

INDEXABLE MILLING

MULTI FUNCTIONAL MILLING

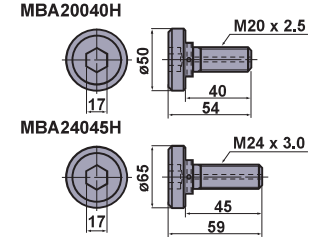
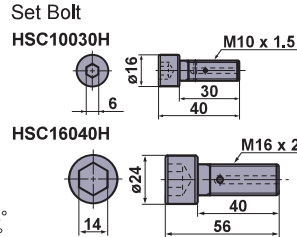
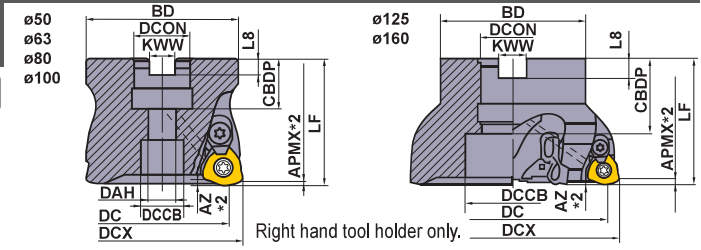


AJX

- P
 - M
 - K
 - N
 - S
 - H
- Steel Stainless Steel Cast Iron Heat Resistant Alloy Hardened Steel



- 13° and 15° positive inserts.
- High rigidity double clamp structure.
- Suitable for high feed machining.
- With through coolant holes.
- Special insert design with 3 cutting edges.



ARBOR TYPE

AJX09 GAMP :+8° GAMF :-6°
 AJX12 GAMP :+8° GAMF :-5°-4°
 AJX14 GAMP :+8° GAMF :-3°

Type	Order Number	Stock	Number of Teeth	Dimensions(mm)										*3 WT (kg)	*1						
				DCX	DC	LF	DCON	CBDP	DAH	BD	KWW	L8	DCCB		Clamp Screw	Clamp Bridge	Clamp Bridge Screw	Spring	Wrench	Set Bolt	Insert
Coarse Pitch	AJX12-050A03R	●	3	50	38.3	50	22	20	11	47	10.4	6.3	17	0.4	TS43	AMS4	AJS40 12T15	ASS2	⓪TKY15T	HSC100 30H	JDM 1204 ZD R-⓪
	AJX12R05003B	●	3	50	38.3	50	22.225	19	11	47	8.4	5	17	0.4						HSC100 30H	JDM 1405 ZD R-⓪
	AJX14-063A03R	●	3	63	51.1	50	22	20	11	60	10.4	6.3	17	0.7						HSC100 30H	JDM 1405 ZD R-⓪
	AJX14R06303B	●	3	63	51.1	50	22.225	19	11	60	8.4	5	17	0.7						HSC160 40H	JDM 1405 ZD R-⓪
	AJX14R08004D	●	4	80	68.1	63	31.75	32	17	76	12.7	8	26	1.3	TS54	AMS5	AJS50 14T25	ASS3	⓪TKY25T	MBA200 40H	JDM 1405 ZD R-⓪
	AJX14R10005D	●	5	100	88.1	63	31.75	32	17	96	12.7	8	26	2.4						MBA240 45H	JDM 1405 ZD R-⓪
	AJX14R12505E	●	5	125	113.2	63	38.1	40	-	100	15.9	10	56	3.3							
AJX14R16006F	●	6	160	148.2	63	50.8	43	-	100	19.1	11	72	5.0								
Fine Pitch	AJX12-050A04R	●	4	50	38.3	50	22	20	11	47	10.4	6.3	17	0.4	TS43	AMS4	AJS40 12T15	ASS2	⓪TKY15T	HSC100 30H	JDM 1204 ZD R-⓪
	AJX12R05004B	●	4	50	38.3	50	22.225	19	11	47	8.4	5	17	0.4						HSC100 30H	JDM 1405 ZD R-⓪
	AJX14-063A04R	●	4	63	51.1	50	22	20	11	60	10.4	6.3	17	0.7						HSC100 30H	JDM 1405 ZD R-⓪
	AJX14R06304B	●	4	63	51.1	50	22.225	19	11	60	8.4	5	17	0.7						HSC160 40H	JDM 1405 ZD R-⓪
	AJX14R08005D	●	5	80	68.1	63	31.75	32	17	76	12.7	8	26	1.3	TS54	AMS5	AJS50 14T25	ASS3	⓪TKY25T	MBA200 40H	JDM 1405 ZD R-⓪
	AJX14R10006D	●	6	100	88.1	63	31.75	32	17	96	12.7	8	26	2.4						MBA240 45H	JDM 1405 ZD R-⓪
	AJX14R12507E	●	7	125	113.2	63	38.1	40	-	100	15.9	10	56	3.3							
AJX14R16008F	●	8	160	148.2	63	50.8	43	-	100	19.1	11	72	5.0								
Extra Fine Pitch	AJX09-050A05R	●	5	50	40	50	22	20	11	47	10.4	6.3	17	0.5	TS351	AMS3	AJS30 10T10	ASS2	⓪TKY10D	HSC100 30H	JDM 09T3 ZD R-⓪
	AJX09R05005B	●	5	50	40	50	22.225	19	11	47	8.4	5	17	0.5						HSC100 30H	JDM 1204 ZD R-⓪
	AJX12-063A05R	●	5	63	51.3	50	22	20	11	60	10.4	6.3	17	0.9						HSC100 30H	JDM 1204 ZD R-⓪
	AJX12R06305B	●	5	63	51.3	50	22.225	19	11	60	8.4	5	17	0.9						HSC160 40H	JDM 1204 ZD R-⓪
	AJX12R08006D	●	6	80	68.3	63	31.75	32	17	76	12.7	8	26	1.7	TS43	AMS4	AJS40 12T15	ASS2	⓪TKY15T		JDM 1204 ZD R-⓪
AJX12R10007D	●	7	100	88.3	63	31.75	32	17	96	12.7	8	26	2.9								

