

HOW TO READ THE STANDARD OF SMALL TOOLS

● How this section page is organised

- ① Organised according to the cutting mode of small tools.
(Refer to the inside title on the next page.)
- ② Shown as Turning → External Grooving → External Cutting Off → Threading → Boring.

TYPE OF TOOL HOLDER indicates the first four letters of the order number, as well as cutting applications.

APPLICATION

PRODUCT SECTION

FIGURE SHOWING THE TOOLING APPLICATION uses illustrations and arrows to depict the available machining applications such as external turning, copying, facing, chamfering, threading, and grooving together with cutting edge lead angles.

GEOMETRY

CHIP BREAKER BY CUTTING APPLICATION

SMALL TOOLS

EXTERNAL FRONT TURNING

SCAC-SM

Order Number	Stock	Insert Number	Dimensions (mm)										Clamp Screw	Wrench
			H	B	LF	LN	HRW	HF	WF2	RF	RF2	RF3		
SCACRL0809K06-SM	●●	0602	8	8	125	11	1.6	8	0	TS254	TKY09R			
SCACRL1010K06-SM	●●	0602	10	10	125	—	—	10	0	TS254	TKY09R			
SCACRL1010K09-SM	●●	09T3	10	10	125	16	3.5	10	0	TS43	TKY15R			
SCACRL1212M09-SM	●●	09T3	12	12	150	14	1.5	12	0	TS43	TKY15R			
SCACRL1616M09-SM	●●	09T3	16	16	150	—	—	16	0	TS43	TKY15R			

* Clamp Torque (N·m) : TS254=1.0, TS43=3.5

SDJC-SM

Order Number	Stock	Insert Number	Dimensions (mm)										Clamp Screw	Wrench
			H	B	LF	LN	HRW	HF	WF2	RF	RF2	RF3		
SDJCLR0809K07-SM	●●	0702	8	8	125	16	2	8	0	TS254	TKY09R			
SDJCLR1010K07-SM	●●	DCMT	10	10	125	—	—	10	0	TS254	TKY09R			
SDJCLR1010K11-SM	●●	DCMT	10	10	125	24	4	10	0	TS43	TKY15R			
SDJCLR1212M11-SM	●●	DCGT	12	12	150	22	2	12	0	TS43	TKY15R			
SDJCLR1616M11-SM	●●	DCGW	16	16	150	—	—	16	0	TS43	TKY15R			

* Clamp Torque (N·m) : TS254=1.0, TS43=3.5

SCLC-SM

Order Number	Stock	Insert Number	Dimensions (mm)										Clamp Screw	Wrench
			H	B	LF	LN	HRW	HF	WF2	RF	RF2	RF3		
SCLCLR0809K06-SM	●●	0602	8	8	125	11	2.1	8	0	TS254	TKY09R			
SCLCLR1010K06-SM	●●	CC-B	10	10	125	—	—	10	0	TS254	TKY09R			
SCLCLR1010K09-SM	●●	CC-H	10	10	125	20	4	10	0	TS43	TKY15R			
SCLCLR1212M09-SM	●●	CC-T	12	12	150	18	2	12	0	TS43	TKY15R			
SCLCLR1616M09-SM	●●	CC-W	16	16	150	—	—	16	0	TS43	TKY15R			

* Clamp Torque (N·m) : TS254=1.0, TS43=3.5

SDNC-SM

Order Number	Stock	Insert Number	Dimensions (mm)										Clamp Screw	Wrench
			H	B	LF	LN	HRW	HF	WF2	RF	RF2	RF3		
SDNCLR0809K07-SM	●●	0702	8	8	125	—	—	8	3	TS254	TKY09R			
SDNCLR1010K07-SM	●●	DCMT	10	10	125	—	—	10	3	TS254	TKY09R			
SDNCLR1010K11-SM	●●	DCMT	10	10	125	24	2	10	5	TS43	TKY15R			
SDNCLR1212M11-SM	●●	DCGT	12	12	150	—	—	12	5	TS43	TKY15R			
SDNCLR1616M11-SM	●●	DCGW	16	16	150	—	—	16	5	TS43	TKY15R			

* Clamp Torque (N·m) : TS254=1.0, TS43=3.5

RECOMMENDED CUTTING CONDITIONS

Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P Carbon Steel - Alloy Steel	180HB~260HB	MS6015/VP15TF	100 (50~150)	0.08 (0.01~0.15)
		MS6015	110 (30~180)	0.08 (0.01~0.15)
Free Cutting Steel	—	NX2525	150 (50~250)	0.08 (0.01~0.15)
		VP15TF/MP9005/MP9015	80 (50~120)	0.06 (0.02~0.1)
M Stainless Steel	5200HB	MS7025/MS9025	100 (50~180)	0.09 (0.03~0.15)
N Non-Ferrous Metal	230HB	HT100/MT9005	150 (70~230)	0.09 (0.03~0.15)
		MT9005	60 (40~80)	0.08 (0.04~0.12)
S Heat Resistant Alloy	—	MP9015/MS9025	50 (20~75)	0.08 (0.04~0.12)

Note1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.
Note2) Dimensions shown for insert corner RE 0.2.

LEGEND FOR STOCK STATUS MARK is shown on the left hand page of each double-page spread.

PRODUCT STANDARDS indicates order numbers, stock status (per right/left hand), applicable inserts, dimensions, and spare parts.

REFERENCE PAGE FOR APPLICABLE INSERTS indicates reference pages giving details of inserts that are applicable to the product.

RECOMMENDED CUTTING CONDITIONS for each workpiece material classification, indicates recommended cutting conditions according to the ISO categories for cutting grades, P, M and N.

PAGE REFERENCE - SPARE PARTS - TECHNICAL DATA indicates reference pages, including the above, on the right hand page of each double-page spread.

● To Order : Please specify
① order number and hand of tool (right/left).

TURNING TOOLS

SMALL TOOLS

OUTLINE OF SMALL TOOLS D002
 CLASSIFICATION..... D006

STANDARD OF SMALL TOOLS

EXTERNAL FRONT TURNING

SCAC-SM D010
 SCLC-SM..... D010
 SDJC-SM..... D011
 SDNC-SM D011
 SVLP-SM D012
 SVJB-SM D012
 SVJC-SM D013
 SVPP-SM..... D013
 SVVB-SM..... D013

EXTERNAL BACK TURNING

BTAH D014
 CTBH D015
 BTVH D016

EXTERNAL GROOVING

GTAH D018
 GTBH..... D018
 GTCH..... D018

EXTERNAL CUTTING OFF

CTAH D020
 CTAH-S..... D020
 CTBH D022

EXTERNAL THREADING

TTAH D024

EXTERNAL FRONT TURNING, COPYING, FACING

SH D026

CAM TYPE TOOL POSTS

CSVH D027

BORING

SBAH..... D030



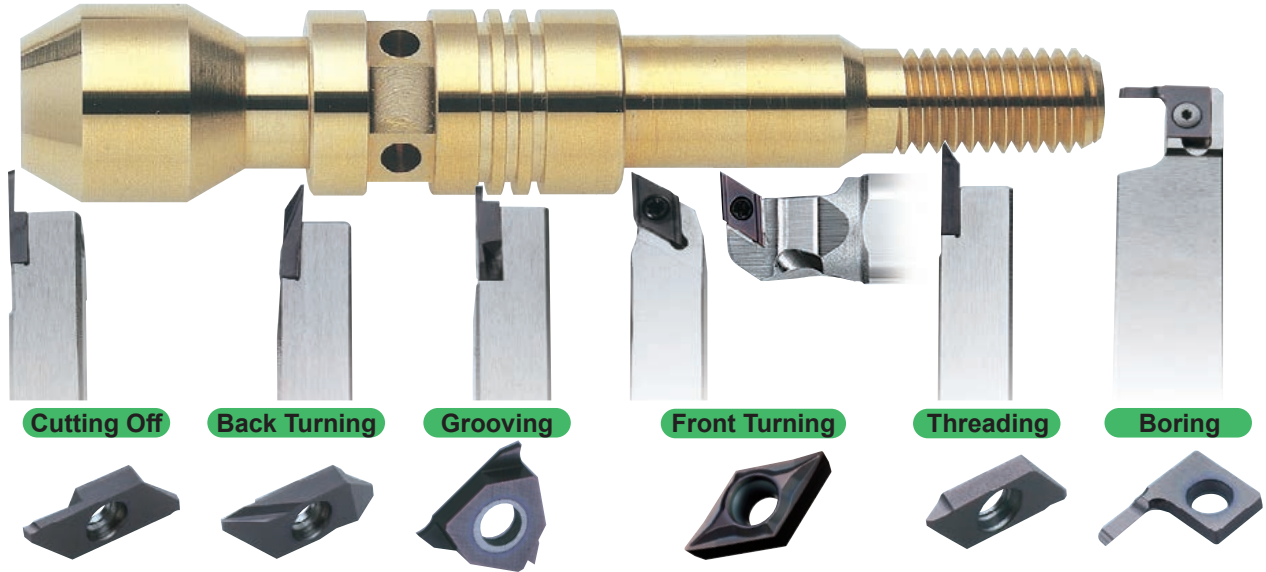
*Arranged by Alphabetical order

D014 BTAH	D015 CTBH	D012 SVJB-SM
D014 BTAT INSERTS	D022 CTBH	D013 SVJC-SM
D015 BTBT INSERTS	D022 CTBT INSERTS	D012 SVLP-SM
D016 BTVH	D018 GTAH	D013 SVPP-SM
D016 BTVT INSERTS	D018 GTAT INSERTS	D013 SVVB-SM
D027 CSVH	D018 GTBH	D024 TTAH
D028 CSVTBXL INSERTS	D018 GTBT INSERTS	D024 TTAT INSERTS
D028 CSVTB INSERTS	D018 GTCH	
D028 CSVTC INSERTS	D018 GTCT INSERTS	
D027 CSVTF INSERTS	D030 SBAH	
D027 CSVTFXL INSERTS	D030 SBAT INSERTS	
D029 CSVTG INSERTS	D010 SCAC-SM	
D029 CSVTT INSERTS	D010 SCLC-SM	
D020 CTAH	D011 SDJC-SM	
D020 CTAH-S	D011 SDNC-SM	
D021 CTAT INSERTS	D026 SH	

OUTLINE OF SMALL TOOLS

TOOLS FOR GANG TYPE AUTOMATIC LATHES (FOR EXTERNAL TURNING AND BORING)

SMALL TOOLS



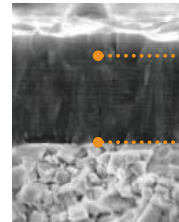
MS Series - PVD Coated Grades for High Precision and Small Parts Machining

MS6015

Skilled at pure iron, carbon steel and free cutting steel turning and achieving implemented stable finished surfaces and excellent dimensional accuracy.

	MS6015	Conventional
Coating	TiCN multilayer	TiAlN
Hardness (HV)	3,000	2,800
Wear Coefficient (Carbon Steel)	Low	High
Base Material Hardness (HRA)	92.0	92.0
T.R.S (GPa)	2.0	2.0

Ti-C-N Multilayer Coating

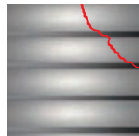


Superior wear and welding resistance and demonstrating the best possible results for carbon steel.
Minute multilayers remarkably improve welding.

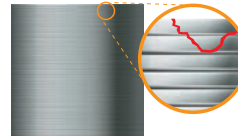
MS7025 NEW

Dramatically improved welding and wear resistance in low feed machining with a more precise nano-multilayer coating

By combining the high lubrication layer with excellent welding resistance, and the high hardness layer with a greater wear resistance that suppresses the progress of wear at the nano-level, the film damage is significantly reduced and the welding and wear resistance are dramatically improved.



Conventional Multilayer Coating



Nano-multilayer Coating

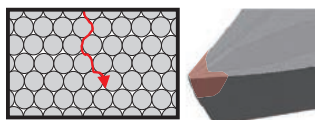
Enlarged Image

MS9025 NEW

Effective reduction of notch wear of stainless steel with a balance of wear and fracture resistance

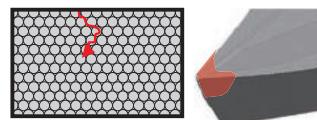
Thermal conductivity has been improved by optimizing the grain size and therefore reducing the boundary contact between the WC particles. This optimization reduces the temperature of the cutting edge during machining.

MS9025



Reducing the cutting edge temperature by improved thermal conductivity.

Conventional



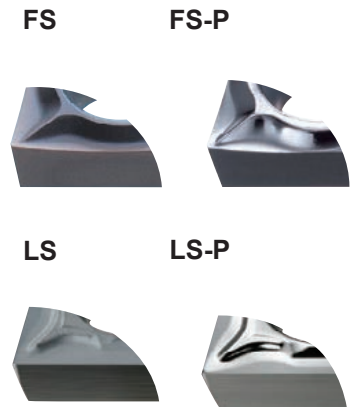
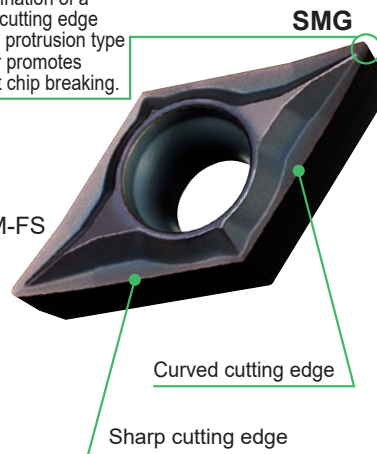
Higher cutting edge temperatures due to more particle boundary contact.

