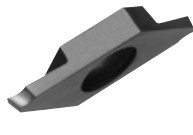
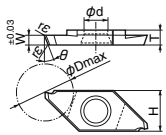
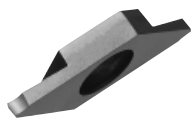
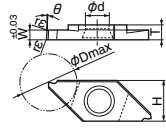
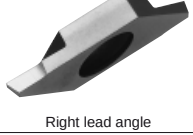
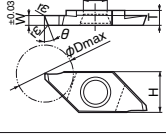
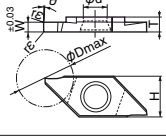
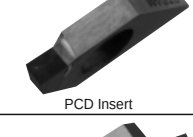
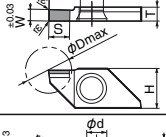
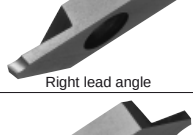
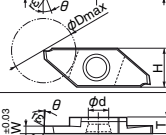
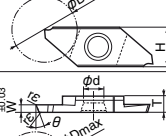
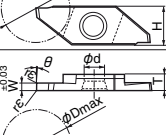


● Applicable Inserts (TKF)

| Classification of usage                      | P | Carbon Steel / Alloy Steel | ● |   |   |
|----------------------------------------------|---|----------------------------|---|---|---|
| ● : Continuous-Low Interruption / 1st Choice | M | Stainless Steel            | ● |   |   |
| ⊙ : Continuous-Low Interruption / 2nd Choice | K | Cast Iron                  |   | ● |   |
| ● : Continuous / 1st Choice                  | N | Non-ferrous Metals         |   | ● | ● |
| ○ : Continuous / 2nd Choice                  |   |                            |   |   |   |

| Insert                                                                                                                        |                                                                                     | Description                      | Dimension (mm) |           |                             |   |     |    |     | Angle<br>(°) | PVD<br>Coated<br>Carbide | Carbide | PCD                            | Applicable<br>Toolholder                                                             |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------|----------------|-----------|-----------------------------|---|-----|----|-----|--------------|--------------------------|---------|--------------------------------|--------------------------------------------------------------------------------------|
|                                                                                                                               |                                                                                     |                                  | W              | ∅D<br>max | rε                          | T | H   | ∅d | S   | *1<br>θ      | PR1025                   | KW10    | KPD001                         |                                                                                      |
| Handed Insert shows Right-hand                                                                                                |                                                                                     |                                  |                |           |                             |   |     |    |     |              |                          |         |                                |                                                                                      |
| <br>Right lead angle                         |    | TKF12 <sup>R/L</sup> 050-S-16DR  | 0.5            | 5         | 0.03                        | 3 | 8.7 | 5  | -   | 16°          | ●                        | ●       |                                | KTKF <sup>R/L</sup><br>... -12                                                       |
|                                                                                                                               |                                                                                     | 070-S-16DR                       | 0.7            | 8         |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 100-S-16DR                       | 1.0            | 12        |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 150-S-16DR                       | 1.5            |           |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 200-S-16DR                       | 2.0            |           |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
| <br>Right lead angle                         |    | TKF12 <sup>R/L</sup> 050-S       | 0.5            | 5         | 0.03                        | 3 | 8.7 | 5  | -   | 0°           | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 070-S                            | 0.7            | 8         |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 100-S                            | 1.0            | 12        |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 150-S                            | 1.5            |           |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 200-S                            | 2.0            |           |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
| <br>Right lead angle                         |    | TKF12 <sup>R/L</sup> 050-NB-20DR | 0.5            | 5         | 0.00                        | 3 | 8.7 | 5  | -   | 20°          | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 070-NB-20DR                      | 0.7            | 8         |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 100-NB-20DR                      | 1.0            | 12        |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 150-NB-20DR                      | 1.5            |           |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 200-NB-20DR                      | 2.0            |           |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
| <br>Without Chipbreaker                     |   | TKF12 <sup>R/L</sup> 050-NB      | 0.5            | 5         | 0.00                        | 3 | 8.7 | 5  | -   | 0°           | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 070-NB                           | 0.7            | 8         |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 100-NB                           | 1.0            | 12        |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 150-NB                           | 1.5            |           |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 200-NB                           | 2.0            |           |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
| <br>PCD Insert                             |  | TKF12 <sup>R/L</sup> 150-NB      | 1.5            | 7.0       | 0.1 <sup>+0<br/>-0.05</sup> | 3 | 8.7 | 5  | 2.0 | 0°           |                          |         | ●                              | KTKF <sup>R/L</sup><br>... -12<br>● Please use PCD Insert<br>for traverse machining. |
|                                                                                                                               |                                                                                     | 200-NB                           | 2.0            | 8.0       |                             |   |     |    | 3.0 |              |                          |         | ●                              |                                                                                      |
|                                                                                                                               |                                                                                     | 250-NB                           | 2.5            | 8.0       |                             |   |     |    | 3.0 |              |                          |         | ●                              |                                                                                      |
|                                                                                                                               |                                                                                     | 250-NB4.5                        | 2.5            | 10.0      |                             |   |     |    | 4.5 |              |                          |         | ●                              |                                                                                      |
| <br>Right lead angle                       |  | TKF16 <sup>R/L</sup> 150-S-16DR  | 1.5            | 16        | 0.05                        | 4 | 9.5 | 5  | -   | 16°          | ●                        | ●       | KTKF <sup>R/L</sup><br>... -16 |                                                                                      |
|                                                                                                                               |                                                                                     | 200-S-16DR                       | 2.0            |           |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
| <br>Right lead angle                       |  | TKF16 <sup>R/L</sup> 150-S       | 1.5            | 16        | 0.05                        | 4 | 9.5 | 5  | -   | 0°           | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 200-S                            | 2.0            |           |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
| <br>Right lead angle / Without Chipbreaker |  | TKF16 <sup>R/L</sup> 150-NB-20DR | 1.5            | 16        | 0.00                        | 4 | 9.5 | 5  | -   | 20°          | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 200-NB-20DR                      | 2.0            |           |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |
| <br>Without Chipbreaker                    |  | TKF16 <sup>R/L</sup> 150-NB      | 1.5            | 16        | 0.00                        | 4 | 9.5 | 5  | -   | 0°           | ●                        | ●       |                                |                                                                                      |
|                                                                                                                               |                                                                                     | 200-NB                           | 2.0            |           |                             |   |     |    |     |              | ●                        | ●       |                                |                                                                                      |

