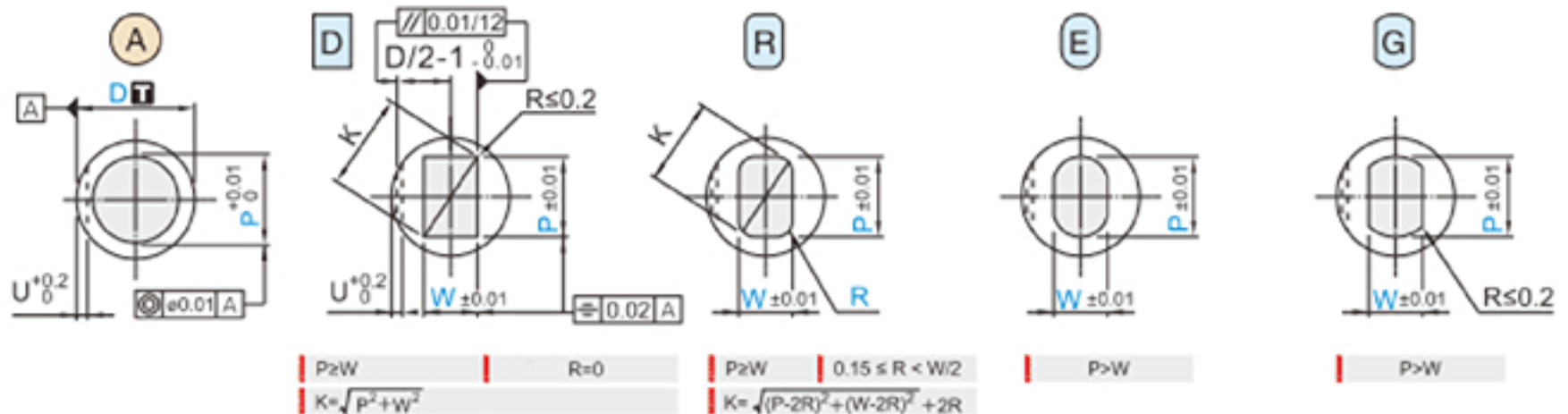
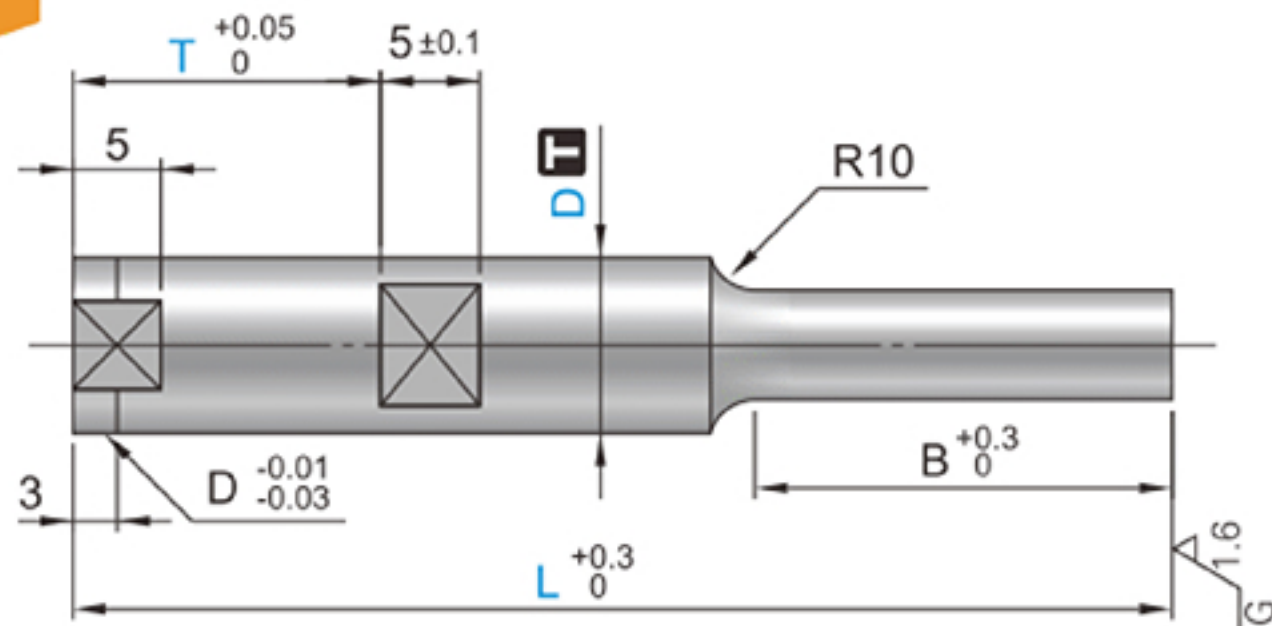
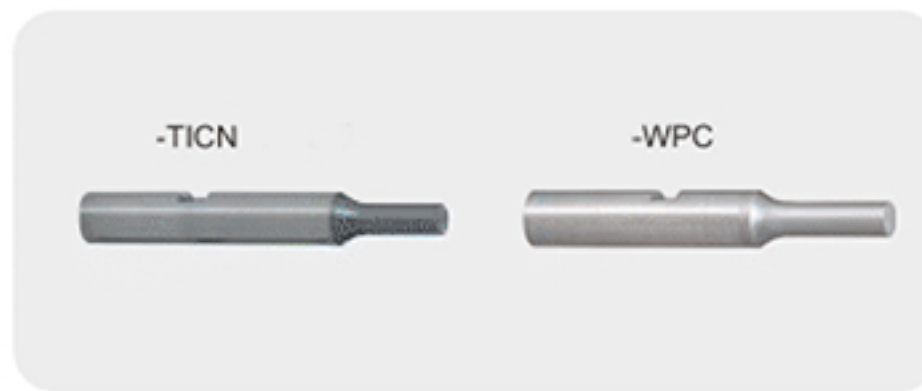


