# THREAD MAKING

## contents

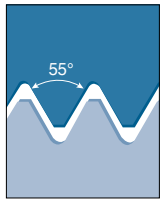
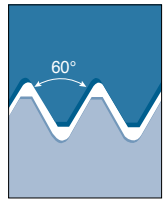
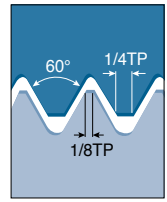
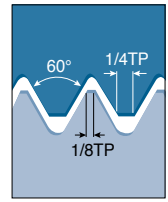
## Guide to Icons

› T-THREAD Holder Page


› Cutting Condition Page

# Tool Selection Guide

## Threading inserts

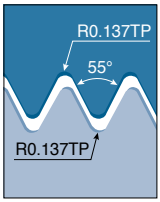
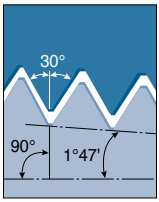
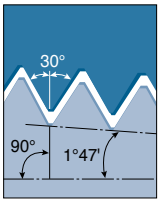
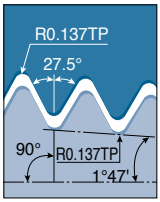
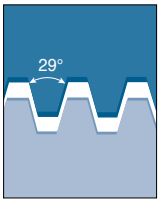
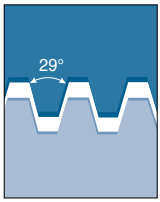
| Thread | | T-THREAD | | | |
|---|---|---|---|---|---|
| | | **55° thread** | **60° thread** | **Metric ISO** | **American UN** |
| | |  |  |  |  |
| **Pages** | | C19 | C20 | C21 - C25 | C26 - C30 |
| **Type of threading** | | Partial profile | Partial profile | Full profile | Full profile |
| **Application** | | General use for 55° thread forms for wide range of pitches | General use for 60° thread forms for wide range of pitches | General usage for all industries | General usage for all industries |
|  M - type | ER | ● | ● | ● | ● |
| | IR | ● | ● | ● | ● |
|  Regular type | ER/IR | ● | ● | ● | ● |
| | EL/IL | ● | ● | ● | ● |
|  B - type | ER | ● | ● | ● | ● |
| | IR | ● | ● | ● | ● |
|  U - type | IRL | ● | ● | ● | ● |
| | EIRL | ● | ● | | |
| | ERL | | | ● | |
|  Multi-tooth type | ER | | | ● | ● |
| | IR | | | ● | ● |

**ER**: External right hand **EL**: External left hand **IR**: Internal right hand **IL**: Internal left hand
**ERL**: External right / left hand **IRL**: Internal Right / left hand **EIRL**: External / internal right / left hand

# Tool Selection Guide

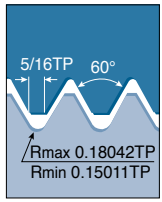
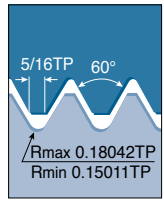
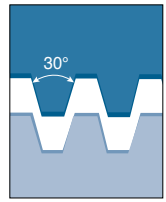
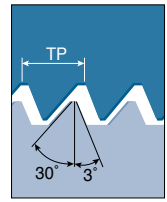
## Threading inserts

T-THREAD

| Whitworth | NPT | NPTF | BSPT | STUB ACME | ACME |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| C31 - C34 | C35 - C36 | C37 | C38 | C39 | C40 |
| Full profile | Full profile | Full profile | Full profile | Partial profile | Partial profile |
| General industries. Pipe fittings and couplings | Steam, gas and water pipes | Steam, gas and water pipes. Dry seal | 55˚ form for steam, gas and water pipes | Shallow ACME profile for motion transmission | Motion transmission. Feed screws |
| ● | ● | | ● | | |
| ● | ● | | ● | | |
| ● | ● | ● | ● | ● | ● |
| ● | ● | | ● | ● | ● |
| ● | ● | | ● | | |
| ● | ● | | ● | | |
| | | | | | ● |
| | | | | | |
| | | | | | ● |
| ● | ● | | | | |
| ● | ● | | | | |

# Tool Selection Guide

## Threading inserts

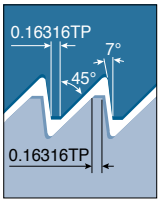
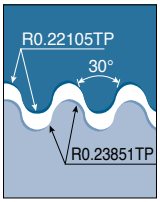
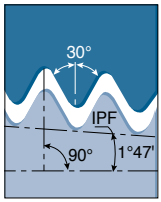
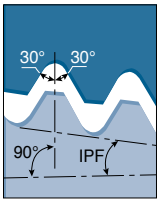
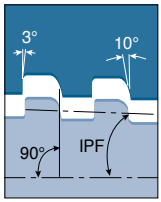
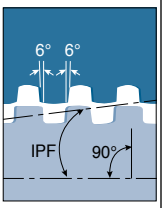
| Thread | | T-THREAD | | | |
|---|---|---|---|---|---|
| | | **UNJ** | **MJ** | **Trapez DIN 103** | **Sagengenwinde DIN 513** |
| | |  |  |  |  |
| **Pages** | | C41 - C42 | C43 | C44 | C46 |
| **Type of threading** | | Full profile | Full profile | Partial profile | Full profile |
| **Application** | | Aviation and aerospace industry | Aviation and aerospace industry | Motion transmission. Feed screws | For high force in one direction |
|  M - type | ER | | | | |
| | IR | | | | |
|  Regular type | ER/IR | ● | ● | ● | ● |
| | EL/IL | ● | | ● | ● |
|  B - type | ER | | | | |
| | IR | ● | | | |
|  U - type | ER/IR | | | | ● |
| | EL/IL | | | | ● |
| | ERL/IRL | | | ● | |
|  Multi-tooth type | ER | | | | |
| | IR | | | | |

**ER**: External right hand **EL**: External left hand **IR**: Internal right hand **IL**: Internal left hand
**ERL**: External right / left hand **IRL**: Internal Right / left hand **EIRL**: External / internal right / left hand

# Tool Selection Guide

## Threading inserts

T-THREAD

| American buttress | Round DIN 405 | API round | API | Buttress casing | Extreme line casing |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| C47 | C48 | C49 | C50 | C51 | C51 |
| Full profile | Full profile | Full profile | Full profile | Full profile | Full profile |
| For high force in one direction | Pipe coupling in fire fighting, chemical and food industries | 60˚ thread with large radius in the oil and gas industry | 60˚ thread form for pipe connections in the oil and gas industry | Tube and casings in the oil and gas industry | Tube and casings in the oil and gas industry |
| | ● | | | | |
| | ● | | | | |
| ● | ● | ● | ● | ● | ● |
| ● | ● | ● | ● | | |
| | | | | | |
| | | | | | |
| ● | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

# Grades

## Thread making grades

| Grades | ISO | Characteristics & applications |
|---|---|---|
| **TT7010**<br>PVD coated | P05 – P25<br>K05 – K25 | • General machining of steel and cast iron |
| **TT8010**<br>PVD coated | P30 – P50<br>M30 – M50<br>S30 – S50 | • Toughest grade in threading product line<br>• For a wide range of threading on low carbon steel & low carbon alloy steel<br>• Medium to low speed threading of stainless steel and exotic materials |
| **TT9030**<br>PVD coated | P20 – P40<br>M20 – M40<br>S20 – S40 | • General machining of steel<br>• General machining of stainless steel<br>• General machining of heat-resistant alloy |
| **P30**<br>Carbide | P25 – P35 | • General machining of steel |

# T-THREAD

## Thread Turning

# Holder Designation System

| S | E | R | 2020 | K | 16 | □ |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## 1 Clamping system

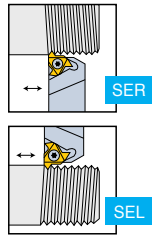
**S -** Screw clamping

## 2 Application

**E -** External
**I -** Internal

## 3 Hand of tool

**R -** Right-hand
**L -** Left-hand




## 4 Shank size

**External toolholders**
Shank: H×B

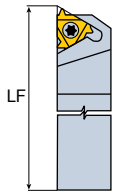
**2020**: 20×20 mm

**Internal toolholders**
Neck diameter

**0025**: Neck diameter 25 mm

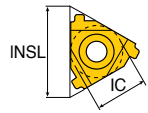
## 5 Tool length

| | | mm |
|---|---|---|
| **D** | - | 60 |
| **F** | - | 80 |
| **H** | - | 100 |
| **K** | - | 125 |
| **L** | - | 140 |
| **M** | - | 150 |
| **P** | - | 170 |
| **R** | - | 200 |
| **S** | - | 250 |
| **T** | - | 300 |
| **U** | - | 350 |
| **V** | - | 400 |




## 6 Insert size

| INSL (mm) | IC |
|---|---|
| **06** | 3.97 mm = 5/32″ |
| **08** | 4.76 mm = 3/16″ |
| **08U** | 4.76 mm = 3/16″ |
| **11** | 6.35 mm = 1/4″ |
| **16** | 9.52 mm = 3/8″ |
| **22** | 12.70 mm = 1/2″ |
| **22U** | 12.70 mm = 1/2″ |
| **27** | 15.88 mm = 5/8″ |
| **27U** | 15.88 mm = 5/8″ |



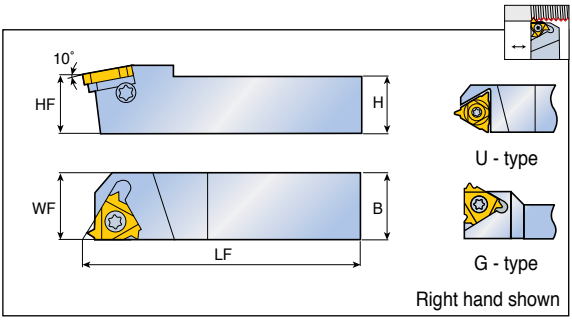

## 7 Optional specifications

**U** - For U-type inserts
**B** - Bore for coolant
**C** - Carbide shank
**D** - Drop head
**G** - Gang tool
**AD** - Short type
**SP** - Special

# SER/L

T-THREAD

## External threading toolholders



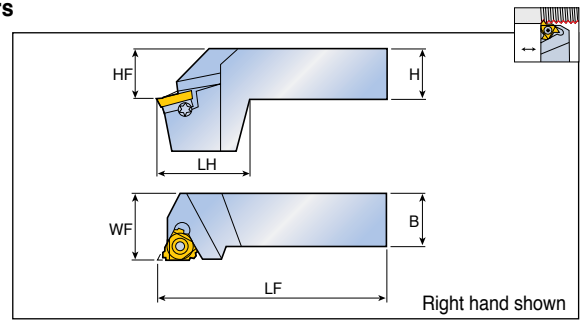

| Designation | | Dimension (mm) | | | | | Insert [2] |
|---|---|---|---|---|---|---|---|
| | | H | HF | B | LF | WF | |
| **SER** | **0808 H11** [1] | 8 | 8 | 8 | 100 | 11 | 11 ER... |
| | **1616 K16G** | 16 | 16 | 16 | 125 | 21.7 | 16 ER... |
| | **4040 R27** | 40 | 40 | 40 | 200 | 40 | 27 ER... |
| **SER/L** | **1010 H11** [1] | 10 | 10 | 10 | 100 | 11 | 11 ER/L... |
| | **1212 F16** | 12 | 12 | 12 | 80 | 16 | 16 ER/L... |
| | **1212 X16** | 12 | 12 | 12 | 120 | 12 | 16 ER/L... |
| | **1616 H16** | 16 | 16 | 16 | 100 | 16 | 16 ER/L... |
| | **2020-16-AD** | 20 | 20 | 20 | 67 | 25 | 16 ER/L... |
| | **2020 K16** | 20 | 20 | 20 | 125 | 20 | 16 ER/L... |
| | **2525 M16** | 25 | 25 | 25 | 150 | 25 | 16 ER/L... |
| | **3232 P16** | 32 | 32 | 32 | 170 | 32 | 16 ER/L... |
| | **2525 M22** | 25 | 25 | 25 | 150 | 25 | 22 ER/L... |
| | **3232 P22** | 32 | 32 | 32 | 170 | 32 | 22 ER/L... |
| | **4040 R22** | 40 | 40 | 40 | 200 | 40 | 22 ER/L... |
| | **2525 M22U** | 25 | 25 | 25 | 150 | 28 | 22 UERL... |
| | **3232 P22U** | 32 | 32 | 32 | 170 | 32 | 22 UERL... |
| | **4040 R22U** | 40 | 40 | 40 | 200 | 40 | 22 UERL... |
| | **2525 M27** | 25 | 25 | 25 | 150 | 25 | 27 ER/L... |
| | **3232 P27** | 32 | 32 | 32 | 170 | 32 | 27 ER/L... |
| | **2525 M27U** | 25 | 25 | 25 | 150 | 32 | 27 UERL... |
| | **3232 P27U** | 32 | 32 | 32 | 170 | 32 | 27 UERL... |
| | **4040 R27U** | 40 | 40 | 40 | 200 | 40 | 27 UERL... |

- [1] Toolholders without anvil
- [2] Right hand inserts (ER) for right hand tools (SER)
- All Toolholders are made with 1.5° helix angle
- For multi-tooth inserts use anvils AE16M, AE22M, AE27M
- Please check for spare parts C15 page

TaeguTec

# SER...D

## External threading drophead toolholders

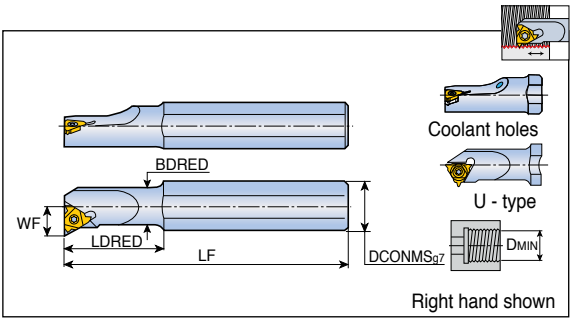



| Designation | | Dimension (mm) | | | | | | Insert |
|---|---|---|---|---|---|---|---|---|
| | | H | HF | B | LF | WF | LH | |
| **SER** | **2020 K16D** | 20 | 20 | 20 | 125 | 25 | 38 | 16 ER... |
| | **2525 M16D** | 25 | 25 | 25 | 150 | 32 | 38 | 16 ER... |
| | **2525 M22D** | 25 | 25 | 25 | 150 | 32 | 38 | 22 ER... |

- All Toolholders are made with 1.5° helix angle
- For multi-tooth inserts use anvils AE16M, AE22M, AE27M
- Please check for spare parts C15 page

# SIR/L

## Internal threading toolholders



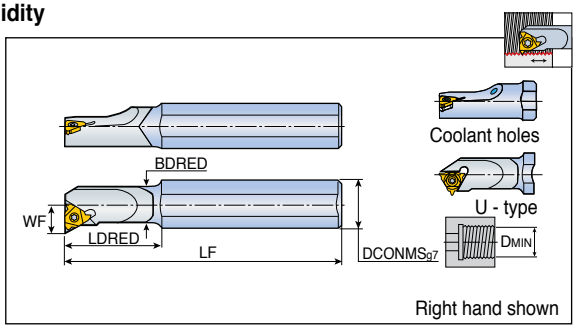

| Designation | Dimension (mm) | | | | | | Coolant hole | Insert [2] |
|---|---|---|---|---|---|---|---|---|
| | DCONMS | BDRED | LF | LDRED | DMIN | WF | | |
| **SIR/L 0005 H06** [1] | 12 | 5.1 | 100 | 12 | 6.4 | 4.3 | X | 06 IR/L... |
| **0007 K08** [1] | 16 | 6.6 | 125 | 18 | 9.0 | 5.3 | X | 08 IR/L... |
| **0008 K08U** [1] | 16 | 7.4 | 125 | 21 | 9.0 | 6.4 | X | 08 UIRL... |
| **0010 H11** [1] | 10 | 10 | 100 | - | 12 | 7.4 | X | 11 IR/L... |
| **SIR 0010 H11B** [1] | 10 | 10 | 100 | - | 12 | 7.4 | • | 11 IR... |
| **SIR/L 0010 K11** [1] | 16 | 10 | 125 | 25 | 12 | 6.5 | X | 11 IR/L... |
| **0010 K11B** [1] | 16 | 10 | 125 | 25 | 12 | 7.4 | • | 11 IR/L... |
| **0013 L11** [1] | 16 | 13 | 140 | 32 | 15 | 8.9 | X | 11 IR/L... |
| **0013 M16** [1] | 16 | 13 | 150 | 32 | 16 | 10.0 | X | 16 IR/L... |
| **0013 M16B** [1] | 16 | 13 | 150 | 32 | 16 | 10.2 | • | 16 IR/L... |
| **0016 P16** [1] | 20 | 16 | 170 | 40 | 19 | 11.4 | X | 16 IR/L... |
| **0016 P16B** [1] | 20 | 16 | 170 | 40 | 19 | 11.7 | • | 16 IR/L... |
| **0020-16-AD** | 20 | 20 | 80 | - | 24 | 13.7 | X | 16 IR/L... |
| **0020 P16** | 20 | 20 | 170 | - | 24 | 13.4 | X | 16 IR/L... |
| **0020 P16B** | 20 | 20 | 170 | - | 24 | 13.7 | • | 16 IR/L... |
| **0025-16-AD** | 25 | 25 | 120 | - | 29 | 16.3 | X | 16 IR/L... |
| **0025 R16** | 25 | 25 | 200 | - | 29 | 16.3 | X | 16 IR/L... |
| **0025 R16B** | 25 | 25 | 200 | - | 29 | 16.2 | • | 16 IR/L... |
| **0032 S16** | 32 | 32 | 250 | - | 36 | 19.6 | X | 16 IR/L... |
| **0040 T16** | 40 | 40 | 300 | - | 44 | 23.8 | X | 16 IR/L... |
| **0050 U16** | 50 | 50 | 350 | - | 54 | 28.7 | X | 16 IR/L... |
| **0020 P22** [1] | 20 | 20 | 170 | - | 24 | 15.6 | X | 22 IR/L... |
| **0025 R22** | 25 | 25 | 200 | - | 29 | 17.2 | X | 22 IR/L... |
| **0025 R22B** | 25 | 25 | 200 | - | 29 | 18.1 | • | 22 IR/L... |
| **0032 S22** | 32 | 32 | 250 | - | 38 | 21.5 | X | 22 IR/L... |
| **0040 T22** | 40 | 40 | 300 | - | 46 | 25.8 | X | 22 IR/L... |
| **0050 U22** | 50 | 50 | 350 | - | 56 | 30.6 | X | 22 IR/L... |
| **0032 S22U** | 32 | 32 | 250 | - | 38 | 25.5 | X | 22 UIRL... |
| **0040 T22U** | 40 | 40 | 300 | - | 46 | 29.5 | X | 22 UIRL... |
| **0032 S27** | 32 | 32 | 250 | - | 40 | 22.4 | X | 27 IR/L... |
| **0040 T27** | 40 | 40 | 300 | - | 48 | 26.4 | X | 27 IR/L... |
| **0050 U27** | 50 | 50 | 350 | - | 58 | 31.4 | X | 27 IR/L... |
| **0060 V27** | 60 | 60 | 400 | - | 68 | 36.4 | X | 27 IR/L... |
| **0032 S27U** | 32 | 32 | 250 | - | 40 | 24.7 | X | 27 UIRL... |
| **0040 T27U** | 40 | 40 | 300 | - | 48 | 29.4 | X | 27 UIRL... |
| **0050 U27U** | 50 | 50 | 350 | - | 58 | 34.3 | X | 27 UIRL... |
| **0060 V27U** | 60 | 60 | 400 | - | 68 | 39.3 | X | 27 UIRL... |

• [1] Toolholders without anvil • [2] Right hand inserts (IR) for right hand tools (SIR)
• For multi-tooth inserts use anvils AI16M, AI22M, AI27M
• All Toolholders are made with 1.5° helix angle • Please check for spare parts C16 page

# SIR/L...CB

T-THREAD

## Solid carbide threading bars for high rigidity




| | Designation | Dimension (mm) | | | | | | Coolant hole | Insert [2] |
|---|---|---|---|---|---|---|---|---|---|
| | | DCONMS | BDRED | LF | LDRED | DMIN | WF | | |
| **SIR/L** | **0005 H06CB** [1] | 6 | 5.1 | 100 | 25 | 6.4 | 4.3 | ● | 06 IR/L... |
| | **0007 K08CB** [1] | 8 | 6.6 | 125 | 30 | 9.0 | 5.3 | ● | 08 IR/L... |
| | **0008 K08UCB** [1] | 8 | 7.3 | 125 | 35 | 9.0 | 6.4 | ● | 08 UIRL... |
| | **0010 M11CB** [1] | 10 | 10 | 150 | - | 12 | 7.4 | ● | 11 IR/L... |
| | **0012 P11CB** [1] | 12 | 12 | 170 | - | 15 | 8.4 | ● | 11 IR/L... |
| | **0016 R16CB** [1] | 16 | 16 | 200 | - | 19 | 11.7 | ● | 16 IR/L... |
| **SIR** | **0020 S16CB** | 20 | 20 | 250 | - | 28 | 13.7 | ● | 16 IR... |
| | **0025 S16CB** | 25 | 25 | 250 | - | 28 | 16.2 | ● | 16 IR... |

- [1] Toolholders without anvil
- For multi-tooth inserts use anvils AI16M, AI22M, AI27M
- All Toolholders are made with 1.5° helix angle
- [2] Right hand inserts (IR) for right hand tools (SIR)
- All carbide shank Toolholders are coolant through type
- Please check for spare parts C16 page