\* 1 Lead angle shows the angle when installed in toolholder.

◆ Recommended Cutting Conditions (For TKF12)

| Workpiece<br>Material | Recommended Insert Grade<br>(Vc: m/min) |         | Dimension (mm) |           |           |           |           | Remarks |
|-----------------------|-----------------------------------------|---------|----------------|-----------|-----------|-----------|-----------|---------|
|                       | PVD Coated Carbide                      | Carbide | 0.5            | 0.7       | 1.0       | 1.5       | 2.0       |         |
|                       | PR1025                                  | KW10    | f (mm/rev)     |           |           |           |           |         |
| Carbon Steel          | 60~130                                  | -       | 0.01~0.02      | 0.01~0.03 | 0.01~0.04 | 0.01~0.04 | 0.01~0.04 | Coolant |
| Alloy Steel           | 60~130                                  | -       | 0.01~0.02      | 0.01~0.03 | 0.01~0.04 | 0.01~0.04 | 0.01~0.04 |         |
| Stainless Steel       | 50~100                                  | -       | 0.005~0.015    | 0.01~0.02 | 0.01~0.02 | 0.01~0.02 | 0.01~0.02 |         |
| Cast Iron             | -                                       | 50~100  | 0.01~0.03      | 0.01~0.04 | 0.01~0.05 | 0.01~0.05 | 0.01~0.05 |         |
| Non-ferrous Metals    | -                                       | 200~450 | 0.01~0.03      | 0.01~0.04 | 0.01~0.05 | 0.01~0.05 | 0.01~0.05 |         |

◆ Recommended Cutting Conditions (For TKF16)

| Workpiece<br>Material | Recommended Insert Grade<br>(Vc: m/min) |         | Width (mm) |           | Remarks |
|-----------------------|-----------------------------------------|---------|------------|-----------|---------|
|                       | PVD Coated Carbide                      | Carbide | 1.5        | 2.0       |         |
|                       | PR1025                                  | KW10    | f (mm/rev) |           |         |
| Carbon Steel          | 60~130                                  | -       | 0.02~0.07  | 0.02~0.07 | Coolant |
| Alloy Steel           | 60~130                                  | -       | 0.02~0.07  | 0.02~0.07 |         |
| Stainless Steel       | 50~100                                  | -       | 0.01~0.04  | 0.01~0.04 |         |
| Cast Iron             | -                                       | 50~100  | 0.02~0.08  | 0.02~0.08 |         |
| Non-ferrous Metals    | -                                       | 200~450 | 0.02~0.08  | 0.02~0.08 |         |

● : Std. Item ○ : Check Availability

R : Std. Item (R-hand Only) L : Std. Item (L-hand Only)

Inserts are sold in 10 piece boxes.  
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