● Moulded breaker insert

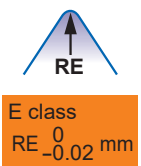
Nose radii designed with minus tolerance

- Suitable for small parts applications that often require minus tolerance dimensions.
- The order number is shown with the letter "M" that indicates minus tolerance. ex) DCGT11T301M-FS
- The radius value is printed on the side of the insert label for easy recognition.

A combination of a curved cutting edge and the protrusion type breaker promotes efficient chip breaking.

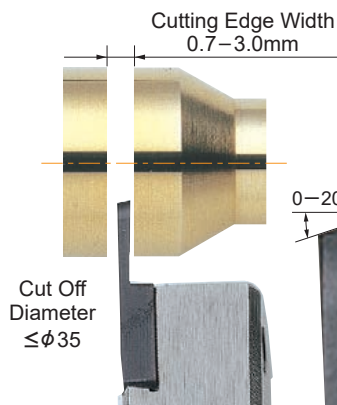


● Tolerance Corner R

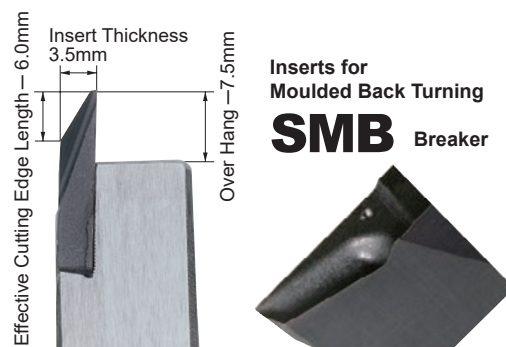


The letter "M" insert
 RE $\begin{smallmatrix} 0 \\ -0.05 \end{smallmatrix}$ mm
 (Conventional G-class insert)
 RE ± 0.10 mm

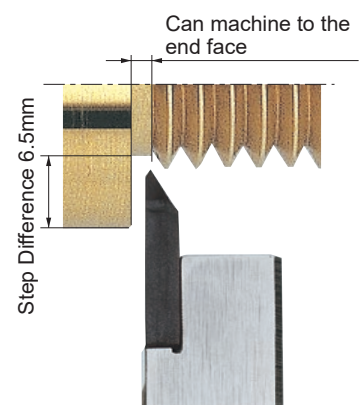
● Cutting Off



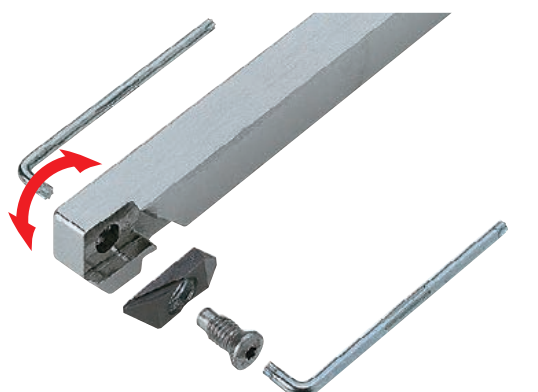
● Back Turning



● Threading



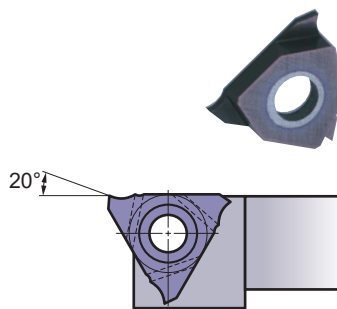
● Back Clamping Mechanism



Screw designed for front and back clamping.

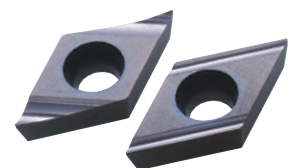
● Grooving

- 3-cornered
- Groove width 0.3-3.0mm
- Traversing possible



● Front Turning

- ISO E class accuracy inserts
- A wide variety of small corner R inserts
- Rake angle 30°



OUTLINE OF SMALL TOOLS

Grooving System

GY series

Monoblock Holder for Swiss-type Automatic Lathe

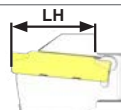
The new geometry with greatly improved rigidity suppresses vibrations and dimensional changes thereby solving problems during cut off.

Max. Cut Off Diameter : 34mm



Overhang Length Compatible with Swiss-type Automatic Lathes

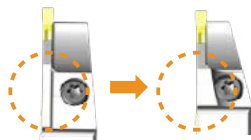
Head length corresponding to the maximum machining diameter of CNC Swiss Type automatic lathes and turret machines.



Features of High Rigidity Holder

Strong Clamp Bridge

The strong design of the clamp bridge suppresses chatter and vibration.



Thicker Tool Base

Tool deflection caused by cutting resistance is greatly reduced.

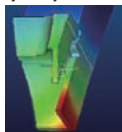


Analysis by Simulation
Deflection Measurement : 0.044



Analysis by Simulation
Deflection Measurement : 0.013

Analysis by Simulation



Cutting Off & Grooving System

GW series

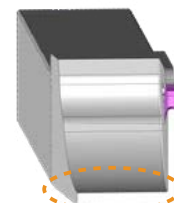
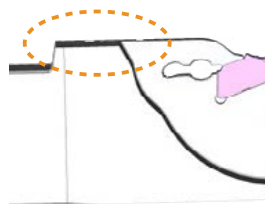
Monoblock Holder for Swiss-type Automatic Lathe

Max. Cut Off Diameter : 76mm



High Rigidity Holder

Tool deflection caused by cutting resistance and the remaining material pip in the centre are greatly reduced.



New Low Resistance and High Lead Angle Insert

New inserts with a lead angle of 8° have been added to the range to reduce burrs and the remaining material pip in the centre.



Lead Angle 5°



Lead Angle 8°

Tools for a very wide range of small parts machining

External Turning	Tools for front turning, back turning, grooving, threading, and cutting off
Internal Turning	Tools for boring, internal grooving and internal threading
Drilling	Drills
End Milling	End Mills

Tools for CNC automatic and small lathes

Types of Tool Posts	Gang type, turret type, cam type (radial pattern type)
Tool Sizes	Square shank: 8-16 mm Round shank : less than $\phi 25.4$

Indexable inserts developed under the concept of "high-quality, high efficiency and long tool life."

High-Quality	E class tolerance, sharp cutting edge, high accuracy small corner R, smooth surface finish
Long Tool Life	PVD coating MS6015/MS7025/MS9025/VP15TF
High Efficiency	Regrinding not necessary due to the employment of indexable inserts. A wide variety of top cutting edge geometries

TOOLS FOR CAM TYPE AUTOMATIC LATHES

- The most suitable for the use with cam type automatic lathes (radial pattern tool posts)
- The most suitable for machining of small parts with work diameter 5mm or smaller
- Single holder for front turning, back turning, grooving, threading and cutting off operations



SMALL TOOLS

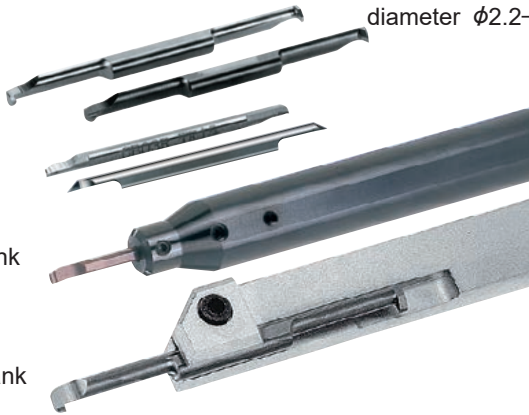
INTERNAL TURNING TOOLS
Solid type **MICRO-MINI TWIN Boring Bars**

Boring
Grooving
Threading

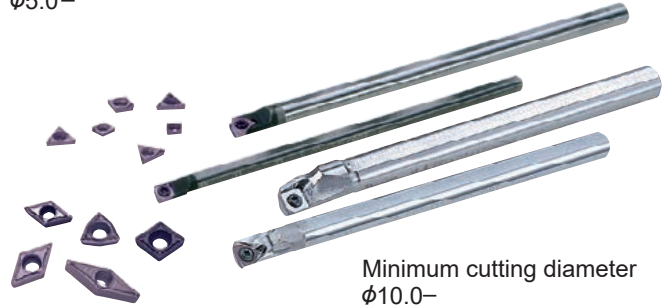
Minimum cutting diameter $\phi 2.2$ -

Round Shank

Square Shank



MICRO-DEX Boring Bars
Minimum cutting diameter $\phi 5.0$ -



Minimum cutting diameter $\phi 10.0$ -

DIMPLE BAR

D

SMALL TOOLS

DRILLING TOOLS

Leading Drill Series
DLE



Leading Drill Series
GKCD NEW



TRISTAR Drill Series
DVAS Mini Size



Solid Carbide Drills for Swiss-type Automatic & Small CNC Lathes
WSTAR Drill Series

DWAE NEW



END MILLING TOOLS

For Swiss Type Automatic Lathes

MS Plus End Mill Series
MP2ES/MP3ES/MP4EC NEW



CLASSIFICATION OF EXTERNAL TURNING TOOLS

SMALL TOOLS

GANG TYPE TOOL POSTS

● FRONT TURNING

Name of Tool Holder	Shank Size (mm) (H x W x L)	Geometry
SCAC-SM ↻ D010	8 x 8 x 125 10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	90° KAPR
SCLC-SM ↻ D010	8 x 8 x 125 10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	95° KAPR
SDJC-SM ↻ D011	8 x 8 x 125 10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	93° KAPR
SDNC-SM ↻ D011	8 x 8 x 125 10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	62.5° KAPR
SVLP-SM ↻ D012	10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	95° KAPR
SVJB-SM ↻ D012	10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	93° KAPR
SVJC-SM ↻ D013	10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	93° KAPR
SVPP-SM ↻ D013	10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	117.5° KAPR
SVVB-SM ↻ D013	10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	72.5° KAPR

● BACK TURNING

Name of Tool Holder	Shank Size (mm) (H x W x L)	Geometry
BTAH (Insert Size 2.8, 3.5, 5.0mm) ↻ D014	8 x 10 x 120 10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	
CTBH (Insert Size 4.5, 6.0mm) ↻ D015	10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	
BTVH (Insert Size 7.5mm) ↻ D016	10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	53° KAPR

● THREADING

Name of Tool Holder	Shank Size (mm) (H x W x L)	Geometry
TTAH ↻ D024	8 x 10 x 120 10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	

● GROOVING

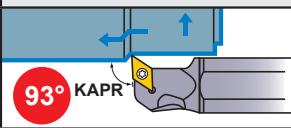
Name of Tool Holder	Shank Size (mm) (H x W x L)	Geometry
GTAH (Groove Width 0.3–3.0mm) ↻ D018	8 x 8 x 80 8 x 8 x 120 10 x 10 x 80 10 x 10 x 120 12 x 12 x 80 12 x 12 x 120 16 x 16 x 120	U Type ↑ E Type ↑ VT Type ↑
GTBH (Groove Width 1.45–3.0mm) ↻ D018	10 x 10 x 80 10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	U Type ↑ E Type ↑ VT Type ↑
GTCH (Groove Width 2.5–3.0mm) ↻ D018	10 x 10 x 80 10 x 10 x 120	U Type ↑ E Type ↑ VT Type ↑

● CUTTING OFF

Name of Tool Holder	Shank Size (mm) (H x W x L)	Geometry
CTAH (Max. Cut Off Diameter 12mm) ↻ D020	8 x 10 x 120 10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	
CTAH-S (Max. Cut Off Diameter 12mm) ↻ D020	10 x 10 x 80	
CTBH (Max. Cut Off Diameter 16mm) ↻ D022	10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	

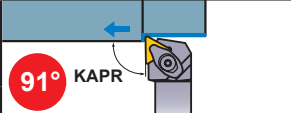
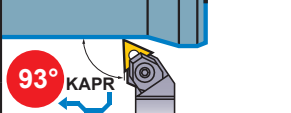
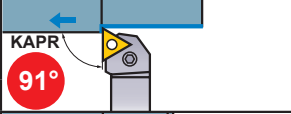



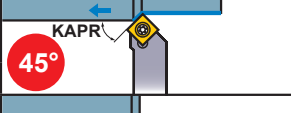



OPPOSITE TOOL POSTS

● DIMPLE SLEEVE HOLDER

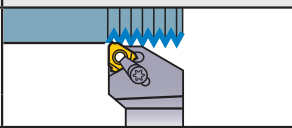
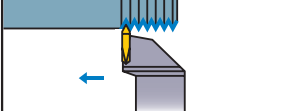
Name of Tool Holder	Shank Size (mm) (Shank Dia. x L)	Geometry
SH (Front Turning, Copying, Facing)	$\phi 15.875 \times 100$ $\phi 19.05 \times 125$ $\phi 20 \times 125$ $\phi 22 \times 125$ $\phi 25.4 \times 150$	
↻ D026		

TURRET TYPE TOOL POSTS

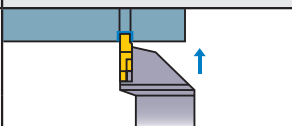
● FRONT TURNING

Name of Tool Holder	Shank Size (mm) (H x W x L)	Geometry
DTGN	16 x 16 x 100 20 x 20 x 125 25 x 25 x 150	
↻ C016		
MTJN	20 x 20 x 125 25 x 25 x 150	
↻ C017		
PTGN	10 x 10 x 70 12 x 12 x 80 16 x 16 x 100 20 x 20 x 125 25 x 25 x 150	
↻ C016		
SCLC	8 x 8 x 60 10 x 10 x 70 12 x 12 x 80 16 x 16 x 100	
↻ C023		
SDJC	10 x 10 x 70 12 x 12 x 80 16 x 16 x 100	
↻ C024		
SDNC	8 x 8 x 60 10 x 10 x 70 12 x 12 x 80 16 x 16 x 100	
↻ C024		
SSSC	12 x 12 x 80 16 x 16 x 100	
↻ C027		
STGC	10 x 10 x 70 12 x 12 x 80 16 x 16 x 100	
↻ C028		
SVJC	10 x 10 x 70 16 x 16 x 100	
↻ C029		
SVVC	16 x 16 x 100	
↻ C029		

