

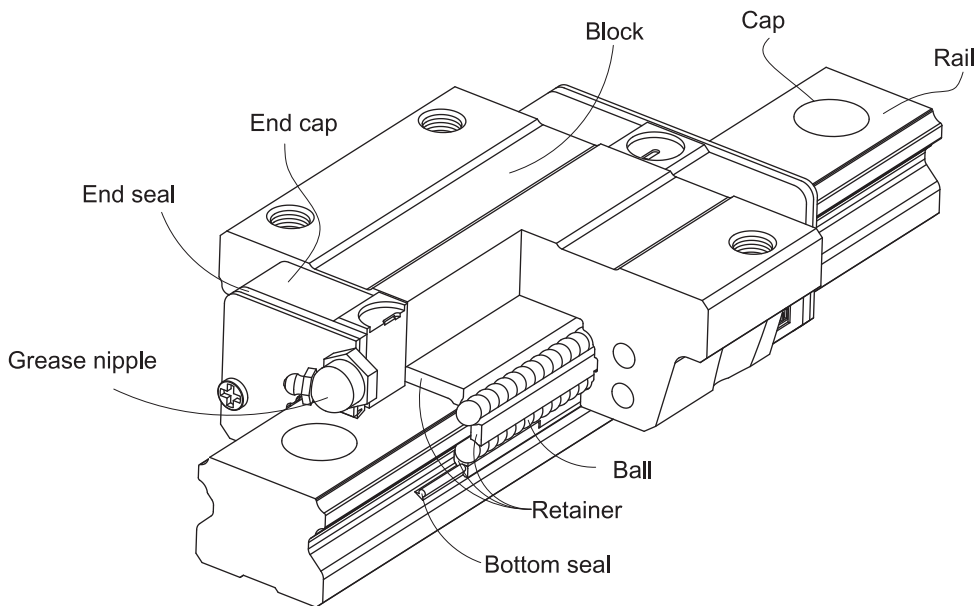


2-2 E Series – Low Profile Ball Type Linear Guideway

2-2-1 Features of E Series

The design of the E series offers a low profile, high load capacity, and high rigidity. It also features an equal load rating in all four directions and self-aligning capability to absorb installation-error, allowing for higher accuracies. Additionally, the lower assembly height and the shorter length make the E series more suitable for high-speed, automation machines and applications where space is limited. The retainer is designed to hold the balls in the block even when it is removed from the rail.

2-2-2 Construction of E Series



- Rolling circulation system: Block, rail, end cap and retainer
- Lubrication system: Grease nipple and piping Joint
- Dust protection system: End seal, bottom seal, cap and scraper

2-2-3 Model Number of E Series

E series linear guideways are classified into non-interchangeable and interchangeable types. The sizes of these two types are the same as one another. The main difference is that the interchangeable type of blocks and rails can be freely exchanged and they can maintain P-class accuracy. Because of strict dimensional control, the interchangeable type linear guideways are a wise choice for customers when rails do not need to be matched for an axis. The model number of the E series identifies the size, type, accuracy class, preload class, etc.

