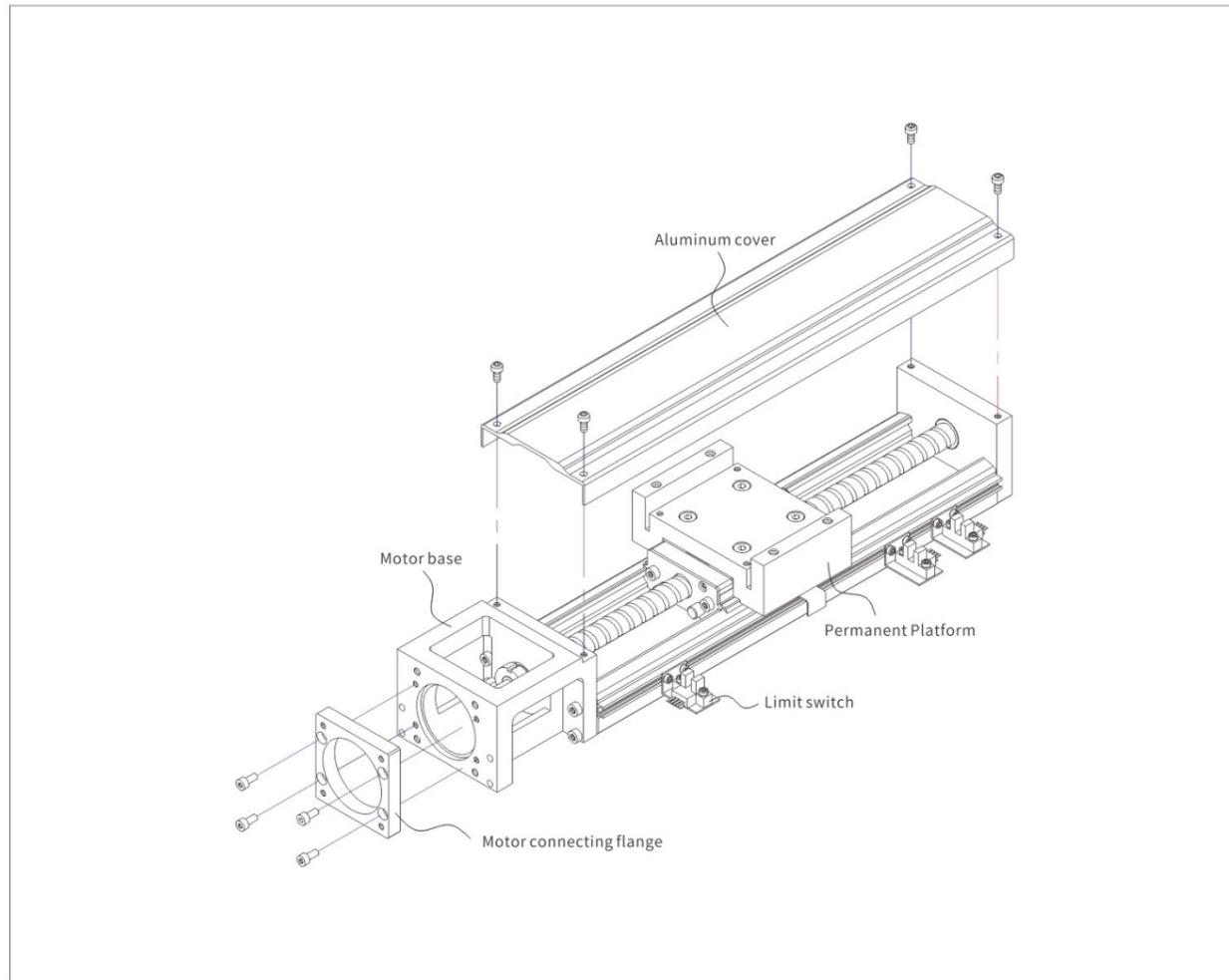
KKR Technical data

KKR20
KKR30
KKR40
KKR50
KKR60
KKR86
KKR100
KKR130

Motor seat and motor connecting flange

1.2 Optional Accessories

To meet various usage needs, the aluminum covers, telescopic sleeves, motor connecting flanges and limit switches can also be purchased for KKR industrial robots. Aluminum cover and telescopic sleeve: they can prevent foreign objects and impurities from entering the KKR industrial robot and affecting its service life, Motor connecting flange: it can lock various motors into KKR industrial robots. Limit switch: it provides a safety mechanism for positioning the slider, starting the origin and preventing the slider from exceeding the stroke.



1.3 Product Model

KKR50 02 P-50 A 2-HR 1 C S0 - D123

Body model Special Order No.

Screw lead(mm)	
KKR20	1
KKR30	1 2
KKR40	2
KKR50	2
KKR50H	5 6 10 20
KKR60	5 6 10 20
KKR86	5 10 20
KKR100	20
KKR130	25

Accuracy	
P	Precision-level cold rail
PU	Precision-level grinding seat
C	General level

Motor direction	
F	Motor direct connection
H0	Without motor seat
HR	Motor right turn
HL	Motor left turn
HW	Motor upfold
HM	Motor downfold

Cover	
C	Aluminum cover
B	Telescopic cover
无	Without cover

Limit switch	
S0	Without switch; with limit track, sensing plate, switch frame
S1	3 SX671
S2	3 SX674
S3	3 GX-F12A
S4	3 GX-F12A-P
No	Without switch, limit track etc.

Actuator base quantity	
1	1 actuator base
2	2 actuator bases One for drive and one for driven

Actuator base type	
A	Standard Type
S	Light load type

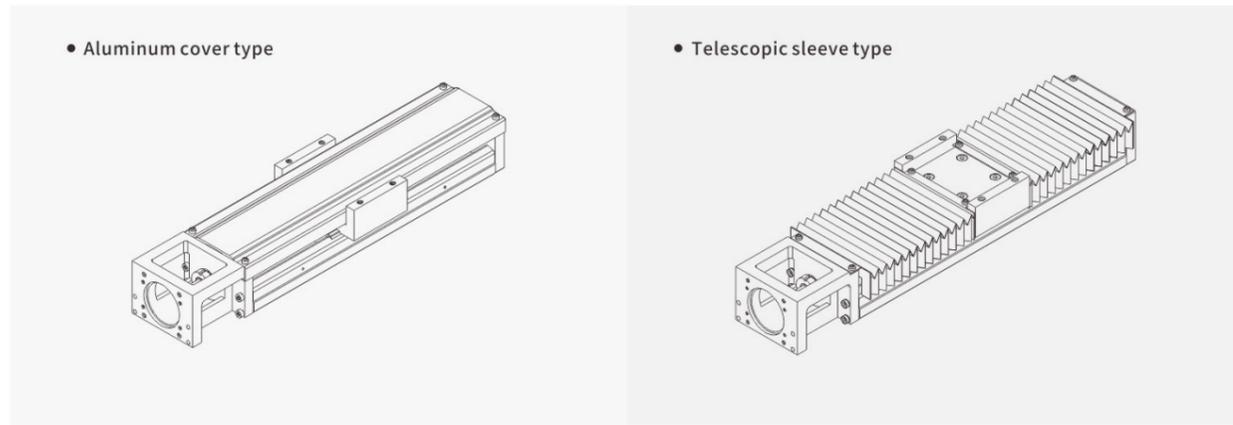
Motor seat number										
Motor seat number	0	1	2	3	4	5	6	7	8	9
KKR30		M02	Y02	B28	H03					
KKR40		T05/T10	P05/P10	B42						
KKR50		T05/T10	P05/P10	B42						
KKR60		T05/T10	P05/P10	B60	B57	B42	P20	T20/T40	P40	
KKR86	T20/T40	P20	T05/T10	P05/P10	P75	B60	B57	B86	T75	P40
KKR100	T20/T40	T75	P75	59	B86					

P: Panasonic servo; T: it generally refers to Mingzhi, Inovance, HCFA, Delta, Yaskawa, Mitsubishi and other servos; (M: it specifically refers to Mitsubishi servo; Y: it specifically refers to Yaskawa servo; H: it specifically refers to HCFA servo)

02/03/05/10.../75: refers to 0.1 times the motor power; 42/57/86 ("B" followed by): refers to the stepping motor frame number

Body length(mm)	
KKR20	60/100/140
KKR30	100/150/200
KKR40	100/150/200
KKR50	150/200/250/300
KKR60	150/200/300/400/500/600
KKR86	340/440/540/640/740/940
KKR100	980/1080/1180/1280/1380
KKR130	980/1180/1380/1680

KKR	Technical data
KKR20	
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Motor seat and motor connecting flange	



KKR	Technical data
KKR20	
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KKR50	
KKR60	
KKR86	
KKR100	
KKR130	
Motor seat and motor connecting flange	

1.4 Performance Parameter Table of Each Specification

Actuator product spec	Body width	Screw diameter	Screw lead	★ Allowable axial static load of product	Allowable radial static load of product	Allowable pitching static torque of actuator base Mp	Allowable deflection static torque of actuator base My	Allowable rolling static torque of actuator base Mr	Maximum stroke of actuator base	Maximum moving speed of actuator base ★	Maximum movable weight of 10,000km design life ★		Allowable arm length in each direction under various loads of the horizontally mounted actuator ★				Allowable arm length in each direction under various loads of the side-mounted actuator				Allowable arm length in each direction under various loads of the vertically mounted actuator		
											Horizontal use	Vertical use	Load value	Lateral Lx	Vertical Ly	Axial Lz	Load value	Lateral Lx	Vertical Ly	Axial Lz	Load value	Lateral Lx	Vertical Ly
											kg	kg	kg	mm	mm	mm	kg	mm	mm	mm	kg	mm	mm
KKR2001-A1-60	20	4	1	21	60	2	2	2	32	50	2	0.6	1	17	570	12	0.5	1000	38	24	0.2	71	76
KKR2001-A1-100											3	0.6	2	6	275	7	1	540	17	9	0.4	33	38
KKR2001-A1-140											4	0.6	4	1	102	0.8	2	160	6	1	0.6	2	25
KKR2001-A2-60	20	4	1	21	119	6	6	5	5	50	4	0.6	4	6	445	8	0.5	1000	80	97	0.2	267	272
KKR2001-A2-100									6		0.6	6	3	273	3	2.5	670	12	10	0.4	131	136	
KKR2001-A2-140									8		0.6	8	1	163	1	4.5	42	5.2	1	0.6	85	90	
KKR3002-A1-100	30	6	2	26	178	7	7	13	56	100	6	0.7	2	60	580	31	2	570	60	27	0.3	226	234
KKR3002-A1-150									7		0.7	4	26	290	13	4	270	26	9	0.5	132	140	
KKR3002-A1-200									8		0.7	8	9	136	4	8	5	9	1	0.7	92	100	
KKR3002-A2-100	30	6	2	26	355	23	23	27	14	100	6	0.7	4	60	850	53	4	880	59	45	0.3	780	790
KKR3002-A2-150									7		0.7	6	37	590	33	6	570	37	26	0.5	460	470	
KKR3002-A2-200									8		0.7	8	26	440	23	8	410	26	16	0.7	330	340	
KKR4002-A1-100	40	8	2	64	259	14	14	23	36	100	18	2.0	4	42	500	26	2	1000	92	52	0.5	240	250
KKR4002-A1-150									86		20	2.1	14	5	120	3	6	300	25	9	1	110	120
KKR4002-A1-200									136		22	2.1	22	1	10	1	10	87	11	1	2	54	63
KKR4002-A2-150	40	8	2	64	518	50	50	45	29	100	21	2.1	14	20	400	22	10	550	31	24	1	440	450
KKR4002-A2-200									79		24	2.1	24	8	220	9	20	110	11	1	2	210	220
KKR5002-A1-150									70		21	2.5	5	78	1200	56	3	1000	130	92	1	310	320
KKR5002-A1-200	50	8	2	76	439	38	38	53	120	100	24	2.5	10	32	600	23	8	720	44	23	1.5	200	210
KKR5002-A1-250									170		27	2.5	20	10	270	7	13	380	22	8	2	150	160
KKR5002-A1-300									220		30	2.6	30	2	140	2	18	100	12	1	2.5	110	130
KKR5002-A2-200	50	8	2	76	878	140	140	105	46	100	28	2.5	14	52	1000	69	14	1000	52	53	1.5	780	790
KKR5002-A2-250									96		31	2.5	24	25	780	32	24	680	25	18	2	580	590
KKR5002-A2-300									146		34	2.6	34	14	530	18	34	270	14	3	2.5	460	470
KKR5006-A1-150	50	6	6	48	439	38	38	53	70	300	4.5	2.1	1.5	285	940	205	1.5	936	280	190	0.5	630	630
KKR5006-A1-200									120		5.5	2.2	3.5	115	400	83	3.5	390	110	75	1	310	310
KKR5006-A1-250									170		6.5	2.3	5.5	68	255	50	5.5	240	68	41	1.5	200	210
KKR5006-A1-300	50	6	6	48	878	140	140	105	220	300	7.5	2.3	7.5	47	185	34	7.5	170	47	26	2	150	150
KKR5006-A2-200									46		6	2.2	4	205	1000	275	4	1000	200	260	1	1000	1000
KKR5006-A2-250									96		7	2.3	6	135	750	180	6	740	130	160	1.5	770	750
KKR5006-A2-300	50	6	6	48	878	140	140	105	146	300	8	2.3	8	98	560	130	8	550	98	110	2	570	560
KKR5010-A1-150									70		5	3.0	1	430	710	310	1	710	420	300	0.5	620	580
KKR5010-A1-200									120		6	3.4	3	134	230	97	3	230	130	89	1.5	200	190
KKR5010-A1-250	50	12	10	76	439	38	38	53	170	500	7	3.6	5	75	140	54	5	130	76	46	2.5	110	110
KKR5010-A1-300									220		7	3.8	7	50	100	36	7	95	50	28	3.5	79	83
KKR5010-A2-200									46		6	3.4	3	270	760	370	3	750	270	350	1.5	760	670
KKR5010-A2-250	50	12	10	76	878	140	140	105	96	500	7	3.6	5	160	450	210	5	450	160	190	2.5	450	400
KKR5010-A2-300									146		7	3.8	7	110	320	140	7	320	110	130	3.5	310	290
KKR6005-A1-150									60		15	5.0	5	170	940	110	5	930	170	100	3	200	215
KKR6005-A1-200	60	12	5	109	687	68	68	99	110	250	18	5.2	10	80	460	54	10	460	80	44	3.5	170	180
KKR6005-A1-300									210		23	5.5	15	48	310	33	15	290	48	23	4	145	160
KKR6005-A1-400									310		26	5.5	20	32	230	22	20	200	32	12	4.5	125	140
KKR6005-A1-500	60	12	5	109	1374	241	241	198	410	250	28	5.6	25	23	180	15	25	130	23	5	110	125	
KKR6005-A1-600									510		30	5.6	30	16	140	11	30	58	17	1	5.5	100	115
KKR6005-A2-200									27		18	5.2	10	170	620	210	10	620	170	190	3.5	640	620
KKR6005-A2-300	60	12	5	109	1374	241	241	198	127	250	23	5.5	15	110	410	135	15	410	110	110	4	555	540
KKR6005-A2-400									227		26	5.5	20	79	310	96	20	300	79	78	4.5	495	480
KKR6005-A2-500									327		28	5.6	25	62	240	73	25	230	60	55	5	440	435
KKR6005-A2-600	60	12	5	109	400	21	21	58	427	250	30	5.6	30	47	200	58	30	190	48	40	5.5	400	395
KKR6005-S1-150									85		17	5.1	5	115	340	42	4	420	140	48	3	63	77
KKR6005-S1-200									135		20	5.3	10	50	170	18	8	200	66	18	3.5	51	66
KKR6005-S1-300	60	12	5	109	400	21	21	58	235	250	24	5.5	15	28	110	10	10	160	50	13	4	43	58
KKR6005-S1-400									335		26	5.5	20	17	81	6	12	130	39	9	4.5	37	51
KKR6005-S1-500									435		29	5.6	25	11	62	4	15	94	28	5	5	31	46
KKR6005-S1-600	60	12	5	109	400	21	21	58	535	250	30	5.6	30	6	47	2	21	23	16	1	5.5	27	42

★ The allowable load of product in table is the rated load, which is the result verified as per the reliability correction coefficient 0.5 and load coefficient 1.5.
★ The maximum speed is determined according to the critical speed of screw and the maximum speed of motor.

★ The maximum movable weight of 10,000km life is determined according to the acceleration time of 50ms and the maximum moving speed of actuator base.
★ The maximum cantilever arm values in each direction are the allowable values when there is no cantilever arm in other directions.

KKR	Technical data
KKR20	
KKR30	
KKR40	
KKR50	
KKR60	
KKR86	
KKR100	
KKR130	
Motor seal and motor connecting flange	

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KKR20	
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Actuator product spec	Body width	Screw diameter	Screw lead	★ Allowable axial static load of product	Allowable radial static load of product	Allowable pitching static torque of actuator base Mp	Allowable deflection static torque of actuator base My	Allowable rolling static torque of actuator base Mr	Maximum stroke of actuator base	Maximum moving speed of actuator base ★	Maximum movable weight of 10,000km design life ★		Allowable arm length in each direction under various loads of the horizontally mounted actuator ★				Allowable arm length in each direction under various loads of the side-mounted actuator				Allowable arm length in each direction under various loads of the vertically mounted actuator		
											Horizontal use	Vertical use	Load value	Lateral Lx	Vertical Ly	Axial Lz	Load value	Lateral Lx	Vertical Ly	Axial Lz	Load value	Lateral Lx	Vertical Ly
											kg	kg	kg	mm	mm	mm	kg	mm	mm	mm	kg	mm	mm
KKR6005-S2-150	60	12	5	109	800	68	68	115	25	250	17	5.1	5	240	1000	140	5	1000	240	130	3	235	250
KKR6005-S2-200									75		20	5.3	10	110	530	68	10	530	110	58	3.5	200	215
KKR6005-S2-300									175		24	5.5	15	72	350	42	15	350	71	33	4	175	185
KKR6005-S2-400									275		26	5.5	20	50	260	29	20	250	50	20	4.5	150	165
KKR6005-S2-500									375		29	5.6	25	37	210	22	25	190	37	13	5	135	150
KKR6005-S2-600									475		30	5.6	30	29	170	17	30	140	28	8	5.5	120	135
KKR6010-S1-150	60	12	10	109	400	21	21	58	85	500	8	4.9	4	146	170	53	4	170	140	47	1.5	140	145
KKR6010-S1-200									135		10	5.4	6	92	110	33	6	110	93	28	2.5	78	89
KKR6010-S1-300									235		12	5.9	8	65	85	23	8	82	66	18	3.5	51	63
KKR6010-S1-400									335		13	6.2	10	49	67	18	10	64	49	12	4.5	36	49
KKR6010-S1-500									435		14	6.4	12	38	56	14	12	51	39	9	5.5	27	40
KKR6010-S1-600									535		15	6.5	15	26	44	9	15	36	28	5	6.5	20	34
KKR6010-S2-150	60	12	10	109	800	68	68	115	25	500	8	4.9	4	300	530	180	4	530	300	170	1.5	485	475
KKR6010-S2-200									75		10	5.4	6	200	350	110	6	350	200	100	2.5	280	285
KKR6010-S2-300									175		12	5.9	8	140	260	86	8	260	140	77	3.5	200	205
KKR6010-S2-400									275		13	6.2	10	110	210	67	10	210	110	58	4.5	150	155
KKR6010-S2-500									375		14	6.4	12	92	170	54	12	170	92	45	5.5	120	130
KKR6010-S2-600									475		15	6.5	15	71	140	42	15	130	71	33	6.5	100	110
KKR6010-A1-150	60	12	10	109	687	68	68	99	60	500	7	4.5	4	220	1000	152	4	1000	220	140	1.5	415	430
KKR6010-A1-200									110		9	5.2	6	140	780	98	6	780	140	88	2.5	240	255
KKR6010-A1-300									210		11	5.8	8	100	580	71	8	580	100	61	3.5	170	180
KKR6010-A1-400									310		13	6.1	10	77	460	55	10	460	80	44	4.5	125	140
KKR6010-A1-500									410		14	6.3	12	61	390	44	12	370	64	33	5.5	100	115
KKR6010-A1-600									510		15	6.5	15	44	310	33	15	290	48	23	6.5	84	99
KKR6010-A2-200	60	12	10	109	1374	241	241	198	27	500	9	5.2	6	290	1000	360	6	1000	290	340	2.5	900	870
KKR6010-A2-300									127		11	5.8	8	220	780	260	8	780	220	250	3.5	640	620
KKR6010-A2-400									227		13	6.1	10	170	620	210	10	620	170	190	4.5	495	480
KKR6010-A2-500									327		14	6.3	12	140	520	170	12	520	140	150	5.5	400	395
KKR6010-A2-600									427		15	6.5	15	110	410	130	15	410	110	110	6.5	335	330
KKR6020-A1-150									60		12	20	109	687	68	68	99	60	1000	2.5	3.1	2	460
KKR6020-A1-200	110	3.5	3.7	3	310	1000	200	3		1000								300		190	3.5	170	180
KKR6020-A1-300	210	4.5	4.5	4	230	1000	150	4		1000								220		140	4	145	160
KKR6020-A1-400	310	5.5	5.1	5	180	940	120	5		930								170		100	4.5	125	140
KKR6020-A1-500	410	6.5	5.5	6	150	780	98	6		780								140		88	5	110	125
KKR6020-A1-600	510	7.5	5.8	7.5	110	620	77	7.5		620								110		66	5.5	100	115
KKR6020-A2-200	60	12	20	109	1374	241	241	198	27	1000	3.5	3.7	3	610	1000	740	3	1000	610	720	3.5	640	620
KKR6020-A2-300									127		4.5	4.5	4	450	1000	550	4	1000	450	530	4	555	540
KKR6020-A2-400									227		5.5	5.1	5	360	1000	440	5	1000	360	420	4.5	495	480
KKR6020-A2-500									327		6.5	5.5	6	290	1000	360	6	1000	290	340	5	440	435
KKR6020-A2-600									427		7.5	5.8	7.5	230	830	280	7.5	830	230	270	5.5	400	395
KKR8605-A1-340									86		16	5	228	1612	201	201	332	210	250	51	12.4	10	320
KKR8605-A1-440	310	250	59	12.5	20	150	1000	93		25								1000	110	58	7.5	255	280
KKR8605-A1-540	410	250	64	12.6	40	66	670	40		35								740	78	34	8.5	225	245
KKR8605-A1-640	510	250	69	12.7	60	37	440	23		45								550	56	20	9.5	200	220
KKR8605-A1-740	610	250	73	12.7	80	23	320	14		55								410	42	12	10.5	175	200
KKR8605-A1-840	710	227	87	12.8	100	14	240	8		65								300	32	6	11.5	160	180
KKR8605-A1-940	810	182	120	12.9	120	8	180	5		75								160	25	2	12.5	145	165
KKR8605-A2-340	94	250	51	12.4	30	210	1000	220		30								1000	210	200	6.5	1000	1000
KKR8605-A2-440	194	250	59	12.5	50	110	1000	120		50								1000	110	100	7.5	965	985
KKR8605-A2-540	294	250	64	12.6	60	95	1000	100		60								1000	95	77	8.5	845	870
KKR8605-A2-640	394	250	69	12.7	70	79	1000	84	70	1000	78	59	9.5	755	775								
KKR8605-A2-740	494	250	73	12.7	80	66	1000	70	80	1000	66	46	10.5	680	700								
KKR8605-A2-840	594	227	87	12.8	100	49	890	52	100	790	48	27	11.5	620	640								
KKR8605-A2-940	694	182	120	12.9	120	37	730	39	120	590	37	15	12.5	570	590								

★ The allowable load of product in table is the rated load, which is the result verified as per the reliability correction coefficient 0.5 and load coefficient 1.5.
★ The maximum speed is determined according to the critical speed of screw and the maximum speed of motor.

★ The maximum movable weight of 10,000km life is determined according to the acceleration time of 50ms and the maximum moving speed of actuator base.
★ The maximum cantilever arm values in each direction are the allowable values when there is no cantilever arm in other directions.

KKR
Technical data

KKR20

KKR30

KKR40

KKR50

KKR60

KKR86

KKR100

KKR130

Motor seal and motor connecting flange

KKR
Technical data

KKR20

KKR30

KKR40

KKR50

KKR60

KKR86

KKR100

KKR130

Motor seal and motor connecting flange

1.4 Performance Parameter Table of Each Specification

Actuator product spec	Body width	Screw diameter	Screw lead	★ Allowable axial static load of product	Allowable radial static load of product	Allowable pitching static torque of actuator base Mp	Allowable deflection static torque of actuator base My	Allowable rolling static torque of actuator base Mr	Maximum stroke of actuator base	Maximum moving speed of actuator base ★	Maximum movable weight of 10,000km design life ★		Allowable arm length in each direction under various loads of the horizontally mounted actuator ★				Allowable arm length in each direction under various loads of the side-mounted actuator				Allowable arm length in each direction under various loads of the vertically mounted actuator		
											Horizontal use	Vertical use	Load value	Lateral Lx	Vertical Ly	Axial Lz	Load value	Lateral Lx	Vertical Ly	Axial Lz	Load value	Lateral Lx	Vertical Ly
											kg	kg	kg	mm	mm	mm	kg	mm	mm	mm	kg	mm	mm
KKR8610-S1-340	86	16	10	228	879	85	85	181	246	500	19	9.3	10	200	550	98	10	550	200	87	4.5	215	235
KKR8610-S1-440									346	500	21	9.7	15	130	370	62	15	360	130	51	5.5	170	190
KKR8610-S1-540									446	500	23	10.0	20	93	270	44	20	270	93	33	6.5	140	160
KKR8610-S1-640									546	500	24	10.2	25	70	220	33	25	210	70	22	7.5	120	140
KKR8610-S1-740									646	500	26	10.3	30	55	180	26	30	160	55	15	8.5	100	125
KKR8610-S1-840									746	454	31	10.5	35	44	150	21	35	130	44	10	9.5	90	110
KKR8610-S1-940									846	363	42	10.8	42	33	120	15	42	94	33	5	10.5	79	100
KKR8610-S2-340									86	16	10	228	1758	277	277	362	162	500	19	9.3	10	430	1000
KKR8610-S2-440	262	500	21	9.7	15	280	1000	210									15	1000	280	190	5.5	610	625
KKR8610-S2-540	362	500	23	10.0	20	200	870	150									20	870	200	140	6.5	510	530
KKR8610-S2-640	462	500	24	10.2	25	160	700	120									25	690	160	100	7.5	440	455
KKR8610-S2-740	562	500	26	10.3	30	130	580	100									30	570	130	83	8.5	385	405
KKR8610-S2-840	662	454	31	10.5	35	100	500	84									35	490	100	66	9.5	340	360
KKR8610-S2-940	762	363	42	10.8	42	88	410	67									42	400	87	49	10.5	305	325
KKR8610-A1-340	86	16	10	228	1612	201	201	332									210	500	24	12.5	10	320	1000
KKR8610-A1-440									310	500	28	13.2	15	210	720	120	15	710	210	114	5	395	415
KKR8610-A1-540									410	500	30	13.7	20	150	540	93	20	530	150	79	7	275	295
KKR8610-A1-640									510	500	33	14.0	25	110	430	72	25	420	110	58	9	210	230
KKR8610-A1-740									610	500	35	14.2	35	78	300	47	35	290	78	34	11	165	185
KKR8610-A1-840									710	454	42	14.5	45	56	230	34	45	210	56	20	13	135	160
KKR8610-A1-940									810	363	55	15.0	55	42	190	25	55	160	42	12	15	115	135
KKR8610-A2-340									86	16	10	228	3224	702	702	663	94	500	24	12.5	25	250	1000
KKR8610-A2-440	194	500	28	13.2	30	210	1000	220									30	1000	210	199	5	1000	1000
KKR8610-A2-540	294	500	30	13.7	35	170	1000	180									35	1000	170	160	7	1000	1000
KKR8610-A2-640	394	500	33	14.0	40	150	900	160									40	890	150	130	9	795	805
KKR8610-A2-740	494	500	35	14.2	45	130	790	140									45	780	130	110	11	645	660
KKR8610-A2-840	594	454	42	14.5	50	110	710	120									50	700	110	100	13	545	560
KKR8610-A2-940	694	363	55	15.0	55	100	650	110									55	630	100	88	15	465	485
KKR8620-A1-340	86	16	20	228	1612	201	201	332									210	1000	12	9.5	4	840	1000
KKR8620-A1-440									310	1000	13	10.6	8	412	530	240	8	530	410	230	5	395	380
KKR8620-A1-540									410	1000	15	11.4	12	260	350	160	12	350	260	140	7	275	270
KKR8620-A1-640									510	1000	16	12.1	16	190	260	110	16	260	190	100	9	210	210
KKR8620-A1-740									610	1000	17	12.6	20	150	210	92	20	210	150	78	11	165	170
KKR8620-A1-840									710	909	20	13.9	24	120	170	74	24	170	120	61	13	135	145
KKR8620-A1-940									810	727	28	15.9	28	100	150	61	28	140	100	48	15	115	125
KKR8620-A2-340									86	16	20	228	3224	702	702	663	94	1000	12	9.5	4	1000	1000
KKR8620-A2-440	194	1000	13	10.6	8	840	1000	890									8	1000	840	870	5	1000	1000
KKR8620-A2-540	294	1000	15	11.4	12	550	1000	580									12	1000	550	560	7	1000	950
KKR8620-A2-640	394	1000	16	12.1	16	410	890	430									16	890	410	410	9	790	730
KKR8620-A2-740	494	1000	17	12.6	20	320	710	340									20	710	320	320	11	640	600
KKR8620-A2-840	594	909	20	13.9	24	260	590	280									24	590	260	250	13	540	510
KKR8620-A2-940	694	727	28	15.9	28	220	510	230									28	500	220	210	15	465	440
KKR10020-A1-980	100	20	20	285	2051	365	365	495									828	925	26	17.6	30	130	500
KKR10020-A1-1080									928	762	35	19.8	40	96	370	71	40	350	96	49	10	325	350
KKR10020-A1-1180									1028	638	45	21.2	50	72	290	53	50	270	72	31	14	225	250
KKR10020-A1-1280									1128	542	58	22.0	60	56	240	41	60	210	56	20	18	165	190
KKR10020-A1-1380									1228	466	70	22.5	70	44	200	33	70	160	44	11	22	130	155
KKR10020-A2-980	100	20	20	285	4102	1322	1322	989	685	925	26	17.6	30	290	1000	390	30	1000	290	350	6	1000	1000
KKR10020-A2-1080									785	762	35	19.8	40	210	1000	290	40	1000	210	250	10	1000	1000
KKR10020-A2-1180									885	638	45	21.2	50	160	1000	220	50	1000	160	180	14	890	905
KKR10020-A2-1280									985	542	58	22.0	60	130	870	180	60	850	130	140	18	685	700
KKR10020-A2-1380									1085	466	70	22.5	70	110	740	150	70	720	110	110	22	555	575

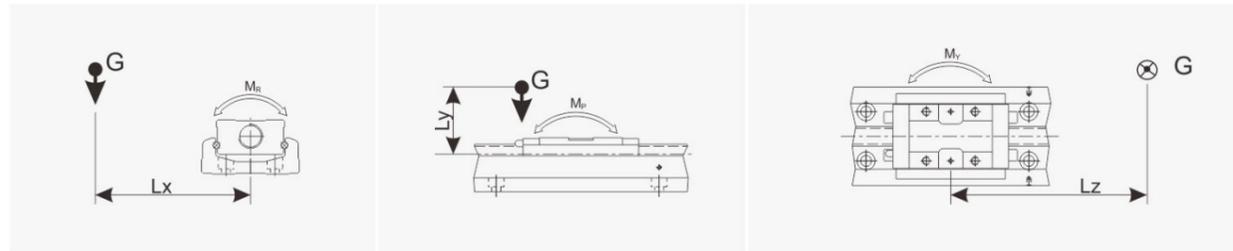
★ The allowable load of product in table is the rated load, which is the result verified as per the reliability correction coefficient 0.5 and load coefficient 1.5.
 ★ The maximum speed is determined according to the critical speed of screw and the maximum speed of motor.

★ The maximum movable weight of 10,000km life is determined according to the acceleration time of 50ms and the maximum moving speed of actuator base.
 ★ The maximum cantilever arm values in each direction are the allowable values when there is no cantilever arm in other directions.

KKR
Technical data
KKR20
KKR30
KKR40
KKR50
KKR60
KKR86
KKR100
KKR130
Motor seal and motor connecting flange

KKR
Technical data
KKR20
KKR30
KKR40
KKR50
KKR60
KKR86
KKR100
KKR130
Motor seal and motor connecting flange

1.5 Torque and Arm Legends



1.6 Accuracy Level

Unit: mm

Model	Track length	Positioning reproduction		Positioning accuracy		Travel parallelism		Maximum starting torque (N-cm)	
		Precision-level	General level	Precision-level	General level	Precision-level	General level	Precision-level	General level
KKR20	60	±0.003	±0.01	0.020	-	0.010	-	0.7	0.5
	100								
	140								
KKR30	100	±0.003	±0.01	0.020	-	0.010	-	0.8	0.5
	150								
	200								
KKR40	100	±0.003	±0.01	0.020	-	0.010	-	1.2	0.8
	150								
	200								
KKR50	150	±0.003	±0.01	0.020	-	0.010	-	4	2
	200								
	250								
	300								
KKR60	150	±0.003	±0.01	0.020	-	0.010	-	15	7
	200								
	300								
	400								
	500								
KKR86	600	±0.003	±0.01	0.025	-	0.015	-	15	7
	340								
	440								
	540								
	640								
	740								
KKR100	980	±0.005	±0.01	0.035	-	0.025	-	17	10
	1080								
	1180								
	1280								
	1380								
KKR130	1380	±0.005	±0.01	0.04	-	0.03	-	25	15
	980								
	1180								
	1680								
	1680	±0.007	±0.012	0.05	-	0.04	-	27	18

1.7 Life Calculation

1.7.1 Life

When the linear actuator rail bears the load and moves, the surface of ball raceway and the steel ball are continuously subjected to the actions of cyclic stress. Once the critical value of rolling fatigue is reached, the contact surface will start to fatigue and damage, and partial surface will appear Fish scale-like flakes peel off, this phenomenon is called surface peeling. The definition of life is the total running distance until the surface of ball raceway and steel ball produce surface peeling due to material fatigue.

