

<80 degree Rhombic Negative type>

Item Number	IC	T
CN_1204	12.7	4.76

Shape	ISO Item Number	Inch Item Number	R	Carbide										Chip Control Range	For applicable holder, see pages:		
				PVD Coated							CVD Coated						
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1				
				Steel	P	●	●	●	●	●	●	●	●	●	●	●	● : 1st Choice ● : 2nd choice
				Stainless Steel	M	●	●	●	●	●	●	●	●	●	●		
				Cast Iron	K	●	●	●	●	●	●	●	●	●	●		
				Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●	●		
				Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●	●		
				Hardened Material	H	●	●	●	●	●	●	●	●	●	●		
	CNGG 120404 FN UL	CNGG431FNUL	0.4			●		●		●							F9 F11 G40 K34
UL	120408 FN UL	432FNUL	0.8			●		●		●							
	CNMG 120408 G	CNMG432-G	0.8										●				
G	120412 G	433-G	1.2										●				
G	120416 G	434-G	1.6										●				
	CNMG 120408 TNB Z5	432-TNB-Z5	0.8					●						●			
Z5																	
	CNGG 120404 FN ZP	CNGG431-FN-ZP	0.4			●		●						●			
ZP	120408 FN ZP	432-FN-ZP	0.8			●		●						●			

● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)

<55 degree Rhombic Negative type>

Item Number	IC	T
DN_1504	12.7	4.76

Shape	ISO Item Number	Inch Item Number	R	Carbide										Chip Control Range	For applicable holder, see pages:	
				PVD Coated							CVD Coated					
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1			
				Steel	P	●	●	●	●	●	●	●	●	●	●	● : 1st Choice ● : 2nd choice
				Stainless Steel	M	●	●	●	●	●	●	●	●	●		
				Cast Iron	K	●	●	●	●	●	●	●	●	●		
				Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●		
				Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●		
				Hardened Material	H	●	●	●	●	●	●	●	●	●		
	DNMG 150404 G	DNMG431-G	0.4											●		
G	150408 G	432-G	0.8											●		
G	150412 G	433-G	1.2											●		
	DNMG 150404 TN G	DNMG431-TN-G	0.4					●								
G																
	DNMG 150408 TNB Z5	DNMG432-TNB-Z5	0.8					●						●		
Z5																
	DNGG 150404 FN ZP	DNGG431-FN-ZP	0.4			●		●						●		
ZP	150408 FN ZP	432-FN-ZP	0.8			●		●						●		

● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)

Carbide

Negative type

Positive type

G

D

E

R

S

T

V

W

<90 degree Square Negative type>

Item Number	IC	T
SN_1204	12.7	4.76

Shape	ISO Item Number	Inch Item Number	R	Carbide								Chip Control Range	For applicable holder, see pages:																																																																					
				PVD Coated				CVD Coated																																																																										
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1			CP7	KM1																																																																			
			<table border="1"> <tr><td>Steel</td><td>P</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>Stainless Steel</td><td>M</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>Cast Iron</td><td>K</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>Non-Ferrous Material</td><td>N</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>Heat Resistant Alloy</td><td>S</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>Hardened Material</td><td>H</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> </table>	Steel	P	●	●	●	●	●	●	●	●	●	●	●	Stainless Steel	M	●	●	●	●	●	●	●	●	●	●	●	Cast Iron	K	●	●	●	●	●	●	●	●	●	●	●	Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●	●	●	Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●	●	●	Hardened Material	H	●	●	●	●	●	●	●	●	●	●	●	<ul style="list-style-type: none"> ● : 1st Choice ● : 2nd choice
Steel	P	●	●	●	●	●	●	●	●	●	●	●																																																																						
Stainless Steel	M	●	●	●	●	●	●	●	●	●	●	●																																																																						
Cast Iron	K	●	●	●	●	●	●	●	●	●	●	●																																																																						
Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●	●	●																																																																						
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●	●	●																																																																						
Hardened Material	H	●	●	●	●	●	●	●	●	●	●	●																																																																						
	SNMG 120408 G SNMG 120412 G SNMG 120416 G	SNMG432-G SNMG433-G SNMG434-G	0.8 1.2 1.6								●	●			F17 F19 K36																																																																			
	SNMG 120408 TNB Z5	SNMG432-TNB-Z5	0.8			●						●																																																																						

● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)

