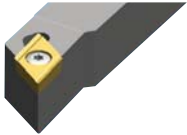


Excellent for precision machining

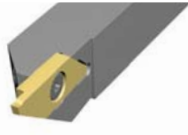
## Auto Tools

- High precision machining of small parts and complex forms, etc.
- High quality products through stable machining
- Exclusive insert for automatic lathes

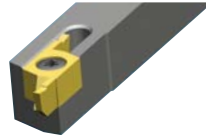
### Type



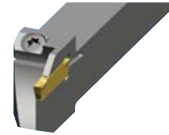
ISO



Blade



Multi utility

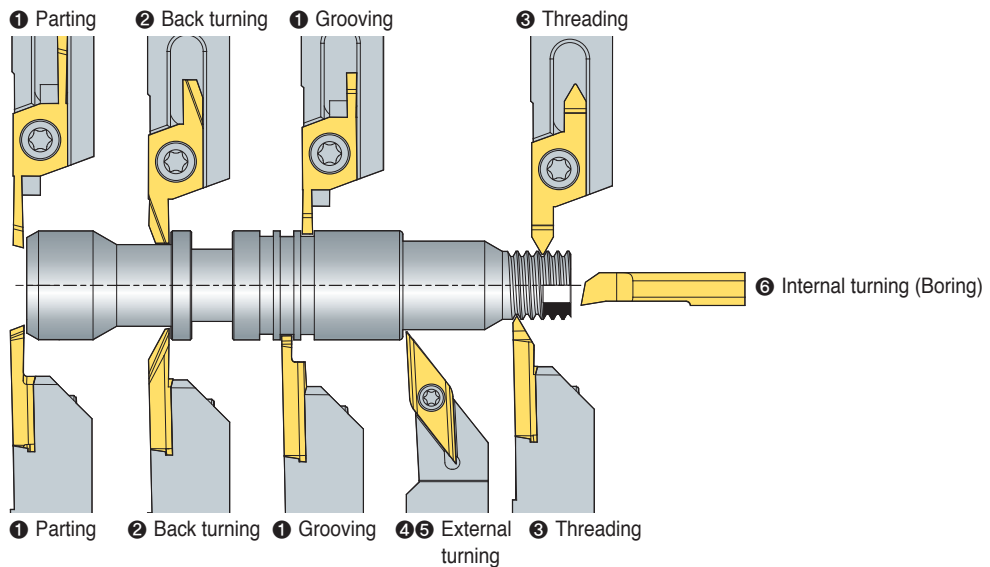


MGT



MSB tools

### Application example



### Index

| Specification        | 1 Parting and Grooving |          |            |            |            |            | 2 Back turning |          |          |
|----------------------|------------------------|----------|------------|------------|------------|------------|----------------|----------|----------|
| <b>Holder</b>        | SXGNR/L                | SXGNR/L  | MGEHR/L    | SBHR/L     | SBHR/L     | MGEHR/L    | SXGNR/L        | SXGNR/L  | SBHR/L   |
| <b>Insert</b>        | SG                     | SC       | MGMN       | SBG        | SBC        | MGMN       | SB             | SGB      | SBB      |
| <b>Holder size</b>   | 10~20 mm               | 10~20 mm | 10~16 mm   | 10~16 mm   | 10~16 mm   | 10~16 mm   | 10~20 mm       | 10~20 mm | 10~16 mm |
| <b>Insert shape</b>  |                        |          |            |            |            |            |                |          |          |
| <b>Cutting width</b> | 1~3 mm                 | 1~3 mm   | 1.5~2.5 mm | 0.7~2.0 mm | 0.7~2.0 mm | 1.5~2.5 mm | 2~4 mm         | 2~3 mm   | 3.18 mm  |
| <b>ØDmax</b>         | Ø18                    | Ø18      | Ø32        | Ø16        | Ø16        | Ø32        | Tmax 8         | Tmax 8.5 | Tmax 8.0 |
| <b>Page</b>          | B119                   | B119     | B123       | B116       | B116       | B123       | B119           | B119     | B116     |

| Specification       | 3 Threading                          |                                      |
|---------------------|--------------------------------------|--------------------------------------|
| <b>Holder</b>       | SXGNR/L                              | SBHR/L                               |
| <b>Insert</b>       | ST                                   | SBT                                  |
| <b>Holder size</b>  | 10~20 mm                             | 10~16 mm                             |
| <b>Insert shape</b> |                                      |                                      |
| <b>Screw ranges</b> | Pitch ranges<br>0.5~1.5 /<br>1.5~3.0 | Pitch ranges<br>0.2~1.5 /<br>1.0~2.0 |
| <b>Insert</b>       | B119                                 | B116                                 |

| Specification       | 4 External turning and Copy machining |         |          |          | 5 External turning and Facing |         |         |
|---------------------|---------------------------------------|---------|----------|----------|-------------------------------|---------|---------|
| <b>Holder</b>       | SDJCR/L                               | SDNCN   | SVJBR/L  | SVJCR/L  | SCACR/L                       | SCLCR/L | STACR/L |
| <b>Insert</b>       | DC□T                                  | DC□T    | VB□T     | VC□T     | CC□T                          | CC□T    | TC□T    |
| <b>Holder size</b>  | 8~16 mm                               | 8~16 mm | 10~16 mm | 10~16 mm | 8~16 mm                       | 8~16 mm | 8~10 mm |
| <b>Insert shape</b> |                                       |         |          |          |                               |         |         |
| <b>Feature</b>      | Offset "0"                            |         |          |          | Offset "0"                    |         |         |
| <b>Page</b>         | B109                                  | B110    | B111     | B111     | B109                          | B109    | B110    |

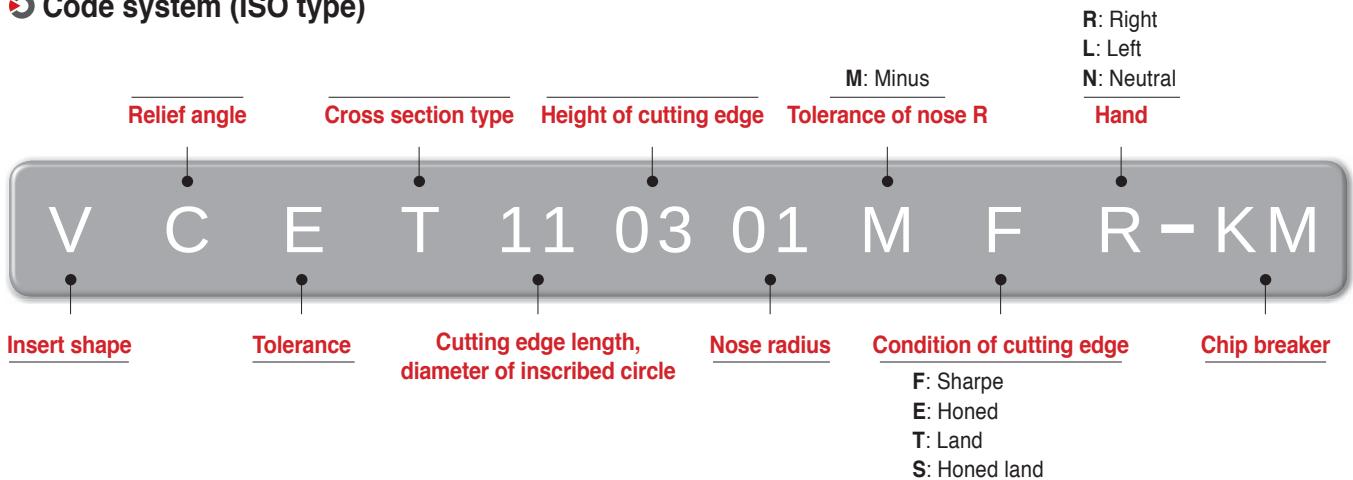
| Specification         | 6 Internal turning (Boring) |         |         |         |           |
|-----------------------|-----------------------------|---------|---------|---------|-----------|
| <b>Holder</b>         | SCLCR/L                     | STUBR/L | STUPR/L | SWUBR/L | MSB       |
| <b>Insert</b>         | CC□T                        | TB□T    | TP□T    | WB□T    | -         |
| <b>Shank diameter</b> | Ø4~Ø10                      | Ø8      | Ø8      | Ø5~Ø8   | Ø4~Ø6     |
| <b>Insert shape</b>   |                             |         |         |         |           |
| <b>ØDmin</b>          | Ø5                          | Ø8      | Ø10     | Ø5.5    | Ø3.2      |
| <b>Page</b>           | B204                        | B204    | B205    | B206    | B126~B130 |

## Auto Tools (ISO type)

- ISO inserts for automatic lathes
- Precise R shape with the use of minus tolerance of nose R
- Tolerance class precise enough in no need for adjusting tools with the use of accurate cutting edge height
- Sharp blade for excellent chip control and surface roughness with low cutting force
- High precision tools for electrical/ electronics instruments and medical instruments

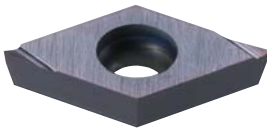
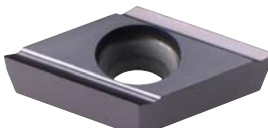


### Code system (ISO type)



### KF/KM chip breaker, ground type for grooving

- Ground chip breaker with sharp cutting edge
- High precision insert of E-class tolerance with accurate nose radius

| KF                                                                                                                                                                                                                                                                                                                                   | KM                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <ul style="list-style-type: none"> <li>• For finishing</li> <li>• Low cutting loads with sharp cutting edges</li> <li>• Longer tool life due to lower chip evacuation resistance at high speed</li> <li>• Excellent surface roughness</li> </ul> |  <ul style="list-style-type: none"> <li>• For medium cutting to finishing</li> <li>• Better chip flow due to wide chip pockets</li> <li>• Longer tool life and better cutting action due to improved chip evacuation</li> <li>• Excellent surface roughness</li> </ul> |

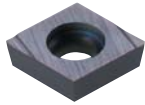
### VP1 chip breaker

- Exclusive chip breaker for hard-to-cut materials such as titanium alloy, Inconel, stainless steel, etc.
- Minimized cutting heat by reducing contact area between chips and rake surface with the use of high positive blade

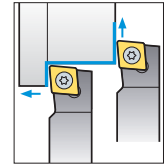
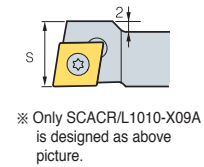
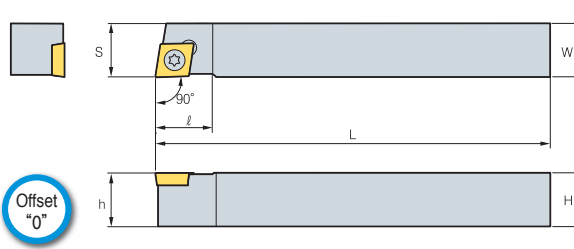
| VP1                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"><li>• <b>Sharp cutting edge</b><ul style="list-style-type: none"><li>- Excellent chip control</li><li>- Low cutting resistance</li><li>- High precision machining</li></ul></li><li>• <b>High positive angle of rake surface</b><ul style="list-style-type: none"><li>- Chip breaking at low depth of cut</li><li>- Stable chip control at high depth of cut</li><li>- Wide cutting area available with the use of optimized chip breaker width according to depth of cuts</li></ul></li></ul> |



# SCACR/L



CC□T



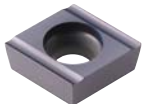
90°

• R type insert (mm)

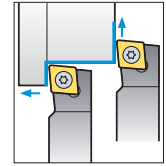
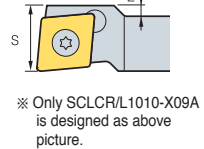
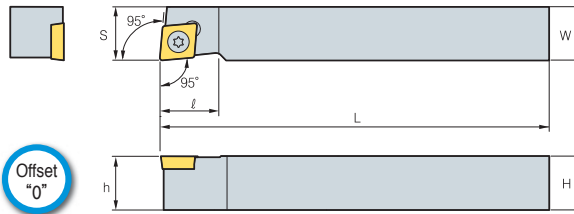
| Designation       | H  | W  | L   | S  | h  | l  | Insert       | Screw     | Wrench |
|-------------------|----|----|-----|----|----|----|--------------|-----------|--------|
| SCACR/L 0808-X06A | 8  | 8  | 120 | 8  | 8  | 10 | CC□T 0602 □□ | FTKA02565 | TW 07P |
| 1010-X06A         | 10 | 10 | 120 | 10 | 10 | 10 |              |           |        |
| 1010-X09A         | 10 | 10 | 120 | 12 | 10 | 13 |              |           |        |
| 1212-X09A         | 12 | 12 | 120 | 12 | 12 | 16 | CC□T 09T3 □□ | FTKA0410  | TW 15P |
| 1616-X09A         | 16 | 16 | 120 | 16 | 16 | 16 |              |           |        |

➡ Applicable inserts B62~B65, B87

# SCLCR/L



CC□T



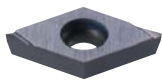
95°

• R type insert (mm)

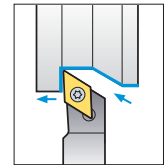
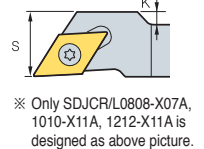
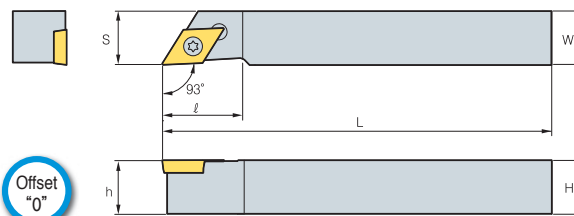
| Designation       | H  | W  | L   | S  | h  | l  | Insert       | Screw     | Wrench |
|-------------------|----|----|-----|----|----|----|--------------|-----------|--------|
| SCLCR/L 0808-X06A | 8  | 8  | 120 | 8  | 8  | 10 | CC□T 0602 □□ | FTKA02565 | TW 07P |
| 1010-X06A         | 10 | 10 | 120 | 10 | 10 | 10 |              |           |        |
| 1010-X09A         | 10 | 10 | 120 | 12 | 10 | 13 |              |           |        |
| 1212-X09A         | 12 | 12 | 120 | 12 | 12 | 16 | CC□T 09T3 □□ | FTKA0410  | TW 15P |
| 1616-X09A         | 16 | 16 | 120 | 16 | 16 | 16 |              |           |        |

➡ Applicable inserts B62~B65, B87

# SDJCR/L



DC□T



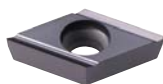
93°

• R type insert (mm)

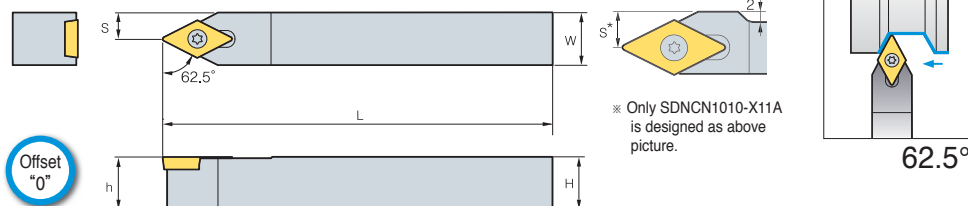
| Designation       | H  | W  | L   | S  | h  | K | l  | Insert       | Screw     | Wrench |
|-------------------|----|----|-----|----|----|---|----|--------------|-----------|--------|
| SDJCR/L 0808-X07A | 8  | 8  | 120 | 10 | 8  | 2 | 18 | DC□T 0702 □□ | FTKA02565 | TW 07P |
| 1010-X07A         | 10 | 10 | 120 | 10 | 10 | - | 15 |              |           |        |
| 1010-X11A         | 10 | 10 | 120 | 14 | 10 | 4 | 18 |              |           |        |
| 1212-X11A         | 12 | 12 | 120 | 14 | 12 | 2 | 18 | DC□T 11T3 □□ | FTKA0410  | TW 15P |
| 1616-X11A         | 16 | 16 | 120 | 16 | 16 | - | 22 |              |           |        |