1.7.2 Rated Life

The life of linear industrial robot shows the high-degree dispersion. Even if the same batch of manufactured products is used under the same motion state, the life will be different. Therefore, the rated life is used to define the life benchmark of KKR actuator in operation.

1.7.3 Rated Life Calculation of KKR Actuator

The life calculation of industrial robot can be divided into two parts, including linear actuator rail and ball screw. The smaller value in the calculation process is deemed as the rated life of actuator. The calculation formulas are shown respectively below:

Linear guide

$$L = \left(\frac{f_t}{f_w} \cdot \frac{C}{P_n} \right)^3 \times 50 \text{ km}$$

L: rated life (km)

f_t: contact coefficient (reference table 1)

f_w: load coefficient (reference table 2)

C: basic dynamic rated load (N)

P_n: work load (N)

Table 1

Actuator base type	Contact coefficient (f _t)
A1, S1	1.0
A2, S2	0.81

Table 2

Working environment		Load coefficient (f _w)
Load condition	Speed (V)	
Non-impact and smooth	Low speed: V<15 m/min	1.0 ~ 1.5
Normal load	Medium speed: 15<V<60 m/min	1.5 ~ 2.0
With impact and vibration	High speed: V>60 m/min	2.0 ~ 3.5

Ball screw and bearing

$$L = \left(\frac{1}{f_w} \cdot \frac{C_a}{P_{a,n}} \right)^3 \times 10^6 \text{ rev}$$

L: rated life (number of revolutions)

f_w: load coefficient (reference table 2)

C_a: basic dynamic rated load (N)

P_{a,n}: axial work load (N)

1.8 Lubrication

If the KKR industrial robot is not properly lubricated, the friction of rolling parts will increase, and the long-term use will become the main reason for shortening the life. Lubricants provide the following functions:

- Reduce friction of rolling parts, prevent burns and reduce wear
- Form an oil film between the rolling surfaces to extend the rolling fatigue life
- Prevent rust.

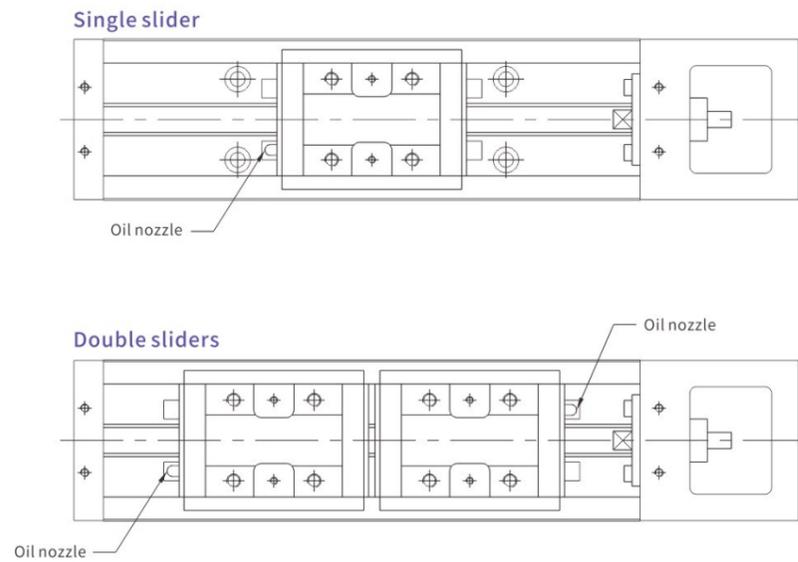
1.8.1 Lubrication Grease

Although lubrication grease is not easy to lose, to avoid insufficient lubrication due to lubrication loss, it is recommended that customers replenish the lubrication grease once when the use distance reaches 100km. At this time, the grease gun can be used to inject grease into the slider through the nozzle attached to the slider. Lubrication grease is suitable for occasions where the speed does not exceed 60 m/min and there is no requirement for cooling effect.

$$T = \frac{100 \times 1000}{V_e \times 60}$$

T: oil refilling frequency (hour)
Ve: speed (m/min)

1.8.2 Nozzle Configuration Diagram



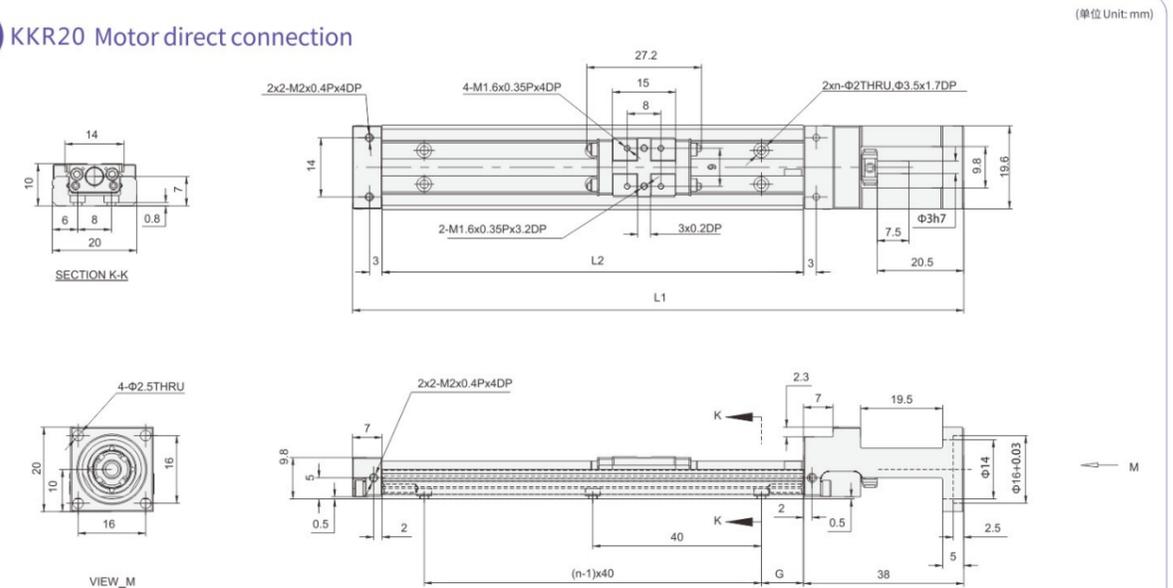
1.9 KKR Product Series

Note: the weight noted in table does not include motor

- KKR Technical data
- KKR20
- KKR30
- KKR40
- KKR50
- KKR60
- KKR86
- KKR100
- KKR130
- Motor seal and motor connecting flange

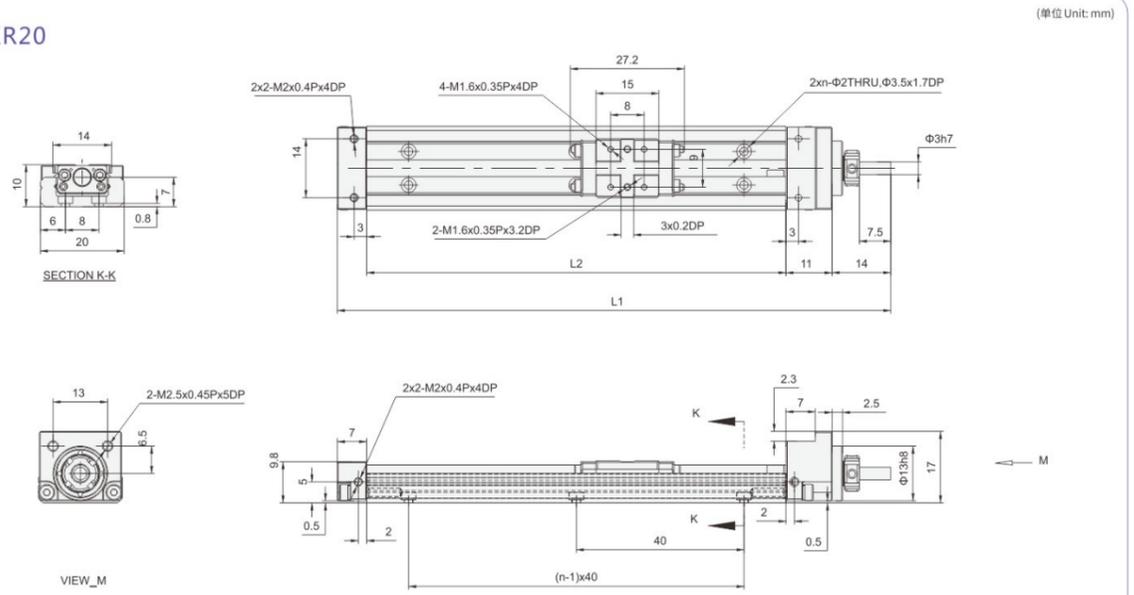
KKR20 Standard Type Without cover

FO KKR20 Motor direct connection



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base			A1 Actuator base	A2 Actuator base
60	105	32	-	10	2	0.07	-
100	145	72	44	10	3	0.10	0.11
140	185	112	84	10	4	0.13	0.14

HO KKR20



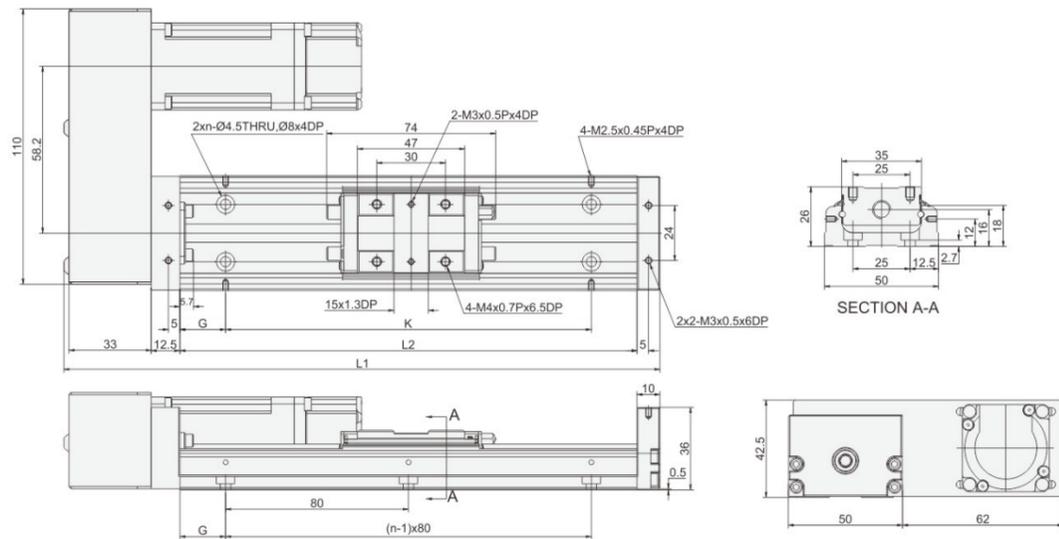
Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base			A1 Actuator base	A2 Actuator base
60	92	32	-	10	2	0.06	-
100	132	72	44	10	3	0.09	0.10
140	172	112	84	10	4	0.12	0.13

- KKR Technical data
- KKR20
- KKR30
- KKR40
- KKR50
- KKR60
- KKR86
- KKR100
- KKR130
- Motor seal and motor connecting flange

KKR50 Standard Type Without cover

HR KKR50 Right-mounted motor

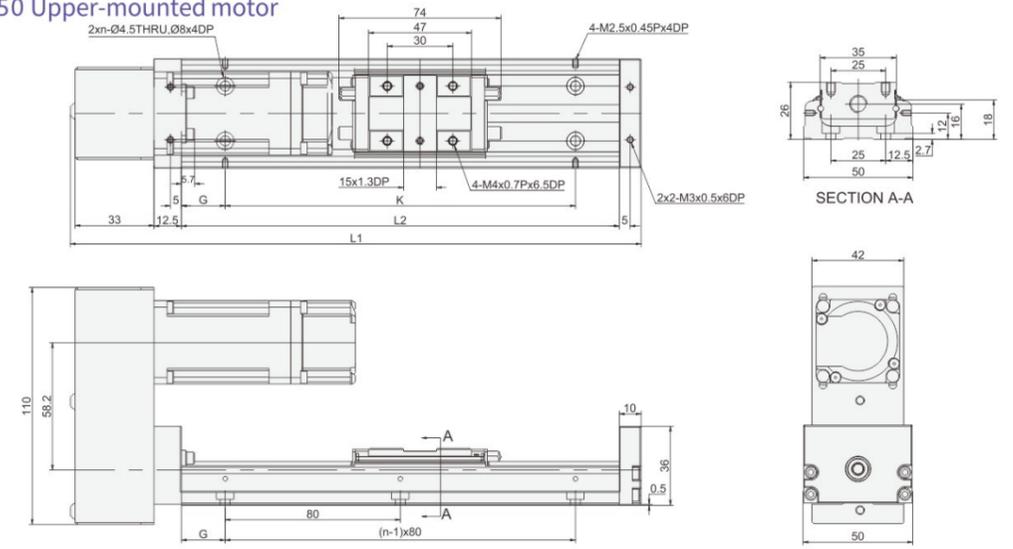
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base				A1 Actuator base	A2 Actuator base
150	206.5	70	-	35	80	2	1.1	-
200	256.5	120	55	20	160	3	1.3	1.5
250	306.5	170	105	45	160	3	1.5	1.7
300	356.5	220	155	30	240	4	1.7	1.9

(Unit: mm)

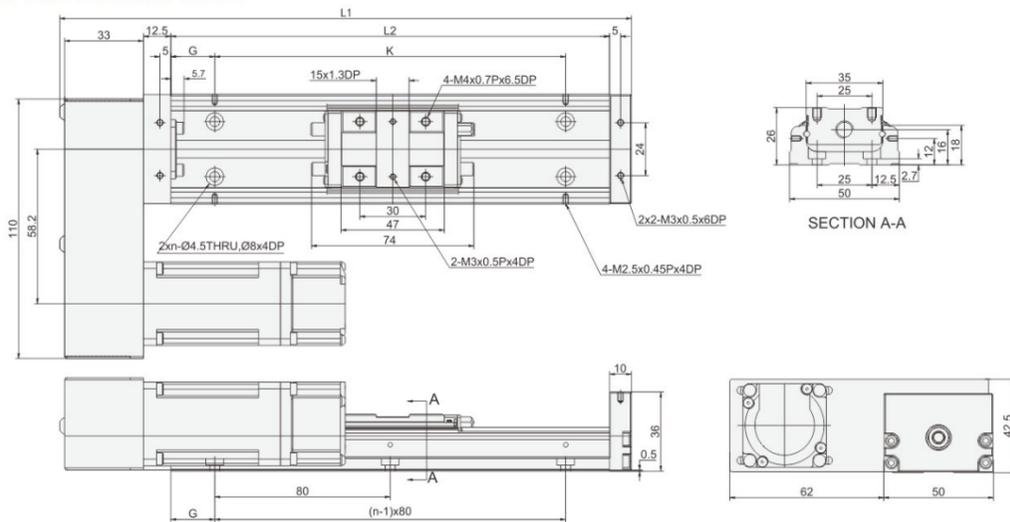
HW KKR50 Upper-mounted motor



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base				A1 Actuator base	A2 Actuator base
150	206.5	70	-	35	80	2	1.1	-
200	256.5	120	55	20	160	3	1.3	1.5
250	306.5	170	105	45	160	3	1.5	1.7
300	356.5	220	155	30	240	4	1.7	1.9

HL KKR50 Left-mounted motor

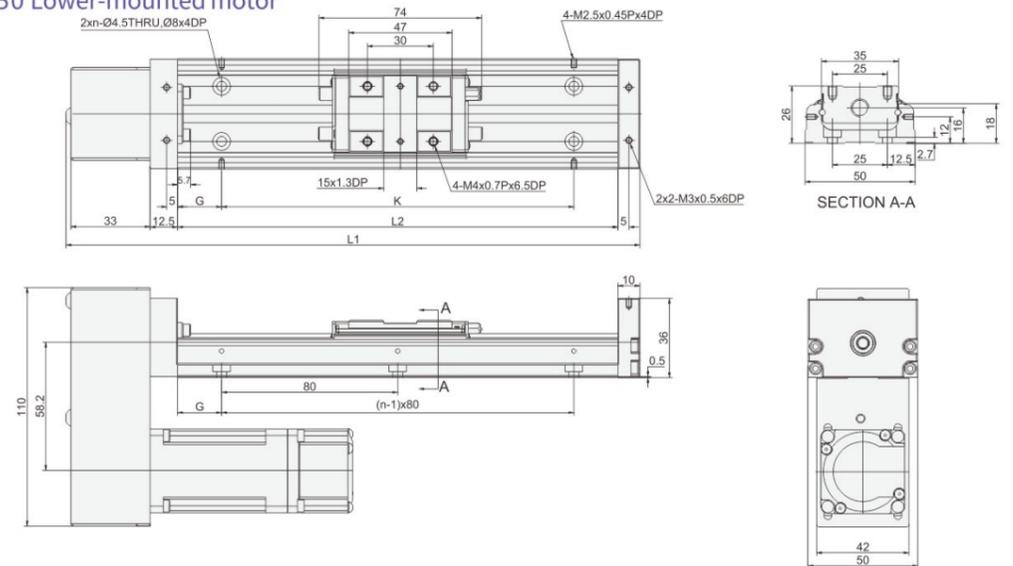
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base				A1 Actuator base	A2 Actuator base
150	206.5	70	-	35	80	2	1.1	-
200	256.5	120	55	20	160	3	1.3	1.5
250	306.5	170	105	45	160	3	1.5	1.7
300	356.5	220	155	30	240	4	1.7	1.9

(Unit: mm)

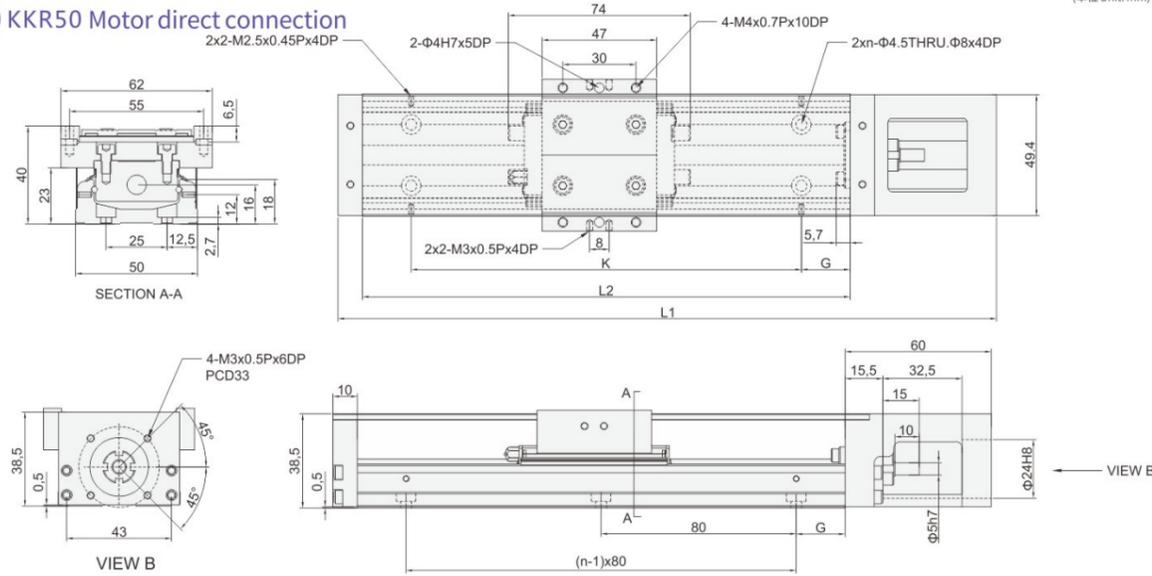
HM KKR50 Lower-mounted motor



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base				A1 Actuator base	A2 Actuator base
150	206.5	70	-	35	80	2	1.1	-
200	256.5	120	55	20	160	3	1.3	1.5
250	306.5	170	105	45	160	3	1.5	1.7
300	356.5	220	155	30	240	4	1.7	1.9

KKR50 Standard Type With cover

F0C KKR50 Motor direct connection

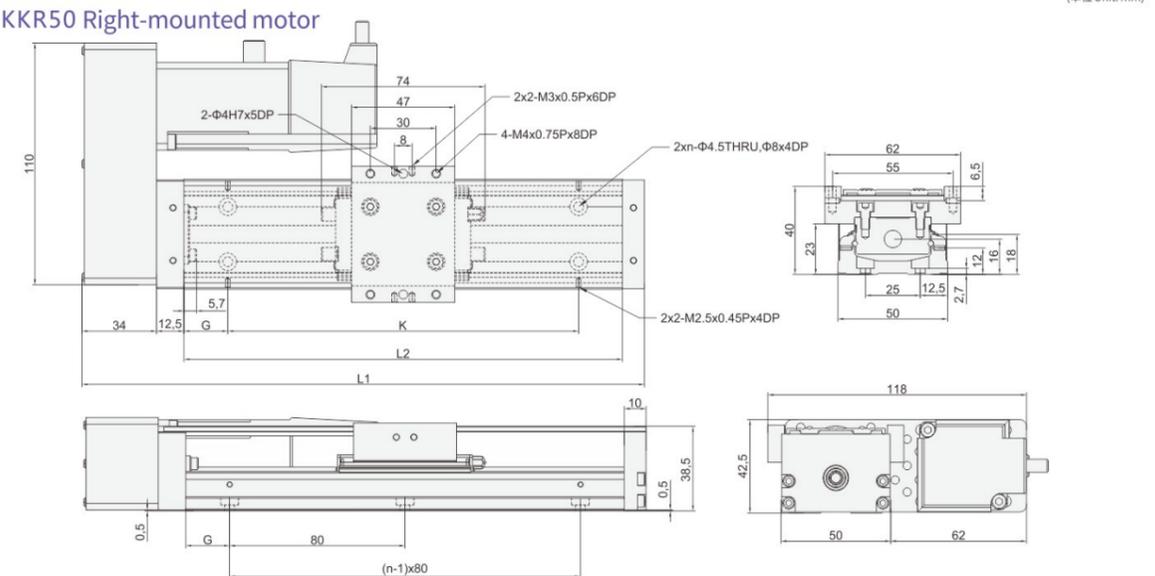


Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base				A1 Actuator base	A2 Actuator base
150	220	70	-	35	80	2	1.1	-
200	270	120	55	20	160	3	1.3	1.5
250	320	170	105	45	160	3	1.6	1.8
300	370	220	155	30	240	4	1.8	2.0

(Unit: mm)

KKR50 Standard Type With cover

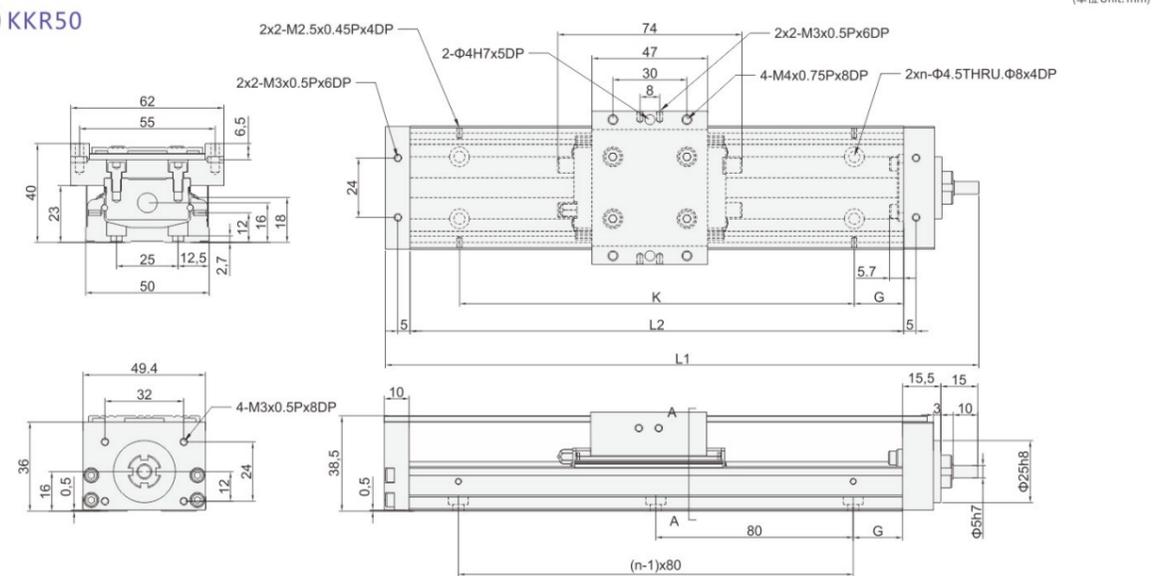
HRC KKR50 Right-mounted motor



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base				A1 Actuator base	A2 Actuator base
150	206.5	70	-	35	80	2	1.2	-
200	256.5	120	55	20	160	3	1.4	1.6
250	306.5	170	105	45	160	3	1.6	1.8
300	356.5	220	155	30	240	4	1.8	2.0

(Unit: mm)

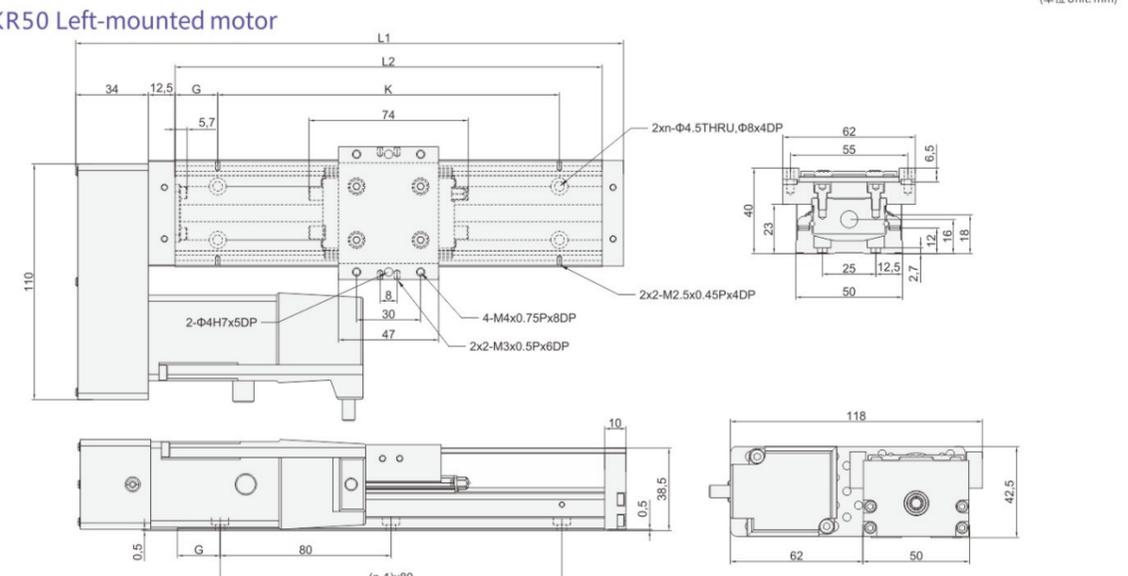
H0C KKR50



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base				A1 Actuator base	A2 Actuator base
150	190.5	70	-	35	80	2	1.0	-
200	240.5	120	55	20	160	3	1.2	1.4
250	290.5	170	105	45	160	3	1.5	1.7
300	340.5	220	155	30	240	4	1.7	1.9

(Unit: mm)

HLC KKR50 Left-mounted motor

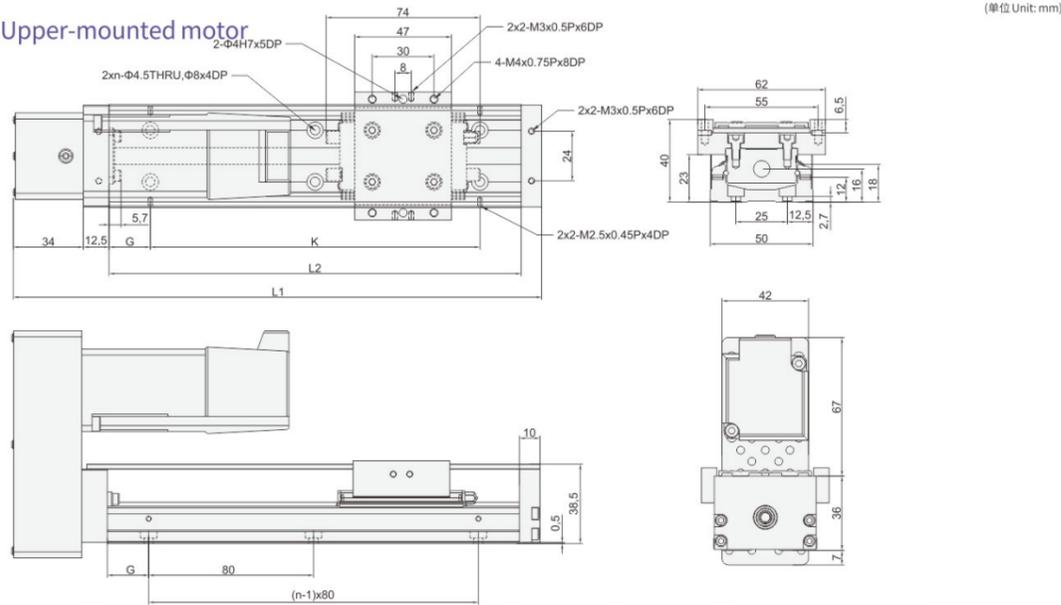


Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base				A1 Actuator base	A2 Actuator base
150	206.5	70	-	35	80	2	1.2	-
200	256.5	120	55	20	160	3	1.4	1.6
250	306.5	170	105	45	160	3	1.6	1.8
300	356.5	220	155	30	240	4	1.8	2.0

(Unit: mm)

KKR50 Standard Type With cover

HWC KKR50 Upper-mounted motor



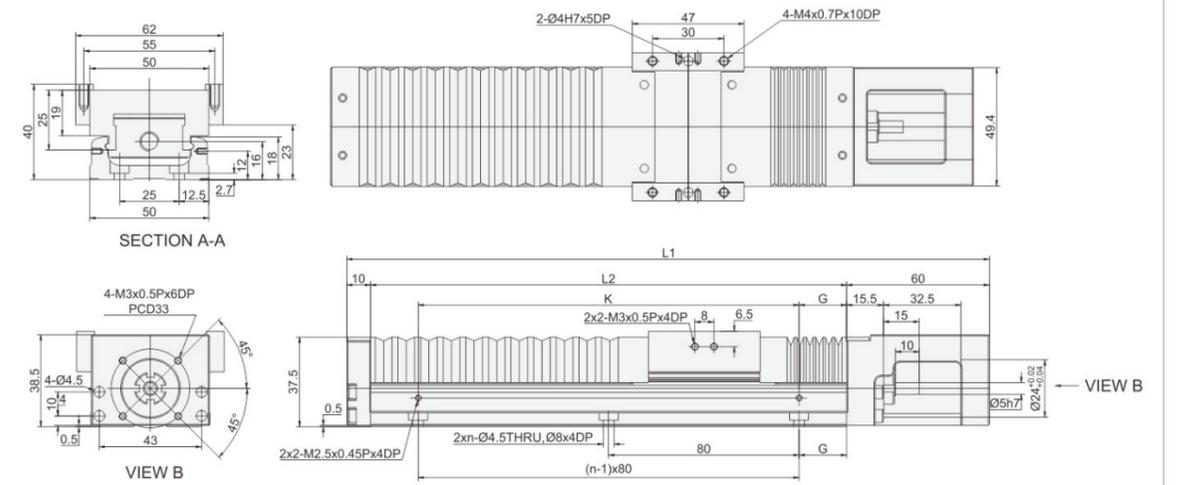
Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base				A1 Actuator base	A2 Actuator base
150	206.5	70	-	35	80	2	1.2	-
200	256.5	120	55	20	160	3	1.4	1.6
250	306.5	170	105	45	160	3	1.6	1.8
300	356.5	220	155	30	240	4	1.8	2.0

(Unit: mm)