# Spare Parts



## SER/L

| Designation | Insert screw | Anvil screw | Anvil int./ext. right | Anvil int./ext. left | Torx wrench |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| **SER 0808 H11** | S11 | | | | T-8/5 |
| **SER/L 1010 H11** | S11 | | | | T-8/5 |
| **SEL 1212 F16** | S16 | A16 | | AI16 | T-10/5 |
| **SER 1212 F16** | S16 | A16 | AE16 | | T-10/5 |
| **SEL 1616 H16** | S16 | A16 | | AI16 | T-10/5 |
| **SER 1616 H16** | S16 | A16 | AE16 | | T-10/5 |
| **SER 1616 K16G** | S16 | A16 | AE16 | | T-10/5 |
| **SEL 2020-16-AD** | S16 | A16 | | AI16 | T-10/5 |
| **SER 2020-16-AD** | S16 | A16 | AE16 | | T-10/5 |
| **SEL 2020 K16** | S16 | A16 | | AI16 | T-10/5 |
| **SER 2020 K16** | S16 | A16 | AE16 | | T-10/5 |
| **SEL 2525 M16** | S16 | A16 | | AI16 | T-10/5 |
| **SER 2525 M16** | S16 | A16 | AE16 | | T-10/5 |
| **SEL 3232 P16** | S16 | A16 | | AI16 | T-10/5 |
| **SER 3232 P16** | S16 | A16 | AE16 | | T-10/5 |
| **SEL 2525 M22** | S22 | A22 | | AI22 | T-20/5 |
| **SER 2525 M22** | S22 | A22 | AE22 | | T-20/5 |
| **SEL 3232 P22** | S22 | A22 | | AI22 | T-20/5 |
| **SER 3232 P22** | S22 | A22 | AE22 | | T-20/5 |
| **SEL 4040 R22** | S22 | A22 | | AI22 | T-20/5 |
| **SER 4040 R22** | S22 | A22 | AE22 | | T-20/5 |
| **SEL 2525 M22U** | S22 | A22 | | AI22U | T-20/5 |
| **SER 2525 M22U** | S22 | A22 | AE22U | | T-20/5 |
| **SEL 3232 P22U** | S22 | A22 | | AI22U | T-20/5 |
| **SER 3232 P22U** | S22 | A22 | AE22U | | T-20/5 |
| **SEL 4040 R22U** | S22 | A22 | | AI22U | T-20/5 |
| **SEL 2525 M27** | TS40 | A27 | | AI27 | TK40 |
| **SER 2525 M27** | TS40 | A27 | AE27 | | TK40 |
| **SEL 3232 P27** | TS40 | A27 | | AI27 | TK40 |
| **SER 3232 P27** | TS40 | A27 | AE27 | | TK40 |
| **SER 4040 R27** | TS40 | A27 | AE27 | | TK40 |
| **SEL 2525 M27U** | TS40 | A27 | | AI27U | TK40 |
| **SEL 3232 P27U** | TS40 | A27 | | AI27U | TK40 |
| **SER 3232 P27U** | TS40 | A27 | AE27U | | TK40 |
| **SEL 4040 R27U** | TS40 | A27 | | AI27U | TK40 |

## SER-D

| Designation | Insert screw | Anvil screw | Anvil int./ext. right | Anvil int./ext. left | Torx wrench |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| **SER 2525 M16D** | S16 | A16 | AE16 | - | T-10/5 |
| **SER 2525 M22D** | S22 | A22 | AE22 | - | T-20/5 |

# Spare Parts

## SIR/L

| Designation | Insert screw | Anvil screw | Anvil int./ext. right | Anvil int./ext. left | Torx wrench |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| **SIR/L 0005 H06** | TS 20038I | | | | T-6/5 |
| **SIR/L 0005 H06CB** | TS 20038I | | | | T-6/5 |
| **SIR 0005 H06-W** | TS 20038I | | | | T-6/5 |
| **SIR/L 0007 K08** | TS 20054I | | | | T-6/5 |
| **SIR/L 0007 K08CB** | TS 20054I | | | | T-6/5 |
| **SIR/L 0008 K08U** | TS 20054I | | | | T-6/5 |
| **SIR 0008 K08UCB** | TS 20054I | | | | T-6/5 |
| **SIR/L 0010 H11** | S11 | | | | T-8/5 |
| **SIR 0010 H11B** | S11 | | | | T-8/5 |
| **SIR/L 0010 K11** | S11 | | | | T-8/5 |
| **SIR/L 0010 K11B** | S11 | | | | T-8/5 |
| **SIR/L 0010 M11CB** | S11 | | | | T-8/5 |
| **SIR/L 0012 P11CB** | S11 | | | | T-8/5 |
| **SIR/L 0013 L11** | S11 | | | | T-8/5 |
| **SIR/L 0013 M16** | S16S | | | | T-10/5 |
| **SIR/L 0013 M16B** | S16S | | | | T-10/5 |
| **SIR/L 0016 P16** | S16S | | | | T-10/5 |
| **SIR/L 0016 P16B** | S16S | | | | T-10/5 |
| **SIR 0016 R16CB** | S16S | | | | T-10/5 |
| **SIL 0020-16-AD** | S16 | A16 | AE16 | | T-10/5 |
| **SIR 0020-16-AD** | S16 | A16 | | AI16 | T-10/5 |
| **SIL 0020 P16** | S16 | A16 | AE16 | | T-10/5 |
| **SIR 0020 P16** | S16 | A16 | | AI16 | T-10/5 |
| **SIL 0020 P16B** | S16 | A16 | AE16 | | T-10/5 |
| **SIR 0020 P16B** | S16 | A16 | | AI16 | T-10/5 |
| **SIR 0020 S16CB** | S16 | A16 | | AI16 | T-10/5 |
| **SIL 0025-16-AD** | S16 | A16 | AE16 | | T-10/5 |
| **SIR 0025-16-AD** | S16 | A16 | | AI16 | T-10/5 |
| **SIL 0025 R16** | S16 | A16 | AE16 | | T-10/5 |
| **SIR 0025 R16** | S16 | A16 | | AI16 | T-10/5 |
| **SIL 0025 R16B** | S16 | A16 | AE16 | | T-10/5 |
| **SIR 0025 R16B** | S16 | A16 | | AI16 | T-10/5 |
| **SIR 0025 S16CB** | S16 | A16 | | AI16 | T-10/5 |
| **SIL 0032 S16** | S16 | A16 | AE16 | | T-10/5 |
| **SIR 0032 S16** | S16 | A16 | | AI16 | T-10/5 |
| **SIL 0040 T16** | S16 | A16 | AE16 | | T-10/5 |
| **SIR 0040 T16** | S16 | A16 | | AI16 | T-10/5 |
| **SIL 0050 U16** | S16 | A16 | AE16 | | T-10/5 |
| **SIR 0050 U16** | S16 | A16 | | AI16 | T-10/5 |
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# Spare Parts

T-THREAD

## SIR/L

| Designation | Insert screw | Anvil screw | Anvil int./ext. right | Anvil int./ext. left | Torx wrench |
|---|---|---|---|---|---|
| |  |  |  |  |  |
| **SIL 0020 P22** | S22S | | | | T-20/5 |
| **SIR 0020 P22** | S22S | | | | T-20/5 |
| **SIL 0025 R22** | S22 | A22 | AE22 | | T-20/5 |
| **SIR 0025 R22** | S22 | A22 | | AI22 | T-20/5 |
| **SIL 0025 R22B** | S22 | A22 | AE22 | | T-20/5 |
| **SIR 0025 R22B** | S22 | A22 | | AI22 | T-20/5 |
| **SIL 0032 S22** | S22 | A22 | AE22 | | T-20/5 |
| **SIR 0032 S22** | S22 | A22 | | AI22 | T-20/5 |
| **SIL 0040 T22** | S22 | A22 | AE22 | | T-20/5 |
| **SIR 0040 T22** | S22 | A22 | | AI22 | T-20/5 |
| **SIL 0050 U22** | S22 | A22 | AE22 | | T-20/5 |
| **SIR 0050 U22** | S22 | A22 | | AI22 | T-20/5 |
| **SIL 0032 S22U** | S22 | A22 | AE22U | | T-20/5 |
| **SIR 0032 S22U** | S22 | A22 | | AI22U | T-20/5 |
| **SIR 0040 T22U** | S22 | A22 | | AI22U | T-20/5 |
| **SIL 0032 S27** | TS40 | A27 | AE27 | | TK40 |
| **SIR 0032 S27** | TS40 | A27 | | AI27 | TK40 |
| **SIL 0040 T27** | TS40 | A27 | AE27 | | TK40 |
| **SIR 0040 T27** | TS40 | A27 | | AI27 | TK40 |
| **SIL 0050 U27** | TS40 | A27 | AE27 | | TK40 |
| **SIR 0050 U27** | TS40 | A27 | | AI27 | TK40 |
| **SIL 0060 V27** | TS40 | A27 | AE27 | | TK40 |
| **SIR 0060 V27** | TS40 | A27 | | AI27 | TK40 |
| **SIL 0032 S27U** | TS40 | A27 | AE27U | | TK40 |
| **SIR 0032 S27U** | TS40 | A27 | | AI27U | TK40 |
| **SIR 0040 T27U** | TS40 | A27 | | AI27U | TK40 |
| **SIL 0050 U27U** | TS40 | A27 | AE27U | | TK40 |
| **SIR 0050 U27U** | TS40 | A27 | | AI27U | TK40 |
| **SIL 0060 V27U** | TS40 | A27 | AE27U | | TK40 |
| **SIR 0060 V27U** | TS40 | A27 | | AI27U | TK40 |
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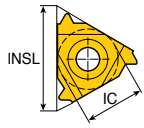
# Insert Designation System

| 16 | E | R | M | 1.50 | ISO | 2M | TT9030 |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

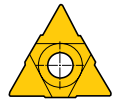
## 1 Insert size

| INSL (mm) | IC |
|---|---|
| **06** | 3.97 mm = 5/32″ |
| **08** | 4.76 mm = 3/16″ |
| **11** | 6.35 mm = 1/4″ |
| **16** | 9.52 mm = 3/8″ |
| **22** | 12.70 mm = 1/2″ |
| **27** | 15.88 mm = 5/8″ |




## 2 Application

**E** - External
**I** - Internal
**UE** - U-type, external
**UI** - U-type, Internal
**UEI** - U-type, external and internal



U-type

Regular type

## 3 Hand of tool

**R** - Right-hand
**L** - Left-hand
**RL** - Right and left-hand

## 4 Type

**M** - With a chip breaker
**B** - Peripherally ground & chip breaker
☐ - No indication regular type

## 5 Pitch

**Full profile**

Value by number

**0.35 - 9.0 mm** (Thread pitch)

**72 - 2** **TPI** (Threads per inch)

**Partial profile**

Range by letter

| | mm (Thread pitch) | TPI (Threads per inch) |
|---|---|---|
| **A** | 0.5 - 1.5 mm | 48 - 16 |
| **AG** | 0.5 - 3.0 mm | 48 - 8 |
| **G** | 1.75 - 3.0 mm | 14 - 8 |
| **N** | 3.5 - 5.0 mm | 7 - 5 |
| **Q** | 5.5 - 6.0 mm | 4.5 - 4 |
| **U** | 5.5 - 9.0 mm | 4.5 - 2.75 |

## 6 Thread standard

**60** - Partial profile 60°
**55** - Partial profile 55°
**ISO** - ISO metric
**UN** - American UN
**W** - Whitworth
**BSPT** - British BSPT
**RND** - Round DIN 405
**TR** - Trapeze DIN 103
**ACME** - ACME
**STACME** - Stub ACME
**ABUT** - American buttress
**UNJ** - UNJ
**MJ** - MJ ISO 5855
**NPT** - NPT
**API RD** - API round
**BUT** - API buttress casing
**API** - API
**EL** - Extreme line casing
**SAGE** - Sagengewinde DIN 513

## 7 No. of teeth (Optional)

**2M** - 2 teeth
**3M** - 3 teeth

## 8 Grades

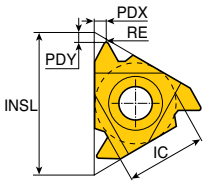
**Coated**
TT7010
TT8010
TT9030

**Uncoated**
P30

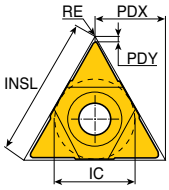
# Partial Profile 55°

T-THREAD

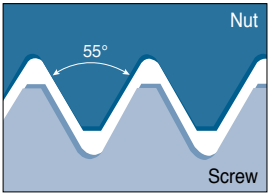
## External & internal




External right hand shown
(Internal left hand)




U-type




• Application: General industry

| Insert | Designation | Pitch | | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TP (mm) | TPI | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External | **11ER/L A 55** | 0.5-1.5 | 48-16 | 6.35 | 11 | 0.05 | 0.8 | 0.9 | ● | ● | | |
|  Regular | **16ER/L A 55** | 0.5-1.5 | 48-16 | 9.52 | 16 | 0.05 | 0.8 | 0.9 | | ● | | ● |
| | **16ER/L AG 55** | 0.5-3.0 | 48-8 | 9.52 | 16 | 0.05 | 1.2 | 1.7 | ● | ● | ● | |
| | **16ERB AG 55** | 0.5-3.0 | 48-8 | 9.52 | 16 | 0.05 | 1.2 | 1.7 | | ● | | |
| | **16ERM AG 55** | 0.5-3.0 | 48-8 | 9.52 | 16 | 0.07 | 1.2 | 1.7 | ● | ● | | ● |
|  B/M | **16ER/L G 55** | 1.75-3.0 | 14-8 | 9.52 | 16 | 0.20 | 1.2 | 1.7 | ● | ● | | |
| | **16ERB G 55** | 1.75-3.0 | 14-8 | 9.52 | 16 | 0.20 | 1.2 | 1.7 | | ● | | |
| | **16ERM G 55** | 1.75-3.0 | 14-8 | 9.52 | 16 | 0.23 | 1.2 | 1.7 | ● | ● | | |
| | **22ER/L N 55** | 3.5-5.0 | 7-5 | 12.70 | 22 | 0.42 | 1.7 | 2.5 | ● | ● | | |
| | **27ER Q 55** | 5.5-6.0 | 4.5-4 | 15.88 | 27 | 0.60 | 2.0 | 2.9 | | ● | | |
| Internal | **06IR/L A 55** | 0.5-1.25 | 48-20 | 3.97 | 6 | 0.05 | 0.5 | 0.6 | | | ● | |
|  Regular | **08IR/L A 55** | 0.5-1.5 | 48-16 | 4.76 | 8 | 0.05 | 0.6 | 0.7 | | ● | ● | |
| | **11IR/L A 55** | 0.5-1.5 | 48-16 | 6.35 | 11 | 0.05 | 0.8 | 0.9 | ● | ● | ● | |
| | **16IR A 55** | 0.5-1.5 | 48-16 | 9.52 | 16 | 0.05 | 0.8 | 0.9 | | ● | | |
| | **16IR/L AG 55** | 0.5-3.0 | 48-8 | 9.52 | 16 | 0.05 | 1.2 | 1.7 | ● | ● | | |
|  B/M | **16IRB AG 55** | 0.5-3.0 | 48-8 | 9.52 | 16 | 0.05 | 1.2 | 1.7 | | ● | | |
| | **16IRM AG 55** | 0.5-3.0 | 48-8 | 9.52 | 16 | 0.05 | 1.2 | 1.7 | ● | ● | | |
| | **16IR/L G 55** | 1.75-3.0 | 14-8 | 9.52 | 16 | 0.20 | 1.2 | 1.7 | ● | ● | | |
| | **16IRB G 55** | 1.75-3.0 | 14-8 | 9.52 | 16 | 0.20 | 1.2 | 1.7 | | ● | | |
| | **16IRM G 55** | 1.75-3.0 | 14-8 | 9.52 | 16 | 0.20 | 1.2 | 1.7 | ● | ● | | |
| | **22IR/L N 55** | 3.5-5.0 | 7-5 | 12.70 | 22 | 0.42 | 1.7 | 2.5 | ● | ● | | ● |
| | **27IR/L Q 55** | 5.5-6.0 | 4.5-4 | 15.88 | 27 | 0.60 | 2.0 | 2.9 | | ● | | |
|  U | **08UIRL U 55** | 1.75-2.0 | 14-11 | 4.76 | 8 | 0.10 | 0.9 | 4.0 | | | ● | |
| | **22UEIRL U 55** | 5.5-8.0 | 4.5-3.25 | 12.70 | 22 | 0.60 | 0.9 | 11.0 | ● | | | |



• ERB / ERM / IRB / IRM with pressed chip breaker

●: Standard items

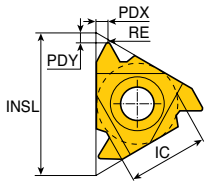


TaeguTec

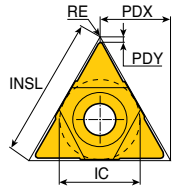
# Partial Profile 60°



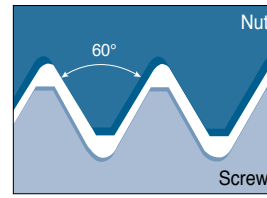
## External & internal




External right hand shown
(Internal left hand)




U-type




• Application: General industry

| Insert | Designation | Pitch | | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TP (mm) | TPI | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External<br>Regular | **11ER/L A 60** | 0.5-1.5 | 48-16 | 6.35 | 11 | 0.05 | 0.8 | 0.9 | | ● | | |
| | **16ER/L A 60** | 0.5-1.5 | 48-16 | 9.52 | 16 | 0.05 | 0.8 | 0.9 | ● | ● | ● | |
| | **16ERB A 60** | 0.5-1.5 | 48-16 | 9.52 | 16 | 0.05 | 0.8 | 0.9 | | ● | | |
| | **16ERM A 60** | 0.5-1.5 | 48-16 | 9.52 | 16 | 0.05 | 0.8 | 0.9 | ● | ● | | ● |
| | **16ER/L AG 60** | 0.5-3.0 | 48-8 | 9.52 | 16 | 0.06 | 1.2 | 1.7 | ● | ● | ● | ● |
| B/M | **16ERB AG 60** | 0.5-3.0 | 48-8 | 9.52 | 16 | 0.05 | 1.2 | 1.7 | | ● | | |
| | **16ERM AG 60** | 0.5-3.0 | 48-8 | 9.52 | 16 | 0.06 | 1.2 | 1.7 | ● | ● | | ● |
| | **16ER/L G 60** | 1.75-3.0 | 14-8 | 9.52 | 16 | 0.17 | 1.2 | 1.7 | ● | ● | ● | |
| | **16ERB G 60** | 1.75-3.0 | 14-8 | 9.52 | 16 | 0.17 | 1.2 | 1.7 | | ● | | |
| | **16ERM G 60** | 1.75-3.0 | 14-8 | 9.52 | 16 | 0.17 | 1.2 | 1.7 | ● | ● | | |
| | **22ER/L N 60** | 3.5-5.0 | 7-5 | 12.70 | 22 | 0.32 | 1.7 | 2.5 | ● | ● | ● | |
| | **22ERM N 60** | 3.5-5.0 | 7-5 | 12.70 | 22 | 0.32 | 1.7 | 2.5 | ● | ● | | ● |
| | **27ER/L Q 60** | 5.5-6.0 | 4.5-4 | 15.88 | 27 | 0.63 | 2.1 | 3.1 | ● | ● | | ● |
| Internal<br>Regular | **06IR/L A 60** | 0.5-1.25 | 48-20 | 3.97 | 6 | 0.05 | 0.6 | 0.6 | | | ● | |
| | **06IRM A 60** | 0.5-1.25 | 48-20 | 3.97 | 6 | 0.05 | 0.5 | 0.6 | | | ● | |
| | **08IR/L A 60** | 0.5-1.5 | 48-16 | 4.76 | 8 | 0.05 | 0.6 | 0.7 | | | ● | |
| | **08IRM A 60** | 0.5-1.5 | 48-16 | 4.76 | 8 | 0.05 | 0.6 | 0.7 | | ● | ● | |
| | **11IR/L A 60** | 0.5-1.5 | 48-16 | 6.35 | 11 | 0.05 | 0.8 | 0.9 | ● | ● | ● | |
| | **11IRM A 60** | 0.5-1.5 | 48-16 | 6.35 | 11 | 0.05 | 0.7 | 0.9 | ● | ● | | |
| B/M | **16IR/L A 60** | 0.5-1.5 | 48-16 | 9.52 | 16 | 0.05 | 0.8 | 0.9 | ● | ● | ● | ● |
| | **16IRB A 60** | 0.5-1.5 | 48-16 | 9.52 | 16 | 0.05 | 0.8 | 0.9 | | ● | | |
| | **16IRM A 60** | 0.5-1.5 | 48-16 | 9.52 | 16 | 0.05 | 0.8 | 0.9 | ● | ● | | |
| | **16IR/L AG 60** | 0.5-3.0 | 48-8 | 9.52 | 16 | 0.05 | 1.2 | 1.7 | ● | ● | ● | ● |
| | **16IRB AG 60** | 0.5-3.0 | 48-8 | 9.52 | 16 | 0.05 | 1.2 | 1.7 | | ● | | |
| | **16IRM AG 60** | 0.5-3.0 | 48-8 | 9.52 | 16 | 0.05 | 1.2 | 1.7 | ● | ● | | ● |
| | **16IR/L G 60** | 1.75-3.0 | 14-8 | 9.52 | 16 | 0.12 | 1.2 | 1.7 | | ● | ● | |
| | **16IRB G 60** | 1.75-3.0 | 14-8 | 9.52 | 16 | 0.12 | 1.2 | 1.7 | | ● | | |
| | **16IRM G 60** | 1.75-3.0 | 14-8 | 9.52 | 16 | 0.10 | 1.2 | 1.7 | ● | ● | | ● |
| | **22IR/L N 60** | 3.5-5.0 | 7-5 | 12.70 | 22 | 0.22 | 1.7 | 2.5 | ● | ● | | |
| | **22IRM N 60** | 3.5-5.0 | 7-5 | 12.70 | 22 | 0.19 | 1.7 | 2.5 | ● | ● | | ● |
| | **27IR/L Q 60** | 5.5- 6.0 | 4.5-4 | 15.88 | 27 | 0.31 | 2.1 | 3.1 | ● | ● | | ● |
| U | **08UIRL U 60** | 1.75-2.0 | 14-11 | 4.76 | 8 | 0.10 | 0.8 | 4.0 | | | ● | |
| | **22UEIRL U 60** | 5.5-8.0 | 4.5-3.25 | 12.70 | 22 | 0.28 | 0.6 | 11.0 | ● | ● | | |
| | **27UEIRL U 60** | 6.5-9.0 | 4-2.75 | 15.88 | 27 | 0.28 | 1.0 | 13.7 | ● | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |



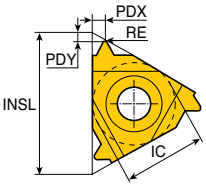
• ERB / ERM / IRB / IRM with pressed chip breaker

●: Standard items

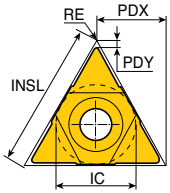
# External ISO Metric

T-THREAD

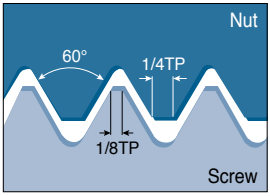
**Full profile (DIN13 12-1986 class: 6G)**




External right hand shown
(Internal left hand)




U-type




- Application: General industry

| Insert | Designation | TP (mm) | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External | **11ER/L 0.35 ISO** | 0.35 | 6.35 | 11 | 0.04 | 0.8 | 0.4 | | ● | | |
|  Regular | **11ER 0.40 ISO** | 0.40 | 6.35 | 11 | 0.04 | 0.7 | 0.4 | | ● | | |
| | **11ER 0.45 ISO** | 0.45 | 6.35 | 11 | 0.05 | 0.7 | 0.4 | | | ● | |
| | **11ER/L 0.50 ISO** | 0.50 | 6.35 | 11 | 0.05 | 0.6 | 0.6 | ● | ● | | |
| | **11ER 0.60 ISO** | 0.60 | 6.35 | 11 | 0.07 | 0.6 | 0.6 | | ● | | |
| | **11ER 0.70 ISO** | 0.70 | 6.35 | 11 | 0.07 | 0.6 | 0.6 | | ● | | |
| | **11ER/L 0.75 ISO** | 0.75 | 6.35 | 11 | 0.08 | 0.6 | 0.6 | | ● | | |
| | **11ER 0.80 ISO** | 0.80 | 6.35 | 11 | 0.09 | 0.6 | 0.6 | | ● | | |
| | **11ER/L 1.00 ISO** | 1.00 | 6.35 | 11 | 0.12 | 0.7 | 0.7 | | ● | | |
| | **11ER 1.25 ISO** | 1.25 | 6.35 | 11 | 0.15 | 0.8 | 0.9 | | ● | | |
| | **11ER/L 1.50 ISO** | 1.50 | 6.35 | 11 | 0.18 | 0.8 | 1.0 | ● | ● | | |
| | **11ER 1.75 ISO** | 1.75 | 6.35 | 11 | 0.21 | 0.8 | 1.1 | ● | | | |
| | **16ER/L 0.35 ISO** | 0.35 | 9.52 | 16 | 0.04 | 0.8 | 0.4 | | ● | | |
| | **16ER/L 0.40 ISO** | 0.40 | 9.52 | 16 | 0.04 | 0.7 | 0.4 | | ● | | |
| | **16ER 0.45 ISO** | 0.45 | 9.52 | 16 | 0.05 | 0.7 | 0.4 | | ● | | |
| | **16ER/L 0.50 ISO** | 0.50 | 9.52 | 16 | 0.04 | 0.6 | 0.6 | ● | ● | | |
| | **16ERM 0.50 ISO** | 0.50 | 9.52 | 16 | 0.04 | 0.6 | 0.6 | | ● | | |
| | **16ER 0.60 ISO** | 0.60 | 9.52 | 16 | 0.07 | 0.6 | 0.6 | | ● | | |
| | **16ER/L 0.70 ISO** | 0.70 | 9.52 | 16 | 0.07 | 0.6 | 0.6 | ● | ● | | |
| | **16ER/L 0.75 ISO** | 0.75 | 9.52 | 16 | 0.08 | 0.6 | 0.6 | ● | ● | | |
| | **16ERM 0.75 ISO** | 0.75 | 9.52 | 16 | 0.08 | 0.6 | 0.6 | | ● | | |
| | **16ER/L 0.80 ISO** | 0.80 | 9.52 | 16 | 0.09 | 0.6 | 0.6 | ● | ● | | |
| | **16ERB 0.80 ISO** | 0.80 | 9.52 | 16 | 0.09 | 0.6 | 0.6 | | ● | | |
| | **16ER/L 1.00 ISO** | 1.00 | 9.52 | 16 | 0.12 | 0.7 | 0.7 | ● | ● | ● | ● |
| | **16ERB 1.00 ISO** | 1.00 | 9.52 | 16 | 0.12 | 0.7 | 0.7 | | ● | | |
| | **16ERM 1.00 ISO** | 1.00 | 9.52 | 16 | 0.11 | 0.7 | 0.7 | ● | ● | | ● |
| | **16ER/L 1.25 ISO** | 1.25 | 9.52 | 16 | 0.15 | 0.8 | 0.9 | ● | ● | | |
| | **16ERB 1.25 ISO** | 1.25 | 9.52 | 16 | 0.15 | 0.8 | 0.9 | | ● | | |
| | **16ERM 1.25 ISO** | 1.25 | 9.52 | 16 | 0.14 | 0.8 | 0.9 | ● | ● | | |
| | **16ER/L 1.50 ISO** | 1.50 | 9.52 | 16 | 0.18 | 0.8 | 1.0 | ● | ● | ● | ● |
| | **16ERB 1.50 ISO** | 1.50 | 9.52 | 16 | 0.18 | 0.8 | 1.0 | | ● | | |
| | **16ERM 1.50 ISO** | 1.50 | 9.52 | 16 | 0.19 | 0.8 | 1.0 | ● | ● | | ● |
| | **16ER/L 1.75 ISO** | 1.75 | 9.52 | 16 | 0.21 | 0.9 | 1.2 | ● | ● | ● | |
| | **16ERB 1.75 ISO** | 1.75 | 9.52 | 16 | 0.21 | 0.9 | 1.2 | | ● | | |
| | **16ERM 1.75 ISO** | 1.75 | 9.52 | 16 | 0.20 | 0.9 | 1.2 | ● | ● | | |



- ERB / ERM with pressed chip breaker

●: Standard items

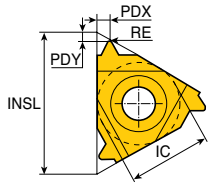


TaeguTec

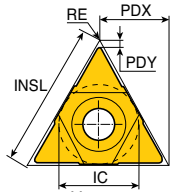
# External ISO Metric

T-THREAD

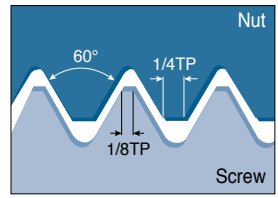
## Full profile (DIN13 12-1986 class: 6G)




External right hand shown
(Internal left hand)




U-type




• Application: General industry

| Insert | Designation | TP (mm) | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External | **16ER/L 2.00 ISO** | 2.00 | 9.52 | 16 | 0.25 | 1.0 | 1.3 | ● | ● | ● | ● |
| | **16ERB 2.00 ISO** | 2.00 | 9.52 | 16 | 0.25 | 1.0 | 1.3 | | ● | | |
| | **16ERM 2.00 ISO** | 2.00 | 9.52 | 16 | 0.24 | 1.0 | 1.3 | ● | ● | | |
| Regular | **16ER/L 2.50 ISO** | 2.50 | 9.52 | 16 | 0.31 | 1.1 | 1.5 | ● | ● | | ● |
| | **16ERB 2.50 ISO** | 2.50 | 9.52 | 16 | 0.31 | 1.1 | 1.5 | | ● | | |
| | **16ERM 2.50 ISO** | 2.50 | 9.52 | 16 | 0.30 | 1.1 | 1.5 | ● | ● | | |
| | **16ER/L 3.00 ISO** | 3.00 | 9.52 | 16 | 0.38 | 1.2 | 1.6 | ● | ● | ● | |
| B/M | **16ERB 3.00 ISO** | 3.00 | 9.52 | 16 | 0.38 | 1.2 | 1.6 | | ● | | |
| | **16ERM 3.00 ISO** | 3.00 | 9.52 | 16 | 0.38 | 1.2 | 1.6 | ● | ● | | ● |
| | **22ER/L 3.50 ISO** | 3.50 | 12.70 | 22 | 0.44 | 1.6 | 2.3 | ● | ● | | |
| | **22ERM 3.50 ISO** | 3.50 | 12.70 | 22 | 0.44 | 1.6 | 2.3 | | ● | | |
| | **22ER/L 4.00 ISO** | 4.00 | 12.70 | 22 | 0.52 | 1.6 | 2.3 | ● | ● | | ● |
| | **22ERM 4.00 ISO** | 4.00 | 12.70 | 22 | 0.52 | 1.6 | 2.3 | | ● | | |
| | **22ER/L 4.50 ISO** | 4.50 | 12.70 | 22 | 0.58 | 1.7 | 2.4 | ● | ● | | |
| | **22ER/L 5.00 ISO** | 5.00 | 12.70 | 22 | 0.64 | 1.7 | 2.5 | ● | ● | | |
| | **22ER/L 6.00 ISO** | 6.00 | 12.70 | 22 | 0.78 | 2.0 | 2.7 | ● | | | |
| | **27ER 5.50 ISO** | 5.50 | 15.88 | 27 | 0.70 | 1.9 | 2.7 | | ● | | |
| | **27ER/L 6.00 ISO** | 6.00 | 15.88 | 27 | 0.78 | 2.0 | 2.9 | ● | ● | ● | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | **22UERL 5.50 ISO** | 5.50 | 12.70 | 22 | 0.70 | 2.3 | 11.0 | ● | | | |
| U | **22UERL 6.00 ISO** | 6.00 | 12.70 | 22 | 0.78 | 2.6 | 11.0 | ● | | ● | |
| | **27UERL 8.00 ISO** | 8.00 | 15.88 | 27 | 1.08 | 2.4 | 13.7 | | ● | | |



• ERB / ERM with pressed chip breaker

●: Standard items

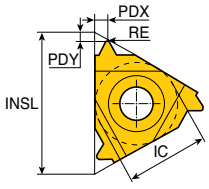


ADVANCE MACHINING
TaeguTec Industry 4.0

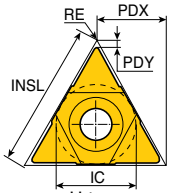
# Internal ISO Metric

T-THREAD

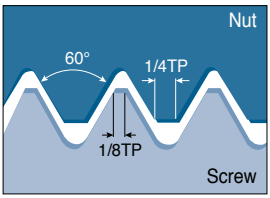
**Full profile (DIN13 12-1986 class: 6H)**




External right hand shown
(Internal left hand)




U-type




- Application: General industry

| Insert | Designation | TP (mm) | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| Internal<br>Regular | **06IR/L 0.50 ISO** | 0.50 | 3.97 | 6 | 0.04 | 0.6 | 0.4 | | | ● | |
| | **06IR/L 0.75 ISO** | 0.75 | 3.97 | 6 | 0.06 | 0.6 | 0.5 | | | ● | |
| | **06IR/L 1.00 ISO** | 1.00 | 3.97 | 6 | 0.05 | 0.6 | 0.6 | | | ● | |
| | **06IR/L 1.25 ISO** | 1.25 | 3.97 | 6 | 0.07 | 0.6 | 0.6 | | | ● | |
| | **08IR/L 0.50 ISO** | 0.50 | 4.76 | 8 | 0.04 | 0.6 | 0.4 | | | ● | |
| B/M | **08IR 0.75 ISO** | 0.75 | 4.76 | 8 | 0.05 | 0.6 | 0.5 | | | ● | |
| | **08IR/L 1.00 ISO** | 1.00 | 4.76 | 8 | 0.07 | 0.6 | 0.6 | | ● | ● | |
| | **08IR/L 1.25 ISO** | 1.25 | 4.76 | 8 | 0.09 | 0.7 | 0.7 | | ● | ● | |
| | **08IR/L 1.50 ISO** | 1.50 | 4.76 | 8 | 0.10 | 0.6 | 0.7 | | ● | ● | |
| | **08IR/L 1.75 ISO** | 1.75 | 4.76 | 8 | 0.15 | 0.6 | 0.9 | | | ● | |
| | **11IR/L 0.35 ISO** | 0.35 | 6.35 | 11 | 0.04 | 0.8 | 0.3 | | ● | | |
| | **11IR 0.40 ISO** | 0.40 | 6.35 | 11 | 0.03 | 0.8 | 0.4 | | ● | | |
| | **11IR/L 0.50 ISO** | 0.50 | 6.35 | 11 | 0.04 | 0.8 | 0.6 | ● | ● | | |
| | **11IRB 0.50 ISO** | 0.50 | 6.35 | 11 | 0.04 | 0.8 | 0.6 | | ● | | |
| | **11IRM 0.50 ISO** | 0.50 | 6.35 | 11 | 0.04 | 0.3 | 0.4 | | ● | | |
| | **11IR 0.70 ISO** | 0.70 | 6.35 | 11 | 0.05 | 0.6 | 0.6 | | ● | | |
| | **11IR/L 0.75 ISO** | 0.75 | 6.35 | 11 | 0.05 | 0.6 | 0.6 | | ● | | |
| | **11IRB 0.75 ISO** | 0.75 | 6.35 | 11 | 0.05 | 0.6 | 0.6 | | ● | | |
| | **11IRM 0.75 ISO** | 0.75 | 6.35 | 11 | 0.06 | 0.3 | 0.5 | | ● | | |
| | **11IR 0.80 ISO** | 0.80 | 6.35 | 11 | 0.04 | 0.6 | 0.6 | | ● | | |
| | **11IR/L 1.00 ISO** | 1.00 | 6.35 | 11 | 0.07 | 0.6 | 0.7 | ● | ● | ● | ● |
| | **11IRB 1.00 ISO** | 1.00 | 6.35 | 11 | 0.07 | 0.6 | 0.6 | | ● | | |
| | **11IRM 1.00 ISO** | 1.00 | 6.35 | 11 | 0.05 | 0.6 | 0.7 | | ● | | |
| | **11IR/L 1.25 ISO** | 1.25 | 6.35 | 11 | 0.09 | 0.8 | 0.8 | | ● | | |
| | **11IR/L 1.50 ISO** | 1.50 | 6.35 | 11 | 0.12 | 0.8 | 1.0 | ● | ● | ● | ● |
| | **11IRM 1.50 ISO** | 1.50 | 6.35 | 11 | 0.08 | 0.8 | 1.0 | ● | ● | | |
| | **11IR/L 1.75 ISO** | 1.75 | 6.35 | 11 | 0.12 | 0.8 | 1.0 | | ● | | |
| | **11IRB 1.75 ISO** | 1.75 | 6.35 | 11 | 0.12 | 0.8 | 1.0 | | ● | | |
| | **11IRM 1.75 ISO** | 1.75 | 6.35 | 11 | 0.15 | 0.6 | 0.9 | | ● | | |
| | **11IR/L 2.00 ISO** | 2.00 | 6.35 | 11 | 0.14 | 0.8 | 0.9 | ● | ● | ● | |
| | **11IRM 2.00 ISO** | 2.00 | 6.35 | 11 | 0.16 | 0.6 | 1.0 | | ● | | |
| | **16IR 0.35 ISO** | 0.35 | 9.52 | 16 | 0.02 | 0.6 | 0.3 | | ● | | |
| | **16IR/L 0.40 ISO** | 0.40 | 9.52 | 16 | 0.03 | 0.6 | 0.4 | | ● | | |
| | **16IR/L 0.50 ISO** | 0.50 | 9.52 | 16 | 0.04 | 0.6 | 0.6 | ● | ● | | |
| | **16IR 0.60 ISO** | 0.60 | 9.52 | 16 | 0.04 | 0.6 | 0.6 | | ● | | |



- IRB / IRM with pressed chip breaker

●: Standard items

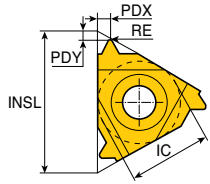


TaeguTec

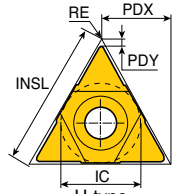
# Internal ISO Metric

T-THREAD

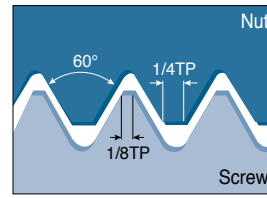
**Full profile (DIN13 12-1986 class: 6H)**




External right hand shown
(Internal left hand)




U-type




• Application: General industry

| Insert | Designation | TP (mm) | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| Internal Regular | **16IR/L 0.70 ISO** | 0.70 | 9.52 | 16 | 0.05 | 0.6 | 0.6 | ● | ● | | |
| | **16IR/L 0.75 ISO** | 0.75 | 9.52 | 16 | 0.05 | 0.6 | 0.6 | ● | ● | | |
| | **16IR/L 0.80 ISO** | 0.80 | 9.52 | 16 | 0.05 | 0.6 | 0.6 | ● | | | |
| | **16IR/L 1.00 ISO** | 1.00 | 9.52 | 16 | 0.07 | 0.7 | 0.8 | ● | ● | | ● |
| | **16IRB 1.00 ISO** | 1.00 | 9.52 | 16 | 0.07 | 0.7 | 0.8 | | ● | | |
| | **16IRM 1.00 ISO** | 1.00 | 9.52 | 16 | 0.05 | 0.6 | 0.7 | ● | ● | | ● |
| | **16IR/L 1.25 ISO** | 1.25 | 9.52 | 16 | 0.09 | 0.8 | 0.9 | ● | ● | | |
| | **16IRB 1.25 ISO** | 1.25 | 9.52 | 16 | 0.09 | 0.7 | 0.8 | | ● | | |
| | **16IRM 1.25 ISO** | 1.25 | 9.52 | 16 | 0.06 | 0.8 | 0.9 | ● | ● | | |
| | **16IR/L 1.50 ISO** | 1.50 | 9.52 | 16 | 0.12 | 0.9 | 1.0 | ● | ● | ● | ● |
| | **16IRB 1.50 ISO** | 1.50 | 9.52 | 16 | 0.12 | 0.1 | 1.2 | | ● | | |
| | **16IRM 1.50 ISO** | 1.50 | 9.52 | 16 | 0.08 | 0.8 | 1.0 | ● | ● | | ● |
| | **16IR/L 1.75 ISO** | 1.75 | 9.52 | 16 | 0.12 | 0.9 | 1.2 | ● | ● | | |
| | **16IRB 1.75 ISO** | 1.75 | 9.52 | 16 | 0.12 | 0.9 | 1.2 | | ● | | |
| | **16IRM 1.75 ISO** | 1.75 | 9.52 | 16 | 0.10 | 0.9 | 1.2 | ● | ● | | |
| | **16IR/L 2.00 ISO** | 2.00 | 9.52 | 16 | 0.16 | 0.9 | 1.2 | ● | ● | ● | |
| | **16IRB 2.00 ISO** | 2.00 | 9.52 | 16 | 0.14 | 1.0 | 1.2 | | ● | | |
| | **16IRM 2.00 ISO** | 2.00 | 9.52 | 16 | 0.11 | 1.0 | 1.3 | ● | ● | | |
| | **16IR/L 2.50 ISO** | 2.50 | 9.52 | 16 | 0.18 | 1.1 | 1.5 | ● | ● | ● | |
| | **16IRB 2.50 ISO** | 2.50 | 9.52 | 16 | 0.18 | 1.2 | 1.5 | | ● | | |
| | **16IRM 2.50 ISO** | 2.50 | 9.52 | 16 | 0.14 | 1.1 | 1.5 | ● | ● | | |
| | **16IR/L 3.00 ISO** | 3.00 | 9.52 | 16 | 0.21 | 1.1 | 1.5 | ● | ● | ● | |
| | **16IRB 3.00 ISO** | 3.00 | 9.52 | 16 | 0.21 | 1.1 | 1.5 | | ● | | |
| | **16IRM 3.00 ISO** | 3.00 | 9.52 | 16 | 0.22 | 1.1 | 1.5 | ● | ● | | |
| | **22IL 3.00 ISO** | 3.00 | 12.70 | 22 | 0.17 | 1.1 | 1.5 | | | ● | |
| | **22IR/L 3.50 ISO** | 3.50 | 12.70 | 22 | 0.23 | 1.6 | 2.3 | ● | ● | | |
| | **22IR/L 4.00 ISO** | 4.00 | 12.70 | 22 | 0.27 | 1.6 | 2.3 | ● | ● | | ● |
| | **22IR/L 4.50 ISO** | 4.50 | 12.70 | 22 | 0.31 | 1.6 | 2.3 | ● | ● | | |
| | **22IR/L 5.00 ISO** | 5.00 | 12.70 | 22 | 0.32 | 1.7 | 2.5 | ● | ● | | |
| | **27IR/L 5.50 ISO** | 5.50 | 15.88 | 27 | 0.36 | 1.8 | 2.5 | ● | ● | | |
| | **27IR/L 6.00 ISO** | 6.00 | 15.88 | 27 | 0.40 | 1.8 | 2.5 | ● | ● | | |
| U | **08UIRL 2.00 ISO** | 2.00 | 4.76 | 8 | 0.14 | 0.8 | 4.3 | | | | |
| | **22UIRL 5.50 ISO** | 5.50 | 12.70 | 22 | 0.36 | 2.3 | 11.0 | ● | | | |
| | **22UIRL 6.00 ISO** | 6.00 | 12.70 | 22 | 0.40 | 2.1 | 11.0 | ● | | | |
| | **27UIRL 8.00 ISO** | 8.00 | 15.88 | 27 | 0.50 | 2.5 | 13.8 | | ● | | |

