

# Guide Rollers

V Groove 60°, V Groove 90°, Sheave (for Wire Cables)

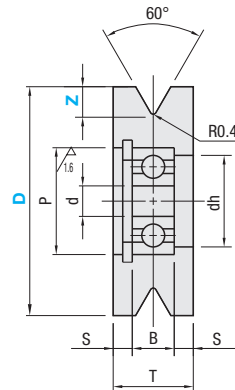
■ **Features:** Can be used for a various guides for rails and workpieces. For 60°= Wire, for 90°= L channel, for Sheaves = Wire Cable.



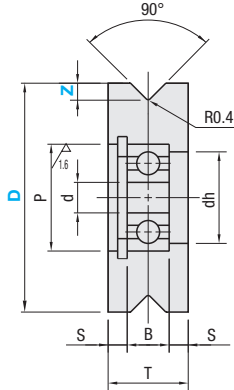
RoHS10

| Type          |                  |                | Body Material    | Surface Treatment          | Material        |       | Bearing Accuracy JIS B 1514, 0 Class<br>Bearings are press-fit. |
|---------------|------------------|----------------|------------------|----------------------------|-----------------|-------|-----------------------------------------------------------------|
| 60°: For Wire | 90°: For Channel | Retaining Ring |                  |                            | Bearing         |       |                                                                 |
| VMRN          | VMQN             | -              | EN 1.1191 Equiv. | -                          | Spring Steel    | Steel |                                                                 |
| VMRB          | VMQB             |                |                  | -                          | Spring Steel    |       |                                                                 |
| VMRG          | VMQG             |                |                  | -                          | Spring Steel    |       |                                                                 |
| VMRA          | -                |                |                  | Aluminum Alloy 5000 series | Stainless Steel |       |                                                                 |
| VMRP          | -                |                |                  | Polyacetal                 | Stainless Steel |       |                                                                 |
| VMRM          | -                |                |                  | Conductive MC Nylon        | Spring Steel    |       |                                                                 |
| -             | -                | SMRN           | MC Nylon         | -                          | Spring Steel    | -     |                                                                 |

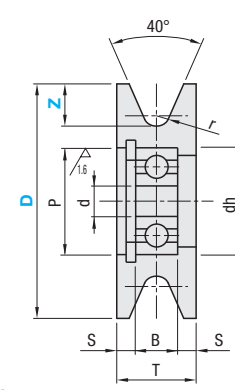
For Wire  
60°



For L Channel Track  
90°



Sheave (for Wire Cable)  
40°



6.3 / ( 1.6 / )

For bearing detailed dimensions, see P989.