Linear Guideways

Ball Screw

Support

Linear Bushing





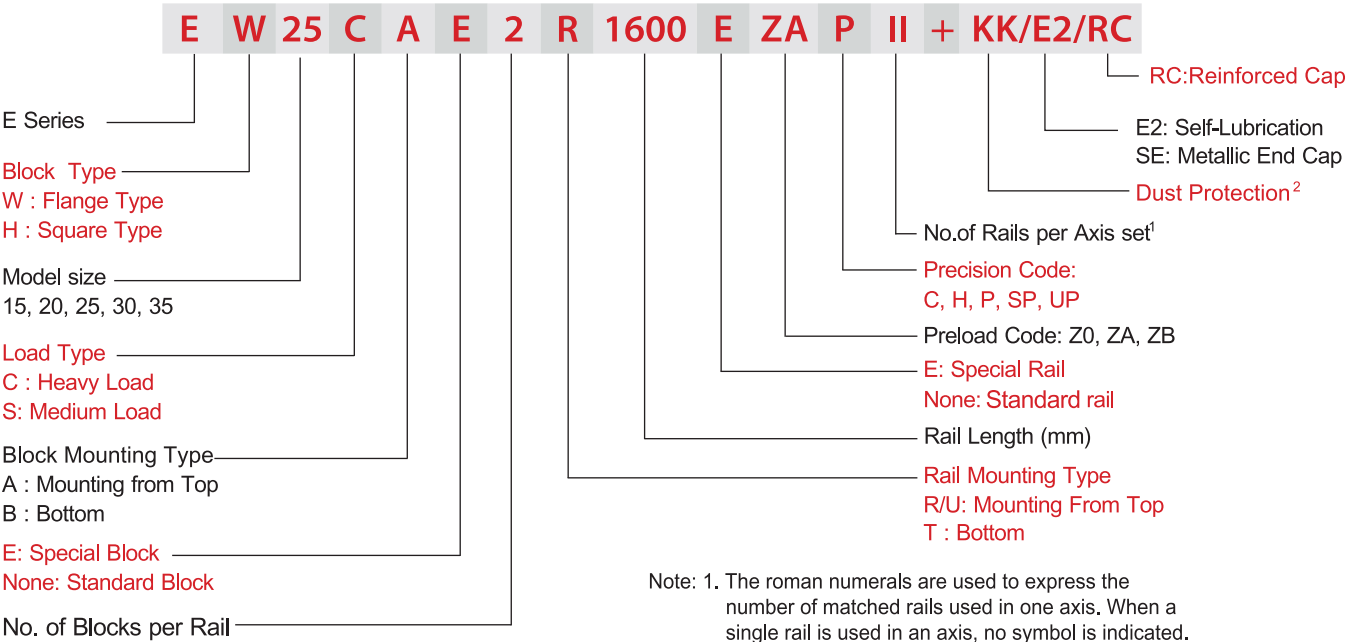
Linear Guideways

Ball Screw

Support

Linear Bushing

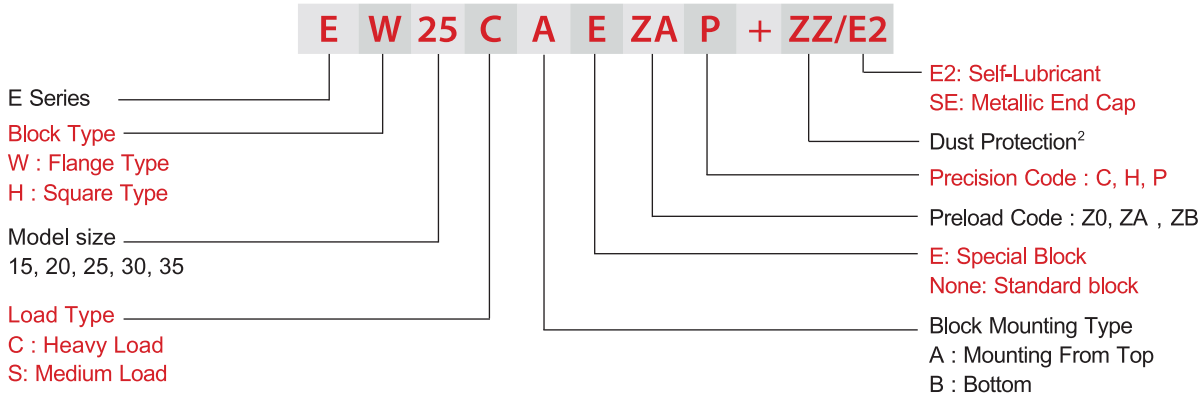
(1) Non-interchangeable type



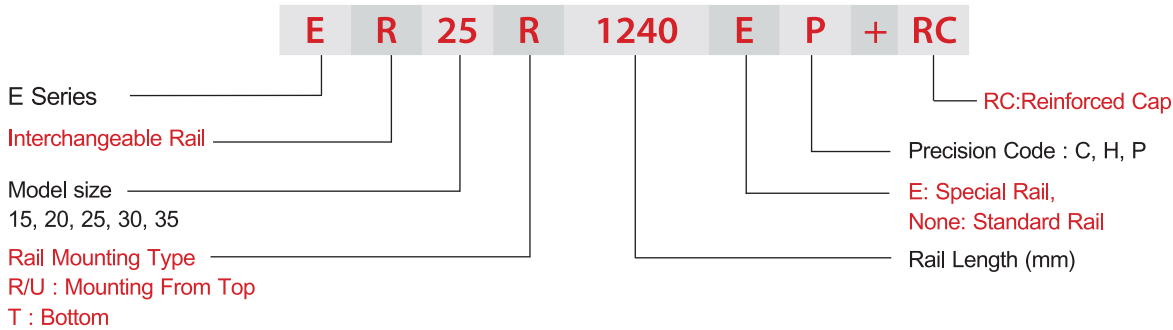
Note: 1. The roman numerals are used to express the number of matched rails used in one axis. When a single rail is used in an axis, no symbol is indicated.
2. No symbol indicates standard protection (end seal and bottom seal).
ZZ : End seal, bottom seal and scraper
KK: Double seals, bottom seal and scraper.
DD: Double seals and bottom seal

(2) Interchangeable type

□ Model Number of E Block



□ Model Number of E Rail

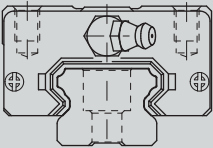
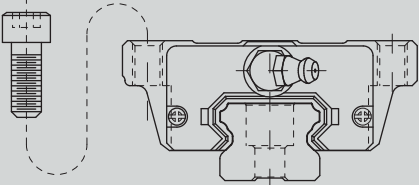
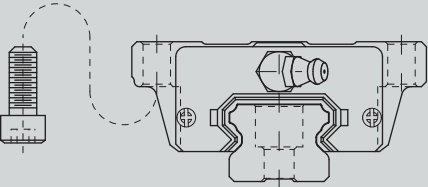




2-2-4 Types

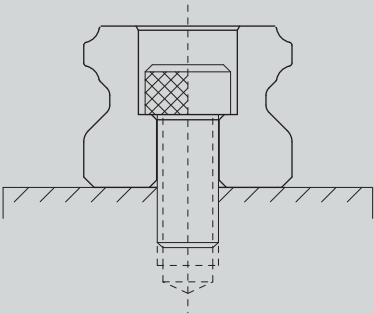
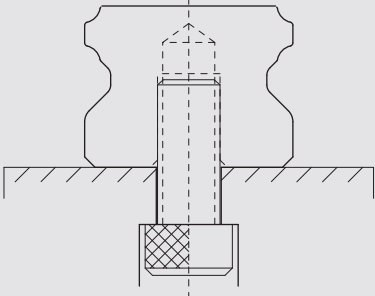
(1) Block types
LIMON offers two types of linear guideways, flange and square types.

Table 2-2-1 Block Types

Type	Model	Shape	Height (mm)	Rail Length (mm)	Main Applications
Square	EH-SA EH-CA		24	100	☐ Automation devices ☐ High-speed transportation equipment ☐ Precision measuring equipment ☐ Semiconductor manufacturing equipment
			↓	↓	
Flange	EW-SA EW-CA		24	100	
			↓	↓	
	EW-SB EW-CB		48	4000	
			↓	↓	
			24	100	
			↓	↓	
			48	4000	
			↓	↓	

(2) Rail types
Besides the standard top mounting type, LIMON also offers bottom mounting type rails.

Table 2-2-2 Rail Types

Mounting from Top	Mounting from Bottom
	

Linear Guideways

Ball Screw

Support

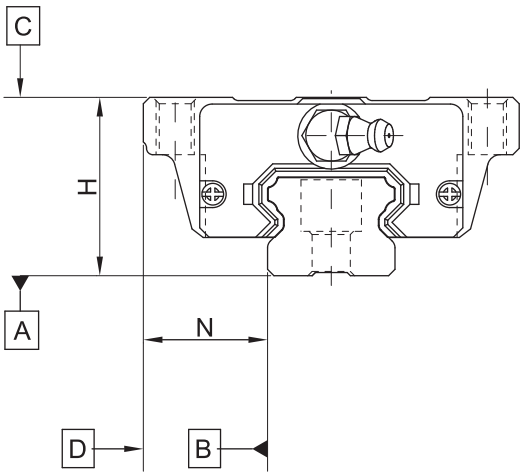
Linear Bushing





2-2-5 Accuracy

The accuracy of the E series can be classified into 5 classes: normal(C), high(H), precision(P), super precision(SP), and ultra precision(UP). Choose the class by referencing the accuracy of selected equipment.



(1) Accuracy of non-interchangeable guideways

Table 2-2-3 Accuracy Standards Unit: mm

Item	E - 15, 20				
Accuracy Classes	Normal (C)	High (H)	Precision (P)	Super Precision (SP)	Ultra Precision (UP)
Dimensional tolerance of height H	± 0.1	± 0.03	0 - 0.03	0 - 0.015	0 - 0.008
Dimensional tolerance of width N	± 0.1	± 0.03	0 - 0.03	0 - 0.015	0 - 0.008
Variation of height H	0.02	0.01	0.006	0.004	0.003
Variation of width N	0.02	0.01	0.006	0.004	0.003
Running parallelism of block surface C to surface A	See Table 2-2-7				
Running parallelism of block surface D to surface B	See Table 2-2-7				

Table 2-2-4 Accuracy Standards Unit: mm

Item	E - 25, 30, 35				
Accuracy Classes	Normal (C)	High (H)	Precision (P)	Super Precision (SP)	Ultra Precision (UP)
Dimensional tolerance of height H	± 0.1	± 0.04	0 - 0.04	0 - 0.02	0 - 0.01
Dimensional tolerance of width N	± 0.1	± 0.04	0 - 0.04	0 - 0.02	0 - 0.01
Variation of height H	0.02	0.015	0.007	0.005	0.003
Variation of width N	0.03	0.015	0.007	0.005	0.003
Running parallelism of block surface C to surface A	See Table 2-2-7				
Running parallelism of block surface D to surface B	See Table 2-2-7				





(2) Accuracy of interchangeable guideways

Table 2-2-5 Accuracy Standards Unit: mm

Item	E - 15, 20		
Accuracy Classes	Normal (C)	High (H)	Precision (P)
Dimensional tolerance of height H	± 0.1	± 0.03	± 0.015
Dimensional tolerance of width N	± 0.1	± 0.03	± 0.015
Variation of height H	0.02	0.01	0.006
Variation of width N	0.02	0.01	0.006
Running parallelism of block surface C to surface A	See Table 2-2-7		
Running parallelism of block surface D to surface B	See Table 2-2-7		

Table 2-2-6 Accuracy Standards Unit: mm

Item	E - 25, 30, 35		
Accuracy Classes	Normal (C)	High (H)	Precision (P)
Dimensional tolerance of height H	± 0.1	± 0.04	± 0.02
Dimensional tolerance of width N	± 0.1	± 0.04	± 0.02
Variation of height H	0.02	0.015	0.007
Variation of width N	0.03	0.015	0.007
Running parallelism of block surface C to surface A	See Table 2-2-7		
Running parallelism of block surface D to surface B	See Table 2-2-7		

