

Modular Tools

H125 to H132

H

H

Modular
Tools

Radius

Multi-
Purpose

Shoulder
Milling

Groove/
T-Slot

		Modular Tools	H126
Radius	Milling of Exotic Alloy	SEC-Wave Radius Mill RSX Type	H128
	Milling of Steel, Cast Iron, Stainless Steel & Non-Ferrous Metal	SEC-Wave Radius Mill WRCX Type	H131
Shoulder Milling	Shoulder Milling of Steel, Die Steel, Cast Iron, Stainless Steel & Non-Ferrous Metal	SEC-Wave Mill WFX Type	H129
	High Efficiency Milling of Steel, Cast Iron, Stainless Steel & Non-Ferrous Metal	SEC-Wave Mill WEX Type	H130
Multi-Purpose	Ultra-High Feed Milling of Steel, Cast Iron & Stainless Steel	SEC-Metal Slash Mill MSX Type	H132

Stock Indications and Symbols

- mark: Standard stocked item
- mark: To be replaced by a new item featured on the same page
- ▲ mark: To be replaced by new item
(Please confirm stock availability)

- * mark: Semi-standard stock (Please confirm stock availability)
- mark: Stock or planned stock (Please confirm stock availability)
- No mark: Made-to-order item
- mark: We cannot produce

H125

SEC- Modular Tools



General Features

- Exchangeable head endmills are available in 3 types!

- Radius Endmill for Exotic Alloys

RSX Type *New*

- Endmill for Shoulder Milling

WFX Type *New*

- High Efficiency Endmill

WEX Type

- Multi-purpose Radius Endmill

WRCX Type

- Ultra-High Feed Endmill

MSX Type

- A wide variety of possible combinations with carbide arbors (16 items) and steel arbors (4 items)!

Suitable for milling with **long overhangs**
when combined with carbide or steel arbors!

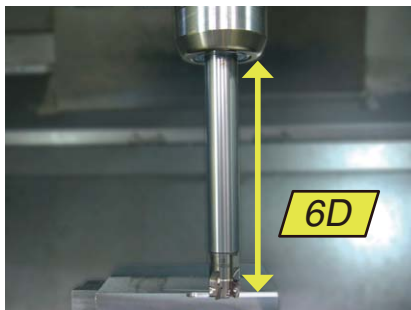
Economically designed
exchangeable head!

Easy assembly, screw-on design

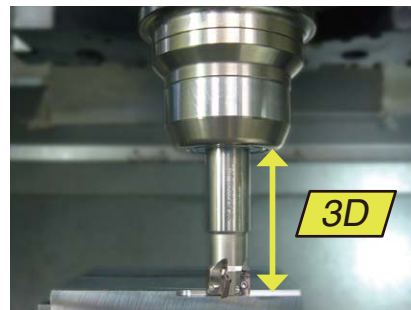


- Characteristics
- Standard type (integrated arbor) capable of 2 to 3D overhang but using carbide arbor supports up to 6D milling overhang.

Modular Type + Carbide Arbors



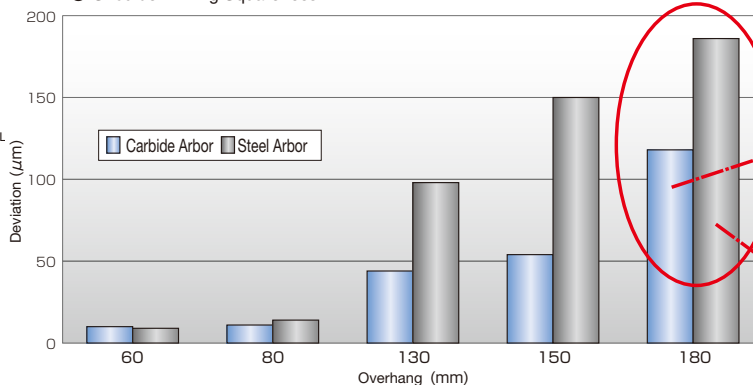
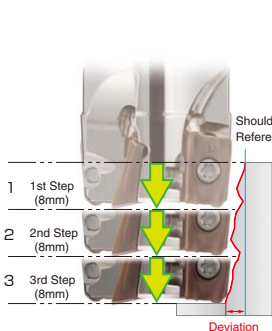
Standard Type (Integrated unit)



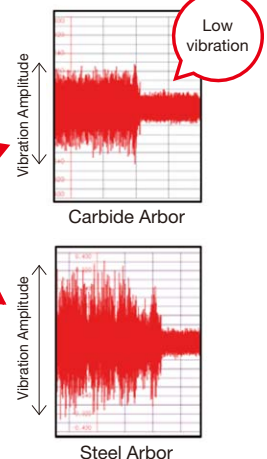
Note : Overhang varies depending on cutting conditions such as the tool used, machine rigidity, and work clamp rigidity.

- Performance
- Carbide arbors achieve greater precision and stable milling compared to steel arbors.