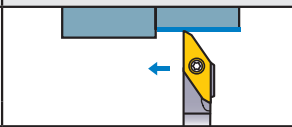
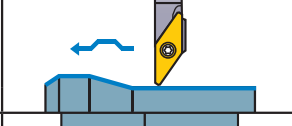
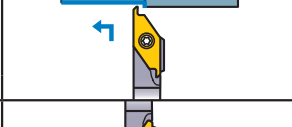
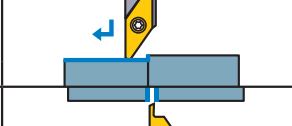
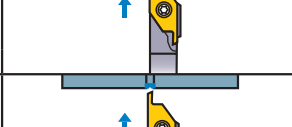
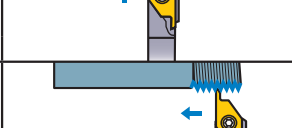
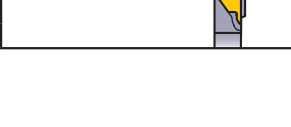
● THREADING

Name of Tool Holder	Shank Size (mm) (H x W x L)	Geometry
MMT	12 x 12 x 100 16 x 16 x 100 20 x 20 x 125 25 x 25 x 150 32 x 32 x 170	
↻ G023		
SMGH	10 x 10 x 70 12 x 12 x 80 16 x 16 x 100	
↻ G030		

● GROOVING

Name of Tool Holder	Shank Size (mm) (H x W x L)	Geometry
SMGH	10 x 10 x 70 12 x 12 x 80 16 x 16 x 100	
↻ F138		

CAM TYPE TOOL POSTS

Name of Tool Holder	Shank Size (mm) (H x W x L)	Geometry
CSVH (Front Turning)	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x 10 x 140 12 x 12 x 140	
↻ D027		
CSVH (Front Turning Copying)	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x 10 x 140 12 x 12 x 140	
↻ D027		
CSVH (Back Turning)	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x 10 x 140 12 x 12 x 140	
↻ D027		
CSVH (Back Turning Copying)	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x 10 x 140 12 x 12 x 140	
↻ D027		
CSVH (Cutting Off)	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x 10 x 140 12 x 12 x 140	
↻ D027		
CSVH (Grooving)	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x 10 x 140 12 x 12 x 140	
↻ D027		
CSVH (Threading)	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x 10 x 140 12 x 12 x 140	
↻ D027		

CLASSIFICATION OF INTERNAL TURNING TOOLS (FOR GENERAL USE)

D
SMALL TOOLS

Product Name	Holder
For Gang Type Tool Posts D030	SBAH  Min. Cutting Diameter : 3mm
MICRO-MINI TWIN Boring Bars (Solid Carbide) E027	CB CR  Min. Cutting Diameter : 2.2mm
MICRO-MINI Boring Bars (Solid Carbide) E030	COFR-BLS  Min. Cutting Diameter : 3.2mm
MICRO-DEX Boring Bars (Carbide Shank) E024	SCLC  Min. Cutting Diameter : 5mm
MICRO-DEX Boring Bars (Carbide Shank) E025	STUC  Min. Cutting Diameter : 8mm
MICRO-DEX Boring Bars (Carbide Shank) E024	SWUB  Min. Cutting Diameter : 6mm
F type Bars (Steel Shank) E035	FSWL1  Min. Cutting Diameter : 5.8mm
F type Bars (Carbide Shank) E035	FSWL2  Min. Cutting Diameter : 5.8mm
DIMPLE BAR (Steel Shank) (Carbide Shank) E008	FSCLC/P FSCLC/P-E  Min. Cutting Diameter : 10mm

Product Name	Holder
DIMPLE BAR (Steel Shank) (Carbide Shank) E012	FSDUC FSDUC-E  Min. Cutting Diameter : 14mm
DIMPLE BAR (Steel Shank) (Carbide Shank) E014	FSDQC FSDQC-E  Min. Cutting Diameter : 13mm
DIMPLE BAR (Steel Shank) (Carbide Shank) E010	FSTUP FSTUP-E  Min. Cutting Diameter : 10mm
DIMPLE BAR (Steel Shank) E018	FSVUB/C  Min. Cutting Diameter : 16mm
DIMPLE BAR (Steel Shank) E019	FSVPB/C  Min. Cutting Diameter : 16mm
DIMPLE BAR (Steel Shank) E020	FSVJB/C  Min. Cutting Diameter : 16mm
DIMPLE BAR (Steel Shank) (Carbide Shank) E016	FSWUB/P FSWUB/P-E  Min. Cutting Diameter : 10mm

TOOLS FOR GROOVING AND THREADING/END MILLS/DRILLS





FOR GROOVING AND THREADING

Product Name	Shape
GY series  ↻ F016 Max. Cut Off Diameter : 34mm	External for Swiss-type lathes
GW series  ↻ F126 Max. Cut Off Diameter : 76mm	External for Swiss-type lathes
MICRO-MINI TWIN Boring Bars (Solid Type) ↻ F140 Min. Cutting Diameter : 3mm	CG TYPE(Grooving) 
MICRO-MINI TWIN Boring Bars (Solid Type) ↻ G037 Min. Cutting Diameter : 3mm	CT TYPE(Threading) 

END MILLS

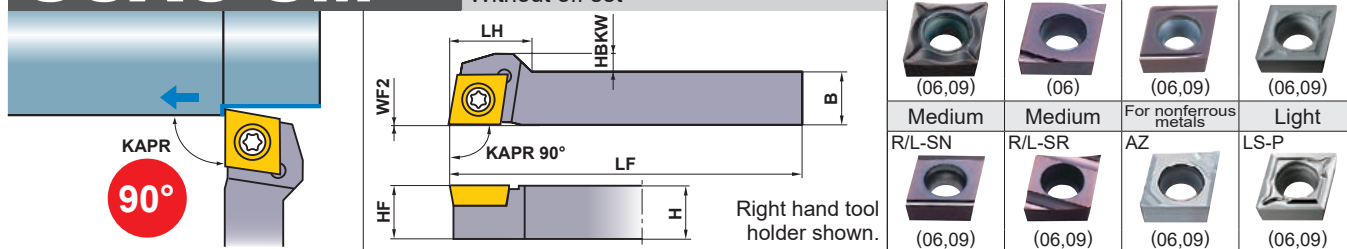
Series Title	Shape
NEW For Swiss-Type Automatic Lathes MS Plus End Mill Series ↻ J074, J098, J138	MP2ES/MP3ES/MP4EC 
Solid Carbide End Mill series	↻ J056
HSS End Mill series	↻ J350

DRILLS

Series Title	Shape
Leading Drill Series ↻ N020	DLE 
NEW Leading Drill Series ↻ N182	GKCD 
NEW WSTAR Drill Series ↻ N030	DWAE 
NEW TRISTAR Drill Series ↻ N038	DVAS 
MFE series	↻ N025
MVX/TAF Drill (Indexable type)	↻ N160
Solid Carbide Drill series	↻ N006
Solid Gun Drill series	↻ N136
HSS Drill series	↻ N012

EXTERNAL FRONT TURNING

SCAC-SM

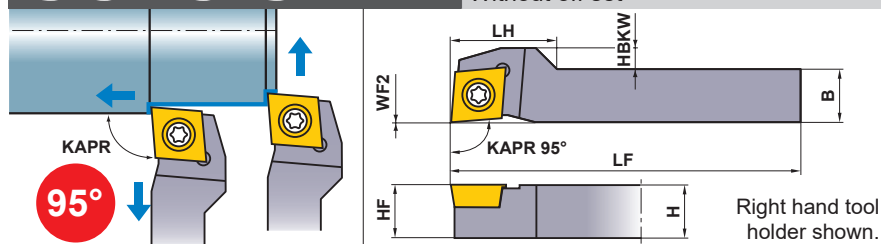


Finish	Finish	Light	Light
SMG/FS (06,09)	R/L-F (06)	R/L-SS (06,09)	LS (06,09)
Medium	Medium	For nonferrous metals	Light
R/L-SN (06,09)	R/L-SR (06,09)	AZ (06,09)	LS-P (06,09)

Order Number	Stock		Insert Number	Dimensions (mm)							* Clamp Screw	Wrench	
	R	L		H	B	LF	LH	HBKW	HF	WF2			
SCACR/L0808K06-SM	●	●	CC●B CC●H CC●T CC●W	0602	8	8	125	11	1.6	8	0	TS254	TKY08R
SCACR/L1010K06-SM	●	●		0602	10	10	125	—	—	10	0	TS254	TKY08R
SCACR/L1010K09-SM	●	●		09T3	10	10	125	16	3.5	10	0	TS43	TKY15R
SCACR/L1212M09-SM	●	●		09T3	12	12	150	14	1.5	12	0	TS43	TKY15R
SCACR/L1616M09-SM	●	●		09T3	16	16	150	—	—	16	0	TS43	TKY15R

* Clamp Torque (N · m) : TS254=1.0, TS43=3.5

SCLC-SM



Finish	Finish	Light	Light
SMG/FS (06,09)	R/L-F (06)	R/L-SS (06,09)	LS (06,09)
Medium	Medium	For nonferrous metals	Light
R/L-SN (06,09)	R/L-SR (06,09)	AZ (06,09)	LS-P (06,09)

Order Number	Stock		Insert Number	Dimensions (mm)							* Clamp Screw	Wrench	
	R	L		H	B	LF	LH	HBKW	HF	WF2			
SCLCR/L0808K06-SM	●	●	CC●B CC●H CC●T CC●W	0602	8	8	125	11	2.1	8	0	TS254	TKY08R
SCLCR/L1010K06-SM	●	●		0602	10	10	125	—	—	10	0	TS254	TKY08R
SCLCR/L1010K09-SM	●	●		09T3	10	10	125	20	4	10	0	TS43	TKY15R
SCLCR/L1212M09-SM	●	●		09T3	12	12	150	18	2	12	0	TS43	TKY15R
SCLCR/L1616M09-SM	●	●		09T3	16	16	150	—	—	16	0	TS43	TKY15R

* Clamp Torque (N · m) : TS254=1.0, TS43=3.5

Note1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.
 Note2) Dimensions shown for insert corner RE 0.2.

● : Inventory maintained in Japan.

SCAC-SM type inserts	> A114–A124
SCLC-SM type inserts	> A114–A124
CBN & PCD inserts	> B040–B042, B059

SDJC-SM		Without off set									Finish	Finish	Light	Light
											SMG/FS (07, 11)	R/L-F (07, 11)	R/L-SS (07, 11)	LS (07, 11)
Order Number		Stock		Insert Number		Dimensions (mm)					* Wrench	Wrench		
		R	L			H	B	LF	LH	HBKW			HF	WF2
SDJCR/L0808K07-SM	●●	●●	DCMT DCMW DCET DCGT DCGW	0702	8	8	125	15	2	8	0	TS254	TKY08R	
SDJCR/L1010K07-SM	●●	●●		0702	10	10	125	—	—	10	0	TS254	TKY08R	
SDJCR/L1010K11-SM	●●	●●		11T3	10	10	125	24	4	10	0	TS43	TKY15R	
SDJCR/L1212M11-SM	●●	●●		11T3	12	12	150	22	2	12	0	TS43	TKY15R	
SDJCR/L1616M11-SM	●●	●●		11T3	16	16	150	—	—	16	0	TS43	TKY15R	

* Clamp Torque (N · m) : TS254=1.0, TS43=3.5

SDNC-SM		Neutral edge with handed holder Without off set									Finish	Finish	Light	Light
											SMG/FS (07, 11)	R/L-F (07, 11)	R/L-SS (07, 11)	LS (07, 11)
Order Number		Stock		Insert Number		Dimensions (mm)					* Wrench	Wrench		
		R	L			H	B	LF	LH	HBKW			HF	WF2
SDNCR/L0808K07-SM	●●	●●	DCMT DCMW DCET DCGT DCGW	0702	8	8	125	—	—	8	3	TS254	TKY08R	
SDNCR/L1010K07-SM	●●	●●		0702	10	10	125	—	—	10	3	TS254	TKY08R	
SDNCR/L1010K11-SM	●●	●●		11T3	10	10	125	24	2	10	5	TS43	TKY15R	
SDNCR/L1212M11-SM	●●	●●		11T3	12	12	150	—	—	12	5	TS43	TKY15R	
SDNCR/L1616M11-SM	●●	●●		11T3	16	16	150	—	—	16	5	TS43	TKY15R	

* Clamp Torque (N · m) : TS254=1.0, TS43=3.5

RECOMMENDED CUTTING CONDITIONS

Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P Carbon Steel · Alloy Steel	180HB—280HB	MS6015/VP15TF	100 (50—150)	0.08 (0.01—0.15)
		MS6015	110 (30—180)	0.08 (0.01—0.15)
	Free Cutting Steel	—	NX2525	150 (50—250)
M Stainless Steel	≤200HB	VP15TF/MP9005/MP9015	80 (50—120)	0.06 (0.02—0.1)
	230HB	MS7025/MS9025	100 (50—180)	0.08 (0.01—0.15)
N Non-Ferrous Metal	—	HTi10/MT9005	150 (70—230)	0.09 (0.03—0.15)
S Titanium Alloy	—	MT9005	60 (40—80)	0.08 (0.04—0.12)
	—	MP9015/MS9025	50 (20—75)	0.08 (0.04—0.12)

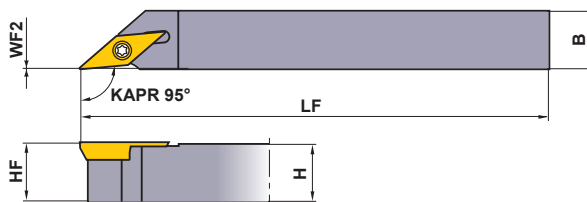
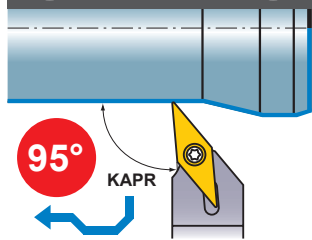
SDJC-SM type inserts > A124—A129
SDNC-SM type inserts > A124—A129

CBN & PCD inserts > B044, B045, B060
SPARE PARTS > P001
TECHNICAL DATA > Q001

EXTERNAL FRONT TURNING

SVLP-SM

Without off set



Right hand tool holder shown.