➡ Applicable inserts B67~B69, B88

## SDNCN



DC□T

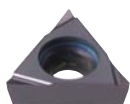


• R type insert (mm)

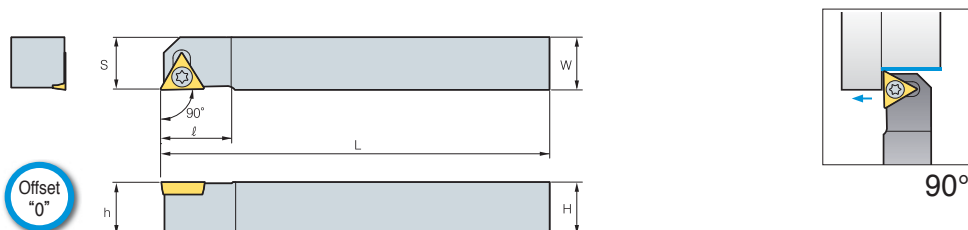
| Designation |           | H  | W  | L   | S | h  | Insert       |  Screw |  Wrench |
|-------------|-----------|----|----|-----|---|----|--------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| SDNCN       | 0808-X07A | 8  | 8  | 120 | 4 | 8  | DC□T 0702 □□ | FTKA02565                                                                                 | TW 07P                                                                                     |
|             | 1010-X07A | 10 | 10 | 120 | 5 | 10 |              |                                                                                           |                                                                                            |
|             | 1010-X11A | 10 | 10 | 120 | 7 | 10 | DC□T 11T3 □□ | FTKA0410                                                                                  | TW 15P                                                                                     |
|             | 1212-X11A | 12 | 12 | 120 | 6 | 12 |              |                                                                                           |                                                                                            |
|             | 1616-X11A | 16 | 16 | 120 | 8 | 16 |              |                                                                                           |                                                                                            |

➔ Applicable inserts B67~B69, B88

## STACR/L



TC□T

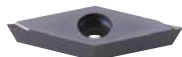


• R type insert (mm)

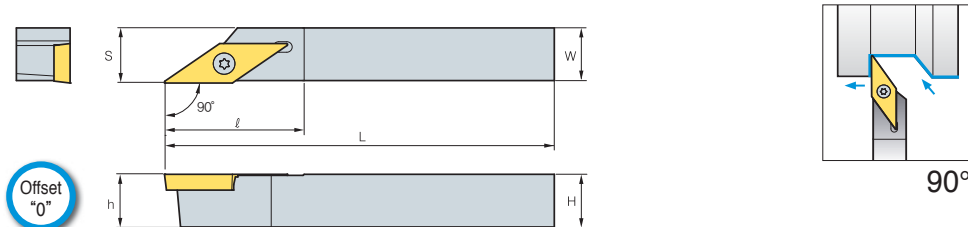
| Designation |           | H  | W  | L   | S  | h  | K | ℓ  | Insert       |  |  |
|-------------|-----------|----|----|-----|----|----|---|----|--------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| STACR/L     | 0808-X08A | 8  | 8  | 120 | 8  | 8  | 1 | 12 | TC□T 0802 □□ | FTNA 0206                                                                             | TW 06P                                                                                |
|             | 1010-X08A | 10 | 10 | 120 | 10 | 10 | 3 | 12 |              |                                                                                       |                                                                                       |

➔ Applicable inserts B75~B76

## SVACR/L



VC□□



• R type insert (mm)

| Designation |           | H  | W  | L   | S    | h  | ℓ  | Insert       |  Screw |  Wrench |
|-------------|-----------|----|----|-----|------|----|----|--------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| SVACR/L     | 0808-X12C | 8  | 8  | 120 | 8.5  | 8  | 26 | VC□□ 1203 □□ |        |         |
|             | 1010-X12C | 10 | 10 | 120 | 10.5 | 10 | 26 |              |                                                                                             |                                                                                              |
|             | 1212-X12C | 12 | 12 | 120 | 12.5 | 12 | 26 |              |                                                                                             |                                                                                              |
|             | 1616-X12C | 16 | 16 | 120 | 16.5 | 16 | 26 |              |                                                                                             |                                                                                              |

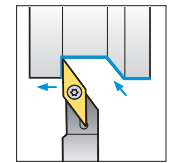
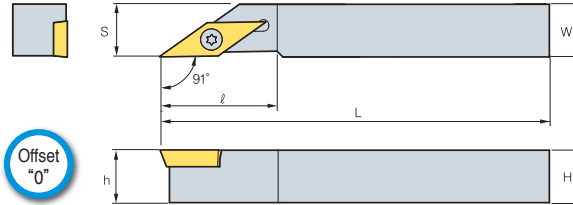
➔ Applicable inserts B82~B83, B93



# SVAPR/L



VP□T



91°

• R type insert  
(mm)

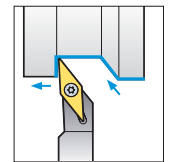
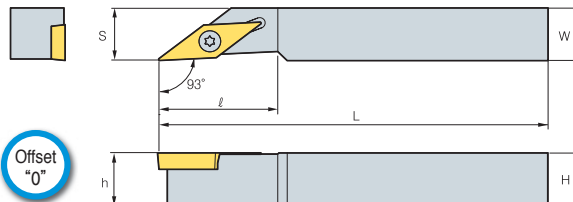
| Designation       | H  | W  | L   | S  | h  | ℓ  | Insert       | Screw      | Wrench |
|-------------------|----|----|-----|----|----|----|--------------|------------|--------|
| SVAPR/L 0808-X11A | 8  | 8  | 120 | 8  | 8  | 22 | VP□T 1103 □□ | FTKA 02565 | TW 07P |
| 1010-X11A         | 10 | 10 | 120 | 10 | 10 | 22 |              |            |        |
| 1212-X11A         | 12 | 12 | 120 | 12 | 12 | 22 |              |            |        |
| 1616-X11A         | 16 | 16 | 120 | 16 | 16 | 24 |              |            |        |

➞ Applicable inserts B84

# SVJBR/L



VB□T



93°

• R type insert  
(mm)

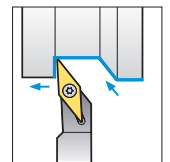
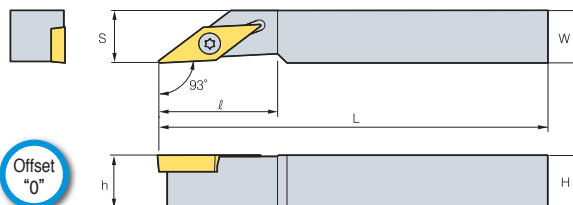
| Designation       | H  | W  | L   | S  | h  | ℓ  | Insert       | Screw      | Wrench |
|-------------------|----|----|-----|----|----|----|--------------|------------|--------|
| SVJBR/L 1010-X11A | 10 | 10 | 120 | 10 | 10 | 22 | VB□T 1103 □□ | FTKA 02565 | TW 07P |
| 1212-X11A         | 12 | 12 | 120 | 12 | 12 | 22 |              |            |        |
| 1616-X11A         | 16 | 16 | 120 | 16 | 16 | 24 |              |            |        |

➞ Applicable inserts B80~B81, B92

# SVJCR/L



VC□T



93°

• R type insert  
(mm)

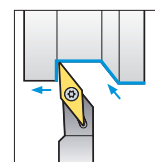
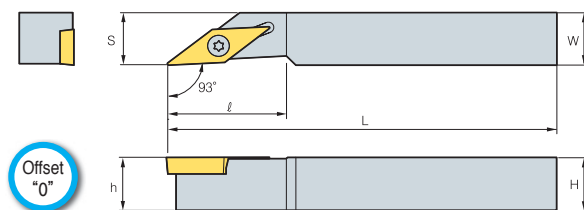
| Designation       | H  | W  | L   | S  | h  | ℓ  | Insert       | Screw      | Wrench |
|-------------------|----|----|-----|----|----|----|--------------|------------|--------|
| SVJCR/L 1010-X11A | 10 | 10 | 120 | 10 | 10 | 22 | VC□T 1103 □□ | FTKA 02565 | TW 07P |
| 1212-X11A         | 12 | 12 | 120 | 12 | 12 | 22 |              |            |        |
| 1616-X11A         | 16 | 16 | 120 | 16 | 16 | 24 |              |            |        |
| SVJCR/L 0810-X12C | 8  | 10 | 120 | 10 | 8  | 26 | VC□□ 1203 □□ | FTKA 02565 | TW 07P |
| 1010-X12C         | 10 | 10 | 120 | 10 | 10 | 26 |              |            |        |
| 1212-X12C         | 12 | 12 | 120 | 12 | 12 | 26 |              |            |        |
| 1616-X12C         | 16 | 16 | 120 | 16 | 16 | 26 |              |            |        |

➞ Applicable inserts B82~B83, B93

## SVJPR/L



VP□T



93°

• R type insert  
(mm)

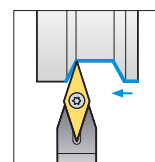
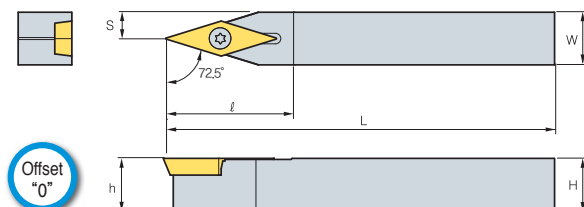
| Designation              | H  | W  | L   | S  | h  | ℓ  | Insert       | Screw      | Wrench |
|--------------------------|----|----|-----|----|----|----|--------------|------------|--------|
| <b>SVJPR/L 0810-X11A</b> | 8  | 10 | 120 | 8  | 10 | 22 | VP□T 1103 □□ | FTKA 02565 | TW 07P |
| <b>1010-X11A</b>         | 10 | 10 | 120 | 10 | 10 | 22 |              |            |        |
| <b>1212-X11A</b>         | 12 | 12 | 120 | 12 | 12 | 22 |              |            |        |
| <b>1616-X11A</b>         | 16 | 16 | 120 | 16 | 16 | 24 |              |            |        |

➔ Applicable inserts **B84**

## SVVPN



VP□T



72.5°

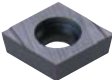
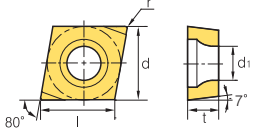
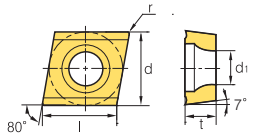
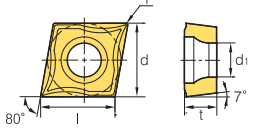
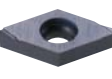
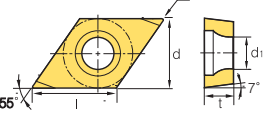
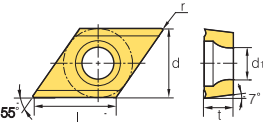
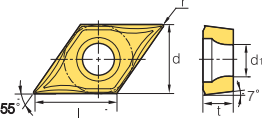
• R type insert  
(mm)

| Designation            | H  | W  | L   | S | h  | ℓ  | Insert       | Screw      | Wrench |
|------------------------|----|----|-----|---|----|----|--------------|------------|--------|
| <b>SVVPN 0808-X11A</b> | 8  | 8  | 120 | 4 | 8  | 24 | VP□T 1103 □□ | FTKA 02565 | TW 07P |
| <b>1010-X11A</b>       | 10 | 10 | 120 | 5 | 10 | 24 |              |            |        |
| <b>1212-X11A</b>       | 12 | 12 | 120 | 6 | 12 | 24 |              |            |        |
| <b>1616-X11A</b>       | 16 | 16 | 120 | 8 | 16 | 28 |              |            |        |