<60 degree Triangle Negative type>

Item Number	IC	T
TN_1604	9.525	4.76

Shape	ISO Item Number	Inch Item Number	R	Carbide								Chip Control Range	For applicable holder, see pages:																																																																					
				PVD Coated				CVD Coated																																																																										
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1			CP7	KM1																																																																			
			<table border="1"> <tr><td>Steel</td><td>P</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>Stainless Steel</td><td>M</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>Cast Iron</td><td>K</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>Non-Ferrous Material</td><td>N</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>Heat Resistant Alloy</td><td>S</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>Hardened Material</td><td>H</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> </table>	Steel	P	●	●	●	●	●	●	●	●	●	●	●	Stainless Steel	M	●	●	●	●	●	●	●	●	●	●	●	Cast Iron	K	●	●	●	●	●	●	●	●	●	●	●	Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●	●	●	Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●	●	●	Hardened Material	H	●	●	●	●	●	●	●	●	●	●	●	<ul style="list-style-type: none"> ● : 1st Choice ● : 2nd choice
Steel	P	●	●	●	●	●	●	●	●	●	●	●																																																																						
Stainless Steel	M	●	●	●	●	●	●	●	●	●	●	●																																																																						
Cast Iron	K	●	●	●	●	●	●	●	●	●	●	●																																																																						
Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●	●	●																																																																						
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●	●	●																																																																						
Hardened Material	H	●	●	●	●	●	●	●	●	●	●	●																																																																						
	TNMG 160408 G 160412 G	TNMG332-G 333-G	0.8 1.2								●	●																																																																						
	TNMG 160404 TNB Z5 160408 TNB Z5	331-TNB-Z5 332-TNB-Z5	0.4 0.8			●					●	●																																																																						
	TNGG 160402 FN ZP 160404 FN ZP 160408 FN ZP	TNGG33Y-FN--ZP 331-FN--ZP 332-FN--ZP	0.2 0.4 0.8			●	●	●			●	●																																																																						
	TNGG 160402 F ^R / _L C	TNGG33Y-F ^R / _L --C	0.2			R									F23 F25 G39																																																																			
	TNEG 160402 F ^R / _L D1 160404 F ^R / _L D1 160408 F ^R / _L D1		0.2 0.4 0.8					●			●	●																																																																						
	TNGG 160401 F ^R / _L DA	TNGG331CF ^R / _L --DA	0.1			R	R																																																																											
	TNGG 160401 F ^R / _L U2 160402 F ^R / _L U2 160404 F ^R / _L U2 160408 F ^R / _L U2	TNGG331CF ^R / _L --U2 33Y-F ^R / _L --U2 331-F ^R / _L --U2 332-F ^R / _L --U2	0.1 0.2 0.4 0.8			R					●	●																																																																						
	TNGG 160401M FN UL 160402M FN UL 160404M FN UL 160408M FN UL	TNGG3304MFNUL 3308MFNUL 331MFNUL 332MFNUL	*0.08 *0.18 *0.38 *0.78			●	●	●			●	●																																																																						

*Inserts having 01M, 02M or 04M as the R code can be used for machining when the component drawing specifies that the radius is less than R=0.1, R=0.2 or R=0.4 respectively. ● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)

<35 degree Rhombic Negative type>

Item Number	IC	T
VN_1604	9.525	4.76

Shape	ISO Item Number	Inch Item Number	R	Carbide										Chip Control Range	For applicable holder, see pages:		
				PVD Coated						CVD Coated							
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1				
				Steel	P	●	●	●	●	●	●	●	●	●	●	● : 1st Choice ● : 2nd choice	
				Stainless Steel	M	●	●	●	●	●	●	●	●	●			
				Cast Iron	K	●	●	●	●	●	●	●	●	●			
				Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●			
				Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●			
				Hardened Material	H	●	●	●	●	●	●	●	●	●			
AM1	VNMG 160404 TNB AM1	331-TNB-AM1	0.4			●											
	160408 TNB AM1	332-TNB-AM1	0.8			●											
G	VNMG 160404 G	VNMG331-G	0.4									●				F27	
	160408 G	332-G	0.8								●						
	160412 G	333-G	1.2								●						
ZP	VNMG 160402 FN ZP	VNMG331-FN-ZP	0.2			●											
	160404 FN ZP	331-FN-ZP	0.4			●											
	160408 FN ZP	332-FN-ZP	0.8			●											

● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)

