

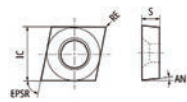
Steel	○	●	●	●	●	●	●	●	●
Stainless Steel	●	○	○	○	●	○	●	●	●
Cast Iron								●	
Non-Ferrous Material					○		○		●
Heat Resistant Alloy		●	○	○					
Hardened Material		○	○	○					
Others (non-metallic)									●

Shape	Item Number (ISO)	CECC	EPSR °	IC mm	S mm	AN °	RE mm	BS mm	Carbide										Uncoated KM1
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	CP7	
	CNKG120404FNUL	Up-sharp edge	80	12.7	4.76	-	0.4	-		●		●	●						
	CNKG120408FNUL	Up-sharp edge	80	12.7	4.76	-	0.8	-		●		●	●						
	CNKG120404FNZP	Up-sharp edge	80	12.7	4.76	-	0.4	-		●		●			●				
	CNKG120408FNZP	Up-sharp edge	80	12.7	4.76	-	0.8	-		●		●			●				
	CNMG120408T00525Z5	T00525	80	12.7	4.76	-	0.8	-		●		●							
	CNMG120408G	-	80	12.7	4.76	-	0.8	-									●		
	CNMG120412G	-	80	12.7	4.76	-	1.2	-									●		
	CNMG120416G	-	80	12.7	4.76	-	1.6	-									●		

Turning Insert

D

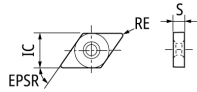
CP..



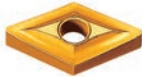
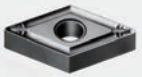
Steel	○	●	●	●	●	●	●	●	●
Stainless Steel	●	○	○	○	●	○	●	●	●
Cast Iron								●	
Non-Ferrous Material					○		○		●
Heat Resistant Alloy		●	○	○					
Hardened Material		○	○	○					
Others (non-metallic)									●

Shape	Item Number (ISO)	CECC	EPSR °	IC mm	S mm	AN °	RE mm	BS mm	Carbide										Uncoated KM1
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	CP7	
	CPGH060202FNAM5	Up-sharp edge	80	6.35	2.38	11	0.2	-					●		●				
	CPGH080202FNAM5	Up-sharp edge	80	6.35	2.38	11	0.2	-					●		●				
	CPGM090302FNAM5	Up-sharp edge	80	9.525	3.18	11	0.2	-					●		●				
	CPGM090304FNAM5	Up-sharp edge	80	9.525	3.18	11	0.4	-					●		●				
	CPGM090308FNAM5	Up-sharp edge	80	9.525	3.18	11	0.8	-					●		●				
	CPGH040101FRF1	Up-sharp edge	80	4.76	1.59	11	0.1	-	●			●	●						
	CPGH040102FRF1	Up-sharp edge	80	4.76	1.59	11	0.2	-	●			●	●						
	CPGH040104FRF1	Up-sharp edge	80	4.76	1.59	11	0.4	-	●			●	●						
	CPGH060202FRF1	Up-sharp edge	80	6.35	2.38	11	0.2	-	●			●	●						
	CPGH060204FRF1	Up-sharp edge	80	6.35	2.38	11	0.4	-	●			●	●						
	CPGH040101LS	Up-sharp edge	80	4.76	1.59	11	0.1	-				●	●						
	CPGH040102LS	Up-sharp edge	80	4.76	1.59	11	0.2	-				●	●						
	CPGH040104LS	Up-sharp edge	80	4.76	1.59	11	0.4	-				●	●						
	CPGH060202LS	Up-sharp edge	80	6.35	2.38	11	0.2	-				●	●						
	CPGH060204LS	Up-sharp edge	80	6.35	2.38	11	0.4	-				●	●						
	CPGH060202FLA	Up-sharp edge	80	6.35	2.38	11	0.2	-					●		●				
	CPGH060204FLA	Up-sharp edge	80	6.35	2.38	11	0.4	-					●		●				
	CPGH080202FLA	Up-sharp edge	80	6.35	2.38	11	0.2	-					●		●				
	CPGH080204FLA	Up-sharp edge	80	6.35	2.38	11	0.4	-					●		●				
	CPGH040102FLA1	Up-sharp edge	80	4.76	1.59	11	0.2	-					●		●				
	CPGH040104FLA1	Up-sharp edge	80	4.76	1.59	11	0.4	-					●		●				
													●		●				

DN.G



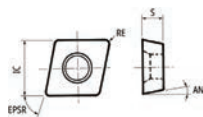
Steel	○	●	●	●	●	●	●	●	●
Stainless Steel	●	○	○	○	●	○	●	●	●
Cast Iron								●	
Non-Ferrous Material					○		○		●
Heat Resistant Alloy		●	○	○					
Hardened Material		○	○	○					
Others (non-metallic)									●