➔ Applicable inserts **B84**



## Insert

| Picture                                                                                                                                          | Designation   | Coated |        |        |        | Uncoated | Dimensions (mm) |       |      |      |                | Configuration                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------|--------|--------|--------|----------|-----------------|-------|------|------|----------------|---------------------------------------------------------------------------------------|
|                                                                                                                                                  |               | PC5300 | PC8105 | PC8110 | PC8115 |          | l               | d     | t    | r    | d <sub>1</sub> |                                                                                       |
| <b>CCET-KF</b><br><br>Finishing<br>(High precision)             | 0602005MFR-KF |        |        |        |        |          | 6.6             | 6.35  | 2.38 | 0.05 | 2.8            |    |
|                                                                                                                                                  | 060201MFR-KF  |        |        | ●      |        |          | 6.4             | 6.35  | 2.38 | 0.1  | 2.8            |                                                                                       |
|                                                                                                                                                  | 060202MFR-KF  |        |        | ●      |        |          | 6.2             | 6.35  | 2.38 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                                  | 09T3005MFR-KF |        |        |        |        |          | 9.8             | 9.525 | 3.97 | 0.05 | 4.4            |                                                                                       |
|                                                                                                                                                  | 09T301MFR-KF  |        |        | ●      |        |          | 9.6             | 9.525 | 3.97 | 0.1  | 4.4            |                                                                                       |
|                                                                                                                                                  | 09T302MFR-KF  |        |        | ●      |        |          | 9.2             | 9.525 | 3.97 | 0.2  | 4.4            |                                                                                       |
|                                                                                                                                                  | 0602005MFL-KF |        |        |        |        |          | 6.6             | 6.35  | 2.38 | 0.05 | 2.8            |                                                                                       |
|                                                                                                                                                  | 060201MFL-KF  |        |        |        |        |          | 6.4             | 6.35  | 2.38 | 0.1  | 2.8            |                                                                                       |
|                                                                                                                                                  | 060202MFL-KF  |        |        |        |        |          | 6.2             | 6.35  | 2.38 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                                  | 09T3005MFL-KF |        |        |        |        |          | 9.8             | 9.525 | 3.97 | 0.05 | 4.4            |                                                                                       |
|                                                                                                                                                  | 09T301MFL-KF  |        |        |        |        |          | 9.6             | 9.525 | 3.97 | 0.1  | 4.4            |                                                                                       |
|                                                                                                                                                  | 09T302MFL-KF  |        |        |        |        |          | 9.2             | 9.525 | 3.97 | 0.2  | 4.4            |                                                                                       |
| <b>CCET-KM</b><br><br>Medium to finishing<br>(High precision)   | 0602005MFR-KM |        |        |        |        |          | 6.6             | 6.35  | 2.38 | 0.05 | 2.8            |    |
|                                                                                                                                                  | 060201MFR-KM  |        |        | ●      |        |          | 6.4             | 6.35  | 2.38 | 0.1  | 2.8            |                                                                                       |
|                                                                                                                                                  | 060202MFR-KM  |        |        | ●      |        |          | 6.2             | 6.35  | 2.38 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                                  | 09T3005MFR-KM |        |        |        |        |          | 9.8             | 9.525 | 3.97 | 0.05 | 4.4            |                                                                                       |
|                                                                                                                                                  | 09T301MFR-KM  |        |        | ●      |        |          | 9.6             | 9.525 | 3.97 | 0.1  | 4.4            |                                                                                       |
|                                                                                                                                                  | 09T302MFR-KM  |        |        | ●      |        |          | 9.2             | 9.525 | 3.97 | 0.2  | 4.4            |                                                                                       |
|                                                                                                                                                  | 0602005MFL-KM |        |        |        |        |          | 6.6             | 6.35  | 2.38 | 0.05 | 2.8            |                                                                                       |
|                                                                                                                                                  | 060201MFL-KM  |        |        |        |        |          | 6.4             | 6.35  | 2.38 | 0.1  | 2.8            |                                                                                       |
|                                                                                                                                                  | 060202MFL-KM  |        |        |        |        |          | 6.2             | 6.35  | 2.38 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                                  | 09T3005MFL-KM |        |        |        |        |          | 9.8             | 9.525 | 3.97 | 0.05 | 4.4            |                                                                                       |
|                                                                                                                                                  | 09T301MFL-KM  |        |        |        |        |          | 9.6             | 9.525 | 3.97 | 0.1  | 4.4            |                                                                                       |
|                                                                                                                                                  | 09T302MFL-KM  |        |        |        |        |          | 9.2             | 9.525 | 3.97 | 0.2  | 4.4            |                                                                                       |
| <b>CCGT-VP1</b><br><br>Finishing<br>(High precision)          | 060201MFN-VP1 |        |        | ●      |        |          | 6.6             | 6.35  | 2.38 | 0.1  | 2.8            |  |
|                                                                                                                                                  | 060202MFN-VP1 |        |        | ●      |        |          | 6.4             | 6.35  | 2.38 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                                  | 060204MFN-VP1 |        |        | ●      |        |          | 6.2             | 6.35  | 2.38 | 0.4  | 2.8            |                                                                                       |
|                                                                                                                                                  | 09T301MFN-VP1 |        |        | ●      |        |          | 9.8             | 9.525 | 3.97 | 0.1  | 4.4            |                                                                                       |
|                                                                                                                                                  | 09T302MFN-VP1 |        |        | ●      |        |          | 9.6             | 9.525 | 3.97 | 0.2  | 4.4            |                                                                                       |
|                                                                                                                                                  | 09T304MFN-VP1 |        |        | ●      |        |          | 9.2             | 9.525 | 3.97 | 0.4  | 4.4            |                                                                                       |
| <b>DCET-KF</b><br><br>Finishing<br>(High precision)           | 0702005MFR-KF |        |        |        |        |          | 7.8             | 6.35  | 2.38 | 0.05 | 2.8            |  |
|                                                                                                                                                  | 070201MFR-KF  |        |        | ●      |        |          | 7.8             | 6.35  | 2.38 | 0.1  | 2.8            |                                                                                       |
|                                                                                                                                                  | 070202MFR-KF  |        |        | ●      |        |          | 7.8             | 6.35  | 2.38 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                                  | 11T3005MFR-KF |        |        |        |        |          | 11.6            | 9.525 | 3.97 | 0.05 | 4.4            |                                                                                       |
|                                                                                                                                                  | 11T301MFR-KF  |        |        | ●      |        |          | 11.6            | 9.525 | 3.97 | 0.1  | 4.4            |                                                                                       |
|                                                                                                                                                  | 11T302MFR-KF  |        |        | ●      |        |          | 11.6            | 9.525 | 3.97 | 0.2  | 4.4            |                                                                                       |
|                                                                                                                                                  | 0702005MFL-KF |        |        |        |        |          | 7.8             | 6.35  | 2.38 | 0.05 | 2.8            |                                                                                       |
|                                                                                                                                                  | 070201MFL-KF  |        |        | ●      |        |          | 7.8             | 6.35  | 2.38 | 0.1  | 2.8            |                                                                                       |
|                                                                                                                                                  | 070202MFL-KF  |        |        |        |        |          | 7.8             | 6.35  | 2.38 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                                  | 11T3005MFL-KF |        |        |        |        |          | 11.6            | 9.525 | 3.97 | 0.05 | 4.4            |                                                                                       |
|                                                                                                                                                  | 11T301MFL-KF  |        |        |        |        |          | 11.6            | 9.525 | 3.97 | 0.1  | 4.4            |                                                                                       |
|                                                                                                                                                  | 11T302MFL-KF  |        |        |        |        |          | 11.6            | 9.525 | 3.97 | 0.2  | 4.4            |                                                                                       |
| <b>DCET-KM</b><br><br>Medium to finishing<br>(High precision) | 0702005MFR-KM |        |        |        |        |          | 7.8             | 6.35  | 2.38 | 0.05 | 2.8            |  |
|                                                                                                                                                  | 070201MFR-KM  |        |        | ●      |        |          | 7.8             | 6.35  | 2.38 | 0.1  | 2.8            |                                                                                       |
|                                                                                                                                                  | 070202MFR-KM  |        |        | ●      |        |          | 7.8             | 6.35  | 2.38 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                                  | 11T3005MFR-KM |        |        |        |        |          | 11.6            | 9.525 | 3.97 | 0.05 | 4.4            |                                                                                       |
|                                                                                                                                                  | 11T301MFR-KM  |        |        | ●      |        |          | 11.6            | 9.525 | 3.97 | 0.1  | 4.4            |                                                                                       |
|                                                                                                                                                  | 11T302MFR-KM  |        |        | ●      |        |          | 11.6            | 9.525 | 3.97 | 0.2  | 4.4            |                                                                                       |
|                                                                                                                                                  | 0702005MFL-KM |        |        |        |        |          | 7.8             | 6.35  | 2.38 | 0.05 | 2.8            |                                                                                       |
|                                                                                                                                                  | 070201MFL-KM  |        |        |        |        |          | 7.8             | 6.35  | 2.38 | 0.1  | 2.8            |                                                                                       |
|                                                                                                                                                  | 070202MFL-KM  |        |        |        |        |          | 7.8             | 6.35  | 2.38 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                                  | 11T3005MFL-KM |        |        |        |        |          | 11.6            | 9.525 | 3.97 | 0.05 | 4.4            |                                                                                       |
|                                                                                                                                                  | 11T301MFL-KM  |        |        |        |        |          | 11.6            | 9.525 | 3.97 | 0.1  | 4.4            |                                                                                       |
|                                                                                                                                                  | 11T302MFL-KM  |        |        |        |        |          | 11.6            | 9.525 | 3.97 | 0.2  | 4.4            |                                                                                       |
| <b>DCGT-VP1</b><br><br>Finishing<br>(High precision)          | 070201MFN-VP1 |        |        | ●      |        |          | 7.8             | 6.35  | 0.1  | 2.38 | 2.8            |  |
|                                                                                                                                                  | 070202MFN-VP1 |        |        | ●      |        |          | 7.8             | 6.35  | 0.2  | 2.38 | 2.8            |                                                                                       |
|                                                                                                                                                  | 070204MFN-VP1 |        |        | ●      |        |          | 7.8             | 6.35  | 0.4  | 2.38 | 2.8            |                                                                                       |
|                                                                                                                                                  | 11T301MFN-VP1 |        |        | ●      |        |          | 11.6            | 9.525 | 0.1  | 3.97 | 4.4            |                                                                                       |
|                                                                                                                                                  | 11T302MFN-VP1 |        |        | ●      |        |          | 11.6            | 9.525 | 0.2  | 3.97 | 4.4            |                                                                                       |
|                                                                                                                                                  | 11T304MFN-VP1 |        |        | ●      |        |          | 11.6            | 9.525 | 0.4  | 3.97 | 4.4            |                                                                                       |

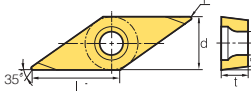
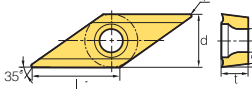
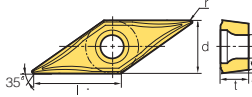
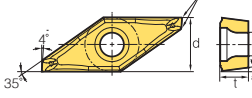
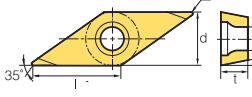
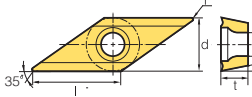
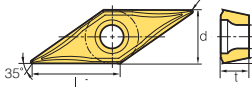
●: Stock item

Turning



B

## Insert

| Picture                                                                                                                        | Designation   | Coated |        |        |        | Uncoated<br>H01 | Dimensions (mm) |      |      |      |                | Configuration                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------|---------------|--------|--------|--------|--------|-----------------|-----------------|------|------|------|----------------|---------------------------------------------------------------------------------------|
|                                                                                                                                |               | PC5300 | PC8105 | PC8110 | PC8115 |                 | l               | d    | t    | r    | d <sub>1</sub> |                                                                                       |
| <br>Finishing<br>(High precision)             | 1103005MFR-KF |        |        |        |        |                 | 11.0            | 6.35 | 3.18 | 0.05 | 2.8            |    |
|                                                                                                                                | 110301MFR-KF  |        |        | ●      |        |                 | 11.0            | 6.35 | 3.18 | 0.1  | 2.8            |                                                                                       |
|                                                                                                                                | 110302MFR-KF  |        |        | ●      |        |                 | 11.0            | 6.35 | 3.18 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                | 1103005MFL-KF |        |        |        |        |                 | 11.0            | 6.35 | 3.18 | 0.05 | 2.8            |                                                                                       |
|                                                                                                                                | 110301MFL-KF  |        |        |        |        |                 | 11.0            | 6.35 | 3.18 | 0.1  | 2.8            |                                                                                       |
|                                                                                                                                | 110302MFL-KF  |        |        |        |        |                 | 11.0            | 6.35 | 3.18 | 0.2  | 2.8            |                                                                                       |
| <br>Medium to finishing<br>(High precision)   | 1103005MFR-KM |        |        |        |        |                 | 11.0            | 6.35 | 3.18 | 0.05 | 2.8            |    |
|                                                                                                                                | 110301MFR-KM  |        |        | ●      |        |                 | 11.0            | 6.35 | 3.18 | 0.1  | 2.8            |                                                                                       |
|                                                                                                                                | 110302MFR-KM  |        |        | ●      |        |                 | 11.0            | 6.35 | 3.18 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                | 1103005MFL-KM |        |        |        |        |                 | 11.0            | 6.35 | 3.18 | 0.05 | 2.8            |                                                                                       |
|                                                                                                                                | 110301MFL-KM  |        |        |        |        |                 | 11.0            | 6.35 | 3.18 | 0.1  | 2.8            |                                                                                       |
|                                                                                                                                | 110302MFL-KM  |        |        |        |        |                 | 11.0            | 6.35 | 3.18 | 0.2  | 2.8            |                                                                                       |
| <br>Finishing<br>(High precision)             | 110301MFN-VP1 |        |        | ●      |        |                 | 11.0            | 6.35 | 3.18 | 0.1  | 2.8            |    |
|                                                                                                                                | 110302MFN-VP1 |        |        | ●      |        |                 | 11.0            | 6.35 | 3.18 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                | 110304MFN-VP1 |        |        | ●      |        |                 | 11.0            | 6.35 | 3.18 | 0.4  | 2.8            |                                                                                       |
|                                                                                                                                |               |        |        |        |        |                 |                 |      |      |      |                |                                                                                       |
| <br>Finishing<br>(High precision)           | 120300MFR-VP1 |        |        |        |        |                 | 11.0            | 7.50 | 3.18 | 0.0  | 2.8            |  |
|                                                                                                                                | 120301MFR-VP1 |        |        |        |        |                 | 11.0            | 7.50 | 3.18 | 0.1  | 2.8            |                                                                                       |
|                                                                                                                                | 120302MFR-VP1 |        |        |        |        |                 | 11.0            | 7.50 | 3.18 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                | 120304MFR-VP1 |        |        |        |        |                 | 11.0            | 7.50 | 3.18 | 0.4  | 2.8            |                                                                                       |
|                                                                                                                                | 120308MFR-VP1 |        |        |        |        |                 | 11.0            | 7.50 | 3.18 | 0.8  | 2.8            |                                                                                       |
| <br>Finishing<br>(High precision)           | 0802005MFR-KF |        |        |        |        |                 | 8.0             | 6.35 | 2.38 | 0.1  | 2.3            |  |
|                                                                                                                                | 080201MFR-KF  |        |        | ●      |        |                 | 8.0             | 6.35 | 2.38 | 0.1  | 2.3            |                                                                                       |
|                                                                                                                                | 080202MFR-KF  |        |        | ●      |        |                 | 8.0             | 6.35 | 2.38 | 0.2  | 2.3            |                                                                                       |
|                                                                                                                                | 080201MFL-KF  |        |        |        |        |                 | 8.0             | 6.35 | 2.38 | 0.1  | 2.3            |                                                                                       |
|                                                                                                                                | 080201MFL-KF  |        |        |        |        |                 | 8.0             | 6.35 | 2.38 | 0.1  | 2.3            |                                                                                       |
|                                                                                                                                | 080202MFL-KF  |        |        |        |        |                 | 8.0             | 6.35 | 2.38 | 0.2  | 2.3            |                                                                                       |
| <br>Medium to finishing<br>(High precision) | 0802005MFR-KM |        |        |        |        |                 | 8.0             | 6.35 | 2.38 | 0.1  | 2.3            |  |
|                                                                                                                                | 080201MFR-KM  |        |        | ●      |        |                 | 8.0             | 6.35 | 2.38 | 0.1  | 2.3            |                                                                                       |
|                                                                                                                                | 080202MFR-KM  |        |        | ●      |        |                 | 8.0             | 6.35 | 2.38 | 0.2  | 2.3            |                                                                                       |
|                                                                                                                                | 0802005MFL-KM |        |        |        |        |                 | 8.0             | 6.35 | 2.38 | 0.1  | 2.3            |                                                                                       |
|                                                                                                                                | 080201MFL-KM  |        |        |        |        |                 | 8.0             | 6.35 | 2.38 | 0.1  | 2.3            |                                                                                       |
|                                                                                                                                | 080202MFL-KM  |        |        |        |        |                 | 8.0             | 6.35 | 2.38 | 0.2  | 2.3            |                                                                                       |
| <br>Finishing<br>(High precision)           | 110301MFN-VP1 |        |        | ●      |        |                 | 11.0            | 6.35 | 3.18 | 0.1  | 2.8            |  |
|                                                                                                                                | 110302MFN-VP1 |        |        | ●      |        |                 | 11.0            | 6.35 | 3.18 | 0.2  | 2.8            |                                                                                       |
|                                                                                                                                | 110304MFN-VP1 |        |        | ●      |        |                 | 11.0            | 6.35 | 3.18 | 0.4  | 2.8            |                                                                                       |
|                                                                                                                                |               |        |        |        |        |                 |                 |      |      |      |                |                                                                                       |

● : Stock item





## Auto tools (Blade type) **new**

- Blade insert for automatic lathes
- For external machining of precise small parts
- 4 types - SSB(for back turning), SGB(for grooving), SBT(for threading), SBC(for parting off)
- Convenient use of one holder to all blade inserts
- Exclusive holder for close cutting action to the sub spindle

### Code system of auto tools insert (Blade type)

|                           |                    |                          |                                 |                         |                              |                                                         |                                                                        |   |     |
|---------------------------|--------------------|--------------------------|---------------------------------|-------------------------|------------------------------|---------------------------------------------------------|------------------------------------------------------------------------|---|-----|
| Turning<br>(Back turning) | SB                 | B                        | R                               | 25                      | 10                           |                                                         |                                                                        |   |     |
|                           | <u>Small blade</u> | <u>Back turning</u>      | <u>Hand</u><br>R: Right L: Left | <u>Length of insert</u> | <u>Nose radius</u>           |                                                         |                                                                        |   |     |
| Grooving                  | SB                 | G                        | R                               | 25                      | 20                           |                                                         |                                                                        |   |     |
|                           | <u>Small blade</u> | <u>Grooving</u>          | <u>Hand</u><br>R: Right L: Left | <u>Length of insert</u> | <u>Width of cutting edge</u> |                                                         |                                                                        |   |     |
| Threading                 | SB                 | T                        | R                               | 25                      | 60                           | —                                                       | N                                                                      | — | 010 |
|                           | <u>Small blade</u> | <u>Threading</u>         | <u>Hand</u><br>R: Right L: Left | <u>Length of insert</u> | <u>Angle of thread</u>       | <u>Hand of thread</u><br>R: Right L: Left<br>N: Neutral | <u>Nose radius</u>                                                     |   |     |
| Parting                   | SB                 | C                        | R                               | 25                      | 20                           | 16                                                      | —                                                                      | N |     |
|                           | <u>Small blade</u> | <u>Cut off / Parting</u> | <u>Hand</u><br>R: Right L: Left | <u>Length of insert</u> | <u>Width of cutting edge</u> | <u>Max. machining diameter</u>                          | <u>Hand of thread</u><br>R: Right<br>L: Left<br>N: None<br>T: C/B none |   |     |