(3) Accuracy of running parallelism

Table 2-2-7 Accuracy of Running Parallelism

Rail Length (mm)	Accuracy (μm)				
	C	H	P	SP	UP
~ 100	12	7	3	2	2
100 ~ 200	14	9	4	2	2
200 ~ 300	15	10	5	3	2
300 ~ 500	17	12	6	3	2
500 ~ 700	20	13	7	4	2
700 ~ 900	22	15	8	5	3
900 ~ 1,100	24	16	9	6	3
1,100 ~ 1,500	26	18	11	7	4
1,500 ~ 1,900	28	20	13	8	4
1,900 ~ 2,500	31	22	15	10	5
2,500 ~ 3,100	33	25	18	11	6
3,100 ~ 3,600	36	27	20	14	7
3,600 ~ 4,000	37	28	21	15	7

Linear Guideways

Ball Screw

Support

Linear Bushing

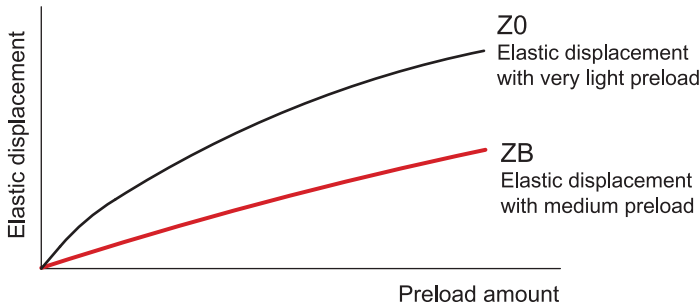




2-2-6 Preload

(1) Definition

A preload can be applied to each guideway. Generally, a linear motion guideway has a negative clearance between the groove and balls in order to improve stiffness and maintain high precision. The figure shows that adding a preload can improve stiffness of the linear guideway. A preload no greater than ZA would be recommended for model sizes smaller than E20. This will avoid an over-loaded condition that would affect guideway life.



(2) Preload classes

LIMON offers three standard preloads for various applications and conditions.

Table 2-2-8 Preload Classes

Class	Code	Preload	Condition
Very Light Preload	Z0	0~ 0.02C	Certain load direction,low impact, low precision required
Light Preload	ZA	0.03C~0.05C	low load and high precision required
Medium Preload	ZB	0.06C~ 0.08C	High rigidity required, with vibration and impact

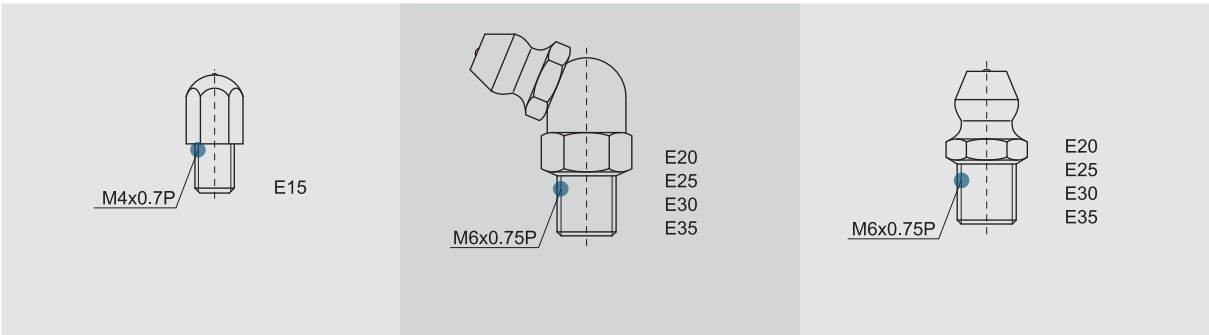
Class	Interchangeable Guideway	Non-Interchangeable Guideway
Preload classes	Z0, ZA	Z0, ZA, ZB

Note: The “C” in the preload column denotes basic dynamic load rating.

2-2-7 Lubrication

(1) Grease

□ Grease nipple





□ Mounting location

The standard location of the grease fitting is at both ends of the block, the nipple may be mounted in the side or top of the block. For lateral installation, we recommend that the nipple be mounted to the non-reference side, otherwise please contact us. When lubricating from above, in the recess for the O-ring, a smaller, preformed recess can be found. Preheat the 0.8 mm diameter metal tip. Carefully open the small recess with the metal tip and pierce through it. Insert a round sealing ring into the recess. (The round sealing ring is not supplied with the block) Do not open the small recess with a drill bit this may introduce the danger of contamination. It is possible to carry out the lubrication by using the oil-piping joint.

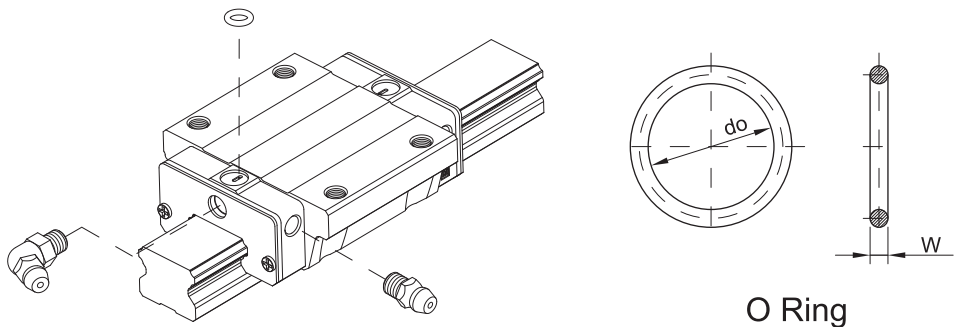


Table 2-2-9 O-Ring size and max. permissible depth for piercing

Size	O-Ring		Lube hole at top: max. permissible depth for piercing
	do(mm)	W (mm)	T _{max} (mm)
E15	2.5 ± 0.15	1.5 ± 0.15	6.9
E20	4.5 ± 0.15	1.5 ± 0.15	8.4
E25	4.5 ± 0.15	1.5 ± 0.15	10.4
E30	4.5 ± 0.15	1.5 ± 0.15	10.4
E35	4.5 ± 0.15	1.5 ± 0.15	10.8

□ The oil amount for a block filled with grease

Table 2-2-10 The oil amount for a block illed with grease

Size	Medium Load (cm ³)	Heavy Load (cm ³)
E15	0.8	1.4
E20	1.5	2.4
E25	2.8	4.6
E30	3.7	6.3
E35	5.6	6.6

Frequency of replenishment

Check the grease every 100 km, or every 3-6 months.

