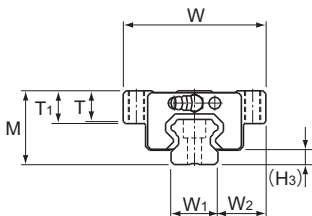


# Curved LM Guide Model HCR



| Model No.        | Outer dimensions |       |        | LM block dimensions |     |     |                |      |                |     |     |               | H <sub>3</sub> |
|------------------|------------------|-------|--------|---------------------|-----|-----|----------------|------|----------------|-----|-----|---------------|----------------|
|                  | Height           | Width | Length |                     |     |     |                |      |                |     |     | Grease nipple |                |
|                  | M                | W     | L      | B                   | C   | S   | L <sub>1</sub> | T    | T <sub>1</sub> | N   | E   |               |                |
| HCR 12A+60/100R  | 18               | 39    | 44.6   | 32                  | 18  | M4  | 30.5           | 4.5  | 5              | 3.4 | 3.5 | PB107         | 3.1            |
| HCR 15A+60/150R  | 24               | 47    | 54.5   | 38                  | 24  | M5  | 38.8           | 10.3 | 11             | 4.5 | 5.5 | PB1021B       | 4.8            |
| HCR 15A+60/300R  |                  |       | 55.5   |                     | 28  |     |                |      |                |     |     |               |                |
| HCR 15A+60/400R  | 36               | 70    | 55.8   | 57                  | 45  | M8  | 59.5           | 14.9 | 16             | 6   | 12  | B-M6F         | 7              |
| HCR 25A+60/500R  |                  |       | 81.6   |                     |     |     |                |      |                |     |     |               |                |
| HCR 25A+60/750R  |                  |       | 82.3   |                     |     |     |                |      |                |     |     |               |                |
| HCR 25A+60/1000R | 48               | 100   | 82.5   | 82                  | 58  | M10 | 80.4           | 19.9 | 21             | 8   | 12  | B-M6F         | 8.5            |
| HCR 35A+60/600R  |                  |       | 107.2  |                     |     |     |                |      |                |     |     |               |                |
| HCR 35A+60/800R  |                  |       | 107.5  |                     |     |     |                |      |                |     |     |               |                |
| HCR 35A+60/1000R |                  |       | 108.2  |                     |     |     |                |      |                |     |     |               |                |
| HCR 35A+60/1300R | 60               | 120   | 108.5  | 100                 | 70  | M12 | 98             | 23.9 | 25             | 10  | 16  | B-PT1/8       | 11.5           |
| HCR 45A+60/800R  |                  |       | 136.7  |                     |     |     |                |      |                |     |     |               |                |
| HCR 45A+60/1000R |                  |       | 137.3  |                     |     |     |                |      |                |     |     |               |                |
| HCR 45A+60/1200R |                  |       | 137.3  |                     |     |     |                |      |                |     |     |               |                |
| HCR 45A+60/1600R | 90               | 170   | 138    | 142                 | 106 | M16 | 147            | 34.9 | 37             | 19  | 16  | B-PT1/8       | 15             |
| HCR 65A+60/1000R |                  |       | 193.8  |                     |     |     |                |      |                |     |     |               |                |
| HCR 65A+60/1500R |                  |       | 195.4  |                     |     |     |                |      |                |     |     |               |                |
| HCR 65A+45/2000R |                  |       | 195.9  |                     |     |     |                |      |                |     |     |               |                |
| HCR 65A+45/2500R |                  |       | 196.5  |                     |     |     |                |      |                |     |     |               |                |
| HCR 65A+30/3000R |                  |       | 196.5  |                     |     |     |                |      |                |     |     |               |                |

## Model number coding

**HCR25A 2 UU C1 +60 / 1000R H 6 T**

Model number

Contamination protection accessory symbol

R-Guide center angle

LM rail radius (in mm)

