

<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°

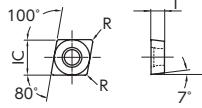
Shape	ISO Item Number	Inch Item Number	R	Carbide											Chip Control Range	For applicable holder, see pages:		
				PVD Coated							CVD Coated							
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1					
				Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	● : 1st Choice ● : 2nd choice
				Stainless Steel	M	●	●	●	●	●	●	●	●	●	●	●		
				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	CCGT 060200 AZ7		0.03			●												G23 K28
	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		●	●	●	●	●										
 AZ8	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									●						
09T308 ENB AZ8		0.8									●							
 F1 R-hand shown	CCGT 060201 FR _L F1		0.1	R		R		R										
	060202 FR _L F1		0.2	R		R		R										
	060204 FR _L F1		0.4	R		R		R										
	CCGT 09T302 FR _L F1		0.2	R		R		R										
	09T304 FR _L F1		0.4	R		R		R										
 KHG	CCET 0602005 R _L KHG		0.05				●											
	0602008 R _L KHG		0.08				●											
	0602018 R _L KHG		0.18				●											
	060202 R _L KHG		0.2				●											
	CCET 09T3005 R _L KHG		0.05				●	R										
	09T3008 R _L KHG		0.08				●	R										
	09T3018 R _L KHG		0.18				●	R										
09T302 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.

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

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

<80 degree Rhombic Positive type>



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		R			R								
	060202M	R/4 S	*0.18		R			R								
	CCGT 09T300	R/4 S	0.03	R	●		R	R								
	09T301	R/4 S	0.1	●	R	●										
	09T302	R/4 S	0.2	R	R	●										
	09T304	R/4 S	0.4		R											
	09T301M	R/4 S	*0.08		R		R	R								
09T302M	R/4 S	*0.18		R		R	R									
09T304M	R/4 S	*0.38		R		R	R									
	CCGT 060200	R/4 U	0.03		R			R								
	060201	R/4 U	0.1	●				R								
	060202	R/4 U	0.2	●				R								
	CCGT 09T300	R/4 U1	0.03	●			R	R								
	09T301	R/4 U1	0.1	●			R	R								
	09T302	R/4 U1	0.2	●			R	R								
	CCGT 060201M	CL	*0.08	●	●	●	●	●	●	●	●	●	●		G23 K28	
	060202M	CL	*0.18	●	●	●	●	●	●	●	●	●	●			
	09T300	CL	0.03				●	●								
	09T301M	CL	*0.08	●	●	●	●	●	●	●	●	●	●			
	09T302M	CL	*0.18	●	●	●	●	●	●	●	●	●	●			
	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°

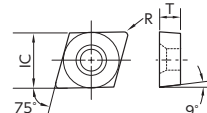
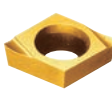
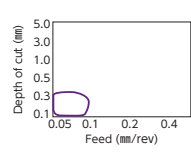
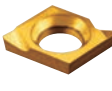
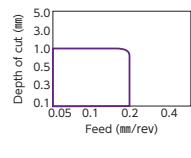
Item Number	IC	T	Relief angle
CP_0802	7.94	2.38	11°
CP_0903	9.525	3.18	11°

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)