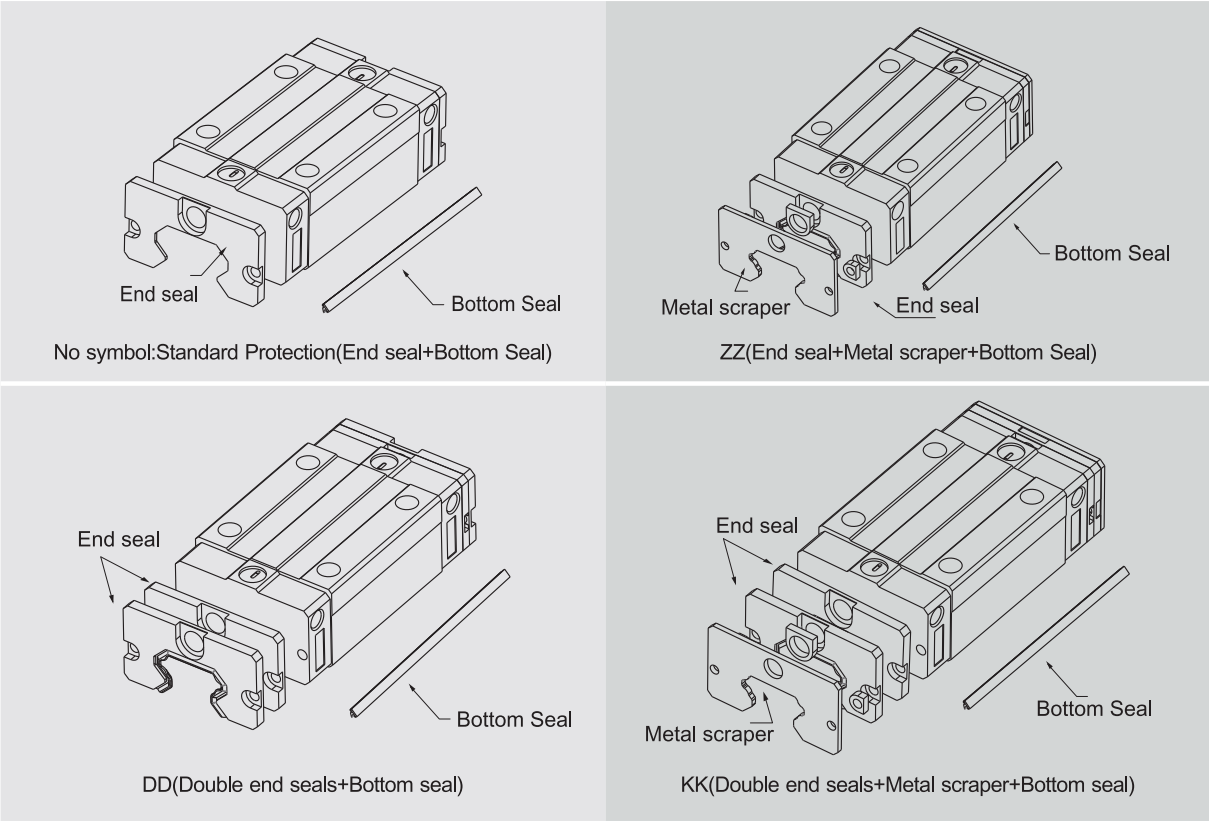




2-2-8 Dust Proof Accessories

(1) Codes of accessories

If the following accessories is needed, please indicate the code followed by the model number.



(2) End seal and bottom seal

Protects against contaminants entering the block. Reduces potential for groove damage resulting in a reduction of life ratings.

(3) Double seals

Removing foreign matters from the rail to prevent contaminants from entering the block.

Table 2-2-11Dimensions of end seal

Size	Thickness (t1) (mm)
E15 ES	2
E20 ES	2
E25 ES	2
E30 ES	2
E35 ES	2





(4) Scraper
Clears larger contaminants, such as weld spatter and metal cuttings, from the rail. Metal scraper protects end seals from excessive damage.

Table 2-2-12 Dimensions of Scraper

Size	Thickness (t2) (mm)
E 15 SC	0.8
E 20 SC	0.8
E 25 SC	1
E 30 SC	1
E 35 SC	1.5

(5) Bolt caps for rail mounting holes
Rail mounting hole caps prevent foreign matter from accumulating in the mounting holes. Caps are included with the rail package.

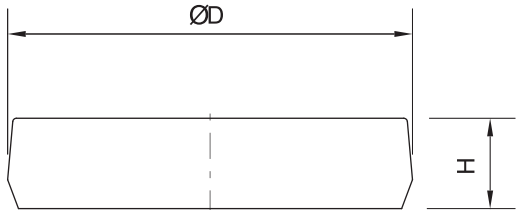


Table 2-2-13 Dimensions of Bolt Caps for Rail Mounting Holes

Rail size	Bolt size	Diameter(D) (mm)	Thickness(H) (mm)
ER15R	M3	6.15	1.2
ER20R	M5	9.65	2.5
ER25R	M6	11.15	2.5
ER30R	M6	11.15	2.5
ER35R	M8	14.20	3.5
ER15U	M4	7.65	1.1
ER30U	M8	14.20	3.5

(6) Dimensions of block equipped with the dustproof parts

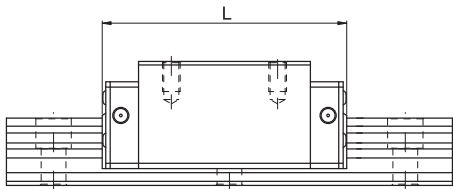


Table 2-2-14 Overall block length

Unit: mm

Size	Overall block length (L)			
	SS	ZZ	DD	KK
E15S	41.1	43.7	46.1	48.7
E15C	57.8	60.4	62.8	65.4
E20S	51.2	53.8	56.4	59
E20C	70.3	72.9	75.5	78.1
E25S	59.7	62.3	65.7	68.3
E25C	85.2	87.8	91.2	93.8
E30S	71.9	74.5	78.1	80.7
E30C	100.4	103	106.6	109.2
E35S	76	79	80	83
E35C	108	111	112	115





2-2-9 Friction

The maximum value of resistance per end seal are as shown in the table.

Table 2-2-15 Seal Resistance

Size	Resistance N (kgf)
E15	1 (0.1)
E20	1.2 (0.17)
E25	2 (0.2)
E30	2.6 (0.27)
E35	3.5 (0.36)

Note:1kgf=9.81N

2-2-10 The Accuracy Tolerance of Mounting Surface

Because of the circular-arc contact design, the E linear guideway can withstand surface-error installation and deliver smooth linear motion. When the mounting surface meets the accuracy requirements of the installation, the high accuracy and rigidity of the guideway will be obtained without any difficulty. For faster installation and smoother movement, LIMON offers a preload with normal clearance because of its ability to absorb higher deviations in mounting surface inaccuracies.

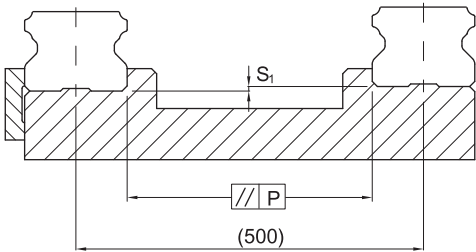


Table 2-2-16 Max. Parallelism Tolerance (P)

unit: μm

Size	Preload classes		
	Z0	ZA	ZB
E15	25	18	-
E20	25	20	18
E25	30	22	20
E30	40	30	27
E35	50	35	30

Table 2-2-17 Max. Tolerance of Reference Surface Height (S_1)

unit: μm

Size	Preload classes		
	Z0	ZA	ZB
E15	130	85	-
E20	130	85	50
E25	130	85	70
E30	170	110	90
E35	210	150	120





2-2-11 Cautions for Installation

(1) Shoulder heights and chamfers
Improper shoulder heights and chamfers of mounting surfaces will cause deviations in accuracy and rail or block interference with the chamfered part.
When recommended shoulder heights and chamfers are used, problems with installation accuracy should be eliminated.

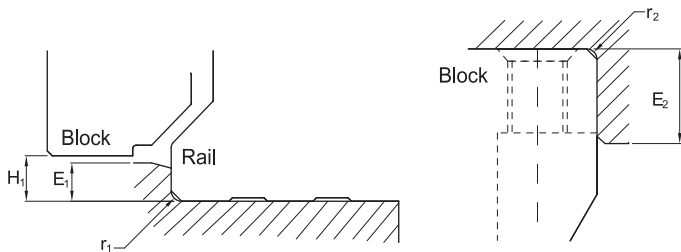


Table 2-2-18 Shoulder Heights and Chamfers unit: mm

Size	Max. radius of fillets r_1 (mm)	Max. radius of fillets r_2 (mm)	Shoulder height of the rail E_1 (mm)	Shoulder height of the block E_2 (mm)	Clearance under block H_1 (mm)
E15	0.5	0.5	2.7	5.0	4.5
E20	0.5	0.5	5.0	7.0	6.0
E25	1.0	1.0	5.0	7.5	7.0
E30	1.0	1.0	7.0	7.0	10.0
E35	1.0	1.0	7.5	9.5	11.0

(2) Tightening Torque of Bolts for Installation
Improperly tightened mounting bolts will seriously affect the accuracy of linear guide installations. The following tightening torques for different sizes of bolts are recommended.