| Part Number                                              |                     |                         | Z Groove Depth |   | d     | P   | dh | T  | S  | B   | r | Applicable Wire Cable Dia. | Bearing Used |        |        |        |
|----------------------------------------------------------|---------------------|-------------------------|----------------|---|-------|-----|----|----|----|-----|---|----------------------------|--------------|--------|--------|--------|
| Type                                                     | D                   | 60°, Sheave             | 90°            |   |       |     |    |    |    |     |   |                            |              |        |        |        |
| For Wire<br>VMRN<br>VMRB<br>VMRG<br>VMRA<br>VMRP<br>VMRM | For L Channel Track | Sheave (for Wire Cable) | 4              | 3 | 3     | 10  | 8  | 10 | 3  | 4   | - | -                          | 623ZZ        |        |        |        |
|                                                          |                     |                         |                |   | (20)  | 5   | 16 |    | 13 | 2.5 | 5 | -                          | -            | 625ZZ  |        |        |
|                                                          |                     |                         |                |   | (30)  | 6   | 19 |    | 16 | 12  | 3 | 6                          | -            | -      | 626ZZ  |        |
|                                                          |                     | 5                       | -              |   | 6     | 19  | 16 | 12 | 3  | 6   | - | -                          | 626ZZ        |        |        |        |
|                                                          |                     |                         |                |   | 8     | 24  | 21 | 14 |    | 8   | - | -                          | 628ZZ        |        |        |        |
|                                                          |                     |                         |                |   | (40)  | 8   | 24 | 21 |    | 14  | 3 | 8                          | -            | -      | 628ZZ  |        |
|                                                          |                     | 7                       | 5              |   | (50)  | 10  | 26 | 23 | 14 | 3   | 8 | -                          | -            | 6000ZZ |        |        |
|                                                          |                     |                         |                |   | *50   | 10  | 26 | 23 |    | 14  | 3 | 8                          | 2.2          | 4      | 6000ZZ |        |
|                                                          |                     |                         |                |   | 60    | 10  | 26 | 23 |    | 14  | 3 | 8                          | -            | -      |        |        |
|                                                          |                     | 10                      | -              |   | *60   | 10  | 26 | 23 | 16 | 4   | 8 | 3.3                        | 6            | 6000ZZ |        |        |
|                                                          |                     |                         |                |   | *60   | 10A | 10 | 26 | 23 | 18  | 5 | 8                          | 4.4          |        | 8      |        |
|                                                          |                     |                         |                |   | 60    | -   | 10 | 26 | 23 | 16  | 4 | 8                          | -            |        | -      |        |
|                                                          |                     | 11                      | -              |   | (60)  | 10  | 26 | 23 | 16 | 4   | 8 | -                          | -            | 6000ZZ |        |        |
|                                                          |                     |                         |                |   | *60   | -   | 12 | 28 | 25 | 20  | 6 | 8                          | 5.5          |        | 10     | 6001ZZ |
|                                                          |                     |                         |                |   | (100) | -   | 12 | 28 | 25 | 16  | 4 | 8                          | -            |        | -      |        |

⚙️ 90°: Channel Type are available in sizes in ( ) only.

🔗 For Sheave Type (for Wire Cables), only \* marked sizes are available.

 Ordering Example

Part Number

Groove Depth Z

VMRA40

SMRN50

VMQN40

-

5

-

9

-

5

| D   | Z Groove Depth |     | Unit Price                                |      |      |      |                                           |        |  |
|-----|----------------|-----|-------------------------------------------|------|------|------|-------------------------------------------|--------|--|
|     | 60° Sheave     | 90° | For Wire                                  |      |      |      | For L Channel Track                       | Sheave |  |
|     |                |     | VMRN (x1.0)<br>VMRB (x1.1)<br>VMRG (x1.2) | VMRA | VMRP | VMRM | VMQN (x1.0)<br>VMQB (x1.1)<br>VMQG (x1.2) | SMRN   |  |
| 20  | 4              | 3   |                                           |      |      |      |                                           | -      |  |
| 30  |                |     |                                           |      |      |      |                                           | -      |  |
| 40  |                |     |                                           |      |      |      |                                           | -      |  |
| 30  | 5              | -   |                                           |      |      |      |                                           | -      |  |
| 40  |                |     |                                           |      |      |      |                                           | -      |  |
| 40  |                |     |                                           |      |      |      |                                           | -      |  |
| 50  | 7              | 5   |                                           |      |      |      |                                           | -      |  |
| 50  |                |     |                                           |      |      |      |                                           | -      |  |
| 60  |                |     |                                           |      |      |      |                                           | -      |  |
| 60  | 9              | -   |                                           |      |      |      |                                           | -      |  |
| 60  |                |     |                                           |      |      |      |                                           | -      |  |
| 60  |                |     |                                           |      |      |      |                                           | -      |  |
| 60  | 10             | -   |                                           |      |      |      |                                           | -      |  |
| 60  |                |     |                                           |      |      |      |                                           | -      |  |
| 60  |                |     |                                           |      |      |      |                                           | -      |  |
| 60  | 10A            | -   |                                           |      |      |      |                                           | -      |  |
| 60  |                |     |                                           |      |      |      |                                           | -      |  |
| 60  |                |     |                                           |      |      |      |                                           | -      |  |
| 60  | 11             | 6   |                                           |      |      |      |                                           | -      |  |
| 60  |                |     |                                           |      |      |      |                                           | -      |  |
| 100 |                |     |                                           |      |      |      |                                           | -      |  |

⚠ The unit price for VMRB and VMQB is a multiplier (x1.1) applied to the price shown in the list. The unit price for VMRG and VMQG is a multiplier (x1.2) applied to the price shown in the list.

