

### Threading tools code key

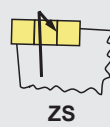
#### Clamping system

Top clamping

Screw clamping



ZC



ZS

#### Thread type

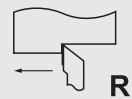
**I** > Internal thread

**E** > External thread

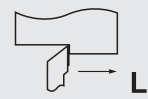
#### Cutting direction

Right hand

Left hand



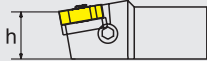
R



L

**ZS E R 20 20 K 16**

#### Nose height



Note: 00 for round tool holder.  
Only to integer, for example:  
h=8mm is labeled as 08.

#### Shank width



Note: Diameter for round tool holder  
for example: b=8mm is labeled as 08.

#### Tool length

| Code   | H   | K   | M   | P   | Q   | R   | S   | T   | U   |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Length | 100 | 125 | 150 | 170 | 180 | 200 | 250 | 300 | 350 |

#### Insert size

| Code                 | 11   | 16    | 22    |
|----------------------|------|-------|-------|
| Triangle side length | 11   | 16    | 22    |
| Inscribed circle     | 6.35 | 9.525 | 12.70 |

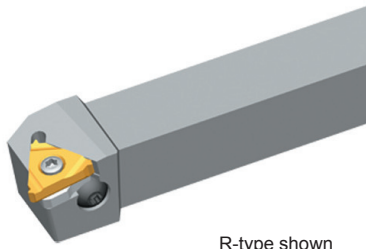
General turning

Parting and grooving

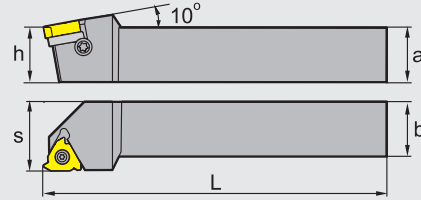
Threading

Threading tools

### External threading tools



R-type shown



| Type    | Stock   | Basic dimensions(mm) |    |    |     |     | Applicable inserts | Inserts screw | Shim          | Shim screw | Wrench  |        |           |               |           |        |        |
|---------|---------|----------------------|----|----|-----|-----|--------------------|---------------|---------------|------------|---------|--------|-----------|---------------|-----------|--------|--------|
|         |         | a                    | h  | b  | L   | s   |                    |               |               |            |         |        |           |               |           |        |        |
| ZSER    | 1616H16 | ▲                    | 16 | 16 | 16  | 100 | 20                 | Z16ER□□□□     | I60 M3.5X12TT | MT16-□□MN  | SM4X8C  | WT15IP |           |               |           |        |        |
|         | 2020K16 | ▲                    | 20 | 20 | 20  | 125 | 25                 |               |               |            |         |        |           |               |           |        |        |
|         | 2525M16 | ▲                    | 25 | 25 | 25  | 150 | 32                 |               |               |            |         |        |           |               |           |        |        |
|         | 3225P16 | ▲                    | 32 | 32 | 25  | 170 | 32                 |               |               |            |         |        |           |               |           |        |        |
|         | 3232P16 | ▲                    | 32 | 32 | 32  | 170 | 40                 |               |               |            |         |        |           |               |           |        |        |
|         | 2525M22 | ▲                    | 25 | 25 | 25  | 150 | 32                 |               |               |            |         |        |           |               |           |        |        |
|         | 3225P22 | ▲                    | 32 | 32 | 25  | 170 | 32                 |               |               |            |         |        |           |               |           |        |        |
|         | 3232P22 | ▲                    | 32 | 32 | 32  | 170 | 40                 |               |               |            |         |        |           |               |           |        |        |
| 4040S22 | △       | 40                   | 40 | 40 | 250 | 50  | Z22ER□□□□          | I60 M5X17     | MT22-□□MN     | SM5X8.5    | WT20IP  |        |           |               |           |        |        |
| ZSEL    | 1616H16 | ▲                    | 16 | 16 | 16  | 100 |                    |               |               |            |         | 20     | Z16EL□□□□ | I60 M3.5X12TT | MT16-□□MN | SM4X8C | WT15IP |
|         | 2020K16 | ▲                    | 20 | 20 | 20  | 125 |                    |               |               |            |         | 25     |           |               |           |        |        |
|         | 2525M16 | ▲                    | 25 | 25 | 25  | 150 |                    |               |               |            |         | 32     |           |               |           |        |        |
|         | 3225P16 | ▲                    | 32 | 32 | 25  | 170 |                    |               |               |            |         | 32     |           |               |           |        |        |
|         | 3232P16 | ▲                    | 32 | 32 | 32  | 170 |                    |               |               |            |         | 40     |           |               |           |        |        |
|         | 2525M22 | ▲                    | 25 | 25 | 25  | 150 |                    |               |               |            |         | 32     |           |               |           |        |        |
|         | 3225P22 | ▲                    | 32 | 32 | 25  | 170 |                    |               |               |            |         | 32     |           |               |           |        |        |
|         | 3232P22 | ▲                    | 32 | 32 | 32  | 170 | 40                 | Z22EL□□□□     | I60 M5X17     | MT22-□□MN  | SM5X8.5 | WT20IP |           |               |           |        |        |
| 4040S22 | △       | 40                   | 40 | 40 | 250 | 50  |                    |               |               |            |         |        |           |               |           |        |        |

