

Threading Tool



- Products are listed by product series and thread shape to be machined.
- Inserts and toolholders in the catalog are our standard items.

Method ③ Select an item from Quick Guide on E004 - E007.

[illegible]

- | | |
|---|--|
| ① : Screw shape | ⑤ : Designation (for external, for internal) |
| ② : Series name | ⑥ : Dimension table (conforming to ISO13399) |
| ③ : Drawing of thread, threading insert, threading toolholder | ⑦ : Applicable toolholder |
| ④ : Applicable pitch and the number of threads | ⑧ : Spare parts |
| | ⑨ : Reference page |

- Please specify the designation and quantity for threading toolholders.
e.g. **TSNR0020R22 ... 1** (one threading toolholder per package)
- Please specify the designation, grade, and quantity for threading inserts.
e.g. **16IR175ISO AH725 ... 5** (five threading inserts per package)

Main products

Thread form	
60°	E010
55°	E015
M (Metric)	E017
UN (Unified)	E021
W (Whitworth)	E023
BSPT (R, PT)	E024
NPT	E025
NPTF	E026
TR (Metric, 30° Trapezoidal)	E027
Round (DIN405)	E027
UNJ	E028
MJ	E028
ACME (29° Trapezoidal)	E029
STUB ACME (29° Trapezoidal)	E030
API Round	E030
API Buttress	E032
API Rotary Shoulder Connection	E035



TUNGTHREAD

Lay down insert, toolholder

Standard items cover a wide variety of threading inserts. Standard tool series with double-clamp system for excellent insert stability in machining API-standard threads.

E004 -, E010 -
E067



TETRAMCUT

Standard tool with 4 corners for threading on Swiss lathes. In small diameter threading using the center of the tool post on general NC lathes, interference with the center is less likely occur.

E004 -, E008



DUOJUST

Standard tool suitable for all types of threading on Swiss lathes. The incomplete thread part from the workpiece face to the thread groove can be the shortest thanks to the excellent accessibility to the workpiece face.

E004 -, E009



J-SERIES

Tool series with 3-cornered inserts. Subselection for threading on Swiss lathes. Standard tool also suitable for radial Swiss lathes.

E004, E013
E016, E048



TUNG-CLAMP

Tool with high clamp rigidity that firmly holds the insert with a clamp. Grooving insert and threading insert can be used with the same toolholder.

E004 -, E014
E062 -, E068



On edge insert, toolholder

ACME and STUB ACME inserts can be used for the range of 16 to 3TPI with 2 types of toolholders. The special full-profile insert realizes both the fine adjustment of thread height and the minimum burr on the crest.

E004 -, E029 -
E052, E065



Chaser

Threading tool with multiple cutting edges for highly efficient machining of API-standard round, buttress, and NPT.

E005 -, E026
E031 -, E053
E066



BOREMEISTER

Boring heads for deep hole threading. All 16-size inserts of TungThread Internal series are applicable, allowing to apply for large variety of threads type.

E056 -



TINYM^{INI}TURN

Internal threading tool suitable for the minimum machining diameter ø4. All tools have oil holes that can supply coolant from the cutting edge.

E059 -, E068

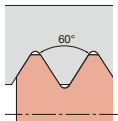
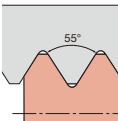
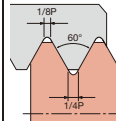
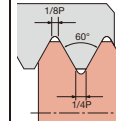
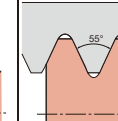
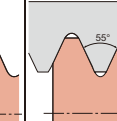
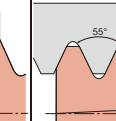
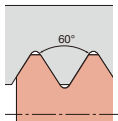
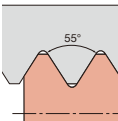
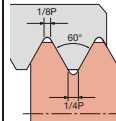
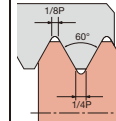
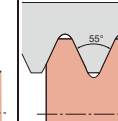
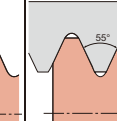
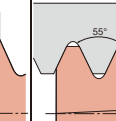
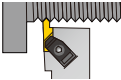


Other tool

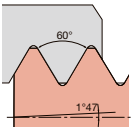
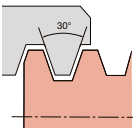
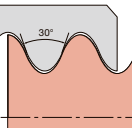
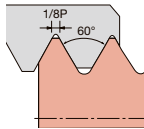
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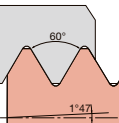
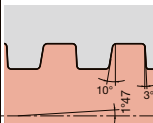
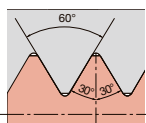
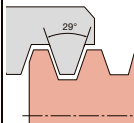
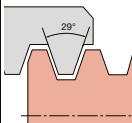
E004 -, E014
E016, E053,
E066

Applicable tool for each external thread type

Applicable tool for each external thread type			General purpose, Machine parts for machine and automotive parts				For valve and pump parts; pneumatic, hydraulic, oil and gas pipes		
Thread types			60°	55°	ISO metric threads, coarse and fine	Unified national threads series, 60° inch threads	- British standard whitworth - British standard fine	- British standard parallel pipe - British standard pipe - Parallel pipe thread (JIS B 9912) - 55° inch thread	- JIS tapered pipe thread - British standard pipe taper
Thread symbols			M, UN, UNC, UNF, UNEF, UNS	G, BSP, PF, BSPP	M	UN, UNR, UNC, UNRC, UNF, UNRF, UNEF, UNREF, UNS, UNRS	BSW, BSF, W	G, BSP, PF, BSPP	R, PT, BSPT
Thread form									
Tool type	Full profile								
	With	Without							
ST type 	○		—	—	0.5 ~ 6 mm E017	32 ~ 5TPI E021	28 ~ 5TPI E023	28 ~ 5TPI E023	28 ~ 11TPI E024
		○	0.5 ~ 6 mm E010	0.5 ~ 5 mm 48 ~ 5TPI E015	—	—	—	—	—
TETRAMCUT 	○		—	—	0.5 ~ 1.5 mm E020	—	—	—	—
		○	0.4 ~ 3 mm 64 ~ 8TPI E012	—	—	—	—	—	—
DUOJUST 		○	0.2 ~ 1.5 mm 127 ~ 16TPI E012	—	—	—	—	—	—
		○	0.5 ~ 1 mm 48 ~ 25TPI E013	0.5 ~ 1 mm 48 ~ 25TPI E016	—	—	—	—	—
TUNG-CLAMP 		○	1.27 ~ 4.23 mm 20 ~ 6TPI E014	—	—	—	—	—	—
		○	~ 3 mm ~ 8TPI E014	~ 3 mm ~ 8TPI E016	—	—	—	—	—
TT type 		○	—	—	—	—	—	—	—

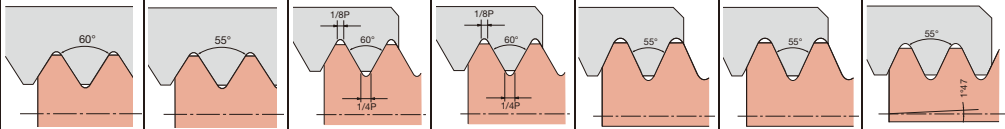
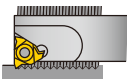
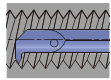
Please see page **E***** for the product details.

Applicable tool for each external thread type		For valve and pump parts; pneumatic, hydraulic, oil and gas pipes		Machine parts		Aerospace threads
Thread types		National pipe taper thread	National pipe taper fuel thread	- TR - 30° trapezoidal - ISO trapezoidal	Knuckle thread	Unified inch screw threads
Thread symbols		NPT	NPTF	TR	Rd	UNJ, UNJC, UNJF, UNUEF, UNJS
Thread form						
Tool type	Full profile					
	With Without					
ST type 		27 ~ 8TPI E025	27 ~ 8TPI E026	1.5 ~ 6 mm E027	8TPI, 6TPI E027	32 ~ 8TPI E028
Chaser 		11.5TPI, 8TPI E026	—	—	—	—

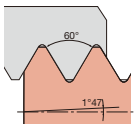
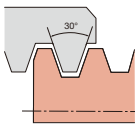
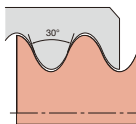
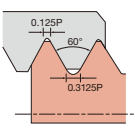
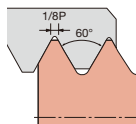
Applicable tool for each external thread type			Oil and gas fields and OCTG drill pipes							Machine parts, Pipe	
Thread types			- API round - API casing - Short casing - API tubing	API buttress casing	- API rotary shoulder connection for drill pipe and collar connections					- ACME - 29° trapezoidal thread	- STUB ACME - 29° trapezoidal thread
					V-0.038R 2TPF	V-0.038R 3TPF	V-0.040R 3TPF	V-0.050R 2TPF	V-0.050R 3TPF		
Thread symbols			CSG, LCSG, TBG, UPTBG	BCSG	NC	NC	REG	REG, FH	REG	—	—
Thread form											
Tool type	Full profile	With Without									
ST type 			10TPI, 8TPI E030	5TPI (0.75TPF) E032	—	—	—	—	—	12 ~ 5TPI E029	—
Chaser 			10TPI, 8TPI E031	5TPI (0.75TPF) E033	—	—	—	—	—	—	—
Other 			10TPI, 8TPI E031	5TPI (0.75TPF) 5TPI (1TPF) E032	4TPI (2TPF) 4TPI (3TPF) 5TPI (3TPF) E035					16 ~ 3TPI E029	16 ~ 3TPI E030

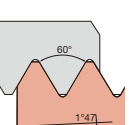
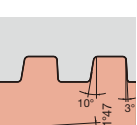
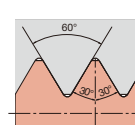
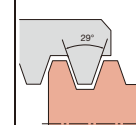
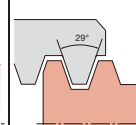
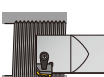
Please see page **E***** for the product details.

Applicable tool for each internal thread type

Applicable tool for each external thread type			General purpose, Machine parts for machine and automotive parts				For valve and pump parts; pneumatic, hydraulic, oil and gas pipes		
Thread types			60°	55°	ISO metric threads, coarse and fine	Unified national threads series, 60° inch threads	- British standard whitworth - British standard fine	- British standard parallel pipe - British standard pipe - Parallel pipe thread (JIS B 9912) - 55° inch thread	- JIS tapered pipe thread - British standard pipe taper
Thread symbols			M, UN, UNC, UNF, UNEF, UNS	G, BSP, PF, BSPP	M	UN, UNR, UNC, UNRC, UNF, UNRF, UNEF, UNREF, UNS, UNRS	BSW, BSF, W	G, BSP, PF, BSPP	R, PT, BSPT
Thread form									
Tool type	Full profile								
	With	Without							
ST type 	○		—	—	0.5 ~ 6 mm E017	32 ~ 5TPI E021	28 ~ 5TPI E023	28 ~ 5TPI E023	19 ~ 11TPI E024
		○	0.5 ~ 6 mm E010	0.5 ~ 5 mm E015	—	—	—	—	—
TINYTURN 		○	0.5 ~ 1.5 mm E060	—	—	—	—	—	—
TUNG-CLAMP 		○	1.27 ~ 4.23 mm E014	—	—	—	—	—	—
TT type 		○	~ 3 mm ~ 8TPI E014	~ 3 mm ~ 8TPI E016	—	—	—	—	—

Please see page **E***** for the product details.

Applicable tool for each external thread type			For valve and pump parts; pneumatic, hydraulic, oil and gas pipes		Machine parts		Aerospace threads	
Thread types			National pipe taper thread	National pipe taper fuel thread	- TR - 30° trapezoidal - ISO trapezoidal	Knuckle thread	Aerospace standard MJ threads	Unified inch screw threads
Thread symbols			NPT	NPTF	TR	Rd	MJ	UNJ, UNJC, UNJF, UNUEF, UNJS
Thread form								
Tool type	Full profile							
	With	Without						
ST type			○	○	○	○	○	○
Chaser			○	○	○	○	○	○
E054			27 ~ 8TPI	14 ~ 8TPI	1.5 ~ 5 mm	6TPI	1 mm	—
E025			—	—	—	—	—	—
E026			—	—	—	—	—	—
E027			—	—	—	—	—	—
E028			—	—	—	—	—	—
E065			11.5TPI, 8TPI	—	—	—	—	—
E026			—	—	—	—	—	—

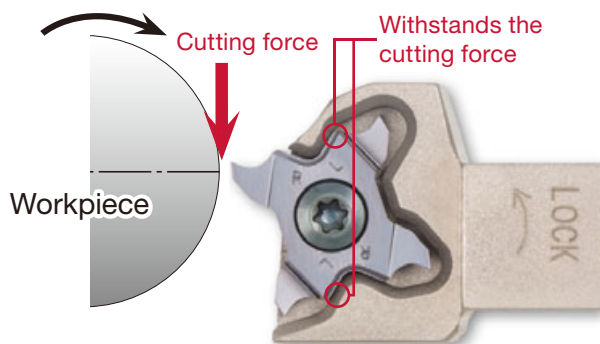
Applicable tool for each external thread type			Oil and gas fields and OCTG drill pipes							Machine parts, Pipe	
Thread types			- API round - API casing - API tubing - Short casing	API buttress casing	- API rotary shoulder connection for drill pipe and collar connections					ACME 29° trapezoidal thread	STUB ACME 29° trapezoidal thread
					V-0.038R 2TPF	V-0.038R 3TPF	V-0.040R 3TPF	V-0.050R 2TPF	V-0.050R 3TPF		
Thread symbols			CSG, LCSG, TBG, UPTBG	BCSG	NC	NC	REG	REG, FH	REG	—	—
Thread form											
Tool type	Full profile										
	With	Without									
ST type			10TPI, 8TPI	5TPI (0.75TPF)	—	—	—	—	—	12 ~ 5TPI	—
E054			E030	E032	—	—	—	—	E029		
Chaser			10TPI, 8TPI	5TPI (0.75TPF)	—	—	—	—	—	—	
E065			E031	E033	—	—	—	—			
Other			10TPI, 8TPI	5TPI (0.75TPF) 5TPI (1TPF)	4TPI (2TPF) 4TPI (3TPF) 5TPI (3TPF)					—	—
E063			E031	E032	E035						

Please see page E*** for the product details.



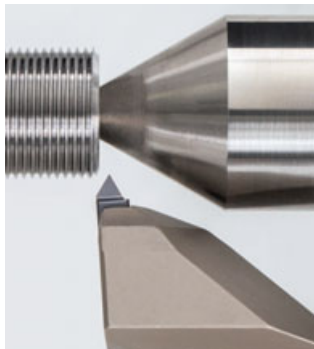
Unique clamping system

The unique pocket design provides accurate indexing repeatability of the cutting edge height.



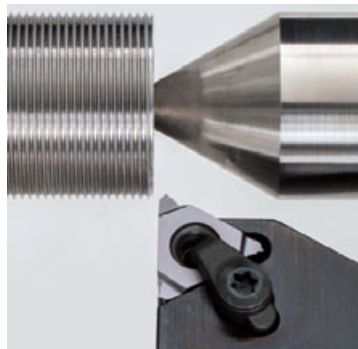
No tool interference with the lathe center when machining small parts

TETRAMCUT M16x1



Insert: TCT18R-60N-020

Conventional M24x1



Insert: 16ER10ISO



Unique clamping system for highly rigid clamping

The unused cutting edge is always protected due to the innovative clamping system. Even if the first cutting edge is chipped, the other unused cutting edge can be used because the insert is clamped in the center.

Insert is secured at 3 points



Excellent accessibility to the workpiece face

Utilizing various tools minimizes the incomplete thread part.



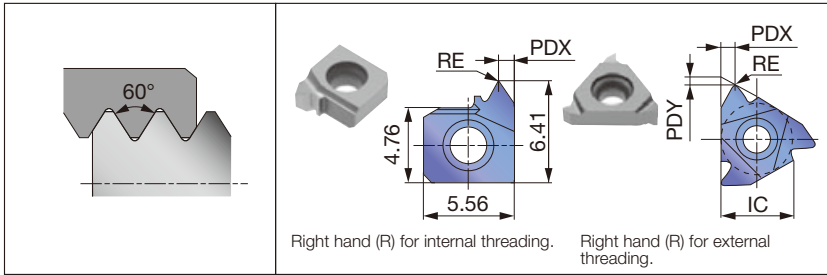
	Type A	Type B	Type N
Right hand	 $a > b$	 $a < b$	 $a = b$
Left hand	 $a > b$	 $a < b$	 $a = b$



Insert designation	Cutting edge geometry (mm)	PDX (mm)	Pitch (mm)										
			0.2	0.25	0.35	0.4	0.5	0.6	0.8	1	1.25	1.5	
JXTG12FR-60A-000	0.05 (flat)	0.25	Applicable area										
JXTG12FL-60A-000													
JXTG12FR-60B-000	0.05 (flat)	2.25	Applicable area										
JXTG12FL-60B-000													
JXTG12FR-60A-005	R0.05	0.6	Applicable area										
JXTG12FL-60A-005													
JXTG12FR-60B-005	R0.05	1.9	Applicable area										
JXTG12FL-60B-005													
JXTG12FR-60N-010	R0.1	1.25									Applicable area		
JXTG12FL-60N-010													
			127	72			52		32				16
			Threads per inch (TPI)										

Reference pages: Inserts → **E012**, External toolholders → **E047 - E048**,
Standard cutting conditions → **E067**

60° thread angle (General purpose)



Applicable toolholder

Insert size	External	Internal
6		SNR/L000*K06SC... SNR/L000*H06...
06		SIR0005...
08		SIR0007...
11	SER**11	SNR/L**11...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...
27	CER/L**27...	CNR/L**27...

Partial-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert								Internal insert											
				Designation	Grade				IC	PDX	PDY	RE	Designation	Grade					IC	PDX	PDY	RE	
					AH8015	AH725	T313V	Uncoated						TH10	Coated								Uncoated
															AH8015	AH725	GH330	T313V					
6	0.5 - 1.5	48 - 16	R									6IRA60	●	●		●	-	0.9	-	0.04			
06	0.5 - 1.25	48 - 20	R									06IRA60				●**		4	0.6	0.6	0.05		
08	0.5 - 1.5	48 - 16	R									08IRA60		●**				5	0.7	0.6	0.05		
11	0.5 - 1.5	48 - 16	R	11ERA60	●				6.35	0.9	0.8	0.06	11IRA60	●	●		●	6.35	0.9	0.7	0.04		
11	0.5 - 1.5	48 - 16	L									11ILA60		●		●	●	6.35	0.9	0.7	0.04		
16	0.5 - 1.5	48 - 16	R	16ERA60	●	●	●	●	9.525	0.9	0.7	0.06	16IRA60	●	●		●	9.525	0.9	0.7	0.04		
16	0.5 - 1.5	48 - 16	L	16ELA60		●	●	●	9.525	0.9	0.7	0.06	16ILA60		●		●	9.525	0.9	0.7	0.04		
16	0.5 - 3	48 - 8	R	16ERAG60	●	●	●		9.525	1.6	1.2	0.06	16IRAG60	●	●		●	9.525	1.6	1.2	0.04		
16	1.75 - 3	14 - 8	R	16ERG60	●	●	●	●	9.525	1.6	1.2	0.22	16IRG60	●	●		●	9.525	1.6	1.2	0.12		
16	1.75 - 3	14 - 8	L	16ELG60		●	●		9.525	1.6	1.2	0.22	16ILG60		●		●	9.525	1.6	1.2	0.12		
22	3.5 - 5	7 - 5	R	22ERN60	●	●	●	●	12.7	2.5	1.7	0.44	22IRN60	●	●		●	12.7	2.5	1.7	0.25		
22	3.5 - 5	7 - 5	L	22ELN60		●	●		12.7	2.5	1.7	0.44	22ILN60		●		●	12.7	2.5	1.7	0.25		
27	4 - 6	6 - 4	R	27ERZ60	●	●			15.875	3.2	2.2	0.5	27IRZ60		●		●	15.875	3.2	2.2	0.28		

●** : Both ..06IR... and ..08IR... inserts have 3 cutting edges.

● : Line up / 5 pieces per package

Partial-profile insert

Insert size	Pitch	TPI	Hand of cut	External insert						
				Designation	Grade	IC	PDX	PDY	RE	
					CBN					
					BX330					
16	1 - 2	20 - 13	R	1QP-16ER60-014-SP	●	9.525	0.95	0.7	0.14	
16	1.5 - 3	16 - 8	R	1QP-16ER60-020-SP	●	9.525	1.55	1.2	0.2	

● : Line up / 1 piece per package

Reference pages: External toolholders → **E036 - E040**
Internal toolholders → **E054 - E056**

Partial-profile insert with chipbreaker

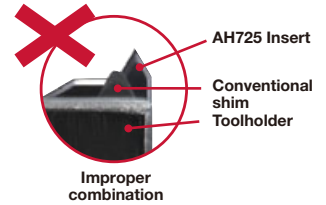
Insert size	Pitch (Reference)	TPI	Hand of cut	External insert								Internal insert							
				Designation	Grade			IC	PDX	PDY	RE	Designation	Grade			IC	PDX	PDY	RE
					Coated		Cermet						Coated		Cermet				
					AH8015	AH725	NS9530						AH8015	AH725	NS9530				
11	0.5 - 1.5	48 - 16	R									11IRA60-B		●		6.35	0.9	0.7	0.04
11	0.5 - 1.5	48 - 16	R									11IRA60-M	●		●	6.35	0.9	0.7	0.04
16	0.5 - 1.5	48 - 16	R	16ERA60-B		●*		9.525	0.9	0.8	0.05	16IRA60-B		●*		9.525	0.9	0.8	0.05
16	0.5 - 1.5	48 - 16	R	16ERA60-M	●		●	9.525	0.9	0.7	0.06	16IRA60-M	●		●	9.525	0.9	0.7	0.04
16	0.5 - 3	48 - 8	R	16ERAG60-B		●*		9.525	1.7	1.2	0.08	16IRAG60-B		●*		9.525	1.7	1.2	0.05
16	0.5 - 3	48 - 8	R	16ERAG60-M	●	●	●	9.525	1.6	1.2	0.06	16IRAG60-M	●	●	●	9.525	1.6	1.2	0.04
16	1.75 - 3	14 - 8	R	16ERG60-B		●*		9.525	1.7	1.2	0.25	16IRG60-B		●*		9.525	1.7	1.2	0.1
16	1.75 - 3	14 - 8	R	16ERG60-M	●		●	9.525	1.6	1.2	0.22	16IRG60-M	●		●	9.525	1.6	1.2	0.14
22	3.5 - 5	7 - 5	R	22ERN60-B		●		12.7	2.5	1.7	0.32	22IRN60-B		●		12.7	2.5	1.7	0.19

●* : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).

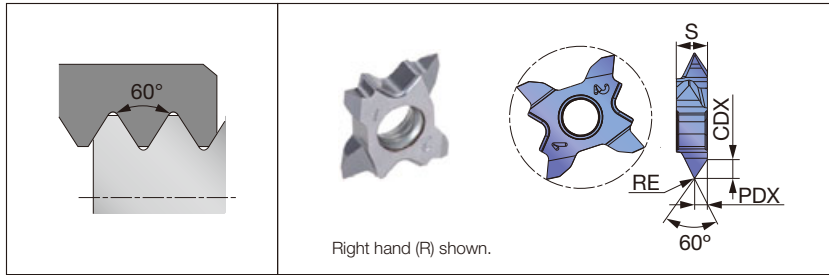
● requires the use of dedicated shim.

When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim. Please refer to the page [E69](#).

● : Line up / 5 pieces per package



60° thread angle (General purpose)



Applicable toolholder

External
STCR/L**-18
STCR/L**18-CHP
JS**-STCL18
C*STCFL**18-CHP
C*STCR/L**18-CHP
QC**STCR/L18 (-Y)
QC**STCR/L18 (-Y)-CHP

Partial-profile insert

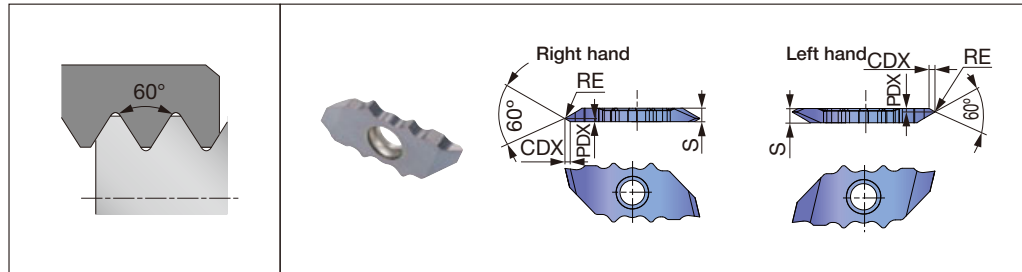
Pitch	TPI	Hand of cut	External insert						
			Designation	Grade		PDX	CDX	RE	S
				Coated					
				SH725	AH725				
0.4 - 1	25 - 64	R	TCT18FR-60A-005	●		0.6	0.99	0.05	4
1 - 2	25 - 12	R	TCT18FR-60A-010	●		1	1.63	0.1	4
0.8 - 3	8 - 32	R/L	TCT18R/L-60N-010		●	1.6	2.67	0.1	4
1.5 - 3	8 - 16	R/L	TCT18R/L-60N-020		●	1.6	2.57	0.2	4

● : Line up / 5 pieces per package

DUOJUST

INSERT

60° thread angle (General purpose)



Applicable toolholder

External
JSXXR/L**09
JSXXR/L**09-CHP
JS**-SXXL09

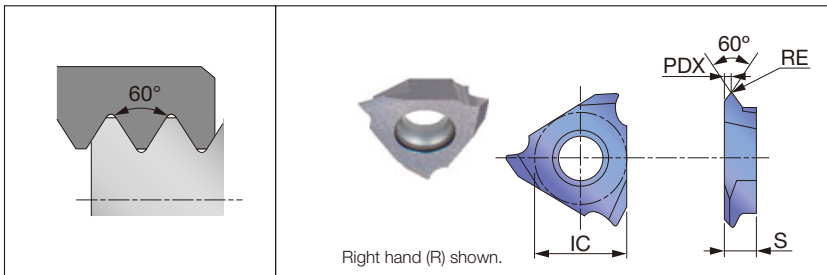
Partial-profile insert

Insert size	Pitch	TPI	Hand of cut	External insert						
				Designation	Grade		PDX	CDX	RE	S
					Coated					
					SH725					
				R	L					
12	0.2 - 0.4	64 - 127	R/L	JXTG12FR/L-60A-000	●	●	0.25	0.4	0.05 max flat	2.5
12	0.2 - 0.4	64 - 127	R/L	JXTG12FR/L-60B-000	●	●	2.25	0.4	0.05 max flat	2.5
12	0.4 - 1	25 - 64	R/L	JXTG12FR/L-60A-005	●	●	0.6	0.99	0.05	2.5
12	0.4 - 1	25 - 64	R/L	JXTG12FR/L-60B-005	●	●	1.9	0.99	0.05	2.5
12	1 - 1.5	16 - 25	R/L	JXTG12FR/L-60N-010	●	●	1.25	2.07	0.1	2.5

● : Line up / 5 pieces per package

	Type A	Type B	Type N
Right hand			
Left hand			

60° thread angle (General purpose)



Applicable toolholder

External
JSTTR/L**3
JS**-TTL3

Partial-profile insert

Pitch	TPI	Hand of cut	External insert												
			Designation	Grade								IC	PDX	S	RE
				Coated				Cermet		Uncoated					
				SH725		J740		NS9530		TH10					
				R	L	R	L	R	L	R	L				
0.5 - 1	25 - 48	R/L	JTTR3005F	●	●	●		●		●		9.525	0.6	3.18	0.05
0.5 - 1	25 - 48	R/L	JTTL3010F	●	●	●		●		●		9.525	1.1	3.18	0.1

● : Line up / 10 pieces per package

60° thread angle (General purpose)



Applicable toolholder

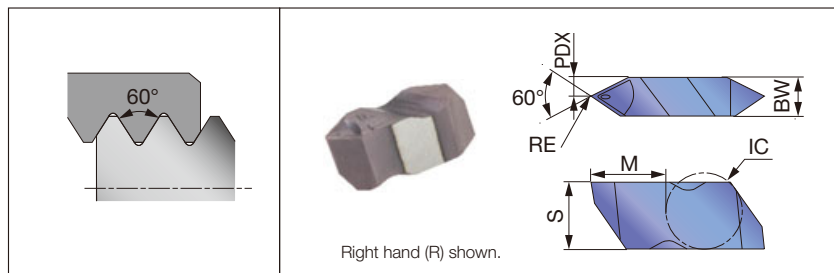
External
JSXBR**K8
JSXBR**K8-C

Partial-profile insert

Pitch	TPI	Hand of cut	External insert					
			Designation	Grade		IC	S	RE
				Coated	Uncoated			
				J740	TH10			
0.5 - 1	25 - 48	R	JXT1R6000F	●	●	8	3.97	0.03
0.5 - 1	25 - 48	R	JXT2R6000F	●	●	8	3.97	0.03

● : Line up / 10 pieces per package

60° thread angle (General purpose)



Applicable toolholder

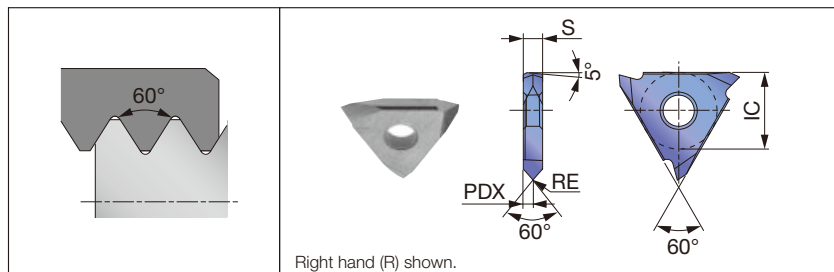
External	Internal
FLASR/L-1616M3	A**M-FLER/L3
FLSR/L-**M3	HS**-FLER3W

Partial-profile insert for external and internal threads

TPI	Hand of cut	External Pitch	Internal Pitch	Designation	Grade	IC	PDX	BW	RE	S	M
					Coated						
					AH725						
6 - 20	R/L	1.27 - 4.23	2.11 - 5.08	FLT-3R/L-HCB	●	9.525	2.49	4.95	0.17	8.74	10.16
11 - 20	R/L	2.31 - 4.23	3.175 - 5.08	FLT-3R/LC-HCB	●	9.525	2.49	4.95	0.35	8.74	10.16
6 - 20	R/L	1.27 - 4.23	2.11 - 5.08	FLT-3R/L-CB	●	9.525	2.49	4.95	0.17	8.74	10.16

● : Line up / 10 pieces per package

TT type / 60° thread angle (General purpose)



Applicable toolholder

External	Internal
TT-****RE/LI	TT-2525RI

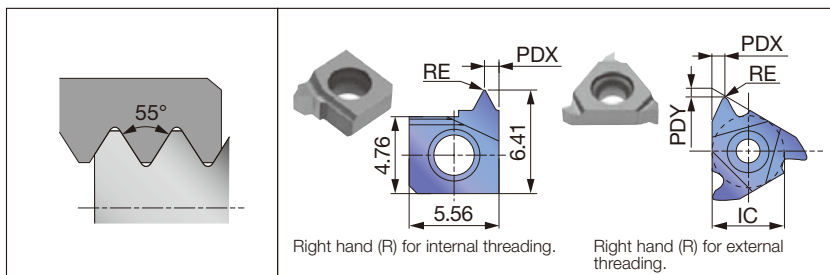
Partial-profile insert for external and internal threads

Pitch	TPI	Hand of cut	Designation	Grade		IC	PDX	S	RE
				Cermet	Uncoated				
				NS9530	TH10				
≤ 3	≥ 8	R	TTR42M-005	●	●	12.7	1.6	3.2	0.05
≤ 3	≥ 8	L	TTL42M-005	●	●	12.7	1.6	3.2	0.05

● : Line up / 5 pieces per package

Reference pages: TungT-Clamp : External toolholders → [E050](#),
Internal toolholders → [E063 - E064](#)
TT type : External toolholders → [E053](#)
Internal toolholders → [E066](#)

55° thread angle (General purpose)



Applicable toolholder

Insert size	External	Internal
6		SNR/L000*K06SC... SNR/L000*H06...
06		SIR0005...
08		SIR0007...
11	SER**11	SNR/L**11...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...

