

HOW TO READ THE STANDARD OF EXTERNAL TURNING TOOLS

●How this section page is organised

- ①Organised according to turning insert shape.
(Refer to the index on the next page.)

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

TITLE OF PRODUCT BY INSERT TYPE
PRODUCT SECTION

EXTERNAL TURNING TOOLS

VN INSERTS TOOL HOLDERS

DVVN		External turning, Copying		DOUBLE CLAMP type		Finish				Chip Breaker			
						F				L			
						Medium				Stainless			
						G Class				CBN			

TURNING TOOLS

EXTERNAL TURNING TOOLS

CLASSIFICATION..... C002

IDENTIFICATION C006

METHOD OF HOLDING C007

STANDARD HOLDERS

CN○○ INSERTS TOOL HOLDERS..... C008

DN○○ INSERTS TOOL HOLDERS..... C010

SN○○ INSERTS TOOL HOLDERS..... C012

TN○○ INSERTS TOOL HOLDERS..... C016

VN○○ INSERTS TOOL HOLDERS..... C019

WN○○ INSERTS TOOL HOLDERS..... C022

CC○○ INSERTS TOOL HOLDERS..... C023

DC○○ INSERTS TOOL HOLDERS..... C024

RC○○ INSERTS TOOL HOLDERS..... C025

SC○○ INSERTS TOOL HOLDERS..... C027

TC○○ INSERTS TOOL HOLDERS..... C028

VC○○ INSERTS TOOL HOLDERS..... C029

XC○○ INSERTS TOOL HOLDERS..... C031

TL HOLDER C035

●AL HOLDER (FOR ALUMINIUM TURNING)

DE○○ INSERTS TOOL HOLDERS C032

TE○○ INSERTS TOOL HOLDERS C033

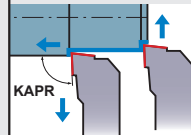
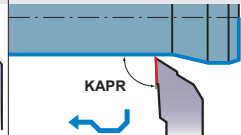
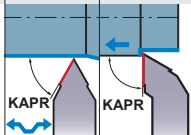
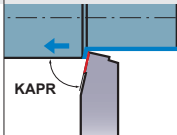
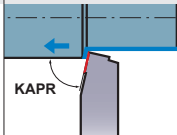
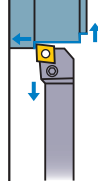
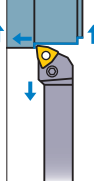
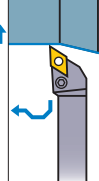
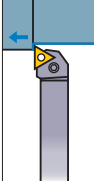
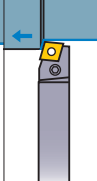
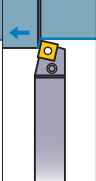
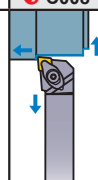
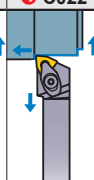
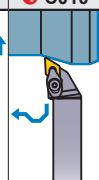
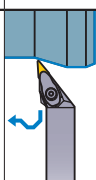
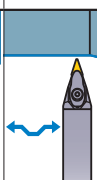
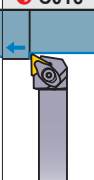
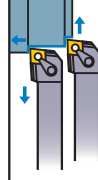
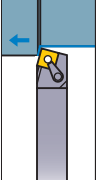
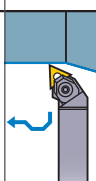
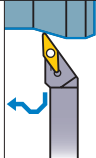
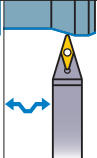
VD○○ INSERTS TOOL HOLDERS C034

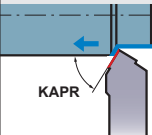
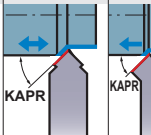
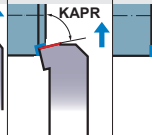
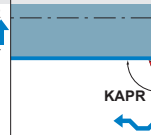
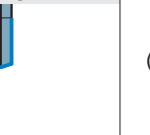
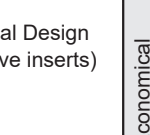
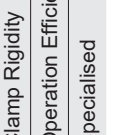
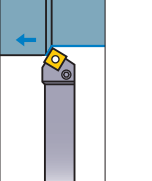
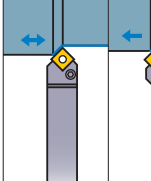
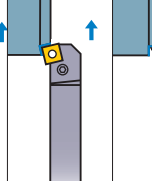
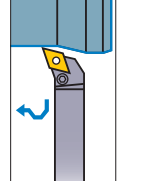
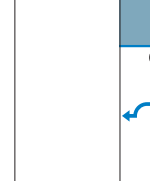
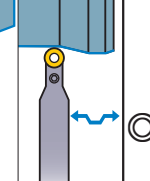
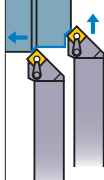
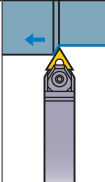
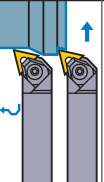
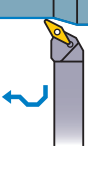
*Arranged by Alphabetical order

C008 DCLN	C012 PSBN	C033 STFE
C010 DDJN	C014 PSDN	C028 STGC
C016 DTGN	C015 PSKN	C033 STGE
C019 DVJN	C013 PSSN	C029 SVJC
C021 DVPN	C013 PSTN	C034 SVJD
C020 DVVN	C017 PTFN	C030 SVPC
C022 DWLN	C016 PTGN	C029 SVVC
C009 MCLN	C019 PVJN	C031 SXZC
C012 MSBN	C021 PVPN	C035 TLHR
C014 MSSN	C020 PVVN	
C018 MTEN	C022 PWLN	
C017 MTJN	C023 SCLC	
C018 MTQN	C024 SDJC	
C009 PCBN	C032 SDJE	
C008 PCLN	C024 SDNC	
C011 PDHN	C032 SDNE	
C010 PDJN	C026 SRDC	
C025 PRDC	C026 SRGC	
C025 PRGC	C027 SSSC	



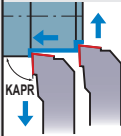
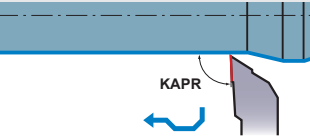
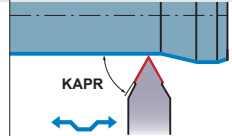
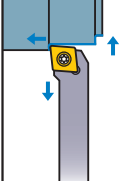
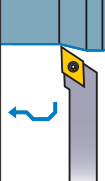
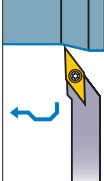
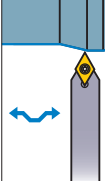
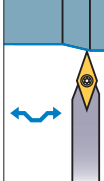
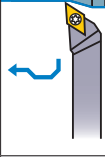
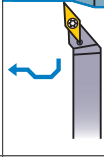
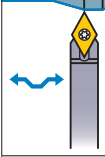
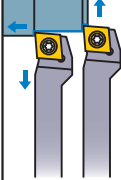
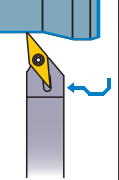
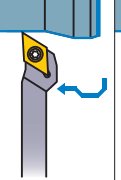
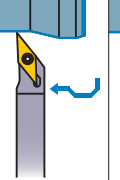
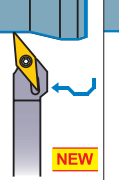
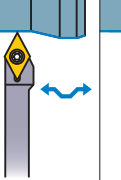
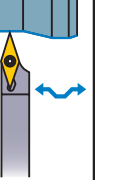
CLASSIFICATION(Negative insert)

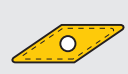
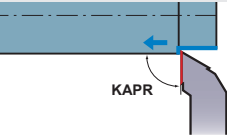
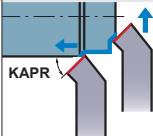
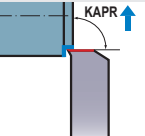
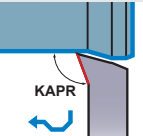
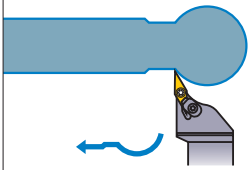
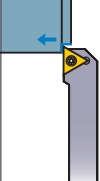
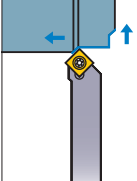
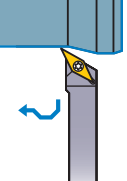
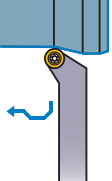
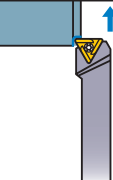
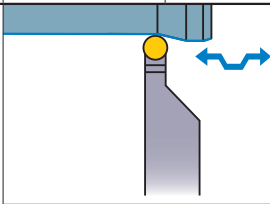
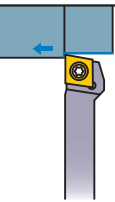
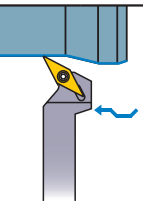
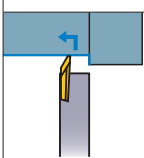
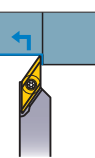
Applicable Insert Type		CN ⁰⁰	WN ⁰⁰	DN ⁰⁰	TN ⁰⁰	VN ⁰⁰	VN ⁰⁰	TN ⁰⁰	CN ⁰⁰	SN ⁰⁰	
											
Tool Holder	Features Shank Size (H x W x L)	External Turning Facing		External Turning Copying			External Turning				
		KAPR=95°		KAPR=93°			KAPR=72.5°	KAPR=91°	KAPR=75°		
											
LL Type Holder 	● Lever lock type. ● ISO standard. ● Various holder shapes. ● Suitable for light to heavy cutting. ● Economical negative insert. 10 x 10 x 70 25 x 25 x 150 12 x 12 x 80 32 x 25 x 170 16 x 16 x 100 32 x 32 x 170 20 x 20 x 125										
		PCLN ⊕ C008	PWLN ⊕ C022	PDJN ⊕ C010				PTGN ⊕ C016	PCBN ⊕ C009	PSBN ⊕ C012	
DOUBLE CLAMP Type Holder 	● New double clamp type. ● Holds inserts securely. ● Excellent cutting edge tolerance. ● Economical negative insert. ● Small insert series. 16 x 16 x 100 25 x 25 x 150 20 x 20 x 125 32 x 25 x 170										
		DCLN ⊕ C008	DWLN ⊕ C022	DDJN ⊕ C010		DVJN ⊕ C019	DVVN ⊕ C020	DTGN ⊕ C016			
DOUBLE CLAMP Type Holder (For heavy cutting) 	● Double clamp holder type. ● Holds inserts securely. ● Suitable for heavy cutting. ● Negative insert. 32 x 32 x 170 40 x 40 x 200										
		MCLN ⊕ C009							MSBN ⊕ C012		
WP Type Holder 	● Double clamp holder type. ● Simple insert exchange. ● Economical negative insert. 20 x 20 x 125 25 x 25 x 150 35 x 25 x 170										
					MTJN ⊕ C017						
MP Type Holder 	● Pin lock type. ● 35° rhombic shape insert. ● Suitable for recessing. 20 x 20 x 125 25 x 25 x 150										
						PVJN ⊕ C019	PVVN ⊕ C020				

	SN ⁰⁰ 	TN ⁰⁰ 	SN ⁰⁰ 	SN ⁰⁰ 	SN ⁰⁰ 	TN ⁰⁰ 	DN ⁰⁰ 	TN ⁰⁰ 	VN ⁰⁰ 	Special Design (Positive inserts)					
	External Turning, Chamfering		External Turning, Facing, Chamfering		Facing		Facing, Copying			External Turning, Copying	Selection Standard				
	KAPR=60°	KAPR=45°	KAPR=45°	KAPR=75°	KAPR=91°	KAPR=105° 107.5° 117.5°			Special Design (Positive inserts)	Economical	Low Cutting Resistance (Sharpness)	Clamp Rigidity	Operation Efficiency	Specialised	
															
											◎		○	◎	
	PSTN ➔ C013	PSDN ➔ C014	PSSN ➔ C013	PSKN ➔ C015	PTFN ➔ C017	PDHN ➔ C011			PRGC ➔ C025	PRDC ➔ C025					
											◎		◎	◎	
									DVPN ➔ C021						
													◎		
			MSSN ➔ C014												
											◎		◎	◎	
	MTEN ➔ C018							MTQN ➔ C018							
											◎			◎	
									PVPN ➔ C021						

Note 1) ◎ : 1st recommendation. ○ : 2nd recommendation.

