

Designation	APMX	DCX	CICT	DC	DCSFMS	LF	DCONMS	CDBP	KWW	b	KAPR	WT(kg)	Air hole	Insert
TXP05063RB-E	1.5	63	6	55.4	59	50	22	20	10.4	6.3	15	0.8	with	WPM*05...
TXP05080RB-E	1.5	80	7	72.4	76	63	27	22	12.4	7	15	1.7	with	WPM*05...
TXP06050R	1.5	50	4	41.4	47	50	22	20	10	6	20	0.4	without	WPM*06...
TXP06050R2	1.5	50	4	41.4	47	50	22.225	20	8	5	20	0.4	with	WPM*06...
TXP06050RA	1.5	50	4	41.4	47	50	22	20	10	6	20	0.4	with	WPM*06...
TXP06063RB-E	1.5	63	5	54.4	59	50	22	20	10.4	6.3	20	0.7	with	WPM*06...
TXP06080RB-E	1.5	80	6	71.4	76	63	27	22	12.4	7	20	1.6	with	WPM*06...
TXP08050R	1.5	50	3	38.6	47	50	22	19.5	10	6	10	0.4	with	WPMT08...
TXP08050R2	1.5	50	3	38.6	47	50	22.225	19.5	8	5	10	0.4	with	WPMT08...
TXP08050RA	1.5	50	3	38.6	47	50	22	19.5	10	6	10	0.4	with	WPMT08...
TXP08050R-E	1.5	50	3	38.6	47	50	22	20	10.4	6.3	10	0.4	without	WPMT08...
TXP08052R-E	1.5	52	3	40.6	50	50	22	20	10.4	6.3	10	0.5	without	WPMT08...
TXP08063R	1.5	63	4	51.6	59	50	22	20	10	6	10	0.7	with	WPMT08...
TXP08063R2	1.5	63	4	51.6	59	50	22.225	20	8	5	10	0.7	with	WPMT08...
TXP08063RA	1.5	63	4	51.6	59	50	22	20	10	6	10	0.7	with	WPMT08...
TXP08063R-E	1.5	63	4	51.6	59	50	22	20	10.4	6.3	10	0.7	without	WPMT08...
TXP08066R-E	1.5	66	4	54.6	63	50	27	22	12.4	7	10	0.8	without	WPM*06...
TXP08080R	1.5	80	5	68.6	76	63	31.75	32	12.7	8	10	1.4	with	WPMT08...
TXP08080RA	1.5	80	5	68.6	76	63	31.75	32	12.7	8	10	1.4	with	WPMT08...
TXP08080R-E	1.5	80	5	68.6	76	63	27	22	12.4	7	10	1.5	without	WPM*06...
TXP08100R	1.5	100	6	88.6	96	63	31.75	32	12.7	8	10	2.5	with	WPMT08...
TXP08100RA	1.5	100	6	88.6	96	63	31.75	32	12.7	8	10	2.5	with	WPMT08...
TXP08100R-E	1.5	100	6	88.6	96	63	32	25	14.4	8	10	2.5	without	WPM*06...
TXP08125R	1.5	125	7	113.6	80	63	38.1	45	15.9	10	10	3.1	with	WPMT08...
TXP08125R-E	1.5	125	7	113.6	98	63	40	32	16.4	9	10	3.1	without	WPMT08...
TXP08160R	1.5	160	8	148.6	100	63	50.8	46	19	11	10	5.1	with	WPMT08...
TXP09063R	3	63	3	49.4	59	50	22	20	10	6	20	0.6	with	WPMT09...
TXP09063R2	3	63	3	49.4	59	50	22.225	20	8	5	20	0.6	with	WPMT09...
TXP09063R-E	3	63	3	49.4	59	50	22	20	10.4	6.3	20	0.6	without	WPMT09...
TXP09080R	3	80	4	66.4	76	63	31.75	32	12.7	8	20	1.3	with	WPMT09...
TXP09080R-E	3	80	4	66.4	76	63	27	22	12.4	7	20	1.3	without	WPMT09...
TXP09100R	3	100	5	86.4	96	63	31.75	32	12.7	8	20	2.4	with	WPMT09...
TXP09100R-E	3	100	5	86.4	96	63	32	25	14.4	8	20	2.4	without	WPMT09...
TXP09125R	3	125	6	111.4	98	63	38.1	38	15.9	10	20	3.1	with	WPMT09...
TXP09125R-E	3	125	6	111.4	98	63	40	32	16.4	9	20	2.9	without	WPMT09...
TXP09160R	3	160	7	146.4	100	63	50.8	38	19	11	20	4.7	with	WPMT09...

