

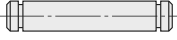









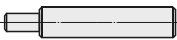







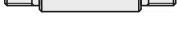



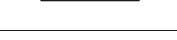
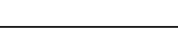


Selection List for Rotary Shafts

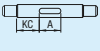
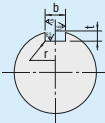

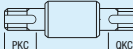
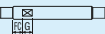

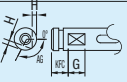
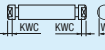

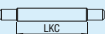
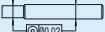
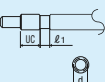
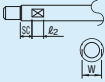
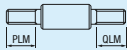
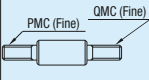
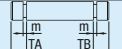


Rotary Shaft Alterations - Overview

Selection List for Rotary Shaft Shapes

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|  | P.833 |
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Rotary Shaft Alterations - Overview: For information about whether any alteration is available or not for the current rotary shaft, see the relevant product pages.

| Alterations | | | code | Dimension Increment | Ordering Code Example | Spec. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|------------------------------|--|--|--|------------|---------------------|------------------|-------------|---------|-------|-----------------|--------|---------|-----------|------------------|----|---------|-----|---------------------|----|----------|-----|----------------------|-------|-----------|----|----------------------|-------|------------|-------|----------------------|-----------|-------------|---|---|-----|-------|----|--------|-----|-------|-------|----|----|-----|-------|----|--------|-----|----------|--|--|--|--|
| Keyway | Alteration at one place |  | KC | KC, A = 1mm Increment | KC50-A10 | <p>⚡ A, E, C≤100 ⚡ If 3 keyways are required, use both KC and WKC. ⚡ Not applicable to D=2-5.</p> <div><table><tr><th>Shaft Dia.</th><th>Reference Dimension</th><th>b Tolerance (N9)</th><th>t Tolerance</th><th>r</th></tr><tr><td>6-7</td><td>2</td><td>-0.004</td><td>1.2</td><td rowspan="2">0.08-0.16</td></tr><tr><td>8-10</td><td>3</td><td>-0.029</td><td>1.8</td></tr><tr><td>11-12</td><td>4</td><td>0</td><td>2.5</td><td rowspan="2">+0.10</td></tr><tr><td>13-17</td><td>5</td><td>0</td><td>3.0</td></tr><tr><td>18-22</td><td>6</td><td>-0.03</td><td>3.5</td><td rowspan="2">0.16-0.25</td></tr><tr><td>23-30</td><td>8</td><td>0</td><td>4.0</td></tr><tr><td>31-38</td><td>10</td><td>-0.036</td><td>5.0</td><td rowspan="2">+0.20</td></tr><tr><td>39-44</td><td>12</td><td>0</td><td>5.0</td></tr><tr><td>45-50</td><td>14</td><td>-0.043</td><td>5.5</td><td>0.25-0.4</td></tr></table></div> | Shaft Dia. | Reference Dimension | b Tolerance (N9) | t Tolerance | r | 6-7 | 2 | -0.004 | 1.2 | 0.08-0.16 | 8-10 | 3 | -0.029 | 1.8 | 11-12 | 4 | 0 | 2.5 | +0.10 | 13-17 | 5 | 0 | 3.0 | 18-22 | 6 | -0.03 | 3.5 | 0.16-0.25 | 23-30 | 8 | 0 | 4.0 | 31-38 | 10 | -0.036 | 5.0 | +0.20 | 39-44 | 12 | 0 | 5.0 | 45-50 | 14 | -0.043 | 5.5 | 0.25-0.4 | | | | |
| | Shaft Dia. | Reference Dimension | b Tolerance (N9) | t Tolerance | r | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6-7 | 2 | -0.004 | 1.2 | 0.08-0.16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8-10 | 3 | -0.029 | 1.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11-12 | 4 | 0 | 2.5 | +0.10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13-17 | 5 | 0 | 3.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18-22 | 6 | -0.03 | 3.5 | 0.16-0.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23-30 | 8 | 0 | 4.