

# HOW TO READ THE STANDARD OF EXTERNAL TURNING TOOLS

- How this section page is organised
- ① Organised 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**

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

**GEOMETRY**  
**CHIP BREAKER BY CUTTING APPLICATION**

**EXTERNAL TURNING TOOLS**  
**VN INSERTS TOOL HOLDERS**

**DVPN** Facing, Copying **DOUBLE CLAMP type** Finish Light Medium Medium

Order Number	Stock	Insert Number	Dimensions (mm)				Shim	Lock Pin	Lock Screw	Stop Ring	Wrench		
			H	B	LF	WF							
DVPNRL2020K16	●	VN-A 1604	20	20	125	32	20	25	PV321	P115	HSP0500BC	E30	HKV25R
DVPNRL2020M16	●	VN-G 1604	25	25	150	32	25	32	DCS202	LLP13	DCS2	DC0621	TKY15F

\*1 Clamp Torque (N·m) : DC0520T=3.5

**EXTERNAL TURNING TOOLS**  
**WN INSERTS TOOL HOLDERS**

**PWLN** External turning, Facing **LL type** Finish Light Medium Medium

Order Number	Stock	Insert Number	Dimensions (mm)				Shim	Lock Pin	Lock Screw	Stop Ring	Wrench	
			H	B	LF	WF						
PWLNRL1616H06	●	06T3	16	16	100	25	16	20	LLS0113	LLP13	LLCS106	HKV25R
PWLNRL2020K06	●	WNMG 06T3	20	20	125	22	20	25	LLS0113	LLP13	LLCS106	HKV25R
PWLNRL2020M06	●	06T3	25	25	150	25	25	32	LLS0113	LLP13	LLCS106	HKV25R

\*1 Clamp Torque (N·m) : LLS106=2.2  
\*2 Please use shim no. LLS0113 with 4.75mm thick inserts. When using inserts, shim should be ordered separately.

**EXTERNAL TURNING TOOLS**  
**VN INSERTS TOOL HOLDERS**

**PVPN** Facing, Copying **MP type** Finish Light Medium Medium

Order Number	Stock	Insert Number	Dimensions (mm)				Shim	Lock Pin	Lock Screw	Stop Ring	Wrench		
			H	B	LF	WF							
PVPNRL2020K16	●	VN-A 1604	20	20	125	32	20	25	PV321	P115	HSP0500BC	E30	HKV25R
PVPNRL2020M16	●	VN-G 1604	25	25	150	32	25	32	PV321	P115	HSP0500BC	E30	HKV25R

\*1 Clamp Torque (N·m) : HSP0500C=2.5  
\*2 Please use shim no. PV321 and PV323 with RE0.4mm and RE 1.2mm thick inserts. When using inserts, shim should be ordered separately.

**EXTERNAL TURNING TOOLS**  
**WN INSERTS TOOL HOLDERS**

**DWLN** External turning, Facing **DOUBLE CLAMP type** Finish Light Medium Medium

Order Number	Stock	Insert Number	Dimensions (mm)				Shim	Lock Pin	Lock Screw	Stop Ring	Wrench			
			H	B	LF	WF								
DWLNRL1616H06	●	06T3	16	16	100	25	16	20	LLS0113	LLP13	DC0621H	DCS2	DC0520T	TKY15F
DWLNRL2020K06	●	06T3	20	20	125	25	20	25	LLS0113	LLP13	DC0621H	DCS2	DC0520T	TKY15F
DWLNRL2020M06	●	06T3	25	25	150	25	25	32	LLS0113	LLP13	DC0621H	DCS2	DC0520T	TKY15F
DWLNRL2020K08	●	0804	20	20	125	31	20	25	LLS0113	LLP14	DC0621H	DCS1	DC0621T	TKY20F
DWLNRL2020M08	●	0804	25	25	150	31	25	32	LLS0113	LLP14	DC0621H	DCS1	DC0621T	TKY20F
DWLNRL3225P08	●	0804	32	25	170	31	32	32	LLS0113	LLP14	DC0621H	DCS1	DC0621T	TKY20F

\*1 Clamp Torque (N·m) : DC0520T=3.5, DC0621T=5.0  
\*2 Please use shim no. LLS0113 with 4.75mm thick inserts. When using inserts, shim should be ordered separately.

**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.

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

● Inventory maintained in Japan.

DVPN type inserts → A128-A131  
PVPN type inserts → A128-A131

CBN & PCD inserts → B042, B043, B076  
RECOMMENDED CUTTING CONDITIONS → A076, B075

PWLN type inserts → A132-A133  
DWLN type inserts → A132-A136  
CBN inserts → B064

RECOMMENDED CUTTING CONDITIONS → A076, B075  
SPARE PARTS → Q001  
TECHNICAL DATA → R001

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

# 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..... C018  
 WN ○ ○ ○ INSERTS TOOL HOLDERS..... C021  
 CC ○ ○ ○ INSERTS TOOL HOLDERS..... C022  
 DC ○ ○ ○ INSERTS TOOL HOLDERS..... C023  
 RC ○ ○ ○ INSERTS TOOL HOLDERS..... C024  
 SC ○ ○ ○ INSERTS TOOL HOLDERS..... C026  
 TC ○ ○ ○ INSERTS TOOL HOLDERS..... C027  
 VC ○ ○ ○ INSERTS TOOL HOLDERS..... C028  
 XC ○ ○ ○ INSERTS TOOL HOLDERS..... C030  
 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


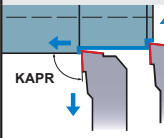
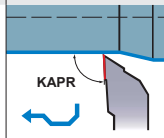
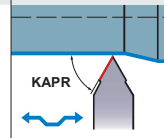
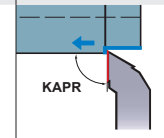

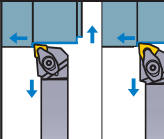
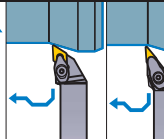
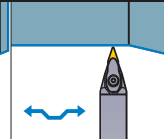
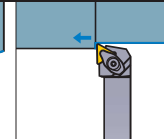

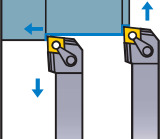


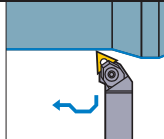

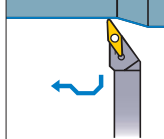
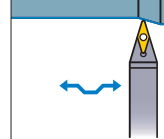
C008	DCLN	C016	PTGN
C010	DDJN	C018	PVJN
C016	DTGN	C020	PVPN
C018	DVJN	C019	PVVN
C020	DVPN	C021	PWLN
C019	DVVN	C022	SCLC
C021	DWLN	C023	SDJC
C009	MCLN	C032	SDJE
C012	MSBN	C023	SDNC
C014	MSSN	C032	SDNE
C017	MTJN	C025	SRDC
C009	PCBN	C025	SRGC
C008	PCLN	C026	SSSC
C011	PDHN	C033	STFE
C010	PDJN	C027	STGC
C024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



# CLASSIFICATION(Negative insert)

C

EXTERNAL TURNING TOOLS

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°			
<b>LL Holder</b>  <ul style="list-style-type: none"> <li>● Lever lock type.</li> <li>● ISO standard.</li> <li>● Various holder shapes.</li> <li>● Suitable for light to heavy cutting.</li> <li>● Economical negative insert.</li> </ul> <p>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</p>	   	<b>PCLN</b> ↻ C008	<b>PWLN</b> ↻ C021	<b>PDJN</b> ↻ C010	<b>PTGN</b> ↻ C016			
<b>DOUBLE CLAMP Holder</b>  <ul style="list-style-type: none"> <li>● New double clamp type.</li> <li>● Holds inserts securely.</li> <li>● Excellent cutting edge tolerance.</li> <li>● Economical negative insert.</li> <li>● Small insert series.</li> </ul> <p>16 x 16 x 100 25 x 25 x 150 20 x 20 x 125 32 x 25 x 170</p>	   	<b>DCLN</b> ↻ C008	<b>DWLN</b> ↻ C021	<b>DDJN</b> ↻ C010	<b>DVJN</b> ↻ C018	<b>DVVN</b> ↻ C019	<b>DTGN</b> ↻ C016	
<b>DOUBLE CLAMP Holder</b> (For heavy cutting)  <ul style="list-style-type: none"> <li>● Double clamp holder type.</li> <li>● Holds inserts securely.</li> <li>● Suitable for heavy cutting.</li> <li>● Negative insert.</li> </ul> <p>32 x 32 x 170 40 x 40 x 200</p>	 	<b>MCLN</b> ↻ C009						
<b>WP Holder</b>  <ul style="list-style-type: none"> <li>● Double clamp holder type.</li> <li>● Simple insert exchange.</li> <li>● Economical negative insert.</li> </ul> <p>20 x 20 x 125 25 x 25 x 150</p>			<b>MTJN</b> ↻ C017					
<b>MP Holder</b>  <ul style="list-style-type: none"> <li>● Pin lock type.</li> <li>● 35° rhombic shape insert.</li> <li>● Suitable for recessing.</li> </ul> <p>20 x 20 x 125 25 x 25 x 150</p>	 		<b>PVJN</b> ↻ C018	<b>PVVN</b> ↻ C019				