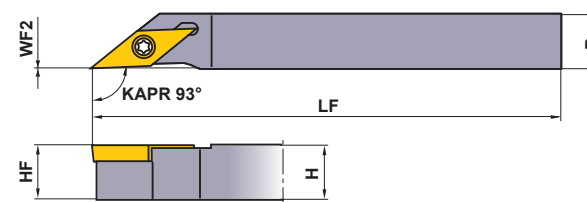
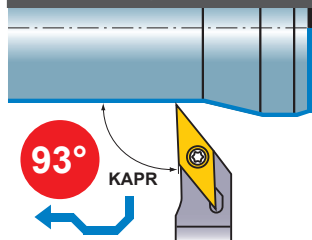
Finish	R/L-SRF
	(08,11)
Finish	SMG
	(08,11)

Order Number	Stock		Insert Number	Dimensions (mm)					* Clamp Screw	Wrench	
	R	L		H	B	LF	HF	WF2			
SVLPR/L1010K08-SM	●	●	VPET VPGT	0802	10	10	125	10	0	TS202	TKY06R
SVLPR/L1212M08-SM	●	●		0802	12	12	150	12	0	TS202	TKY06R
SVLPR/L1010K11-SM	●	●		1103	10	10	125	10	0	TS255	TKY08R
SVLPR/L1212M11-SM	●	●		1103	12	12	150	12	0	TS255	TKY08R
SVLPR/L1616M11-SM	●	●		1103	16	16	150	16	0	TS255	TKY08R

* Clamp Torque (N · m) : TS202=0.6, TS255=1.0

SVJB-SM

Without off set



Right hand tool holder shown.

Finish	R/L-F	Medium	R/L-SN
	(11)		(11)
Medium	R/L-SR		
	(11)		

Order Number	Stock		Insert Number	Dimensions (mm)					* Clamp Screw	Wrench	
	R	L		H	B	LF	HF	WF2			
SVJBR/L1010K11-SM	●	●	VBMT VBET VBGT VBGW	1103	10	10	125	10	0	TS255	TKY08R
SVJBR/L1212M11-SM	●	●		1103	12	12	150	12	0	TS255	TKY08R
SVJBR/L1616M11-SM	●	●		1103	16	16	150	16	0	TS255	TKY08R

* Clamp Torque (N · m) : TS255=1.0

RECOMMENDED CUTTING CONDITIONS


	Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P	Carbon Steel · Alloy Steel	180HB~280HB	MS6015/VP15TF	100 (50~150)	0.08 (0.01~0.15)
			MS6015	110 (30~180)	0.08 (0.01~0.15)
	Free Cutting Steel	—	NX2525	150 (50~250)	0.08 (0.01~0.15)
M	Stainless Steel	≤200HB	VP15TF/MP9005/MP9015	80 (50~120)	0.06 (0.02~0.1)
		230HB	MS7025/MS9025	100 (50~180)	0.08 (0.01~0.15)
N	Non-Ferrous Metal	—	HT110/MT9005	150 (70~230)	0.09 (0.03~0.15)
S	Titanium Alloy	—	MT9005	60 (40~80)	0.08 (0.04~0.12)
	Heat Resistant Alloy	—	MP9015/MS9025	50 (20~75)	0.08 (0.04~0.12)

Note1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.


Note2) Dimensions shown for insert corner RE 0.2.

● : Inventory maintained in Japan.


SVLP-SM type inserts	> A149
SVJB-SM type inserts	> A142-A144
CBN & PCD inserts	> B049, B064

Order Number		Stock		Insert Number		Dimensions (mm)				* 		
						H	B	LF	HBKW	HF	WF2	Clamp Screw
SVJCR/L1010JX11-SM	●●	●●	VCMW VCMT VCGT	1103	10	10	120	—	10	0	TS255	TKY08R
SVJCR/L1212JX11-SM	●●	●●		1103	12	12	120	—	12	0	TS255	TKY08R
SVJCR/L1616JX11-SM	●●	●●		1103	16	16	120	—	16	0	TS255	TKY08R
SVJCR/L1010JX13-SM	●●	●●		1303	10	10	120	2	10	0	TS32	TKY08R
SVJCR/L1212JX13-SM	●●	●●		1303	12	12	120	—	12	0	TS32	TKY08R
SVJCR/L1616JX13-SM	●●	●●		1303	16	16	120	—	16	0	TS32	TKY08R

* Clamp Torque (N · m) : TS255=1.0, TS32=1.0

Order Number		Stock		Insert Number		Dimensions (mm)				* 			
						H	B	LF	LH	HBKW	HF	WF2	Clamp Screw
SVPPR/L1010K11-SM	●●	●●	VPET VPGT	1103	10	10	125	20	8	10	0	TS255	TKY08R
SVPPR/L1212M11-SM	●●	●●		1103	12	12	150	20	6	12	0	TS255	TKY08R
SVPPR/L1616M11-SM	●●	●●		1103	16	16	150	17	—	16	0	TS255	TKY08R

* Clamp Torque (N · m) : TS255=1.0

Order Number		Stock		Insert Number		Dimensions (mm)				* 	
						H	B	LF	HF	WF2	Clamp Screw
SVVBR/L1010K11-SM	●●	●●	VBET VBGT VBMT VBGW	1103	10	10	125	10	3	TS255	TKY08R
SVVBR/L1212M11-SM	●●	●●		1103	12	12	150	12	3	TS255	TKY08R
SVVBR/L1616M11-SM	●●	●●		1103	16	16	150	16	3	TS255	TKY08R

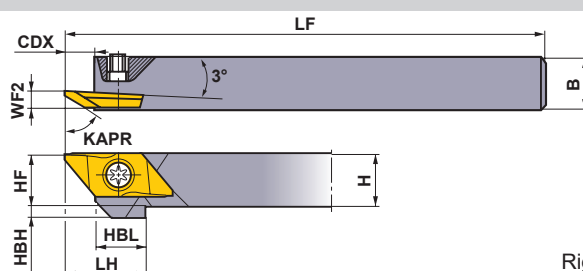
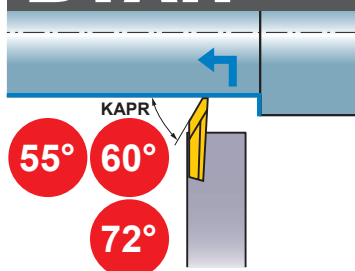
* Clamp Torque (N · m) : TS255=1.0

SVJC-SM type inserts > A145–A147
 SVPP-SM type inserts > A149
 SVVB-SM type inserts > A142–A144

CBN & PCD inserts > B050, B064
 SPARE PARTS > P001
 TECHNICAL DATA > Q001

EXTERNAL BACK TURNING

BTAH



Right hand tool holder shown.

SMALL TOOLS

Order Number	Stock		Insert Number	Dimensions (mm)										Clamp Screw *	Wrench			
	R	L		H	B	LF	LH	HF	WF2	HBH	HBL	CDX						
BTAHR/L0810-50	●	●	BTAT	5528	○	○	R/L-B	8	10	120	15	8	3.5	4	9.5	5.5	NS402W	NKY15S
BTAHR/L1010-50	●	●		6035	○	○	R/L-B	10	10	120	15	10	3.5	2	9.5	5.5	NS402W	NKY15S
BTAHR/L1212-50	●	●		605000RX				12	12	120	15	12	3.5	—	9.5	5.5	NS403W	NKY15S
BTAHR/L1616-50	●	●		7235	○	○	R-SMB	16	16	120	15	16	3.5	—	9.5	5.5	NS403W	NKY15S

Note 1) Please use right hand insert for right hand holder and left hand insert for left hand holder.

Note 2) Set the maximum depth of cut at under 60% of the effective cutting edge length (LE).

* Clamp Torque (N · m) : NS402W=1.0, NS403W=1.0

INSERTS

Order Number	Hand	Coated		Dimensions (mm)							LE* (mm)	Geometry
		VP15TF	MS6015	PSIRR/L*	RER/L	CF	L	W1	CW	S		
BTAT7235V5R-SMB	R	●		72°	0.05	0.3	20	8	1.4	2.5	3.5	With Breaker
BTAT723501MR-SMB	R	●		72°	0.08	0.3	20	8	1.4	2.5	3.5	
BTAT723502MR-SMB	R	●		72°	0.18	0.3	20	8	1.4	2.5	3.5	
BTAT552800R-B	R	●	●	55°	0	0	20	8	0.5	2.5	2.8	
BTAT552800L-B	L	●		55°	0	0	20	8	0.5	2.5	2.8	
BTAT552801R-B	R	●	●	55°	0.1	0	20	8	0.5	2.5	2.8	
BTAT552801L-B	L	●		55°	0.1	0	20	8	0.5	2.5	2.8	
BTAT603500R-B	R	●	●	60°	0	0	20	8	0.5	2.5	3.5	
BTAT603500L-B	L	●		60°	0	0	20	8	0.5	2.5	3.5	
BTAT603501MR-B	R		●	60°	0.08	0	20	8	0.5	2.5	3.5	
BTAT603501R-B	R	●	●	60°	0.1	0	20	8	0.5	2.5	3.5	
BTAT603501L-B	L	●		60°	0.1	0	20	8	0.5	2.5	3.5	
BTAT605000RX	R	●		60°	0	0	20	8	1.25	2.5	5.0	

Note 1) REL, PSIRR dimensions for Right Hand Tool and RER, PSIRL dimensions for Left Hand Tool.

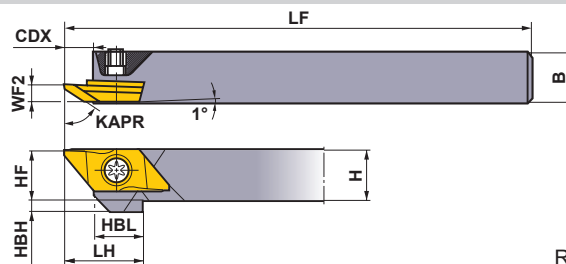
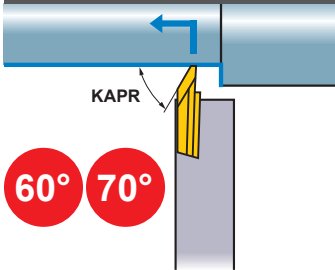
* Numeric value set insert on holder.

RECOMMENDED CUTTING CONDITIONS



	Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P	Carbon Steel · Alloy Steel	180HB–280HB	MS6015/VP15TF	100 (50–150)	0.08 (0.01–0.15)
	Free Cutting Steel	—	MS6015	110 (30–180)	0.08 (0.01–0.15)
M	Stainless Steel	≤200HB	VP15TF	80 (50–120)	0.06 (0.02–0.1)
N	Non-Ferrous Metal	—	MS6015	150 (70–230)	0.09 (0.03–0.15)

● : Inventory maintained in Japan.
(Contains 5 inserts per case.)

CTBH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)									*  				
	R	L		H	B	LF	LH	HF	WF2	HBH	HBL	CDX	Clamp Screw	Wrench			
CTBHR/L1010-160	●	●	BTBT	60450	○	R/L-B	10	10	120	19.5	10	3.4	2	12	7.5	NS402W	NKY15S
CTBHR/L1212-160	●	●		606000	R/L	12	12	120	19.5	12	3.4	—	12	7.5	NS403W	NKY15S	
CTBHR/L1616-160	●	●		7055	○	R-SMB	16	16	120	19.5	16	3.4	—	12	7.5	NS403W	NKY15S

Note 1) Please use right hand insert for right hand holder and left hand insert for left hand holder.

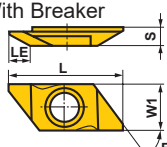
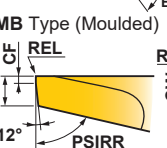
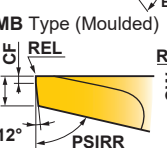
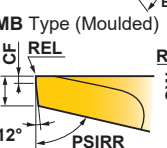
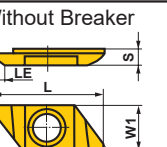
Note 2) Set the maximum depth of cut at under 60% of the effective cutting edge length (LE).

