



TURNING General Turning Inserts

General turning inserts code key

General turning

General turning inserts code key

Insert shape/Code		
 A	 B	 C
 D	 E	 H
 K	 L	 M
 O	 P	 R
 S	 T	 T
 V	 W	Others Z

Insert shape

Metric							
Code	With/Without hole	With/Without chipbreaker	Section plane of insert	Code	With/Without hole	With/Without chipbreaker	Section plane of insert
B	With	Without		N	Without	Without	
H	With	Single-side		R	Without	Single-side	
C	With	Without		F	Without	Double-side	
J	With	Double-side		A	With	Without	
W	With	Without		M	With	Single-side	
T	With	Single-side		G	With	Double-side	
Q	With	Without		X	---	---	Special
U	With	Double-side					

Chipbreaker and clamping system

T N M G

Clearance angle of main cutting edge			
Code	Clearance angle	Code	Clearance angle
A	 3°	B	 5°
C	 7°	D	 15°
E	 20°	F	 25°
G	 30°	N	 0°
P	 11°	O	Other clearance angles

Tolerance										
Code	Nose height m Tolerance(mm)	Inscribed circle ØI.C Tolerance(mm)	Thickness S Tolerance(mm)	(Reference) Details of M-level tolerance (Identified by shape)						
				● Nose height tolerance(mm)						
	Inscribed circle	Regular triangle	Square	Diamond with 80°	Diamond with 55°	Diamond with 35°	Round			
A	±0.005	±0.025	±0.025							
F	±0.005	±0.013	±0.025	6.35	±0.08	±0.08	±0.08	±0.11	±0.16	---
C	±0.013	±0.025	±0.025	9.525	±0.08	±0.08	±0.08	±0.11	±0.16	---
H	±0.013	±0.013	±0.025	12.7	±0.13	±0.13	±0.13	±0.15	---	---
E	±0.025	±0.025	±0.025	15.875	±0.15	±0.15	±0.15	±0.18	---	---
G	±0.025	±0.025	±0.13	19.05	±0.15	±0.15	±0.15	±0.18	---	---
J	±0.005	±0.05±0.13	±0.025	25.4	---	±0.18	---	---	---	---
				● Tolerance of inscribed circle ØI.C(mm)						
	Inscribed circle	Regular triangle	Square	Diamond with 80°	Diamond with 55°	Diamond with 35°	Round			
K	±0.013	±0.05±0.13	±0.025	6.35	±0.05	±0.05	±0.05	±0.05	±0.05	---
L	±0.025	±0.05±0.13	±0.025	9.525	±0.05	±0.05	±0.05	±0.05	±0.05	±0.05
M	±0.08±0.18	±0.05±0.13	±0.13	12.7	±0.08	±0.08	±0.08	±0.08	---	±0.08
N	±0.08±0.18	±0.05±0.13	±0.025	15.875	±0.10	±0.10	±0.10	±0.10	---	±0.10
U	±0.13±0.38	±0.08±0.25	±0.13	19.05	±0.10	±0.10	±0.10	±0.10	---	±0.10
				25.4	---	±0.13	---	---	---	±0.13



General turning inserts code key

Diameter of IC	Insert shape							
	C	D	R	S	T	V	W	K
3.97					06			
5.0			05					
5.56					09			
6.0			06					
6.35	06	07			11	11		
8.0			08					
9.525	09	11	09	09	16	16	06	16
10.0			10					
12.0			12					
12.7	12	15	12	12	22	22	08	
15.875	16		15	15	27			
16.0		19	16					
19.05	19		19	19	33			
20.0			20					
25.0	25	25	25					
25.4			25	25				
31.75			31					
32			32					

Length of cutting edge

Thickness is defined as the height from the bottom of insert to the highest part of cutting edge

Code	Insert thickness(mm)
00	0.79
T0	0.99
01	1.59
T1	1.98
02	2.38
T2	2.58
03	3.18
T3	3.97
04	4.76
T4	4.96
05	5.96
T5	5.95
06	6.35
T6	6.75
07	7.94
09	9.52
T9	9.72
11	11.11
12	12.70

Insert thickness

22 04 08 - DM (ISO)
4 3 2 (inch)

Inscribed circle

Code	Diameter of IC(mm)
2	6.35
3	9.525
4	12.7
5	15.875
6	19.05
8	25.4

Thickness

Code	Thickness (mm)
2	3.18
3	4.76
4	6.35
5	7.94
6	9.52

Nose radius

Code	Nose radius (mm)
0	0.2
1	0.4
2	0.8
3	1.2
4	1.6
5	2.0
6	2.4

Nose radius code

Code	Nose radius (mm)
00	No radius
02	0.2
04	0.4
08	0.8
12	1.2
16	1.6
20	2.0
24	2.4
32	3.2
X	Others

Diameter of insert (Metric) Round insert

Chipbreaker code

DF	DM	DR
HF	HM	HR
EF	EM	ER
NF	NM	SF
PM	WGF	SNR

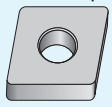
General turning inserts code key

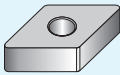


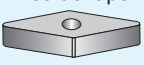
Metric and inch comparison table of negative inserts

General turning

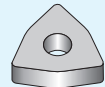
Metric and inch comparison table of general turning inserts

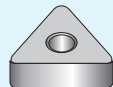
C-type negative angle	(ISO)	(Inch)	Chipbreaker
Insert shape 	090304	321	-DF
	090308	322	-WGF
	120404	431	-SF
	120408	432	-EF
	120412	433	-NF
	120416	434	-WGM
	160608	542	-PM
	160612	543	-DM
	160616	544	-EM
	190608	642	-NM
	190612	643	-DR
	190616	644	-ER
	190624	646	-LR
	250724	856	-HDR
	250732	858	-HPR
250924	866	-SNR	
250932	868		


D-type negative angle	(ISO)	(Inch)	Chipbreaker
Insert shape 	110404	331	-EF
	110408	332	-DF
	110412	333	-WGF
	150404	431	-SF
	150408	432	-NF
	150412	433	-WGM
	150416	434	-PM
	150604	441	-DM
	150608	442	-EM
	150612	443	-NM
	150616	444	-DR
	190608	542	-ER
	190612	543	-LR
			-HDR
			-SNR
			-NGF

V-type negative angle	(ISO)	(Inch)	Chipbreaker
Insert shape 	160404	331	-DF -EF
	160408	332	-SF -NF
	160412	333	-PM -DM
			-EM -NM
			-SNR -NGF

R-type negative angle	(ISO)	(Inch)	Chipbreaker
Insert shape 	120400	43	

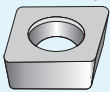
W-type negative angle	(ISO)	(Inch)	Chipbreaker
Insert shape 	06T304	3(2.5)1	-DF
	06T308	3(2.5)2	-WGF
	06T312	3(2.5)3	-SF
	060404	331	-EF
	060408	332	-NF
	060412	333	-WGM
	080404	431	-PM
	080408	432	-DM
	080412	433	-EM
			-DR
			-SNR

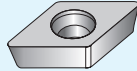
T-type negative angle	(ISO)	(Inch)	Chipbreaker
Insert shape 	110304	221	-DF
	110308	222	-WGF
	160404	331	-SF
	160408	332	-EF
	160412	333	-NF
	220404	431	-WGM
	220408	432	-PM
	220412	433	-DM
	220416	434	-EM
	270608	542	-NR
	270612	543	-LR
	270616	544	-HDR

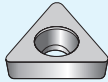
S-type negative angle	(ISO)	(Inch)	Chipbreaker
Insert shape 	090304	321	
	090308	322	
	090312	323	
	120404	431	-DF
	120408	432	-SF
	120412	433	-EF
	120416	434	-PM
	150608	542	-DM
	150612	543	-EM
	150616	544	-NM
	190412	633	-DR
	190424	636	-ER
	190612	643	-LR
	190616	644	-HDR
	250724	856	-HPR
	250732	858	
	250924	866	
	250932	868	-SNR

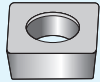


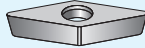
Metric and inch comparison table of positive insert

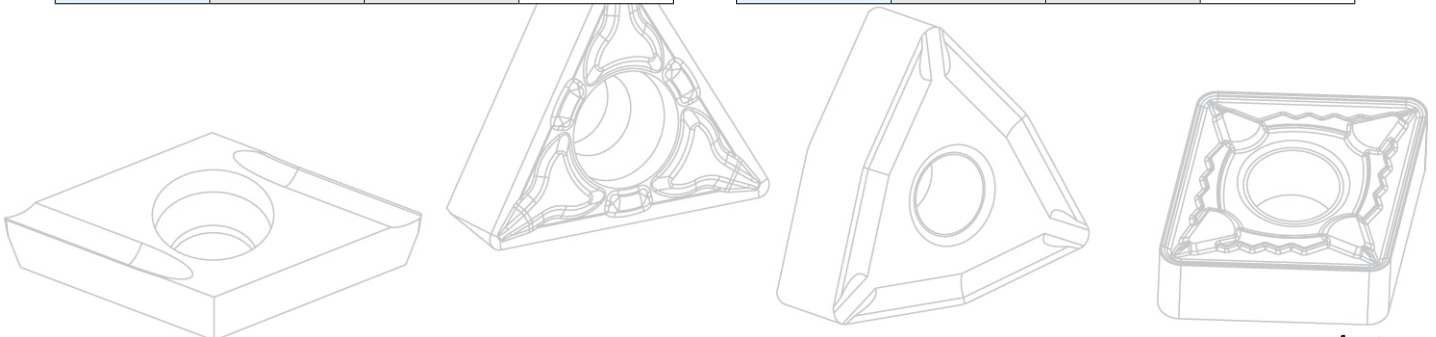
C-type positive angle	(ISO)	(Inch)	Chipbreaker
Insert shape 	060202	2(1.5)0	-USF
	060204	2(1.5)1	-SF
	060208	2(1.5)2	-HF
	09T302	3(2.5)0	-EF
	09T304	3(2.5)1	-HM
	09T308	3(2.5)2	-EM
	120404	431	-HR
	120408	432	-LH
	120412	433	-LC