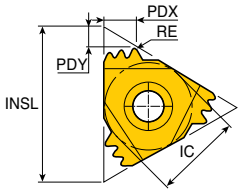

• IRB / IRM with pressed chip breaker

●: Standard items

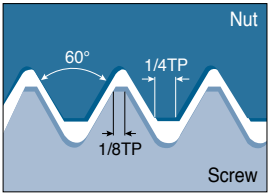
# External & Internal ISO Metric

T-THREAD

**Full profile, multi-tooth**




External right hand shown
(Internal left hand)




- Application: General industry

| Insert | Designation | TP (mm) | Dimension (mm) | | | | | CICT(1) | Coated | | | Uncoated | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | | TT7010 | TT9030 | TT8010 | P30 | |
| Internal / External  | **16ER 0.75 ISO 3M** | 0.75 | 9.52 | 16 | 0.07 | 1.4 | 1.9 | 3 | | ● | | | |
| | **16ER/IR 1.00 ISO 3M** | 1.0 | 9.52 | 16 | 0.07 | 1.5 | 2.5 | 3 | | ● | | | |
| | **16ER/IR 1.50 ISO 2M** | 1.5 | 9.52 | 16 | 0.10 | 1.5 | 2.3 | 2 | | ● | | | |
| | **16ER/IR 2.00 ISO 2M** | 2.00 | 9.52 | 16 | 0.14 | 1.6 | 2.7 | 2 | | ● | | | |
| | **22ER/IR 1.50 ISO 3M** | 1.5 | 12.70 | 22 | 0.11 | 2.3 | 3.7 | 3 | | ● | | | |
| | **22ER/IR 2.00 ISO 2M** | 2.0 | 12.70 | 22 | 0.15 | 2.3 | 3.0 | 2 | | ● | | | |
| | **22ER/IR 2.00 ISO 3M** | 2.0 | 12.70 | 22 | 0.13 | 3.1 | 5.0 | 3 | | ● | | | |
| | **27ER/IR 3.00 ISO 2M** | 3.0 | 15.88 | 27 | 0.21 | 3.1 | 4.6 | 2 | | ● | | | |



- (1) Number of teeth per corner

●: Standard items

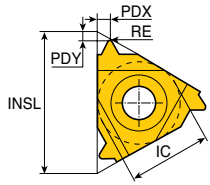


TaeguTec

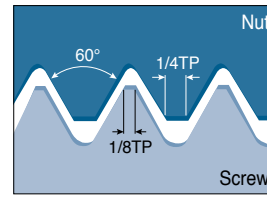
# External American UN

T-THREAD

**Full profile, UN, UNC, UNF, UNEF**




External right hand shown
(Internal left hand)




- Application: General industry

External

Regular

B/M

| Insert | Designation | TPI | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| | **11ER 32 UN** | 32 | 6.35 | 11 | 0.09 | 0.6 | 0.6 | | ● | | |
| | **11ER 28 UN** | 28 | 6.35 | 11 | 0.10 | 0.6 | 0.7 | | ● | | |
| | **16ER 72 UN** | 72 | 9.52 | 16 | - | 0.8 | 0.4 | | ● | | |
| | **16ER 56 UN** | 56 | 9.52 | 16 | 0.04 | 0.7 | 0.4 | | ● | | |
| | **16ER 48 UN** | 48 | 9.52 | 16 | 0.05 | 0.6 | 0.6 | | ● | | |
| | **16ER/L 40 UN** | 40 | 9.52 | 16 | 0.06 | 0.6 | 0.6 | | ● | | |
| | **16ER/L 36 UN** | 36 | 9.52 | 16 | 0.07 | 0.6 | 0.6 | | ● | | ● |
| | **16ER/L 32 UN** | 32 | 9.52 | 16 | 0.09 | 0.6 | 0.6 | | ● | | |
| | **16ER/L 28 UN** | 28 | 9.52 | 16 | 0.10 | 0.6 | 0.7 | ● | ● | | |
| | **16ER/L 24 UN** | 24 | 9.52 | 16 | 0.12 | 0.7 | 0.8 | | ● | | |
| | **16ERB 24 UN** | 24 | 9.52 | 16 | 0.12 | 0.7 | 0.8 | | ● | | |
| | **16ERM 24 UN** | 24 | 9.52 | 16 | 0.11 | 0.7 | 0.8 | ● | ● | | |
| | **16ER/L 20 UN** | 20 | 9.52 | 16 | 0.15 | 0.8 | 0.9 | | ● | | |
| | **16ERB 20 UN** | 20 | 9.52 | 16 | 0.15 | 0.8 | 0.9 | | ● | | |
| | **16ERM 20 UN** | 20 | 9.52 | 16 | 0.14 | 0.8 | 0.9 | ● | ● | | |
| | **16ER/L 18 UN** | 18 | 9.52 | 16 | 0.17 | 0.8 | 1.0 | | ● | | |
| | **16ERB 18 UN** | 18 | 9.52 | 16 | 0.17 | 0.8 | 1.0 | | ● | | |
| | **16ERM 18 UN** | 18 | 9.52 | 16 | 0.15 | 0.8 | 1.0 | | ● | | |
| | **16ER/L 16 UN** | 16 | 9.52 | 16 | 0.18 | 0.9 | 1.1 | | ● | | |
| | **16ERB 16 UN** | 16 | 9.52 | 16 | 0.18 | 0.9 | 1.1 | | ● | | |
| | **16ERM 16 UN** | 16 | 9.52 | 16 | 0.19 | 0.9 | 1.1 | ● | ● | | |
| | **16ER/L 14 UN** | 14 | 9.52 | 16 | 0.22 | 1.0 | 1.2 | | ● | | |
| | **16ERB 14 UN** | 14 | 9.52 | 16 | 0.22 | 1.0 | 1.2 | | ● | | |
| | **16ERM 14 UN** | 14 | 9.52 | 16 | 0.22 | 1.0 | 1.2 | ● | ● | | |
| | **16ER/L 13 UN** | 13 | 9.52 | 16 | 0.24 | 1.0 | 1.3 | | ● | | |
| | **16ERB 13 UN** | 13 | 9.52 | 16 | 0.24 | 1.0 | 1.3 | | ● | | |
| | **16ERM 13 UN** | 13 | 9.52 | 16 | 0.24 | 1.0 | 1.3 | ● | ● | | |



- ERB / ERM with pressed chip breaker
- Tolerance: Class 2A

●: Standard items

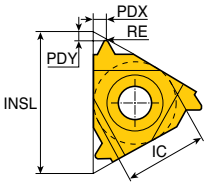


ADVANCE MACHINING
TaeguTec Industry 4.0

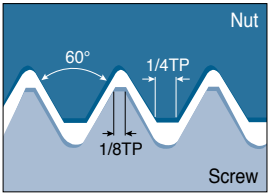
# External American UN

T-THREAD

**Full profile, UN, UNC, UNF, UNEF**




External right hand shown
(Internal left hand)




- Application: General industry

| Insert | Designation | TPI | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External | **16ER/L 12 UN** | 12 | 9.52 | 16 | 0.26 | 1.1 | 1.4 | ● | ● | | |
| | **16ERB 12 UN** | 12 | 9.52 | 16 | 0.26 | 1.1 | 1.4 | | ● | | |
| | **16ERM 12 UN** | 12 | 9.52 | 16 | 0.25 | 1.1 | 1.4 | ● | ● | | ● |
| | **16ER 11.5 UN** | 11.5 | 9.52 | 16 | 0.27 | 1.1 | 1.5 | | ● | | |
| | **16ER/L 11 UN** | 11 | 9.52 | 16 | 0.28 | 1.1 | 1.5 | ● | ● | | |
| | **16ERB 11 UN** | 11 | 9.52 | 16 | 0.28 | 1.1 | 1.5 | | ● | | |
| | **16ER/L 10 UN** | 10 | 9.52 | 16 | 0.32 | 1.1 | 1.5 | ● | ● | | |
| | **16ERB 10 UN** | 10 | 9.52 | 16 | 0.32 | 1.1 | 1.5 | | ● | | |
| | **16ERM 10 UN** | 10 | 9.52 | 16 | 0.32 | 1.1 | 1.5 | | ● | | |
| | **16ER/L 9 UN** | 9 | 9.52 | 16 | 0.36 | 1.2 | 1.7 | | ● | | |
| | **16ERB 9 UN** | 9 | 9.52 | 16 | 0.36 | 1.2 | 1.7 | | ● | | |
| | **16ER/L 8 UN** | 8 | 9.52 | 16 | 0.41 | 1.2 | 1.6 | ● | ● | | |
| | **16ERB 8 UN** | 8 | 9.52 | 16 | 0.41 | 1.2 | 1.6 | | ● | | |
| | **16ERM 8 UN** | 8 | 9.52 | 16 | 0.41 | 1.2 | 1.6 | ● | ● | | |
| | **22ER 7 UN** | 7 | 12.70 | 22 | 0.47 | 1.6 | 2.3 | | ● | | |
| | **22ER/L 6 UN** | 6 | 12.70 | 22 | 0.67 | 1.6 | 2.3 | | ● | | |
| | **22ER 5 UN** | 5 | 12.70 | 22 | 0.67 | 1.7 | 2.5 | ● | ● | | |
| | **27ER 4.5 UN** | 4.5 | 15.88 | 27 | 0.75 | 1.9 | 2.7 | | ● | | |
| | **27ER/L 4 UN** | 4 | 15.88 | 27 | 0.85 | 2.1 | 3.0 | ● | ● | | |


Regular


B/M



- ERB / ERM with pressed chip breaker
- Tolerance: Class 2A

●: Standard items

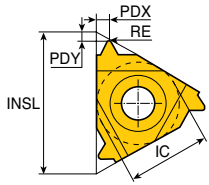


TaeguTec

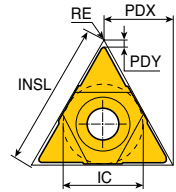
# Internal American UN

T-THREAD

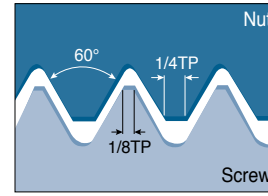
## Full profile, UN, UNC, UNF, UNEF




External right hand shown
(Internal left hand)




U-type




- Application: General industry

| Insert | Designation | TPI | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| Internal<br>  <br>Regular<br>  <br>B/M | **06IR 32 UN** | 32 | 3.97 | 6 | 0.04 | 0.8 | 0.5 | | | ● | |
| | **06IR/L 24 UN** | 24 | 3.97 | 6 | 0.05 | 0.7 | 0.6 | | | ● | |
| | **06IR/L 20 UN** | 20 | 3.97 | 6 | 0.06 | 0.6 | 0.6 | | | ● | |
| | **06IR 18 UN** | 18 | 3.97 | 6 | 0.07 | 0.6 | 0.7 | | | ● | |
| | **08IR 32 UN** | 32 | 4.76 | 8 | 0.04 | 0.6 | 0.5 | | | ● | |
| | **08IR 28 UN** | 28 | 4.76 | 8 | 0.04 | 0.6 | 0.6 | | | ● | |
| | **08IR 24 UN** | 24 | 4.76 | 8 | 0.05 | 0.6 | 0.6 | | | ● | |
| | **08IR/L 20 UN** | 20 | 4.76 | 8 | 0.06 | 0.6 | 0.7 | | | ● | |
| | **08IR 18 UN** | 18 | 4.76 | 8 | 0.07 | 0.6 | 0.7 | | | ● | |
| | **08IR 16 UN** | 16 | 4.76 | 8 | 0.09 | 0.6 | 0.7 | | | ● | |
| | **08IR 14 UN** | 14 | 4.76 | 8 | 0.10 | 0.6 | 0.8 | | ● | ● | |
| | **11IR 32 UN** | 32 | 6.35 | 11 | 0.04 | 0.6 | 0.6 | | ● | | |
| | **11IR 28 UN** | 28 | 6.35 | 11 | 0.04 | 0.6 | 0.7 | | ● | | |
| | **11IR 24 UN** | 24 | 6.35 | 11 | 0.05 | 0.7 | 0.8 | | ● | | |
| | **11IR 20 UN** | 20 | 6.35 | 11 | 0.06 | 0.8 | 0.9 | | ● | | |
| | **11IR/L 18 UN** | 18 | 6.35 | 11 | 0.07 | 0.8 | 1.0 | | ● | | |
| | **11IR/L 16 UN** | 16 | 6.35 | 11 | 0.09 | 0.9 | 1.1 | | ● | | |
| | **11IR/L 14 UN** | 14 | 6.35 | 11 | 0.10 | 0.9 | 1.1 | | ● | | |
| | **11IR 12 UN** | 12 | 6.35 | 11 | 0.12 | 0.9 | 1.1 | ● | | | |
| | **11IR 11 UN** | 11 | 6.35 | 11 | 0.14 | 0.8 | 1.1 | ● | ● | | |
| | **16IR 32 UN** | 32 | 9.52 | 16 | 0.04 | 0.6 | 0.6 | ● | ● | | |
| | **16IR/L 28 UN** | 28 | 9.52 | 16 | 0.04 | 0.6 | 0.7 | | ● | | |
| | **16IR 24 UN** | 24 | 9.52 | 16 | 0.05 | 0.7 | 0.8 | | ● | | |
| | **16IRB 24 UN** | 24 | 9.52 | 16 | 0.05 | 0.7 | 0.8 | | ● | | |
| | **16IR/L 20 UN** | 20 | 9.52 | 16 | 0.06 | 0.8 | 0.9 | | ● | | |
| | **16IRB 20 UN** | 20 | 9.52 | 16 | 0.06 | 0.8 | 0.9 | | ● | | |
| | **16IRM 20 UN** | 20 | 9.52 | 16 | 0.06 | 0.8 | 0.9 | | ● | | |
| | **16IR/L 18 UN** | 18 | 9.52 | 16 | 0.07 | 0.8 | 1.0 | | ● | | |
| | **16IRB 18 UN** | 18 | 9.52 | 16 | 0.07 | 0.8 | 1.0 | | ● | | |
| | **16IRM 18 UN** | 18 | 9.52 | 16 | 0.08 | 0.8 | 1.0 | ● | ● | | |



- IRB / IRM with pressed chip breaker
- Tolerance: Class 2B, ANSI B1, 3M-1986

●: Standard items

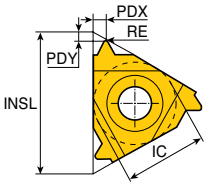


ADVANCE MACHINING
TaeguTec Industry 4.0

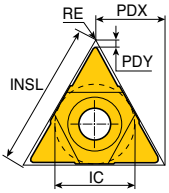
# Internal American UN

T-THREAD

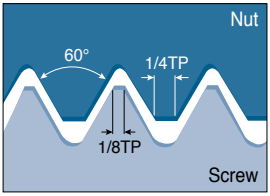
**Full profile, UN, UNC, UNF, UNEF**




External right hand shown
(Internal left hand)




U-type




- Application: General industry

| Insert | Designation | TPI | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| Internal Regular | **16IR/L 16 UN** | 16 | 9.52 | 16 | 0.09 | 0.9 | 1.1 | | ● | | |
| | **16IRB 16 UN** | 16 | 9.52 | 16 | 0.09 | 0.9 | 1.1 | | ● | | |
| | **16IRM 16 UN** | 16 | 9.52 | 16 | 0.09 | 0.9 | 1.1 | ● | ● | | |
| | **16IR/L 14 UN** | 14 | 9.52 | 16 | 0.10 | 0.9 | 1.2 | | ● | | |
| | **16IRB 14 UN** | 14 | 9.52 | 16 | 0.10 | 0.9 | 1.2 | | ● | | |
| | **16IRM 14 UN** | 14 | 9.52 | 16 | 0.11 | 0.9 | 1.2 | ● | ● | | |
| | **16IR/L 12 UN** | 12 | 9.52 | 16 | 0.12 | 1.1 | 1.4 | ● | ● | ● | |
| | **16IRB 12 UN** | 12 | 9.52 | 16 | 0.12 | 1.1 | 1.4 | | ● | | |
| | **16IRM 12 UN** | 12 | 9.52 | 16 | 0.12 | 1.1 | 1.4 | | ● | | |
| | **16IR 11.5 UN** | 11.5 | 9.52 | 16 | 0.13 | 1.1 | 1.5 | | ● | | |
| | **16IR 11 UN** | 11 | 9.52 | 16 | 0.14 | 1.1 | 1.5 | | ● | | |
| | **16IR 10 UN** | 10 | 9.52 | 16 | 0.15 | 1.1 | 1.5 | ● | ● | | |
| | **16IRB 10 UN** | 10 | 9.52 | 16 | 0.15 | 1.1 | 1.5 | | ● | | |
| | **16IR 9 UN** | 9 | 9.52 | 16 | 0.17 | 1.2 | 1.7 | | ● | | |
| | **16IR 8 UN** | 8 | 9.52 | 16 | 0.19 | 1.1 | 1.5 | | ● | | |
| | **16IRB 8 UN** | 8 | 9.52 | 16 | 0.19 | 1.1 | 1.5 | | ● | | |
| | **16IRM 8 UN** | 8 | 9.52 | 16 | 0.20 | 1.1 | 1.5 | ● | ● | | |
| | **22IR 7 UN** | 7 | 12.70 | 22 | 0.22 | 1.6 | 2.3 | | ● | | |
| | **22IR 6 UN** | 6 | 12.70 | 22 | 0.26 | 1.6 | 2.3 | | ● | | |
| | **22IR 5 UN** | 5 | 12.70 | 22 | 0.32 | 1.6 | 2.3 | | ● | | |
| | **27IR 4 UN** | 4 | 15.88 | 27 | 0.41 | 1.8 | 2.7 | | ● | | |
| Internal U | **08UIRL 13 UN** | 13 | 4.76 | 8 | 0.10 | 1.0 | 4.0 | | ● | | |

C11-C14 | Cutting Condition C52-C60

- IRB / IRM with pressed chip breaker
- Tolerance: Class 2B, ANSI B1, 3M-1986

●: Standard items

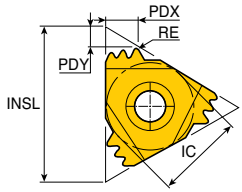


TaeguTec

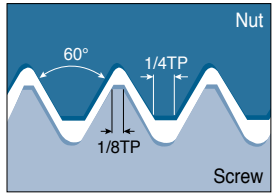
# External & Internal American UN

T-THREAD

**Full profile, multi-tooth, UN, UNC, UNF, UNEF**




External right hand shown
(Internal left hand)




• Application: General industry

| Insert | Designation | TPI | Dimension (mm) | | | | | CICT(1) | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | | TT7010 | TT9030 | TT8010 | P30 |
| Internal / External  | **16ER/IR 16 UN 2M** | 16 | 9.52 | 16 | 0.09 | 1.5 | 2.3 | 2 | | ● | | |
| | **16ER 12 UN 2M** | 12 | 9.52 | 16 | 0.26 | 2.2 | 3.4 | 2 | | ● | | |
| | **22ER 12 UN 2M** | 12 | 12.70 | 22 | 0.27 | 2.2 | 3.4 | 2 | | ● | | |
| | **22ER/IR 12 UN 3M** | 12 | 12.70 | 22 | 0.27 | 3.3 | 5.3 | 3 | | ● | | ● |


C11-C14 | Cutting Condition | C52-C60

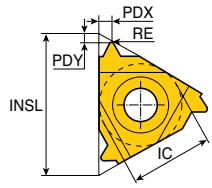

• (1) Number of teeth per corner

●: Standard items

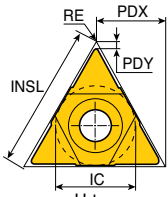
# External Whitworth

T-THREAD

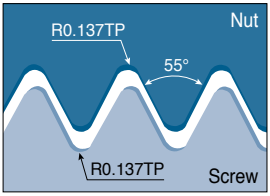
**Full profile, BSW, BSF, BSP (B.S. 84-1956 DIN 259)**




External right hand shown
(Internal left hand)