### Code system of auto tools holder (Blade type)

|             |        |                          |                 |                |                  |             |
|-------------|--------|--------------------------|-----------------|----------------|------------------|-------------|
| SB          | H      | R                        | 10              | 10             | K25              | X           |
| Small blade | Holder | Hand<br>R: Right L: Left | Height of shank | Width of shank | Length of insert | Sub spindle |

### Types of blade insert

Possible to apply various types of blade inserts to one holder



**SSB:** For back turning

- Approach angle: 59°
- Max. cutting depth: 4 mm
- Nose R: 0.05, 0.1, 0.2 mm



**SGB:** For grooving

- Width: 0.5~2.5 mm
- Nose R: 0.05 mm



**SBT:** For threading

- V profile: 60°
- Pitch: 0.2~1.0 mm
- Nose R: 0.05 mm



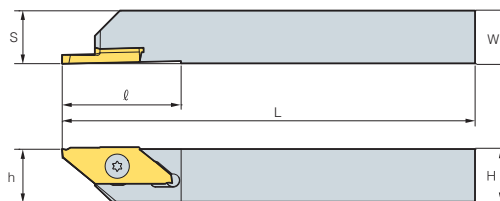
**SBC:** For cut off/Parting

- Cutting width: 0.7~2.0
- D Max.: 16 mm
- Nose R: 0.05 mm

## SBHR/L



SBBR SBGR  
SBTR SBCR



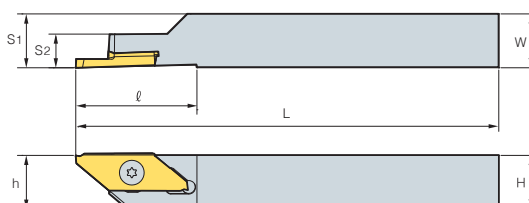
(mm)

| Designation     | H  | W  | L   | S  | h  | l  | Insert   | Screw     | Wrench |
|-----------------|----|----|-----|----|----|----|----------|-----------|--------|
| SBHR/L 1010-K25 | 10 | 10 | 125 | 10 | 10 | 27 | SB□R/L25 | FTKA0409S | T9     |
| 1212-K25        | 12 | 12 | 125 | 12 | 12 | 27 |          |           |        |
| 1616-K25        | 16 | 16 | 125 | 16 | 16 | 27 |          |           |        |

## SBHR/L-X (sub spindle)



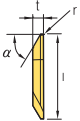
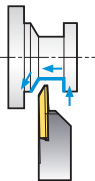
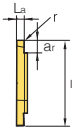
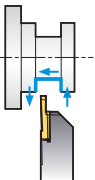
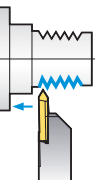
SBBR SBGR  
SBTR SBCR



(mm)

| Designation       | H  | W  | L   | S1 | S2  | h  | l  | Insert   | Screw     | Wrench |
|-------------------|----|----|-----|----|-----|----|----|----------|-----------|--------|
| SBHR/L 1010-K25-X | 10 | 10 | 125 | 10 | 7.5 | 10 | 27 | SB□R/L25 | FTKA0407S | T9     |
| 1212-K25-X        | 12 | 12 | 125 | 12 | 7.5 | 12 | 27 |          |           |        |

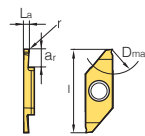
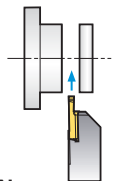
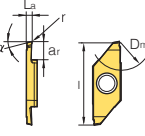
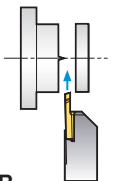
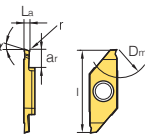
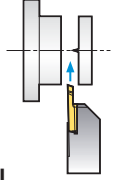
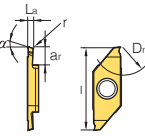
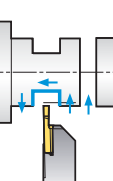
## Insert

| Application  | Picture                                                                             | Designation       | Coated | Dimensions (mm) |          |    |      |      |     |      |       |             |     |      | Configuration                                                                         | Feed direction                                                                        |
|--------------|-------------------------------------------------------------------------------------|-------------------|--------|-----------------|----------|----|------|------|-----|------|-------|-------------|-----|------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|              |                                                                                     |                   | PC8110 | l               | $\alpha$ | t  | r    | La   | ar  | f    | D-MAX | Pitch range |     |      |                                                                                       |                                                                                       |
|              |                                                                                     |                   |        |                 |          |    |      |      |     |      |       | R           | L   | Min. |                                                                                       |                                                                                       |
| Back turning |  | SBBR/L 25005      | ●      |                 | 25       | 59 | 3.18 | 0.05 | -   | -    | -     | -           | -   | -    |  |  |
|              |                                                                                     | 25010             | ●      |                 | 25       | 59 | 3.18 | 0.10 | -   | -    | -     | -           | -   |      |                                                                                       |                                                                                       |
|              |                                                                                     | 25020             | ●      |                 | 25       | 59 | 3.18 | 0.20 | -   | -    | -     | -           | -   |      |                                                                                       |                                                                                       |
|              |                                                                                     |                   |        |                 |          |    |      |      |     |      |       |             |     |      |                                                                                       |                                                                                       |
| Grooving     |  | SBGR/L 2505       | ●      |                 | 25       | -  | -    | 0.05 | 0.5 | 1.35 | -     | -           | -   | -    |  |  |
|              |                                                                                     | 2510              | ●      |                 | 25       | -  | -    | 0.05 | 1.0 | 2.75 | -     | -           | -   | -    |                                                                                       |                                                                                       |
|              |                                                                                     | 2515              | ●      |                 | 25       | -  | -    | 0.05 | 1.5 | 3.75 | -     | -           | -   | -    |                                                                                       |                                                                                       |
|              |                                                                                     | 2520              | ●      |                 | 25       | -  | -    | 0.05 | 2.0 | 3.75 | -     | -           | -   | -    |                                                                                       |                                                                                       |
|              |                                                                                     | 2525              | ●      |                 | 25       | -  | -    | 0.05 | 2.5 | 3.75 | -     | -           | -   | -    |                                                                                       |                                                                                       |
| Threading    |  | SBTR/L 2560-N-005 | ●      |                 | 25       | -  | -    | 0.05 | -   | -    | 1.59  | -           | 0.2 | 2.0  |  |  |
|              |                                                                                     | 2560-N-010        | ●      |                 | 25       | -  | -    | 0.10 | -   | -    | 1.59  | -           | 1.0 | 2.0  |                                                                                       |                                                                                       |
|              |                                                                                     | 2560-R-005        | ●      |                 | 25       | -  | -    | 0.05 | -   | -    | 0.6   | -           | 0.2 | 1.5  |                                                                                       |                                                                                       |
|              |                                                                                     | 2560-R-010        | ●      |                 | 25       | -  | -    | 0.10 | -   | -    | 0.6   | -           | 1.0 | 1.5  |                                                                                       |                                                                                       |
|              |                                                                                     | 2560-L-005        | ●      |                 | 25       | -  | -    | 0.05 | -   | -    | 0.6   | -           | 0.2 | 1.5  |                                                                                       |                                                                                       |
|              |                                                                                     | 2560-L-010        | ●      |                 | 25       | -  | -    | 0.10 | -   | -    | 0.6   | -           | 1.0 | 1.5  |                                                                                       |                                                                                       |

● : Stock item



**KGT Insert**

| Application | Picture                                                                           | Designation            | Coated | Dimensions (mm) |    |          |   |      |      |     |   |       |             | Configuration | Feed direction                                                                        |                                                                                       |
|-------------|-----------------------------------------------------------------------------------|------------------------|--------|-----------------|----|----------|---|------|------|-----|---|-------|-------------|---------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|             |                                                                                   |                        | PC8110 |                 | l  | $\alpha$ | t | r    | La   | ar  | f | D-MAX | Pitch range |               |                                                                                       |                                                                                       |
|             |                                                                                   |                        | R      | L               |    |          |   |      |      |     |   |       | Min.        |               |                                                                                       | Max.                                                                                  |
| Parting off |  | <b>SBCR/L 250708-N</b> | ●      |                 | 25 | 0        | - | 0.05 | 0.70 | 4.3 | - | 8     | -           | -             |    |    |
|             |                                                                                   | <b>251012-N</b>        | ●      |                 | 25 | 0        | - | 0.05 | 1.00 | 6.3 | - | 12    | -           | -             |                                                                                       |                                                                                       |
|             |                                                                                   | <b>251512-N</b>        | ●      |                 | 25 | 0        | - | 0.05 | 1.50 | 6.3 | - | 12    | -           | -             |                                                                                       |                                                                                       |
|             |                                                                                   | <b>252016-N</b>        | ●      |                 | 25 | 0        | - | 0.05 | 2.00 | 8.3 | - | 16    | -           | -             |                                                                                       |                                                                                       |
|             |                                                                                   |                        |        |                 |    |          |   |      |      |     |   |       |             |               |                                                                                       |                                                                                       |
|             |                                                                                   | <b>250708-R</b>        | ●      |                 | 25 | 15       | - | 0.05 | 0.70 | 4.3 | - | 8     | -           | -             |    |    |
|             |                                                                                   | <b>251012-R</b>        | ●      |                 | 25 | 15       | - | 0.05 | 1.00 | 6.3 | - | 12    | -           | -             |                                                                                       |                                                                                       |
|             |                                                                                   | <b>251512-R</b>        | ●      |                 | 25 | 15       | - | 0.05 | 1.50 | 6.3 | - | 12    | -           | -             |                                                                                       |                                                                                       |
|             |                                                                                   | <b>252016-R</b>        | ●      |                 | 25 | 15       | - | 0.05 | 2.00 | 8.3 | - | 16    | -           | -             |                                                                                       |                                                                                       |
|             |                                                                                   |                        |        |                 |    |          |   |      |      |     |   |       |             |               |                                                                                       |                                                                                       |
|             |                                                                                   | <b>250708-L</b>        | ●      |                 | 25 | 15       | - | 0.05 | 0.70 | 4.3 | - | 8     | -           | -             |   |   |
|             |                                                                                   | <b>251012-L</b>        | ●      |                 | 25 | 15       | - | 0.05 | 1.00 | 6.3 | - | 12    | -           | -             |                                                                                       |                                                                                       |
|             |                                                                                   | <b>251512-L</b>        | ●      |                 | 25 | 15       | - | 0.05 | 1.50 | 6.3 | - | 12    | -           | -             |                                                                                       |                                                                                       |
|             |                                                                                   | <b>252016-L</b>        | ●      |                 | 25 | 15       | - | 0.05 | 2.00 | 8.3 | - | 16    | -           | -             |                                                                                       |                                                                                       |
|             |                                                                                   |                        |        |                 |    |          |   |      |      |     |   |       |             |               |                                                                                       |                                                                                       |
|             |                                                                                   | <b>251012-T</b>        | ●      |                 | 25 | 0        | - | 0.05 | 1.00 | 6.3 | - | 12    | -           | -             |  |  |
|             |                                                                                   | <b>251512-T</b>        | ●      |                 | 25 | 0        | - | 0.05 | 1.50 | 6.3 | - | 12    | -           | -             |                                                                                       |                                                                                       |
|             |                                                                                   | <b>252016-T</b>        | ●      |                 | 25 | 0        | - | 0.05 | 2.00 | 8.3 | - | 16    | -           | -             |                                                                                       |                                                                                       |
|             |                                                                                   |                        |        |                 |    |          |   |      |      |     |   |       |             |               |                                                                                       |                                                                                       |

● : Stock item

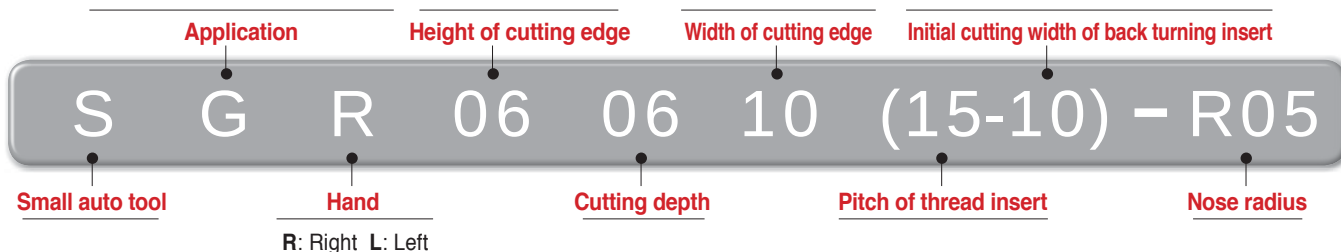
# B Auto tools (For multi utility)

## Auto tools (For multi utility)

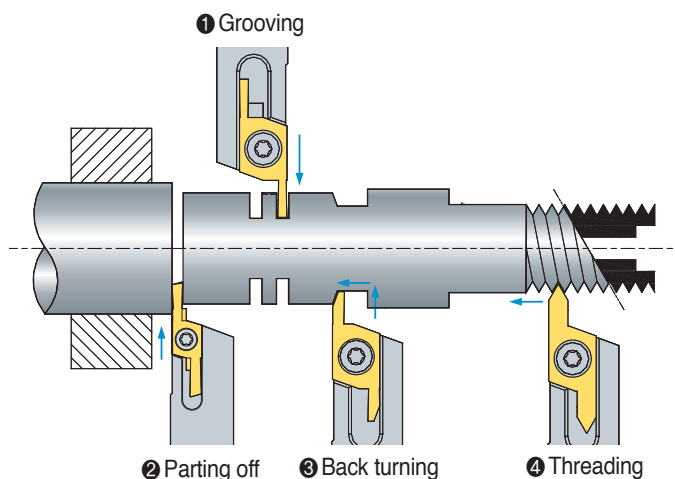
- Multifunctional insert for automatic lathes
- For external machining of precise small parts
- 5 types - SB(for back turning), SG(for grooving), ST(for threading), SC(for parting off), SGB(for grooving and back turning)
- Convenient use of one holder to all inserts
- Offset "0" to all ISO type holders

### Insert code system (Multi utility type)

B: Back turning    G: Grooving  
C: Parting off    T: Threading  
GB: Grooving and back turning

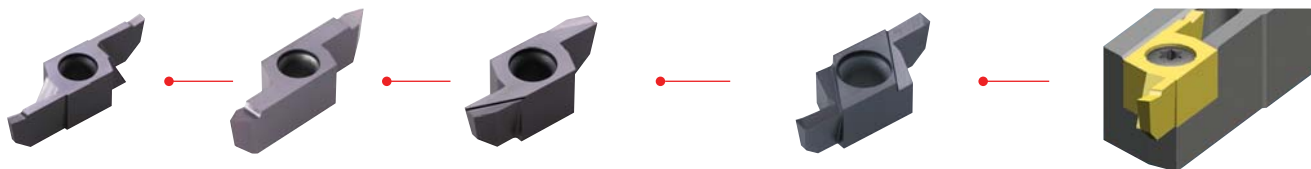


### Application example



### Types of multifunctional insert

Possible to apply various types of blade inserts to one holder (Ex: All designations of 06 size inserts can be applied to one 06 size holder.)