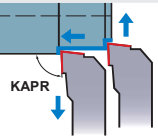
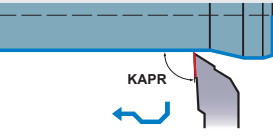
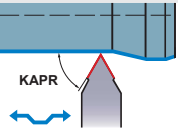

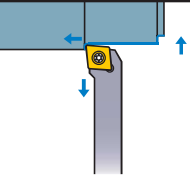
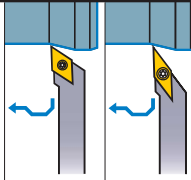
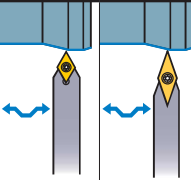

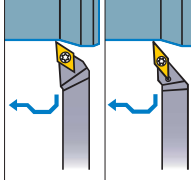
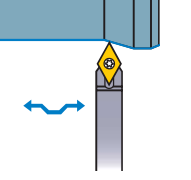


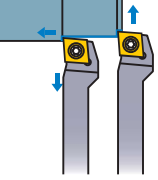
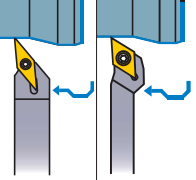
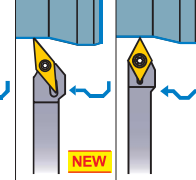

	External Turning	External Turning, Chamfering		External Turning, Facing, Chamfering	Facing		Facing, Copying	External Turning, Copying		Selection Standard					
	KAPR=75°	KAPR=60°	KAPR=45°	KAPR=45°	KAPR=75°	KAPR=91°	KAPR=107.5° 117.5°	Special Design (Positive inserts)		Economical	Low Cutting Resistance (Sharpness)	Clamp Rigidity	Operation Efficiency	Specialised	
	<b>PCBN</b> ⊕ C009	<b>PSBN</b> ⊕ C012	<b>PSTN</b> ⊕ C013	<b>PSDN</b> ⊕ C014	<b>PSSN</b> ⊕ C013	<b>PSKN</b> ⊕ C015	<b>PTFN</b> ⊕ C017	<b>PDHN</b> ⊕ C011	<b>PRGC</b> ⊕ C024	<b>PRDC</b> ⊕ C024					
								<b>DVPN</b> ⊕ C020							
	<b>MSBN</b> ⊕ C012			<b>MSSN</b> ⊕ C014											
								<b>PVPN</b> ⊕ C020							

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

EXTERNAL TURNING TOOLS

# CLASSIFICATION(Positive insert)

EXTERNAL TURNING TOOLS

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°
	<ul style="list-style-type: none"> <li>● Double clamp holder type.</li> <li>● 25° rhombic shape insert.</li> <li>● Possible to machine a face relief with up to 60° inclination.</li> </ul> 16 x 16 x 100 20 x 20 x 125 25 x 25 x 150			
	<ul style="list-style-type: none"> <li>● Screw-on type.</li> <li>● Miniature holder with 7° positive insert.</li> </ul> 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			
	<ul style="list-style-type: none"> <li>● Screw-on type.</li> <li>● 20° positive insert. (35° rhombic shape insert is 15°)</li> <li>● High rake and good sharpness.</li> </ul> 16 x 16 x 100 20 x 20 x 125 25 x 25 x 150			
	<ul style="list-style-type: none"> <li>● Taper lock type</li> <li>● Excellent finished surface with round shape insert.</li> </ul> 20 x 20 x 125 25 x 25 x 150 32 x 25 x 170			
	<ul style="list-style-type: none"> <li>● Screw-on type.</li> <li>● Tools to be equipped on gang type tool posts.</li> <li>● Miniature holder with 7° positive insert.</li> </ul> 8 x 8 x 125 10 x 10 x 125 12 x 12 x 150 16 x 16 x 150			
	<ul style="list-style-type: none"> <li>● Screw-on type.</li> <li>● Tools to be equipped on gang type tool posts.</li> <li>● High rigidity due to designing of vertical insert. (BTA/CTB type)</li> <li>● Back machining. (BTA/CTB type)</li> </ul> 8 x 10 x 120 10 x 10 x 120 12 x 12 x 120 16 x 16 x 120			

	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
							◎	◎		
					<b>SXZC</b> ↻ C030					
	<b>STGC</b> ↻ C027	<b>SSSC</b> ↻ C026		<b>SVPC</b> ↻ C029	<b>SRGC</b> ↻ C025 <b>SRDC</b> ↻ C025					
	<b>STGE</b> ↻ C033		<b>STFE</b> ↻ C033							
					<b>TLHR</b> ↻ C035					
	<b>SCAC-SM</b> ↻ D008			<b>SVPP-SM</b> ↻ D011						
					Special Design					
					<b>BTAH/CTBH</b> ↻ D012 <b>BTVH</b> ↻ D014					



EXTERNAL TURNING TOOLS

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

# IDENTIFICATION

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

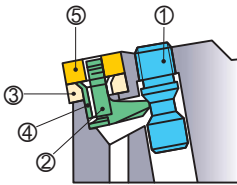
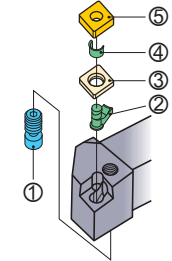
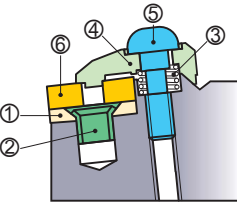
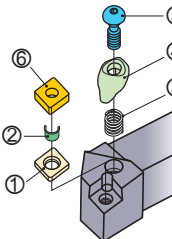
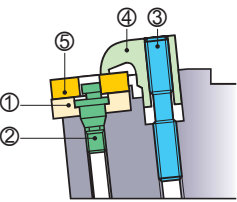
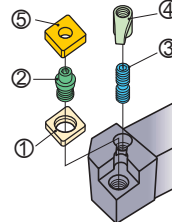
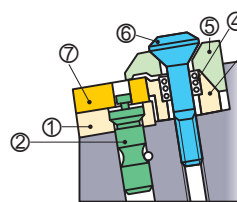
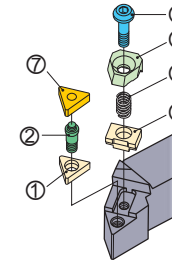
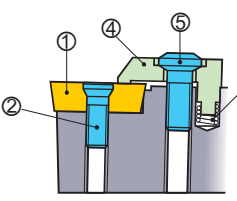
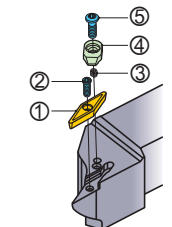
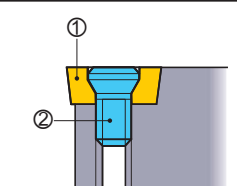
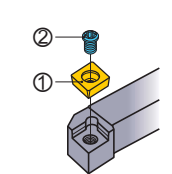
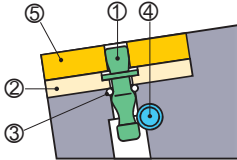
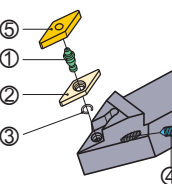
⑦Tool Length  
LF (mm)