CLASSIFICATION(Positive insert)

Applicable Insert Type		CC ^{○○}	VP ^{○○}	DC/DE ^{○○}	VB/VC/ VD ^{○○}	VC ^{○○}	DC/DE ^{○○}	VB/VC ^{○○}	
									
Tool Holder	Features Shank Size (H x W x L)	External Turning, Facing	External Turning, Copying						
		KAPR=95° 	KAPR=93° 95° 			KAPR=62.5° 72.5° 			
Profile Type Holder 	- Double clamp holder type. 25° rhombic shape insert. - Possible to machine a face relief with up to 60° inclination. 16 x 16 x 100 20 x 20 x 125 25 x 25 x 150								
SP Type Holder 	- Screw-on type. - Miniature holder with 7° positive insert. 8 x 8 x 60 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	 SCLC ⊕ C023	 SDJC ⊕ C024	 SVJC ⊕ C029		 SDNC ⊕ C024	 SVVC ⊕ C029		
AL Type Holder (For Aluminium turning) 	- Screw-on type. 20° positive insert. (35° rhombic shape insert is 15°) - High rake and good sharpness. 16 x 16 x 100 20 x 20 x 125 25 x 25 x 150			 SDJE ⊕ C032	 SVJD ⊕ C034		 SDNE ⊕ C032		
TL Type Holder 	- Taper lock type - Excellent finished surface with round shape insert. 20 x 20 x 125 25 x 25 x 150 32 x 25 x 170								
SMALL TOOLS (Tools for front turning) 	- Screw-on type. - Tools to be equipped on gang type tool posts. - Miniature holder with 7° positive insert. 8 x 8 x 125 10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	 SCLC-SM ⊕ D010	 SVLP-SM ⊕ D012	 SDJC-SM ⊕ D011	 SVJB-SM ⊕ D012	 SVJC-SM ⊕ D013	 SDNC-SM ⊕ D011	 SVVB-SM ⊕ D013	
SMALL TOOLS (Tools for back turning) 	- Screw-on type. - Tools to be equipped on gang type tool posts. - High rigidity due to designing of vertical insert. (BTA/CTB type) - Back machining. (BTA/CTB type) 8 x 10 x 120 10 x 10 x 120 12 x 12 x 120 16 x 16 x 120								

	CC ^{○○} 	TC/TE ^{○○} 	SC ^{○○} 	TE ^{○○} 	VC/VP ^{○○} 	Special Design					
	External Turning		External Turning, Facing, Chamfering	Facing	Facing, Copying	External Turning, Copying	Selection Standard				
	KAPR=90° 91°		KAPR=45°	KAPR=91°	KAPR=117.5°	Special Design	Economical	Low Cutting Resistance (Sharpness)	Clamp Rigidity	Operation Efficiency	Specialised
											
								◎	◎		
						SXZC ➔ C031					
								○			
		STGC ➔ C028	SSSC ➔ C027		SVPC ➔ C030	SRGC ➔ C026					
								◎			◎
		STGE ➔ C033		STFE ➔ C033							
								○			◎
						TLHR ➔ C035					
								○			
	SCAC-SM ➔ D010				SVPP-SM ➔ D013						
						Special Design		○			
											
						BTAH/CTBH ➔ D014					
											
						BT VH ➔ D016					

Note 1) ◎ : 1st recommendation. ○ : 2nd recommendation.

IDENTIFICATION

■ LL Type Holder / Double Clamp Type Holder /
SP Type Holder / Profile Type Holder / AL Type Holder

P **C** **L** **N** **R** **25** **25** **M** **12**

C
EXTERNAL TURNING TOOLS

①Clamp Structure	
D	Double Clamp Type
M	Wedge Lock Type Multiple Clamp Type
P	Lever Lock Type
S	Screw-on Type

②Insert Shape	
C	Rhombic 80°
D	Rhombic 55°
R	Round
S	Square
T	Triangular
V	Rhombic 35°
W	Trigon
X	Special Design

③Cutting Angle KAPR	
A	90°Without Offset
B	75°
D	45°Neutral
E	60°
F	90°
G	90°With Offset
H	107.5°
J	93°
K	75°
L	95°
N	62.5°
P	117.5°
Q	105°
S	45°
T	60°
V	72.5°
Z	Special

④Insert Clearance	
C	7°Positive
N	Negative
E	20°Positive

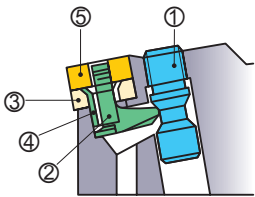
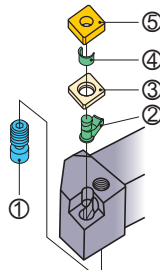
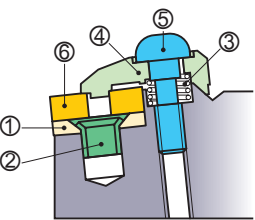
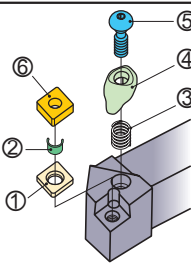
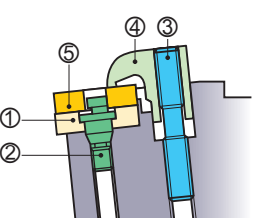
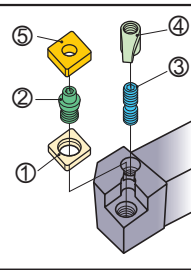
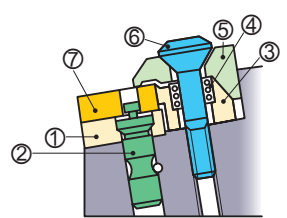
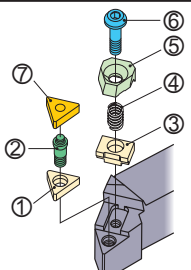
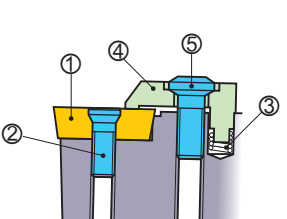
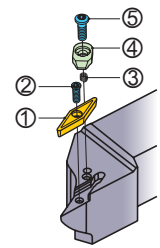
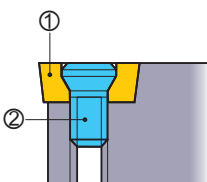
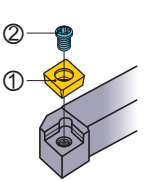
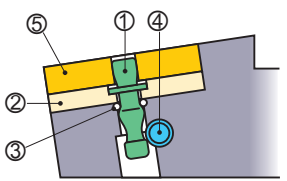
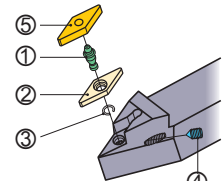
⑤Hand of Tool	
R	Right Hand
L	Left Hand
N	Neutral

⑥Tool Size H/B (mm) (Height and Width)	
8	08
10	10
12	12
16	16
20	20
25	25
32	32

⑦Tool Length LF (mm)	
D	60
E	70
F	80
H	100
K	125
M	150
P	170
Q	180
R	200

⑧Cutting Edge Length (mm)						
Inscribed Circle	Insert Shape					
	Square	Triangular	Round	Rhombic 80°	Rhombic 55°	Rhombic 35°
6.00	—	—	06	—	—	—
6.35	—	11	—	06	07	11
7.94	—	13	—	—	—	—
8.00	—	—	08	—	—	—
9.525	09	16	—	09	11	16
10.00	—	—	10	—	—	—
12.00	—	—	12	—	—	—
12.70	12	22	—	12	15	—
15.875	15	27	—	16	—	—
16.00	—	—	16	—	—	—
19.05	19	—	—	19	—	—
20.00	—	—	20	—	—	—
25.00	—	—	25	—	—	—
25.40	25	—	—	—	—	—
32.00	—	—	32	—	—	—

METHOD OF HOLDING

Type (Holder)	Structure	
Lever Lock (LL Type Holder)	 ① Clamp Screw ② Lever ③ Shim ④ Shim Pin ⑤ Insert 	
Double Clamp (DOUBLE CLAMP) (Type Holder)	 ① Shim ② Shim Pin ③ Spring ④ Clamp Bridge ⑤ Clamp Screw ⑥ Insert 	
Multiple Clamp (DOUBLE CLAMP) (Type Holder) (For heavy cutting)	 ① Shim ② Shim Pin ③ Clamp Screw ④ Clamp Bridge ⑤ Insert 	
Wedge Lock (WP Type Holder)	 ① Shim ② Shim Pin ③ Plate ④ Spring ⑤ Clamp Bridge ⑥ Clamp Screw ⑦ Insert 	
Two Action Double Clamp (PROFILE Type Holder)	 ① Insert ② Clamp Screw (1) ③ Spring ④ Clamp Bridge ⑤ Clamp Screw (2) 	
Screw-on (SP Type Holder) (AL Type Holder)	 ① Insert ② Clamp Screw 	
Pin Lock (MP Type Holder)	 ① Lock Pin ② Shim ③ Stop Ring ④ Lock Screw ⑤ Insert 	

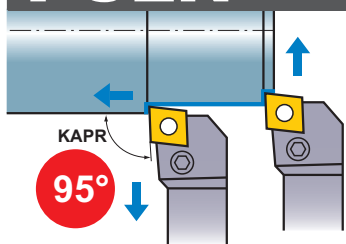
EXTERNAL TURNING TOOLS

CN INSERTS TOOL HOLDERS



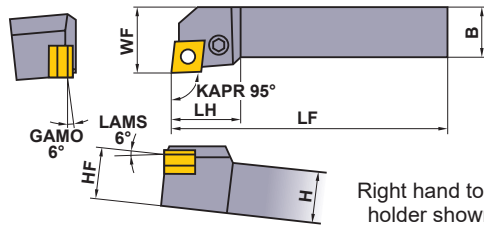
TOOL NEWS

PCLN



External turning,
Facing

LL type



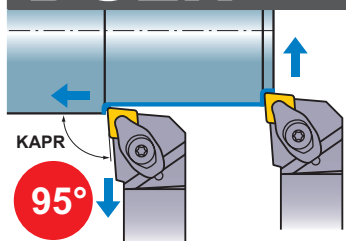
Right hand tool
holder shown.

Finish	Light	Medium	Medium
FP  (12)	LP  (12)	MP  (12,16)	MK  (12,16,19)
Medium Standard  (09,12,16,19)	Medium to Rough RP  (12,16,19)	Stainless MM  (12,16,19)	CBN  (12)

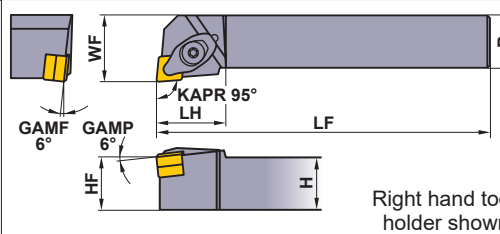
Order Number	Stock		Insert Number		Dimensions (mm)										
	R	L			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench
PCLNR/L1616H09	●	●	CNMG	09T3 	16	16	100	22	16	20	LLSCN3T3	LLP13	LLCL13	LLCS106	HKY25R
PCLNR/L2020K09	●	●		09T3 	20	20	125	22	20	25	LLSCN3T3	LLP13	LLCL13	LLCS106	HKY25R
PCLNR/L2525M09	●	●		09T3 	25	25	150	22	25	32	LLSCN3T3	LLP13	LLCL13	LLCS106	HKY25R
PCLNR/L2020K12	●	●	CNMA CNMG CNMM CNGA CNGG CNGM	1204 	20	20	125	28	20	25	LLSCN42	LLP14	LLCL14	LLCS108	HKY30R
PCLNR/L2525M12	●	●		1204 	25	25	150	28	25	32	LLSCN42	LLP14	LLCL14	LLCS108	HKY30R
PCLNR/L3225P12	●	●		1204 	32	25	170	28	32	32	LLSCN42	LLP14	LLCL14	LLCS108	HKY30R
PCLNR/L3232P16	●	●		1606 	32	32	170	32	32	40	LLSCN53	LLP15	LLCL25	LLCS508	HKY30R
PCLNR/L3232P19	●	●		1906 	32	32	170	40	32	40	LLSCN63	LLP16	LLCL16	LLCS310	HKY40R

* Clamp Torque (N · m) : LLCS106=2.2, LLCS108=3.3, LLCS508=3.3, LLCS310=7.0

DCLN



External turning, **DOUBLE CLAMP** type
Facing



Right hand tool
holder shown.

Finish	Light	Medium	Medium
FP  (12)	LP  (12)	MP  (12)	MK  (12)
Medium Standard  (09,12)	Medium to Rough RP  (12)	Stainless MM  (12)	CBN  (12)

Order Number	Stock		Insert Number		Dimensions (mm)					*2					*1	
	R	L			H	B	LF	LH	HF	WF						
DCLNR/L1616H09	●	●	CNMG	09T3	16	16	100	25	16	20	LLSCN3T3 (LLSCN33)	LLP23	DCK2211	DCS2	DC0520T	TKY15F
DCLNR/L2020K09	●	●		09T3	20	20	125	25	20	25	LLSCN3T3 (LLSCN33)	LLP23	DCK2211	DCS2	DC0520T	TKY15F
DCLNR/L2525M09	●	●		09T3	25	25	150	25	25	32	LLSCN3T3 (LLSCN33)	LLP23	DCK2211	DCS2	DC0520T	TKY15F
DCLNR/L2020K12	●	●	CNMA CNMG CNMM CNGA CNGG CNGM	1204	20	20	125	29	20	25	LLSCN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F
DCLNR/L2525M12	●	●		1204	25	25	150	29	25	32	LLSCN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F
DCLNR/L3225P12	●	●		1204	32	25	170	29	32	32	LLSCN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F

*1 Clamp Torque (N · m) : DC0520T=3.5, DC0621T=5.0

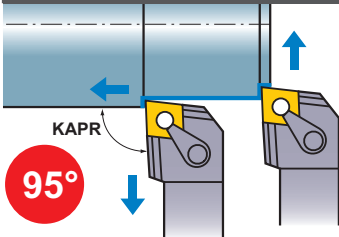
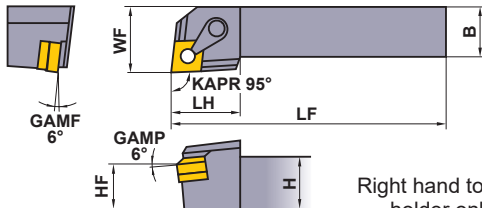
*2 Please use shim no. LLSCN33 with 3.18mm thick inserts. When using 3.18mm thick inserts, shim should be ordered separately.