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 31-38 | 10 | -0.036 | 5.0 | +0.20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 39-44 | 12 | 0 | 5.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 45-50 | 14 | -0.043 | 5.5 | 0.25-0.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alteration at two places |  | WKC | WKC, C, K, E = 1mm Increment | WKC50-C8-K40-E10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shaft End Keyway |  | PKC QKC | PKC, QKC = 1mm Increment | PKC10, QKC15 | <p>⚡ PKC, QKC≤50PKC(QKC)≤F(T) ⚡ Not applicable to P, Q=5 or less. ⚡ Keyway(s) and set screw flats are added in the same plane. When the distance of the alterations are over 500mm, ±2 degree phase differential may occur.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Set Screw Flat | Alteration at one place |  | FC | FC, G = 1mm Increment | FC10-G3 | <p>⚡ G, J, V≤50 ⚡ Keyway(s) and set screw flats are added in the same plane. When the distance of the alterations are over 500mm, ±2 degree phase differential may occur.</p> <table><tr><th>D</th><th>H</th></tr><tr><td>3-5</td><td>0.5</td></tr><tr><td>6-17</td><td>1</td></tr><tr><td>18-40</td><td>2</td></tr><tr><td>50</td><td>3</td></tr></table> | D | H | 3-5 | 0.5 | 6-17 | 1 | 18-40 | 2 | 50 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | D | H | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-5 | 0.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6-17 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18-40 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alteration at two places |  | WFC | WFC, J, W, V = 1mm Increment | WFC10-J3-W10-V3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 Set Screw Flats | 2 Set Screw Flats (Angle Specified) |  | KFC | KFC, G = 1mm Increment AG = 15° Increment | KFC10-G3-A90 | <p>Adds a set screw flat at any desired angle besides the datum plane (0°). ⚡ G≤50 ⚡ Not applicable to D2 and D2.5. ⚡ When combined with other alterations, ±2 degree phase differential may occur.</p> <table><tr><th>D</th><th>H</th></tr><tr><td>3-5</td><td>0.5</td></tr><tr><td>6-17</td><td>1</td></tr><tr><td>18-40</td><td>2</td></tr><tr><td>50</td><td>3</td></tr></table> | D | H | 3-5 | 0.5 | 6-17 | 1 | 18-40 | 2 | 50 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | D | H | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3-5 | 0.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6-17 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18-40 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Both Ends 2 Set Screw Flats (Angle Specified) |  | KWC | KWC = 1mm Increment | KWC20 | <p>Adds 2 Set Screw Flats at both ends. ⚡ KWC<B-m, S-m ⚡ L≤680 is applicable. ⚡ Not applicable for D dimensions other than indicated on the right</p> <table><tr><th>D</th><th>W</th><th>D</th><th>W</th></tr><tr><td>8</td><td>7</td><td>25</td><td>20</td></tr><tr><td>10</td><td>8</td><td>30</td><td>25</td></tr><tr><td>12</td><td>9</td><td>35</td><td>30</td></tr><tr><td>15</td><td>12</td><td>40</td><td>35</td></tr><tr><td>20</td><td>16</td><td>50</td><td>45</td></tr></table> | D | W | D | W | 8 | 7 | 25 | 20 | 10 | 8 | 30 | 25 | 12 | 9 | 35 | 30 | 15 | 12 | 40 | 35 | 20 | 16 | 50 | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | W | D | W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 7 | 25 | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 8 | 30 | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 9 | 35 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 12 | 40 | 35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 16 | 50 | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Configure Chamfer Depth |  | WC | WC = 0.1mm Increment | WC6.8 | <p>Chamfering depth can be specified in 0.1mm increments. ⚡ Applicable only when KWC alteration is performed. ⚡ Applicable to D8 or more.