-TICN  
H-WSHK  
H-WPK  
AH-WSHK  
AH-WPK  
-WPC  
W-WSK  
W-WSHK  
W-WPK  
AW-WSK  
AW-WSHK  
AW-WPK



|                      |       |          |             | Type    |         | Catalog No. | (B)<br>(X>L>S) |
|----------------------|-------|----------|-------------|---------|---------|-------------|----------------|
| T                    | M     | H        |             | TiCN    | WPC     |             |                |
| D m5                 | SKD11 | 60-63HRC | 1000-1100HV | —       | W-WSK   | A D R E G   | S              |
|                      | SKH51 | 61-64HRC | 1000-1100HV | H-WSHK  | W-WSHK  |             | L              |
|                      |       | 64-67HRC | 1000-1100HV | H-WPK   | W-WPK   |             | X              |
| D $\frac{+0.005}{0}$ | SKD11 | 60-63HRC | 1000-1100HV | —       | AW-WSK  | A D R E G   | S              |
|                      | SKH51 | 61-64HRC | 1000-1100HV | AH-WSHK | AW-WSHK |             | L              |
|                      |       | 64-67HRC | 1000-1100HV | AH-WPK  | AW-WPK  |             | X              |



 **ORDER** Catalog No. - L - P - W - R (  ) - T  
H-WSHKEL 16 - 70 - P12.00 - W6.00 - T20.1

| Catalog No.                                                                                                                                                                                    |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                       |       | L                                   | (A)         | (D)                         | (E)     | (R)                         | (G)     | (R) | T       | B    | U<br>键槽深度 |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------------------------|-------------|-----------------------------|---------|-----------------------------|---------|-----|---------|------|-----------|------|
| Type                                                                                                                                                                                           |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                       | D     |                                     | P           | P-K max.                    | P-Wmin. | R                           |         |     |         |      |           |      |
| (D m5)<br>-TiCN<br>H-WSHK<br>H-WPK<br><br>-WPC<br>W-WSK<br>W-WSHK<br>W-WPK<br><br>(D <sup>+0.005</sup> <sub>0</sub> )<br>-TiCN<br>AH-WSHK<br>AH-WPK<br><br>-WPC<br>AW-WSK<br>AW-WSHK<br>AW-WPK |  | <br><br><br><br> | 3     | 40 · 50 · 60 · 70 · 80              | 1.00~ 2.99  | —                           | —       | 0.15<br>~<br>W/2<br><br>(R) | T > 5.0 | 8   | 0.5     |      |           |      |
|                                                                                                                                                                                                |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                       | 4     |                                     | 1.00~ 3.99  | 3.97                        | 1.00    |                             |         |     |         |      |           |      |
|                                                                                                                                                                                                |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                       | 5     |                                     | 2.00~ 4.99  | 4.97                        | 1.20    |                             |         |     |         |      |           |      |
|                                                                                                                                                                                                |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                       | 6     |                                     | 2.00~ 5.99  | 5.97                        | 1.50    |                             |         |     |         |      |           |      |
|                                                                                                                                                                                                |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8     | 3.00~ 7.99                          | 7.97        | 2.00                        |         |                             |         |     |         |      |           |      |
|                                                                                                                                                                                                |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                       | 10    | 3.00~ 9.99                          | 9.97        | 2.50                        |         |                             |         |     |         |      |           |      |
|                                                                                                                                                                                                |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                       | 13    | (40) · 50 · 60 · 70 · 80 · 90 · 100 | 6.00~12.99  | 12.97                       | 3.00    |                             |         | 13  | 1.5     |      |           |      |
|                                                                                                                                                                                                |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                       | 16    |                                     | 10.00~15.99 | 15.97                       | 4.00    |                             |         |     |         |      |           |      |
| 3                                                                                                                                                                                              | 50 · 60 · 70 · 80                                                                 | 1.00~ 2.99                                                                                                                                                                                                                                                                                                                                                                                                                            | —     | 0.15<br>~<br>W/2<br><br>(R)         | T > 5.0     | 13                          | 0.5     |                             |         |     |         |      |           |      |
| 4                                                                                                                                                                                              |                                                                                   | 1.00~ 3.99                                                                                                                                                                                                                                                                                                                                                                                                                            | 3.97  |                                     |             |                             |         |                             |         |     |         | 2.00 |           |      |
| 5                                                                                                                                                                                              |                                                                                   | 2.00~ 4.99                                                                                                                                                                                                                                                                                                                                                                                                                            | 4.97  |                                     |             |                             |         |                             |         |     |         | 2.00 |           |      |
| 6                                                                                                                                                                                              |                                                                                   | 2.00~ 5.99                                                                                                                                                                                                                                                                                                                                                                                                                            | 5.97  |                                     |             |                             |         |                             |         |     |         | 2.00 |           |      |
| 8                                                                                                                                                                                              | 3.00~ 7.99                                                                        | 7.97                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2.50  |                                     |             |                             |         |                             |         |     |         |      |           |      |
| 10                                                                                                                                                                                             | 3.00~ 9.99                                                                        | 9.97                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2.50  |                                     |             |                             |         |                             |         |     |         |      |           |      |