<75 degree Rhombic Positive type>

Item Number	IC	T	Relief angle
ER_T301	3.97	1.59	9°

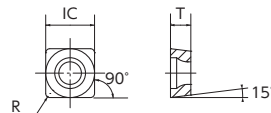

Shape	ISO Item Number	Inch Item Number	R	Carbide										Chip Control Range	For applicable holder, see pages:																																																																																										
				PVD Coated						CVD Coated																																																																																															
				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><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><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><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><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><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><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	●	●	●	●	●	●	●	●	●	●	●	●	●	<p>● : 1st Choice ● : 2nd choice</p>											
Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	●																																																																																											
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Cast Iron	K	●	●	●	●	●	●	●	●	●	●	●	●	●																																																																																											
Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●	●	●	●	●																																																																																											
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●	●	●	●	●																																																																																											
Hardened Material	H	●	●	●	●	●	●	●	●	●	●	●	●	●																																																																																											
	ERGH T30102 F_R/L A2	ERGP52Y-F_R/L--A2	0.2		●		■	●										K27																																																																																							
A2 R-hand shown	T30104 F_R/L A2	521-F_R/L--A2	0.4	L				●																																																																																																	
	ERGH T30101 F_R/L F1	—	0.1	R		R		R										K27																																																																																							
F1 ※ R-hand shown	T30102 F_R/L F1	—	0.2	R		R		R																																																																																																	
	T30104 F_R/L F1	—	0.4	R		R		R																																																																																																	

※For F05, F1 and FG chipbreaker, right-hand inserts fit to right-hand toolholder.

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

<90 degree Square Positive type>

Item Number	IC	T	Relief angle
SD_0602	6.35	2.38	15°

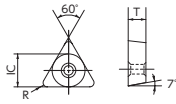
Shape	ISO Item Number	Inch Item Number	R	Carbide										Chip Control Range	For applicable holder, see pages:																																																																																										
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Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	●																																																																																											
Stainless Steel	M	●	●	●	●	●	●	●	●	●	●	●	●	●																																																																																											
Cast Iron	K	●	●	●	●	●	●	●	●	●	●	●	●	●																																																																																											
Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●	●	●	●	●																																																																																											
Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●	●	●	●	●																																																																																											
Hardened Material	H	●	●	●	●	●	●	●	●	●	●	●	●	●																																																																																											
	SDEW 060202 FN		0.2		●																																																																																																				

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

<60 degree Triangle Positive type>


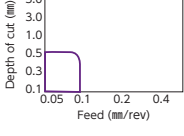

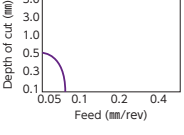

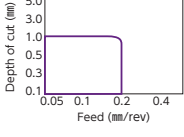
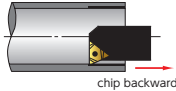

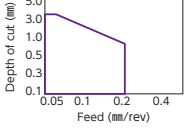

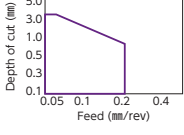

Item Number	IC	T	Relief angle
TC_0601	3.97	1.59	7°
TC_06T1	3.97	1.98	7°

Item Number	IC	T	Relief angle
TC_0902	5.56	2.38	7°
TC_1102	6.35	2.38	7°



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

● : 1st Choice
● : 2nd choice

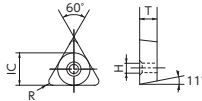

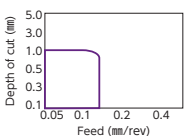
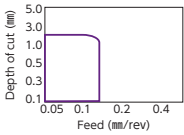

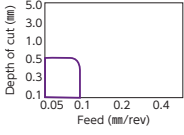

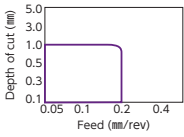
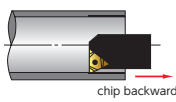

