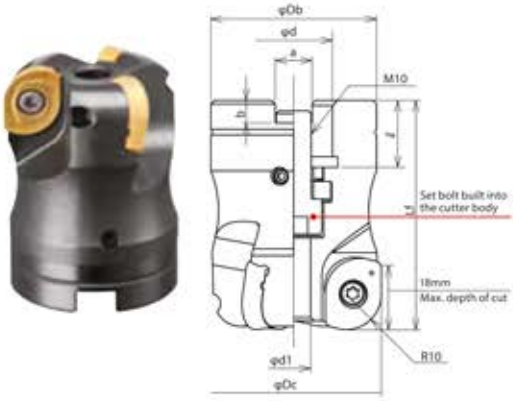
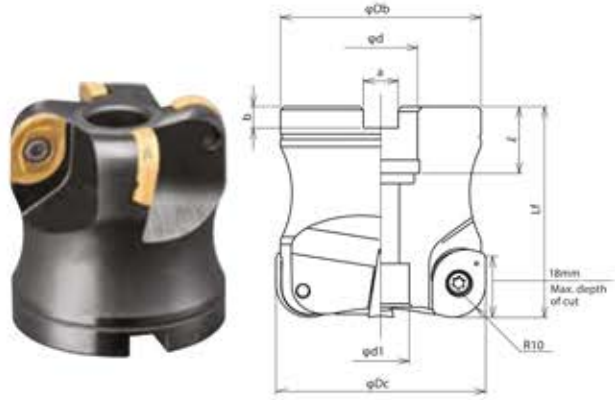
Wild Radius — WDR TYPE

● Fig 1. Without coolant hole



● Fig 2. Without coolant hole



■ BODY/FACE MILL TYPE

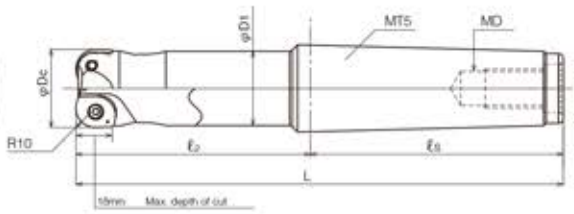
Type	Cat. No.	Stock	No. of flutes	Dimensions (mm) φDc	Lf	φDb	φd	φd1	a	b	ℓ	Set Bolt	Weight (kg)	Fig.
Metric Bore	**WDR-3050R-22**	●	3	**50**	65	47	22	9.6	10.4	6.3	19	M10x1.5x25*	0.7	1
	WDR-4063R-22	●	4	**63**	63	60	22	17	10.4	6.3	20	M10x1.5x50*	1.1	2
	WDR-4063R-27	●	4	**63**	63	60	27	20	12.4	7	22	M12x1.75x40*	1.1	2
	WDR-5080R-27	□	5	**80**	63	76	27	20	12.4	7	22	M12x1.75x40*	1.7	2
	WDR-6100R-32	□	6	**100**	63	96	32	26	14.4	8	32	M16	2.8	2
	WDR-6125R-40	□	6	**125**	63	100	40	32	16.4	9	32	M20x2.5x45*	4.0	2

Note) 1. All cutters are supplied without inserts.
2. Please refer page C104-C105 for recommended cutting conditions.
3. * mark shows: these cutter bodies are equipped with the set bolt because of the specified bolt size.
Except for these cutter bodies, please use the set bolt equipped with arbor.

Clamp Screw	Recommended Torque N•m
CSW-513H	5.5

● : Standard stock items □ : Stock in Japan ○ : Soon to be deleted

Wild Radius — WDR TYPE



■ BODY/END MILL TYPE

Type	Cat. No.	Stock	No. of flutes	Dimensions (mm) φDc	ℓ2	ℓs	L	φD1	MD	Weight (kg)
MT shank type	**WDR-2040-120-MT5-M20**	●	2	**40**	120	130	249.5	38	M20X2.5	2.2

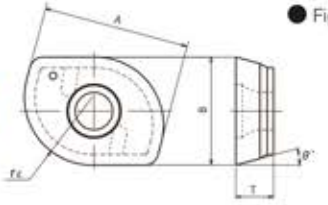
Note) All cutters are supplied without inserts

■ PARTS

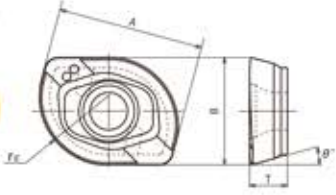
Clamps crew	Wrench
	
CSW-513H	A-20

■ INSERT

● Fig 1. Without chipbreaker



● Fig 2. With chipbreaker



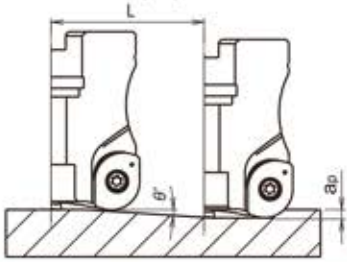
Cat. No.	Tolerance	PVD coated JC7560	JC8118	Dimensions (mm) A	T	B	rε	θ°	Fig.
YDMW1505100ZTR	**M**	●	●	21.5	5.56	15.875	10	15°	1
YDMT1505100ZER	**M**	●	●	21.5	5.56	15.875	10	15°	2

10 inserts per case

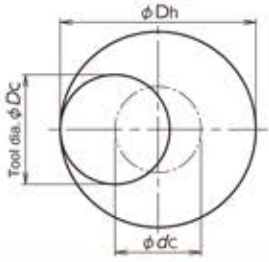
Wild Radius WDR TYPE

■ Instructions for profile milling

● Ramping



● Helical interpolation



● Calculation of tool pass dia.

$$\varphi dc = \varphi Dh - \varphi Dc$$

Tool pass dia. Bore dia. Tool dia.

● Depth of cut per one circle should not exceed max. depth of cut ap.

● Down cutting is recommended & tool pass rotation should be counterclockwise.

● In case of ramping and helical interpolation, apply 70% or less feed speed from standard cutting condition table.
● In case of drilling, apply 50% or less Z axis feed speed from standard cutting condition table.
● Long continous chips may come out in case of drilling, confirm the safe cutting conditions.

Cat. No.	Tool dia. φDc (mm)	Effective cutting dia. (mm)	Ramping (at ap=3mm)	Helical interpolation		Max. drilling depth Z (mm)
			Max. ramping angle θ°	Min. bore dia. Dh min (mm)	Max. bore dia. Dh max (mm)	
WDR-2040	40	20.1	4°24′	56	78	2
WDR-3050	50	30.7	2°48′	76	98	2
WDR-4063	63	43.4	1°48′	102	124	2
WDR-5080	80	60.3	1°12′	136	158	2
WDR-6100	100	80.2	0°54′	176	198	2
WDR-6125	125	104.7	0°36′	226	248	2

Note) For tool dia. φ40-φ63mm, recommended ramping angle is 1° or less.
For tool dia. φ80-φ125mm, recommended ramping angle is 0°30′ or less.