Table 2-2-19 Tightening Torque

Size	Bolt size	Torque N-cm(kgf-cm)		
		Iron	Casting	Aluminum
E15	M3×0.5P×16L	186 (19)	127 (13)	98 (10)
E20	M5×0.8P×16L	883 (90)	588 (60)	441 (45)
E25	M6×1P×20L	1373 (140)	921 (94)	686 (70)
E30	M6×1P×25L	1373 (140)	921 (94)	686 (70)
E35	M8×1.25P×25L	3041 (310)	2010 (205)	1470 (150)

Note: 1 kgf = 9.81 N





Linear Guideways

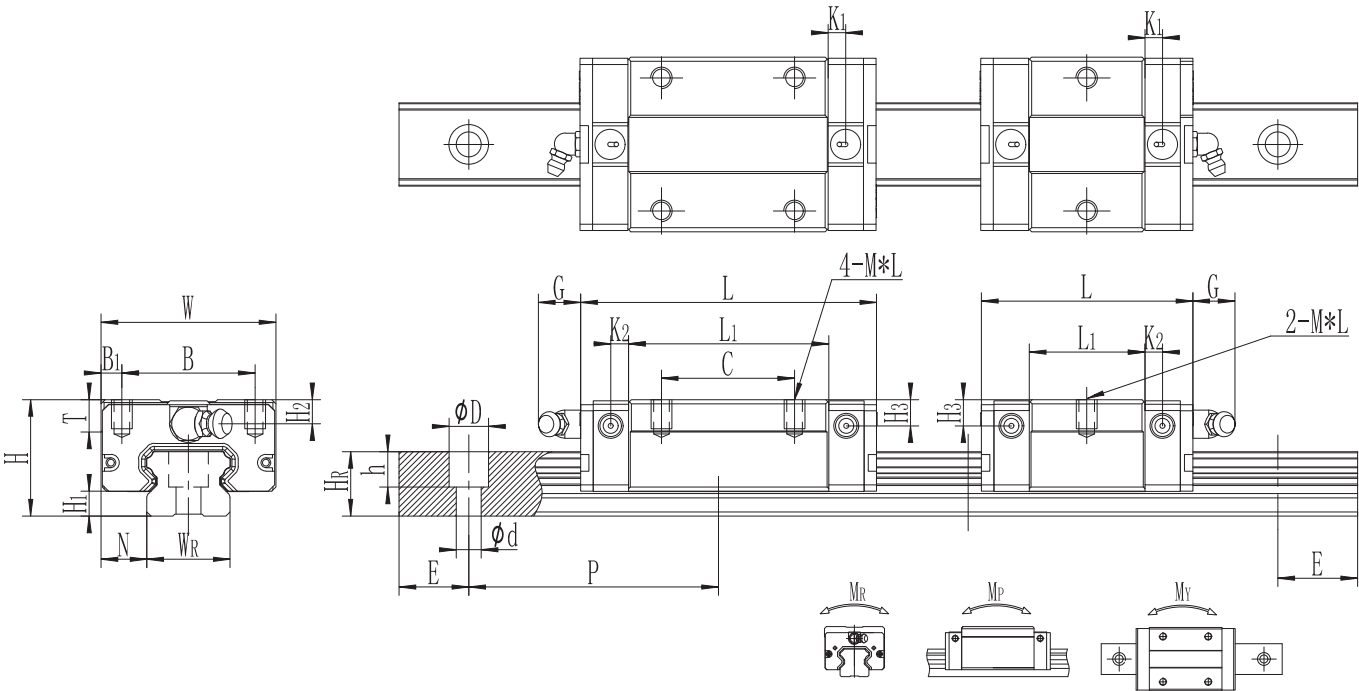
Ball Screw

Support

Linear Bushing

2-2-12 Dimensions for E Series

(1) EH-SA / EH-CA



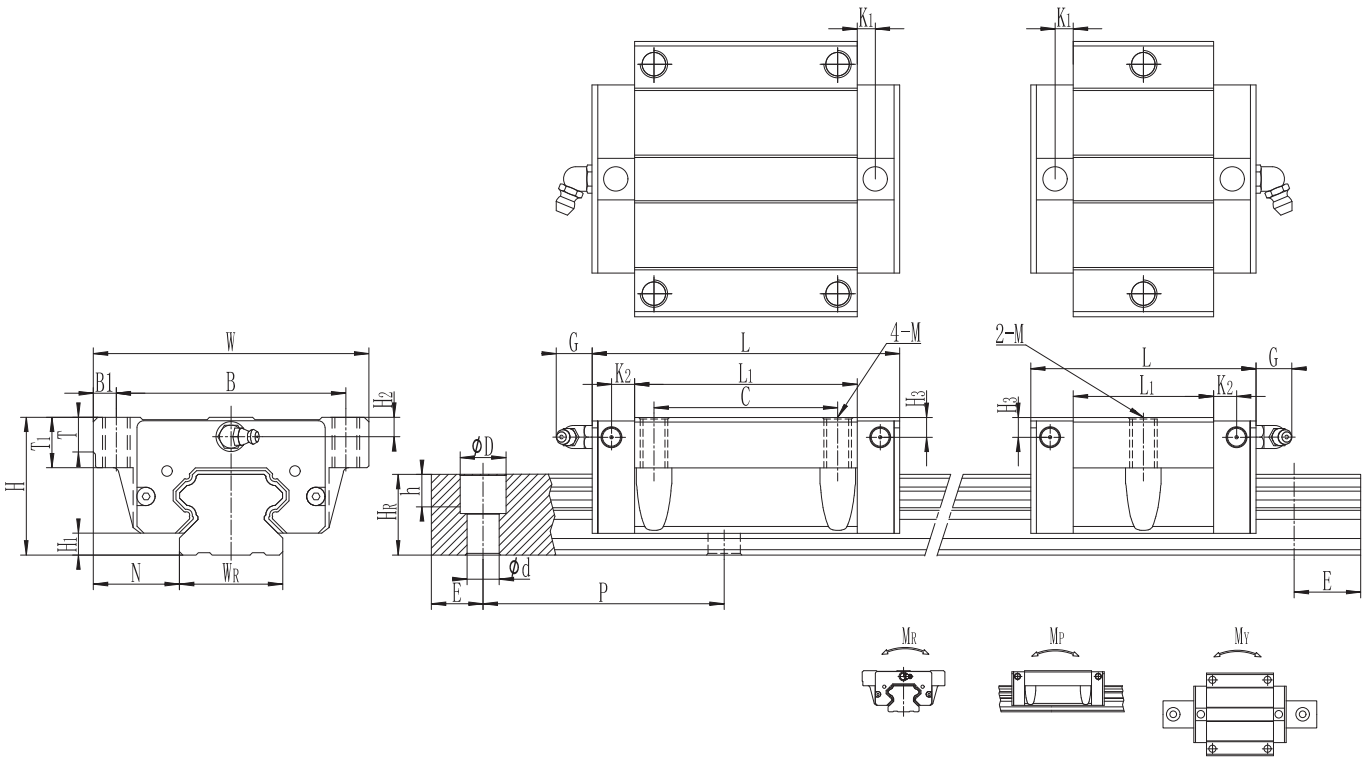
Model No.	Dimensions of Assembly (mm)			Dimensions of Block(mm)														Dimensions of Rail (mm)							Mounting Bolt for Rail	Basic Dynamic Load Rating	Basic Static Load Rating	Static Rated Moment			Weight	
	H	H ₁	N	W	B	B ₁	C	L ₁	L	K ₁	K ₂	G	M*L	T	H ₂	H ₃	W _R	H _R	D	h	d	P	E	(mm)				C(KN)	C0(KN)	M _R KN-m	M _P KN-m	M _Y KN-m
EH15SA	24	4.4	9.5	34	26	4	-	23.1	41.1	3.4	3.4	5.5	M4×6	6	5.8	5.8	15	12.5	6	4.5	3.5	60	20	M3×16	5.1	8.94	0.06	0.03	0.03	0.12	1.26	
EH15CA							26	39.8	57.8																7.21	14.25	0.11	0.09	0.09	0.17		
EH15SA	24	4.4	9.5	34	26	4	-	23.1	41.1	3.4	3.4	5.5	M4×6	6	5.8	5.8	15	12.5	7.5	5.3	4.5	60	20	M4×16	5.1	8.94	0.06	0.03	0.03	0.12	1.26	
EH15CA							26	39.8	57.8																7.21	14.25	0.11	0.09	0.09	0.17		
EH20SA	28	6	11	42	32	5	-	29	50	4.2	4.2	12	M5×7	7.5	5.8	6.3	20	15.5	9.5	8.5	6	60	20	M5×16	6.54	10.75	0.1	0.50	0.50	0.16	2.09	
EH20CA							32	48.1	69.1																9.81	18.32	0.19	0.10	0.10	0.28		
EH25SA	33	6.2	12.5	48	35	6.5	-	35.5	59.7	5	5	12	M6×9	8	7.4	7.4	23	18	11	9	7	60	20	M6×20	10.2	17.6	0.2	0.09	0.09	0.26	2.69	
EH25CA		6.9					35	59	85																15.1	30.12	0.35	0.3	0.3	0.42		
EH30SA	42	10	16	60	40	10	-	41.5	71.5	6	6	12	M8×12	9	9	9	28	23	11	9	7	80	20	M6×25	15.32	26.28	0.3	0.15	0.15	0.46	4.26	
EH30CA							40	70	100																20.12	45.33	0.5	0.42	0.42	0.77		
EH30SA	42	10	16	60	40	10	-	41.5	71.5	6	6	12	M8×12	9	9	9	28	23	14	12	9	80	20	M8×25	15.32	26.28	0.3	0.15	0.15	0.46	4.26	
EH30CA							40	70	100																20.12	45.33	0.5	0.42	0.42	0.77		
EH35SA	48	11	18	70	50	10	-	45	75	7	7	12	M8×12	10	8.5	8.5	34	27.5	14	12	9	80	20	M8×25	20.65	35.58	0.46	0.2	0.2	0.75	6.11	
EH35CA							50	78	108																30.94	61.83	0.8	0.51	0.51	1.12		