Shoulder Milling Squareness



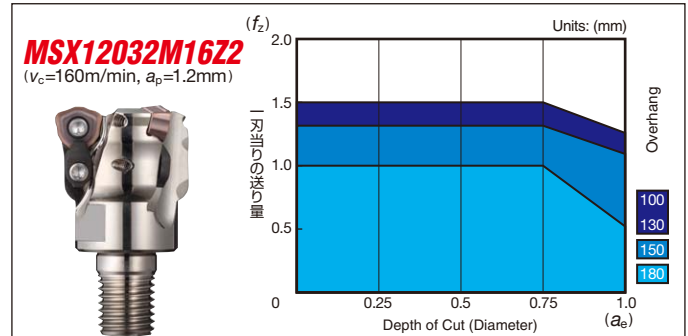
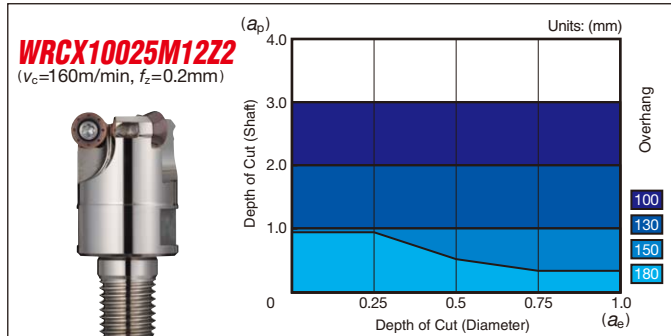
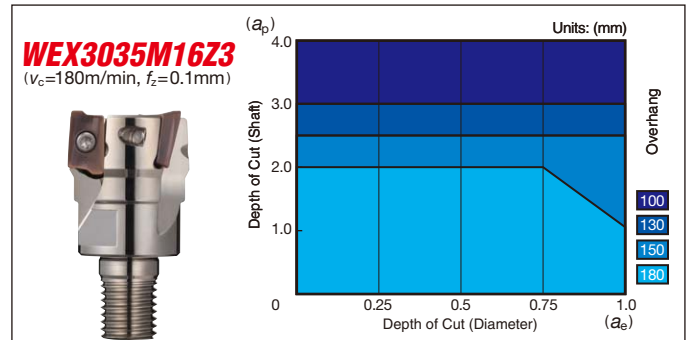
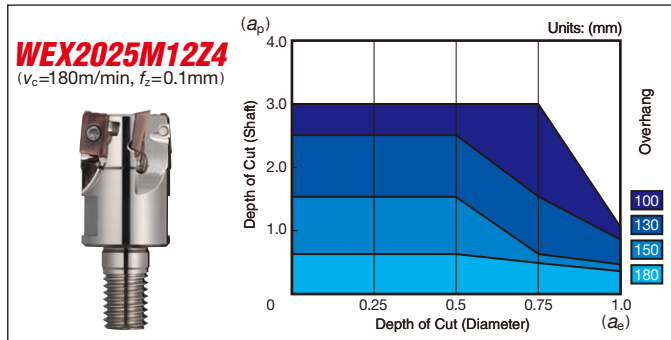
Vibration



Work Material : S50C
Tool : WEX2025M12Z4 (φ25×4 flutes)
Cutting Conditions : $v_c=100\text{m/min}$ $f_z=0.1\text{mm/t}$ $a_e=8\text{mm} \times 3 \text{ times}$ $a_p=2.0\text{mm}$ Equipment : M/C BT50

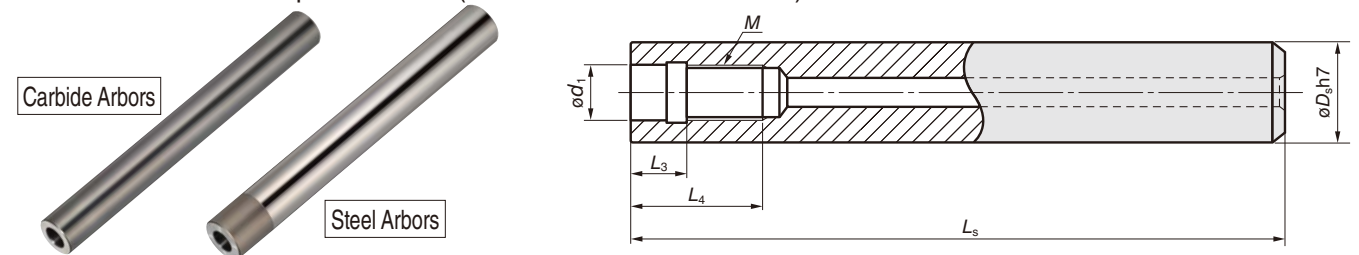
SEC- Modular Tools

Application Range (Work Material : S50C Equipment : Vertical M/C BT50 Dry)



Note: These tables indicate reference machining conditions. Actual machining parameters should be adjusted based on machine rigidity and work clamp rigidity.