U-type




- Application: General industry, fittings and pipe coupings

| Insert | Designation | TPI | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External<br>Regular | **11ER/L 19 W** | 19 | 6.35 | 11 | 0.15 | 0.8 | 1.0 | | ● | | |
| | **11ER 14 W** | 14 | 6.35 | 11 | 0.21 | 0.9 | 1.1 | | ● | | |
| | **16EL 32 W** | 32 | 9.52 | 16 | 0.09 | 0.6 | 0.6 | | | | ● |
| | **16ER 28 W** | 28 | 9.52 | 16 | 0.09 | 0.6 | 0.7 | ● | ● | | |
| | **16ER 26 W** | 26 | 9.52 | 16 | 0.10 | 0.7 | 0.7 | | ● | | |
| | **16ER 24 W** | 24 | 9.52 | 16 | 0.11 | 0.7 | 0.8 | | ● | | |
| | **16ER 20 W** | 20 | 9.52 | 16 | 0.14 | 0.8 | 0.9 | | ● | | |
| B/M | **16ER/L 19 W** | 19 | 9.52 | 16 | 0.15 | 0.8 | 1.0 | | ● | ● | |
| | **16ERB 19 W** | 19 | 9.52 | 16 | 0.15 | 0.8 | 1.0 | | ● | | |
| | **16ERM 19 W** | 19 | 9.52 | 16 | 0.16 | 0.8 | 1.0 | ● | ● | | |
| | **16ER 18 W** | 18 | 9.52 | 16 | 0.16 | 0.8 | 1.0 | | ● | | ● |
| | **16ER 16 W** | 16 | 9.52 | 16 | 0.18 | 0.9 | 1.1 | | ● | | |
| | **16ERB 16 W** | 16 | 9.52 | 16 | 0.18 | 0.9 | 1.1 | | ● | | |
| | **16ERM 16 W** | 16 | 9.52 | 16 | 0.20 | 0.9 | 1.1 | ● | ● | | |
| | **16ER/L 14 W** | 14 | 9.52 | 16 | 0.21 | 1.0 | 1.2 | | ● | ● | |
| | **16ERB 14 W** | 14 | 9.52 | 16 | 0.21 | 1.0 | 1.2 | | ● | | |
| | **16ERM 14 W** | 14 | 9.52 | 16 | 0.24 | 1.0 | 1.2 | ● | ● | | ● |
| | **16ER/L 12 W** | 12 | 9.52 | 16 | 0.25 | 1.1 | 1.4 | | ● | | |
| | **16ER/L 11 W** | 11 | 9.52 | 16 | 0.27 | 1.1 | 1.5 | ● | ● | | ● |
| | **16ERB 11 W** | 11 | 9.52 | 16 | 0.27 | 1.1 | 1.5 | | ● | | |
| | **16ERM 11 W** | 11 | 9.52 | 16 | 0.27 | 1.1 | 1.5 | ● | ● | | |
| | **16ER 10 W** | 10 | 9.52 | 16 | 0.31 | 1.1 | 1.5 | ● | ● | | |
| | **16ERB 10 W** | 10 | 9.52 | 16 | 0.31 | 1.1 | 1.5 | | ● | | |
| | **16ER 9 W** | 9 | 9.52 | 16 | 0.34 | 1.2 | 1.7 | ● | | | |
| | **16ER 8 W** | 8 | 9.52 | 16 | 0.39 | 1.2 | 1.5 | | ● | | |
| | **22ER 7 W** | 7 | 12.70 | 22 | 0.45 | 1.6 | 2.3 | | ● | | |
| | **22ER 6 W** | 6 | 12.70 | 22 | 0.52 | 1.6 | 2.3 | | ● | | |
| | **22ER 5 W** | 5 | 12.70 | 22 | 0.65 | 1.7 | 2.4 | ● | | | |

C11-C14

Cutting Condition C52-C60

- ERB / ERM with pressed chip breaker
- Tolerance: Medium class

●: Standard items

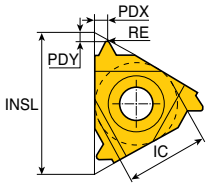


TaeguTec

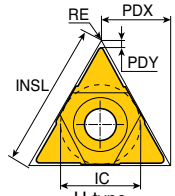
# Internal Whitworth

T-THREAD

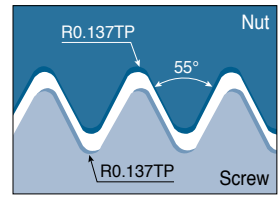
**Full profile, BSW, BSF, BSP (B.S. 84-1956 DIN 259)**




External right hand shown
(Internal left hand)




U-type




• Application: General industry, fittings and pipe coupings

| Insert | Designation | TPI | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| Internal Regular  B/M  | **06IR 26 W** | 26 | 3.97 | 6 | 0.10 | 0.7 | 0.6 | | | ● | |
| | **08IR 28 W** | 28 | 4.76 | 8 | 0.09 | 0.6 | 0.6 | | | ● | |
| | **08IR 19 W** | 19 | 4.76 | 8 | 0.15 | 0.6 | 0.7 | | ● | ● | |
| | **08IR 18 W** | 18 | 4.76 | 8 | 0.16 | 0.6 | 0.7 | | | ● | |
| | **08IR 16 W** | 16 | 4.76 | 8 | 0.18 | 0.6 | 0.7 | | | ● | |
| | **11IR 28 W** | 28 | 6.35 | 11 | 0.10 | 0.6 | 0.7 | ● | | | |
| | **11IR 26 W** | 26 | 6.35 | 11 | 0.10 | 0.7 | 0.7 | | | ● | |
| | **11IR 24 W** | 24 | 6.35 | 11 | 0.11 | 0.7 | 0.8 | | ● | | |
| | **11IR 20 W** | 20 | 6.35 | 11 | 0.14 | 0.8 | 0.9 | ● | ● | | |
| | **11IR 19 W** | 19 | 6.35 | 11 | 0.15 | 0.8 | 1.0 | ● | ● | | |
| | **11IR/L 18 W** | 18 | 6.35 | 11 | 0.16 | 0.8 | 1.0 | | ● | | |
| | **11IR 16 W** | 16 | 6.35 | 11 | 0.18 | 0.9 | 1.1 | | ● | | |
| | **11IR/L 14 W** | 14 | 6.35 | 11 | 0.21 | 0.9 | 1.1 | ● | ● | ● | |


• Tolerance: Medium class

●: Standard items

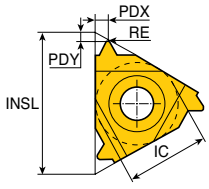


ADVANCE MACHINING
TaeguTec Industry 4.0

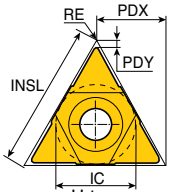
# Internal Whitworth

T-THREAD

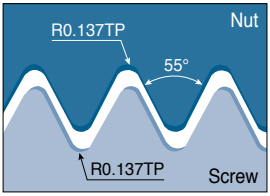
## Full profile, BSW, BSF, BSP (B.S. 84-1956 DIN 259)




External right hand shown
(Internal left hand)




U-type




- Application: General industry, fittings and pipe coupings

| Insert | Designation | TPI | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| Internal | **16IR 32 W** | 32 | 9.52 | 16 | 0.09 | 0.6 | 0.6 | | | | ● |
| Regular | **16IR 28 W** | 28 | 9.52 | 16 | 0.09 | 0.6 | 0.7 | ● | | | |
| | **16IR 26 W** | 26 | 9.52 | 16 | 0.10 | 0.7 | 0.7 | | ● | | |
| | **16IR 24 W** | 24 | 9.52 | 16 | 0.11 | 0.7 | 0.8 | | ● | | |
| | **16IR/L 20 W** | 20 | 9.52 | 16 | 0.14 | 0.8 | 0.9 | | ● | | |
| | **16IRM 20 W** | 20 | 9.52 | 16 | 0.14 | 0.8 | 0.9 | | ● | | |
| | **16IR/L 19 W** | 19 | 9.52 | 16 | 0.15 | 0.8 | 1.0 | ● | ● | | |
| B/M | **16IRB 19 W** | 19 | 9.52 | 16 | 0.15 | 0.8 | 1.0 | | ● | | |
| | **16IRM 19 W** | 19 | 9.52 | 16 | 0.15 | 0.8 | 1.0 | ● | | | |
| | **16IR 18 W** | 18 | 9.52 | 16 | 0.16 | 0.8 | 1.0 | | ● | | |
| | **16IR 16 W** | 16 | 9.52 | 16 | 0.18 | 0.9 | 1.1 | | ● | | |
| | **16IRB 16 W** | 16 | 9.52 | 16 | 0.18 | 0.9 | 1.1 | | ● | | |
| | **16IRM 16 W** | 16 | 9.52 | 16 | 0.18 | 0.9 | 1.1 | | ● | | |
| | **16IR/L 14 W** | 14 | 9.52 | 16 | 0.21 | 1.0 | 1.2 | ● | ● | ● | |
| | **16IRB 14 W** | 14 | 9.52 | 16 | 0.21 | 1.0 | 1.2 | | ● | | |
| | **16IRM 14 W** | 14 | 9.52 | 16 | 0.21 | 1.0 | 1.2 | ● | ● | | |
| | **16IR/L 12 W** | 12 | 9.52 | 16 | 0.25 | 1.1 | 1.4 | | ● | | |
| | **16IR/L 11 W** | 11 | 9.52 | 16 | 0.27 | 1.1 | 1.5 | ● | ● | ● | |
| | **16IRB 11 W** | 11 | 9.52 | 16 | 0.27 | 1.1 | 1.5 | | ● | | |
| | **16IRM 11 W** | 11 | 9.52 | 16 | 0.27 | 1.1 | 1.5 | ● | ● | | |
| | **16IR 10 W** | 10 | 9.52 | 16 | 0.31 | 1.1 | 1.5 | | ● | | |
| | **16IRB 10 W** | 10 | 9.52 | 16 | 0.31 | 1.1 | 1.5 | | ● | | |
| | **16IR/L 9 W** | 9 | 9.52 | 16 | 0.34 | 1.2 | 1.7 | ● | | | |
| | **16IR/L 8 W** | 8 | 9.52 | 16 | 0.39 | 1.2 | 1.5 | | ● | | |
| | **22IR 7 W** | 7 | 12.70 | 22 | 0.45 | 1.6 | 2.3 | | ● | | |
| | **22IR 6 W** | 6 | 12.70 | 22 | 0.52 | 1.6 | 2.3 | ● | | | |
| | **22IR 5 W** | 5 | 12.70 | 22 | 0.65 | 1.7 | 2.4 | ● | | | |
| | **27IR 4 W** | 4 | 15.88 | 27 | 0.82 | 2.0 | 2.9 | | ● | | |



- IRB / IRM with pressed chip breaker
- Tolerance: Medium class

●: Standard items



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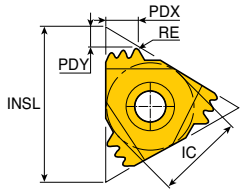
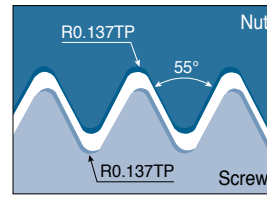
# External & Internal Whitworth

T-THREAD

**Full profile, multi-tooth, BSW, BSF, BSP**




External right hand shown
(Internal left hand)




- Application: General industry, fittings and pipe coupings

| Insert | Designation | TPI | Dimension (mm) | | | | | CICT(1) | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | | TT7010 | TT9030 | TT8010 | P30 |
| Internal / External  | **16ER/IR 14 W 2M** | 14 | 9.52 | 16 | 0.23 | 1.7 | 2.7 | 2 | | ● | | |
| | **22IR 11 W 2M** | 11 | 12.70 | 22 | 0.27 | 2.3 | 3.4 | 2 | | ● | | |

C11-C14 Cutting Condition C52-C60

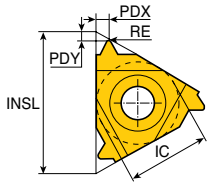
- (1) Number of teeth per corner

●: Standard items

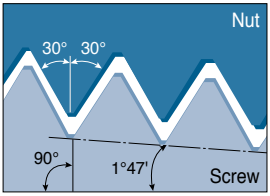
# External & Internal NPT

T-THREAD

**Full profile, national pipe threads (ANSI/ASME B1.20.1-1983)**




External right hand shown
(Internal left hand)




- Application: Steam, gas and water pipes

| Insert | Designation | TPI | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External | **16ER 27 NPT** | 27 | 9.52 | 16 | 0.04 | 0.7 | 0.8 | | ● | | |
|  Regular | **16ER/L 18 NPT** | 18 | 9.52 | 16 | 0.06 | 0.8 | 1.0 | ● | ● | | |
| | **16ERB 18 NPT** | 18 | 9.52 | 16 | 0.06 | 0.8 | 1.0 | | ● | | |
| | **16ERM 18 NPT** | 18 | 9.52 | 16 | 0.05 | 0.8 | 1.0 | | ● | | |
| | **16ER/L 14 NPT** | 14 | 9.52 | 16 | 0.07 | 0.9 | 1.2 | | ● | ● | |
|  B/M | **16ERB 14 NPT** | 14 | 9.52 | 16 | 0.07 | 0.9 | 1.2 | | ● | | |
| | **16ERM 14 NPT** | 14 | 9.52 | 16 | 0.05 | 0.9 | 1.2 | ● | ● | | ● |
| | **16ER/L 11.5 NPT** | 11.5 | 9.52 | 16 | 0.09 | 1.1 | 1.5 | ● | ● | | ● |
| | **16ERB 11.5 NPT** | 11.5 | 9.52 | 16 | 0.09 | 1.1 | 1.5 | | ● | | |
| | **16ERM 11.5 NPT** | 11.5 | 9.52 | 16 | 0.09 | 1.1 | 1.5 | | ● | | |
| | **16ER 8 NPT** | 8 | 9.52 | 16 | 0.12 | 1.3 | 1.8 | ● | ● | | |
| | **16ERB 8 NPT** | 8 | 9.52 | 16 | 0.12 | 1.3 | 1.8 | | ● | | |
| | **16ERM 8 NPT** | 8 | 9.52 | 16 | 0.15 | 1.3 | 1.8 | ● | ● | | |
| Internal | **06IR 27 NPT** | 27 | 3.97 | 6 | 0.04 | 0.6 | 0.6 | | | ● | |
|  Regular | **08IR 27 NPT** | 27 | 4.76 | 8 | 0.04 | 0.6 | 0.6 | | | ● | |
| | **08IR/L 18 NPT** | 18 | 4.76 | 8 | 0.06 | 0.6 | 0.6 | | ● | ● | |
| | **11IR/L 18 NPT** | 18 | 6.35 | 11 | 0.06 | 0.8 | 1.0 | ● | ● | | |
| | **11IR/L 14 NPT** | 14 | 6.35 | 11 | 0.07 | 0.8 | 1.0 | | ● | | |
| | **16IR 18 NPT** | 18 | 9.52 | 16 | 0.06 | 0.8 | 1.0 | | ● | | |
| | **16IR/L 14 NPT** | 14 | 9.52 | 16 | 0.07 | 0.9 | 1.2 | ● | ● | ● | |
|  B/M | **16IRB 14 NPT** | 14 | 9.52 | 16 | 0.07 | 0.9 | 1.2 | | ● | | |
| | **16IRM 14 NPT** | 14 | 9.52 | 16 | 0.05 | 0.9 | 1.2 | | ● | | |
| | **16IR 11.5 NPT** | 11.5 | 9.52 | 16 | 0.09 | 1.1 | 1.5 | | ● | | |
| | **16IRB 11.5 NPT** | 11.5 | 9.52 | 16 | 0.09 | 1.1 | 1.5 | | ● | | |
| | **16IRM 11.5 NPT** | 11.5 | 9.52 | 16 | 0.09 | 1.1 | 1.5 | ● | ● | | ● |
| | **16IR/L 8 NPT** | 8 | 9.52 | 16 | 0.12 | 1.3 | 1.8 | | ● | | |
| | **16IRB 8 NPT** | 8 | 9.52 | 16 | 0.12 | 1.3 | 1.8 | | ● | | |
| | **16IRM 8 NPT** | 8 | 9.52 | 16 | 0.12 | 1.3 | 1.8 | | ● | | |

C11-C14

Cutting Condition C52-C60

- ERB / ERM / IRB / IRM with pressed chip breaker

●: Standard items



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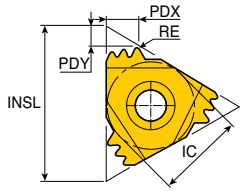
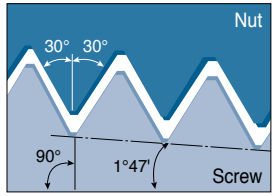
# External & Internal NPT

T-THREAD

**Full profile, multi-tooth, national pipe threads**




External right hand shown
(Internal left hand)




- Application: Steam, gas and water pipes

| Insert | Designation | TPI | Dimension (mm) | | | | | CICT(1) | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | | TT7010 | TT9030 | TT8010 | P30 |
| Internal / External  | **22ER/IR 11.5 NPT 2M** | 11.5 | 12.70 | 22 | 0.09 | 2.3 | 3.5 | 2 | | ● | | |
| | **27ER 11.5 NPT 3M** | 11.5 | 15.88 | 27 | 0.09 | 3.3 | 5.5 | 3 | | ● | | |
| | **27ER/IR 8 NPT 2M** | 8 | 15.88 | 27 | 0.12 | 3.1 | 5.0 | 2 | | ● | | |

C11-C14 Cutting Condition C52-C60

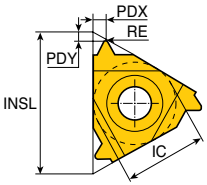
- (1) Number of teeth per corner

●: Standard items

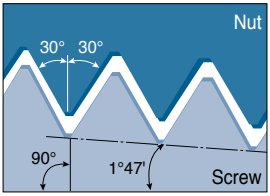
# External & Internal NPTF

T-THREAD

**Full profile, national pipe threads-dryseal (ANSI / ASME B1.20.1-1976)**




External right hand shown
(Internal left hand)




- Application: Steam, gas and water pipes

| Insert | Designation | TPI | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External  Regular | **11ER 14 NPTF** | 14 | 6.35 | 11 | 0.07 | 0.8 | 1.0 | | ● | | |
| | **16ER 27 NPTF** | 27 | 9.52 | 16 | 0.04 | 0.7 | 0.7 | | ● | | |
| | **16ER 18 NPTF** | 18 | 9.52 | 16 | 0.06 | 0.8 | 1.0 | | ● | | |
| | **16ER 14 NPTF** | 14 | 9.52 | 16 | 0.07 | 0.9 | 1.2 | ● | ● | | |
| | **16ER 11.5 NPTF** | 11.5 | 9.52 | 16 | 0.09 | 1.1 | 1.5 | | ● | | |
| | | | | | | | | | | | |
| Internal  Regular | **08IR 27 NPTF** | 27 | 4.76 | 8 | 0.04 | 0.6 | 0.6 | | | ● | |
| | **08IR 18 NPTF** | 18 | 4.76 | 8 | 0.06 | 0.6 | 0.6 | | | ● | |
| | **11IR 18 NPTF** | 18 | 6.35 | 11 | 0.06 | 0.8 | 1.0 | | ● | | |
| | **11IR 14 NPTF** | 14 | 6.35 | 11 | 0.07 | 0.8 | 1.0 | | ● | | |
| | **16IR 18 NPTF** | 18 | 9.52 | 16 | 0.06 | 0.8 | 1.0 | | ● | | |
| | **16IR 14 NPTF** | 14 | 9.52 | 16 | 0.07 | 0.9 | 1.2 | | ● | | |
| | **16IR 11.5 NPTF** | 11.5 | 9.52 | 16 | 0.09 | 1.1 | 1.5 | ● | ● | | |

●: Standard items



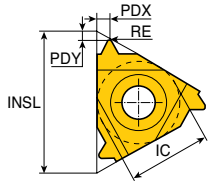



TaeguTec

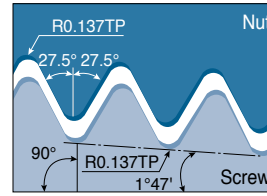
# External & Internal BSPT

T-THREAD

**Full profile, british standard pipe (B.S. 21-1957)**




External right hand shown
(Internal left hand)




- Application: Steam, gas and water pipes

| Insert | Designation | TPI | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External | | | | | | | | | | | |
|  Regular | **16ER 28 BSPT** | 28 | 9.52 | 16 | 0.11 | 0.6 | 0.6 | | ● | | |
| | **16ER 19 BSPT** | 19 | 9.52 | 16 | 0.16 | 0.8 | 0.9 | | ● | | |
| | **16ER/L 14 BSPT** | 14 | 9.52 | 16 | 0.21 | 1.0 | 1.2 | ● | ● | | |
| | **16ERB 14 BSPT** | 14 | 9.52 | 16 | 0.21 | 1.0 | 1.2 | | ● | | |
| | **16ERM 14 BSPT** | 14 | 9.52 | 16 | 0.21 | 1.0 | 1.2 | | ● | | |
|  B/M | **16ER/L 11 BSPT** | 11 | 9.52 | 16 | 0.28 | 1.1 | 1.5 | ● | ● | | |
| | **16ERB 11 BSPT** | 11 | 9.52 | 16 | 0.28 | 1.1 | 1.5 | | ● | | |
| | **16ERM 11 BSPT** | 11 | 9.52 | 16 | 0.28 | 1.1 | 1.5 | | ● | | |
| Internal | | | | | | | | | | | |
| | **06IR 28 BSPT** | 28 | 3.97 | 6 | 0.11 | 0.7 | 0.6 | | | ● | |
| | **08IR 19 BSPT** | 19 | 4.76 | 8 | 0.16 | 0.6 | 0.6 | | | ● | |
|  Regular | **11IR 19 BSPT** | 19 | 6.35 | 11 | 0.16 | 0.8 | 0.9 | | ● | | |
| | **11IRB 19 BSPT** | 19 | 6.35 | 11 | 0.16 | 0.8 | 0.9 | | ● | | |
| | **11IR 14 BSPT** | 14 | 6.35 | 11 | 0.21 | 0.9 | 1.0 | ● | ● | | |
|  B/M | **16IR 19 BSPT** | 19 | 9.52 | 16 | 0.16 | 0.8 | 0.9 | ● | | | |
| | **16IR/L 14 BSPT** | 14 | 9.52 | 16 | 0.21 | 1.0 | 1.2 | | ● | | |
| | **16IRB 14 BSPT** | 14 | 9.52 | 16 | 0.21 | 1.0 | 1.2 | | ● | | |
| | **16IRM 14 BSPT** | 14 | 9.52 | 16 | 0.21 | 1.0 | 1.2 | | ● | | |
| | **16IR/L 11 BSPT** | 11 | 9.52 | 16 | 0.28 | 1.1 | 1.5 | | ● | | |
| | **16IRB 11 BSPT** | 11 | 9.52 | 16 | 0.28 | 1.1 | 1.5 | | ● | | |
| | **16IRM 11 BSPT** | 11 | 9.52 | 16 | 0.28 | 1.1 | 1.5 | | ● | | |