D-type positive angle	(ISO)	(Inch)	Chipbreaker
Insert shape 	070202	2(1.5)0	-USF
	070204	2(1.5)1	-SF
	070208	2(1.5)2	-HF
	11T302	3(2.5)0	-EF
	11T304	3(2.5)1	-HM
	11T308	3(2.5)2	-EM
	11T312	3(2.5)3	-LH
			-LC

T-type positive angle	(ISO)	(Inch)	Chipbreaker
Insert shape 	06T102	1.2(1.2)0	
	06T104	1.2(1.2)1	
	06T108	1.2(1.2)2	
	090202	1.8(1.5)0	
	090204	1.8(1.5)1	
	090208	1.8(1.5)2	
	110202	2(1.5)0	
	110204	2(1.5)1	
	110208	2(1.5)2	
	110302	220	
	110304	221	
	110308	222	
	16T302	3(2.5)0	
	16T304	3(2.5)1	
	16T308	3(2.5)2	
	16T312	3(2.5)3	
	160400	330	
	220408	432	
	220412	433	
	220416	434	
	270408	532	
	270412	533	
	330612	643	
	330616	644	

S-type positive angle	(ISO)	(Inch)	Chipbreaker
Insert shape 	060204	2(1.5)1	
	09T302	3(2.5)0	
	09T304	3(2.5)1	
	09T308	3(2.5)2	
	120404	431	
	120408	432	
	120412	433	
	150404	531	
	150408	532	
	150412	533	
	190408	632	
	190412	633	
	190416	634	

V-type positive angle	(ISO)	(Inch)	Chipbreaker
Insert shape 	110202	2(1.5)0	
	110204	2(1.5)1	
	110208	2(1.5)2	
	110302	220	
	110304	221	
	110308	222	
	160402	330	
	160404	331	
	160408	332	
	160412	333	



General turning

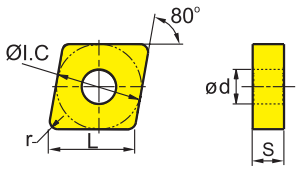
Metric and inch comparison table of general turning inserts



Cemented carbide and cermet inserts

CN (Negative inserts)

😊 Good working condition 😐 Normal working condition 😞 Bad working condition



Workpiece material	Steel (P)	Stainless steel (M)	Cast iron (K)	Non-ferrous metal (N)	Heat resistant alloy, Ti alloy (S)
Steel (P)	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
Stainless steel (M)	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
Cast iron (K)	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
Non-ferrous metal (N)	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
Heat resistant alloy, Ti alloy (S)	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide														Cermet Coated cermet	Cemented carbide															
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153			YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201			
For semi-finishing	CNMG120404-NM	12.9	12.7	4.76	5.16	0.4									○	★																					○
	CNMG120408-NM	12.9	12.7	4.76	5.16	0.8									●	★																				○	
	CNMG120412-NM	12.9	12.7	4.76	5.16	1.2									○	★																				○	
Light-load roughing	CNMM120408-LR	12.9	12.7	4.76	5.16	0.8																															
	CNMM120412-LR	12.9	12.7	4.76	5.16	1.2																															
	CNMM120416-LR	12.9	12.7	4.76	5.16	1.6																															
	CNMM160608-LR	16.1	15.875	6.35	6.35	0.8																															
	CNMM160612-LR	16.1	15.875	6.35	6.35	1.2																															
	CNMM160616-LR	16.1	15.875	6.35	6.35	1.6																															
	CNMM160624-LR	16.1	15.875	6.35	6.35	2.4																															
	CNMM190612-LR	19.3	19.05	6.35	7.94	1.2																															
	CNMM190616-LR	19.3	19.05	6.35	7.94	1.6																															
	CNMM190624-LR	19.3	19.05	6.35	7.94	2.4																															
CNMM250924-LR	25.79	25.4	9.525	9.12	2.4																																

★Recommended grade (always stock available) ●Available grade (always stock available) ○Make-to-order

General turning
Cemented carbide and cermet inserts

Applicable tool



Page A166 A172 A173 A212

Insert code key **A50-A51**

Grade selection reference **A19/A36-A48**

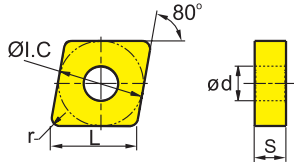
Chipbreaker selection reference **A22-A35**

Recommended cutting parameters **A241-A244**



Cemented carbide and cermet inserts

CN □ □ (Negative inserts)



😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Workpiece material	P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
	M Stainless steel				😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
	K Cast iron				😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
	N Non-ferrous metal				😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
	S Heat resistant alloy, Ti alloy				😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊

General turning

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																	Cermet	Coated cermet	Cemented carbide													
		L	ØI.C	S	Ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253				YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201				
HDR For heavy machining	CNMM120408-HDR	12.9	12.7	4.76	5.16	0.8		○	●	○	○	○																											
	CNMM120412-HDR	12.9	12.7	4.76	5.16	1.2			○	○	○	○																											
	CNMM120416-HDR	12.9	12.7	4.76	5.16	1.6			○		○	○																											
	CNMM160612-HDR	16.1	15.875	6.35	6.35	1.2			○		○	○																											
	CNMM160616-HDR	16.1	15.875	6.35	6.35	1.6					○	○	○																										
	CNMM190616-HDR	19.3	19.05	6.35	7.94	1.6			○	○	○	○																											
	CNMM190624-HDR	19.3	19.05	6.35	7.94	2.4		○	○	○	○	○																											
HPR For heavy machining	CNMM190616-HPR	19.5	19.05	6.35	7.94	1.6					★	○																											
	CNMM250924-HPR	25.19	25.4	9.525	9.12	2.4					★	○																											
Without chipbreaker 	CNMA120404	12.9	12.7	4.76	5.16	0.4																																	
	CNMA120408	12.9	12.7	4.76	5.16	0.8																																	
	CNMA120412	12.9	12.7	4.76	5.16	1.2																																	
	CNMA120416	12.9	12.7	4.76	5.16	1.6																																	
	CNMA160608	16.1	15.875	6.35	6.35	0.8																																	
	CNMA160612	16.1	15.875	6.35	6.35	1.2																																	
	CNMA160616	16.1	15.875	6.35	6.35	1.6																																	
	CNMA160620	16.1	15.875	6.35	6.35	2.0																																	
	CNMA160630	16.1	15.875	6.35	6.35	3.0																																	
	CNMA190612	19.3	19.05	6.35	7.94	1.2																																	
	CNMA190616	19.3	19.05	6.35	7.94	1.6																																	

★Recommended grade (always stock available) ●Available grade (always stock available) ○Make-to-order

Cemented carbide and cermet inserts

Applicable tool



Page A166 A172 A173 A212



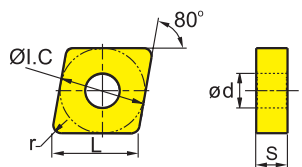


TURNING General Turning Inserts

- Cemented carbide and cermet inserts

CN (Negative inserts)

 Good working condition  Normal working condition  Bad working condition





Workpiece material	P Steel	M Stainless steel	K Cast iron	N Non-ferrous metal	S Heat resistant alloy, Ti alloy
--------------------	----------------	--------------------------	--------------------	----------------------------	---

	P	M	K	N	S	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201	
Good working condition	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	
Normal working condition			😊																													
Bad working condition				😞																				😞	😞	😞	😞	😞			😞	

General turning

Cemented carbide and cermet inserts

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																		Cermet Coated cermet	Cemented carbide											
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103			YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201			
All round 	CNMG120404	12.9	12.7	4.76	5.16	0.4	●	●														●			○												
	CNMG120408	12.9	12.7	4.76	5.16	0.8	●	★	●	★	○													●			★	★	★								
	CNMG120412	12.9	12.7	4.76	5.16	1.2	●	★	●	★																○	○	○									
	CNMG160608	16.1	15.875	6.35	6.35	0.8	●		●																○												
	CNMG160612	16.1	15.875	6.35	6.35	1.2			●		○																										
	CNMG160616	16.1	15.875	6.35	6.35	1.6					○																										
	CNMG190608	19.3	19.05	6.35	7.94	0.8	○				○																										
	CNMG190612	19.3	19.05	6.35	7.94	1.2	○		●		○																										
	CNMG190616	19.3	19.05	6.35	7.94	1.6	○				○																										
All round 	CNMM120404	12.9	12.7	4.76	5.16	0.4	○																														
	CNMM120408	12.9	12.7	4.76	5.16	0.8	○			○																											
	CNMM120412	12.9	12.7	4.76	5.16	1.2	○																														
	CNMM190608	19.3	19.05	6.35	7.94	0.8																															
	CNMM190612	19.3	19.05	6.35	7.94	1.2					○																										
	CNMM190616	19.3	19.05	6.35	7.94	1.6					○																										
	CNMM190624	19.3	19.05	6.35	7.94	2.4																															

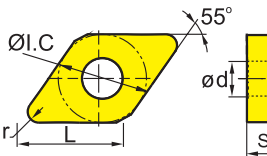
★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool



Page A166 A172 A173 A212



DN □ □ (Negative inserts)



Workpiece material

P	Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M	Stainless steel			😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K	Cast iron														😊	😊	😊	😊	😊	😊
N	Non-ferrous metal																			
S	Heat resistant alloy, Ti alloy			😊	😊		😊													