SEC-Modular Tools Special Arbors (Carbide Arbors/Steel Arbors)



Carbide Arbors

Cat. No.	Stock	Dimension (mm)						
		M	ϕd_1	ϕD_s	L_s	L_3	L_4	L_5^*
MA15M08L120C	●	M8	8.5	15	120	10	18	145
15M08L160C	●	M8	8.5	15	160	10	18	185
16M08L120C	●	M8	8.5	16	120	10	18	145
16M08L160C	●	M8	8.5	16	160	10	18	185
MA18M10L150C	●	M10	10.5	18	150	10	20	180
18M10L200C	●	M10	10.5	18	200	10	20	230
20M10L150C	●	M10	10.5	20	150	10	20	180
20M10L200C	●	M10	10.5	20	200	10	20	230
MA23M12L200C	●	M12	12.5	23	200	10	22	235
23M12L250C	●	M12	12.5	23	250	10	22	285
25M12L200C	●	M12	12.5	25	200	10	22	235
25M12L250C	●	M12	12.5	25	250	10	22	285
MA28M16L200C	●	M16	17.0	28	200	10	24	240
28M16L300C	●	M16	17.0	28	300	10	24	340
32M16L200C	●	M16	17.0	32	200	10	24	240
32M16L300C	●	M16	17.0	32	300	10	24	340

Steel Arbors

Cat. No.	Stock	Dimension (mm)						
		M	ϕd_1	ϕD_s	L_s	L_3	L_4	L_5
MA16M08L120S	●	M8	8.5	16	120	10	18	145
20M10L150S	●	M10	10.5	20	150	10	20	180
25M12L200S	●	M12	12.5	25	200	10	22	235
32M16L200S	●	M16	17.0	32	200	10	24	240

Endmill Identification

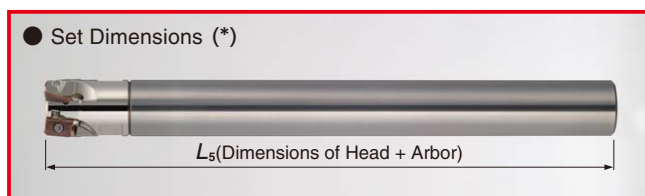
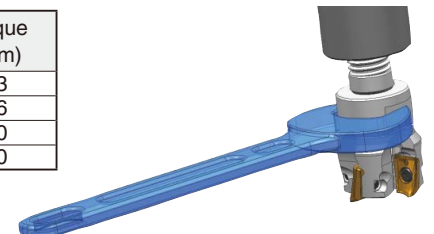
MA 15 M08 L120 C				
(1)	(2)	(3)	(4)	(5)
Cutter Series	Shank Diameter	Mounting Screw	Arbor Length	Materials (C : Carbide S : Steel)

Recommended Tightening Torque (N·m)

*Notes about tightening the head.

- When attaching the head to an arbor, follow the standard tightening torque in the table below.
- Check the mounting screw size for the head and arbor beforehand.

Screw Size	Torque (N·m)
M8	23
M10	46
M12	60
M16	80



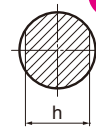
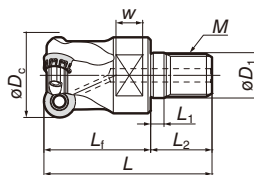
Rake Angle	Radial	-5° to -8°
	Axial	10°



(10000M Type)



(12000M Type)



Head (RSX 10000M) Applicable Insert A = 10 mm Type

Cat. No.	Stock	Dimensions (mm)										No. of Teeth
		ϕD_c	ϕD_1	M	L	L_f	L_1	L_2	W	h		
RSX 10025M12Z2	●	25	12.5	M12	56	35	5	21	10	19	2	
RSX 10032M16Z3	●	32	17.0	M16	63	40	5	23	10	24	3	

Inserts are not included.

Head (RSX 12000M) Applicable Insert A = 12mm Type

Cat. No.	Stock	Dimensions (mm)										No. of Teeth
		ϕD_c	ϕD_1	M	L	L_f	L_1	L_2	W	h		
RSX 12032M16Z2	●	32	17.0	M16	63	40	5	23	10	24	2	
12040M16Z3	●	40	17.0	M16	63	40	5	23	10	24	3	

Inserts are not included.

Head (RSXF 10000M) [Fine Pitch Type] Applicable Insert A = 10mm Type

Cat. No.	Stock	Dimensions (mm)										No. of Teeth
		ϕD_c	ϕD_1	M	L	L_f	L_1	L_2	W	h		
RSXF 10025M12Z3	●	25	12.5	M12	56	35	5	21	10	19	3	
RSXF 10032M16Z4	●	32	17.0	M16	63	40	5	23	10	24	4	

Inserts are not included.

Head (RSXF 12000M) [Fine Pitch Type] Applicable Insert A = 12mm Type

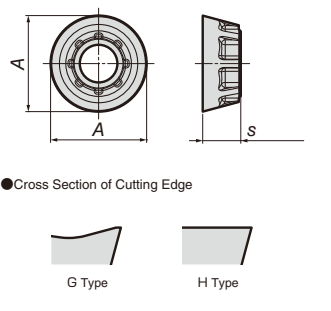
Cat. No.	Stock	Dimensions (mm)										No. of Teeth
		ϕD_c	ϕD_1	M	L	L_f	L_1	L_2	W	h		
RSXF 12032M16Z3	●	32	17.0	M16	63	40	5	23	10	24	3	
12040M16Z4	●	40	17.0	M16	63	40	5	23	10	24	4	

Inserts are not included.