VIEW B

KKR50 Standard Type With Bellows

F0B KKR50 Motor direct connection

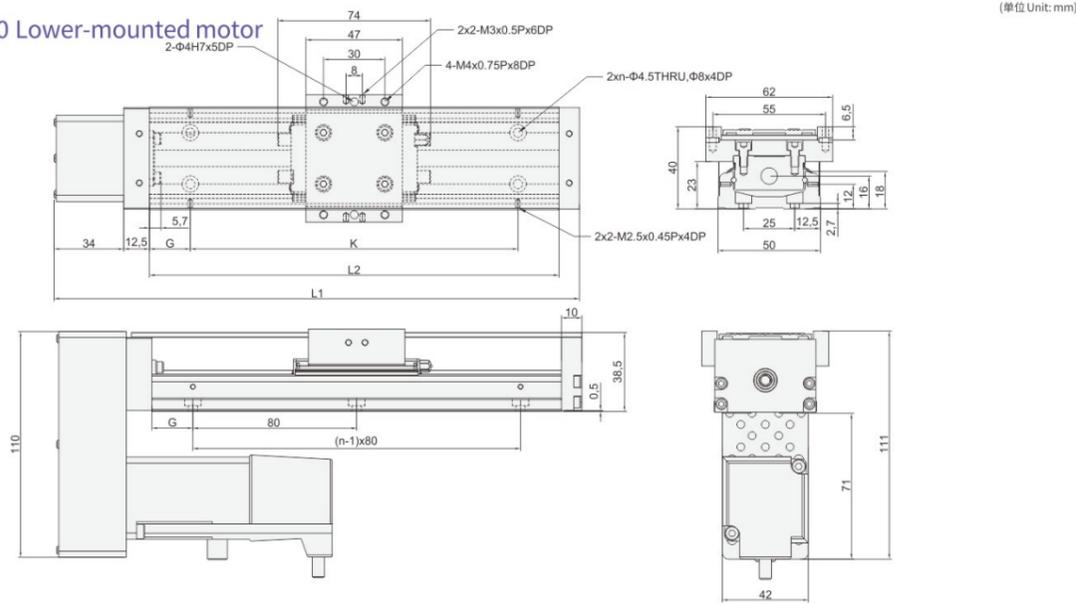


Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base				A1 Actuator base	A2 Actuator base
150	220	50	16	72	35	80	2	1.1
200	270	80	29	110	20	160	3	1.3
250	320	110	39	150	45	160	3	1.6
300	370	160	40	200	30	240	4	1.8

(Unit: mm)

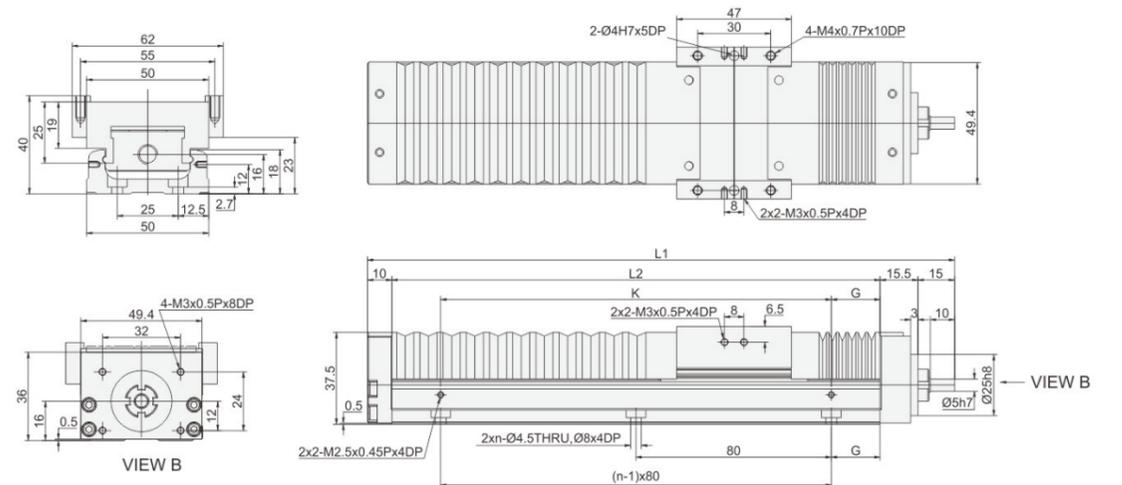
VIEW B

HMC KKR50 Lower-mounted motor



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base				A1 Actuator base	A2 Actuator base
150	206.5	70	-	35	80	2	1.2	-
200	256.5	120	55	20	160	3	1.4	1.6
250	306.5	170	105	45	160	3	1.6	1.8
300	356.5	220	155	30	240	4	1.8	2.0

H0B KKR50



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	Weight (kg)	
		A1 Actuator base	A2 Actuator base				A1 Actuator base	A2 Actuator base
150	190.5	50	16	72	35	80	2	1.0
200	240.5	80	29	110	20	160	3	1.2
250	290.5	110	39	150	45	160	3	1.5
300	340.5	160	40	200	30	240	4	1.7

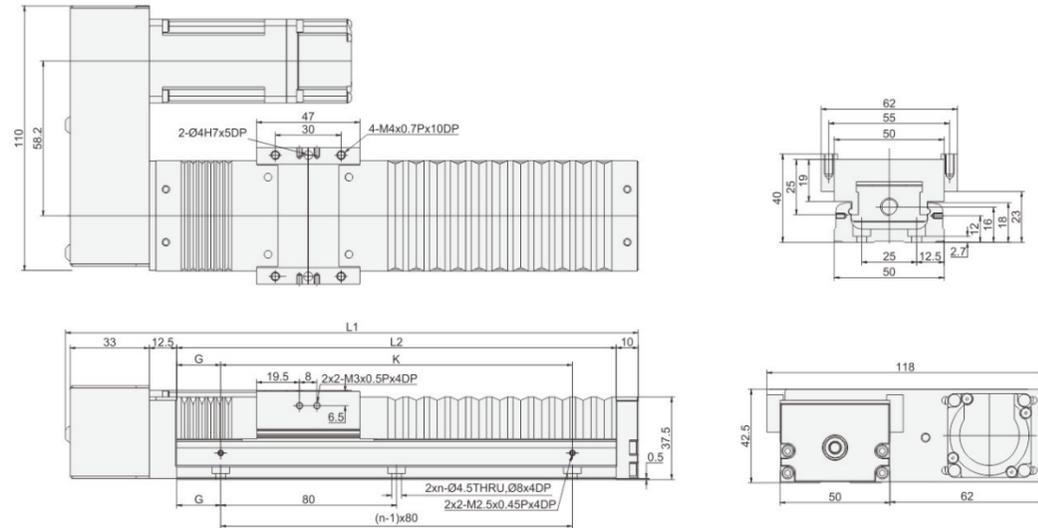
(Unit: mm)

VIEW B

KKR50 Standard Type With Bellows

HRB KKR50 Right-mounted motor

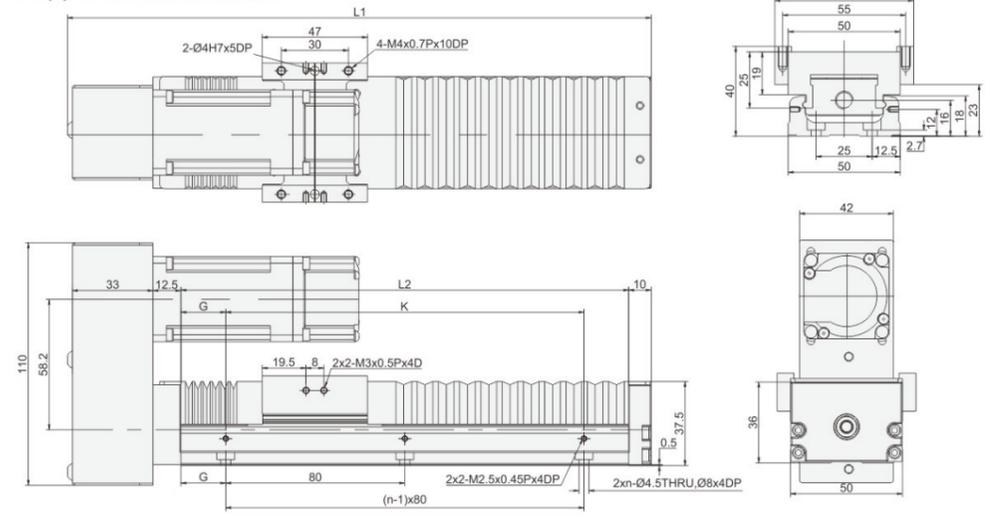
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		G (mm)	K (mm)	n	Weight (kg)
			Minimum expansion	Maximum expansion				
150	206.5	50	16	72	35	80	2	1.2
200	256.5	80	29	110	20	160	3	1.4
250	306.5	110	39	150	45	160	3	1.6
300	356.5	160	40	200	30	240	4	1.8

(Unit: mm)

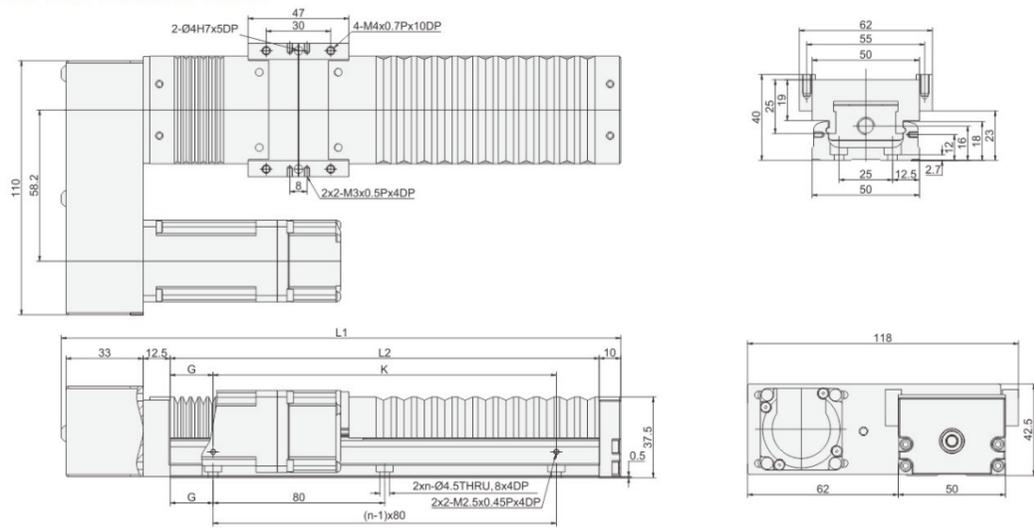
HWB KKR50 Upper-mounted motor



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		G (mm)	K (mm)	n	Weight (kg)
			Minimum expansion	Maximum expansion				
150	206.5	50	16	72	35	80	2	1.2
200	256.5	80	29	110	20	160	3	1.4
250	306.5	110	39	150	45	160	3	1.6
300	356.5	160	40	200	30	240	4	1.8

HLB KKR50 Left-mounted motor

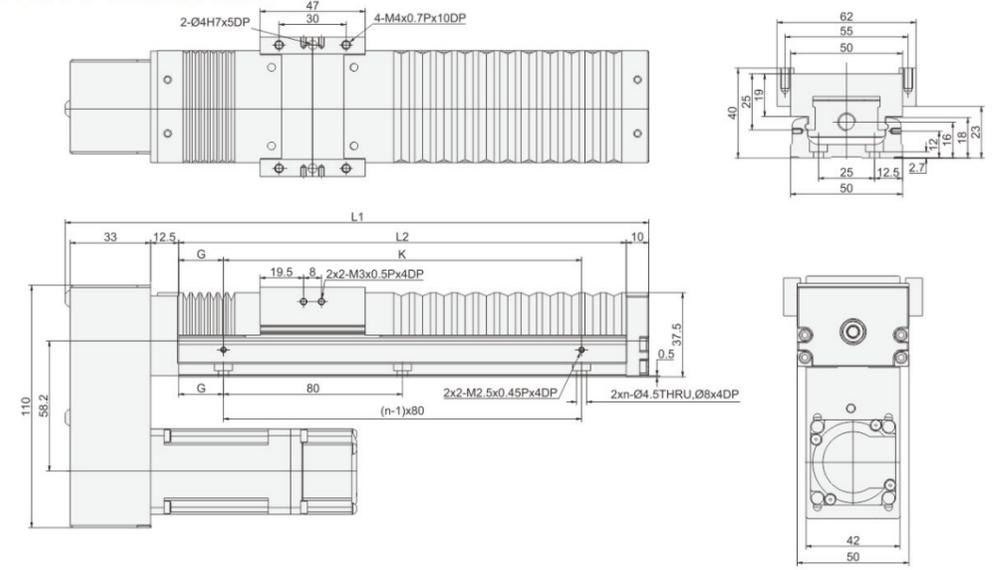
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		G (mm)	K (mm)	n	Weight (kg)
			Minimum expansion	Maximum expansion				
150	206.5	50	16	72	35	80	2	1.2
200	256.5	80	29	110	20	160	3	1.4
250	306.5	110	39	150	45	160	3	1.6
300	356.5	160	40	200	30	240	4	1.8

(Unit: mm)

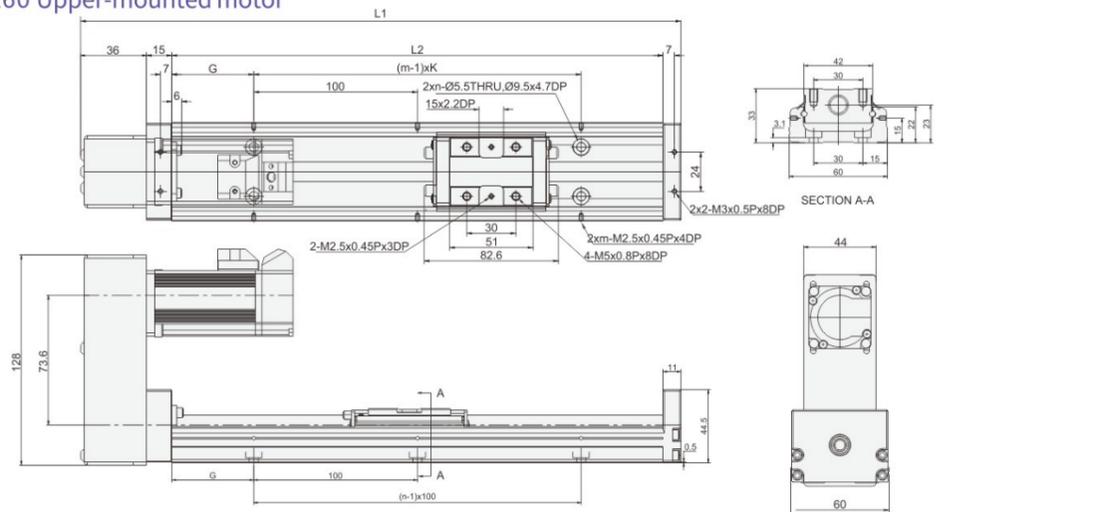
HMB KKR50 Lower-mounted motor



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		G (mm)	K (mm)	n	Weight (kg)
			Minimum expansion	Maximum expansion				
150	206.5	50	16	72	35	80	2	1.2
200	256.5	80	29	110	20	160	3	1.4
250	306.5	110	39	150	45	160	3	1.6
300	356.5	160	40	200	30	240	4	1.8

KKR60 Standard Type Without cover

HW KKR60 Upper-mounted motor



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight(Excluding electrical) (kg)	
		A1 Actuator base	A2 Actuator base					A1 Actuator base	A2 Actuator base
150	212	60	-	25	100	2	2	1.6	-
200	262	110	-	50	100	2	2	1.9	-
300	362	210	135	50	200	3	2	2.5	2.8
400	462	310	235	50	100	4	4	3.1	3.4
500	562	410	335	50	200	5	3	3.7	4.1
600	662	510	435	50	100	6	6	4.3	4.6

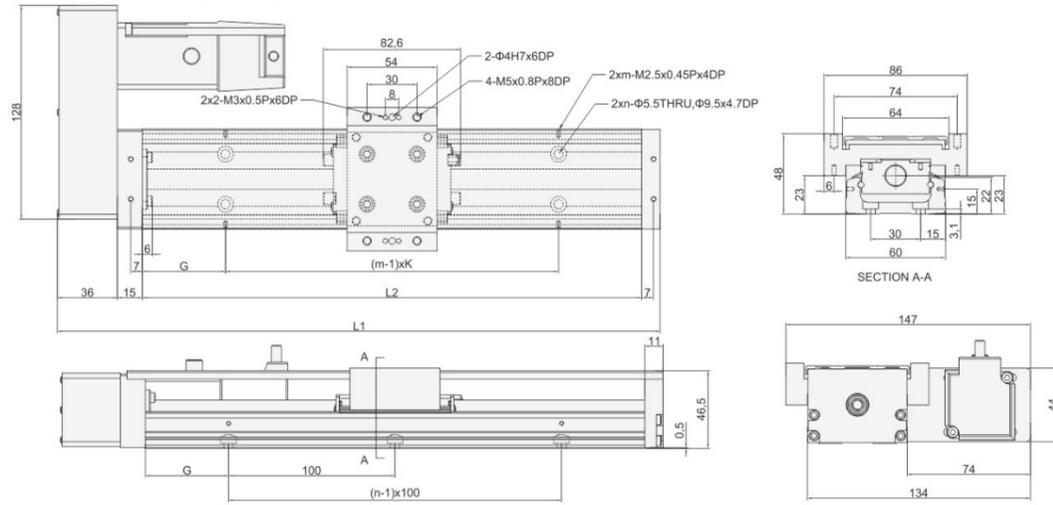
(Unit: mm)

VIEW B

KKR60 Standard Type With cover

HRC KKR60 Right-mounted motor

(Unit: mm)

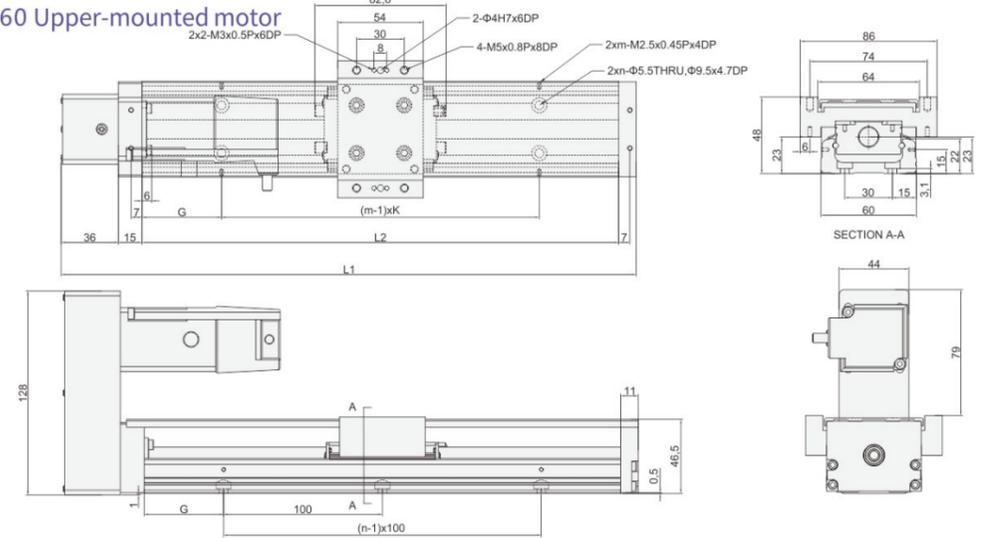


Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight(Excluding electrical) (kg)	
		A1 Actuator base	A2 Actuator base					A1 Actuator base	A2 Actuator base
150	212	60	-	25	100	2	2	1.8	-
200	262	110	-	50	100	2	2	2.1	-
300	362	210	135	50	200	3	2	2.7	3.0
400	462	310	235	50	100	4	4	3.3	3.6
500	562	410	335	50	200	5	3	3.9	4.2
600	662	510	435	50	100	6	6	4.5	4.8

KKR60 Standard Type With cover

HWC KKR60 Upper-mounted motor

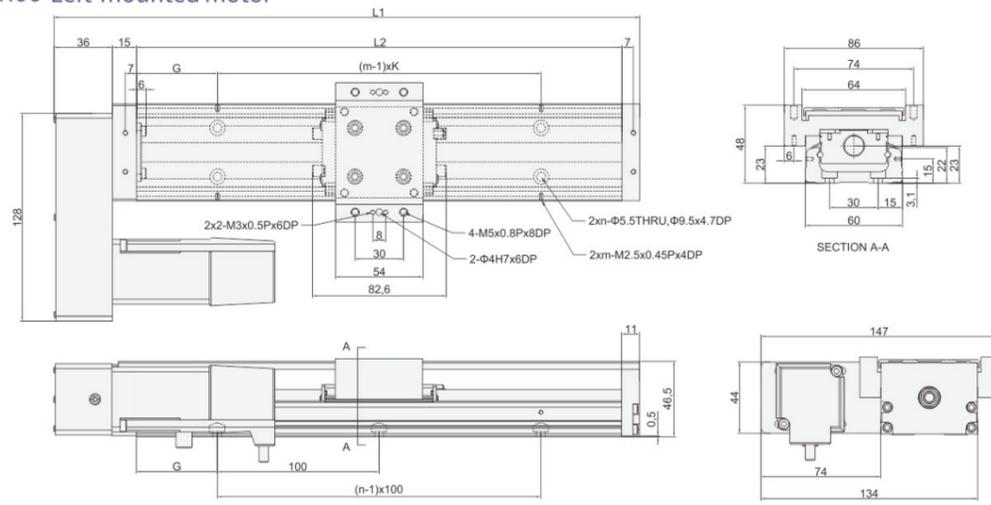
(Unit: mm)



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight(Excluding electrical) (kg)	
		A1 Actuator base	A2 Actuator base					A1 Actuator base	A2 Actuator base
150	212	60	-	25	100	2	2	1.8	-
200	262	110	-	50	100	2	2	2.1	-
300	362	210	135	50	200	3	2	2.7	3.0
400	462	310	235	50	100	4	4	3.3	3.6
500	562	410	335	50	200	5	3	3.9	4.2
600	662	510	435	50	100	6	6	4.5	4.8

HLC KKR60 Left-mounted motor

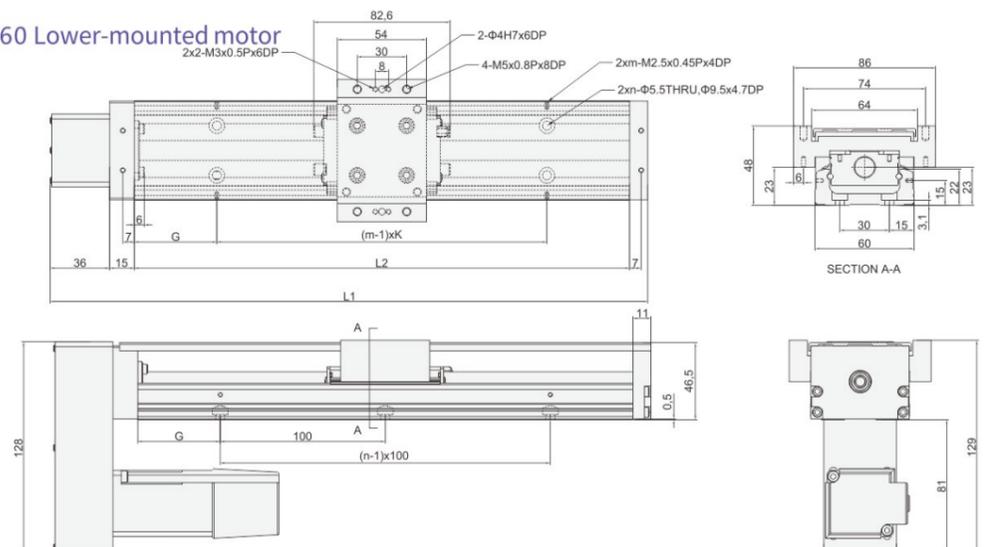
(Unit: mm)



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight(Excluding electrical) (kg)	
		A1 Actuator base	A2 Actuator base					A1 Actuator base	A2 Actuator base
150	212	60	-	25	100	2	2	1.8	-
200	262	110	-	50	100	2	2	2.1	-
300	362	210	135	50	200	3	2	2.7	3.0
400	462	310	235	50	100	4	4	3.3	3.6
500	562	410	335	50	200	5	3	3.9	4.2
600	662	510	435	50	100	6	6	4.5	4.8

HMC KKR60 Lower-mounted motor

(Unit: mm)



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight(Excluding electrical) (kg)	
		A1 Actuator base	A2 Actuator base					A1 Actuator base	A2 Actuator base
150	212	60	-	25	100	2	2	1.8	-
200	262	110	-	50	100	2	2	2.1	-
300	362	210	135	50	200	3	2	2.7	3.0
400	462	310	235	50	100	4	4	3.3	3.6
500	562	410	335	50	200	5	3	3.9	4.2
600	662	510	435	50	100	6	6	4.5	4.8

KKR
Technical data

KKR20

KKR30

KKR40

KKR50

KKR60

KKR86

KKR100

KKR130

Motor seal and
motor connecting
flange

KKR
Technical data

KKR20

KKR30

KKR40

KKR50

KKR60

KKR86

KKR100

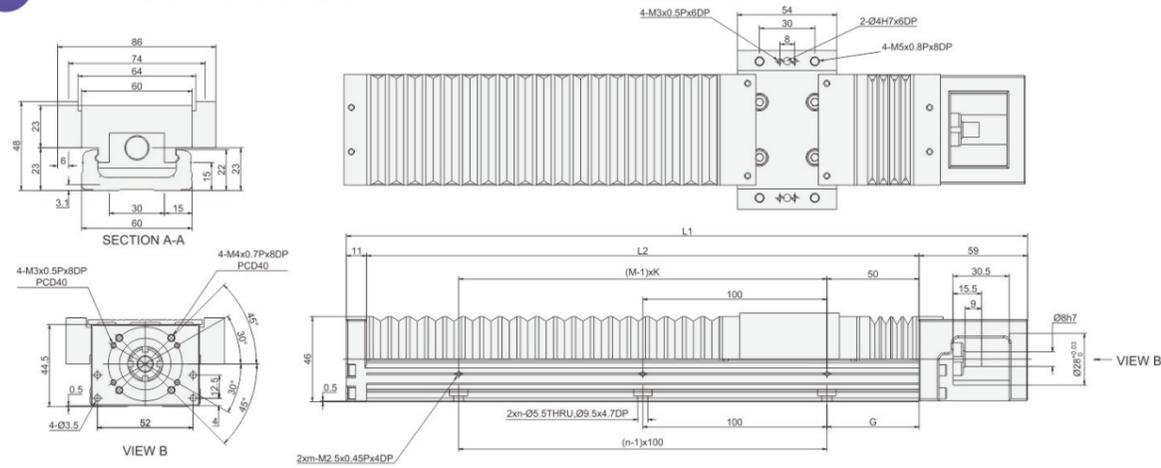
KKR130

Motor seal and
motor connecting
flange

KKR60 Standard Type With Bellows

F0B KKR60 Motor direct connection

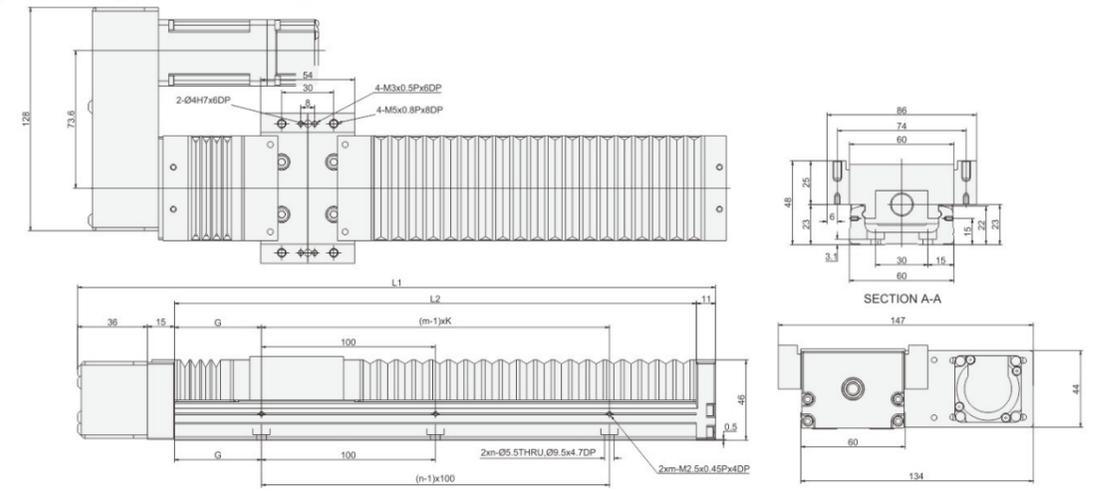
(Unit: mm)



Track length L2(mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion(mm)		G (mm)	K (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion					
150	220	50	13	66	25	100	2	2	1.7
200	270	90	19.5	110	50	100	2	2	2.1
300	370	160	35	195	50	200	3	2	2.7
400	470	230	49.5	278	50	100	4	4	3.3
500	570	310	59.5	370	50	200	5	3	3.9
600	670	380	75	455	50	100	6	6	4.6

(Unit: mm)

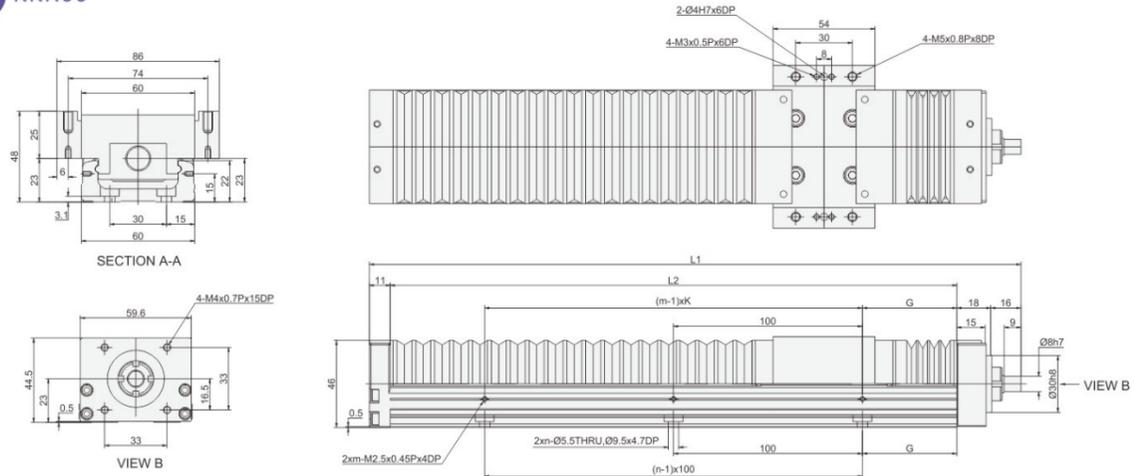
HRB KKR60 Right-mounted motor



Track length L2(mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion(mm)		G (mm)	K (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion					
150	212	50	13	66	25	100	2	2	1.8
200	262	90	19.5	110	50	100	2	2	2.2
300	362	160	35	195	50	200	3	2	2.8
400	462	230	49.5	278	50	100	4	4	3.4
500	562	310	59.5	370	50	200	5	3	4.0
600	662	380	75	455	50	100	6	6	4.6

H0B KKR60

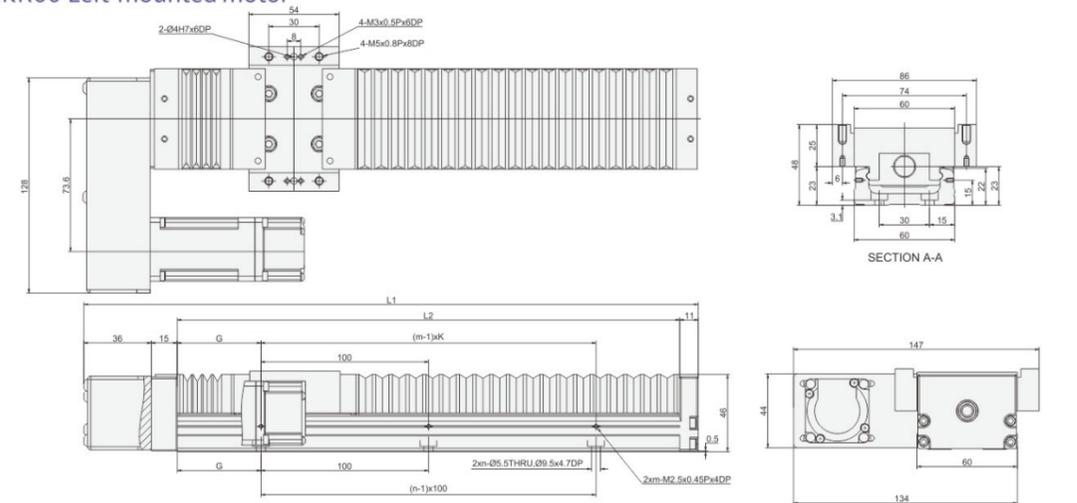
(Unit: mm)



Track length L2(mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion(mm)		G (mm)	K (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion					
150	195	50	13	66	25	100	2	2	1.6
200	245	90	19.5	110	50	100	2	2	2.0
300	345	160	35	195	50	200	3	2	2.6
400	445	230	49.5	278	50	100	4	1.7	3.2
500	545	310	59.5	370	50	200	5	3	3.8
600	645	380	75	455	50	100	6	1.7	4.5

HLB KKR60 Left-mounted motor

(Unit: mm)