- ERB / ERM / IRB / IRM with pressed chip breaker

●: Standard items

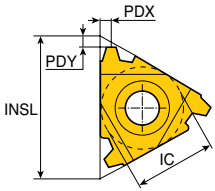


ADVANCE MACHINING
TaeguTec Industry 4.0

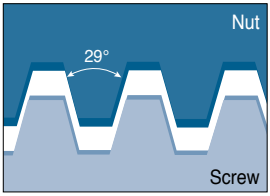
# External & Internal STUB ACME

T-THREAD

**ASME / ANSI B.1.8-1988 class: 2G**




External right hand shown
(Internal left hand)




- Application: Control valves and modified ACME thread forms

| Insert | Designation | TPI | Dimension (mm) | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External<br>Regular | **16ER 16 STACME** | 16 | 9.52 | 16 | 1.0 | 1.0 | | ● | | |
| | **16ER 12 STACME** | 12 | 9.52 | 16 | 1.2 | 1.2 | | ● | | |
| | **16ER 10 STACME** | 10 | 9.52 | 16 | 1.3 | 1.3 | | ● | | |
| | **16ER 8 STACME** | 8 | 9.52 | 16 | 1.5 | 1.5 | ● | ● | | ● |
| | **16ER 6 STACME** | 6 | 9.52 | 16 | 1.7 | 1.7 | ● | ● | | |
| | **22ER/L 5 STACME** | 5 | 12.70 | 22 | 2.0 | 2.3 | | ● | | |
| | **27ER 4 STACME** | 4 | 15.88 | 27 | 2.2 | 2.4 | | ● | | |
| | **27ER/L 3 STACME** | 3 | 15.88 | 27 | 2.8 | 2.9 | ● | | | |
| | | | | | | | | | | |
| Internal<br>Regular | **16IR 16 STACME** | 16 | 9.52 | 16 | 1.0 | 1.0 | | | | ● |
| | **16IR 12 STACME** | 12 | 9.52 | 16 | 1.2 | 1.2 | | ● | | |
| | **16IR/L 10 STACME** | 10 | 9.52 | 16 | 1.2 | 1.2 | | ● | | ● |
| | **16IR 8 STACME** | 8 | 9.52 | 16 | 1.5 | 1.5 | | ● | | ● |
| | **16IR/L 6 STACME** | 6 | 9.52 | 16 | 1.6 | 1.7 | ● | ● | | |
| | **22IR 5 STACME** | 5 | 12.70 | 22 | 2.0 | 2.1 | ● | | | ● |
| | **22UIR 3 STACME** | 3 | 12.70 | 22 | 3.3 | 11.0 | ● | | | |
| | **27IR 4 STACME** | 4 | 15.88 | 27 | 2.3 | 2.4 | | ● | | |
| | **27IR/L 3 STACME** | 3 | 15.88 | 27 | 2.8 | 2.9 | ● | | | |



●: Standard items

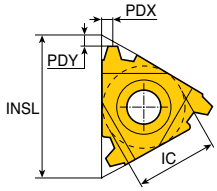


TaeguTec

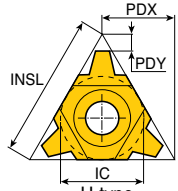
# External & Internal ACME

T-THREAD

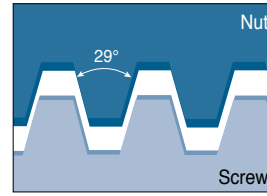
**ASME / ANSI B.1.8-1988 class: 3G**




External right hand shown
(Internal left hand)




U-type




• Application: Feed screws

| Insert | Designation | TPI | Dimension (mm) | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External  Regular | **16ER 16 ACME** | 16 | 9.52 | 16 | 0.9 | 1.0 | | ● | | |
| | **16ER 12 ACME** | 12 | 9.52 | 16 | 1.1 | 1.2 | | ● | | |
| | **16ER 10 ACME** | 10 | 9.52 | 16 | 1.3 | 1.3 | | ● | | |
| | **16ER/L 8 ACME** | 8 | 9.52 | 16 | 1.5 | 1.5 | | ● | | |
| | **22ER/L 6 ACME** | 6 | 12.70 | 22 | 1.8 | 2.1 | | ● | | ● |
| | **22ER/L 5 ACME** | 5 | 12.70 | 22 | 2.0 | 2.3 | | ● | | |
| | **22ER/L 4 ACME** | 4 | 12.70 | 22 | 2.1 | 2.2 | | ● | | |
| | **27ER/L 4 ACME** | 4 | 15.88 | 27 | 2.3 | 2.7 | ● | ● | | |
| Internal  Regular | **16IR 16 ACME** | 16 | 9.52 | 16 | 0.9 | 1.0 | ● | | | |
| | **16IR 12 ACME** | 12 | 9.52 | 16 | 1.1 | 1.2 | | ● | | |
| | **16IR/L 10 ACME** | 10 | 9.52 | 16 | 1.3 | 1.3 | ● | | | |
| | **16IR 8 ACME** | 8 | 9.52 | 16 | 1.5 | 1.5 | ● | ● | | |
| | **22IR/L 6 ACME** | 6 | 12.70 | 22 | 1.8 | 2.1 | | ● | | |
| | **22IR/L 5 ACME** | 5 | 12.70 | 22 | 2.0 | 2.3 | | ● | | |
| | **22IR 4 ACME** | 4 | 12.70 | 22 | 2.1 | 2.2 | | ● | | |
| | **27IR/L 4 ACME** | 4 | 15.88 | 27 | 2.3 | 2.7 | ● | ● | | |
| Internal / External  U | **22UERL 4 ACME** | 4 | 12.70 | 22 | 2.3 | 11 | | ● | | ● |
| | **27UERL 3 ACME** | 3 | 15.88 | 27 | 2.8 | 13.7 | | ● | | |
| | **27UIRL 3 ACME** | 3 | 15.88 | 27 | 2.8 | 13.7 | | ● | | |

●: Standard items



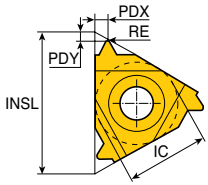
C11-C14

Cutting Condition
C52-C60

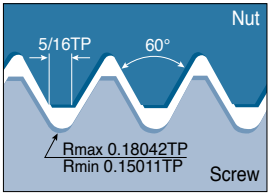
# External UNJ

T-THREAD

**Full profile (MIL-S-8879C 9-1992 class: 3A)**




External right hand shown
(Internal left hand)




- Application: Aircraft and aerospace industry

| Insert | Designation | TPI | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External | **16ER 40 UNJ** | 40 | 9.52 | 16 | 0.10 | 0.6 | 0.6 | | ● | | |
|  | **16ER 32 UNJ** | 32 | 9.52 | 16 | 0.12 | 0.6 | 0.6 | | ● | | |
| | **16ER/L 28 UNJ** | 28 | 9.52 | 16 | 0.14 | 0.6 | 0.6 | | ● | | |
| | **16ER/L 24 UNJ** | 24 | 9.52 | 16 | 0.16 | 0.7 | 0.8 | | ● | | |
| Regular | **16ER/L 20 UNJ** | 20 | 9.52 | 16 | 0.19 | 0.8 | 0.9 | | ● | | |
| | **16ER/L 18 UNJ** | 18 | 9.52 | 16 | 0.21 | 0.8 | 1.0 | | ● | | |
| | **16ER 16 UNJ** | 16 | 9.52 | 16 | 0.24 | 0.8 | 1.0 | | ● | | ● |
| | **16ER/L 14 UNJ** | 14 | 9.52 | 16 | 0.27 | 1.0 | 1.2 | | ● | | |
| | **16ER 13 UNJ** | 13 | 9.52 | 16 | 0.29 | 1.1 | 1.3 | | ● | | |
| | **16ER 12 UNJ** | 12 | 9.52 | 16 | 0.32 | 1.1 | 1.4 | | ● | | |
| | **16ER 11 UNJ** | 11 | 9.52 | 16 | 0.35 | 1.1 | 1.5 | | ● | | |
| | **16ER 8 UNJ** | 8 | 9.52 | 16 | 0.48 | 1.2 | 1.6 | | ● | | |




●: Standard items

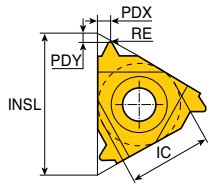


TaeguTec

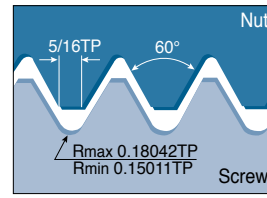
# Internal UNJ

T-THREAD

## Full profile




External right hand shown
(Internal left hand)




• Application: Aircraft and aerospace industry

| Insert | Designation | TPI | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| Internal | **08IR 20 UNJ** | 20 | 4.76 | 8 | 0.06 | 0.8 | 0.9 | | | ● | |
|  | **08IR 18 UNJ** | 18 | 4.76 | 8 | 0.07 | 0.8 | 1.0 | | | ● | |
| | **11IRB 32 UNJ** | 32 | 6.35 | 11 | 0.04 | 0.6 | 0.6 | | ● | | |
| | **11IR 24 UNJ** | 24 | 6.35 | 11 | 0.05 | 0.7 | 0.8 | | ● | | |
| Regular | **11IRB 24 UNJ** | 24 | 6.35 | 11 | 0.05 | 0.6 | 0.6 | | ● | | |
| | **11IR 20 UNJ** | 20 | 6.35 | 11 | 0.06 | 0.8 | 0.9 | | ● | | |
| | **11IR 18 UNJ** | 18 | 6.35 | 11 | 0.07 | 0.8 | 1.0 | | ● | | |
| | **11IR 16 UNJ** | 16 | 6.35 | 11 | 0.09 | 0.8 | 1.0 | | ● | | |
| | **16IR 24 UNJ** | 24 | 9.52 | 16 | 0.05 | 0.7 | 0.8 | | | | ● |
| | **16IR 20 UNJ** | 20 | 9.52 | 16 | 0.06 | 0.8 | 0.9 | | ● | | |
| | **16IR 18 UNJ** | 18 | 9.52 | 16 | 0.07 | 0.8 | 1.0 | | ● | | |
| | **16IR 16 UNJ** | 16 | 9.52 | 16 | 0.09 | 0.8 | 1.0 | | ● | | |
| | **16IR 14 UNJ** | 14 | 9.52 | 16 | 0.10 | 1.0 | 1.2 | | ● | | |
| | **16IR 12 UNJ** | 12 | 9.52 | 16 | 0.12 | 1.1 | 1.4 | | ● | | |
| | **16IR/L 8 UNJ** | 8 | 9.52 | 16 | 0.19 | 1.2 | 1.6 | | ● | | |

●: Standard items



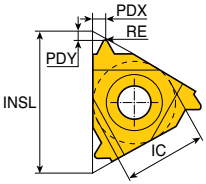
C11-C14

C52-C60

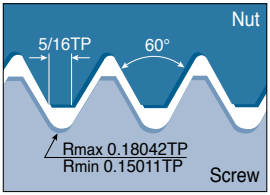
# External & Internal MJ

T-THREAD

**Full profile (ISO 5855)**




External right hand shown
(Internal left hand)




- Application: Aircraft and aerospace industry

| Insert | Designation | TP (mm) | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External  Regular | **16ER 1.00 MJ** | 1.00 | 9.52 | 16 | 0.16 | 0.7 | 0.8 | | ● | | |
| | **16ER 1.25 MJ** | 1.25 | 9.52 | 16 | 0.20 | 0.8 | 0.9 | | ● | | |
| | **16ER 1.50 MJ** | 1.50 | 9.52 | 16 | 0.23 | 0.8 | 1.0 | ● | ● | | |
| | **16ER 2.00 MJ** | 2.00 | 9.52 | 16 | 0.32 | 1.0 | 1.3 | | ● | | |
| Internal  Regular | **11IR 1.00 MJ** | 1.00 | 6.35 | 11 | 0.05 | 0.7 | 0.8 | | ● | | |
| | **11IR 1.25 MJ** | 1.25 | 6.35 | 11 | 0.07 | 0.8 | 0.9 | | ● | | |
| | **11IR 1.50 MJ** | 1.50 | 6.35 | 11 | 0.08 | 0.8 | 1.0 | | ● | | |
| | **11IR 2.00 MJ** | 2.00 | 6.35 | 11 | 0.12 | 0.9 | 1.0 | | ● | | |
| | **16IR 1.00 MJ** | 1.00 | 9.52 | 16 | 0.05 | 0.7 | 0.8 | | ● | | |
| | **16IR 1.50 MJ** | 1.50 | 9.52 | 16 | 0.08 | 0.8 | 1.0 | | ● | | |


●: Standard items

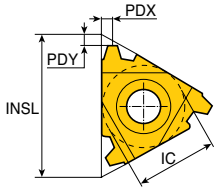


TaeguTec

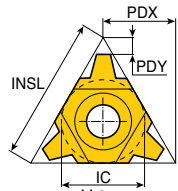
# External & Internal Trapez

T-THREAD

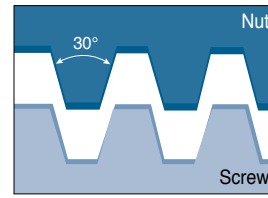
## DIN 103




External right hand shown
(Internal left hand)




U-type




• Application: Feed screws

| Insert | Designation | TP (mm) | Dimension (mm) | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External<br>  <br>Regular | **16ER 1.5 TR** | 1.5 | 9.52 | 16 | 1.0 | 1.1 | ● | ● | | |
| | **16ER/L 2 TR** | 2.0 | 9.52 | 16 | 1.0 | 1.3 | ● | ● | | |
| | **16ER/L 3 TR** | 3.0 | 9.52 | 16 | 1.3 | 1.5 | ● | ● | | |
| | **22ER/L 4 TR** | 4.0 | 12.70 | 22 | 1.8 | 1.9 | ● | ● | | |
| | **22ER/L 5 TR** | 5.0 | 12.70 | 22 | 2.0 | 2.4 | ● | ● | | |
| | **22ER/L 6 TR** | 6.0 | 12.70 | 22 | 2.0 | 2.4 | | ● | | |
| | **27ER/L 6 TR** | 6.0 | 15.88 | 27 | 2.3 | 2.7 | ● | ● | | |
| | **27ER/L 7 TR** | 7.0 | 15.88 | 27 | 2.2 | 2.6 | ● | ● | | |
| Internal<br>  <br>Regular | **08IR 1.5 TR** | 1.5 | 4.76 | 8 | 0.6 | 0.6 | | | ● | |
| | **16IR 1.5 TR** | 1.5 | 9.52 | 16 | 1.0 | 1.1 | ● | | | |
| | **16IR/L 2 TR** | 2.0 | 9.52 | 16 | 1.0 | 1.3 | ● | ● | | |
| | **16IR/L 3 TR** | 3.0 | 9.52 | 16 | 1.3 | 1.5 | | ● | ● | |
| | **22IR/L 4 TR** | 4.0 | 12.70 | 22 | 1.8 | 1.9 | ● | ● | | |
| | **22IR/L 5 TR** | 5.0 | 12.70 | 22 | 2.0 | 2.4 | ● | ● | | |
| | **22IR/L 6 TR** | 6.0 | 12.70 | 22 | 2.0 | 2.4 | ● | ● | ● | ● |
| | **27IR/L 6 TR** | 6.0 | 15.88 | 27 | 2.3 | 2.7 | ● | ● | | |
| | **27IR 7 TR** | 7.0 | 15.88 | 27 | 2.2 | 2.6 | ● | | | |
| Internal / External<br>  <br>U | **22UERL 6 TR** | 6.0 | 12.70 | 22 | 2.0 | 11.0 | | ● | | |
| | **22UERL 7 TR** | 7.0 | 12.70 | 22 | 2.3 | 11.0 | ● | ● | | |
| | **22UERL 8 TR** | 8.0 | 12.70 | 22 | 2.5 | 11.0 | ● | | | |
| | **27UERL 8 TR** | 8.0 | 15.88 | 27 | 2.5 | 13.7 | ● | ● | | |
| | **27UERL 9 TR** | 9.0 | 15.88 | 27 | 3.0 | 13.7 | ● | ● | | |
| | **27UERL 10 TR**(1) | 10.0 | 15.88 | 27 | 3.2 | 13.7 | | ● | | |
| | **08UIRL 2 TR** | 2.0 | 4.76 | 8 | 0.9 | 4.0 | | | ● | |
| | **22UIRL 6 TR** | 6.0 | 12.70 | 22 | 2.0 | 11.0 | ● | ● | | |
| | **22UIRL 7 TR** | 7.0 | 12.70 | 22 | 2.3 | 11.0 | ● | | | |
| | **27UIRL 8 TR** | 8.0 | 15.88 | 27 | 2.5 | 13.7 | ● | | | |
| | **27UIRL 9 TR** | 9.0 | 15.88 | 27 | 3.0 | 13.7 | ● | ● | | |
| | **27UIRL 10 TR**(1) | 10.0 | 15.88 | 27 | 3.2 | 13.7 | | ● | | |

C11-C14 Cutting Condition C52-C60

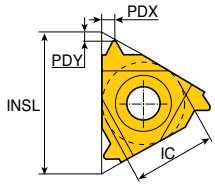
• (1) One cutting edge only
• DIN 103 04 / 1977, 150 2901 / 1977 Class 7H (7E)

●: Standard items

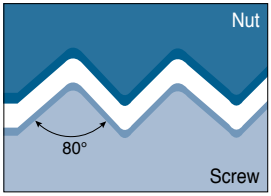
# External & Internal PG

T-THREAD

**Full profile (DIN 40430)**




External right hand shown
(Internal left hand)




- Application: Electrical industry

| Insert | Designation | TPI | Dimension (mm) | | | | Coated | | | Uncoated | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 | |
| External  Regular | **16ER 16 PG** | 16 | 9.52 | 16 | 0.8 | 1.0 | | ● | | | |
| | **16ER 18 PG** | 18 | 9.52 | 16 | 0.8 | 0.9 | | ● | | | |
| | **16ER 20 PG** | 20 | 9.52 | 16 | 0.7 | 0.8 | | ● | | | |
| Internal  Regular | **11IR 18 PG** | 18 | 6.35 | 11 | 0.8 | 0.9 | | ● | | | |
| | **16IR 16 PG** | 16 | 9.52 | 16 | 0.8 | 1.0 | | ● | | | |
| | **16IR 18 PG** | 18 | 9.52 | 16 | 0.8 | 0.9 | | ● | | | |



●: Standard items

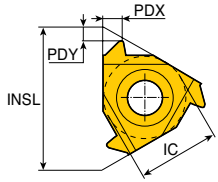


TaeguTec

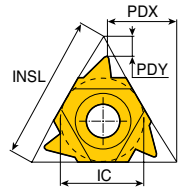
# External & Internal Sagengenwinde

T-THREAD

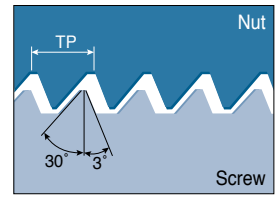
## DIN 513




External right hand shown
(Internal left hand)




U-type




• Application: For high forces in one direction

| Insert | Designation | TP (mm) | Dimension (mm) | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External  Regular | **16ER/L 2 SAGE** | 2.0 | 9.52 | 16 | 1.1 | 1.6 | | ● | | |
| | **22ER 3 SAGE** | 3.0 | 12.70 | 22 | 1.5 | 2.4 | | ● | | |
| | **22ER 4 SAGE** | 4.0 | 12.70 | 22 | 1.9 | 3.1 | ● | ● | | |
| External  U | **22UER 5 SAGE** | 5.0(1) | 12.70 | 22 | 1.2 | 11.6 | | ● | | |
| | **22UER/L 6 SAGE** | 6.0(1) | 12.70 | 22 | 1.2 | 11.7 | | ● | | |
| Internal  Regular | **16IR 2 SAGE** | 2.0 | 9.52 | 16 | 1.2 | 1.7 | | ● | | |
| | **22IR 3 SAGE** | 3.0 | 12.70 | 22 | 1.9 | 2.9 | | ● | | |
| | **22IR 4 SAGE** | 4.0 | 12.70 | 22 | 2.3 | 3.5 | | ● | | |
| Internal  U | **22UIR 5 SAGE** | 5.0(1) | 12.70 | 22 | 1.9 | 11.7 | | ● | | |
| | **22UIR 6 SAGE** | 6.0(1) | 12.70 | 22 | 2.1 | 11.9 | | ● | | |


• (1) Requires special anvil

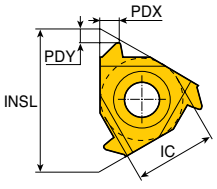
●: Standard items



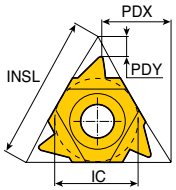
ADVANCE MACHINING
TaeguTec Industry 4.0

# External & Internal American Buttress

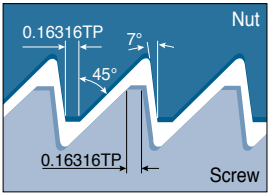
T-THREAD




External right hand shown
(Internal left hand)