Note : 1 kgf = 9.81 N
Model with "*" means guide rail with new installation hole, pls not the requirement when placing the order.





(2) EW-SA / EW-CA



Linear Guideways

Ball Screw

Support

Linear Bushing

Model No.	Dimensions of Assembly (mm)			Dimensions of Block(mm)														Dimensions of Rail (mm)						Mounting Bolt for Rail	Basic Dynamic Load Rating	Basic Static Load Rating	Static Rated Moment			Weight		
	H	H ₁	N	W	B	B ₁	C	L ₁	L	K ₁	K ₂	G	M	T	T ₁	H ₂	H ₃	W _R	H _R	D	h	d	P				E	(mm)	C(KN)	C0(KN)	M _R KN-m	M _P KN-m
EW15SA	24	4.4	18.5	52	41	5.5	-	23.1	41.1	3.4	3.4	5.5	M5	5	7.8	5.8	5.8	15	12.5	6	4.5	3.5	60	20	M3×16	5.1	8.94	0.06	0.03	0.03	0.12	1.26
EW15CA						26	39.8	57.8																								
EW15SA	24	4.4	18.5	52	41	5.5	-	23.1	41.1	3.4	3.4	5.5	M5	5	7.8	5.8	5.8	15	12.5	7.5	5.3	4.5	60	20	M4×16	5.1	8.94	0.06	0.03	0.03	0.12	1.26
EW15CA						26	39.8	57.8																								
EW20SA	28	6	19.5	59	49	5	-	29	50	4.2	4.2	12	M6	7	9	5.8	6.3	20	15.5	9.5	8.5	6	60	20	M5×16	6.54	10.75	0.1	0.50	0.50	0.16	2.09
EW20CA						32	48.1	69.1																								
EW25SA	33	6.2	25	73	60	6.5	-	35.5	59.7	5	5	12	M8	7.5	10	7.4	7.4	23	18	11	9	7	60	20	M6×20	10.2	17.6	0.2	0.09	0.09	0.26	2.69
EW25CA		6.9					35	59	85																							
EW30SA	42	10	31	90	72	9	-	41.5	71.5	6	6	12	M10	7	10	9	9	28	23	11	9	7	80	20	M6×25	15.32	26.28	0.3	0.15	0.15	0.46	4.26
EW30CA						40	70	100																								
EW30SA	42	10	31	90	72	9	-	41.5	71.5	6	6	12	M10	7	10	9	9	28	23	14	12	9	80	20	M8×25	15.32	26.28	0.3	0.15	0.15	0.46	4.26
EW30CA						40	70	100																								
EW35SA	48	11	33	100	82	9	-	45	75	7	7	12	M10	10	13	8.5	8.5	34	27.5	14	12	9	80	20	M8×25	20.65	35.58	0.46	0.2	0.2	0.75	6.11
EW35CA						50	78	108																								

Note : 1 kgf = 9.81 N
Model with "" means guide rail with new installation hole, pls not the requirement when placing the order.