▲Stock available    △Make-to-order

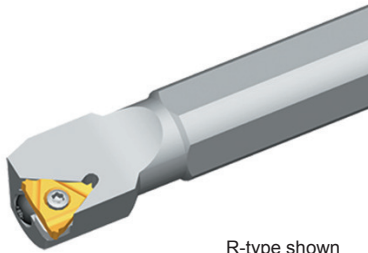
General turning

Parting and grooving

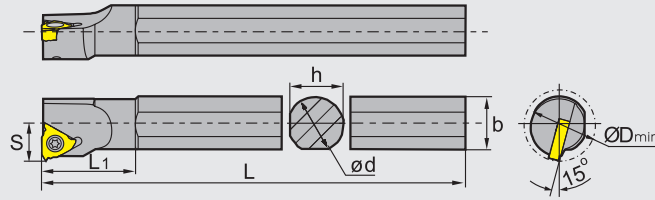
Threading

Threading tools

### Internal threading tools



R-type shown



| Type    | Stock   | Basic dimensions(mm) |     |      |                  |    |      |                |      | Applicable inserts | Inserts screw | Shim    | Shim screw | Wrench |
|---------|---------|----------------------|-----|------|------------------|----|------|----------------|------|--------------------|---------------|---------|------------|--------|
|         |         | d                    | L   | b    | D <sub>min</sub> | s  | h    | L <sub>1</sub> |      |                    |               |         |            |        |
| ZSIR    | 0016K11 | ▲                    | 16  | 125  | 16               | 12 | 10   | 15             | 20.9 | Z11IR□□□□          | I60 M2.5X6.5T | ---     | ---        | WT08IP |
|         | 0016M11 | ▲                    | 16  | 150  | 15.5             | 16 | 10.5 | 15             | 25.9 |                    |               |         |            |        |
|         | 0016M16 | ▲                    | 16  | 150  | 15.5             | 20 | 12   | 15             | 27   | Z16IR□□□□          | I60 M3.5X08TT | ---     | ---        | WT15IP |
|         | 0020M16 | ▲                    | 20  | 150  | 19               | 25 | 14   | 18             | 28.7 |                    |               |         |            |        |
|         | 0020Q16 | ▲                    | 20  | 180  | 19               | 25 | 14   | 18             | 34   | Z22IR□□□□          | I60 M5X13.2   | ---     | ---        | WT20IP |
|         | 0025M16 | ▲                    | 25  | 150  | 24               | 32 | 17   | 23             | 28.8 |                    |               |         |            |        |
|         | 0032R16 | ▲                    | 32  | 200  | 31               | 40 | 22   | 30             | 30.9 | I60 M3.5X12TT      | MT16-□□MN     | SM4X8C  | WT15IP     |        |
|         | 0032S16 | ▲                    | 32  | 250  | 31               | 40 | 22   | 30             | 30.9 |                    |               |         |            |        |
|         | 0040T16 | ▲                    | 40  | 300  | 38.5             | 50 | 27   | 37             | 31.5 | I60 M5X17          | MT22-□□MN     | SM5X8.5 | WT20IP     |        |
|         | 0050U16 | ▲                    | 50  | 350  | 49.5             | 63 | 35   | 49             | 40.2 |                    |               |         |            |        |
|         | 0020Q22 | ▲                    | 20  | 180  | 21.5             | 25 | 15   | 18             | 35   | I60 M5X17          | MT22-□□MN     | SM5X8.5 | WT20IP     |        |
|         | 0025R22 | ▲                    | 25  | 200  | 24               | 32 | 19   | 23             | 39   |                    |               |         |            |        |
|         | 0032S22 | ▲                    | 32  | 250  | 31               | 40 | 22   | 30             | 36.4 | I60 M5X17          | MT22-□□MN     | SM5X8.5 | WT20IP     |        |
