

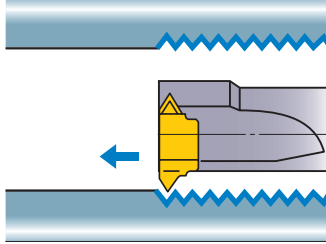
# INTERNAL THREADING

## F TYPE BORING BARS

- Minimum cutting diameter 10mm.
- Screw-on type.
- Applicable to threading, grooving and boring.
- Thread pitch 1.5—3.5mm.

### FSL51

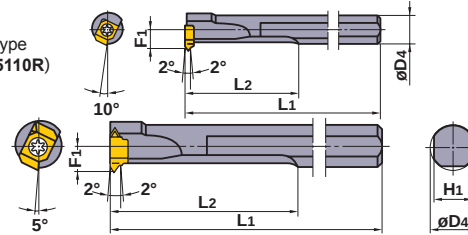
#### Internal threading, Grooving, Boring



(Note) Cutting in the opposite direction is not possible.

1 Corner Type  
(FSL5108R, 5110R)

2 Corner Type  
(FSL5112R, 5114R, 5116R)



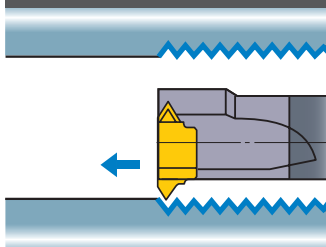
Right hand tool holder only.

| Order Number | Stock<br>R | Insert Number |                 | Dimensions (mm) |     |    |     |      | Min. Cutting Diameter | ★<br>Clamp Screw | Wrench |
|--------------|------------|---------------|-----------------|-----------------|-----|----|-----|------|-----------------------|------------------|--------|
|              |            | Threading     | Grooving        | D4              | L1  | L2 | F1  | H1   |                       |                  |        |
| FSL5108R     | ●          | MLT1001L      | MLG10 $\odot$ L | 8               | 125 | 30 | 4.8 | 7    | 10                    | TS25             | TKY08F |
| 5110R        | ●          | MLT1001L      | MLG10 $\odot$ L | 10              | 150 | 40 | 5.8 | 9    | 12                    | TS25             | TKY08F |
| 5112R        | ●          | MLT1401L      | MLG14 $\odot$ L | 12              | 180 | 50 | 6.8 | 10.8 | 14                    | TS32             | TKY08F |
| 5114R        | ●          | MLT1401L      | MLG14 $\odot$ L | 14              | 180 | 60 | 7.8 | 12.4 | 16                    | TS32             | TKY08F |
| 5116R        | ●          | MLT2001L      | MLG20 $\odot$ L | 16              | 200 | 70 | 9.7 | 14   | 20                    | TS43             | TKY15F |

★ Clamp Torque (N · m) : TS25=1.0, TS32=1.0, TS43=3.5

### FSL52

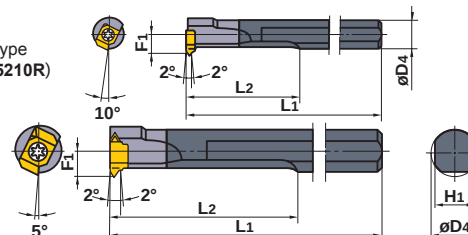
#### Carbide shank



(Note) Cutting in the opposite direction is not possible.

1 Corner Type  
(FSL5208R, 5210R)

2 Corner Type  
(FSL5212R, 5214R, 5216R)



Right hand tool holder only.

| Order Number | Stock<br>R | Insert Number |                 | Dimensions (mm) |     |     |     |    | Min. Cutting Diameter | ★<br>Clamp Screw | Wrench |
|--------------|------------|---------------|-----------------|-----------------|-----|-----|-----|----|-----------------------|------------------|--------|
|              |            | Threading     | Grooving        | D4              | L1  | L2  | F1  | H1 |                       |                  |        |
| FSL5208R     | ●          | MLT1001L      | MLG10 $\odot$ L | 8               | 125 | 60  | 4.8 | 7  | 10                    | TS25             | TKY08F |
| 5210R        | ●          | MLT1001L      | MLG10 $\odot$ L | 10              | 150 | 70  | 5.8 | 9  | 12                    | TS25             | TKY08F |
| 5212R        | ●          | MLT1401L      | MLG14 $\odot$ L | 12              | 180 | 80  | 6.8 | 11 | 14                    | TS32             | TKY08F |
| 5214R        | ●          | MLT1401L      | MLG14 $\odot$ L | 14              | 180 | 85  | 7.8 | 12 | 16                    | TS32             | TKY08F |
| 5216R        | ★          | MLT2001L      | MLG20 $\odot$ L | 16              | 200 | 115 | 9.7 | 14 | 20                    | TS43             | TKY15F |

★ Clamp Torque (N · m) : TS25=1.0, TS32=1.0, TS43=3.5

## RECOMMENDED CUTTING CONDITIONS

| Work Material | Hardness  | Grade  | Cutting Speed (m/min) |
|---------------|-----------|--------|-----------------------|
| P             | ≤180HB    | UP20M  | 140 (100—180)         |
|               |           | UTi20T | 120 (100—150)         |
|               | 180—280HB | UP20M  | 120 (100—150)         |
|               |           | UTi20T | 100 (70—120)          |

| Work Material | Hardness                    | Grade  | Cutting Speed (m/min) |
|---------------|-----------------------------|--------|-----------------------|
| M             | ≤200HB                      | UP20M  | 120 (80—150)          |
|               |                             | UTi20T | 100 (70—130)          |
| K             | Tensile Strength<br>≤350MPa | UP20M  | 80 (60—100)           |
|               |                             | UTi20T | 80 (60—100)           |

● : Inventory maintained. ★ : Inventory maintained in Japan.