Insert

M Stainless Steel S Exotic Alloy

Grade		Coat					
Application	High Speed/Light						
	General Purpose						
	Roughing						
Cat. No.					Dimensions		Applicable Cutter
		ACM100	ACM200	ACM300	A	s	
RDET 10T3M0EN-G		●	●	●	10	3.97	RSX(F)10000M Type
10T3M0EN-H		●	●	●	10	3.97	
RDET 1204M0EN-G		●	●	●	12	4.76	RSX(F)12000M Type
1204M0EN-H		●	●	●	12	4.76	



● Cross Section of Cutting Edge

G Type

H Type

Parts

Applicable Cutter	Screw	Spanner
RSX(F)10000M Type	BFTX03584IP 3.0	TRDR15IP
RSX(F)12000M Type	BFTX0409IP 3.0	

(N·m) Recommended Tightening Torque (N·m) Anti-seizure cream SUMI-P included in the package.

Identification Details

RSX F 10 025 M12 Z2

(1) Cutter Series (2) Insert Size (3) Diameter (4) Cutter (5) Mounting Screw (6) No. of Flutes

Recommended Cutting Conditions

ISO	Work Material		Hardness	Cutting Speed V_c (m/min) Min. - Optimum - Max.	Feed Rate f_z (mm/t) Min. - Optimum - Max.	Grade	
M	Stainless Steel	Cr	Ferritic	200HB	150- 180 -200	0.15- 0.25 -0.35	ACM300
		Martensitic	200 to 330HB	80 - 120 -180	0.15- 0.25 -0.35	ACM300	
		Austenitic	200HB	150- 180 -200	0.15- 0.25 -0.35	ACM300	
		2 Phase Structures (Austenitic + Ferritic)	230 to 270HB	80 - 120 -180	0.15- 0.25 -0.35	ACM200	
		Deposition Hardened Structures	330HB	60- 100 -160	0.15- 0.25 -0.35	ACM200	
S	Heat-Resistant Alloy	Ni-Based Material	250 to 350HB	20- 30 - 40	0.10- 0.20 -0.30	ACM100 ACM200	
	Titanium	Pure Titanium (99.5%)	(Rm400)	60- 80 -100	0.10- 0.20 -0.30		
		Alloy $\alpha + \beta$	(Rm1050)	40- 50 - 60	0.10- 0.20 -0.30		

Note The cutting conditions above are a guide. Actual conditions will need to be adjusted according to machine rigidity, work clamp rigidity, cutting depth, and other factors.

Rake Angle	Radial	-6°
	Axial	12°

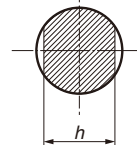
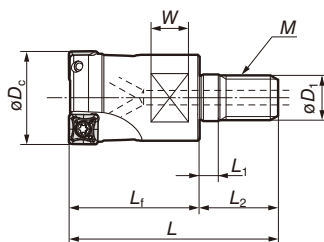
6mm 90°



SEC-Wave Mill

WFX08000M Type

SEC-Modular Tools



New

Head

Cat. No.	Stock	Dimensions (mm)									No. of Teeth
		ϕD_c	ϕD_1	M	L	L ₁	L ₂	W	h		
WFX 08020M10Z2	●	20	10.5	M10	49	30	5	19	8	15	2
08022M10Z2	●	22	10.5	M10	49	30	5	19	8	15	2
WFX 08025M12Z2	●	25	12.5	M12	56	35	5	21	10	19	2
08028M12Z2	●	28	12.5	M12	56	35	5	21	10	19	2
WFX 08030M16Z3	●	30	17.0	M16	63	40	5	23	10	24	3
08032M16Z3	●	32	17.0	M16	63	40	5	23	10	24	3
08040M16Z3	●	40	17.0	M16	63	40	5	23	10	24	3

Inserts are not included.

Identification Details

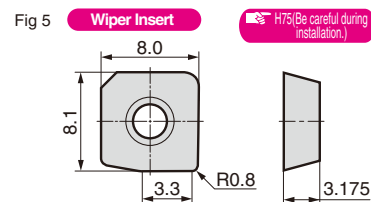
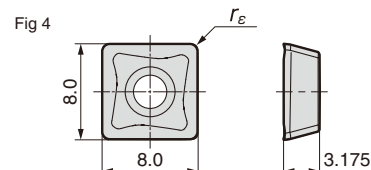
WFX 08 020 M10 Z2

(1) Cutter Series (2) Insert Size (3) Diameter (4) Mounting Screw (5) No. of Flutes

Insert

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metal **S** Exotic Alloy **H** Hardened Steel