U-type




• Application: For high forces in one direction

| Insert | Designation | TPI | Dimension (mm) | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External  Regular | **16ER 20 ABUT** | 20 | 9.52 | 16 | 1.0 | 1.3 | | ● | | |
| | **16ER 16 ABUT** | 16 | 9.52 | 16 | 1.1 | 1.5 | | ● | | |
| | **16ER 12 ABUT** | 12 | 9.52 | 16 | 1.4 | 2.0 | | ● | | |
| | **16ER/L 10 ABUT** | 10 | 9.52 | 16 | 1.5 | 2.3 | | ● | | |
| | **22ER 8 ABUT** | 8 | 12.70 | 22 | 2.1 | 3.3 | | ● | | |
| | **22ER 6 ABUT** | 6 | 12.70 | 22 | 2.1 | 3.4 | | ● | | |
| External  U | **22UER 4 ABUT** | 4 | 12.70 | 22 | 2.3 | 9.5 | | ● | | |
| | **27UER 3 ABUT** | 3 | 15.88 | 27 | 3.1 | 11.7 | | ● | | |
| Internal  Regular | **11IR 20 ABUT** | 20 | 6.35 | 11 | 1.0 | 1.3 | | ● | | |
| | **11IR 16 ABUT** | 16 | 6.35 | 11 | 1.0 | 1.5 | | ● | | |
| | **16IR 20 ABUT** | 20 | 9.52 | 16 | 1.0 | 1.3 | | ● | | |
| | **16IR/L 16 ABUT** | 16 | 9.52 | 16 | 1.0 | 1.5 | | ● | | |
| | **16IR/L 12 ABUT** | 12 | 9.52 | 16 | 1.4 | 2.0 | ● | ● | | |
| | **16IR 10 ABUT** | 10 | 9.52 | 16 | 1.5 | 2.3 | | ● | | |
| | **22IR 8 ABUT** | 8 | 12.70 | 22 | 2.1 | 3.3 | | ● | | |
| | **22IR/L 6 ABUT** | 6 | 12.70 | 22 | 2.1 | 3.4 | | ● | | |
| Internal  U | **22UIR 4 ABUT** | 4 | 12.70 | 22 | 2.3 | 9.5 | ● | | | |



• ANSI B1.9-1973 class 2

●: Standard items

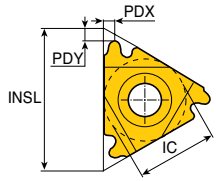


TaeguTec

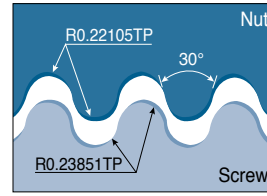
# External & Internal Round

T-THREAD

## DIN 405




External right hand shown
(Internal left hand)




• Application: Pipe coupings in fire fighting and food industries

| Insert | Designation | TPI | Dimension (mm) | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External<br>Regular | **16ER 10 RND** | 10 | 9.52 | 16 | 1.1 | 1.2 | ● | ● | | |
| | **16ER/L 8 RND** | 8 | 9.52 | 16 | 1.4 | 1.3 | | ● | | |
| | **16ERM 8 RND** | 8 | 9.52 | 16 | 1.4 | 1.3 | | ● | | |
| | **16ER 6 RND** | 6 | 9.52 | 16 | 1.5 | 1.7 | ● | ● | | |
| | **16ERM 6 RND** | 6 | 9.52 | 16 | 1.5 | 1.7 | | ● | | |
| | **22ER 6 RND** | 6 | 12.70 | 22 | 1.5 | 1.7 | | ● | ● | |
| | **22ER 4 RND** | 4 | 12.70 | 22 | 2.2 | 2.3 | ● | ● | | |
| Internal<br>Regular | **16IR 10 RND** | 10 | 9.52 | 16 | 1.1 | 1.2 | | ● | | |
| | **16IR/L 8 RND** | 8 | 9.52 | 16 | 1.4 | 1.4 | | ● | | |
| | **16IR 6 RND** | 6 | 9.52 | 16 | 1.4 | 1.5 | ● | ● | ● | |
| | **16IRM 6 RND** | 6 | 9.52 | 16 | 1.4 | 1.5 | | ● | | |
| | **22IR 6 RND** | 6 | 12.70 | 22 | 1.5 | 1.7 | | ● | | |
| | **22IR 4 RND** | 4 | 12.70 | 22 | 2.2 | 2.3 | | ● | | |

C11-C14 Cutting Condition C52-C60

• ERM / IRM with pressed chip breaker
• Tolerance class 7H

●: Standard items

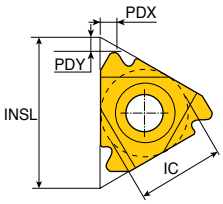


ADVANCE MACHINING
TaeguTec Industry 4.0

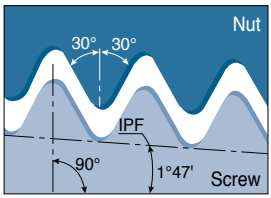
# API - Oil Threads

T-THREAD

## Round profile




External right hand shown
(Internal left hand)




- Application: Oil & gas industry

| Insert | Designation | TPI | Dimension (mm) | | | | | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | IPF | PDY | PDX | TT7010 | TT9030 | TT8010 | P30 |
| External<br>  <br>Regular | **16ER 10 API RD** | 10 | 9.52 | 16 | 0.75 | 1.5 | 1.4 | ● | ● | | |
| | **16ER/L 8 API RD** | 8 | 9.52 | 16 | 0.75 | 1.3 | 1.6 | ● | ● | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| Internal<br>  <br>Regular | **16IR 10 API RD** | 10 | 9.52 | 16 | 0.75 | 1.5 | 1.4 | ● | ● | | |
| | **16IR/L 8 API RD** | 8 | 9.52 | 16 | 0.75 | 1.3 | 1.6 | ● | ● | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

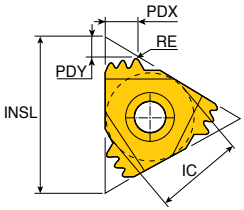



●: Standard items

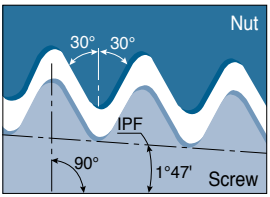
# API - Oil Threads

T-THREAD

## Round profile, multi-tooth




External right hand shown
(Internal left hand)




- Application: Oil & gas industry

| Insert | Designation | TPI | Dimension (mm) | | | | | | CICT(1) | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | RE | IPF | PDY | PDX | | TT7010 | TT9030 | TT8010 | P30 |
| Internal / External<br>  | **22ER/IR 10 API RD 2M** | 10 | 12.70 | 22 | 0.36 | 0.75 | 2.4 | 3.7 | 2 | | ● | | |
| | **27ER/IR 8 API RD 2M** | 8 | 15.88 | 27 | 0.43 | 0.75 | 3.0 | 4.5 | 2 | | ● | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

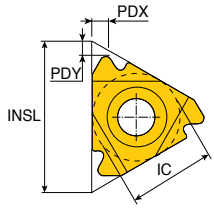



- API Spec 5B8-1996
- (1) Number of teeth per corner

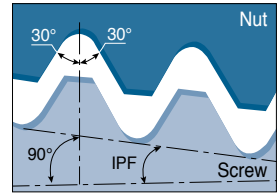
●: Standard items

# API - Oil Thread Profile

T-THREAD




External right hand shown
(Internal left hand)




• Application: Oil & gas industry

| Insert | Designation | TPI | Dimension (mm) IC | INSL | IPF | PDY | PDX | Connection No. or size | Coated TT7010 | TT9030 | TT8010 | Uncoated P30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| External  Regular | **22ER 5 API 403**(1) | 5 | 12.70 | 22 | 3 | 1.8 | 2.5 | 2.375"-4.5"REG | | ● | | |
| | **27ER 4 API 382**(2) | 4 | 15.88 | 27 | 2 | 2.1 | 2.8 | NC23-NC50 | ● | ● | | |
| | **27ER 4 API 383**(2) | 4 | 15.88 | 27 | 3 | 2.1 | 2.8 | NC56-NC77 | | ● | | |
| | **27ER/L 4 API 502**(3) | 4 | 15.88 | 27 | 2 | 2.0 | 3.0 | 6-5/8"REG | ● | ● | | |
| | **27ER 4 API 503**(3) | 4 | 15.88 | 27 | 3 | 2.0 | 3.0 | 5-1/2, 7-5/8, 8-5/8"REG | | ● | | |
| Internal  Regular | **22IR 5 API 403**(1) | 5 | 12.70 | 22 | 3 | 1.8 | 2.5 | 2.375"-4.5"REG | ● | ● | | |
| | **27IR 4 API 382**(2) | 4 | 15.88 | 27 | 2 | 2.1 | 2.8 | NC23-NC50 | ● | ● | | |
| | **27IR/L 4 API 502**(3) | 4 | 15.88 | 27 | 2 | 2.0 | 3.0 | 6-5/8"REG | ● | | | |



• (1) V-0.040 (2) V-0.038R (3) V-0.050
• 0.050, API spec 74-1994

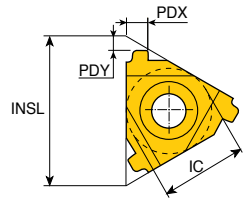
●: Standard items



ADVANCE MACHINING
TaeguTec Industry 4.0

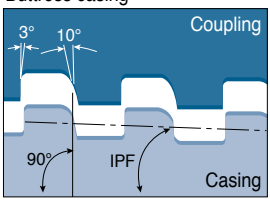
# Buttress Casing / Extreme Line Casing

T-THREAD

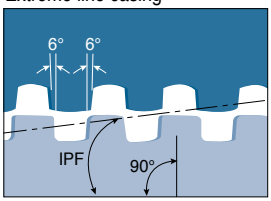



External right hand shown
(Internal left hand)

Buttress casing




Extreme line casing




• Application: Oil & gas industry

| Insert | Designation | TPI | Dimension (mm) | | | | | Connection No. or size | Coated | | | Uncoated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | IC | INSL | IPF | PDY | PDX | | TT7010 | TT9030 | TT8010 | P30 |
|  Buttress | **22ER/IR 5 BUT 0.75** | 5 | 12.70 | 22 | 0.75 | 2.2 | 2.4 | 4-1/2″ - 13-3/8″ | ● | ● | | |
| | **22ER/IR 5 BUT 1.0** | 5 | 12.70 | 22 | 1.0 | 2.3 | 2.4 | 16″ - 20″ | ● | | | |
|  Extreme line casing | **22ER 6 EL 1.5** | 6 | 12.70 | 22 | 1.5 | 1.9 | 1.9 | 5″ - 7-5/8″ | | ● | | |
| | **22IR 6 EL 1.5** | 6 | 12.70 | 22 | 1.5 | 1.9 | 1.9 | 5″ - 7-5/8″ | | ● | | |



• ANSI B1.9-1973 class 2

●: Standard items



TaeguTec

# Recommended Cutting Conditions

T-THREAD

## Machining data for thread turning insert

| ISO | Material | | Condition | Tensile strength ($N/mm^2$) | Hardness HB | Material No. |
|---|---|---|---|---|---|---|
| P | Non-alloy steel, cast steel, free cutting steel | <0.25%C | Annealed | 420 | 125 | 1 |
| | | >=0.25%C | Annealed | 650 | 190 | 2 |
| | | <0.55%C | Quenched and tempered | 850 | 250 | 3 |
| | | >=0.55%C | Annealed | 750 | 220 | 4 |
| | | | Quenched and tempered | 1000 | 300 | 5 |
| | Low alloy steel and cast steel (Less than 5% of alloying elements) | | Annealed | 600 | 200 | 6 |
| | | | Quenched and tempered | 930 | 275 | 7 |
| | | | | 1000 | 300 | 8 |
| | | | | 1200 | 350 | 9 |
| | High alloy steel, cast steel and tool steel | | Annealed | 680 | 200 | 10 |
| | | | Quenched and tempered | 1100 | 325 | 11 |
| M | Stainless steel and cast steel | | Ferritic / martensitic | 680 | 200 | 12 |
| | | | Martensitic | 820 | 240 | 13 |
| | | | Austenitic | 600 | 180 | 14 |
| K | Gray cast iron (GG) | | Ferritic | | 160 | 15 |
| | | | Pearlitic | | 250 | 16 |
| | Cast iron nodular (GGG) | | Ferritic | | 180 | 17 |
| | | | Pearlitic | | 260 | 18 |
| | Malleable cast iron | | Ferritic | | 130 | 19 |
| | | | Pearlitic | | 230 | 20 |
| N | Aluminum - Wrought alloy | | Not cureable | | 60 | 21 |
| | | | Cured | | 100 | 22 |
| | Aluminum-cast, alloyed | <=12% Si | Not cureable | | 75 | 23 |
| | | | Cured | | 90 | 24 |
| | | >12% Si | High temp. | | 130 | 25 |
| | Copper alloys | >1% Pb | Free cutting | | 110 | 26 |
| | | | Brass | | 90 | 27 |
| | | | Electrolitic copper | | 100 | 28 |
| | Non-metallic | | Duroplastics, fiber plastics | | | 29 |
| | | | Hard rubber | | | 30 |
| S | High temp. alloys | Fe based | Annealed | | 200 | 31 |
| | | | Cured | | 280 | 32 |
| | | Ni or Co based | Annealed | | 250 | 33 |
| | | | Cured | | 350 | 34 |
| | | | Cast | | 320 | 35 |
| | Titanium, Ti alloys | | | Rm 400 | | 36 |
| | | | Alpha+beta alloys cured | Rm 1050 | | 37 |
| H | Hardened steel | | Hardened | | 55HRC | 38 |
| | | | Hardened | | 60HRC | 39 |
| | Chilled cast iron | | Cast | | 400 | 40 |
| | Cast iron nodular | | Hardened | | 55HRC | 41 |

• For more information of material groups, see the materials & grades "material conversion table"

Steel Stainless steel Cast iron Nonferrous High temp. alloys Hardened steel

# Recommended Cutting Conditions

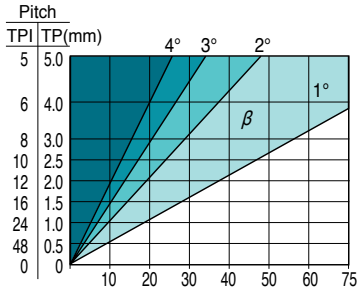
T-THREAD

## Machining data for thread turning insert

| Cutting speed (m/min) | | | | | |
|---|---|---|---|---|---|
| Coated | | | Uncoated | | |
| TT7010 | TT9030 | TT8010 | P30 | | |
| 120-200 | 140-220 | 85-125 | 80-120 | | |
| 120-200 | 140-220 | 85-125 | 80-120 | | |
| 110-190 | 130-210 | 80-120 | 70-110 | | |
| 110-190 | 130-210 | 80-120 | 70-110 | | |
| 90-170 | 110-190 | 70-100 | 65-95 | | |
| 70-120 | 70-120 | 50-70 | 70-110 | | |
| 90-170 | 110-190 | 70-100 | 65-95 | | |
| 80-120 | 100-140 | 60-100 | 70-110 | | |
| 70-120 | 90-140 | 40-80 | 40-80 | | |
| 70-100 | 70-100 | 40-70 | 40-70 | | |
| 40-80 | 40-80 | 40-70 | 40-70 | | |
| 85-125 | 90-130 | 40-70 | 40-70 | | |
| 120-180 | 130-190 | 80-120 | 80-120 | | |
| 50-100 | 60-110 | 40-60 | 40-60 | | |
| | 100-140 | 80-120 | | | |
| | 110-150 | 80-120 | | | |
| | 110-150 | 80-120 | | | |
| | 80-120 | 80-120 | | | |
| | 110-150 | 60-100 | | | |
| | 80-120 | 55-95 | | | |
| | 1300-1500 | 700-900 | | | |
| | 400-600 | 330-430 | | | |
| | 500-800 | 350-450 | | | |
| | 370-470 | 300-360 | | | |
| | 200-280 | 150-210 | | | |
| | 260-340 | 160-240 | | | |
| | 350-450 | 250-310 | | | |
| | 100-140 | 80-120 | | | |
| | 250-350 | 160-200 | | | |
| | 250-350 | 150-210 | | | |
| | 50-70 | 20-50 | | | |
| | 30-50 | 20-50 | | | |
| | 30-50 | 20-40 | | | |
| | 20-40 | 15-30 | | | |
| | 20-40 | 15-30 | | | |
| | 120-140 | 90-110 | | | |
| | 40-60 | 20-50 | | | |
| | 30-60 | 20-35 | | | |
| | 20-40 | 20-30 | | | |
| | 20-40 | 20-30 | | | |
| | 20-30 | 15-25 | | | |

## Thread helix angle and anvil selection

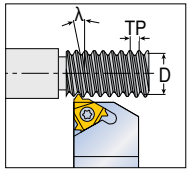
■ Helix angle λ evaluation




(1)β=4.5°
(1)β=3.5°
(1)β=2.5°
(1)β=1.5°
(1)β=0.5°

$$tg\ \lambda = \frac{1 \times TP}{3.14 \cdot D}$$

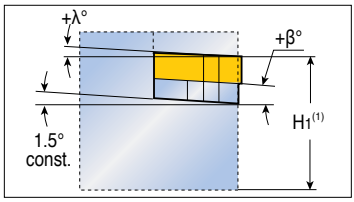
$$\lambda° = \frac{20 \times TP}{D}$$



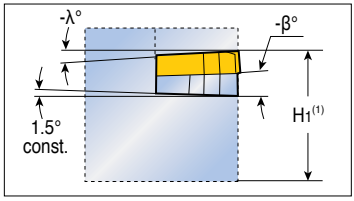

TP - Thread pitch (mm)
D - Effective diameter of thread (mm)
λ - Angle of inclination

## Anvil selection according to thread helix angle λ

| Standard | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Thread helix angle λ | | > 4° | 3°- 4° | 2°- 3° | 1°- 2° | 0°- 1° | Negative anvils | |
| | Inclination angle β | 4.5° | 3.5° | 2.5° | 1.5° | 0.5° | -0.5° | -1.5° |
| INSL(IC) | Toolholder | Anvil designation | | | | | | |
| 16 | EX RH OR IN LH | AE 16 +4.5 | AE 16 +3.5 | AE 16 +2.5 | AE 16 | AE 16 +0.5 | AE 16 -0.5 | AE 16 -1.5 |
| (3/8) | EX LH OR IN RH | AI 16 +4.5 | AI 16 +3.5 | AI 16 +2.5 | AI 16 | AI 16 +0.5 | AI 16 -0.5 | AI 16 -1.5 |
| 22 | EX RH OR IN LH | AE 22 +4.5 | AE 22 +3.5 | AE 22 +2.5 | AE 22 | AE 22 +0.5 | AE 22 -0.5 | AE 22 -1.5 |
| (1/2) | EX LH OR IN RH | AI 22 +4.5 | AI 22 +3.5 | AI 22 +2.5 | AI 22 | AI 22 +0.5 | AI 22 -0.5 | AI 22 -1.5 |
| 27 | EX RH OR IN LH | AE 27 +4.5 | AE 27 +3.5 | AE 27 +2.5 | AE 27 | AI 27 +0.5 | AE 27 -0.5 | AE 27 -1.5 |
| (5/8) | EX LH OR IN RH | AI 27 +4.5 | AI 27 +3.5 | AI 27 +2.5 | AI 27 | AI 27 +0.5 | AI 27 -0.5 | AI 27 -1.5 |
| 22U | EX RH OR IN LH | AE 22U +4.5 | AE 22U +3.5 | AE 22U +2.5 | AE 22U | AE 22U +0.5 | AE 22U -0.5 | AE 22U -1.5 |
| (1/2U) | EX LH OR IN RH | AI 22U +4.5 | AI 22U +3.5 | AI 22U +2.5 | AI 22U | AI 22U +0.5 | AI 22U -0.5 | AI 22U -1.5 |
| 27U | EX RH OR IN LH | AE 27U +4.5 | AE 27U +3.5 | AE 27U +2.5 | AE 27U | AE 27U +0.5 | AE 27U -0.5 | AE 27U -1.5 |
| (5/8U) | EX LH OR IN RH | AI 27U +4.5 | AI 27U +3.5 | AI 27U +2.5 | AI 27U | AI 27U +0.5 | AI 27U -0.5 | AI 27U -1.5 |




■ Anvils for positive inclination angle β applicable when turning
- RH thread with RH holder or LH thread with LH holder

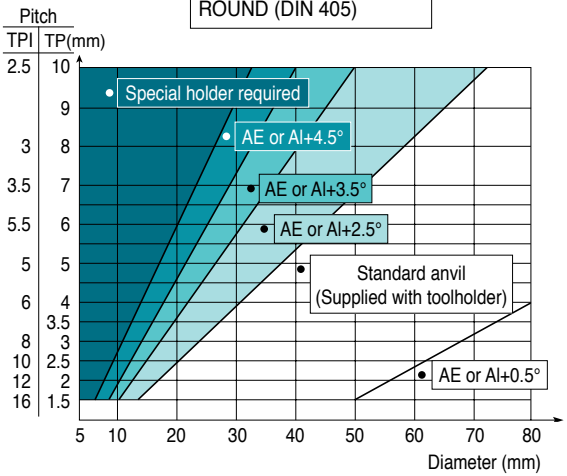


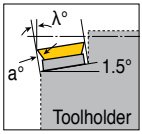

■ Anvils for negative inclination β used when turning
- RH thread with LH holder or LH thread with RH holder

• (1) H1 remains constant for every anvil combination.