😊 Good working condition 😐 Normal working condition 😞 Bad working condition

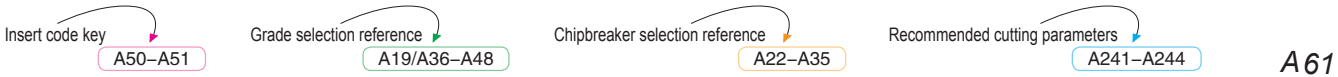
Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																	Cermet Coated cermet	Cermet	Cemented carbide															
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253				YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201						
 For finishing	DNMG110404-DF	11.6	9.525	4.76	3.81	0.4	○	●	○																									●							
	DNMG110408-DF	11.6	9.525	4.76	3.81	0.8	○	○	○																																
	DNMG110412-DF	11.6	9.525	4.76	3.81	1.2	○	○																																	
	DNMG150404-DF	15.5	12.7	4.76	5.16	0.4	★	●	★																																
	DNMG150408-DF	15.5	12.7	4.76	5.16	0.8	★	●	★																																
	DNMG150412-DF	15.5	12.7	4.76	5.16	1.2	○	○																																	
	DNMG150604-DF	15.5	12.7	6.35	5.16	0.4	●	★	●	★													○																		
	DNMG150608-DF	15.5	12.7	6.35	5.16	0.8	★	●	○																																
	DNMG150612-DF	15.5	12.7	6.35	5.16	1.2			○																																
 For finishing Wiper	DNMX110404-WGF	11.6	9.525	4.76	3.81	0.4	★																																		
	DNMX110408-WGF	11.6	9.525	4.76	3.81	0.8	★																																		
	DNMX150404-WGF	15.5	12.7	4.76	5.16	0.4	★																																		
	DNMX150408-WGF	15.5	12.7	4.76	5.16	0.8	★																																		
	DNMX150604-WGF	15.5	12.7	6.35	5.16	0.4	★																																		
	DNMX150608-WGF	15.5	12.7	6.35	5.16	0.8	★																																		

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool



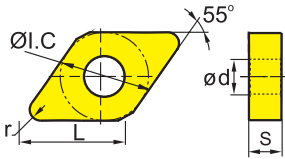
Page A167 A174 A175 A213 A214



General turning

Cemented carbide and cermet inserts

DN (Negative inserts)



Workpiece material	Working Condition																					
	Good working condition							Normal working condition							Bad working condition							
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel				😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron																				😊	😊	😊
N Non-ferrous metal																					😊	😊
S Heat resistant alloy, Ti alloy				😊	😊																😊	😊

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide															Cermet Coated cermet	Cermet												
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215			YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252					
WGM For semi-finishing Wiper	DNMX150408-WGM	15.5	12.7	4.76	5.16	0.8				★						★											★								
	DNMX150412-WGM	15.5	12.7	4.76	5.16	1.2				★						★											★								
	DNMX150608-WGM	15.5	12.7	6.35	5.16	0.8				★						★												★							
	DNMX150612-WGM	15.5	12.7	6.35	5.16	1.2				★						★												★							
PM For semi-finishing	DNMG110404-PM	11.6	9.525	4.76	3.81	0.4	●	●	○																									●	
	DNMG110408-PM	11.6	9.525	4.76	3.81	0.8	●	●	○	○																	★	○	○						
	DNMG110412-PM	11.6	9.525	4.76	3.81	1.2			○	○																									
	DNMG150404-PM	15.5	12.7	4.76	5.16	0.4	●	●	○																										
	DNMG150408-PM	15.5	12.7	4.76	5.16	0.8	●	●	●	○	○																	★	★	○					
	DNMG150412-PM	15.5	12.7	4.76	5.16	1.2			●	○		○																○	★	○					
	DNMG150416-PM	15.5	12.7	4.76	5.16	1.6			○	○																									
	DNMG150604-PM	15.5	12.7	6.35	5.16	0.4	●	●	○	○																			★	★					
	DNMG150608-PM	15.5	12.7	6.35	5.16	0.8	●	○	●	★	●																	★	★	○					
	DNMG150612-PM	15.5	12.7	6.35	5.16	1.2			★	●	★	○																★	○						
	DNMG150616-PM	15.5	12.7	6.35	5.16	1.6			○	○																									

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool



Page A167 A174 A175 A213 A214

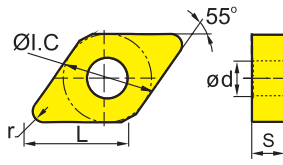
Insert code key **A50-A51** Grade selection reference **A19/A36-A48** Chipbreaker selection reference **A22-A35** Recommended cutting parameters **A241-A244**

General turning

Cemented carbide and cermet inserts

DN □ □ (Negative inserts)

😊 Good working condition 🙄 Normal working condition ☹️ Bad working condition



Workpiece material	Good working condition												Normal working condition		Bad working condition						
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel						😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron																					😊
N Non-ferrous metal																					😊
S Heat resistant alloy, Ti alloy						😊	😊														😊

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide													Cermet Coated Cermet	Cermet	Cemented carbide						
		L	Øl.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151				YBM153	YBM215	YBM251	YBM253	YBS103	YBD052
 Light-load roughing	DNMM150608-LR	15.5	12.7	6.35	5.16	0.8				★																		
	DNMM150612-LR	15.5	12.7	6.35	5.16	1.2				★																		
	DNMM150616-LR	15.5	12.7	6.35	5.16	1.6				★																		
 For light roughing	DNMG150408-DR	15.5	12.7	4.76	5.16	0.8				○																		
	DNMG150412-DR	15.5	12.7	4.76	5.16	1.2				○																		
	DNMG150416-DR	15.5	12.7	4.76	5.16	1.6				○	○																	
	DNMG150608-DR	15.5	12.7	6.35	5.16	0.8	★	○	○	○															●	●		
	DNMG150612-DR	15.5	12.7	6.35	5.16	1.2	○	●	★	○															○	●		
	DNMG150616-DR	15.5	12.7	6.35	5.16	1.6				○																○		
 For roughing	DNMM150608-DR	15.5	12.7	6.35	5.16	0.8	○	○																				
	DNMM150612-DR	15.5	12.7	6.35	5.16	1.2	○	●																				
	DNMM150616-DR	15.5	12.7	6.35	5.16	1.6				○																		
 For roughing	DNMG150608-ER	15.5	12.7	6.35	5.16	0.8																	★					
	DNMG150612-ER	15.5	12.7	6.35	5.16	1.2																	★					
 For roughing	DNMM150608-ER	15.5	12.7	6.35	5.16	0.8																	★					
	DNMM150612-ER	15.5	12.7	6.35	5.16	1.2																	★					
 For roughing	DNMG150608-SNR	15.5	12.7	6.35	5.16	0.8							○	●		○								●				
	DNMG150612-SNR	15.5	12.7	6.35	5.16	1.2							○	●		○								●				

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool



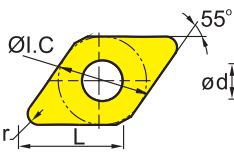
Page A167 A174 A175 A213 A214

Insert code key → A50-A51 Grade selection reference → A19/A36-A48 Chipbreaker selection reference → A22-A35 Recommended cutting parameters → A241-A244

Cemented carbide and cermet inserts

DN (Negative inserts)

Good working condition Normal working condition Bad working condition



Workpiece material	Steel	Stainless steel	Cast iron	Non-ferrous metal	Heat resistant alloy, Ti alloy
P Steel					
M Stainless steel					
K Cast iron					
N Non-ferrous metal					
S Heat resistant alloy, Ti alloy					

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																Cermet Coated cermet	Cemented carbide												
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251			YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201		
 For heavy machining	DNMM150608-HDR	15.5	12.7	6.35	5.16	0.8			○																											
	DNMM150612-HDR	15.5	12.7	6.35	5.16	1.2																														
	DNMM150616-HDR	15.5	12.7	6.35	5.16	1.6																														
 All round	DNMG150604	15.5	12.7	6.35	5.16	0.4			○																											
	DNMG150608	15.5	12.7	6.35	5.16	0.8			○																											
	DNMG150612	15.5	12.7	6.35	5.16	1.2			○																											
	DNMG150616	15.5	12.7	6.35	5.16	1.6			○																											
	DNMG190608	19.3	15.875	6.35	7.94	0.8			○																											
 Without chipbreaker	DNMA110416	11.6	9.525	4.76	3.81	1.6																														
	DNMA110424	11.6	9.525	4.76	3.81	2.4																														
	DNMA150404	15.5	12.7	4.76	5.16	0.4																														
	DNMA150408	15.5	12.7	4.76	5.16	0.8																														
	DNMA150604	15.5	12.7	6.35	5.16	0.4																														
	DNMA150608	15.5	12.7	6.35	5.16	0.8																														
	DNMA150612	15.5	12.7	6.35	5.16	1.2																														
	DNMA150616	15.5	12.7	6.35	5.16	1.6																														

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool



Page A167



A174



A175

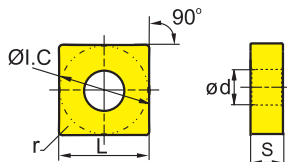


A213



A214

SN (Negative inserts)



Workpiece material	Steel	Stainless steel	Cast iron	Non-ferrous metal	Heat resistant alloy, Ti alloy
P	Good	Normal	Normal	Normal	Normal
M	Normal	Good	Normal	Normal	Normal
K	Normal	Normal	Good	Normal	Normal
N	Normal	Normal	Normal	Good	Normal
S	Normal	Normal	Normal	Normal	Good

😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																Cermet	Coated cermet	Cemented carbide															
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251				YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201					
 For light roughing	SNMG120408-DR	12.7	12.7	4.76	5.16	0.8	○	●	★	○																														
	SNMG120412-DR	12.7	12.7	4.76	5.16	1.2		●	○	●																														
	SNMG120416-DR	12.7	12.7	4.76	5.16	1.6	○	○	○																															
	SNMG150608-DR	15.875	15.875	6.35	6.35	0.8			○																															
	SNMG150612-DR	15.875	15.875	6.35	6.35	1.2		●	★	●																	○	○												
	SNMG150616-DR	15.875	15.875	6.35	6.35	1.6		●	★																		○	○												
	SNMG150624-DR	15.875	15.875	6.35	6.35	2.4			○																															
	SNMG190612-DR	19.05	19.05	6.35	7.94	1.2		●	○	○																														
	SNMG190616-DR	19.05	19.05	6.35	7.94	1.6		●	★	●																		○	○											
	SNMG190624-DR	19.05	19.05	6.35	7.94	2.4		●	○	○																														
 For roughing	SNMM120408-DR	12.7	12.7	4.76	5.16	0.8																																		
	SNMM120412-DR	12.7	12.7	4.76	5.16	1.2																																		
	SNMM120416-DR	12.7	12.7	4.76	5.16	1.6																																		
	SNMM150608-DR	15.875	15.875	6.35	6.35	0.8																																		
	SNMM150612-DR	15.875	15.875	6.35	6.35	1.2																																		
	SNMM150616-DR	15.875	15.875	6.35	6.35	1.6			●	○																														
	SNMM190608-DR	19.05	19.05	6.35	7.94	0.8																																		