* Clamp Torque (N · m) : NS402W=1.0, NS403W=1.0

D

SMALL TOOLS

INSERTS

Order Number	Hand	Coated		Dimensions (mm)									LE* (mm)	Geometry
		VP15TF	MS6015	PSIRRL*	RER/L	CF	L	W1	CW	S	CDX			
BTBT7055V5R-SMB	R	●		70°	0.05	0.3	25	9.4	1.35	3.5	6.5	5.5		
BTBT705501MR-SMB	R	●		70°	0.08	0.3	25	9.4	1.35	3.5	6.5	5.5		
BTBT705502MR-SMB	R	●		70°	0.18	0.3	25	9.4	1.35	3.5	6.5	5.5		
BTBT604500R-B	R	●	●	60°	0	0.2	25	9.4	0.7	3.5	5.5	4.5		
BTBT604500L-B	L	●		60°	0	0.2	25	9.4	0.7	3.5	5.5	4.5		
BTBT604501MR-B	R		●	60°	0.08	0.3	25	9.4	0.7	3.5	5.5	4.5		
BTBT604501R-B	R	●	●	60°	0.1	0.3	25	9.4	0.7	3.5	5.5	4.5		
BTBT604501L-B	L	●		60°	0.1	0.3	25	9.4	0.7	3.5	5.5	4.5		
BTBT606000R	R	●		60°	0	0.2	25	9.4	0.7	3.5	7	6.0		
BTBT606000L	L	●		60°	0	0.2	25	9.4	0.7	3.5	7	6.0		

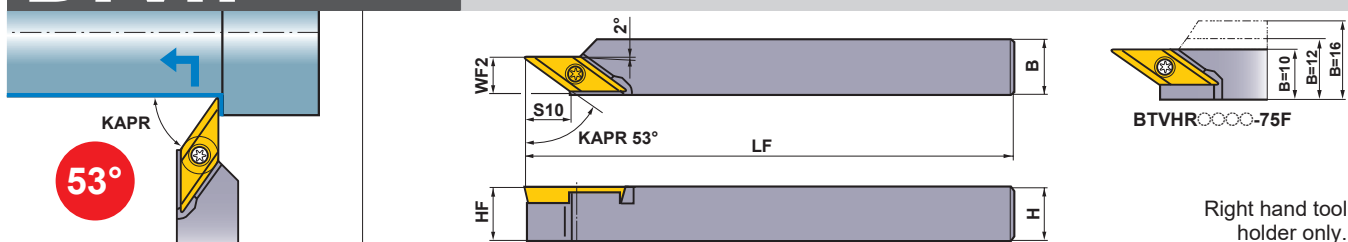
Note 1) REL, PSIRR dimensions for Right Hand Tool and RER,

PSIRL dimensions for Left Hand Tool.

* Numeric value set insert on holder.

EXTERNAL BACK TURNING

BTVH



SMALL TOOLS

Order Number	Stock	Insert Number	Dimensions (mm)						*	
	R		H	B	LF	HF	WF2	S10	Clamp Screw	Wrench
BTVHR1010-75	●	BTVT 537500R-B	10	10	120	10	7.5	8.5	NS251	NKY15S
BTVHR1212-75	●		12	12	120	12	7.5	8.5	NS251	NKY15S
BTVHR1616-75	●		16	16	120	16	7.5	8.5	NS251	NKY15S
BTVHR1010-75F	●		10	10	120	10	10.0	8.5	NS251	NKY15S
BTVHR1212-75F	●		12	12	120	12	10.0	8.5	NS251	NKY15S
BTVHR1616-75F	●		16	16	120	16	10.0	8.5	NS251	NKY15S

Note 1) Set the maximum depth of cut at under 30% of the effective cutting edge length (LE).

Note 2) For high load machining, F type is recommended.

* Clamp Torque (N · m) : NS251=1.0

INSERTS

Order Number	Hand	Coated	Dimensions (mm)				LE* (mm)	Geometry
		VP15TF	IC	S	REL	CW		
BTVT5375V5R-B	R	●	6.35	3.18	0.05	0.5	7.5	With Breaker
BTVT537501R-B	R	●	6.35	3.18	0.1	0.5	7.5	

* Numeric value set insert on holder.

RECOMMENDED CUTTING CONDITIONS

	Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P	Carbon Steel · Alloy Steel	180HB-280HB	VP15TF	100 (50-150)	0.08 (0.01-0.15)
	Free Cutting Steel	-	VP15TF	110 (30-180)	0.08 (0.01-0.15)
M	Stainless Steel	≤200HB	VP15TF	80 (50-120)	0.06 (0.02-0.1)
N	Non-Ferrous Metal	-	VP15TF	150 (70-230)	0.09 (0.03-0.15)

● : Inventory maintained in Japan.
(Contains 5 inserts per case.)

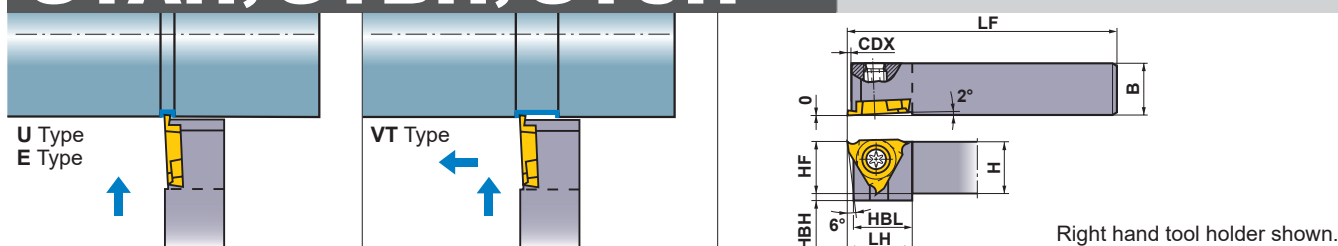
SPARE PARTS > P001
TECHNICAL DATA > Q001

Memo

A series of horizontal dashed lines for writing, spanning the width of the page.

EXTERNAL GROOVING

GTAH, GTBH, GTCH



Right hand tool holder shown.

SMALL TOOLS

D

	Order Number	Stock		Insert Number	Dimensions (mm)							Cutting Width (mm)	*2		
		R	L		H	B	HF	LF	CDX*1	LH	HBH		HBL	Clamp Screw	Wrench
Standard Shank	GTAHR/L0808-20S	●	●	GTAT GTBT *1 GTCT *1	8	8	8	80	2	15	5	12.9	0.3-3.0	NS404W	NKY15S
	GTAHR/L1010-20S	●	●		10	10	10	80	2	15	3	12.9	0.3-3.0	NS404W	NKY15S
	GTAHR/L1212-20S	●	●		12	12	12	80	2	15	1	12.9	0.3-3.0	NS404W	NKY15S
	GTBHR/L1010-30S	●	●	GTBT, GTCT	10	10	10	80	3	15	3	13.4	1.45-3.0	NS404W	NKY15S
	GTCHR/L1010-30S	●	●	GTCT	10	10	10	80	3	15	3	13.4	2.5-3.0	NS404W	NKY15S
Long Shank	GTAHR/L0808-20	●	●	GTAT GTBT *1 GTCT *1	8	8	8	120	2	15	5	12.9	0.3-3.0	NS404W	NKY15S
	GTAHR/L1010-20	●	●		10	10	10	120	2	15	3	12.9	0.3-3.0	NS404W	NKY15S
	GTAHR/L1212-20	●	●		12	12	12	120	2	15	1	12.9	0.3-3.0	NS404W	NKY15S
	GTAHR/L1616-20	●	●		16	16	16	120	2	15	-	12.9	0.3-3.0	NS404W	NKY15S
	GTBHR/L1010-30	●	●	GTBT, GTCT	10	10	10	120	3	15	3	13.4	1.45-3.0	NS404W	NKY15S
	GTBHR/L1212-30	●	●	GTBT, GTCT	12	12	12	120	3	15	1	13.4	1.45-3.0	NS404W	NKY15S
	GTBHR/L1616-30	●	●		16	16	16	120	3	15	-	13.4	1.45-3.0	NS404W	NKY15S
	GTCHR/L1010-30	●	●	GTCT	10	10	10	120	3	15	3	13.4	2.5-3.0	NS404W	NKY15S

Note 1) Please use right hand insert for right hand holder and left hand insert for left hand holder.

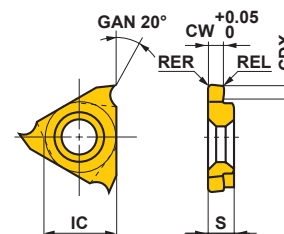
*1 It is not possible to machine depths over CDX dimensions(Max. Groove Depth).

For the actual maximum depth that can be machined, check the CDX of only the insert.

*2 Clamp Torque (N · m) : NS404W=1.0

INSERTS

Order Number	Hand	Coated	Dimensions (mm)					Geometry
		VP15TF	CW	CDX*1	RER/L	IC	S	
GTAT03006V3R-U	R	●	0.3	0.27	0.03	9.525	3.18	U Type Breaker (General purpose Grooving)
GTAT03006V3L-U	L	●	0.3	0.27	0.03	9.525	3.18	
GTAT05012V5R-U	R	●	0.5	0.9	0.05	9.525	3.18	
GTAT05012V5L-U	L	●	0.5	0.9	0.05	9.525	3.18	
GTAT07520V5R-U	R	●	0.75	1.8	0.05	9.525	3.18	
GTAT07520V5L-U	L	●	0.75	1.8	0.05	9.525	3.18	
GTAT09520V5R-U	R	●	0.95	1.8	0.05	9.525	3.18	
GTAT09520V5L-U	L	●	0.95	1.8	0.05	9.525	3.18	
GTAT10020V5R-U	R	●	1.0	1.8	0.05	9.525	3.18	
GTAT10020V5L-U	L	●	1.0	1.8	0.05	9.525	3.18	
GTAT10320V5R-U	R	●	1.03	1.8	0.05	9.525	3.18	
GTAT12520V5R-U	R	●	1.25	1.8	0.05	9.525	3.18	
GTAT12520V5L-U	L	●	1.25	1.8	0.05	9.525	3.18	
GTBT14530V5R-U	R	●	1.45	2.8	0.05	9.525	3.18	
GTBT14530V5L-U	L	●	1.45	2.8	0.05	9.525	3.18	
GTBT15030V5R-U	R	●	1.5	2.8	0.05	9.525	3.18	
GTBT15030V5L-U	L	●	1.5	2.8	0.05	9.525	3.18	
GTBT17530V5R-U	R	●	1.75	2.8	0.05	9.525	3.18	
GTBT17530V5L-U	L	●	1.75	2.8	0.05	9.525	3.18	
GTBT20030V5R-U	R	●	2.0	2.8	0.05	9.525	3.18	
GTBT20030V5L-U	L	●	2.0	2.8	0.05	9.525	3.18	
GTCT25030V5R-U	R	●	2.5	2.8	0.05	9.525	3.18	
GTCT25030V5L-U	L	●	2.5	2.8	0.05	9.525	3.18	



Right hand insert shown.

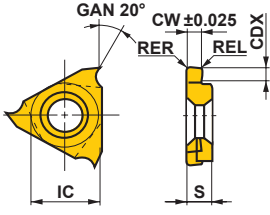
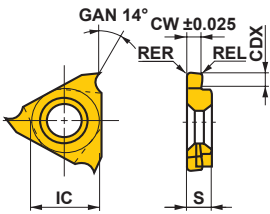
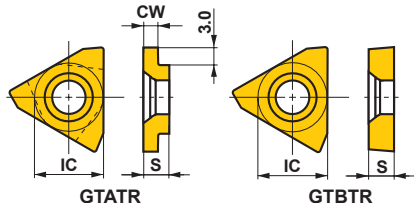
*1 CDX is a value that assumes the machining diameter of $\phi 42$ or less.

Please note that the maximum machining depth is limited by the holder used.

● : Inventory maintained in Japan.

(Contains 5 inserts per case.)