### Recommended cutting conditions

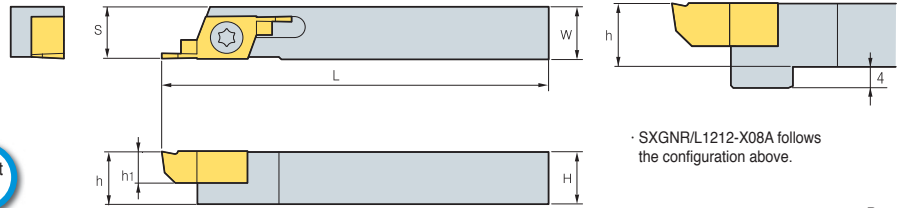
| Workpiece          | Turning                   |                   | Grooving                  |                   | Parting off               |                   | Back turning              |                   |
|--------------------|---------------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|
|                    | Cutting speed, vc (m/min) | Feed, fn (mm/rev) | Cutting speed, vc (m/min) | Feed, fn (mm/rev) | Cutting speed, vc (m/min) | Feed, fn (mm/rev) | Cutting speed, vc (m/min) | Feed, fn (mm/rev) |
| Stainless steel    | 50~120                    | 0.02~0.20         | 30~120                    | 0.02~0.05         | 30~120                    | 0.02~0.05         | 30~120                    | 0.02~0.20         |
| Carbon steel       | 50~150                    | 0.01~0.25         | 50~150                    | 0.02~0.08         | 50~150                    | 0.01~0.08         | 50~150                    | 0.01~0.25         |
| Free cutting steel | 30~150                    | 0.02~0.25         | 30~150                    | 0.02~0.08         | 30~150                    | 0.01~0.08         | 30~150                    | 0.01~0.25         |
| Non-ferrous metal  | 70~200                    | 0.03~0.25         | 70~200                    | 0.03~0.10         | 70~200                    | 0.03~0.10         | 70~200                    | 0.03~0.30         |



# SXGNR/L



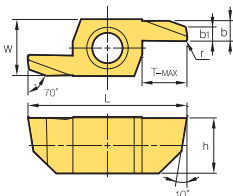
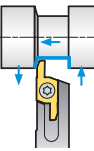
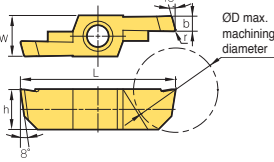
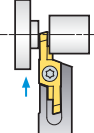
SBR, SGBR  
SCR, STR, SGR



• R type insert  
(mm)

| Designation              | H  | W  | L   | S  | h  | h1 | Insert   | Screw     | Wrench |
|--------------------------|----|----|-----|----|----|----|----------|-----------|--------|
| <b>SXGNR/L</b> 1010-X06A | 10 | 10 | 125 | 10 | 10 | 6  | S□R/L 06 | FTNA 0408 | TW 15P |
| 1212-X06A                | 12 | 12 | 125 | 12 | 12 | 6  |          |           |        |
| 1616-X06A                | 16 | 16 | 125 | 16 | 16 | 6  |          |           |        |
| 2020-X06A                | 20 | 20 | 125 | 20 | 20 | 6  |          |           |        |
| 1212-X08A                | 12 | 12 | 130 | 12 | 12 | 8  | S□R/L 08 | FTNA 0411 | TW 15P |
| 1616-X08A                | 16 | 16 | 130 | 16 | 16 | 8  |          |           |        |
| 2020-X08A                | 20 | 20 | 130 | 20 | 20 | 8  |          |           |        |
|                          |    |    |     |    |    |    |          |           |        |

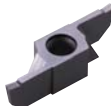
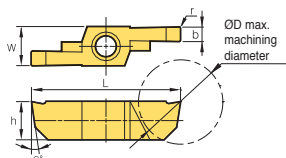
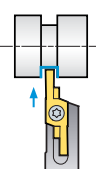
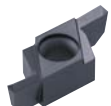
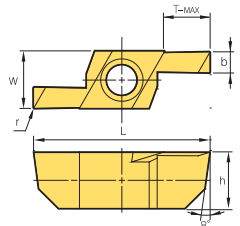
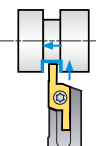
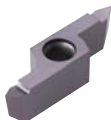
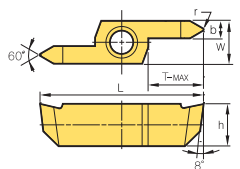
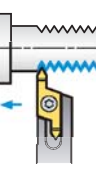
## Insert

| Application  | Picture                                                                             | Designation  | Coated        |   | Dimensions (mm) |   |     |   |    |      |       |     | Configuration | Feed direction                                                                        |                                                                                       |
|--------------|-------------------------------------------------------------------------------------|--------------|---------------|---|-----------------|---|-----|---|----|------|-------|-----|---------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|              |                                                                                     |              | PC9030        |   | b1              | b | W   | L | r  | h    | T-MAX | ØD  |               |                                                                                       |                                                                                       |
|              |                                                                                     |              | R             | L |                 |   |     |   |    |      |       |     |               |                                                                                       |                                                                                       |
| Back turning |  | <b>SBR/L</b> | 060520-10-R00 |   |                 | 1 | 2   | 8 | 22 | 0    | 6     | 5.5 | -             |  |  |
|              |                                                                                     |              | 060520-10-R05 |   |                 | 1 | 2   | 8 | 22 | 0.05 | 6     | 5.5 | -             |                                                                                       |                                                                                       |
|              |                                                                                     |              | 060520-10-R10 |   |                 | 1 | 2   | 8 | 22 | 0.1  | 6     | 5.5 | -             |                                                                                       |                                                                                       |
|              |                                                                                     |              | 060630-20-R00 |   |                 | 2 | 3   | 8 | 24 | 0    | 6     | 6.5 | -             |                                                                                       |                                                                                       |
|              |                                                                                     |              | 060630-20-R05 |   |                 | 2 | 3   | 8 | 24 | 0.05 | 6     | 6.5 | -             |                                                                                       |                                                                                       |
|              |                                                                                     |              | 060630-20-R10 |   |                 | 2 | 3   | 8 | 24 | 0.1  | 6     | 6.5 | -             |                                                                                       |                                                                                       |
|              |                                                                                     |              | 080630-20-R00 |   |                 | 2 | 3   | 8 | 23 | 0    | 8     | 6.5 | -             |                                                                                       |                                                                                       |
|              |                                                                                     |              | 080630-20-R05 |   |                 | 2 | 3   | 8 | 23 | 0.05 | 8     | 6.5 | -             |                                                                                       |                                                                                       |
|              |                                                                                     |              | 080630-20-R10 |   |                 | 2 | 3   | 8 | 23 | 0.1  | 8     | 6.5 | -             |                                                                                       |                                                                                       |
|              |                                                                                     |              | 080840-20-R00 |   |                 | 2 | 4   | 8 | 27 | 0    | 8     | 8.5 | -             |                                                                                       |                                                                                       |
|              |                                                                                     |              | 080840-20-R05 |   |                 | 2 | 4   | 8 | 27 | 0.05 | 8     | 8.5 | -             |                                                                                       |                                                                                       |
|              |                                                                                     |              | 080840-20-R10 |   |                 | 2 | 4   | 8 | 27 | 0.1  | 8     | 8.5 | -             |                                                                                       |                                                                                       |
| Parting off  |  | <b>SCR/L</b> | 060610-R00    |   |                 | - | 1   | 8 | 24 | 0    | 6     | -   | 11            |  |  |
|              |                                                                                     |              | 060610-R05    | ● |                 | - | 1   | 8 | 24 | 0.05 | 6     | -   | 11            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 060610-R10    | ● |                 | - | 1   | 8 | 24 | 0.1  | 6     | -   | 11            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 060615-R00    |   |                 | - | 1.5 | 8 | 24 | 0    | 6     | -   | 11            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 060615-R05    | ● |                 | - | 1.5 | 8 | 24 | 0.05 | 6     | -   | 11            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 060615-R10    | ● |                 | - | 1.5 | 8 | 24 | 0.1  | 6     | -   | 11            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 060620-R00    |   |                 | - | 2   | 8 | 24 | 0    | 6     | -   | 11            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 060620-R05    | ● |                 | - | 2   | 8 | 24 | 0.05 | 6     | -   | 11            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 060620-R10    | ● |                 | - | 2   | 8 | 24 | 0.1  | 6     | -   | 11            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 081015-R00    |   |                 | - | 1.5 | 8 | 31 | 0    | 8     | -   | 18            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 081015-R05    |   |                 | - | 1.5 | 8 | 31 | 0.05 | 8     | -   | 18            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 081015-R10    |   |                 | - | 1.5 | 8 | 31 | 0.1  | 8     | -   | 18            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 081020-R00    |   |                 | - | 2   | 8 | 31 | 0    | 8     | -   | 18            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 081020-R05    |   |                 | - | 2   | 8 | 31 | 0.05 | 8     | -   | 18            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 081020-R10    | ● |                 | - | 2   | 8 | 31 | 0.1  | 8     | -   | 18            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 081025-R00    |   |                 | - | 2.5 | 8 | 31 | 0    | 8     | -   | 18            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 081025-R05    | ● |                 | - | 2.5 | 8 | 31 | 0.05 | 8     | -   | 18            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 081025-R10    | ● |                 | - | 2.5 | 8 | 31 | 0.1  | 8     | -   | 18            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 081030-R00    |   |                 | - | 3   | 8 | 31 | 0    | 8     | -   | 18            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 081030-R05    | ● |                 | - | 3   | 8 | 31 | 0.05 | 8     | -   | 18            |                                                                                       |                                                                                       |
|              |                                                                                     |              | 081030-R10    |   |                 | - | 3   | 8 | 31 | 0.1  | 8     | -   | 18            |                                                                                       |                                                                                       |

●: Stock item

# B Auto tools (For multi utility)

## Insert

| Application               | Picture                                                                             | Designation        | Coated |   | Dimensions (mm) |      |    |      |    |       |    |         | Configuration                                                                         | Feed direction                                                                        |
|---------------------------|-------------------------------------------------------------------------------------|--------------------|--------|---|-----------------|------|----|------|----|-------|----|---------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                           |                                                                                     |                    | PC9030 |   | b               | W    | L  | r    | h  | T-MAX | ØD | Pitch   |                                                                                       |                                                                                       |
|                           |                                                                                     |                    | R      | L |                 |      |    |      |    |       |    |         |                                                                                       |                                                                                       |
| Grooving                  |    | SGR/L 060610-R00   |        |   | 1               | 8    | 24 | 0    | 6  | -     | 11 | -       |    |    |
|                           |                                                                                     | 060610-R05         | ●      |   | 1               | 8    | 24 | 0.05 | 6  | -     | 11 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 060610-R10         | ●      |   | 1               | 8    | 24 | 0.1  | 6  | -     | 11 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 060615-R00         |        |   | 1.5             | 8    | 24 | 0    | 6  | -     | 11 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 060615-R05         | ●      |   | 1.5             | 8    | 24 | 0.05 | 6  | -     | 11 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 060615-R10         | ●      |   | 1.5             | 8    | 24 | 0.1  | 6  | -     | 11 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 060620-R00         |        |   | 2               | 8    | 24 | 0    | 6  | -     | 11 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 060620-R05         | ●      |   | 2               | 8    | 24 | 0.05 | 6  | -     | 11 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 060620-R10         | ●      |   | 2               | 8    | 24 | 0.1  | 6  | -     | 11 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 081015-R00         |        |   | 1.5             | 8    | 31 | 0    | 8  | -     | 18 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 081015-R05         |        |   | 1.5             | 8    | 31 | 0.05 | 8  | -     | 18 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 081015-R10         |        |   | 1.5             | 8    | 31 | 0.1  | 8  | -     | 18 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 081020-R00         |        |   | 2               | 8    | 31 | 0    | 8  | -     | 18 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 081020-R05         | ●      |   | 2               | 8    | 31 | 0.05 | 8  | -     | 18 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 081020-R10         |        |   | 2               | 8    | 31 | 0.1  | 8  | -     | 18 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 081025-R00         |        |   | 2.5             | 8    | 31 | 0    | 8  | -     | 18 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 081025-R05         |        |   | 2.5             | 8    | 31 | 0.05 | 8  | -     | 18 | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 081025-R10         |        |   | 2.5             | 8    | 31 | 0.1  | 8  | -     | 18 | -       |                                                                                       |                                                                                       |
| 081030-R00                |                                                                                     |                    | 3      | 8 | 31              | 0    | 8  | -    | 18 | -     |    |         |                                                                                       |                                                                                       |
| 081030-R05                |                                                                                     |                    | 3      | 8 | 31              | 0.05 | 8  | -    | 18 | -     |    |         |                                                                                       |                                                                                       |
| 081030-R10                |                                                                                     |                    | 3      | 8 | 31              | 0.1  | 8  | -    | 18 | -     |    |         |                                                                                       |                                                                                       |
| Grooving and back turning |  | SGBR/L 0604520-R00 |        |   | 2               | 8    | 22 | 0    | 6  | 4.5   | -  | -       |  |  |
|                           |                                                                                     | 0604520-R05        |        |   | 2               | 8    | 22 | 0.05 | 6  | 4.5   | -  | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 0604520-R10        |        |   | 2               | 8    | 22 | 0.1  | 6  | 4.5   | -  | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 0604525-R00        |        |   | 2.5             | 8    | 22 | 0    | 6  | 4.5   | -  | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 0604525-R05        |        |   | 2.5             | 8    | 22 | 0.05 | 6  | 4.5   | -  | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 0604525-R10        |        |   | 2.5             | 8    | 22 | 0.1  | 6  | 4.5   | -  | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 0605530-R00        |        |   | 3               | 8    | 24 | 0    | 6  | 5.5   | -  | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 0605530-R05        |        |   | 3               | 8    | 24 | 0.05 | 6  | 5.5   | -  | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 0605530-R10        |        |   | 3               | 8    | 24 | 0.1  | 6  | 5.5   | -  | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 0805525-R00        |        |   | 2.5             | 8    | 24 | 0    | 8  | 5.5   | -  | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 0805525-R05        |        |   | 2.5             | 8    | 24 | 0.05 | 8  | 5.5   | -  | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 0805525-R10        |        |   | 2.5             | 8    | 24 | 0.1  | 8  | 5.5   | -  | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 0806530-R00        |        |   | 3               | 8    | 26 | 0    | 8  | 6.5   | -  | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 0806530-R05        |        |   | 3               | 8    | 26 | 0.05 | 8  | 6.5   | -  | -       |                                                                                       |                                                                                       |
|                           |                                                                                     | 0806530-R10        |        |   | 3               | 8    | 26 | 0.1  | 8  | 6.5   | -  | -       |                                                                                       |                                                                                       |
| Threading                 |  | STR/L 06073215     |        |   | 3.2             | 8    | 25 | 0.06 | 6  | 7     | -  | 0.5-1.5 |  |  |
|                           |                                                                                     | 06073230           |        |   | 3.2             | 8    | 25 | 0.19 | 6  | 7     | -  | 1.5-3.0 |                                                                                       |                                                                                       |
|                           |                                                                                     | 08103215           |        |   | 3.2             | 8    | 31 | 0.06 | 8  | 10.5  | -  | 0.5-1.5 |                                                                                       |                                                                                       |
|                           |                                                                                     | 08103230           |        |   | 3.2             | 8    | 31 | 0.19 | 8  | 10.5  | -  | 1.5-3.0 |                                                                                       |                                                                                       |

● : Stock item



## Auto tools (KGT/MGT type)

- Grooving insert for automatic lathes
- Exclusive holder for automatic lathes
- Economic double sided insert
- Strong clamping system secures stable machining and precision.
- A wide selection of chip breakers according to various cutting conditions such as low/high feed, continuous/interrupted machining, etc.