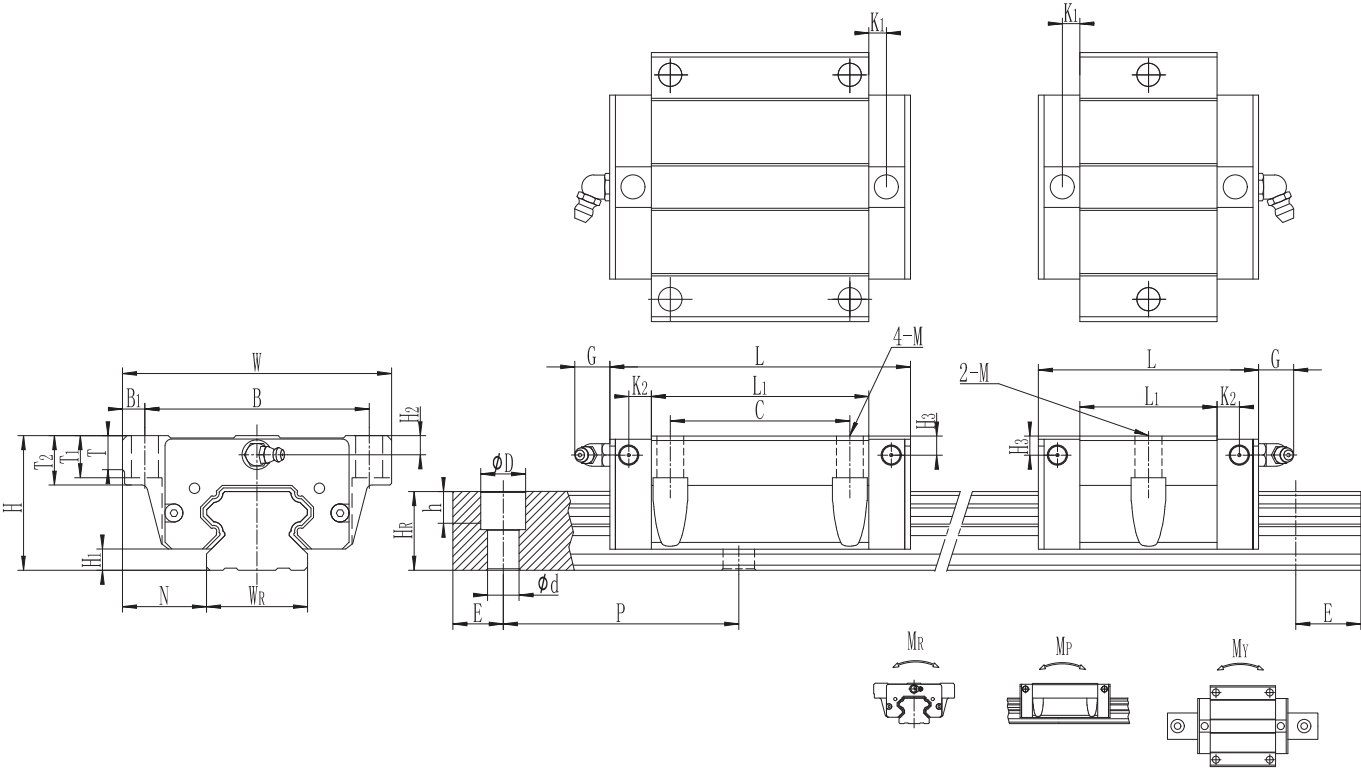
Linear Guideways

Ball Screw

Support

Linear Bushing

(3) EW-SB / EW-CB



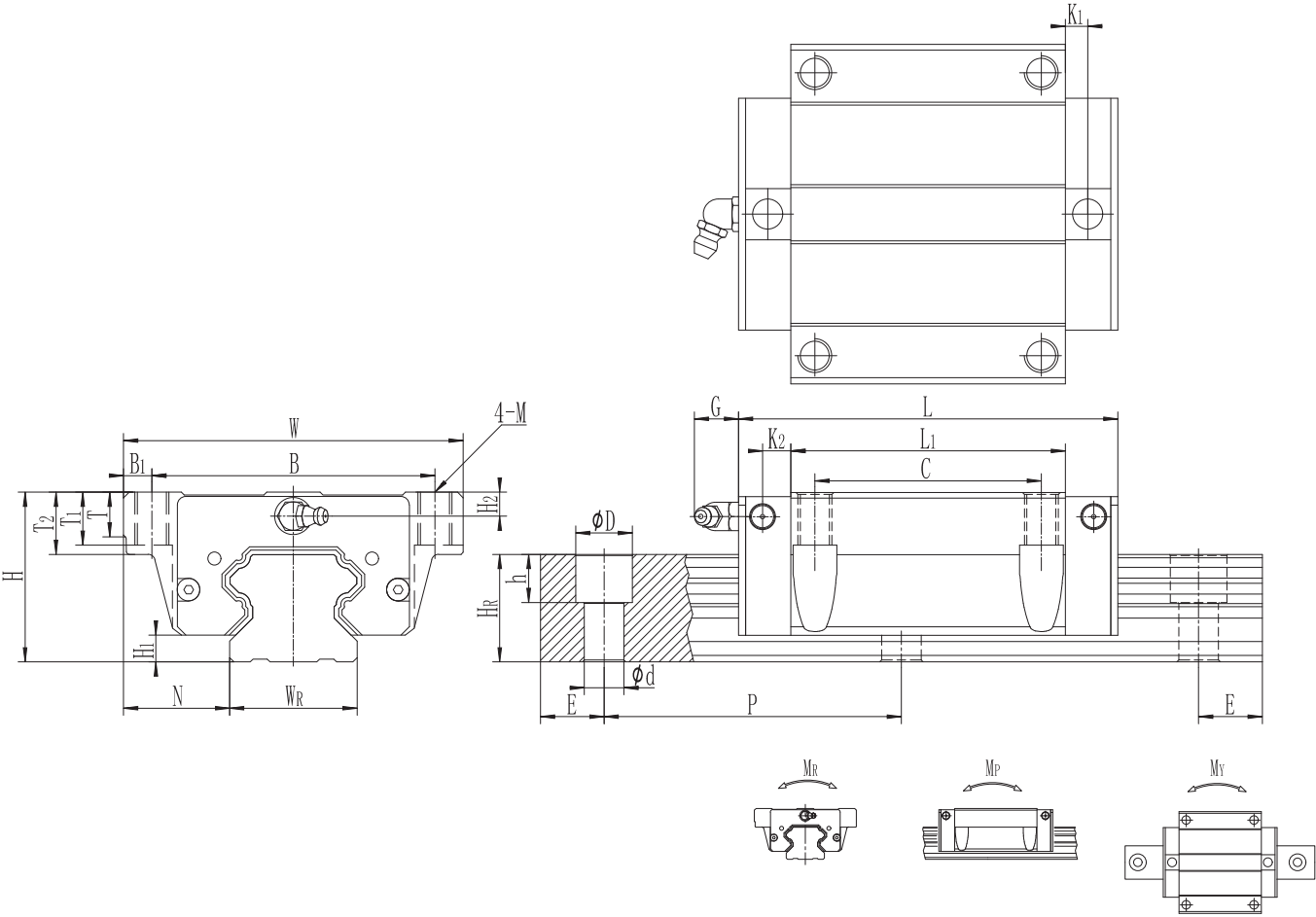
Model No.	Dimensions of Assembly (mm)			Dimensions of Block(mm)														Dimensions of Rail (mm)						Mounting Bolt for Rail	Basic Dynamic Load Rating	Basic Static Load Rating	Static Rated Moment			Weight				
	H	H ₁	N	W	B	B ₁	C	L ₁	L	K ₁	K ₂	G	M	T	T ₁	T ₂	H ₂	H ₃	W _R	H _R	D	h	d				P	E	(mm)	C(KN)	C0(KN)	M _R KN-m	M _P KN-m	M _Y KN-m
★	EW15SB	24	4.4	18.5	52	41	5.5	-	23.1	41.1	3.4	3.4	5.5	φ 4.5	5	7	7.8	5.8	5.8	15	12.5	6	4.5	3.5	60	20	M3×16	5.1	8.94	0.06	0.03	0.03	0.12	1.26
	EW15CB						26	39.8	57.8																		7.21	14.25	0.11	0.09	0.09	0.17		
	EW15SB	24	4.4	18.5	52	41	5.5	-	23.1	41.1	3.4	3.4	5.5	φ 4.5	5	7	7.8	5.8	5.8	15	12.5	7.5	5.3	4.5	60	20	M4×16	5.1	8.94	0.06	0.03	0.03	0.12	1.26
	EW15CB						26	39.8	57.8																		7.21	14.25	0.11	0.09	0.09	0.17		
	EW20SB	28	6	19.5	59	49	5	-	29	50	4.2	4.2	12	φ 5.5	7	7	9	5.8	6.3	20	15.5	9.5	8.5	6	60	20	M5×16	6.54	10.75	0.1	0.50	0.50	0.16	2.09
	EW20CB						32	48.1	69.1																		9.81	18.32	0.19	0.10	0.10	0.28		
	EW25SB	33	6.2	25	73	60	6.5	-	35.5	59.7	5	5	12	φ7	7.5	10	10	7.4	7.4	23	18	11	9	7	60	20	M6×20	10.2	17.6	0.2	0.09	0.09	0.26	2.69
	EW25CB		6.9								35	59	85																		15.1	30.12	0.35	
★	EW30SB	42	10	31	90	72	9	-	41.5	71.5	6	6	12	φ9	7	10	10	9	9	28	23	11	9	7	80	20	M6×25	15.32	26.28	0.3	0.15	0.15	0.46	4.26
	EW30CB						40	70	100																			20.12	45.33	0.5	0.42	0.42	0.77	
	EW30SB	42	10	31	90	72	9	-	41.5	71.5	6	6	12	φ9	7	10	10	9	9	28	23	14	12	9	80	20	M8×25	15.32	26.28	0.3	0.15	0.15	0.46	4.26
	EW30CB						40	70	100																			20.12	45.33	0.5	0.42	0.42	0.77	
	EW35SB	48	11	33	100	82	9	-	45	75	7	7	12	φ9	10	13	13	8.5	8.5	34	27.5	14	12	9	80	20	M8×25	20.65	35.58	0.46	0.2	0.2	0.75	6.11
	EW35CB						50	78	108																			30.94	61.83	0.8	0.51	0.51	1.12	