<80 degree Hexagon Negative type>

Item Number	IC	T
WN_0804	12.7	4.76

Shape	ISO Item Number	Inch Item Number	R	Carbide										Chip Control Range	For applicable holder, see pages:	
				PVD Coated						CVD Coated						
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1			
				Steel	P	●	●	●	●	●	●	●	●	●	● : 1st Choice ● : 2nd choice	
				Stainless Steel	M	●	●	●	●	●	●	●	●	●		
				Cast Iron	K	●	●	●	●	●	●	●	●	●		
				Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●		
				Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●		
				Hardened Material	H	●	●	●	●	●	●	●	●	●		
G	WNMG 080408 G	WNMG432-G	0.8									●				
	080412 G	433-G	1.2								●					
Z5	WNMG 080408 TNB Z5	WNMG432-TNB-Z5	0.8			●										F29
	080412 TNB Z5	433-TNB-Z5	1.2			●										
ZP	WNGG 080404 FN ZP	WNGG431-FN-ZP	0.4			●	●					●				K37
	080408 FN ZP	432-FN-ZP	0.8			●	●					●				
UL	WNGG 080404 FN UL	WNGG431FNUL	0.4			●		●				●				
	080408 FN UL	432FNUL	0.8			●		●				●				

● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)

<80 degree Rhombic Positive type>

Item Number	IC	T	Relief angle
CC_0602	6.35	2.38	7°
CC_09T3	9.525	3.97	7°

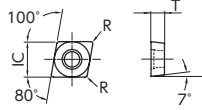
Shape	ISO Item Number	Inch Item Number	R	Carbide											Chip Control Range	For applicable holder, see pages:		
				PVD Coated							CVD Coated							
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1					
				Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	● : 1st Choice ● : 2nd choice
				Stainless Steel	M	●	●	●	●	●	●	●	●	●	●	●		
				Cast Iron	K	●	●	●	●	●	●	●	●	●	●	●		
				Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●	●	●		
				Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●	●	●		
				Hardened Material	H	●	●	●	●	●	●	●	●	●	●	●		
 AM3	CCGT 060200 FN AM3		0.03				●	●	●									
	060202 FN AM3		0.2		●		●											
	060204 FN AM3		0.4		●													
	060201M FN AM3		*0.08	●		●		●	●									
	060202M FN AM3		*0.18	●		●		●	●									
	060204M FN AM3		*0.38	●		●		●	●									
	CCGT 09T300 FN AM3		0.03				●	●	●									
	09T302 FN AM3		0.2				●	●										
	09T304 FN AM3		0.4				●	●										
	09T301M FN AM3		*0.08	●	●	●	●	●	●									
	09T302M FN AM3		*0.18	●	●	●	●	●	●									
	09T304M FN AM3		*0.38	●	●	●	●	●	●									
 AZ7	CCMT 060202 FN AM3		0.2							●							G23 K28	
	060204 FN AM3		0.4							●								
	CCMT 09T302 FN AM3		0.2							●								
	09T304 FN AM3		0.4							●								
	09T308 FN AM3		0.8							●								
	CCGT 060200 AZ7		0.03			●												
 AZ8	060201M AZ7		*0.08			●												
	060202M AZ7		*0.18			●												
	CCGT 09T300 AZ7		0.03		●	●	●	●	●									
	09T301M AZ7		*0.08		●	●	●	●	●									
	09T302M AZ7		*0.18		●	●	●	●	●									
	09T304M AZ7		*0.38		●	●	●	●	●									
 F1 R-hand shown	CCMT 060202 ENA AZ8		0.2									●						
	060204 ENB AZ8		0.4									●						
	060208 ENB AZ8		0.8									●						
	CCMT 09T302 ENA AZ8		0.2									●						
	09T304 ENB AZ8		0.4									●						
 KHG	09T308 ENB AZ8		0.8								●							
	CCGT 060201 F ^R / _L F1		0.1	R		R		R										
	060202 F ^R / _L F1		0.2	R		R		R										
	060204 F ^R / _L F1		0.4	R		R		R										
	CCGT 09T302 F ^R / _L F1		0.2	R		R		R										
09T304 F ^R / _L F1		0.4	R		R		R											
 KHG	CCET 0602005 F ^R / _L KHG		0.05				●											
	0602008 F ^R / _L KHG		0.08				●											
	0602018 F ^R / _L KHG		0.18				●											
	060202 F ^R / _L KHG		0.2				●											
	CCET 09T3005 F ^R / _L KHG		0.05				●	R										
	09T3008 F ^R / _L KHG		0.08				●	R										
	09T3018 F ^R / _L KHG		0.18				●	R										
09T302 F ^R / _L KHG		0.2				●	R											

*Inserts having 01M, 02M or 04M as the R code can be used for machining when the component drawing specifies that the radius is less than R=0.1, R=0.2 or R=0.4 respectively.

