

# Support Pins

## Configurable / with Pilot



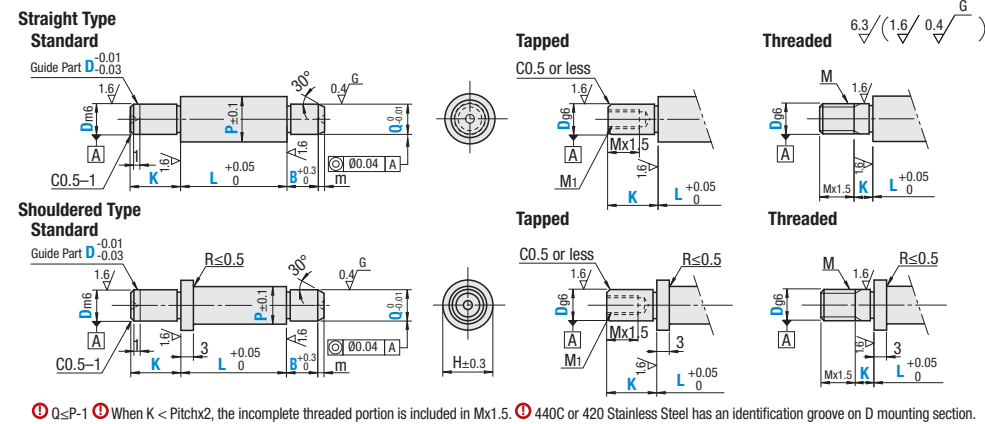
RoHS 10

$a=1.0$   
 $d=P-0.2$

Relief dimension is a reference value.

| D  | H  | M (Coarse) | M <sub>1</sub> (Coarse) | m |
|----|----|------------|-------------------------|---|
| 3  | 6  | M3         | —                       | 1 |
| 4  | —  | M4         | —                       | — |
| 5  | 8  | M5         | —                       | — |
| 6  | —  | M6         | M3                      | 2 |
| 8  | 11 | M8         | M4                      | — |
| 10 | 13 | M10        | —                       | — |
| 12 | 15 | M12        | M5                      | 3 |

| Type     |        |          |            |        |          | Material                    | Surface Treatment   | Hardness  |
|----------|--------|----------|------------|--------|----------|-----------------------------|---------------------|---|
| Straight |        |          | Shouldered |        |          |                             |                     |   |
| Standard | Tapped | Threaded | Standard   | Tapped | Threaded |                             |                     |   |
| SHFJ     | SHFU   | SHFN     | —          | SHXU   | SHXN     | 01 Tool Steel or Equivalent | —                   | Treated Hardness: 60-63 HRC min.                      |
| GSHFJ    | GSHFU  | GSHFN    | GSHXJ      | —      | —        | —                           | Hard Chrome Plating | Hardness: 50-55 HRC min. Plating Hardness 750 HV min. |
| SSHFJ    | SSHFU  | SSHFN    | —          | —      | SSHXN    | 304 Stainless Steel         | —                   | —   |
| CSHFJ    | CSHFU  | CSHFN    | CSHXJ      | CSHXU  | CSHXN    | 440C or 420 Stainless Steel | —                   | Treated Hardness: 50-55 HRC min.                      |



