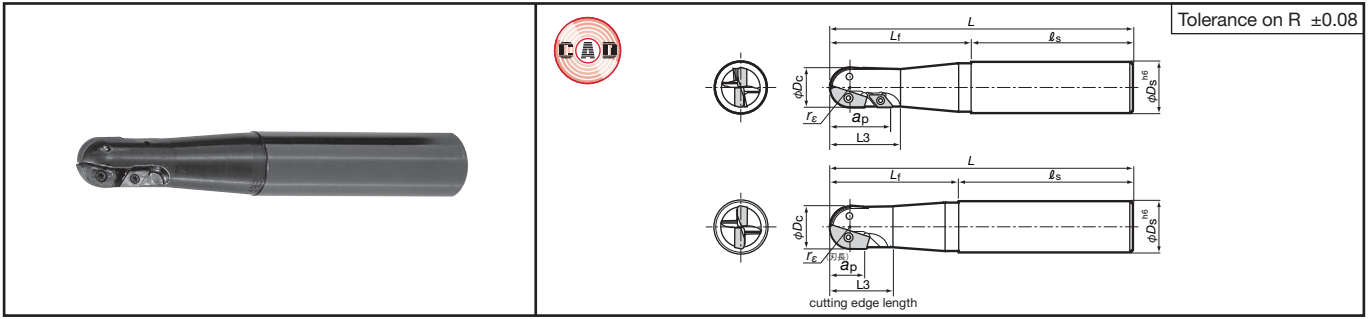


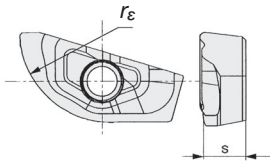
For medium to finish engraving of steel and cast iron dies



	Cat. No.	Stock	No. of inserts	Dimensions (mm)							Applicable inserts		Clamping screw		Wrench			
				ϕD_c	L	L_f	l_s	L_3	ϕD_s	a_p	r_e	For R-edge	For peripheral edge	For R-edge	For peripheral edge	For R-edge	For peripheral edge	
Standard type	EBP020SS	●	2	20	140	60	80	30	25	16	10	ZPET2004-MJ	—	CSTD-3T	—	T-10D	—	
	EBP025SS	●		25	150	70		35	32	21	12.5	ZPET2505-MJ	—	CSTB-4S	—	T-15D	—	
	EBP030SS	●		30	160	80		40	—	24	15	ZPET3006-MJ	—	CSTB-5S	—	T-20D	—	
Long edge type	EBP020MSE	●	2+2	20	150	70	100	35	25	29.5	10	ZPET2004-MJ	DCMW070204TN	CSTD-3T	CSTB-2.5S	T-10D	T-8D	
	EBP025MSE	●		25	180	80		50	32	41	12.5	ZPET2505-MJ	DCMW11T304TN	CSTB-4S	CSTB-4S	T-15D	T-15D	
	EBP030MSE	●		30	200	100		55	—	45	15	ZPET3006-MJ	DCMW11T304TN	CSTB-5S	CSTB-4S	T-20D	T-15D	
Long shank type	EBP020LSE	●	2+2	20	250	70	180	35	25	29.5	10	ZPET2004-MJ	DCMW070204TN	CSTD-3T	CSTB-2.5S	T-10D	T-8D	
	EBP025LSE	●		25	300	80		220	50	32	41	12.5	ZPET2505-MJ	DCMW11T304TN	CSTB-4S	CSTB-4S	T-15D	T-15D
	EBP030LSE	●		30	350	100		250	55	—	45	15	ZPET3006-MJ	DCMW11T304TN	CSTB-5S	CSTB-4S	T-20D	T-15D

Inserts

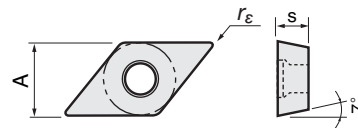
For R-edge



Cat. No.	Accuracy	Honing	Stocked grade		Dimensions (mm)	
			Coated		s	r_e
			AH120	AH330		
ZPET2004-MJ	E	With	●	●	4.5	10
ZPET2505-MJ			●	●	4.625	12.5
ZPET3006-MJ			●	●	6.75	15

"ZPET3006-MJ" : 5-inserts packing

For peripheral edge

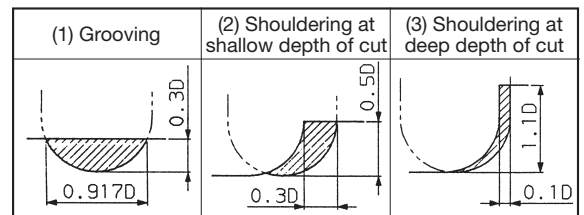


Cat. No.	Accuracy	Honing	Stocked grade		Dimensions (mm)		
			Coated		A	s	r_e
			AH120	AH330			
DCMW070204TN	M	With	●	●	6.35	2.38	0.4
DCMW11T304TN			●	●	9.525	3.97	

Standard cutting conditions

Work material	Insert grade	Machining type	Cutting speed v_c (m/min)	Table feed v_f (mm/min)		
				Tool dia.: $\phi 20$	Tool dia.: $\phi 25$	Tool dia.: $\phi 30$
Carbon steels (JIS S55C, etc.) < 300 HB	AH120	(1)	200(170~230)	760(610~910)	610(460~760)	510(360~660)
		(2)	230(200~260)	1100(900~1300)	880(680~1080)	730(530~930)
		(3)	180(150~200)	570(420~350)	460(310~610)	380(230~530)
Alloy steels (JIS SCM440, etc.) < 300 HB	AH120	(1)	180(150~210)	680(530~830)	550(400~700)	450(300~600)
		(2)	210(180~240)	1000(800~1200)	800(600~400)	670(470~870)
		(3)	160(130~180)	510(360~660)	400(250~550)	340(190~490)
Die steels (JIS SKD11, etc.) < 300 HB	AH330	(1)	150(120~180)	570(420~720)	460(310~610)	380(230~530)
		(2)	180(150~210)	860(660~1060)	690(490~890)	570(370~770)
		(3)	130(100~150)	410(260~560)	330(180~480)	280(130~430)
Cast irons (JIS FC250, etc.)	AH120	(1)	200(170~230)	950(800~1100)	760(610~910)	640(490~790)
		(2)	230(200~260)	1200(900~1400)	1000(700~1200)	830(530~1030)
		(3)	180(150~200)	570(420~720)	460(310~610)	380(230~530)
Hardened steels Prehardened steels < 45 HRC	AH120	(1)	80(60~100)	250(150~350)	200(100~300)	160(100~260)
		(2)	100(70~130)	310(160~460)	250(100~400)	210(100~360)
		(3)	60(40~80)	190(140~240)	150(100~200)	130(80~180)

Machining types



Notes:

- Cutting speeds shown in the left table are of the most outer diameter of the tool.
- When the depth of cut is the upper limit shown in the above figures, set the cutting conditions to the lowest values shown left.
- When using long edge types (MSE), set the cutting speed and feed to 60 to 80 % of values shown in the table.
- When using long shank types (LSE), set the cutting speed and feed to 20 to 50 % of values shown in the table, bearing in mind the overhang length.

● : Stocked in Japan.