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	
<b>Lever Lock (LL HOLDER)</b>		<ul style="list-style-type: none"> <li>① Clamp Screw</li> <li>② Lever</li> <li>③ Shim</li> <li>④ Shim Pin</li> <li>⑤ Insert</li> </ul> 
<b>Double Clamp (DOUBLE CLAMP) HOLDER</b>		<ul style="list-style-type: none"> <li>① Shim</li> <li>② Shim Pin</li> <li>③ Spring</li> <li>④ Clamp Bridge</li> <li>⑤ Clamp Screw</li> <li>⑥ Insert</li> </ul> 
<b>Multiple Clamp (DOUBLE CLAMP) HOLDER (For heavy cutting)</b>		<ul style="list-style-type: none"> <li>① Shim</li> <li>② Shim Pin</li> <li>③ Clamp Screw</li> <li>④ Clamp Bridge</li> <li>⑤ Insert</li> </ul> 
<b>Wedge Lock (WP HOLDER)</b>		<ul style="list-style-type: none"> <li>① Shim</li> <li>② Shim Pin</li> <li>③ Plate</li> <li>④ Spring</li> <li>⑤ Clamp Bridge</li> <li>⑥ Clamp Screw</li> <li>⑦ Insert</li> </ul> 
<b>Two Action Double Clamp (PROFILE HOLDER)</b>		<ul style="list-style-type: none"> <li>① Insert</li> <li>② Clamp Screw (1)</li> <li>③ Spring</li> <li>④ Clamp Bridge</li> <li>⑤ Clamp Screw (2)</li> </ul> 
<b>Screw-on (SP HOLDER) (AL HOLDER)</b>		<ul style="list-style-type: none"> <li>① Insert</li> <li>② Clamp Screw</li> </ul> 
<b>Pin Lock (MP HOLDER)</b>		<ul style="list-style-type: none"> <li>① Lock Pin</li> <li>② Shim</li> <li>③ Stop Ring</li> <li>④ Lock Screw</li> <li>⑤ Insert</li> </ul> 



EXTERNAL TURNING TOOLS



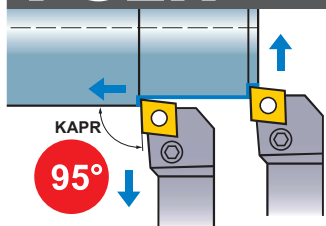
# EXTERNAL TURNING TOOLS

## CN<sup>00</sup> INSERTS TOOL HOLDERS



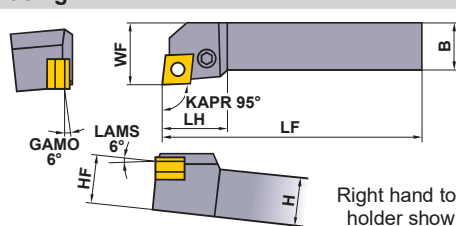
TOOL NEWS

### PCLN



External turning, Facing

LL type



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

Right hand tool holder shown.

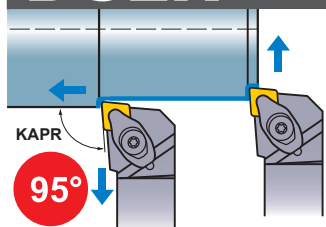
C

EXTERNAL TURNING TOOLS

Order Number	Stock		Insert Number	Dimensions (mm)						Shim	Shim Pin	Clamp Lever	Clamp Screw*	Wrench	
	R	L		H	B	LF	LH	HF	WF						
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

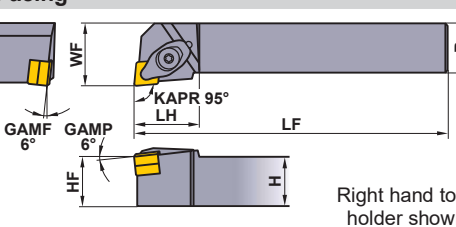
\* Clamp Torque (N · m) : LLCS106=2.2, LLCS108=3.3, LLCS508=3.3, LLCS310=7.0

### DCLN



External turning, Facing

DOUBLE CLAMP type



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

Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)						Shim*2	Shim Pin	Clamp Bridge	Spring	Clamp Screw*1	Wrench	
	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
				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 > A100—A106  
DCLN type inserts > A100—A106

CBN & PCD inserts > B028—B031, B068  
RECOMMENDED CUTTING CONDITIONS > A076, B015



Order Number		Stock	Insert Number	Dimensions (mm)						Accessories					
				H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Clamp Screw	Wrench	
<b>MCLNR3232P19</b>	●	●	CNMG CNMM CNMA	1906	32	32	170	36	32	40	MSCN63	MP6	CKW6	LS25	HKY40R
<b>MCLNR4040R19</b>	●	●	CNMG CNMM CNMA	1906	40	40	200	36	40	50	MSCN63	MP6	CKW6	LS25	HKY40R

\* Clamp Torque (N · m) : LS25=8.2

Order Number		Stock	Insert Number	Dimensions (mm)						Accessories					
				H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench	
<b>PCBNR/L2020K12</b>	●	●	CN○A CN○G CN○M	1204	20	20	125	28	20	17	LLSCN42	LLP14	LLCL14	LLCS108	HKY30R
<b>PCBNR/L2525M12</b>	●	●	CN○A CN○G CN○M	1204	25	25	150	25	25	22	LLSCN42	LLP14	LLCL14	LLCS108	HKY30R

\* Clamp Torque (N · m) : LLCS108=3.3

EXTERNAL TURNING TOOLS

MCLN type inserts > A100—A106  
 PCBN type inserts > A100—A106  
 CBN & PCD inserts > B028—B031, B068

RECOMMENDED CUTTING CONDITIONS > A076, B015  
 SPARE PARTS > Q001  
 TECHNICAL DATA > R001

# EXTERNAL TURNING TOOLS

## DN INSERTS TOOL HOLDERS

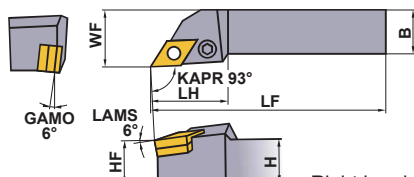


### PDJN



External turning, Copying

LL type



Right hand tool holder shown.

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

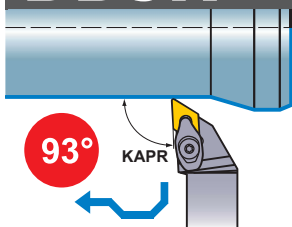
Order Number	Stock		Insert Number	Dimensions (mm)						*2					
	R	L		H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench	
PDJNR/L2020K15	●	●	DNMA DNMG DNMM DNMX DNXA DNXX DNXX	1504	20	20	125	35	20	25	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HKY30R
PDJNR/L2525M15	●	●	DNMA DNMG DNMM DNMX DNXA DNXX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

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

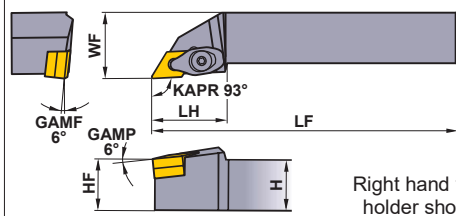
\*2 Please use shim no. LLSDN42 with 6.35mm thick inserts. When using 6.35mm thick inserts, shim should be ordered separately.

EXTERNAL TURNING TOOLS

### DDJN



External turning, DOUBLE CLAMP type



Right hand tool holder shown.

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

Order Number	Stock		Insert Number	Dimensions (mm)						*2						
	R	L		H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench	
DDJNR/L1616H11	●	●	DNMG DNXA	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 DNXA DNXX DNXX	1504	20	20	125	37	20	25	LLSDN43 (LLSDN42)	LLP24	DCK2613	DCS1	DC0621T	TKY20F
DDJNR/L2525M15	●	●	DNMA DNMG DNMM DNMX DNXA DNXX DNXX	1504	25	25	150	37	25	32	LLSDN43 (LLSDN42)	LLP24	DCK2613	DCS1	DC0621T	TKY20F
DDJNR/L3225P15	●	●	DNMA DNMG DNMM DNMX DNXA DNXX DNXX	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 > A107—A113

DDJN type inserts > A107—A113

CBN & PCD inserts > B032—B036, B068

RECOMMENDED CUTTING CONDITIONS > A076, B015

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
<b>PDHNR/L2020K15</b>		●	●	DNMA DNMG DNMM	1504	20	20	125	34	20	25	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HKY30R
<b>PDHNR/L2525M15</b>		●	●	DNGA DNGG DNGM	1504	25	25	150	34	25	32	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HKY30R
<b>PDHNR/L3225P15</b>		●	●		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.