# Guide Rollers

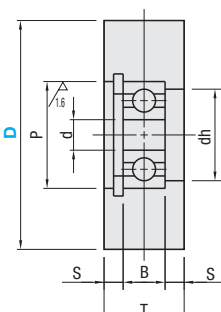
Flat, Double Flanged, Tapered



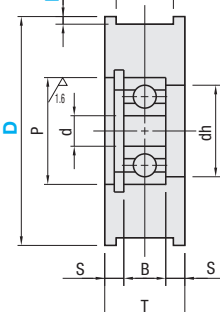
RoHS10

| Type  |                |         | Body Material              | Surface Treatment          | Material        |         | Bearing Accuracy JIS B 1514, 0 Class<br>Bearings are press-fit. |
|-------|----------------|---------|----------------------------|----------------------------|-----------------|---------|-----------------------------------------------------------------|
| Flat  | Double Flanged | Tapered |                            |                            | Retaining Ring  | Bearing |                                                                 |
| FTMRN | HMNRN          | TMRN    | EN 1.1191 Equiv.           | -                          | Spring Steel    | Steel   |                                                                 |
| FTMRB | -              | -       |                            | -                          | Spring Steel    |         |                                                                 |
| FTMRG | -              | -       |                            | -                          | Spring Steel    |         |                                                                 |
| FTMRA | HMRA           | -       | Aluminum Alloy 5000 series | Electroless Nickel Plating | Stainless Steel | Steel   |                                                                 |
| FTMRP | HMRP           | -       | Polyacetal                 | Clear Anodize              | Stainless Steel |         |                                                                 |

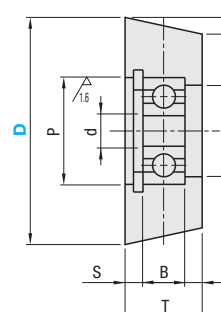
Flat



Double Flanged



Tapered



6.3 / ( 1.6 / )

For bearing detailed dimensions, see P989.

