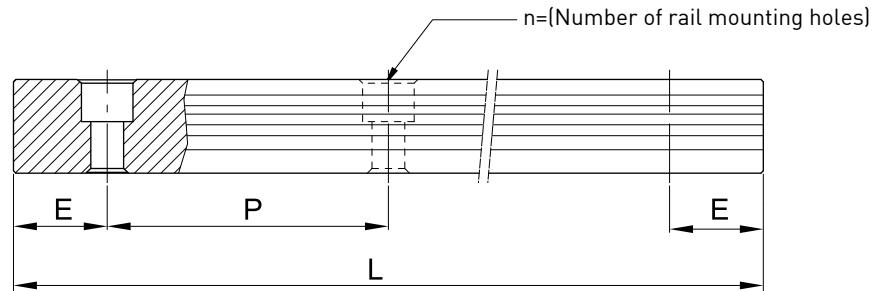


## 2-1-12 Standard and Maximum Lengths of Rail

HIWIN offers standard rail lengths for customer needs. For non-standard E-values, the recommended dimension should no greater than 1/2 of the pitch (P) dimension. This will prevent an unstable rail end.



$$L = (n - 1) \times P + 2 \times E \quad \text{Eq.2.1}$$

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 2-1-26 Rail Standard Length and Max. Length

unit: mm

| Item                              | HG15      | HG20       | HG25       | HG30       | HG35       | HG45       | HG55       | HG65       |
|-----------------------------------|-----------|------------|------------|------------|------------|------------|------------|------------|
| Standard Length L(n)              | 160 (3)   | 220 (4)    | 220 (4)    | 280 (4)    | 280 (4)    | 570 (6)    | 780 (7)    | 1,270 (9)  |
|                                   | 220 (4)   | 280 (5)    | 280 (5)    | 440 (6)    | 440 (6)    | 885 (9)    | 1,020 (9)  | 1,570 (11) |
|                                   | 280 (5)   | 340 (6)    | 340 (6)    | 600 (8)    | 600 (8)    | 1,200 (12) | 1,260 (11) | 2,020 (14) |
|                                   | 340 (6)   | 460 (8)    | 460 (8)    | 760 (10)   | 760 (10)   | 1,620 (16) | 1,500 (13) | 2,620 (18) |
|                                   | 460 (8)   | 640 (11)   | 640 (11)   | 1,000 (13) | 1,000 (13) | 2,040 (20) | 1,980 (17) |            |
|                                   | 640 (11)  | 820 (14)   | 820 (14)   | 1,640 (21) | 1,640 (21) | 2,460 (24) | 2,580 (22) |            |
|                                   | 820 (14)  | 1,000 (17) | 1,000 (17) | 2,040 (26) | 2,040 (26) | 2,985 (29) | 2,940 (25) |            |
|                                   |           | 1,240 (21) | 1,240 (21) | 2,520 (32) | 2,520 (32) |            |            |            |
| Pitch (P)                         | 60        | 60         | 60         | 80         | 80         | 105        | 120        | 150        |
| Distance to End (E <sub>s</sub> ) | 20        | 20         | 20         | 20         | 20         | 22.5       | 30         | 35         |
| Max. Standard Length              | 4,000(67) | 4,000 (67) | 4,000 (67) | 3,960 (50) | 3,960 (50) | 3,930 (38) | 3,900 (33) | 3,970 (27) |
| Max. Length                       | 4,000     | 4,000      | 4,000      | 4,000      | 4,000      | 4,000      | 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.

4. HGR15/HGR20/HGR25 of stainless steel is supplied with the maximum length of 2000mm.