# PDHN

## Facing, Copying LL type

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



EXTERNAL TURNING TOOLS

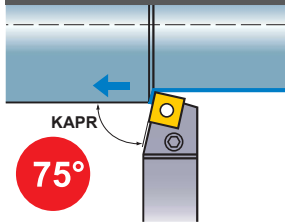
PDHN type inserts > A107-A113  
 CBN & PCD inserts > B032-B036, B068  
 RECOMMENDED CUTTING CONDITIONS > A076, B015

SPARE PARTS > Q001  
 TECHNICAL DATA > R001

# EXTERNAL TURNING TOOLS

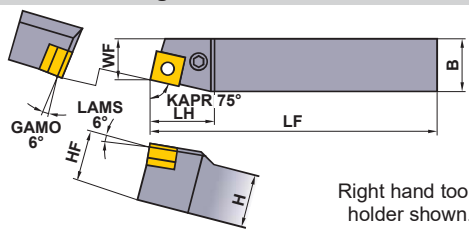
## SN INSERTS TOOL HOLDERS

### PSBN



75°

### External turning LL type



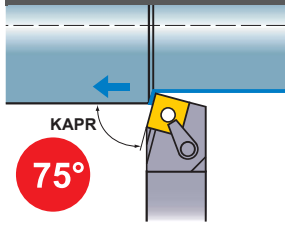
Right hand tool holder shown.

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

Order Number	Stock		Insert Number	Dimensions (mm)						Accessories						
	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

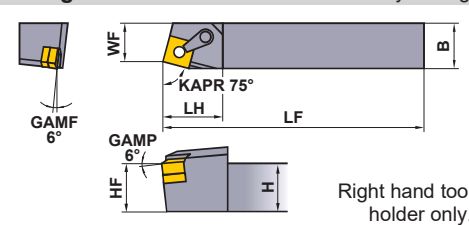
### MSBN



75°

### External turning DOUBLE CLAMP type

For heavy cutting



Right hand tool holder only.

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)

Order Number	Stock		Insert Number	Dimensions (mm)						Accessories					
	R	L		H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Clamp Screw*	Wrench	
MSBNR3232P19	●	●	SNMG	1906	32	32	170	41	32	27	MSSN63	MP6	CKW6	LS25	HKY40R
MSBNR4040R19	●	●	SNMM SNMA	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 > A115—A120

MSBN type inserts > A116—A120

CBN & PCD inserts > B037, B038, B069

RECOMMENDED CUTTING CONDITIONS > A076, B015

PSTN		External turning, Chamfering		LL type		Finish				Tools						
						FP	LP	MP	MK	Shim	Shim Pin	Clamp Lever	Clamp Screw*	Wrench		
				Right hand tool holder shown.				(12)	(12)	(12)	(12)					
				Medium to Rough				Stainless	G Class	CBN						
				RP				MM	R/L							
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 SNMG SNMM SNGA SNGG	0903	16	16	100	20	16	13	LLSSN33	LLP23	LLCL13	LLCS106	HKY25R	
PSTNR/L2020K12	●	●		1204	20	20	125	25	20	17	LLSSN42	LLP14	LLCL14	LLCS108	HKY30R	
PSTNR/L2525M12	●	●		1204	25	25	150	25	25	22	LLSSN42	LLP14	LLCL14	LLCS108	HKY30R	

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

PSSN		External turning, Facing, Chamfering		LL type		Finish				Tools						
						FP	LP	MP	MK	Shim	Shim Pin	Clamp Lever	Clamp Screw*	Wrench		
				Right hand tool holder shown.				(12)	(12)	(12)	(12,15,19)					
				Medium to Rough				Stainless	G Class	CBN						
				RP				MM	R/L							
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 > A115–A120  
 PSSN type inserts > A115–A120  
 CBN & PCD inserts > B037, B038, B069

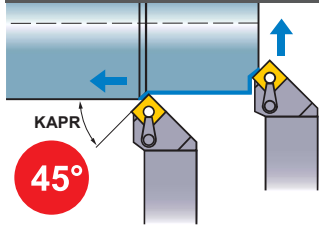
RECOMMENDED CUTTING CONDITIONS > A076, B015  
 SPARE PARTS > Q001  
 TECHNICAL DATA > R001



# EXTERNAL TURNING TOOLS

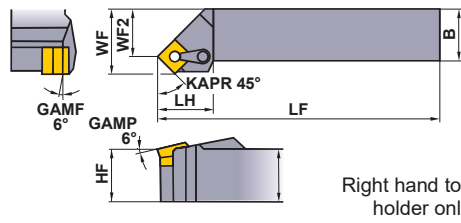
## SN TOOL HOLDERS

### MSSN



45°

External turning, Facing, Chamfering **DOUBLE CLAMP type** For heavy cutting



Right hand tool holder only.

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

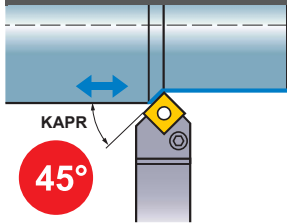
Order Number	Stock	Insert Number	Dimensions (mm)												
	R		H	B	LF	LH	HF	WF	WF2	Shim	Shim Pin	Clamp Bridge	Clamp Screw	Wrench	
MSSNR3232P19	●	SNMG SNMM SNMA	1906	32	32	170	44	32	40	27	MSSN63	MP6	CKW6	LS25	HKY40R
MSSNR4040R19	●	SNMG SNMM SNMA	1906	40	40	200	44	40	50	37	MSSN63	MP6	CKW6	LS25	HKY40R

\* Clamp Torque (N · m) : LS25=8.2

EXTERNAL TURNING TOOLS

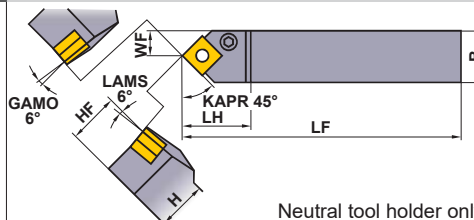
C

### PSDN



45°

External turning, Chamfering **LL type**



Neutral tool holder only.

Finish FP	Light LP	Medium MP	Medium 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)												
	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	●	SNMA SNMG SNMM SNGA SNGG	0903	16	16	100	22	16	8.0	LLSSN33	LLP23	—	LLCL13	LLCS106	HKY25R
PSDNN2020K12	●	SNMA SNMG SNMM SNGA SNGG	1204	20	20	125	28	20	10.0	LLSSN42	LLP14	—	LLCL14	LLCS108	HKY30R
PSDNN2525M12	●	SNMA SNMG SNMM SNGA SNGG	1204	25	25	150	28	25	12.5	LLSSN42	LLP14	—	LLCL14	LLCS108	HKY30R
PSDNN3225P12	●	SNMA SNMG SNMM SNGA SNGG	1204	32	25	170	28	32	12.5	LLSSN42	LLP14	—	LLCL14	LLCS108	HKY30R

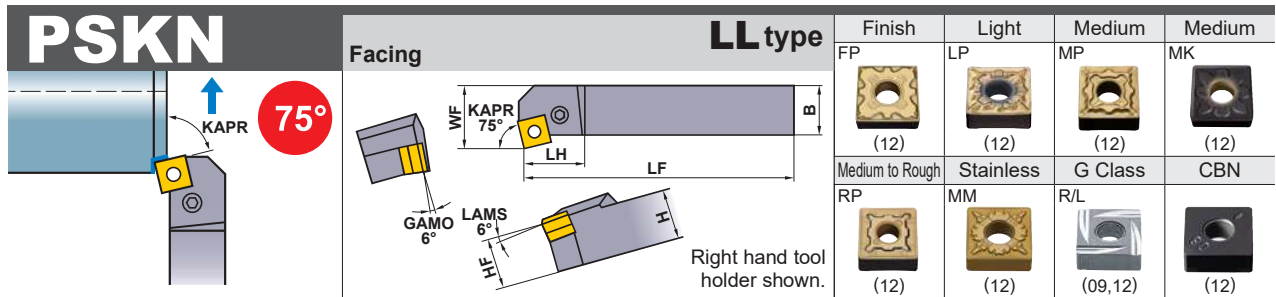
\* Clamp Torque (N · m) : LLCS105=1.5, LLCS106=2.2, LLCS108=3.3

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 > A116—A120  
PSDN type inserts > A115—A120

CBN & PCD inserts > B037, B038, B069  
RECOMMENDED CUTTING CONDITIONS > A076, B015



Order Number	Stock		Insert Number	Dimensions (mm)						Accessories					
	R	L		H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Lever	Clamp Screw*	Wrench	
PSKNR/L1616H09	●	●	SNMA SNMG SNMM	0903	16	16	100	20	16	20	LLSSN33	LLP23	LLCL13	LLCS106	HKY25R
PSKNR/L2020K12	●	●	SNGA SNGG	1204	20	20	125	25	20	25	LLSSN42	LLP14	LLCL14	LLCS108	HKY30R
PSKNR/L2525M12	●	●		1204	25	25	150	25	25	32	LLSSN42	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.