|         | 0040T22 | ▲                    | 40  | 300  | 38.5             | 50 | 27   | 37             | 37.2 |                    |               |         |            |        |
| 0050U22 | ▲       | 50                   | 350 | 48.5 | 63               | 35 | 47   | 42.6           |      |                    |               |         |            |        |
| ZSIL    | 0016K11 | ▲                    | 16  | 125  | 16               | 12 | 10   | 15             | 20.9 | Z11IL□□□□          | I60 M2.5X6.5  | ---     | ---        | WT07IP |
|         | 0016M11 | ▲                    | 16  | 150  | 15.5             | 16 | 10.5 | 15             | 25.9 |                    |               |         |            |        |
|         | 0016M16 | ▲                    | 16  | 150  | 15.5             | 20 | 12   | 15             | 27   | Z16IL□□□□          | I60 M3.5X08TT | ---     | ---        | WT15IP |
|         | 0020M16 | ▲                    | 20  | 150  | 19               | 25 | 14   | 18             | 28.7 |                    |               |         |            |        |
|         | 0020Q16 | ▲                    | 20  | 180  | 19               | 25 | 14   | 18             | 34   | I60 M3.5X12        | MT16-□□MN     | SM4X8C  | WT15IP     |        |
|         | 0025M16 | ▲                    | 25  | 150  | 24               | 32 | 17   | 23             | 28.8 |                    |               |         |            |        |
|         | 0032R16 | ▲                    | 32  | 200  | 31               | 40 | 22   | 30             | 30.9 | I60 M5X13.2        | ---           | ---     | WT20IP     |        |
|         | 0032S16 | ▲                    | 32  | 250  | 31               | 40 | 22   | 30             | 30.9 |                    |               |         |            |        |
|         | 0040T16 | ▲                    | 40  | 300  | 38.5             | 50 | 27   | 37             | 31.5 | I60 M5X17          | MT22-□□MN     | SM5X8.5 | WT20IP     |        |
|         | 0050U16 | ▲                    | 50  | 350  | 49.5             | 63 | 35   | 49             | 40.2 |                    |               |         |            |        |
|         | 0020Q22 | ▲                    | 20  | 180  | 21.5             | 25 | 15   | 18             | 35   | I60 M5X17          | MT22-□□MN     | SM5X8.5 | WT20IP     |        |
|         | 0025R22 | ▲                    | 25  | 200  | 24               | 32 | 19   | 23             | 39   |                    |               |         |            |        |
|         | 0032S22 | ▲                    | 32  | 250  | 31               | 40 | 22   | 30             | 36.4 | I60 M5X17          | MT22-□□MN     | SM5X8.5 | WT20IP     |        |
|         | 0040T22 | ▲                    | 40  | 300  | 38.5             | 50 | 27   | 37             | 37.2 |                    |               |         |            |        |
| 0050U22 | ▲       | 50                   | 350 | 48.5 | 63               | 35 | 47   | 42.6           |      |                    |               |         |            |        |

▲Stock available

△Make-to-order

General turning

Parting and grooving

Threading

Threading tools