</p> <table><tr><th>D</th><th>WC</th><th>D</th><th>WC</th></tr><tr><td>8</td><td>4.0-6.9</td><td>25</td><td>17.0-19.9</td></tr><tr><td>10</td><td>5.0-7.9</td><td>30</td><td>22.0-24.9</td></tr><tr><td>12</td><td>6.0-8.9</td><td>35</td><td>27.0-29.9</td></tr><tr><td>15</td><td>9.0-11.9</td><td>40</td><td>32.0-34.9</td></tr><tr><td>20</td><td>13.0-15.9</td><td>50</td><td>42.0-44.9</td></tr></table> | D | WC | D | WC | 8 | 4.0-6.9 | 25 | 17.0-19.9 | 10 | 5.0-7.9 | 30 | 22.0-24.9 | 12 | 6.0-8.9 | 35 | 27.0-29.9 | 15 | 9.0-11.9 | 40 | 32.0-34.9 | 20 | 13.0-15.9 | 50 | 42.0-44.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | WC | D | WC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 4.0-6.9 | 25 | 17.0-19.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 5.0-7.9 | 30 | 22.0-24.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 6.0-8.9 | 35 | 27.0-29.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 9.0-11.9 | 40 | 32.0-34.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 13.0-15.9 | 50 | 42.0-44.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L Dimension Tolerance |  | LKC | - | LKC | <p>Changes L dimension tolerance. ⚡ L<500 -> L±0.05 ⚡ L≥500 -> L±0.1</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Concentricity |  | CKC | - | CKC | <p>Changes the concentricity to 0.02. ⚡ Applicable within dimension L range in the table shown on the right. ⚡ Not applicable to D part of h9 (Cold-drawn).</p> <table><tr><th>D</th><th>Lmax</th></tr><tr><td>6-22</td><td>450</td></tr><tr><td>25-50</td><td>600</td></tr></table> | D | Lmax | 6-22 | 450 | 25-50 | 600 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | Lmax | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6-22 | 450 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25-50 | 600 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Slit Cam Groove |  | UC | UC = 1mm Increment | UC10 | <p>Adds a slit cam groove. ⚡ UC+ℓ1≤L ⚡ UC≥1 ⚡ Not applicable to D2 and D2.5. ⚡ Not applicable to D13 or more.</p> <table><tr><th>D</th><th>d</th><th>ℓ1</th></tr><tr><td>3</td><td>2</td><td rowspan="4">4</td></tr><tr><td>4</td><td>3</td></tr><tr><td>5</td><td>4</td></tr><tr><td>6</td><td>5</td></tr><tr><td>8</td><td>7</td><td rowspan="2">5</td></tr><tr><td>10</td><td>8</td></tr><tr><td>12</td><td>10</td><td></td></tr></table> | D | d | ℓ1 | 3 | 2 | 4 | 4 | 3 | 5 | 4 | 6 | 5 | 8 | 7 | 5 | 10 | 8 | 12 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | d | ℓ1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 2 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 7 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wrench Flats |  | SC | SC = 1mm Increment | SC10 | <p>Adds a wrench flat. ⚡ SC+ℓ2≤L ⚡ SC=0 or SC≥1 ⚡ Not applicable to D2 and D2.5. ⚡ Keyway(s) and set screw flats are added in the same plane. When the distance of the alterations are over 500mm, ±2 degree phase differential may occur.</p> <table><tr><th>D</th><th>W</th><th>ℓ2</th><th>D</th><th>W</th><th>ℓ2</th></tr><tr><td>6</td><td>5</td><td rowspan="2">8</td><td>30</td><td>27</td><td rowspan="2">15</td></tr><tr><td>8</td><td>7</td><td>35</td><td>30</td></tr><tr><td>10</td><td>8</td><td></td><td>40</td><td>36</td><td></td></tr><tr><td>12</td><td>13</td><td rowspan="2">10</td><td>50</td><td>41</td><td rowspan="2">20</td></tr><tr><td>15</td><td>16</td><td></td><td></td><td></td></tr><tr><td>17</td><td>18</td><td></td><td></td><td></td><td></td></tr><tr><td>20</td><td>22</td><td></td><td></td><td></td><td></td></tr><tr><td>25</td><td>22</td><td></td><td></td><td></td><td></td></tr></table> | D | W | ℓ2 | D | W | ℓ2 | 6 | 5 | 8 | 30 | 27 | 15 | 8 | 7 | 35 | 30 | 10 | 8 | | 40 | 36 | | 12 | 13 | 10 | 50 | 41 | 20 | 15 | 16 | | | | 17 | 18 | | | | | 20 | 22 | | | | | 25 | 22 | | | | |