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool



Page A168



A176



A177



A178

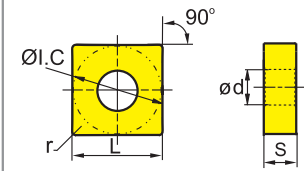


A179



A215

SN (Negative inserts)



Workpiece material	Legend
P Steel	
M Stainless steel	
K Cast iron	
N Non-ferrous metal	
S Heat resistant alloy, Ti alloy	

😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Non-ferrous metal	S Heat resistant alloy, Ti alloy
P Steel	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊
M Stainless steel	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊
K Cast iron	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊
N Non-ferrous metal	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊
S Heat resistant alloy, Ti alloy	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																						
		L	$\phi I.C.$	S	ϕd	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	Cermet Coated cermet
 For roughing	SNMM190612-DR	19.05	19.05	6.35	7.94	1.2	●	○	○																				
	SNMM190616-DR	19.05	19.05	6.35	7.94	1.6	○	●	★	●																			
	SNMM190624-DR	19.05	19.05	6.35	7.94	2.4	★	●	○	●																			
	SNMM250724-DR	25.4	25.4	7.94	9.12	2.4	●	○																					
	SNMM250924-DR	25.4	25.4	9.525	9.12	2.4	●	★	●																				
 For roughing	SNMG120408-ER	12.7	12.7	4.76	5.16	0.8																							
	SNMG120412-ER	12.7	12.7	4.76	5.16	1.2																							
	SNMG150608-ER	15.875	15.875	6.35	6.35	0.8																							
	SNMG150612-ER	15.875	15.875	6.35	6.35	1.2																							
	SNMG190612-ER	19.05	19.05	6.35	7.94	1.2																							
	SNMG190616-ER	19.05	19.05	6.35	7.94	1.6																							
 For roughing	SNMM250724-ER	25.4	25.4	7.94	9.12	2.4		●																					
	SNMM250732-ER	25.4	25.4	7.94	9.12	3.2		●																					
	SNMM250924-ER	25.4	25.4	9.525	9.12	2.4		●																					
	SNMM250932-ER	25.4	25.4	9.525	9.12	3.2		●																					
 For roughing	SNMG120408-SNR	12.7	12.7	4.76	5.16	0.8						○	●			○									●				

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool



Page A168

A176

A177

A178

A179

A215

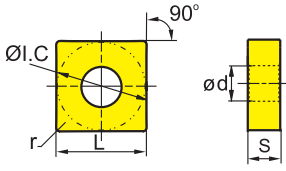
Insert code key A50-A51

Grade selection reference A19/A36-A48

Chipbreaker selection reference A22-A35

Recommended cutting parameters A241-A244

SN [] [] (Negative inserts)





Workpiece material

- P** Steel
- M** Stainless steel
- K** Cast iron
- N** Non-ferrous metal
- S** Heat resistant alloy, Ti alloy

😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Material	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201	
Steel (P)	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
Stainless steel (M)	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
Cast iron (K)	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
Non-ferrous metal (N)	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
Heat resistant alloy, Ti alloy (S)	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																	Cermet	Coated cermet	Cemented carbide										
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253				YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201	
	SNMG090304	9.525	9.525	3.18	3.81	0.4			○																											
	SNMG090308	9.525	9.525	3.18	3.81	0.8			○	○																										
	SNMG120404	12.7	12.7	4.76	5.16	0.4			●																											
	SNMG120408	12.7	12.7	4.76	5.16	0.8		○	●	○							●						○													
	SNMG120412	12.7	12.7	4.76	5.16	1.2			○	○	●																									
	SNMG120416	12.7	12.7	4.76	5.16	1.6		○	○																											
	SNMG150608	15.875	15.875	6.35	6.35	0.8			○																											
	SNMG150612	15.875	15.875	6.35	6.35	1.2		○	●																											
	SNMG190612	19.05	19.05	6.35	7.94	1.2		○	●	○																										
	SNMG190616	19.05	19.05	6.35	7.94	1.6		○	●																											
	SNMG250724	25.4	25.4	7.94	9.12	2.4		○	○	●																										
	SNMG250924	25.4	25.4	9.525	9.12	2.4			○	●																										
	SNMM090304	9.525	9.525	3.18	3.81	0.4																												○		
	SNMM090308	9.525	9.525	3.18	3.81	0.8			○																											
	SNMM120408	12.7	12.7	4.76	5.16	0.8		○																												
	SNMM120412	12.7	12.7	4.76	5.16	1.2			○																											
	SNMM120416	12.7	12.7	4.76	5.16	1.6			○																											

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool

DSBNR/L
Kr:75°



Page A168

PSBNR/L
Kr:75°



A176

PSDNN
Kr:45°



A177

PSKNR/L
Kr:75°



A178

PSSNR/L
Kr:45°



A179

PSKNR/L
Kr:75°



A215

Insert code key

A50–A51

Grade selection reference

A19/A36–A48

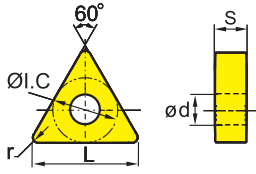
Chipbreaker selection reference

A22–A35

Recommended cutting parameters

A241–A244

TN (Negative inserts)



😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Workpiece material	Steel (P)	Stainless steel (M)	Cast iron (K)	Non-ferrous metal (N)	Heat resistant alloy, Ti alloy (S)
P Steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
M Stainless steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
K Cast iron	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
N Non-ferrous metal	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
S Heat resistant alloy, Ti alloy	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide														Cermet	Coated cermet	Cemented carbide														
		L	Øl.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153				YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201		
DF For finishing	TNMG160404-DF	16.5	9.525	4.76	3.81	0.4	★	●	★													○											●				
	TNMG160408-DF	16.5	9.525	4.76	3.81	0.8	★	○	★																								●				
	TNMG160412-DF	16.5	9.525	4.76	3.81	1.2	○	○	○																												
	TNMG220408-DF	22	12.7	4.76	5.16	0.8	★	○	○																												
	TNMG220412-DF	22	12.7	4.76	5.16	1.2	○																														
WGF For finishing Wiper	TNMX160404-WGF	16.5	9.525	4.76	3.81	0.4	★														★																
	TNMX160408-WGF	16.5	9.525	4.76	3.81	0.8	★															★															
SF For finishing	TNMG110304-SF	11	6.35	3.18	2.26	0.4																									○	★					
	TNMG160404-SF	16.5	9.525	4.76	3.81	0.4																	○								○	★					
	TNMG160408-SF	16.5	9.525	4.76	3.81	0.8																	○								○	★					
	TNMG220408-SF	22	12.7	4.76	5.16	0.8																		○							○	★					
	TNMG220412-SF	22	12.7	4.76	5.16	1.2																		○							○	★					

★Recommended grade (always stock available) ●Available grade (always stock available) ○Make-to-order

General turning
Cemented carbide and cermet inserts

Applicable tool



Page A169



A180



A181



A182



A216

Insert code key
A50-A51

Grade selection reference
A19/A36-A48

Chipbreaker selection reference
A22-A35

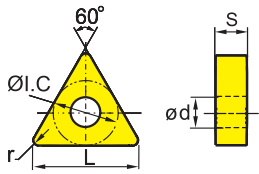
Recommended cutting parameters
A241-A244



Cemented carbide and cermet inserts

TN (Negative inserts)

😊 Good working condition 😐 Normal working condition 😞 Bad working condition



Workpiece material	P Steel	😊😊😊😊😊😊😊😊😊😊
	M Stainless steel	😊😊😊😊😊😊😊😊😊😊
	K Cast iron	😊😊😊😊😊😊😊😊😊😊
	N Non-ferrous metal	😊😊😊😊😊😊😊😊😊😊
	S Heat resistant alloy, Ti alloy	😊😊😊😊😊😊😊😊😊😊

Inserts shape	Type	Dimensions(mm)						Coated cemented carbide																	Cermet Coated cermet	Cemented carbide																	
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103			YBD052	YBD102	YBD152	YBD252													
							YNG151	YNG151C	YD101	YD201																																	
DM For semi-finishing	TNMG110308-DM	11	6.35	3.18	2.26	0.8	○	○																																			
	TNMG160404-DM	16.5	9.525	4.76	3.81	0.4	★	●	★	○					○																									●			
	TNMG160408-DM	16.5	9.525	4.76	3.81	0.8	★	●	★	●					●								●																				
	TNMG160412-DM	16.5	9.525	4.76	3.81	1.2	○	○	★	○																																	
	TNMG220404-DM	22	12.7	4.76	5.16	0.4	★	●	★	○																																	
	TNMG220408-DM	22	12.7	4.76	5.16	0.8	★	●	★	●																																	
	TNMG220412-DM	22	12.7	4.76	5.16	1.2	○	○	○	○																																	
	TNMG220416-DM	22	12.7	4.76	5.16	1.6	○	○	○																																		
EM For semi-finishing	TNMG160404-EM	16.5	9.525	4.76	3.81	0.4									●	★					★	★																					
	TNMG160408-EM	16.5	9.525	4.76	3.81	0.8									●	★					★	★																					
	TNMG160412-EM	16.5	9.525	4.76	3.81	1.2									○	★					★	★																					
	TNMG220408-EM	22	12.7	4.76	5.16	0.8										●	★					○	★																				
	TNMG220412-EM	22	12.7	4.76	5.16	1.2										○	★					○	★																				
	TNMG220416-EM	22	12.7	4.76	5.16	1.6										○	★					○	★																				
LR Light-load roughing	TNMM160408-LR	16.5	9.525	4.76	3.81	0.8																																					
	TNMM160412-LR	16.5	9.525	4.76	3.81	1.2																																					
	TNMM220408-LR	22	12.7	4.76	5.16	0.8																																					
	TNMM220412-LR	22	12.7	4.76	5.16	1.2																																					
	TNMM220416-LR	22	12.7	4.76	5.16	1.6																																					