### Insert code system (KGT/MGT type)

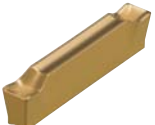
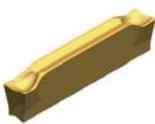
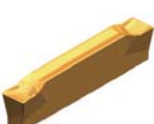
| KG                                                              | M                                   | N                                                | 300                          | - | 04                                  | - | T                   |
|-----------------------------------------------------------------|-------------------------------------|--------------------------------------------------|------------------------------|---|-------------------------------------|---|---------------------|
| <b>System code</b>                                              | <b>Tolerance</b>                    | <b>Hand</b>                                      | <b>Width of cutting edge</b> |   | <b>Corner nose radius of insert</b> |   | <b>Chip breaker</b> |
| KG SYSTEM<br>(KORLOY Grooving)<br>MG SYSTEM<br>(Multi Grooving) | M: Pressed class<br>G: Ground class | N: Neutral<br>R: Right<br>L: Left<br>I: Internal | 2.0~8.0 mm                   |   | 0.2 mm<br>0.3 mm<br>0.4 mm          |   | L/R/T/<br>LP/RP     |

### Holder code system (KGT/MGT type)

| KG                                                              | E                                              | H                                                          | R/L                 | 1212                                                                           | - | 3                    | D25A                         |
|-----------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------|---|----------------------|------------------------------|
| <b>System code</b>                                              | <b>Application</b>                             | <b>Holder type</b>                                         | <b>Hand</b>         | <b>Shank size</b>                                                              |   | <b>Cutting width</b> | <b>Max. cutting diameter</b> |
| KG SYSTEM<br>(KORLOY Grooving)<br>MG SYSTEM<br>(Multi Grooving) | E: External machining<br>I: Internal machining | H: Horizontal type<br>V: Vertical type<br>U: Undercut type | R: Right<br>L: Left | Height 12 mm, width 12 mm<br>(For internal machining: Min. machining diameter) |   | 2.0~3.0 mm           | Ø15~Ø32 mm                   |

### Chip breaker line-up

#### KGT Type

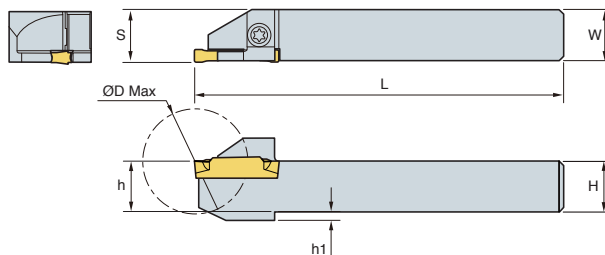
|                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>KGMN-L</b><br> <ul style="list-style-type: none"> <li>• Sharp cutting edge</li> <li>• For low feed machining</li> <li>• For small diameter parts</li> </ul>                                                               | <b>KGMN-R</b><br> <ul style="list-style-type: none"> <li>• Reinforced cutting edge</li> <li>• For high feed machining</li> <li>• For interrupted cutting</li> </ul>                               | <b>KGMN-T</b><br> <ul style="list-style-type: none"> <li>• Sharp cutting edge</li> <li>• Stronger chip control</li> <li>• For turning and grooving</li> </ul> |
| <b>KGMR/L-LP</b><br> <ul style="list-style-type: none"> <li>• Sharp cutting edge</li> <li>• For low feed machining</li> <li>• Small diameter component</li> <li>• Right / Left handed</li> <li>• Low carbon steel</li> </ul> | <b>KGMR/L-RP</b><br> <ul style="list-style-type: none"> <li>• Strong cutting edge</li> <li>• For high feed machining</li> <li>• For interrupted cutting</li> <li>• Right / Left handed</li> </ul> | <b>KRMN-C</b><br> <ul style="list-style-type: none"> <li>• Improved chip control</li> <li>• Copying</li> <li>• Relief</li> </ul>                              |

#### MGT Type

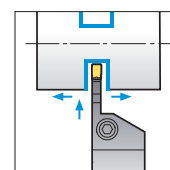
|                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>MGM(G)N-M</b><br> <ul style="list-style-type: none"> <li>• Easier chip control by narrowing chip width with the use of chip breaker on rake surface center</li> <li>• Smooth chip flow by small dots in external machining</li> <li>• Available for both external machining and grooving</li> </ul> | <b>MGMN-G</b><br> <ul style="list-style-type: none"> <li>• Specially designed chip breaker allows narrower chips to promote better chip flow with the use of center dots</li> <li>• Exclusive chip breaker for grooving</li> </ul> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## KGEHR/L-D00A

KGGN KGMN KGMR/L



Grooving, turning, parting off



• R type insert (mm)

| Designation | H = (h)     | W  | L  | S   | h <sub>1</sub> | ØD Max | Insert                                                                                                                   | Screw    | Wrench |
|-------------|-------------|----|----|-----|----------------|--------|--------------------------------------------------------------------------------------------------------------------------|----------|--------|
| KGEHR/L     | 1010-2-D20A | 10 | 10 | 125 | 10.2           | 2      | 20                                                                                                                       | ETNA0412 | TW15L  |
|             | 1212-2-D25A | 12 | 12 | 125 | 12.2           | 2      | 25                                                                                                                       |          |        |
|             | 1414-2-D25A | 14 | 14 | 125 | 14.2           | -      | 25                                                                                                                       |          |        |
|             | 1616-2-D32A | 16 | 16 | 125 | 16.2           | -      | 32                                                                                                                       |          |        |
|             | 1212-3-D25A | 12 | 12 | 125 | 12.4           | 2      | 25                                                                                                                       |          |        |
|             | 1616-3-D32A | 16 | 16 | 125 | 16.4           | -      | 32                                                                                                                       |          |        |
|             |             |    |    |     |                |        | KGMN200-□-□<br>KGMR/L200-□-□<br>KRMN200-C<br>KGGN200-□-□<br><br>KGMN300-□-□<br>KGMR/L300-□-□<br>KRMN300-C<br>KGGN200-□-□ |          |        |

### KGT Insert

| Application                | Picture | Designation    | Coated |        |        |        |        |        | Dimensions (mm) |     |    |     |     | Configuration |
|----------------------------|---------|----------------|--------|--------|--------|--------|--------|--------|-----------------|-----|----|-----|-----|---------------|
|                            |         |                | NC3120 | NC3225 | NC5330 | NC6315 | PC5300 | PC9030 | b               | r   | l  | d   | α ° |               |
| Grooving                   | KGMN-L  | KGMMN 200-02-L |        | ●      | ●      |        | ●      | ●      | 2.0             | 0.2 | 20 | 1.7 | -   |               |
|                            |         | 300-02-L       |        | ●      | ●      |        | ●      | ●      | 3.0             | 0.2 | 20 | 2.3 | -   |               |
| Grooving · Parting off     | KGMN-R  | KGMMN 200-02-R |        | ●      | ●      |        | ●      | ●      | 2.0             | 0.2 | 20 | 1.7 | -   |               |
|                            |         | 300-02-R       |        | ●      | ●      |        | ●      | ●      | 3.0             | 0.2 | 20 | 2.3 | -   |               |
| Grooving · turning         | KGMN-T  | KGMMN 200-02-T |        | ●      | ●      | ●      | ●      | ●      | 2.0             | 0.2 | 20 | 1.7 | -   |               |
|                            |         | 300-02-T       |        | ●      | ●      | ●      | ●      | ●      | 3.0             | 0.2 | 20 | 2.3 | -   |               |
|                            |         | 300-04-T       |        | ●      | ●      | ●      | ●      | ●      | 3.0             | 0.4 | 20 | 2.3 | -   |               |
| Parting off (Right handed) | KGMR-LP | KGMR 200-6D-LP |        |        | ●      |        | ●      |        | 2.0             | 0.2 | 20 | -   | 6   |               |
|                            |         | 200-15D-LP     |        |        | ●      |        | ●      |        | 2.0             | 0.2 | 20 | -   | 15  |               |
|                            |         | 300-6D-LP      |        |        | ●      |        | ●      |        | 3.0             | 0.2 | 20 | -   | 6   |               |
|                            |         | 300-15D-LP     |        |        | ●      |        | ●      |        | 3.0             | 0.2 | 20 | -   | 15  |               |
| Parting off (Right handed) | KGMR-RP | KGMR 200-6D-RP |        |        | ●      |        | ●      |        | 2.0             | 0.2 | 20 | -   | 6   |               |
|                            |         | 200-15D-RP     |        |        | ●      |        | ●      |        | 2.0             | 0.2 | 20 | -   | 15  |               |
|                            |         | 300-6D-RP      |        |        | ●      |        | ●      |        | 3.0             | 0.2 | 20 | -   | 6   |               |
|                            |         | 300-15D-RP     |        |        | ●      |        | ●      |        | 3.0             | 0.2 | 20 | -   | 15  |               |
| Parting off (Left handed)  | KGML-LP | KGML 200-6D-LP |        |        |        |        |        |        | 2.0             | 0.2 | 20 | 1.7 | 6   |               |
|                            |         | 200-15D-LP     |        |        |        |        |        |        | 2.0             | 0.2 | 20 | 1.7 | 15  |               |
|                            |         | 300-6D-LP      |        |        |        |        |        |        | 3.0             | 0.2 | 20 | 2.3 | 6   |               |
|                            |         | 300-15D-LP     |        |        |        |        |        |        | 3.0             | 0.2 | 20 | 2.3 | 15  |               |
| Parting off (Left handed)  | KGML-RP | KGML 200-6D-RP |        |        |        |        |        |        | 2.0             | 0.2 | 20 | 1.7 | 6   |               |
|                            |         | 200-15D-RP     |        |        |        |        |        |        | 2.0             | 0.2 | 20 | 1.7 | 15  |               |
|                            |         | 300-6D-RP      |        |        |        |        |        |        | 3.0             | 0.2 | 20 | 2.3 | 6   |               |
|                            |         | 300-15D-RP     |        |        |        |        |        |        | 3.0             | 0.2 | 20 | 2.3 | 15  |               |
| Grooving · Turning         | KRMN-C  | KRMN 200-C     |        | ●      | ●      | ●      | ●      |        | 2.0             | 1.0 | 20 | 1.7 | -   |               |
|                            |         | 300-C          |        | ●      | ●      | ●      | ●      |        | 3.0             | 1.5 | 20 | 2.2 | -   |               |

● : Stock item

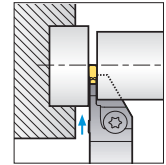
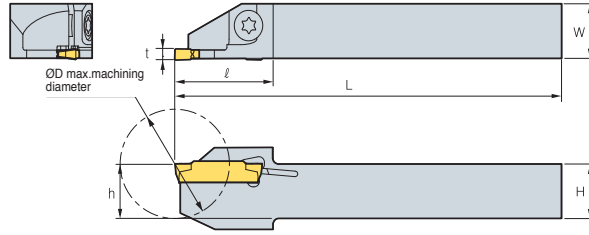




# MGEHR/L



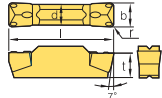
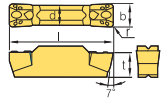
MGMN



• R type insert (mm)

| Designation |           | ØD | H = (h) | W  | L   | ℓ    | t   | Insert                 |  Screw |  Wrench |
|-------------|-----------|----|---------|----|-----|------|-----|------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| MGEHR/L     | 1010-X15A | 20 | 10      | 10 | 125 | 18   | 1.5 | MGMN150-G              | ETNA 0412                                                                                 | TW 15L                                                                                     |
|             | 1212-X15A | 25 | 12      | 12 | 125 | 19.5 | 1.5 |                        |                                                                                           |                                                                                            |
|             | 1010-X20A | 20 | 10      | 10 | 125 | 18   | 2   | MGMN200-M<br>MGMN200-G | ETNA 0412                                                                                 | TW 15L                                                                                     |
|             | 1212-X20A | 25 | 12      | 12 | 125 | 19.5 | 2   |                        |                                                                                           |                                                                                            |
|             | 1616-X20A | 32 | 16      | 16 | 125 | 25   | 2   | MGMN250-M<br>MGMN250-G | ETNA 0412                                                                                 | TW 15L                                                                                     |
|             | 1010-X25A | 20 | 10      | 10 | 125 | 20   | 2.5 |                        |                                                                                           |                                                                                            |
|             | 1212-X25A | 25 | 12      | 12 | 125 | 20   | 2.5 |                        |                                                                                           |                                                                                            |
|             | 1616-X25A | 32 | 16      | 16 | 125 | 25   | 2.5 |                        |                                                                                           |                                                                                            |

## MGT Insert

| Application | Picture                                                                             | Designation | Coated |        |        |        |        |        |        | Uncoated |     |       | Dimensions (mm) |      |      |     |      | Configuration                                                                         |
|-------------|-------------------------------------------------------------------------------------|-------------|--------|--------|--------|--------|--------|--------|--------|----------|-----|-------|-----------------|------|------|-----|------|---------------------------------------------------------------------------------------|
|             |                                                                                     |             | NC3120 | NC3225 | NC5330 | NC6315 | NC3030 | PC5300 | PC9030 | H01      | G10 | ST30A | b               | r    | l    | d   | t    |                                                                                       |
| Grooving    |  | MGMN        | 150-G  |        |        |        |        | ●      | ●      | ●        | ●   |       | 1.5             | 0.15 | 16.0 | 1.2 | 3.5  |  |
|             |                                                                                     |             | 200-G  | ●      |        |        |        | ●      |        | ●        | ●   |       | 2.0             | 0.2  | 16.0 | 1.6 | 3.5  |                                                                                       |
|             |                                                                                     |             | 250-G  |        |        |        |        | ●      | ●      | ●        |     |       | 2.5             | 0.2  | 18.5 | 2.0 | 3.85 |                                                                                       |
|             |                                                                                     |             |        |        |        |        |        |        |        |          |     |       |                 |      |      |     |      |                                                                                       |
| Grooving    |  | MGMN        | 200-M  | ●      |        | ●      |        | ●      | ●      | ●        | ●   |       | 2.0             | 0.2  | 16.0 | 1.6 | 3.5  |  |
|             |                                                                                     |             | 250-M  | ●      |        |        |        | ●      | ●      | ●        |     |       | 2.5             | 0.2  | 18.5 | 2.0 | 3.85 |                                                                                       |
|             |                                                                                     |             |        |        |        |        |        |        |        |          |     |       |                 |      |      |     |      |                                                                                       |

● : Stock item

# B Auto tool (MSB tool)

## Auto tool (MSB tool)

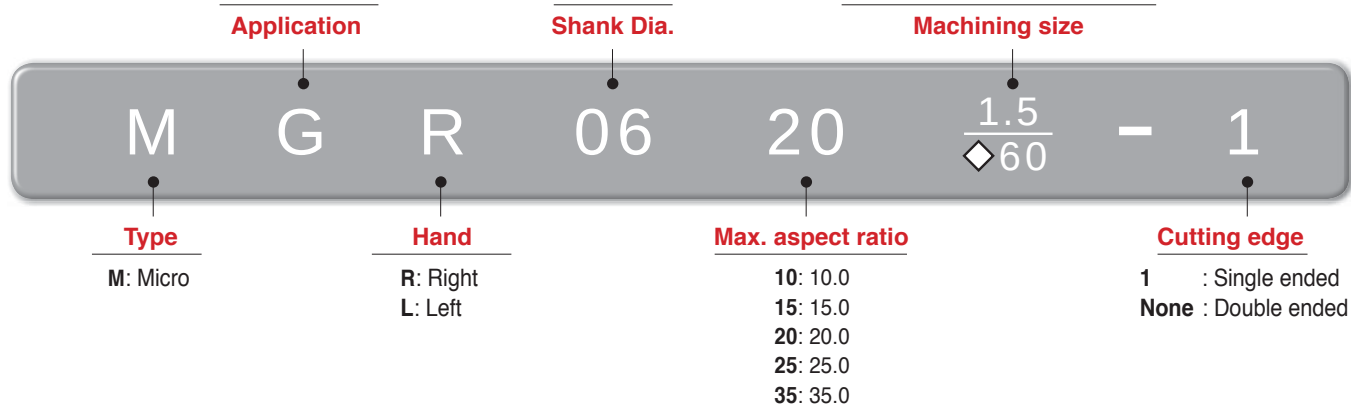
- High hardness grade guarantees longer tool life
- Various kinds of machining (Fitting, Valve, Medical parts, Automobile component, and Semiconductor equipment) are available
- Various types of MSB tools (Boring, Grooving, Threading)