SPARE PARTS

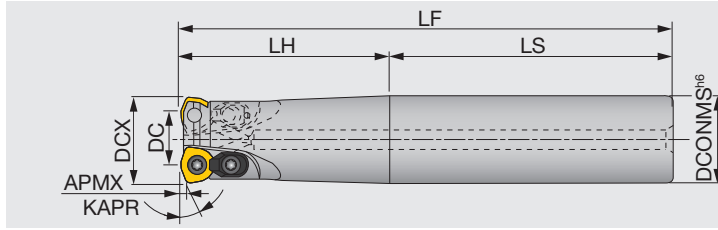


Designation	Clamp set	Clamping screw	Lubricant	Shell locking bolt 1	Shell locking bolt 2	Shell locking bolt 3	Wrench 1	Wrench 2
TXP05063RB-E	CSY-15	CSPB-3.5S	M-1000	-	CM10X30H	-	IP-15D	-
TXP05080RB-E	CSY-15	CSPB-3.5S	M-1000	-	-	CAP-CM12X1.75X30	IP-15D	-
TXP06050R	CSY-15	CSPB-4S	M-1000	-	-	CAP-CM10X1.5X30	IP-15D	-
TXP06050R2, RA	CSY-15	CSPB-4S	M-1000	-	CM10X30H	-	IP-15D	-
TXP06063RB-E	CSY-15	CSPB-4S	M-1000	-	CM10X30H	-	IP-15D	-
TXP06080RB-E	CSY-15	CSPB-4S	M-1000	-	CM12X30H	-	IP-15D	-
TXP08050R	CSX20	CSTB-5	M-1000	-	-	FSHM10-40	-	T-20T
TXP08050R*	CSX20	CSTB-5	M-1000	-	FSHM10-40H	-	-	T-20T
TXP0805*R-E	CSX20	CSTB-5	M-1000	-	-	FSHM10-40	-	T-20T
TXP08063R	CSX20	CSTB-5	M-1000	-	-	CAP-CM10X1.5X30	-	T-20T
TXP08063R2	CSX20	CSTB-5	M-1000	-	CM10X30H	-	-	T-20T
TXP08063RA	CSX20	CSTB-5	M-1000	-	CM10X30H	-	-	T-20T
TXP08063, 066R-E	CSX20	CSTB-5	M-1000	-	-	-	-	T-20T
TXP08080R	CSX20	CSTB-5	M-1000	-	-	CAP-CM16X2.0X40	-	T-20T
TXP08080RA	CSX20	CSTB-5	M-1000	-	CM16X40H	-	-	T-20T
TXP08080R-E	CSX20	CSTB-5	M-1000	-	-	-	-	T-20T
TXP08100R	CSX20	CSTB-5	M-1000	-	-	CAP-CM16X2.0X40	-	T-20T
TXP08100RA	CSX20	CSTB-5	M-1000	-	CM16X40H	-	-	T-20T
TXP08100R-E	CSX20	CSTB-5	M-1000	-	-	-	-	IP-20T
TXP08125R	CSX20	CSTB-5	M-1000	TMBA-M20H	-	-	-	T-20T
TXP08160R	CSX20	CSTB-5	M-1000	TMBA-M24H	-	-	-	T-20T
TXP09063R*	CSY-20	CSPB-5	M-1000	-	CM10X30H	-	-	IP-20T
TXP09063R-E	CSY-20	CSPB-5	M-1000	-	-	-	-	IP-20T
TXP09080R	CSY-20	CSPB-5	M-1000	-	CM16X40H	-	-	IP-20T
TXP09080R-E	CSY-20	CSPB-5	M-1000	-	-	-	-	IP-20T
TXP09100R	CSY-20	CSPB-5	M-1000	-	CM16X40H	-	-	IP-20T
TXP09100R-E	CSY-20	CSPB-5	M-1000	-	-	-	-	IP-20T
TXP09125R	CSY-20	CSPB-5	M-1000	TMBA-M20H	-	-	-	IP-20T
TXP09125R-E	CSY-20	CSPB-5	M-1000	-	-	-	-	IP-20T
TXP09160R	CSY-20	CSPB-5	M-1000	TMBA-M24H	-	-	-	IP-20T