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



EXTERNAL TURNING TOOLS

PSKN type inserts	> A115—A120
CBN & PCD inserts	> B037, B038, B069
RECOMMENDED CUTTING CONDITIONS	> A076, B015

SPARE PARTS	> Q001
TECHNICAL DATA	> R001



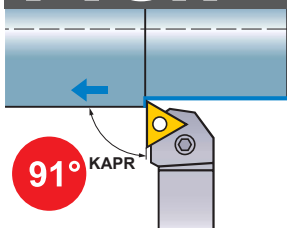
# EXTERNAL TURNING TOOLS

## TN INSERTS TOOL HOLDERS



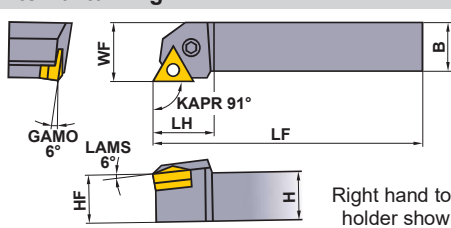
TOOL NEWS

### PTGN



91° KAPR

### External turning LL type



Right hand tool holder shown.

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

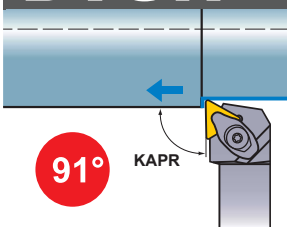
Order Number	Stock		Insert Number	Dimensions (mm)						*2		*1				
	R	L		H	B	LF	LH	HF	WF	Shim	Shim Pin	Lever Spring	Clamp Lever	Clamp Screw	Wrench	
PTGNR/L1010E11	●	●	TNMA TNMG TNMM TNGA TNGG TNGM	1103	10	10	70	17	10	12	—	—	HLS1	LLCL12S	LLCS105	HKY20F
PTGNR/L1212F11	●	●		1103	12	12	80	17	12	16	—	—	HLS1	LLCL12S	LLCS105	HKY20F
PTGNR/L1616H16	●	●		1604	16	16	100	22	16	20	LLSTN32 (LLSTN33)	LLP13 (LLP23)	—	LLCL13	LLCS106	HKY25R
PTGNR/L2020K16	●	●		1604	20	20	125	22	20	25	LLSTN32 (LLSTN33)	LLP13 (LLP23)	—	LLCL13	LLCS106	HKY25R
PTGNR/L2525M16	●	●		1604	25	25	150	22	25	32	LLSTN32 (LLSTN33)	LLP13 (LLP23)	—	LLCL13	LLCS206	HKY25R
PTGNR/L2525M22	●	●		2204	25	25	150	28	25	32	LLSTN42	LLP14	—	LLCL14	LLCS108	HKY30R
PTGNR/L3225P22	●	●		2204	32	25	170	28	32	32	LLSTN42	LLP14	—	LLCL14	LLCS108	HKY30R
PTGNR/L3232P27	●	●		2706	32	32	170	35	32	40	LLSTN53	LLP15	—	LLCL25	LLCS508	HKY30R

\*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

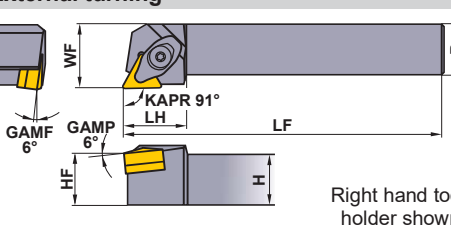
\*2 Please use shim no. LLSTN33 and shim pin no. LLP23 with 3.18mm thick inserts. When using 3.18mm thick inserts, shim and shim pin should be ordered separately.

### DTGN



91° KAPR

### External turning DOUBLE CLAMP type



Right hand tool holder shown.

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

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	
DTGNR/L1616H16	●	●	TNMA TNMG TNMM TNGA TNGG TNGM	1604	16	16	100	25	16	20	LLSTN32 (LLSTN33)	LLP23	DCK2211	DCS2	DC0520T	TKY15F
DTGNR/L2020K16	●	●	1604	20	20	125	25	20	25	LLSTN32 (LLSTN33)	LLP23	DCK2211	DCS2	DC0520T	TKY15F	
DTGNR/L2525M16	●	●	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 > A121—A127

DTGN type inserts > A121—A127

CBN & PCD inserts > B039—B041, B069

RECOMMENDED CUTTING CONDITIONS > A076, B015

PTFN		Facing								LL type					Finish	Light	Medium	Medium
															FP	LP	MP	MK
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	●	●	TNMM	1604	25	25	150	22	25	32	LLSTN32 (LLSTN33)	LLP13 (LLP23)	LLCL13	LLCS206	HKY25R			
PTFNR/L2525M22	●	●	TNGA TNGG TNGM	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
															FP	LP	MP	MK
Order Number	Stock		Insert Number		Dimensions (mm)					*2		*2		*1		*2		
	R	L			H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Side Lock Plate	Spring	Clamp Screw	Wrench	
MTJNR/L2020K16N	●	●	TN○A	1604	20	20	125	31	20	25	WPSTN33	CCP33	CCK13	CPT13	MES2	SLCS105	HKY25R HKY40R	
MTJNR/L2525M16N	●	●	TN○G	1604	25	25	150	31	25	32	WPSTN33	CCP33	CCK13	CPT13	MES2	SLCS105	HKY25R HKY40R	
MTJNR/L2525M22N	●	●	TN○M	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	> A121—A127
MTJN type inserts	> A121—A127
CBN & PCD inserts	> B039—B041, B069
RECOMMENDED CUTTING CONDITIONS	> A076, B015

SPARE PARTS	> Q001
TECHNICAL DATA	> R001

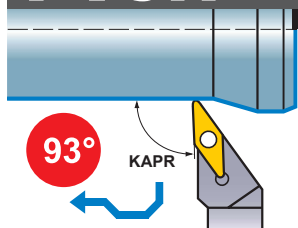
# EXTERNAL TURNING TOOLS

## VN<sup>○</sup> INSERTS TOOL HOLDERS

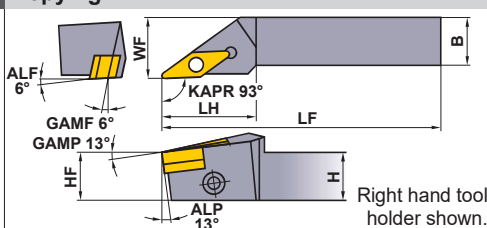


TOOL NEWS

### PVJN



### External turning, Copying MP type



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

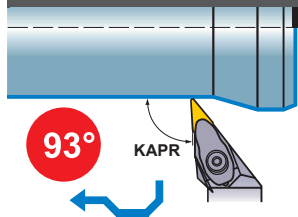
Order Number	Stock		Insert Number	Dimensions (mm)						Accessories					
	R	L		H	B	LF	LH	HF	WF	Shim	Lock Pin	Lock Screw	Stop Ring	Wrench	
PVJNR/L2020K16	●	●	VN <sup>○</sup> A VN <sup>○</sup> G VN <sup>○</sup> M	1604	20	20	125	32	20	25	PV322 (PV321) (PV323)	P11S	HSP05008C	E03	HKY25R
PVJNR/L2525M16	●	●	VN <sup>○</sup> A VN <sup>○</sup> G VN <sup>○</sup> M	1604	25	25	150	38	25	32		P11S	HSP05008C	E03	HKY25R

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

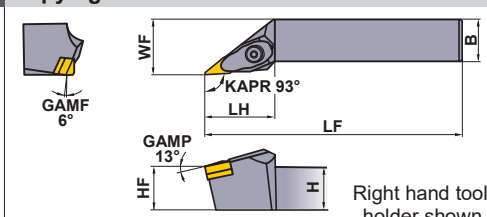
\*2 Please use shim no. PV321 and PV323 with RE0.4mm and RE1.2mm thick inserts. When using inserts, shim should be ordered separately.

EXTERNAL TURNING TOOLS

### DVJN



### External turning, DOUBLE CLAMP type



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

Order Number	Stock		Insert Number	Dimensions (mm)						Accessories						
	R	L		H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench	
DVJNR/L2020K16	●	●	VN <sup>○</sup> A VN <sup>○</sup> G VN <sup>○</sup> M	1604	20	20	125	41	20	25	DCSVN32	LLP13	DCK3113	DCS2	DC0520T	TKY15F
DVJNR/L2525M16	●	●	VN <sup>○</sup> A VN <sup>○</sup> G VN <sup>○</sup> M	1604	25	25	150	41	25	32	DCSVN32	LLP13	DCK3113	DCS2	DC0520T	TKY15F

\* Clamp Torque (N · m) : DC0520T=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.