★Recommended grade (always stock available) ●Available grade (always stock available) ○Make-to-order

General turning
Cemented carbide and cermet inserts

Applicable tool



Page A169 A180 A181 A182 A216

Insert code key Grade selection reference Chipbreaker selection reference Recommended cutting parameters

A50-A51

A19/A36-A48

A22-A35

A241-A244

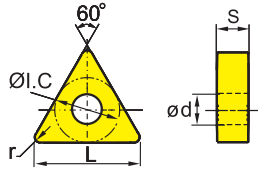


General Turning Inserts

Cemented carbide and cermet inserts

TN (Negative inserts)

😊 Good working condition 😐 Normal working condition 😞 Bad working condition

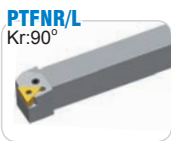


Workpiece material	Steel	Stainless steel	Cast iron	Non-ferrous metal	Heat resistant alloy, Ti alloy
P Steel	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊
M Stainless steel	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊
K Cast iron	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊
N Non-ferrous metal	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊
S Heat resistant alloy, Ti alloy	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																Cermet	Coated cermet	Cemented carbide															
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251				YBM253	YBS103	YBD052	YBD102	YBD152	YBD252									
							YNG151	YNG151C	YD101	YD201																														
 For light roughing	TNMG160408-DR	16.5	9.525	4.76	3.81	0.8	○		○	○																														
	TNMG160412-DR	16.5	9.525	4.76	3.81	1.2	○		○	○																	●	●												
	TNMG220408-DR	22	12.7	4.76	5.16	0.8				○	●																	○												
	TNMG220412-DR	22	12.7	4.76	5.16	1.2				○	○																		○											
	TNMG220416-DR	22	12.7	4.76	5.16	1.6					○																	○												
	TNMG270608-DR	27.5	15.875	6.35	6.35	0.8						○																												
	TNMG270612-DR	27.5	15.875	6.35	6.35	1.2							○																											
	TNMG270616-DR	27.5	15.875	6.35	6.35	1.6								○																										
 For roughing	TNMM160408-DR	16.5	9.525	4.76	3.81	0.8			○	○																														
	TNMM160412-DR	16.5	9.525	4.76	3.81	1.2			○	○																														
	TNMM220408-DR	22	12.7	4.76	5.16	0.8				●	●																													
	TNMM220412-DR	22	12.7	4.76	5.16	1.2				●	○																													
	TNMM220416-DR	22	12.7	4.76	5.16	1.6					○	○																												
	TNMM270612-DR	27.5	15.875	6.35	5.16	1.2						○																												
 For roughing	TNMG160408-ER	16.5	9.525	4.76	3.81	0.8																																		
	TNMG160412-ER	16.5	9.525	4.76	3.81	1.2																																		
 For roughing	TNMG220408-ER	22	12.7	4.76	5.16	0.8																																		
	TNMG220412-ER	22	12.7	4.76	5.16	1.2																																		
TNMG160408-SNR	16.5	9.525	4.76	3.81	0.8								○	●			○										●													

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool



Page A169

A180

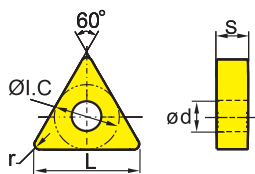
A181

A182

A216

TN (Negative inserts)

☺ Good working condition 😐 Normal working condition ☹ Bad working condition



Workpiece material	Steel	Stainless steel	Cast iron	Non-ferrous metal	Heat resistant alloy, Ti alloy
P	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
M	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
K	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
N	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
S	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide													Cermet Coated cermet	Cemented carbide												
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151			YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101
HDR For heavy machining	TNMM160408-HDR	16.5	9.525	4.76	3.81	0.8					○	○																					
	TNMM160412-HDR	16.5	9.525	4.76	3.81	1.2					○	○																					
	TNMM220408-HDR	22	12.7	4.76	5.16	0.8					○	○																					
	TNMM220412-HDR	22	12.7	4.76	5.16	1.2					○	○																					
	TNMM220416-HDR	22	12.7	4.76	5.16	1.6					○	○																					
	TNMM270612-HDR	27.5	15.875	6.35	6.35	1.2					○	○																					
	TNMM270616-HDR	27.5	15.875	6.35	6.35	1.6					○	○																					
	TNMM270624-HDR	27.5	15.875	6.35	6.35	2.4					○	○																					
All round	TNMG110308	11	6.35	3.18	2.26	0.8				○																							
	TNMG160404	16.5	9.525	4.76	3.81	0.4	○	●																									
	TNMG160408	16.5	9.525	4.76	3.81	0.8	●	○	●																								
	TNMG160412	16.5	9.525	4.76	3.81	1.2	●		●	○												○											
	TNMG220404	22	12.7	4.76	5.16	0.4	○		●		○																						
	TNMG220408	22	12.7	4.76	5.16	0.8	○		●		○												○										
	TNMG220412	22	12.7	4.76	5.16	1.2	●		●		○																						
	TNMG220416	22	12.7	4.76	5.16	1.6					○																						
	TNMG270612	27.5	15.875	6.35	6.35	1.2			●		●																						
	TNMG270616	27.5	15.875	6.35	6.35	1.6					○	○																					
	TNMG330916	33	19.05	9.525	7.94	1.6																											
	TNMG330924	33	19.05	9.525	7.94	2.4	○	○			●																						

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool



Page A169

A180

A181

A182

A216

Insert code key

A50-A51

Grade selection reference

A19/A36-A48

Chipbreaker selection reference

A22-A35

Recommended cutting parameters

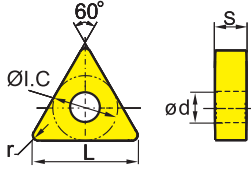
A241-A244



Cemented carbide and cermet inserts

TN (Negative inserts)

😊 Good working condition 😐 Normal working condition 😞 Bad working condition



P Steel
M Stainless steel
K Cast iron
N Non-ferrous metal
S Heat resistant alloy, Ti alloy

Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
Stainless steel			😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
Cast iron																		😊
Non-ferrous metal																		😊
Heat resistant alloy, Ti alloy	😊	😊								😊								😊

General turning
Cemented carbide and cermet inserts

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide															Cermet	Coated cermet	Cemented carbide								
		L	Ø1.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215				YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	
	TNMM160404	16.5	9.525	4.76	3.81	0.4				○																						
	TNMM160408	16.5	9.525	4.76	3.81	0.8																										
	TNMM160412	16.5	9.525	4.76	3.81	1.2	○																									
	TNMM220408	22	12.7	4.76	5.16	0.8				○																						
	TNMM220412	22	12.7	4.76	5.16	1.2				●		○											○									
	TNMM220416	22	12.7	4.76	5.16	1.6						○																				
	TNMM270616	27.5	15.875	6.35	6.35	1.6				●		○																				
	TNMA160404	16.5	9.525	4.76	3.81	0.4																			○	★	★					
	TNMA160408	16.5	9.525	4.76	3.81	0.8	○																			★	★	★			○	
	TNMA160412	16.5	9.525	4.76	3.81	1.2																					★	○	○			
	TNMA160416	16.5	9.525	4.76	3.81	1.6																					○	○	○			
	TNMA220404	22	12.7	4.76	5.16	0.4																					○	○	○			
	TNMA220408	22	12.7	4.76	5.16	0.8																					○	○	○			
	TNMA270616	27.5	15.875	6.35	6.35	1.6																						○				

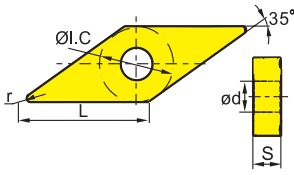
★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool



Page A169 A180 A181 A182 A216

VN (Negative inserts)



😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Workpiece material	Steel	Stainless steel	Cast iron	Non-ferrous metal	Heat resistant alloy, Ti alloy
P	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊
M	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊
K	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊
N	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊
S	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide														Cermet Coated cermet	Cemented carbide										
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153			YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C
 For finishing	VNMG160404-DF	16.6	9.525	4.76	3.81	0.4	★	●	★																							
	VNMG160408-DF	16.6	9.525	4.76	3.81	0.8	★	○	○																							
 For finishing	VNMG160404-EF	16.6	9.525	4.76	3.81	0.4									○	★																
	VNMG160408-EF	16.6	9.525	4.76	3.81	0.8									○	★																
	VNMG160412-EF	16.6	9.525	4.76	3.81	1.2									○	★																
 For finishing	VNEG160404-NF	16.6	9.525	4.76	3.81	0.4																										○
	VNEG160408-NF	16.6	9.525	4.76	3.81	0.8																										○
 For finishing	VNEG160408-NGF	16.6	9.525	4.76	3.81	0.8							○	●		○																
	VNEG160412-NGF	16.6	9.525	4.76	3.81	1.2							○	●		○																
 For finishing	VNMG160404-SF	16.6	9.525	4.76	3.81	0.4																								○	★	
	VNMG160408-SF	16.6	9.525	4.76	3.81	0.8																								○		

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool



Page A170

A170

Insert code key

A50-A51

Grade selection reference

A19/A36-A48

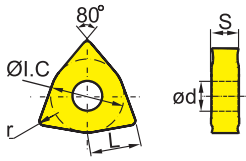
Chipbreaker selection reference

A22-A35

Recommended cutting parameters

A241-A244

WN (Negative inserts)