Grade		Coated Carbide						Cermet	DLC	Cermet	Dimensions (mm)	Fig
Application	High Speed/Light	P			K		M	N				
	General Purpose	P	P	K	M	S	M	N		P		
	Roughing	P	P	K	M	S	M	N		P		
Cat. No.		ACP100	ACP200	ACP300	ACK200	ACK300	ACM200	ACM300	H1	DL1000	T4500A	
SOMT 080304PZER-L		●	●	●	●	●	●	●	—	—	—	0.4 1
080308PZER-L		●	●	●	●	●	●	●	—	—	—	0.8 1
SOMT 080304PZER-G		●	●	●	●	●	●	●	—	—	—	0.4 1
080308PZER-G		●	●	●	●	●	●	●	—	—	—	0.8 1
080312PZER-G		●	●	●	●	●	●	●	—	—	—	1.2 1
SOMT 080308PZER-H		●	●	●	●	●	●	●	—	—	—	0.8 1
080312PZER-H		●	●	●	●	●	●	●	—	—	—	1.2 1
SOET 080304PZER-G		●	●	●	●	●	●	●	—	—	●	0.4 1
080308PZER-G		●	●	●	●	●	●	●	—	—	●	0.8 1
080312PZER-G		●	●	●	●	●	●	●	—	—	●	1.2 1
SOET 080302PZFR-S		—	—	—	—	—	—	—	●	—	—	0.2 1
080304PZFR-S		—	—	—	—	—	—	—	●	—	—	0.4 1
080308PZFR-S		—	—	—	—	—	—	—	●	—	—	0.8 1
XOEW 080308PZTR-W		—	—	—	●	—	—	—	—	—	●	— 2



Parts

Insert Screw	Spanner
	
BFTX0306IP	TRDR08IP

 Recommended Tightening Torque (N·m)

Recommended Cutting Conditions

ISO	Work Material	Hardness	Cutting Speed v_c (m/min) Min. - Optimum - Max.	Feed Rate f_z (mm/t) Min. - Optimum - Max.	Depth of Cut (mm)	Grade
P	General Steel	180 to 280HB	150-200-250	0.08-0.12-0.18	<6	ACP200 ACP300
	Soft Steel	≤180HB	180-250-350	0.10-0.15-0.20	<6	ACP200 ACP300
	Die Steel	200 to 220HB	100-150-200	0.08-0.12-0.18	<4	ACP200 ACP300
M	Stainless Steel	-	160-200-250	0.10-0.15-0.20	<6	ACM300
K	Cast Iron	250HB	100-175-250	0.10-0.15-0.20	<6	ACK200 ACK300
N	Non-Ferrous Metal	-	300-500-1000	0.10-0.15-0.20	<6	H1 DL1000

Note The cutting conditions above are a guide. Actual conditions will need to be adjusted according to machine rigidity, work clamp rigidity, cutting depth, and other factors.

H
Modular Tools

Radius
Multi-Purpose
Shoulder Milling
Groove/T-Slot

WEX2000M / 3000M Type

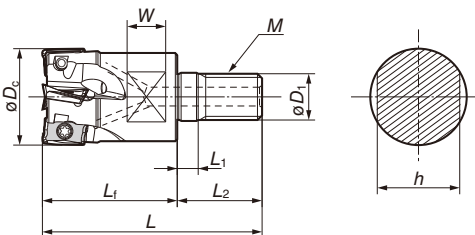
SEC-
Modular
Tools

WEX2000M Type



WEX3000M Type

Rake Angle	Radial	10° to 18°; 8° to 15°	Max. Depth of Cut	10mm	90°	Material Legend
	Axial	14° to 25°; 16° to 24° (2000M Type) (3000M Type)	Max. Depth of Cut	14mm	90°	
				(2000M Type)	(3000M Type)	P M K N N S H



Head (WEX 2000M)

Cat. No.	Stock	Dimension (mm)										No. of Teeth
		ϕD_c	ϕD_1	M	L	L _f	L ₁	L ₂	W	h		
WEX 2016M08Z2	●	16	8.5	M8	42	25	5	17	8	13	2	
2018M08Z2	●	18	8.5	M8	42	25	5	17	8	13	2	
WEX 2020M10Z3	●	20	10.5	M10	49	30	5	19	8	15	3	
2022M10Z3	●	22	10.5	M10	49	30	5	19	8	15	3	
WEX 2025M12Z4	●	25	12.5	M12	56	35	5	21	10	19	4	
2028M12Z4	●	28	12.5	M12	56	35	5	21	10	19	4	
WEX 2030M16Z4	●	30	17.0	M16	63	40	5	23	10	24	4	
2032M16Z5	●	32	17.0	M16	63	40	5	23	10	24	5	
2040M16Z6	●	40	17.0	M16	63	40	5	23	10	24	6	

Inserts are not included.

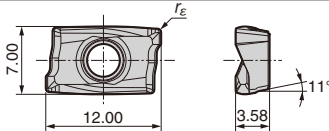
Head (WEX 3000M)

Cat. No.	Stock	Dimension (mm)										No. of Teeth
		ϕD_c	ϕD_1	M	L	L _f	L ₁	L ₂	W	h		
WEX 3025M12Z2	●	25	12.5	M12	56	35	5	21	10	19	2	
3028M12Z2	●	28	12.5	M12	56	35	5	21	10	19	2	
WEX 3030M16Z3	●	30	17.0	M16	63	40	5	23	10	24	3	
3032M16Z3	●	32	17.0	M16	63	40	5	23	10	24	3	
3035M16Z3	●	35	17.0	M16	63	40	5	23	10	24	3	
WEX 3040M16Z4	●	40	17.0	M16	63	40	5	23	10	24	4	

Inserts are not included.