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<80 degree Rhombic Positive type>

Item Number	IC	T	Relief angle
CC_0602	6.35	2.38	7°
CC_09T3	9.525	3.97	7°



Material	P	M	K	N	S	H
Steel	●	●	●	●	●	●
Stainless Steel	●	●	●	●	●	●
Cast Iron	●	●	●	●	●	●
Non-Ferrous Material	●	●	●	●	●	●
Heat Resistant Alloy	●	●	●	●	●	●
Hardened Material	●	●	●	●	●	●

● : 1st Choice
● : 2nd choice

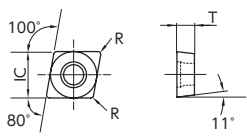

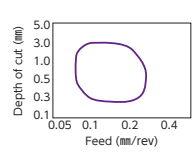

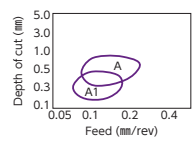

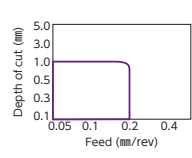

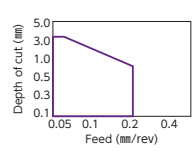
Shape	ISO Item Number	Inch Item Number	R	Carbide										Chip Control Range	For applicable holder, see pages:		
				PVD Coated						CVD Coated							
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1				
	CCGT 060200	R/4 S	0.03	●	●	●	●	●	●	●	●						
	060201	R/4 S	0.1	●	●	●	●	●	●	●	●						
	060202	R/4 S	0.2	●	●	●	●	●	●	●	●						
	060201M	R/4 S	*0.08		●		●		●								
	060202M	R/4 S	*0.18		●		●		●	●							
	CCGT 09T300	R/4 S	0.03	●		●	●	●	●	●	●						
	09T301	R/4 S	0.1	●	●	●	●	●	●	●	●						
	09T302	R/4 S	0.2	●	●	●	●	●	●	●	●						
	09T304	R/4 S	0.4	●	●	●	●	●	●	●	●						
	09T301M	R/4 S	*0.08		●		●	●	●	●	●						
09T302M	R/4 S	*0.18		●		●	●	●	●	●							
09T304M	R/4 S	*0.38		●		●	●	●	●	●							
	CCGT 060200	R/4 U	0.03	●				●		●							
	060201	R/4 U	0.1	●				●		●							
	060202	R/4 U	0.2	●				●		●							
	CCGT 09T300	R/4 U1	0.03	●				●	●	●							
	09T301	R/4 U1	0.1	●				●	●	●							
	09T302	R/4 U1	0.2	●				●	●	●							
09T304	R/4 U1	0.4	●				●	●	●								
	CCGT 060201M	CL	*0.08	●	●	●	●	●	●	●						G23 K28	
	060202M	CL	*0.18	●	●	●	●	●	●	●							
	09T300	CL	0.03					●	●	●							
	09T301M	CL	*0.08	●	●	●	●	●	●	●							
	09T302M	CL	*0.18	●	●	●	●	●	●	●							
09T304M	CL	*0.38	●	●	●	●	●	●	●								
	CCGT 09T300	YL	0.03					●	●	●							
	09T301M	YL	0.08	●	●	●	●	●	●	●							
	09T302M	YL	0.18	●	●	●	●	●	●	●							
	09T304M	YL	0.38	●	●	●	●	●	●	●							
	09T308M	YL	0.78	●	●	●	●	●	●	●							
	CCGW 060200	FN	0.03	●													
	060201	FN	0.1	●													
	060200	H (M)	0.03									●					
	060201	H (M)	0.1									●					
	060202	H (M)	0.2									●					
	CCGW 09T300	FN	0.03	●													
	09T301	FN	0.1	●													
	09T300	H (M)	0.03									●					
	09T301	H (M)	0.1									●					
	09T302	H (M)	0.2									●					
	09T302M	P (M)	*0.18							●							
	09T30	V (M)	0.0					●									
09T301	P (M)	0.1					●										
09T302	P (M)	0.2					●										

* Inserts having 01M, 02M or 04M as the R code can be used for machining when the component drawing specifies that the radius is less than R=0.1, R=0.2 or R=0.4 respectively.
 ● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)
 ※2 The specifications of CL chipbreaker are slightly different from the above dimensions, but it has no problem for machining.