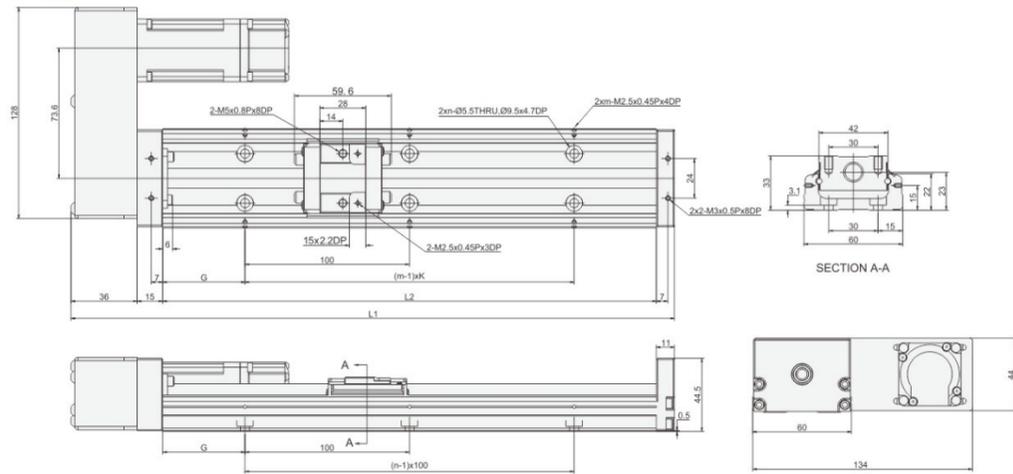


Track length L2(mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion(mm)		G (mm)	K (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion					
150	212	50	13	66	25	100	2	2	1.8
200	262	90	19.5	110	50	100	2	2	2.2
300	362	160	35	195	50	200	3	2	2.8
400	462	230	49.5	278	50	100	4	4	3.4
500	562	310	59.5	370	50	200	5	3	4.0
600	662	380	75	455	50	100	6	6	4.6

KKR60 Light load type Without cover

HR KKR60 Right-mounted motor

(単位: mm)

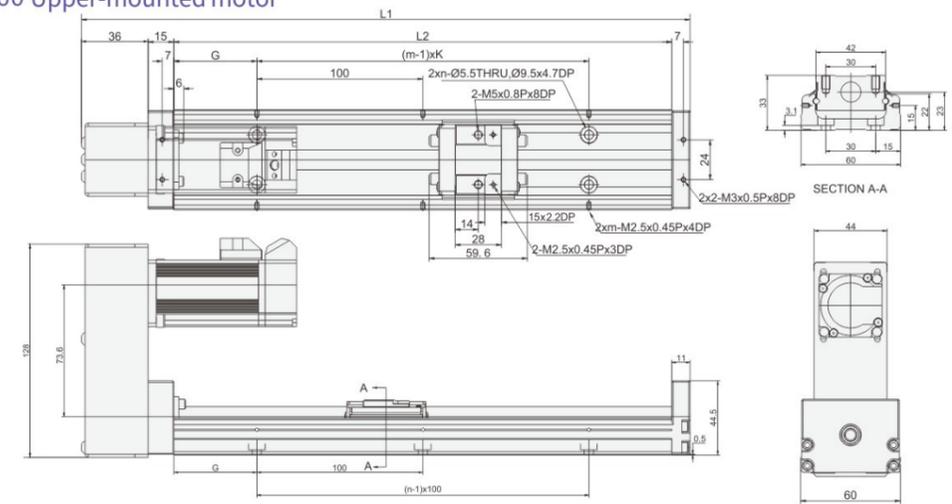


Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator					S1 Actuator	S2 Actuator
150	212	85	34	25	100	2	2	1.5	1.7
200	262	135	84	50	100	2	2	1.8	2.0
300	362	235	184	50	200	3	2	2.4	2.6
400	462	335	284	50	100	4	4	3.0	3.2
500	562	435	384	50	200	5	3	3.6	3.8
600	662	535	484	50	100	6	6	4.2	4.4

KKR60 Light load type Without cover

HW KKR60 Upper-mounted motor

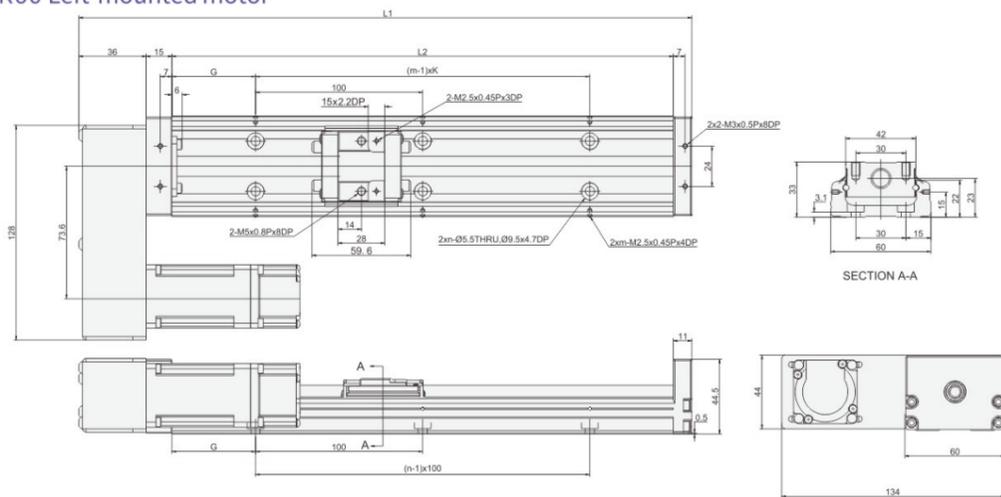
(単位: mm)



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator					S1 Actuator	S2 Actuator
150	212	85	34	25	100	2	2	1.5	1.7
200	262	135	84	50	100	2	2	1.8	2.0
300	362	235	184	50	200	3	2	2.4	2.6
400	462	335	284	50	100	4	4	3.0	3.2
500	562	435	384	50	200	5	3	3.6	3.8
600	662	535	484	50	100	6	6	4.2	4.4

HL KKR60 Left-mounted motor

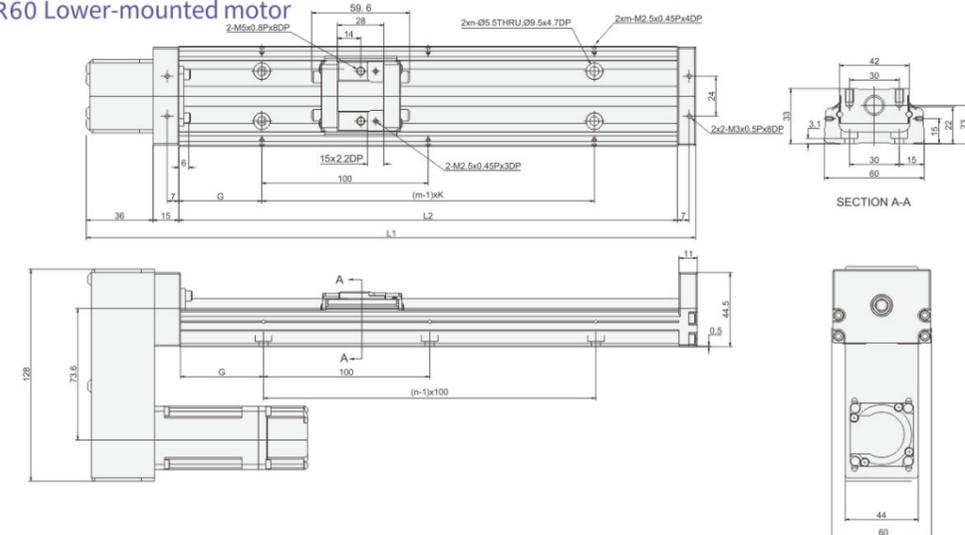
(単位: mm)



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator					S1 Actuator	S2 Actuator
150	212	85	34	25	100	2	2	1.5	1.7
200	262	135	84	50	100	2	2	1.8	2.0
300	362	235	184	50	200	3	2	2.4	2.6
400	462	335	284	50	100	4	4	3.0	3.2
500	562	435	384	50	200	5	3	3.6	3.8
600	662	535	484	50	100	6	6	4.2	4.4

HM KKR60 Lower-mounted motor

(単位: mm)

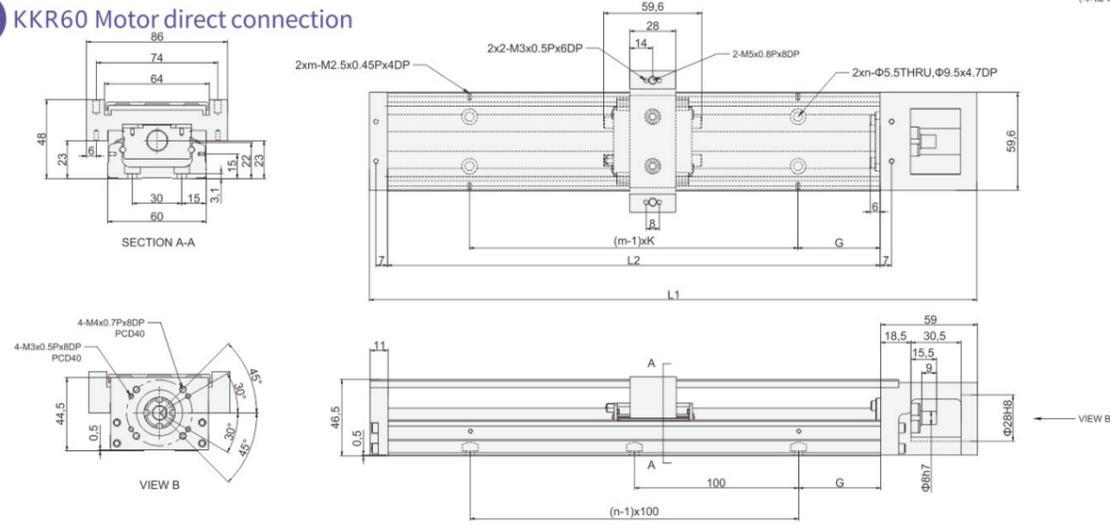


Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator					S1 Actuator	S2 Actuator
150	212	85	34	25	100	2	2	1.5	1.7
200	262	135	84	50	100	2	2	1.8	2.0
300	362	235	184	50	200	3	2	2.4	2.6
400	462	335	284	50	100	4	4	3.0	3.2
500	562	435	384	50	200	5	3	3.6	3.8
600	662	535	484	50	100	6	6	4.2	4.4

KKR60 Light load type With cover

F0C KKR60 Motor direct connection

(Unit: mm)

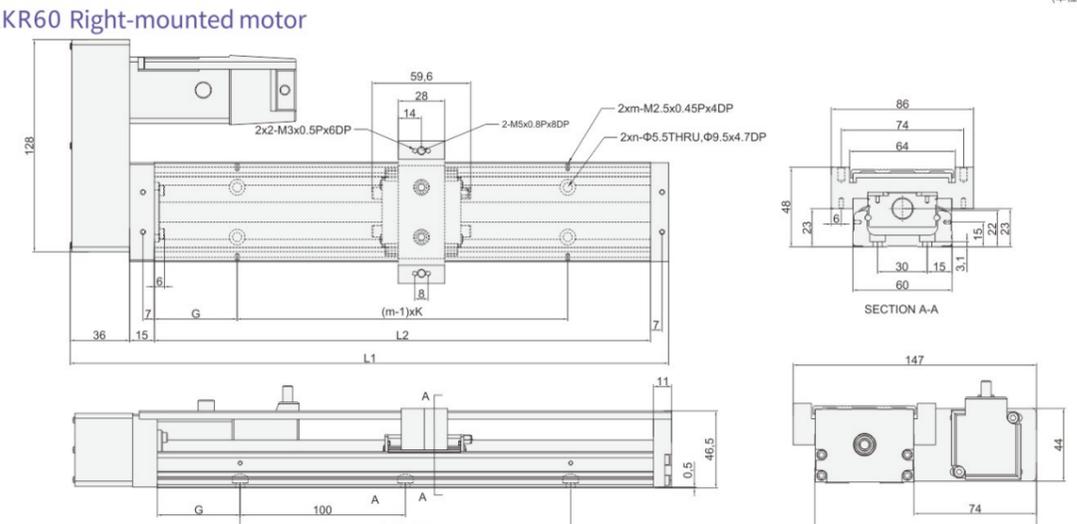


Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator					S1 Actuator	S2 Actuator
150	220	85	34	25	100	2	2	1.6	1.8
200	270	135	84	50	100	2	2	1.9	2.1
300	370	235	184	50	200	3	2	2.5	2.7
400	470	335	284	50	100	4	4	3.1	3.3
500	570	435	384	50	200	5	3	3.7	3.9
600	670	535	484	50	100	6	6	4.4	4.6

KKR60 Light load type With cover

HRC KKR60 Right-mounted motor

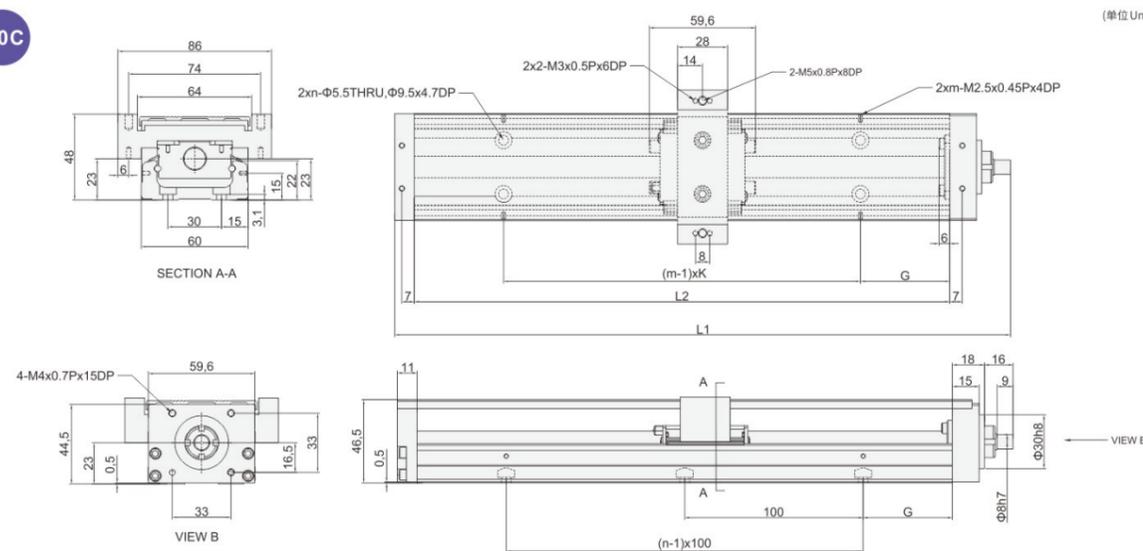
(Unit: mm)



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator					S1 Actuator	S2 Actuator
150	212	85	34	25	100	2	2	1.7	1.9
200	262	135	84	50	100	2	2	2.0	2.2
300	362	235	184	50	200	3	2	2.6	2.8
400	462	335	284	50	100	4	4	3.2	3.4
500	562	435	384	50	200	5	3	3.8	4.0
600	662	535	484	50	100	6	6	4.4	4.6

H0C

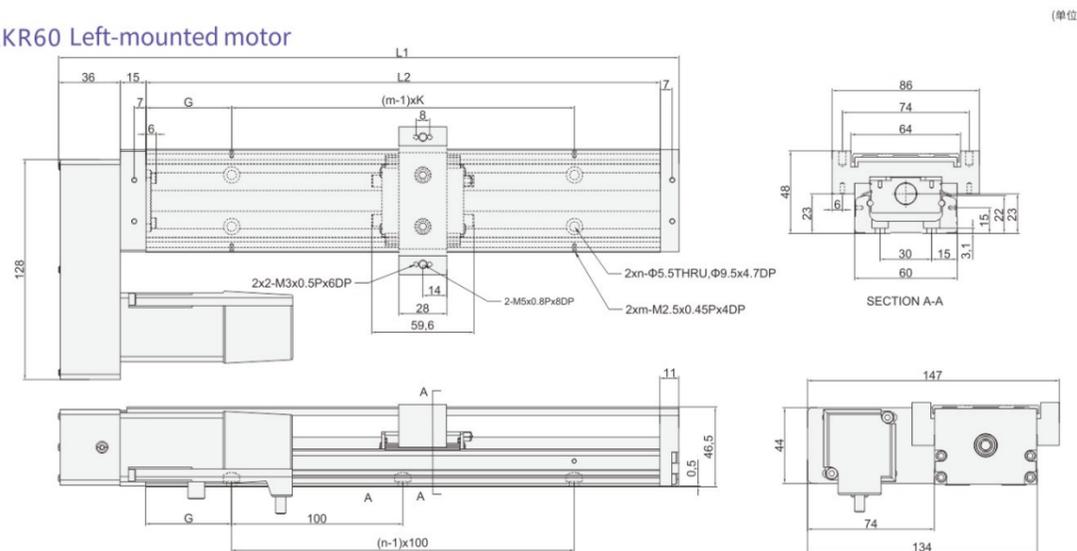
(Unit: mm)



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator					S1 Actuator	S2 Actuator
150	195	85	34	25	100	2	2	1.5	1.7
200	245	135	84	50	100	2	2	1.8	2.0
300	345	235	184	50	200	3	2	2.4	2.6
400	445	335	284	50	100	4	4	3.0	3.2
500	545	435	384	50	200	5	3	3.6	3.8
600	645	535	484	50	100	6	6	4.2	4.7

HLC KKR60 Left-mounted motor

(Unit: mm)



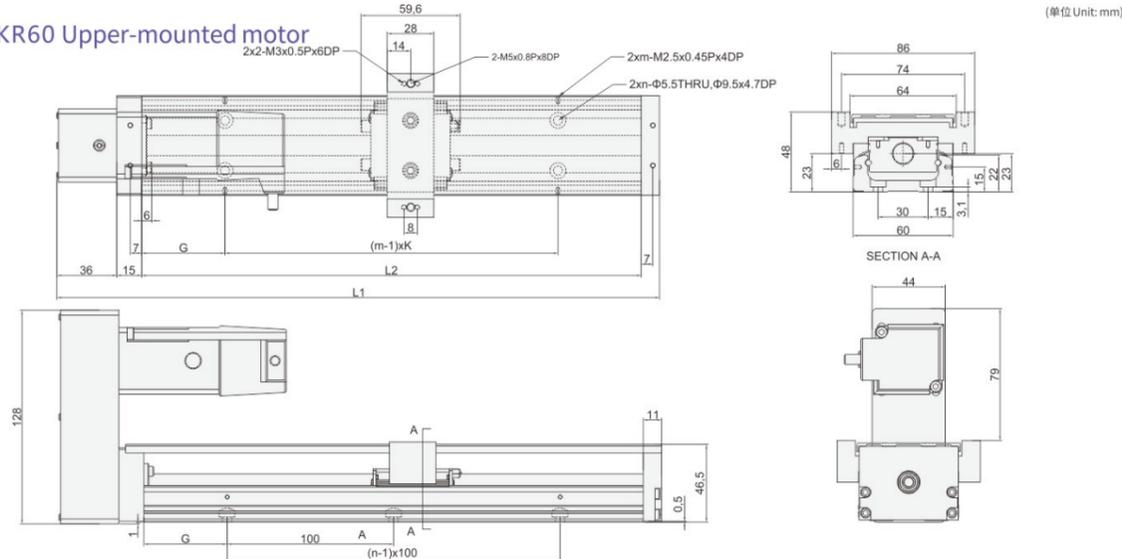
Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator					S1 Actuator	S2 Actuator
150	212	85	34	25	100	2	2	1.7	1.9
200	262	135	84	50	100	2	2	2.0	2.2
300	362	235	184	50	200	3	2	2.6	2.8
400	462	335	284	50	100	4	4	3.2	3.4
500	562	435	384	50	200	5	3	3.8	4.0
600	662	535	484	50	100	6	6	4.4	4.6

- KKR Technical data
- KKR20
- KKR30
- KKR40
- KKR50
- KKR60-S
- KKR86
- KKR100
- KKR130
- Motor seal and motor connecting flange

- KKR Technical data
- KKR20
- KKR30
- KKR40
- KKR50
- KKR60-S
- KKR86
- KKR100
- KKR130
- Motor seal and motor connecting flange

KKR60 Light load type With cover

HWC KKR60 Upper-mounted motor



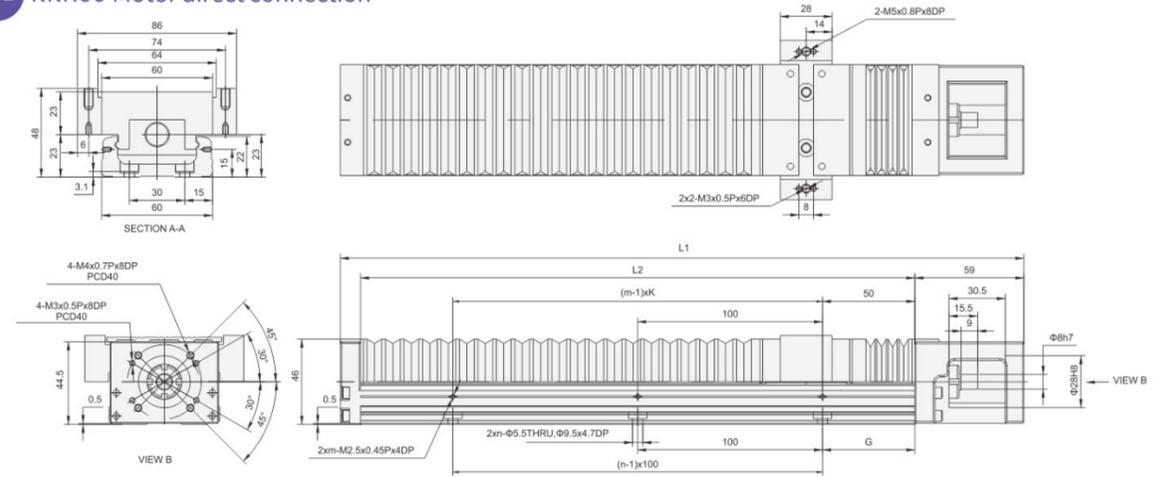
Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator					S1 Actuator	S2 Actuator
150	212	85	34	25	100	2	2	1.7	1.9
200	262	135	84	50	100	2	2	2.0	2.2
300	362	235	184	50	200	3	2	2.6	2.8
400	462	335	284	50	100	4	4	3.2	3.4
500	562	435	384	50	200	5	3	3.8	4.0
600	662	535	484	50	100	6	6	4.4	4.6

(Unit: mm)

(Unit: mm)

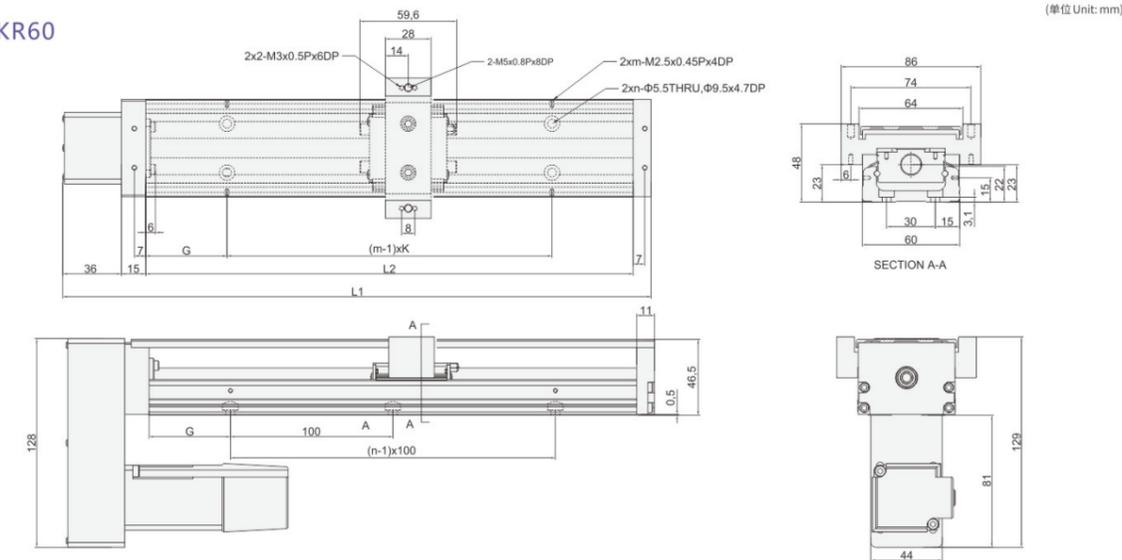
KKR60 Light load type With Bellows

F0B KKR60 Motor direct connection



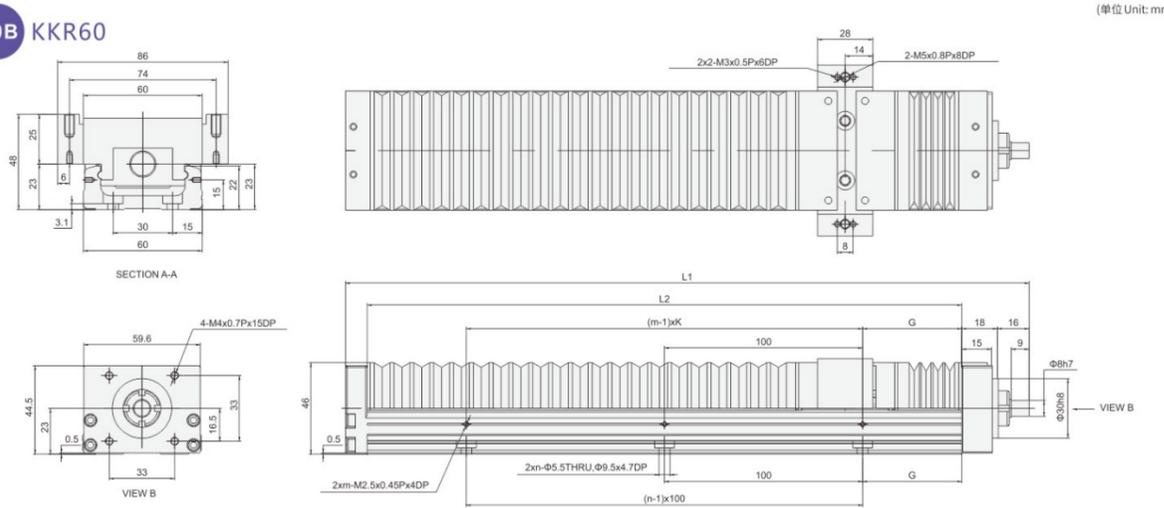
Track length L2(mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion(mm)		G (mm)	K (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion					
150	220	70	16	86	25	100	2	2	1.6
200	270	115	23.5	128	50	100	2	2	1.9
300	370	180	36	216	50	200	3	2	2.5
400	470	250	51	301	50	100	4	4	3.1
500	570	330	61	391	50	200	5	3	3.7
600	670	400	78	476	50	100	6	6	4.3

HMC KKR60



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	K (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator					S1 Actuator	S2 Actuator
150	212	85	34	25	100	2	2	1.7	1.9
200	262	135	84	50	100	2	2	2.0	2.2
300	362	235	184	50	200	3	2	2.6	2.8
400	462	335	284	50	100	4	4	3.2	3.4
500	562	435	384	50	200	5	3	3.8	4.0
600	662	535	484	50	100	6	6	4.4	4.6

H0B KKR60



Track length L2(mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion(mm)		G (mm)	K (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion					
150	195	70	16	86	25	100	2	2	1.5
200	245	115	23.5	128	50	100	2	2	1.8
300	345	180	36	216	50	200	3	2	2.4
400	445	250	51	301	50	100	4	4	3.0
500	545	330	61	391	50	200	5	3	3.6
600	645	400	78	476	50	100	6	6	4.2

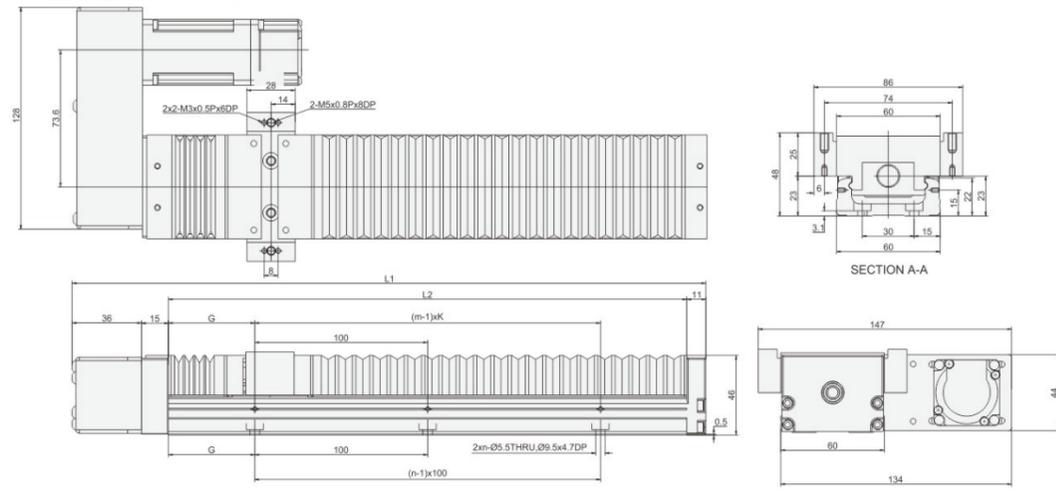
- KKR Technical data
- KKR20
- KKR30
- KKR40
- KKR50
- KKR60-S
- KKR86
- KKR100
- KKR130
- Motor seal and motor connecting flange

- KKR Technical data
- KKR20
- KKR30
- KKR40
- KKR50
- KKR60-S
- KKR86
- KKR100
- KKR130
- Motor seal and motor connecting flange

KKR60 Light load type With Bellows

HRB KKR60 Right-mounted motor

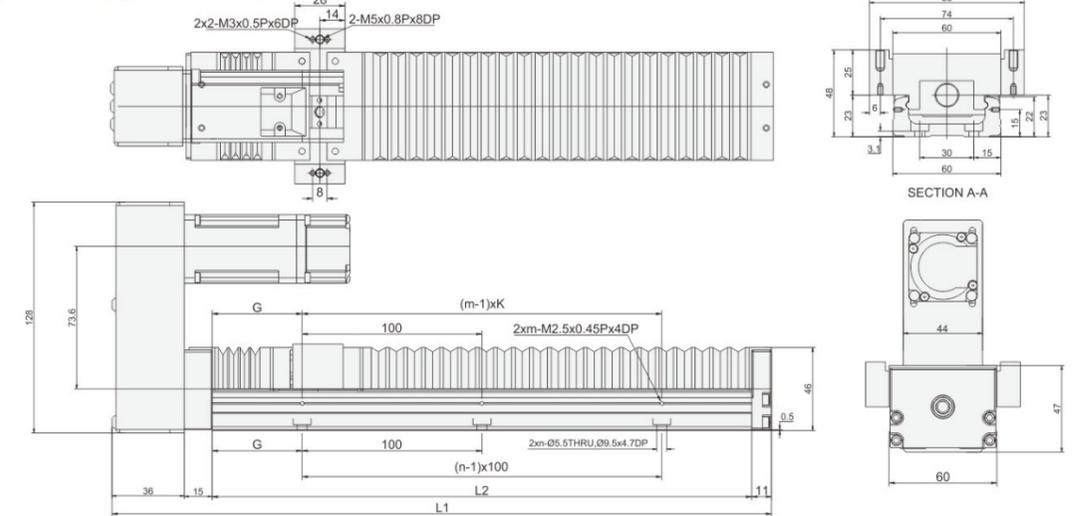
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		G (mm)	K (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion					
150	212	70	16	86	25	100	2	2	1.7
200	262	115	23.5	128	50	100	2	2	2.1
300	362	180	36	216	50	200	3	2	2.7
400	462	250	51	301	50	100	4	4	3.3
500	562	330	61	391	50	200	5	3	3.9
600	662	400	78	476	50	100	6	6	4.6

(Unit: mm)

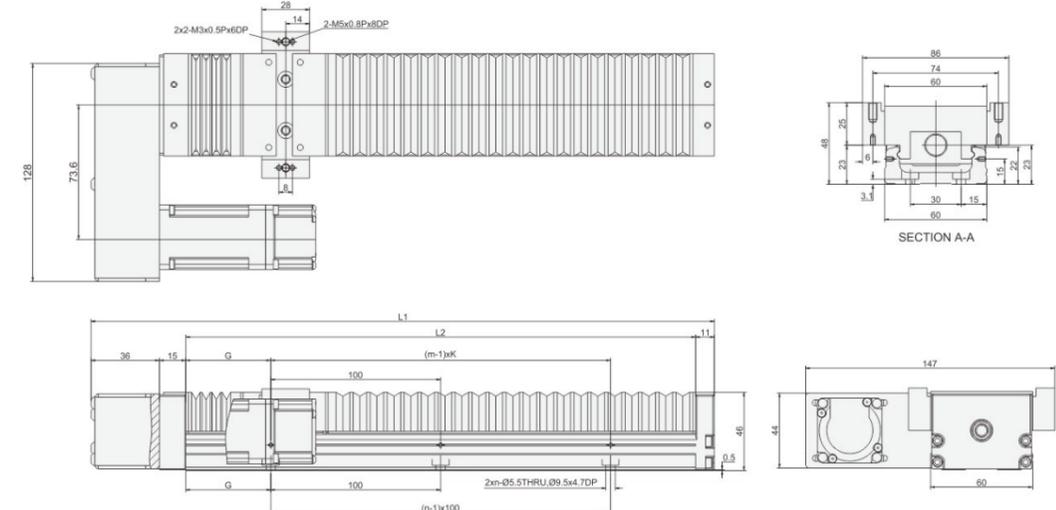
HWB KKR60 Upper-mounted motor



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		G (mm)	K (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion					
150	212	70	16	86	25	100	2	2	1.7
200	262	115	23.5	128	50	100	2	2	2.1
300	362	180	36	216	50	200	3	2	2.7
400	462	250	51	301	50	100	4	4	3.3
500	562	330	61	391	50	200	5	3	3.9
600	662	400	76	476	50	100	6	6	4.6