PVJN type inserts > A128—A131  
DVJN type inserts > A128—A131

CBN & PCD inserts > B042, B043, B070  
RECOMMENDED CUTTING CONDITIONS > A076, B015

Order Number		Stock N	Insert Number		Dimensions (mm)						Accessories					
					H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench
<b>DVVNN2020K16</b>		●	VN○A VN○G VN○M	1604	20	20	125	44	20	10	DCSVN32	LLP13	DCK3113	DCS2	DC0520T	TKY15F
<b>DVVNN2525M16</b>		●	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

Order Number		Stock N	Insert Number		Dimensions (mm)						Accessories				
					H	B	LF	LH	HF	WF	Shim	Lock Pin	Lock Screw	Stop Ring	Wrench
<b>PVVNN2020K16</b>		●	VN○A VN○G VN○M	1604	20	20	125	38	20	10	PV322 (PV321) (PV323)	P11S	HSP05008C	E03	HKY25R
<b>PVVNN2525M16</b>		●	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.

DVVN type inserts > A128—A131  
 PVVN type inserts > A128—A131  
 CBN & PCD inserts > B042, B043, B070

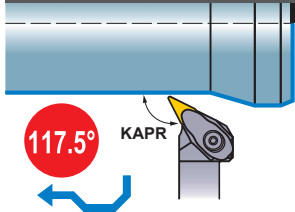
RECOMMENDED CUTTING CONDITIONS > A076, B015  
 SPARE PARTS > Q001  
 TECHNICAL DATA > R001

# EXTERNAL TURNING TOOLS

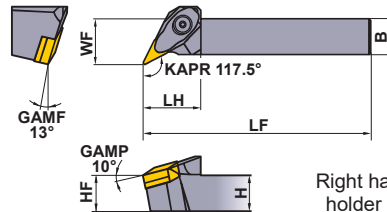
## VN<sup>○</sup> INSERTS TOOL HOLDERS



### DV<sup>PN</sup>



### Facing, Copying **DOUBLE CLAMP type**



Right hand tool holder shown.

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

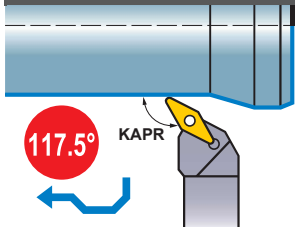
Order Number	Stock		Insert Number	Dimensions (mm)						Accessories						
	R	L		H	B	LF	LH	HF	WF	Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench	
DV <sup>PNR</sup> /L2020K16	●	●	VN <sup>○</sup> A VN <sup>○</sup> G VN <sup>○</sup> M	1604	20	20	125	32	20	25	DCSVN32	LLP13	DCK3113	DCS2	DC0520T	TKY15F
DV <sup>PNR</sup> /L2525M16	●	●	VN <sup>○</sup> A VN <sup>○</sup> G VN <sup>○</sup> M	1604	25	25	150	32	25	32	DCSVN32	LLP13	DCK3113	DCS2	DC0520T	TKY15F

\* Clamp Torque (N · m) : DC0520T=3.5

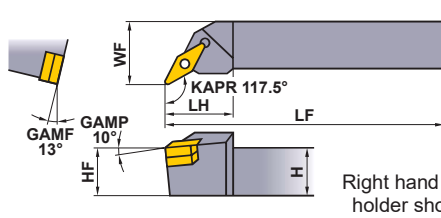
EXTERNAL TURNING TOOLS

C

### PV<sup>PN</sup>



### Facing, Copying **MP type**



Right hand tool holder shown.

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

Order Number	Stock		Insert Number	Dimensions (mm)						Accessories					
	R	L		H	B	LF	LH	HF	WF	Shim	Lock Pin	Lock Screw	Stop Ring	Wrench	
PV <sup>PNR</sup> /L2020K16	●	●	VN <sup>○</sup> A VN <sup>○</sup> G VN <sup>○</sup> M	1604	20	20	125	32	20	25	PV322 (PV321)	P11S	HSP05008C	E03	HKY25R
PV <sup>PNR</sup> /L2525M16	●	●	VN <sup>○</sup> A VN <sup>○</sup> G VN <sup>○</sup> M	1604	25	25	150	32	25	32	(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.

DV<sup>PN</sup> type inserts > A128—A131  
PV<sup>PN</sup> type inserts > A128—A131

CBN & PCD inserts > B042, B043, B070  
RECOMMENDED CUTTING CONDITIONS > A076, B015

# WN<sup>〇</sup>INSERTS TOOL HOLDERS



PWLN		External turning, Facing							LL type					Light	Medium	
														LP	MP	
														 (06)	 (06)	
														Stainless		
														MM		 (06)
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		
PWLNR/L1616H06	●●	WNMG	06T3 <sup>〇</sup>	16	16	100	22	16	20	LLSWN3T3 (LLSWN32)	LLP13	LLCL13	LLCS106	HKY25R		
PWLNR/L2020K06	●●		06T3 <sup>〇</sup>	20	20	125	22	20	25	LLSWN3T3 (LLSWN32)	LLP13	LLCL13	LLCS106	HKY25R		
PWLNR/L2525M06	●●		06T3 <sup>〇</sup>	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.

EXTERNAL TURNING TOOLS

DWLN		External turning, Facing							DOUBLE CLAMP type				Finish	Light	Medium	Medium
									FP	LP	MP	MK				
													 (08)	 (06,08)	 (06,08)	 (08)
													Medium	Medium to Rough	Stainless	CBN
													Standard	RP	MM	
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 <sup>〇</sup>	16	16	100	25	16	20	LLSWN3T3 (LLSWN32)	LLP23	DCK2211	DCS2	DC0520T	TKY15F	
DWLNR/L2020K06	●●		06T3 <sup>〇</sup>	20	20	125	25	20	25	LLSWN3T3 (LLSWN32)	LLP23	DCK2211	DCS2	DC0520T	TKY15F	
DWLNR/L2525M06	●●		06T3 <sup>〇</sup>	25	25	150	25	25	32	LLSWN3T3 (LLSWN32)	LLP23	DCK2211	DCS2	DC0520T	TKY15F	
DWLNR/L2020K08	●●		0804 <sup>〇</sup>	20	20	125	31	20	25	LLSWN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F	
DWLNR/L2525M08	●●		0804 <sup>〇</sup>	25	25	150	31	25	32	LLSWN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F	
DWLNR/L3225P08	●●		0804 <sup>〇</sup>	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.

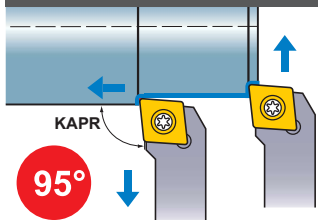
PWLN type inserts > A132—A135  
 DWLN type inserts > A132—A136  
 CBN inserts > B044

RECOMMENDED CUTTING CONDITIONS > A076, B015  
 SPARE PARTS > Q001  
 TECHNICAL DATA > R001

# EXTERNAL TURNING TOOLS

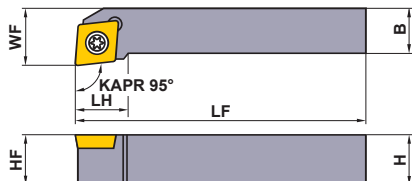
## CC<sup>○</sup> INSERTS TOOL HOLDERS

### SCLC



External turning,  
Facing

SP type



Right hand tool holder shown.

Finish	Light	Medium	Stainless
FP (06,09)	LP (06,09)	MP (06,09,12)	FM (06,09)
Stainless	Stainless	Flat top	PCD/CBN
LM (06,09)	MM (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	●	●	CC <sup>○</sup> B CC <sup>○</sup> H *2	8	8	60	8.9	8	10	TS25	TKY08F	
SCLCR/L1010E06	●	●		0602 <sup>○</sup>	10	10	70	8.9	10	12	TS25	TKY08F
SCLCR/L1212F09	●	●	CC <sup>○</sup> T CC <sup>○</sup> W	09T3 <sup>○</sup>	12	12	80	13.6	12	16	TS43	TKY15F
SCLCR/L1616H12	●	●		1204 <sup>○</sup>	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

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.