### Code system

**B** : Boring  
**BC** : Copying  
**BB** : Back Boring  
**BF** : Chamfering  
**G** : Square Grooving  
**GR** : Round Grooving  
**GF** : Face Grooving  
**T** : Threading

**03**: 3.0  
**04**: 4.0  
**06**: 6.0  
**08**: 8.0  
**10**: 10.0

|           |    |                 |       |
|-----------|----|-----------------|-------|
| Boring    |    | No Code         |       |
| Copying   |    | Width of Groove |       |
| Threading |    | 60°             | 55°   |
|           |    | Pitch           | tpi   |
| ◇         | F  | 0.25~1.0        | 72~24 |
|           | A  | 0.5~1.5         | 48~16 |
|           | AG | 0.5~3.0         | 48~8  |



### MSB tool code system

| Types |           | Application     | Designation          |
|-------|-----------|-----------------|----------------------|
| 01    | Boring    | Boring          | MBR/LOO☆☆            |
| 02    |           | Copying         | MBCR/LOO☆☆           |
| 03    |           | Back Boring     | MBBR/LOO☆☆           |
| 04    |           | Chamfering      | MBFR/LOO☆☆           |
| 05    | Grooving  | Square Grooving | MGR/LOO☆☆-□□         |
| 06    |           | Round Grooving  | MGRR/LOO☆☆-□□        |
| 07    |           | Face Grooving   | MGFR/LOO00-□□        |
| 08    | Threading | Partial         | 60°<br>MTR/LOO☆☆-◇60 |
|       |           |                 | 55°<br>MTR/LOO☆☆-◇55 |

### Details

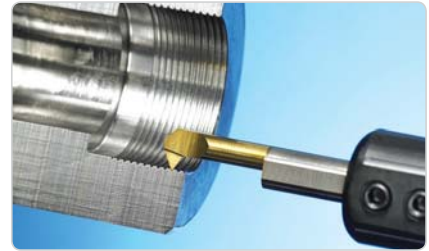
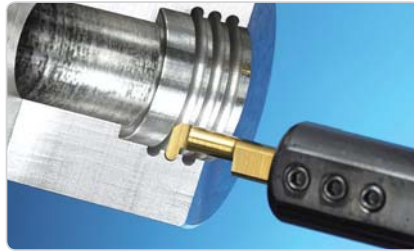
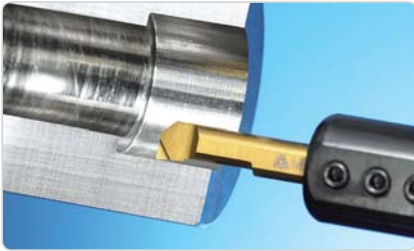
|       |    |                      |    |          |       |
|-------|----|----------------------|----|----------|-------|
| Marks | ○○ | Shank Dia.           |    |          |       |
|       | ☆☆ | Max. depth of boring |    |          |       |
|       | □□ | Width of groove      |    |          |       |
|       | ◇  | Pitch / tpi          | F  | 0.25~1.0 | 72~24 |
|       |    |                      | A  | 0.5~1.5  | 48~16 |
|       |    |                      | AG | 0.5~3.0  | 48~8  |



## Grades

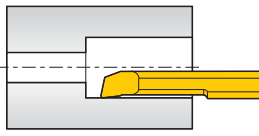
| Grades | Coating     | Application and features                                                                                                                              |
|--------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Z12M   | Carbide     | Ultra fine grain substrate ensures superior wear resistance and toughness<br>Application: Cast iron, Aluminum alloy and Non-ferrous metals machining  |
| PC30M  | TiN coating | TiN coated ultra fine grain substrate ensures long tool life<br>Application: Stainless steel, heat resisting alloy and hard-to-cut material machining |

## Machining types

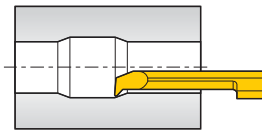


## Types

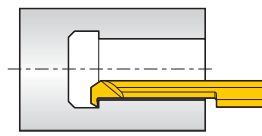
### Boring



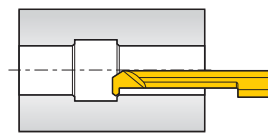
**Boring**  
Min. dia. of machining: Ø3.2



**Copying**  
Min. dia. of machining: Ø4.2

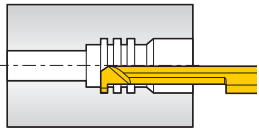


**Back Boring**  
Min. dia. of machining: Ø3.2

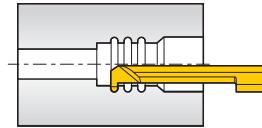


**Chamfering**  
Min. dia. of machining: Ø4.2

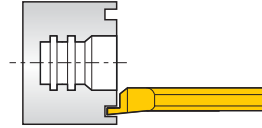
### Grooving



**Square Grooving**  
Min. dia. of machining: Ø3.2

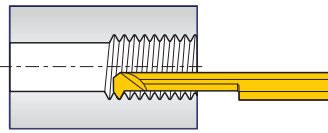


**Round Grooving**  
Min. dia. of machining: Ø3.2

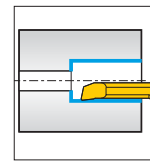
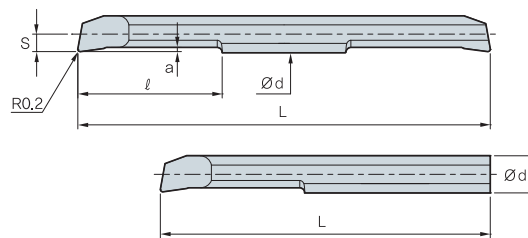


**Face Grooving**  
Min. dia. of machining: Ø6.0

### Threading

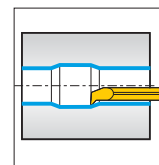
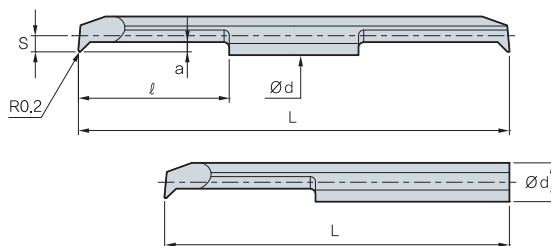


**Threading**  
Min. dia. of machining: Ø3.3



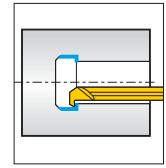
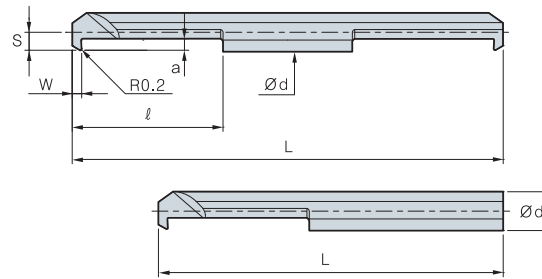
| Twin Edge   |        |          | Single Edge |              |              | Ød | Min.dia.<br>of mach-<br>ining | ℓ    | Overall length |    | Detailed cutting edge |    |      |     |
|-------------|--------|----------|-------------|--------------|--------------|----|-------------------------------|------|----------------|----|-----------------------|----|------|-----|
| Designation | Coated | Uncoated | Designation | Coated       | Uncoated     |    |                               |      | L              |    | a                     | S  |      |     |
|             | PC30M  | Z12M     |             | Double ended | Single ended |    |                               |      |                |    |                       |    |      |     |
| MBR         | 0310   | ●        |             | MBR          | 0310-1       |    |                               | 3.0  | 3.2            | 10 | 40                    | 35 | 0.5  | 1.4 |
|             | 0315   | ●        |             |              | 0315-1       |    |                               |      |                | 15 | 50                    | 45 |      |     |
|             | 0410   | ●        |             |              | 0410-1       |    |                               | 4.0  | 4.2            | 10 | 40                    | 35 | 0.6  | 1.9 |
|             | 0415   | ●        |             |              | 0415-1       |    |                               |      |                | 15 | 50                    | 45 |      |     |
|             | 0420   | ●        |             |              | 0420-1       |    |                               |      |                | 20 | 60                    | 50 |      |     |
|             | 0610   |          |             |              | 0610-1       |    |                               | 6.0  | 6.2            | 10 | 45                    | 40 | 0.75 | 2.9 |
|             | 0615   | ●        |             |              | 0615-1       |    |                               |      |                | 15 | 55                    | 45 |      |     |
|             | 0620   | ●        |             |              | 0620-1       |    |                               |      |                | 20 | 65                    | 50 |      |     |
|             | 0810   |          |             |              | 0810-1       |    |                               | 8.0  | 8.2            | 10 | 50                    | 45 | 0.8  | 3.9 |
|             | 0820   | ●        |             |              | 0820-1       |    |                               |      |                | 20 | 70                    | 60 |      |     |
|             | 0830   |          |             |              | 0830-1       |    |                               |      |                | 30 | 80                    | 70 |      |     |
|             | 1015   |          |             |              | 1015-1       |    |                               | 10.0 | 10.2           | 15 | 60                    | 60 | 1.0  | 4.9 |
|             | 1025   | ●        |             |              | 1025-1       |    |                               |      |                | 25 | 80                    | 70 |      |     |
|             | 1035   |          |             |              | 1035-1       |    |                               |      |                | 35 | 100                   | 80 |      |     |

● : Stock item

[illegible]

● : Stock item

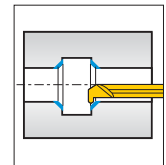
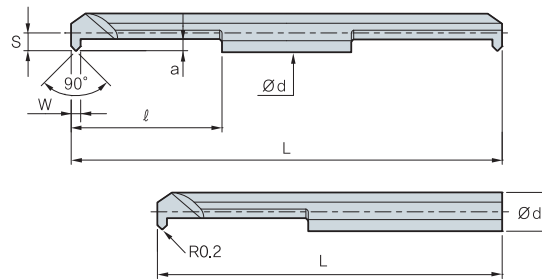
# Back Boring



| Twin Edge                                                         |        |          | Single Edge                                                                       |        |          | Ød  | Min.dia. of machining | ℓ  | Overall length |              | Detailed cutting edge |     |     |
|-------------------------------------------------------------------|--------|----------|-----------------------------------------------------------------------------------|--------|----------|-----|-----------------------|----|----------------|--------------|-----------------------|-----|-----|
| Designation                                                       | Coated | Uncoated | Designation                                                                       | Coated | Uncoated |     |                       |    | L              |              | W                     | a   | S   |
|                                                                   | PC30M  | Z12M     |                                                                                   | PC30M  | Z12M     |     |                       |    | Double ended   | Single ended |                       |     |     |
| MBBR 0310<br>0315<br>0410<br>0415<br>0420<br>0610<br>0615<br>0620 |        |          | MBBR 0310-1<br>0315-1<br>0410-1<br>0415-1<br>0420-1<br>0610-1<br>0615-1<br>0620-1 |        |          | 3.0 | 3.2                   | 10 | 40             | 35           | 1.5                   | 0.8 | 1.4 |
|                                                                   |        |          |                                                                                   |        |          |     |                       | 15 | 50             | 45           |                       |     |     |
|                                                                   |        |          |                                                                                   |        |          |     |                       | 10 | 40             | 35           |                       |     |     |
|                                                                   |        |          |                                                                                   |        |          | 4.0 | 4.2                   | 15 | 50             | 45           | 2.0                   | 1.3 | 1.9 |
|                                                                   |        |          |                                                                                   |        |          |     |                       | 20 | 60             | 50           |                       |     |     |
|                                                                   |        |          |                                                                                   |        |          |     |                       | 10 | 45             | 40           |                       |     |     |
|                                                                   |        |          |                                                                                   |        |          | 6.0 | 6.2                   | 15 | 55             | 45           | 2.0                   | 1.9 | 2.9 |
|                                                                   |        |          |                                                                                   |        |          |     |                       | 20 | 65             | 50           |                       |     |     |
|                                                                   |        |          |                                                                                   |        |          |     |                       |    |                |              |                       |     |     |

● : Stock item

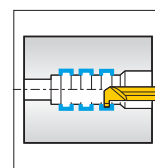
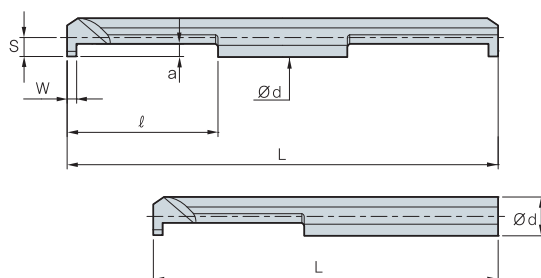
# Chamfering



| Twin Edge                                         |        |          | Single Edge                                                   |        |          | Ød  | Min.dia. of machining | ℓ  | Overall length |              | Detailed cutting edge |     |     |
|---------------------------------------------------|--------|----------|---------------------------------------------------------------|--------|----------|-----|-----------------------|----|----------------|--------------|-----------------------|-----|-----|
| Designation                                       | Coated | Uncoated | Designation                                                   | Coated | Uncoated |     |                       |    | L              |              | W                     | a   | S   |
|                                                   | PC30M  | Z12M     |                                                               | PC30M  | Z12M     |     |                       |    | Double ended   | Single ended |                       |     |     |
| MBFR 0410<br>0415<br>0420<br>0610<br>0615<br>0620 |        |          | MBFR 0410-1<br>0415-1<br>0420-1<br>0610-1<br>0615-1<br>0620-1 |        |          | 4.0 | 4.2                   | 10 | 40             | 35           | 0.8                   | 1.0 | 1.9 |
|                                                   |        |          |                                                               |        |          |     |                       | 15 | 50             | 45           |                       |     |     |
|                                                   |        |          |                                                               |        |          |     |                       | 20 | 60             | 50           |                       |     |     |
|                                                   |        |          |                                                               |        |          | 6.0 | 6.2                   | 10 | 45             | 40           | 1.4                   | 1.2 | 2.9 |
|                                                   |        |          |                                                               |        |          |     |                       | 15 | 55             | 45           |                       |     |     |
|                                                   |        |          |                                                               |        |          |     |                       | 20 | 65             | 50           |                       |     |     |
|                                                   |        |          |                                                               |        |          |     |                       |    |                |              |                       |     |     |
|                                                   |        |          |                                                               |        |          |     |                       |    |                |              |                       |     |     |