Symbol for LM rail jointed use

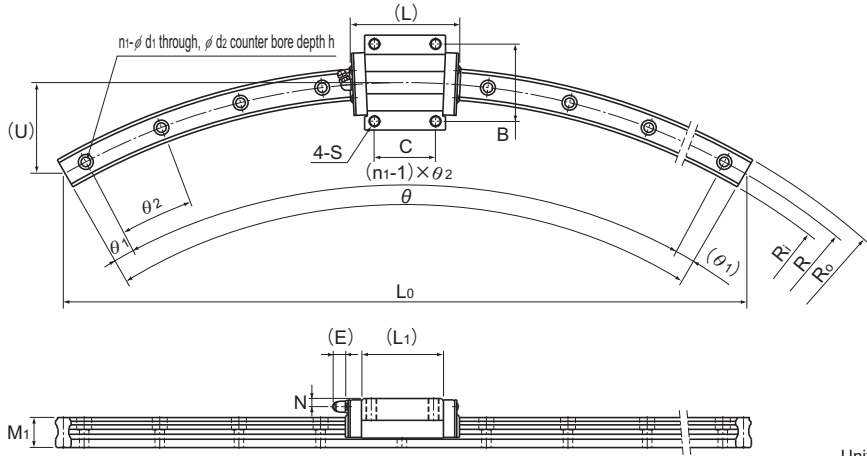
No. of LM blocks used on the same rail

Radial clearance symbol  
Normal (No symbol)  
Light preload (C1)

Accuracy symbol  
Normal grade (No Symbol)  
High accuracy grade (H)

Number of LM rail joints used on one axis

Note) See **A1-545** for contamination protection accessories, see **A1-75** for radial clearance. See **A1-81** for accuracy code. This is the number of LM rails used for one arc. Contact THK for details. When using joined LM rails for models HCR15 to 65, the end seal utilized for dust-proofing options will be a low-resistance end seal.