SCLC type inserts > A140—A147

CBN & PCD inserts > B049—B052, B072

RECOMMENDED CUTTING CONDITIONS > A090, B015



# 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

EXTERNAL TURNING TOOLS

SDNC		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)						
				Neutral tool holder only.									
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

SDJC type inserts > A149—A154  
 SDNC type inserts > A149—A154  
 CBN & PCD inserts > B054—B056, B073

RECOMMENDED CUTTING CONDITIONS > A090, B015  
 SPARE PARTS > Q001  
 TECHNICAL DATA > R001



# EXTERNAL TURNING TOOLS

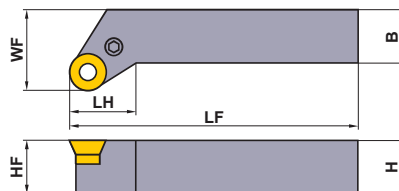
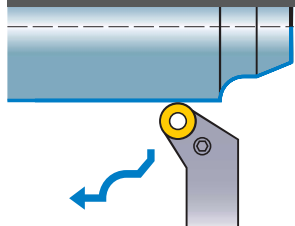
## RC INSERTS TOOL HOLDERS

### PRGC

External turning,  
Facing, Copying

LL type

Medium



Right hand tool holder shown.



(10,12,16,20)

Heavy Cutting  
RR



(16,20)

Order Number	Stock		Insert Number	Dimensions (mm)						Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench	
	R	L		H	B	LF	LH	HF	WF						
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

EXTERNAL TURNING TOOLS

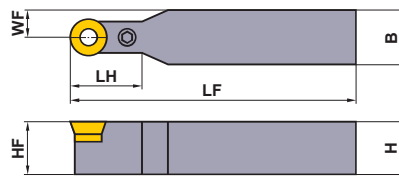
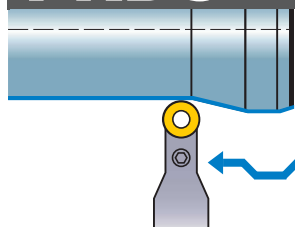
C

### PRDC

External turning,  
Copying

LL type

Medium



Neutral tool holder only.



(10,12,16,20)

Heavy Cutting  
RR



(16,20)

Order Number	Stock	Insert Number	Dimensions (mm)						Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench	
	N		H	B	LF	LH	HF	WF						
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



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.



PRGC type inserts > A156

PRDC type inserts > A156

RECOMMENDED CUTTING CONDITIONS > A090

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

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

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

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



EXTERNAL TURNING TOOLS

SRGC type inserts > A156  
 SRDC type inserts > A156  
 RECOMMENDED CUTTING CONDITIONS > A090

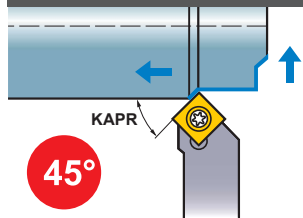
SPARE PARTS > Q001  
 TECHNICAL DATA > R001

C025

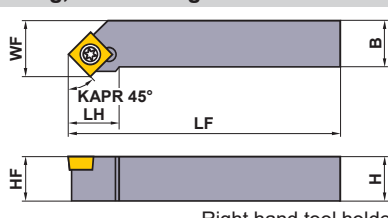
# EXTERNAL TURNING TOOLS

## SC INSERTS TOOL HOLDERS

### SSSC



External turning, Facing, Chamfering **SP type**





Right hand tool holder shown.

Finish	Light	Medium	Stainless
FP (09)	LP (09)	MP (09)	FM (09)
Stainless	Stainless	Medium	Flat top
LM (09)	MM (09)	Standard (09)	(09)

C

EXTERNAL TURNING TOOLS

Order Number	Stock		Insert Number	Dimensions (mm)						* 			
	R	L		H	B	LF	LH	HF	WF	Clamp Screw	Wrench		
<b>SSSCR/L1212F09</b>	●	●	SCMW SCMT	09T3	12	12	80	15.2	12	13	TS43	TKY15F	
<b>SSSCR/L1616H09</b>	●	●		09T3	16	16	100	15.2	16	17	TS43	TKY15F	

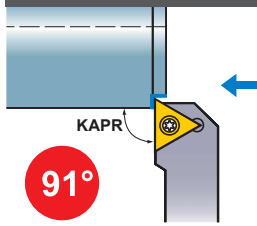
\* Clamp Torque (N · m) : TS43=3.5

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

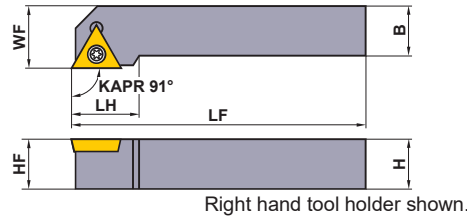
● : Inventory maintained in Japan.

# TC INSERTS TOOL HOLDERS



## STGC



### External turning **SP type**



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

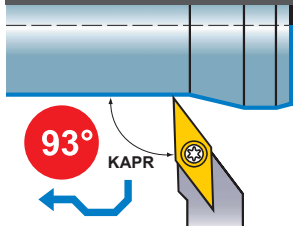


EXTERNAL TURNING TOOLS

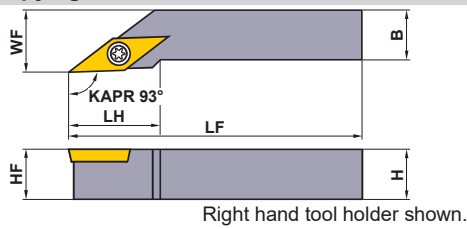
# EXTERNAL TURNING TOOLS

## VC INSERTS TOOL HOLDERS

### SVJC



External turning, Copying **SP type**



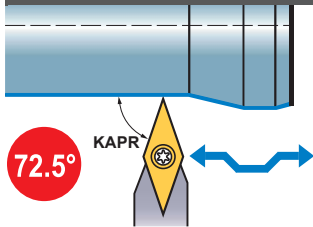
Finish	Light	Medium	Stainless
FP (11,16)	LP (11,16)	MP (16)	FM (11,16)
Stainless	Stainless	Medium	Flat top
LM (11,16)	MM (16)	Standard (11,16)	(11,16)

Order Number	Stock		Insert Number	Dimensions (mm)						Shim	Shim Pin	Clamp Screw	Wrench	
	R	L		H	B	LF	LH	HF	WF					
SVJCR/L1010E11	●	●	VCGT VCGW VCMT 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

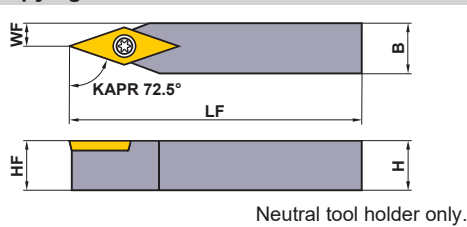
\* Clamp Torque (N · m) : TS25=1.0, TS43=3.5, TS44=3.5

EXTERNAL TURNING TOOLS

### SVVC



External turning, Copying **SP type**



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

Order Number	Stock	Insert Number	Dimensions (mm)						Shim	Shim Pin	Clamp Screw	Wrench
	N		H	B	LF	HF	WF					
SVVCN1616H16	●	VCGT VCGW VCMT VCMW	1604	16	16	100	16	8	—	—	TS43	①TKY15F
SVVCN2020K16	●		1604	20	20	125	20	10	SPSVN32	BCP141	TS44	②TKY15R
SVVCN2525M16	●		1604	25	25	150	25	12.5	SPSVN32	BCP141	TS44	②TKY15R

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

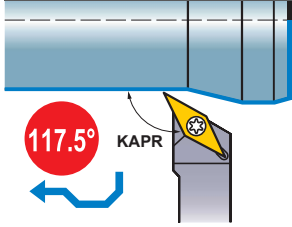
Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

● : Inventory maintained in Japan.

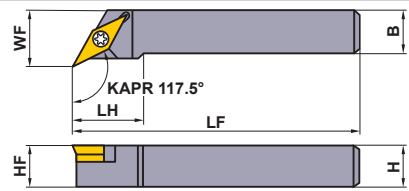
SVJC type inserts > A170—A172  
SVVC type inserts > A170—A172

CBN & PCD inserts > B062, B077  
RECOMMENDED CUTTING CONDITIONS > A090, B015








# SVPC







## Facing, Copying **SP type**



Right hand tool holder shown.