HLB KKR60 Left-mounted motor

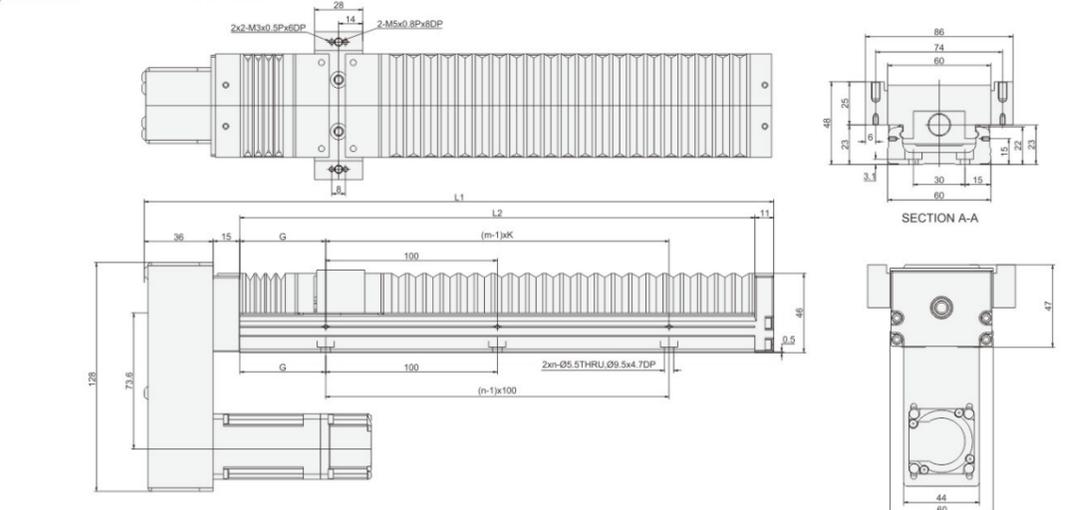
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		G (mm)	K (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion					
150	212	70	16	86	25	100	2	2	1.7
200	262	115	23.5	128	50	100	2	2	2.1
300	362	180	36	216	50	200	3	2	2.7
400	462	250	51	301	50	100	4	4	3.3
500	562	330	61	391	50	200	5	3	3.9
600	662	400	76	476	50	100	6	6	4.6

(Unit: mm)

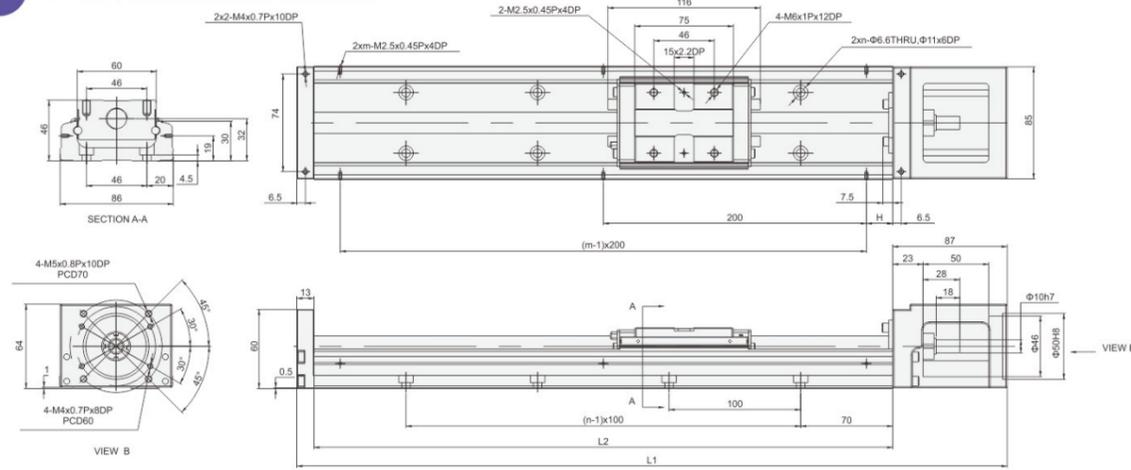
HMB KKR60 Lower-mounted motor



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		G (mm)	K (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion					
150	212	70	16	86	25	100	2	2	1.7
200	262	115	23.5	128	50	100	2	2	2.1
300	362	180	36	216	50	200	3	2	2.7
400	462	250	51	301	50	100	4	4	3.3
500	562	330	61	391	50	200	5	3	3.9
600	662	400	76	476	50	100	6	6	4.6

F0 KKR86 Motor direct connection

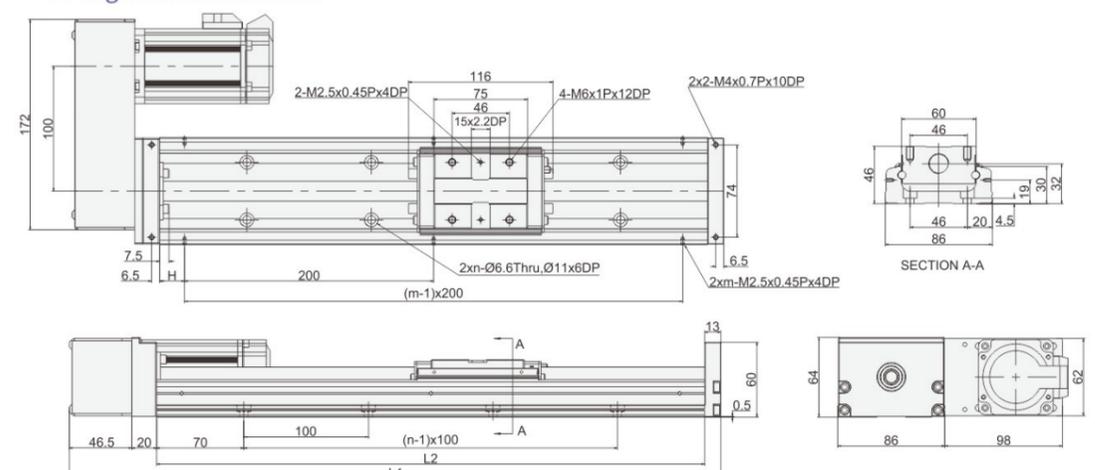
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator				A1 Actuator	A2 Actuator
340	440	210	100	70	3	2	5.7	6.5
440	540	310	200	20	4	3	6.9	7.7
540	640	410	300	70	5	3	8.0	8.8
640	740	510	400	20	6	4	9.2	10.0
740	840	610	500	70	7	4	10.4	11.2
940	1040	810	700	70	9	5	12.8	13.6

(Unit: mm)

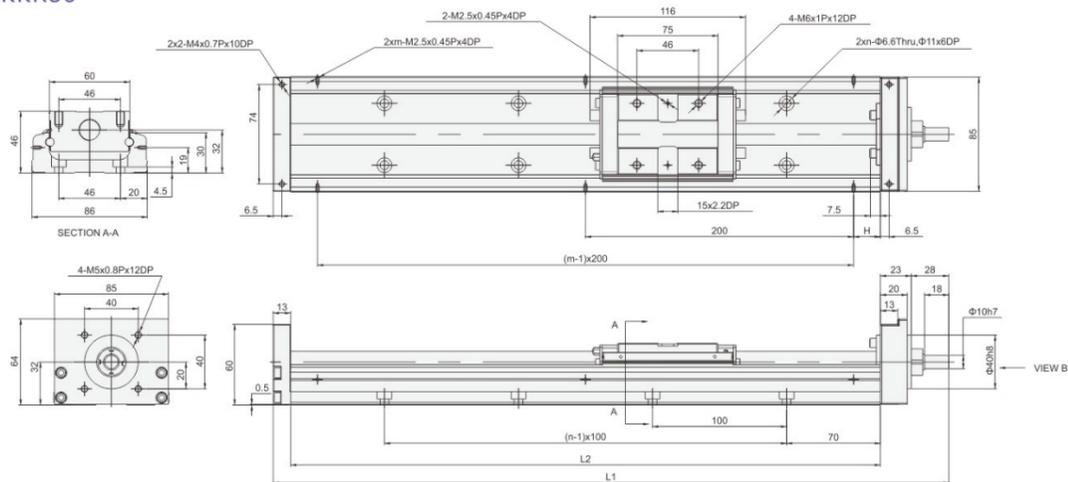
HR KKR86 Right-mounted motor



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator				A1 Actuator	A2 Actuator
340	419.5	210	100	70	3	2	5.8	6.6
440	519.5	310	200	20	4	3	7.0	7.8
540	619.5	410	300	70	5	3	8.2	9.0
640	719.5	510	400	20	6	4	9.4	10.2
740	819.5	610	500	70	7	4	10.6	11.4
940	1019.5	810	700	70	9	5	13.0	13.8

H0 KKR86

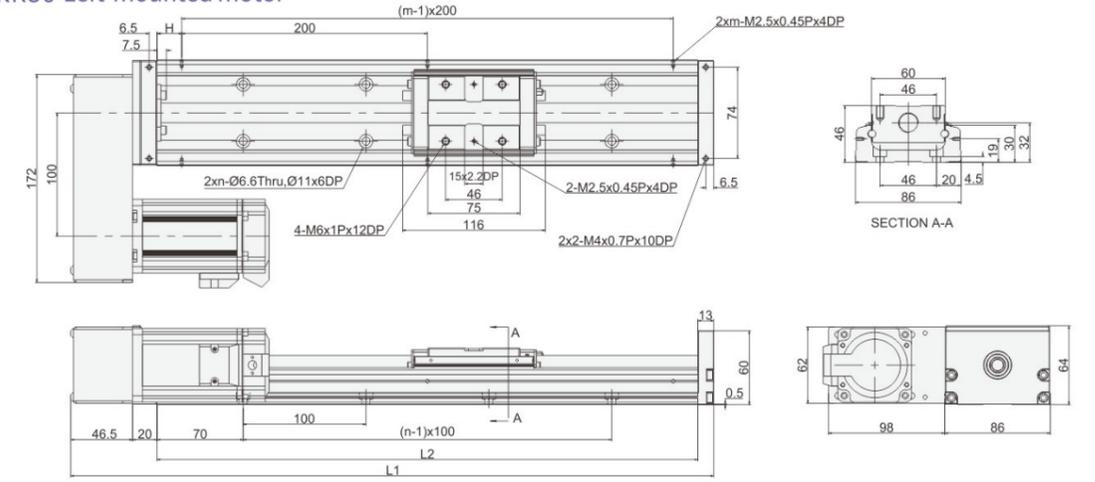
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator				A1 Actuator	A2 Actuator
340	404	210	100	70	3	2	5.6	6.4
440	504	310	200	20	4	3	6.8	7.6
540	604	410	300	70	5	3	7.9	8.7
640	704	510	400	20	6	4	9.1	9.9
740	804	610	500	70	7	4	10.3	11.1
940	1004	810	700	70	9	5	12.7	13.5

HL KKR86 Left-mounted motor

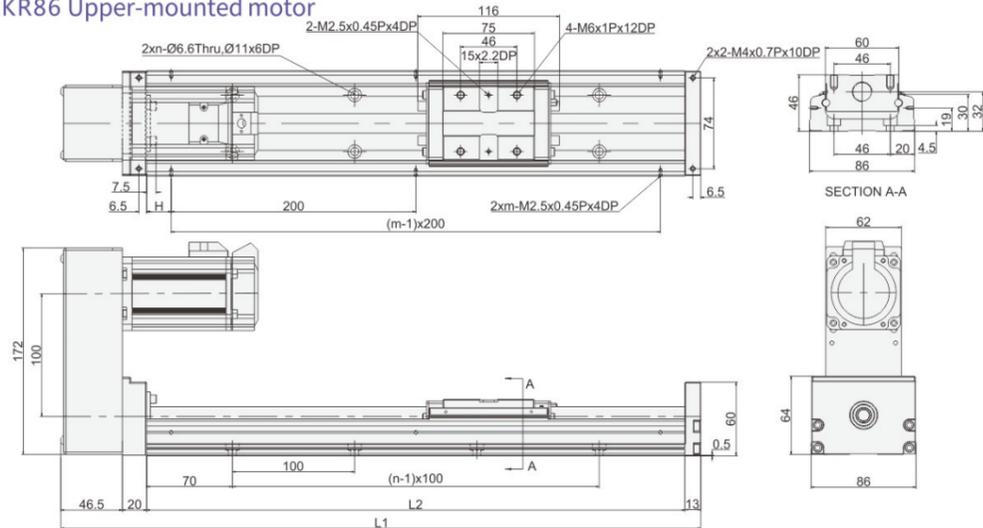
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator				A1 Actuator	A2 Actuator
340	419.5	210	100	70	3	2	5.8	6.6
440	519.5	310	200	20	4	3	7.0	7.8
540	619.5	410	300	70	5	3	8.2	9.0
640	719.5	510	400	20	6	4	9.4	10.2
740	819.5	610	500	70	7	4	10.6	11.4
940	1019.5	810	700	70	9	5	13.0	13.8

KKR86 Standard Type Without cover

HW KKR86 Upper-mounted motor



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator				A1 Actuator	A2 Actuator
340	419.5	210	100	70	3	2	5.8	6.6
440	519.5	310	200	20	4	3	7.0	7.8
540	619.5	410	300	70	5	3	8.2	9.0
640	719.5	510	400	20	6	4	9.4	10.2
740	819.5	610	500	70	7	4	10.6	11.4
940	1019.5	810	700	70	9	5	13.0	13.8

(Unit: mm)

VIEW B

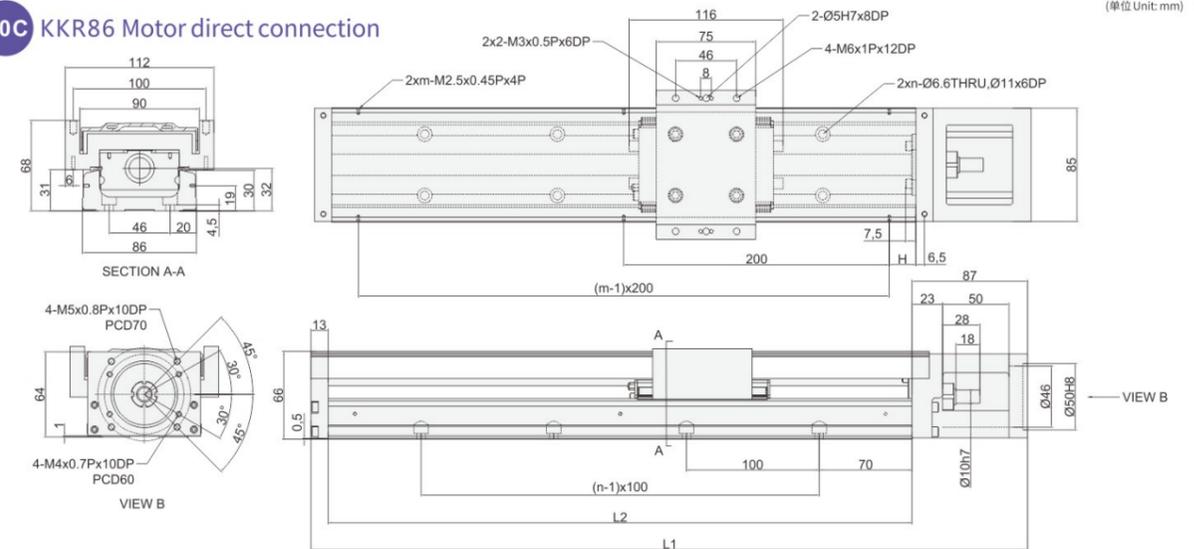
(Unit: mm)

VIEW B

Motor seal and motor connecting flange

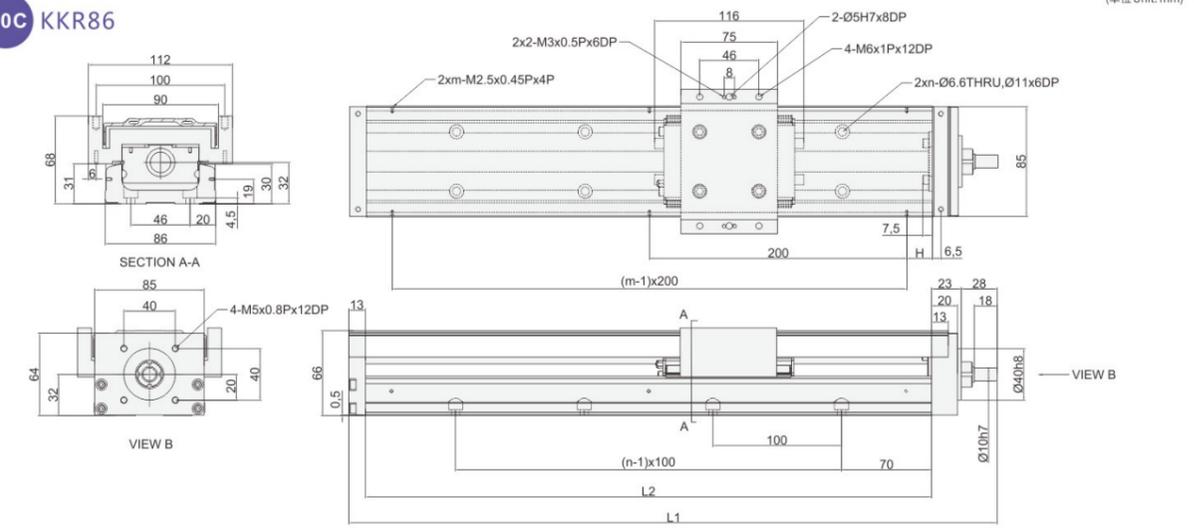
KKR86 Standard Type With cover

F0C KKR86 Motor direct connection



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator				A1 Actuator	A2 Actuator
340	440	210	100	70	3	2	6.5	7.3
440	540	310	200	20	4	3	7.8	8.6
540	640	410	300	70	5	3	9.0	9.8
640	740	510	400	20	6	4	10.3	11.3
740	840	610	500	70	7	4	11.6	12.4
940	1040	810	700	70	9	5	14.2	15.0

H0C KKR86

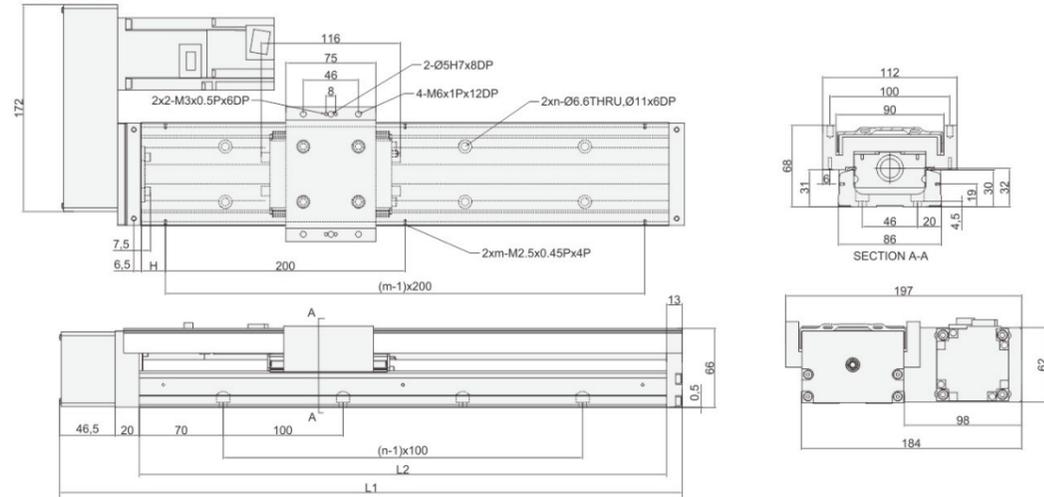


Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator				A1 Actuator	A2 Actuator
340	404	210	100	70	3	2	6.4	7.2
440	504	310	200	20	4	3	7.7	8.5
540	604	410	300	70	5	3	8.9	9.7
640	704	510	400	20	6	4	10.0	10.8
740	804	610	500	70	7	4	11.3	12.1
940	1004	810	700	70	9	5	13.9	14.7

KKR86 Standard Type With cover

HRC KKR86 Right-mounted motor

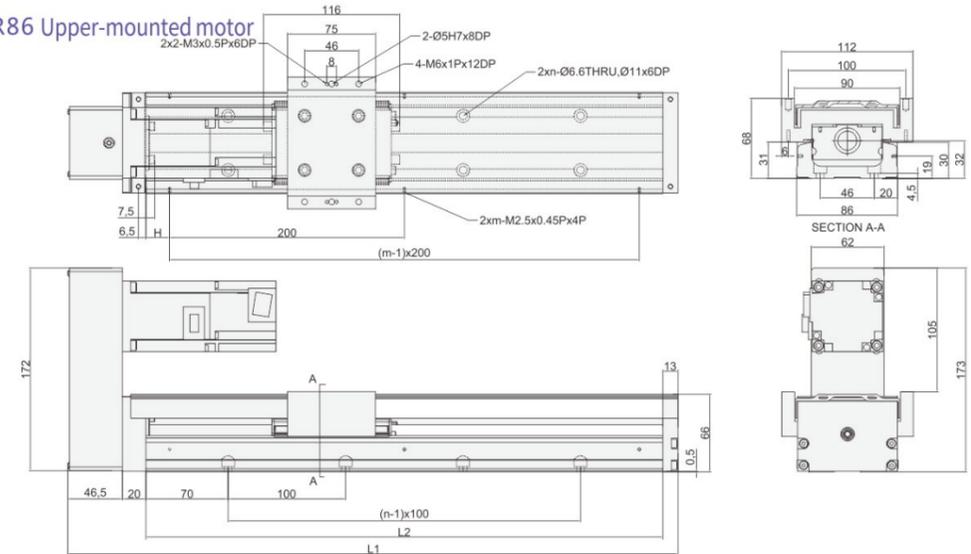
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator				A1 Actuator	A2 Actuator
340	419.5	210	100	70	3	2	6.6	7.4
440	519.5	310	200	20	4	3	7.9	8.7
540	619.5	410	300	70	5	3	9.1	9.9
640	719.5	510	400	20	6	4	10.4	11.2
740	819.5	610	500	70	7	4	11.7	12.5
940	1019.5	810	700	70	9	5	14.3	15.1

(Unit: mm)

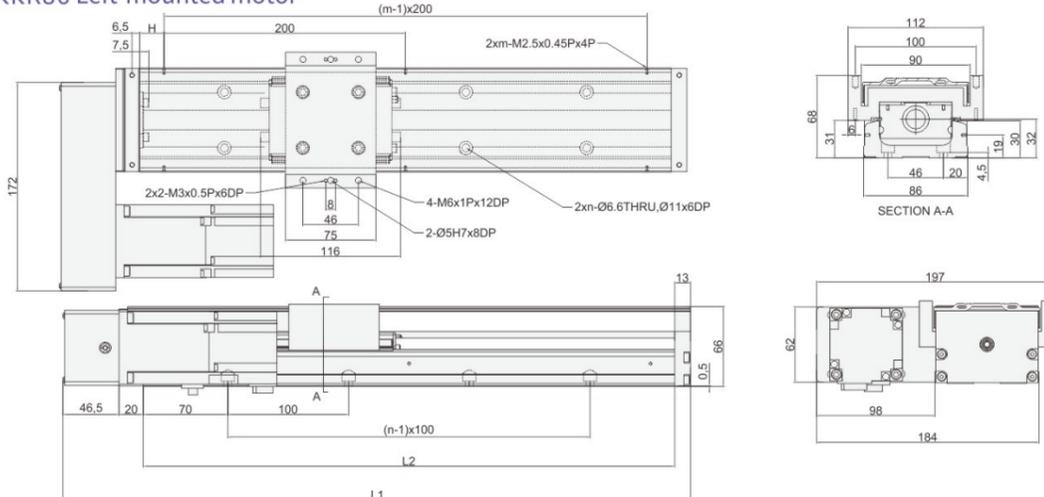
HWC KKR86 Upper-mounted motor



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator				A1 Actuator	A2 Actuator
340	419.5	210	100	70	3	2	6.6	7.4
440	519.5	310	200	20	4	3	7.9	8.7
540	619.5	410	300	70	5	3	9.1	9.9
640	719.5	510	400	20	6	4	10.4	11.2
740	819.5	610	500	70	7	4	11.7	12.5
940	1019.5	810	700	70	9	5	14.3	15.1

HLC KKR86 Left-mounted motor

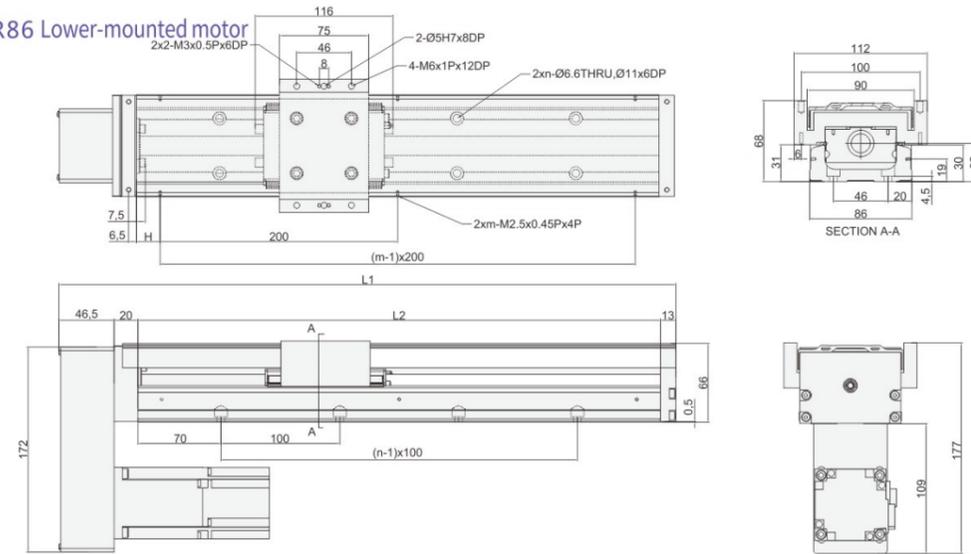
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator				A1 Actuator	A2 Actuator
340	419.5	210	100	70	3	2	6.6	7.4
440	519.5	310	200	20	4	3	7.9	8.7
540	619.5	410	300	70	5	3	9.1	9.9
640	719.5	510	400	20	6	4	10.4	11.2
740	819.5	610	500	70	7	4	11.7	12.5
940	1019.5	810	700	70	9	5	14.3	15.1

(Unit: mm)

HMC KKR86 Lower-mounted motor

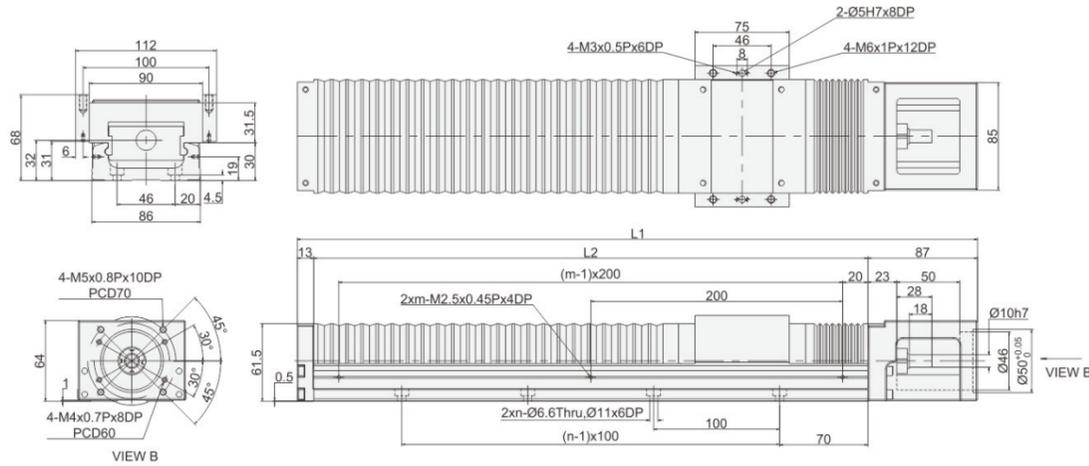


Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator				A1 Actuator	A2 Actuator
340	419.5	210	100	70	3	2	6.6	7.4
440	519.5	310	200	20	4	3	7.9	8.7
540	619.5	410	300	70	5	3	9.1	9.9
640	719.5	510	400	20	6	4	10.4	11.2
740	819.5	610	500	70	7	4	11.7	12.5
940	1019.5	810	700	70	9	5	14.3	15.1

KKR86 Standard Type With Bellows

F0B KKR86 Motor direct connection

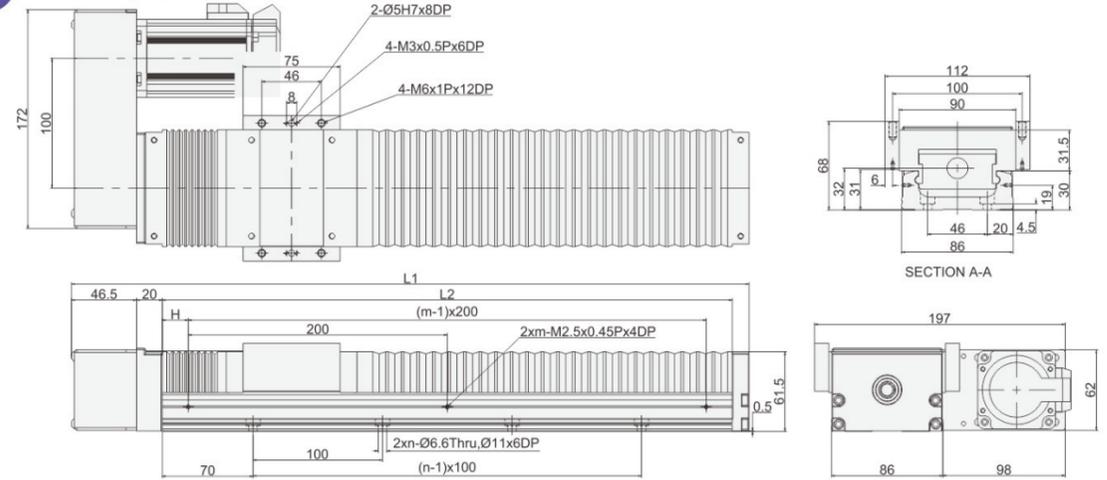
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		H (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion				
340	440	160	38	200	70	3	2	6.5
440	540	240	49	289	20	4	3	7.8
540	640	320	59.5	378.5	70	5	3	9.0
640	740	390	75	463	20	6	4	10.3
740	840	460	89	549	70	7	4	11.6
940	1040	610	114	724	70	9	5	14.2

(Unit: mm)

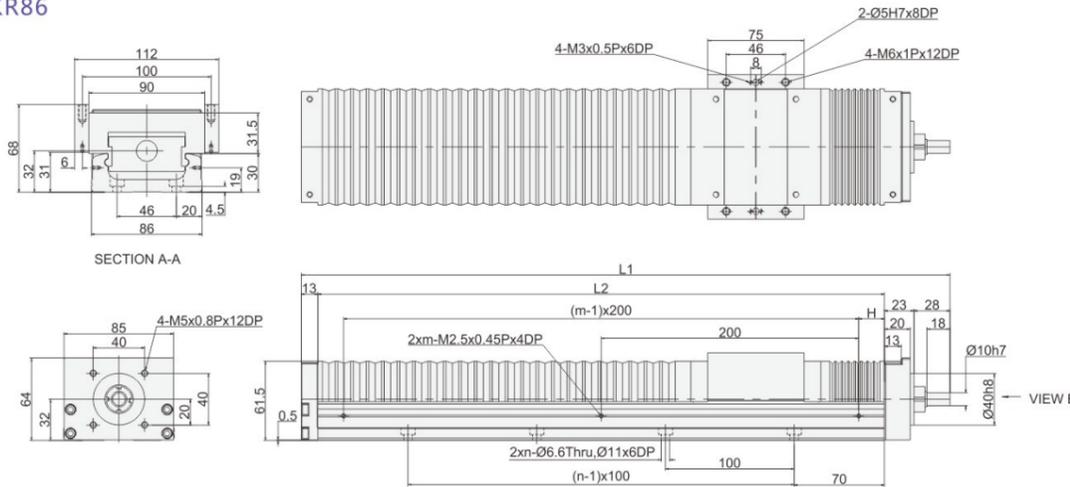
HRB KKR86 Right-mounted motor



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		H (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion				
340	419.5	160	38	200	70	3	2	6.6
440	519.5	240	49	289	20	4	3	7.9
540	619.5	320	59.5	378.5	70	5	3	9.1
640	719.5	390	75	463	20	6	4	10.4
740	819.5	460	89	549	70	7	4	11.7
940	1019.5	610	114	724	70	9	5	14.3