### Standard

| Part Number | Type       | D          | P Increment |           | Q          | K          | L            | B            |          |
|-------------|------------|------------|-------------|-----------|------------|------------|--------------|--------------|----------|
|             |            |            | 0.1 mm      | 0.01 mm   |            |            |              |              |          |
| Straight    | Shouldered | 3          | 3.5-6.0     | 3.0-5.0   | 2.00-5.00  | 3-6        | 10.00-60.00  | 2.0-5.0      |          |
|             |            | 4          | 4.5-7.0     | 3.0-5.0   | 2.00-6.00  | 4-8        | 10.00-60.00  | 2.0-10.0     |          |
|             |            | 5          | 5.5-8.0     | 3.0-7.0   | 2.00-7.00  | 5-10       | 10.00-60.00  | 2.0-10.0     |          |
|             |            | 6          | 6.5-10.0    | 5.0-7.0   | 4.00-9.00  | 6-12       | 10.00-80.00  | 2.0-12.0     |          |
|             |            | 8          | 9.0-13.0    | 5.0-8.0   | 4.00-12.00 | 8-16       | 10.00-80.00  | 2.0-15.0     |          |
|             |            | 10         | 11.0-15.0   | 6.0-11.0  | 5.00-14.00 | 10-20      | 10.00-100.00 | 2.0-20.0     |          |
|             | Tapped     | Shouldered | 3           | 3.5-6.0   | 3.0-5.0    | 2.00-5.00  | 3-6          | 10.00-60.00  | 2.0-5.0  |
|             |            |            | 4           | 4.5-7.0   | 3.0-5.0    | 2.00-6.00  | 4-8          | 10.00-60.00  | 2.0-10.0 |
|             |            |            | 5           | 5.5-8.0   | 3.0-7.0    | 2.00-7.00  | 5-10         | 10.00-60.00  | 2.0-10.0 |
|             |            |            | 6           | 6.5-10.0  | 5.0-7.0    | 4.00-9.00  | 6-12         | 10.00-80.00  | 2.0-12.0 |
|             |            |            | 8           | 9.0-13.0  | 5.0-8.0    | 4.00-12.00 | 8-16         | 10.00-80.00  | 2.0-15.0 |
|             |            |            | 10          | 11.0-15.0 | 6.0-11.0   | 5.00-14.00 | 10-20        | 10.00-100.00 | 2.0-20.0 |

### Tapped & Threaded Recommended Tightening Torque (Reference)

| M (Coarse) | Tightening Torque N-cm |
|------------|------------------------|
| M3         | 98                     |
| M4         | 225                    |
| M5         | 461                    |
| M6         | 784                    |
| M8         | 1911                   |
| M10        | 3783                   |
| M12        | 6605                   |

\* 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 agents or spring washers.

### Tapped

| Part Number | Type       | D  | P Increment |          | Q          | K     | L            | B        |
|-------------|------------|----|-------------|----------|------------|-------|--------------|----------|
|             |            |    | 0.1 mm      | 0.01 mm  |            |       |              |          |
| Straight    | Shouldered | 6  | 6.5-10.0    | 5.0-7.0  | 4.00-9.00  | 6-12  | 10.00-80.00  | 2.0-12.0 |
|             |            | 8  | 9.0-13.0    | 5.0-9.0  | 4.00-12.00 | 8-16  | 10.00-80.00  | 2.0-15.0 |
|             |            | 10 | 11.0-15.0   | 6.0-11.0 | 5.00-14.00 | 10-20 | 10.00-100.00 | 2.0-20.0 |
|             |            | 12 | 13.0-16.0   | 6.0-13.0 | 5.00-15.00 | 12-24 | 10.00-100.00 | 2.0-20.0 |

### Threaded

| Part Number | Type       | D          | P Increment |           | Q          | K          | L            | B            |          |
|-------------|------------|------------|-------------|-----------|------------|------------|--------------|--------------|----------|
|             |            |            | 0.1 mm      | 0.01 mm   |            |            |              |              |          |
| Straight    | Shouldered | 3          | 3.5-6.0     | 3.0-5.0   | 2.00-5.00  | 0-6        | 10.00-60.00  | 2.0-5.0      |          |
|             |            | 4          | 4.5-7.0     | 3.0-5.0   | 2.00-6.00  | 0-8        | 10.00-60.00  | 2.0-10.0     |          |
|             |            | 5          | 5.5-8.0     | 3.0-7.0   | 2.00-7.00  | 0-10       | 10.00-60.00  | 2.0-10.0     |          |
|             |            | 6          | 6.5-10.0    | 5.0-7.0   | 4.00-9.00  | 0-12       | 10.00-80.00  | 2.0-12.0     |          |
|             |            | 8          | 9.0-13.0    | 5.0-9.0   | 4.00-12.00 | 0-16       | 10.00-80.00  | 2.0-15.0     |          |
|             |            | 10         | 11.0-15.0   | 6.0-11.0  | 5.00-14.00 | 0-20       | 10.00-100.00 | 2.0-20.0     |          |
|             | Tapped     | Shouldered | 3           | 3.5-6.0   | 3.0-5.0    | 2.00-5.00  | 0-6          | 10.00-60.00  | 2.0-5.0  |
|             |            |            | 4           | 4.5-7.0   | 3.0-5.0    | 2.00-6.00  | 0-8          | 10.00-60.00  | 2.0-10.0 |
|             |            |            | 5           | 5.5-8.0   | 3.0-7.0    | 2.00-7.00  | 0-10         | 10.00-60.00  | 2.0-10.0 |
|             |            |            | 6           | 6.5-10.0  | 5.0-7.0    | 4.00-9.00  | 0-12         | 10.00-80.00  | 2.0-12.0 |
|             |            |            | 8           | 9.0-13.0  | 5.0-9.0    | 4.00-12.00 | 0-16         | 10.00-80.00  | 2.0-15.0 |
|             |            |            | 10          | 11.0-15.0 | 6.0-11.0   | 5.00-14.00 | 0-20         | 10.00-100.00 | 2.0-20.0 |