● : Stock item

## Square Grooving

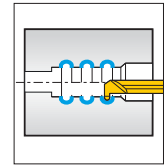
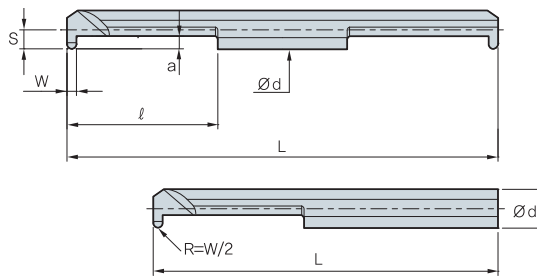


| Twin Edge   |          |                 |                  | Single Edge |            |                 |                  | Ød  | Min.dia. of machining | ℓ   | Overall length |              | Detailed cutting edge |     |     |    |     |     |     |
|-------------|----------|-----------------|------------------|-------------|------------|-----------------|------------------|-----|-----------------------|-----|----------------|--------------|-----------------------|-----|-----|----|-----|-----|-----|
| Designation |          | Coated<br>PC30M | Uncoated<br>Z12M | Designation |            | Coated<br>PC30M | Uncoated<br>Z12M |     |                       |     | L              |              | W                     | a   | S   |    |     |     |     |
|             |          |                 |                  |             |            |                 |                  |     |                       |     | Double ended   | Single ended |                       |     |     |    |     |     |     |
| MGR         | 0310-1.0 |                 |                  | MGR         | 0310-1.0-1 |                 |                  | 3.0 | 3.2                   | 10  | 40             | 35           | 1.0                   | 0.8 | 1.4 |    |     |     |     |
|             | 0315-1.0 |                 |                  |             | 0315-1.0-1 |                 |                  |     |                       | 15  | 50             | 45           |                       |     |     |    |     |     |     |
|             | 0310-1.5 |                 |                  |             | 0310-1.5-1 |                 |                  |     |                       | 10  | 40             | 35           | 1.5                   |     |     |    |     |     |     |
|             | 0315-1.5 |                 |                  |             | 0315-1.5-1 |                 |                  |     |                       | 15  | 50             | 45           |                       |     |     |    |     |     |     |
|             | 0410-1.0 |                 |                  |             | 0410-1.0-1 |                 |                  | 4.0 | 4.2                   | 10  | 40             | 35           | 1.0                   | 1.4 | 1.9 |    |     |     |     |
|             | 0420-1.0 |                 |                  |             | 0420-1.0-1 |                 |                  |     |                       | 20  | 60             | 50           |                       |     |     |    |     |     |     |
|             | 0410-1.5 |                 |                  |             | 0410-1.5-1 |                 |                  |     |                       | 10  | 40             | 35           | 1.5                   |     |     |    |     |     |     |
|             | 0420-1.5 |                 |                  |             | 0420-1.5-1 |                 |                  |     |                       | 20  | 60             | 50           |                       |     |     |    |     |     |     |
|             | 0410-2.0 |                 |                  |             | 0410-2.0-1 |                 |                  |     |                       | 10  | 40             | 35           | 2.0                   |     |     |    |     |     |     |
|             | 0420-2.0 |                 |                  |             | 0420-2.0-1 |                 |                  |     |                       | 20  | 60             | 50           |                       |     |     |    |     |     |     |
|             | 0610-1.0 | ●               |                  |             | 0610-1.0-1 |                 |                  |     |                       | 6.0 | 6.2            | 10           | 45                    |     |     | 40 | 1.0 | 1.8 | 2.9 |
|             | 0620-1.0 | ●               |                  |             | 0620-1.0-1 |                 |                  |     |                       |     |                | 20           | 65                    |     |     | 50 |     |     |     |
| 0610-1.5    |          |                 | 0610-1.5-1       |             |            | 10              | 45               | 40  | 1.5                   |     |                |              |                       |     |     |    |     |     |     |
| 0620-1.5    |          |                 | 0620-1.5-1       |             |            | 20              | 65               | 50  |                       |     |                | 2.0          |                       |     |     |    |     |     |     |
| 0610-2.0    |          |                 | 0610-2.0-1       |             |            | 10              | 45               | 40  | 2.5                   | 2.0 |                |              |                       |     |     |    |     |     |     |
| 0620-2.0    |          |                 | 0620-2.0-1       |             |            | 20              | 65               | 50  |                       |     |                |              |                       |     |     |    |     |     |     |
| 0610-2.5    |          |                 | 0610-2.5-1       |             |            | 8.0             | 8.2              | 20  | 70                    | 60  |                | 1.5          |                       | 2.5 | 3.9 |    |     |     |     |
| 0620-2.5    |          |                 | 0620-2.5-1       |             |            |                 |                  |     |                       |     |                | 2.0          |                       |     |     |    |     |     |     |
| 0820-1.5    |          |                 | 0820-1.5-1       |             |            | 2.5             | 3.5              |     |                       |     |                |              |                       | 3.0 |     |    |     |     |     |
| 0820-2.0    |          |                 | 0820-2.0-1       |             |            | 1.5             |                  |     |                       |     |                |              |                       |     |     |    |     |     |     |
| 0820-2.5    |          |                 | 0820-2.5-1       |             |            | 2.0             | 2.5              | 4.9 |                       |     |                |              |                       |     |     |    |     |     |     |
| 0820-3.0    |          |                 | 0820-3.0-1       |             |            | 2.5             |                  |     |                       |     |                |              |                       |     |     |    |     |     |     |
| 1025-1.5    |          |                 | 1025-1.5-1       |             |            | 10.0            | 10.2             |     | 25                    | 80  | 70             | 1.5          | 2.5                   |     |     |    |     |     |     |
| 1025-2.0    |          |                 | 1025-2.0-1       |             |            |                 |                  |     |                       |     |                | 2.0          |                       |     |     |    |     |     |     |
| 1025-2.5    |          |                 | 1025-2.5-1       |             |            |                 |                  | 2.5 |                       |     |                | 3.5          |                       |     |     |    |     |     |     |
| 1025-3.0    |          |                 | 1025-3.0-1       |             |            |                 |                  | 3.0 |                       |     |                |              |                       |     |     |    |     |     |     |

● : Stock item



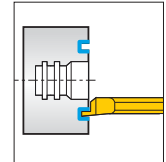
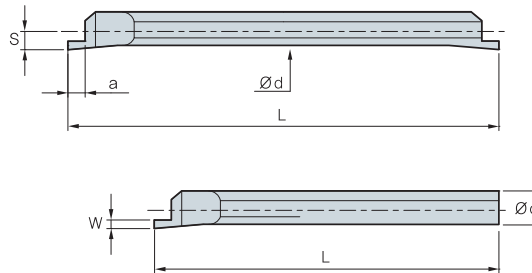
# Round Grooving



| Twin Edge   |          |          | Single Edge |            |          | Ød   | Min.dia.<br>of mach-<br>ining | ℓ  | Overall length |              | Detailed cutting edge |     |     |
|-------------|----------|----------|-------------|------------|----------|------|-------------------------------|----|----------------|--------------|-----------------------|-----|-----|
| Designation | Coated   | Uncoated | Designation | Coated     | Uncoated |      |                               |    | L              |              | W                     | a   | S   |
|             | PC30M    | Z12M     |             | PC30M      | Z12M     |      |                               |    | Double ended   | Single ended |                       |     |     |
| MGRR        | 0310-0.8 |          | MGRR        | 0310-0.8-1 |          | 3.0  | 3.2                           | 10 | 40             | 35           | 0.8                   | 0.8 | 1.4 |
|             | 0315-0.8 |          |             | 0315-0.8-1 |          |      |                               | 15 | 50             | 45           |                       |     |     |
|             | 0410-1.0 |          |             | 0410-1.0-1 |          | 4.0  | 4.2                           | 10 | 40             | 35           | 1.0                   | 1.0 | 1.9 |
|             | 0420-1.0 |          |             | 0420-1.0-1 |          |      |                               | 20 | 60             | 50           |                       |     |     |
|             | 0610-1.0 |          |             | 0610-1.0-1 |          | 6.0  | 6.2                           | 10 | 45             | 40           | 1.0                   | 2.0 | 2.9 |
|             | 0620-1.0 |          |             | 0620-1.0-1 |          |      |                               | 20 | 65             | 50           |                       |     |     |
|             | 0610-1.5 |          |             | 0610-1.5-1 |          |      |                               | 10 | 45             | 40           | 1.5                   |     |     |
|             | 0620-1.5 |          |             | 0620-1.5-1 |          |      |                               | 20 | 65             | 50           |                       |     |     |
|             | 0610-2.0 |          |             | 0610-2.0-1 |          |      |                               | 10 | 45             | 40           | 2.0                   |     |     |
|             | 0620-2.0 |          |             | 0620-2.0-1 |          |      |                               | 20 | 65             | 50           |                       |     |     |
|             | 0820-1.0 |          |             | 0820-1.0-1 |          | 8.0  | 8.2                           | 20 | 70             | 60           | 1.0                   | 2.3 | 3.9 |
|             | 0820-1.5 |          |             | 0820-1.5-1 |          |      |                               |    |                |              | 1.5                   |     |     |
|             | 0820-2.0 |          |             | 0820-2.0-1 |          |      |                               |    |                |              | 2.0                   |     |     |
|             | 1025-1.0 |          |             | 1025-1.0-1 |          | 10.0 | 10.2                          | 25 | 80             | 70           | 1.0                   | 2.8 | 4.9 |
|             | 1025-1.5 |          |             | 1025-1.5-1 |          |      |                               |    |                |              | 1.5                   |     |     |
|             | 1025-2.0 |          |             | 1025-2.0-1 |          |      |                               |    |                |              | 2.0                   |     |     |

● : Stock item

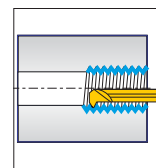
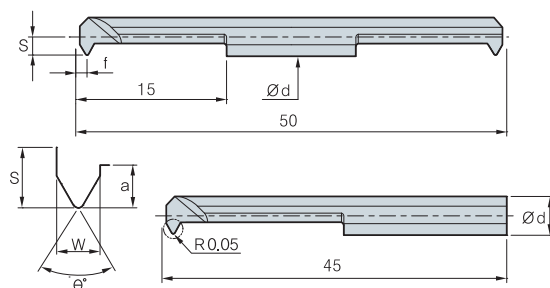
# Face Grooving



| Twin Edge   |          |          | Single Edge |            |          | Ød   | Min.dia. of machining | Overall length |              | Detailed cutting edge |     |     |
|-------------|----------|----------|-------------|------------|----------|------|-----------------------|----------------|--------------|-----------------------|-----|-----|
| Designation | Coated   | Uncoated | Designation | Coated     | Uncoated |      |                       | L              |              | W                     | a   | S   |
|             | PC30M    | Z12M     |             | PC30M      | Z12M     |      |                       | Double ended   | Single ended |                       |     |     |
| MGFR        | 0400-1.0 |          | MGFR        | 0400-1.0-1 |          | 4.0  | 6.0                   | 50             | 45           | 1.0                   | 1.5 | 1.8 |
|             | 0400-1.5 |          |             | 0400-1.5-1 |          |      |                       |                |              | 1.5                   | 2.0 |     |
|             | 0600-1.0 |          |             | 0600-1.0-1 |          | 6.0  | 8.5                   | 50             | 45           | 1.0                   | 1.5 | 2.9 |
|             | 0600-1.5 |          |             | 0600-1.5-1 |          |      |                       |                |              | 1.5                   | 2.0 |     |
|             | 0600-2.0 | ●        |             | 0600-2.0-1 |          | 8.0  | 10.4                  | 70             | 60           | 2.0                   | 2.5 | 3.9 |
|             | 0800-1.0 |          |             | 0800-1.0-1 |          |      |                       |                |              | 1.0                   | 1.5 |     |
|             | 0800-1.5 |          |             | 0800-1.5-1 |          |      |                       |                |              | 1.5                   | 2.0 |     |
|             | 0800-2.0 |          |             | 0800-2.0-1 |          | 10.0 | 12.4                  | 80             | 70           | 2.0                   | 2.5 | 4.9 |
|             | 1000-2.0 |          |             | 1000-2.0-1 |          |      |                       |                |              | 2.5                   | 3.0 |     |
|             | 1000-2.5 |          |             | 1000-2.5-1 |          |      |                       |                |              | 3.0                   | 3.5 |     |
|             | 1000-3.0 |          |             | 1000-3.0-1 |          |      |                       |                |              | 3.5                   | 4.0 |     |
|             | 1000-3.5 |          |             | 1000-3.5-1 |          |      |                       |                |              | 4.0                   | 4.5 |     |
|             | 1000-4.0 |          |             | 1000-4.0-1 |          |      |                       |                |              | 4.5                   | 5.0 |     |
|             | 1000-4.5 |          |             | 1000-4.5-1 |          |      |                       |                |              |                       |     |     |

● : Stock item

## Threading

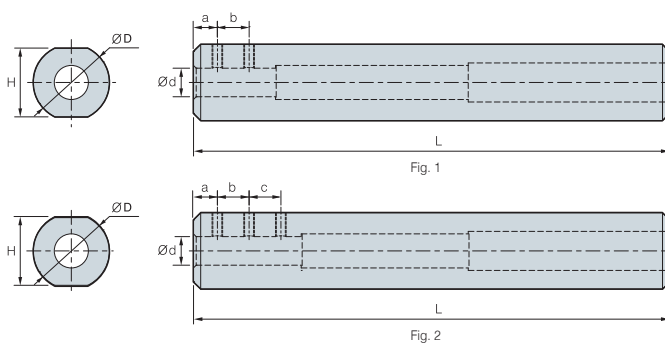


| Twin Edge                                                                |                 |                  | Single Edge                                                                          |                 |                  | Ød  | Min.dia. of machining | Threading |             |     | Detailed cutting edge |     |     |
|--------------------------------------------------------------------------|-----------------|------------------|--------------------------------------------------------------------------------------|-----------------|------------------|-----|-----------------------|-----------|-------------|-----|-----------------------|-----|-----|
| Designation                                                              | Coated<br>PC30M | Uncoated<br>Z12M | Designation                                                                          | Coated<br>PC30M | Uncoated<br>Z12M |     |                       | W         | Pitch / tpi | θ°  | S                     | a   | f   |
| MTR 0315-F60<br>0415-F60<br>0615-A60<br>0315-F55<br>0415-F55<br>0615-A55 |                 |                  | MTR 0315-F60-1<br>0415-F60-1<br>0615-A60-1<br>0315-F55-1<br>0415-F55-1<br>0615-A55-1 |                 |                  | 3.0 | 3.3                   | 1.2       | 0.5~1.0     | 60° | 1.45                  | 1.2 | 0.6 |
|                                                                          |                 |                  |                                                                                      |                 |                  | 4.0 | 4.3                   |           |             |     | 1.95                  |     |     |
|                                                                          |                 |                  |                                                                                      |                 |                  | 6.0 | 6.2                   |           |             |     | 2.90                  |     |     |
|                                                                          |                 |                  |                                                                                      |                 |                  | 3.0 | 3.3                   | 1.2       | 48~24       | 55° | 1.45                  | 1.2 | 0.6 |
|                                                                          |                 |                  |                                                                                      |                 |                  | 4.0 | 4.3                   |           |             |     | 1.95                  |     |     |
|                                                                          |                 |                  |                                                                                      |                 |                  | 6.0 | 6.2                   |           |             |     | 2.9                   |     |     |

● : Stock item

## SLEEVE

## SL (SLEEVE)



(mm)

| Designation | Ød | a | b  | c  | ØD | H  | L   | Screw | Wrench | Fig. |
|-------------|----|---|----|----|----|----|-----|-------|--------|------|
| SL1603      | 3  | 5 | -  | -  | 16 | 14 | 100 | M3    | HW15L  | 1    |
| SL1604      | 4  | 5 | 6  | -  | 16 | 14 | 100 | M4    | HW20L  |      |
| SL1605      | 5  | 5 | 8  | -  | 16 | 14 | 100 | M4    | HW20L  |      |
| SL1606      | 6  | 5 | 6  | 6  | 16 | 14 | 100 | M4    | HW20L  | 2    |
| SL1607      | 7  | 5 | 6  | 8  | 16 | 14 | 100 | M4    | HW20L  |      |
| SL2008      | 8  | 5 | 10 | 10 | 20 | 18 | 100 | M4    | HW20L  | 2    |
| SL2010      | 10 | 5 | 10 | 10 | 20 | 18 | 100 | M5    | HW20L  |      |

\* Fine tolerance and surface roughness

