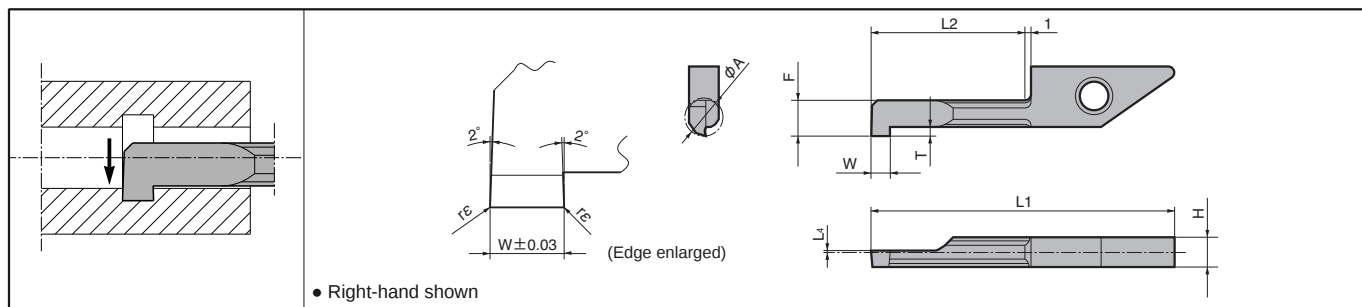


System Tip-Bar for Micro Internal Grooving

VNG



Classification of usage	P	Carbon Steel / Alloy Steel				●			
	M	Stainless Steel				○			
	K	Cast Iron					●		
	N	Non-ferrous Metals							
	S	Titanium Alloy							
	H	Hard materials (under 40HRC)				●			
		Hard materials (over 40HRC)							

● : Continuous / 1st Choice
○ : Continuous / 2nd Choice

Insert Dimensions

Description		Min. Cutting Dia.	Dimension (mm)										Cermet		PVD Coated Carbide		Carbide	PCD		Ref. Page for		
			øA	W	rε	øD	H	L1	L2	L3	L4	F	T	TC60	PR630	PR915	PR930	KW10	KPD001		KPD010	
VNGR	0410-11	4	1.0	0.05	-	3.9	30.8	11	-	0.1	3.5	0.8				●	●			F12 F13 F14		
	0420-11		2.0	0.10										●	●		●	●				
	0510-11	5	1.0	0.05							4.4	1.0	●	●		●	●					
	0520-11		2.0	0.10									●	●		●	●					
	0610-20	6	1.0	0.05			39.8	20		0.3	5.2	1.8	●	●		●	●					
	0620-20		2.0	0.10							●	●		●	●							
	0710-20	7	1.0	0.05							6.2	2.0	●	●		●	●					
0720-20	2.0		0.10	●	●								●	●								
VNGR	0410-11NB	4	1.0	0.05	-	3.9	30.8	11	-	0.1	3.5	0.8							○		○	
	0420-11NB		2.0	0.10														○	○			
	0510-11NB	5	1.0	0.05							4.4	1.0							○		○	
	0520-11NB		2.0	0.10															○		○	
	0610-20NB	6	1.0	0.05			39.8	20		0.3	5.2	1.8							○		○	
	0620-20NB		2.0	0.10														○	○			
	0710-20NB	7	1.0	0.05							6.2	2.0								○	○	
0720-20NB	2.0		0.10														○	○				

• Dimension T shows available grooving depth.

• Dimension L4 indicates the cutting edge is above the Tool's Center Position.

Recommended Cutting Conditions

Workpiece Material	Recommended Insert Grade (Cutting Speed: m/min)				VNG04 VNG05	VNG06 VNG07	Remarks
	Cermet		PVD Coated Carbide				
	TC60	PR630	PR930	KW10	f (mm/rev)		
Carbon Steel / Alloy Steel	☆ 60 ~ 120	☆ 30 ~ 100	★ 30 ~ 100		~ 0.03	~ 0.05	Coolant
Stainless Steel	☆ 50 ~ 100	☆ 30 ~ 80	★ 30 ~ 80		~ 0.02	~ 0.03	
Non-ferrous Metals				★ ~ 300	~ 0.05	~ 0.08	

★ : 1st Recommendation ☆ : 2nd Recommendation

● : Std. Item ○ : Check Availability

R : Std. Item (R-hand Only) L : Std. Item (L-hand Only)

kyocera@kyocera-tools.ru
www.kyocera-tools.ruSystem Tip-Bars (VNG) are
sold in 5 piece boxes.CBN & PCD Inserts are sold
in 1 piece boxes.