Ⓢ Note the strength of under-head part. P.1542

Ⓢ The dispersion of dimension L should be within 0.02 for same orders. Ⓢ For full thread, specify a K dimension of 0 and NNC alteration.



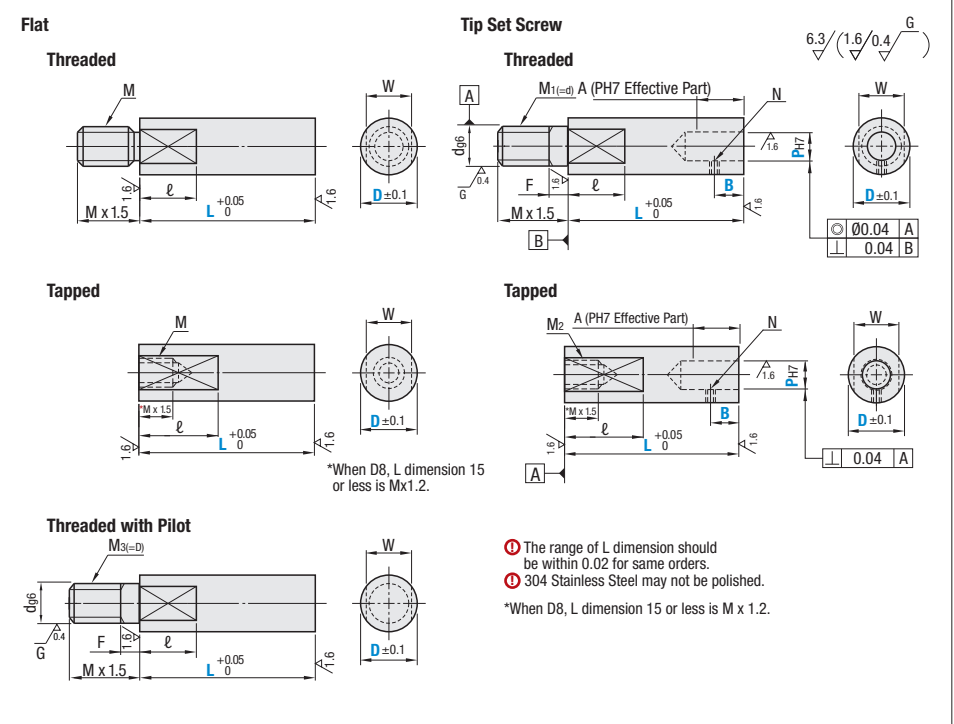
| Alterations | Wrench Flats   | Wrench Flats  | Screwdriver Slot  | Relief  |
|-------------|--|---|---|---|
| Code        | SC   | HC  | DRC   | NNC   |
| Spec.       | SC = 1 mm Increment SC>D<br>Ordering Code: SC8<br>Ⓢ For Tapped, SC≥M1+3<br>Ⓢ Applicable to Straight Type only. | HC = 1 mm Increment HC>P HC>D<br>Ordering Code: HC10<br>Ⓢ Applicable to Shouldered Type only. | Width 0.8mm Depth 1 mm<br>Ordering Code: DRC<br>Ⓢ Applicable to Threaded Type only. | Adds a relief at the thread end.<br>Ordering Code: NNC<br>Ⓢ Applicable when K=0.<br>Ⓢ Applicable to Threaded Type only. |