Note : 1 kgf = 9.81 N
Model with "" means guide rail with new installation hole, pls not the requirement when placing the order.





(4)EW- SC/EW-CC



Linear Guideways

Ball Screw

Support

Linear Bushing

Model No.	Dimensions of Assembly (mm)			Dimensions of Block(mm)																Dimensions of Rail (mm)								Mounting Bolt for Rail	Basic Dynamic Load Rating	Basic Static Load Rating	Static Rated Moment			Weight	
	H	H ₁	N	W	B	B ₁	C	L ₁	L	K ₁	K ₂	G	M	T	T ₁	T ₂	H ₂	H ₃	W _R	H _R	D	h	d	P	E	(mm)	C(KN)				C0(KN)	M _R KN-m	M _P KN-m	M _V KN-m	Block kg
EW15SC	24	4.4	18.5	52	41	5.5	-	23.1	41.1	3.4	3.4	5.5	M5	5	7	7.8	5.8	5.8	15	12.5	6	4.5	3.5	60	20	M3×16	5.1	8.94	0.06	0.03	0.03	0.12	1.26		
EW15CC							26	39.8	57.8																		7.21	14.25	0.11	0.09	0.09	0.17			
EW15SC	24	4.4	18.5	52	41	5.5	-	23.1	41.1	3.4	3.4	5.5	M5	5	7	7.8	5.8	5.8	15	12.5	7.5	5.3	4.5	60	20	M4×16	5.1	8.94	0.06	0.03	0.03	0.12	1.26		
EW15CC							26	39.8	57.8																		7.21	14.25	0.11	0.09	0.09	0.17			
EW20SC	28	6	19.5	59	49	5	-	29	50	4.2	4.2	12	M6	7	7	9	5.8	6.3	20	15.5	9.5	8.5	6	60	20	M5×16	6.54	10.75	0.1	0.50	0.50	0.16	2.09		
EW20CC							32	48.1	69.1																		9.81	18.32	0.19	0.10	0.10	0.28			
EW25SC	33	6.2 6.9	25	73	60	6.5	-	35.5	59.7	5	5	12	M8	7.5	10	10	7.4	7.4	23	18	11	9	7	60	20	M6×20	10.2	17.6	0.2	0.09	0.09	0.26	2.69		
EW25CC							35	59	85																		15.1	30.12	0.35	0.3	0.3	0.42			
EW30SC	42	10	31	90	72	9	-	41.5	71.5	6	6	12	M10	7	10	10	9	9	28	23	11	9	7	80	20	M6×25	15.32	26.28	0.3	0.15	0.15	0.46	4.26		
EW30CC							40	70	100																		20.12	45.33	0.5	0.42	0.42	0.77			
EW30SC	42	10	31	90	72	9	-	41.5	71.5	6	6	12	M10	7	10	10	9	9	28	23	14	12	9	80	20	M8×25	15.32	26.28	0.3	0.15	0.15	0.46	4.26		
EW30CC							40	70	100																		20.12	45.33	0.5	0.42	0.42	0.77			
EW35SC	48	11	33	100	82	9	-	45	75	7	7	12	M10	10	13	13	8.5	8.5	34	27.5	14	12	9	80	20	M8×25	20.65	35.58	0.46	0.2	0.2	0.75	6.11		
EW35CC							50	78	108																		30.94	61.83	0.8	0.51	0.51	1.12			

Note : 1 kgf = 9.81 N
Model with "*" means guide rail with new installation hole, pls not the requirement when placing the order.





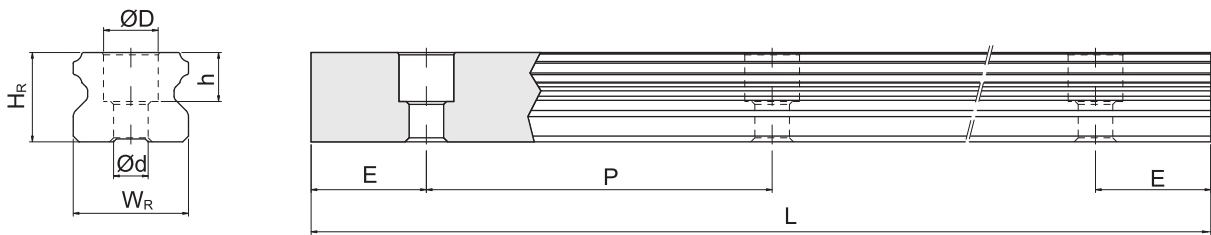
Linear Guideways

Ball Screw

Support

Linear Bushing

(4) Dimensions for ER-U (large mounting hole, rail mounting from top)

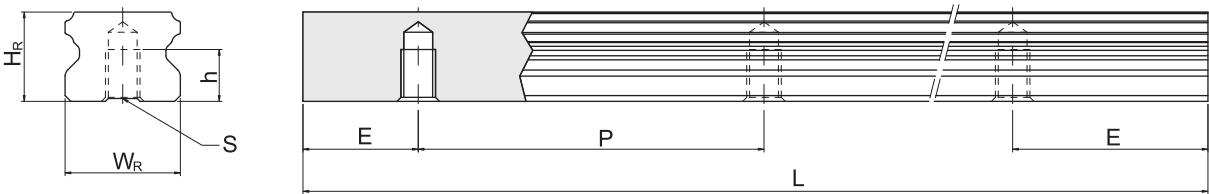


Model No.	Mounting Bolt for Rail(mm)	Dimensions of Rail (mm)							Weight
		W_R	H_R	D	h	d	P	E	(kg/m)
ER15U	M4x16	15	12.5	7.5	5.3	4.5	60	20	1.23
ER30U	M8x25	28	23	14	12	9	80	20	4.23





(5) Dimensions for ER-T (rail mounting from bottom)



Model No.	Dimensions of Rail (mm)						Weight
	W _R	H _R	S	h	P	E	(kg/m)
ER15T	15	12.5	M5 x 0.8P	7	60	20	1.26
ER20T	20	15.5	M6 x 1P	9	60	20	2.15
ER25T	23	18	M6 x 1P	10	60	20	2.79
ER30T	28	23	M8 x 1.25P	14	80	20	4.42
ER35T	34	27.5	M8 x 1.25P	17	80	20	6.34

Linear Guideways

Ball Screw

Support

Linear Bushing