*1 Clamp Torque (N · m) : TS351=2.5, TS43=3.5, TS54=7.5, AJS3010T10=2.5, AJS4012T15=3.5, AJS5014T25=7.5

*2 Refer to page L091 for the max. depth of cut APMX and maximum drilling depth AZ.

*3 WT : Tool Weight

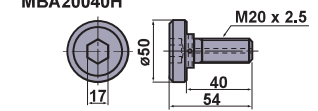
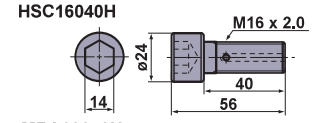
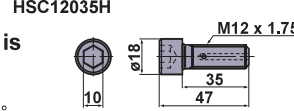
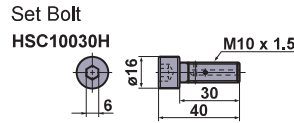
● : Inventory maintained in Japan.



For metric arbor

The cutter bore diameter DCON is indicated in millimetre.

AJX09	AJX12	AJX14
GAMP :+8°	GAMP :+8°	GAMP :+8°
GAMF :-6°	GAMF :-5°--4°	GAMF :-3°



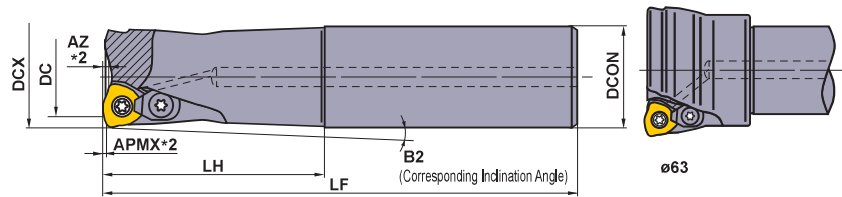
ARBOR TYPE

Type	Order Number	Stock	Number of Teeth	Dimensions(mm)									*3 WT (kg)								
				DCX	DC	LF	DCON	CBDP	DAH	BD	KWW	L8		DCCB	Clamp Screw	Clamp Bridge	Clamp Bridge Screw	Spring	Wrench	Set Bolt	Insert
Coarse Pitch	AJX12-050A03R	●	3	50	38.3	50	22	20	11	47	10.4	6.3	17	0.4	TS43	AMS4	AJS40 12T15	ASS2	TKY15T	HSC100 30H	JDM 1204 ZD-R-00
	AJX14-063A03R	●	3	63	51.1	50	22	20	11	60	10.4	6.3	17	0.7						HSC100 30H	JDM 1405 ZD-R-00
	AJX14-080A04R	●	4	80	68.1	50	27	23	13	76	12.4	7.0	19	1.2						HSC120 35H	
	AJX14-100A05R	●	5	100	88.1	63	32	26	17	96	14.4	8.0	26	2.4	TS54	AMS5	AJS50 14T25	ASS3	TKY25T	HSC160 40H	
	AJX14-125B05R	●	5	125	113.2	63	40	40	—	100	16.4	9.0	56	3.3						MBA200 40H	
AJX14-160B06R	●	6	160	148.2	63	40	40	—	100	16.4	9.0	56	5.0								
Fine Pitch	AJX12-050A04R	●	4	50	38.3	50	22	20	11	47	10.4	6.3	17	0.4						HSC100 30H	JDM 1204 ZD-R-00
	AJX12-080A06R	●	6	80	68.3	50	27	23	13	76	12.4	7.0	19	1.2	TS43	AMS4	AJS40 12T15	ASS2	TKY15T	HSC120 35H	
	AJX12-100A07R	●	7	100	88.3	63	32	26	17	96	14.4	8.0	26	2.6						HSC160 40H	
	AJX14-063A04R	●	4	63	51.1	50	22	20	11	60	10.4	6.3	17	0.7						HSC100 30H	
	AJX14-080A05R	●	5	80	68.1	50	27	23	13	76	12.4	7.0	19	1.2						HSC120 35H	
	AJX14-100A06R	●	6	100	88.1	63	32	26	17	96	14.4	8.0	26	2.4	TS54	AMS5	AJS50 14T25	ASS3	TKY25T	HSC160 40H	
Extra Fine Pitch	AJX14-125B07R	●	7	125	113.2	63	40	40	—	100	16.4	9.0	56	3.3						MBA200 40H	JDM 1405 ZD-R-00
	AJX14-160B08R	●	8	160	148.2	63	40	40	—	100	16.4	9.0	56	5.0							
Extra Fine Pitch	AJX09-050A05R	●	5	50	40	50	22	20	11	47	10.4	6.3	17	0.4	TS351	AMS3	AJS30 10T10	ASS2	TKY10D	HSC100 30H	JDM 09T3 ZD-R-00
	AJX12-063A05R	●	5	63	51.3	50	22	20	11	60	10.4	6.3	17	0.7	TS43	AMS4	AJS40 12T15	ASS2	TKY15T	HSC100 30H	JDM 1204 ZD-R-00

*1 Clamp Torque (N · m) : TS351=2.5, TS43=3.5, TS54=7.5, AJS3010T10=2.5, AJS4012T15=3.5, AJS5014T25=7.5
 *2 Refer to page L091 for the max. depth of cut APMX and maximum drilling depth AZ.
 *3 WT : Tool Weight

MILLING

INDEXABLE MILLING



SHANK TYPE

Right hand tool holder only.

