

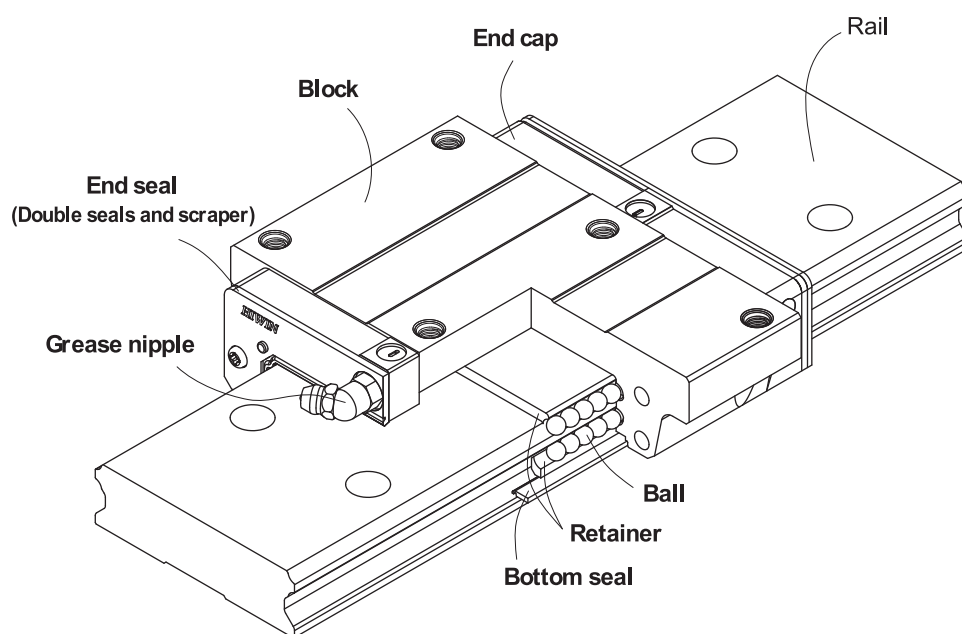
WE Series

2-5 WE Type – Four-Row Wide Rail Linear Guideway

2-5-1 Construction

The WE series features equal load ratings in the radial, reverse radial and the lateral direction with contact points at 45 degrees. This along with the wide rail, allows the guide way to be rated for high loads, moments and rigidity. By design, it has a self-aligning capacity that can absorb most installation errors and can meet high accuracy standards. The ability to use a single rail and to have the low profile with a low center of gravity is ideal where space is limited and/or high moments are required.