Inserts

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metal S Exotic Alloy H Hardened Steel

											
Grade		Coated Carbide						Carbide	DL	Cat. No.	Dimensions
Application	High Speed/Light										
	General Purpose										
	Roughing										
Grade		ACP100	ACP200	ACP300	ACK200	ACK300	ACM200	ACM300	H1	DL1000	
											
AXMT 123504PEER-G		●	●	●	●	●			—	—	0.4
123508PEER-G		●	●	●	●	●			—	—	0.8
123512PEER-G		●	●	●	●	●			—	—	1.2
AXMT 123504PEER-H		●	●	●	●	●			—	—	0.4
123508PEER-H		●	●	●	●	●			—	—	0.8
123512PEER-H		●	●	●	●	●			—	—	1.2
AXMT 123504PEER-E							●	●	—	—	0.4
123508PEER-E				▲			●	●	—	—	0.8
123512PEER-E							●	●	—	—	1.2
AXMT 123508PEER-EH				▲			●	●	—	—	0.8
AXET 123502PEFR-S		—	—	—	—	—	—	—	●	●	0.2
123504PEFR-S		—	—	—	—	—	—	—	●	●	0.4
123508PEFR-S		—	—	—	—	—	—	—	●	●	0.8

Endmill Identification

WEX 2 016 M08 Z2

(1) Cutter Series (2) Insert size (3) Diameter (4) Mounting Screw (5) No. of Flutes

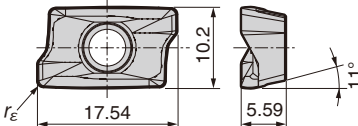
Spare Parts (WEX2000M)

Spanner	Screw	Applicable Endmill
BFTX0305IP	2.0	WEX2016M, WEX2018M
BFTX0306IP	2.0	WEX2020M to WEX2040M

N-m Recommended Tightening Torque (N · m) Anti-seizure cream SUMI-P included in the package.

Inserts (Common)

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metal S Exotic Alloy H Hardened Steel

												
Grade			Coated Carbide						Carbide	DLC		
Application	High Speed/Light	P			K		M S	K N	N			
	General Purpose	P M	P M	K		M S	M S		N			
	Roughing	P M	P M	K		M S						
Cat. No.			ACP100	ACP200	ACP300	ACK200	ACK300	ACM200	ACM300	H1	DL1000	Dimensions
								<i>New</i>	<i>New</i>			r_E
AXMT 170508PEER-L			●	●	●	●	●			—	—	0.8
AXMT 170504PEER-G			●	●	●	●	●			—	—	0.4
170508PEER-G			●	●	●	●	●			—	—	0.8
170512PEER-G			●	●	●	●	●			—	—	1.2
170516PEER-G			●	●	●	●	●			—	—	1.6
170520PEER-G *			●	●	●	●	●			—	—	2.0
170530PEER-G *			●	●	●	●	●			—	—	3.0
AXMT 170508PEER-H			●	●	●	●	●			—	—	0.8
170512PEER-H			●	●	●	●	●			—	—	1.2
AXMT 170504PEER-E								●	●	—	—	0.4
170508PEER-E					▲			●	●	—	—	0.8
170512PEER-E								●	●	—	—	1.2
170516PEER-E								●	●	—	—	1.6
170520PEER-E *								●	●	—	—	2.0
170530PEER-E *								●	●	—	—	3.0
AXMT 170508PEER-EH					▲			●	●	—	—	0.8
AXET 170502PEFR-S			—	—	—	—	—	—	—	●	●	0.2
170504PEFR-S			—	—	—	—	—	—	—	●	●	0.4
170508PEFR-S			—	—	—	—	—	—	—	●	●	0.8

* Cutter body modification is required.

Spare Parts (WEX3000M)

Spanner	Screw	Applicable Endmill
BFTX0407IP	3.0	WEX3025M to WEX3030M
BFTX0409IP	3.0	WEX3032M to WEX3040M

N-m Recommended Tightening Torque (N · m) Anti-seizure cream SUMI-P included in the package.

Recommended Cutting Conditions

H87

Rake Angle	Max. Depth of Cut		Max. Depth of Cut	Max. Depth of Cut	
	Radial	0°	5mm	6mm	
Axial	-3°				
		(08000M Type)	(10000M Type)	(12000M Type)	

SEC-Wave Radius Mill

WRCX08000M/10000M/12000M Type

SEC-Modular Tools



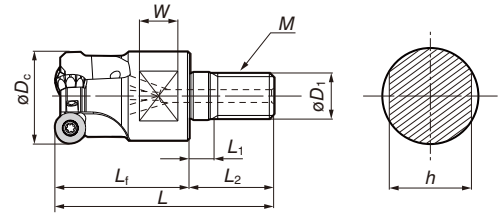
WRCX08000M Type



WRCX10000M Type



WRCX12000M Type



Head (WRCX 08000M) Applicable Insert A = 8 mm Type

Cat. No.	Stock	Dimensions (mm)										No. of Teeth
		ϕD_c	ϕD_1	M	L	L_f	L_{f1}	L_{f2}	W	h		
WRCX 08020M10Z2	●	20	10.5	M10	49	30	5	19	8	15	2	
08025M12Z3	●	25	12.5	M12	56	35	5	21	10	19	3	

Inserts are not included.