Workpiece material	Working Condition														
	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺
P Steel	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺
M Stainless steel	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺
K Cast iron	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺
N Non-ferrous metal	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺
S Heat resistant alloy, Ti alloy	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺

General turning

Cemented carbide and cermet inserts

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																Cermet Coated cermet	Cermet cermet	Cemented carbide								
		L	Ø.L.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251				YBM253	YBS103	YBD052	YBD102	YBD152	YBD252		
PM For semi-finishing	WNMG060408-PM	6.5	9.525	4.76	3.81	0.8	★	●	○	○																	★	★					
	WNMG060412-PM	6.5	9.525	4.76	3.81	1.2	○	○																			★	★					
	WNMG080404-PM	8.7	12.7	4.76	5.16	0.4	○	●	○	○																							
	WNMG080408-PM	8.7	12.7	4.76	5.16	0.8	★	●	★	●																			★	★	★		
	WNMG080412-PM	8.7	12.7	4.76	5.16	1.2	★	●	★	●																			★	★	★		
	WNMG080416-PM	8.7	12.7	4.76	5.16	1.6				○																			○	○			
	WNMG080608-PM	8.7	12.7	6.35	5.16	0.8				○																							
DM For semi-finishing	WNMG06T304-DM	6.5	9.525	3.97	3.81	0.4				○																							
	WNMG06T308-DM	6.5	9.525	3.97	3.81	0.8				○	○																						
	WNMG06T312-DM	6.5	9.525	3.97	3.81	1.2				○																							
	WNMG060408-DM	6.5	9.525	4.76	3.81	0.8	★	●	★	●													●										
	WNMG060412-DM	6.5	9.525	4.76	3.81	1.2				○	○																						
	WNMG080404-DM	8.7	12.7	4.76	5.16	0.4	★	●	★	○					○									○									
	WNMG080408-DM	8.7	12.7	4.76	5.16	0.8	★	●	★	●														○									
	WNMG080412-DM	8.7	12.7	4.76	5.16	1.2	★	●	★															○									
WNMG080416-DM	8.7	12.7	4.76	5.16	1.6				○																								
EM For semi-finishing	WNMG06T304-EM	6.5	9.525	3.97	3.81	0.4										○	★					○		★									
	WNMG06T308-EM	6.5	9.525	3.97	3.81	0.8										○	★						○		★								
	WNMG06T312-EM	6.5	9.525	3.97	3.81	1.2										○	★						○		★								
	WNMG060404-EM	6.5	9.525	4.76	3.81	0.4										○	★							○		★							
	WNMG060408-EM	6.5	9.525	4.76	3.81	0.8										●	★							○		★							
	WNMG080404-EM	8.7	12.7	4.76	5.16	0.4										●	★							★		★							
	WNMG080408-EM	8.7	12.7	4.76	5.16	0.8										●	★							★		★							
	WNMG080412-EM	8.7	12.7	4.76	5.16	1.2										●	★							★		★							

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool

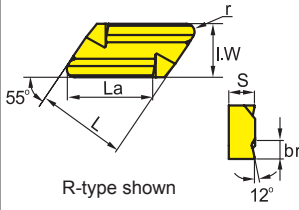


Page A171 A183 A217

Insert code key: A50-A51 Grade selection reference: A19/A36-A48 Chipbreaker selection reference: A22-A35 Recommended cutting parameters: A241-A244



KN □ □ (Negative inserts)



😊 Good working condition 😐 Normal working condition ☹️ Bad working condition

Workpiece material	Steel	Stainless steel	Cast iron	Non-ferrous metal	Heat resistant alloy, Ti alloy
P	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊
M	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊
K	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊
N	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊
S	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊

Inserts shape	Type	Dimensions(mm)						Coated cemented carbide															Cermet	Coated cermet	Cemented carbide											
		La	L	I.W	S	brn	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215				YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201
Profile turning	KNUX160405L11	16	16.15	9.525	4.76	2.2	0.5	○	●	★	○												●													
	KNUX160410L11	16	16.15	9.525	4.76	2.2	1.0			●													○													
	KNUX160405L12	16	16.15	9.525	4.76	2.2	0.5	○	●														○													
	KNUX160410L12	16	16.15	9.525	4.76	2.2	1.0	○	○	●													○													
	KNUX160415L12	16	16.15	9.525	4.76	2.2	1.5			○																										
	KNUX160405R11	16	16.15	9.525	4.76	2.2	0.5	●	●	○	●												●													
	KNUX160410R11	16	16.15	9.525	4.76	2.2	1.0	○	●														○													
	KNUX160405R12	16	16.15	9.525	4.76	2.2	0.5	●	●														○													
	KNUX160410R12	16	16.15	9.525	4.76	2.2	1.0	○	○	●	○												○													
	KNUX160415R12	16	16.15	9.525	4.76	2.2	1.5			○																										

Note: KNUX160405L11 ★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order
 Chipbreaker code: 11 → Declining chipbreaker 12 → Straight chipbreaker

General turning

Cemented carbide and cermet inserts

Applicable tool

CKJNR/L
Kr:93°

Page A204

CKNNR/L
Kr:63°

A204

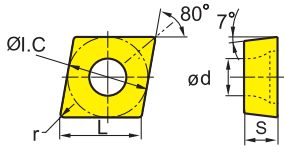
Insert code key → **A50-A51**

Grade selection reference → **A19/A36-A48**

Chipbreaker selection reference → **A22-A35**

Recommended cutting parameters → **A241-A244**

CC (Positive inserts)



☺ Good working condition ☹ Normal working condition ☹ Bad working condition

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Non-ferrous metal	S Heat resistant alloy, Ti alloy
P Steel	☺☺☺☺☺☺☺☺☺☺				
M Stainless steel		☺☺☺☺☺☺☺☺☺☺			
K Cast iron			☺☺☺☺☺☺☺☺☺☺		
N Non-ferrous metal				☺☺☺☺☺☺☺☺☺☺	
S Heat resistant alloy, Ti alloy					☺☺☺☺☺☺☺☺☺☺

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																										
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	Cermet Coated cermet YNG151	Cermet Coated cermet YNG151C	Cemented carbide YD101	Cemented carbide YD201	
USF For extra finishing	CCGT09T301R-USF	9.7	9.525	3.97	4.4	0.1									○	○																	
	CCGT09T302R-USF	9.7	9.525	3.97	4.4	0.2									●	○																	
	CCGT09T304R-USF	9.7	9.525	3.97	4.4	0.4									○	○																	
USF For extra finishing	CCGT09T301L-USF	9.7	9.525	3.97	4.4	0.1									○	○																	
	CCGT09T302L-USF	9.7	9.525	3.97	4.4	0.2									●	○																	
	CCGT09T304L-USF	9.7	9.525	3.97	4.4	0.4									○	○																	
SF For extra finishing	CCGT060202-SF	6.4	6.35	2.38	2.8	0.2							○															○	○				
	CCGT060204-SF	6.4	6.35	2.38	2.8	0.4							○															○	○				
	CCGT09T304-SF	9.7	9.525	3.97	4.4	0.4							○															○	★				
HF For finishing	CCMT060202-HF	6.4	6.35	2.38	2.8	0.2	★	●	★					●														○				○	
	CCMT060204-HF	6.4	6.35	2.38	2.8	0.4	★	●	○	○				●												●			●				
	CCMT060208-HF	6.4	6.35	2.38	2.8	0.8	★	●		○				●								○						●					
	CCMT09T302-HF	9.7	9.525	3.97	4.4	0.2			●	○					●													●				○	
	CCMT09T304-HF	9.7	9.525	3.97	4.4	0.4	★	●	★	○					●											●	●	●	●	○			○
	CCMT09T308-HF	9.7	9.525	3.97	4.4	0.8	★	●	○	○					●								○			○	○	○	○	○			○
	CCMT120404-HF	12.9	12.7	4.76	5.56	0.4	●	○	●	○																	●						
	CCMT120408-HF	12.9	12.7	4.76	5.56	0.8	○																										

★Recommended grade (always stock available) ●Available grade (always stock available) ○Make-to-order

General turning

Cemented carbide and cermet inserts

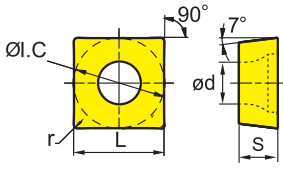
Applicable tool



Page A184 A185 A218 A232 A233

Insert code key → A50-A51
 Grade selection reference → A19/A36-A48
 Chipbreaker selection reference → A22-A35
 Recommended cutting parameters → A241-A244

SC (Positive inserts)



😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Workpiece material	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel					😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron																				😊	😊	😊	😊	😊	😊	😊
N Non-ferrous metal																										
S Heat resistant alloy, Ti alloy	😊	😊																		😊	😊					

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																		Cermet Coated cermet	Cemented carbide										
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103			YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201		
	SCGX09T304-LC	9.525	9.525	3.97	4.4	0.4																														★
	SCGX09T308-LC	9.525	9.525	3.97	4.4	0.8																													★	
	SCGX120408-LC	12.7	12.7	4.76	5.5	0.8																														★
	SCGX09T302-LH	9.525	9.525	3.97	4.4	0.2																													○	
	SCGX09T304-LH	9.525	9.525	3.97	4.4	0.4																													○	
	SCGX09T308-LH	9.525	9.525	3.97	4.4	0.8																													★	
	SCGX120404-LH	12.7	12.7	4.76	5.56	0.4																													○	
	SCGX120408-LH	12.7	12.7	4.76	5.56	0.8																													★	
	SCMT09T304-HR	9.525	9.525	3.97	4.4	0.4	★	●	●						●																			○		
	SCMT09T308-HR	9.525	9.525	3.97	4.4	0.8	★	○	●																										●	
	SCMT09T312-HR	9.525	9.525	3.97	4.4	1.2	★																													
	SCMT120404-HR	12.7	12.7	4.76	5.56	0.4	○	●	○																											
	SCMT120408-HR	12.7	12.7	4.76	5.56	0.8	★	●	○	●																									○	
	SCMT120412-HR	12.7	12.7	4.76	5.56	1.2	○	○	●																											
	SCMT09T304	9.525	9.525	3.97	4.4	0.4	○	●																												
	SCMT120404	12.7	12.7	4.76	5.56	0.4		○	○																											
	SCMT120408	12.7	12.7	4.76	5.56	0.8	○	●																												
	SCMW060204	6.35	6.35	2.38	2.8	0.4																												○		
	SCMW09T304	9.525	9.525	3.97	4.4	0.4																												○		
	SCMW09T308	9.525	9.525	3.97	4.4	0.8																												○		
	SCMW120408	12.7	12.7	4.76	5.56	0.8	●																													