## Anvil selection according to thread helix angle λ

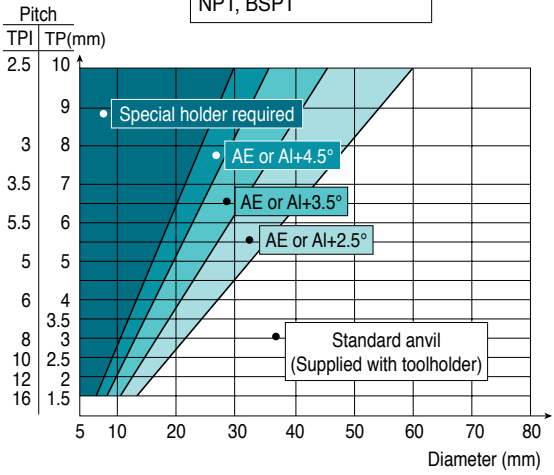
ACME
STUB ACME
TRAPEZE (DIN 103)
ROUND (DIN 405)




AE anvils : EX-RH and IN-LH toolholders
AI anvils : IN-RH and EX-LH toolholders

PARTIAL PROFILES 60°
PARTIAL PROFILES 55°
ISO, UN,WHITWORTH,
NPT, BSPT




AE anvils : EX-RH and IN-LH toolholders
AI anvils : IN-RH and EX-LH toolholders

## Maximum depth of first cut for CNC control / external threading - M-type inserts

| Full profile | Pitch | | Insert designation | No. of passes | | Max. depth for first pass ($D_1$) mm | |
|---|---|---|---|---|---|---|---|
| | | | | | | Low carbon steel | |
| | TP (mm) | TPI | | Min. | Max. | Eq.(2) | Dim.(3) |
| ISO metric | 1.00 | | **16 ERM 1.00 ISO** | 5 | 9 | 0.34 | 0.51 |
| | 1.25 | | **16 ERM 1.25 ISO** | 6 | 11 | 0.42 | 0.63 |
| | 1.50 | | **16 ERM 1.50 ISO** | 6 | 12 | 0.46 | 0.69 |
| | 1.75 | | **16 ERM 1.75 ISO** | 8 | 13 | 0.48 | 0.72 |
| | 2.00 | | **16 ERM 2.00 ISO** | 8 | 14 | 0.50 | 0.75 |
| | 2.50 | | **16 ERM 2.50 ISO** | 10 | 15 | 0.53 | 0.80 |
| | 3.00 | | **16 ERM 3.00 ISO** | 12 | 17 | 0.56 | 0.84 |
| American UN | | 24 | **16 ERM 24 UN** | 5 | 9 | 0.34 | 0.51 |
| | | 20 | **16 ERM 20 UN** | 6 | 10 | 0.42 | 0.63 |
| | | 18 | **16 ERM 18 UN** | 6 | 11 | 0.46 | 0.69 |
| | | 16 | **16 ERM 16 UN** | 7 | 12 | 0.47 | 0.71 |
| | | 14 | **16 ERM 14 UN** | 6 | 13 | 0.46 | 0.69 |
| | | 12 | **16 ERM 12 UN** | 8 | 14 | 0.50 | 0.75 |
| | | 8 | **16 ERM 8 UN** | 12 | 17 | 0.56 | 0.84 |
| British BSW | | 19 | **16 ERM 19 W** | 6 | 11 | 0.35 | 0.52 |
| | | 16 | **16 ERM 16 W** | 7 | 12 | 0.47 | 0.71 |
| | | 14 | **16 ERM 14 W** | 8 | 13 | 0.50 | 0.75 |
| | | 11 | **16 ERM 11 W** | 9 | 14 | 0.44 | 0.66 |
| NPT | | 18 | **16 ERM 18 NPT** | 10 | 20 | 0.24 | 0.36 |
| | | 14 | **16 ERM 14 NPT** | 13 | 26 | 0.24 | 0.36 |
| | | 11.5 | **16 ERM 11.5 NPT** | 15 | 24 | 0.27 | 0.40 |
| | | 8 | **16 ERM 8 NPT** | 17 | 30 | 0.31 | 0.46 |
| Round | | 6 | **16 ERM 6 RND** | 9 | 20 | 0.42 | 0.63 |
| Partial profile 60° | | 48-16 | **16 ERM A 60** | (1) | | 0.22 | 0.33 |
| | | 14-8 | **16 ERM G 60** | | | 0.50 | 0.75 |
| | | 48-8 | **16 ERM AG 60** | | | 0.24 | 0.36 |
| | | 7-5 | **16 ERM N 60** | | | 0.41 | 0.62 |
| Partial profile 55° | | 14-8 | **16 ERM G 55** | | | 0.50 | 0.75 |
| | | 48-8 | **16 ERM AG 55** | | | 0.22 | 0.33 |

- (1) As per the number of passes for the relevant pitch
  (2) Equal depth of cut method
  (3) Diminished depth of cut for each pass method

| Max. depth for first pass ($D_1$) mm | | | | | | | |
|---|---|---|---|---|---|---|---|
| High carbon steel | | Alloy steel | | Stainless steel | | Nonferrous aluminum | |
| Eq.[2] | Dim.[3] | Eq.[2] | Dim.[3] | Eq.[2] | Dim.[3] | Eq.[2] | Dim.[3] |
| 0.31 | 0.46 | 0.27 | 0.41 | 0.22 | 0.33 | 0.48 | 0.71 |
| 0.38 | 0.57 | 0.34 | 0.50 | 0.27 | 0.41 | 0.59 | 0.88 |
| 0.41 | 0.62 | 0.37 | 0.55 | 0.30 | 0.45 | 0.64 | 0.97 |
| 0.43 | 0.65 | 0.38 | 0.58 | 0.31 | 0.47 | 0.67 | 1.01 |
| 0.45 | 0.68 | 0.40 | 0.60 | 0.33 | 0.49 | 0.70 | 1.05 |
| 0.48 | 0.72 | 0.42 | 0.64 | 0.34 | 0.52 | 0.74 | 1.12 |
| 0.50 | 0.76 | 0.45 | 0.67 | 0.36 | 0.55 | 0.78 | 1.18 |
| 0.31 | 0.46 | 0.27 | 0.41 | 0.22 | 0.33 | 0.48 | 0.71 |
| 0.38 | 0.57 | 0.34 | 0.50 | 0.27 | 0.41 | 0.59 | 0.88 |
| 0.41 | 0.62 | 0.37 | 0.55 | 0.30 | 0.45 | 0.64 | 0.97 |
| 0.42 | 0.64 | 0.38 | 0.57 | 0.31 | 0.46 | 0.66 | 0.99 |
| 0.41 | 0.62 | 0.37 | 0.55 | 0.28 | 0.41 | 0.64 | 0.97 |
| 0.45 | 0.68 | 0.40 | 0.60 | 0.33 | 0.49 | 0.70 | 1.05 |
| 0.50 | 0.76 | 0.45 | 0.67 | 0.36 | 0.55 | 0.78 | 1.18 |
| 0.32 | 0.47 | 0.28 | 0.42 | 0.21 | 0.31 | 0.49 | 0.73 |
| 0.42 | 0.64 | 0.38 | 0.57 | 0.31 | 0.46 | 0.66 | 0.99 |
| 0.45 | 0.68 | 0.40 | 0.60 | 0.33 | 0.49 | 0.70 | 1.05 |
| 0.40 | 0.59 | 0.35 | 0.53 | 0.29 | 0.43 | 0.62 | 0.92 |
| 0.22 | 0.32 | 0.19 | 0.29 | 0.16 | 0.23 | 0.34 | 0.50 |
| 0.22 | 0.32 | 0.19 | 0.29 | 0.14 | 0.22 | 0.34 | 0.50 |
| 0.24 | 0.36 | 0.22 | 0.32 | 0.18 | 0.26 | 0.38 | 0.56 |
| 0.28 | 0.41 | 0.25 | 0.37 | 0.20 | 0.30 | 0.43 | 0.64 |
| 0.38 | 0.57 | 0.34 | 0.50 | 0.27 | 0.41 | 0.59 | 0.88 |
| 0.20 | 0.30 | 0.18 | 0.26 | 0.14 | 0.21 | 0.31 | 0.46 |
| 0.45 | 0.68 | 0.40 | 0.60 | 0.33 | 0.49 | 0.70 | 1.05 |
| 0.22 | 0.32 | 0.19 | 0.29 | 0.16 | 0.23 | 0.34 | 0.50 |
| 0.37 | 0.56 | 0.33 | 0.50 | 0.27 | 0.40 | 0.57 | 0.87 |
| 0.45 | 0.68 | 0.40 | 0.60 | 0.33 | 0.49 | 0.70 | 1.05 |
| 0.20 | 0.30 | 0.18 | 0.26 | 0.14 | 0.21 | 0.31 | 0.46 |

## Maximum depth of first cut for CNC control / internal threading - M-type inserts

| Full profile | Pitch | | Insert designation | No. of passes | | Max. depth for first pass ($D_1$) mm | |
|---|---|---|---|---|---|---|---|
| | | | | | | Low carbon steel | |
| | TP (mm) | TPI | | Min. | Max. | Eq.(2) | Dim.(3) |
| ISO metric | 1.50 | | **11 IRM 1.50 ISO** | 10 | 20 | 0.20 | 0.30 |
| | 1.00 | | **16 IRM 1.00 ISO** | 9 | 16 | 0.14 | 0.20 |
| | 1.25 | | **16 IRM 1.25 ISO** | 9 | 16 | 0.19 | 0.28 |
| | 1.50 | | **16 IRM 1.50 ISO** | 10 | 20 | 0.20 | 0.30 |
| | 1.75 | | **16 IRM 1.75 ISO** | 11 | 18 | 0.21 | 0.32 |
| | 2.00 | | **16 IRM 2.00 ISO** | 12 | 21 | 0.22 | 0.33 |
| | 2.50 | | **16 IRM 2.50 ISO** | 14 | 21 | 0.23 | 0.34 |
| | 3.00 | | **16 IRM 3.00 ISO** | 16 | 22 | 0.24 | 0.35 |
| American UN | | 20 | **16 IRM 20 UN** | 7 | 13 | 0.20 | 0.30 |
| | | 18 | **16 IRM 18 UN** | 8 | 15 | 0.20 | 0.30 |
| | | 16 | **16 IRM 16 UN** | 11 | 19 | 0.20 | 0.30 |
| | | 14 | **16 IRM 14 UN** | 11 | 20 | 0.21 | 0.31 |
| | | 12 | **16 IRM 12 UN** | 12 | 21 | 0.23 | 0.34 |
| | | 8 | **16 IRM 8 UN** | 14 | 20 | 0.24 | 0.36 |
| British BSW | | 19 | **16 IRM 19 W** | 7 | 12 | 0.28 | 0.42 |
| | | 16 | **16 IRM 16 W** | 9 | 14 | 0.26 | 0.39 |
| | | 14 | **16 IRM 14 W** | 10 | 16 | 0.27 | 0.41 |
| | | 11 | **16 IRM 11 W** | 12 | 19 | 0.31 | 0.46 |
| NPT | | 14 | **16 IRM 14 NPT** | 21 | 35 | 0.13 | 0.20 |
| | | 11.5 | **16 IRM 11.5 NPT** | 21 | 33 | 0.17 | 0.25 |
| | | 8 | **16 IRM 8 NPT** | 20 | 34 | 0.23 | 0.34 |
| Round | | 6 | **16 IRM 6 RND** | 12 | 24 | 0.30 | 0.46 |
| Partial profile 60° | | 48-16 | **06 IRM A 60** | (1) | | 0.22 | 0.33 |
| | | 48-16 | **08 IRM A 60** | | | 0.13 | 0.20 |
| | | 48-16 | **11 IRM A 60** | | | 0.13 | 0.20 |
| | | 48-16 | **16 IRM A 60** | | | 0.13 | 0.20 |
| | | 14-8 | **16 IRM G 60** | | | 0.22 | 0.33 |
| | | 48-8 | **16 IRM AG 60** | | | 0.14 | 0.21 |
| | | 7-5 | **22 IRM N 60** | | | 0.23 | 0.34 |
| Partial profile 55° | | 14-8 | **16 IRM G 55** | | | 0.34 | 0.50 |
| | | 48-8 | **16 IRM AG 55** | | | 0.14 | 0.20 |

- (1) As per the number of passes for the relevant pitch
  (2) Equal depth of cut method
  (3) Diminished depth of cut for each pass method

## Number of cutting passes for regular type inserts

| Pitch TP (mm) | 0.5 | 1.0 | 1.5 | 2.0 | 2.5 | 3.0 | 4.0 | 6.0 |
|---|---|---|---|---|---|---|---|---|
| TPI | 48 | 24 | 16 | 12 | 10 | 8 | 6 | 4 |
| Number of passes | 4-6 | 5-9 | 5-12 | 6-14 | 7-15 | 8-17 | 10-20 | 11-22 |

- For mini-tools (06IR or 08IR) add 1-3 passes. Increase for hard materials

| Max. depth for first pass ($D_1$) mm | | | | | | | |
|---|---|---|---|---|---|---|---|
| High carbon steel | | Alloy steel | | Stainless steel | | Nonferrous aluminum | |
| Eq.[2] | Dim.[3] | Eq.[2] | Dim.[3] | Eq.[2] | Dim.[3] | Eq.[2] | Dim.[3] |
| 0.18 | 0.27 | 0.16 | 0.24 | 0.12 | 0.18 | 0.28 | 0.42 |
| 0.13 | 0.18 | 0.11 | 0.16 | 0.09 | 0.13 | 0.20 | 0.28 |
| 0.17 | 0.25 | 0.15 | 0.22 | 0.12 | 0.18 | 0.27 | 0.39 |
| 0.18 | 0.27 | 0.16 | 0.24 | 0.12 | 0.18 | 0.28 | 0.42 |
| 0.19 | 0.29 | 0.17 | 0.26 | 0.14 | 0.21 | 0.29 | 0.45 |
| 0.20 | 0.30 | 0.18 | 0.26 | 0.14 | 0.21 | 0.31 | 0.46 |
| 0.21 | 0.31 | 0.18 | 0.27 | 0.15 | 0.22 | 0.32 | 0.48 |
| 0.22 | 0.32 | 0.19 | 0.29 | 0.16 | 0.23 | 0.34 | 0.50 |
| 0.18 | 0.27 | 0.16 | 0.24 | 0.12 | 0.18 | 0.28 | 0.42 |
| 0.18 | 0.27 | 0.16 | 0.24 | 0.12 | 0.18 | 0.28 | 0.42 |
| 0.18 | 0.27 | 0.16 | 0.24 | 0.13 | 0.20 | 0.28 | 0.42 |
| 0.19 | 0.28 | 0.17 | 0.25 | 0.13 | 0.19 | 0.29 | 0.43 |
| 0.21 | 0.31 | 0.18 | 0.27 | 0.15 | 0.22 | 0.32 | 0.48 |
| 0.22 | 0.32 | 0.19 | 0.29 | 0.16 | 0.23 | 0.34 | 0.50 |
| 0.25 | 0.38 | 0.22 | 0.34 | 0.17 | 0.25 | 0.39 | 0.59 |
| 0.23 | 0.35 | 0.21 | 0.31 | 0.17 | 0.25 | 0.36 | 0.55 |
| 0.24 | 0.37 | 0.22 | 0.33 | 0.18 | 0.27 | 0.38 | 0.57 |
| 0.28 | 0.41 | 0.25 | 0.37 | 0.20 | 0.30 | 0.43 | 0.64 |
| 0.12 | 0.18 | 0.10 | 0.16 | 0.08 | 0.12 | 0.18 | 0.28 |
| 0.15 | 0.23 | 0.14 | 0.20 | 0.11 | 0.16 | 0.24 | 0.35 |
| 0.21 | 0.31 | 0.18 | 0.27 | 0.14 | 0.20 | 0.32 | 0.48 |
| 0.27 | 0.41 | 0.24 | 0.37 | 0.20 | 0.30 | 0.42 | 0.64 |
| 0.20 | 0.30 | 0.18 | 0.26 | 0.14 | 0.21 | 0.31 | 0.46 |
| 0.12 | 0.18 | 0.10 | 0.16 | 0.08 | 0.13 | 0.18 | 0.28 |
| 0.12 | 0.18 | 0.10 | 0.16 | 0.08 | 0.13 | 0.18 | 0.28 |
| 0.12 | 0.18 | 0.10 | 0.16 | 0.08 | 0.13 | 0.18 | 0.28 |
| 0.20 | 0.30 | 0.18 | 0.26 | 0.14 | 0.21 | 0.31 | 0.46 |
| 0.13 | 0.19 | 0.11 | 0.17 | 0.09 | 0.14 | 0.20 | 0.29 |
| 0.21 | 0.31 | 0.18 | 0.27 | 0.15 | 0.22 | 0.32 | 0.48 |
| 0.31 | 0.45 | 0.27 | 0.40 | 0.22 | 0.33 | 0.48 | 0.70 |
| 0.13 | 0.18 | 0.11 | 0.16 | 0.09 | 0.13 | 0.20 | 0.28 |

## Recommended number of passes for multi-tooth insert

| Full profile | Insert description | No. of passes | 1st pass | 2nd pass | 3rd pass | 4th pass | External / internal |
|---|---|---|---|---|---|---|---|
| ISO metric | **16 ER 1.0 ISO 3M** | 2 | 0.39 | 0.24 | - | - | External |
| | **16 ER 1.5 ISO 2M** | 3 | 0.40 | 0.31 | 0.21 | - | External |
| | **22 ER 1.5 ISO 3M** | 2 | 0.54 | 0.38 | - | - | External |
| | **22 ER 2.0 ISO 2M** | 3 | 0.56 | 0.42 | 0.27 | - | External |
| | **22 ER 2.0 ISO 3M** | 2 | 0.75 | 0.50 | - | - | External |
| | **27 ER 3.0 ISO 2M** | 4 | 0.60 | 0.52 | 0.44 | 0.30 | External |
| | **16 IR 1.0 ISO 3M** | 2 | 0.32 | 0.26 | - | - | Internal |
| | **16 IR 1.5 ISO 2M** | 3 | 0.36 | 0.29 | 0.22 | - | Internal |
| | **22 IR 1.5 ISO 3M** | 2 | 0.49 | 0.38 | - | - | Internal |
| | **22 IR 2.0 ISO 2M** | 3 | 0.50 | 0.40 | 0.25 | - | Internal |
| | **22 IR 2.0 ISO 3M** | 2 | 0.72 | 0.43 | - | - | Internal |
| | **27 IR 3.0 ISO 2M** | 4 | 0.57 | 0.45 | 0.38 | 0.33 | Internal |
| UN | **16 ER 16 UN 2M** | 3 | 0.45 | 0.32 | 0.20 | - | External |
| | **22 ER 16 UN 3M** | 2 | 0.60 | 0.37 | - | - | External |
| | **22 ER 12 UN 2M** | 3 | 0.60 | 0.39 | 0.31 | - | External |
| | **22 ER 12 UN 3M** | 2 | 0.80 | 0.50 | - | - | External |
| | **27 ER 8 UN 2M** | 4 | 0.63 | 0.55 | 0.42 | 0.36 | External |
| | **16 IR 16 UN 2M** | 3 | 0.40 | 0.29 | 0.23 | - | Internal |
| | **22 IR 16 UN 3M** | 2 | 0.57 | 0.35 | - | - | Internal |
| | **22 IR 12 UN 2M** | 3 | 0.55 | 0.39 | 0.28 | - | Internal |
| | **22 IR 12 UN 3M** | 2 | 0.75 | 0.47 | - | - | Internal |
| | **27 IR 8 UN 2M** | 4 | 0.65 | 0.49 | 0.42 | 0.27 | Internal |
| NPT | **22 ER 11.5 NPT 2M** | 4 | 0.55 | 0.46 | 0.35 | 0.32 | External |
| | **27 ER 11.5 NPT 3M** | 3 | 0.75 | 0.57 | 0.36 | - | External |
| | **27 ER 8 NPT 2M** | 4 | 0.80 | 0.62 | 0.54 | 0.45 | External |
| | **22 IR 11.5 NPT 2M** | 4 | 0.55 | 0.46 | 0.35 | 0.32 | Internal |
| | **27 IR 11.5 NPT 3M** | 3 | 0.75 | 0.57 | 0.36 | - | Internal |
| | **27 IR 8 NPT 2M** | 4 | 0.80 | 0.62 | 0.54 | 0.45 | Internal |
| Whitworth | **16 ER 14 W 2M** | 3 | 0.51 | 0.39 | 0.26 | - | External |
| | **22 ER 14 W 3M** | 2 | 0.72 | 0.44 | - | - | External |
| | **22 ER 11 W 2M** | 3 | 0.65 | 0.46 | 0.37 | - | External |
| | **16 IR 14 W 2M** | 3 | 0.51 | 0.39 | 0.26 | - | Internal |
| | **22 IR 14 W 3M** | 2 | 0.72 | 0.44 | - | - | Internal |
| | **22 IR 11 W 2M** | 3 | 0.65 | 0.46 | 0.37 | - | Internal |
| API round | **22 ER 10 API RD 2M** | 3 | 0.58 | 0.53 | 0.30 | - | External |
| | **27 ER 10 API RD 3M** | 2 | 0.98 | 0.43 | - | - | External |
| | **27 ER 8 API RD 2M** | 3 | 0.82 | 0.59 | 0.40 | - | External |
| | **22 IR 10 API RD 2M** | 3 | 0.58 | 0.53 | 0.30 | - | Internal |
| | **27 IR 10 API RD 3M** | 2 | 0.98 | 0.43 | - | - | Internal |
| | **27 IR 8 API RD 2M** | 3 | 0.82 | 0.59 | 0.40 | - | Internal |