2-5-2 Construction of WE Series

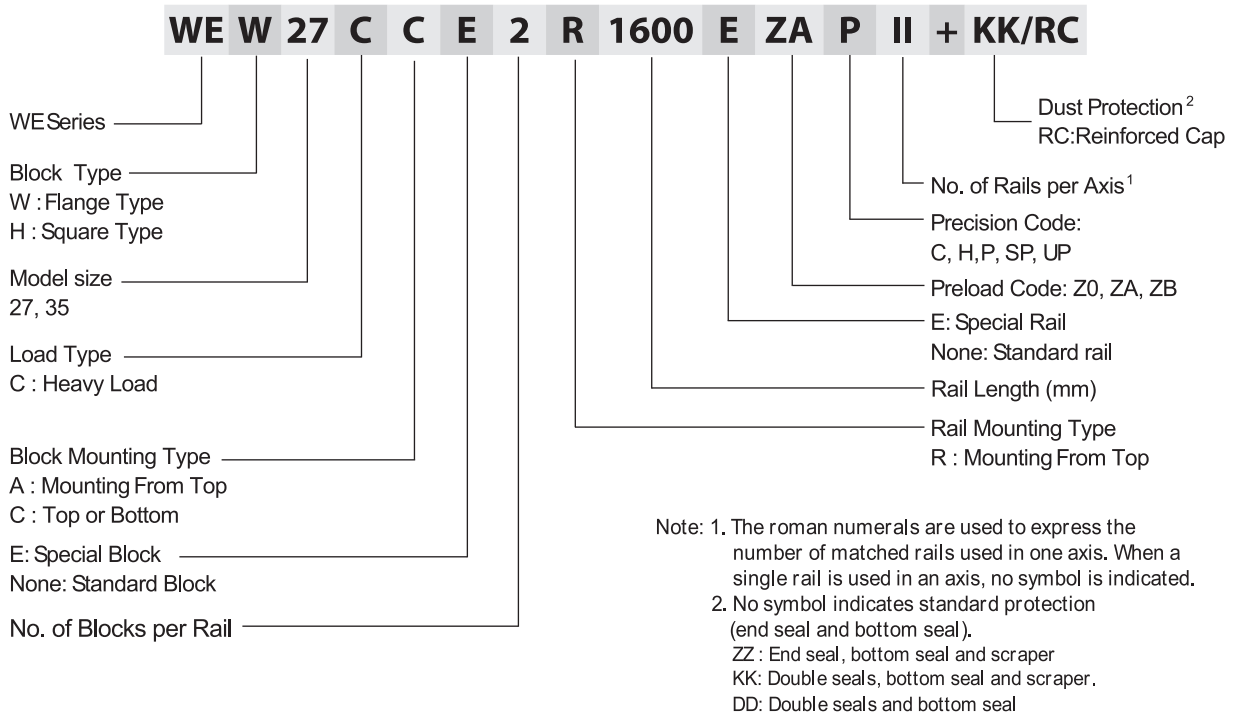


- Rolling circulation system: Block, rail, end cap and retainer
- Lubrication system: Grease nipple and piping Joint
- Dust protection system: End seal, bottom seal, cap and scraper

2-5-3 Model Number of WE Series

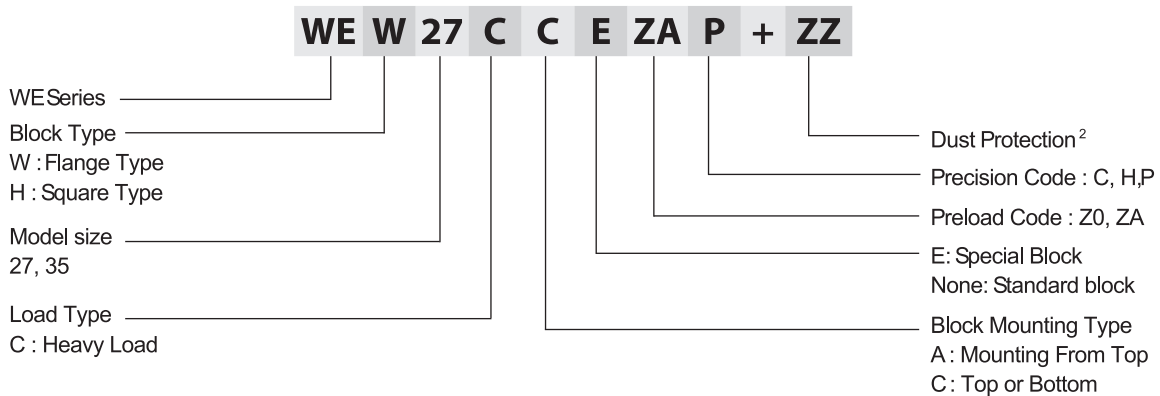
WE series linear guideways are classified into non-interchangeable and interchangeable types. The sizes of these two types are the same as one another. The main difference is that the interchangeable type of blocks and rails can be freely exchanged and they can maintain P-class accuracy. Because of strict 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 WE series identifies the size, type, accuracy class, preload class, etc.