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	BS	Carbide										Uncoated
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	KM1	
(ISO)	°	mm	mm	°	mm	mm													
	DNGG150404FNZP	Up-sharp edge	55	12.7	4.76	-	0.4	-		●		●				●			
	DNGG150408FNZP	Up-sharp edge	55	12.7	4.76	-	0.8	-		●		●				●			
	DNMG150408T00525Z5	T00525	55	12.7	4.76	-	0.8	-		●		●							
	DNMG150404TNG	T01025	55	12.7	4.76	-	0.4	-				●							
	DNMG150404G	-	55	12.7	4.76	-	0.4	-									●		
	DNMG150408G	-	55	12.7	4.76	-	0.8	-									●		
	DNMG150412G	-	55	12.7	4.76	-	1.2	-									●		

Turning Insert

D

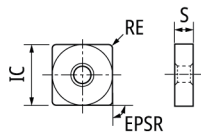
ERGH



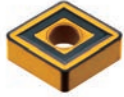
Steel	○	●	●	●	●	●	●	●	●
Stainless Steel	●	○	○	○	●	○	●	●	●
Cast Iron								●	
Non-Ferrous Material							○	○	●
Heat Resistant Alloy		●	○	○					
Hardened Material		○	○	○					
Others (non-metallic)									●

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	BS	Carbide										Uncoated
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	KM1	
(ISO)	°	mm	mm	°	mm	mm													
	ERGHT30101FRF1	Up-sharp edge	75	3.97	1.59	9	0.1	-	●			●	●						
	ERGHT30102FRF1	Up-sharp edge	75	3.97	1.59	9	0.2	-	●			●	●						
	ERGHT30104FRF1	Up-sharp edge	75	3.97	1.59	9	0.4	-	●			●	●						
	ERGHT30102FRA2	Up-sharp edge	75	3.97	1.59	9	0.2	-					●			●			
	ERGHT30102FLA2	Up-sharp edge	75	3.97	1.59	9	0.2	-					●			●			
	ERGHT30104FRA2	Up-sharp edge	75	3.97	1.59	9	0.4	-					●						
	ERGHT30104FLA2	Up-sharp edge	75	3.97	1.59	9	0.4	-					●			●			

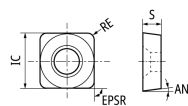
SNMG



Steel	○	●	●	●	●	●	●	●	●
Stainless Steel	●	○	○	○	●	○	●	●	●
Cast Iron								●	
Non-Ferrous Material					○		○		●
Heat Resistant Alloy		●	○	○					
Hardened Material		○	○	○					
Others (non-metallic)									●

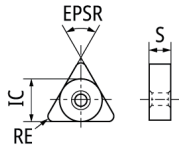
Shape	Item Number (ISO)	CECC	EPSR °	IC mm	S mm	AN °	RE mm	BS mm	Carbide										
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	CVD	CVD	Uncoated
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	KM1	Uncoated
	SNMG120408T00525Z5	T00525	90	12.7	4.76	-	0.8	-		●		●							
	SNMG120408G	-	90	12.7	4.76	-	0.8	-									●		
	SNMG120412G	-	90	12.7	4.76	-	1.2	-									●		
	SNMG120416G	-	90	12.7	4.76	-	1.6	-									●		

SDEW



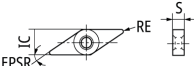
Steel	○	●	●	●	●	●	●	●	●
Stainless Steel	●	○	○	○	●	○	●	●	●
Cast Iron								●	
Non-Ferrous Material					○		○		●
Heat Resistant Alloy		●	○	○					
Hardened Material		○	○	○					
Others (non-metallic)									●

Shape	Item Number (ISO)	CECC	EPSR °	IC mm	S mm	AN °	RE mm	BS mm	Carbide										
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	CVD	CVD	Uncoated
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	KM1	Uncoated
	SDEW060202FN	Up-sharp edge	90	6.35	2.38	15	0.2	-								●			

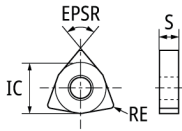


Steel	○	●	●	●	●	●	●	●	●
Stainless Steel	●	○	○	○	●	○	●	●	●
Cast Iron								●	
Non-Ferrous Material					○		○		●
Heat Resistant Alloy		●	○	○					
Hardened Material		○	○	○					
Others (non-metallic)									●