Partial-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert									Internal insert									
				Designation	Grade				IC	PDX	PDY	RE	Designation	Grade					IC	PDX	PDY	RE
					AH8015	AH725	T313V	TH10						Coated				Uncoated				
6	0.5 - 1.5	48 - 16	R										6IRA55	●			●	-	0.9	-	0.07	
06	0.5 - 1.25	48 - 20	R										06IRA55			●**			4	0.5	0.5	0.08
08	0.5 - 1.5	48 - 16	R										08IRA55		●**				5	0.7	0.6	0.08
11	0.5 - 1.5	48 - 16	R	11ERA55		●			6.35	0.9	0.8	0.05	11IRA55	●	●		●	●	6.35	0.9	0.7	0.07
16	0.5 - 1.5	48 - 16	R	16ERA55		●	●	●	9.525	0.9	0.7	0.07	16IRA55		●		●	●	9.525	0.9	0.7	0.07
16	0.5 - 3	48 - 8	R	16ERAG55		●			9.525	1.7	1.2	0.07	16IRAG55		●				9.525	1.7	1.2	0.07
16	1.75 - 3	14 - 8	R	16ERG55	●	●	●	●	9.525	1.6	1.2	0.25	16IRG55	●	●		●	●	9.525	1.7	1.2	0.25
22	3.5 - 5	7 - 5	R	22ERN55		●	●	●	12.7	2.5	1.7	0.5	22IRN55		●		●	●	12.7	2.5	1.7	0.5

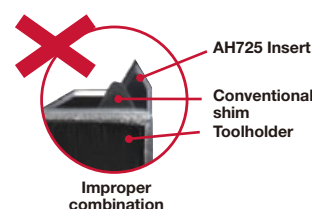
● : Line up / 5 pieces per package

Partial-profile insert with chipbreaker

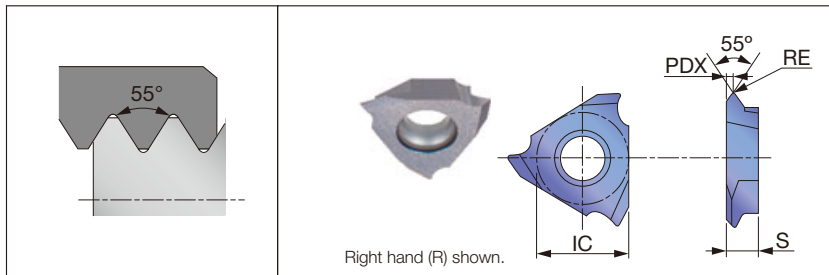
Insert size	Pitch (Reference)	TPI	Hand of cut	External insert							Internal insert						
				Designation	Grade	IC	PDX	PDY	RE	Designation	Grade	IC	PDX	PDY	RE		
					Coated						Coated						
					AH725						AH725						
16	0.5 - 3	48 - 16	R	16ERAG55-B	●*	9.525	1.7	1.2	0.07	16IRAG55-B	●*	9.525	1.7	1.2	0.05		
16	1.75 - 3	14 - 8	R	16ERG55-B	●*	9.525	1.7	1.2	0.23	16IRG55-B	●*	9.525	1.7	1.2	0.2		

● : Line up / 5 pieces per package

- * : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).
 - ** : Both ..06IR... and ..08IR... inserts have 3 cutting edges.
 - requires the use of dedicated shim.
- When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim. Please refer to the page **E069**.



55° thread angle (General purpose)



Applicable toolholder

External
JSTTR/L**3
JS**-TTL3

Partial-profile insert

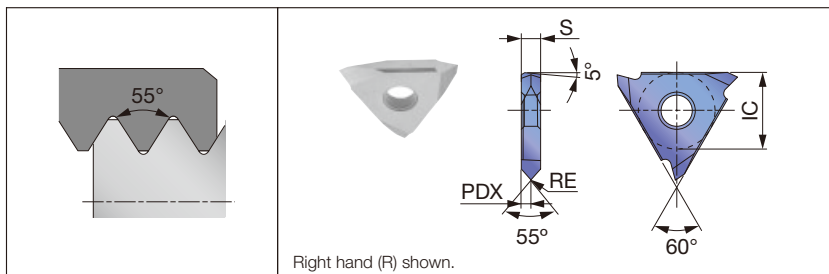
Pitch	TPI	Hand of cut	External insert								
			Designation	Grade				IC	PDX	S	RE
				Coated							
				SH725		J740					
R	L	R	L								
0.5 - 1	25 - 48	R/L	JTTR/L3005F-55	●		●		9.525	0.6	3.18	0.05

● : Line up / 5 pieces per package

TUNGTHREAD

INSERT

TT type / 55° thread angle (General purpose)



Applicable toolholder

External	Internal
TT-****RE/LI	TT-2525RI

Partial-profile insert for external and internal threads

Pitch	TPI	Hand of cut	Designation	Grade		IC	PDX	S	RE
				Cermet	Uncoated				
				NS9530	TH10				
≤ 3	≥ 8	R	TTR42W-005	●	●	12.7	1.6	3.2	0.05
≤ 3	≥ 8	L	TTL42W-005	●	●	12.7	1.6	3.2	0.05

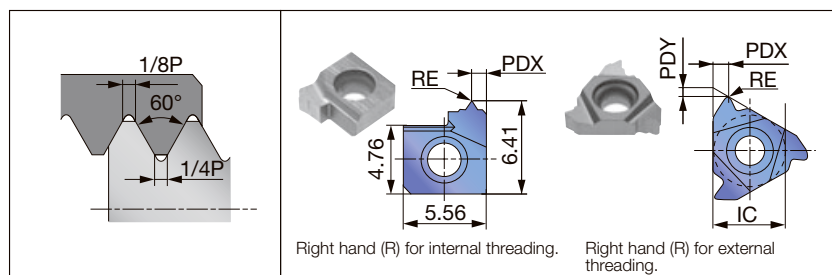
● : Line up / 5 pieces per package

Reference pages: J-Series: External toolholders → **E048 - E049**

TT type: External toolholders → **E053**

Internal toolholders → **E066**

ISO metric (General purpose)



Applicable toolholder

Insert size	External	Internal
6		SNR/L000*K06SC... SNR/L000*H06...
06		SIR0005...
08		SIR0007...
11	SER**11	SNR/L**11...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...
27	CER/L**27...	CNR/L**27...

Full-profile insert

Insert size	Pitch (Reference)	Hand of cut	External insert								Internal insert									
			Designation	Grade				IC	PDX	PDY	RE	Designation	Grade				IC	PDX	PDY	RE
				Coated			Uncoated						Coated			Uncoated				
				AH8015	AH725	T313V							TH10	AH8015	AH725					
6	0.75	R									6IR075ISO		●		●	-	0.5	-	0.05	
6	1	R									6IR10ISO	●	●		●	-	0.9	-	0.07	
6	1.25	R									6IR125ISO	●	●		●	-	0.9	-	0.09	
6	1.5	R									6IR15ISO	●	●		●	-	0.9	-	0.11	
6	1.75	R									6IR175ISO	●	●		●	-	0.9	-	0.12	
6	2	R									6IR20ISO	●	●		●	-	0.9	-	0.14	
06	0.5	R									06IR05ISO		●**			4	0.4	0.6	0.04	
06	0.75	R									06IR075ISO		●**			4	0.5	0.6	0.06	
06	1	R									06IR10ISO		●**			4	0.6	0.6	0.05	
06	1.25	R									06IR125ISO		●**			4	0.6	0.6	0.07	
08	1	R									08IR10ISO		●**			5	0.6	0.6	0.07	
08	1.25	R									08IR125ISO		●**			5	0.7	0.7	0.09	
08	1.5	R									08IR15ISO		●**			5	0.7	0.7	0.1	
08	1.75	R									08IR175ISO		●**			5	0.8	0.6	0.15	
11	0.35	R	11ER035ISO		●			6.35	0.4	0.6	0.04									
11	0.5	R	11ER05ISO		●			6.35	0.6	0.6	0.07	11IR05ISO		●		●	6.35	0.5	1.2	0.04
11	0.7	R	11ER07ISO		●			6.35	0.6	0.6	0.11									
11	0.75	R	11ER075ISO		●			6.35	0.6	0.6	0.11	11IR075ISO	●	●			6.35	0.5	1.2	0.05
11	0.8	R	11ER080ISO		●			6.35	0.6	0.6	0.12									
11	1	R	11ER10ISO		●			6.35	0.7	0.7	0.15	11IR10ISO	●	●	●	●	6.35	0.9	0.7	0.07
11	1	L									11IL10ISO	●	●				6.35	0.9	0.7	0.07
11	1.25	R	11ER125ISO		●			6.35	0.9	0.8	0.16	11IR125ISO		●			6.35	0.9	0.7	0.09
11	1.25	L									11IL125ISO		●				6.35	0.9	0.7	0.09
11	1.5	R	11ER15ISO		●			6.35	0.8	1	0.19	11IR15ISO	●	●	●	●	6.35	0.9	0.7	0.11
11	1.5	L									11IL15ISO	●	●				6.35	0.9	0.7	0.11
11	1.75	R									11IR175ISO		●	●			6.35	0.9	0.7	0.12
11	1.75	L									11IL175ISO		●				6.35	0.9	0.7	0.12
11	2	R									11IR20ISO	●	●	●			6.35	0.9	0.7	0.14
11	2	L									11IL20ISO	●	●				6.35	0.9	0.7	0.14

●** : Both ..06IR... and ..08IR... inserts have 3 cutting edges.

● : Line up / 5 pieces per package

Reference pages: External toolholders → **E036 - E040**
Internal toolholders → **E054 - E056**

Insert size	Pitch (Reference)	Hand of cut	External insert								Internal insert									
			Designation	Grade				IC	PDX	PDY	RE	Designation	Grade				IC	PDX	PDY	RE
				Coated			Uncoated						Coated			Uncoated				
				AH8015	AH725	T313V	TH10						AH8015	AH725	T313V	TH10				
16	0.5	R	16ER05ISO	●	●		●	9.525	0.5	1.2	0.06	16IR05ISO		●			9.525	0.5	1.2	0.04
16	0.75	R	16ER075ISO	●	●	●	●	9.525	0.5	1.2	0.09	16IR075ISO		●			9.525	0.5	1.2	0.05
16	1	R	16ER10ISO	●	●	●	●	9.525	0.9	0.7	0.13	16IR10ISO	●	●	●	●	9.525	0.9	0.7	0.07
16	1	L										16IL10ISO	●	●			9.525	0.9	0.7	0.07
16	1.25	R	16ER125ISO	●	●	●		9.525	0.9	0.7	0.16	16IR125ISO		●			9.525	0.9	0.7	0.09
16	1.25	L										16IL125ISO		●			9.525	0.9	0.7	0.09
16	1.5	R	16ER15ISO	●	●	●	●	9.525	0.9	0.7	0.19	16IR15ISO	●	●	●	●	9.525	0.9	0.7	0.11
16	1.5	L	16EL15ISO	●				9.525	0.9	0.7	0.19	16IL15ISO	●	●			9.525	0.9	0.7	0.11
16	1.75	R	16ER175ISO	●	●	●		9.525	1.6	1.2	0.22	16IR175ISO		●	●		9.525	1.6	1.2	0.12
16	2	R	16ER20ISO	●	●	●	●	9.525	1.6	1.2	0.25	16IR20ISO	●	●	●	●	9.525	1.6	1.2	0.14
16	2	L	16EL20ISO	●	●			9.525	1.6	1.2	0.25	16IL20ISO		●			9.525	1.6	1.2	0.14
16	2.5	R	16ER25ISO	●	●	●	●	9.525	1.6	1.2	0.31	16IR25ISO	●	●	●	●	9.525	1.6	1.2	0.18
16	3	R	16ER30ISO	●	●	●	●	9.525	1.6	1.2	0.38	16IR30ISO	●	●	●	●	9.525	1.6	1.2	0.21
16	3	L										16IL30ISO		●			9.525	1.6	1.2	0.21
22	3.5	R	22ER35ISO	●	●	●		12.7	2.5	1.7	0.44	22IR35ISO	●	●	●		12.7	2.5	1.7	0.25
22	4	R	22ER40ISO	●	●	●		12.7	2.5	1.7	0.5	22IR40ISO	●	●	●		12.7	2.5	1.7	0.28
22	4.5	R	22ER45ISO	●	●			12.7	2.5	1.7	0.56	22IR45ISO	●	●			12.7	2.5	1.7	0.32
22	5	R	22ER50ISO		●	●		12.7	2.5	1.7	0.63	22IR50ISO		●	●		12.7	2.5	1.7	0.35
27	6	R	27ER60ISO		●	●		15.875	3.2	2.2	0.75	27IR60ISO		●	●		15.875	3.2	2.2	0.42

● : Line up / 5 pieces per package

Reference pages: External toolholders → **E036 - E040**, Internal toolholders → **E054 - E056**

Full-profile insert with chipbreaker

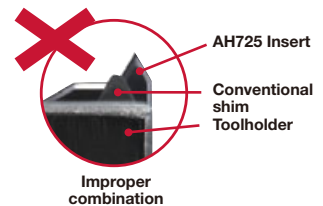
Insert size	Pitch (Reference)	Hand of cut	External insert								Internal insert							
			Designation	Grade			IC	PDX	PDY	RE	Designation	Grade			IC	PDX	PDY	RE
				Coated		Cermet						Coated		Cermet				
				AH8015	AH725	NS9530						AH8015	AH725	NS9530				
11	0.5	R									11IR05ISO-B	●		6.35	0.5	1.2	0.04	
11	0.5	R									11IR05ISO-M		●	6.35	0.5	1.2	0.04	
11	0.75	R									11IR075ISO-B	●		6.35	0.5	1.2	0.05	
11	0.75	R									11IR075ISO-M		●	6.35	0.5	1.2	0.05	
11	1	R									11IR10ISO-B	●		6.35	0.9	0.7	0.08	
11	1	R									11IR10ISO-M	●		●	6.35	0.9	0.7	0.08
11	1.25	R									11IR125ISO-B	●		6.35	0.9	0.7	0.1	
11	1.25	R									11IR125ISO-M	●		●	6.35	0.9	0.7	0.1
11	1.5	R									11IR15ISO-B	●		6.35	0.9	0.7	0.12	
11	1.5	R									11IR15ISO-M	●		●	6.35	0.9	0.7	0.12
11	1.75	R									11IR175ISO-B	●		6.35	0.9	0.7	0.12	
11	1.75	R									11IR175ISO-M		●	6.35	0.9	0.7	0.12	
11	2	R									11IR20ISO-B	●		6.35	0.9	0.7	0.14	
11	2	R									11IR20ISO-M	●		●	6.35	0.9	0.7	0.14
16	0.5	R	16ER05ISO-M			●	9.525	0.5	1.2	0.06								
16	0.75	R	16ER075ISO-B		●*		9.525	0.6	0.6	0.08								
16	0.75	R	16ER075ISO-M	●		●	9.525	0.5	1.2	0.09								
16	1	R	16ER10ISO-B		●*		9.525	0.7	0.7	0.11	16IR10ISO-B		●*		9.525	0.7	0.6	0.05
16	1	R	16ER10ISO-M	●	●	●	9.525	0.9	0.7	0.13	16IR10ISO-M	●		●	9.525	0.9	0.7	0.08
16	1.25	R	16ER125ISO-B		●*		9.525	0.9	0.8	0.14	16IR125ISO-B		●*		9.525	0.9	0.8	0.06
16	1.25	R	16ER125ISO-M	●		●	9.525	0.9	0.7	0.16	16IR125ISO-M			●	9.525	0.9	0.7	0.1
16	1.5	R	16ER15ISO-B		●*		9.525	1	0.8	0.19	16IR15ISO-B		●*		9.525	1	0.8	0.08
16	1.5	R	16ER15ISO-M	●	●	●	9.525	0.9	0.7	0.19	16IR15ISO-M	●	●	●	9.525	0.9	0.7	0.12
16	1.75	R	16ER175ISO-B		●*		9.525	1.2	0.9	0.25	16IR175ISO-B		●*		9.525	1.2	0.9	0.10
16	1.75	R	16ER175ISO-M	●		●	9.525	1.6	1.2	0.22	16IR175ISO-M			●	9.525	1.6	1.2	0.14
16	2	R	16ER20ISO-B		●*		9.525	1.3	1	0.28	16IR20ISO-B		●*		9.525	1.3	1	0.11
16	2	R	16ER20ISO-M	●	●	●	9.525	1.6	1.2	0.25	16IR20ISO-M	●		●	9.525	1.6	1.2	0.14
16	2.5	R	16ER25ISO-B		●*		9.525	1.5	1.1	0.3	16IR25ISO-B		●*		9.525	1.5	1.1	0.14
16	2.5	R	16ER25ISO-M	●		●	9.525	1.6	1.2	0.31	16IR25ISO-M			●	9.525	1.6	1.2	0.18
16	3	R	16ER30ISO-B		●*		9.525	1.6	1.2	0.38	16IR30ISO-B		●*		9.525	1.5	1.1	0.22
16	3	R	16ER30ISO-M	●		●	9.525	1.6	1.2	0.38	16IR30ISO-M	●		●	9.525	1.6	1.2	0.21
22	3.5	R	22ER35ISO-B		●		12.7	2.3	1.6	0.48								
22	4	R	22ER40ISO-B		●		12.7	2.3	1.6	0.52								

- ●* : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).

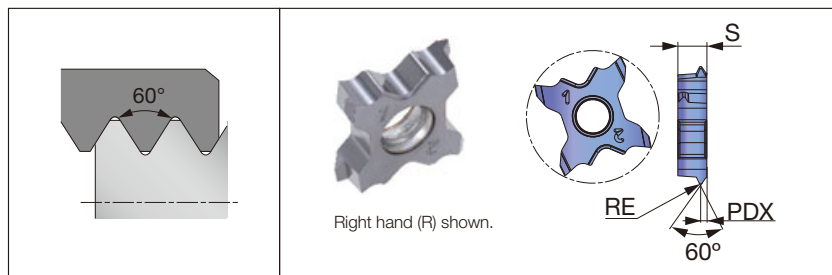
- requires the use of dedicated shim.

When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim. Please refer to the page [E069](#).

● : Line up / 5 pieces per package



ISO metric (General purpose)



Applicable toolholder

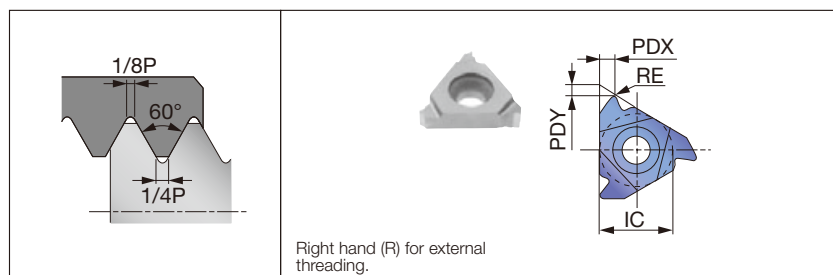
External
STCR/L**-18
STCR/L**18-CHP
JS**-STCL18
C*STCFL**18-CHP
C*STCR/L**18-CHP
QC**STCR/L18 (-Y)
QC**STCR/L18 (-Y)-CHP

Partial-profile insert

Pitch	Hand of cut	External insert					
		Designation	Grade		PDX	RE	S
			Coated				
			SH725	AH725			
0.5	R	TCT18FR-05ISO	●		0.35	0.06	4
0.7	R	TCT18FR-07ISO	●		0.45	0.09	4
0.75	R	TCT18FR-075ISO	●		0.5	0.09	4
0.8	R	TCT18FR-08ISO	●		0.5	0.1	4
1	R	TCT18R-10ISO		●	0.6	0.13	4
1.25	R	TCT18R-125ISO		●	0.7	0.17	4
1.5	R	TCT18R-15ISO		●	0.8	0.2	4

● : Line up / 5 pieces per package

Unified (General purpose)



Applicable toolholder

Insert size	External	Internal
11	SER**11	SNR/L**11...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert								Internal insert							
				Designation	Grade			IC	PDX	PDY	RE	Designation	Grade			IC	PDX	PDY	RE
					Coated								Coated						
					AH8015	AH725	T313V						AH8015	AH725	T313V				
11	(0.794)	32	R									11IR32UN	●			6.35	0.5	1.2	0.06
11	(0.907)	28	R									11IR28UN	●			6.35	0.5	1.2	0.06
11	(1.058)	24	R									11IR24UN	●			6.35	0.9	0.7	0.07
11	(1.27)	20	R									11IR20UN	●			6.35	0.9	0.7	0.09
11	(1.411)	18	R									11IR18UN	●			6.35	0.9	0.7	0.1
11	(1.588)	16	R									11IR16UN	●	●		6.35	0.9	0.7	0.11
11	(1.814)	14	R									11IR14UN	●			6.35	0.9	0.7	0.13
16	(0.794)	32	R	16ER32UN	●	●		9.525	0.5	1.2	0.1	16IR32UN	●			9.525	0.5	1.2	0.06
16	(0.907)	28	R	16ER28UN	●	●		9.525	0.5	1.2	0.11	16IR28UN	●			9.525	0.5	1.2	0.06
16	(1.058)	24	R	16ER24UN	●	●		9.525	0.9	0.7	0.13	16IR24UN	●			9.525	0.9	0.7	0.07
16	(1.27)	20	R	16ER20UN	●	●		9.525	0.9	0.7	0.16	16IR20UN	●			9.525	0.9	0.7	0.09
16	(1.411)	18	R	16ER18UN	●	●		9.525	0.9	0.7	0.18	16IR18UN	●			9.525	0.9	0.7	0.1
16	(1.588)	16	R	16ER16UN	●	●	●	9.525	0.9	0.7	0.2	16IR16UN	●	●		9.525	0.9	0.7	0.11
16	(1.814)	14	R	16ER14UN	●	●	●	9.525	1.6	1.2	0.23	16IR14UN	●	●		9.525	1.6	1.2	0.13
16	(1.954)	13	R	16ER13UN		●		9.525	1.6	1.2	0.24	16IR13UN	●			9.525	1.6	1.2	0.14
16	(2.117)	12	R	16ER12UN	●	●	●	9.525	1.6	1.2	0.27	16IR12UN	●	●		9.525	1.6	1.2	0.15
16	(2.309)	11	R	16ER11UN		●		9.525	1.6	1.2	0.29	16IR11UN	●			9.525	1.6	1.2	0.16
16	(2.54)	10	R	16ER10UN	●	●		9.525	1.6	1.2	0.32	16IR10UN	●			9.525	1.6	1.2	0.18
16	(2.822)	9	R	16ER9UN		●		9.525	1.6	1.2	0.35	16IR9UN	●			9.525	1.6	1.2	0.2
16	(3.175)	8	R	16ER8UN		●	●	9.525	1.6	1.2	0.4	16IR8UN	●	●		9.525	1.6	1.2	0.22
22	(3.629)	7	R	22ER7UN		●		12.7	2.5	1.7	0.45	22IR7UN	●			12.7	2.5	1.7	0.25
22	(4.233)	6	R	22ER6UN		●		12.7	2.5	1.7	0.53	22IR6UN	●			12.7	2.5	1.7	0.3
22	(5.08)	5	R	22ER5UN		●		12.7	2.5	1.7	0.64	22IR5UN	●			12.7	2.5	1.7	0.36

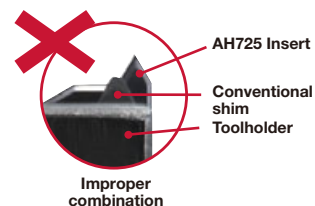
● : Line up / 5 pieces per package

Full-profile insert with chipbreaker

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert								Internal insert							
				Designation	Grade			IC	PDX	PDY	RE	Designation	Grade			IC	PDX	PDY	RE
					Coated		Cermet						Coated		Cermet				
					AH8015	AH725							NS9530	AH8015					
16	(1.058)	24	R	16ER24UN-B	●*			9.525	0.8	0.7	0.11								
16	(1.058)	24	R	16ER24UN-M			●	9.525	0.9	0.7	0.13								
16	(1.27)	20	R	16ER20UN-B	●*			9.525	0.9	0.8	0.14	16IR20UN-B	●*			9.525	0.9	0.8	0.06
16	(1.27)	20	R	16ER20UN-M	●		●	9.525	0.9	0.7	0.16	16IR20UN-M			●	9.525	0.9	0.7	0.09
16	(1.411)	18	R	16ER18UN-B	●*			9.525	1	0.8	0.15	16IR18UN-B	●*			9.525	1	0.8	0.08
16	(1.411)	18	R	16ER18UN-M	●		●	9.525	0.9	0.7	0.18	16IR18UN-M	●		●	9.525	0.9	0.7	0.1
16	(1.588)	16	R	16ER16UN-B	●*			9.525	1.1	0.9	0.19	16IR16UN-B	●*			9.525	1.1	0.9	0.09
16	(1.588)	16	R	16ER16UN-M	●		●	9.525	0.9	0.7	0.2	16IR16UN-M			●	9.525	0.9	0.7	0.11
16	(1.814)	14	R	16ER14UN-B	●*			9.525	1.2	1	0.22	16IR14UN-B	●*			9.525	1.2	0.9	0.11
16	(1.814)	14	R	16ER14UN-M	●		●	9.525	1.6	1.2	0.23	16IR14UN-M			●	9.525	1.6	1.2	0.13
16	(1.954)	13	R	16ER13UN-B	●*			9.525	1.3	1	0.24								
16	(2.117)	12	R	16ER12UN-B	●*			9.525	1.4	1.1	0.25	16IR12UN-B	●*			9.525	1.4	1.1	0.12
16	(2.117)	12	R	16ER12UN-M	●		●	9.525	1.6	1.2	0.27	16IR12UN-M	●		●	9.525	1.6	1.2	0.15
16	(3.175)	8	R	16ER8UN-B	●*			9.525	1.6	1.2	0.41	16IR8UN-B	●*			9.525	1.5	1.1	0.2
16	(3.175)	8	R	16ER8UN-M			●	9.525	1.6	1.2	0.4	16IR8UN-M			●	9.525	1.6	1.2	0.22

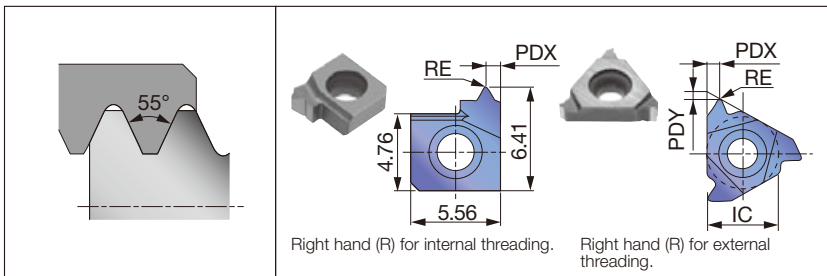
● : Line up / 5 pieces per package

- * : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).
 - requires the use of dedicated shim.
- When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim. Please refer to the page [E069](#).



Reference pages: External toolholders → [E036 - E040](#), Internal toolholders → [E054 - E056](#)

Whitworth, Parallel pipe thread



Applicable toolholder

Insert size	External	Internal
6		SNR/L000*K06SC... SNR/L000*H06...
11	SER**11	SNR/L**11...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16... SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22... SNR/L**22... TCNR/L**22... CNR/L**22...

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert								Internal insert													
				Designation	Grade				IC	PDX	PDY	RE	Designation	Grade				IC	PDX	PDY	RE				
					Coated			Uncoated						Coated			Uncoated								
					AH8015	AH725	T313V	TH10						AH8015	AH725	T313V	TH10								
6	(1.337)	19	R									6IR19W	●	●		●	-	0.9	-	0.17					
11	(1.337)	19	R									11IR19W	●	●	●	●	6.35	0.9	0.7	0.17					
11	(1.814)	14	R									11IR14W	●	●	●	●	6.35	0.9	0.7	0.23					
16	(0.907)	28	R	16ER28W			●	●		9.525	0.9	0.7	0.11	16IR28W			●		9.525	0.9	0.7	0.11			
16	(0.97)	26	R	16ER26W			●			9.525	0.9	0.7	0.12	16IR26W			●		9.525	0.9	0.7	0.12			
16	(1.27)	20	R	16ER20W			●			9.525	0.9	0.7	0.16	16IR20W			●		9.525	0.9	0.7	0.16			
16	(1.337)	19	R	16ER19W			●	●	●	9.525	0.9	0.7	0.17	16IR19W			●		9.525	0.9	0.7	0.17			
16	(1.411)	18	R	16ER18W			●			9.525	0.9	0.7	0.18	16IR18W			●		9.525	0.9	0.7	0.18			
16	(1.588)	16	R	16ER16W			●	●		9.525	0.9	0.7	0.2	16IR16W			●	●	9.525	0.9	0.7	0.2			
16	(1.814)	14	R	16ER14W			●	●	●	●	9.525	1.6	1.2	0.23	16IR14W			●	●	●	●	9.525	1.6	1.2	0.23
16	(1.814)	14	L	16EL14W			●			9.525	1.6	1.2	0.23												
16	(2.117)	12	R	16ER12W			●	●		9.525	1.6	1.2	0.27	16IR12W			●	●	9.525	1.6	1.2	0.27			
16	(2.309)	11	R	16ER11W			●	●	●	●	9.525	1.6	1.2	0.29	16IR11W			●	●	●	●	9.525	1.6	1.2	0.29
16	(2.54)	10	R	16ER10W			●	●		9.525	1.6	1.2	0.32	16IR10W			●	●	9.525	1.6	1.2	0.32			
16	(2.822)	9	R	16ER9W			●			9.525	1.6	1.2	0.35	16IR9W			●		9.525	1.6	1.2	0.35			
16	(3.175)	8	R	16ER8W			●	●		9.525	1.6	1.2	0.4	16IR8W			●	●	9.525	1.6	1.2	0.4			
22	(3.629)	7	R	22ER7W			●			12.7	2.5	1.7	0.45	22IR7W			●		12.7	2.5	1.7	0.45			
22	(4.233)	6	R	22ER6W			●			12.7	2.5	1.7	0.53	22IR6W			●		12.7	2.5	1.7	0.53			
22	(5.08)	5	R	22ER5W			●			12.7	2.5	1.7	0.64	22IR5W			●		12.7	2.5	1.7	0.64			

Full-profile insert with chipbreaker

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert								Internal insert							
				Designation	Grade			IC	PDX	PDY	RE	Designation	Grade			IC	PDX	PDY	RE
					Coated		Cermet						Coated		Cermet				
					AH8015	AH725	NS9530						AH8015	AH725	NS9530				
16	(1.337)	19	R	16ER19W-B		●*		9.525	1	0.8	0.16								
16	(1.337)	19	R	16ER19W-M	●		●	9.525	0.9	0.7	0.17	16IR19W-M			●	9.525	0.9	0.7	0.17
16	(1.588)	16	R	16ER16W-B		●*		9.525	1.1	0.9	0.2	16IR16W-B			●*	9.525	1.1	0.9	0.18
16	(1.814)	14	R	16ER14W-B		●*		9.525	1.2	1	0.24	16IR14W-B			●*	9.525	1.2	1	0.21
16	(1.814)	14	R	16ER14W-M	●		●	9.525	1.6	1.2	0.23	16IR14W-M	●		●	9.525	1.6	1.2	0.23
16	(2.309)	11	R	16ER11W-B		●*		9.525	1.5	1.1	0.27	16IR11W-B			●*	9.525	1.5	1.1	0.27
16	(2.309)	11	R	16ER11W-M	●		●	9.525	1.6	1.2	0.29	16IR11W-M	●		●	9.525	1.6	1.2	0.29

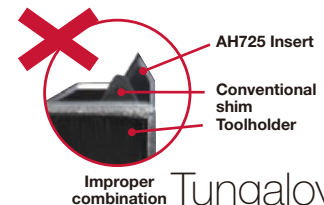
- ●* : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).

- requires the use of dedicated shim.

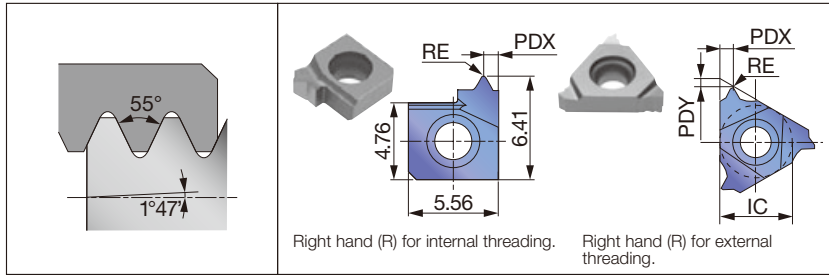
When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim. Please refer to the page E069.

Reference pages: External toolholders → E036 - E040

Internal toolholders → E054 - E056



BSPT (for Pipe)



Applicable toolholder

Insert size	External	Internal
6		SNR/L000*K06SC... SNR/L000*H06...
11	SER**11	SNR/L**11...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert								Internal insert									
				Designation	Grade				IC	PDX	PDY	RE	Designation	Grade				IC	PDX	PDY	RE
					Coated			Uncoated						Coated			Uncoated				
					AH8015	AH725	T313V							TH10	AH8015	AH725					
6	(1.337)	19	R									6IR19PT	●	●		●	-	0.9	-	0.14	
11	(1.337)	19	R									11IR19PT	●	●	●	●	6.35	0.9	0.7	0.14	
11	(1.814)	14	R									11IR14PT	●	●	●	●	6.35	0.9	0.7	0.16	
16	(0.907)	28	R	16ER28PT		●	●		9.525	0.9	0.7	0.09									
16	(1.337)	19	R	16ER19PT	●	●	●		9.525	0.9	0.7	0.14	16IR19PT		●		9.525	0.9	0.7	0.14	
16	(1.814)	14	R	16ER14PT	●	●	●		9.525	1.6	1.2	0.16	16IR14PT	●	●	●	●	9.525	1.6	1.2	0.16
16	(2.309)	11	R	16ER11PT	●	●	●		9.525	1.6	1.2	0.26	16IR11PT	●	●	●	●	9.525	1.6	1.2	0.26

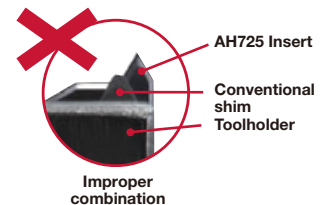
● : Line up / 5 pieces per package

Full-profile insert with chipbreaker

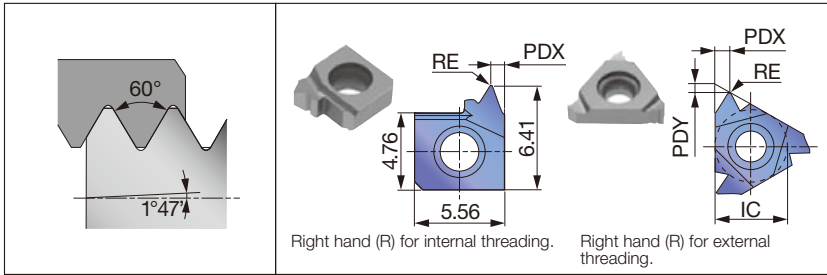
Insert size	Pitch (Reference)	TPI	Hand of cut	External insert								Internal insert							
				Designation	Grade			IC	PDX	PDY	RE	Designation	Grade			IC	PDX	PDY	RE
					Coated		Cermet						Coated		Cermet				
					AH8015	AH725	NS9530						AH8015	AH725	NS9530				
16	(1.337)	19	R	16ER19PT-M			●	9.525	0.9	0.7	0.18	16IR19PT-M			●	9.525	0.9	0.7	0.18
16	(1.814)	14	R	16ER14PT-B			●*	9.525	1.2	1	0.24	16IR14PT-B			●*	9.525	1.2	1	0.21
16	(1.814)	14	R	16ER14PT-M	●		●	9.525	1.6	1.2	0.25	16IR14PT-M	●		●	9.525	1.6	1.2	0.25
16	(2.309)	11	R	16ER11PT-B			●*	9.525	1.5	1.1	0.31	16IR11PT-B			●*	9.525	1.5	1.1	0.31
16	(2.309)	11	R	16ER11PT-M	●		●	9.525	1.6	1.2	0.32	16IR11PT-M	●		●	9.525	1.6	1.2	0.32

- * : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).
 - requires the use of dedicated shim.
- When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim. Please refer to the page [E069](#).

● : Line up / 5 pieces per package



NPT (for Pipe)



Applicable toolholder

Insert size	External	Internal
6		SNR/L000*K06SC... SNR/L000*H06...
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert								Internal insert									
				Designation	Grade				IC	PDX	PDY	RE	Designation	Grade				IC	PDX	PDY	RE
					Coated			Uncoated						Coated			Uncoated				
					AH8015	AH725	T313V							TH10	AH8015	AH725					
6	(1.411)	18	R									6IR18NPT	●		●		-	0.9	-	0.03	
16	(0.941)	27	R	16ER27NPT	●				9.525	0.5	1.2	0.02	16IR27NPT	●				9.525	0.5	1.2	0.02
16	(1.411)	18	R	16ER18NPT	●			●	9.525	0.9	0.7	0.03	16IR18NPT	●				9.525	0.9	0.7	0.03
16	(1.814)	14	R	16ER14NPT	●				9.525	1.6	1.2	0.04	16IR14NPT	●	●		●	9.525	1.6	1.2	0.04
16	(2.209)	11.5	R	16ER115NPT	●				9.525	1.6	1.2	0.05	16IR115NPT	●			●	9.525	1.6	1.2	0.05
16	(3.175)	8	R	16ER8NPT	●				9.525	1.6	1.2	0.07	16IR8NPT	●			●	9.525	1.6	1.2	0.07

● : Line up / 5 pieces per package

Full-profile insert with chipbreaker

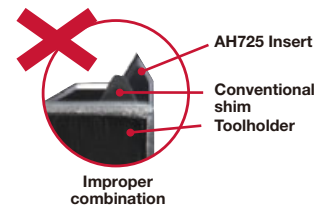
Insert size	Pitch (Reference)	TPI	Hand of cut	External insert								Internal insert							
				Designation	Grade			IC	PDX	PDY	RE	Designation	Grade			IC	PDX	PDY	RE
					Coated		Cermet						Coated		Cermet				
					AH8015	AH725	NS9530						AH8015	AH725	NS9530				
16	(1.411)	18	R	16ER18NPT-B		●*		9.525	1	0.8	0.05								
16	(1.411)	18	R	16ER18NPT-M	●		●	9.525	0.9	0.7	0.07	16IR18NPT-M			●	9.525	0.9	0.7	0.07
16	(1.814)	14	R	16ER14NPT-B		●*		9.525	1.2	0.9	0.05	16IR14NPT-B		●*		9.525	1.2	0.9	0.05
16	(1.814)	14	R	16ER14NPT-M	●		●	9.525	1.6	1.2	0.08	16IR14NPT-M	●		●	9.525	1.6	1.2	0.08
16	(2.209)	11.5	R	16ER115NPT-B		●*		9.525	1.5	1.1	0.09	16IR115NPT-B		●*		9.525	1.5	1.1	0.09
16	(2.209)	11.5	R	16ER115NPT-M			●	9.525	1.6	1.2	0.09	16IR115NPT-M	●		●	9.525	1.6	1.2	0.09
16	(3.175)	8	R	16ER8NPT-B		●*		9.525	1.8	1.3	0.12	16IR8NPT-B		●*		9.525	1.8	1.3	0.12

- ●* : The cutting edge position needs re-adjusting for these inserts have different PDY and PDX dimensions (Note: for size 16 inserts only).

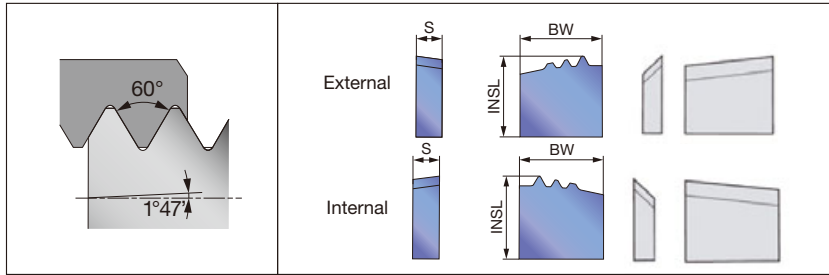
- ● requires the use of dedicated shim.

When using a new AH725 with chipbreaker, the conventional shim may need to be replaced with a new standard shim. Please refer to the page E069.

● : Line up / 5 pieces per package



NPT (for Pipe)



Applicable toolholder

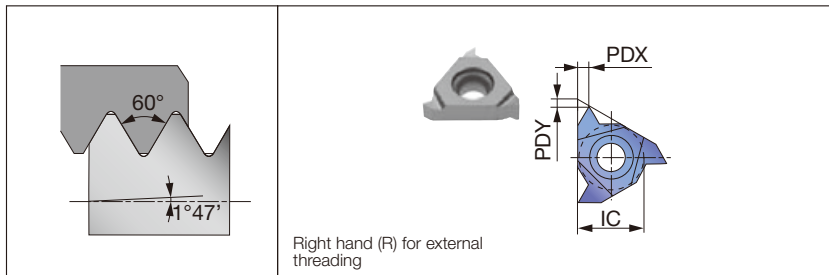
External	Internal
CLVOR-**M...	SI-CLHOR...

Full-profile insert (chaser)

Pitch (Reference)	TPI	Taper		External insert						Internal insert					
				Designation	Grade	BW	INSL	S	Chip breaking attachment	Designation	Grade	BW	INSL	S	Chip breaking attachment
		mm/ mm	TPF		Coated						Coated				
					AH725						AH725				
(2.209)	11.5	1/16	0.75	CR-11.5NPT-4E	●	16	15.7	5.2	CR-8R / 10R-3E / 4E-CB	CR-11.5NPT-4I	●	16	15.7	5.2	CR-8R / 10R-3I / 4I-CB
(3.175)	8	1/16	0.75	CR-8NPT-4E	●	16	15.7	5.2	CR-8R / 10R-3E / 4E-CB	CR-8NPT-4I	●	16	15.7	5.2	CR-8R / 10R-3I / 4I-CB

● : Line up / 5 pieces per package

NPTF (for Pipe)



Applicable toolholder

Insert size	External	Internal
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...

Full-profile insert

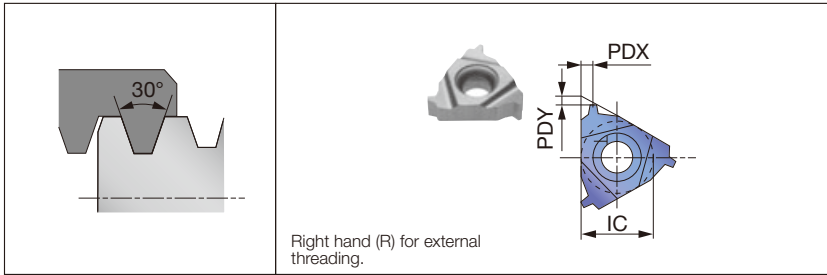
Insert size	Pitch (Reference)	TPI	Hand of cut	External insert						Internal insert					
				Designation	Grade	IC	PDX	PDY	RE	Designation	Grade	IC	PDX	PDY	RE
					Coated						Coated				
					AH725						AH725				
16	(0.941)	27	R	16ER27NPTF	●	9.525	0.5	1.2	-						
16	(1.411)	18	R	16ER18NPTF	●	9.525	0.9	0.7	-						
16	(1.814)	14	R	16ER14NPTF	●	9.525	1.6	1.2	-	16IR14NPTF	●	9.525	1.6	1.2	-
16	(2.209)	11.5	R	16ER115NPTF	●	9.525	1.6	1.2	-	16IR115NPTF	●	9.525	1.6	1.2	-
16	(3.175)	8	R	16ER8NPTF	●	9.525	1.6	1.2	-	16IR8NPTF	●	9.525	1.6	1.2	-

● : Line up / 5 pieces per package

Reference pages: NPT: External toolholders → **E053**, Internal toolholders → **E066**

NPTF: External toolholders → **E036 - E040**, Internal toolholders → **E054 - E056**

30° Trapezoidal / DIN103 (for Machine parts)



Applicable toolholder

Insert size	External	Internal
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...
27	CER/L**27...	CNR/L**27...

With the special full-profile insert

Insert size	Pitch (Reference)	Hand of cut	External insert						Internal insert					
			Designation	Grade		IC	PDX	PDY	Designation	Grade		IC	PDX	PDY
				Coated						Coated				
				AH725	T313V					AH725	T313V			
16	1.5	R	16ER15TR	●		9.525	0.9	0.7	16IR15TR	●		9.525	0.9	0.7
16	2	R	16ER20TR	●	●	9.525	1.6	1.3	16IR20TR	●	●	9.525	1.6	1.3
16	3	R	16ER30TR	●	●	9.525	1.6	1.3	16IR30TR	●	●	9.525	1.6	1.3
22	4	R	22ER40TR	●	●	12.7	2.5	2	22IR40TR	●	●	12.7	2.5	2
22	5	R	22ER50TR	●	●	12.7	2.5	2	22IR50TR	●	●	12.7	2.5	2
27	6	R	27ER60TR	●	●	15.875	3.2	2.5						

● : Line up / 5 pieces per package

Round / DIN405 (for Machine parts)



Applicable toolholder

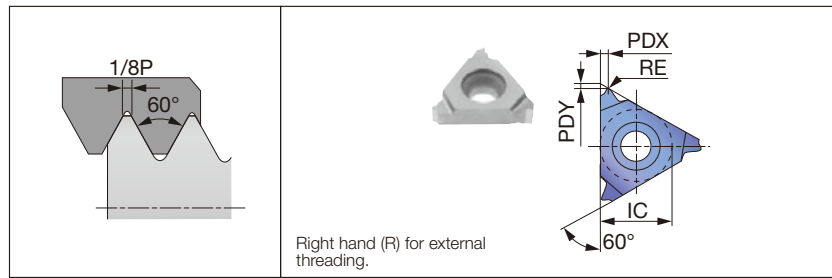
Insert size	External	Internal
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert						Internal insert					
				Designation	Grade	IC	PDX	PDY	RE	Designation	Grade	IC	PDX	PDY	RE
					Coated						Coated				
					AH725						AH725				
16	(3.175)	8	R	16ER8RD-B	●	9.525	1.3	1.4	0.75						
16	(4.233)	6	R	16ER6RD-B	●	9.525	1.7	1.5	1.01	16IR6RD-B	●	9.525	1.5	1.4	0.94

● : Line up / 5 pieces per package

UNJ (for Aerospace industry)



Applicable toolholder

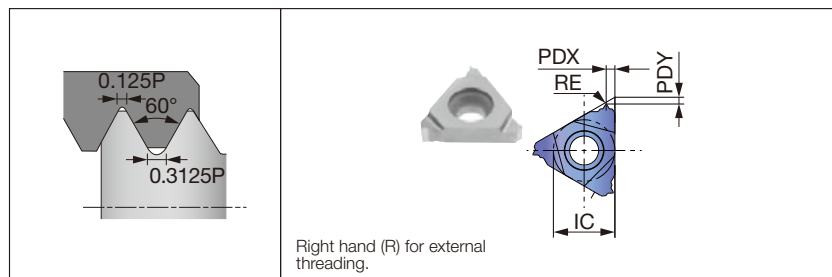
Insert size	External
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert						
				Designation	Grade		IC	PDX	PDY	RE
					Coated					
					AH8015	AH725				
16	(0.794)	32	R	16ER32UNJ	●	●	9.525	0.5	1.2	0.13
16	(0.907)	28	R	16ER28UNJ	●	●	9.525	0.5	1.2	0.15
16	(1.058)	24	R	16ER24UNJ	●	●	9.525	0.9	0.7	0.18
16	(1.27)	20	R	16ER20UNJ	●	●	9.525	0.9	0.7	0.21
16	(1.411)	18	R	16ER18UNJ	●	●	9.525	0.9	0.7	0.24
16	(1.588)	16	R	16ER16UNJ	●	●	9.525	0.9	0.7	0.26
16	(1.814)	14	R	16ER14UNJ	●	●	9.525	1.6	1.2	0.3
16	(2.117)	12	R	16ER12UNJ	●	●	9.525	1.6	1.2	0.35
16	(2.54)	10	R	16ER10UNJ	●	●	9.525	1.6	1.2	0.42
16	(3.175)	8	R	16ER8UNJ	●	●	9.525	1.6	1.2	0.53

● : Line up / 5 pieces per package

MJ (for Aerospace industry)



Applicable toolholder

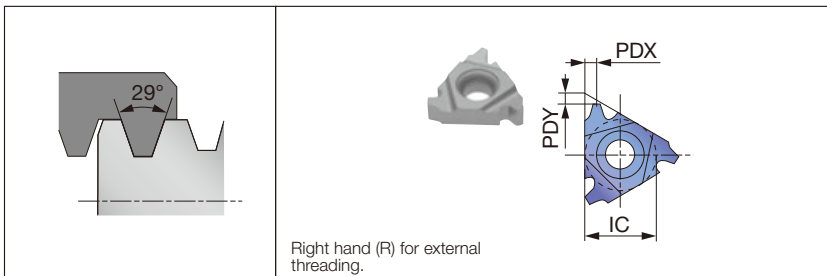
Insert size	Internal
11	SNR/L**11...

Insert size	Pitch (Reference)	Hand of cut	Internal insert						
			Designation	Grade	IC	PDX	PDY	RE	
				Coated					
				AH8015					
11	1	R	11IR10MJ	●	6.35	0.9	0.7	0.05	

● : Line up / 5 pieces per package

Reference pages: UNJ : External toolholders → **E036 - E040**
MJ : Internal toolholders → **E055**

29° Trapezoidal / ACME (for Machine parts, Pipe)



Applicable toolholder

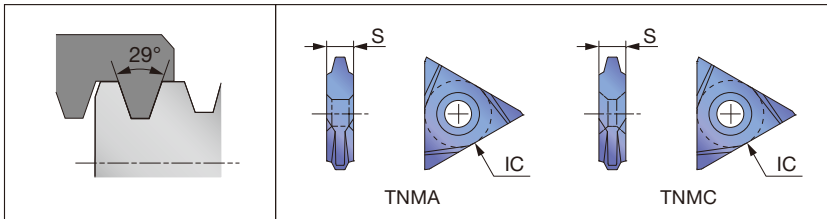
Insert size	External	Internal
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...

With the special full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert						Internal insert					
				Designation	Grade		IC	PDX	PDY	Designation	Grade		IC	PDX	PDY
					Coated						Coated				
					AH725	T313V					AH725	T313V			
16	(2.117)	12	R	16ER12ACME	●		9.525	1.6	1.3	16IR12ACME	●		9.525	1.6	1.3
16	(2.540)	10	R	16ER10ACME	●		9.525	1.6	1.3	16IR10ACME	●		9.525	1.6	1.3
16	(3.175)	8	R	16ER8ACME	●	●	9.525	1.6	1.3	16IR8ACME	●	●	9.525	1.6	1.3
22	(4.233)	6	R	22ER6ACME	●	●	12.7	2.5	2	22IR6ACME	●	●	12.7	2.5	2
22	(5.080)	5	R	22ER5ACME	●	●	12.7	2.5	2	22IR5ACME	●	●	12.7	2.5	2

● : Line up / 5 pieces per package

29° Trapezoidal / ACME (for Machine parts, Pipe)



Applicable toolholder

External
MTVOR-**M.. STVOR-**M...

On edge

Pitch	TPI	Taper		External insert			
		mm/mm	TPF	Designation	Grade	IC	S
					Coated		
(1.588)	16	-	-	TNMA43NT16PEXT-PT	●	12.7	4.8
(1.814)	14	-	-	TNMA43NT14PEXT-PT	●	12.7	4.8
(2.117)	12	-	-	TNMA43NT12PEXT-PT	●	12.7	4.8
(2.54)	10	-	-	TNMA43NT10PEXT-PT	●	12.7	4.8
(3.175)	8	-	-	TNMA43NT8PEXT-PT	●	12.7	4.8
(4.233)	6	-	-	TNMA43NT6PEXT-PT	●	12.7	4.8
(5.08)	5	-	-	TNMA54NT5PEXT-PT	●	15.875	6.4
(6.35)	4	-	-	TNMA54NT4PEXT-PT	●	15.875	6.4
(8.47)	3	-	-	TNMA54NT3PEXT-PT	●	15.875	6.4
(1.588)	16	-	-	TNMC43NT16PEXT-PT	●	12.7	4.8
(1.814)	14	-	-	TNMC43NT14PEXT-PT	●	12.7	4.8
(2.117)	12	-	-	TNMC43NT12PEXT-PT	●	12.7	4.8
(2.54)	10	-	-	TNMC43NT10PEXT-PT	●	12.7	4.8
(3.175)	8	-	-	TNMC43NT8PEXT-PT	●	12.7	4.8
(4.233)	6	-	-	TNMC43NT6PEXT-PT	●	12.7	4.8
(5.08)	5	-	-	TNMC54NT5PEXT-PT	●	15.875	6.4
(6.35)	4	-	-	TNMC54NT4PEXT-PT	●	15.875	6.4
(8.47)	3	-	-	TNMC54NT3PEXT-PT	●	15.875	6.4

● : Line up / 10 pieces per package

Reference pages: 29° Trapezoidal With the special full-profile insert : External toolholders → **E036 - E040**, Internal toolholders → **E054 - E056**
 29° Trapezoidal On edge : External toolholders → **E052**

29° Trapezoidal/ STUB ACME (for Machine parts, Pipe)

On edge

Applicable toolholder

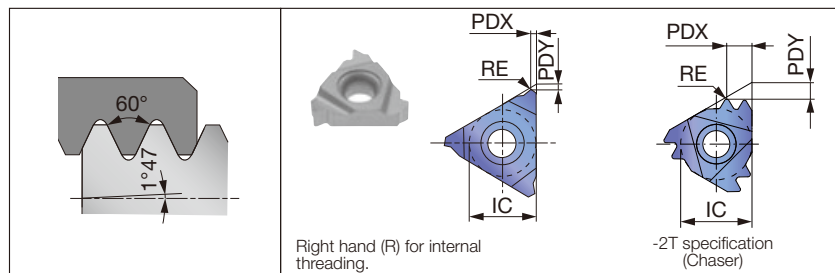
Pitch (Reference)	TPI	Taper		External insert			
		mm/mm	TPF	Designation	Grade	IC	S
					Coated		
					AH725		
(1.588)	16	-	-	TNMA43NT16PSTUBE-PT	●	12.7	4.8
(1.814)	14	-	-	TNMA43NT14PSTUBE-PT	●	12.7	4.8
(2.117)	12	-	-	TNMA43NT12PSTUBE-PT	●	12.7	4.8
(2.54)	10	-	-	TNMA43NT10PSTUBE-PT	●	12.7	4.8
(3.175)	8	-	-	TNMA43NT8PSTUBE-PT	●	12.7	4.8
(4.233)	6	-	-	TNMA43NT6PSTUBE-PT	●	12.7	4.8
(5.08)	5	-	-	TNMA54NT5PSTUBE-PT	●	15.875	6.4
(6.35)	4	-	-	TNMA54NT4PSTUBE-PT	●	15.875	6.4
(8.47)	3	-	-	TNMA54NT3PSTUBE-PT	●	15.875	6.4
(1.588)	16	-	-	TNMC43NT16PSTUBE-PT	●	12.7	4.8
(1.814)	14	-	-	TNMC43NT14PSTUBE-PT	●	12.7	4.8
(2.117)	12	-	-	TNMC43NT12PSTUBE-PT	●	12.7	4.8
(2.54)	10	-	-	TNMC43NT10PSTUBE-PT	●	12.7	4.8
(3.175)	8	-	-	TNMC43NT8PSTUBE-PT	●	12.7	4.8
(4.233)	6	-	-	TNMC43NT6PSTUBE-PT	●	12.7	4.8
(5.08)	5	-	-	TNMC54NT5PSTUBE-PT	●	15.875	6.4
(6.35)	4	-	-	TNMC54NT4PSTUBE-PT	●	15.875	6.4
(8.47)	3	-	-	TNMC54NT3PSTUBE-PT	●	15.875	6.4

Note: ACME and STUB ACME can cut crest radius. Crest flat of ACME and STUB ACME need to be cut by another tool.

● : Line up / 10 pieces per package

External
MTVOR-**M..
STVOR-**M...

API Round (for Energy industry)



Applicable toolholder

Insert size	External	Internal
16	CER/L**16... (C*CER/L...) JSER**16... JS**SEL16 SER**16-CHP B-SER/L**16 B-CER/L**16 BC-SER/L**16	TSNR/L**16 SNR/L**16... TCNR/L**16... CNR/L**16...
22	CER/L**22... SER**22-CHP	TSNR/L**22 SNR/L**22... TCNR/L**22... CNR/L**22...

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert							Internal insert							
				Designation	Grade		IC	PDX	PDY	RE	Designation	Grade			IC	PDX	PDY	RE
					Coated							Coated						
					AH725	T313V						AH8015	AH725	T313V				
16	(2.54)	10	R	16ER10RAPI	●		9.525	1.6	1.2	0.36	16IR10RAPI	●	●		9.525	1.6	1.2	0.36
16	(3.175)	8	R	16ER8RAPI	●		9.525	1.6	1.2	0.43	16IR8RAPI	●	●	●	9.525	1.6	1.2	0.43
22	(3.175)	8	R								22IR8RAPI-2T	●			12.7	4.5	3	0.43

● : Line up / 5 pieces per package

Full-profile insert with chipbreaker

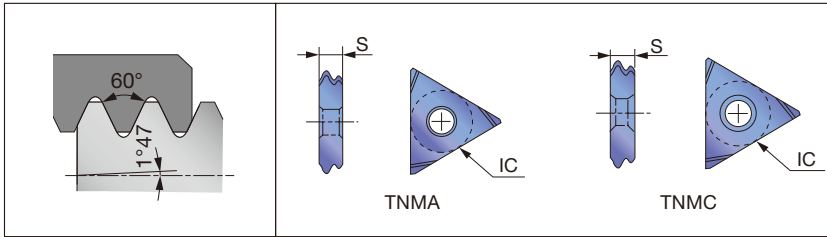
Insert size	Pitch (Reference)	TPI	Hand of cut	External insert						Internal insert					
				Designation	Grade	IC	PDX	PDY	RE	Designation	Grade	IC	PDX	PDY	RE
					Coated						Coated				
					AH725						AH725				
16	(2.54)	10	R	16ER10RD-CB	●	9.525	1.2	1.5	0.36	16IR10RD-CB	●	9.525	1.2	1.5	0.36
16	(3.175)	8	R	16ER8RD-CB	●	9.525	1.3	1.5	0.43	16IR8RD-CB	●	9.525	1.3	1.5	0.43

● : Line up / 10 pieces per package

Reference pages: 29° Trapezoidal : External toolholders → **E052**

API Round : External toolholders → **E036 - E040**, Internal toolholders → **E054 - E056**

API Round (for Energy)



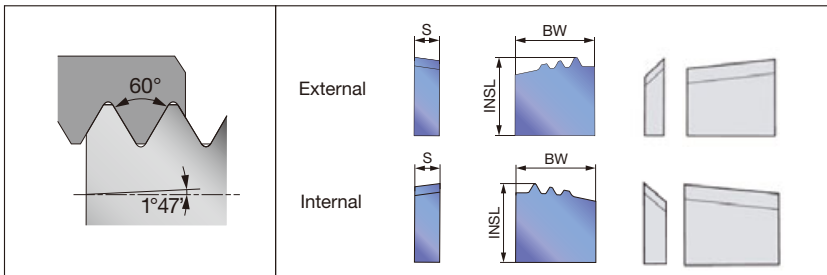
Applicable toolholder

External	Internal
MTVOR-**M.. STVOR-**M...	HS**-MTHOR...

On edge

Pitch (Reference)	TPI	Taper		External insert				Internal insert			
		mm/mm	TPF	Designation	Grade	IC	S	Designation	Grade	IC	S
					Coated				Coated		
(2.54)	10	1/16	0.75	TNMA4310RDEXT	●	12.7	4.8	TNMA4310RDINT	●	12.7	4.8
(3.175)	8	1/16	0.75	TNMA438RDEXT	●	12.7	4.8	TNMA438RDINT	●	12.7	4.8
(2.54)	10	1/16	0.75	TNMC4310RDEXT	●	12.7	4.8	TNMC4310RDINT	●	12.7	4.8
(3.175)	8	1/16	0.75	TNMC438RDEXT	●	12.7	4.8	TNMC438RDINT	●	12.7	4.8

● : Line up / 10 pieces per package



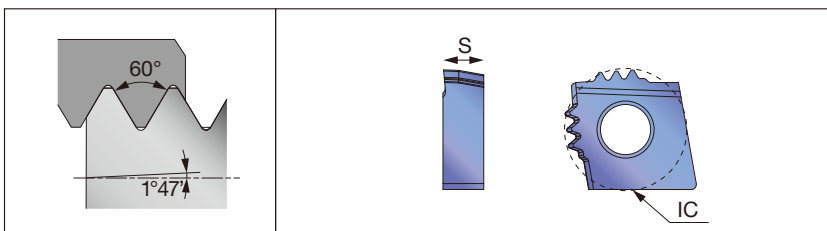
Applicable toolholder

External	Internal
CLVOR-**M...	SI-CLHOR...

Full-profile insert (chaser)

Pitch (Reference)	TPI	Taper		External insert						Internal insert					
		mm/mm	TPF	Designation	Grade	BW	INSL	S	Chip breaking attachment	Designation	Grade	BW	INSL	S	Chip breaking attachment
					Coated						Coated				
(3.175)	8	1/16	0.75	CR-8R-3E	●	16	15	5.2	CR-8R / 10R-3E / 4E-CB	CR-8R-3I	●	16	15	5.2	CR-8R / 10R-3I / 4I-CB
(2.54)	10	1/16	0.75	CR-10R-3E	●	16	15.9	5.2	CR-8R / 10R-3E / 4E-CB	CR-10R-3I	●	16	15.9	5.2	CR-8R / 10R-3I / 4I-CB

● : Line up / 10 pieces per package



Full-profile insert (chaser)

Pitch (Reference)	TPI	Taper		External insert			
		mm/mm	TPF	Designation	Grade	IC	S
					Coated		
(2.54)	10	1/16	0.75	CNGA-10R-3E	●	19.05	6.4
(3.175)	8	1/16	0.75	CNGA-8R-3E	●	19.05	6.4

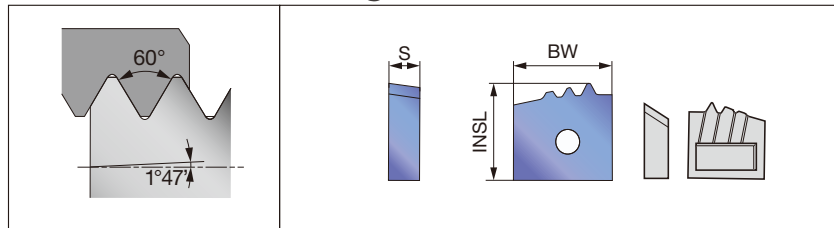
Note: Toolholders need to be customized for these types of inserts.

● : Line up / 10 pieces per package

Reference pages: API Round On edge : External toolholders → **E052**, Internal toolholders → **E065**

API Round Full-profile insert : External toolholders → **E053**, Internal toolholders → **E066**

API Round (for Energy industry) For tool-rotating machines



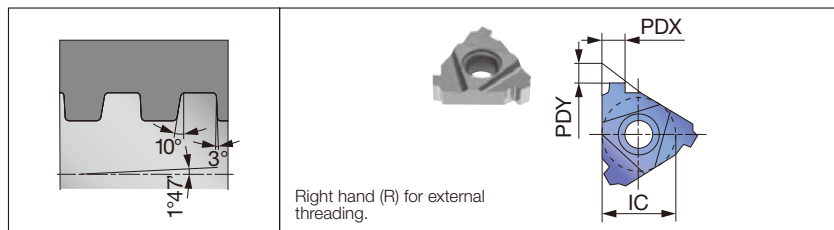
Full-profile insert (chaser)

Pitch (Reference)	TPI	Taper		External insert					
		mm/ mm	TPF	Designation	Grade	BW	INSL	S	Chip breaking attachment
					Coated				
					AH725				
(3.175)	8	1/16	0.75	CR-8R-3E#1	●	16	14.7	5.2	TD39318R-1-CBW/CAVITY
(3.175)	8	1/16	0.75	CR-8R-3E#2	●	16	14.9	5.2	TD39328R-2-CBW/CAVITY
(3.175)	8	1/16	0.75	CR-8R-3E#3	●	16	15	5.2	TD39338R-3-CBW/CAVITY

Note: Toolholders need to be customized for these types of inserts.

● : Line up / 10 pieces per package

API Buttress (for Energy industry)



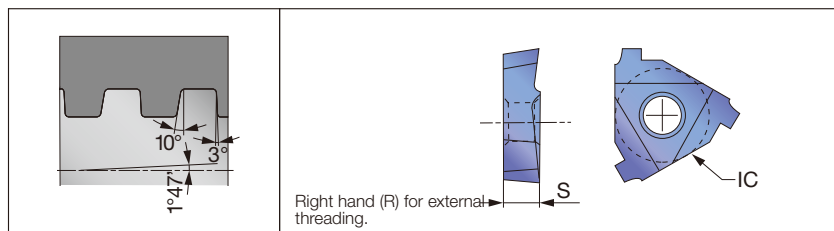
Applicable toolholder

Insert size	External	Internal
22	CER/L**22... SER**22-CHP	TSNR/L**22... SNR/L**22... TCNR/L**22... CNR/L**22...

Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	External insert					Internal insert				
				Designation	Grade	IC	PDX	PDY	Designation	Grade	IC	PDX	PDY
					Coated					Coated			
					AH725					AH725			
22	(5.08)	5	R	22ER5BAPI	●	12.7	3.72	2.2	22IR5BAPI	●	12.7	3.45	2.2

● : Line up / 5 pieces per package



Applicable toolholder

External	Internal
MTVNR**M5	HS**-LNFR...

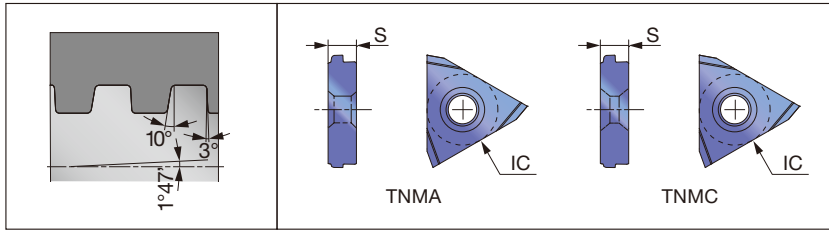
Full-profile insert (single side)

Pitch (Reference)	TPI	Taper		External insert				Internal insert			
		mm/mm	TPF	Designation	Grade	IC	S	Designation	Grade	IC	S
					Coated				Coated		
					AH725				AH725		
(5.08)	5	1/16	0.75	L535B75EXT-FC	●	15.875	4.8	L535B75INT-FC	●	15.875	4.8
(5.08)	5	1/12	1	L535B1EXT-FC	●	15.875	4.8	L535B1INT-FC	●	15.875	4.8

● : Line up / 10 pieces per package

Reference pages: API Buttress Full-profile insert : External toolholders → **E036, E038**, Internal toolholders → **E055 - E056**
API Buttress Full-profile insert (single side) : External toolholders → **E051**, Internal toolholders → **E064**

API Buttress (for Energy industry)



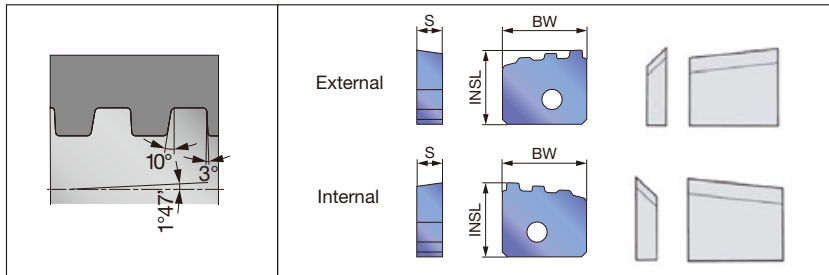
Applicable toolholder

External	Internal
MTVOR-**M...	HS**-MTHOR...
STVOR-**M...	

On edge

Pitch (Reference)	TPI	Taper		External insert				Internal insert			
		mm/mm	TPF	Designation	Grade	IC	S	Designation	Grade	IC	S
					Coated				Coated		
(5.08)	5	1/12	1	TNMA545B1EXT-FC	●	15.875	6.4	TNMA545B1INT-FC	●	15.875	6.4
(5.08)	5	1/16	0.75	TNMA545B75EXT-FC	●	15.875	6.4	TNMA545B75INT-FC	●	15.875	6.4
(5.08)	5	1/12	1	TNMC545B1EXT-FC	●	15.875	6.4	TNMC545B1INT-FC	●	15.875	6.4
(5.08)	5	1/16	0.75	TNMC545B75EXT-FC	●	15.875	6.4	TNMC545B75INT-FC	●	15.875	6.4

● : Line up / 10 pieces per package



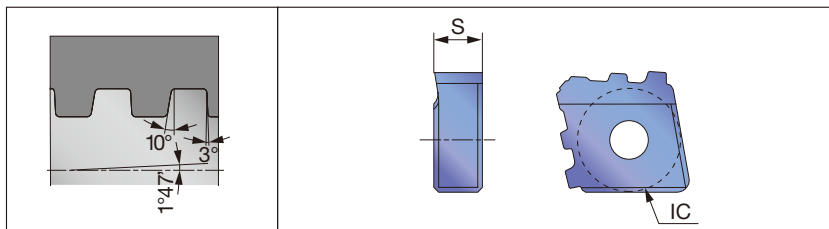
Applicable toolholder

External	Internal
CLVOR-**M...	SI-CLHOR...

Full-profile insert (chaser)

Pitch (Reference)	TPI	Taper		External insert						Internal insert					
		mm/mm	TPF	Designation	Grade	BW	INSL	S	Chip breaking attachment	Designation	Grade	BW	INSL	S	Chip breaking attachment
					Coated						Coated				
(5.08)	5	1/16	0.75	CR-5B75-4E	●	20.4	15.9	5.1	CR-5B75 / 5B1-4E-CB	CR-5B75-3I	●	16	15.8	5.2	CR-8R / 10R-3I / 4I-CB

● : Line up / 10 pieces per package



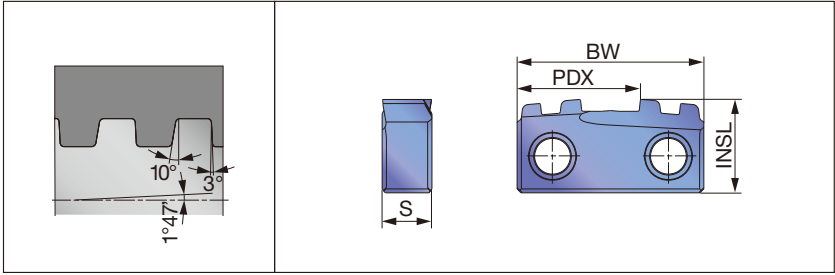
Full-profile insert (chaser)

Pitch (Reference)	TPI	Taper		External insert			
		mm/mm	TPF	Designation	Grade	IC	S
					Coated		
(5.08)	5	1/16	0.75	CNGA-5B75-3E	●	19.05	6.4

Note: Toolholders need to be customized for these types of inserts.

● : Line up / 10 pieces per package

API Buttress (for Energy industry)

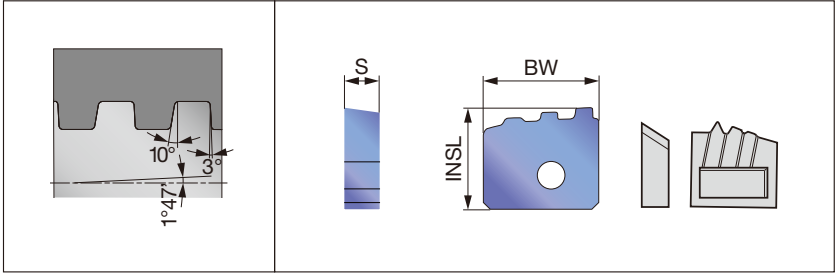


Full-profile insert

Insert size	Pitch (Reference)	TPI	Hand of cut	Internal insert					
				Designation	Grade	BW	INSL	PDX	S
					Coated				
					T05HP				
22	(5.08)	5	R	CR-5B75-2I-W24	●	24	12	15.85	6.4

Note: Toolholders need to be customized for these types of inserts. ● : Line up / 10 pieces per package

API Buttress (for Energy industry)
For tool-rotating machines

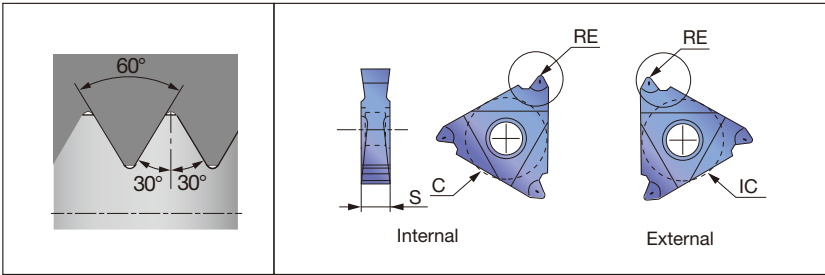


Full-profile insert (chaser)

Pitch (Reference)	TPI	Taper		External insert							
				Designation	Grade	BW	INSL	S	RE	Chip breaking attachment	
		Coated									
		AH725									
(5.08)	5	1/16	0.75	CR-5B75-3E#1	●	17	14.6	5.2		TD46015B75-1-CBW/CAVITY	
(5.08)	5	1/16	0.75	CR-5B75-3E#2	●	17	14.8	5.2		TD46025B75-2-CBW/CAVITY	
(5.08)	5	1/16	0.75	CR-5B75-3E#3	●	17	15	5.2		TD46035B75-3-CBW/CAVITY	

Note: Toolholders need to be customized for these types of inserts. ● : Line up / 10 pieces per package

API Rotary shoulder connection (for Energy industry)



Applicable toolholder

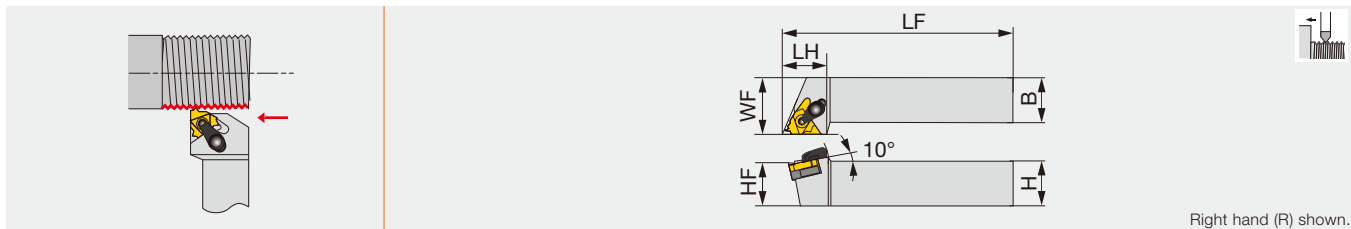
External	Internal
MTVNR-3232M54	HS**-LNFR-54API

Full-profile insert (Double side)

Pitch (Reference)	TPI	Connection	Taper		Designation	Grade	IC	S	RE
			mm/mm	TPF		Coated			
						AH725			
(6.35)	4	V-0.038R	1/6	2	LDS54428FT-CB#1	●	15.875	6.4	0.97
(6.35)	4	V-0.038R	1/4	3	LDS54438FT-CB#2	●	15.875	6.4	0.97
(6.35)	4	V-0.050	1/6	2	LDS54425FT-CB#3	●	15.875	6.4	0.64
(6.35)	4	V-0.050	1/4	3	LDS54435FT-CB#4	●	15.875	6.4	0.64
(5.08)	5	V-0.040	1/4	3	LDS54530FT-CB#5	●	15.875	6.4	0.51

● : Line up / 10 pieces per package

External threading toolholder, alternative clamping of screw-on or clamp-on only for DT type



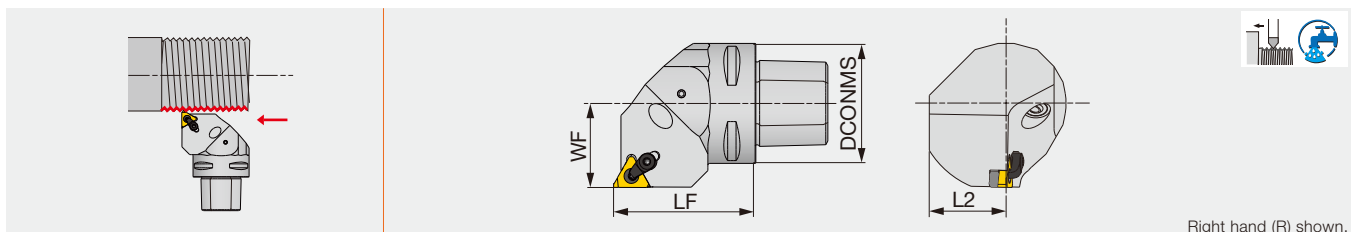
Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	Insert
CER/L1212H16DT	12	12	100	24	12	16	16ER/L...
CER/L1616H16DT	16	16	100	24	16	20	16ER/L...
CER/L2020K16DT	20	20	125	24	20	25	16ER/L...
CER/L2525M16DT	25	25	150	28	25	32	16ER/L...
CER/L2525M22DT	25	25	150	31.3	25	32	22ER/L...
CER3232P16T	32	32	170	32	32	40	16ER...
CER3232P22T	32	32	170	32	32	40	22ER...
CER2525M27T	25	25	150	34	25	32	27ER...
CER3232P27T	32	32	170	34	32	40	27ER...

Note: A clamp set consists of a clamp and a clamping screw. A shim set consists of a shim and a shim screw to secure the shim to the shank.
Standard shims can be used on both right- and left-hand toolholders. Please use either of the sides depending on the tool hand.
When using DT type, please remove either the clamp set or the insert clamping screw.

C-CER/L

External threading toolholder, alternative clamping of screw-on or clamp-on



Right hand (R) shown.

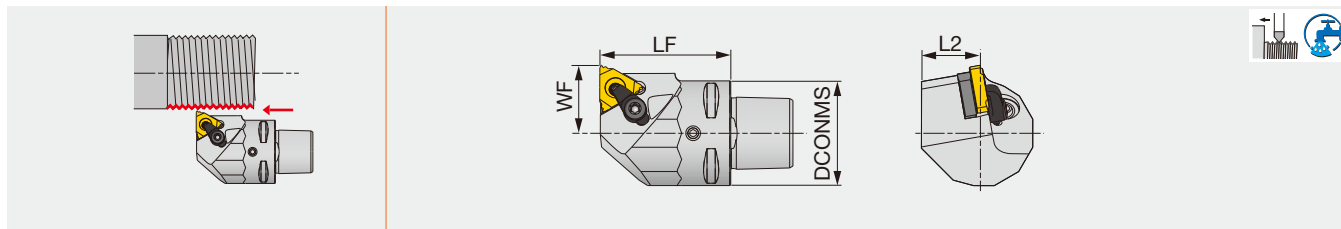
Designation	DCONMS	LF	L2	WF	Insert
C3CER/L22040-16ERN ⁽²⁾	32	40	20	22	16ER/L...
C4CER/L27050-16ERN ⁽²⁾	40	50	25	27	16ER/L...
C5CER/L35060-16ERN ⁽¹⁾	50	60	32	35	16ER/L...
C5CER/L35060-16ERN ⁽²⁾	50	60	32	35	16ER/L...
C6CER/L45065-16ERN ⁽¹⁾	63	65	41	45	16ER/L...
C6CER/L45065-16ERN ⁽²⁾	63	65	41	45	16ER/L...

(1) Applicable for 3 MPa coolant (2) Applicable for 7 MPa coolant

SPARE PARTS									
Designation	Clamp set	Clamping screw	Coolant parts	Shim screw	Shim	Shim set	Wrench 1	Wrench 2	Wrench 3
CER/L*16DT	CSP16	CSTB-3.5ST	-	DTS5-3.5	A16-1DT	-	P-3.5	T-15F	-
CER/L2525M22DT	CSP22	CSTB-4ST	-	DTS6-4	GX22-1DT	-	P-4	T-15F	T-20F
CER3232P16T	CSP16	-	-	-	-	A16-1	-	T-15F	-
CER3232P22T	CSP22	-	-	-	-	NXE22-1	-	T-20F	-
CER*27T	CSP27	-	-	-	-	NXE27-1	P-4	-	-
C3CE*22040-16ERN, C4CE*27050-16ERN	CSP16	CSTB-3.5ST	SATZ-M8X1-M3	DTS5-3.5	A16-1DT	-	P-3.5	T-15F	-
C5CE*35060-16ER, C6CE*45065-16ER	CSP16	CSTB-3.5ST	EZ104	DTS5-3.5	A16-1DT	-	P-3.5	T-15F	-
C5CE*35060-16ERN, C6CE*45065-16ERN	CSP16	CSTB-3.5ST	SATZ-M10X1-M5	DTS5-3.5	A16-1DT	-	P-3.5	T-15F	-

Reference pages: Inserts → **E010 - E011, E015, E017 - E030, E032**

External threading toolholder, alternative clamping of screw-on or clamp-on



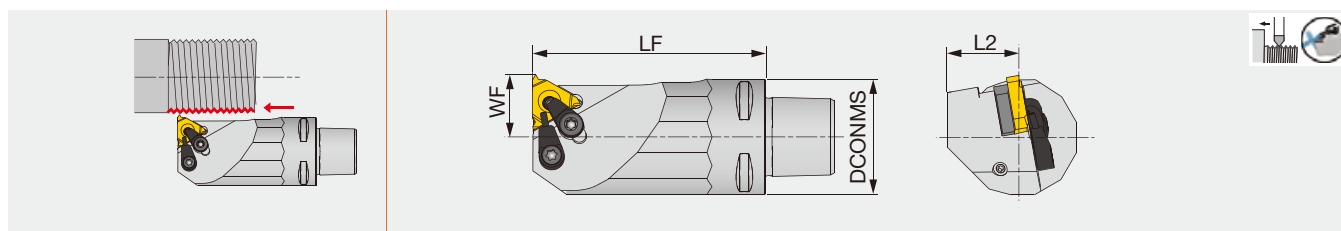
Designation	DCONMS	LF	L2	WF	Insert
C3CEL22040-16ERN-B	32	40	18	22	16ER...

Applicable for 7 MPa coolant
Cannot be used for boring

C-CEL-ERB-CHP

Tube connection

External threading toolholder, alternative clamping of screw-on or clamp-on, with high pressure coolant capability



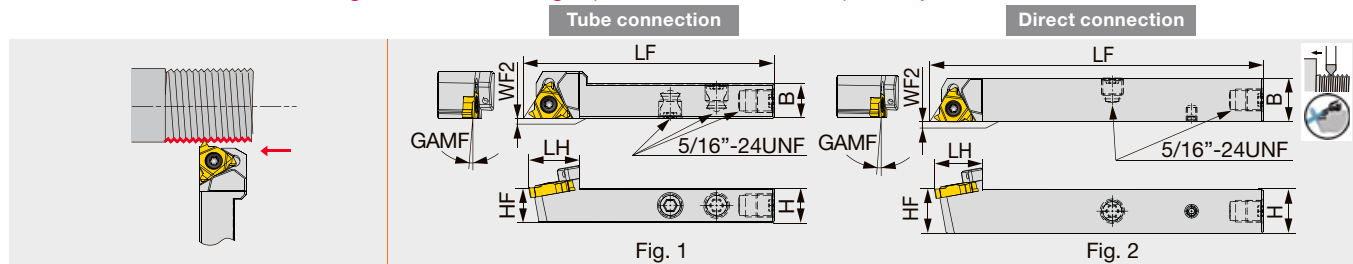
Designation	DCONMS	LF	L2	WF	Insert
C3CEL18065-16ERB-CHP	32	65	20	18	16ER...

Applicable for 14 MPa coolant
Cannot be used for boring

SPARE PARTS

Designation	Shim	Shim screw	Clamping screw	Clamping screw	Wrench 1	Wrench 2	Coolant parts	Coolant unit
C3CEL22040-16ERN-B	A16-1DT	DTS5-3.5	CSTB-3.5ST	CSP16	T-15F	P-3.5	SATZ-M8X1-M3	-
C3CEL18065-16ERB-CHP	A16-1DT	DTS5-3.5	CSTB-3.5ST	CSP16	T-15F	P-3.5	-	S-CU-CHP

Screw-on external threading toolholders-High-pressure coolant capability with tube and direct connection

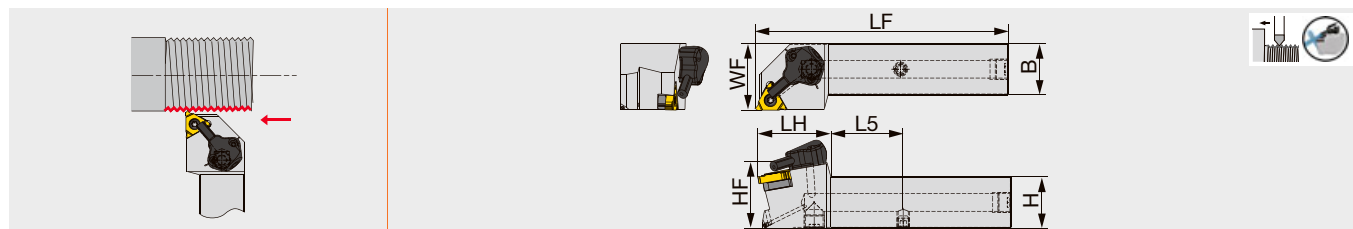


Designation	H	B	LF	LH	HF	WF2	GAMF	Fig.	Insert
JSE2R1212F16-CHP	12	12	85	19	12	0	1°	1	16ER...
JSE2R1212X16-CHP	12	12	120	19	12	0	1°	2	16ER...
JSE2R1616X16-CHP	16	16	120	19	16	0	1°	2	16ER...

SER-X-CHP-MC

Direct connection

Screw-on external threading toolholders-High-pressure coolant capability with tube and direct connection



Designation	H	B	LF	LH	HF	WF	L5	Insert
SER2020X16-CHP-MC	20	20	107	36	20	25	27.9	16ER...
SER2525X16-CHP-MC	25	25	122	36	25	32	33.75	16ER...
SER2525X22-CHP-MC	25	25	122	36	25	32	33.75	22ER...

SPARE PARTS

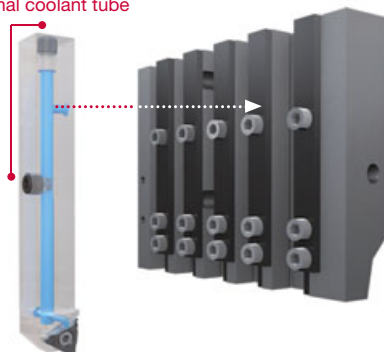
Designation	Clamping screw	Wrench	Shim screw	Shim	Coolant unit	Coolant plug	Wrench
JSE2R**16-CHP	CSTB-3.5	T-15F	-	-	-	SR5/16UNFTL360	P-4
SER**X16-CHP-MC	CSTB-3.5ST	T-15F	DTS5-3.5	A16-1DT	CU-V-CHP	PLUGG1/8-6.5TL360	P-3.5
SER**X22-CHP-MC	CSTB-4ST	T-15F	DTS6-4	GX22-1DT	CU-CW-CHP	PLUGG1/8-6.5TL360	P-4

No need for coolant tube setup.

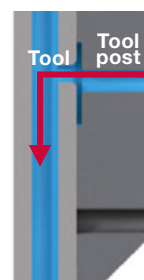
Eliminates chip entanglement on tubes and streamlines tool replacement.

Coolant is supplied from the tool post directly to the tools

Internal thread
Optional connection with
external coolant tube

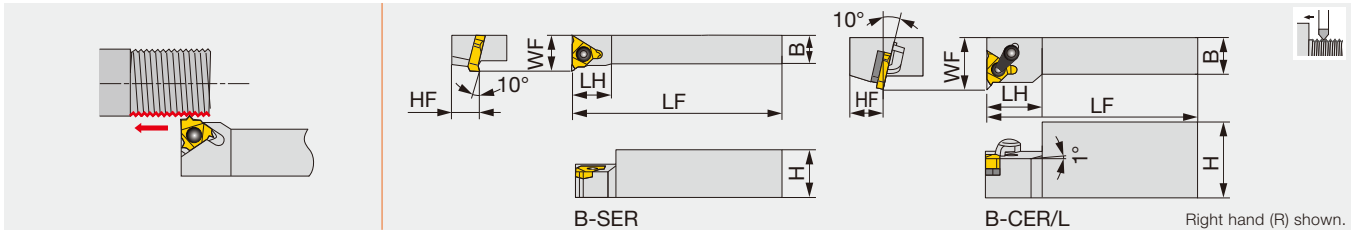


Detailed view of the coolant
flow after connection



B-S/CER/L

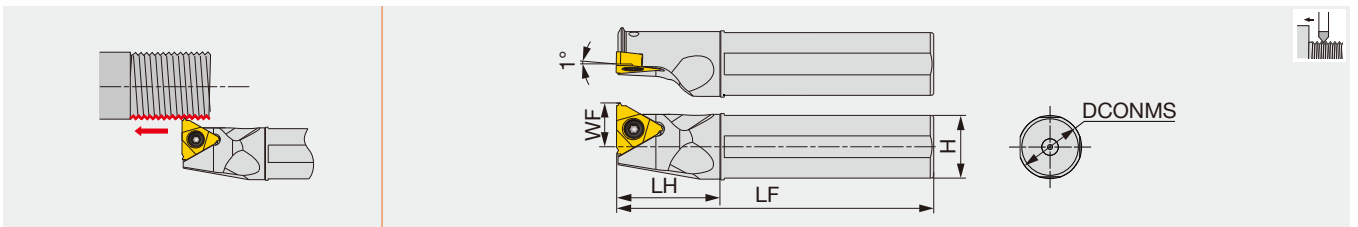
External threading toolholder for Swiss lathes



Designation	H	B	LF	LH	HF	WF	Insert
B-SER10H16	20	10	100	15	10	16	16ER...
B-SER12K16	24	12	125	18	12	18	16ER...
B-CER/L16M16	32	16	150	24	16	22	16ER/L...

JS-SEL16

External threading toolholder for Swiss lathes



Designation	DCONMS	H	LF	LH	WF	Insert
JS16F-SEL16	16	15	85	25	11	16ER...
JS19G-SEL16	19.05	18	90	30	12.5	16ER...
JS19X-SEL16	19.05	18	120	30	12.5	16ER...
JS20G-SEL16	20	19	90	30	13	16ER...
JS20X-SEL16	20	19	120	30	13	16ER...
JS25H-SEL16	25	24	100	30	15.5	16ER...
JS254X-SEL16	25.4	24	120	30	15.7	16ER...

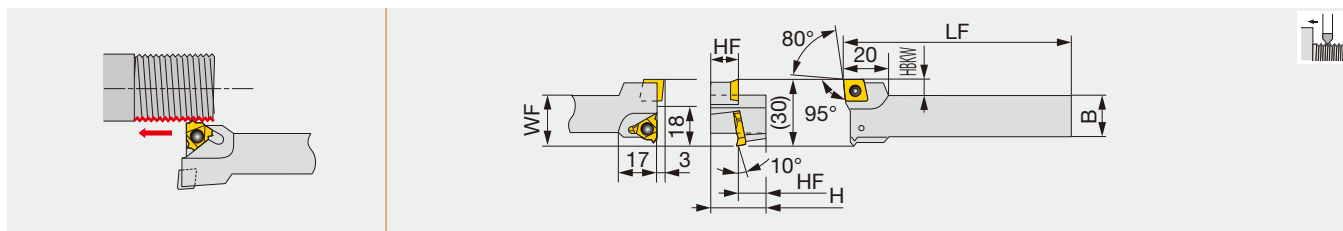
Note: Use the right-hand insert (16ER...) for a left-hand holder (JS***-SEL...).

SPARE PARTS

Designation	Clamp set	Shim set	Clamping screw	Wrench
B-SER***16	-	-	CSTB-3.5	T-15F
B-CER/L16M16	CSP16	A16-1	-	T-15F
JS***-SEL16	-	-	CSTB-3.5	T-15F

Reference pages: Inserts → [E010](#) - [E011](#), [E015](#), [E017](#) - [E030](#)

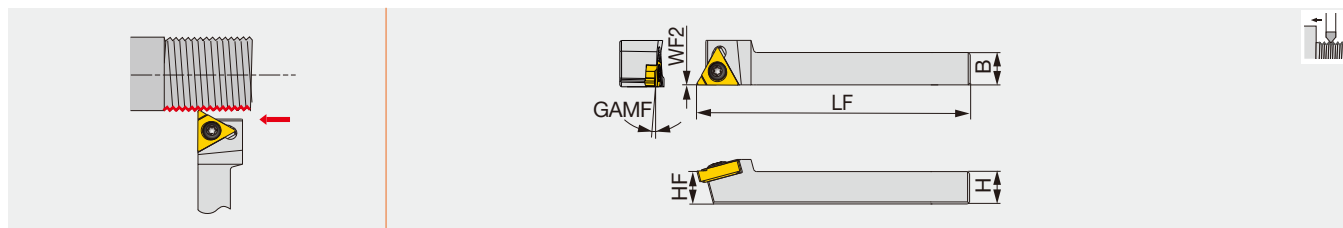
External threading toolholder for multi-functional Swiss lathes



Designation	H	B	LF	HF	WF	HBKW	Insert
BC-SER12K16	24	16	125	12	23	7	16ER..., CC*T09T3...

SER

Screw-on external threading toolholders



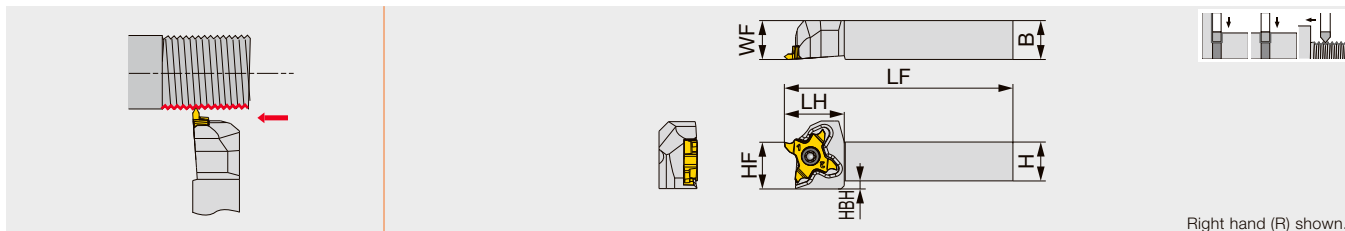
Designation	H	B	LF	HF	WF2	GAMF	Insert
SER0808H11	8	8	100	8	0	1.5°	11ER...
SER1010H11	10	10	100	10	0	1.5°	11ER...

SPARE PARTS



Designation	Clamping screw	Wrench
BC-SER12K16	CSTB-3.5	T-15F
SER**H11	SR M2.6-L6.7-S11	T-8/5

External grooving and threading toolholder



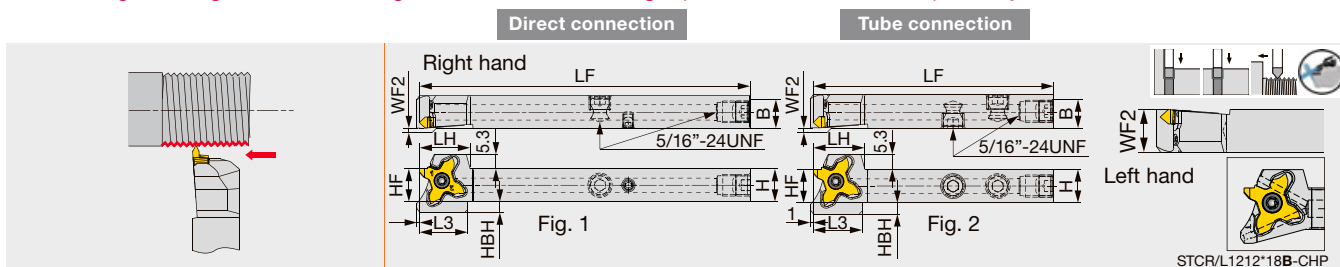
Designation	H	B	LF	LH	HF	WF	HBH	Insert	Torque*
STCR/L1010X18	10	10	120	18.5	10	10	4.5	TCT18...	1.2
STCR/L1212F18	12	12	85	18.5	12	12	2.5	TCT18...	1.2
STCR/L1212X18	12	12	120	18.5	12	12	2.5	TCT18...	1.2
STCR/L1616X18	16	16	120	18.5	16	16	-	TCT18...	1.2
STCR/L2020H18	20	20	100	18.5	20	20	-	TCT18...	1.2
STCR/L2020X18	20	20	120	23	20	25	-	TCT18...	1.2
STCR/L2525Z18	25	25	135	23	25	30	-	TCT18...	1.2

Torque* : Recommended clamping torque (N-m)

Note: Use the right-hand insert (TC*18R...) for a right-hand holder (STCR...); the left-hand insert (TC*18L...) for a left-hand holder (STCL...).

STCR/L-18-CHP

External grooving and threading toolholder, with high pressure coolant capability



Designation	H	B	LF	LH	HBL	HF	WF2**	HBH	Fig.	Insert	Torque*
STCR/L1012H18-CHP ⁽¹⁾	10	12	100	17.1	10	17.1	0/12	4	1	TCT18...	1.2
STCR/L1212F18B-CHP	12	12	120	18.5	17.5	12	0/12	4	2	TCT18...	1.2
STCR/L1212X18B-CHP ⁽¹⁾	12	12	120	18.5	17.5	12	0/12	4	1	TCT18...	1.2
STCR/L1616X18-CHP ⁽¹⁾	16	16	120	18.5	-	16	0/16	-	1	TCT18...	1.2

Torque* : Recommended clamping torque (N-m)

WF2** : The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.

(1) Compatible to the direct internal coolant supply system without the use of external coolant hose.

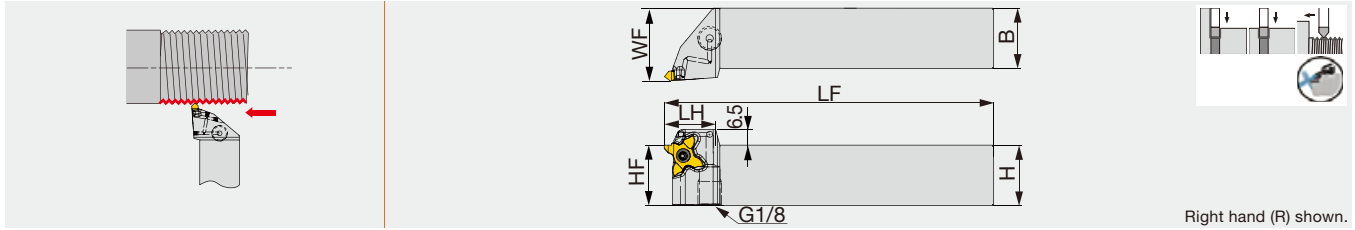
Note: This toolholder can be used with threading and grooving inserts.

Use the right-hand insert (TC*18R...) for a right-hand holder (STCR...); the left-hand insert (TC*18L...) for a left-hand holder (STCL...).

SPARE PARTS

Designation	Clamping screw	Wrench
STCL..., STCL**18-CHP	CSTC-4L100DR	T-1008/5
STCR..., STCR**18-CHP	CSTC-4L100DL	T-1008/5

External threading with high pressure coolant capability



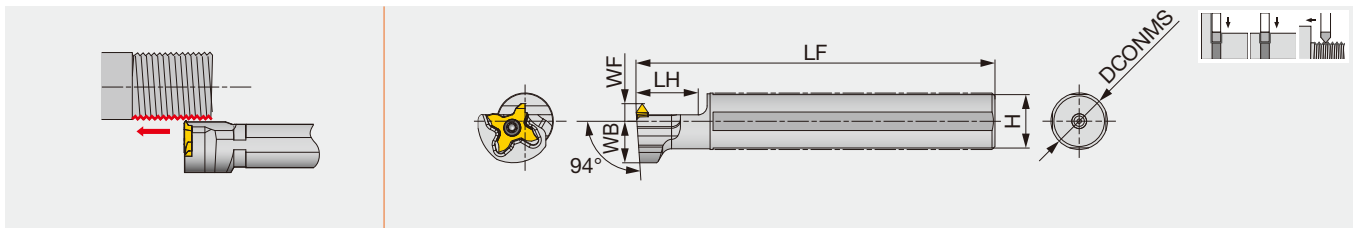
Designation	H	B	LF	LH	HBL	HF	WF	HBH	Insert	Torque*
STCR/L2020X18-CHP	20	20	120	23	-	20	25	-	TC*18...	1.2
STCR/L2525Z18-CHP	25	25	135	23	-	25	30	-	TC*18...	1.2

Torque* : Recommended clamping torque (N·m)

Note: Use the right-hand insert (TC*18R...) for a right-hand toolholders (STCR...); the left-hand insert (TC*18L...) for a left-hand holder (STCL...).

JS-STCL18

External grooving and threading toolholder with round shank



Designation	DCONMS	LF	LH	H	WB	WF	Insert	Torque*
JS14H-STCL18	14	100	20	13	14	6	TCT18R...	1.2
JS159F-STCL18	15.875	85	20	15	14	6	TCT18R...	1.2
JS16F-STCL18	16	85	20	15	14	6	TCT18R...	1.2
JS19G-STCL18	19.05	90	20	18	14	6	TCT18R...	1.2
JS19X-STCL18	19.05	120	20	18	14	6	TCT18R...	1.2
JS20G-STCL18	20	90	20	19	14	6	TCT18R...	1.2
JS20X-STCL18	20	120	20	19	14	6	TCT18R...	1.2
JS22X-STCL18	22	120	20	21	12.25	10	TCT18R...	1.2
JS25H-STCL18	25	100	20	24	12.25	10	TCT18R...	1.2
JS254X-STCL18	25.4	120	20	24	12.25	10	TCT18R...	1.2

Torque* : Recommended clamping torque (N·m)

Note: Use the right-hand insert (TC*18R...) for a left-hand holder (STCL...).

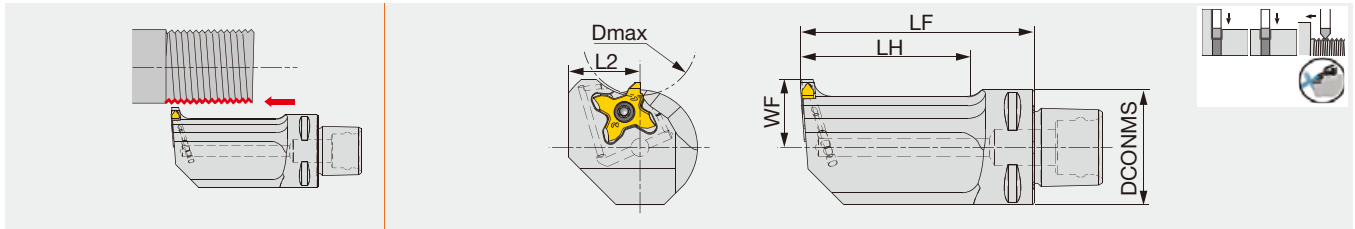
SPARE PARTS



Designation	Clamping screw	Wrench
STCL**18-CHP	CSTC-4L100DR	T-1008/5
STCR**18-CHP, JS**STCL18	CSTC-4L100DL	T-1008/5

C-STCFL-18-CHP

External grooving and threading toolholder, with high pressure coolant capability



Designation	DCONMS	LF	LH	L2	WF	Dmax	Insert	Torque*
C3STCFL18040-18-CHP	32	40	21.5	20	18	32	TC*18R...	1.2
C3STCFL18065-18-CHP	32	65	46.5	20	18	32	TC*18R...	1.2

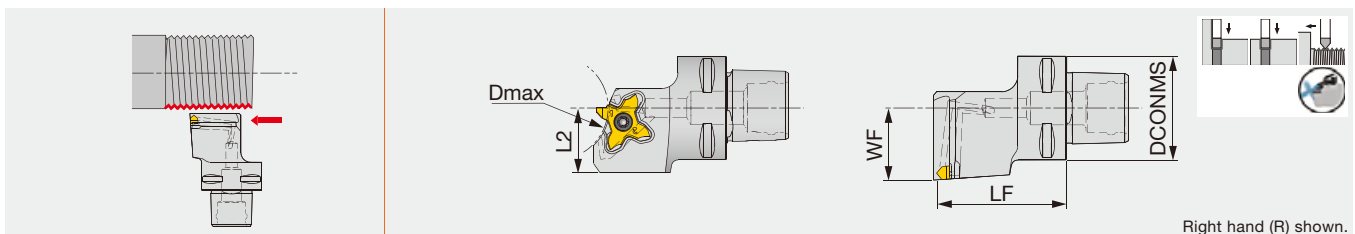
Torque* : Recommended clamping torque (N·m)

Applicable for 14 MPa coolant

Note: Use the right-hand insert (TC*18R...) for a left-hand holder (STCFL...).

C-STCR/L-18-CHP

External grooving and threading toolholder, with high pressure coolant capability



Designation	DCONMS	LF	L2	WF	Dmax	Insert	Torque*
C3STCR/L22040-18-CHP	32	40	20	22	32	TC*18...	1.2
C4STCR/L27050-18-CHP	40	50	25	27	75 ⁽¹⁾	TC*18...	1.2

Torque* : Recommended clamping torque (N·m)

Applicable for 14 MPa coolant

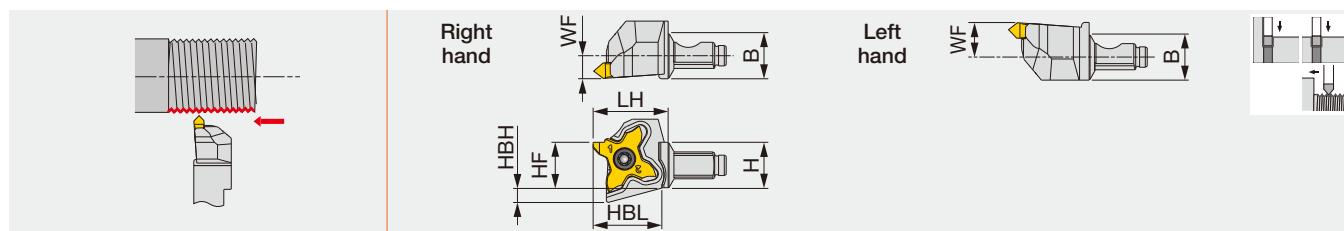
(1) The value for 3.5 mm groove depth. Dmax varies according to the grooving depth required. For further information, see Tungaloy Report #416 TetraMini-Cut/TetraForce-Cut.

Note: Use the right-hand insert (TC*18R...) for a right-hand holder (STCR...); the left-hand insert (TC*18L...) for a left-hand holder (STCL...).

SPARE PARTS

Designation	Clamping screw	Wrench
C*STCL*-18-CHP	CSTC-4L100DR	T-1008/5
C3STCFL*-18-CHP, C*STCR*-18-CHP	CSTC-4L100DL	T-1008/5

External grooving and threading head



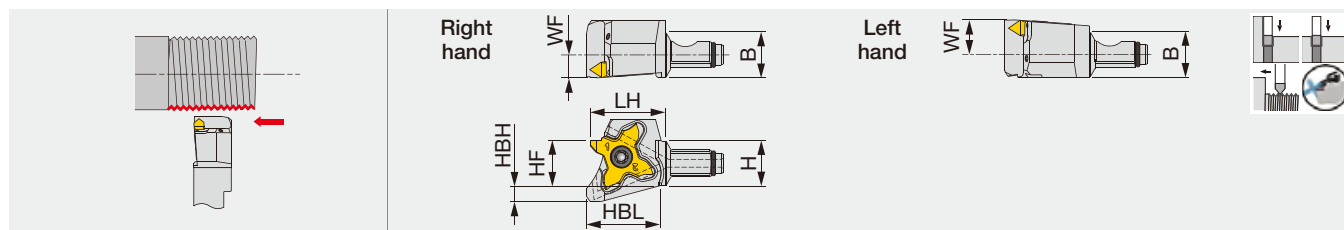
Designation	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR18	12	12	19.5	12	3.9	17.9	6	TC*18R...	1.2
QC12-STCL18	12	12	21	12	3.9	18.3	9	TC*18L...	1.2

Torque* : Recommended clamping torque (N·m)

Note: Use the right-hand insert (TC*18R...) for a right-hand holder (QC12-STCR...); the left-hand insert (TC*18L...) for a left-hand holder (QC12-STCL...).

QC12-STCR/L-CHP

External grooving and threading head, with high pressure coolant capability



Designation	H	B	LH	HF	HBH	HBL	WF	Insert	Torque*
QC12-STCR18-CHP	12	12	19.5	12	4.2	19.3	6	TC*18R...	1.2
QC12-STCL18-CHP	12	12	21	12	4.2	19.3	9	TC*18L...	1.2

Torque* : Recommended clamping torque (N·m)

Through-coolant head

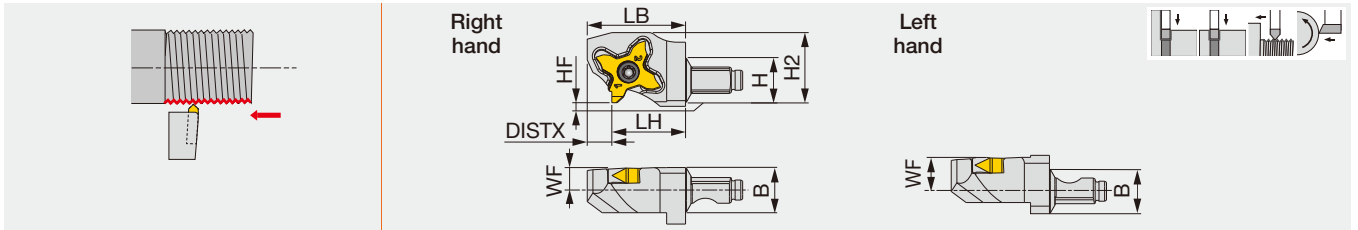
Note: Use the right-hand insert (TC*18R...) for a right-hand holder (QC12-STCR...); the left-hand insert (TC*18L...) for a left-hand holder (QC12-STCL...).

SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-STCR18	CSTC-4L100DL	T-1008/5	-
QC12-STCL18	CSTC-4L100DR	T-1008/5	-
QC12-STCR18-CHP	CSTC-4L100DL	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCL18-CHP	CSTC-4L100DR	T-1008/5	ORSS-0454.5X1.0NBR70

QC12-STCR/L-Y

Y-axis turning modular head for external grooving and threading



Designation	H	B	LH	HF	WF**	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y	12	12	19.5	0	6/9	26	18.6	6.5	TC*18...	1.2

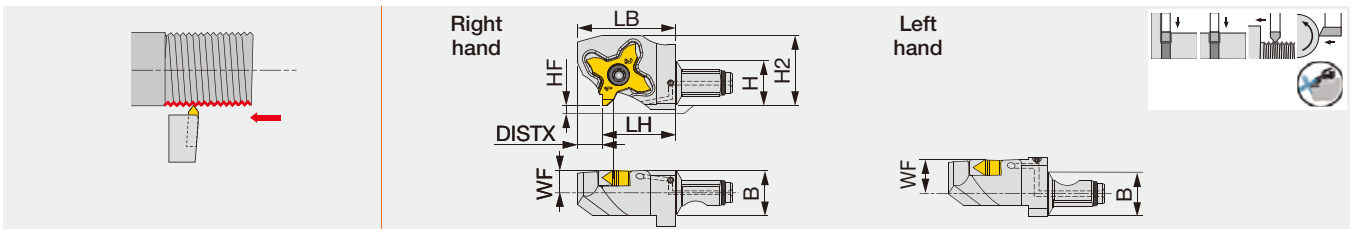
Torque* : Recommended clamping torque (N·m)

WF** : The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.

Note: Use the right-hand insert (TC*18R...) for a right-hand holder (QC12-STCR...); the left-hand insert (TC*18L...) for a left-hand holder (QC12-STCL...).

QC12-STCR/L-Y-CHP

Y-axis turning modular head for external grooving and threading, with high pressure coolant capability



Designation	H	B	LH	HF	WF**	LB	H2	DISTX	Insert	Torque*
QC12-STCR/L18-Y-CHP	12	12	19.5	0	6/9	26	18.6	6.5	TC*18...	1.2

Torque* : Recommended clamping torque (N·m)

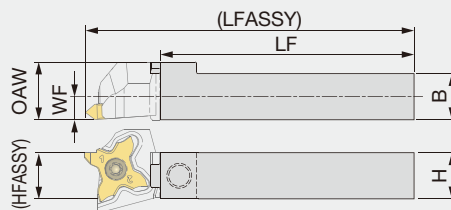
WF** : The first value before "/" indicates the WF for the right-hand holder and the second value after "/" for the left-hand holder.

Through-coolant head

Note: Use the right-hand insert (TC*18R...) for a right-hand holder (QC12-STCR...); the left-hand insert (TC*18L...) for a left-hand holder (QC12-STCL...).

SPARE PARTS

Designation	Clamping screw	Wrench	O-ring
QC12-STCR18-Y	CSTC-4L100DL	T-1008/5	-
QC12-STCL18-Y	CSTC-4L100DR	T-1008/5	-
QC12-STCR18-Y-CHP	CSTC-4L100DL	T-1008/5	ORSS-0454.5X1.0NBR70
QC12-STCL18-Y-CHP	CSTC-4L100DR	T-1008/5	ORSS-0454.5X1.0NBR70



Designation	H	B	WF	LF	OAW	HFASSY	LFASSY ⁽¹⁾	Torque*
QC-1212F	12	12	6	65	15	12	85	3
QC-1212X	12	12	6	100	15	12	120	3

Torque* : Recommended clamping torque (N-m)

(1) The size is true when the modular head with LH = 19.5 mm is mounted.

QC-1212-CHP

Shank for modular heads, with high pressure coolant capability

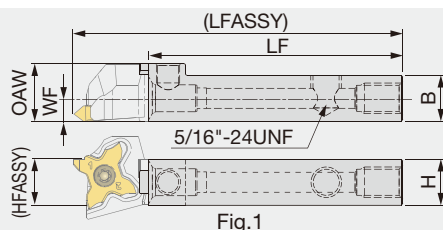


Fig.1

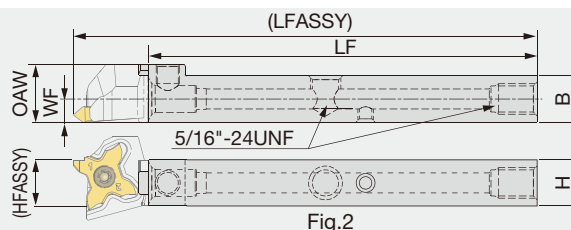


Fig.2

Designation	H	B	LF	WF	OAW	HFASSY	LFASSY ⁽¹⁾	Torque*	Fig.
QC-1212F-CHP	12	12	65	6	15	12	85	3	1
QC-1212X-CHP ^(*)	12	12	100	6	15	12	120	3	2

Torque* : Recommended clamping torque (N-m)

Through-coolant shank

(*) : Compatible to the direct internal coolant supply system without the use of external coolant hose.