INSERTS

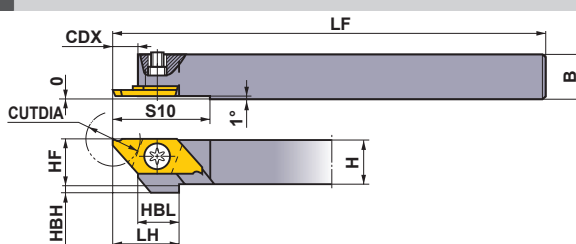
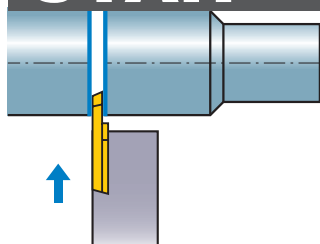
Order Number	Hand	Coated			Carbide			Dimensions (mm)					Geometry
		VP15TF	VP15KZ	TF15	CW	CDX	RER/L	IC	S				
GTAT03306V3R-E	R	●			0.33	0.27	0.03	9.525	3.18				
GTAT03306V3L-E	L	●			0.33	0.27	0.03	9.525	3.18				
GTAT04312V3R-E	R	●			0.43	0.9	0.03	9.525	3.18				
GTAT04312V3L-E	L	●			0.43	0.9	0.03	9.525	3.18				
GTAT05312V5R-E	R	●			0.53	0.9	0.05	9.525	3.18				
GTAT05312V5L-E	L	●			0.53	0.9	0.05	9.525	3.18				
GTAT07520V5R-E	R	●			0.75	1.8	0.05	9.525	3.18				
GTAT07520V5L-E	L	●			0.75	1.8	0.05	9.525	3.18				
GTAT09520V5R-E	R	●			0.95	1.8	0.05	9.525	3.18				
GTAT09520V5L-E	L	●			0.95	1.8	0.05	9.525	3.18				
GTAT10020V5R-E	R	●			1.0	1.8	0.05	9.525	3.18				
GTAT10020V5L-E	L	●			1.0	1.8	0.05	9.525	3.18				
GTAT1002001R-E	R	●			1.0	1.8	0.1	9.525	3.18				
GTAT1002001L-E	L	●			1.0	1.8	0.1	9.525	3.18				
GTAT12020V5R-E	R	●			1.2	1.8	0.05	9.525	3.18				
GTAT12020V5L-E	L	●			1.2	1.8	0.05	9.525	3.18				
GTAT1202001R-E	R	●			1.2	1.8	0.1	9.525	3.18				
GTAT1202001L-E	L	●			1.2	1.8	0.1	9.525	3.18				
GTAT14020V5R-E	R	●			1.4	1.8	0.05	9.525	3.18				
GTAT14020V5L-E	L	●			1.4	1.8	0.05	9.525	3.18				
GTBT15030V5R-E	R	●			1.5	2.8	0.05	9.525	3.18				
GTBT15030V5L-E	L	●			1.5	2.8	0.05	9.525	3.18				
GTBT1503001R-E	R	●			1.5	2.8	0.1	9.525	3.18				
GTBT1503001L-E	L	●			1.5	2.8	0.1	9.525	3.18				
GTBT18030V5R-E	R	●			1.8	2.8	0.05	9.525	3.18				
GTBT18030V5L-E	L	●			1.8	2.8	0.05	9.525	3.18				
GTBT20030V5R-E	R	●			2.0	2.8	0.05	9.525	3.18				
GTBT20030V5L-E	L	●			2.0	2.8	0.05	9.525	3.18				
GTBT2003001R-E	R	●			2.0	2.8	0.1	9.525	3.18				
GTBT2003001L-E	L	●			2.0	2.8	0.1	9.525	3.18				
GTBT22530V5R-E	R	●			2.25	2.8	0.05	9.525	3.18				
GTBT22530V5L-E	L	●			2.25	2.8	0.05	9.525	3.18				
GTCT25030V5R-E	R	●			2.5	2.8	0.05	9.525	3.18				
GTCT25030V5L-E	L	●			2.5	2.8	0.05	9.525	3.18				
GTCT27530V5R-E	R	●			2.75	2.8	0.05	9.525	3.18				
GTCT27530V5L-E	L	●			2.75	2.8	0.05	9.525	3.18				
GTCT30030V5R-E	R	●			3.0	2.8	0.05	9.525	3.18				
GTCT30030V5L-E	L	●			3.0	2.8	0.05	9.525	3.18				
Right hand insert shown.													
GTAT0330600R-VT	R		●		0.33	0.25	0	9.525	3.18				
GTAT0431200R-VT	R		●		0.43	0.9	0	9.525	3.18				
GTAT0532000R-VT	R		●		0.53	1.6	0	9.525	3.18				
GTAT0652000R-VT	R		●		0.65	1.6	0	9.525	3.18				
GTAT0752000R-VT	R		●		0.75	1.6	0	9.525	3.18				
GTAT0802000R-VT	R		●		0.8	1.6	0	9.525	3.18				
GTAT0852000R-VT	R		●		0.85	1.6	0	9.525	3.18				
GTAT0952000R-VT	R		●		0.95	1.6	0	9.525	3.18				
GTAT1002000R-VT	R		●		1.0	1.6	0	9.525	3.18				
GTAT1102000R-VT	R		●		1.1	1.6	0	9.525	3.18				
GTAT1202000R-VT	R		●		1.2	1.6	0	9.525	3.18				
GTAT1302000R-VT	R		●		1.3	1.6	0	9.525	3.18				
GTAT1402000R-VT	R		●		1.4	1.6	0	9.525	3.18				
GTBT1503000R-VT	R		●		1.5	2.7	0	9.525	3.18				
GTBT2003000R-VT	R		●		2.0	2.7	0	9.525	3.18				
GTATR	R			*●	1.76	—	—	9.525	3.18				
GTATL	L			*●	1.76	—	—	9.525	3.18				
GTBTR	R			*●	—	—	—	9.525	3.18				
GTBTL	L			*●	—	—	—	9.525	3.18				
Right hand insert shown.													

* Contains 10 inserts per case.

CUTTING CONDITIONS > D020
 SPARE PARTS > P001
 TECHNICAL DATA > Q001

EXTERNAL CUTTING OFF

CTAH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)									CUTDIA (mm)	*2		
	R	L		H	B	HF	LF	LH	CDX	HBH	HBL	S10		Clamp Screw	Wrench	
CTAHR/L0810-120	●	●	CTAT	○	8	10	8	120	15	5.5	4	9.5	22	12 (8)*1	NS402W	NKY15S
CTAHR/L1010-120	●	●		○	10	10	10	120	15	5.5	2	9.5	22		NS402W	NKY15S
CTAHR/L1212-120	●	●		○	12	12	12	120	15	5.5	—	9.5	22		NS403W	NKY15S
CTAHR/L1616-120	●	●		○	16	16	16	120	15	5.5	—	9.5	22		NS403W	NKY15S

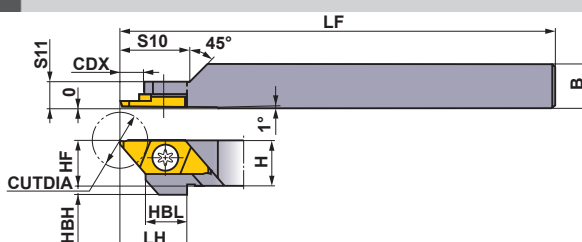
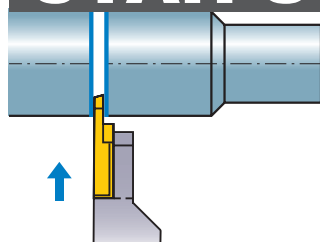
*1 When the width of cutting off (CW) is 0.7mm.

*2 Clamp Torque (N • m) : NS402W=1.0, NS403W=1.0

SMALL TOOLS

D

CTAH-S



Right hand tool holder only.

Order Number	Stock		Insert Number	Dimensions (mm)										CUTDIA (mm)	*2		
	R	L		H	B	HF	LF	LH	CDX	HBH	HBL	S10	S11		Clamp Screw	Wrench	
CTAHR1010-120S	●		CTAT	○	10	10	10	80	15	16	2	9.5	16	5.5	12 (8)*1	NS401	NKY25R

*1 When the width of cutting off (CW) is 0.7mm.

*2 Clamp Torque (N • m) : NS401=3.5

RECOMMENDED CUTTING CONDITIONS

	Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P	Carbon Steel · Alloy Steel	180HB–280HB	MS6015/VP15TF	100 (50–150)	0.05 (0.02–0.09)
	Free Cutting Steel	—	MS6015	110 (30–180)	0.05 (0.01–0.09)
M	Stainless Steel	≤200HB	VP15TF	80 (50–120)	0.03 (0.02–0.05)
N	Non-Ferrous Metal	—	MS6015	150 (70–230)	0.07 (0.03–0.11)

● : Inventory maintained in Japan.
(Contains 5 inserts per case.)

INSERTS

Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated		Dimensions (mm)								CUTDIA (mm)
							VP15TF	MS6015	CW	CDX	RER/L	L	W1	S	LBB		
Right Hand (R)	16°	With Breaker			CTAT07080V5RR-B	R	●		0.7	4.5	0.05	20	8	2.5	1.5	8	
					CTAT10120V5RR-B	R	●	●	1.0	6.7	0.05	20	8	2.5	1.5	12	
					CTAT15120V5RR-B	R	●	●	1.5	6.7	0.05	20	8	2.5	1.5	12	
					CTAT20120V5RR-B	R	●	●	2.0	6.7	0.05	20	8	2.5	1.5	12	
	16°				CTAT15120V5RR-BX	R	●		1.5	6.7	0.05	20	8	2.5	1.5	12	
					CTAT20120V5RR-BX	R	●		2.0	6.7	0.05	20	8	2.5	1.5	12	
	0°				CTAT10120V5RN-B	N	●	●	1.0	6.7	0.05	20	8	2.5	1.5	12	
					CTAT15120V5RN-B	N	●	●	1.5	6.7	0.05	20	8	2.5	1.5	12	
	0°				CTAT20120V5RN-B	N	●	●	2.0	6.7	0.05	20	8	2.5	1.5	12	
					CTAT15120V5RN-BX	N	●		1.5	6.7	0.05	20	8	2.5	1.5	12	
				CTAT20120V5RN-BX	N	●		2.0	6.7	0.05	20	8	2.5	1.5	12		
	16°			Without Breaker		CTAT10110V5RL-B	L	●		1.0	6.7	0.05	20	8	2.5	1.5	11
		CTAT15110V5RL-B	L		●		1.5	6.7	0.05	20	8	2.5	1.5	11			
		CTAT20110V5RL-B	L		●		2.0	6.7	0.05	20	8	2.5	1.5	11			
20°	Without Breaker		CTAT1012000RR	R	●	●	1.0	6.7	0	20	8	2.5	3.5	12			
			CTAT1512000RR	R	●	●	1.5	6.7	0	20	8	2.5	3.5	12			
			CTAT2012000RR	R	●	●	2.0	6.7	0	20	8	2.5	3.5	12			
Left Hand (L)	16°	With Breaker			CTAT07080V5LL-B	L	●		0.7	4.5	0.05	20	8	2.5	1.5	8	
					CTAT10120V5LL-B	L	●		1.0	6.7	0	20	8	2.5	1.5	12	
					CTAT15120V5LL-B	L	●		1.5	6.7	0	20	8	2.5	1.5	12	
					CTAT20120V5LL-B	L	●		2.0	6.7	0	20	8	2.5	1.5	12	
	0°				CTAT10120V5LN-B	N	●	●	1.0	6.7	0.05	20	8	2.5	1.5	12	
					CTAT15120V5LN-B	N	●	●	1.5	6.7	0.05	20	8	2.5	1.5	12	
					CTAT20120V5LN-B	N	●	●	2.0	6.7	0.05	20	8	2.5	1.5	12	
	16°			Without Breaker		CTAT10110V5LR-B	R	●	●	1.0	6.7	0.05	20	8	2.5	1.5	11
						CTAT15110V5LR-B	R	●	●	1.5	6.7	0.05	20	8	2.5	1.5	11
						CTAT20110V5LR-B	R	●	●	2.0	6.7	0.05	20	8	2.5	1.5	11
	20°			Without Breaker		CTAT1012000LL	L	●		1.0	6.7	0	20	8	2.5	3.5	12
						CTAT1512000LL	L	●		1.5	6.7	0	20	8	2.5	3.5	12
		CTAT2012000LL	L		●		2.0	6.7	0	20	8	2.5	3.5	12			

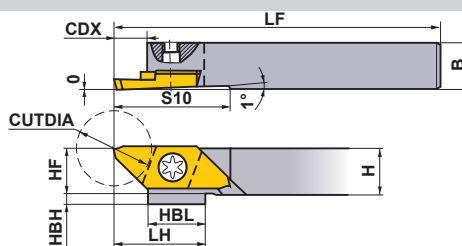
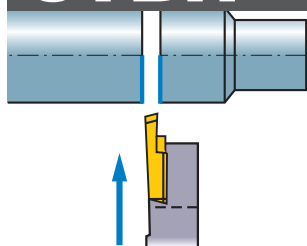
Right hand insert shown.

D

SMALL TOOLS

EXTERNAL CUTTING OFF

CTBH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)										CUTDIA (mm)	*	
	R	L		H	B	HF	LF	LH	CDX	HBH	HBL	S10	Clamp Screw		Wrench	
CTBHR/L1010-160	●	●	CTBT	10	10	10	120	19.5	7.5	2	9.5	25	16	NS402W	NKY15S	
CTBHR/L1212-160	●	●		12	12	12	120	19.5	7.5	—	9.5	25	16	NS403W	NKY15S	
CTBHR/L1616-160	●	●		16	16	16	120	19.5	7.5	—	9.5	25	16	NS403W	NKY15S	

* Clamp Torque (N · m) : NS402W=1.0, NS403W=1.0

SMALL TOOLS

D

INSERTS

Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated		Dimensions (mm)							CUTDIA (mm)
							VP15TF	MS6015	CW	CDX	RER/L	L	W1	S		
Right Hand (R)					CTBT15160V5RR-B	R	●	●	1.5	9.2	0.05	25	9.4	3.5	16	
					CTBT20160V5RR-B	R	●	●	2.0	9.2	0.05	25	9.4	3.5	16	
Left Hand (L)		With Breaker			CTBT20160V5RN-B	N	●	●	2.0	9.2	0.05	25	9.4	3.5	16	
					CTBT20160V5LL-B	L	●		2.0	9.2	0.05	25	9.4	3.5	16	
					CTBT20160V5LN-B	N	●	●	2.0	9.2	0.05	25	9.4	3.5	16	
					CTBT20145V5LR-B	R	●	●	2.0	9.2	0.05	25	9.4	3.5	14.5	

Right hand insert shown.

RECOMMENDED CUTTING CONDITIONS

Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P Carbon Steel · Alloy Steel	180HB–280HB	MS6015/VP15TF	100 (50–150)	0.05 (0.02–0.09)
	Free Cutting Steel	MS6015	110 (30–180)	0.05 (0.01–0.09)
M Stainless Steel	≤200HB	VP15TF	80 (50–120)	0.03 (0.02–0.05)
N Non-Ferrous Metal	—	MS6015	150 (70–230)	0.07 (0.03–0.11)

● : Inventory maintained in Japan.
(Contains 5 inserts per case.)