*Recommended clamping torque (N·m): CSPB-3.5S/CSPB-4S=3.5, CSTB-5/CSPB-5=5

High feed endmill, shank type

GAMP = +5°, GAMF = -6°



- High Feed Milling
- Face Milling
- Shoulder Milling
- Slot Milling
- Profile Milling
- Approach angle
- 10°-20°
- 45°
- 70°
- 85°
- 88°
- 90°
- Others

Designation	APMX	DCX	CICT	DC	DCONMS	LF	LH	LS	KAPR	Air hole	Insert	Shank
EXP05020RL	1.5	20	2	12.4	20	180	100	80	15°	with	WPM*05...	Cylindrical
EXP05020RLL	1.5	20	2	12.4	20	250	130	120	15°	with	WPM*05...	Cylindrical
EXP05020RS	1.5	20	2	12.4	20	130	50	80	15°	with	WPM*05...	Cylindrical
EXP05021RL	1.5	21	2	13.4	20	180	100	80	15°	with	WPM*05...	Cylindrical
EXP05021RLL	1.5	21	2	13.4	20	250	50	200	15°	with	WPM*05...	Cylindrical
EXP05021RS	1.5	21	2	13.4	20	130	50	80	15°	with	WPM*05...	Cylindrical
EXP06025RL	1.5	25	2	16.4	25	200	120	80	20°	with	WPM*06...	Cylindrical
EXP06025RLL	1.5	25	2	16.4	25	300	180	120	20°	with	WPM*06...	Cylindrical
EXP06025RS	1.5	25	2	16.4	25	140	60	80	20°	with	WPM*06...	Cylindrical
EXP06026RL	1.5	26	2	17.4	25	200	120	80	20°	with	WPM*06...	Cylindrical
EXP06026RLL	1.5	26	2	17.4	25	300	60	240	20°	with	WPM*06...	Cylindrical
EXP06026RS	1.5	26	2	17.4	25	140	60	80	20°	with	WPM*06...	Cylindrical
EXP06032RL	1.5	32	2	23.4	32	200	120	80	20°	with	WPM*06...	Cylindrical
EXP06032RLB	1.5	32	3	23.4	32	200	120	80	20°	with	WPM*06...	Cylindrical
EXP06032RLL	1.5	32	2	23.4	32	300	180	120	20°	with	WPM*06...	Cylindrical
EXP06032RS	1.5	32	2	23.4	32	150	70	80	20°	with	WPM*06...	Cylindrical
EXP06032RSB	1.5	32	3	23.4	32	150	70	80	20°	with	WPM*06...	Cylindrical
EXP06033RL	1.5	33	2	24.4	32	200	120	80	20°	with	WPM*06...	Cylindrical
EXP06033RLB	1.5	33	3	24.4	32	200	120	80	20°	with	WPM*06...	Cylindrical
EXP06033RLL	1.5	33	2	24.4	32	300	70	230	20°	with	WPM*06...	Cylindrical
EXP06033RS	1.5	33	2	24.4	32	150	70	80	20°	with	WPM*06...	Cylindrical
EXP06033RSB	1.5	33	3	24.4	32	150	70	80	20°	with	WPM*06...	Cylindrical
EXP06040RL	1.5	40	3	31.4	32	250	50	200	20°	with	WPM*06...	Cylindrical
EXP06040RLL	1.5	40	3	31.4	32	300	50	250	20°	with	WPM*06...	Cylindrical
EXP06040RLS42	1.5	40	3	31.4	42	250	50	200	20°	with	WPM*06...	Cylindrical
EXP06040RS	1.5	40	3	31.4	32	150	50	100	20°	with	WPM*06...	Cylindrical
EXP08040RLA	1.5	40	2	28.6	32	250	50	200	10°	with	WPMT08...	Cylindrical
EXP08040RLL	1.5	40	2	28.6	32	300	50	250	10°	with	WPMT08...	Cylindrical
EXP08040RSA	1.5	40	2	28.6	32	150	50	100	10°	with	WPMT08...	Cylindrical
EXP09050RS	3	50	2	36.4	42	150	50	100	20°	with	WPMT09...	Cylindrical
EXP09050RL	3	50	2	36.4	42	250	50	200	20°	with	WPMT09...	Cylindrical