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

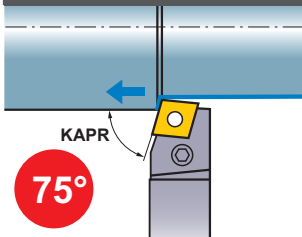
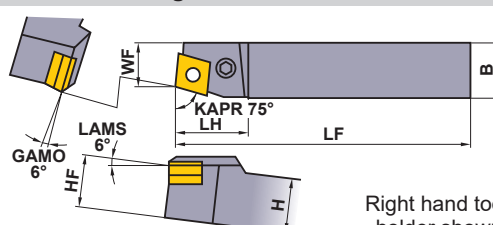
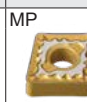
● : Inventory maintained in Japan.

PCLN type inserts > A074—A080
DCLN type inserts > A074—A080

CBN & PCD inserts > B022—B025, B055
RECOMMENDED CUTTING CONDITIONS > A010—A015, B008

MCLN			External turning, DOUBLE CLAMP type Facing For heavy cutting							Medium		Medium		Medium		Medium to Rough								
										MH  (19)		Standard  (19)		MS  (19)		RP  (19)								
										Heavy HZ  (19)		Heavy HX  (19)		Heavy HL  (19)		M Class Flat Top  (19)								
										Right hand tool holder only.														
Order Number	Stock	Insert Number	Dimensions (mm)																					
	R		H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Clamp Screw	Wrench											
MCLNR3232P19	●	CNMG	1906	32	32	170	36	32	40	MSCN63	MP6	CKW6	LS25	HKY40R										
MCLNR4040R19	●	CNMM CNMA	1906	40	40	200	36	40	50	MSCN63	MP6	CKW6	LS25	HKY40R										

* Clamp Torque (N • m) : LS25=8.2

PCBN		External turning								LL type		Finish	Light	Medium	Medium
															
										(12)	(12)	(12)	(12)		
										Medium	Medium to Rough	Stainless			
										Standard	RP	MM			
Right hand tool holder shown.										(12)	(12)	(12)			
Order Number	Stock	Insert Number	Dimensions (mm)												
	R		L	H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench	
PCBNR/L2020K12	● ●	CNMA CNG CNM	1204	20	20	125	28	20	17	LLSCN42	LLP14	LLCL14	LLCS108	HKY30R	
PCBNR/L2525M12	● ●		1204	25	25	150	25	25	22	LLSCN42	LLP14	LLCL14	LLCS108	HKY30R	

* Clamp Torque (N • m) : LLCS108=3.3

MCLN type inserts > A076—A080
PCBN type inserts > A074—A080
CBN & PCD inserts > B022—B025, B055

RECOMMENDED CUTTING CONDITIONS > A010—A015, B008
SPARE PARTS > P001
TECHNICAL DATA > Q001

EXTERNAL TURNING TOOLS

DN INSERTS TOOL HOLDERS

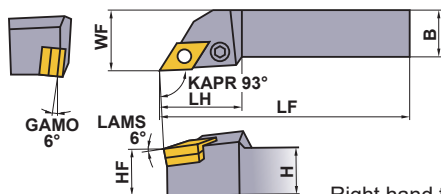
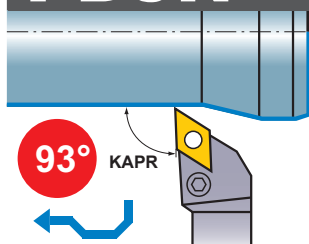


TOOL NEWS

PDJN

External turning, Copying

LL type



Right hand tool holder shown.

Finish	Light	Medium	Medium
FP	LP	MP	MK
			
(15)	(15)	(15)	(15)
Medium to Rough	Stainless	G Class	CBN
RP	MM	R/L	
			
(15)	(15)	(15)	(15)

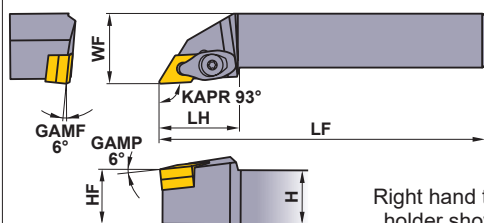
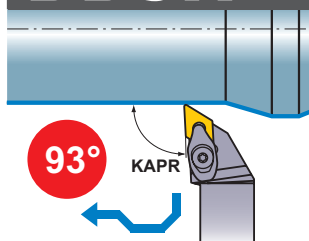
Order Number	Stock		Insert Number		Dimensions (mm)						 *2			 *1	
	R	L			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench
PDJNR/L2020K15	●	●	DNMA DNMG DNMM	1504	20	20	125	35	20	25	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HKY30R
PDJNR/L2525M15	●	●	DNMA DNMG DNMX DNGA	1504	25	25	150	35	25	32	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HKY30R
PDJNR/L3225P15	●	●	DNMA DNMG DNMM DNGG DNGM	1504	32	25	170	35	32	32	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HKY30R

*1 Clamp Torque (N · m) : LLCS108=3.3

*2 Please use shim no. LLSDN42 with 6.35mm thick inserts. When using 6.35mm thick inserts, shim should be ordered separately.

DDJN

External turning, DOUBLE CLAMP type



Right hand tool holder shown.

Finish	Light	Medium	Medium
FP	LP	MP	MK
			
(15)	(11,15)	(15)	(11,15)
Medium to Rough	Stainless	G Class	CBN
RP	MM	R/L	
			
(15)	(15)	(15)	(15)

Order Number	Stock		Insert Number		Dimensions (mm)						*2								*1	
	R	L			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench				
DDJNR/L1616H11	●	●	DNMG DNGA	1104	16	16	100	28	16	20	LLSDN32	LLP23	DCK2211	DCS2	DC0520T	TKY15F				
DDJNR/L2020K11	●	●		1104	20	20	125	28	20	25	LLSDN32	LLP23	DCK2211	DCS2	DC0520T	TKY15F				
DDJNR/L2525M11	●	●		1104	25	25	150	28	25	32	LLSDN32	LLP23	DCK2211	DCS2	DC0520T	TKY15F				
DDJNR/L3225P11	●	●		1104	32	25	170	28	32	32	LLSDN32	LLP23	DCK2211	DCS2	DC0520T	TKY15F				
DDJNR/L2020K15	●	●	DNMA DNMG DNMM DNMX DNGA DNGG DNGM	1504	20	20	125	37	20	25	LLSDN43 (LLSDN42)	LLP24	DCK2613	DCS1	DC0621T	TKY20F				
DDJNR/L2525M15	●	●		1504	25	25	150	37	25	32	LLSDN43 (LLSDN42)	LLP24	DCK2613	DCS1	DC0621T	TKY20F				
DDJNR/L3225P15	●	●		1504	32	25	170	37	32	32	LLSDN43 (LLSDN42)	LLP24	DCK2613	DCS1	DC0621T	TKY20F				

*1 Clamp Torque (N · m) : DC0520T=3.5, DC0621T=5.0

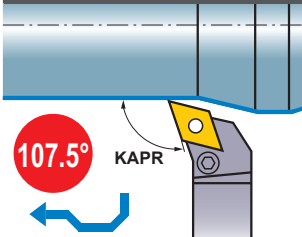
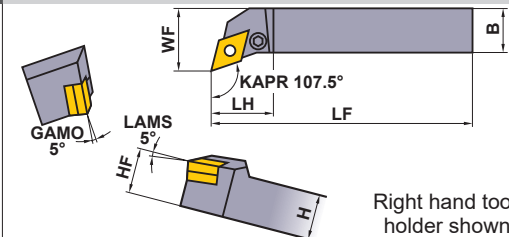
*2 Please use shim no. LLSDN42 with 6.35mm thick inserts. When using 6.35mm thick inserts, shim should be ordered separately.

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

● : Inventory maintained in Japan.

PDJN type inserts > A081—A087
DDJN type inserts > A081—A087

CBN & PCD inserts > B026—B030, B055
RECOMMENDED CUTTING CONDITIONS > A010—A015, B008

PDHN		Facing, Copying								LL type		Finish	Light	Medium	Medium	
												FP	LP	MP	MK	
												(15)	(15)	(15)	(15)	
												Medium to Rough	Stainless	G Class	CBN	
												RP	MM	R/L		
												(15)	(15)	(15)	(15)	
Order Number	Stock		Insert Number		Dimensions (mm)						*2					
	R	L			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench	
PDHNR/L2020K15	●	●	DNMA DNMG DNMM	1504	20	20	125	34	20	25	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HKY30R	
PDHNR/L2525M15	●	●	DNGA DNMG DNMM	1504	25	25	150	34	25	32	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HKY30R	
PDHNR/L3225P15	●	●	DNGG DNMG DNMM	1504	32	25	170	34	32	32	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HKY30R	

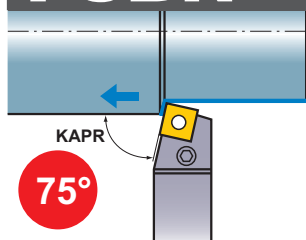
*1 Clamp Torque (N • m) : LLCS108=3.3

*2 Please use shim no. LLSDN42 with 6.35mm thick inserts. When using 6.35mm thick inserts, shim should be ordered separately.

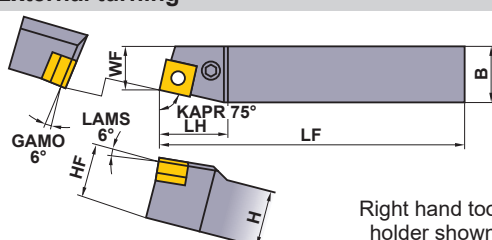
EXTERNAL TURNING TOOLS

SN INSERTS TOOL HOLDERS

PSBN



External turning LL type



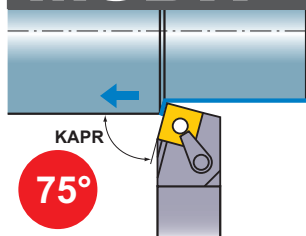
Right hand tool holder shown.

Finish	Light	Medium	Medium
FP	LP	MP	MK
			
(12)	(12)	(12)	(12,15,19)
Medium to Rough	Stainless	G Class	CBN
RP	MM	R/L	
			
(12,15,19)	(12,15,19)	(09,12)	(12)

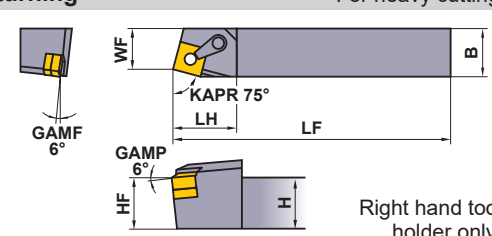
Order Number	Stock		Insert Number	Dimensions (mm)										 *		
	R	L		H	B	LF	LH	HF	WF	Shim	Shim Pin	Lever Spring	Clamp Lever	Clamp Screw	Wrench	
PSBNR/L1212F09	●	●	SNMA SNMG SNMM SNGA SNGG	0903 	12	12	80	20	12	13	—	—	HLS2	LLCL13S	LLCS105	HKY20R
PSBNR/L1616H09	●	●		0903 	16	16	100	22	16	13	LLSSN33	LLP23	—	LLCL13	LLCS106	HKY25R
PSBNR/L2020K12	●	●		1204 	20	20	125	28	20	17	LLSSN42	LLP14	—	LLCL14	LLCS108	HKY30R
PSBNR/L2525M12	●	●		1204 	25	25	150	25	25	22	LLSSN42	LLP14	—	LLCL14	LLCS108	HKY30R
PSBNR/L2525M15	●	●		1506 	25	25	150	33	25	22	LLSSN53	LLP15	—	LLCL25	LLCS508	HKY30R
PSBNR/L3232P19	●	●		1906 	32	32	170	40	32	27	LLSSN63	LLP16	—	LLCL16	LLCS310	HKY40R

* Clamp Torque (N · m) : LLCS105=1.5, LLCS106=2.2, LLCS108=3.3, LLCS508=3.3, LLCS310=7.0

MSBN



External turning DOUBLE CLAMP type For heavy cutting



Right hand tool holder only.

Medium	Medium	Medium	Medium to Rough
MH	Standard	MS	RP
			
(19)	(19)	(19)	(19)
Heavy	Heavy	Heavy	M Class
HZ	HX	HL	Flat Top
			
(19)	(19)	(19)	(19)

Order Number	Stock	Insert Number		Dimensions (mm)									 *	
	R			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Clamp Screw	Wrench
MSBNR3232P19	●	SNMG SNMM SNMA	1906	32	32	170	41	32	27	MSSN63	MP6	CKW6	LS25	HKY40R
MSBNR4040R19	●		1906	40	40	200	41	40	35	MSSN63	MP6	CKW6	LS25	HKY40R

* Clamp Torque (N · m) : LS25=8.2

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

● : Inventory maintained in Japan.