H0C KKR86

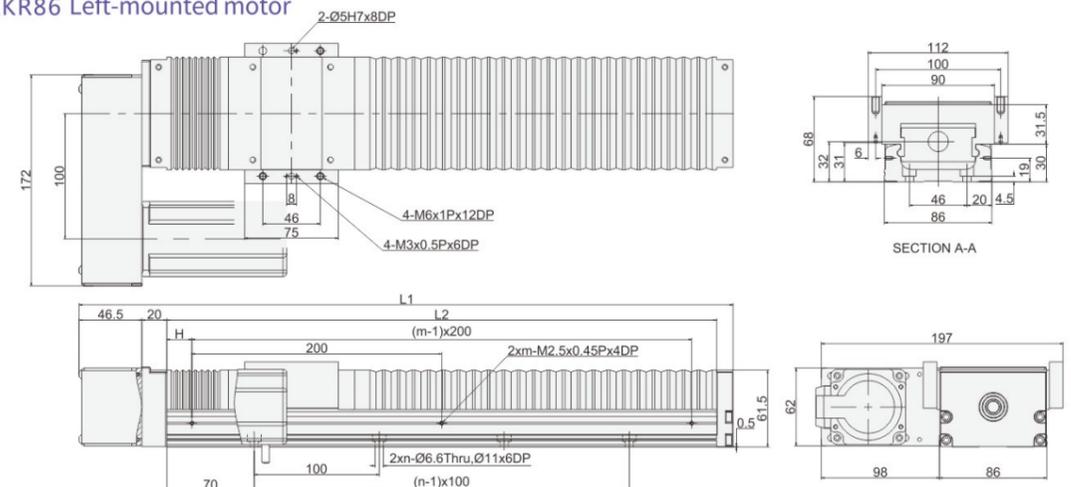
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		H (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion				
340	404	160	38	200	70	3	2	6.4
440	504	240	49	289	20	4	3	7.7
540	604	320	59.5	378.5	70	5	3	8.9
640	704	390	75	463	20	6	4	10.2
740	804	460	89	549	70	7	4	11.5
940	1004	610	114	724	70	9	5	14.1

(Unit: mm)

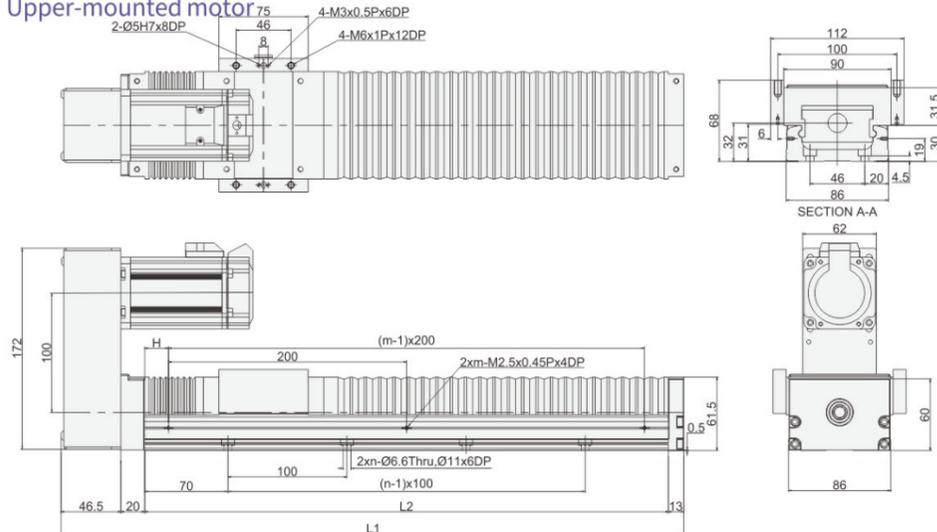
HLB KKR86 Left-mounted motor



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		H (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion				
340	419.5	160	38	200	70	3	2	6.6
440	519.5	240	49	289	20	4	3	7.9
540	619.5	320	59.5	378.5	70	5	3	9.1
640	719.5	390	75	463	20	6	4	10.4
740	819.5	460	89	549	70	7	4	11.7
940	1019.5	610	114	724	70	9	5	14.3

KKR86 Standard Type With Bellows

HWB KKR86 Upper-mounted motor



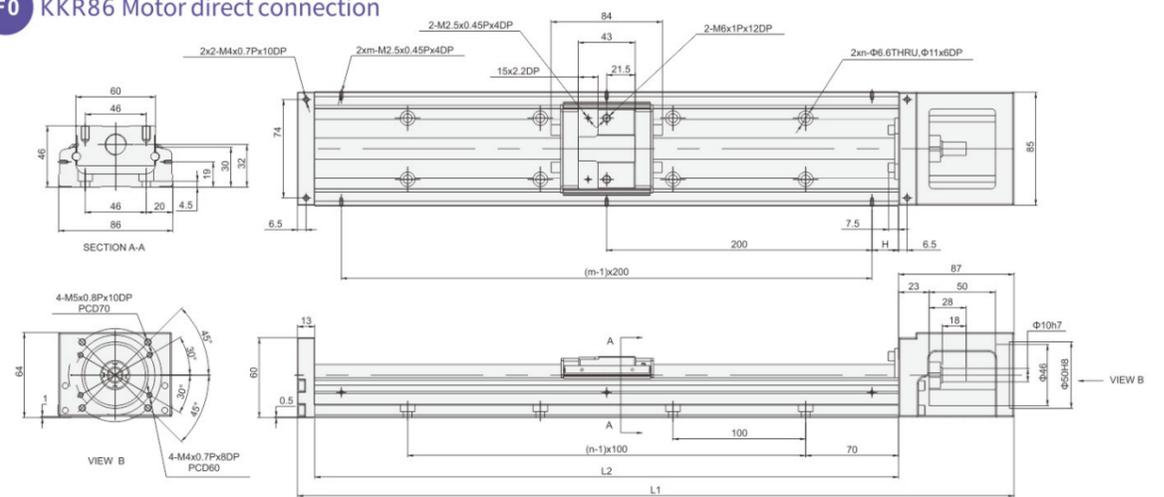
(Unit: mm)

Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		H (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion				
340	419.5	160	38	200	70	3	2	6.6
440	519.5	240	49	289	20	4	3	7.9
540	619.5	320	59.5	378.5	70	5	3	9.1
640	719.5	390	75	463	20	6	4	10.4
740	819.5	460	89	549	70	7	4	11.7
940	1019.5	610	114	724	70	9	5	14.3

(Unit: mm)

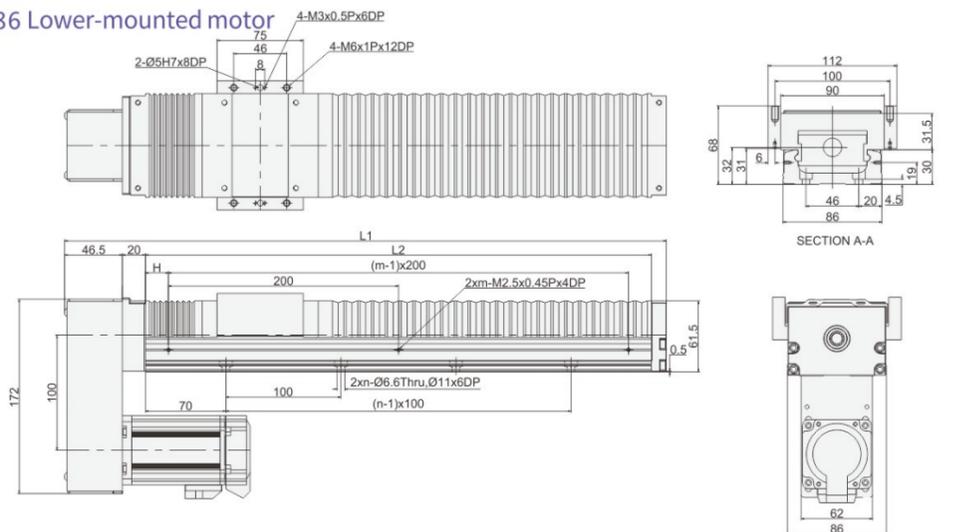
KKR86 Light load type Without cover

F0 KKR86 Motor direct connection



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator				S1 Actuator	S2 Actuator
340	440	246	170	70	3	2	5.4	5.9
440	540	346	270	20	5	3	6.6	7.1
540	640	446	370	70	5	3	7.7	8.2
640	740	546	470	20	7	4	8.9	9.4
740	840	646	570	70	7	4	10.1	10.6
940	1040	846	770	70	9	5	12.5	13.0

HMB KKR86 Lower-mounted motor

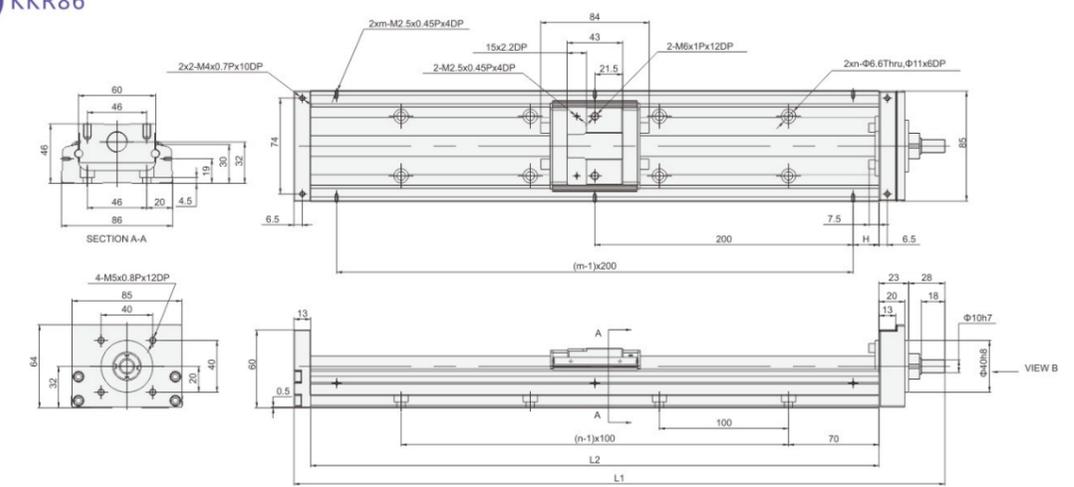


(Unit: mm)

Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		H (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion				
340	419.5	160	38	200	70	3	2	6.6
440	519.5	240	49	289	20	4	3	7.9
540	619.5	320	59.5	378.5	70	5	3	9.1
640	719.5	390	75	463	20	6	4	10.4
740	819.5	460	89	549	70	7	4	11.7
940	1019.5	610	114	724	70	9	5	14.3

(Unit: mm)

H0 KKR86

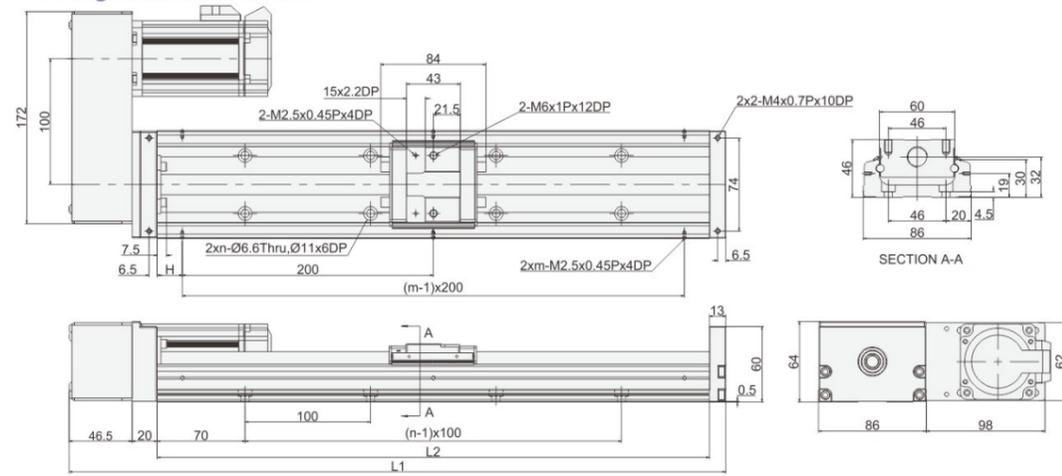


Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator				S1 Actuator	S2 Actuator
340	404	246	170	70	3	2	5.3	5.8
440	504	346	270	20	4	3	6.5	7.0
540	604	446	370	70	5	3	7.6	8.1
640	704	546	470	20	6	4	8.7	9.3
740	804	646	570	70	7	4	10.0	10.5
940	1004	846	770	70	9	5	12.4	12.9

KKR86 Light load type Without cover

HR KKR86 Right-mounted motor

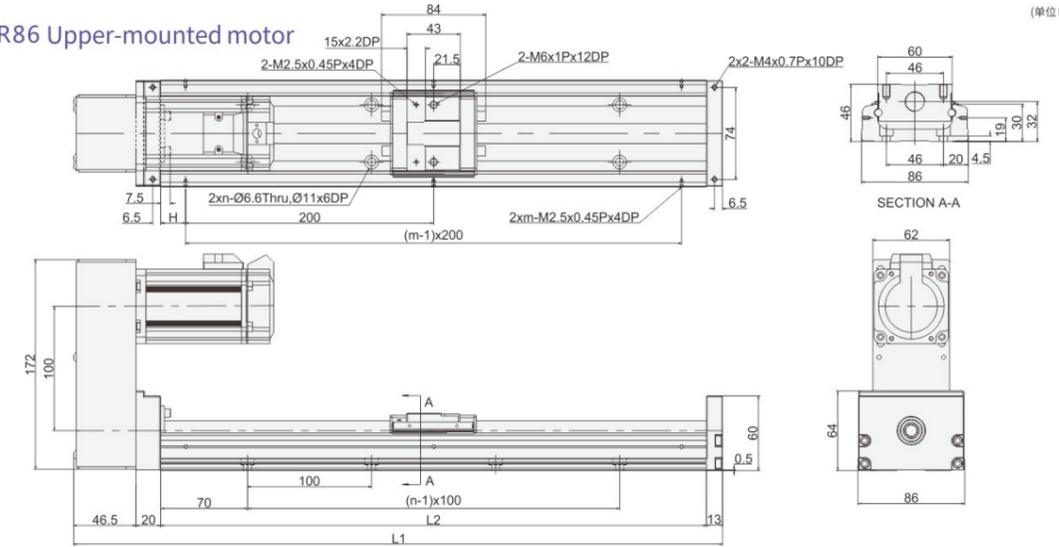
(単位 Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator				S1 Actuator	S2 Actuator
340	419.5	246	170	70	3	2	5.5	6.0
440	519.5	346	270	20	4	3	6.7	7.2
540	619.5	446	370	70	5	3	7.9	8.4
640	719.5	546	470	20	6	4	9.1	9.6
740	819.5	646	570	70	7	4	10.3	10.8
940	1019.5	846	770	70	9	5	12.7	13.2

(単位 Unit: mm)

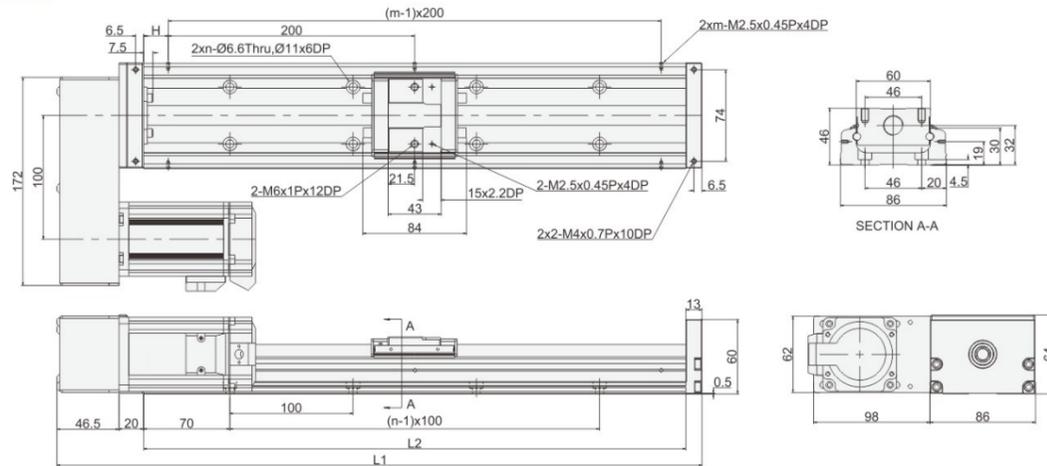
HW KKR86 Upper-mounted motor



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator				S1 Actuator	S2 Actuator
340	419.5	246	170	70	3	2	5.5	6.0
440	519.5	346	270	20	4	3	6.7	7.2
540	619.5	446	370	70	5	3	7.9	8.4
640	719.5	546	470	20	6	4	9.1	9.6
740	819.5	646	570	70	7	4	10.3	10.8
940	1019.5	846	770	70	9	5	12.7	13.2

HL KKR86 Left-mounted motor

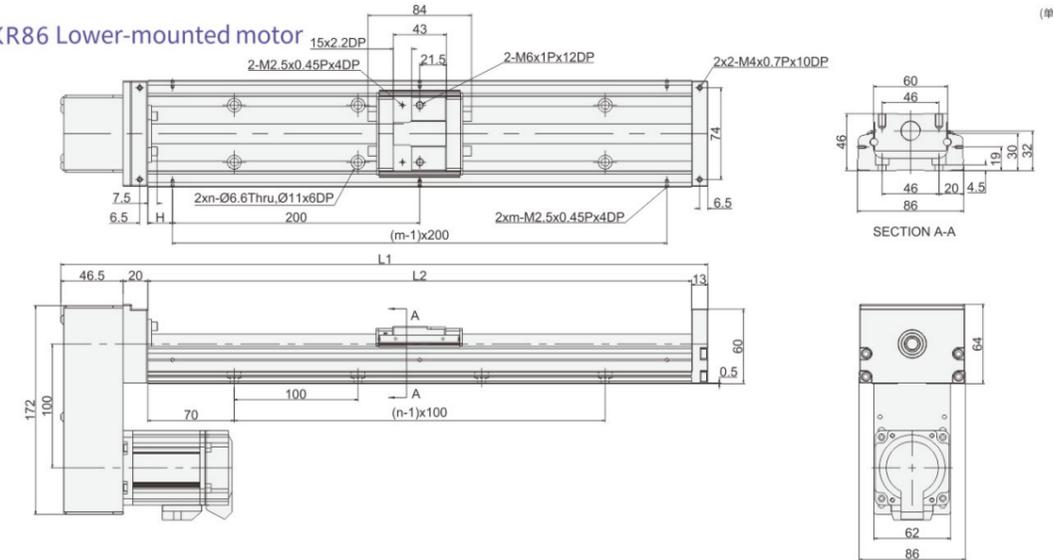
(単位 Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator				S1 Actuator	S2 Actuator
340	419.5	246	170	70	3	2	5.5	6.0
440	519.5	346	270	20	4	3	6.7	7.2
540	619.5	446	370	70	5	3	7.9	8.4
640	719.5	546	470	20	6	4	9.1	9.6
740	819.5	646	570	70	7	4	10.3	10.8
940	1019.5	846	770	70	9	5	12.7	13.2

HM KKR86 Lower-mounted motor

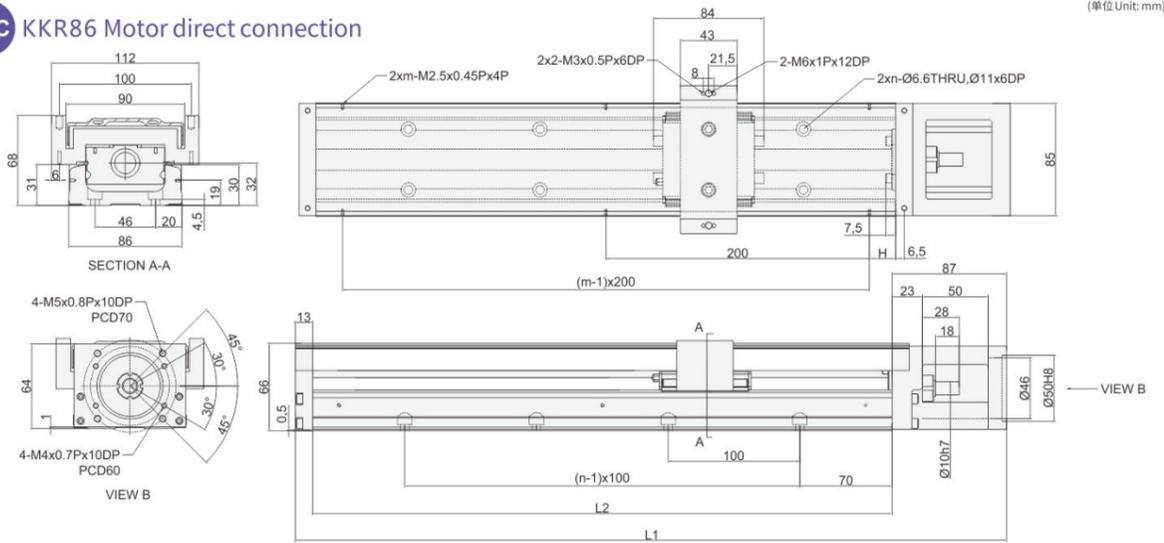
(単位 Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator				S1 Actuator	S2 Actuator
340	419.5	246	170	70	3	2	5.5	6.0
440	519.5	346	270	20	4	3	6.7	7.2
540	619.5	446	370	70	5	3	7.9	8.4
640	719.5	546	470	20	6	4	9.1	9.6
740	819.5	646	570	70	7	4	10.3	10.8
940	1019.5	846	770	70	9	5	12.7	13.2

KKR86 Light load type With cover

F0C KKR86 Motor direct connection



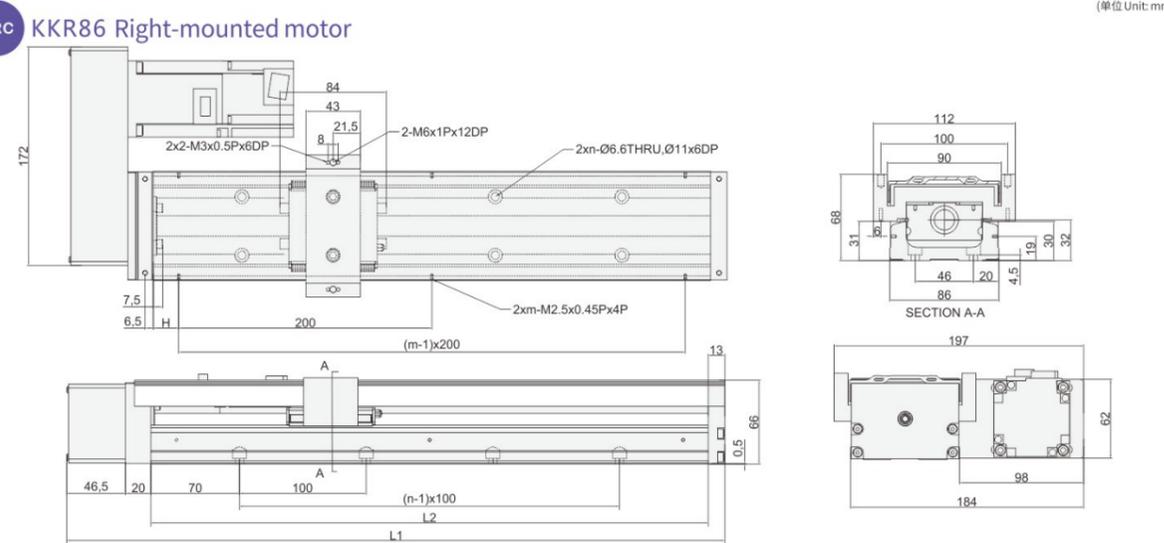
Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator				S1 Actuator	S2 Actuator
340	440	246	170	70	3	2	6.3	7.1
440	540	346	270	20	4	3	7.6	8.4
540	640	446	370	70	5	3	8.9	9.7
640	740	546	470	20	6	4	10.2	11.0
740	840	646	570	70	7	4	11.6	12.4
940	1040	846	770	70	9	5	14.2	15.0

(Unit: mm)

(Unit: mm)

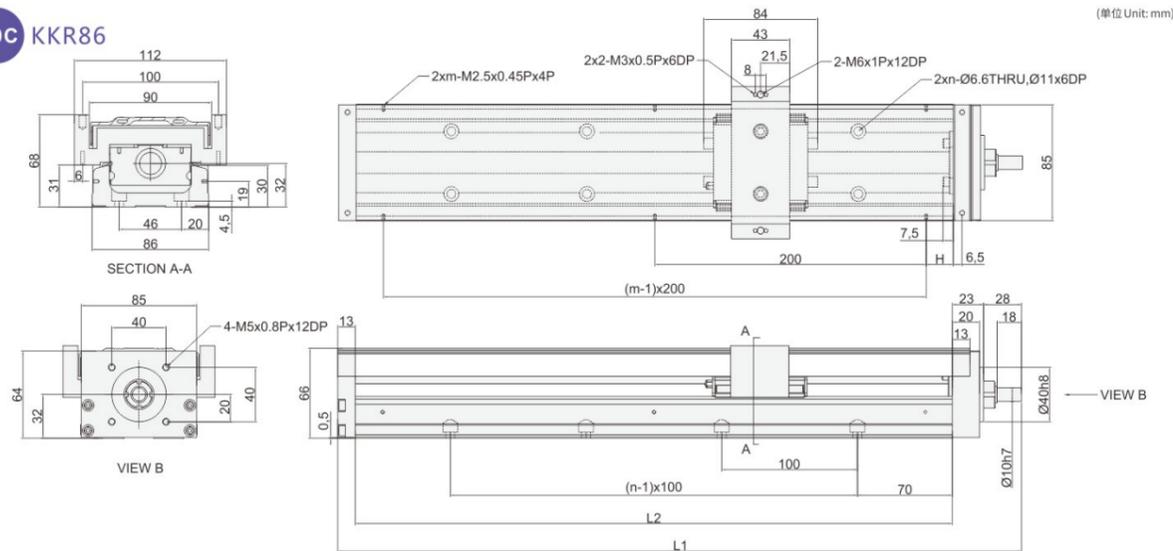
KKR86 Light load type With cover

HRC KKR86 Right-mounted motor



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator				S1 Actuator	S2 Actuator
340	419.5	246	170	70	3	2	6.4	7.2
440	519.5	346	270	20	4	3	7.7	8.5
540	619.5	446	370	70	5	3	9.0	9.8
640	719.5	546	470	20	6	4	10.3	11.1
740	819.5	646	570	70	7	4	11.7	12.5
940	1019.5	846	770	70	9	5	14.3	15.1

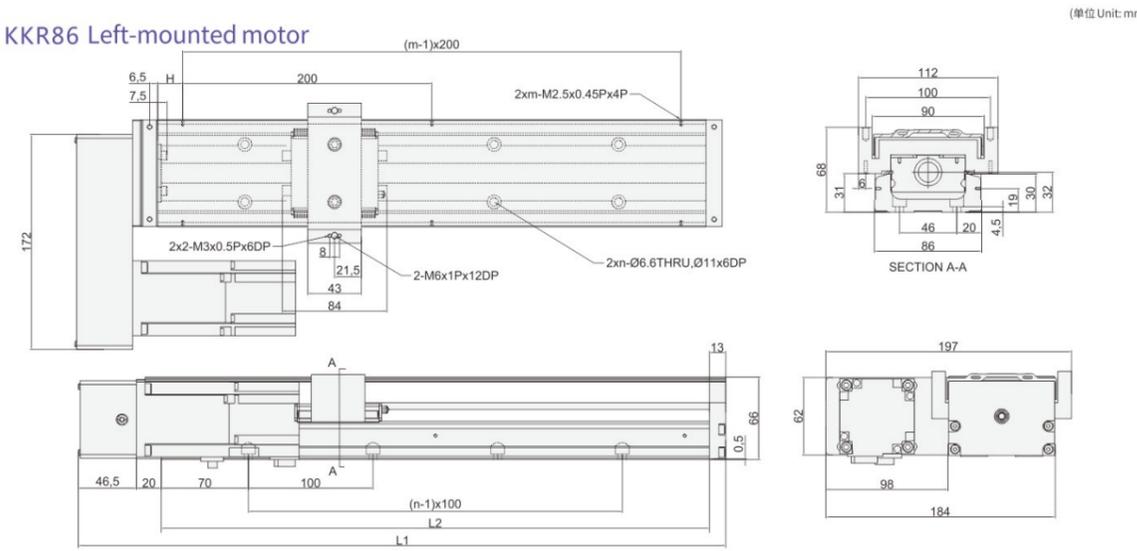
H0C KKR86



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator				S1 Actuator	S2 Actuator
340	440	246	170	70	3	2	6.2	7.0
440	540	346	270	20	4	3	7.5	8.3
540	640	446	370	70	5	3	8.8	9.6
640	740	546	470	20	6	4	10.1	10.9
740	840	646	570	70	7	4	11.5	12.3
940	1040	846	770	70	9	5	14.1	14.9

(Unit: mm)

HLC KKR86 Left-mounted motor

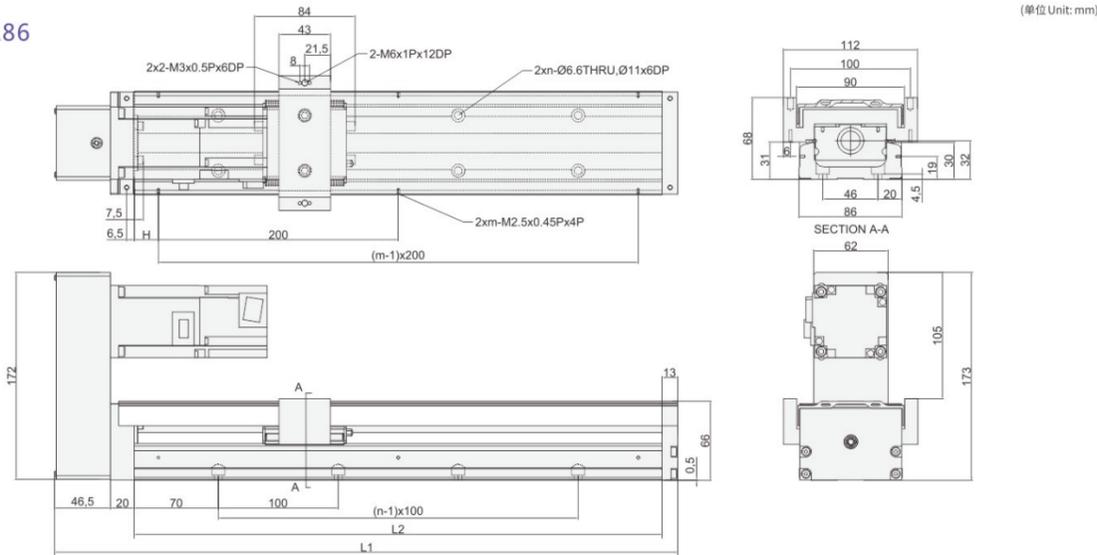


Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator				S1 Actuator	S2 Actuator
340	419.5	246	170	70	3	2	6.4	7.2
440	519.5	346	270	20	4	3	7.7	8.5
540	619.5	446	370	70	5	3	9.0	9.8
640	719.5	546	470	20	6	4	10.3	11.1
740	819.5	646	570	70	7	4	11.7	12.5
940	1019.5	846	770	70	9	5	14.3	15.1

(Unit: mm)

KKR86 Light load type With cover

HWC KKR86



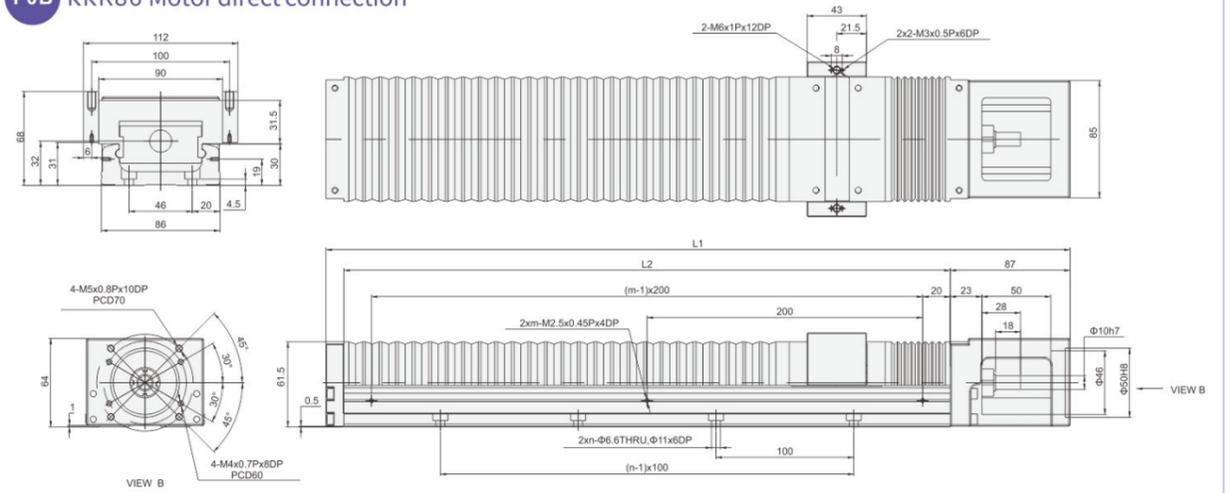
Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator				S1 Actuator	S2 Actuator
340	419.5	246	170	70	3	2	6.4	7.2
440	519.5	346	270	20	4	3	7.7	8.5
540	619.5	446	370	70	5	3	9.0	9.8
640	719.5	546	470	20	6	4	10.3	11.1
740	819.5	646	570	70	7	4	11.7	12.5
940	1019.5	846	770	70	9	5	14.3	15.1

(Unit: mm)

(Unit: mm)