SPARE PARTS



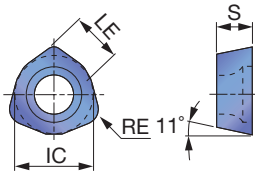
Designation	Clamp set	Clamping screw	Lubricant	Wrench 1	Wrench 2
EXP050...	-	CSPB-3.5S	M-1000	IP-15D	-
EXP060...	CSY-15	CSPB-4S	M-1000	IP-15D	-
EXP080...	CSX20	CSTB-5	M-1000	-	T-20T
EXP090...	CSY-20	CSPB-5	M-1000	-	IP-20T

*Recommended clamping torque (N·m): CSPB-3.5S/CSPB-4S=3.5, CSTB-5/CSPB-5=5

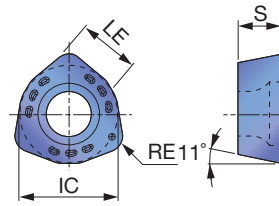
Reference pages: Inserts → **H053**, Standard cutting conditions → **H054 - H055**

INSERT

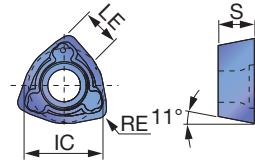
WPMW05/06



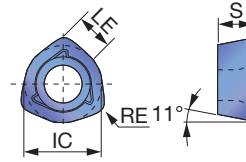
WPMT08/09



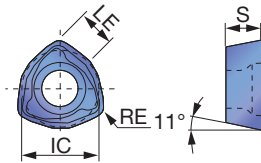
WPMT05/06/08/09-ML



WPMT05/06/08/09-MH



WPMT05/06/08/09-DML



P	Steel	☆				☆	★													
M	Stainless		★	☆			★													
K	Cast iron	★																		
N	Non-ferrous																			
S	Superalloys	★	☆																	
H	Hard materials				★															

★ : First choice
☆ : Second choice

Designation	RE	APMX	Coated						LE	IC	S		
			AH120	AH130	AH140	AH730	T3130	AH3135					
WPMW05H315ZPR	1.5	1.5	●		●		●	●			5	7.94	3.5
WPMT05H315ZPR-ML	1.5	1.5	●		●		●	●			5	7.94	3.5
WPMT05H315ZPR-MH	1.5	1.5	●		●			●			5	7.94	3.5
WPMT05H315ZPR-DML	1.5	1.5				●					5	7.94	3.5
WPMW06X415ZPR	1.5	1.5	●		●		●	●			6	9.525	4.2
WPMT06X415ZPR-ML	1.5	1.5	●	●	●		●	●			6	9.525	4.2
WPMT06X415ZPR-MH	1.5	1.5	●		●			●			6	9.525	4.2
WPMT06X415ZPR-DML	1.5	1.5				●					6	9.525	4.2
WPMT080615ZSR	1.5	1.5	●	●	●		●	●			8	12.87	6.35
WPMT080615ZPR-ML	1.5	1.5	●	●	●		●	●			8	12.87	6.35
WPMT080615ZSR-MH	1.5	1.5	●		●			●			8	12.87	6.35
WPMT080615ZPR-DML	1.5	1.5				●					8	12.87	6.35
WPMT090725ZSR	2.5	3	●		●		●	●			9	15	7
WPMT090725ZPR-ML	2.5	3	●	●	●		●	●			9	15	7
WPMT090725ZSR-MH	2.5	3	●	●	●			●			9	15	7
WPMT090725ZPR-DML	2.5	3				●					9	15	7