# Support Pins

## Flat / Tip Set Screw



| Type                              | Shape Code  | Material Code | Material                        | Surface Treatment  | Hardness                         |
|-----------------------------------|---|---------------|---------------------------------|--|----------------------------------|
| STP (Flat)<br>SPF (Tip Set Screw) | A (Threaded)<br>B (Tapped)<br>D (Threaded with Pilot) | B             | 1045 Carbon Steel or Equivalent | Black Oxide  | —                                |
|                                   |   | R             |                                 | Hard Chrome Plating  | Plating Hardness: 750 HV min.    |
|                                   |   | HB            |                                 | Black Oxide  | Treated Hardness: 45-50 HRC min. |
|                                   |   | HR            | Hard Chrome Plating             | Treated Hardness: 45-50 HRC min. Plating Hardness: 750 HV min. |                                  |
|                                   |   | SU            | 304 Stainless Steel             | —  |                                  |
|                                   |   | C             | 440C or 420 Stainless Steel     | —  | Treated Hardness: 50-55 HRC min. |



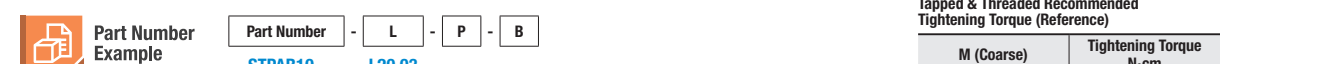
### Flat

| Type       | Part Number   |                               | Material Code                   | D  | L           | M (Coarse) | d  | M <sub>1</sub> (Coarse) | F   | W  | L |
|------------|---|-------------------------------|---------------------------------|----|-------------|------------|----|-------------------------|-----|----|---|
|            | Shape Code  | D                             |                                 |    |             |            |    |                         |     |    |   |
| STP (Flat) | A (Threaded)<br>B (Tapped)<br>D (Threaded with Pilot) | B<br>R<br>HB<br>HR<br>SU<br>C | 1045 Carbon Steel or Equivalent | 6  | 10.00-50.00 | M3         | 3  | M3                      | 1.5 | 5  | 8 |
|            |   |                               |                                 | 8  |             |            | 5  | M5                      | 2   | 7  |   |
|            |   |                               |                                 | 10 | 20.00-80.00 | M5         | 6  | M6                      | 3   | 8  |   |
|            |   |                               |                                 | 12 |             |            | 8  | M8                      | 4   | 10 |   |
|            |   |                               |                                 | 15 | 20.00-80.00 | M8         | 10 | M10                     | 5   | 13 |   |
|            |   |                               |                                 | 20 |             |            | 12 | M12                     | 5   | 17 |   |

### Tip Set Screw

| Type                | Shape Code                 | Material Code | D                               | L  | P Selection | B        | d  | F | M <sub>1</sub> | W  | L  | A  | M <sub>2</sub> | N  |
|---------------------|----------------------------|---------------|---------------------------------|----|-------------|----------|----|---|----------------|----|----|----|----------------|----|
|                     |                            |               |                                 |    |             |          |    |   |                |    |    |    |                |    |
| SPF (Tip Set Screw) | A (Threaded)<br>B (Tapped) | B<br>SU       | 1045 Carbon Steel or Equivalent | 12 | 6           | 4.0-6.0  | 8  | 4 | M8             | 10 | 10 | 10 | M5             | M3 |
|                     |                            |               |                                 | 15 |             |          | 10 | 5 | M10            | 13 | 10 | 15 | M8             | M4 |
|                     |                            |               |                                 | 20 | 10 12       | 5.0-15.0 | 12 | 5 | M12            | 17 | 10 | 20 | M8             | M4 |
|                     |                            |               |                                 | 25 |             |          | 16 | 5 | M16            | 20 | 12 | 24 | M10            | M4 |
|                     |                            |               |                                 | 30 | 16 20       | 5.0-23.0 | 20 | 6 | M20            | 24 | 18 | 28 | M16            | M4 |
|                     |                            |               |                                 | 35 |             |          | 24 | 6 | M24            | 24 | 18 | 28 | M16            | M4 |

Ⓢ L dimension in ( ) is applicable to Tapped Type only. Ⓢ Threaded type not available for Stainless Steel material. Tapped type not available for Carbon Steel material.



### Tapped & Threaded Recommended Tightening Torque (Reference)

| M (Coarse) | Tightening Torque N-cm |
|------------|------------------------|
| M3         | 98                     |
| M4         | 225                    |
| M5         | 461                    |
| M6         | 784                    |
| M8         | 1911                   |
| M10        | 3783                   |
| M12        | 6605                   |
| M16        | 16366                  |
| M20        | 32928                  |

\* 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 agents or spring washers.