Head (WRCX 10000M) Applicable Insert A = 8 mm Type

Cat. No.	Stock	Dimensions (mm)										No. of Teeth
		ϕD_c	ϕD_1	M	L	L_f	L_{f1}	L_{f2}	W	h		
WRCX 10025M12Z2	●	25	12.5	M12	56	35	5	21	10	19	2	
10028M12Z2	●	28	12.5	M12	56	35	5	21	10	19	2	
WRCX 10030M16Z3	●	30	17.0	M16	63	40	5	23	10	24	3	
10032M16Z3	●	32	17.0	M16	63	40	5	23	10	24	3	

Inserts are not included.

Head (WRCX 12000M) Applicable Insert A = 8 mm Type

Cat. No.	Stock	Dimensions (mm)										No. of Teeth
		ϕD_c	ϕD_1	M	L	L_f	L_{f1}	L_{f2}	W	h		
WRCX 12040M16Z4	●	40	17.0	M16	63	40	5	23	10	24	4	

Inserts are not included.

Spare Parts

Spanner	Screw	Applicable Head
BFTX02506IP	1.5 TRDR08IP	
BFTX03584IP	3.0 TRDR15IP	
BFTX0409IP	3.0	WRCX12000M

Recommended Tightening Torque (N·m) Anti-seizure cream SUMI-P included in the package.

Identification Details

WRCX 08 020 M10 Z2

(1) Cutter Series (2) Insert size (3) Diameter (4) Mounting Screw (5) No. of Flutes

Inserts

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metal S Exotic Alloy H Hardened Steel

Grade		Coated Carbide		Carbide	DLC				
Application	High Speed/Light	P		K	N				
	General Purpose	P	M	K	N				
	Roughing	P	M	K	N				
Usage	Cat. No.	ACP100	ACP200	ACP300	ACK200	ACK300	H1	DL1000	
General Purpose	QPMT 080330 PPEN	●	●	●	●	●	—	—	8 3.0 3.18 1
	080330 PPEN-H	●	●	●	●	●	—	—	8 3.0 3.18 1
	QPMT 10T335 PPEN	●	●	●	●	●	—	—	10 3.5 3.97 1
	10T335 PPEN-H	●	●	●	●	●	—	—	10 3.5 3.97 1
	QPMT 120440 PPEN	●	●	●	●	●	—	—	12 4.0 4.76 1
Non-Ferrous Metal	120440 PPEN-H	●	●	●	●	●	—	—	12 4.0 4.76 1
	QPET 10T350 PPFR-S	—	—	—	—	—	●	●	10 5.0 3.97 2
Surfing	QPET 120460 PPFR-S	—	—	—	—	—	●	●	12 6.0 4.76 2
	QPMT 120460 PPER-R	●	●	—	—	—	—	—	12 6.0 4.76 3

Fig 1

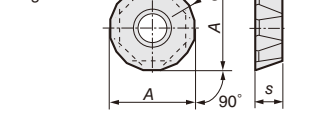


Fig 2

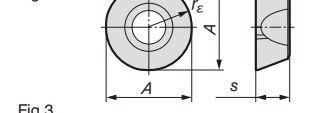
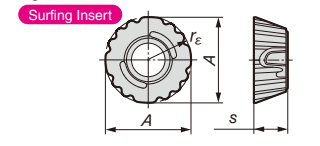


Fig 3



*1-H: Strong edge.

Recommended Cutting Conditions

External Diameter: $\phi 20$ to $\phi 32$ mm

ISO	Work Material	Hardness	Cutting Speed v_c (m/min)	Feed Rate f_z (mm/t)	Grade
			Min. - Optimum - Max.	Min. - Optimum - Max.	
P	Carbon Steel	180 to 280HB	80-120-160	0.10-0.30-0.40	ACP200
	Alloy Steel	180 to 280HB	60-100-140	0.10-0.20-0.30	ACP200
M	Stainless Steel	—	60-100-120	0.10-0.15-0.20	ACP300
K	Cast Iron	250HB	60-80-120	0.10-0.20-0.30	ACK200
N	Non-Ferrous Metal	—	200-500-1000	0.10-0.20-0.30	DL1000

Note The cutting conditions above are a guide. Actual conditions will need to be adjusted according to machine rigidity, work clamp rigidity, cutting depth, and other factors.

External Diameter: $\phi 40$ mm

ISO	Work Material	Hardness	Cutting Speed v_c (m/min)	Feed Rate f_z (mm/t)	Grade
			Min. - Optimum - Max.	Min. - Optimum - Max.	
P	Carbon Steel	180 to 280HB	100-160-200	0.20-0.40-0.60	ACP200
	Alloy Steel	180 to 280HB	100-140-180	0.20-0.30-0.40	ACP200
M	Stainless Steel	—	80-120-160	0.10-0.20-0.30	ACP300
K	Cast Iron	250HB	80-120-160	0.10-0.20-0.40	ACK200
N	Non-Ferrous Metal	—	200-500-1000	0.10-0.30-0.40	DL1000

Note The cutting conditions above are a guide. Actual conditions will need to be adjusted according to machine rigidity, work clamp rigidity, cutting depth, and other factors.