● : Line up

Reference pages: Standard cutting conditions → **H054 - H055**



High Feed Milling

STANDARD CUTTING CONDITIONS

05-06 type



Face Milling



Shoulder Milling



Slot Milling



Profile Milling

Approach angle



Others

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Feed per tooth fz (mm/t)	ø20, 21 (CICT = 2)	ø25, 26 (CICT = 2)	ø32, 33 (CICT = 2, 3)	ø40 (CICT = 3)	ø50 (CICT = 4)	ø63 (CICT = 5, 6)	
P	Carbon Steels S50C, etc. C50, etc. < 300HB	AH3135	100 ~ 250	0.5 ~ 2	Vc = 150 m/min, fz = 0.8 mm/t ap = 1 mm, ae = 1×DCX mm	Vc = 150 m/min, fz = 1 mm/t ap = 1 mm, ae = 1×DCX mm					
	When plunging in small depth: fz = 0.2 mm/t										
	Alloy steels SCM440, etc. 42CrMo4etc, etc. < 300 HB	AH3135	100 ~ 200	0.5 ~ 2	Vc = 130 m/min, fz = 0.8 mm/t ap = 1 mm, ae = 1×DCX mm	Vc = 130 m/min, fz = 1 mm/t ap = 1 mm, ae = 1×DCX mm					
When plunging in small depth: fz = 0.2 mm/t											
M	Prehardened steels NAK80, PX5, X96CrMoV12, etc. 30 ~ 40HRC	AH3135	80 ~ 150	0.5 ~ 1	Vc = 100 m/min, fz = 0.5 mm/t ap = 1 mm, ae = 1×DCX mm	Vc = 100 m/min, fz = 0.5 mm/t ap = 1 mm, ae = 1×DCX mm					
	When plunging in small depth: fz = 0.1 mm/t										
	Stainless steels SUS304, etc. X5CrNi18 9, etc.	AH130 (AH3135)	100 ~ 200	0.5 ~ 2	Vc = 130 m/min, fz = 0.8 mm/t ap = 1 mm, ae = 1×DCX mm	Vc = 130 m/min, fz = 1 mm/t ap = 1 mm, ae = 1×DCX mm					
When plunging in small depth: fz = 0.2 mm/t											
K	Cast irons FC250, etc. 250, etc.	AH120	100 ~ 250	0.8 ~ 2.5	Vc = 150 m/min, fz = 1 mm/t ap = 1 mm, ae = 1×DCX mm	Vc = 180 m/min, fz = 1.5 mm/t ap = 1 mm, ae = 1×DCX mm					
	When plunging in small depth: fz = 0.2 mm/t										
	Titanium alloys Ti-6Al-4V, etc.	AH130	30 ~ 60	0.3 ~ 0.7	Vc = 50 m/min, fz = 0.5 mm/t, ap = 0.7 mm, ae = 0.5×DCX mm						
When plunging in small depth: fz = 0.1 mm/t											
S	Heat-resistant alloys Inconel 718, etc.	AH120	10 ~ 40	0.1 ~ 0.3	Vc = 30 m/min, fz = 0.2 mm/t, ap = 0.7 mm, ae = 0.5×DCX mm						
	When plunging in small depth: fz = 0.1 mm/t										
	Hard materials SKD11, etc. X153CrMoV12, etc. 40 ~ 50HRC	AH730	50 ~ 80	0.5 ~ 1	Vc = 70 m/min, fz = 0.7 mm/t, ap = 0.7 mm, ae = 1×DCX mm						
When plunging in small depth: fz = 0.1 mm/t											