(1) Non-interchangeable type

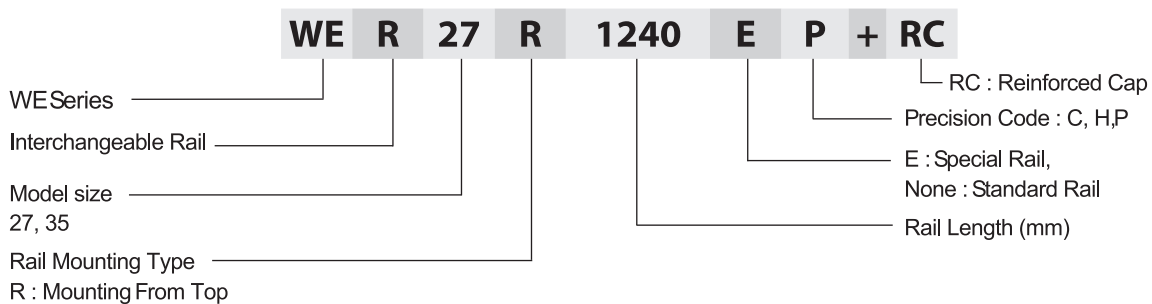


(2) Interchangeable type

○ Model Number of WE Block



○ Model Number of WE Rail



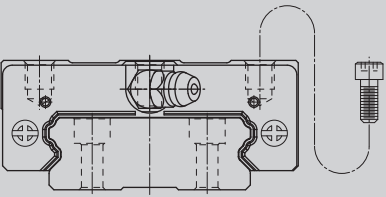
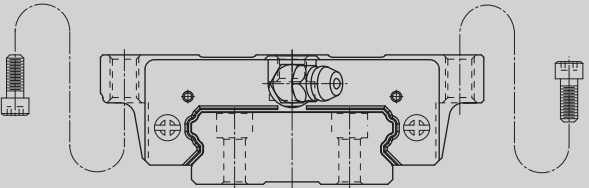
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2-5-4 Types

(1) Block types

HIWIN offers two types of linear guideways, flanged and square types.

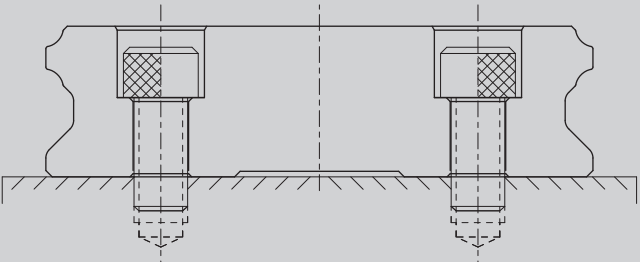
Table 2-5-1 Block Types

Type	Model	Shape	Height (mm)	Rail Length (mm)	Main Applications
Square	WEH-CA		27	100	○ Automation devices
			↓	↓	○ High-speed transportation equipment
Flange	WEW-CC		35	4000	○ Precision measuring equipment
			27	100	○ Semiconductor manufacturing equipment
			↓	↓	○ Blow Moulding machines
			35	4000	○ Single Axis Robot-Robotics
					○ Single Axis Equipment with High Anti-rolling Requirement

(2) Rail types

HIWIN offers standard top mounting type.