PSBN type inserts > A089—A094
MSBN type inserts > A090—A094

CBN & PCD inserts > B031, B056
RECOMMENDED CUTTING CONDITIONS > A010—A015, B008

PSTN				External turning, Chamfering							LL type		Finish		Light		Medium		Medium		
 KAPR 60°				 KAPR 60° GAMO 6° LAMS 6° WF LF LH HF H B							FP		LP		MP		MK				
											(12)		(12)		(12)		(12)				
											Medium to Rough		Stainless		G Class		CBN				
											RP		MM		R/L						
											(12)		(12)		(09,12)		(12)				
Order Number		Stock		Insert Number		Dimensions (mm)															
		R	L			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench					
PSTNR/L1616H09		●	●	SNMA	0903	16	16	100	20	16	13	LLSSN33	LLP23	LLCL13	LLCS106	HKY25R					
PSTNR/L2020K12		●	●	SNMG	1204	20	20	125	25	20	17	LLSSN42	LLP14	LLCL14	LLCS108	HKY30R					
PSTNR/L2525M12		●	●	SNMM	1204	25	25	150	25	25	22	LLSSN42	LLP14	LLCL14	LLCS108	HKY30R					
				SNGA																	
				SNGG																	

* Clamp Torque (N · m) : LLCS106=2.2, LLCS108=3.3

PSSN				External turning, Facing, Chamfering								LL type		Finish	Light	Medium	Medium
 KAPR 45°				 WF WF2 KAPR 45° LH LF H HF GAMO 8.45° Right hand tool holder shown.								FP	LP	MP	MK		
												(12)	(12)	(12)	(12,15,19)		
												Medium to Rough	Stainless	G Class	CBN		
												RP	MM	R/L	(12)		
												(12,15,19)	(12,15,19)	(09,12)	(12)		
Order Number		Stock		Insert Number		Dimensions (mm)											
		R	L			H	B	LF	LH	HF	WF	WF2	Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench
PSSNR/L1616H09		●	●	SNMA SNMG SNMM SNGA SNGG	0903	16	16	100	22	16	20	14	LLSSN33	LLP23	LLCL13	LLCS106	HKY25R
PSSNR/L2020K12		●	●		1204	20	20	125	31	20	25	17	LLSSN42	LLP14	LLCL14	LLCS108	HKY30R
PSSNR/L2525M12		●	●		1204	25	25	150	31	25	32	24	LLSSN42	LLP14	LLCL14	LLCS108	HKY30R
PSSNR/L3232P15		●	●		1506	32	32	170	34	32	40	29	LLSSN53	LLP15	LLCL25	LLCS508	HKY30R
PSSNR/L3232P19		●	●		1906	32	32	170	40	32	40	27	LLSSN63	LLP16	LLCL16	LLCS310	HKY40R

Note 1) When facing or chamfering only and using insert with right or left hand breaker, please use left hand insert for right hand holder and right hand insert for left hand holder.

* Clamp Torque (N · m) : LLCS106=2.2, LLCS108=3.3, LLCS508=3.3, LLCS310=7.0

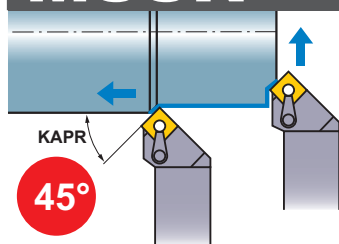
PSTN type inserts > A089 – A094
PSSN type inserts > A089 – A094
CBN & PCD inserts > B031, B056

RECOMMENDED CUTTING CONDITIONS > A010 – A015, B008
SPARE PARTS > P001
TECHNICAL DATA > Q001

EXTERNAL TURNING TOOLS

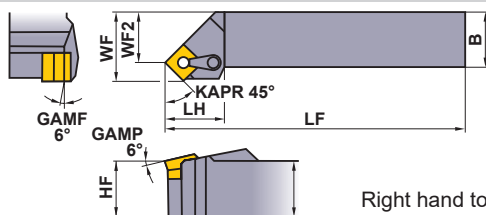
SN INSERTS TOOL HOLDERS

MSSN



External turning,
Facing, Chamfering

DOUBLE CLAMP type
For heavy cutting



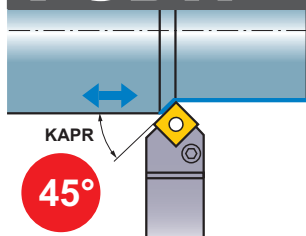
Right hand tool holder only.

Medium	Medium	Medium	Rough
MH (19)	Standard (19)	MS (19)	RP (19)
Heavy HZ (19)	Heavy HX (19)	Heavy HL (19)	M Class Flat Top (19)

Order Number	Stock	Insert Number		Dimensions (mm)										 *	
	R			H	B	LF	LH	HF	WF	WF2	Shim	Shim Pin	Clamp Bridge	Clamp Screw	Wrench
MSSNR3232P19	●	SNMG SNMM SNMA	1906	32	32	170	44	32	40	27	MSSN63	MP6	CKW6	LS25	HKY40R
MSSNR4040R19	●		1906	40	40	200	44	40	50	37	MSSN63	MP6	CKW6	LS25	HKY40R

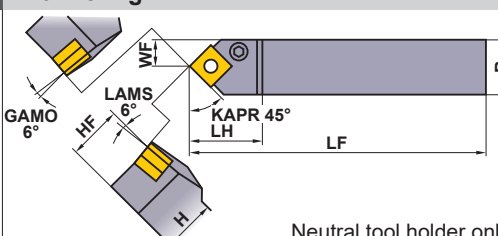
* Clamp Torque (N · m) : LS25=8.2

PSDN



External turning,
Chamfering

LL type



Neutral tool holder only.

Finish	Light	Medium	Medium
FP (12)	LP (12)	MP (12)	MK (12)
Medium to Rough RP (12)	Stainless MM (12)	G Class R/L (09,12)	CBN (12)

Order Number	Stock	Insert Number		Dimensions (mm)										 *	
	N			H	B	LF	LH	HF	WF	Shim	Shim Pin	Lever Spring	Clamp Lever	Clamp Screw	Wrench
PSDNN1212F09	●	SNMA SNMG SNMM SNGA SNGG	0903 	12	12	80	20	12	6.0	—	—	HLS2	LLCL13S	LLCS105	HKY20R
PSDNN1616H09	●		0903 	16	16	100	22	16	8.0	LLSSN33	LLP23	—	LLCL13	LLCS106	HKY25R
PSDNN2020K12	●		1204 	20	20	125	28	20	10.0	LLSSN42	LLP14	—	LLCL14	LLCS108	HKY30R
PSDNN2525M12	●		1204 	25	25	150	28	25	12.5	LLSSN42	LLP14	—	LLCL14	LLCS108	HKY30R
PSDNN3225P12	●		1204 	32	25	170	28	32	12.5	LLSSN42	LLP14	—	LLCL14	LLCS108	HKY30R

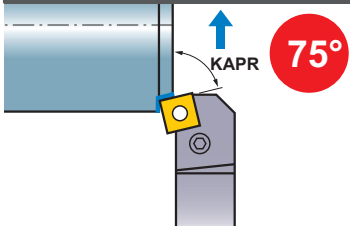
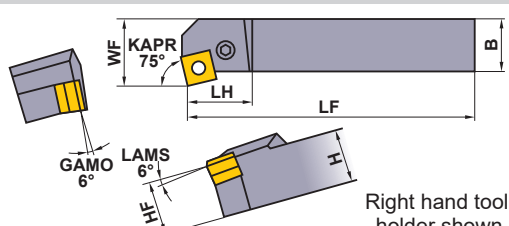
* Clamp Torque (N · m) : LLCS105=1.5, LLCS106=2.2, LLCS108=3.3

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

● : Inventory maintained in Japan.

MSSN type inserts > A090—A094
PSDN type inserts > A089—A094

CBN & PCD inserts > B031, B056
RECOMMENDED CUTTING CONDITIONS > A010—A015, B008

PSKN				Facing							LL type					Finish		Light		Medium		Medium	
											FP		LP		MP		MK						
											 (12)		 (12)		 (12)		 (12)						
											Medium to Rough RP		Stainless MM		G Class R/L		CBN						
											 (12)		 (12)		 (09,12)		 (12)						
Order Number		Stock		Insert Number		Dimensions (mm)																	
		R	L			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench							
PSKNR/L1616H09		●	●	SNMA	0903	16	16	100	20	16	20	LLSSN33	LLP23	LLCL13	LLCS106	HKY25R							
PSKNR/L2020K12		●	●	SNMG	1204	20	20	125	25	20	25	LLSSN42	LLP14	LLCL14	LLCS108	HKY30R							
PSKNR/L2525M12		●	●	SNGA	1204	25	25	150	25	25	32	LLSSN42	LLP14	LLCL14	LLCS108	HKY30R							
		●	●	SNGG																			

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

* Clamp Torque (N • m) : LLCS106=2.2, LLCS108=3.3

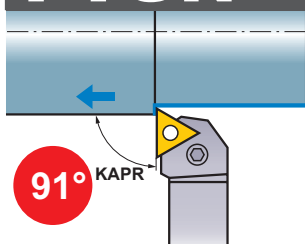
EXTERNAL TURNING TOOLS

TN INSERTS TOOL HOLDERS

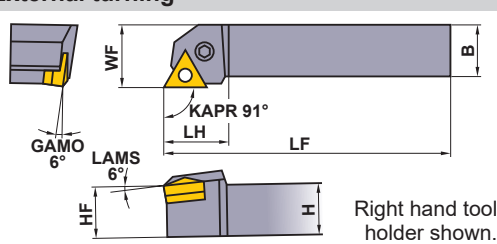


TOOL NEWS

PTGN



External turning LL type



Right hand tool holder shown.

Finish	Light	Medium	Medium
FP	LP	MP	MK
			
(16)	(16,22)	(16,22)	(16,22)
Medium to Rough	Stainless	G Class	CBN
RP	MM	R/L	
			
(16,22,27)	(16,22)	(11,16,22)	(16)

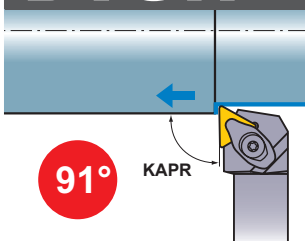
Order Number	Stock		Insert Number		Dimensions (mm)					 *2	 *2			 *1		
	R	L			H	B	LF	LH	HF	WF	Shim	Shim Pin	Lever Spring	Clamp Lever	Clamp Screw	Wrench
PTGNR/L1010E11	●	●	TNMA TNMG TNMM TNGA TNGG TNGM	1103 	10	10	70	17	10	12	—	—	HLS1	LLCL12S	LLCS105	HKY20F
PTGNR/L1212F11	●	●		1103 	12	12	80	17	12	16	—	—	HLS1	LLCL12S	LLCS105	HKY20F
PTGNR/L1616H16	●	●		1604 	16	16	100	22	16	20	LLSTN32 (LLSTN33)	LLP13 (LLP23)	—	LLCL13	LLCS106	HKY25F
PTGNR/L2020K16	●	●		1604 	20	20	125	22	20	25	LLSTN32 (LLSTN33)	LLP13 (LLP23)	—	LLCL13	LLCS106	HKY25F
PTGNR/L2525M16	●	●		1604 	25	25	150	22	25	32	LLSTN32 (LLSTN33)	LLP13 (LLP23)	—	LLCL13	LLCS206	HKY25F
PTGNR/L2525M22	●	●		2204 	25	25	150	28	25	32	LLSTN42	LLP14	—	LLCL14	LLCS108	HKY30F
PTGNR/L3225P22	●	●		2204 	32	25	170	28	32	32	LLSTN42	LLP14	—	LLCL14	LLCS108	HKY30F
PTGNR/L3232P27	●	●		2706 	32	32	170	35	32	40	LLSTN53	LLP15	—	LLCL25	LLCS508	HKY30F

*1 Clamp Torque (N · m) : LLCS105=1.5, LLCS106=2.2, LLCS206=2.2, LLCS108=3.3, LLCS508=3.3

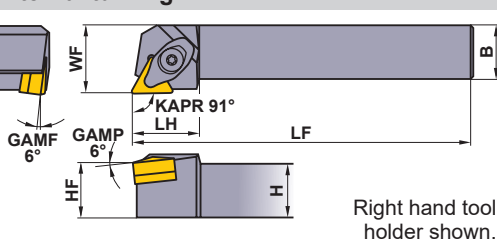
PTGNR/L1010E11 · PTGNR/L1212F11 Clamp Torque (N · m) : LLCS105=1.0

*2 Please use shim no. LLSTN33 and shim pin no. LLP23 with 3.18mm thick inserts. When using 3.18mm thick inserts, shim and shim pin should be ordered separately.

DTGN



External turning DOUBLE CLAMP type



Right hand tool holder shown.

Finish	Light	Medium	Medium
FP	LP	MP	MK
			
(16)	(16)	(16)	(16)
Medium to Rough	Stainless	G Class	CBN
RP	MM	R/L	
			
(16)	(16)	(16)	(16)

Order Number	Stock		Insert Number		Dimensions (mm)						^{*2} 	^{*2} 				^{*1} 
	R	L			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench
DTGNR/L1616H16	●	●	TNMA TNMG	1604 	16	16	100	25	16	20	LLSTN32 (LLSTN33)	LLP23	DCK2211	DCS2	DC0520T	TKY15F
DTGNR/L2020K16	●	●	TNMM TNGA	1604 	20	20	125	25	20	25	LLSTN32 (LLSTN33)	LLP23	DCK2211	DCS2	DC0520T	TKY15F
DTGNR/L2525M16	●	●	TNGG TNGM	1604 	25	25	150	25	25	32	LLSTN32 (LLSTN33)	LLP23	DCK2211	DCS2	DC0520T	TKY15F

*1 Clamp Torque (N · m) : DC0520T=3.5

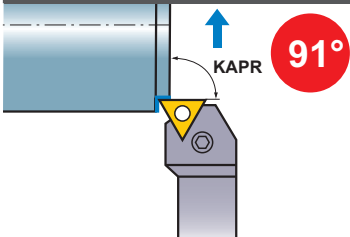
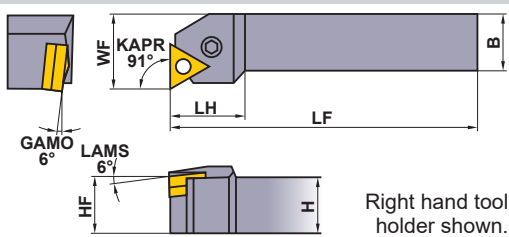
*2 Please use shim no. LLSTN33 with 3.18mm thick inserts. When using 3.18mm thick inserts, shim should be ordered separately.

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

● : Inventory maintained in Japan.