08 type

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Feed per tooth fz (mm/t)	ø40 (CICT = 2)	ø50 (CICT = 3)	ø63 (CICT = 4)	ø80 (CICT = 5)	ø100 (CICT = 6)	ø125 (CICT = 7)	ø160 (CICT = 8)
P	Carbon Steels S50C, etc. C50, etc. < 300HB	AH3135	100 ~ 250	0.5 ~ 2	Vc = 180 m/min, fz = 1 mm/t ap = 1 mm, ae = 40 mm	Vc = 200 m/min, fz = 1.5 mm/t ap = 1 mm, ae = 1×DCX mm					
	When plunging in small depth: fz = 0.2 mm/t										
	Alloy steels SCM440, etc. 42CrMo4etc, etc. < 300 HB	AH3135	100 ~ 200	0.5 ~ 2	Vc = 130 m/min, fz = 1 mm/t ap = 1 mm, ae = 40 mm	Vc = 150 m/min, fz = 1.5 mm/t ap = 1 mm, ae = 1×DCX mm					
When plunging in small depth: fz = 0.2 mm/t											
M	Prehardened steels NAK80, PX5, X96CrMoV12, etc. 30 ~ 40HRC	AH3135	80 ~ 150	0.5 ~ 1	Vc = 100 m/min, fz = 0.5 mm/t ap = 1 mm, ae = 40 mm	Vc = 120 m/min, fz = 0.8 mm/t ap = 1 mm, ae = 1×DCX mm					
	When plunging in small depth: fz = 0.1 mm/t										
	Stainless steels SUS304, etc. X5CrNi18 9, etc.	AH130 (AH3135)	100 ~ 200	0.5 ~ 2	Vc = 130 m/min, fz = 1 mm/t ap = 1 mm, ae = 40 mm	Vc = 150 m/min, fz = 1.5 mm/t ap = 1 mm, ae = 1×DCX mm					
When plunging in small depth: fz = 0.2 mm/t											
K	Cast irons FC250, etc. 250, etc.	AH120	150 ~ 250	0.8 ~ 2.5	Vc = 180 m/min, fz = 1.5 mm/t ap = 1 mm, ae = 40 mm	Vc = 200 m/min, fz = 2 mm/t ap = 1 mm, ae = 1×DCX mm					
	When plunging in small depth: fz = 0.2 mm/t										
	Titanium alloys Ti-6Al-4V, etc.	AH130	30 ~ 60	0.3 ~ 0.7	Vc = 50 m/min, fz = 0.5 mm/t, ap = 0.7 mm, ae = 0.5×DCX mm						
When plunging in small depth: fz = 0.1 mm/t											
S	Heat-resistant alloys Inconel 718, etc.	AH120	10 ~ 40	0.1 ~ 0.3	Vc = 30 m/min, fz = 0.2 mm/t, ap = 0.7 mm, ae = 0.5×DCX mm						
	When plunging in small depth: fz = 0.1 mm/t										
	Hard materials SKD11, etc. X153CrMoV12, etc. 40 ~ 50HRC	AH730	50 ~ 80	0.5 ~ 1	Vc = 70 m/min, fz = 0.7 mm/t, ap = 0.7 mm, ae = 1×DCX mm						
When plunging in small depth: fz = 0.1 mm/t											

Note: •The above values of cutting speed show the standard speed when overhang length of tool is below 3D. The cutting speed and the feed rate should be set at the lower limit values when overhang length of tool exceeds 3D.
 •Thick and heavy chips are discharged by these TAC mills. Use internal air supply or air-blowing in order to prevent tool failure.

STANDARD CUTTING CONDITIONS

09 type

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Feed per tooth fz (mm/t)	ø50 (CICT = 2)	ø63 (CICT = 3)	ø80 (CICT = 4)	ø100 (CICT = 5)	ø125 (CICT = 6)	ø160 (CICT = 7)
P	Carbon Steels S50C, etc. C50, etc. < 300HB	AH3135	100 ~ 250	0.5 ~ 2	Vc = 200 m/min, fz = 1.5 mm/t, ap = 2 mm, ae = 1×DCX mm When plunging in small depth: fz = 0.2 mm/t					
	Alloy steels SCM440, etc. 42CrMo4 etc., etc. < 300 HB	AH3135	100 ~ 200	0.5 ~ 2	Vc = 150 m/min, fz = 1.5 mm/t, ap = 2 mm, ae = 1×DCX mm When plunging in small depth: fz = 0.2 mm/t					
	Prehardened steels NAK80, PX5, X96CrMoV12, etc. 30 ~ 40HRC	AH3135	80 ~ 150	0.5 ~ 1	Vc = 120 m/min, fz = 0.8 mm/t, ap = 2 mm, ae = 1×DCX mm When plunging in small depth: fz = 0.1 mm/t					
M	Stainless steels SUS304, etc. X5CrNi18 9, etc.	AH130 (AH3135)	100 ~ 200	0.5 ~ 2	Vc = 150 m/min, fz = 1.5 mm/t, ap = 2 mm, ae = 1×DCX mm When plunging in small depth: fz = 0.2 mm/t					
K	Cast irons FC250, etc. 250, etc.	AH120	150 ~ 250	0.8 ~ 2.5	Vc = 200 m/min, fz = 2 mm/t, ap = 2 mm, ae = 1×DCX mm When plunging in small depth: fz = 0.2 mm/t					
S	Titanium alloys Ti-6Al-4V, etc.	AH130	30 ~ 60	0.3 ~ 0.7	Vc = 50 m/min, fz = 0.5 mm/t, ap = 1.5 mm, ae = 0.5×DCX mm When plunging in small depth: fz = 0.1 mm/t					
	Heat-resistant alloys Inconel 718, etc.	AH120	10 ~ 40	0.1 ~ 0.3	Vc = 30 m/min, fz = 0.2 mm/t, ap = 1 mm, ae = 0.5×DCX mm When plunging in small depth: fz = 0.1 mm/t					
H	Hard materials SKD11, etc. X153CrMoV12, etc. 40 ~ 50HRC	AH730	60 ~ 100	0.5 ~ 1	Vc = 70 m/min, fz = 0.7 mm/t, ap = 0.7 mm, ae = 1×DCX mm When plunging in small depth: fz = 0.1 mm/t					