Unit: mm

| LM rail dimensions |                |                |                |      |                |                |                |                                     |                |    |                  |                  | Basic load rating |                | Static permissible moment kN·m* |               |                |               |                | Mass     |         |
|--------------------|----------------|----------------|----------------|------|----------------|----------------|----------------|-------------------------------------|----------------|----|------------------|------------------|-------------------|----------------|---------------------------------|---------------|----------------|---------------|----------------|----------|---------|
| R                  | R <sub>0</sub> | R <sub>i</sub> | L <sub>0</sub> | U    | W <sub>1</sub> | W <sub>2</sub> | M <sub>1</sub> | d <sub>1</sub> × d <sub>2</sub> × h | n <sub>1</sub> | θ° | θ <sub>1</sub> ° | θ <sub>2</sub> ° | C                 | C <sub>0</sub> | M <sub>A</sub>                  |               | M <sub>B</sub> |               | M <sub>C</sub> | LM block | LM rail |
|                    |                |                |                |      |                |                |                |                                     |                |    |                  |                  | kN                | kN             | 1 block                         | Double blocks | 1 block        | Double blocks | 1 block        | kg       | kg/m    |
| 100                | 106            | 94             | 100            | 13.4 | 12             | 13.5           | 11             | 3.5×6×5                             | 3              | 60 | 7                | 23               | 4.7               | 8.53           | 0.0409                          | 0.228         | 0.0409         | 0.228         | 0.0445         | 0.08     | 0.83    |
| 150                | 157.5          | 142.5          | 150            | 20.1 |                |                |                |                                     | 3              |    | 7                | 23               | 6.66              | 10.8           |                                 |               |                |               |                |          |         |
| 300                | 307.5          | 292.5          | 300            | 40   | 15             | 16             | 15             | 4.5×7.5×5.3                         | 5              | 60 | 6                | 12               | 8.33              | 13.5           | 0.0805                          | 0.457         | 0.0805         | 0.457         | 0.0844         | 0.2      | 1.5     |
| 400                | 407.5          | 392.5          | 400            | 54   |                |                |                |                                     | 7              |    | 3                | 9                | 8.33              | 13.5           |                                 |               |                |               |                |          |         |
| 500                | 511.5          | 488.5          | 500            | 67   |                |                |                |                                     | 9              |    | 2                | 7                |                   |                |                                 |               |                |               |                |          |         |
| 750                | 761.5          | 738.5          | 750            | 100  | 23             | 23.5           | 22             | 7×11×9                              | 12             | 60 | 2.5              | 5                | 19.9              | 34.4           | 0.307                           | 1.71          | 0.307          | 1.71          | 0.344          | 0.59     | 3.3     |
| 1000               | 1011.5         | 988.5          | 1000           | 134  |                |                |                |                                     | 15             |    | 2                | 4                |                   |                |                                 |               |                |               |                |          |         |
| 600                | 617            | 583            | 600            | 80   |                |                |                |                                     | 7              |    | 3                | 9                |                   |                |                                 |               |                |               |                |          |         |
| 800                | 817            | 783            | 800            | 107  | 34             | 33             | 29             | 9×14×12                             | 11             | 60 | 2.5              | 5.5              | 37.3              | 61.1           | 0.782                           | 3.93          | 0.782          | 3.93          | 0.905          | 1.6      | 6.6     |
| 1000               | 1017           | 983            | 1000           | 134  |                |                |                |                                     | 12             |    | 2.5              | 5                |                   |                |                                 |               |                |               |                |          |         |
| 1300               | 1317           | 1283           | 1300           | 174  |                |                |                |                                     | 17             |    | 2                | 3.5              |                   |                |                                 |               |                |               |                |          |         |
| 800                | 822.5          | 777.5          | 800            | 107  |                |                |                |                                     | 8              |    | 2                | 8                |                   |                |                                 |               |                |               |                |          |         |
| 1000               | 1022.5         | 977.5          | 1000           | 134  | 45             | 37.5           | 38             | 14×20×17                            | 10             | 60 | 3                | 6                | 60                | 95.6           | 1.42                            | 7.92          | 1.42           | 7.92          | 1.83           | 2.8      | 11      |
| 1200               | 1222.5         | 1177.5         | 1200           | 161  |                |                |                |                                     | 12             |    | 2.5              | 5                |                   |                |                                 |               |                |               |                |          |         |
| 1600               | 1622.5         | 1577.5         | 1600           | 214  |                |                |                |                                     | 15             |    | 2                | 4                |                   |                |                                 |               |                |               |                |          |         |
| 1000               | 1031.5         | 968.5          | 1000           | 134  |                |                |                |                                     | 8              | 60 | 2                | 8                |                   |                |                                 |               |                |               |                |          |         |
| 1500               | 1531.5         | 1468.5         | 1500           | 201  |                |                |                |                                     | 10             | 60 | 3                | 6                |                   |                |                                 |               |                |               |                |          |         |
| 2000               | 2031.5         | 1968.5         | 1531           | 152  | 63             | 53.5           | 53             | 18×26×22                            | 12             | 45 | 0.5              | 4                | 141               | 215            | 4.8                             | 23.5          | 4.8            | 23.5          | 5.82           | 8.5      | 22.5    |
| 2500               | 2531.5         | 2468.5         | 1913           | 190  |                |                |                |                                     | 13             | 45 | 1.5              | 3.5              |                   |                |                                 |               |                |               |                |          |         |
| 3000               | 3031.5         | 2968.5         | 1553           | 102  |                |                |                |                                     | 10             | 30 | 1.5              | 3                |                   |                |                                 |               |                |               |                |          |         |

Note) Static permissible moment\*

1 block: the static permissible moment with one LM block

Double blocks: static permissible moment when two LM blocks are in close contact with each other

Total block length L

: The total block length L shown in the table is the length with the dust proof parts, code UU or SS. If other contamination protection accessories or lubricant equipment are installed, the total block length will increase.

(See A1-519 or A1-541)

Please be aware that balls will fall out if the LM block is removed from the LM rail.

LM rail radii other than those shown in the table are also available. Contact THK for details.

The θ° in the table represents the maximum manufacturing angle. Exceeding this angle is normally done by using a joint; however, some products may have LM rails that exceed the maximum manufacturing angle. Contact THK for details.