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	BS	Carbide											Uncoated
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	KM1		
(ISO)	°	mm	mm	°	mm	mm														
	TNGG160401MFNUL	Up-sharp edge	60	9.525	4.76	-	0.1	-	●	●		●	●							
	TNGG160402MFNUL	Up-sharp edge	60	9.525	4.76	-	0.2	-	●	●		●	●							
	TNGG160404MFNUL	Up-sharp edge	60	9.525	4.76	-	0.4	-	●	●		●	●							
	TNGG160408MFNUL	Up-sharp edge	60	9.525	4.76	-	0.8	-	●	●		●	●							
	TNGG160402FNZP	Up-sharp edge	60	9.525	4.76	-	0.2	-		●		●	●	●	●					
	TNGG160404FNZP	Up-sharp edge	60	9.525	4.76	-	0.4	-		●		●	●	●	●					
	TNGG160408FNZP	Up-sharp edge	60	9.525	4.76	-	0.8	-		●		●		●	●					
	TNMG160408G	-	60	9.525	4.76	-	0.8	-									●			
	TNMG160412G	-	60	9.525	4.76	-	1.2	-									●			
	TNMG160404T00525Z5	T00525	60	9.525	4.76	-	0.4	-		●		●								
	TNMG160408T00525Z5	T00525	60	9.525	4.76	-	0.8	-		●		●								
	TNEG160402FLD1	Up-sharp edge	60	9.525	4.76	-	0.2	-					●							
	TNEG160402FRD1	Up-sharp edge	60	9.525	4.76	-	0.2	-					●							
	TNEG160404FLD1	Up-sharp edge	60	9.525	4.76	-	0.4	-					●							
	TNEG160404FRD1	Up-sharp edge	60	9.525	4.76	-	0.4	-					●							
	TNEG160408FLD1	Up-sharp edge	60	9.525	4.76	-	0.8	-					●							
	TNEG160408FRD1	Up-sharp edge	60	9.525	4.76	-	0.8	-					●							
	TNGG160401FRU2	Up-sharp edge	60	9.525	4.76	-	0.1	-						●	●					
	TNGG160402FLU2	Up-sharp edge	60	9.525	4.76	-	0.2	-		●					●					
	TNGG160402FRU2	Up-sharp edge	60	9.525	4.76	-	0.2	-		●					●					
	TNGG160404FLU2	Up-sharp edge	60	9.525	4.76	-	0.4	-		●					●					
	TNGG160404FRU2	Up-sharp edge	60	9.525	4.76	-	0.4	-		●					●					
	TNGG160408FLU2	Up-sharp edge	60	9.525	4.76	-	0.8	-							●					
	TNGG160408FRU2	Up-sharp edge	60	9.525	4.76	-	0.8	-							●					
	TNGG160402FRC	Up-sharp edge	60	9.525	4.76	-	0.2	-								●				
	TNGG160401FRDA	Up-sharp edge	60	9.525	4.76	-	0.1	-							●	●				

			Steel Stainless Steel Cast Iron Non-Ferrous Material Heat Resistant Alloy Hardened Material Others (non-metallic)																		
			Carbide ST4 DM4 DT4 QM3 TM4 VM1 ZM3 CP1 CP7 KM1																		
			Shape	Item Number	CECC	EPSR	IC	S	AN	RE	BS	PVD	PVD	PVD	PVD	PVD	PVD	PVD	CVD	CVD	Uncoated
				(ISO)		°	mm	mm	°	mm	mm	ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	KM1
				VNGG160402FNZP	Up-sharp edge	35	9.525	4.76	-	0.2	-										
				VNGG160404FNZP	Up-sharp edge	35	9.525	4.76	-	0.4	-										
				VNGG160408FNZP	Up-sharp edge	35	9.525	4.76	-	0.8	-										
	VNMG160404G	-	35	9.525	4.76	-	0.4	-													
	VNMG160408G	-	35	9.525	4.76	-	0.8	-													
	VNMG160412G	-	35	9.525	4.76	-	1.2	-													
	VNMG160404T00525AM1	T00525	35	9.525	4.76	-	0.4	-													
	VNMG160408T00525AM1	T00525	35	9.525	4.76	-	0.8	-													

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Steel	○	●	●	●	●	●	●	●	●
Stainless Steel	●	○	○	○	●	○	●	●	●
Cast Iron								●	
Non-Ferrous Material					○		○		●
Heat Resistant Alloy		●	○	○					
Hardened Material		○	○	○					
Others (non-metallic)									●

Shape	Item Number	CECC	EPSR	IC	S	AN	RE	BS	Carbide											Uncoated
									PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	PVD	CVD	CVD	
									ST4	DM4	DT4	QM3	TM4	VM1	ZM3	CP1	CP7	KM1		
(ISO)	°	mm	mm	°	mm	mm														
	WNGG080404FNUL	Up-sharp edge	80	12.7	4.76	-	0.4	-		●		●	●							
	WNGG080408FNUL	Up-sharp edge	80	12.7	4.76	-	0.8	-		●		●	●							
	WNGG080404FNZP	Up-sharp edge	80	12.7	4.76	-	0.4	-		●		●			●					
	WNGG080408FNZP	Up-sharp edge	80	12.7	4.76	-	0.8	-		●		●			●					
	WNMG080408T00525Z5	T00525	80	12.7	4.76	-	0.8	-		●		●								
	WNMG080412T00525Z5	T00525	80	12.7	4.76	-	1.2	-		●		●								
	WNMG080408G	-	80	12.7	4.76	-	0.8	-										●		
	WNMG080412G	-	80	12.7	4.76	-	1.2	-										●		

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Turning Insert