Type	Order Number	Stock R	Number of Teeth	Dimensions(mm)					*1		*1		Wrench	Insert	
				DCX	DCON	DC	LF	LH	B2	Clamp Screw	Clamp Bridge	Clamp Bridge Screw			Spring
Short	AJX06R162SA16SS	●	2	16	16	8.9	70	20	3°30'	TS25	—	—	—	⌀TKY08F	JOM 06T215 ZZR-○○
	AJX06R172SA16SS	●	2	17	16	9.9	70	20	—	TS25	—	—	—	⌀TKY08F	
Standard	AJX06R162SA16S	●	2	16	16	8.9	110	30	2°15'	TS25	—	—	—	⌀TKY08F	JOM 06T215 ZZR-○○
	AJX06R172SA16S	●	2	17	16	9.9	110	20	—	TS25	—	—	—	⌀TKY08F	
	AJX06R203SA20S	●	3	20	20	12.9	130	50	1°18'	TS25	—	—	—	⌀TKY08F	
	AJX06R223SA20S	●	3	22	20	14.9	130	30	—	TS25	—	—	—	⌀TKY08F	
	AJX08R202SA20S	●	2	20	20	11.4	130	50	1°20'	TS33	—	—	—	⌀TKY08D	JOM 080320 ZZR-○○
	AJX08R222SA20S	●	2	22	20	13.4	130	30	—	TS33	—	—	—	⌀TKY08D	
	AJX08R253SA25S	●	3	25	25	16.4	140	60	1°06'	TS33	—	—	—	⌀TKY08D	
	AJX08R283SA25S	●	3	28	25	19.4	140	40	—	TS33	—	—	—	⌀TKY08D	
	AJX09R252SA25S	●	2	25	25	14.9	140	60	1°06'	TS351	AMS3	AJS3010T10	ASS2	⌀TKY10D	JDM 09T3○○ ZDR-○○
	AJX09R282SA25S	●	2	28	25	17.9	140	40	—	TS351	AMS3	AJS3010T10	ASS2	⌀TKY10D	
	AJX09R303SA32S	●	3	30	32	20.0	150	70	1°48'	TS351	AMS3	AJS3010T10	ASS2	⌀TKY10D	
	AJX09R323SA32S	●	3	32	32	21.9	150	70	0°56'	TS351	AMS3	AJS3010T10	ASS2	⌀TKY10D	
	AJX09R353SA32S	●	3	35	32	24.9	150	50	—	TS351	AMS3	AJS3010T10	ASS2	⌀TKY10D	
	AJX09R404SA32S	●	4	40	32	29.9	150	50	—	TS351	AMS3	AJS3010T10	ASS2	⌀TKY10D	
	AJX09R404SA42S	●	4	40	42	29.9	150	70	1°48'	TS351	AMS3	AJS3010T10	ASS2	⌀TKY10D	
	AJX12R302SA32S	●	2	30	32	18.3	150	70	1°48'	TS407	AMS4	AJS4012T15	ASS2	⌀TKY15D	JDM 1204○○ ZDR-○○
AJX12R322SA32S	●	2	32	32	20.3	150	70	0°58'	TS43	AMS4	AJS4012T15	ASS2	⌀TKY15D		
AJX12R352SA32S	●	2	35	32	23.3	150	50	—	TS43	AMS4	AJS4012T15	ASS2	⌀TKY15D		
AJX12R403SA32S	●	3	40	32	28.3	150	50	—	TS43	AMS4	AJS4012T15	ASS2	⌀TKY15D		
AJX12R403SA42S	●	3	40	42	28.3	150	70	1°48'	TS43	AMS4	AJS4012T15	ASS2	⌀TKY15D		
AJX14R503SA42S	●	3	50	42	38.2	150	50	—	TS54	AMS5	AJS5014T25	ASS3	⌀TKY25D	JDM 1405○○ ZDR-○○	
AJX14R634SA42S	●	4	63	42	51.1	150	50	—	TS54	AMS5	AJS5014T25	ASS3	⌀TKY25D		

*1 Clamp Torque (N • m) : TS25=1.0, TS33=1.0, TS351=2.5, TS407=3.5, TS43=3.5, TS54=7.5, AJS3010T10=2.5, AJS4012T15=3.5, AJS5014T25=7.5

*2 Refer to page L091 for the max. depth of cut APMX(max), and maximum drilling depth AZ.

MILLING

● : Inventory maintained in Japan.