| D | W | ℓ2 | D | W | ℓ2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 5 | 8 | 30 | 27 | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 7 | | 35 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 8 | | 40 | 36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 13 | 10 | 50 | 41 | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Left-hand Thread / Thread |  | PLM QLM | - | PLM (QLM) | <p>Changes the threads on shaft end P(Q) to Left-hand Thread. ⚡ Applicable to Both Ends Threaded Type only. ⚡ Combination with PMC and QMC is not applicable.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fine Thread |  | PMC QMC | - | PMC20 (QMC16) | <p>Changes threads to Fine Thread in the table shown on the right. ⚡ P (Q) dimension is the same as PMC (QMC). ⚡ Use PMC (QMC) to specify P (Q) dimension.</p> <table><tr><th>D</th><th>PMC, QMC</th><th>D</th><th>PMC, QMC</th></tr><tr><td>6</td><td>3 4 5</td><td>33</td><td>6 8 10 12 15 17</td></tr><tr><td>8</td><td>3 4 5 6</td><td>25</td><td>8 10 12 15 17 20</td></tr><tr><td>10</td><td>4 5 6 8</td><td>30</td><td>8 10 12 15 17 20 25</td></tr><tr><td>12</td><td>5 6 8 10</td><td>35</td><td>10 12 15 17 20 25 30</td></tr><tr><td>15</td><td>6 8 10 12</td><td>40</td><td>12 15 17 20 25 30 35</td></tr><tr><td>17</td><td>8 10 12 15</td><td>50</td><td>15 17 20 25 30 35 40</td></tr><tr><td>20</td><td>10 12 15 17</td><td></td><td></td></tr></table> <p>ℓ1: 0.5, 0.7, 1.0 ℓ2: 0.5, 0.7, 1.0, 1.5</p> | D | PMC, QMC | D | PMC, QMC | 6 | 3 4 5 | 33 | 6 8 10 12 15 17 | 8 | 3 4 5 6 | 25 | 8 10 12 15 17 20 | 10 | 4 5 6 8 | 30 | 8 10 12 15 17 20 25 | 12 | 5 6 8 10 | 35 | 10 12 15 17 20 25 30 | 15 | 6 8 10 12 | 40 | 12 15 17 20 25 30 35 | 17 | 8 10 12 15 | 50 | 15 17 20 25 30 35 40 | 20 | 10 12 15 17 | | | | | | | | | | | | | | | | | | | | | |
| D | PMC, QMC | D | PMC, QMC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 3 4 5 | 33 | 6 8 10 12 15 17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 3 4 5 6 | 25 | 8 10 12 15 17 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 4 5 6 8 | 30 | 8 10 12 15 17 20 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 5 6 8 10 | 35 | 10 12 15 17 20 25 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 6 8 10 12 | 40 | 12 15 17 20 25 30 35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | 8 10 12 15 | 50 | 15 17 20 25 30 35 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 10 12 15 17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Retaining Ring Groove |  | TA TB | TA, TB = 1mm Increment | TA10-TB10 | <p>Adds a retaining ring groove. (Applicable retaining rings are included.) ⚡ 4<TA, TB<L/2 ⚡ For dimensions of the retaining ring groove, see P.820</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Slit Added |  | MM | - | MM | <p>Slot is added to D dimensioned section. ⚡ When specified together with WC, in-plane interface is not available. ⚡ Not applicable to D35 or more.</p> <table><tr><th>D</th><th>N</th><th>V</th></tr><tr><td>6-13</td><td>1.2</td><td>1.5</td></tr><tr><td>15-20</td><td>2.0</td><td>2.5</td></tr><tr><td>22-30</td><td>3.0</td><td>3.8</td></tr></table> | D | N | V | 6-13 | 1.2 | 1.5 | 15-20 | 2.0 | 2.5 | 22-30 | 3.0 | 3.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | N | V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6-13 | 1.2 | 1.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15-20 | 2.0 | 2.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22-30 | 3.0 | 3.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Undercut Dimensions |  | PC QC | - | PC (QC) | <p>PC, QC: Adds an undercut on P and Q. ⚡ For undercut dimension details, refer to P.820. ⚡ F-B≤Mx2 ⚡ Not applicable when D=P or D=Q.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |