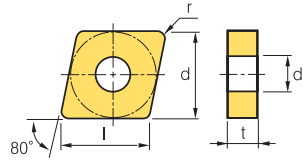


B Turning Insert (Negative)

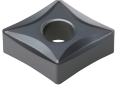
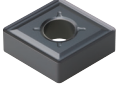
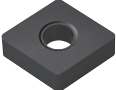


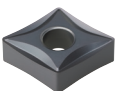
CN ○ ○

Rhombic 80° Negative



Dimensions (mm)			
Size	d	t	d ₁
09	9.525	3.18	3.81
12	12.7	4.76	5.16
16	15.875	6.35	6.35
19	19.05	6.35	7.93

Workpiece	Material		Machining types																			
	Steel	Stainless steel	Cast iron	Non-ferrous metal	Heat resistant alloy, Titanium alloy	Hardened steel																
	P	M	K	N	S	H																
							● Continuous cutting ● General cutting ✳ Interrupted cutting															

	Inserts	Designation	Cermet		Coated		Coated										Uncoated		Cutting Condition									
			CN1500	CN2000	CN2500	CC1500	CC2500	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05	f _n (mm/rev)	a _p (mm)	
Finishing	VP1 	CNMG 120402-VP1																								0.01-0.10	0.10-1.00	
		120404-VP1																				●					0.05-0.15	0.10-1.50
		120408-VP1																				●					0.07-0.20	0.10-1.50
Medium cutting	VP3 	CNMG 120404-VP3																			●	●	●		●	0.05-0.30	0.10-3.00	
		120408-VP3																			●	●	●		●	0.10-0.40	0.50-4.50	
		120412-VP3																			●	●	●		●	0.12-0.50	0.50-5.00	
Roughing		CNMA 090308																								0.10-0.30	0.50-3.00	
		120404																							●	0.15-0.60	1.00-5.00	
		120408																							●	0.15-0.60	1.00-6.00	
		120412																									0.15-0.70	1.50-6.00
		120416																									0.20-0.80	2.00-6.00
		160608																									0.15-0.70	2.00-6.00
		160612																									0.15-0.70	2.00-6.00
		160616																									0.15-0.70	2.00-6.00
		190608																									0.15-0.70	2.00-10.00
190612																									0.15-0.70	2.00-10.00		
190616																									0.20-1.00	3.00-10.00		
Finishing	VB 	CNMG 120404-VB	●		●	●	●	●	●																	0.15-0.35	0.30-2.00	
		120408-VB	●		●	●	●	●	●																		0.15-0.45	0.50-2.00
		120412-VB						●	●	●																	0.20-0.50	0.50-2.00
Finishing	VF 	CNMG 090304-VF								●	●															0.07-0.30	0.50-1.50	
		090308-VF																									0.10-0.30	0.50-1.50
		120404-VF									●			●													0.07-0.30	0.50-1.50
		120408-VF												●													0.10-0.40	0.50-1.50
		120412-VF																									0.10-0.50	0.60-1.50
Finishing	VP1 	CNMG 120404-VP1																			●	●		●	0.05-0.15	0.10-1.50		
		120408-VP1																			●	●		●	0.07-0.20	0.10-1.50		

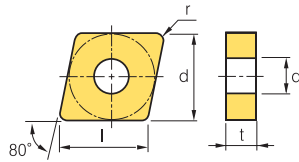
Cutting edge geometry **A52~A61**
 Recommended chip breaker **B04~B11**
 Code system **B26~B27**
 ● : Stock item

Available tool holders			
Designation	Page	Designation	Page
MCKNR/L	B171	MCRNR/L	B172
MCLNR/L	B171	PCBNR/L	B159
MCMNN	B171	PCLNR/L	B160



CN

Dimensions (mm)			
Size	d	t	d ₁
09	9.525	3.18	3.81
12	12.7	4.76	5.16



Rhombic **80° Negative**

Workpiece	Material		Machining types														
	Steel	P	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	● Continuous cutting ● General cutting ⌘ Interrupted cutting													
Stainless steel	M	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●															
Cast iron	K	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●															
Non-ferrous metal	N	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●															
Heat resistant alloy, Titanium alloy	S	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●															
Hardened steel	H	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●															

Inserts	Designation	Cermet		Coated		Coated										Uncoated		Cutting Condition									
		CN1500	CN2000	CN2500	CC1500	CC2500	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05	f _n (mm/rev)	a _p (mm)	
Finishing	 [Mild steel]	CNMG 120404-VL	●	●						●															0.05~0.25	0.10~1.00	
		120408-VL	●	●				●		●																0.10~0.35	0.20~1.50
		120412-VL						●																		0.10~0.35	0.20~1.50
Finishing	 [wiper]	CNMG 120404-VW																								0.10~0.30	0.50~3.00
		120408-VW						●																		0.15~0.50	0.50~4.00
		120412-VW																								0.20~0.55	1.00~4.50
Medium to finishing		CNMG 120404-HA																				●	●		0.05~0.20	0.80~3.50	
		120408-HA																					●	●		0.10~0.40	0.80~3.50
		120412-HA																						●		0.13~0.55	0.80~3.50
Medium to finishing	 new	CNMG 090304-LP																								0.07~0.30	0.30~1.50
		090308-LP						●		●																0.10~0.30	0.30~1.50
		120404-LP						●				●														0.10~0.35	0.30~2.00
		120408-LP						●		●		●														0.10~0.40	0.50~2.50
		120412-LP						●		●		●														0.13~0.45	0.80~3.00
Medium to finishing		CNMG 120404-VC					●		●		●															0.10~0.35	0.30~2.00
		120408-VC					●		●		●															0.15~0.40	0.50~3.00
		120412-VC					●		●		●															0.15~0.45	0.50~3.00

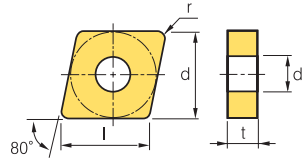
↻ Cutting edge geometry **A52~A61**
 ↻ Recommended chip breaker **B04~B11**
 ↻ Code system **B26~B27**
● : Stock item

Available tool holders			
Designation	Page	Designation	Page
MCKNR/L	B171	MCRNR/L	B172
MCLNR/L	B171	PCBNR/L	B159
MCMNN	B171	PCLNR/L	B160

B Turning Insert (Negative)

CN○○○

Rhombic 80° Negative



Dimensions (mm)			
Size	d	t	d ₁
09	9.525	3.18	3.81
12	12.7	4.76	5.16
16	15.875	6.35	6.35
19	19.05	6.35	7.93

Workpiece	Material		Machining types																	
	Symbol	Code	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛
Steel		P	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛
Stainless steel		M	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛
Cast iron		K	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛	●	⊕	⊛
Non-ferrous metal		N																		
Heat resistant alloy, Titanium alloy		S																		
Hardened steel		H																		

● Continuous cutting
 ⊕ General cutting
 ⊛ Interrupted cutting

Inserts	Designation	Cermets		Coated		Coated										Uncoated		Cutting Condition											
		CN1500	CN2000	CN2500	CC1500	CC2500	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05	f _n (mm/rev)	a _p (mm)			
Medium to finishing VP2	CNMG 120404-VP2							●									●	●	●	●	●	●	●	●	●	0.05-0.30	0.10-3.00		
	120408-VP2																●	●	●	●	●	●	●	●	●	●	0.10-0.40	0.50-4.50	
	160618-VP2																										0.12-0.45	0.80-5.00	
	190608-VP2																										0.12-0.50	1.00-5.20	
	190612-VP2																											0.15-0.50	1.20-5.50
	190616-VP2																											0.18-0.50	1.50-5.50
Medium to finishing VQ [Cermet]	CNMG 090304-VQ																										0.05-0.30	0.50-3.50	
	090308-VQ																											0.08-0.30	0.80-4.00
	090408-VQ										●																	0.05-0.30	0.50-3.50
	090412-VQ										●																	0.08-0.30	0.80-4.00
	120404-VQ		●	●	●	●	●																					0.05-0.30	0.80-4.00
	120408-VQ		●	●	●	●	●																					0.08-0.40	0.80-4.00
	120412-VQ																											0.10-0.40	0.80-4.00
Medium cutting HM	CNMG 090304-HM																										0.12-0.40	0.50-3.80	
	120404-HM							●	●	●													●					0.05-0.30	0.90-5.00
	120408-HM							●	●	●						●							●					0.10-0.50	1.00-5.00
	120412-HM							●																●				0.18-0.50	1.00-5.00
	190612-HM																											0.13-0.60	1.30-7.00
Medium cutting MK new	CNMG 120404-MK																										0.05-0.30	0.90-4.00	
	120408-MK																											0.10-0.50	1.00-5.00
	120412-MK																											0.13-0.60	1.30-5.00
	120416-MK																											0.15-0.60	1.30-5.00
	160608-MK																											0.28-0.70	1.80-7.00
	160612-MK																											0.28-0.72	2.00-8.00
	160616-MK																											0.28-0.74	2.00-8.00
	190608-MK																											0.33-0.78	2.50-9.00
	190612-MK																											0.35-0.78	2.60-9.50
190616-MK																											0.35-0.80	2.60-10.00	

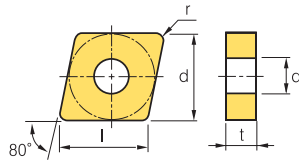
Cutting edge geometry A52~A61
 Recommended chip breaker B04~B11
 Code system B26~B27
 ● : Stock item

Available tool holders			
Designation	Page	Designation	Page
MCKNR/L	B171	MCRNR/L	B172
MCLNR/L	B171	PCBNR/L	B159
MCMNN	B171	PCLNR/L	B160





Rhombic **80° Negative**



Dimensions (mm)			
Size	d	t	d ₁
09	9.525	3.18	3.81
12	12.7	4.76	5.16
16	15.875	6.35	6.35
19	19.05	6.35	7.93

Workpiece	Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Machining types		
	Stainless steel	M	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Cast iron	K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Non-ferrous metal	N	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Heat resistant alloy, Titanium alloy	S	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Hardened steel	H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
																						● Continuous cutting	
																							● General cutting
																							● Interrupted cutting

Inserts	Designation	Cermet		Coated		Coated														Uncoated		Cutting Condition								
		CN1500	CN2000	CN2500	CC1500	CC2500	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05	f _n (mm/rev)	a _p (mm)				
Medium cutting MM <small>new</small>	CNMG 090304-MM																									0.08~0.35	0.50~5.00			
	090308-MM														●	●							●			0.10~0.40	0.50~5.00			
	090312-MM																									0.12~0.45	0.50~5.00			
	090404-MM																									0.08~0.35	0.50~5.00			
	090408-MM																									0.10~0.40	0.50~5.00			
	090412-MM																									0.12~0.45	0.50~5.00			
	120404-MM														●	●	●							●	●	●	0.10~0.40	0.50~5.50		
	120408-MM														●	●	●	●							●	●	●	0.12~0.45	0.50~5.50	
	120412-MM														●	●	●	●								●	●	●	0.15~0.60	0.50~5.50
	120416-MM														●	●	●	●								●		0.20~0.65	0.50~5.50	
	160608-MM														●	●	●	●								●		0.12~0.45	0.50~7.00	
	160612-MM														●	●	●	●								●	●	0.15~0.60	0.50~7.00	
	160616-MM														●	●	●	●								●	●	0.18~0.65	0.50~7.00	
	190608-MM														●	●	●	●								●		0.12~0.45	0.50~8.50	
190612-MM														●	●	●	●								●	●	0.15~0.60	0.50~8.50		
190616-MM														●	●	●	●								●	●	0.18~0.65	0.50~8.50		
Medium cutting MP <small>new</small>	CNMG 090304-MP					●		●		●				●												0.10~0.40	0.40~3.80			
	090308-MP					●		●		●				●													0.15~0.40	0.50~4.00		
	090312-MP																										0.15~0.50	0.80~4.20		
	090404-MP																										0.10~0.40	0.40~3.80		
	090408-MP																										0.15~0.40	0.50~4.00		
	090412-MP																										0.15~0.50	0.80~4.20		
	120404-MP						●		●		●	●		●	●	●									●	●	●	0.10~0.40	0.40~4.00	
	120408-MP						●		●	●	●	●		●	●	●									●	●	●	0.15~0.45	0.50~4.50	
	120412-MP						●		●		●			●	●	●									●	●		0.15~0.50	0.80~5.00	
	120416-MP						●		●		●			●	●	●											0.28~0.55	1.00~5.00		
	160608-MP						●		●		●			●	●	●										●		0.15~0.50	0.50~7.00	
	160612-MP						●		●		●			●	●	●										●	●	0.18~0.60	0.80~7.00	
	160616-MP						●		●		●			●	●	●										●		0.15~0.60	1.00~7.00	
	190608-MP								●																		0.15~0.60	0.50~8.50		
190612-MP								●																		0.10~0.40	0.40~3.80			
190616-MP														●	●	●										0.15~0.40	0.50~4.00			

↻ Cutting edge geometry A52~A61
↻ Recommended chip breaker B04~B11
↻ Code system B26~B27
● : Stock item

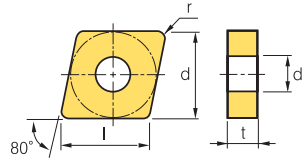
Available tool holders			
Designation	Page	Designation	Page
MCKNR/L	B171	MCRNR/L	B172
MCLNR/L	B171	PCBNR/L	B159
MCMNN	B171	PCLNR/L	B160



B Turning Insert (Negative)

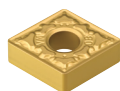

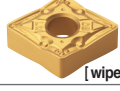

CN ○ ○

 Rhombic **80° Negative**



Dimensions (mm)			
Size	d	t	d ₁
09	9.525	3.18	3.81
12	12.7	4.76	5.16
16	15.875	6.35	6.35
19	19.05	6.35	7.93
25	25.4	9.52	9.12

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

Inserts	Designation	Cermets		Coated		Coated										Uncoated		Cutting Condition										
		CN1500	CN2000	CN2500	CC1500	CC2500	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05	f _n (mm/rev)	a _p (mm)		
Medium cutting VM 	CNMG 090304-VM																									0.05~0.30	0.90~3.50	
	090308-VM						●		●																	0.10~0.45	1.00~3.50	
	120404-VM	●	●	●			●		●	●						●	●					●				0.05~0.30	0.90~5.00	
	120408-VM	●	●	●			●	●	●	●						●	●			●		●				0.10~0.50	1.00~5.00	
	120412-VM						●		●	●						●	●			●						0.13~0.60	1.30~5.00	
	120416-VM										●															0.20~0.60	1.50~5.50	
	160608-VM										●															0.10~0.50	1.00~6.70	
	160612-VM																										0.13~0.60	1.30~6.70
	190608-VM									●																	0.13~0.65	1.30~7.00
	190612-VM										●																0.15~0.70	1.50~7.00
190616-VM																										0.18~0.75	1.80~7.00	
Medium cutting VP3 	CNMG 120404-VP3															●	●	●	●	●			●	●	0.05~0.30	0.10~3.00		
	120408-VP3															●	●	●	●	●			●	●	0.10~0.40	0.50~4.50		
	120412-VP3															●	●	●	●	●			●	●	0.12~0.50	0.50~5.00		
	120416-VP3																									0.25~0.45	1.00~4.00	
	160608-VP3																									0.15~0.35	0.80~6.00	
	160612-VP3																									0.20~0.40	1.00~6.00	
	160616-VP3																									0.20~0.40	1.00~6.00	
	190608-VP3																									0.20~0.50	1.00~7.00	
	190612-VP3																										0.25~0.55	1.00~8.00
	190616-VP3																										0.30~0.60	1.00~8.00
Medium cutting LW 	CNMG 120408-LW						●	●	●						●											0.15~0.60	1.00~5.00	
	120412-LW						●	●							●												0.20~0.70	1.00~6.00
General B25 	CNMG 120404-B25	●	●	●			●	●	●	●					●											0.17~0.45	1.00~5.00	
	120408-B25	●	●	●			●	●	●	●					●	●			●		●					0.23~0.60	1.50~5.00	
	120412-B25			●			●	●	●	●																	0.25~0.60	2.00~5.00
	160608-B25						●	●	●	●																	0.25~0.60	2.00~6.50
	160612-B25						●	●	●	●																	0.27~0.60	2.00~6.50
	160616-B25						●	●	●	●																	0.27~0.60	2.00~6.50
	190604-B25									●	●																0.20~0.45	3.00~8.00
	190608-B25						●	●	●	●	●																0.25~0.60	3.00~8.00
	190612-B25						●	●	●	●	●					●	●			●							0.30~0.60	3.00~8.00
	190616-B25						●	●																			0.23~0.70	3.00~8.00

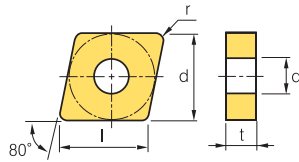
 Cutting edge geometry A52~A61
  Recommended chip breaker B04~B11
  Code system B26~B27
 ● : Stock item

Available tool holders			
Designation	Page	Designation	Page
MCKNR/L	B171	MCRNR/L	B172
MCLNR/L	B171	PCBNR/L	B159
MCMNN	B171	PCLNR/L	B160



CN


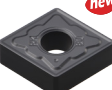

Rhombic 80° Negative



Dimensions (mm)			
Size	d	t	d ₁
12	12.7	4.76	5.16
16	15.875	6.35	6.35
19	19.05	6.35	7.93
25	25.4	9.52	9.12

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

● Continuous cutting
 ● General cutting
 ● Interrupted cutting

Inserts	Designation	Cermet		Coated		Coated										Uncoated		Cutting Condition								
		CN1500	CN2000	CN2500	CC1500	CC2500	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05	f _n (mm/rev)	a _p (mm)
Roughing 	CNMG 120408-GR					●	●	●	●	●															0.20~0.50	1.00~7.00
	120412-GR						●	●	●	●															0.25~0.50	1.30~7.00
	120416-GR																								0.25~0.60	1.80~6.00
	160608-GR									●															0.20~0.70	1.00~8.00
	160612-GR							●	●	●	●														0.25~0.70	1.30~8.00
	160616-GR									●															0.25~0.75	1.80~8.00
	190608-GR								●	●	●														0.20~0.70	1.70~10.00
	190612-GR							●	●	●	●	●													0.30~0.75	1.70~10.00
	190616-GR								●	●	●	●													0.30~0.80	1.80~10.00
	190624-GR																								0.35~0.85	2.00~12.00
	250724-GR																								0.40~1.00	2.30~15.00
250924-GR								●	●	●														0.40~1.00	2.30~15.00	
Roughing 	CNMG 120404-RK																								0.20~0.47	1.30~6.00
	120408-RK										●	●													0.20~0.50	1.50~6.00
	120412-RK										●	●													0.28~0.53	1.80~6.00
	120416-RK											●													0.28~0.63	2.00~6.00
	160608-RK											●													0.28~0.70	1.80~7.00
	160612-RK											●													0.28~0.72	2.00~8.00
	160616-RK											●	●												0.28~0.74	2.00~8.00
	190612-RK											●													0.35~0.78	2.60~9.50
190616-RK											●													0.35~0.80	2.60~10.00	
Roughing 	CNMG 120404-RM													●	●	●						●	●		0.10~0.50	2.00~6.00
	120408-RM													●	●	●	●					●	●	●	0.15~0.55	2.00~6.00
	120412-RM													●	●	●	●					●	●	●	0.20~0.60	2.00~6.00
	120416-RM														●	●	●						●		0.25~0.70	2.00~6.00
	160608-RM													●	●	●							●		0.15~0.55	2.00~8.00
	160612-RM													●	●	●							●		0.20~0.60	2.00~8.00
	160616-RM													●	●	●							●		0.25~0.70	2.00~8.00
	190608-RM													●	●	●							●		0.15~0.55	2.00~10.00
	190612-RM													●	●	●							●		0.20~0.60	2.00~10.00
	190616-RM													●	●	●							●		0.25~0.70	2.00~10.00
	250924-RM														●	●	●								0.40~1.20	4.00~14.00