<80 degree Rhombic Positive type>

Item Number	IC	T	Relief angle
CP_0401	4.76	1.59	11°
CP_0602	6.35	2.38	11°

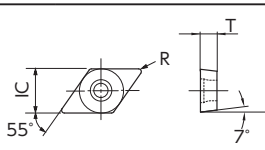
Item Number	IC	T	Relief angle
CP_0802	7.94	2.38	11°
CP_0903	9.525	3.18	11°

Shape	ISO Item Number	Inch Item Number	R	Carbide										Chip Control Range	For applicable holder, see pages:		
				PVD Coated						CVD Coated							
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1				
				Steel	P	●	●	●	●	●	●	●	●	●	●	●	● : 1st Choice ● : 2nd choice
				Stainless Steel	M	●	●	●	●	●	●	●	●	●	●		
				Cast Iron	K	●	●	●	●	●	●	●	●	●	●		
				Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●	●		
				Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●	●		
				Hardened Material	H	●	●	●	●	●	●	●	●	●	●		
 AM5	CPGH 060202 FN AM5	CPGP83Y-FN--AM5	0.2		●				●								
	CPGH 080202 FN AM5	CPGP03Y-FN--AM5	0.2		●			●									
	CPGH 090302 FN AM5	CPGM32Y-FN--AM5	0.2		●			●									
	090304 FN AM5	321-FN--AM5	0.4		●			●									
	090308 FN AM5	322-FN--AM5	0.8		●			●									
 A · A1 L-hand shown	CPGH 040102 F _{R/L} A1	CPGP62Y-F _{R/L} --A1	0.2		L			L									
	040104 F _{R/L} A1	621-F _{R/L} --A1	0.4		L			L									
	CPGH 060202 F _{R/L} A	CPGP83Y-F _{R/L} --A	0.2		L			L									
	060204 F _{R/L} A	831-F _{R/L} --A	0.4		L			L									
	CPGH 080202 F _{R/L} A	CPGP03Y-F _{R/L} --A	0.2		L			L									
080204 F _{R/L} A	031-F _{R/L} --A	0.4		L			L										
 F1 R-hand shown	CPGH 040101 F _{R/L} F1		0.1	R		R		R									
	040102 F _{R/L} F1		0.2	R		R		R									
	040104 F _{R/L} F1		0.4	R		R		R									
	CPGH 060202 F _{R/L} F1		0.2	R		R		R									
	060204 F _{R/L} F1		0.4	R		R		R									
 S L-hand shown	CPGH 040101 _{R/L} S		0.1			L		L									
	040102 _{R/L} S		0.2			L		L									
	040104 _{R/L} S		0.4			L		L									
	CPGH 060202 _{R/L} S		0.2				L		L								
	060204 _{R/L} S		0.4				L		L								

● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)


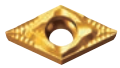
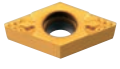

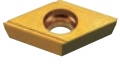

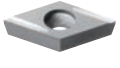
<55 degree Rhombic Positive type>

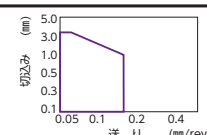
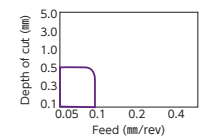
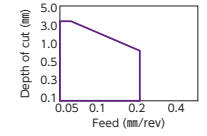
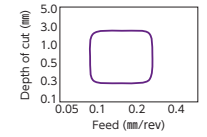
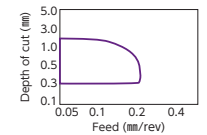
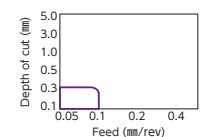
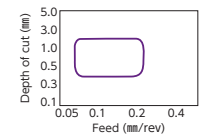
Item Number	IC	T	Relief angle
DC_0702	6.35	2.38	7°
DC_11T3	9.525	3.97	7°



Material	P	M	K	N	S	H
Steel	●	●	●	●	●	●
Stainless Steel	●	●	●	●	●	●
Cast Iron	●	●	●	●	●	●
Non-Ferrous Material	●	●	●	●	●	●
Heat Resistant Alloy	●	●	●	●	●	●
Hardened Material	●	●	●	●	●	●

● : 1st Choice
● : 2nd choice

Shape	ISO Item Number	Inch Item Number	R	Carbide										Chip Control Range	For applicable holder, see pages:		
				PVD Coated						CVD Coated							
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1				
 AM3	DCGT 070200 FN AM3		0.03	●	●	●	●	●	●	●	●	●	●	●			
	070201 FN AM3		0.1	●	●	●	●	●	●	●	●	●	●	●	●		
	070202 FN AM3		0.2	●	●	●	●	●	●	●	●	●	●	●	●		
	070204 FN AM3		0.4	●	●	●	●	●	●	●	●	●	●	●	●		
	070201M FN AM3		*0.08	●	●	●	●	●	●	●	●	●	●	●	●		
	070202M FN AM3		*0.18	●	●	●	●	●	●	●	●	●	●	●	●		
	070204M FN AM3		*0.38	●	●	●	●	●	●	●	●	●	●	●	●		
	DCGT 11T300 FN AM3		0.03	●	●	●	●	●	●	●	●	●	●	●	●		
	11T302 FN AM3		0.2	●	●	●	●	●	●	●	●	●	●	●	●		
	11T304 FN AM3		0.4	●	●	●	●	●	●	●	●	●	●	●	●		
	11T301M FN AM3		*0.08	●	●	●	●	●	●	●	●	●	●	●	●		
	11T302M FN AM3		*0.18	●	●	●	●	●	●	●	●	●	●	●	●		
11T304M FN AM3		*0.38	●	●	●	●	●	●	●	●	●	●	●	●			
DCMT 070202 FN AM3		0.2										●					
070204 FN AM3		0.4										●					
DCMT 11T302 FN AM3		0.2										●					
11T304 FN AM3		0.4										●					
11T308 FN AM3		0.8										●					
 AMX	DCGT 070201M AMX		*0.08					●	●	●	●						
	070202M AMX		*0.18					●	●	●	●						
	070204M AMX		*0.38					●	●	●	●						
	DCGT 11T301M AMX		*0.08					●	●	●	●						
	11T302M AMX		*0.18					●	●	●	●						
	11T304M AMX		*0.38					●	●	●	●						
 AZ7	DCGT 070200 AZ7		0.03			●											
	070201M AZ7		*0.08			●											
	070202M AZ7		*0.18			●											
	DCGT 11T300 AZ7		0.03		●	●		●	●								
	11T301M AZ7		*0.08		●	●		●	●								
	11T302M AZ7		*0.18		●	●		●	●								
11T304M AZ7		*0.38		●	●		●	●									
11T308 AZ7		0.8		●	●		●	●									
 AZ8	DCMT 070202 ENA AZ8		0.2										●				
	070204 ENB AZ8		0.4										●				
	070208 ENB AZ8		0.8										●				
	DCMT 11T302 ENA AZ8		0.2										●				
	11T304 ENB AZ8		0.4										●				
	11T308 ENB AZ8		0.8										●				
 AT	DCET 11T301M R _L AT		*0.08						R								
	11T302M R _L AT		*0.18						R								
 KHG	DCET 0702005 R _L KHG		0.05				●										
	0702008 R _L KHG		0.08				●										
	0702018 R _L KHG		0.18				●										
	070202 R _L KHG		0.2				●										
	DCET 11T3005 R _L KHG		0.05				●		R								
	11T3008 R _L KHG		0.08				●		R								
11T3018 R _L KHG		0.18				●		R									
11T302 R _L KHG		0.2				●		R									
 UHG R-hand shown	DCET 0702008 R _L UHG		0.08						R								
	DCET 11T3008 R _L UHG		0.08						R								



G25
G27

*Inserts having 01M, 02M or 04M as the R code can be used for machining when the component drawing specifies that the radius is less than R=0.1, R=0.2 or R=0.4 respectively.

● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)

<55 degree Rhombic Positive type>

Item Number	IC	T	Relief angle
DC_0702	6.35	2.38	7°
DC_11T3	9.525	3.97	7°

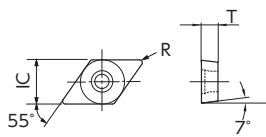
Shape	ISO Item Number	Inch Item Number	R	Carbide											Chip Control Range	For applicable holder, see pages:		
				PVD Coated						CVD Coated								
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1					
				Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	● : 1st Choice ● : 2nd choice
				Stainless Steel	M	●	●	●	●	●	●	●	●	●	●	●		
				Cast Iron	K	●	●	●	●	●	●	●	●	●	●	●		
				Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●	●	●		
				Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●	●	●		
				Hardened Material	H	●	●	●	●	●	●	●	●	●	●	●		
 S R-hand shown	DCGT 070200	R/4 S		0.03	●													
	070201	R/4 S		0.1	●													
	070202	R/4 S		0.2	●													
	070204	R/4 S		0.4														
	070201M	R/4 S		*0.08		R				R								
	070202M	R/4 S		*0.18		R				R								
	DCGT 11T300	R/4 S		0.03	R		●	R	R									
	11T301	R/4 S		0.1	R	R	●											
	11T302	R/4 S		0.2	R	R	●											
	11T304	R/4 S		0.4		R												
 U · U1 R-hand shown	DCGT 070200	R/4 U		0.03	R		R											
	070201	R/4 U		0.1	R		R											
	070202	R/4 U		0.2	●		R											
	DCGT 11T300	R/4 U1		0.03	●		R	R	R									
	11T301	R/4 U1		0.1	●		R	R	R									
	11T302	R/4 U1		0.2	●		R	R	R									
 without chipbreaker	DCGW 070200	FN		0.03	●												G25 G27	
	070201	FN		0.1	●													
	070200	H (M)		0.03														
	070201	H (M)		0.1														
	070202	H (M)		0.2														
	07020	V (M)		0.0			●											
	DCGW 11T300	FN		0.03	●													
	11T301	FN		0.1	●													
	11T300	H (M)		0.03														
	11T301	H (M)		0.1														
 CL ※2	DCGT 070201M	CL		*0.08	●	●		●	●	●								
	070202M	CL		*0.18	●	●		●	●	●								
	070204M	CL		*0.38	●	●		●	●	●								
	DCGT 11T301M	CL		*0.08	●	●		●	●	●								
	11T302M	CL		*0.18	●	●		●	●	●								
	11T304M	CL		*0.38	●	●		●	●	●								
 YL	DCGT 070201M	YL		0.08		●					●							
	070202M	YL		0.18		●					●							
	070204M	YL		0.38		●					●							
	DCGT 11T300	YL		0.03				●	●									
	11T301M	YL		0.08	●	●		●	●	●								
	11T302M	YL		0.18	●	●		●	●	●								
	11T304M	YL		0.38	●	●		●	●	●								
	11T308M	YL		0.78	●	●		●	●	●								

* Inserts having 01M, 02M or 04M as the R code can be used for machining when the component drawing specifies that the radius is less than R=0.1, R=0.2 or R=0.4 respectively.
 ※2 The specifications of CL chipbreaker are slightly different from the above dimensions, but it has no problem for machining.

● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)


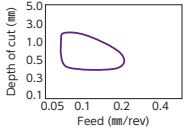
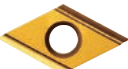
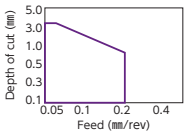
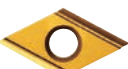
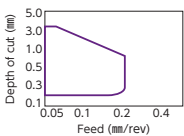



Item Number	IC	T	Relief angle
TFD_07	6.35	2.38	7°
TFD_11	9.525	3.97	7°

<TFD with Wiper edge>

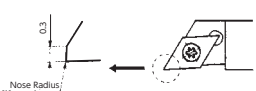


Steel	P	●	●	●	●	●	●	●	●	●	●	●
Stainless Steel	M	●	●	●	●	●	●	●	●	●	●	●
Cast Iron	K	●	●	●	●	●	●	●	●	●	●	●
Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●	●	●
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●	●	●
Hardened Material	H	●	●	●	●	●	●	●	●	●	●	●

● : 1st Choice
● : 2nd choice

Shape	ISO Item Number	Inch Item Number	R	Carbide										Chip Control Range	For applicable holder, see pages:		
				PVD Coated							CVD Coated						
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1				
 AM3	TFD 11 FR 05 AM3	DCGT32.502AM3-WP	0.05			R											
	11 FR 15 AM3	32.506AM3-WP	0.15			R											
 S ※ R-hand shown	TFD 07 FR 05	DCGT21.502 ^{R/L} S-WP	0.05	●		R	R										
	07 FR 15	21.506 ^{R/L} S-WP	0.15	●		R											
	TFD 11 FR 05	DCGT32.502RS-WP	0.05		R	R	R										
	11 FR 15	32.506RS-WP	0.15		R	R											
 U · U1 ※ R-hand shown	TFD 07 FR 05 U	DCGT21.502RU-WP	0.05			R	R	R									G25 G27
	07 FR 15 U	21.506RU-WP	0.15			R	R										
	TFD 11 FR 05 U1	DCGT32.502RU1-WP	0.05		R	R	R										
	11 FR 15 U1	32.506RU1-WP	0.15		R	R											
 without chipbreaker	TFD 07 FR 05 H 	DCGW21.502RH-WP	0.05											R			
	TFD 11 FR 05 H 	DCGW32.502RH-WP	0.05											R			

● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)



*Note: NTK WP style inserts have a wiper facet design. The insert has a 0.3mm flat on the cutting edge when the insert is set into the toolholder. The flat on the cutting edge ensures a superior surface when feed rates are increased. WP style inserts can be used in toolholders: SDJC, Y-SDJC, CH-SDUCL and DS-SDUL.