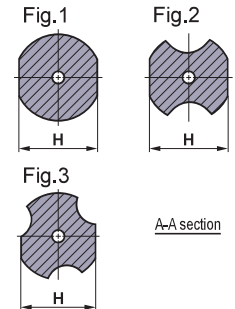
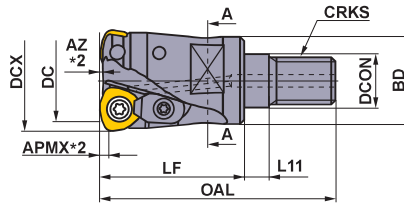
Type	Order Number	Stock	Number of Teeth	Dimensions(mm)					*1		*1		Wrench	Insert	
				DCX	DCON	DC	LF	LH	B2	Clamp Screw	Clamp Bridge	Clamp Bridge Screw			Spring
Long	AJX06R162SA16L	●	2	16	16	8.9	150	70	0°56'	TS25	—	—	—	⊙TKY08F	JOM 06T215 ZZR-○○
	AJX06R172SA16L	●	2	17	16	9.9	150	20	—	TS25	—	—	—	⊙TKY08F	
	AJX06R203SA20L	●	3	20	20	12.9	180	100	0°38'	TS25	—	—	—	⊙TKY08F	
	AJX06R223SA20L	●	3	22	20	14.9	180	30	—	TS25	—	—	—	⊙TKY08F	
	AJX08R202SA20L	●	2	20	20	11.4	180	100	0°39'	TS33	—	—	—	⊙TKY08D	JOM 080320 ZZR-○○
	AJX08R222SA20L	●	2	22	20	13.4	180	30	—	TS33	—	—	—	⊙TKY08D	
	AJX08R253SA25L	●	3	25	25	16.4	200	120	0°32'	TS33	—	—	—	⊙TKY08D	
	AJX08R283SA25L	●	3	28	25	19.4	200	40	—	TS33	—	—	—	⊙TKY08D	
	AJX09R252SA25L	●	2	25	25	14.9	200	120	0°32'	TS351	AMS3	AJS3010T10	ASS2	⊙TKY10D	JDM 09T3○○ ZDR-○○
	AJX09R282SA25L	●	2	28	25	17.9	200	40	—	TS351	AMS3	AJS3010T10	ASS2	⊙TKY10D	
	AJX09R303SA32L	●	3	30	32	20.0	200	120	1°02'	TS351	AMS3	AJS3010T10	ASS2	⊙TKY10D	
	AJX09R323SA32L	●	3	32	32	21.9	200	120	0°32'	TS351	AMS3	AJS3010T10	ASS2	⊙TKY10D	
	AJX09R353SA32L	●	3	35	32	24.9	200	50	—	TS351	AMS3	AJS3010T10	ASS2	⊙TKY10D	
	AJX09R404SA32L	●	4	40	32	29.9	250	50	—	TS351	AMS3	AJS3010T10	ASS2	⊙TKY10D	
	AJX09R404SA42L	●	4	40	42	29.9	250	70	1°48'	TS351	AMS3	AJS3010T10	ASS2	⊙TKY10D	
	AJX12R302SA32L	●	2	30	32	18.3	200	120	1°02'	TS407	AMS4	AJS4012T15	ASS2	⊙TKY15D	JDM 1204○○ ZDR-○○