Notes : The cutting speed and feed should be set to 70 to 80 % of the value shown in the above table when overhang length of tool exceeds 3D.

Grade

Insert

Toolholder

Ext. Toolholder

Int. Toolholder

Threading

Grooving

Miniature tool

Milling cutter

Endmill

Drilling tool

Tooling System

User's Guide

Index





High Feed Milling

MILLFEED BT50-FMC/FMA

Arbor for TXP mill



Face Milling



Shoulder Milling



Slot Milling

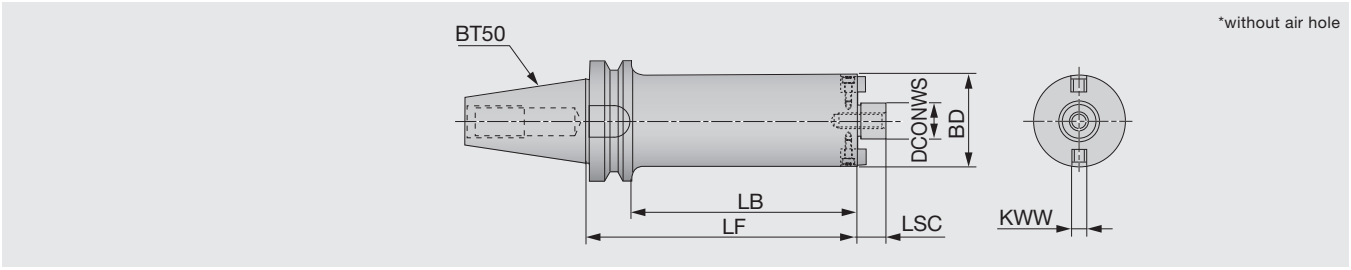


Profile Milling

Approach angle

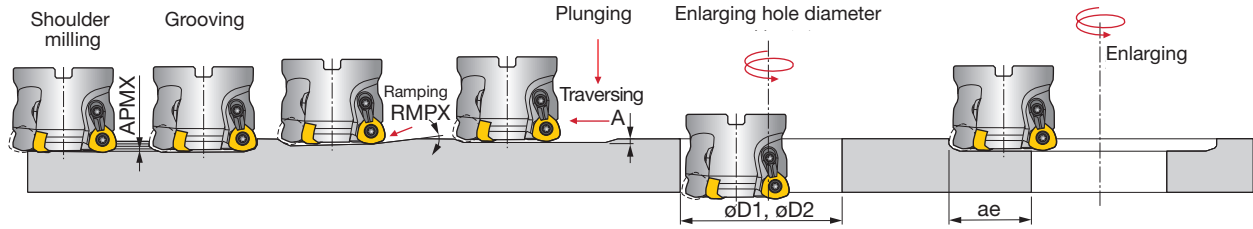


Others



Designation	LF	LB	BD	DCONWS	LSC	KWW	WT(kg)	Applicable mill
BT50-FMC22-138-47	138	100	47	22	18	10	5.2	
BT50-FMC22-188-47	188	150	47	22	18	10	5.9	TXP06050R...
BT50-FMC22-243-47	243	205	47	22	18	10	6.5	TXP08050R...
BT50-FMC22-293-47	293	255	47	22	18	10	7.2	
BT50-FMC22-178-59	178	140	59	22	18	10	6.8	
BT50-FMC22-238-59	238	200	59	22	18	10	8	TXP08063R...
BT50-FMC22-308-59	308	270	59	22	18	10	9.5	TXP09063R...
BT50-FMC22-373-59	373	335	59	22	18	10	10.9	
BT50-FMA31.75-215-76	215	177	76	31.75	30	12.7	10	
BT50-FMA31.75-295-76	295	257	76	31.75	30	12.7	12.9	TXP08080R...
BT50-FMA31.75-375-76	375	337	76	31.75	30	12.7	15.8	TXP09080R...
BT50-FMA31.75-275-96	275	237	96	31.75	30	12.7	16.8	TXP08100R...
BT50-FMA31.75-375-96	375	337	96	31.75	30	12.7	23	TXP09100R...

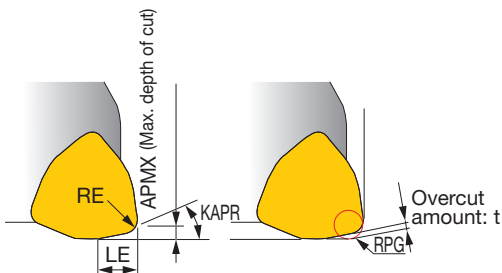
APPLICATION RANGE



Designation	DCX	Max. depth of cut APMX	Max. ramping angle RMPX	Max. plunging depth A	Min. machining hole dia. øD1	Max. machining hole dia. øD2	Max. cutting width in enlarging hole ae