PTGN type inserts > A095—A101
DTGN type inserts > A095—A101

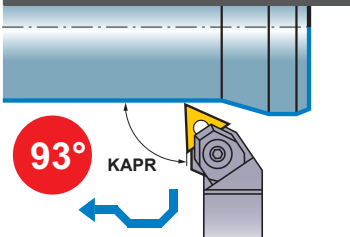
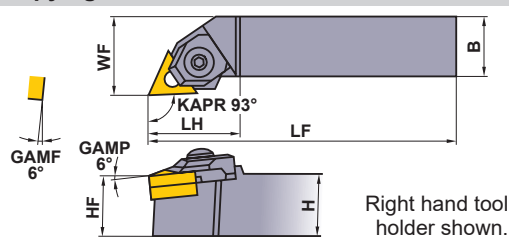
CBN & PCD inserts > B032—B034, B056
RECOMMENDED CUTTING CONDITIONS > A010—A015, B008

PTFN				Facing							LL type					Finish		Light		Medium		Medium		
											Right hand tool holder shown.					FP		LP		MP		MK		
																 (16)		 (16.22)		 (16.22)		 (16.22)		
																Medium to Rough RP		Stainless MM		G Class R/L		CBN		
																 (16.22)		 (16.22)		 (16.22)		 (16)		
Order Number				Stock		Insert Number		Dimensions (mm)							 *2		 *2				 *1			
				R	L			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench						
PTFNR/L1616H16				●	●	TNMA	1604	16	16	100	22	16	20	LLSTN32 (LLSTN33)	LLP13 (LLP23)	LLCL13	LLCS106	HKY25R						
PTFNR/L2020K16				●	●	TNMG	1604	20	20	125	22	20	25	LLSTN32 (LLSTN33)	LLP13 (LLP23)	LLCL13	LLCS106	HKY25R						
PTFNR/L2525M16				●	●	TNGA	1604	25	25	150	22	25	32	LLSTN32 (LLSTN33)	LLP13 (LLP23)	LLCL13	LLCS206	HKY25R						
PTFNR/L2525M22				●	●	TNGG	2204	25	25	150	28	25	32	LLSTN42	LLP14	LLCL14	LLCS108	HKY30R						

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

*1 Clamp Torque (N · m) : LLCS106=2.2, LLCS206=2.2, LLCS108=3.3

*2 Please use shim no. LLSTN33 and shim pin no. LLP23 with 3.18mm thick inserts. When using 3.18mm thick inserts, shim should be ordered separately.

MTJN		External turning, Copying								WP type		Finish		Light		Medium		Medium	
											Right hand tool holder shown.		FP	LP	MP	MK			
													 (16)	 (16.22)	 (16.22)	 (16.22)			
													Medium to Rough	Stainless	G Class	CBN			
													RP	MM	R/L				
													 (16.22)	 (16.22)	 (16.22)	 (16)			
Order Number	Stock		Insert Number	Dimensions (mm)															
	R	L		H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Side Lock Plate	Spring	Clamp Screw	Wrench			
MTJNR/L2020K16N	●	●	TNMA	1604	20	20	125	31	20	25	WPSTN33	CCP33	CCK13	CPT13	MES2	SLCS105	HKY25R HKY40R		
MTJNR/L2525M16N	●	●	TNMG TNOM	1604	25	25	150	31	25	32	WPSTN33	CCP33	CCK13	CPT13	MES2	SLCS105	HKY25R HKY40R		
MTJNR/L2525M22N	●	●	TNMX	2204	25	25	150	38	25	32	WPSTN43	CCP34	CCK14	CPT14	MES3	SLCS106	HKY30R HKY40R		

*1 Clamp Torque (N · m) : SLCS105=7.0, SLCS106=7.0

*2 HKY25R, HKY30R Wrench for Shim Pin, HKY40R Wrench for Clamp Screw.

PTFN type inserts	> A095—A101
MTJN type inserts	> A095—A101
CBN & PCD inserts	> B032—B034, B056
RECOMMENDED CUTTING CONDITIONS	> A010—A015, B008

SPARE PARTS	> P001
TECHNICAL DATA	> Q001

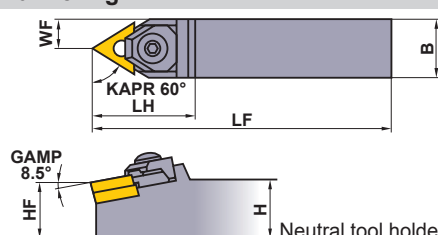
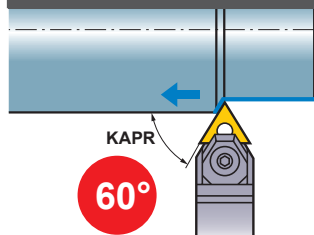
EXTERNAL TURNING TOOLS

TN INSERTS TOOL HOLDERS

MTEN

External turning,
Chamfering

WPtype



Finish	Light	Medium	Medium
FP	LP	MP	MK
			
(16)	(16.22)	(16.22)	(16.22)
Medium to Rough	Stainless	G Class	CBN
RP	MM	R/L	
			
(16.22)	(16.22)	(16.22)	(16)

Neutral tool holder only.

Order Number	Stock	Insert Number		Dimensions (mm)											*1 	*2 
				H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Side Lock Plate	Spring	Clamp Screw	Wrench
MTENN2020K16N	●	TN-A TN-G	1604	20	20	125	34	20	10	WPSTN33	CCP33	CCK13	CPT13	MES2	SLCS105	HKY25R HKY40R
MTENN2525M22N	●	TN-M TNMX	2204	25	25	150	44	25	12.5	WPSTN43	CCP34	CCK14	CPT14	MES3	SLCS106	HKY30R HKY40R

*1 Clamp Torque (N · m) : SLCS105=7.0, SLCS106=7.0

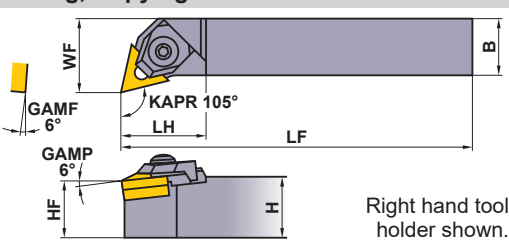
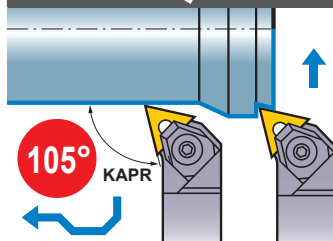
*2 HKY25R, HKY30R Wrench for Shim Pin, HKY40R Wrench for Clamp Screw.

EXTERNAL TURNING TOOLS

MTQN

Facing, Copying

WPtype



Right hand tool holder shown.

Finish	Light	Medium	Medium
FP	LP	MP	MK
			
(16)	(16.22)	(16.22)	(16.22)
Medium to Rough	Stainless	G Class	CBN
RP	MM	R/L	
			
(16.22)	(16.22)	(16.22)	(16)

Order Number	Stock		Insert Number	Dimensions (mm)											*1	*2	
	R	L		H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Side Lock Plate	Spring	Clamp Screw	Wrench	
MTQNR/L2020K16N	●	●	TN-A TN-G	1604	20	20	125	31	20	25	WPSTN33	CCP33	CCK13	CPT13	MES2	SLCS105	HKY25R HKY40R
MTQNR/L2525M22N	●	●	TN-M TNMX	2204	25	25	150	36	25	32	WPSTN43	CCP34	CCK14	CPT14	MES3	SLCS106	HKY30R HKY40R

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

*1 Clamp Torque (N · m) : SLCS105=7.0, SLCS106=7.0

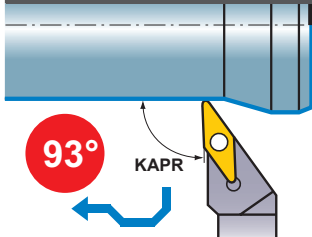
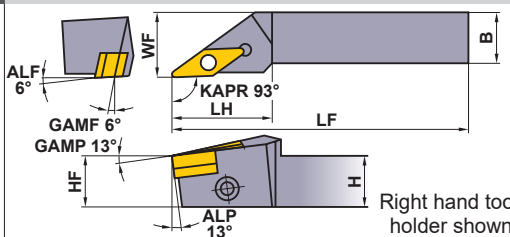
*2 HKY25R, HKY30R Wrench for Shim Pin, HKY40R Wrench for Clamp Screw.

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

● : Inventory maintained in Japan.

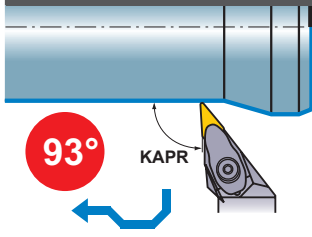
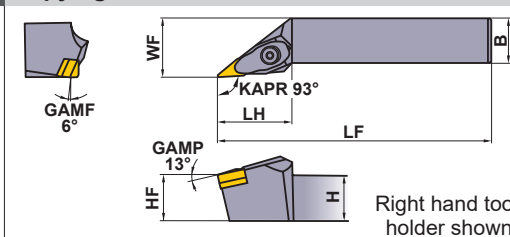
MTEN type inserts > A095—A101
MTQN type inserts > A095—A101

CBN & PCD inserts > B032—B034, B056
RECOMMENDED CUTTING CONDITIONS > A010—A015, B008

PVJN		External turning, Copying		MP type		Finish	Light	Medium	Medium							
				Right hand tool holder shown.		FP	LP	MP	MK							
						(16)	(16)	(16)	(16)							
						Medium	Stainless	G Class	CBN							
						Standard	MM	R/L	(16)							
Order Number		Stock	Insert Number		Dimensions (mm)		 *2		 *1							
		R L			H	B	LF	LH	HF	WF	Shim	Lock Pin	Lock Screw	Stop Ring	Wrench	
PVJNR/L2020K16		● ●	VN ⁰⁰ A VN ⁰⁰ G VN ⁰⁰ M		1604	20	20	125	32	20	25	PV322 (PV321) (PV323)	P11S	HSP05008C	E03	HKY25R
PVJNR/L2525M16		● ●	VN ⁰⁰ A VN ⁰⁰ G VN ⁰⁰ M		1604	25	25	150	38	25	32		P11S	HSP05008C	E03	HKY25R

*1 Clamp Torque (N • m) : HSP05008C=2.5

*2 Please use shim no. PV321 and PV323 with RE0.4mm and RE1.2mm thick inserts. When using inserts, shim should be ordered separately.

DVJN		External turning, Copying										DOUBLE CLAMP type										Finish		Light		Medium		Medium	
														FP		LP		MP		MK									
														(16)		(16)		(16)		(16)									
														Medium		Stainless		G Class		CBN									
														Standard		MM		R/L		(16)									
														(16)		(16)		(16)		(16)									
Order Number				Stock		Insert Number				Dimensions (mm)											* 								
				R L						H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench								
DVJNR/L2020K16				● ●		VN ⁰⁰ A VN ⁰⁰ G VN ⁰⁰ M				20	20	125	41	20	25	DCSVN32	LLP13	DCK3113	DCS2	DC0520T	TKY15F								
DVJNR/L2525M16				● ●		VN ⁰⁰ A VN ⁰⁰ G VN ⁰⁰ M				25	25	150	41	25	32	DCSVN32	LLP13	DCK3113	DCS2	DC0520T	TKY15F								

* Clamp Torque (N • m) : DC0520T=3.5

PVJN type inserts	> A102 – A105
DVJN type inserts	> A102 – A105
CBN & PCD inserts	> B035, B036, B057

RECOMMENDED CUTTING CONDITIONS	> A010 – A015, B008
SPARE PARTS	> P001
TECHNICAL DATA	> Q001

EXTERNAL TURNING TOOLS

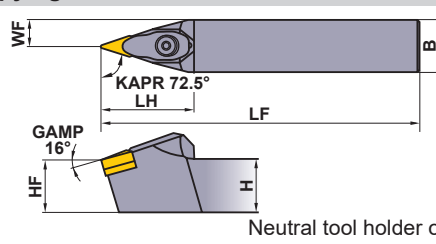
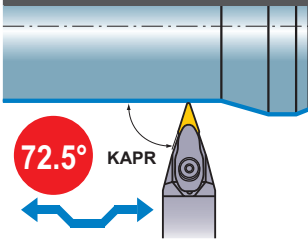
VN INSERTS TOOL HOLDERS



TOOL NEWS

DVVN

External turning, Copying **DOUBLE CLAMP type**



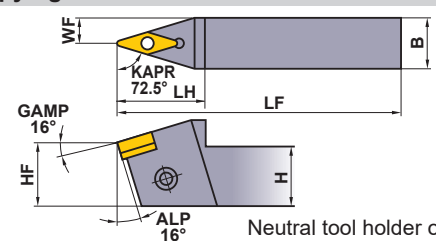
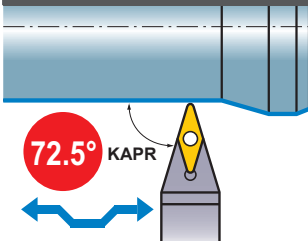
Finish	Light	Medium	Medium
FP	LP	MP	MK
			
(16)	(16)	(16)	(16)
Medium	Stainless	G Class	CBN
Standard	MM	R/L	
			
(16)	(16)	(16)	(16)

Order Number	Stock	Insert Number		Dimensions (mm)											*	
	N			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench	
DVVNN2020K16	●	VN-A VN-G VN-M	1604 	20	20	125	44	20	10	DCSVN32	LLP13	DCK3113	DCS2	DC0520T		TKY15F
DVVNN2525M16	●	VN-A VN-G VN-M	1604 	25	25	150	44	25	12.5	DCSVN32	LLP13	DCK3113	DCS2	DC0520T		TKY15F

* Clamp Torque (N · m) : DC0520T=3.5

PVVN

External turning, Copying **MP type**



Finish	Light	Medium	Medium
FP	LP	MP	MK
			
(16)	(16)	(16)	(16)
Medium	Stainless	G Class	CBN
Standard	MM	R/L	
			
(16)	(16)	(16)	(16)

Order Number	Stock	Insert Number		Dimensions (mm)										
	N			H	B	LF	LH	HF	WF	Shim	Lock Pin	Lock Screw	Stop Ring	Wrench
PVVNN2020K16	●	VN-A VN-G VN-M	1604	20	20	125	38	20	10	PV322 (PV321) (PV323)	P11S	HSP05008C	E03	HKY25R
PVVNN2525M16	●	VN-A VN-G VN-M	1604	25	25	150	38	25	12.5	PV322 (PV321) (PV323)	P11S	HSP05008C	E03	HKY25R

*1 Clamp Torque (N · m) : HSP05008C=2.5

*2 Please use shim no. PV321 and PV323 with RE0.4mm and RE1.2mm thick inserts. When using inserts, shim should be ordered separately.