| Part Number                                       |       | Double Flanged |                   | Tapered           |    | d  | P  | dh | T  | S   | B | Bearing Used |  |
|---------------------------------------------------|-------|----------------|-------------------|-------------------|----|----|----|----|----|-----|---|--------------|--|
| Type                                              | D     | V Groove Width | F 0.5mm Increment | Z 0.5mm Increment |    |    |    |    |    |     |   |              |  |
| Flat<br>FTMRN<br>FTMRB<br>FTMRG<br>FTMRA<br>FTMRP | 15    | 4              | 0.5~2.0           | -                 | 3  | 10 | 8  | 9  | 10 | 2.5 | 4 | 623ZZ        |  |
|                                                   | 20    |                |                   |                   | 4  | 13 | 11 | 11 |    |     | 5 | 624ZZ        |  |
|                                                   | 30    |                |                   |                   | 5  | 16 | 13 | 13 |    |     | 6 | 625ZZ        |  |
|                                                   | (30)  | 5              | 0.5~2.0           | -                 | 6  | 19 | 16 | 12 | 10 | 2.5 | 6 | 626ZZ        |  |
|                                                   | *20   |                |                   |                   | 4  | 13 | 11 | 11 |    |     | 5 | 624ZZ        |  |
|                                                   | 30    |                |                   |                   | 5  | 16 | 13 | 13 |    |     | 6 | 625ZZ        |  |
|                                                   | 40    | 6              | 0.5~2.0           | -                 | 6  | 19 | 16 | 11 | 11 | 2.5 | 6 | 626ZZ        |  |
|                                                   | (40)  |                |                   |                   | 8  | 24 | 21 | 14 |    |     | 8 | 628ZZ        |  |
|                                                   | *30   |                |                   |                   | 5  | 16 | 13 | 10 |    |     | 5 | 625ZZ        |  |
|                                                   | 40    | 8              | 0.5~2.0           | -                 | 6  | 19 | 16 | 11 | 11 | 2.5 | 6 | 626ZZ        |  |
|                                                   | (40)  |                |                   |                   | 8  | 24 | 21 | 14 |    |     | 8 | 628ZZ        |  |
|                                                   | *30   |                |                   |                   | 5  | 16 | 13 | 10 |    |     | 5 | 625ZZ        |  |
|                                                   | 40    | 10             | 0.5~2.0           | -                 | 6  | 19 | 16 | 11 | 11 | 2.5 | 6 | 626ZZ        |  |
|                                                   | 50    |                |                   |                   | 8  | 24 | 21 | 14 |    |     | 8 | 628ZZ        |  |
|                                                   | (50)  |                |                   |                   | 10 | 26 | 23 | 14 |    |     | 3 | 6000ZZ       |  |
|                                                   | *40   | 12             | 0.5~2.0           | -                 | 6  | 19 | 16 | 11 | 11 | 2.5 | 6 | 626ZZ        |  |
|                                                   | *50   |                |                   |                   | 8  | 24 | 21 | 14 |    |     | 3 | 628ZZ        |  |
|                                                   | (60)  |                |                   |                   | 10 | 26 | 23 | 14 |    |     | 8 | 6000ZZ       |  |
|                                                   | (100) | -              | -                 | -                 | 12 | 28 | 25 | 16 | 4  | -   | - | 6001ZZ       |  |

 Ordering Example

Part Number

V Groove Width

F

Z

FTMRN40

HMRA30

TMRN20

-

4

-

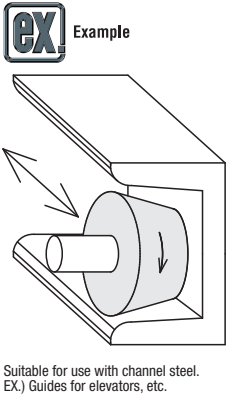
F0.5

-

Z3.0

| D   | V Groove Width | Unit Price                                   |       |       |                |      |      |         |
|-----|----------------|----------------------------------------------|-------|-------|----------------|------|------|---------|
|     |                | Flat                                         |       |       | Double Flanged |      |      | Tapered |
|     |                | FTMRN (x1.0)<br>FTMRB (x1.1)<br>FTMRG (x1.2) | FTMRA | FTMRP | HMNRN          | HMRA | HMRP | TMRN    |
| 15  | 4              | -                                            | -     | -     |                |      |      | -       |
| 20  |                | -                                            | -     | -     |                |      |      |         |
| 30  |                | -                                            | -     | -     |                |      |      |         |
| 20  | 5              | -                                            | -     | -     |                |      |      | -       |
| 30  |                | -                                            | -     | -     |                |      |      |         |
| 40  |                | -                                            | -     | -     |                |      |      |         |
| 30  | 6              | -                                            | -     | -     |                |      |      | -       |
| 40  |                | -                                            | -     | -     |                |      |      |         |
| 50  |                | -                                            | -     | -     |                |      |      |         |
| 40  | 8              | -                                            | -     | -     |                |      |      | -       |
| 50  |                | -                                            | -     | -     |                |      |      |         |
| 60  |                | -                                            | -     | -     |                |      |      |         |
| 60  | 10             | -                                            | -     | -     |                |      |      | -       |
| 60  |                | -                                            | -     | -     |                |      |      |         |
| 100 |                | -                                            | -     | -     |                |      |      |         |

⚠ The unit price for FTMRB is a multiplier (x1.1) applied to the price shown in the list. The unit price for FTMRG is a multiplier (x1.2) applied to the price shown in the list.



Suitable for use with channel steel.  
EX) Guides for elevators, etc.