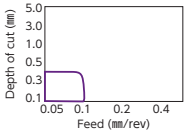
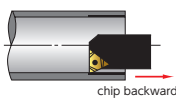
Shape	ISO Item Number	Inch Item Number	R	Carbide										Chip Control Range	For applicable holder, see pages:			
				PVD Coated							CVD Coated							
				ST4	ZM3	QM3	VM1	TM4	DT4	DM4	CP1	CP7	KM1					
 K L-hand shown	TCGH 060102 F _{R/L} K		0.2															
	060104 F _{R/L} K		0.4															
 B1 L-hand shown	TCGH 060102 F _{R/L} B1	TCGP52Y-F _{R/L} -B1	0.2		L				L								K30 K31 K32	
	060104 F _{R/L} B1	521-F _{R/L} -B1	0.4		L				L									
 F05 ※ R-hand shown	TCGH 060101 F _{R/L} F05	TCGP521CF _{R/L} -F05	0.1		R				R							 		
	060102 F _{R/L} F05	52Y-F _{R/L} -F05	0.2		R	●	R	■	●									
	060104 F _{R/L} F05	521-F _{R/L} -F05	0.4		R	R	R	■	R									
 S R-hand shown	TCGT 090201 R _L S		0.1		R			●										
	090202 R _L S		0.2		R													
	TCGT 110201 R _L S		0.1		R			●										
 U R-hand shown	TCGT 090201 R _L U		0.1		R												G36	
	090202 R _L U		0.2		R													
 without chipbreaker	TCGW 06T108 FN		0.8		●											—		
	TCGW 090200 FN		0.03		●													
	090201 FN		0.1		●													
	TCGW 110200 FN		0.03		●													
	110201 FN		0.1		●													

※For F05 chipbreaker, right-hand inserts fit to right-hand toolholder.

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

<60 degree Triangle Positive type>

Item Number	IC	T	Relief angle
TP_0802	4.76	2.38	11°
TP_0902	5.56	2.38	11°
TP_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				
				Steel	P	●	●	●	●	●	●	●	●	●	●	●	● : 1st Choice ● : 2nd choice
				Stainless Steel	M	●	●	●	●	●	●	●	●	●	●		
				Cast Iron	K	●	●	●	●	●	●	●	●	●	●		
				Non-Ferrous Material	N	●	●	●	●	●	●	●	●	●	●		
				Heat Resistant Alloy	S	●	●	●	●	●	●	●	●	●	●		
				Hardened Material	H	●	●	●	●	●	●	●	●	●	●		
 B2 · B3 L-hand shown	TPGH 090202 F _{R/L} B2	TPGP73Y-F _{R/L} --B2	0.2		L				L								
	090204 F _{R/L} B2	731-F _{R/L} --B2	0.4		L				L								
	090208 F _{R/L} B2	732-F _{R/L} --B2	0.8		L				L								
	TPGH 080202 F _{R/L} B3	TPGP63Y-F _{R/L} --B3	0.2		L				L								
	080204 F _{R/L} B3	631-F _{R/L} --B3	0.4		L				L								
 K L-hand shown	TPGH 090202 F _{R/L} K		0.2						L								
	090204 F _{R/L} K		0.4						L								
	090208 F _{R/L} K		0.8						L								
 F1 ※ R-hand shown	TPGH 080202 F _{R/L} F1	TPGP63Y-F _{R/L} --F1	0.2		R			R	R						 		
	080204 F _{R/L} F1	631-F _{R/L} --F1	0.4		R			R	R								
	TPGH 090201 F _{R/L} F1	TPGP731CF _{R/L} --F1	0.1	R		R			R								
	090202 F _{R/L} F1	73Y-F _{R/L} --F1	0.2	R	R	R			R	R							
	090204 F _{R/L} F1	731-F _{R/L} --F1	0.4	R	R	R			R	R							
	090208 F _{R/L} F1	732-F _{R/L} --F1	0.8	R	R	R			R								
	TPGH 110302 F _{R/L} F1	TPGH22Y-F _{R/L} --F1	0.2	R	R	R			R	R							
110304 F _{R/L} F1	221-F _{R/L} --F1	0.4	R	R	R			R	R								
 FG ※ R-hand shown	TPGH 090202 _{R/L} FG		0.2	R					R					 			
	090204 _{R/L} FG		0.4	R					R								
	TPGH 110302 _{R/L} FG		0.2	R					R								
	110304 _{R/L} FG		0.4	R					R								

※For F1 and FG chipbreaker, right-hand inserts fit to right-hand toolholder. ● : Standard stock ● : New standard stock ■ : Scheduled to be produced by order ★ : Standard stock (Specified)