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

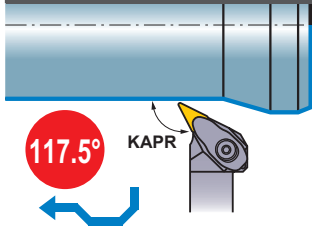
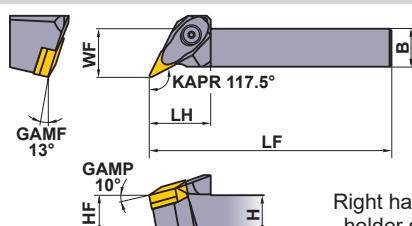
● : Inventory maintained in Japan.

DVVN type inserts > A102—A105
PVVN type inserts > A102—A105

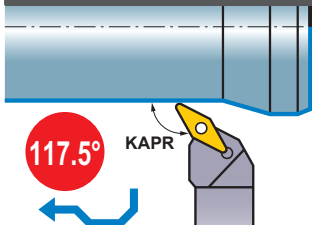
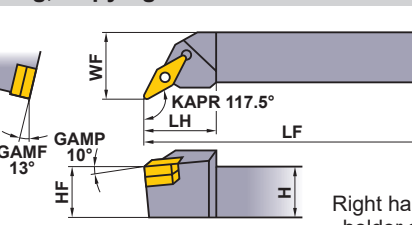
CBN & PCD inserts > B035, B036, B057
RECOMMENDED CUTTING CONDITIONS > A010—A015, B008



TOOL NEWS

DVPN		DOUBLE CLAMP type										Finish		Light		Medium		Medium	
		Facing, Copying										FP	LP	MP	MK				
												 (16)	 (16)	 (16)	 (16)				
												Medium	Stainless	G Class	CBN				
												Standard	MM	R/L					
												 (16)	 (16)	 (16)	 (16)				
Order Number	Stock		Insert Number		Dimensions (mm)														
	R	L			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench			
DVPNR/L2020K16	●	●	VN-A VN-G VN-M	1604	20	20	125	32	20	25	DCSVN32	LLP13	DCK3113	DCS2	DC0520T	TKY15F			
DVPNR/L2525M16	●	●	VN-A VN-G VN-M	1604	25	25	150	32	25	32	DCSVN32	LLP13	DCK3113	DCS2	DC0520T	TKY15F			

* Clamp Torque (N · m) : DC0520T=3.5

PVPN				Facing, Copying							MP type		Finish	Light	Medium	Medium
											FP	LP	MP	MK		
																
											(16)	(16)	(16)	(16)		
											Medium	Stainless	G Class	CBN		
											Standard	MM	R/L			
																
											(16)	(16)	(16)	(16)		
Order Number		Stock		Insert Number		Dimensions (mm)										
		R	L			H	B	LF	LH	HF	WF	Shim	Lock Pin	Lock Screw	Stop Ring	Wrench
PVPNR/L2020K16		●	●	VN-A VN-G VN-M	1604	20	20	125	32	20	25	PV322 (PV321) (PV323)	P11S	HSP05008C	E03	HKY25R
PVPNR/L2525M16		●	●	VN-A VN-G VN-M	1604	25	25	150	32	25	32		P11S	HSP05008C	E03	HKY25R

*1 Clamp Torque (N · m) : HSP05008C=2.5

*2 Please use shim no. PV321 and PV323 with RE0.4mm and RE1.2mm thick inserts. When using inserts, shim should be ordered separately.

DVPN type inserts	> A102 – A105
PVPN type inserts	> A102 – A105
CBN & PCD inserts	> B035, B036, B057

RECOMMENDED CUTTING CONDITIONS	> A010 – A015, B008
SPARE PARTS	> P001
TECHNICAL DATA	> Q001

EXTERNAL TURNING TOOLS

WN INSERTS TOOL HOLDERS



TOOL NEWS

PWLN

External turning,
Facing

LL type

Light

Medium

LP

MP



(06)

(06)

Stainless

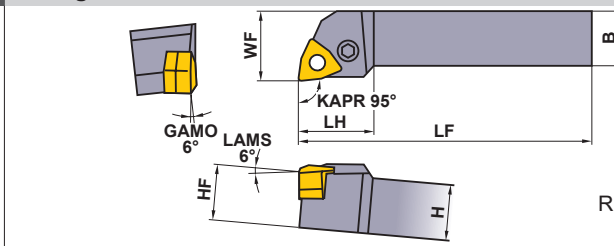
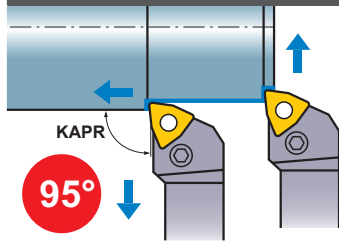
MM



(06)

(06)

Right hand tool holder shown.



Order Number	Stock		Insert Number	Dimensions (mm)						 *2			 *1		
	R	L		H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench	
PWLN ^R /L1616H06	●	●	WNMG	06T3	16	16	100	22	16	20	LLSWN3T3 (LLSWN32)	LLP13	LLCL13	LLCS106	HKY25R
PWLN ^R /L2020K06	●	●		06T3	20	20	125	22	20	25	LLSWN3T3 (LLSWN32)	LLP13	LLCL13	LLCS106	HKY25R
PWLN ^R /L2525M06	●	●		06T3	25	25	150	25	25	32	LLSWN3T3 (LLSWN32)	LLP13	LLCL13	LLCS106	HKY25R

*1 Clamp Torque (N · m) : LLCS106=2.2

*2 Please use shim no. LLSWN32 with 4.76mm thick inserts. When using inserts, shim should be ordered separately.

DWLN

External turning, **DOUBLE CLAMP type**
Facing

Finish

Light

Medium

Medium

FP

LP

MP

MK



(08)

(06,08)

(06,08)

(08)

Medium

Medium to Rough

Stainless

CBN

Standard

RP

MM



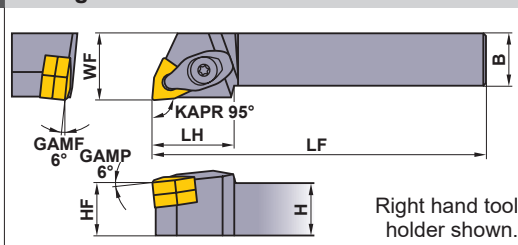
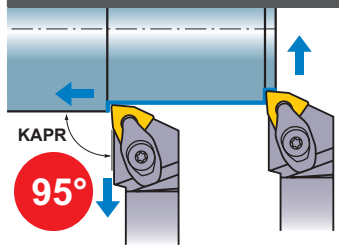
(08)

(08)

(06,08)

(08)

Right hand tool holder shown.



Order Number	Stock		Insert Number	Dimensions (mm)						^{*2} 					^{*1} 	
	R	L		H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench	
DWLNR/L1616H06	●	●	WNMA WNMG WNGA	06T3 	16	16	100	25	16	20	LLSWN3T3 (LLSWN32)	LLP23	DCK2211	DCS2	DC0520T	TKY15F
DWLNR/L2020K06	●	●		06T3 	20	20	125	25	20	25	LLSWN3T3 (LLSWN32)	LLP23	DCK2211	DCS2	DC0520T	TKY15F
DWLNR/L2525M06	●	●		06T3 	25	25	150	25	25	32	LLSWN3T3 (LLSWN32)	LLP23	DCK2211	DCS2	DC0520T	TKY15F
DWLNR/L2020K08	●	●		0804 	20	20	125	31	20	25	LLSWN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F
DWLNR/L2525M08	●	●		0804 	25	25	150	31	25	32	LLSWN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F
DWLNR/L3225P08	●	●		0804 	32	25	170	31	32	32	LLSWN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F

*1 Clamp Torque (N · m) : DC0520T=3.5, DC0621T=5.0

*2 Please use shim no. LLSWN32 with 4.76mm thick inserts. When using inserts, shim should be ordered separately.

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

● : Inventory maintained in Japan.

PWLN type inserts > A106—A110

DWLN type inserts > A106—A110

CBN inserts > B037

RECOMMENDED CUTTING CONDITIONS > A010—A015, B008

CC INSERTS TOOL HOLDERS

SCLC				External turning, Facing							SP type		Finish		Light		Medium		Stainless	
 KAPR 95°				 KAPR 95° WF LF LH HF B Right hand tool holder shown.							 FP (06,09)		 LP (06,09)		 MP (06,09,12)		 FM (06,09)			
											Stainless		Stainless		Flat top		PCD/CBN			
											LM		MM							
											(06,09)		(06,09,12)		(06,09,12)		(06,09,12)			
Order Number		Stock		Insert Number		Dimensions (mm)						*1								
		R	L			H	B	LF	LH	HF	WF	Clamp Screw		Wrench						
SCLCR/L0808D06		●	●	 	0602	8	8	60	8.9	8	10	TS25		TKY08F						
SCLCR/L1010E06		●	●		0602	10	10	70	8.9	10	12	TS25		TKY08F						
SCLCR/L1212F09		●	●		09T3	12	12	80	13.6	12	16	TS43		TKY15F						
SCLCR/L1616H12		●	●		1204	16	16	100	16.7	16	20	TS5		TKY25F						

*1 Clamp Torque (N • m) : TS25=1.0, TS43=3.5, TS5=7.5

*2 When using CCGH and CCMH, it is recommended to use TS253 clamp screw.

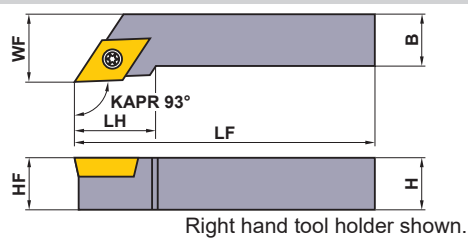
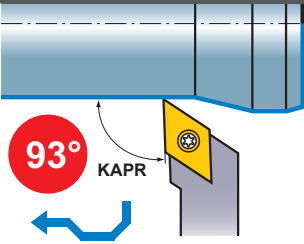
EXTERNAL TURNING TOOLS

DC INSERTS TOOL HOLDERS

SDJC

External turning,
Copying

SP type



Finish	Light	Medium	Stainless
FP	LP	MP	FM
			
(07,11)	(07,11)	(07,11)	(07,11)
Stainless	Stainless	Flat top	PCD/CBN
LM	MM		
			
(07,11)	(07,11)	(07,11)	(07,11)

Right hand tool holder shown.

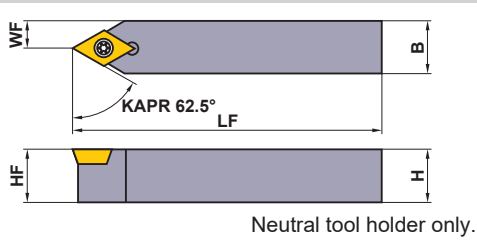
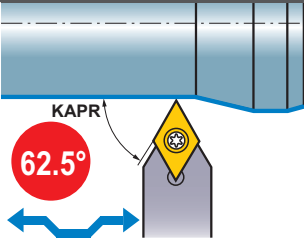
Order Number	Stock		Insert Number		Dimensions (mm)						 *	
	R	L			H	B	LF	LH	HF	WF	Clamp Screw	Wrench
SDJCR/L1010E07	●	●	DCET DCGT DCMW DCMT DCGW	0702	10	10	70	12	10	12	TS25	TKY08F
SDJCR/L1212F11	●	●		11T3	12	12	80	18	12	16	TS43	TKY15F
SDJCR/L1616H11	●	●		11T3	16	16	100	18	16	20	TS43	TKY15F

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

SDNC

External turning,
Copying

SP type



Neutral tool holder only.

Finish	Light	Medium	Stainless
FP	LP	MP	FM
			
(07,11)	(07,11)	(07,11)	(07,11)
Stainless	Stainless	Flat top	PCD/CBN
LM	MM		
			
(07,11)	(07,11)	(07,11)	(07,11)

Order Number	Stock	Insert Number		Dimensions (mm)					 *	
	N			H	B	LF	HF	WF	Clamp Screw	Wrench
SDNCN0808D07	●	DCET DCGT DCMW DCMT DCGW	0702	8	8	60	8	4	TS25	TKY08F
SDNCN1010E07	●		0702	10	10	70	10	5	TS25	TKY08F
SDNCN1212F11	●		11T3	12	12	80	12	6	TS43	TKY15F
SDNCN1616H11	●		11T3	16	16	100	16	8	TS43	TKY15F

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

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

● : Inventory maintained in Japan.