Cutting edge geometry A52~A61
 Recommended chip breaker B04~B11
 Code system B26~B27
 ● : Stock item

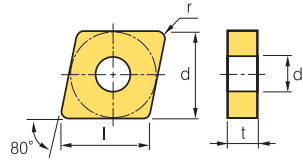
Available tool holders			
Designation	Page	Designation	Page
MCKNR/L	B171	MCRNR/L	B172
MCLNR/L	B171	PCBNR/L	B159
MCMNN	B171	PCLNR/L	B160



B Turning Insert (Negative)

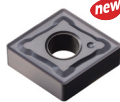
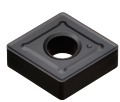


CN ○ ○

 Rhombic **80° Negative**



Dimensions (mm)			
Size	d	t	d ₁
12	12.7	4.76	5.16
16	15.875	4.76~6.35	6.35
19	19.05	6.35	7.93

Workpiece	Machining types																							
	P	M	K	N	S	H	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05
Steel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Stainless steel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cast iron	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-ferrous metal	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Heat resistant alloy, Titanium alloy	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Hardened steel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Inserts	Designation	Cermet		Coated		Coated												Uncoated		Cutting Condition							
		CN1500	CN2000	CN2500	CC1500	CC2500	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05	f _n (mm/rev)	a _p (mm)	
VP4 	CNMG 120408-VP4																								0.15~0.35	1.00~4.00	
	120412-VP4																									0.20~0.40	1.00~4.00
	160608-VP4																									0.20~0.45	1.00~6.50
	160612-VP4																									0.25~0.50	1.50~6.50
	190608-VP4																									0.15~0.45	1.00~8.00
	190612-VP4																									0.20~0.50	1.20~8.50
VR 	CNMG 120404-VR																								0.20~0.50	1.00~6.50	
	120408-VR																									0.25~0.55	1.20~7.00
	120412-VR																									0.30~0.60	1.50~7.00
	120416-VR																									0.35~0.65	1.70~7.00
	120508-VR																									0.25~0.55	1.20~7.00
	120512-VR																									0.30~0.60	1.50~7.00
	160612-VR																									0.35~0.70	2.00~8.00
	160616-VR																									0.35~0.75	2.20~8.00
190612-VR						●	●																		0.35~0.70	2.00~10.00	
190616-VR						●	●																		0.35~0.75	2.20~10.00	
HA 	CNMM 120408-HA																								0.10~0.40	0.80~3.50	
GR 	CNMM 120408-GR																								0.20~0.50	1.00~7.00	
	120412-GR																								0.25~0.50	1.30~7.00	
	190612-GR								●																0.30~0.75	1.70~10.00	
	190616-GR																								0.30~0.80	1.80~10.00	

 Cutting edge geometry **A52~A61**
 Recommended chip breaker **B04~B11**
 Code system **B26~B27**
● : Stock item

Available tool holders			
Designation	Page	Designation	Page
MCKNR/L	B171	MCRNR/L	B172
MCLNR/L	B171	PCBNR/L	B159
MCMNN	B171	PCLNR/L	B160

