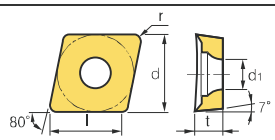
CC○○ Rhombic 80° Positive Relief Angle : 7°

Workpiece		
Steel	P	
Stainless steel	M	
Cast iron	K	
Non-ferrous metal	N	●
Heat resistant alloy, Titanium alloy	S	
Hardened steel	H	

Machining types
● Continuous cutting
Continuous cutting
Interrupted cutting



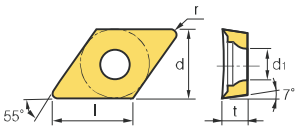
Inserts	Designation	Coated KTW	Coated KKW	Coated KW135	Uncoated KW12	Uncoated H01	l	d	t	r	d1	fn	ap	Available toolholders Designation
CCGT-AK	CCGT 060202-AK			●	●	●	6.2	6.35	2.38	0.2	2.8	0.01~0.12	0.05~3.00	SCACR/L
	060204-AK			●	●	●	6.0	6.35	2.38	0.4	2.8	0.02~0.15	0.10~3.00	SCLCR/L
	060208-AK			●	●	●	5.6	6.35	2.38	0.8	2.8	0.02~0.20	0.10~4.00	
	09T302-AK			●	●	●	9.4	9.525	3.97	0.2	4.4	0.02~0.20	0.05~3.00	
	09T304-AK			●	●	●	9.2	9.525	3.97	0.4	4.4	0.02~0.30	0.10~5.00	
	09T308-AK			●	●	●	8.8	9.525	3.97	0.8	4.4	0.03~0.50	0.10~5.00	
	120402-AK			●	●	●	12.6	12.7	4.76	0.2	5.5	0.02~0.30	0.05~4.00	
	120404-AK			●	●	●	12.4	12.7	4.76	0.4	5.5	0.03~0.50	0.10~5.00	
	120408-AK			●	●	●	12.0	12.7	4.76	0.8	5.5	0.04~0.80	0.10~5.50	
CCGT-AR	CCGT 060202-AR			●	●	●	6.2	6.35	2.38	0.2	2.8	0.02~0.30	0.30~4.00	SCACR/L
	060204-AR			●	●	●	6.0	6.35	2.38	0.4	2.8	0.03~0.35	0.50~4.50	SCLCR/L
	060208-AR			●	●	●	5.6	6.35	2.38	0.8	2.8	0.04~0.50	0.50~4.50	
	09T302-AR			●	●	●	9.4	9.525	3.97	0.2	4.4	0.03~0.45	0.30~4.00	
	09T304-AR			●	●	●	9.2	9.525	3.97	0.4	4.4	0.04~0.50	0.50~4.50	
	09T308-AR			●	●	●	8.8	9.525	3.97	0.8	4.4	0.05~0.60	0.50~6.00	
	120402-AR			●	●	●	12.6	12.7	4.76	0.2	5.5	0.04~0.50	0.30~5.00	
	120404-AR			●	●	●	12.4	12.7	4.76	0.4	5.5	0.05~0.60	0.50~6.00	
	120408-AR			●	●	●	12.0	12.7	4.76	0.8	5.5	0.06~0.65	0.50~6.00	
	120412-AR			●	●	●	11.6	12.7	4.76	1.2	5.5	0.08~0.70	0.50~6.50	

● : Stock item ○ : Under preparing for stock

DC○○ Rhombic 55° Positive Relief Angle : 7°

Workpiece		
Steel	P	
Stainless steel	M	
Cast iron	K	
Non-ferrous metal	N	●
Heat resistant alloy, Titanium alloy	S	
Hardened steel	H	