(1) The size is true when the modular head with LH = 19.5 mm is mounted.

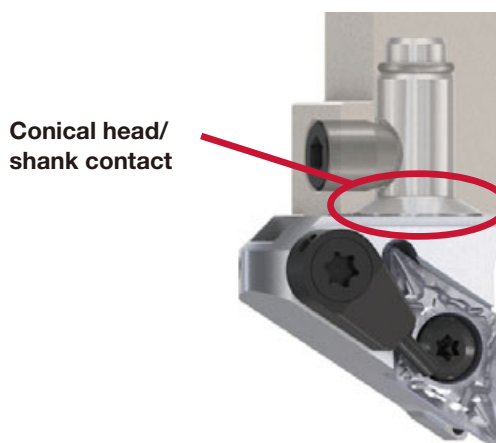
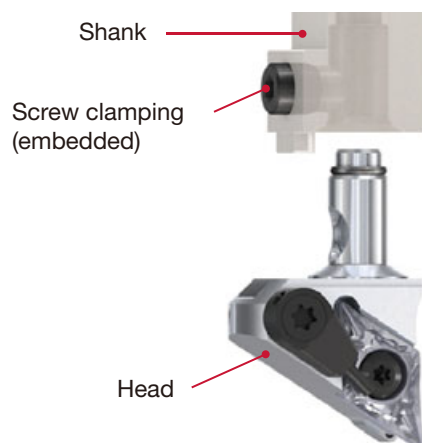
SPARE PARTS

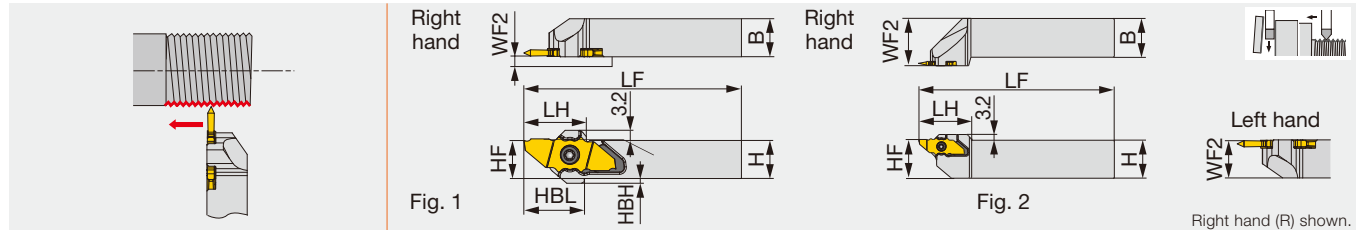
Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
QC-1212*	SRM6X0.5-26977	P-3	-	-	-	-
QC-1212F-CHP	SRM6X0.5-26977	P-3	SR5/16UNFTL360	P-4	-	-
QC-1212X-CHP	SRM6X0.5-26977	P-3	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

Unique coupling design

Simply loosen the clamping screw for easy tool exchanges.

Unique coupling design allows extremely high repeatability.





Designation	H	B	LF	LH	HF	WF2 ⁽¹⁾	HBL	HBH	Insert	Torque*	Fig.
JSXXR/L1010X09	10	10	118	17.65	10	0.2/9.8	17	3	JX**12...	1.2	1
JSXXR/L1212F09	12	12	83	17.65	12	0.2/11.8	17	1.5	JX**12...	1.2	1
JSXXR/L1212X09	12	12	118	17.65	12	0.2/11.8	17	1.5	JX**12...	1.2	1
JSXXR/L1616X09	16	16	118	17.65	16	0.2/15.8	-	-	JX**12...	1.2	1
JSXXR/L2020H09	20	20	98	20.5	20	0.2/19.8	-	-	JX**12...	1.2	1
JSXXR/L2525Z09	25	25	133	32	25	30	-	-	JX**12...	1.2	2

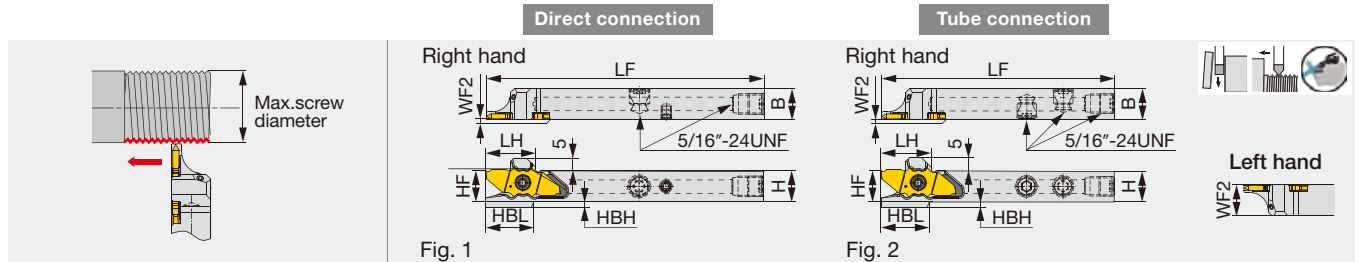
Torque* : Recommended clamping torque (N·m)

(1) The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.

Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

JSXXR/L-F/H/X-CHP

Parting and threading toolholder, with high pressure coolant capability



Designation	H	B	LF	LH	HF	WF2 ⁽¹⁾	HBL	HBH	Insert	Torque*	Fig.
JSXXR/L1012H09-CHP ⁽²⁾	10	12	100	17.2	10	0.2/11.8	16.7	3	JX**12...	1.2	1
JSXXR/L1212F09-CHP	12	12	83	17.4	12	0.2/11.8	16.8	2	JX**12...	1.2	2
JSXXR/L1212X09-CHP ⁽²⁾	12	12	118	17.4	12	0.2/11.8	16.8	2	JX**12...	1.2	1
JSXXR1616X09-CHP ^{(2),(3)}	16	16	118	17.4	16	0.2	16.7	2.5	JX**12...	1.2	1
JSXXR/L1616X09B-CHP ⁽²⁾	16	16	118	17.4	16	0.2/15.8	16.7	-	JX**12...	1.2	1

Torque* : Recommended clamping torque (N·m)

(1) The first value before "/" indicates the WF2 for the right-hand holder and the second value after "/" for the left-hand holder.

(2) Compatible to the direct internal coolant supply system without the use of external coolant hose.

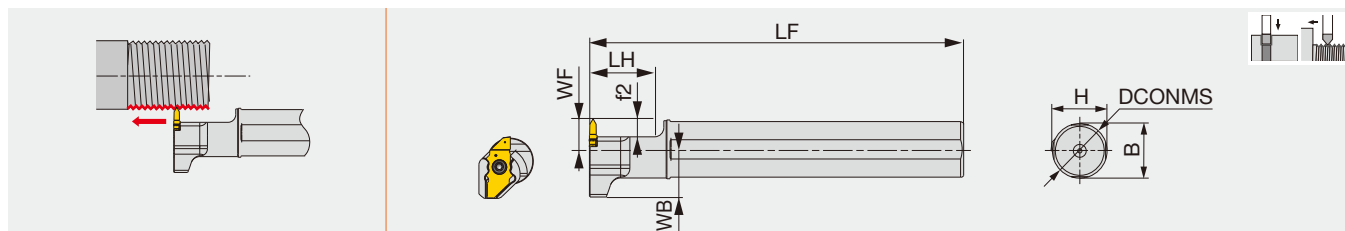
(3) To be replaced with the new design

Note: Use the right-hand insert (JX****R...) for a right-hand holder (JSXXR...); the left-hand insert (JX****L...) for a left-hand holder (JSXXL...).

SPARE PARTS

Designation	Clamping screw	Wrench 1	Coolant plug	Wrench 2	DirectJet plug	Wrench 3
JSXXR...	CSTC-4L100DL	T-1008/5	-	-	-	-
JSXXL...	CSTC-4L100DR	T-1008/5	-	-	-	-
JSXXR**F...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXL**F...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	-	-
JSXXR**H/X...	CSTC-4L100DL	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2
JSXXL**H/X...	CSTC-4L100DR	T-1008/5	SR5/16UNFTL360	P-4	SSHM4-6-TB	P-2

External threading toolholder, for 2 corner inserts

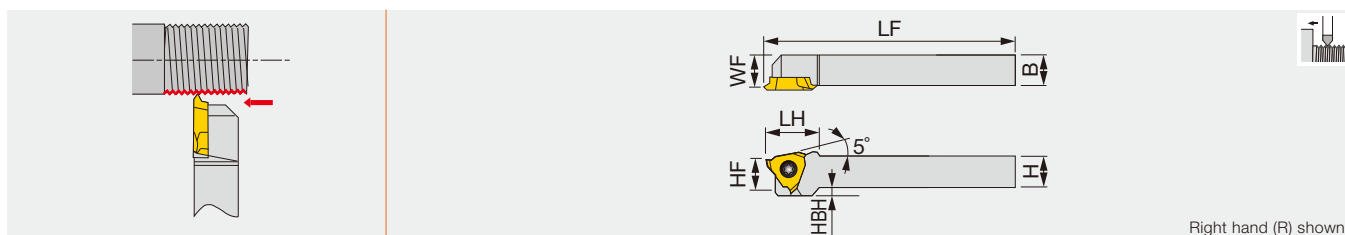


Designation	DCONMS	H	B	LF	LH	WB	WF	f2	Insert	Torque*
JS19G-SXXL09	19.05	18	18	90	21	15.43	8	4	JX**12...	1.2
JS19X-SXXL09	19.05	18	18	120	21	15.43	8	4	JX**12...	1.2
JS20G-SXXL09	20	19	19	90	21	15.4	8	4	JX**12...	1.2
JS20X-SXXL09	20	19	19	120	21	15.4	8	4	JX**12...	1.2
JS22X-SXXL09	22	21	21	120	21	15.4	8	4	JX**12...	1.2
JS25H-SXXL09	25	24	24	100	21	15.4	8	4	JX**12...	1.2
JS254X-SXXL09	25.4	24	24	120	21	15.4	8	4	JX**12...	1.2

Torque* : Recommended clamping torque (N-m)

J-SERIES
JSTTR/L

External toolholder for Swiss lathes



Right hand (R) shown.

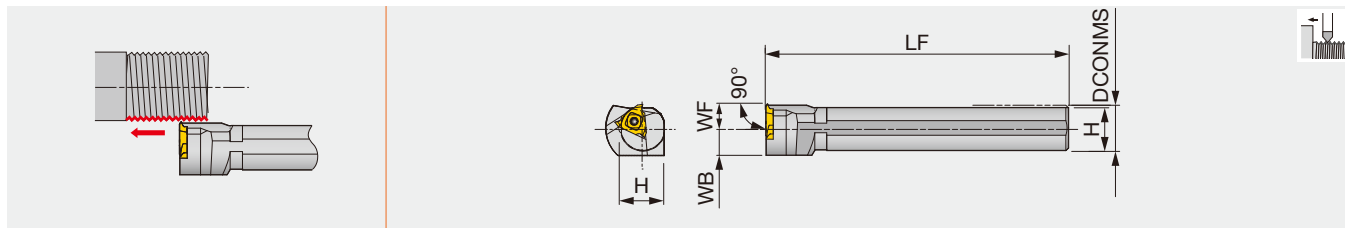
Designation	H	B	LF	LH	HF	WF	HBH	Insert
JSTTR/L1010X3	10	10	120	18.5	10	9.5	2	JTTR/L30...
JSTTR/L1212F3	12	12	85	18.5	12	11.5	-	JTTR/L30...
JSTTR/L1212X3	12	12	120	18.5	12	11.5	-	JTTR/L30...
JSTTR/L1616X3	16	16	120	16.5	16	15.5	-	JTTR/L30...

Recommended clamping torque: 1.2 N-m

SPARE PARTS

Designation	Clamping screw 1	Clamping screw 2	Wrench 1	Wrench 2	Wrench 2 (Optional)
JSTTR/L...	-	CSTB-4SD	-	T-8F	(T-8L)
JS**-SXXL09	CSTC-4L055L	-	T-1008/5	-	-

Reference pages: DuoJust-Cut : Inserts → **E012**
J-Series : Inserts → **E013**

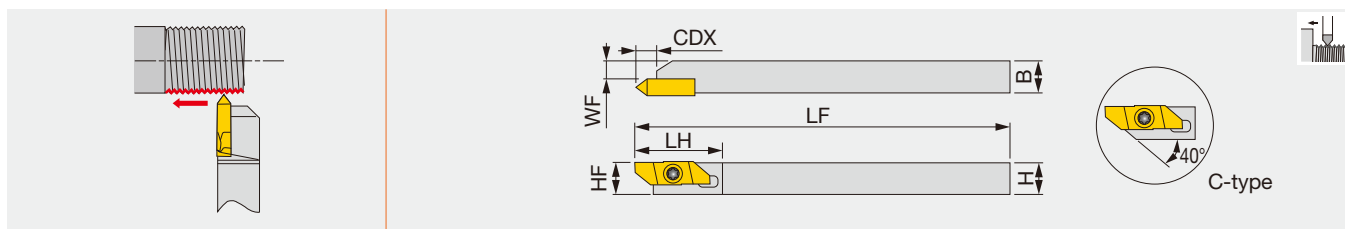


Designation	DCONMS	WF	LF	H	WB	Insert
JS19K-TTL3	19.05	10	125	18	11.5	JTTR30...
JS20K-TTL3	20	10	125	19	11.5	JTTR30...
JS22K-TTL3	22	10	125	21	11.5	JTTR30...
JS25K-TTL3	25.4	10	125	24	12.7	JTTR30...

Recommended clamping torque: 3.5 N·m

JSXBR

External threading toolholder for Swiss lathes



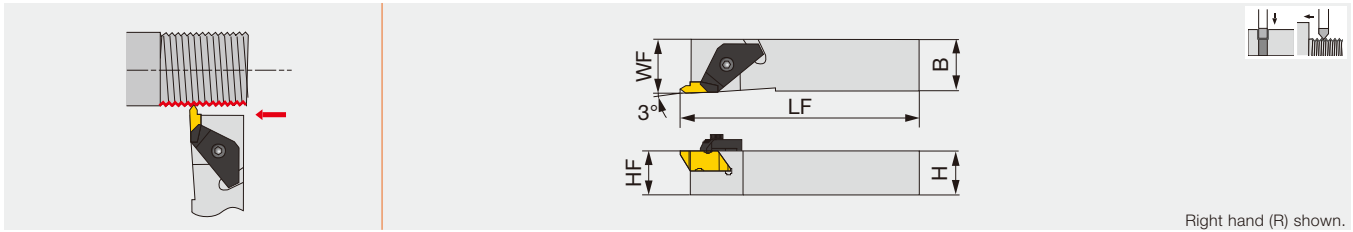
Designation	H	B	LF	LH	CDX	HF	WF	Insert
JSXBR1010K8-C	10	10	125	29	6.4	10	5.7	JXT*R...
JSXBR1212K8-C	12	12	125	29	6.4	12	7.7	JXT*R...
JSXBR1616K8	16	16	125	29	6.4	16	11.7	JXT*R...
JSXBR2020K8	20	20	125	29	6.4	20	15.7	JXT*R...
JSXBR2525K8	25	25	125	29	6.4	25	20.7	JXT*R...

Note: Can be wrenched also from the back with a double-head screw.
This toolholder can be used for JXB back-turning insert and JXT threading insert.

SPARE PARTS

Designation	Clamping screw	Wrench 1	Wrench 2 (Optional)
JS**-TTL3	CSTB-4S	T-15F	-
JSXBR...	CSTB-4SD	T-8F	(T-8L)

External grooving and threading toolholder, for Swiss lathes



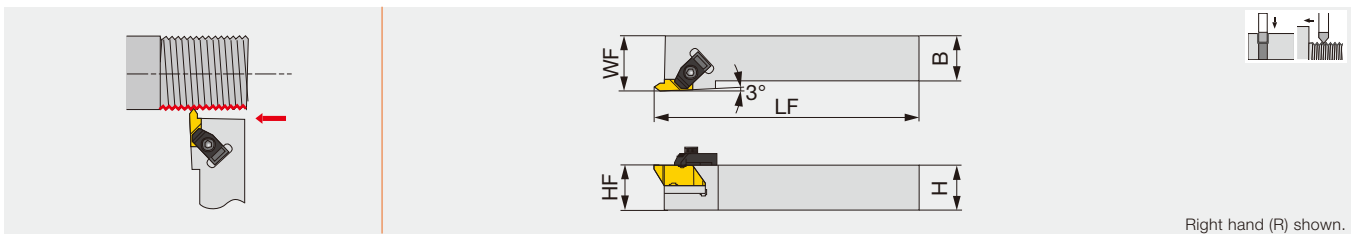
Designation	H	B	LF	HF	WF	Insert	Torque*
FLASR/L-1616M3	16	16	125	16	16	FLT-3...	3

Torque* : Recommended clamping torque (N·m)

Note: Use the right-hand insert (FLT-3R...) for a right-hand holder (FLASR...); the left-hand insert (FLT-3L...) for a left-hand holder (FLASL...).

FLSR/L

External grooving and threading toolholder



Designation	H	B	LF	HF	WF	Insert	Torque*
FLSR/L-2020M3	20	20	125	20	32	FLT-3...	3
FLSR/L-2525M3	25	25	150	25	32	FLT-3...	3

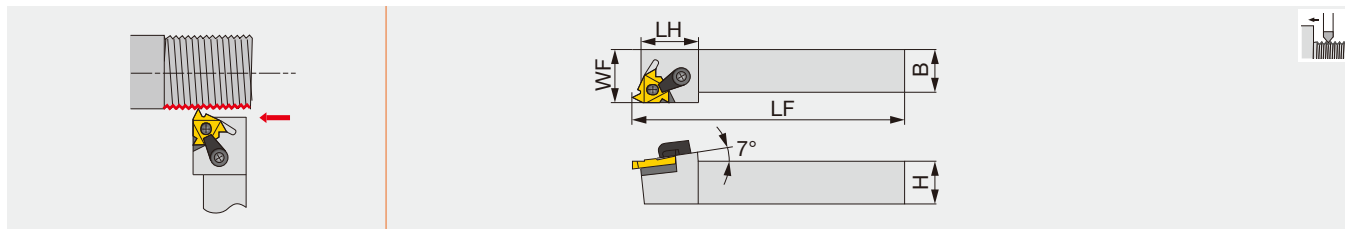
Torque* : Recommended clamping torque (N·m)

Note: Use the right-hand insert (FLT-3R...) for a right-hand holder (FLSR...); the left-hand insert (FLT-3L...) for a left-hand holder (FLSL...).

SPARE PARTS

Designation	Clamp	Clamping screw	Wrench
FLASR-1616M3	TF-184	S-412	5/32HEX
FLASL-1616M3	TF-185	S-412	5/32HEX
FLSR-****M3	TF-72	S-412	5/32HEX
FLSL-****M3	TF-73	S-412	5/32HEX

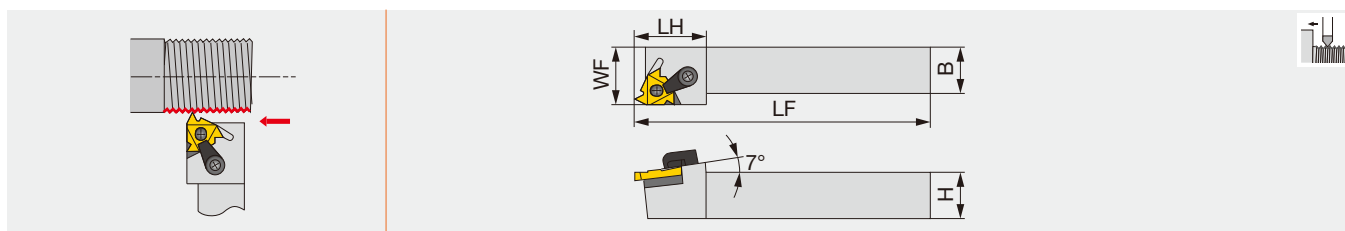
External threading toolholder, for single-sided lay down inserts



Designation	H	B	LF	LH	WF	Insert
MTVNR-2525M5	25	25	152	39	31.8	L535B**EXT-FC
MTVNR-3232M5	32	32	178	39	38.1	L535B**EXT-FC

MTVNR-54

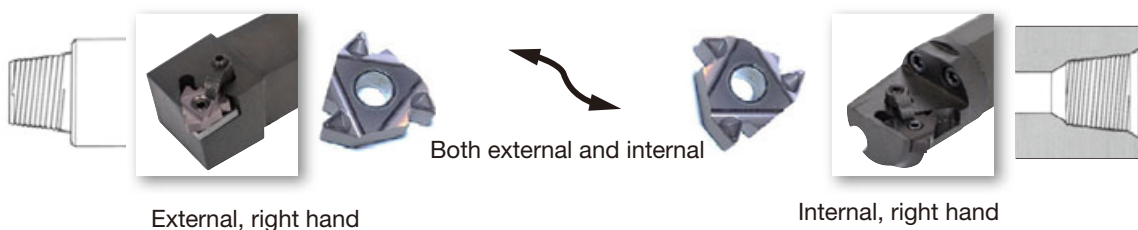
External threading toolholder, for double-sided lay down inserts



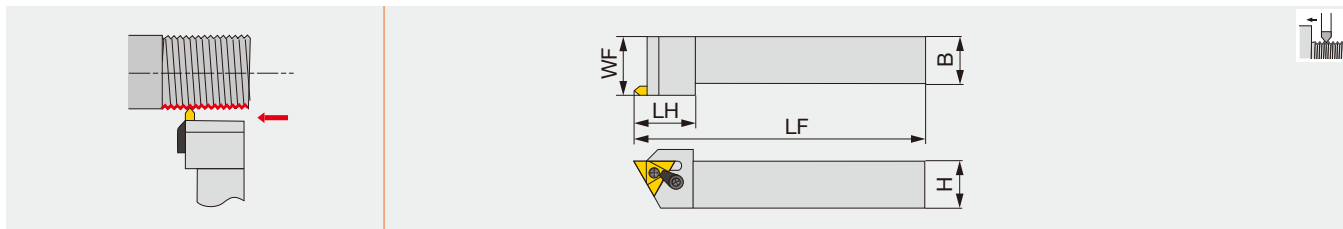
Designation	H	B	LF	LH	WF	Insert
MTVNR-3232M54	32	32	178	39	38.1	LDS54**FT-CB#...

SPARE PARTS

Designation	Shim	Lock pin	Clamp	Clamping screw	Wrench
MTVNR..., MTVNR-3232M54	LS53NOFORMEXT	NL-58	TC-250	STC-11	1/8HEX



Multi-clamp external threading toolholder, for on edge inserts

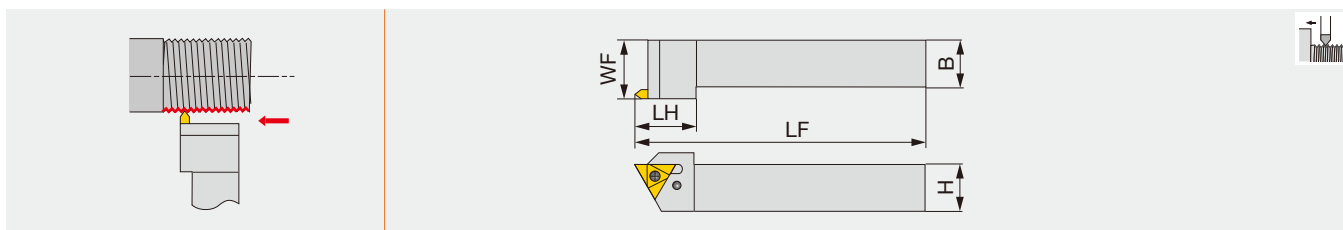


Designation	H	B	LF	LH	WF	Insert
MTVOR-2525M4	25	25	150	31	31.7	TNM*43...
MTVOR-3232M4	32	32	170	32	38.1	TNM*43...
MTVOR-2525M5	25	25	150	36	31.7	TNM*54...
MTVOR-3232M5	32	32	178	36	38.1	TNM*54...

Note: STVOR is recommended for TNMC insert although the insert can be used on multi-clamp (M type) toolholder.

STVOR

Screw-on external threading toolholder, for on edge inserts



Designation	H	B	LF	LH	WF	Insert
STVOR-2525M4	25	25	150	31	31.7	TNMC43...
STVOR-3232M4	32	32	178	31	38.1	TNMC43...
STVOR-2525M5	25	25	150	36	31.7	TNMC54...
STVOR-3232M5	32	32	178	36	38.1	TNMC54...

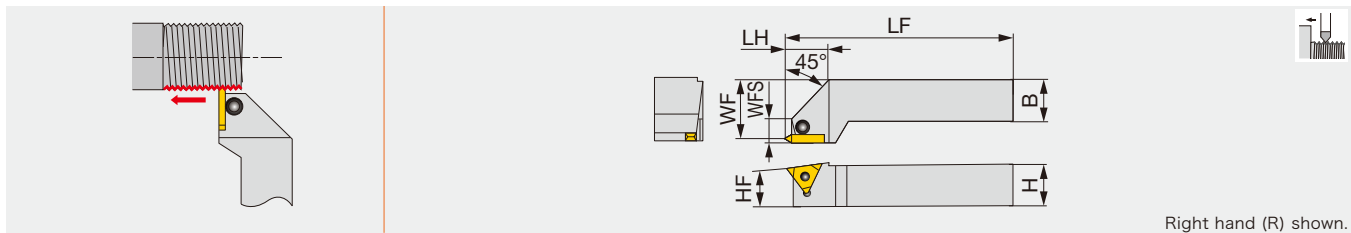
SPARE PARTS



Designation	Clamping screw	Lock pin	Wrench 1	Wrench 2	Clamp (Optional)	Clamping screw (Optional)
MTVOR-**M4	-	NL-44	-	3/32HEX	TC-190	STC-5
MTVOR-**M5	-	NL-56	-	1/8HEX	TC-250	STC-11
STVOR-**M4	SD2	-	T-20TORX	3/32HEX	TC-190	STC-9
STVOR-**M5	SD3	-	T-20TORX	1/8HEX	TC-250	STC-11

TT-R/LE

TT-type pin-lock external threading toolholder

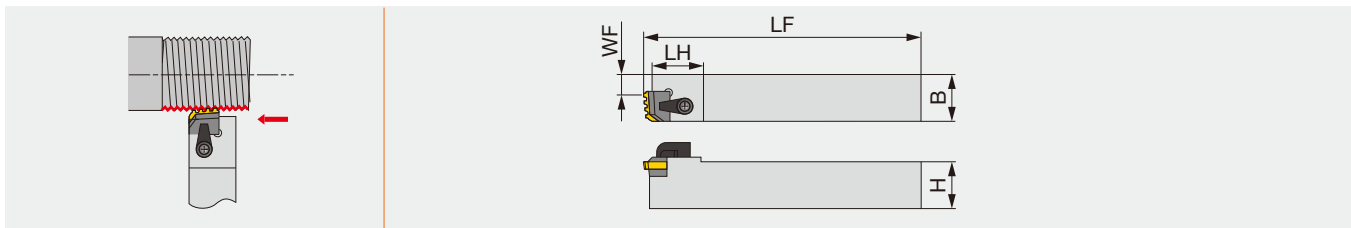


Right hand (R) shown.

Designation	H	B	LF	LH	HF	WF	WFS	Insert
TT-2525R/LE	25	25	150	25	25	32	15	TTR/L42...

CLVOR

External threading toolholder, for chaser inserts



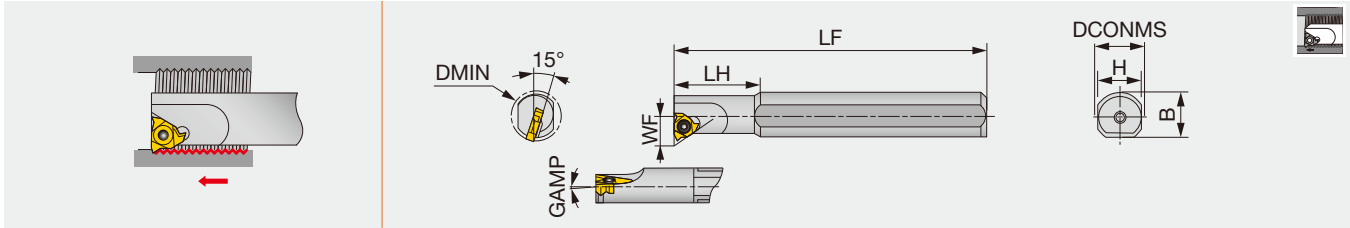
Designation	WF	LF	LH	H	B	Insert
CLVOR-25M6	16.1	177	32	25	25	CR...
CLVOR-32M6	16.1	177	32	32	32	CR...
CLVOR-40M8	21	170	38.1	40	40	CR-5B75-4E

SPARE PARTS

Designation	Shim	Shim screw	Clamp 1	Clamp 2	Clamping screw	Wrench 1	Wrench 2
TT-2525R/LE	-	-	CP91	-	DS-6	-	P-3
CLVOR-25M6	TF1207	SF80	-	TC-311	STC-4	T-25TORX	5/32HEX
CLVOR-32M6	TF1207	SF85	-	TC-311	STC-4	T-25TORX	5/32HEX
CLVOR-40M8	TF8132-E	SF60	-	TC-311	STC-4	T-20TORX	5/32HEX

Reference pages: TT-R/LE : Inserts → **E014, E016**
CLVOR : Inserts → **E026, E031 - E034**

Internal threading bars, Screw-on clamp



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	B	GAMP	Coolant hole	Insert
SIR0005H06	STEEL	6.4	12	4.3	100	12	11	-	1.5°	Without	06IR...
SIR0007K08	STEEL	8	16	5.3	125	18	15	-	1.5°	Without	08IR...
SIR0005H06CB	CARBIDE	6.4	6	4.3	100	25	5	-	1.5°	With	06IR...
SIR0007K08CB	CARBIDE	7.8	8	5.3	125	30	7	-	1.5°	With	08IR...