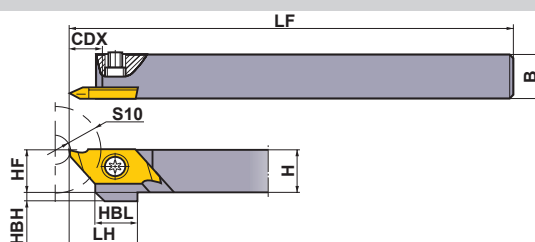
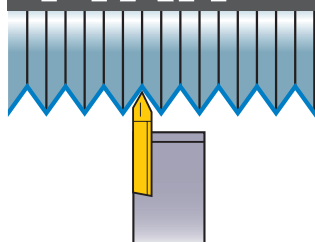
SPARE PARTS > P001
TECHNICAL DATA > Q001

Memo







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EXTERNAL THREADING

TTAH


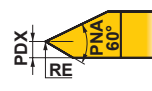

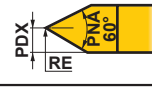

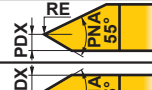

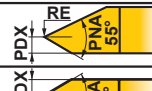


Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)										*  	
	R	L		H	B	HF	LF	LH	HBH	HBL	CDX	S10	Clamp Screw	Wrench	
TTAHR/L0810	●	●	TTAT		8	10	8	120	15	4	9.5	7	6.5	NS402W	NKY15S
TTAHR/L1010	●	●			10	10	10	120	15	2	9.5	7	6.5	NS402W	NKY15S
TTAHR/L1212	●	●			12	12	12	120	15	—	9.5	7	6.5	NS403W	NKY15S
TTAHR/L1616	●	●			16	16	16	120	15	—	9.5	7	6.5	NS403W	NKY15S

* Clamp Torque (N · m) : NS402W=1.0, NS403W=1.0

INSERTS

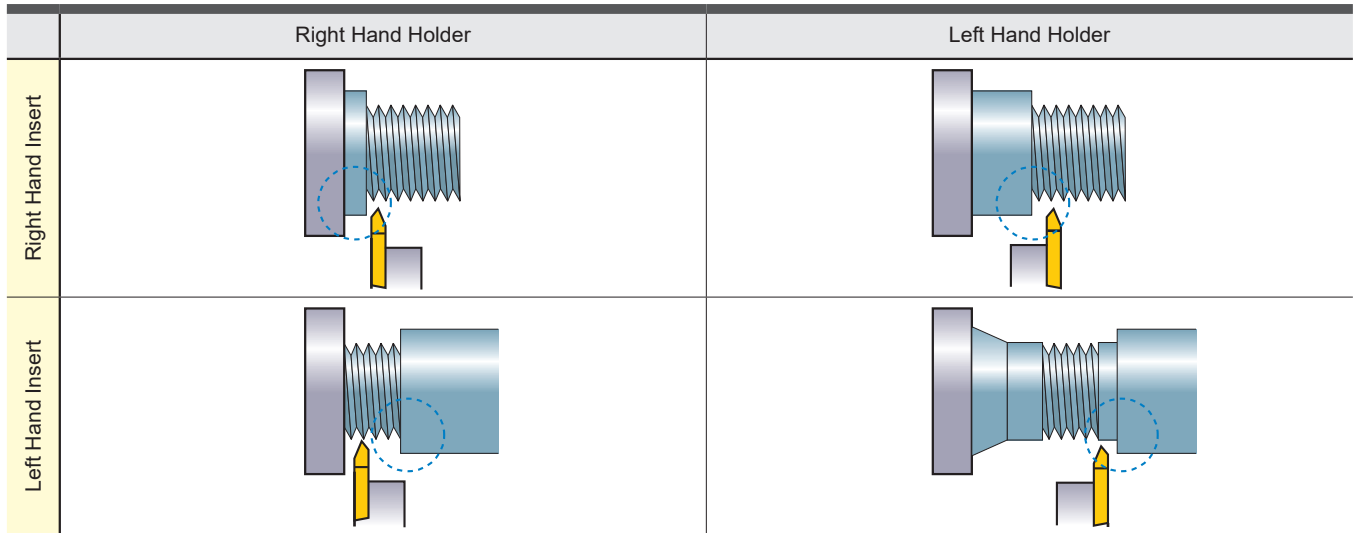
Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated	Dimensions (mm)					Pitch of Screw mm (thread/inch)
							VP15TF	PDX	RE	L	W1	S	
Right Hand (R)			General Purpose Partial Profile (60°)		TTAT60075F5RR-B	R	●	0.4	0.05 Flat	20.0	8.0	2.5	0.2-0.75 (80-36)
					TTAT60125V5RR-B	R	●	0.8	0.05 Flat	20.0	8.0	2.5	0.5-1.25 (40-16)
					TTAT60075F5RL-B	L	●	0.4	0.05 Flat	20.0	8.0	2.5	0.2-0.75 (80-36)
					TTAT60125V5RL-B	L	●	0.8	0.05 Flat	20.0	8.0	2.5	0.5-1.25 (40-16)
Left Hand (L)		With Breaker	General Purpose Partial Profile (60°)		TTAT6015001RN-B	N	●	1.25	0.1	20.0	8.0	2.5	1.0-1.5 (24-18)
					TTAT60075F5LR-B	R	●	0.4	0.05 Flat	20.0	8.0	2.5	0.2-0.75 (80-36)
					TTAT60125V5LR-B	R	●	0.8	0.05 Flat	20.0	8.0	2.5	0.5-1.25 (40-16)
					TTAT60075F5LL-B	L	●	0.4	0.05 Flat	20.0	8.0	2.5	0.2-0.75 (80-36)
					TTAT60125V5LL-B	L	●	0.8	0.05 Flat	20.0	8.0	2.5	0.5-1.25 (40-16)
					TTAT6015001LN-B	N	●	1.25	0.1	20.0	8.0	2.5	1.0-1.5 (24-18)
Right Hand (R)			General Purpose Partial Profile (55°)		TTAT55158V5RR-B	R	●	0.8	0.05 Flat	20.0	8.0	2.5	(40-16)
					TTAT55158V5RL-B	L	●	0.8	0.05 Flat	20.0	8.0	2.5	(40-16)
Left Hand (L)			General Purpose Partial Profile (55°)		TTAT55158V5LR-B	R	●	0.8	0.05 Flat	20.0	8.0	2.5	(40-16)
					TTAT55158V5LL-B	L	●	0.8	0.05 Flat	20.0	8.0	2.5	(40-16)

RECOMMENDED CUTTING CONDITIONS

Workpiece Material	Hardness	Cutting Speed (m/min)	Workpiece Material	Hardness	Cutting Speed (m/min)
P Carbon Steel · Alloy Steel	180HB-280HB	100 (50-150)	M Stainless Steel	≤200HB	80 (50-120)
Free Cutting Steel	—	110 (30-180)	N Non-Ferrous Metal	—	150 (70-230)

● : Inventory maintained in Japan.
(Contains 5 inserts per case.)

HOLDER APPLICATION



*The above combinations enable to machine the side of

D
SMALL TOOLS

THREAD RANGE

Application range

Pitch (mm)	Pitch Diameter of Thread (mm)										Number of Passes
	≥ φ1.0	≥ φ1.2	≥ φ1.6	≥ φ2.0	≥ φ2.5	≥ φ3.0	≥ φ4.0	≥ φ5.0	≥ φ6.0	≥ φ7.0	
0.2											2-4
0.25											3-5
0.3											4-6
0.35											5-7
0.4											6-8
0.45											
0.5											
0.6											
0.7											
0.75											
0.8											
1											
1.25											
1.5											

Threading impossible

*Metric Thread (60°)

Pitch(thread/inch)	Pitch Diameter of Thread									Number of Passes
Inch	≥ φ0.060	≥ φ0.073	≥ φ0.086	≥ φ0.099	≥ φ0.112	≥ φ0.164	≥ φ0.190	≥ φ0.250	≥ φ0.313	
mm	≥ φ1.524	≥ φ1.854	≥ φ2.184	≥ φ2.515	≥ φ2.845	≥ φ4.166	≥ φ4.826	≥ φ6.350	≥ φ7.938	
80										3-5
72										4-6
64										5-7
56										6-8
48										
44										
40										
32										
28										
26										
24										
20										
18										
16										

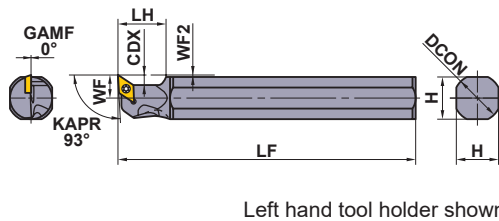
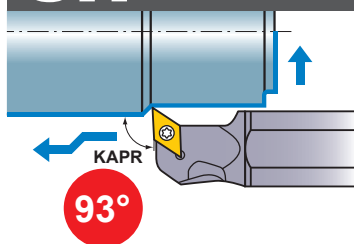
Threading impossible

*American UN, Whitworth


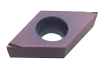
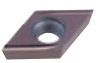



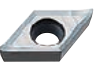

SPARE PARTS > P001
TECHNICAL DATA > Q001

EXTERNAL FRONT TURNING, COPYING, FACING (FOR OPPOSITE TOOL POSTS)

SH





Left hand tool holder shown.

Finish SMG/FS  (07, 11)	Finish R-F  (07, 11)	Light R-SS  (07, 11)	Light LS  (07, 11)
Medium R-SN  (07, 11)	Medium R-SR  (07, 11)	For nonferrous metals AZ  (07, 11)	Light LS-P  (07, 11)

SMALL TOOLS

D

Order Number	Stock L	Insert Number	Dimensions (mm)									* 	
			DCON	LF	LH	H	WF	WF2	CDX	Clamp Screw	Wrench		
SH16H-FSDUCL07	●	DCMT DCMW DCET DCGT DCGW	0702	15.875	100	20	14	7.75	0.75	4.2	TS254	TKY08R	
SH19K-FSDUCL07	●			19.05	125	20	17	9.25	0.75	4.2	TS254	TKY08R	
SH20K-FSDUCL07	●			20	125	20	18	9.75	0.75	4.2	TS254	TKY08R	
SH22K-FSDUCL07	●			22	125	20	20	10.75	0.75	4.2	TS254	TKY08R	
SH25M-FSDUCL07	●			25.4	150	20	23	12.25	0.75	4.2	TS254	TKY08R	
SH16H-FSDUCL11	●	DCMT DCMW DCET DCGT DCGW	11T3	15.875	100	20	15	7.75	0.75	6.4	TS43	TKY15R	
SH19K-FSDUCL11	●			19.05	125	20	17	9.25	0.75	6.4	TS43	TKY15R	
SH20K-FSDUCL11	●			20	125	20	18	9.75	0.75	6.4	TS43	TKY15R	
SH22K-FSDUCL11	●			22	125	20	20	10.75	0.75	6.4	TS43	TKY15R	
SH25M-FSDUCL11	●			25.4	150	20	23	12.25	0.75	6.4	TS43	TKY15R	

Note 1) When using insert with right and left hand chip breaker, please use right hand insert.

Note 2) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

* Clamp Torque (N · m) : TS254=1.0, TS43=3.5

RECOMMENDED CUTTING CONDITIONS

	Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P	Carbon Steel · Alloy Steel	180HB–280HB	MS6015/VP15TF	100 (50–150)	0.08 (0.01–0.15)
			MS6015	110 (30–180)	0.08 (0.01–0.15)
	Free Cutting Steel	–	NX2525	150 (50–250)	0.08 (0.01–0.15)
M	Stainless Steel	≤200HB	VP15TF/MP9005/MP9015	80 (50–120)	0.06 (0.02–0.1)
		230HB	MS7025/MS9025	100 (50–180)	0.08 (0.01–0.15)
N	Non-Ferrous Metal	–	HTI10/MT9005	150 (70–230)	0.09 (0.03–0.15)
S	Titanium Alloy	–	MT9005	60 (40–80)	0.08 (0.04–0.12)
	Heat Resistant Alloy	–	MP9015/MS9025	50 (20–75)	0.08 (0.04–0.12)

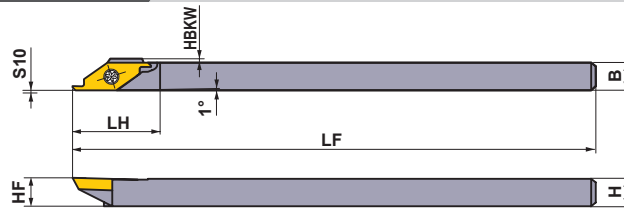
● : Inventory maintained in Japan.

SH type inserts > A124–A129

CBN & PCD inserts > B044, B045, B060

CAM TYPE TOOL POSTS

CSVH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)							*1 APMX (mm)	*2		
	R	L		H	B	HF	LF	HBKW	LH	S10		Clamp Screw	Wrench	
CSVHR/L0707	●	●	CSVT		7	7	7	140	0.5	20	0.1	3.0	NS251	NKY15S
CSVHR/L0808	●	●			8	8	8	140	0	20	0.1	3.0	NS251	NKY15S
CSVHR/L0909	●	●			9.5	9.5	9.5	140	0	20	0.1	3.0	NS251	NKY15S
CSVHR/L1010	●	●			10	10	10	140	0	20	0.1	3.0	NS251	NKY15S
CSVHR/L1212	●	●			12	12	12	140	0	20	0.1	3.0	NS251	NKY15S

Note 1) Please use right hand insert for right hand holder and left hand insert for left hand holder.

Note 2) Max. Cutting Depth (APMX) varies depending on the type of insert used.

