

# Bushings for Locating Pins (Flanged)

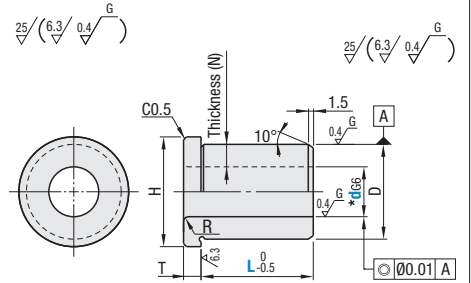
Standard / Thin Wall



| Type        |              | Material                    | Surface Treatment          | Hardness    |
|-------------|--------------|-----------------------------|----------------------------|-------------|
| p6          | m6           |                             |                            |             |
| <b>JBH</b>  | <b>JBHM</b>  | O1 Tool Steel or Equivalent | —                          | 60 HRC min. |
| <b>JBHN</b> | <b>JBHMN</b> | O1 Tool Steel or Equivalent | Electroless Nickel Plating | 60 HRC min. |
| <b>JBHC</b> | <b>JBHMC</b> | 440C or 420 Stainless Steel | —                          | 50 HRC min. |

- Ⓢ Tolerance of d dimension 2–6 of electroless nickel plated products is H7.
- Ⓢ For hole machining, please note that inner diameter shrinkage of p6 Type is larger than that of m6 Type.

(See "Variance of Inner Diameter after Press-fit of Bushings for Locating Pins" on P.1680.)



| Part Number |    | D Tolerance          |                            | L Selection | Thickness (N) | R   | H  | T   | D  | D Tolerance |        | Compliance with Standard |               |               |     |        |        |     |    |        |
|-------------|----|----------------------|----------------------------|-------------|---------------|-----|----|-----|----|-------------|--------|--------------------------|---------------|---------------|-----|--------|--------|-----|----|--------|
| Type        | d  | No Surface Treatment | Electroless Nickel Plating |             |               |     |    |     |    | p6          | m6     | JBH<br>JBHM              | JBHN<br>JBHMN | JBHC<br>JBHMC |     |        |        |     |    |        |
| (p6)        | 2  | +0.008               | H7                         | +0.010      | 5             | 0.8 | 9  | 2.5 | 5  | +0.020      | +0.012 | •                        | —             | —             |     |        |        |     |    |        |
|             | 3  | +0.002               |                            | 0           | 6             |     |    |     |    | +0.012      | +0.004 | •                        | •             | •             |     |        |        |     |    |        |
|             | 4  | +0.012               |                            | +0.012      | 5             |     |    |     |    | 6           | 8      | 10                       | 12            | 15            | *16 | 20     | •      | •   | •  |        |
|             | 5  |                      |                            |             | 5             |     |    |     |    | 6           | 8      | 10                       | 12            | 15            | 16  | 20     | •      | •   | •  |        |
|             | 6  |                      |                            |             | 5             |     |    |     |    | 6           | 8      | 10                       | 12            | 15            | 16  | 20     | 25     | •   | •  | •      |
| (m6)        | 8  | +0.014               | G6                         | +0.014      | 6             | 2   | 16 | 4   | 12 | +0.029      | +0.018 | •                        | •             | •             |     |        |        |     |    |        |
|             | 10 | +0.005               |                            | +0.005      | 6             |     |    |     |    | 8           | 10     | 12                       | 15            | 16            | 20  | 25     | •      | •   | •  |        |
|             | 12 | +0.017               |                            | +0.017      | 8             |     |    |     |    | 10          | 12     | 15                       | 16            | 20            | 25  | 30     | •      | •   | •  |        |
|             | 13 |                      |                            |             | 10            |     |    |     |    | 12          | 15     | 16                       | 20            | 25            | 30  | •      | •      | •   |    |        |
|             | 15 |                      |                            |             | 10            |     |    |     |    | *12         | *15    | *16                      | *20           | *25           | *30 | •      | •      | •   |    |        |
|             | 16 | +0.006               |                            | +0.006      | 10            |     |    |     |    | 12          | 15     | 16                       | 20            | 25            | 30  | •      | •      | •   |    |        |
|             | 20 |                      |                            |             | 12            |     |    |     |    | 15          | 16     | 20                       | 25            | 30            | •   | •      | •      |     |    |        |
|             | 25 |                      |                            |             | 12            |     |    |     |    | 15          | 16     | 20                       | 25            | 30            | •   | •      | •      |     |    |        |
|             |    | 25                   |                            | +0.020      | G6            |     |    |     |    | +0.020      | 16     | 5                        | 3             | 40            | 35  | +0.042 | +0.025 | •   | •  | •      |
|             |    | 20                   |                            | +0.007      |               |     |    |     |    | +0.007      | 16     |                          |               |               |     | 20     | 25     | *30 | 35 | +0.026 |