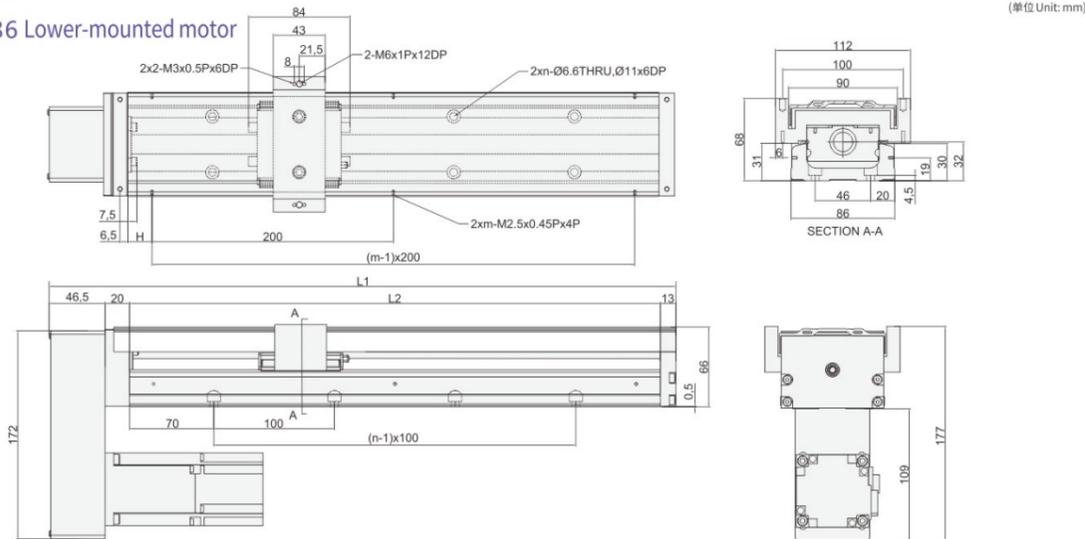
KKR86 Light load type With Bellows

F0B KKR86 Motor direct connection



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		H (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion				
340	440	190	40	230	70	3	2	6.5
440	540	265	52.5	317	20	4	3	7.8
540	640	340	65	405	70	5	3	9.1
640	740	410	80	490	20	6	4	10.4
740	840	485	92.5	577	70	7	4	11.7
940	1040	630	120	750	70	9	5	14.3

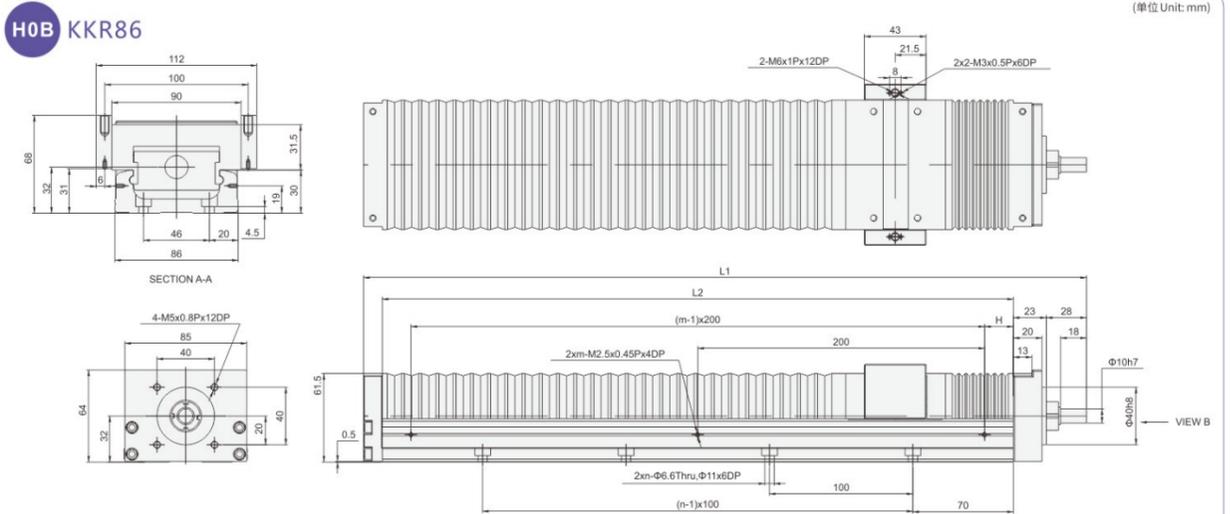
HMC KKR86 Lower-mounted motor



Track length L2 (mm)	Length L1 (mm)	Max. stroke (mm)		H (mm)	n	m	Weight (kg)	
		S1 Actuator	S2 Actuator				S1 Actuator	S2 Actuator
340	419.5	246	170	70	3	2	6.4	7.2
440	519.5	346	270	20	4	3	7.7	8.5
540	619.5	446	370	70	5	3	9.0	9.8
640	719.5	546	470	20	6	4	10.3	11.1
740	819.5	646	570	70	7	4	11.7	12.5
940	1019.5	846	770	70	9	5	14.3	15.1

(Unit: mm)

H0B KKR86



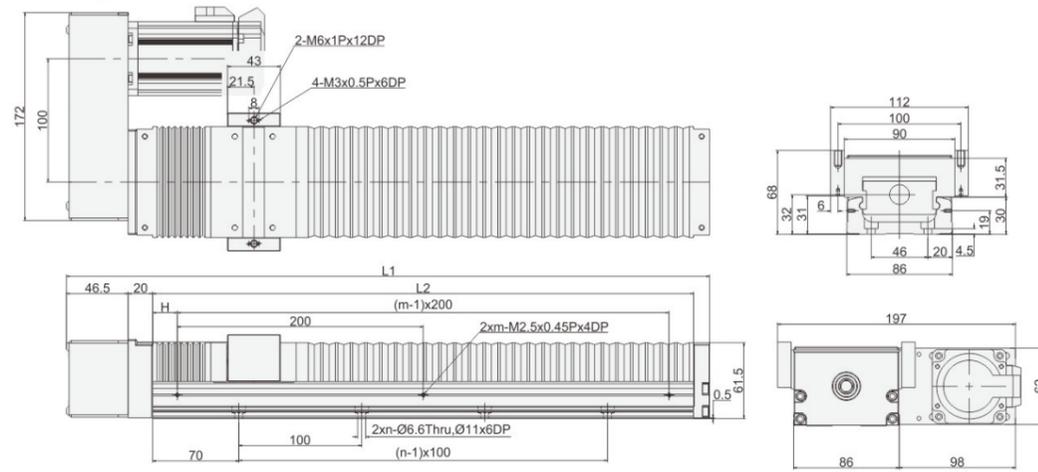
Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		H (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion				
340	404	190	40	230	70	3	2	6.4
440	504	265	52.5	317	20	4	3	7.7
540	604	340	65	405	70	5	3	9.0
640	704	410	80	490	20	6	4	10.3
740	704	485	92.5	577	70	7	4	11.6
940	1004	630	120	750	70	9	5	14.2

(Unit: mm)

KKR86 Light load type With Bellows

HRB KKR86 Right-mounted motor

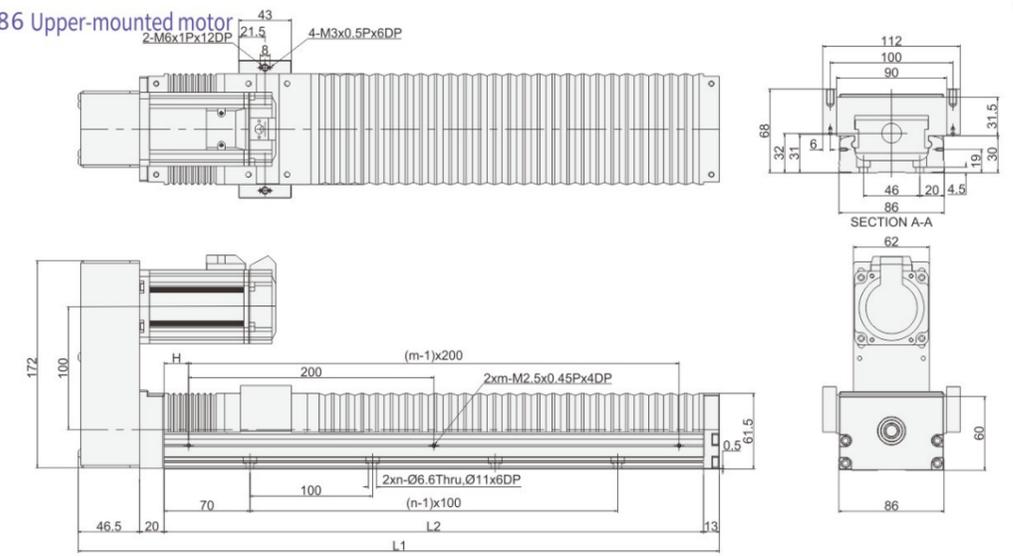
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		H (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion				
340	419.5	190	40	230	70	3	2	6.6
440	519.5	265	52.5	317	20	4	3	7.9
540	619.5	340	65	405	70	5	3	9.2
640	719.5	410	80	490	20	6	4	10.5
740	819.5	485	92.5	577	70	7	4	11.8
940	1019.5	630	120	750	70	9	5	14.4

(Unit: mm)

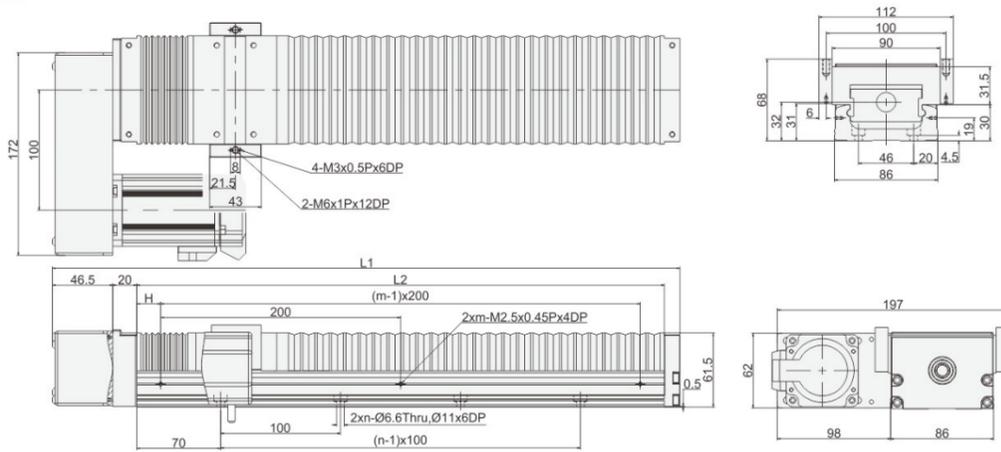
HWB KKR86 Upper-mounted motor



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		H (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion				
340	419.5	190	40	230	70	3	2	6.6
440	519.5	265	52.5	317	20	4	3	7.9
540	619.5	340	65	405	70	5	3	9.2
640	719.5	410	80	490	20	6	4	10.5
740	819.5	485	92.5	577	70	7	4	11.8
940	1019.5	630	120	750	70	9	5	14.4

HLB KKR86 Left-mounted motor

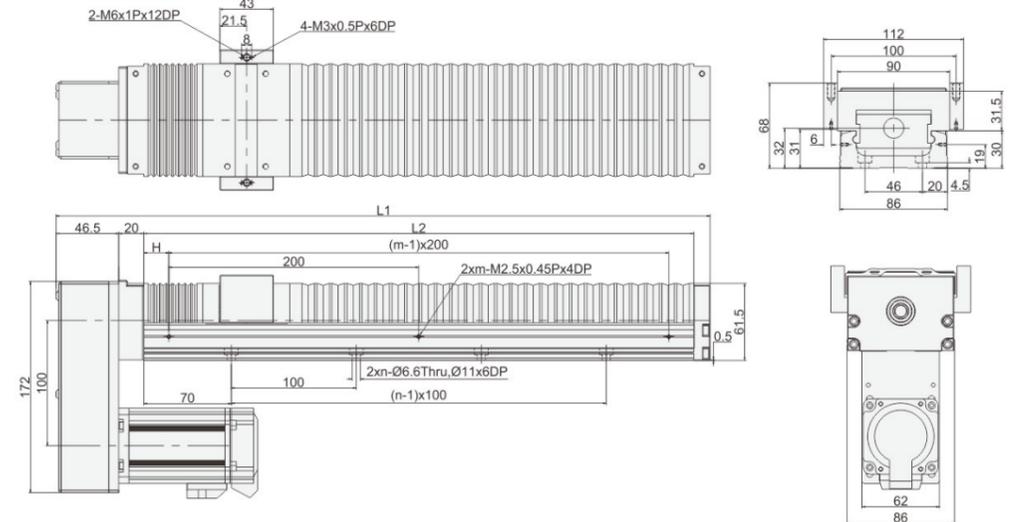
(Unit: mm)



Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		H (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion				
340	419.5	190	40	230	70	3	2	6.6
440	519.5	265	52.5	317	20	4	3	7.9
540	619.5	340	65	405	70	5	3	9.2
640	719.5	410	80	490	20	6	4	10.5
740	819.5	485	92.5	577	70	7	4	11.8
940	1019.5	630	120	750	70	9	5	14.4

(Unit: mm)

HMB KKR86 Lower-mounted motor

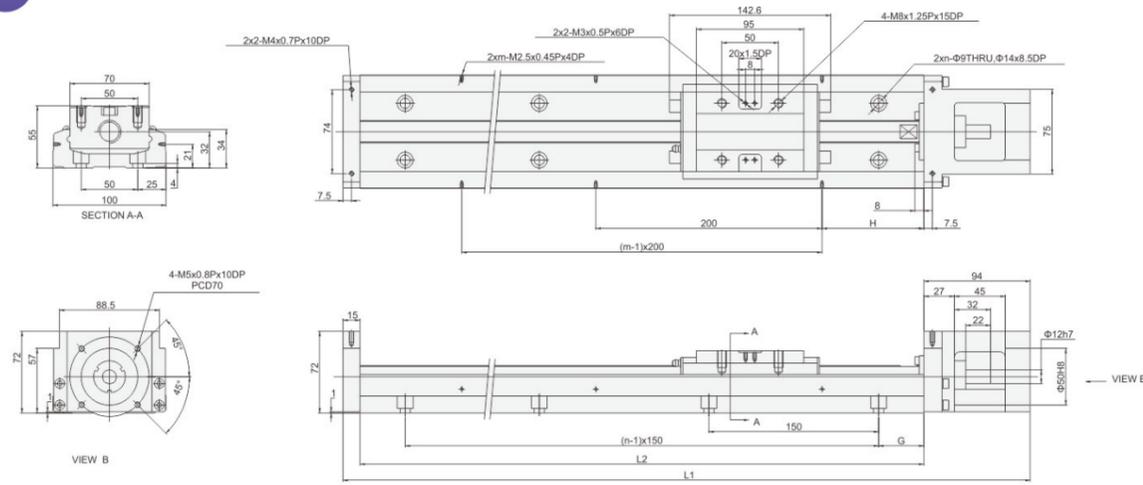


Track length L2 (mm)	Length L1 (mm)	Stroke (mm)	Sleeve expansion (mm)		H (mm)	n	m	Weight (kg)
			Minimum expansion	Maximum expansion				
340	419.5	190	40	230	70	3	2	6.6
440	519.5	265	52.5	317	20	4	3	7.9
540	619.5	340	65	405	70	5	3	9.2
640	719.5	410	80	490	20	6	4	10.5
740	819.5	485	92.5	577	70	7	4	11.8
940	1019.5	630	120	750	70	9	5	14.4

KKR100 Model selection needs to be confirmed

F0 KKR100 Motor direct connection (Without cover)

(Unit: mm)

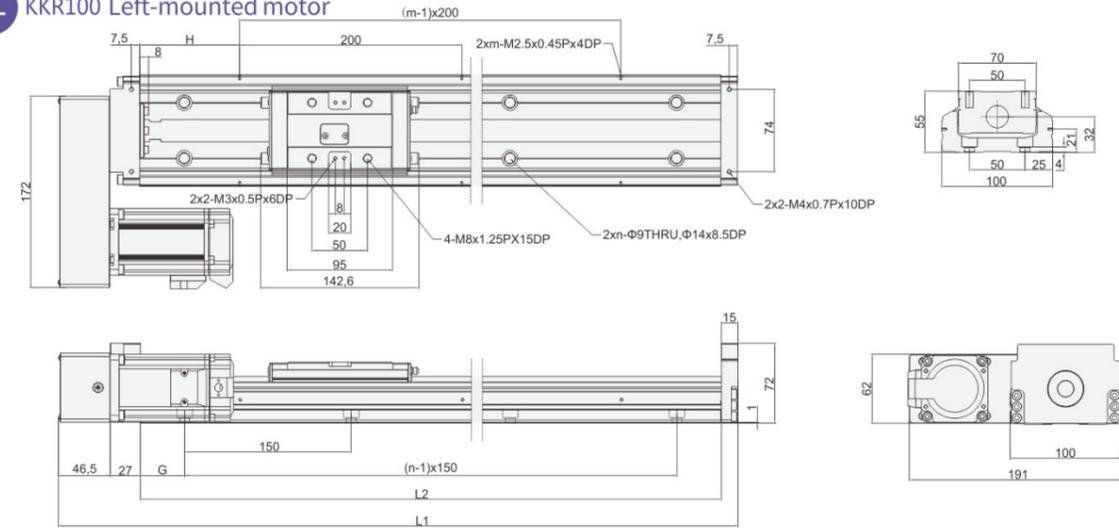


Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1089	828	700	40	90	7	5	18.6	20.3
1080	1189	928	800	15	40	8	6	20.3	22.0
1180	1289	1028	900	65	90	8	6	22.0	23.7
1280	1389	1128	1000	40	40	9	7	23.6	25.3
1380	1489	1228	1100	15	90	10	7	25.3	27.0

KKR100 Model selection needs to be confirmed Standard Type Without cover 400W

HL KKR100 Left-mounted motor

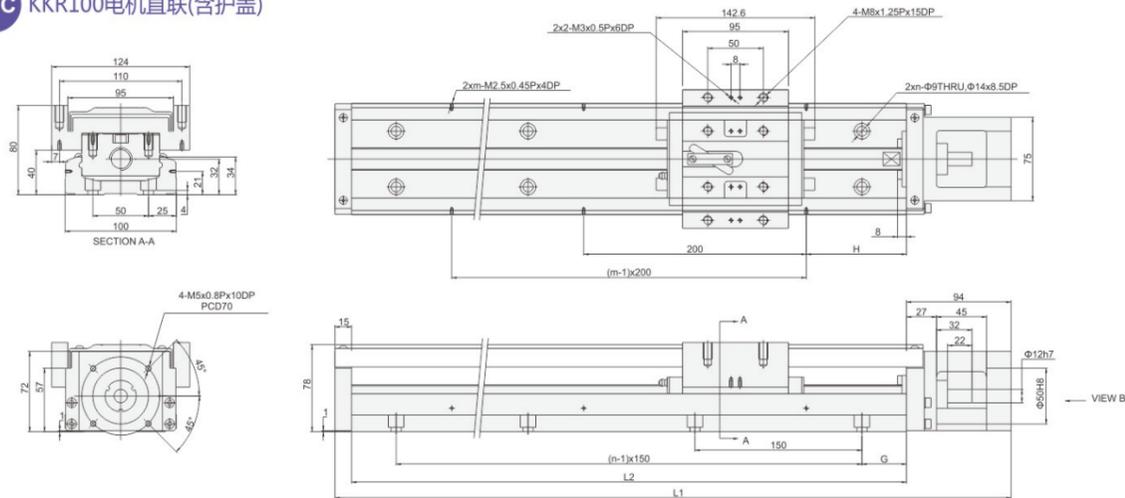
(Unit: mm)



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1068.5	828	700	40	90	7	5	19.3	21
1080	1168.5	928	800	15	40	8	6	21	22.7
1180	1268.5	1028	900	65	90	8	6	22.7	24.4
1280	1368.5	1128	1000	40	40	9	7	24.3	26
1380	1468.5	1228	1100	15	90	10	7	26	27.7

F0C KKR100电机直联(含护盖)

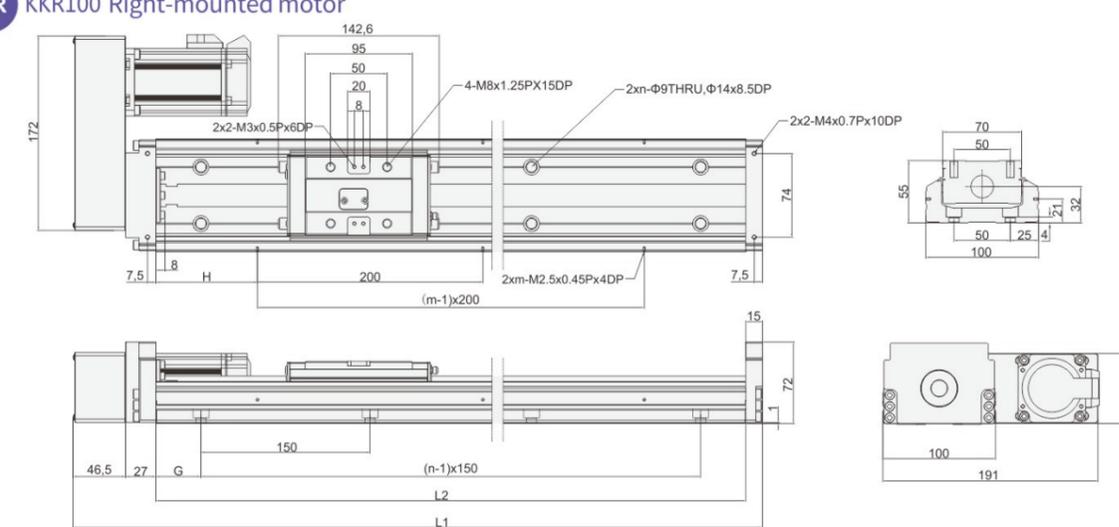
(Unit: mm)



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1089	828	700	40	90	7	5	20.4	22.1
1080	1189	928	800	15	40	8	6	22.2	23.9
1180	1289	1028	900	65	90	8	6	24.0	25.7
1280	1389	1128	1000	40	40	9	7	25.7	27.4
1380	1489	1228	1100	15	90	10	7	27.5	29.2

HR KKR100 Right-mounted motor

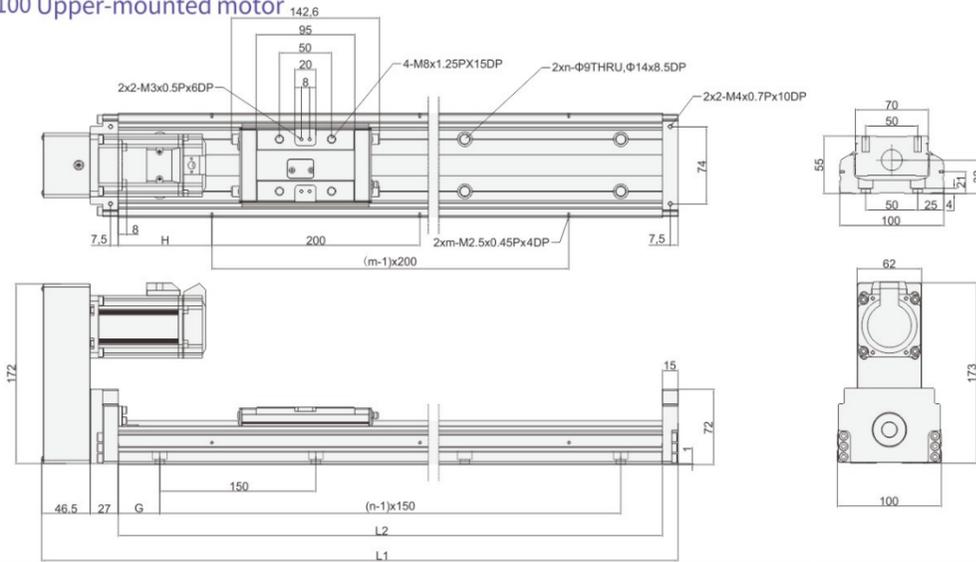
(Unit: mm)



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1068.5	828	700	40	90	7	5	19.3	21
1080	1168.5	928	800	15	40	8	6	21	22.7
1180	1268.5	1028	900	65	90	8	6	22.7	24.4
1280	1368.5	1128	1000	40	40	9	7	24.3	26
1380	1468.5	1228	1100	15	90	10	7	26	27.7

HW KKR100 Upper-mounted motor

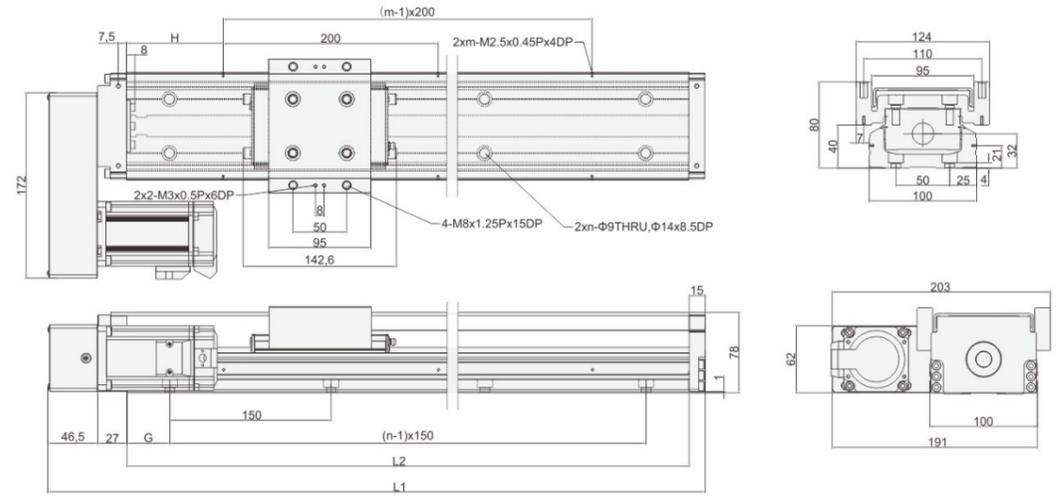
(Unit: mm)



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1068.5	828	700	40	90	7	5	19.3	21
1080	1168.5	928	800	15	40	8	6	21	22.7
1180	1268.5	1028	900	65	90	8	6	22.7	24.4
1280	1368.5	1128	1000	40	40	9	7	24.3	26
1380	1468.5	1228	1100	15	90	10	7	26	27.7

(Unit: mm)

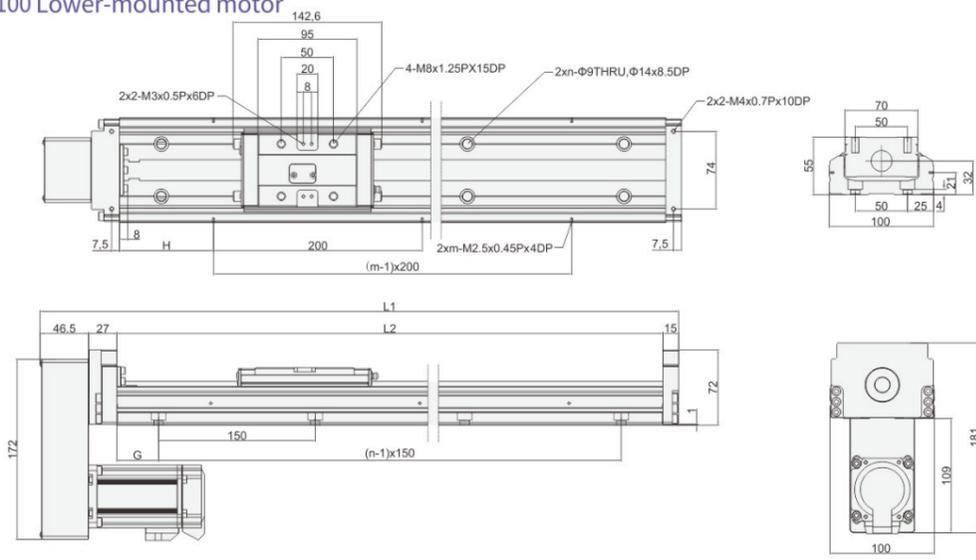
HLC KKR100 Left-mounted motor



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1068.5	828	700	40	90	7	5	21.1	22.8
1080	1168.5	928	800	15	40	8	6	22.9	24.6
1180	1268.5	1028	900	65	90	8	6	24.7	26.4
1280	1368.5	1128	1000	40	40	9	7	26.4	28.1
1380	1468.5	1228	1100	15	90	10	7	28.2	29.9

HM KKR100 Lower-mounted motor

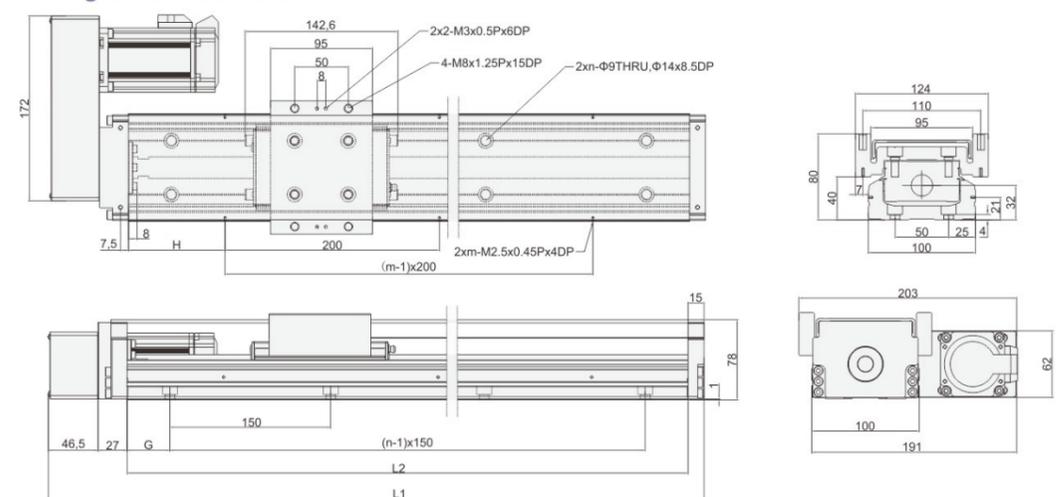
(Unit: mm)



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1068.5	828	700	40	90	7	5	19.3	21
1080	1168.5	928	800	15	40	8	6	21	22.7
1180	1268.5	1028	900	65	90	8	6	22.7	24.4
1280	1368.5	1128	1000	40	40	9	7	24.3	26
1380	1468.5	1228	1100	15	90	10	7	26	27.7

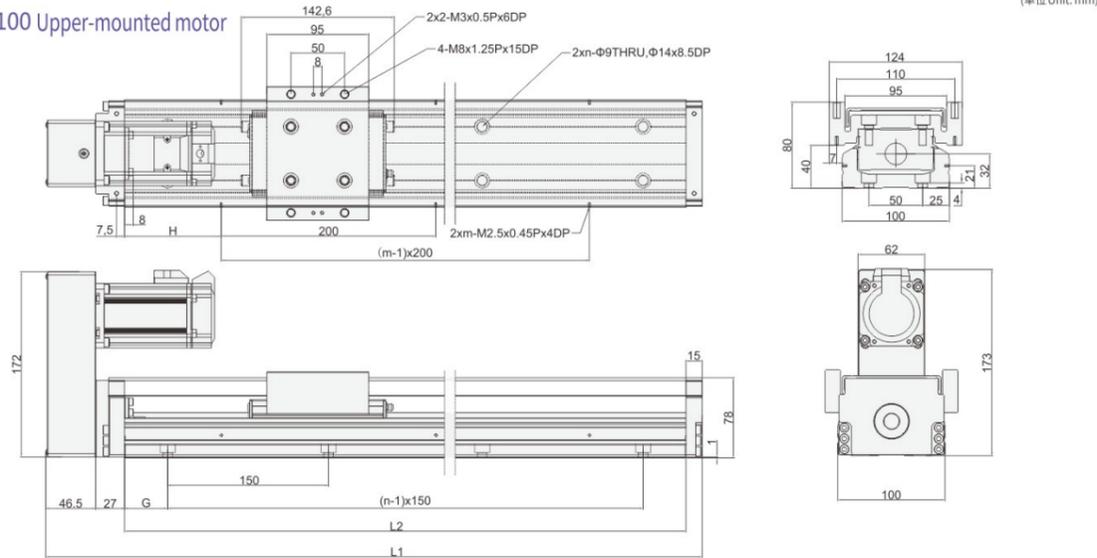
(Unit: mm)

HRC KKR100 Right-mounted motor



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1068.5	828	700	40	90	7	5	21.1	22.8
1080	1168.5	928	800	15	40	8	6	22.9	24.6
1180	1268.5	1028	900	65	90	8	6	24.7	26.4
1280	1368.5	1128	1000	40	40	9	7	26.4	28.1
1380	1468.5	1228	1100	15	90	10	7	28.2	29.9