Machining types
● Continuous cutting
General cutting
Interrupted cutting



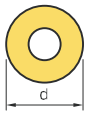
Inserts	Designation	Coated KTW	Coated KKW	Coated KW135	Uncoated KW12	Uncoated H01	l	d	t	r	d1	fn	ap	Available toolholders Designation
DCGT-AK	DCGT 070202-AK			●	●	●	7.5	6.35	2.38	0.2	2.8	0.01~0.20	0.05~3.00	SDACR/L
	070204-AK			●	●	●	7.3	6.35	2.38	0.4	2.8	0.02~0.30	0.10~4.00	SDJCR/L
	070208-AK			●	●	●	6.8	6.35	2.38	0.8	2.8	0.03~0.40	0.10~4.00	SDNCN
	11T302-AK			●	●	●	11.4	9.525	3.97	0.2	4.4	0.02~0.30	0.05~4.00	SDQCR/L
	11T304-AK			●	●	●	11.2	9.525	3.97	0.4	4.4	0.03~0.50	0.10~5.00	SDUCR/L
	11T308-AK			●	●	●	10.8	9.525	3.97	0.8	4.4	0.03~0.50	0.10~5.00	SDZCR/L
	11T312-AK			●	●	●	10.4	9.525	3.97	1.2	4.4	0.04~0.60	0.15~5.00	
DCGT-AR	DCGT 070202-AR			●	●	●	7.5	6.35	2.38	0.2	2.8	0.02~0.30	0.30~4.00	SDACR/L
	070204-AR			●	●	●	7.3	6.35	2.38	0.4	2.8	0.03~0.40	0.50~5.00	SDJCR/L
	070208-AR			●	●	●	6.8	6.35	2.38	0.8	2.8	0.04~0.50	0.50~5.00	SDNCN
	11T302-AR			●	●	●	11.4	9.525	3.97	0.2	4.4	0.03~0.45	0.30~6.00	SDQCR/L
	11T304-AR			●	●	●	11.2	9.525	3.97	0.4	4.4	0.04~0.50	0.50~6.00	SDUCR/L
	11T308-AR			●	●	●	10.8	9.525	3.97	0.8	4.4	0.05~0.60	0.50~6.00	SDZCR/L
	11T312-AR			●	●	●	10.4	9.525	3.97	1.2	4.4	0.08~0.65	0.50~6.50	

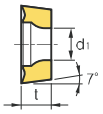
● : Stock item ○ : Under preparing for stock

RC○○ Round Positive Relief Angle : 7°

Workpiece								
Steel	P							
Stainless steel	M							
Cast iron	K							
Non-ferrous metal	N							●
Heat resistant alloy, Titanium alloy	S							
Hardened steel	H							

Machining types
● Continuous cutting
General cutting
Interrupted cutting





Inserts	Designation		Coated			Uncoated		Dimensions (mm)			Cutting Condition		Available toolholders	
			KTW	KKW	KW135	KW12	H01	d	t	d_1	fn	ap	Designation	Page
RCGT-AK 	RCGT	0602M0-AK					●	6.0	2.38	2.8	0.05~0.20	0.50~2.00	SRDCN	B83
		0803M0-AK					●	8.0	3.18	3.35	0.05~0.25	0.50~2.50	SRGCR/L	B84
		1003M0-AK					●	10.0	3.18	4.0	0.10~0.30	1.00~3.00		
		10T3M0-AK						10.0	3.97	4.4	0.10~0.30	1.00~3.00		
		1204M0-AK					●	12.0	4.76	4.4	0.10~0.35	1.00~3.50		
RCGT-AR 	RCGT	0602M0-AR					●	6.0	2.38	2.8	0.05~0.20	0.50~2.00	SRDCN	B83
		0803M0-AR					●	8.0	3.18	3.35	0.05~0.25	0.50~2.50	SRGCR/L	B84
		1003M0-AR					●	10.0	3.18	4.0	0.10~0.30	1.00~3.00		
		10T3M0-AR						10.0	3.97	4.4	0.10~0.30	1.00~3.00		
		1204M0-AR					●	12.0	4.76	4.4	0.10~0.35	1.00~3.50		

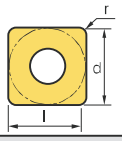
● : Stock item ○ : Under preparing for stock

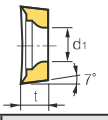
A

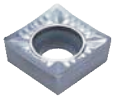
SC○○ Square 90° Positive Relief Angle : 7°

Workpiece								
Steel	P							
Stainless steel	M							
Cast iron	K							
Non-ferrous metal	N							●
Heat resistant alloy, Titanium alloy	S							
Hardened steel	H							

Machining types
● Continuous cutting
General cutting
Interrupted cutting





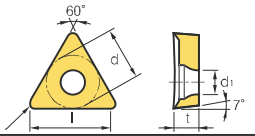
Inserts	Designation		Coated			Uncoated		Dimensions (mm)					Cutting Condition		Available toolholders	
			KTW	KKW	KW135	KW12	H01	l	d	t	r	d_1	fn	ap	Designation	Page
SCGT-AK 	SCGT	09T302-AK						9.3	9.525	3.97	0.2	4.4	0.02~0.30	0.10~4.00	SSBCR/L	B84
		09T304-AK					●	9.1	9.525	3.97	0.4	4.4	0.04~0.40	0.10~5.00	SSDCN	B85
		09T308-AK					●	8.7	9.525	3.97	0.8	4.4	0.03~0.40	0.10~5.00	SSKCR/L	B103
		120404-AK					●	12.3	12.7	4.76	0.4	5.5	0.03~0.50	0.10~5.00	SSSCR/L	
		120408-AK					●	11.9	12.7	4.76	0.8	5.5	0.04~0.60	0.15~5.50		
		120416-AK						11.1	12.7	4.76	1.6	5.5				
SCGT-AR 	SCGT	09T302-AR						9.3	9.525	3.97	0.2	4.4	0.03~0.40	0.50~5.00	SSBCR/L	B84
		09T304-AR					●	9.1	9.525	3.97	0.4	4.4	0.04~0.50	0.50~6.00	SSDCN	B85
		09T308-AR					●	8.7	9.525	3.97	0.8	4.4	0.04~0.50	0.50~6.50	SSKCR/L	B103
		120404-AR					●	12.3	12.7	4.76	0.4	4.4	0.05~0.60	0.50~6.50	SSSCR/L	
		120408-AR					●	11.9	12.7	4.76	0.8	5.5	0.05~0.60	0.50~7.00		
		120416-AR						11.1	12.7	4.76	1.6	5.5				

● : Stock item ○ : Under preparing for stock

TC○○ Triangular 60° Positive Relief Angle : 7°

Workpiece		
Steel	P	
Stainless steel	M	
Cast iron	K	
Non-ferrous metal	N	●
Heat resistant alloy, Titanium alloy	S	
Hardened steel	H	

Machining types
● Continuous cutting
⇆ General cutting
✱ Interrupted cutting



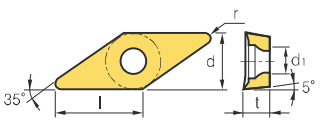
Inserts	Designation	Coated KTW	Coated KKW	Coated KW135	Uncoated KW12	Uncoated H01	l	d	t	r	d1	fn	ap	Available toolholders Designation
							Dimensions (mm)					Cutting Condition		
TCGT-AK	TCGT 090202-AK					●	9.1	5.56	2.38	0.2	2.5	0.01~0.12	0.05~3.00	STACR/L
	090204-AK					●	8.6	5.56	2.38	0.4	2.5	0.02~0.15	0.10~4.00	STFCR/L
	110202-AK					●	10.5	6.35	2.38	0.2	2.8	0.02~0.20	0.05~4.00	STGCR/L
	110204-AK					●	10.0	6.35	2.38	0.4	2.8	0.03~0.30	0.10~4.00	STTCR/L
	110208-AK					●	9.0	6.35	2.38	0.8	2.8	0.03~0.40	0.10~5.00	
	16T302-AK					●	15.0	9.525	3.97	0.2	4.4	0.02~0.30	0.05~5.00	
	16T304-AK					●	15.5	9.525	3.97	0.4	4.4	0.03~0.40	0.10~5.50	
	16T308-AK					●	14.5	9.525	3.97	0.8	4.4	0.03~0.50	0.10~5.50	
	16T312-AK					●	13.5	9.525	3.97	1.2	4.4	0.04~0.60	0.15~5.50	
	16T316-AK					●	12.5	9.525	3.97	1.6	4.4	0.05~0.80	0.15~5.50	
	16T325-AK						10.0	9.525	3.97	2.5	4.4	0.06~0.90	0.20~7.00	
TCGT-AR	TCGT 090202-AR						9.1	5.56	2.38	0.2	2.5	0.02~0.18	0.30~3.00	STACR/L
	090204-AR					●	8.6	5.56	2.38	0.4	2.5	0.02~0.25	0.30~5.00	STFCR/L
	110202-AR					●	10.5	6.35	2.38	0.2	2.8	0.02~0.30	0.30~4.00	STGCR/L
	110204-AR					●	10.0	6.35	2.38	0.4	2.8	0.03~0.40	0.30~5.00	STTCR/L
	110208-AR					●	9.0	6.35	2.38	0.8	2.8	0.04~0.45	0.50~6.00	
	16T302-AR					●	15.0	9.525	3.97	0.2	4.4	0.03~0.45	0.30~5.00	
	16T304-AR					●	15.5	9.525	3.97	0.4	4.4	0.04~0.50	0.50~6.00	
	16T308-AR					●	14.5	9.525	3.97	0.8	4.4	0.05~0.60	0.50~6.00	
	16T312-AR					●	13.5	9.525	3.97	1.2	4.4	0.06~0.65	0.50~6.00	
	16T316-AR					●	12.5	9.525	3.97	1.6	4.4	0.08~0.70	0.50~6.50	
	16T325-AR						10.0	9.525	3.97	2.5	4.4	0.10~0.10	0.80~7.00	

● : Stock item ○ : Under preparing for stock

VB○○ Rhombic 35° Positive Relief Angle : 7°

Workpiece		
Steel	P	
Stainless steel	M	
Cast iron	K	
Non-ferrous metal	N	● ● ●
Heat resistant alloy, Titanium alloy	S	
Hardened steel	H	

Machining types
● Continuous cutting
⇆ General cutting
✱ Interrupted cutting



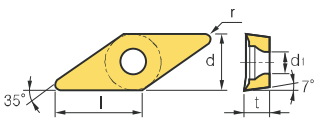
Inserts	Designation	Coated KTW	Coated KKW	Coated KW135	Uncoated KW12	Uncoated H01	l	d	t	r	d1	fn	ap	Available toolholders Designation
							Dimensions (mm)					Cutting Condition		
VBGT-AK	VBGT 110302-AK			●	●	●	10.5	6.35	3.18	0.2	2.8	0.02~0.15	0.05~3.00	SVABR/L
	110304-AK			●	●	●	10.0	6.35	3.18	0.4	2.8	0.02~0.15	0.10~4.00	SVJBR/L
	110308-AK			●	●	●	9.0	6.35	3.18	0.8	2.8	0.03~0.18	0.10~5.00	SVVBN
	160402-AK			●	●	●	16.1	9.525	4.76	0.2	4.4	0.03~0.30	0.05~4.00	SVQBR/L
	160404-AK			●	●	●	15.6	9.525	4.76	0.4	4.4	0.03~0.40	0.10~5.00	SVUBR/L
	160408-AK			●	●	●	14.6	9.525	4.76	0.8	4.4	0.03~0.50	0.10~5.00	
	160412-AK						13.6	9.525	4.76	1.2	4.4	0.05~0.60	0.10~5.50	
VBGT-AR	VBGT 110302-AR			●	●	●	10.5	6.35	3.18	0.2	2.8	0.02~0.35	0.30~3.00	SVABR/L
	110304-AR			●	●	●	10.0	6.35	3.18	0.4	2.8	0.03~0.45	0.30~4.00	SVJBR/L
	110308-AR			●	●	●	9.0	6.35	3.18	0.8	2.8	0.03~0.50	0.50~6.00	SVVBN
	160402-AR			●	●	●	16.1	9.525	4.76	0.2	4.4	0.04~0.45	0.30~5.00	SVQBR/L
	160404-AR			●	●	●	15.6	9.525	4.76	0.4	4.4	0.04~0.50	0.50~6.00	SVUBR/L
	160408-AR			●	●	●	14.6	9.525	4.76	0.8	4.4	0.05~0.60	0.50~6.00	
	160412-AR						13.6	9.525	4.76	1.2	4.4	0.05~0.70	0.50~6.50	

● : Stock item ○ : Under preparing for stock

VC○○ Rhombic 35° Positive Relief Angle : 7°

Workpiece							
	Steel	P					
	Stainless steel	M					
	Cast iron	K					
	Non-ferrous metal	N			●	●	●
	Heat resistant alloy, Titanium alloy	S					
	Hardened steel	H					

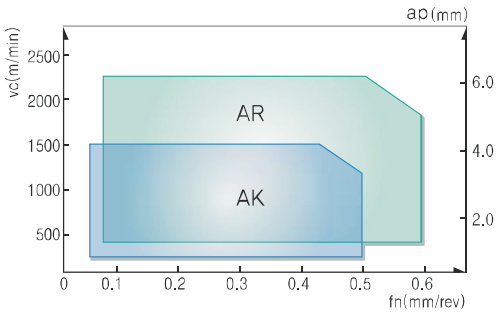
Machining types
● Continuous cutting
General cutting
Interrupted cutting



Inserts	Designation	Coated			Uncoated		Dimensions (mm)					Cutting Condition		Available toolholders
		KTW	KKW	KW135	KW12	H01	l	d	t	r	d_1	fn	ap	Designation
VCGT-AK	VCGT 110301-AK						10.2	6.35	3.18	0.1	2.8	0.02~0.15	0.05~3.00	SVJCR/L
	110302-AK			●	●	●	10.5	6.35	3.18	0.2	2.8	0.02~0.20	0.05~3.00	SVVCN
	110304-AK			●	●	●	10.0	6.35	3.18	0.4	2.8	0.02~0.25	0.10~4.00	SVQCR/L
	110308-AK			●	●	●	9.0	6.35	3.18	0.8	2.8	0.03~0.30	0.10~5.00	SVUCR/L
	130302-AK			●	●	●	10.5	7.94	3.18	0.2	3.4	0.02~0.35	0.10~5.00	
	130304-AK			●	●	●	10.0	7.94	3.18	0.4	3.4	0.03~0.35	0.10~5.00	
	130308-AK						9.0	7.94	3.18	0.8	3.4	0.04~0.40	0.10~5.00	
	160402-AK			●	●	●	16.1	9.525	4.76	0.2	4.4	0.02~0.30	0.05~5.00	
	160404-AK			●	●	●	15.6	9.525	4.76	0.4	4.4	0.03~0.40	0.10~5.00	
	160408-AK			●	●	●	14.0	9.525	4.76	0.8	4.4	0.03~0.50	0.10~5.00	
	160412-AK			●	●	●	13.6	9.525	4.76	1.2	4.4	0.03~0.50	0.10~5.00	
	220516-AK						18.0	12.7	5.56	1.6	5.6	0.03~0.60	0.10~7.00	
	220525-AK						15.6	12.7	5.56	2.5	5.6	0.05~0.70	0.10~7.00	
	220530-AK			●	●	●	14.3	12.7	5.56	3.0	5.6	0.08~1.00	0.10~7.00	
VCGT-AR	VCGT 110301-AR						10.2	6.35	3.18	0.1	2.8	0.02~0.20	0.10~3.00	SVJCR/L
	110302-AR			●	●	●	10.5	6.35	3.18	0.2	2.8	0.02~0.25	0.30~3.00	SVVCN
	110304-AR			●	●	●	10.0	6.35	3.18	0.4	2.8	0.03~0.35	0.30~4.00	SVQCR/L
	110308-AR			●	●	●	9.0	6.35	3.18	0.8	2.8	0.04~0.45	0.50~6.00	SVUCR/L
	130302-AR			●	●	●	10.5	7.94	3.18	0.2	3.4	0.02~0.40	0.50~3.00	
	130304-AR			●	●	●	10.0	7.94	3.18	0.4	3.4	0.03~0.45	0.50~4.00	
	130308-AR			●	●	●	9.0	7.94	3.18	0.8	3.4	0.04~0.50	0.50~5.00	
	160402-AR			●	●	●	16.1	9.525	4.76	0.2	4.4	0.03~0.40	0.30~5.00	
	160404-AR			●	●	●	15.6	9.525	4.76	0.4	4.4	0.04~0.50	0.50~6.00	
	160408-AR			●	●	●	14.6	9.525	4.76	0.8	4.4	0.05~0.60	0.50~6.00	
	160412-AR			●	●	●	13.6	9.525	4.76	1.2	4.4	0.06~0.65	0.50~6.50	
	220516-AR						18.0	12.7	5.56	1.6	5.6	0.10~0.65	0.80~6.50	
	220525-AR			●	●	●	15.6	12.7	5.56	2.5	5.6	0.10~0.70	0.80~7.00	
	220530-AR			●	●	●	14.3	12.7	5.56	3.0	5.6	0.12~0.75	1.00~7.00	

● : Stock item ○ : Under preparing for stock

AK and AR chip breaker specially developed for aluminum



	Recommendation range	Grades
AK	ap=0.1~5.0mm fn=0.03~0.5mm/rev	H01(Uncoated cemented carbides K10~K20) KTW (Diamond coating)
AR	ap=0.5~6.0mm fn=0.05~0.6mm/rev	H01(Uncoated cemented carbides K10~K20) KTW (Diamond coating)

Features of H01

- Useful for aluminum and alloyed steel machining
- Buffed on top face reduced built-up edge
- 3-dimensional design reduced cutting load and shows good performance at high feed and speed machining

Workpiece		Hardness(HB)	kc(Mpa)	vc(m/min)	fn(mm/rev)
Aluminum alloy(forged)	before heat treatment	50 ~ 70	500 ~ 600	1000 ~ 2500	0.1 ~ 0.6
	after heat treatment	90 ~ 110	700 ~ 900	300 ~ 1000	0.1 ~ 0.5
Aluminum alloy (cast)	before heat treatment	70 ~ 80	700 ~ 800	300 ~ 1000	0.1 ~ 0.6
	after heat treatment	80 ~ 100	800 ~ 950	200 ~ 600	0.1 ~ 0.4
Copper alloy	-	90 ~ 110	700	250 ~ 600	0.1 ~ 0.5
Non-ferrous metal, etc	-	100	1700	150 ~ 300	0.1 ~ 0.6