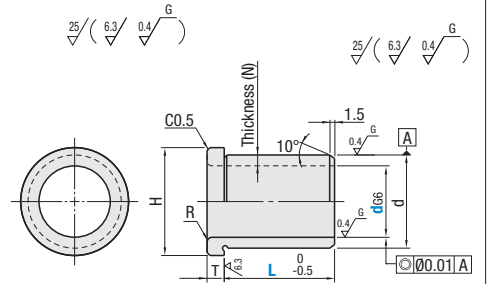
Ⓢ L dimension with \* is not applicable to JBHMC.



| Type          |              | Material   | Surface Treatment          | Hardness       |
|---------------|--------------|--|----------------------------|----------------|
| p6            | m6           |  |                            |                |
| <b>JBHUP</b>  | <b>JBHU</b>  | 52100 Bearing Steel or O1 Tool Steel or Equivalent | —                          | 58 HRC min.    |
| <b>JBHUNP</b> | <b>JBHUN</b> | 52100 Bearing Steel or O1 Tool Steel or Equivalent | Electroless Nickel Plating | 58 HRC min.    |
| <b>JBHUCP</b> | <b>JBHUC</b> | 440C or 420 Stainless Steel                        | —                          | 50–55 HRC min. |

- Ⓢ Tolerance of d dimension 3–6 of electroless nickel plated products is H7.
- Ⓢ For hole machining, please note that inner diameter shrinkage of p6 Type is larger than that of m6 Type.

(See "Variance of Inner Diameter after Press-fit of Bushings for Locating Pins" on P.1680.)



| Part Number |    | D Tolerance          |                            | L Selection | Thickness (N) | R   | H | T   | D  | D Tolerance |        | Compliance with Standard |                 |                 |     |    |   |   |   |
|-------------|----|----------------------|----------------------------|-------------|---------------|-----|---|-----|----|-------------|--------|--------------------------|-----------------|-----------------|-----|----|---|---|---|
| Type        | d  | No Surface Treatment | Electroless Nickel Plating |             |               |     |   |     |    | p6          | m6     | JBHU<br>JBHUP            | JBHUN<br>JBHUNP | JBHUC<br>JBHUCP |     |    |   |   |   |
| (p6)        | 3  | +0.008               | H7                         | +0.010      | 1             | 0.5 | 9 | 2.5 | 5  | +0.020      | +0.012 | •                        | •               | •               |     |    |   |   |   |
|             | 4  | +0.002               |                            | 0           |               |     |   |     |    | 6           | +0.012 | +0.004                   | •               | •               | •   |    |   |   |   |
|             | 5  | +0.012               |                            | +0.012      |               |     |   |     |    | 6           | 8      | 10                       | 12              | 15              | 16  | •  | • | • |   |
|             | 6  |                      |                            |             |               |     |   |     |    | 6           | 8      | 10                       | 12              | *15             | *16 | 20 | • | • | • |
|             | 8  |                      |                            |             |               |     |   |     |    | 6           | 8      | 10                       | 12              | *15             | 16  | 20 | • | • | • |
| (m6)        | 10 | +0.014               | G6                         | +0.014      | 1.5           | 17  | 4 | 13  | 15 | +0.029      | +0.018 | •                        | •               | •               |     |    |   |   |   |
|             | 12 | +0.005               |                            | +0.005      |               |     |   |     |    | 8           | 10     | 12                       | 15              | 16              | *20 | •  | • | • |   |
|             | 13 | +0.017               |                            | +0.017      |               |     |   |     |    | 10          | 12     | 15                       | 16              | 20              | •   | •  | • |   |   |
|             | 15 |                      |                            |             |               |     |   |     |    | 12          | 15     | 16                       | 20              | •               | •   | •  |   |   |   |
|             | 16 |                      |                            |             |               |     |   |     |    | 12          | 15     | 16                       | 20              | *25             | •   | •  | • |   |   |
|             | 20 | +0.006               |                            | +0.006      |               |     |   |     |    | 12          | 15     | 16                       | 20              | 25              | •   | •  | • |   |   |
|             | 25 |                      |                            |             |               |     |   |     |    | 12          | 15     | 16                       | 20              | 25              | •   | •  | • |   |   |

Ⓢ L dimension with \* is not applicable to JBHUC.

Ⓢ d13 value unavailable for parts JBHUC, JBHUCP

**Part Number Example**

|             |   |    |
|-------------|---|----|
| Part Number | - | L  |
| JBH5        | - | 8  |
| JBHUN12     | - | 12 |