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

CBN & PCD inserts > B044, B045, B060
RECOMMENDED CUTTING CONDITIONS > A016—A022, B008

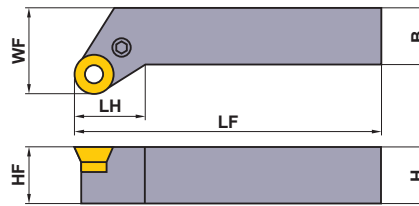
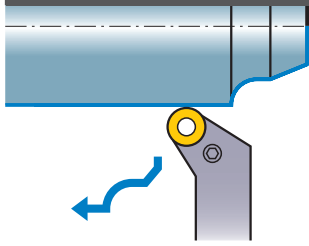
RC INSERTS TOOL HOLDERS

PRGC

External turning,
Facing, Copying

LL type

Medium



Right hand tool
holder shown.



Order Number	Stock		Insert Number		Dimensions (mm)									 *	
	R	L			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench
PRGCR/L2525M10	●	●	RCMX	1003M0	25	25	150	16.7	25	32	LLSRN103	LLP13	LLCL110	LLCS205	HKY20R
PRGCR/L2525M12	●	●		1204M0	25	25	150	17.5	25	32	LLSRN123	LLP13	LLCL112	LLCS106	HKY25R
PRGCR/L2525M16	●	●		1606M0	25	25	150	19.9	25	32	LLSRN164	LLP24	LLCL116	LLCS306	HKY25R
PRGCR/L3232P20	●	●		2006M0	32	32	170	23.8	32	40	LLSRN204	LLP15	LLCL120	LLCS508	HKY30R

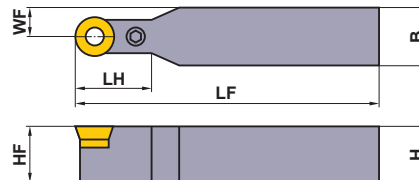
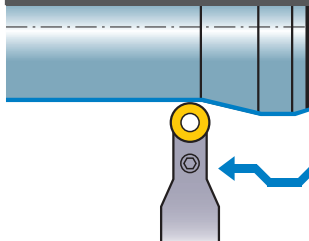
* Clamp Torque (N • m) : LLCS205=1.5, LLCS106=2.2, LLCS306=2.2, LLCS508=3.3

PRDC

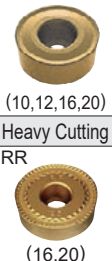
External turning,
Copying

LL type

Medium



Neutral tool holder only.



Order Number	Stock	Insert Number		Dimensions (mm)										
	N			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench
PRDCN2020K10	●	RCMX	1003M0	20	20	125	23	20	10.0	LLSRN103	LLP13	LLCL110	LLCS205	HKY20R
PRDCN2525M12	●		1204M0	25	25	150	24	25	12.5	LLSRN123	LLP13	LLCL112	LLCS106	HKY25R
PRDCN3225P12	●		1204M0	32	25	170	24	32	12.5	LLSRN123	LLP13	LLCL112	LLCS106	HKY25R
PRDCN3225P16	●		1606M0	32	25	170	28	32	12.5	LLSRN164	LLP24	LLCL116	LLCS306	HKY25R
PRDCN3232P20	●		2006M0	32	32	170	33	32	16.0	LLSRN204	LLP15	LLCL120	LLCS508	HKY30R

* Clamp Torque (N • m) : LLCS205=1.5, LLCS106=2.2, LLCS306=2.2, LLCS508=3.3

PRGC type inserts > A131
PRDC type inserts > A131
RECOMMENDED CUTTING CONDITIONS > A016—A022

SPARE PARTS > P001
TECHNICAL DATA > Q001

C025

EXTERNAL TURNING TOOLS

RC INSERTS TOOL HOLDERS

SRGC

External turning,
Facing, Copying

SP type

Medium –
Finish Cutting

AZ



Medium
Standard



Right hand tool
holder shown.

Order Number	Stock		Insert Number		Dimensions (mm)					 *		
	R	L			H	B	LF	LH	HF	WF	Clamp Screw	Wrench
SRGCR/L1616H06	●	●	RCMT	0602	16	16	100	10	16	20	TS25	TKY08F
SRGCR/L1616H08	●	●	RCGT	0803	16	16	100	14.5	16	22	TS3	TKY08F

* Clamp Torque (N · m) : TS25=1.0, TS3=1.0

EXTERNAL TURNING TOOLS

SRDC

External turning,
Copying

SP type

Medium –
Finish Cutting

AZ



Medium
Standard



Neutral tool holder only.

Order Number	Stock	Insert Number		Dimensions (mm)						 *	
	N			H	B	LF	LH	HF	WF	Clamp Screw	Wrench
SRDCN1616H06	●	RCMT	0602	16	16	100	12	16	8	TS25	TKY08F
SRDCN1616H08	●	RCGT	0803	16	16	100	16	16	8	TS3	TKY08F

* Clamp Torque (N · m) : TS25=1.0, TS3=1.0

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

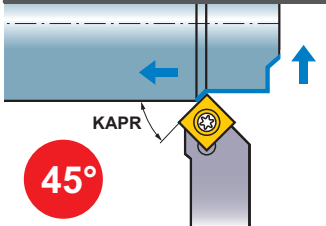
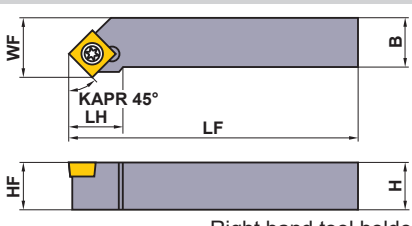
● : Inventory maintained in Japan.

SRGC type inserts > A131

SRDC type inserts > A131

RECOMMENDED CUTTING CONDITIONS > A016—A022

SC INSERTS TOOL HOLDERS

SSSC		External turning, Facing, Chamfering									SP type	Finish		Light		Medium		Stainless	
											FP		LP		MP		FM		
		Right hand tool holder shown.									Stainless		Stainless		Medium		Flat top		
											LM		MM		Standard				
																			
											(09)		(09)		(09)		(09)		
Order Number		Stock		Insert Number		Dimensions (mm)													
		R	L			H	B	LF	LH	HF	WF					Clamp Screw		Wrench	
SSSCR/L1212F09		●	●	SCMW SCMT	09T3	12	12	80	15.2	12	13	TS43		TKY15F					
SSSCR/L1616H09		●	●		09T3	16	16	100	15.2	16	17	TS43		TKY15F					

* Clamp Torque (N • m) : TS43=3.5

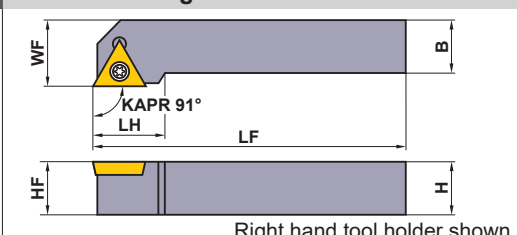
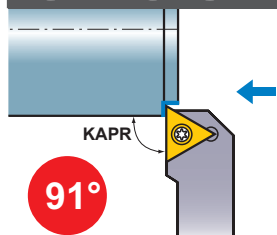
EXTERNAL TURNING TOOLS

TC INSERTS TOOL HOLDERS

STGC

External turning SP type

Finish	Light	Medium	Stainless
FP	LP	MP	FM
			
(11,16)	(11,16)	(11,13,16)	(11,16)
Stainless	Stainless	Flat top	PCD/CBN
LM	MM		
			
(11,16)	(11,13,16)	(11,13,16)	(11,13,16)



Order Number	Stock		Insert Number		Dimensions (mm)						 *	
	R	L			H	B	LF	LH	HF	WF	Clamp Screw	Wrench
STGCR/L1010E11	●	●	TCGT	1102 	10	10	70	13.5	10	12	TS25	TKY08F
STGCR/L1212F13	●	●	TCMT TCGW	1303 	12	12	80	17.6	12	16	TS3	TKY08F
STGCR/L1616H16	●	●	TCMW	16T3 	16	16	100	20.7	16	20	TS43	TKY15F

* Clamp Torque (N • m) : TS25=1.0, TS3=1.0, TS43=3.5

EXTERNAL TURNING TOOLS

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

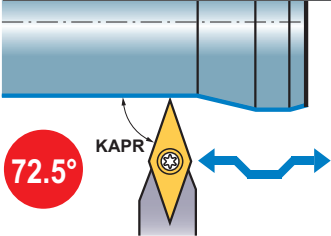
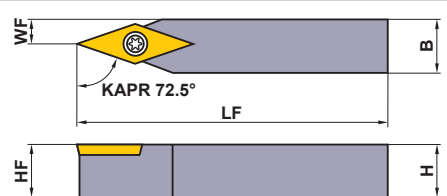
● : Inventory maintained in Japan.

STGC type inserts	➤ A135—A137
CBN & PCD inserts	➤ B046, B061
RECOMMENDED CUTTING CONDITIONS	➤ A016—A022, B008

VC INSERTS TOOL HOLDERS

SVJC		External turning, Copying		SP type		Finish		Light		Medium		Stainless		
						FP		LP		MP		FM		
						(11,16)		(11,16)		(16)		(11,16)		
						Stainless		Stainless		Medium		Flat top		
						LM		MM		Standard				
						(11,16)		(16)		(11,16)		(11,16)		
Order Number	Stock		Insert Number	Dimensions (mm)										
	R	L		H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Screw	Wrench	
SVJCR/L1010E11	●	●	VCMT VCGW VCMW	1103	10	10	70	17	10	12	—	—	TS25	①TKY08F
SVJCR/L1616H16	●	●		1604	16	16	100	25	16	20	—	—	TS43	①TKY15F
SVJCR/L2020K16	●	●		1604	20	20	125	40	20	25	SPSVN32	BCP141	TS44	②TKY15R
SVJCR/L2525M16	●	●		1604	25	25	150	40	25	32	SPSVN32	BCP141	TS44	②TKY15R

* Clamp Torque (N • m) : TS25=1.0, TS43=3.5, TS44=3.5

SVVC		External turning, Copying							SP type		Finish	Light	Medium	Stainless
									FP	LP	MP	FM		
									(16)	(16)	(16)	(16)		
									Stainless	Stainless	Medium	Flat top		
									LM	MM	Standard			
									(16)	(16)	(16)	(16)		
Order Number	Stock	Insert Number		Dimensions (mm)										
	N			H	B	LF	HF	WF	Shim	Shim Pin	Clamp Screw	Wrench		
SVVCN1616H16	●	VCMT	1604	16	16	100	16	8	—	—	TS43	①TKY15F		
SVVCN2020K16	●	VCGW	1604	20	20	125	20	10	SPSVN32	BCP141	TS44	②TKY15R		
SVVCN2525M16	●	VCMW	1604	25	25	150	25	12.5	SPSVN32	BCP141	TS44	②TKY15R		

* Clamp Torque (N • m) : TS43=3.5, TS44=3.5

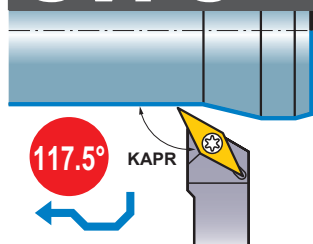
SVJC type inserts > A145—A147
SVVC type inserts > A145—A147
CBN & PCD inserts > B050, B064

RECOMMENDED CUTTING CONDITIONS > A016—A022, B008
SPARE PARTS > P001
TECHNICAL DATA > Q001

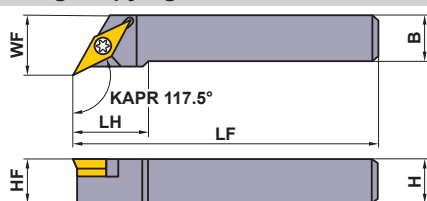
EXTERNAL TURNING TOOLS

VC INSERTS TOOL HOLDERS

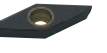
SVPC



Facing, Copying **SP type**



Right hand tool holder shown.

Finish	Light	Medium	Stainless
FP	LP	MP	FM
			
(16)	(16)	(16)	(16)
Stainless	Stainless	Medium	Flat top
LM	MM	Standard	
			
(16)	(16)	(16)	(16)

Order Number	Stock		Insert Number		Dimensions (mm)									
	R	L			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Screw	Wrench
SVPCR/L2020K16	●	●	VCGT VCGW	1604	20	20	125	30	20	25	SPSVN32	BCP141	TS44	TKY15R
SVPCR/L2525M16	●	●	VCMT VCMW	1604	25	25	150	30	25	32	SPSVN32	BCP141	TS44	TKY15R

* Clamp Torque (N • m) : TS44=3.5

EXTERNAL TURNING TOOLS

C

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

● : Inventory maintained in Japan.

SVPC type inserts	➤ A145—A147
CBN inserts	➤ B050, B064
RECOMMENDED CUTTING CONDITIONS	➤ A016—A022, B008

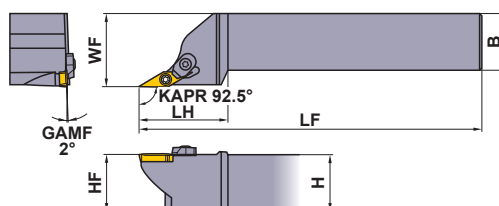
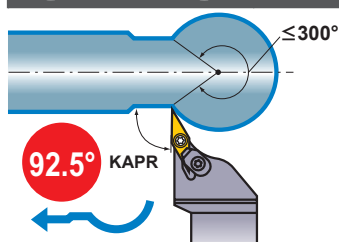
SXZC

External turning,
Copying

Profile type

Finish

SVX



Right hand tool holder shown.



