

● Insert Dimensions

Description	Min. Bore Dia.	Dimension (mm)							Insert Grade									
		øA	H	L1	L2	F	S	rε	Cermet		PVD Coated Carbide		Carbide		CBN		PCD	
									TC60	PR915	PR930	KW10	KBN510	KPD001	KPD010			
VNBR 0206-003 0311-003 0411-003 0420-003 0511-003 0520-003 0620-003 0630-003 0720-003 0730-003	2	3.9	26.5	6	1.8	0.25	0.03											
	3		30.8	11	2.6	0.4												
	4		30.8	11	3.5	0.5												
			39.8	20														
	5		30.8	11	4.5	0.7												
			39.8	20														
	6		39.8	20	5.3	1.0												
			49.8	30														
	7		39.8	20	6.2	1.0												
49.8		30																
VNBR 0206-02 0311-02 0411-02 0420-02 0511-02 0520-02 0620-02 0630-02 0720-02 0730-02	2	3.9	26.5	6	1.8	0.25	0.2											
	3		30.8	11	2.6	0.4												
	4		30.8	11	3.5	0.5												
			39.8	20														
	5		30.8	11	4.5	0.7												
			39.8	20														
	6		39.8	20	5.3	1.0												
			49.8	30														
	7		39.8	20	6.2	1.0												
49.8		30																
VNBR 0206-01 0311-01 0411-01 0420-01 0511-01 0520-01 0620-01 0630-01 0720-01 0730-01	2	3.9	26.5	6	1.8	0.25	0.1											
	3		30.8	11	2.6	0.4												
	4		30.8	11	3.5	0.5												
			39.8	20														
	5		30.8	11	4.5	0.7												
			39.8	20														
	6		49.8	30	5.3	1.0												
			39.8	20														
	7		39.8	20	6.2	1.0												
49.8		30																
VNBR 0206-003NB 0311-003NB 0411-003NB 0420-003NB 0511-003NB 0520-003NB 0620-003NB 0630-003NB 0720-003NB 0730-003NB	2	3.9	26.5	6	1.8	0.25	0.03											
	3		30.8	11	2.6	0.4												
	4		30.8	11	3.5	0.5												
			39.8	20														
	5		30.8	11	4.5	0.7												
			39.8	20														
	6		39.8	20	5.3	1.0												
			49.8	30														
	7		39.8	20	6.2	1.0												
49.8		30																
VNBR 0206-02NB 0311-02NB 0411-02NB 0420-02NB 0511-02NB 0520-02NB 0620-02NB 0630-02NB 0720-02NB 0730-02NB	2	3.9	26.5	6	1.8	0.25	0.2											
	3		30.8	11	2.6	0.4												
	4		30.8	11	3.5	0.5												
			39.8	20														
	5		30.8	11	4.5	0.7												
			39.8	20														
	6		39.8	20	5.3	1.0												
			49.8	30														
	7		39.8	20	6.2	1.0												
49.8		30																
VNBR 0411-003 0420-003	4	3.9	30.8	11	3.6	1.0	0.03											
	5		30.8	11	4.6	1.3												
			39.8	20														
VNBR 0411-01 0420-01 0511-01 0520-01	4	3.9	30.8	11	3.6	1.0	0.1											
	5		30.8	11	4.6	1.3												
			39.8	20														

◆ Recommended Cutting Conditions (In the case of VNB / VNB-NB / VNBTR)

Workpiece Material	Recommended Insert Grade (Cutting Speed: m/min)							VNB02 Type	VNB03 Type	VNB04 VNBTR04 Type	VNB05 VNB06 VNB07 VNBTR05 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		ap		f		ap		f		
Carbon Steel / Alloy Steel	☆ 60~120	☆ 50~150	★ 30~100					~0.3	~0.03	~0.4	~0.04	~0.45	~0.07	~0.5	~0.1	Coolant
Stainless Steel	☆ 50~100	☆ 50~150	★ 30~80					~0.3	~0.02	~0.4	~0.03	~0.45	~0.05	~0.5	~0.07	
Non-ferrous Metals				☆ ~100		★ ~300	☆ ~300	~0.3	~0.05	~0.4	~0.06	~0.45	~0.1	~0.5	~0.15	

★ : 1st Recommendation ☆ : 2nd Recommendation

● : Std. Item □ : Check Availability

System-Tip-Bars are sold in 5 piece boxes.