<35 degree Rhombic Positive type>

Item Number	IC	T	Relief angle
VB_1604	9.525	4.76	5°

Item Number	IC	T	Relief angle
VC_1103	6.35	3.18	7°
VC_1303	7.94	3.18	7°

Shape	ISO Item Number	Inch Item Number	R	Carbide										Chip Control Range	For applicable holder, see pages:			
				PVD Coated						CVD Coated								
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1					
				Steel P Stainless Steel M Cast Iron K Non-Ferrous Material N Heat Resistant Alloy S Hardened Material H											● : 1st Choice ● : 2nd choice			
	VBGT 160402 FN YL		0.2	●						●								—
	160404 FN YL		0.4	●						●								
	160408 FN YL		0.8	●						●								
	VCET 1103008 R/2 UHG		0.08				R											
	VCGT 110300 AZ7		0.03		●	●												G29 G31 G56
	110301M AZ7		*0.08		●	●												
	110302M AZ7		*0.18		●	●												
	110304M AZ7		*0.38		●	●												
	VCGT 110300 FN AM3		0.03					●	●									
	110301 FN AM3		0.1		●	●												
	110302 FN AM3		0.2		●	●												
	110301M FN AM3		*0.08	●	●	●	●											
	110302M FN AM3		*0.18	●	●	●	●											
	110304M FN AM3		*0.38	●	●	●	●											
	VCMT 110302 FN AM3		0.2							●								
	110304 FN AM3		0.4							●								
	VCGT 130300 F R/2 2M		0.03								●							G29 G62
	130301 F R/2 2M		0.1								●							
	VCGT 110300 R/2 U		0.03		R	R												
	110301 R/2 U		0.1		R	R												
	110302 R/2 U		0.2		R	R												
	110301M R/2 U		*0.08						R									
	110302M R/2 U		*0.18						R									
	VCGW 110300 H M		0.03												●			G29 G31 G56
	110301 H M		0.1												●			
	110302 H M		0.2												●			

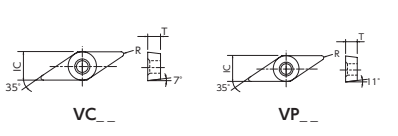
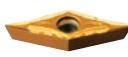





*Inserts having 01M, 02M or 04M as the R code can be used for machining when the component drawing specifies that the radius is less than R=0.1, R=0.2 or R=0.4 respectively.

● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)

<35 degree Rhombic Positive type>

Item Number	IC	T	Relief angle
VC_1102	6.35	2.38	7°
VC_1103	6.35	3.18	7°

Item Number	IC	T	Relief angle
VP_0802	4.76	2.38	11°
VP_1103	6.35	3.18	11°

Shape	ISO Item Number	Inch Item Number	R	Carbide										Chip Control Range	For applicable holder, see pages:	
				PVD Coated						CVD Coated						
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1			
 VC_1102 VC_1103																
	 VC_1102M CL			*0.18			●		●	●	●					
	 VC_110301M CL			*0.08	●		●		●	●	●					
	110302M CL			*0.18	●		●		●	●	●					
 YL	VC_110301M YL			0.08	●		●		●	●	●					
	110302M YL			0.18	●		●		●	●	●					
	110304M YL			0.38	●		●		●	●	●					
 KHG R-hand shown	VPET 0802005 $\frac{R}{L}$ KHG			0.05			●		R							
	0802008 $\frac{R}{L}$ KHG			0.08			●		R	R						
	0802018 $\frac{R}{L}$ KHG			0.18			●		R							
	080202 $\frac{R}{L}$ KHG			0.2			●		R							
	VPET 1103005 $\frac{R}{L}$ KHG			0.05			●		R							
	1103008 $\frac{R}{L}$ KHG			0.08			●		R							
	1103018 $\frac{R}{L}$ KHG			0.18			●		R							
110302 $\frac{R}{L}$ KHG			0.2			●		R								
 UHG R-hand shown	VPET 0802008 $\frac{R}{L}$ UHG			0.08						●						
 AM3	VP_110300 FN AM3			0.03					●	●						
	110301M FN AM3			*0.08	●		●		●	●						
	110302M FN AM3			*0.18	●		●		●	●						

* Inserts having 01M, 02M or 04M as the R code can be used for machining when the component drawing specifies that the radius is less than R=0.1, R=0.2 or R=0.4 respectively.
 **2 The specifications of CL chipbreaker are slightly different from the above dimensions, but it has no problem for machining.

● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)