★Recommended grade (always stock available) ●Available grade (always stock available) ○Make-to-order

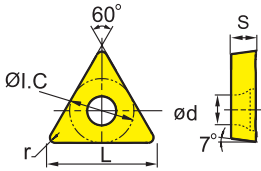
Applicable tool



Page A194 A195 A196 A197 A222

Insert code key → **A50-A51** Grade selection reference → **A19/A36-A48** Chipbreaker selection reference → **A22-A35** Recommended cutting parameters → **A241-A244**

TC (Positive inserts)



😊 Good working condition 😐 Normal working condition ☹️ Bad working condition

Workpiece material	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
N Non-ferrous metal	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
S Heat resistant alloy, Ti alloy	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																									
		L	Ø1.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	Cermet Coated cermet	Cemented carbide		
HF For finishing	TCMT090202-HF	9.6	5.56	2.38	2.5	0.2	★	●																					○	○		
	TCMT090204-HF	9.6	5.56	2.38	2.5	0.4	★	●																					●	○		
	TCMT090208-HF	9.6	5.56	2.38	2.5	0.8			○																					○		
	TCMT110202-HF	11	6.35	2.38	2.8	0.2			●					●									○								○	
	TCMT110204-HF	11	6.35	2.38	2.8	0.4	●	★	●	★													●							○	○	
	TCMT110208-HF	11	6.35	2.38	2.8	0.8		○	●	○					●								○						○	○	○	
	TCMT16T302-HF	16.5	9.525	3.97	4.4	0.2		○																						○	○	
	TCMT16T304-HF	16.5	9.525	3.97	4.4	0.4	●	●							○														●	○	○	
	TCMT16T308-HF	16.5	9.525	3.97	4.4	0.8		○	●																				○	○	○	

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool

STACR/L Kr:90° Page A198
STFCR/L Kr:90° A198
STGCR/L Kr:91° A199
STECR/L Kr:60° A200
STFCR/L Kr:90° A223

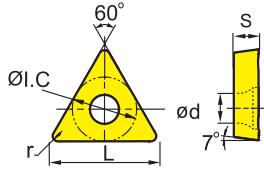
Insert code key → A50-A51
 Grade selection reference → A19/A36-A48
 Chipbreaker selection reference → A22-A35
 Recommended cutting parameters → A241-A244



Cemented carbide and cermet inserts

TC (Positive inserts)

😊 Good working condition 😐 Normal working condition 😞 Bad working condition



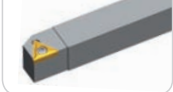
Workpiece material	TC	EM	EF	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201	
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	
K Cast iron	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	
N Non-ferrous metal	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	
S Heat resistant alloy, Ti alloy	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																	Cermet Coated cermet	Cemented carbide															
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253			YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201						
EF For finishing	TCMT090202-EF	9.6	5.56	2.38	2.5	0.2																																		
	TCMT090204-EF	9.6	5.56	2.38	2.5	0.4																																		
	TCMT110202-EF	11	6.35	2.38	2.8	0.2																																		
	TCMT110204-EF	11	6.35	2.38	2.8	0.4																																		
	TCMT110208-EF	11	6.35	2.38	2.8	0.8																																		
	TCMT16T304-EF	16.5	9.525	3.97	4.4	0.4																																		
	TCMT16T308-EF	16.5	9.525	3.97	4.4	0.8																																		
EM For semi-finishing	TCMT090204-EM	9.6	5.56	2.38	2.8	0.4																																		
	TCMT090208-EM	9.6	5.56	2.38	2.8	0.8																																		
	TCMT110204-EM	11	6.35	2.38	2.8	0.4																																		
	TCMT110208-EM	11	6.35	2.38	2.8	0.8																																		
	TCMT110212-EM	11	6.35	2.38	2.8	1.2																																		
	TCMT16T304-EM	16.5	9.525	3.97	4.4	0.4																																		
	TCMT16T308-EM	16.5	9.525	3.97	4.4	0.8																																		
	TCMT16T312-EM	16.5	9.525	3.97	4.4	1.2																																		

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

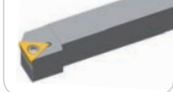
Applicable tool

STAGR/L
Kr:90°



Page A198

STFCR/L
Kr:90°



A198

STGCR/L
Kr:91°



A199

STECR/L
Kr:60°



A200

STFCR/L
Kr:90°

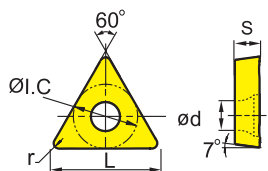


A223

Cemented carbide and cermet inserts

TC □ □ (Positive inserts)

☺ Good working condition ☹ Normal working condition ☹ Bad working condition



Workpiece material	Steel	Stainless steel	Cast iron	Non-ferrous metal	Heat resistant alloy, Ti alloy
P	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺
M	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺
K	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺
N	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺
S	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																Cermet Coated cermet	Cermet	Cemented carbide													
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251				YBM253	YBS103	YBD052	YBD102	YBD152	YBD252							
LH For Al machining	TCGX090202-LH	9.6	5.56	2.38	2.5	0.2																																★
	TCGX090204-LH	9.6	5.56	2.38	2.5	0.4																																★
	TCGX110202-LH	11	6.35	2.38	2.8	0.2																																★
	TCGX110204-LH	11	6.35	2.38	2.8	0.4																																★
	TCGX110208-LH	11	6.35	2.38	2.8	0.8																																★
	TCGX16T302-LH	16.5	9.525	3.97	4.4	0.2																															○	
	TCGX16T304-LH	16.5	9.525	3.97	4.4	0.4																																★
TCGX16T308-LH	16.5	9.525	3.97	4.4	0.8																																★	
All round 	TCMT220408	22	12.7	4.76	5.5	0.8	○	●																				○								○		
Without chipbreaker 	TCMW110204	11	6.35	2.38	2.8	0.4																														● ○		
	TCMW16T304	16.5	9.525	3.97	4.4	0.4	○																													○		
	TCMW16T308	16.5	9.525	3.97	4.4	0.8										○												○ ○										
	TCMW16T312	16.5	9.525	3.97	4.4	1.2	○									○																						
	TCMW220408	22	12.7	4.76	5.5	0.8	○																						○									

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

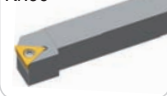
Applicable tool

STAGR/L
Kr:90°



Page A198

STFCR/L
Kr:90°



A198

STGCR/L
Kr:91°



A199

STECR/L
Kr:60°



A200

STFCR/L
Kr:90°

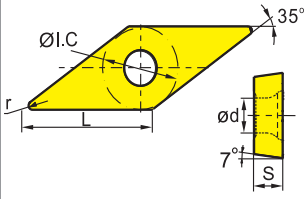


A223



Cemented carbide and cermet inserts

VC (Positive inserts)



😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Workpiece material	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel							😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron																										
N Non-ferrous metal																										
S Heat resistant alloy, Ti alloy							😊	😊					😊													

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																				Cermet Coated cermet	Cermet	Cemented carbide									
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102				YBD152	YBD252	YNG151	YNG151C	YD101	YD201			
For extra finishing	USF VCGT080201R-USF	8	4.76	2.38	2.3	0.1																																
	USF VCGT080202R-USF	8	4.76	2.38	2.3	0.2										● ○																						
	USF VCGT110301R-USF	11	6.35	3.18	2.8	0.1																																
	USF VCGT110302R-USF	11	6.35	3.18	2.8	0.2																																
For extra finishing	USF VCGT080201L-USF	8	4.76	2.38	2.3	0.1										○ ○																						
	USF VCGT080202L-USF	8	4.76	2.38	2.3	0.2										○ ○																						
	USF VCGT110301L-USF	11	6.35	3.18	2.8	0.1											○ ○																					
	USF VCGT110302L-USF	11	6.35	3.18	2.8	0.2											● ○																					
For extra finishing	SF VCGT110302-SF	11	6.35	3.18	2.8	0.2																												○	★			
	SF VCGT110304-SF	11	6.35	3.18	2.8	0.4																												○	★			
For finishing	HF VCGT110304-HF	11	6.35	3.18	2.8	0.4											●																					
For finishing	NF VCGT160408-NF	16.5	9.525	4.76	4.4	0.8																																
For finishing	NGF VCGT160408-NGF	16.5	9.525	4.76	4.4	0.8																																

★Recommended grade (always stock available) ●Available grade (always stock available) ○Make-to-order

Applicable tool

SVQCR/L
Kr:107°30'



Page A224

SVUCR/L
Kr:93°



A225

SVVCN
Kr:72°30'



A192

SVJCR/L
Kr:93°



A193

Insert code key

A50-A51

Grade selection reference

A19/A36-A48

Chipbreaker selection reference

A22-A35

Recommended cutting parameters

A241-A244

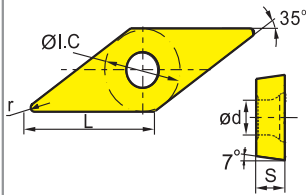
General turning
Cemented carbide and cermet inserts



General Turning Inserts

Cemented carbide and cermet inserts

VC □ □ (Positive inserts)



😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Workpiece material	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel								😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron																										
N Non-ferrous metal																										
S Heat resistant alloy, Ti alloy	😊	😊						😊																		