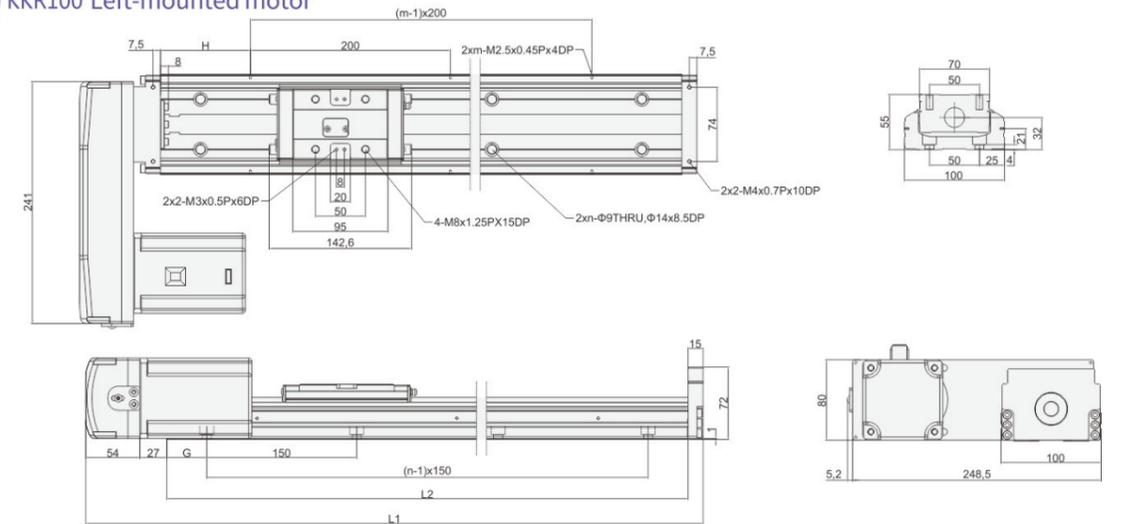
HWC KKR100 Upper-mounted motor



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1068.5	828	700	40	90	7	5	21.1	22.8
1080	1168.5	928	800	15	40	8	6	22.9	24.6
1180	1268.5	1028	900	65	90	8	6	24.7	26.4
1280	1368.5	1128	1000	40	40	9	7	26.4	28.1
1380	1468.5	1228	1100	15	90	10	7	28.2	29.9

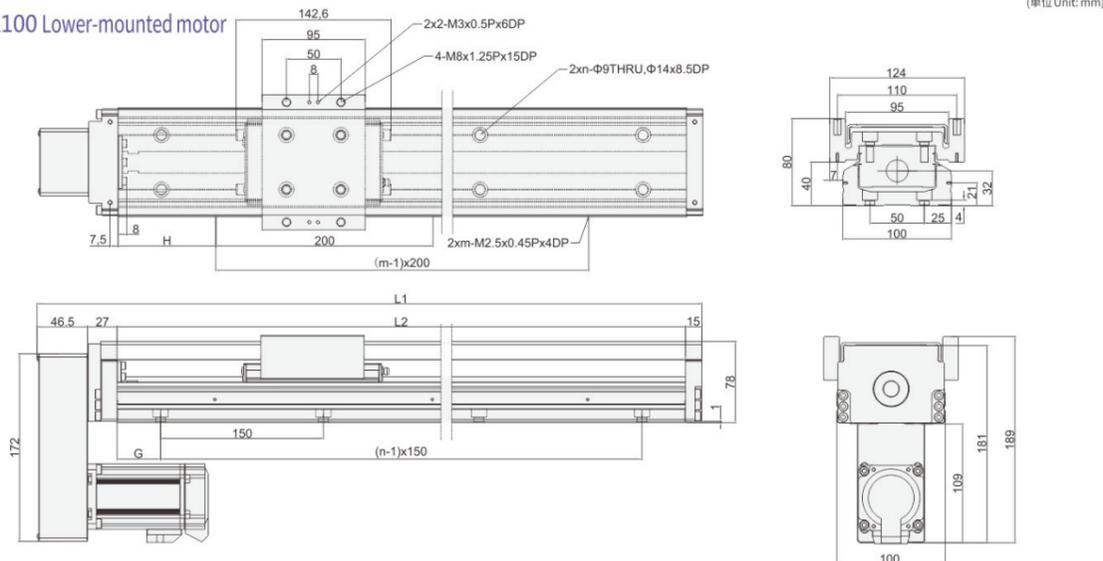
(単位 Unit: mm)

HL KKR100 Left-mounted motor



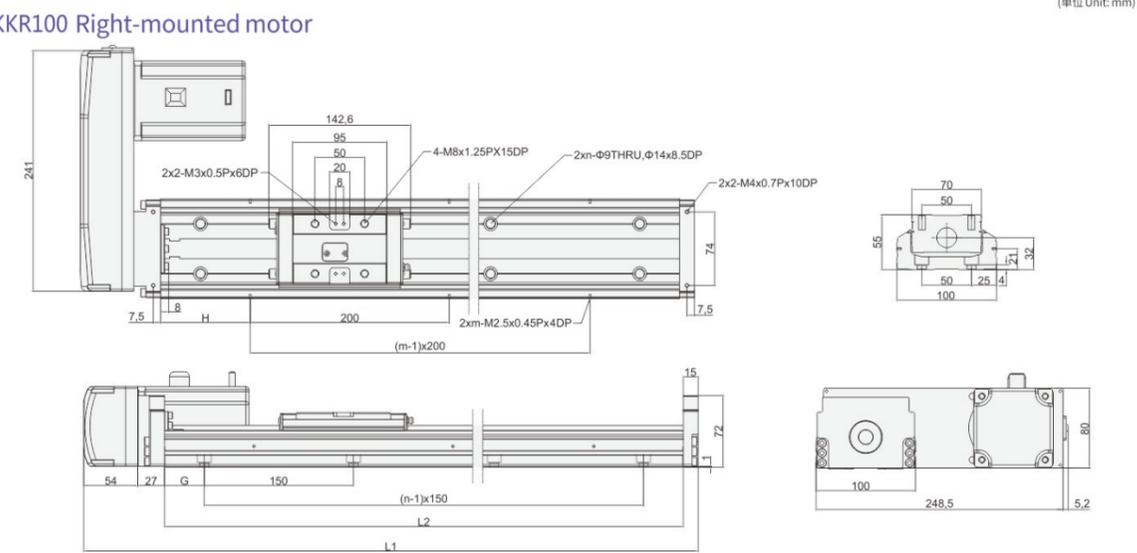
Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1076	828	700	40	90	7	5	19.3	21
1080	1176	928	800	15	40	8	6	21	22.7
1180	1276	1028	900	65	90	8	6	22.7	24.4
1280	1376	1128	1000	40	40	9	7	24.3	26
1380	1476	1228	1100	15	90	10	7	26	27.7

HMC KKR100 Lower-mounted motor



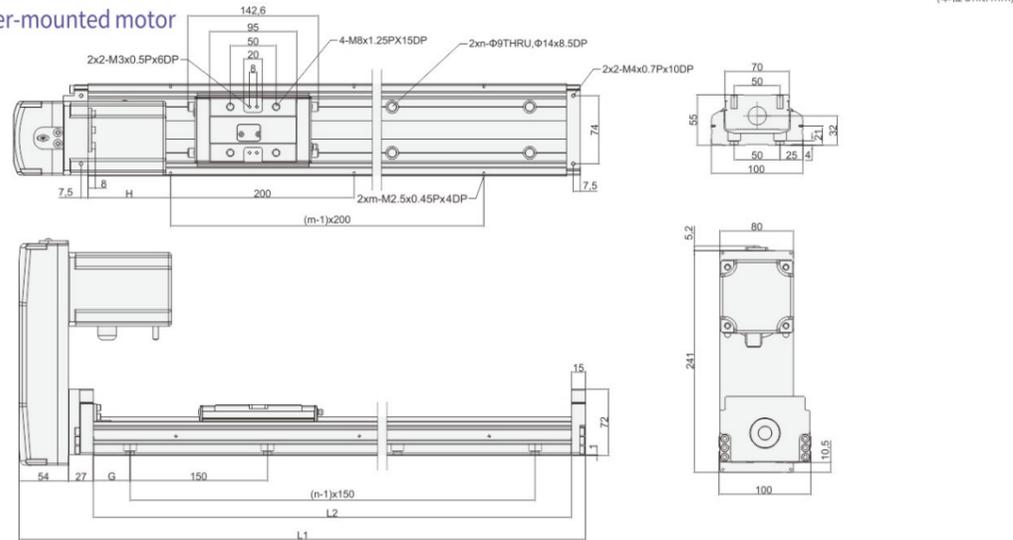
Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1068.5	828	700	40	90	7	5	21.1	22.8
1080	1168.5	928	800	15	40	8	6	22.9	24.6
1180	1268.5	1028	900	65	90	8	6	24.7	26.4
1280	1368.5	1128	1000	40	40	9	7	26.4	28.1
1380	1468.5	1228	1100	15	90	10	7	28.2	29.9

HR KKR100 Right-mounted motor



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1076	828	700	40	90	7	5	19.3	21
1080	1176	928	800	15	40	8	6	21	22.7
1180	1276	1028	900	65	90	8	6	22.7	24.4
1280	1376	1128	1000	40	40	9	7	24.3	26
1380	1476	1228	1100	15	90	10	7	26	27.7

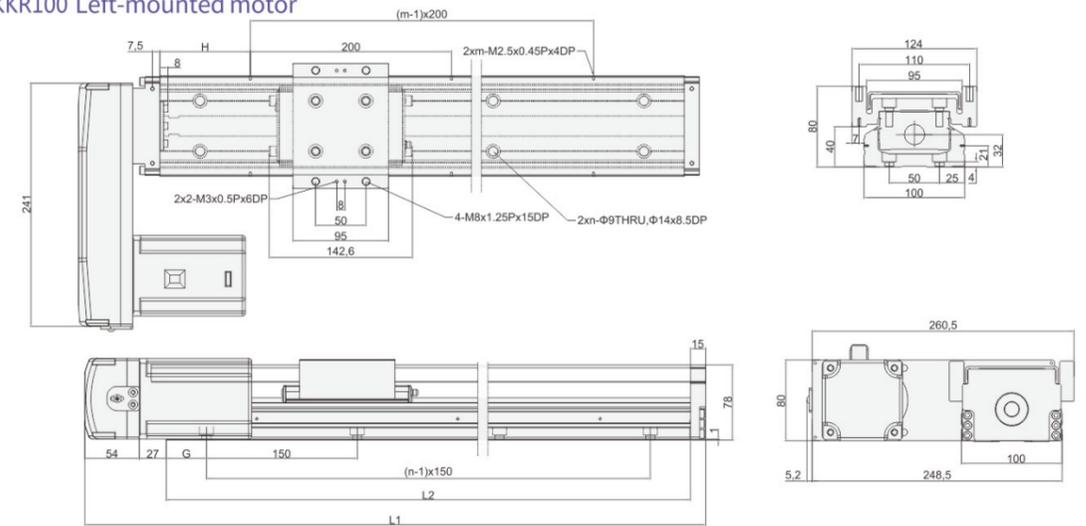
HW KKR100 Upper-mounted motor



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1076	828	700	40	90	7	5	19.3	21
1080	1176	928	800	15	40	8	6	21	22.7
1180	1276	1028	900	65	90	8	6	22.7	24.4
1280	1376	1128	1000	40	40	9	7	24.3	26
1380	1476	1228	1100	15	90	10	7	26	27.7

(Unit: mm)

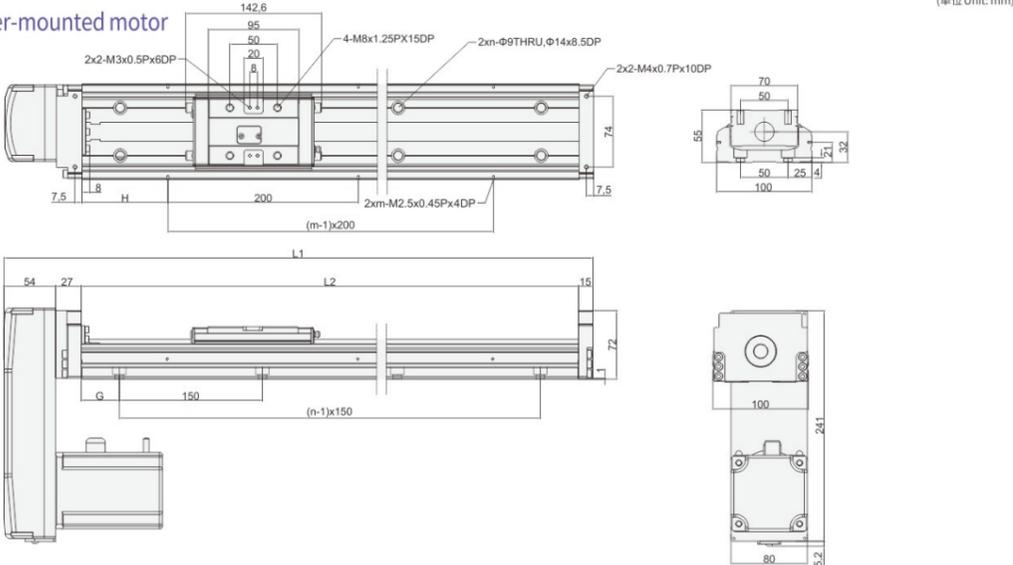
HLC KKR100 Left-mounted motor



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1076	828	700	40	90	7	5	21.1	22.8
1080	1176	928	800	15	40	8	6	22.9	24.6
1180	1276	1028	900	65	90	8	6	24.7	26.4
1280	1376	1128	1000	40	40	9	7	26.4	28.1
1380	1476	1228	1100	15	90	10	7	28.2	29.9

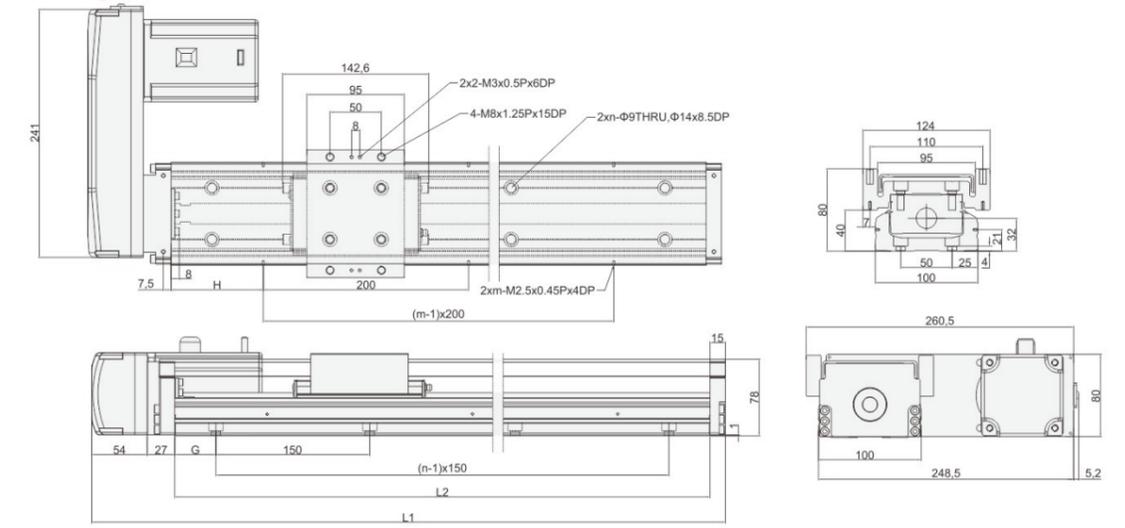
(Unit: mm)

HM KKR100 Lower-mounted motor



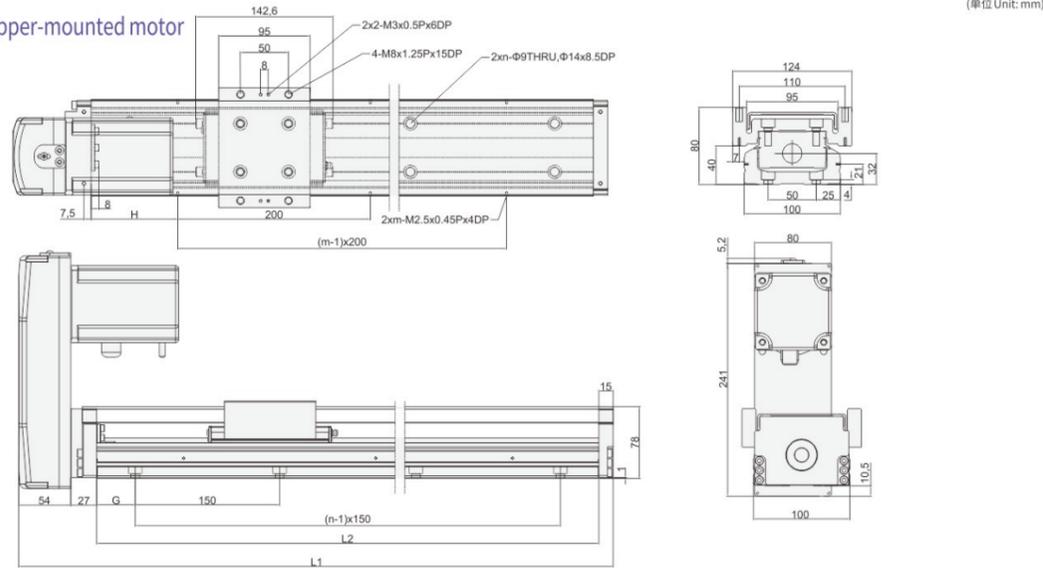
Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1076	828	700	40	90	7	5	19.3	21
1080	1176	928	800	15	40	8	6	21	22.7
1180	1276	1028	900	65	90	8	6	22.7	24.4
1280	1376	1128	1000	40	40	9	7	24.3	26
1380	1476	1228	1100	15	90	10	7	26	27.7

HRC KKR100 Right-mounted motor



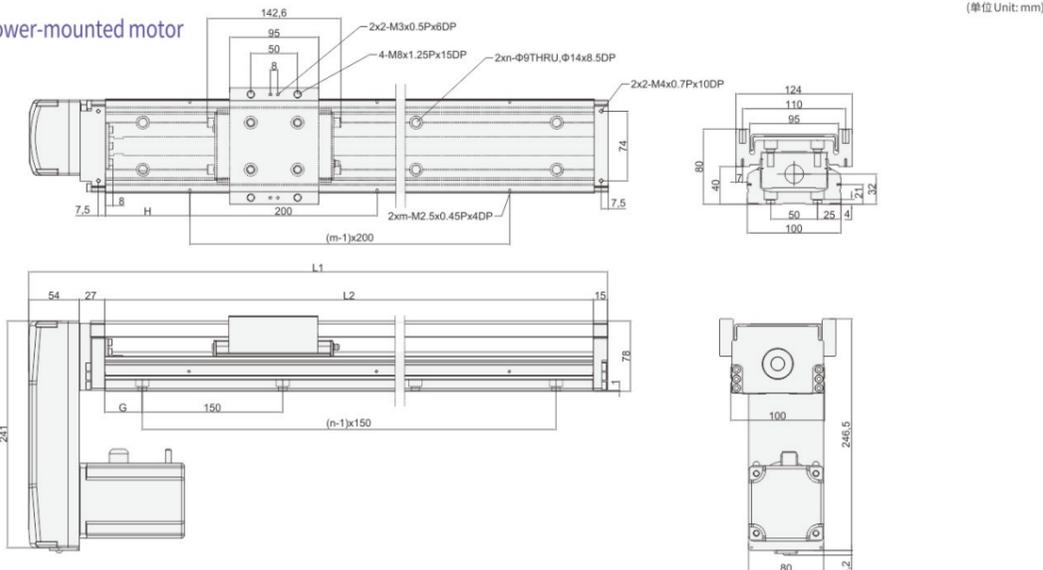
Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1076	828	700	40	90	7	5	21.1	22.8
1080	1176	928	800	15	40	8	6	22.9	24.6
1180	1276	1028	900	65	90	8	6	24.7	26.4
1280	1376	1128	1000	40	40	9	7	26.4	28.1
1380	1476	1228	1100	15	90	10	7	28.2	29.9

HWC KKR100 Upper-mounted motor



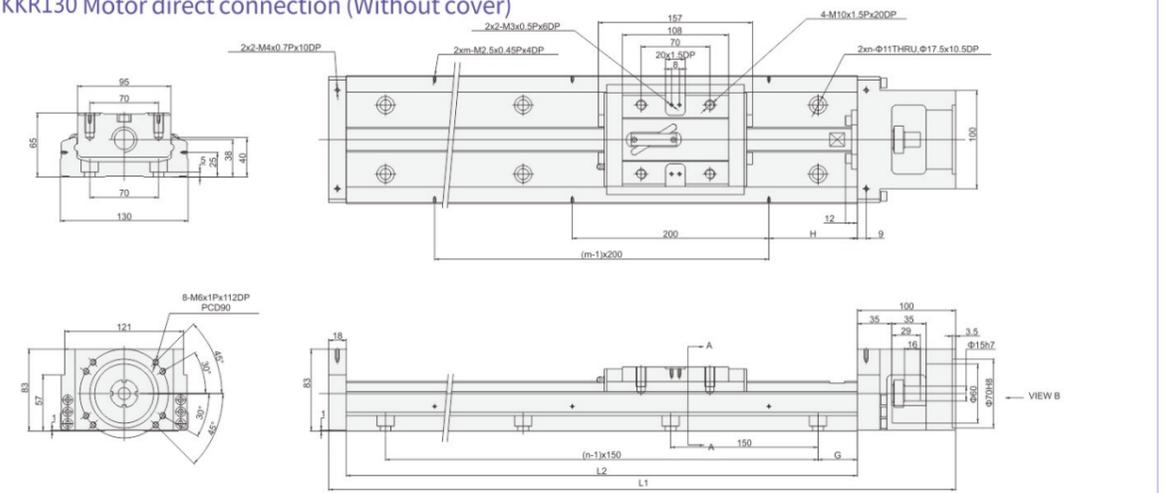
Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1076	828	700	40	90	7	5	21.1	22.8
1080	1176	928	800	15	40	8	6	22.9	24.6
1180	1276	1028	900	65	90	8	6	24.7	26.4
1280	1376	1128	1000	40	40	9	7	26.4	28.1
1380	1476	1228	1100	15	90	10	7	28.2	29.9

HMC KKR100 Lower-mounted motor



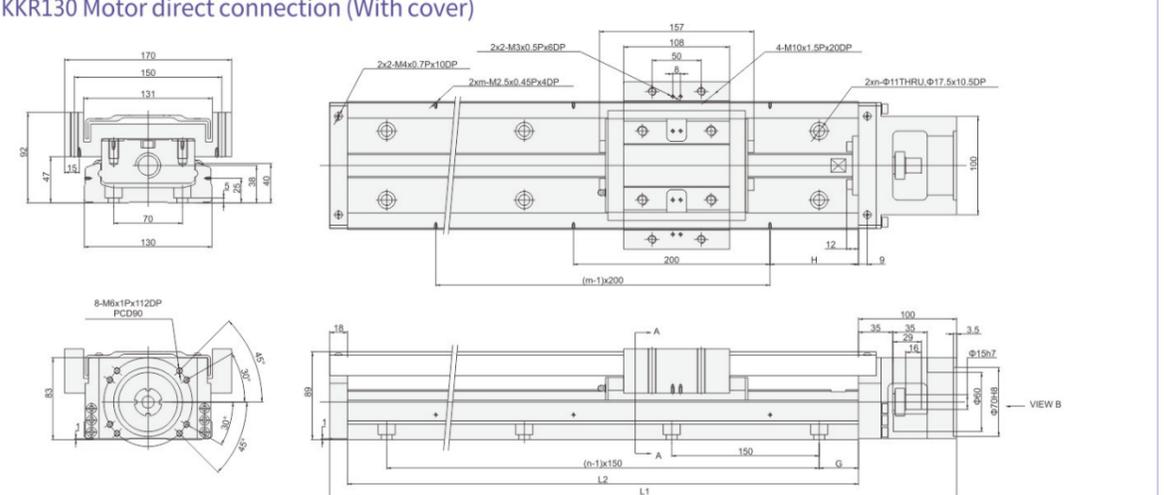
Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1076	828	700	40	90	7	5	21.1	22.8
1080	1176	928	800	15	40	8	6	22.9	24.6
1180	1276	1028	900	65	90	8	6	24.7	26.4
1280	1376	1128	1000	40	40	9	7	26.4	28.1
1380	1476	1228	1100	15	90	10	7	28.2	29.9

F0 KKR130 Motor direct connection (Without cover)



Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1098	811	659	40	90	7	5	29.4	32.3
1180	1298	1011	859	65	90	8	6	34.3	37.2
1380	1498	1211	1059	90	90	9	7	39.2	42.1
1680	1798	1511	1359	90	40	11	9	46.5	49.4

F0C KKR130 Motor direct connection (With cover)

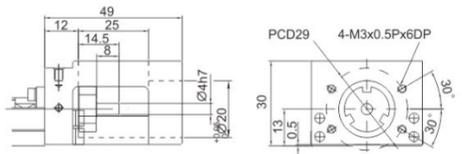


Track length L2(mm)	Length L1 (mm)	Max. stroke (mm)		G (mm)	H (mm)	n	m	Weight (kg)	
		A1 Actuator	A2 Actuator					A1 Actuator	A2 Actuator
980	1098	811	659	40	90	7	5	31.9	35.9
1180	1298	1011	859	65	90	8	6	37.1	41.1
1380	1498	1211	1059	90	90	9	7	42.2	46.2
1680	1798	1511	1359	90	40	11	9	49.9	53.9

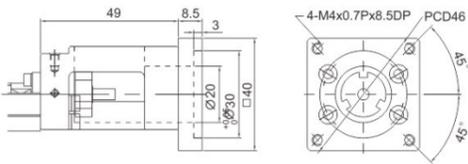
1.10 Motor seat and motor connecting flange

KKR40

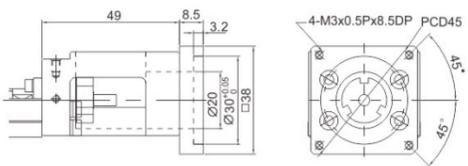
Motor seat F0 (without adapter flange)



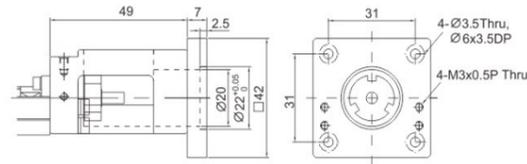
Motor connecting flange F1 (Delta, Mitsubishi, Yaskawa, Inovance, Fuji 100W)



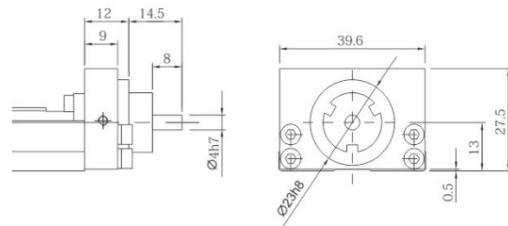
Motor connecting flange (Panasonic 100W)



Motor connecting flange F3 (42 stepping)

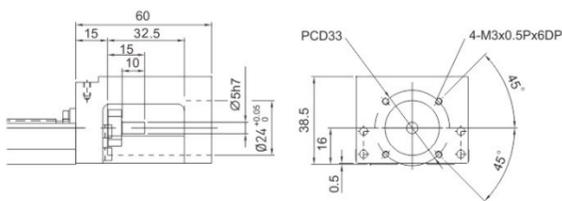


Adapter fixing seat H0

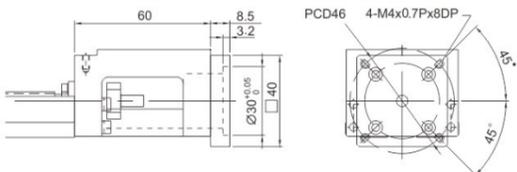


KKR50

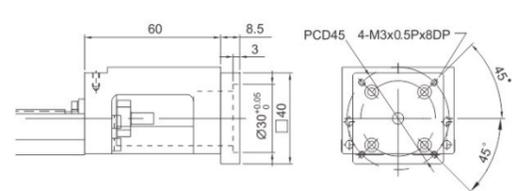
Motor seat F0 (without adapter flange)



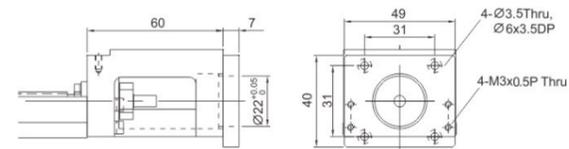
Motor connecting flange F1 (Delta, Mitsubishi, Yaskawa, Inovance, Fuji 100W)



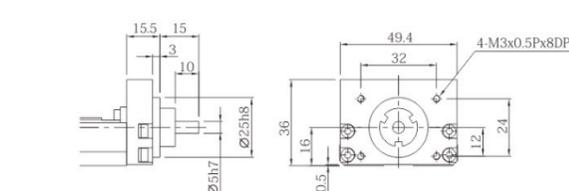
Motor connecting flange F1 (Panasonic 50W/100W)



Motor connecting flange F3 (42 stepping)

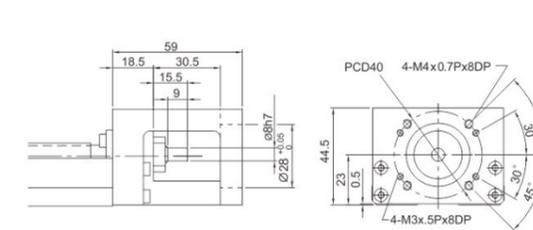


Adapter fixing seat H0

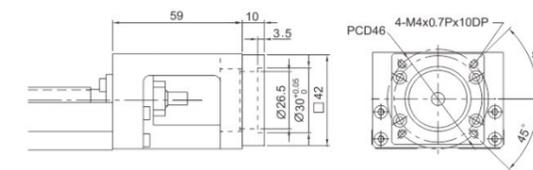


KKR60

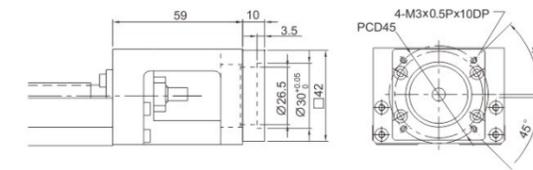
Motor seat F0 (without adapter flange)



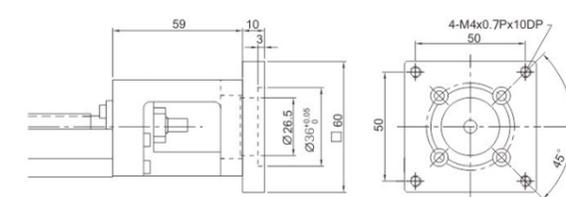
Motor connecting flange F1 (Delta, Mitsubishi, Yaskawa, Inovance, Fuji 100W)



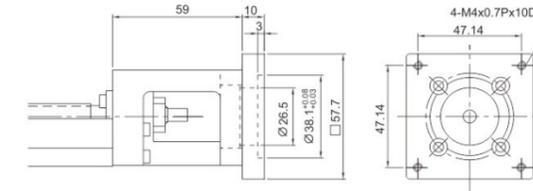
Motor connecting flange F2 (Panasonic 50W/100W)



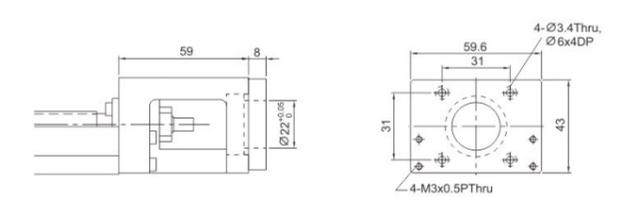
Motor connecting flange F3 (60 stepping)



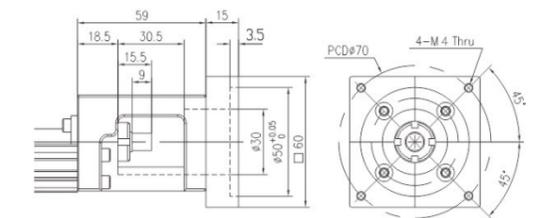
Motor connecting flange F4 (57 stepping)



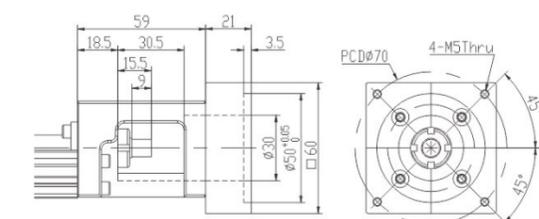
Motor connecting flange F5 (42 stepping)



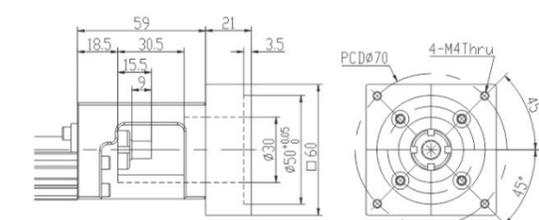
Motor connecting flange F6 (Panasonic 200W)



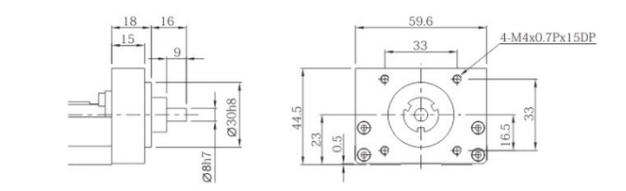
Motor connecting flange F7 (Delta, Mitsubishi, Yaskawa, Inovance, Fuji 200W/400W)



Motor connecting flange F8 (Panasonic 400W)



Adapter fixing seat H0



KKR
Technical data

KKR20

KKR30

KKR40

KKR50

KKR60

KKR86

KKR100

KKR130

Motor seat and motor connecting flange

KKR
Technical data

KKR20

KKR30

KKR40

KKR50

KKR60

KKR86

KKR100

KKR130

Motor seat and motor connecting flange