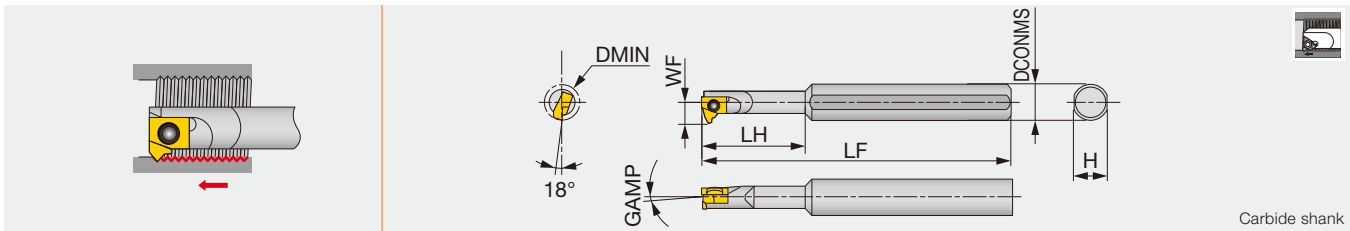
Note: Use the right-hand insert (**IR...) for a right-hand holder (SIR...).
Recommend over 1 mm clearance between internal diameter of thread and each tools DMIN.

Applicable thread size

Description	ISO metric	Unified IRA60 Insert	Parallel pipe IRA55 Insert
SIR0005H06...	≥ M9	≥ 3/8-24 UNF	≥ G1/8
SIR0007K08...	≥ M11	≥ 7/16-20 UNF	≥ G1/4

SNR-2/3

Screw-on internal threading toolholder



Designation	Material	DMIN	DCONMS	WF	LF	LH	H	GAMP	Insert
SNR0006H06-2	Steel	8	8	4.7	100	18	7	2°	6IR...
SNR0006H06-3	Steel	8	8	4.7	100	18	7	3°	6IR...
SNR0008H06-2	Steel	10	8	5.7	100	18	7	2°	6IR...
SNR0008H06-3	Steel	10	8	5.7	100	18	7	3°	6IR...
SNR0006K06SC-2	Carbide	8	8	4.7	125	30	7	2°	6IR...
SNR0006K06SC-3	Carbide	8	8	4.7	125	30	7	3°	6IR...
SNR0008K06SC-2	Carbide	10	8	5.7	125	18	7	2°	6IR...
SNR0008K06SC-3	Carbide	10	8	5.7	125	18	7	3°	6IR...

Note: Use the right-hand insert (6IR...) for a right-hand holder (SNR...).

SPARE PARTS

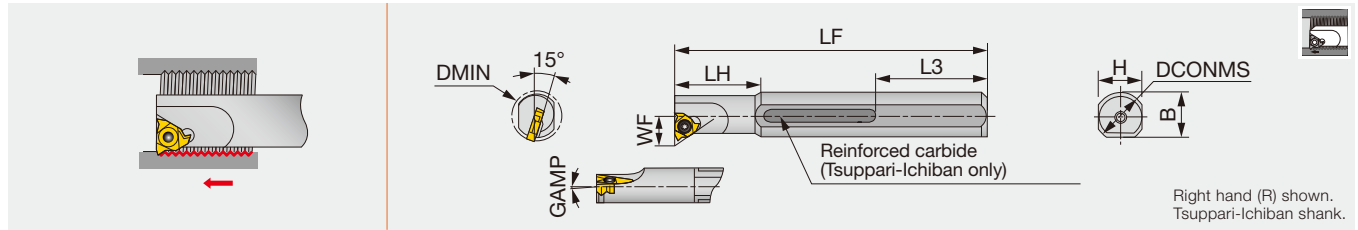


Designation	Clamping screw	Wrench
SIR0005H06...	SR 14-552	T-6F-S
SIR0007K08...	SR 14-558	T-6F-S
SNR0006H06...	CSTB-2L040	T-6F
SNR0008H06...	CSTB-2L	T-6F
SNR0006K06SC...	CSTB-2L040	T-6F
SNR0008K06SC...	CSTB-2L	T-6F

Reference pages: SIR : Inserts → **E010, E015, E017**
SNR-2/3 : Inserts → **E010, E015, E017, E023 - E025**

SNR/L

Screw-on internal threading toolholder



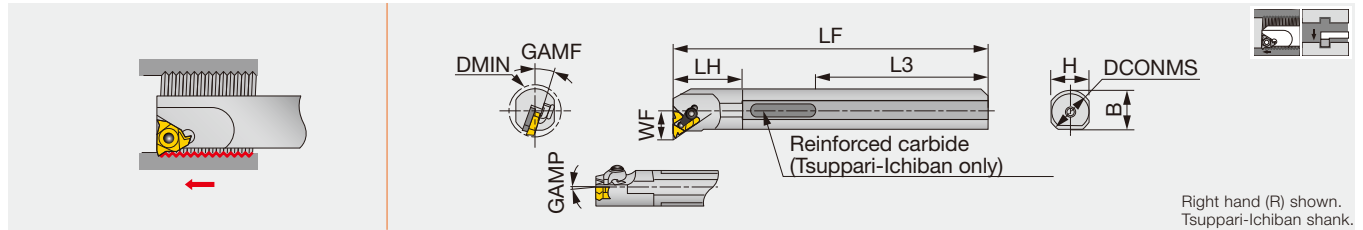
Designation	Material	DMIN	DCONMS	WF	LF	LH	L3	H	B	GAMP	Insert
TSNR0016Q16	Reinforced	19	16	10.6	180	40	59	15	-	1°	16IR...
TSNR0020R22	Reinforced	24	20	13.9	200	50	49	18	-	1°	22IR...
SNR/L0010K11	Steel	12	16	6.6	125	25	-	15	15.5	1°	11IR/L...
SNR0010K11-2	Steel	12	16	6.6	125	25	-	15	15.5	2°	11IR...
SNR0010K11-3	Steel	12	16	6.6	125	25	-	15	15.5	3°	11IR...
SNR/L0013L11	Steel	15	16	8.2	140	32.5	-	15	15.5	1°	11IR/L...
SNR0013L11-2	Steel	15	16	8.2	140	32.5	-	15	15.5	2°	11IR...
SNR0013L11-3	Steel	15	16	8.2	140	32.5	-	15	15.5	3°	11IR...
SNR/L0016M16	Steel	19	16	10.6	150	40	-	15	15.5	1°	16IR/L...
SNR0016M16-2	Steel	19	16	10.6	150	40	-	15	15.5	2°	16IR...
SNR0016M16-3	Steel	19	16	10.6	150	40	-	15	15.5	3°	16IR...
SNR/L0020Q22	Steel	24	20	13.9	180	50	-	18	19	1°	22IR/L...
SNR0020Q22-2	Steel	24	20	13.9	180	50	-	18	19	2°	22IR...
SNR0020Q22-3	Steel	24	20	13.9	180	50	-	18	19	3°	22IR...
SNR0010M11SC	Carbide	13	10	7.4	150	24	-	9	-	1°	11IR...
SNR0010M11SC-2	Carbide	13	10	7.4	150	24	-	9	-	2°	11IR...
SNR0010M11SC-3	Carbide	13	10	7.4	150	24	-	9	-	3°	11IR...
SNR0012P11SC	Carbide	15	12	8.5	170	28	-	11	-	1°	11IR...
SNR0012P11SC-2	Carbide	15	12	8.5	170	28	-	11	-	2°	11IR...
SNR0012P11SC-3	Carbide	15	12	8.5	170	28	-	11	-	3°	11IR...
SNR/L0016R16SC	Carbide	20	16	11.9	200	35	-	15	-	1°	16IR/L...
SNR0016R16SC-2	Carbide	20	16	11.9	200	35	-	15	-	2°	16IR...

Note: Use the right-hand insert (**IR...) for a right-hand holder (SNR...); the left-hand insert (**IL...) for a left-hand holder (SNL...).

SPARE PARTS

Designation	Clamping screw	Wrench
TSNR0016Q16	CSTB-3.5	T-15F
TSNR0020R22	CSTB-4	T-15F
SNR/L00**11...	CSTB-2.5	T-8F
SNR/L0016M16...	CSTB-3.5	T-15F
SNR/L0020Q22...	CSTB-4	T-15F
SNR00**11SC...	CSTB-2.5	T-8F
SNR/L0016R16SC...	CSTB-3.5	T-15F

Clamp-on internal threading toolholder (alternative clamping of screw-on or clamp-on only for DT type)



Right hand (R) shown.
Tsuppari-Ichiban shank.

Designation	Material	DMIN	DCONMS	WF	LF	LH	L3	H	B	GAMF	GAMP	Insert
TCNR0020R16DT	Reinforced	24	20	14	200	30	49	18	-	15°	1°	16IR...
TCNR0025S16DT	Reinforced	29	25	16.5	250	38	64	23	-	15°	1°	16IR...
TCNR0025S22DT	Reinforced	30	25	18.2	250	38	64	23	-	15°	1°	22IR...
CNR/L0020P16	Steel	24	20	14	170	30	-	18	19	15°	1°	16IR/L...
CNR/L0025R16	Steel	29	25	16.5	200	38	-	23	24	15°	1°	16IR/L...
CNR/L0032S16	Steel	37	32	20.1	250	48	-	30	31	15°	1°	16IR/L...
CNR/L0025R22	Steel	30	25	18.2	200	38	-	23	24	15°	1°	22IR/L...
CNR/L0032S22	Steel	38	32	21.9	250	48	-	30	31	15°	1°	22IR/L...
CNR0040T27	Steel	46	40	26.9	300	60	-	37	38.5	10°	1°	27IR...

Note: A clamp set consists of a clamp and a clamping screw.

A shim set consists of a shim and a shim screw to secure the shim to the shank.

Standard shims can be used on both right- and left-hand toolholders. Please use either of the sides depending on the tool hand.

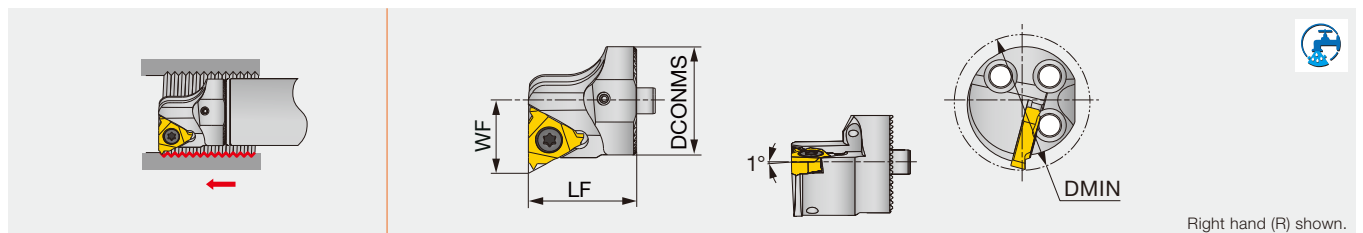
Use the right-hand insert (**IR...) for a right-hand holder (CNR...); the left-hand insert (**IL...) for a left-hand holder (CNL...).

When using DT type, please remove either the clamp set or the insert clamping screw.

BOREMEISTER

S-SNR-H

Screw-on clamp exchangeable boring head, for threading inserts

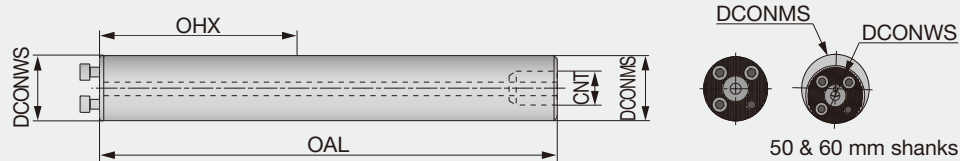


Designation	DMIN	DCONMS	WF	LF	Shank	Insert
S20-SNR16-H	25	20	14	25	D20	16IR...
S25-SNR16-H	32	25	17	25	D25	16IR...
S32-SNR16-H	40	32	22	32	D32	16IR...
S40-SNR16-H	50	40	27	32	D40, D50, D60	16IR...

SPARE PARTS									
Designation	Clamp set	Clamping screw	Shim screw	Shim	Shim set R	Shim set L	Wrench 1	Wrench 2	Wrench 3
TCNR002**16DT	CSP16	CSTB-3.5ST	DTS5-3.5	A16-1DT	-	-	P-3.5	T-15F	-
TCNR0025S22DT	CSP22	CSTB-4ST	DTS6-4	GX22-1DT	-	-	P-4	T-15F	T-20F
CNR/L**16	CSP16	-	-	-	A16-1	A16-1	-	T-15F	-
CNR/L**22	CSP22	-	-	-	NXN22-1	NXE22-1	-	T-20F	-
CNR0040T27	CSP27	-	-	-	NXN27-1	NXE27-1	P-4	-	-
S**-SNR16-H	-	CSTB-3.5	-	-	-	-	-	T-15F	-

Reference pages: CNR/L : Inserts → **E010 - E011, E015, E017 - E030, E032**
S-SNR-H : Inserts → **E010 - E011, E015, E018 - E030**

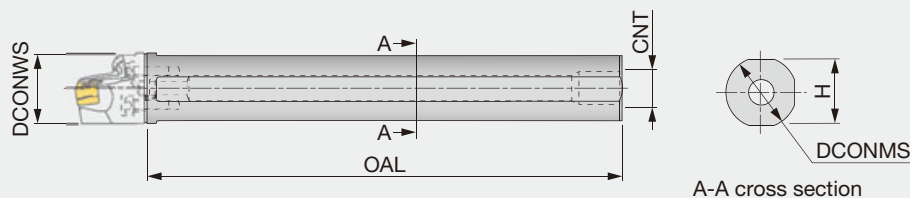
Anti-vibration bars with through coolant for interchangeable turning heads



Designation	Material	DCONWS	DCONMS	OAL	OHX	CNT
D16-L156-7D-C	Steel	16	16	156.3	92	G1/8
G16-L204-10D-E	Carbide	16	16	204.3	140	-
D20-L200-7D-C	Steel	20	20	200.3	120	G1/4
G20-L260-10D-E	Carbide	20	20	260.3	180	-
D25-L255-7D-C	Steel	25	25	257.5	155	G1/4
D25-L330-10D-C	Steel	25	25	332.5	230	G1/4
D32-L320-7D-C	Steel	32	32	323	192	G3/8
D32-L416-10D-C	Steel	32	32	419	288	G3/8
D40-L408-7D-C	Steel	40	40	411	248	G1/2
D40-L528-10D-C	Steel	40	40	531	368	G1/2
D50-L518-7D-C	Steel	40	50	523	318	G1/2
D50-L668-10D-C	Steel	40	50	673	468	G1/2
D60-L628-7D-C	Steel	40	60	633	388	G3/4
D60-L808-10D-C	Steel	40	60	813	568	G3/4

D#4D-SH

Steel shank for internal turning, with through coolant

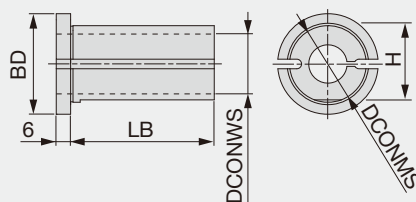


Designation	Material	DCONWS	DCONMS	OAL	CNT	H
D16-L105-4D-SH	Steel	16	16	105	UNC-2B 3/8"-16	15
D20-L140-4D-SH	Steel	20	20	140	UNFC-2B 3/8"-24	18
D25-L200-4D-SH	Steel	25	25	200	UNF-2B 1/2"-20	23
D32-L218-4D-SH	Steel	32	32	218	UNF-2B 1/2"-20	29
D40-L283-4D-SH	Steel	40	40	283	UNF-2B 1/2"-20	36

SPARE PARTS



Designation	Clamping screw	Wrench
D16-L..., G16-L..., D16**4D-SH	SRM3X10DIN912	HW2.5
D20-L..., G20-L..., D20**4D-SH	SR55-2M3.5X10	HW2.5
D25-L..., D25**4D-SH	SRM4X12DIN912	HW3.0
D32-L..., D32**4D-SH	SRM5X12DIN912	HW4.0
D40-L..., D50-L..., D60-L..., D40**4D-SH	SRM6X16DIN912-12.9	HW5.0



Designation	DCONWS	DCONMS	BD	LB	H
RSL-32-16-L66	16	32	42	60	31
RSL-32-20-L66	20	32	42	60	31
RSL-32-25-L66	25	32	42	60	31
RSL-40-16-L76	16	40	50	70	38.5
RSL-40-20-L76	20	40	50	70	38.5
RSL-40-25-L76	25	40	50	70	38.5

C#-SH-CHP / C#-SH-E-CHP

PSC compatible adapter with steel or carbide core

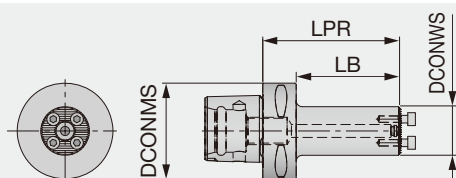


Fig. 1

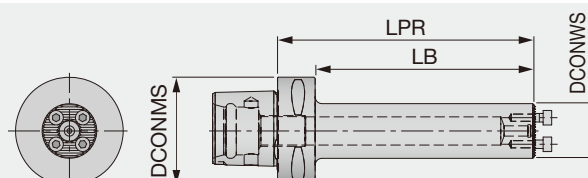


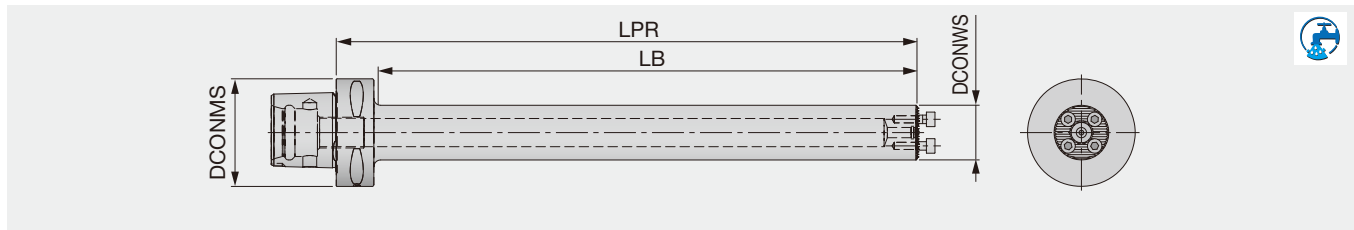
Fig. 2

Designation	Material	DCONWS	DCONMS	LPR	LB	Fig
C4-SH-D16-2.5D-CHP	Steel	16	40	40	20	1
C4-SH-D20-2.5D-CHP	Steel	20	40	50	30	1
C4-SH-D25-2.5D-CHP	Steel	25	40	55	35	1
C4-SH-D32-2.5D-CHP	Steel	32	40	75	55	1
C4-SH-D40-3D-CHP	Steel	40	40	80	80	1
C6-SH-D20-5D-E-CHP	Carbide	20	63	100	78	2
C6-SH-D25-5D-E-CHP	Carbide	25	63	115	93	2
C6-SH-D32-5D-E-CHP	Carbide	32	63	150	128	2
C6-SH-D40-5D-E-CHP	Carbide	40	63	185	163	2

SPARE PARTS



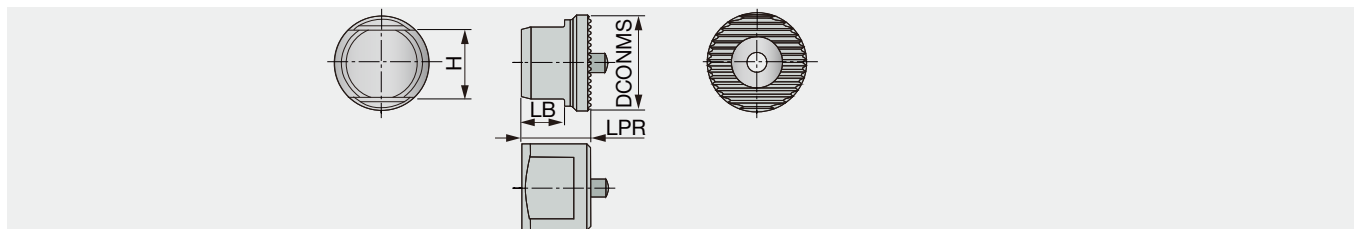
Designation	Clamping screw	Wrench
C4**D16...	SRM3X10DIN912	HW2.5
C4/C6**D20...	SR55-2M3.5X10	HW2.5
C4/C6**D25...	SRM4X12DIN912	HW3.0
C4/C6**D32...	SRM5X12DIN912	HW4.0
C4/C6**D40...	SRM6X16DIN912-12.9	HW5.0



Designation	Material	DCONWS	DCONMS	LPR	LB	WT (kg)
C6-D25-L230-9D-C	Steel	25	63	230.5	200.1	1.65
C6-D32-L288-9D-C	Steel	32	63	288.5	259.5	2.73
C6-D40-L368-9D-C	Steel	40	63	368.5	339	4.45

AVC-SET

Center height set up device



Designation	DCONMS	H	LPR	LB	Applicable shank
AVC-SET 16-25	20	15	14.5	8.9	16, 20, 25
AVC-SET 32-60	29	16	17.5	11.43	32, 40, 50, 60

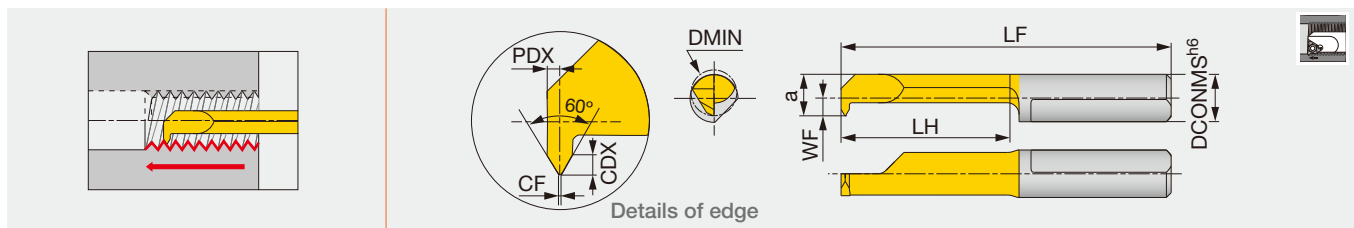
SPARE PARTS

Designation	Clamping screw	Wrench
C6-D25...	SRM4X12DIN912	HW3.0
C6-D32...	SRM5X12DIN912	HW4.0
C6-D40...	SRM6X16DIN912-12.9	HW5.0

TINYM^{INI}TURN

TBIR

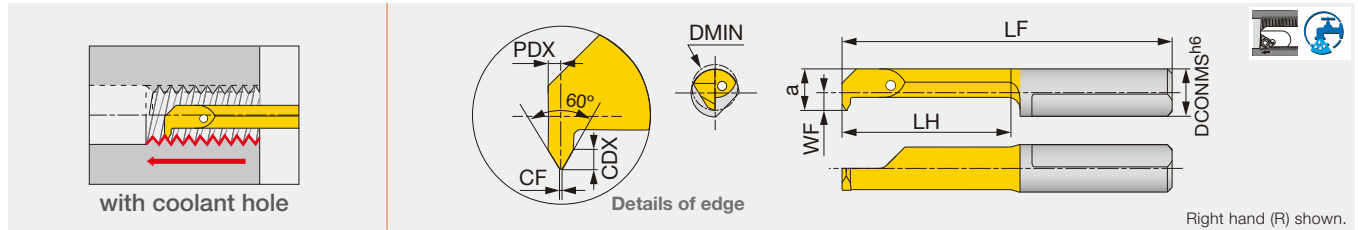
Solid boring bar for internal threading



Designation	SH725	Pitch	DMIN	CF- ⁰ _{0.02}	DCONMS	WF	a	LF	LH	CDX	PDX
TBIR04140050-D040	●	0.5	4	0.06	4	1.5	3.5	30	14	0.3	0.35
TBIR07140050-D050	●	0.5	5	0.06	7	0.9	4.4	30	14	0.3	0.35
TBIR07140075-D050	●	0.75	5	0.09	7	0.9	4.4	30	14	0.4	0.45
TBIR07140100-D048	●	1	4.8	0.12	7	0.9	4.4	30	14	0.6	0.55
TBIR07140100-D060	●	1	6	0.12	7	1.8	5.3	30	14	0.6	0.55
TBIR07140150-D060	●	1.5	6	0.18	7	1.8	5.3	30	14	0.8	0.75

● : Line up

Solid boring bars for threading (metric)



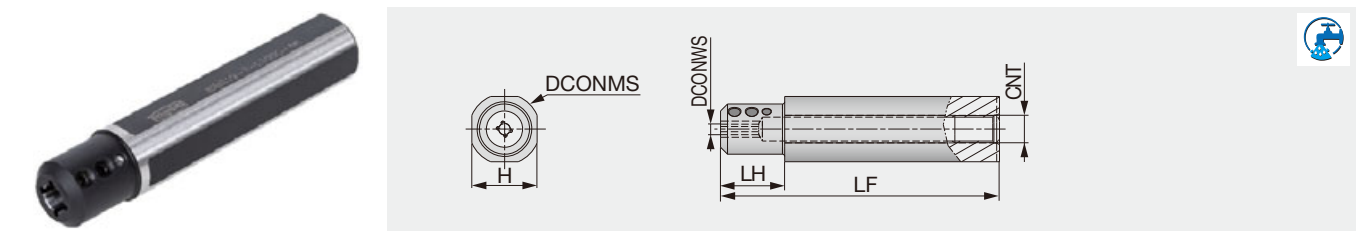
Right hand (R) shown.

Designation	SH730	Pitch	DMIN	CF $\frac{0}{0.02}$	DCONMS	WF	a	LF	LH	CDX	PDX
JBIR04140050-D040	●	0.5	4	0.06	4	1.5	3.5	30	14	0.3	0.35
JBIR07140050-D050	●	0.5	5	0.06	7	0.9	4.4	30	14	0.3	0.35
JBIR07140075-D050	●	0.75	5	0.09	7	0.9	4.4	30	14	0.4	0.45
JBIR07140100-D048	●	1	4.8	0.12	7	0.9	4.4	30	14	0.6	0.55
JBIR07140100-D060	●	1	6	0.12	7	1.8	5.3	30	14	0.6	0.55
JBIR07140125-D060	●	1.25	6	0.15	7	1.8	5.3	30	14	0.7	0.65
JBIR07140150-D060	●	1.5	6	0.18	7	1.8	5.3	30	14	0.8	0.75
JBIR07140150-D070	●	1.5	7	0.18	7	2.8	6.3	30	14	0.8	0.75

● : Line up

JBBS-4N

Sleeve for internal coolant supply with 4 coolant holes



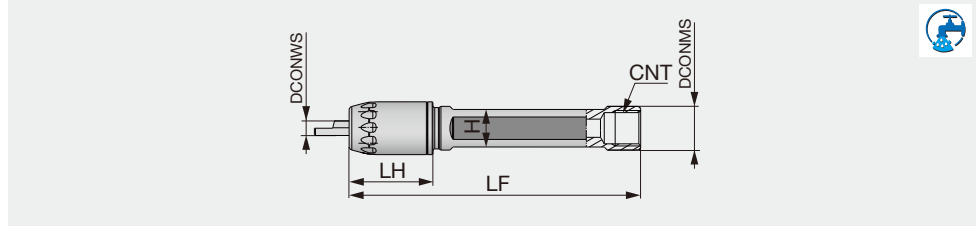
Designation	DCONMS	DCONWS	LF	LH	H	CNT
JBBS12-4-L80C-4N	12	4	80	10	10.3	Rc1/16
JBBS127-4-L80C-4N	12.7	4	80	10	11.6	Rc1/16
JBBS14-4-L80C-4N	14	4	80	10	12	Rc1/8
JBBS159-4-L100C-4N	15.875	4	100	10	14.58	Rc1/8
JBBS159-7-L100C-4N	15.875	7	100	10	14.58	Rc1/8
JBBS16-4-L100C-4N	16	4	100	10	15	Rc1/8
JBBS16-7-L100C-4N	16	7	100	10	15	Rc1/8
JBBS19-4-L100C-4N	19.05	4	100	20	17.2	Rc1/8
JBBS19-7-L100C-4N	19.05	7	100	20	17.2	Rc1/8
JBBS20-4-L100C-4N	20	4	100	20	18	Rc1/8
JBBS20-7-L100C-4N	20	7	100	20	18	Rc1/8
JBBS22-4-L100C-4N	22	4	100	20	20	Rc1/8
JBBS22-7-L100C-4N	22	7	100	20	20	Rc1/8
JBBS25-4-L100C-4N	25	4	100	23	23	Rc1/8
JBBS25-7-L100C-4N	25	7	100	23	23	Rc1/8
JBBS254-4-L100C-4N	25.4	4	100	23	23.4	Rc1/8
JBBS254-7-L100C-4N	25.4	7	100	23	23.4	Rc1/8

SPARE PARTS

Designation	Clamping screw	Wrench
JBBS**-4-L***C-4N	SSHM5-6PF-S	P-2.5
JBBS**-7-L***C-4N	SSHM5-4PF-S	P-2.5

JBBSA-C

Collet chuck sleeve with internal coolant supply



Designation	DCONMS	DCONWS	LF	LH	H	CNT
JBBSA12-4-L80C	12	4	80	23	10.3	Rc1/8
JBBSA127-4-L80C	12.7	4	80	23	11.6	Rc1/8
JBBSA14-4-L80C	14	4	80	23	12	Rc1/8
JBBSA159-4-L100C	15.875	4	100	23	14	Rc1/8
JBBSA159-7-L100C	15.875	7	100	23	14	Rc1/8
JBBSA16-4-L100C	16	4	100	23	14	Rc1/8
JBBSA16-7-L100C	16	7	100	23	14	Rc1/8
JBBSA19-4-L120C	19.05	4	120	23	17.2	Rc1/8
JBBSA19-7-L120C	19.05	7	120	23	17.2	Rc1/8
JBBSA20-4-L120C	20	4	120	23	18	Rc1/8
JBBSA20-7-L120C	20	7	120	23	18	Rc1/8
JBBSA22-4-L135C	22	4	135	23	20	Rc1/8
JBBSA22-7-L135C	22	7	135	23	20	Rc1/8
JBBSA25-4-L135C	25	4	120	23	23	Rc1/8
JBBSA25-7-L135C	25	7	120	23	23	Rc1/8
JBBSA254-4-L120C	25.4	4	120	23	23.4	Rc1/8
JBBSA254-7-L120C	25.4	7	120	23	23.4	Rc1/8

SPARE PARTS



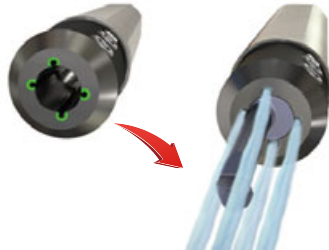
Designation	Cap	Wrench
JBBSA**-4-L...	CAP-A-4	WRENCH-A-4
JBBSA**-7-L...	CAP-A-7	WRENCH-A-7

■ New sleeve with four coolant holes for optimal performance

- Optimum sleeve option for all boring operations. Sleeves with four coolant holes can be used with all TinyMini-Turn tools
- 4 streams of coolant jets are directed to the cutting point, improving chip evacuation
- Sufficient coolant supply eliminates chip bird-nesting on the tools or workpiece, enabling trouble-free, unattended operation over an extended time
- Significantly prolongs tool life

Internal coolant sleeve

First recommendation!