	AJX12R322SA32L	●	2	32	32	20.3	200	120	0°33'	TS43	AMS4	AJS4012T15	ASS2	⊙TKY15D	
	AJX12R352SA32L	●	2	35	32	23.3	200	50	—	TS43	AMS4	AJS4012T15	ASS2	⊙TKY15D	
	AJX12R403SA32L	●	3	40	32	28.3	250	50	—	TS43	AMS4	AJS4012T15	ASS2	⊙TKY15D	
	AJX12R403SA42L	●	3	40	42	28.3	250	70	1°48'	TS43	AMS4	AJS4012T15	ASS2	⊙TKY25D	
AJX14R503SA42L	●	3	50	42	38.1	250	50	—	TS54	AMS5	AJS5014T25	ASS3	⊙TKY25D	JDM 1405○○ ZDR-○○	
AJX14R634SA42L	●	4	63	42	51.1	250	50	—	TS54	AMS5	AJS5014T25	ASS3	⊙TKY25D		
Extra Long	AJX06R162SA16EL	●	2	16	16	8.9	200	100	0°38'	TS25	—	—	—	⊙TKY08F	JOM 06T215 ZZR-○○
	AJX06R172SA16EL	●	2	17	16	9.9	200	20	—	TS25	—	—	—	⊙TKY08F	
	AJX08R202SA20EL	●	2	20	20	11.4	250	130	0°30'	TS33	—	—	—	⊙TKY08D	JOM 080320 ZZR-○○
	AJX08R222SA20EL	●	2	22	20	13.4	250	30	—	TS33	—	—	—	⊙TKY10D	
	AJX09R252SA25EL	●	2	25	25	14.9	300	180	0°22'	TS351	AMS3	AJS3010T10	ASS2	⊙TKY10D	JDM 09T3○○ ZDR-○○
	AJX09R282SA25EL	●	2	28	25	17.9	300	40	—	TS351	AMS3	AJS3010T10	ASS2	⊙TKY10D	
	AJX12R302SA32EL	●	2	30	32	18.3	300	180	0°42'	TS407	AMS4	AJS4012T15	ASS2	⊙TKY15D	JDM 1204○○ ZDR-○○
	AJX12R322SA32EL	●	2	32	32	20.3	300	180	0°22'	TS43	AMS4	AJS4012T15	ASS2	⊙TKY15D	
	AJX12R352SA32EL	●	2	35	32	23.3	300	50	—	TS43	AMS4	AJS4012T15	ASS2	⊙TKY15D	
AJX12R402SA32EL	●	2	40	32	28.3	350	50	—	TS43	AMS4	AJS4012T15	ASS2	⊙TKY15D		
AJX12R402SA42EL	●	2	40	42	28.3	350	70	1°48'	TS43	AMS4	AJS4012T15	ASS2	⊙TKY15D		