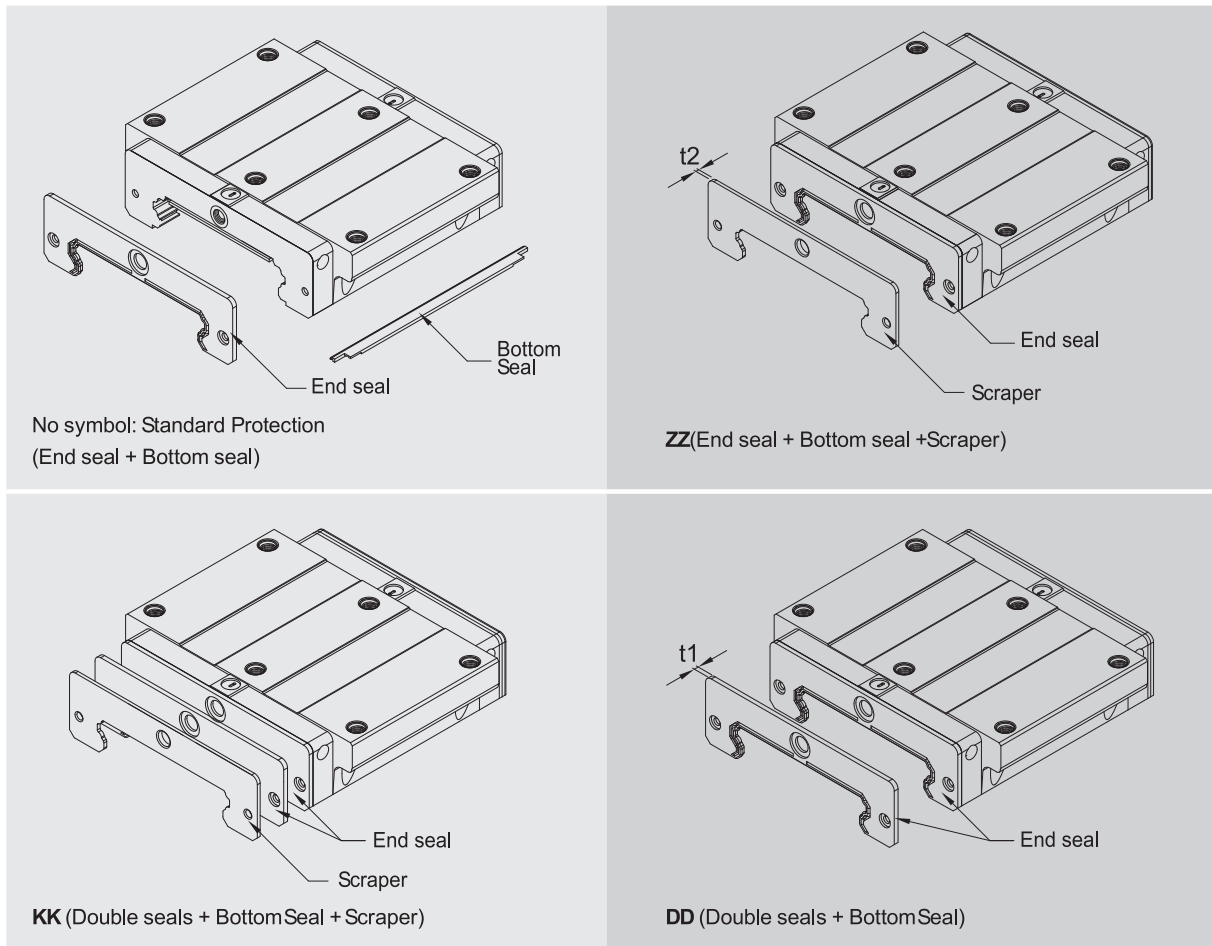
Table 2-5-2 Rail Types

Mounting from Above


2-5-8 Dust Protection Equipment

(1) Codes of equipment

If the following equipment 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

Removes foreign matter from the rail preventing contaminants from entering the block.

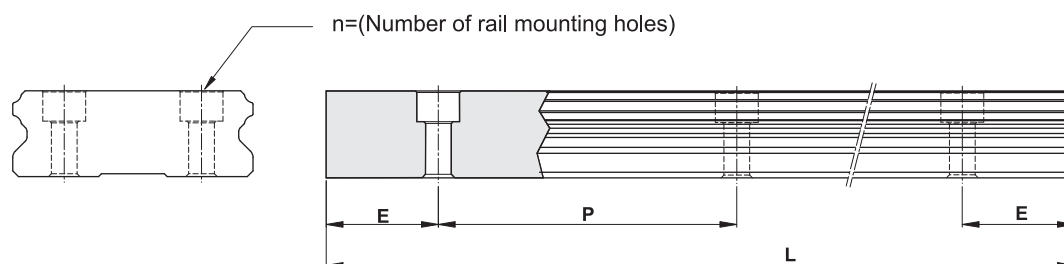
Table 2-5-10 Dimensions of end seal

Size	Thickness (t1) (mm)
WE 27	2
WE 35	2

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2-5-12 Standard and Maximum Lengths of Rail

HIWIN offers a number of standard rail lengths. Standard rail lengths feature end mounting hole placements set to predetermined values (E). For non-standard rail lengths, be sure to specify the E-value to be no greater than 1/2 the pitch (P) dimension. An E-value greater than this will result in unstable rail ends.



$$L = (n-1) \times P + 2 \times E \quad \text{Eq.2.3}$$

L : Total length of rail (mm)

n : Number of mounting holes

P : Distance between any two holes (mm)

E : Distance from the center of the last hole to the edge (mm)