| 13                                                                                                                                                                                             | 50 · 60 · 70 · 80 · 90 · 100                                                      | 6.00~12.99                                                                                                                                                                                                                                                                                                                                                                                                                            | 12.97 |                                     |             | 3.00                        | 19      |                             |         | 1.5 |         |      |           |      |
| 16                                                                                                                                                                                             |                                                                                   | 10.00~15.99                                                                                                                                                                                                                                                                                                                                                                                                                           | 15.97 |                                     |             | 4.00                        |         |                             |         |     |         |      |           |      |
| 3                                                                                                                                                                                              | 50 · 60 · 70 · 80                                                                 | 1.20~ 2.99                                                                                                                                                                                                                                                                                                                                                                                                                            | —     |                                     |             | 0.15<br>~<br>W/2<br><br>(R) |         |                             |         |     | T > 5.0 | 19   | 0.5       |      |
| 4                                                                                                                                                                                              |                                                                                   | 1.20~ 3.99                                                                                                                                                                                                                                                                                                                                                                                                                            | 3.97  |                                     |             |                             |         |                             |         |     |         |      |           | 2.00 |
| 5                                                                                                                                                                                              |                                                                                   | 2.00~ 4.99                                                                                                                                                                                                                                                                                                                                                                                                                            | 4.97  |                                     |             |                             |         |                             |         |     |         |      |           | 3.50 |
| 6                                                                                                                                                                                              |                                                                                   | 2.00~ 5.99                                                                                                                                                                                                                                                                                                                                                                                                                            | 5.97  |                                     |             |                             |         |                             |         |     |         |      |           | 3.50 |
| 8                                                                                                                                                                                              | 3.00~ 7.99                                                                        | 7.97                                                                                                                                                                                                                                                                                                                                                                                                                                  | 5.00  |                                     |             |                             |         |                             |         |     |         |      |           |      |
| 10                                                                                                                                                                                             | 3.00~ 9.99                                                                        | 9.97                                                                                                                                                                                                                                                                                                                                                                                                                                  | 5.00  |                                     |             |                             |         |                             |         |     |         |      |           |      |
| 13                                                                                                                                                                                             | 60 · 70 · 80 · 90 · 100                                                           | 6.00~12.99                                                                                                                                                                                                                                                                                                                                                                                                                            | 12.97 |                                     |             |                             | 5.00    |                             |         | 30  |         | 1.5  |           |      |
| 16                                                                                                                                                                                             |                                                                                   | 10.00~15.99                                                                                                                                                                                                                                                                                                                                                                                                                           | —     |                                     |             |                             | —       |                             |         |     |         |      |           |      |
| 16                                                                                                                                                                                             | 70 · 80 · 90 · 100                                                                | 10.00~15.99                                                                                                                                                                                                                                                                                                                                                                                                                           | —     |                                     |             |                             | —       | 40                          |         |     |         |      |           |      |

⚠ L(40) →B=8

⚠ L(40) ----> B=8

#### ■ Coating punch feature:

- 1、TiCN-coated punches are PVD coatings for punches, which can improve the hardness and wear resistance of the cutting edge and increase the service life of the punches. It is the abbreviation of "Titanium carbonitride".
- 2、It can correspond to the sheet material with tensile strength above 270MPa, and it is a material with higher strength that the punch can process.

#### ■ Using Features :

- 1、It is widely Apply to mould manufacturing and processing industries.
- 2、You can choose SKD11, SKH51, powder high speed steel two or three base materials to deal with various stamping conditions
- 3、The diameter of the punch rod has two tolerances of m5 and 0~+0.005, which can correspond to different matching methods.