*1 APMX : Max. Cutting Depth

*2 Clamp Torque (N · m) : NS251=1.0

INSERTS

CSVTF

Front turning

Order Number	Hand	Coated	Dimensions (mm)				APMX (mm) [*]	Geometry
		VP15KZ	IC	S	RER/L	CF		
CSVTF30AR	R	●	6.35	2.38	0	0.3	3.0	<p>Without Breaker</p> <p>Right hand insert shown.</p> <p>With Breaker</p> <p>Right hand insert shown.</p>
CSVTF30AL	L	●	6.35	2.38	0	0.3	3.0	
CSVTF30BR	R	●	6.35	2.38	0	0.3	3.0	
CSVTF30CR	R	●	6.35	2.38	0	0.15	3.0	
CSVTF30DR	R	●	6.35	2.38	0	0.15	3.0	
CSVTF30AR-B	R	●	6.35	2.38	0	0.3	3.0	<p>Without Breaker</p> <p>Right hand insert shown.</p> <p>With Breaker</p> <p>Right hand insert shown.</p>
CSVTF30AL-B	L	●	6.35	2.38	0	0.3	3.0	
CSVTF30BR-B	R	●	6.35	2.38	0	0.3	3.0	
CSVTF30CR-B	R	●	6.35	2.38	0	0.15	3.0	
CSVTF30DR-B	R	●	6.35	2.38	0	0.15	3.0	

* APMX : Max. Cutting Depth

CSVTFXL

Front turning, Copying

Order Number	Hand	Coated	Dimensions (mm)			APMX (mm) [*]	Geometry
		VP15KZ	IC	S	CFD		
CSVTFXL	L	●	6.35	2.38	0.7	3.0	<p>Without Breaker</p>

* APMX : Max. Cutting Depth

● : Inventory maintained in Japan.
(Contains 5 inserts per case.)

SPARE PARTS > P001
TECHNICAL DATA > Q001

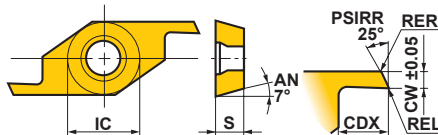
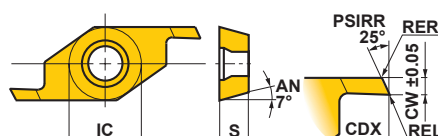
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CAM TYPE TOOL POSTS

INSERTS

CSVTC

Cutting off

Order Number	Hand	Coated	Dimensions (mm)					APMX* (mm)	Geometry	
		VP15KZ	IC	S	RER/L	CDX	CW			
CSVTC0640R	R	●	6.35	2.38	0	2.0	0.6	1.5	 <p>Without Breaker</p>	
CSVTC0750R	R	●	6.35	2.38	0	2.5	0.7	2.0		
CSVTC0750L	L	●	6.35	2.38	0	2.5	0.7	2.0		
CSVTC0850R	R	●	6.35	2.38	0	2.5	0.8	2.0		
CSVTC0850L	L	●	6.35	2.38	0	2.5	0.8	2.0		
CSVTC0950R	R	●	6.35	2.38	0	2.5	0.9	2.0		
CSVTC1060R	R	●	6.35	2.38	0	3.0	1.0	2.5		
CSVTC1060L	L	●	6.35	2.38	0	3.0	1.0	2.5		
CSVTC1360R	R	●	6.35	2.38	0	3.0	1.3	2.5		
CSVTC1360L	L	●	6.35	2.38	0	3.0	1.3	2.5		
CSVTC1560R	R	●	6.35	2.38	0	3.0	1.5	2.5		
CSVTC1560L	L	●	6.35	2.38	0	3.0	1.5	2.5		
CSVTC0640R-B	R	●	6.35	2.38	0	2.0	0.6	1.5		 <p>With Breaker</p>
CSVTC0750R-B	R	●	6.35	2.38	0	2.5	0.7	2.0		
CSVTC0850R-B	R	●	6.35	2.38	0	2.5	0.8	2.0		
CSVTC0950R-B	R	●	6.35	2.38	0	2.5	0.9	2.0		
CSVTC1060R-B	R	●	6.35	2.38	0	3.0	1.0	2.5		
CSVTC1360R-B	R	●	6.35	2.38	0	3.0	1.3	2.5		
CSVTC1560R-B	R	●	6.35	2.38	0	3.0	1.5	2.5		

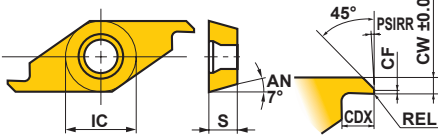
Right hand insert shown.

Right hand insert shown.

* APMX : Max. Cutting Depth

CSVTB

Back turning

Order Number	Hand	Coated	Dimensions (mm)							APMX* (mm)	Geometry
		VP15KZ	IC	S	RER/L	CDX	CW	CF	PSIRR/L		
CSVTB10AR	R	●	6.35	2.38	0	2.5	1	0.3	5°	2.0	 <p>Without Breaker</p>
CSVTB10AL	L	●	6.35	2.38	0	2.5	1	0.3	5°	2.0	
CSVTB10BR	R	●	6.35	2.38	0	2.5	1	0.3	2°	2.0	
CSVTB10CR	R	●	6.35	2.38	0	2.5	1	0.15	2°	2.0	
CSVTB10DR	R	●	6.35	2.38	0	2.5	1	0.15	5°	2.0	
CSVTB12AR	R	●	6.35	2.38	0	2.5	1.2	0.3	5°	2.0	
CSVTB14AR	R	●	6.35	2.38	0	2.5	1.4	0.3	5°	2.0	
CSVTB10AR-B	R	●	6.35	2.38	0	2.5	1	0.3	5°	2.0	
CSVTB10BR-B	R	●	6.35	2.38	0	2.5	1	0.3	2°	2.0	
CSVTB10CR-B	R	●	6.35	2.38	0	2.5	1	0.15	2°	2.0	
CSVTB10DR-B	R	●	6.35	2.38	0	2.5	1	0.15	5°	2.0	
CSVTB12AR-B	R	●	6.35	2.38	0	2.5	1.2	0.3	5°	2.0	
CSVTB14AR-B	R	●	6.35	2.38	0	2.5	1.4	0.3	5°	2.0	

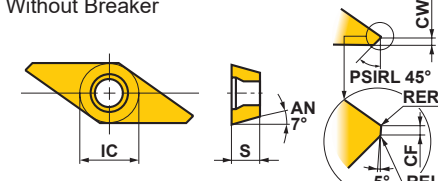
Right hand insert shown.

Right hand insert shown.

* APMX : Max. Cutting Depth

CSVTBXL

Back turning, Copying

Order Number	Hand	Coated	Dimensions (mm)					APMX* (mm)	Geometry
		VP15KZ	IC	S	RER/L	CW	CF		
CSVTBXL	L	●	6.35	2.38	0	0.7	0.035	3.0	 <p>Without Breaker</p>

* APMX : Max. Cutting Depth

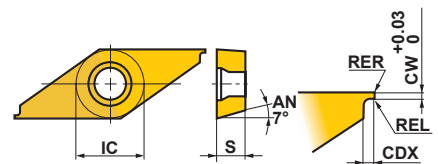
● : Inventory maintained in Japan.
(Contains 5 inserts per case.)

D

SMALL TOOLS

INSERTS

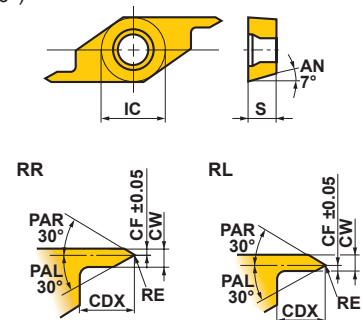
Order Number		Hand	Coated	Dimensions (mm)					APMX* (mm)	Geometry
			VP15KZ	IC	S	RER/L	CDX	CW		
CSV TG02505R	R	●	6.35	2.38	0	0.5	0.25	0.15	Without Breaker	
CSV TG03005R	R	●	6.35	2.38	0	0.5	0.3	0.15		
CSV TG03505R	R	●	6.35	2.38	0	0.5	0.35	0.15		
CSV TG04005R	R	●	6.35	2.38	0	0.5	0.4	0.15		
CSV TG04510R	R	●	6.35	2.38	0	1.0	0.45	0.45		
CSV TG05010R	R	●	6.35	2.38	0	1.0	0.5	0.45		
CSV TG05510R	R	●	6.35	2.38	0	1.0	0.55	0.45		
CSV TG06010R	R	●	6.35	2.38	0	1.0	0.6	0.45		
CSV TG06510R	R	●	6.35	2.38	0	1.0	0.65	0.45		
CSV TG07010R	R	●	6.35	2.38	0	1.0	0.7	0.45		
CSV TG07520R	R	●	6.35	2.38	0	2.0	0.75	1.4		
CSV TG07520L	L	●	6.35	2.38	0	2.0	0.75	1.4		
CSV TG08020R	R	●	6.35	2.38	0	2.0	0.8	1.4		
CSV TG08520R	R	●	6.35	2.38	0	2.0	0.85	1.4		
CSV TG09020R	R	●	6.35	2.38	0	2.0	0.9	1.4		
CSV TG09520R	R	●	6.35	2.38	0	2.0	0.95	1.4		
CSV TG09520L	L	●	6.35	2.38	0	2.0	0.95	1.4		
CSV TG10020R	R	●	6.35	2.38	0	2.0	1.0	1.4		
CSV TG11030R	R	●	6.35	2.38	0	3.0	1.1	2.6		
CSV TG12030R	R	●	6.35	2.38	0	3.0	1.2	2.6		
CSV TG12030L	L	●	6.35	2.38	0	3.0	1.2	2.6		
CSV TG13030R	R	●	6.35	2.38	0	3.0	1.3	2.6		
CSV TG14030R	R	●	6.35	2.38	0	3.0	1.4	2.6		
CSV TG15030R	R	●	6.35	2.38	0	3.0	1.5	2.6		



Right hand insert shown.

* APMX : Max. Cutting Depth

Order Number		Hand	Coated	Pitch (mm)	Dimensions (mm)					Geometry
			VP15KZ		IC	S	RE	CDX	CW	
CSV TT60050RR	R	●	0.2—0.5	6.35	2.38	0.03	3.0	1.0	0.35	Without Breaker General Purpose Partial Profile (60°)
CSV TT60050RL	L	●	0.2—0.5	6.35	2.38	0.03	3.0	1.0	0.35	



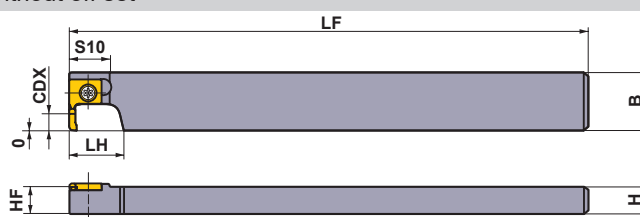
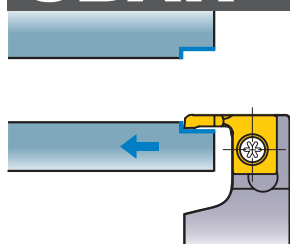
Right hand insert shown.

D
SMALL TOOLS

BORING

SBAH

Without off set



Right hand tool holder only.

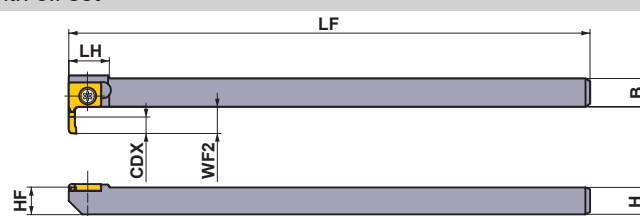
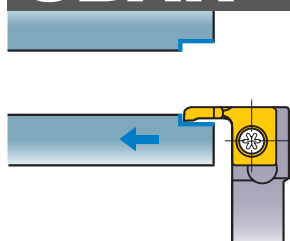
Order Number	Stock	Insert Number	Dimensions (mm)							CDX (mm)	DMIN*1 (mm)	*2	*2
	R		H	B	LF	HF	LH	S10	Clamp Screw				
SBAHR1022	●	SBAT	3080	10	21.5	120	10	17.5	15	8	3	NS402W	NKY15S
SBAHR1222	●		3080	12	21.5	120	12	17.5	15	8	3	NS403W	NKY15S

*1 DMIN : Min. Cutting Diameter

*2 Clamp Torque (N • m) : NS402W=1.0, NS403W=1.0

SBAH

With off set



Right hand tool holder only.

Order Number	Stock	Insert Number	Dimensions (mm)							CDX (mm)	DMIN*1 (mm)	*2	*2
	R		H	B	LF	HF	WF2	LH	Clamp Screw				
SBAHR1010	●	SBAT	3080	10	10	120	10	10	15	8	3	NS402W	NKY15S

*1 DMIN : Min. Cutting Diameter

*2 Clamp Torque (N • m) : NS402W=1.0

INSERTS

Breaker	Order Number	Coated	Dimensions (mm)								DMIN* (mm)	Geometry
		VP15KZ	PSIRL	RER	CDX	L	W1	S	CW	S10		
Without Breaker	SBAT308000L	●	5°	0	8.0	18.5	12.0	2.50	1.25	9.0	3	
	SBAT3080V5L	●	5°	0.05	8.0	18.5	12.0	2.50	1.25	9.0	3	
With Breaker	SBAT308000L-B	●	5°	0	8.0	18.5	12.0	2.50	1.25	9.0	3	
	SBAT3080V5L-B	●	5°	0.05	8.0	18.5	12.0	2.50	1.25	9.0	3	

* DMIN : Min. Cutting Diameter

● : Inventory maintained in Japan.
(Contains 5 inserts per case.)

SPARE PARTS > P001
TECHNICAL DATA > Q001

Memo

A series of horizontal dashed lines for writing, spanning the width of the page.