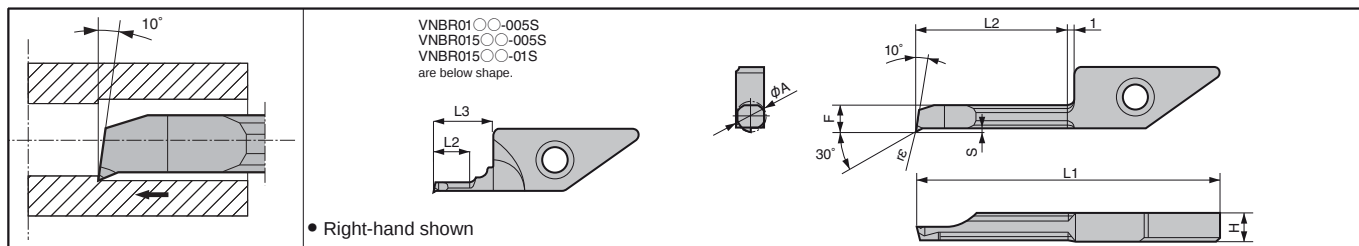
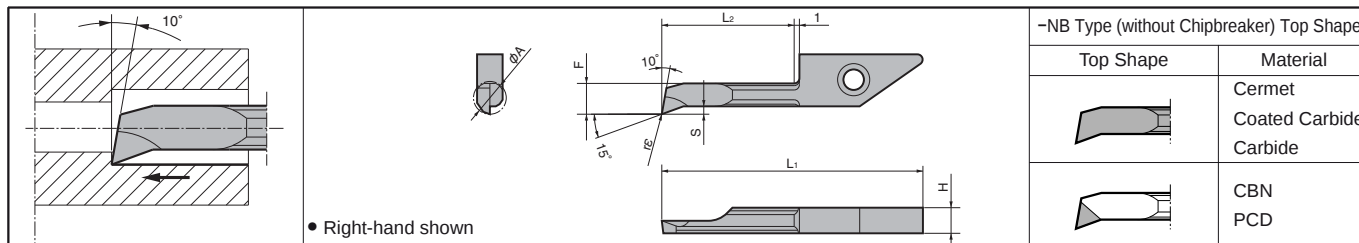


System Tip-Bar

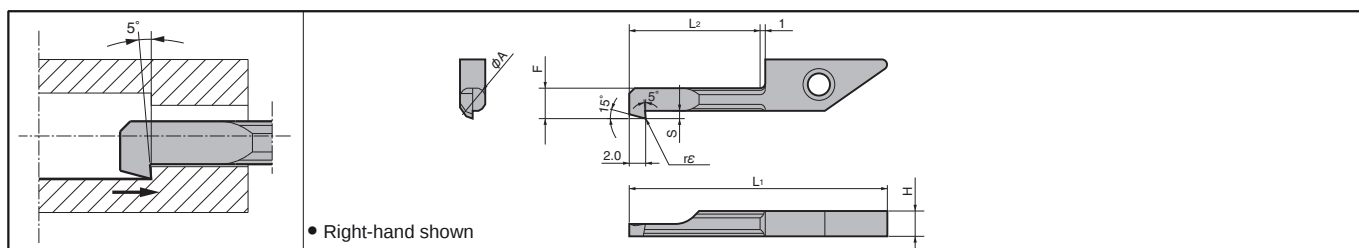
VNB-S (Boring) [Corner- R (rε) Tolerance: + 0/-0.025mm]



VNB (Boring)



VNBT (Back Boring)



Insert Dimensions

Description	Min. Bore Dia.	Dimension (mm)								Insert Grade					
		øA	H	L1	L2	L3	F	S	rε +0/-0.025	Cermet	PVD Coated Carbide		Carbide	CBN	PCD
										TC60	PR915	PR930	KW10	KBN510	KPD001
VNBR 0103-005S 0105-005S 01503-005S 01505-005S 0206-005S 025075-005S 0311-005S 03515-005S 0411-005S 0420-005S	1.0	3.9	26.5	3	7	0.85	0.2	0.05	0.05			●			
	1.5			5								●			
	2.0			3								●			
	2.5			5								●			
	3.0			6								●			
	3.5			28.1								●			
	4.0			30.8								●			
	4.0			34.8								●			
	4.0			30.8								●			
VNBR 01503-01S 01505-01S 0206-01S 025075-01S 0311-01S 03515-01S 0411-01S 0420-01S	1.5	3.9	26.5	3	7	1.3	0.2	0.1	0.1			●			
	2.0			5								●			
	2.5			6								●			
	3.0			28.1								●			
	3.5			30.8								●			
	4.0			34.8								●			
	4.0			30.8								●			
	4.0			39.8								●			
	4.0			30.8								●			
VNBR 0411-02S 0420-02S	4.0	3.9	30.8	11	-	3.5	0.5	0.2	0.2			●			
	4.0			20								●			

Recommended Cutting Conditions (In the case of VNB-S)

Workpiece Material	Recommended Insert Grade (Cutting Speed: m/min)							VNB01-S Type VNB015-S Type		VNB02-S Type } VNB04-S Type		Remarks
	Cermet	PVD Coated Carbide		Carbide	CBN	PCD						
	TC60	PR915	PR930	KW10	KBN510	KPD001	KPD010	Cut: ap (mm), Feed: f (mm/rev)				
								ap		f		
								ap		f		
Carbon Steel / Alloy Steel			★ 30~100					~0.1	~0.01	~0.2	~0.03	Coolant
Stainless Steel			★ 30~80					~0.1	~0.01	~0.2	~0.02	

★ : 1st Recommendation

● : Std. Item ○ : Check Availability R : Std. Item (R-hand Only) L : Std. Item (L-hand Only)