*1 Clamp Torque (N · m) : TS25=1.0, TS33=1.0, TS351=2.5, TS407=3.5, TS43=3.5, TS54=7.5, AJS3010T10=2.5, AJS4012T15=3.5, AJS5014T25=7.5

*2 Refer to page L091 for the max. depth of cut APMX(max), and maximum drilling depth AZ.

MILLING

INDEXABLE MILLING



SCREW-IN TYPE

Right hand tool holder only.

Order Number	Stock	Coolant Hole	Number of Teeth	Dimensions(mm)									*3 WT (kg)	Type (Fig.)	*1 Clamp Screw	Clamp Bridge	*1 Clamp Bridge Screw	Spring	Wrench	Insert
				DCX	DCON	BD	DC	OAL	LF	L11	H	CRKS								
AJX06R162AM0830	●	○	2	16	8.5	13	8.9	48	30	6	10	M8	0.1	1	TS25	—	—	—	①TKY08F	JOM 08T215 ZZOR-○○
AJX06R172AM0830	●	○	2	17	8.5	13	9.9	48	30	6	10	M8	0.1	1	TS25	—	—	—	①TKY08F	
AJX06R203AM1030	●	○	3	20	10.5	18	12.9	49	30	6	14	M10	0.1	3	TS25	—	—	—	①TKY08F	
AJX06R223AM1030	●	○	3	22	10.5	18	14.9	49	30	6	14	M10	0.1	3	TS25	—	—	—	①TKY08F	JOM 080320 ZZOR-○○
AJX08R202AM1030	●	○	2	20	10.5	18	11.4	49	30	6	14	M10	0.1	2	TS33	—	—	—	①TKY08D	
AJX08R222AM1030	●	○	2	22	10.5	18	13.4	49	30	6	14	M10	0.1	2	TS33	—	—	—	①TKY08D	
AJX08R253AM1235	●	○	3	25	12.5	21	16.4	57	35	6	19	M12	0.1	1	TS33	—	—	—	①TKY08D	JDM 09T3○○ ZDOR-○○
AJX08R283AM1235	●	○	3	28	12.5	21	19.4	57	35	6	19	M12	0.1	1	TS33	—	—	—	①TKY08D	
AJX09R252AM1235	●	○	2	25	12.5	21	14.9	57	35	6	19	M12	0.2	2	TS351	AMS3	AJS3010T10	ASS2	②TKY10D	
AJX09R282AM1235	●	○	2	28	12.5	21	17.9	57	35	6	19	M12	0.2	2	TS351	AMS3	AJS3010T10	ASS2	②TKY10D	JDM 09T3○○ ZDOR-○○
AJX09R303AM1645	●	○	3	30	17	29	20.0	68	45	6	24	M16	0.2	1	TS351	AMS3	AJS3010T10	ASS2	②TKY10D	
AJX09R323AM1645	●	○	3	32	17	29	21.9	68	45	6	24	M16	0.2	1	TS351	AMS3	AJS3010T10	ASS2	②TKY10D	
AJX09R353AM1645	●	○	3	35	17	29	24.9	68	45	6	24	M16	0.2	1	TS351	AMS3	AJS3010T10	ASS2	②TKY10D	JDM 1204○○ ZDOR-○○
AJX09R404AM1645	●	○	4	40	17	29	29.9	68	45	6	24	M16	0.2	1	TS351	AMS3	AJS3010T10	ASS2	②TKY10D	
AJX12R302AM1645	●	○	2	30	17	29	18.3	68	45	6	24	M16	0.3	2	TS407	AMS4	AJS4012T15	ASS2	②TKY15D	
AJX12R322AM1645	●	○	2	32	17	29	20.3	68	45	6	24	M16	0.3	2	TS43	AMS4	AJS4012T15	ASS2	②TKY15D	JDM 1204○○ ZDOR-○○
AJX12R352AM1645	●	○	2	35	17	29	23.3	68	45	6	24	M16	0.3	2	TS43	AMS4	AJS4012T15	ASS2	②TKY15D	
AJX12R403AM1645	●	○	3	40	17	29	28.3	68	45	6	24	M16	0.3	2	TS43	AMS4	AJS4012T15	ASS2	②TKY15D	