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																		Cermet Coated cermet	Cemented carbide									
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103			YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201	
LC For Al machining	VCGX110301-LC	11	6.35	3.18	2.8	0.1																													★
	VCGX110302-LC	11	6.35	3.18	2.8	0.2																													★
	VCGX110304-LC	11	6.35	3.18	2.8	0.4																													★
	VCGX110308-LC	11	6.35	3.18	2.8	0.8																													★
	VCGX160404-LC	16.6	9.525	4.76	4.4	0.4																													★
	VCGX160408-LC	16.6	9.525	4.76	4.4	0.8																													★
	VCGX160412-LC	16.6	9.525	4.76	4.4	1.2																													★
	VCGX220530-LC	22	12.7	5.56	5.5	3.0																													★
LH For Al machining	VCGX110202-LH	11	6.35	2.38	2.8	0.2																												○	
	VCGX110204-LH	11	6.35	2.38	2.8	0.4																													★
	VCGX110301-LH	11	6.35	3.18	2.8	0.1																												★ ●	
	VCGX110302-LH	11	6.35	3.18	2.8	0.2																												★ ●	
	VCGX110304-LH	11	6.35	3.18	2.8	0.4																												★ ●	
	VCGX110308-LH	11	6.35	3.18	2.8	0.8																												○	
	VCGX160402-LH	16.6	9.525	4.76	4.4	0.2																													★
	VCGX160404-LH	16.6	9.525	4.76	4.4	0.4																													★ ○
	VCGX160408-LH	16.6	9.525	4.76	4.4	0.8																													★ ○
	VCGX160412-LH	16.6	9.525	4.76	4.4	1.2																													★ ●
	VCGX220530-LH	22	12.7	5.56	5.5	3.0																													★ ●

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool



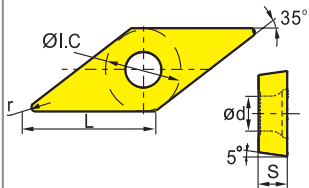
Page A224 A225 A192 A193



General Turning Inserts

Cemented carbide and cermet inserts

VB (Positive inserts)



😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Workpiece material	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel									😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron																										
N Non-ferrous metal																										
S Heat resistant alloy, Ti alloy	😊	😊					😊																			

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																	Cermet Coated cermet	Cermet	Cemented carbide															
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253				YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C	YD101	YD201						
SF 	VBGT110302-SF	11	6.35	3.18	2.8	0.2																																			
	VBGT110304-SF	11	6.35	3.18	2.8	0.4																																			
For extra finishing																																									
EF 	VBMT110302-EF	11	6.35	3.18	2.8	0.2																																			
	VBMT110304-EF	11	6.35	3.18	2.8	0.4																																			
	VBMT110308-EF	11	6.35	3.18	2.8	0.8																																			
	VBMT160404-EF	16.5	9.525	4.76	4.4	0.4																																			
	VBMT160408-EF	16.5	9.525	4.76	4.4	0.8																																			
For finishing																																									
HF 	VBMT110202-HF	11	6.35	2.38	2.8	0.2																																			
	VBMT110204-HF	11	6.35	2.38	2.8	0.4																																			
	VBMT110208-HF	11	6.35	2.38	2.8	0.8																																			
For finishing																																									
NF 	VBET160404-NF	16.5	9.525	4.76	4.4	0.4																																			
	VBET160408-NF	16.5	9.525	4.76	4.4	0.8																																			
For finishing																																									
NGF 	VBET160404-NGF	16.5	9.525	4.76	4.4	0.4																																			
	VBET160408-NGF	16.5	9.525	4.76	4.4	0.8																																			
	VBET160412-NGF	16.5	9.525	4.76	4.4	1.2																																			
For finishing																																									

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool

SVJBR/L
Kr:93°



Page A189

SVABR/L
Kr:90°



A190

SVVBN
Kr:72°30'



A191

SVQBR/L
Kr:107°30'



A226

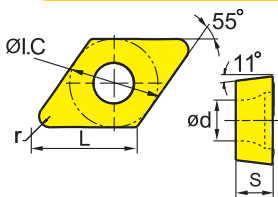
SVUBR/L
Kr:93°



A227

Cemented carbide and cermet inserts

DP (Positive inserts)



Good working condition Normal working condition Bad working condition

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Non-ferrous metal	S Heat resistant alloy, Ti alloy
P Steel					
M Stainless steel					
K Cast iron					
N Non-ferrous metal					
S Heat resistant alloy, Ti alloy					

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																	Cermet Coated cermet	Cemented carbide							
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253			YBS103	YBD052	YBD102	YBD152	YBD252	YNG151	YNG151C
 For extra finishing	DPGT0702005R-USF	7.8	6.35	2.38	2.8	0.05									○	○																
	DPGT070201R-USF	7.8	6.35	2.38	2.8	0.1									○	○																
	DPGT11T301R-USF	11.6	9.525	3.97	4.4	0.1									●	○																
 For extra finishing	DPGT0702005L-USF	7.8	6.35	2.38	2.8	0.05									○	○																
	DPGT070201L-USF	7.8	6.35	2.38	2.8	0.1									○	○																
	DPGT11T301L-USF	11.6	9.525	3.97	4.4	0.1									○	○																
 For extra finishing	DPGT070202-SF	7.8	6.35	2.38	2.8	0.2																						○	○			
	DPGT070204-SF	7.8	6.35	2.38	2.8	0.4																						○				
	DPGT070208-SF	7.8	6.35	2.38	2.8	0.8																						○				
	DPGT11T304-SF	11.6	9.525	3.97	4.4	0.4																						○				
	DPGT11T308-SF	11.6	9.525	3.97	4.4	0.8																							○			

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

General turning

Cemented carbide and cermet inserts

Applicable tool

SDQPR/L
Kr:107°30'



Page A229

SDUPR/L
Kr:93°



A230

Insert code key

A50-A51

Grade selection reference

A19/A36-A48

Chipbreaker selection reference

A22-A35

Recommended cutting parameters

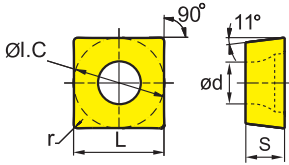
A241-A244

Cemented carbide and cermet inserts

General turning

Cemented carbide and cermet inserts

SP (Positive inserts)

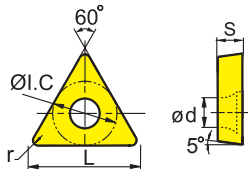


Compatibility matrix for SP inserts showing working conditions (Good, Normal, Bad) for materials: Steel (P), Stainless steel (M), Cast iron (K), Non-ferrous metal (N), Heat resistant alloy, Ti alloy (S).

Main table for SP inserts listing types (SPMW09T304, SPMW09T308, SPMW120408), dimensions (L, ØI.C, S, ød, r), and coated cemented carbide grades (YBC151-YBG302, YBM151-YBM253, YBS103, YBD052, YBD102, YBD152, YBD252).

★Recommended grade (always stock available) ●Available grade (always stock available) ○Make-to-order

TB (Positive inserts)



Compatibility matrix for TB inserts showing working conditions (Good, Normal, Bad) for materials: Steel (P), Stainless steel (M), Cast iron (K), Non-ferrous metal (N), Heat resistant alloy, Ti alloy (S).

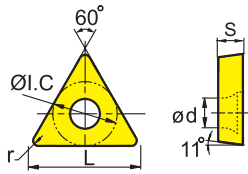
Main table for TB inserts listing types (TBGH060102L, TBGH060104L), dimensions (L, ØI.C, S, ød, r), and coated cemented carbide grades (YBC151-YBG302, YBM151-YBM253, YBS103, YBD052, YBD102, YBD152, YBD252).

★Recommended grade (always stock available) ●Available grade (always stock available) ○Make-to-order



Cemented carbide and cermet inserts

TP (Positive inserts)



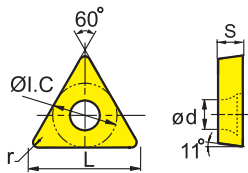
😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Workpiece material	Coated cemented carbide																						
	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252	
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel							😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron																				😊	😊	😊	😊
N Non-ferrous metal																							
S Heat resistant alloy, Ti alloy							😊	😊											😊				😊

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																Cermet	Coated cermet	Cemented carbide				
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251				YBM253	YBS103	YBD052	YBD102
For extra finishing	TPGH090202L	9.6	5.56	2.38	2.8	0.2																							○
	TPGH090204L	9.6	5.56	2.38	2.8	0.4																							●
	TPGH110302L	11	6.35	3.18	3.18	0.2																							●
	TPGH110304L	11	6.35	3.18	3.18	0.4																							●

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

TP (Positive inserts)



😊 Good working condition 😐 Normal working condition 😞 Bad working condition

Workpiece material	Coated cemented carbide																											
	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YBD252						
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel							😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron																					😊	😊	😊	😊	😊	😊	😊	😊
N Non-ferrous metal																												
S Heat resistant alloy, Ti alloy							😊	😊												😊								😊

Inserts shape	Type	Dimensions(mm)					Coated cemented carbide																Cermet	Coated cermet	Cemented carbide				
		L	ØI.C	S	ød	r	YBC151	YBC152	YBC251	YBC252	YBC351	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM151	YBM153	YBM215	YBM251				YBM253	YBS103	YBD052	YBD102
For extra finishing	TPGT090202-SF	9.6	5.56	2.38	2.5	0.2																							○
	TPGT090204-SF	9.6	5.56	2.38	2.5	0.4																							○
	TPGT090208-SF	9.6	5.56	2.38	2.5	0.8																							○
	TPGT110302-SF	11	6.35	3.18	2.8	0.2																							○
	TPGT110304-SF	11	6.35	3.18	2.8	0.4																							○
	TPGT110308-SF	11	6.35	3.18	2.8	0.8																							○

★ Recommended grade (always stock available) ● Available grade (always stock available) ○ Make-to-order

Applicable tool



Page A231

Insert code key

A50-A51

Grade selection reference

A19/A36-A48

Chipbreaker selection reference

A22-A35

Recommended cutting parameters

A241-A244