(15)

Order Number	Stock		Insert Number		Dimensions (mm)											
	R	L			H	B	LF	LH	HF	WF	Clamp Screw	Clamp Bridge	Clamp Bridge Screw	Spring	Insert Wrench	Wrench for clamp bridge
SXZCR/L1616H15	●	●	XCMT	1503	16	16	100	35	16	20	TS255	AMS3	AJS3010T10	ASS2	TKY08F	TKY10F
SXZCR/L2020K15	●	●		1503	20	20	125	35	20	25	TS255	AMS3	AJS3010T10	ASS2	TKY08F	TKY10F
SXZCR/L2525M15	●	●		1503	25	25	150	40	25	32	TS255	AMS3	AJS3010T10	ASS2	TKY08F	TKY10F

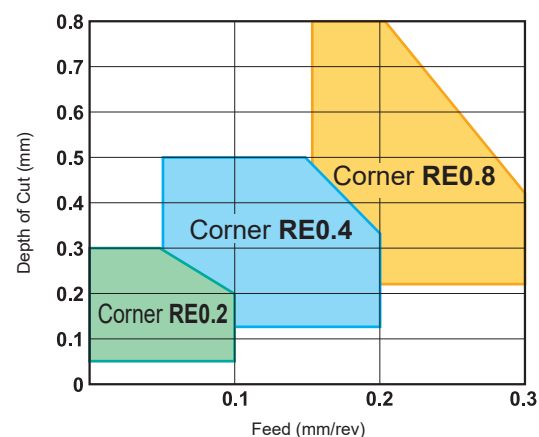
* Clamp Torque (N · m) : TS255=1.0, AJS3010T10=2.5

RECOMMENDED CUTTING CONDITIONS

Workpiece Material		Hardness	Grade	Cutting Speed (m/min)
P	Mild Steel	≤180HB	UE6020	250 (150—350)
	Carbon Steel, Alloy Steel	150HB—250HB	UE6020	175 (100—250)
M	Stainless Steel	≤200HB	VP15TF	100 (70—120)

The above cutting conditions are general guidelines.
Adjustments maybe necessary depending on machine rigidity, workpiece geometry and clamping.

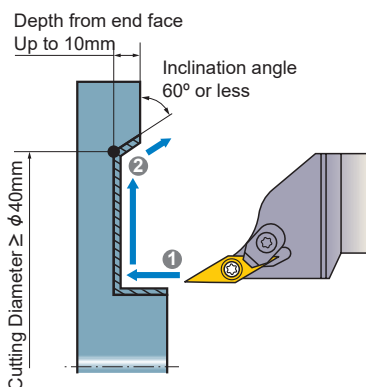
Applicable range



NOTE

Notes when end face copying

Pay special attention to the following when face copying.



Machining of an outer diameter (Step ①)

- To prevent burr formation, the depth of cut should be below half the nose radius.

Machining of an inclination (Step ②)

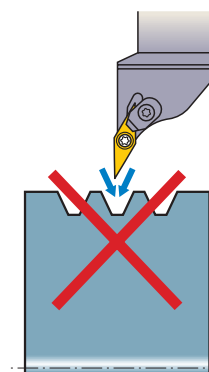
- To reduce the contact length of chips, the depth of cut should be below half the nose radius.
- To prevent interference between the tool and the workpiece, the cutting diameter should be 40mm or larger, inclination angle 60° or less and depth from the end face up to 10mm.

When changing inserts

- When indexing the inserts, it is recommended to preset the cutting edge position to maintain machining accuracy.

Not possible

●Machining of V-pulleys



When machining V-pulleys, use a VNMG insert.

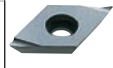
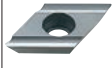
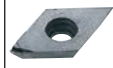
EXTERNAL TURNING TOOLS [FOR ALUMINIUM TURNING]

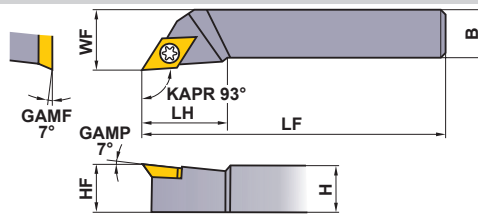
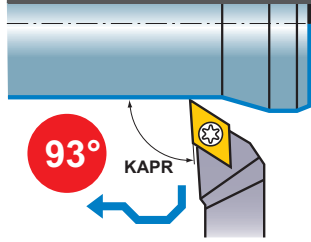
DE INSERTS TOOL HOLDERS

SDJE

External turning,
Copying

AL type

Finish	Medium
R/L-F  (15)	R/L  (15)
PCD	
R/L-F  (15)	



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)						 [*]		
	R	L		H	B	LF	LH	HF	WF	Clamp Screw	Wrench	
SDJER/L1616H15	●	●	DEGX	1504	16	16	100	27	16	20	CS451190T	TKY20F
SDJER/L2020K15	●	●		1504	20	20	125	35	20	25	CS451190T	TKY20F
SDJER/L2525M15	●	●		1504	25	25	150	35	25	32	CS451190T	TKY20F

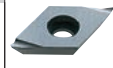
* Clamp Torque (N · m) : CS451190T=5.0

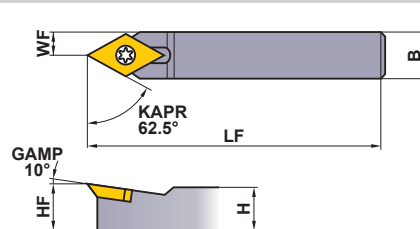
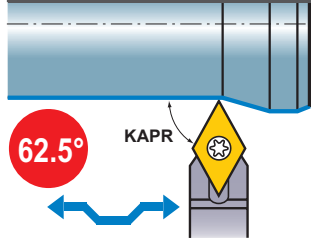
EXTERNAL TURNING TOOLS

SDNE

External turning,
Copying

AL type

Finish	Medium
R/L-F  (15)	R/L  (15)
PCD	
R/L-F  (15)	



Order Number	Stock	Insert Number		Dimensions (mm)					 *	
				H	B	LF	HF	WF	Clamp Screw	Wrench
SDNEN1616H15	●	DEGX	1504	16	16	100	16	8	CS451190T	TKY20F
SDNEN2020K15	●		1504	20	20	125	20	10	CS451190T	TKY20F
SDNEN2525M15	●		1504	25	25	150	25	12.5	CS451190T	TKY20F

* Clamp Torque (N · m) : CS451190T=5.0

RECOMMENDED CUTTING CONDITIONS

Workpiece Material	Grade	Cutting Speed (m/min)	Feed (mm/rev)	Depth of Cut (mm)
N	HTi10	400	0.05—0.3	0.2—3.0
	MD220	800	0.05—0.3	0.2—0.5

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

● : Inventory maintained in Japan.

SDJE type inserts > A130
SDNE type inserts > A130
PCD inserts > B066

TE INSERTS TOOL HOLDERS

STGE

External turning

AL type

Medium

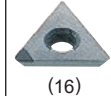
PCD

R/L

R/L

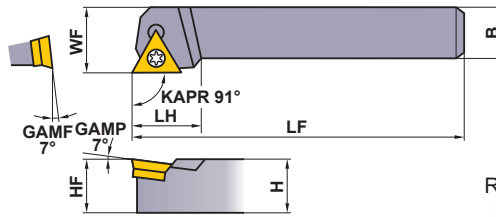
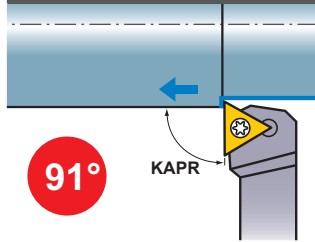


PCD



Right hand tool holder shown.

(16)



Order Number	Stock		Insert Number		Dimensions (mm)					 *		
	R	L			H	B	LF	LH	HF	WF	Clamp Screw	Wrench
STGER/L1616H16	●	●	TEGX	1603	16	16	100	22	16	20	FC400890T	TKY10F
STGER/L2020K16	●	●		1603	20	20	125	22	20	25	FC400890T	TKY10F
STGER/L2525M16	●	●		1603	25	25	150	22	25	32	FC400890T	TKY10F

* Clamp Torque (N · m) : FC400890T=2.5

STFE

Facing

AL type

Medium

PCD

R/L

R/L

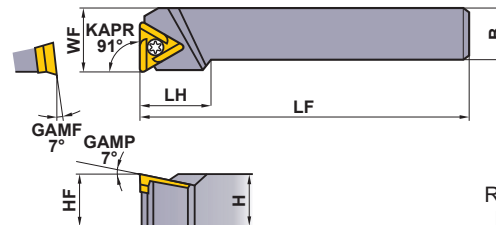
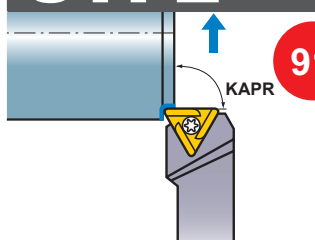


PCD



Right hand tool holder shown.

(16)



Order Number	Stock		Insert Number	Dimensions (mm)						 *		
	R	L		H	B	LF	LH	HF	WF	Clamp Screw	Wrench	
STFER/L1616H16	●	●	TEGX	1603	16	16	100	22	16	20	FC400890T	TKY10F
STFER/L2020K16	●	●		1603	20	20	125	22	20	25	FC400890T	TKY10F
STFER/L2525M16	●	●		1603	25	25	150	22	25	32	FC400890T	TKY10F

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

* Clamp Torque (N · m) : FC400890T=2.5

RECOMMENDED CUTTING CONDITIONS

Workpiece Material		Grade	Cutting Speed (m/min)	Feed (mm/rev)	Depth of Cut (mm)
N	Aluminium Alloy	HT110	400	0.05—0.3	0.2—3.0
		MD220	800	0.05—0.3	0.2—0.5

STGE type inserts > A138

STFE type inserts > A138

PCD inserts > B066

SPARE PARTS > P001

TECHNICAL DATA > Q001

C033

EXTERNAL TURNING TOOLS [FOR ALUMINIUM]

VD INSERTS TOOL HOLDERS

SVJD

External turning,
Copying

AL type

Finish

R/L



(16)

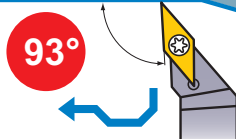
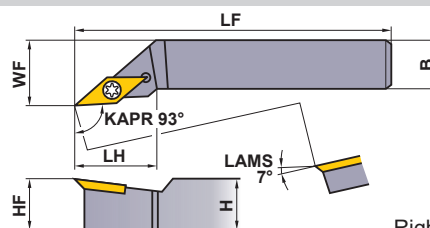
PCD

R/L-F



(16)

Right hand tool holder shown.



EXTERNAL TURNING TOOLS

C

Order Number	Stock		Insert Number		Dimensions (mm)					 *		
	R	L			H	B	LF	LH	HF	WF	Clamp Screw	Wrench
SVJDR/L1616H16	●	●	VDGX	1603	16	16	100	30	16	20	FC400890T	TKY10F
SVJDR/L2020K16	●	●		1603	20	20	125	30	20	25	FC400890T	TKY10F
SVJDR/L2525M16	●	●		1603	25	25	150	30	25	32	FC400890T	TKY10F

* Clamp Torque (N • m) : FC400890T=2.5

RECOMMENDED CUTTING CONDITIONS

Workpiece Material	Grade	Cutting Speed (m/min)	Feed (mm/rev)	Depth of Cut (mm)
N Aluminium Alloy	HTi10	400	0.05—0.3	0.2—3.0
	MD220	800	0.05—0.3	0.2—0.5

Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

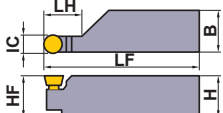
● : Inventory maintained in Japan.

SVJD type inserts > A148

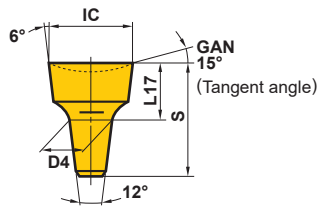
PCD inserts > B067

TL TYPE HOLDER

HOLDER

Geometry	Revised order number	Conventional order number	Stock	Insert Number	Dimensions (mm)					
					IC	H	B	HF	LF	LH
TLHR (External turning, Copying) 	TLHR2020K5	TLHR2020K5	●	RTG05A	5	20	20	20	125	16
	TLHR2020K6	TLHR2020K6	●	RTG06A	6	20	20	20	125	16
	TLHR2525M7	TLHR2525M7	●	RTG07A	7	25	25	25	150	20
	TLHR3225P10	TLHR54P10	●	RTG10A	10	32	25	32	170	25

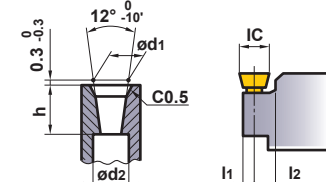
INSERTS



Order Number	Stock Carbide		Dimensions (mm)			
	UTi20T	HTi10	IC	S	D4	L17
RTG05A	●	●	5	7.5	2.5	3.5
RTG06A	●	●	6	7.5	3.5	3.5
RTG07A	●	●	7	11	3.5	5
RTG08A	●	●	8	11	4.5	5
RTG10A	●	●	10	14	5.5	6.5

INSERT SEAT LOCATION

When manufacturing a special tool holder, please machine insert seat in accordance to the drawing.

Insert Seat Dimensions	Insert Diameter IC	Dimensions (mm)					Taper Diameter
		h	d1	d2	l1	l2	
	5	4	2.5	1.9	1.85	3.2	1.5
	6	4	3.5	2.9	2.35	3.7	2.5
	7	6	3.5	2.5	2.75	4.3	2.1
	8	6	4.5	3.5	3.25	4.8	3.1
	10	7.5	5.5	4.2	4.15	5.9	3.8
	12	7.5	7.5	6.2	5.15	6.9	5.8