

# Locating Pins (Large Flat Head)

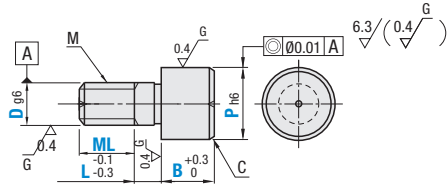
with Threaded Shank



## P Tolerance Table

| P           | h6          |
|-------------|-------------|
| 3.50-6.00   | 0<br>-0.008 |
| 6.01-10.00  | 0<br>-0.009 |
| 10.01-18.00 | 0<br>-0.011 |
| 18.01-30.00 | 0<br>-0.013 |

| Material No. | Material                       | Surface Treatment   | Hardness   | Type         |                |                      |                          |
|--------------|--------------------------------|---------------------|--|--------------|----------------|----------------------|--------------------------|
|              |                                |                     |  | P Selectable | P Configurable | P, L, B Configurable | P, L, B, ML Configurable |
| (1)          | O1 Tool Steel Equivalent       | —                   | Treated Hardness: 60-63 HRC min.                       | JPFNB        | JPFNA          | FPFNA                | FPFNLA                   |
| (2)          | O1 Tool Steel Equivalent       | Hard Chrome Plating | Hardness: 50-55 HRC min. Plating Hardness: 750 HV min. | —            | GJPFNA         | GFPFNA               | GFPFNLA                  |
| (3)          | SKS3 Tool Steel or Equivalent  | —                   | —  | —            | BJPFNA         | BFPFNA               | —                        |
| (4)          | 304 Stainless Steel Equivalent | —                   | —  | SJPFNB       | SJPFNA         | SFPFNA               | SFPFNLA                  |
| (6)          | 440C or 420 Stainless Steel    | —                   | Treated Hardness: 50-55 HRC min.                       | CJPFNB       | CJPFNA         | CFPFNA               | CFPFNLA                  |



④ 440C or 420 Stainless Steel has an identification groove on D part.

## P Selectable

| Part Number Type | D | D Tolerance g6   | P Selection | L | B | C   | M (Coarse) | ML  |
|------------------|---|------------------|-------------|---|---|-----|------------|-----|
|                  |   |                  |             |   |   |     |            |     |
|                  | 4 | -0.004<br>-0.012 | 5 6 8       | 3 | 4 | 1   | M4         | 6   |
|                  | 5 | -0.004<br>-0.012 | 6 8 9       | 3 | 5 | 1   | M5         | 7.5 |
|                  | 6 | -0.005<br>-0.014 | 8 9 10      | 3 | 6 | 1.5 | M6         | 9   |
|                  | 8 | -0.005<br>-0.014 | 9 10 12 13  | 5 | 6 | 1.5 | M8         | 12  |

## P Configurable

| Part Number Type | D  | D Tolerance g6   | P 0.01 mm Increment | L  | B  | C   | M (Coarse) | ML  |
|------------------|----|------------------|---------------------|----|----|-----|------------|-----|
|                  |    |                  |                     |    |    |     |            |     |
|                  | 4  | -0.004<br>-0.012 | 4.50-7.00           | 3  | 4  | 1   | M4         | 6   |
|                  | 5  | -0.004<br>-0.012 | 5.50-8.00           | 3  | 5  | 1   | M5         | 7.5 |
|                  | 6  | -0.005<br>-0.014 | 6.50-10.00          | 3  | 6  | 1.5 | M6         | 9   |
|                  | 8  | -0.005<br>-0.014 | 9.00-13.00          | 5  | 6  | 1.5 | M8         | 12  |
|                  | 10 | -0.006<br>-0.017 | 11.00-15.00         | 5  | 10 | 2   | M10        | 15  |
|                  | 12 | -0.006<br>-0.017 | 13.00-16.00         | 8  | 20 | 2   | M12        | 18  |
|                  | 16 | -0.007<br>-0.020 | 17.00-25.00         | 8  | 25 | 3   | M16        | 24  |
|                  | 20 | -0.007<br>-0.020 | 22.00-30.00         | 10 | 30 | 3   | M20        | 30  |