H

Modular Tools

Radius

Multi-Purpose

Shoulder Milling

Groove/T-Slot

Radial	-5° to -8°
Axial	8°

1.0 mm	20°
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1.5 mm	20°
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2.0 mm	20°
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P	M	K	N	S	H
Steel	Stainless Steel	Cast Iron	Non-Ferrous Metal	Exotic Alloy	Hardened Steel

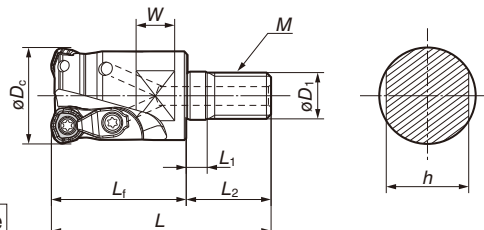
(06000M Type) (08000M Type) (12000M Type)

MSX06000M Type
(Only the MSX06000M type is a single-clamp type.)

MSX08000M Type



MSX12000M Type



■ Head (MSX 06000M)

Applicable Insert A = 6 mm Type

Cat. No.	Stock	Dimensions (mm)										No. of Teeth
		ϕD_c	ϕD_1	M	L	L_f	L_1	L_2	W	h		
MSX 06016M08Z2	●	16	8.5	M8	42	25	5	17	8	13	2	
06018M08Z2	●	18	8.5	M8	42	25	5	17	8	13	2	
MSX 06020M10Z3	●	20	10.5	M10	49	30	5	19	8	15	3	
06022M10Z3	●	22	10.5	M10	49	30	5	19	8	15	3	
MSX 06025M12Z3	●	25	12.5	M12	56	35	5	21	10	19	3	

Inserts are not included.

■ Head (MSX 12000M)

Applicable Insert A = 12mm Type

Cat. No.	Stock	Dimensions (mm)										No. of Teeth
		ϕD_c	ϕD_1	M	L	L_f	L_1	L_2	W	h		
MSX 12032M16Z2	●	32	17.0	M16	63	40	5	23	10	24	2	
12035M16Z2	●	35	17.0	M16	63	40	5	23	10	24	2	
12040M16Z3	●	40	17.0	M16	63	40	5	23	10	24	3	

Inserts are not included.

■ Head (MSX 08000M)

Applicable Insert A = 8 mm Type

Cat. No.	Stock	Dimensions (mm)										No. of Teeth
		ϕD_c	ϕD_1	M	L	L_f	L_1	L_2	W	h		
MSX 08025M12Z2	●	25	12.5	M12	56	35	5	21	10	19	2	
08028M12Z2	●	28	12.5	M12	56	35	5	21	10	19	2	
MSX 08030M16Z3	●	30	17.0	M16	63	40	5	23	10	24	3	
08032M16Z3	●	32	17.0	M16	63	40	5	23	10	24	3	
08035M16Z3	●	35	17.0	M16	63	40	5	23	10	24	3	

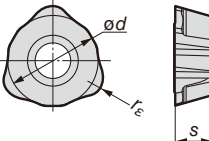
Inserts are not included.

■ Identification Details

MSX 06 016 M08 Z2

(1) Cutter Series (2) Insert Size (3) Diameter (4) Mounting Screw (5) No. of Flutes

■ Inserts

Grade		Coated Carbide										
Application		General Purpose		  								
		Roughing		 								
						 Steel  Stainless Steel  Cast Iron  Non-Ferrous Metal  Exotic Alloy  Hardened Steel						
Usage	Cat. No.	ACP200	ACP300	ACK200	ACK300	Dimensions (mm)			Applicable Cutter			
						ϕd	s	r_{ϵ}				
General Purpose	WDMT 0603 ZDTR	●	●	●	●	6.35	3.0	1.5	MSX06000M Type			
	0804 ZDTR	●	●	●	●	8.50	4.0	2.0	MSX08000M Type			
	1205 ZDTR	●	●	●	●	12.00	5.0	2.0	MSX12000M Type			
Strong Edged	WDMT 0603 ZDTR-H	●	●	●	●	6.35	3.0	1.5	MSX06000M Type			
	0804 ZDTR-H	●	●	●	●	8.50	4.0	2.0	MSX08000M Type			
	1205 ZDTR-H	●	●	●	●	12.00	5.0	2.0	MSX12000M Type			

■ Spare Parts

Screws	Spanner	Clamp	C Ring	Clamp Screw	Applicable Body
 BFTX02505IP 1.5 BFTX0306IP 2.0 BFTX0409IP 3.0	 TRDR08IP TRDR15IP	 CCH3.5	 CR03	 BFTX03510IP08 BFTX03510IP15	MSX06000M Type MSX08000M Type MSX12000M Type

(N·m) Recommended Tightening Torque (N·m)

■ Recommended Cutting Conditions H65