Table 2-5-18 Rail Standard Length and Max. Length

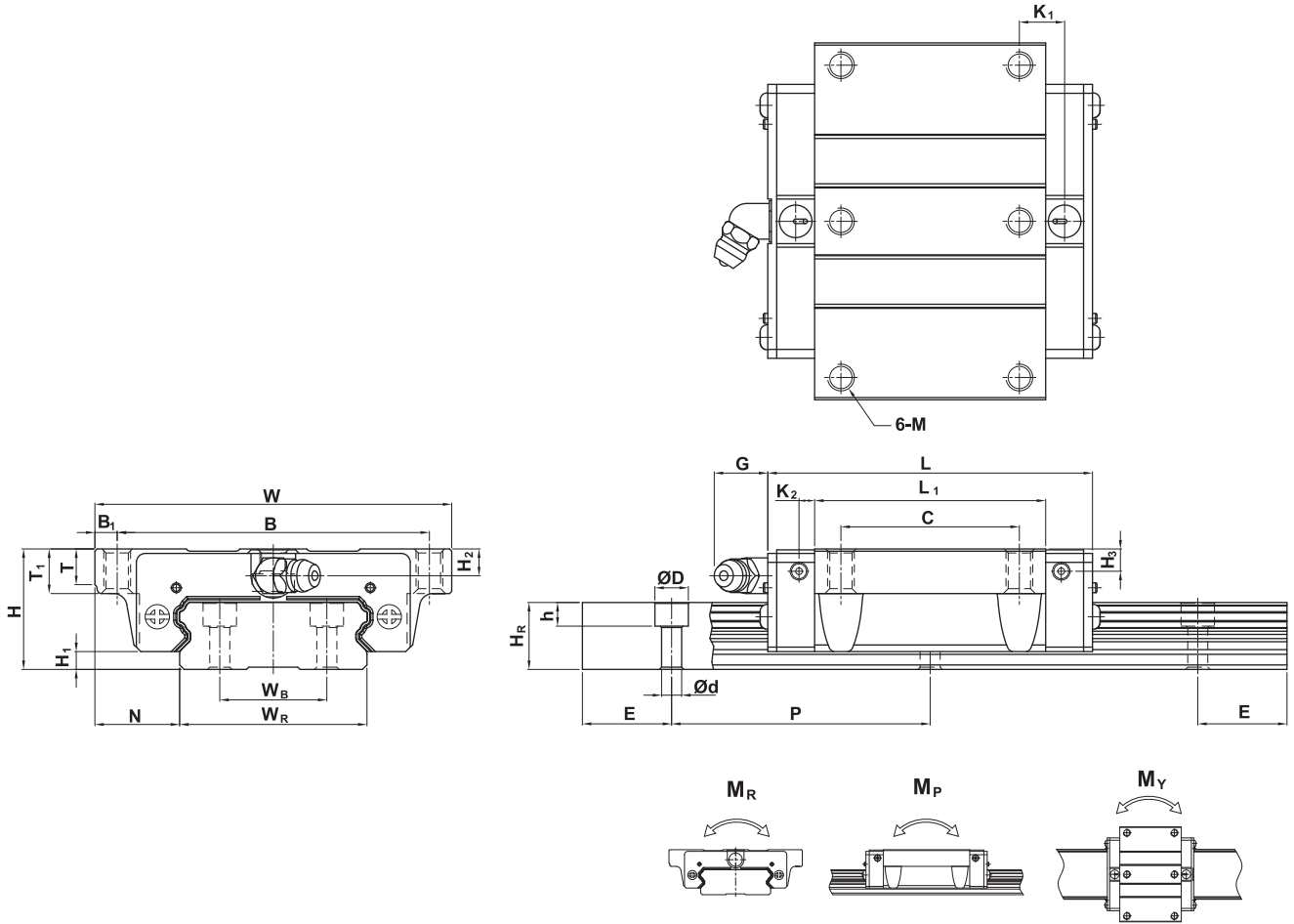
unit: mm

Item	WER27	WER35
Standard Length L(n)	220 (4)	280 (4)
	280 (5)	440 (6)
	340 (6)	600 (8)
	460 (8)	760 (10)
	640 (11)	1000 (13)
	820 (14)	1,640 (21)
	1,000 (17)	2,040 (26)
	1,240 (21)	2,520 (32)
	1,600 (27)	3,000 (38)
Pitch (P)	60	80
Distance to End (E _s)	20	20
Max. Standard Length	4,000 (67)	3,960 (50)
Max. Length	4,000	4,000

- Note :
1. Tolerance of E value for standard rail is 0.5~0.5 mm. Tolerance of E value for jointed rail is 0~-0.3 mm.
 2. Maximum standard length means the max. rail length with standard E value on both sides.
 3. If different E value is needed, please contact HIWIN.

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(2) WEW-CC



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	W _B	H _R	D	h	d	P	E	(mm)	C(kN)	C ₀ (kN)	M _R	M _p	M _Y	Block	Rail				
WEW27CC	27	4	19	80	70	5	40	51.8	72.8	10.15	3.5	12	M6	8	10	6	5	42	24	15	7.5	5.3	4.5	60	20	M4x16	12.4	21.6	0.47	0.17	0.17	0.43	4.8				
WEW35CC	35	4	25.5	120	107	6.5	60	77.6	102.6	13.35	5.25	12	M8	11.2	14	8	6.5	69	40	19	11	9	7	80	20	M6x20	29.8	49.4	1.6	0.67	0.67	1.26	9.9				
Note : 1 kgf = 9.81 N																																					

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