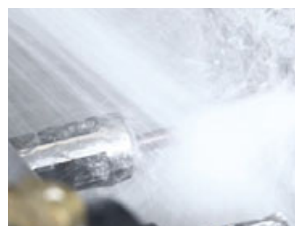


Excellent chip evacuation



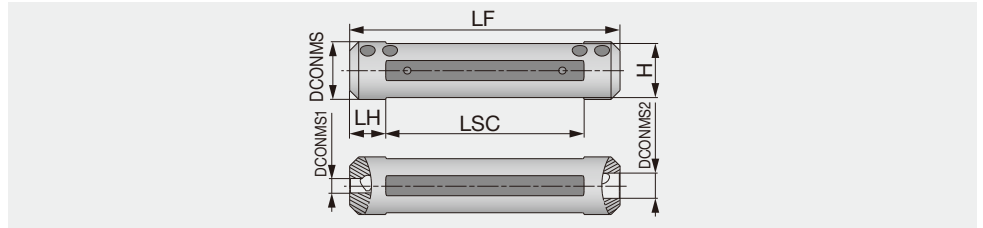
- No chip jamming
- No machine stoppage
- No downtime

Conventional (External coolant)



- Chip jamming
- Increased machine downtime

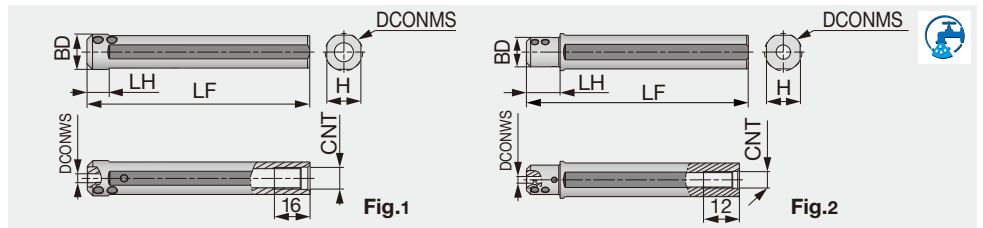
Sleeve for external coolant supply



Designation	DCONMS	DCONWS1	DCONWS2	LF	LH	LSC	H
JBBS12-4-4	12	4	4	75	10	55	10.3
JBBS127-4-4	12.7	4	4	76.2	10	56.2	11.6
JBBS14-4-4	14	4	4	75	10	55	12
JBBS159-4-7	15.875	4	7	76.2	10	56.2	14
JBBS16-4-7	16	4	7	75	10	55	15
JBBS19-4-7	19.05	4	7	89	10	69	17.2
JBBS20-4-7	20	4	7	90	10	70	18
JBBS22-4-7	22	4	7	90	10	70	20
JBBS25-4-7	25	4	7	100	10	80	23
JBBS254-4-7	25.4	4	7	90	10	70	23.4

JBBS-C

Sleeve for internal coolant supply

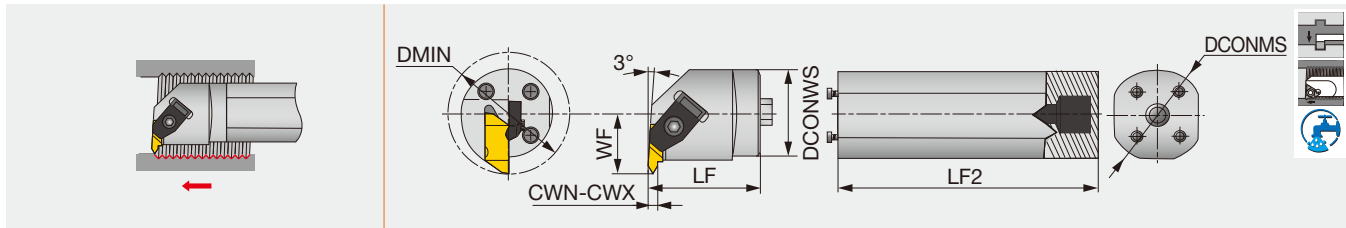


Designation	DCONMS	BD	DCONWS	LF	LH	H	CNT	Fig
JBBS159-4-L100C	15.875	15.875	4	100	10	14.58	Rc1/8	1
JBBS159-7-L100C	15.875	15.875	7	100	10	14.58	Rc1/8	1
JBBS16-4-L100C	16	16	4	100	10	15	Rc1/8	1
JBBS16-7-L100C	16	16	7	100	10	15	Rc1/8	1
JBBS19-4-L100C	19.05	17.5	4	100	20	17.2	Rc1/8	2
JBBS19-7-L100C	19.05	17.5	7	100	20	17.2	Rc1/8	2
JBBS20-4-L100C	20	17.5	4	100	20	18	Rc1/8	2
JBBS20-7-L100C	20	17.5	7	100	20	18	Rc1/8	2
JBBS22-4-L100C	22	17.5	4	100	20	20	Rc1/8	2
JBBS22-7-L100C	22	17.5	7	100	20	20	Rc1/8	2
JBBS25-4-L100C	25	18	4	100	23	23	Rc1/8	2
JBBS25-7-L100C	25	18	7	100	23	23	Rc1/8	2
JBBS254-4-L100C	25.4	18	4	100	23	23.4	Rc1/8	2
JBBS254-7-L100C	25.4	18	7	100	23	23.4	Rc1/8	2

SPARE PARTS



Designation	Clamping screw	Wrench
JBBS12-4-4, JBBS14-4-4 JBBS**-7-L100C	SSHM5-4PF-S	P-2.5
JBBS127-4-4, JBBS**-4-7 JBBS**-4-L100C	SSHM5-6PF-S	P-2.5



Designation	DMIN	DCONWS	LF	WF	Insert	Torque*
HS40-FLER3W	56.1	40	41.3	25.4	FLT-3L...	3
HS50-FLER3W	70.1	50	41.9	35	FLT-3L...	3

Torque* : Recommended clamping torque (N-m)

Note: Use the left-hand insert (FLT-3L...) for a right-hand holder (HS**-FLER...).

SPARE PARTS

Designation	Clamp	Clamping screw 2	Wrench
HS40-FLER3W	TF-73	S-412	5/32HEX
HS50-FLER3W	TF-73	S-412	5/32HEX

Shank

Designation	DCONMS	LF2
S-570-40M-40	40	273
S-570-50M-50	50	366

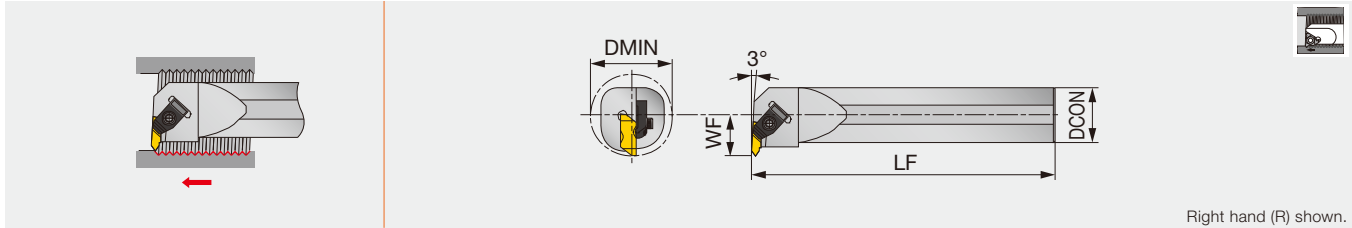
Spare parts

Designation	Clamping screw	Wrench
S-570-40M-40	SS100	5/32HEX
S-570-50M-50	SS94	1/4EX

TUNG-CLAMP

A_M-FLER/L

Internal grooving and threading toolholder



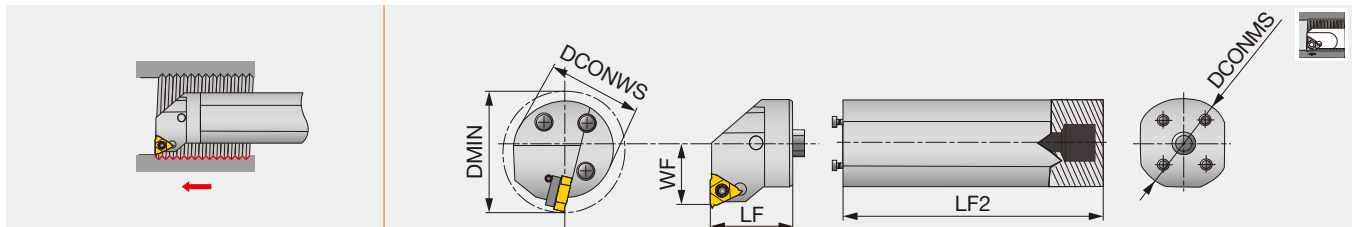
Right hand (R) shown.

Designation	Pitch	DMIN	DCON	LF	WF	Insert
A25M-FLER/L3	2.11 - 5.08	34.9	25	300	17.7	FLT-3...
A32M-FLER/L3	2.11 - 5.08	44.5	32	350	22.1	FLT-3...
A40M-FLER3	2.11 - 5.08	50.8	40	350	24.5	FLT-3L...

TUNGTHREAD

HS-LNFR-53

Head exchangeable internal threading, for single-sided lay down inserts



Designation	DMIN	DCONWS	WF	LF	Insert
HS40-LNFR-53	50	40	28.7	41.3	L535B**INT-FC
HS50-LNFR-53	63	50	32.7	41.3	L535B**INT-FC

SPARE PARTS

Designation	Lock pin	Clamp 1	Clamp 2	Clamping screw 1	Clamping screw 2	Wrench
A**M-FLER3	-	TF-73	-	S-412	-	5/32HEX
A**M-FLEL3	-	TF-72	-	S-412	-	5/32HEX
HS**-LNFR-53	NL-56	-	TC-250	-	STC-11	1/8HEX

Shank

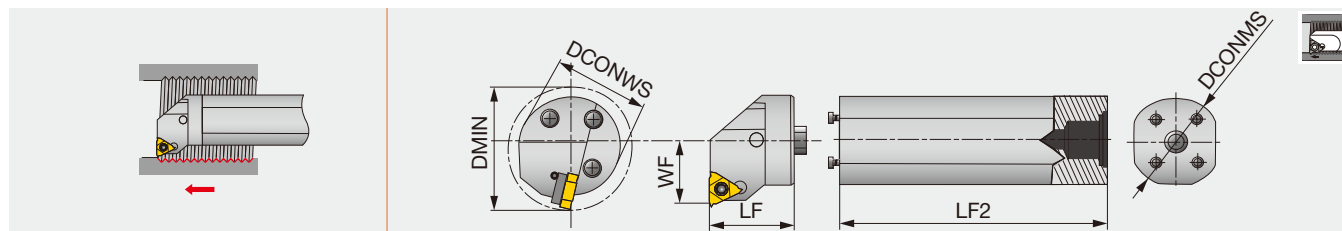
Designation	DCONMS	LF2
S-570-40M-40	40	273
S-570-50M-50	50	366

SPARE PARTS

Designation	Clamping screw	Wrench
S-570-40M-40	SS100	5/32HEX
S-570-50M-50	SS94	1/4EX

Reference pages: A_M-FLER/L : Inserts → [E014](#)
HS-LNFR-53 : Inserts → [E032](#)

Head exchangeable internal threading toolholder, for double-sided lay down inserts



Designation	DMIN	DCONWS	WF	LF	Insert
HS40-LNFR-54API	50	40	27	32	LDS54**FT-CB#...
HS50-LNFR-54API	63	50	35	40	LDS54**FT-CB#...

Shank

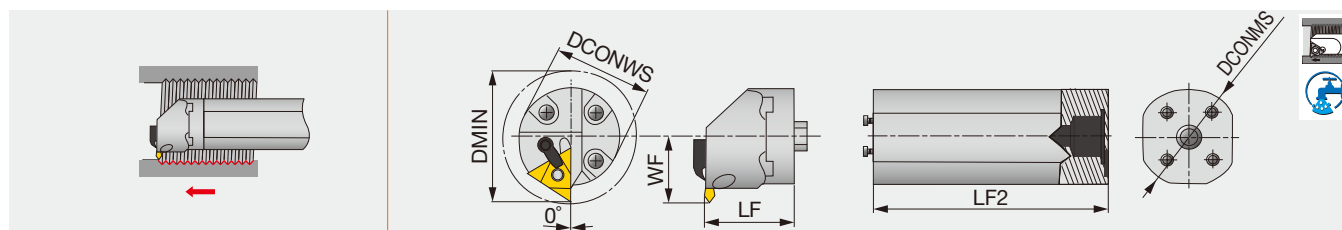
Designation	DCONMS	LF2
S-570-40M-40	40	273
S-570-50M-50	50	366

SPARE PARTS

Designation	Clamping screw	Wrench
S-570-40M-40	SS100	5/32HEX
S-570-50M-50	SS94	1/4EX

HS-MTHOR

Multi-clamp internal threading toolholder, for on edge inserts



Designation	DMIN	DCONWS	WF	LF	Insert
HS40-MTHOR-4	66.7	40	25.9	32	TNM*43...
HS50-MTHOR-4	73	50	35.9	40	TNM*43...
HS40-MTHOR-5	81.3	40	30.6	32	TNM*54...
HS50-MTHOR-5	82.6	50	35.9	40	TNM*54...

Shank

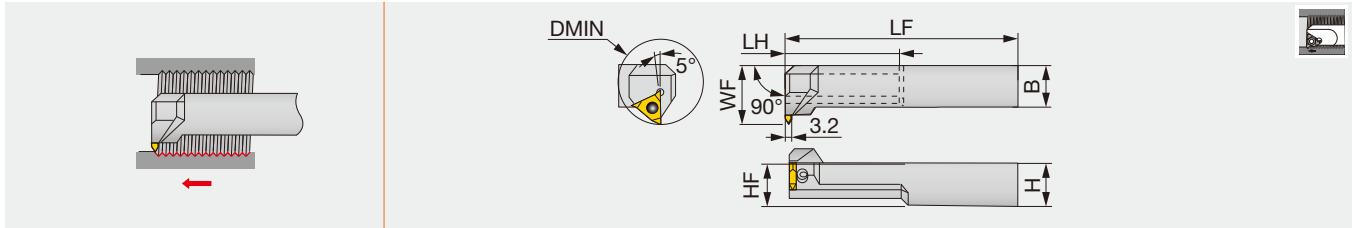
Designation	DCONMS	LF2
S-570-40M-40	40	273
S-570-50M-50	50	366

SPARE PARTS

Designation	Clamping screw	Wrench
S-570-40M-40	SS100	5/32HEX
S-570-50M-50	SS94	1/4EX

SPARE PARTS

Designation	Lock pin	Clamp	Clamping screw	Wrench
HS40-LNFR-54API	H410-1	TC-250	STC-11	1/8HEX
HS50-LNFR-54API	NL-56	TC-250	STC-11	1/8HEX
HS**-MTHOR-4	NL-44	TC-190	STC-5	3/32HEX
HS**-MTHOR-5	NL-56	TC-250	STC-11	1/8HEX

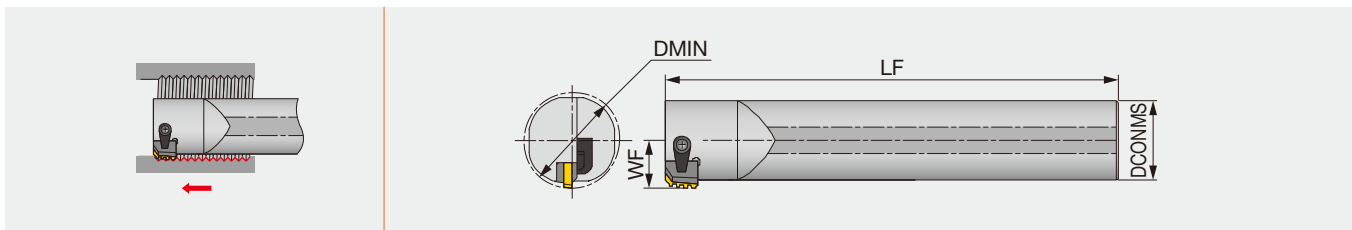


Designation	DMIN	H	B	LF	LH	HF	WF	Insert
TT-2525RI	50	25	25	200	70	25	35	TTL42...

Note: Use the left-hand insert (TTL42...) for a right-hand holder (TT-2525RI).

SI-CLHOR

Internal threading toolholder, for chaser inserts



Designation	DMIN	DCONMS	WF	LF	Insert
SI-CLHOR-40M6	50.8	40	23.16	400	CR...

SPARE PARTS

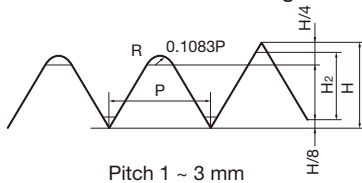
Designation	Clamp	Clamp	Right-left screw	Wrench
TT-2525RI	CP91	-	DS-6	P-3
SI-CLHOR-40M6	-	TC-311	STC-8	5/32HEX

Reference pages: TT-RI : Inserts → [E014](#), [E016](#)

SI-CLHOR : Inserts → [E026](#), [E031](#)

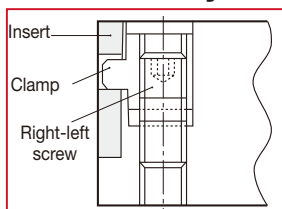
Technical Guide

- Relationship between pitch, depth of cut and number of passes for external metric threading



Note: Maximum machinable pitch is 3 mm.

Part assembly



	P	1	1.25	1.5	1.75	2	2.5	3
	H ₂	0.6	0.76	0.92	1.09	1.25	1.57	1.9
	H	0.866	1.083	1.299	1.516	1.732	2.165	2.598
Number of passes	1	0.25	0.3	0.3	0.3	0.35	0.4	0.4
	2	0.15	0.2	0.25	0.25	0.25	0.3	0.35
	3	0.1	0.1	0.15	0.2	0.2	0.25	0.28
	4	0.05	0.06	0.1	0.1	0.16	0.2	0.2
	5	0.05	0.06	0.05	0.1	0.1	0.15	0.2
	6		0.06	0.05	0.07	0.07	0.1	0.13
	7			0.02	0.05	0.05	0.07	0.1
	8				0.02	0.02	0.05	0.1
	9					0.02	0.03	0.05
	10						0.02	0.05
	11							0.02
	12							0.02

STANDARD CUTTING CONDITIONS

TUNGTHREAD

ISO	Workpiece material	Hardness	Cutting speed: Vc (m/min)						
			AH8015	T05HP	AH725	T313V	NS9530	TH10	BX330
P	Steel / Alloy steel S45C, SCM440, etc. C45, 42CrMoS4, etc.	< 200HB	80 - 180	100 - 200	80 - 180	100 - 200	150 - 200	-	-
		> 200HB	60 - 160	100 - 150	60 - 160	100 - 150	100 - 170	-	-
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	-	50 - 130	70 - 130	50 - 130	70 - 130	-	-	-
K	Cast iron FC250, FC300, etc. 250, 300, etc.	-	60 - 150	70 - 150	50 - 100	70 - 150	-	70 - 90	-
N	Non-ferrous metal	-	-	-	-	-	-	100 - 500	-
S	Superalloys Ti-6Al-4V, Inconel718, etc.	-	20 - 80	-	-	-	-	10 - 40	-
H	Hardened steel	50 - 60HRC	-	-	-	-	-	10 - 30	50 - 200

TETRAMCUT

TCT18R/L / TCT18FR

ISO	Workpiece material	Hardness	Priority	Grade	Cutting speed Vc (m/min)	Pitch (mm)	Threads per inch (TPI)
P	Steel / Alloy steel S45C, SCM440, etc. C45, 42CrMoS4, etc.	< 200HB	First choice	SH725	60 - 150	0.4 - 2.0	64 - 12
			Fracture resistance	AH725	60 - 150	0.8 - 3.0	32 - 8
		> 200HB	First choice	SH725	60 - 150	0.4 - 2.0	64 - 12
			Fracture resistance	AH725	60 - 150	0.8 - 3.0	32 - 8
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	-	First choice	SH725	50 - 80	0.4 - 2.0	64 - 12
		-	Fracture resistance	AH725	50 - 80	0.8 - 3.0	32 - 8
K	Cast iron FC250, FC300, etc. 250, 300, etc.	-	First choice	AH725	50 - 100	0.8 - 3.0	32 - 8
		-	Sharpness	SH725	50 - 100	0.4 - 2.0	64 - 12
S	Superalloys Ti-6Al-4V, Inconel718, etc.	-	First choice	SH725	30 - 100	0.4 - 2.0	64 - 12
		-	Fracture resistance	AH725	30 - 100	0.8 - 3.0	32 - 8

DUOJUST CUT

ISO	Workpiece material	Hardness	Grade	Cutting speed Vc (m/min)	Pitch (mm)	Threads per inch (TPI)
P	Steel / Alloy steel S45C, SCM440, etc. C45, 42CrMoS4, etc.	< 200HB	SH725	50 - 200	0.2 - 1.5	127 - 16
		> 200HB	SH725	50 - 200	0.2 - 1.5	127 - 16
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	-	SH725	50 - 200	0.2 - 1.5	127 - 16
N	Aluminium alloys A5056, A6061, etc.	-	SH725	150 - 200	0.2 - 1.5	127 - 16
	Copper alloy C2600, C280C, etc.	-	SH725	100 - 200	0.2 - 1.5	127 - 16
S	Superalloys Ti-6Al-4V, Inconel718, etc.	-	SH725	30 - 80	0.2 - 1.5	127 - 16

Reference pages: TungThread : Inserts → **E010 - E011, E015 - E035**

External toolholders → **E036 - E040, E051 - E053**

Internal toolholders → **E054 - E056, E064 - E066**

TetraMini-Cut: Inserts → **E012**, External toolholders → **E041 - E045**

DuoJust-Cut : Inserts → **E012**, External toolholders → **E047 - E048**

Technical Guide

STANDARD CUTTING CONDITIONS

TUNG^T-CLAMP

ISO	Workpiece material	Hardness	Grade	Application	Cutting speed V _c (m/min)	Pitch (mm)	Threads per inch (TPI)
P	Steel / Alloy steel S45C, SCM440, etc. C45, 42CrMoS4, etc.	< 200HB	AH725	Threading	80 - 180	Internal 2.11 - 5.08 External 1.27 - 4.23	Internal 5 - 12 External 6 - 20
		> 200HB	AH725	Threading	60 - 160	Internal 2.11 - 5.08 External 1.27 - 4.23	Internal 5 - 12 External 6 - 20
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	-	AH725	Threading	50 - 130	Internal 2.11 - 5.08 External 1.27 - 4.23	Internal 5 - 12 External 6 - 20

TINY^{MINI}TURN



Internal threading

ISO	Workpiece material	Hardness	Grade	Cutting speed V _c (m/min)	Number of passes				
					Pitch (mm)				
					0.5	0.75	1	1.25	1.5
P	Steel / Alloy steel S45C, SCM440, etc. C45, 42CrMoS4, etc.	< 200HB	SH730, SH725	40 - 140	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18
		> 200HB	SH730, SH725	40 - 140	6 - 8	8 - 10	10 - 12	12 - 15	15 - 18
M	Stainless steel SUS304, etc. X5CrNi18-9, etc.	-	SH730, SH725	40 - 140	8	10	12	15	18
K	Cast iron FC250, FC300, etc. 250, 300, etc.	-	SH730, SH725	30 - 100	7	9	12	14	17
N	Aluminium alloys, Copper alloy Si < 12%	-	SH730, SH725	90 - 200	6	8	10	12	15

Reference pages: TungT-Clamp : Inserts → **E014**, External toolholders → **E050**
 Internal toolholders → **E063 - E064**
 TinyMini-Turn: Solid carbide boring bars → **E059**

Index	M
User's Guide	L
Tooling System	K
Drilling tool	J
Endmill	I
Milling cutter	H
Miniature tool	G
Grooving	F
Threading	E
Int. Toolholder	D
Ext. Toolholder	C
Insert	B
Grade	A

AH725 Insert

Conventional shim

Toolholder

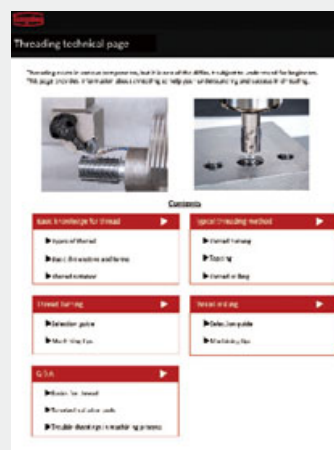
Improper combination

Toolholder screw type		External		Internal	
		① Conventional shim	① Standard (New)	② Conventional shim	② Standard (New)
Dual clamping methods of screw-on and clamp-on	4°	GXE16-4DT	AE16-4DT	GXN16-4DT	AN16-4DT
	3°	GXE16-3DT	AE16-3DT	GXN16-3DT	AN16-3DT
	2°	GXE16-2DT	AE16-2DT	GXN16-2DT	AN16-2DT
	1° (Standard)	GX16-1DT	A16-1DT	GX16-1DT	A16-1DT
	0°	GXE16-0DT	AE16-0DT	GXN16-0DT	AN16-0DT
	-1°	GXE16-99DT	AE16-99DT	GXN16-99DT	AN16-99DT
	-2°	GXE16-98DT	AE16-98DT	GXN16-98DT	AN16-98DT
Clamp-on	4°	GXE16-4	AE16-4	GXN16-4	AN16-4
	3°	GXE16-3	AE16-3	GXN16-3	AN16-3
	2°	GXE16-2	AE16-2	GXN16-2	AN16-2
	1° (Standard)	GXE16-1	A16-1	GXN16-1	A16-1
	0°	GXE16-0	AE16-0	GXN16-0	AN16-0
	-1°	GXE16-99	AE16-99	GXN16-99	AN16-99
	-2°	GXE16-98	AE16-98	GXN16-98	AN16-98

Thread	External			Internal		
	Designation	Grade	Replacement	Designation	Grade	Replacement
ISO			① Conventional shim ↓ ① Standard (New)	16IR15ISO-B	AH725	② Conventional shim ↓ ② Standard (New)
				16IR175ISO-B	AH725	
				16IR20ISO-B	AH725	
55°	16ERAG55-B	AH725		16IRAG55-B	AH725	
				16IRG55-B	AH725	
60°	16ERA60-B	AH725		16IRAG60-B	AH725	
				16IRA60-B	AH725	
				16IRG60-B	AH725	
UN				16IR18UN-B	AH725	
				16IR16UN-B	AH725	
				16IR14UN-B	AH725	
W				16IR16W-B	AH725	
			16IR14W-B	AH725		
PT			16IR14PT-B	AH725		
NPT	16ER8NPT-B	AH725	16IR14NPT-B	AH725		
			16IR115NPT-B	AH725		

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- Threading tool selection guide and the latest machining techniques
- F.A.Q. and troubleshooting guide



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