## P, L & B Configurable

| Part Number Type | D  | D Tolerance g6   | P 0.01 mm Increment | L 1 mm Increment | B 0.1 mm Increment | C   | M (Coarse) | ML  |
|------------------|----|------------------|---------------------|------------------|--------------------|-----|------------|-----|
|                  |    |                  |                     |                  |                    |     |            |     |
|                  | 4  | -0.004<br>-0.012 | 4.50-7.00           | 0-8              | 4.0-10.0           | 1   | M4         | 6   |
|                  | 5  | -0.004<br>-0.012 | 5.50-8.00           | 0-10             | 4.0-10.0           | 1   | M5         | 7.5 |
|                  | 6  | -0.005<br>-0.014 | 6.50-10.00          | 0-10             | 4.0-12.0           | 1   | M6         | 9   |
|                  | 8  | -0.005<br>-0.014 | 9.00-13.00          | 0-10             | 5.0-15.0           | 1.5 | M8         | 12  |
|                  | 10 | -0.006<br>-0.017 | 11.00-15.00         | 0-15             | 6.0-20.0           | 2   | M10        | 15  |
|                  | 12 | -0.006<br>-0.017 | 13.00-16.00         | 0-15             | 6.0-20.0           | 2   | M12        | 18  |
|                  | 16 | -0.007<br>-0.020 | 17.00-25.00         | 0-20             | 7.0-20.0           | 3   | M16        | 24  |
|                  | 20 | -0.007<br>-0.020 | 22.00-30.00         | 0-20             | 10.0-20.0          | 3   | M20        | 30  |

# Locating Pins (Large Flat Head)

with Threaded Shank, *continued*

## P, L, B & ML Configurable Thread Length (ML) is Configurable Between Mx1-Mx3 (Max.)

| Part Number Type | D  | D Tolerance g6   | P 0.01 mm Increment | L 1 mm Increment | B 0.1 mm Increment | ML 1 mm Increment | C   | M (Coarse) |
|------------------|----|------------------|---------------------|------------------|--------------------|-------------------|-----|------------|
|                  |    |                  |                     |                  |                    |                   |     |            |
|                  | 4  | -0.004<br>-0.012 | 4.50-7.00           | 0-8              | 4.0-10.0           | 4-12              | 1   | M4         |
|                  | 5  | -0.004<br>-0.012 | 5.50-8.00           | 0-10             | 4.0-10.0           | 5-15              | 1   | M5         |
|                  | 6  | -0.005<br>-0.014 | 6.50-10.00          | 0-10             | 4.0-12.0           | 6-18              | 1.5 | M6         |
|                  | 8  | -0.005<br>-0.014 | 9.00-13.00          | 0-10             | 5.0-15.0           | 8-24              | 1.5 | M8         |
|                  | 10 | -0.006<br>-0.017 | 11.00-15.00         | 0-15             | 6.0-20.0           | 10-30             | 2   | M10        |
|                  | 12 | -0.006<br>-0.017 | 13.00-16.00         | 0-15             | 6.0-20.0           | 12-30             | 2   | M12        |
|                  | 16 | -0.007<br>-0.020 | 17.00-25.00         | 0-20             | 7.0-20.0           | 16-40             | 3   | M16        |
|                  | 20 | -0.007<br>-0.020 | 22.00-30.00         | 0-20             | 10.0-20.0          | 20-40             | 3   | M20        |

\* The tightening torque (ref. value) for hardened products is strength class 8.8. (See technical data on MISUMI 2019 catalog P.4015).

\* Not applicable when using locking adhesives or lock washers.



Part Number Example

|             |   |        |   |    |   |      |   |     |
|-------------|---|--------|---|----|---|------|---|-----|
| Part Number | - | P      | - | L  | - | B    | - | ML  |
| JPFNA3      | - | 5.20   | - |    | - |      | - |     |
| FPFNA5      | - | P7.80  | - | L8 | - | B4.0 | - |     |
| FPFNLA8     | - | P10.00 | - | L5 | - | B5.0 | - | ML8 |



Part Number Alterations

|             |   |        |   |    |   |      |   |                    |
|-------------|---|--------|---|----|---|------|---|--------------------|
| Part Number | - | P      | - | L  | - | B    | - | (RC, CN, RAC, LAC) |
| FPFNA10     | - | P12.00 | - | L5 | - | B9.0 | - | LAC                |

