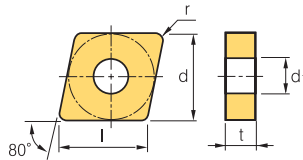


# B

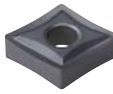
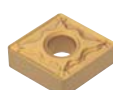
## Turning Insert (Negative)

C N ○ ○



| Dimensions (mm) |        |      |                |
|-----------------|--------|------|----------------|
| Size            | d      | t    | d <sub>1</sub> |
| 09              | 9.525  | 3.18 | 3.81           |
| 12              | 12.7   | 4.76 | 5.16           |
| 16              | 15.875 | 6.35 | 6.35           |
| 19              | 19.05  | 6.35 | 7.93           |

| Workpiece | Steel |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Inserts             |                                                                                                         | Designation | Cermet     |        |        | Coated |        | Coated |        |        |        |        |        |        |        |        |        | Uncoated |        | Cutting Condition |        |        |        |     |     |                |            |           |            |
|---------------------|---------------------------------------------------------------------------------------------------------|-------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|--------|-------------------|--------|--------|--------|-----|-----|----------------|------------|-----------|------------|
|                     |                                                                                                         |             | CN1500     | CN2000 | CN2500 | CC1500 | CC2500 | NC3215 | NC3120 | NC3225 | NC3030 | NC5330 | NC6310 | NC6315 | NC9115 | NC9125 | NC9135 | PC5300   | PC5400 | PC8105            | PC8110 | PC8115 | PC9030 | H01 | H05 | fn<br>(mm/rev) | ap<br>(mm) |           |            |
| Medium to finishing |                        | CNMG        | 120404-VP2 |        |        |        |        |        |        | ●      |        |        |        |        |        |        |        | ●        | ●      | ●                 | ●      | ●      |        | ●   |     | 0.05~0.30      | 0.10~3.00  |           |            |
|                     |                                                                                                         |             | 120408-VP2 |        |        |        |        |        |        |        |        |        |        |        |        |        |        | ●        | ●      | ●                 | ●      | ●      |        | ●   |     | 0.10~0.40      | 0.50~4.50  |           |            |
|                     |                                                                                                         |             | 160618-VP2 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                | 0.12~0.45  | 0.80~5.00 |            |
|                     |                                                                                                         |             | 190608-VP2 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                | 0.12~0.50  | 1.00~5.20 |            |
|                     |                                                                                                         |             | 190612-VP2 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.15~0.50 | 1.20~5.50  |
|                     |                                                                                                         |             | 190616-VP2 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.18~0.50 | 1.50~5.50  |
|                     |                                                                                                         |             |            |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            |           |            |
| Medium to finishing | <br>[ Cermet ]        | CNMG        | 090304-VQ  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                | 0.05~0.30  | 0.50~3.50 |            |
|                     |                                                                                                         |             | 090308-VQ  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.08~0.30 | 0.80~4.00  |
|                     |                                                                                                         |             | 090408-VQ  |        |        |        |        |        |        |        |        |        | ●      |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.05~0.30 | 0.50~3.50  |
|                     |                                                                                                         |             | 090412-VQ  |        |        |        |        |        |        |        |        |        | ●      |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.08~0.30 | 0.80~4.00  |
|                     |                                                                                                         |             | 120404-VQ  | ●      | ●      | ●      | ●      | ●      |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.05~0.30 | 0.80~4.00  |
|                     |                                                                                                         |             | 120408-VQ  | ●      | ●      | ●      | ●      | ●      |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.08~0.40 | 0.80~4.00  |
|                     |                                                                                                         |             | 120412-VQ  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.10~0.40 | 0.80~4.00  |
|                     |                                                                                                         |             |            |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            |           |            |
| Medium cutting      |                      | CNMG        | 090304-HM  |        |        |        |        |        |        |        |        | ●      |        |        |        |        |        |          |        |                   |        |        |        |     |     |                | 0.12~0.40  | 0.50~3.80 |            |
|                     |                                                                                                         |             | 120404-HM  |        |        |        |        |        |        | ●      | ●      | ●      |        |        |        |        |        |          |        |                   |        |        |        | ●   |     |                | 0.05~0.30  | 0.90~5.00 |            |
|                     |                                                                                                         |             | 120408-HM  |        |        |        |        |        |        | ●      | ●      | ●      |        |        |        |        |        | ●        |        |                   |        |        |        | ●   |     |                | 0.10~0.50  | 1.00~5.00 |            |
|                     |                                                                                                         |             | 120412-HM  |        |        |        |        |        | ●      |        |        |        |        |        |        |        |        |          |        |                   |        |        |        | ●   |     |                | 0.18~0.50  | 1.00~5.00 |            |
|                     |                                                                                                         |             | 190612-HM  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.13~0.60 | 1.30~7.00  |
|                     |                                                                                                         |             |            |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            |           |            |
| Medium cutting      | <br><span>new</span> | CNMG        | 120404-MK  |        |        |        |        |        |        |        |        |        |        | ●      | ●      |        |        |          |        |                   |        |        |        |     |     |                | 0.05~0.30  | 0.90~4.00 |            |
|                     |                                                                                                         |             | 120408-MK  |        |        |        |        |        |        |        |        |        |        |        | ●      | ●      |        |          |        |                   |        |        |        |     |     |                |            | 0.10~0.50 | 1.00~5.00  |
|                     |                                                                                                         |             | 120412-MK  |        |        |        |        |        |        |        |        |        |        |        | ●      | ●      |        |          |        |                   |        |        |        |     |     |                |            | 0.13~0.60 | 1.30~5.00  |
|                     |                                                                                                         |             | 120416-MK  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.15~0.60 | 1.30~5.00  |
|                     |                                                                                                         |             | 160608-MK  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.28~0.70 | 1.80~7.00  |
|                     |                                                                                                         |             | 160612-MK  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.28~0.72 | 2.00~8.00  |
|                     |                                                                                                         |             | 160616-MK  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.28~0.74 | 2.00~8.00  |
|                     |                                                                                                         |             | 190608-MK  |        |        |        |        |        |        |        |        |        |        |        |        | ●      |        |          |        |                   |        |        |        |     |     |                |            | 0.33~0.78 | 2.50~9.00  |
|                     |                                                                                                         |             | 190612-MK  |        |        |        |        |        |        |        |        |        |        |        |        | ●      |        |          |        |                   |        |        |        |     |     |                |            | 0.35~0.78 | 2.60~9.50  |
|                     |                                                                                                         |             | 190616-MK  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            | 0.35~0.80 | 2.60~10.00 |
|                     |                                                                                                         |             |            |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |        |     |     |                |            |           |            |

 Cutting edge geometry **A52~A61**

 Recommended chip breaker **B04~B11**

 Code system **B26~B27**

- : Stock item

| Available tool holders |      |             |      |
|------------------------|------|-------------|------|
| Designation            | Page | Designation | Page |
| MCKNR/L                | B171 | MCRNR/L     | B172 |
| MCLNR/L                | B171 | PCBNR/L     | B159 |
| MCMNN                  | B171 | PCLNR/L     | B160 |