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

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

\* Clamp Torque (N • m) : TS44=3.5

EXTERNAL TURNING TOOLS

SVPC type inserts > A170—A172  
 CBN inserts > B062, B077  
 RECOMMENDED CUTTING CONDITIONS > A090, B015

SPARE PARTS > Q001  
 TECHNICAL DATA > R001

# EXTERNAL TURNING TOOLS

## XC INSERTS TOOL HOLDERS

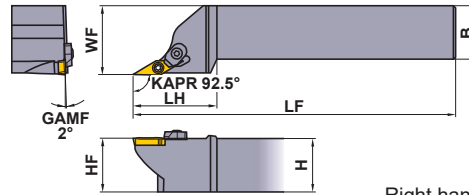
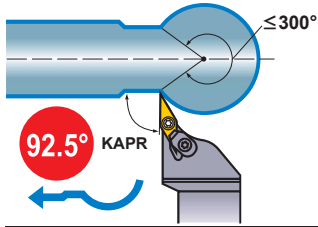


### SXZC

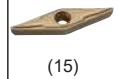
External turning,  
Copying

Profile Holder

Finish  
SVX



Right hand tool holder shown.



(15)

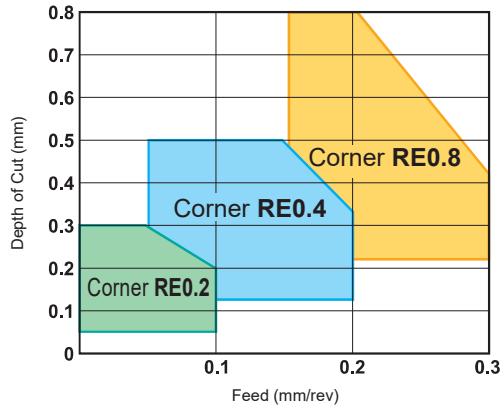
C

EXTERNAL TURNING TOOLS

Order Number	Stock		Insert Number	Dimensions (mm)						Accessories						
	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

### Applicable range



### RECOMMENDED CUTTING CONDITIONS

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

The above cutting conditions are general guidelines.

Adjustments may be necessary depending on machine rigidity, workpiece geometry and clamping.

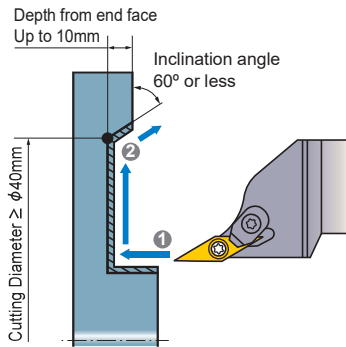
Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

● : Inventory maintained in Japan.

## 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)

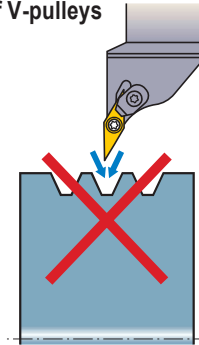
- To reduce the contact length of chips, the depth of cut should be below half the nose radius.
- To prevent interference between the tool and the workpiece, the cutting diameter should be 40mm or larger, inclination angle 60° or less and depth from the end face up to 10mm.

#### 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]

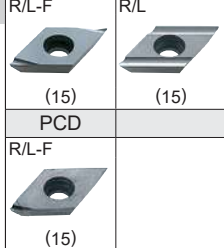
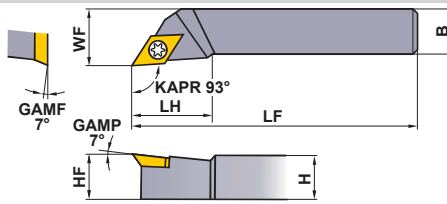
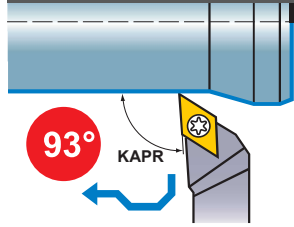
## DE INSERTS TOOL HOLDERS

### SDJE

External turning,  
Copying

AL type

Finish Medium



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)						* Clamp Screw	Wrench	
	R	L		H	B	LF	LH	HF	WF			
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

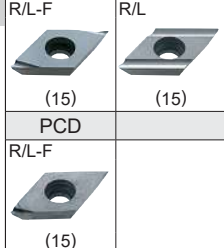
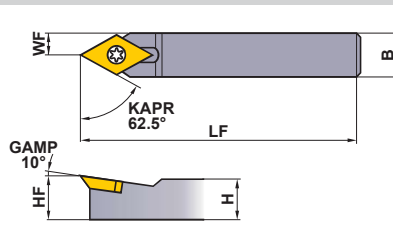
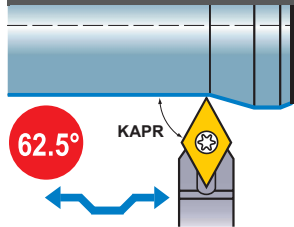
C

### SDNE

External turning,  
Copying

AL type

Finish Medium



Order Number	Stock		Insert Number	Dimensions (mm)						* Clamp Screw	Wrench
	R	L		H	B	LF	HF	WF			
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

Work 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

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 > A155  
SDNE type inserts > A155  
PCD inserts > B079

# TE INSERTS TOOL HOLDERS

STGE		External turning							AL type		Medium	PCD	
									R/L	R/L	(16)	(16)	
											 (16)	 (16)	
												 (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

EXTERNAL TURNING TOOLS

STFE		Facing							AL type		Medium	PCD	
									R/L	R/L	(16)	(16)	
											 (16)	 (16)	
												 (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

Work Material	Grade	Cutting Speed (m/min)	Feed (mm/rev)	Depth of Cut (mm)
N Aluminium Alloy	HT10	400	0.05-0.3	0.2-3.0
	MD220	800	0.05-0.3	0.2-0.5

STGE type inserts > A163

STFE type inserts > A163

PCD inserts > B079

SPARE PARTS > Q001

TECHNICAL DATA > R001

C033

# EXTERNAL TURNING TOOLS [FOR ALUMINIUM]

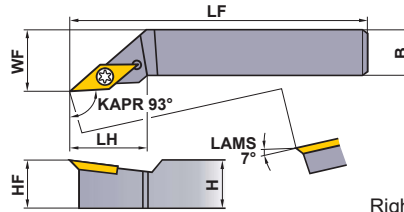
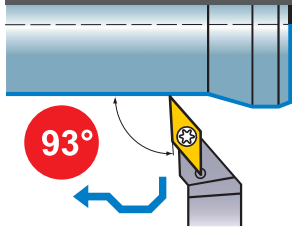
## VD INSERTS TOOL HOLDERS

### SVJD

External turning,  
Copying

AL type

Finish



Right hand tool holder shown.

R/L



(16)

PCD

R/L-F



(16)

EXTERNAL TURNING TOOLS

C

Order Number	Stock		Insert Number	Dimensions (mm)						* Clamp Screw	Wrench	
	R	L		H	B	LF	LH	HF	WF			
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

Work 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

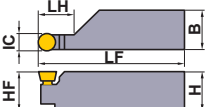
Note 1) The insert photos are only examples. The letters refer to the chip breaker and the dimension refers to the inscribed circle.

● : Inventory maintained in Japan.  
▲ : Inventory maintained in Japan. To be replaced by new products.

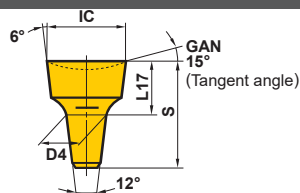
SVJD type inserts > A173  
PCD inserts > B080

# TL HOLDER

## HOLDER

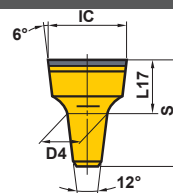
Geometry	Revised order number	Conventional order number	Stock	Insert Number	Dimensions (mm)					
					IC	H	B	HF	LF	LH
<b>TLHR</b> (External turning, Copying) 	<b>TLHR2020K5</b>	TLHR2020K5	●	RTG05A	5	20	20	20	125	16
	<b>TLHR2020K6</b>	TLHR2020K6	●	RTG06A	6	20	20	20	125	16
	<b>TLHR2525M7</b>	TLHR2525M7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

## INSERTS



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

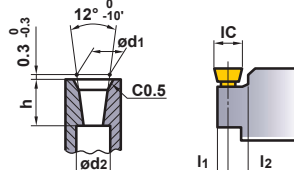
## INSERTS (CBN)



Order Number	Stock CBN	Dimensions (mm)			
	MB825	IC	S	D4	L17
<b>RTG05A</b>	▲	5	7.5	2.5	3.5
<b>RTG06A</b>	▲	6	7.5	3.5	3.5
<b>RTG07A</b>	▲	7	11	3.5	5
<b>RTG08A</b>	▲	8	11	4.5	5
<b>RTG10A</b>	▲	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