| Alterations | Spherical Tip   | C Chamfered Size   | Hex Socket Machining  | Wrench Hole Machining |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
|-------------|---|--|---|-----------------------|----------------------|--|--------------------|--|---|---|---|--|---|------|---|---|--|---|-------|-----|---|--|----|-------|---|---|--|----|-------|---|---|--|----|-------|---|---|--|----|-------|--|--|--|--|---|----------------------|-----------------------|--|---|---|---|------|-----------|---|---|------|-------------|-----|----|------|--------|---|----|------|--|--|----|-------|--|--|----|-------|--|--|
|             | Code  | RC<br>(R0.5)   | C0.5 or less  | RAC                   | LAC                  |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| Spec.       | Changes the relief to R0.5.<br>Ordering Code: RC<br>Ⓢ P-D≥2<br>ⓧ Combination with RAC and LAC is not available. | Changes C Chamfering at P dimension part to 0.5 or less. | Machines hex socket. Ordering Code: RAC<br><table border="1"> <thead> <tr> <th rowspan="2">D</th> <th colspan="2">Applicable Dimension</th> <th colspan="2">Hex Hole Dimension</th> </tr> <tr> <th>B</th> <th>E</th> <th>S</th> <th></th> </tr> </thead> <tbody> <tr> <td>6</td> <td>8.0~</td> <td>2</td> <td>3</td> <td></td> </tr> <tr> <td>8</td> <td>12.5~</td> <td>2.5</td> <td>4</td> <td></td> </tr> <tr> <td>10</td> <td>13.0~</td> <td>3</td> <td>5</td> <td></td> </tr> <tr> <td>12</td> <td>16.0~</td> <td>4</td> <td>6</td> <td></td> </tr> <tr> <td>16</td> <td>20.0~</td> <td>5</td> <td>8</td> <td></td> </tr> <tr> <td>20</td> <td>20.0~</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | D                     | Applicable Dimension |  | Hex Hole Dimension |  | B | E | S |  | 6 | 8.0~ | 2 | 3 |  | 8 | 12.5~ | 2.5 | 4 |  | 10 | 13.0~ | 3 | 5 |  | 12 | 16.0~ | 4 | 6 |  | 16 | 20.0~ | 5 | 8 |  | 20 | 20.0~ |  |  |  | Machines wrench hole. Ordering Code: LAC<br><table border="1"> <thead> <tr> <th rowspan="2">D</th> <th rowspan="2">Applicable Dimension</th> <th colspan="2">Wrench Hole Dimension</th> </tr> <tr> <th>P</th> <th>Q</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>8.0~</td> <td>6.50-9.99</td> <td>2</td> </tr> <tr> <td>8</td> <td>9.0~</td> <td>10.00-16.99</td> <td>3.5</td> </tr> <tr> <td>10</td> <td>9.0~</td> <td>17.00~</td> <td>5</td> </tr> <tr> <td>12</td> <td>9.0~</td> <td></td> <td></td> </tr> <tr> <td>16</td> <td>15.0~</td> <td></td> <td></td> </tr> <tr> <td>20</td> <td>15.0~</td> <td></td> <td></td> </tr> </tbody> </table> | D | Applicable Dimension | Wrench Hole Dimension |  | P | Q | 6 | 8.0~ | 6.50-9.99 | 2 | 8 | 9.0~ | 10.00-16.99 | 3.5 | 10 | 9.0~ | 17.00~ | 5 | 12 | 9.0~ |  |  | 16 | 15.0~ |  |  | 20 | 15.0~ |  |  |
| D           | Applicable Dimension  |  | Hex Hole Dimension  |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
|             | B   | E  | S   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| 6           | 8.0~  | 2  | 3   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| 8           | 12.5~   | 2.5  | 4   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| 10          | 13.0~   | 3  | 5   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| 12          | 16.0~   | 4  | 6   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| 16          | 20.0~   | 5  | 8   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| 20          | 20.0~   |  |   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| D           | Applicable Dimension  | Wrench Hole Dimension                                    |   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
|             |   | P  | Q   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| 6           | 8.0~  | 6.50-9.99  | 2   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| 8           | 9.0~  | 10.00-16.99  | 3.5   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| 10          | 9.0~  | 17.00~   | 5   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| 12          | 9.0~  |  |   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| 16          | 15.0~   |  |   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |
| 20          | 15.0~   |  |   |                       |                      |  |                    |  |   |   |   |  |   |      |   |   |  |   |       |     |   |  |    |       |   |   |  |    |       |   |   |  |    |       |   |   |  |    |       |  |  |  |  |   |                      |                       |  |   |   |   |      |           |   |   |      |             |     |    |      |        |   |    |      |  |  |    |       |  |  |    |       |  |  |