EXP05020...	20	1.5	3°	0.5	30	37	16
EXP05021...	21	1.5	2.5°	0.5	32	39	17
TXP05063RB-E	63	1.5	1°	0.5	116	123	59
TXP05080RB-E	80	1.5	0.5	0.5	150	157	76
E/HXP06025...	25	1.5	5°	1	33	47	20
E/HXP06026...	26	1.5	4.5°	1	35	49	21
E/HXP06032...	32	1.5	3.5°	1	47	61	27
E/HXP06033...	33	1.5	3°	1	49	63	28
E/HXP06040...	40	1.5	2°	1	63	77	35
T/HXP06050...	50	1.5	1.5°	1	83	97	45
TXP06063RB-E	63	1.5	1°	1	109	123	58
TXP06080RB-E	80	1.5	0.5	1	143	157	75
E/HXP08040...	40	1.5	6°	1	53	77	34
T/HXP08050...	50	1.5	4°	1	72	97	44
TXP08052R-E	52	1.5	4°	1	76	101	46
TXP08063...	63	1.5	2.5°	1	98	123	57
TXP08066R-E	66	1.5	2.5	1	104	129	60
TXP08080...	80	1.5	1.5°	1	132	157	74
TXP08100...	100	1.5	1°	1	172	197	94
TXP08125R	125	1.5	0.75°	1	222	247	119
TXP08160R	160	1.5	0.5°	1	292	317	154
E/HXP09050...	50	3	1.5°	0.8	76	97	43
EXP09050RS/L	50	3	1.5	0.8	76	97	43
TXP09063...	63	3	2°	1.5	98	123	56
TXP09080R	80	3	1.5°	1.5	132	157	73
TXP09100R	100	3	1°	1.5	172	197	93
TXP09125R	125	3	0.75°	1.5	222	247	118
TXP09160R	160	3	0.5°	1.5	292	317	153

TOOL GEOMETRY FOR PROGRAMMING

When programming for CAD/CAM, the tool should be assumed to be a radius cutter shown in the table below. In this case, the amount left as uncut (t) is shown below.



	Max. depth of cut APMX	Corner of insert RE	Cutting edge angle KAPR	Corner R when programming LE	t	RPG
TXP 05	1.5	1.5	15°	3.8	0.5	2
06	1.5	1.5	20°	4.3	0.7	2.5
08	1.5	1.5	10°	5.7	0.7	2
09	3	2.5	20°	6.8	1.4	3
09	3	2.5	20°	6.8	1.2	4