(Note) For screw-in type arbors, refer to page L145—L146.

*1 Clamp Torque (N • m) : TS25=1.0, TS33=1.0, TS351=2.5, TS407=3.5, TS43=3.5, AJS3010T10=2.5, AJS4012T15=3.5

*2 Refer to page L091 for the max. depth of cut APMX(max), and maximum drilling depth AZ.

*3 WT : Tool Weight

INSERTS

Work Material	P	Steel	●	●	✦										Cutting Conditions (Guide) : ● : Stable Cutting ● : General Cutting ✦ : Unstable Cutting		
	M	Stainless Steel				●	✦										
	K	Cast Iron	●														
Shape	Order Number	Class	Coated								Dimensions (mm)					Geometry	
			FH7020	MP6120	MP6130	MP7130	MP7140	MP9120	MP9130	VP15TF	VP30RT	AN	IC	S	BS		RE
 General purpose	JOMW06T215ZZSR-FT	M	●	●	●	●	●			●	●	13°	6.35	2.78	1.2	1.5	
	JOMW080320ZZSR-FT	M	●	●	●	●	●			●	●	13°	8	3.18	1.4	2	
	JDMW09T320ZDSR-FT	M	●	●	●	●	●			●	●	15°	9.525	3.97	1.8	2	
	JDMW120420ZDSR-FT	M	●	●	●	●	●			●	●	15°	12	4.76	2.5	2	
	JDMW140520ZDSR-FT	M	●	●	●	●	●			●	●	15°	14	5.56	2.8	2	
 Cutting edge enhancement type	JDMT120420ZDSR-ST	M	●	●	●	●	●			●	●	15°	12	4.76	2.5	2	
	JDMT140520ZDSR-ST	M	●	●	●	●	●			●	●	15°	14	5.56	2.8	2	
 Low cutting resistance (Difficult-to-Cut Materials)	JDMT09T323ZDER-JL	M						●	●			15°	9.525	3.97	1.8	2.3	
	JDMT120423ZDER-JL	M						●	●			15°	12	4.76	2.5	2.3	
	JDMT140523ZDER-JL	M						●	●			15°	14	5.56	2.8	2.3	
 Low cutting resistance	JOMT06T215ZZSR-JM	M	●	●	●	●	●			●	●	13°	6.35	2.78	1.2	1.5	
	JOMT080320ZZSR-JM	M	●	●	●	●	●			●	●	13°	8	3.18	1.4	2	
	JDMT09T320ZDSR-JM	M	●	●	●	●	●			●	●	15°	9.525	3.97	1.8	2	
	JDMT120420ZDSR-JM	M	●	●	●	●	●			●	●	15°	12	4.76	2.5	2	
	JDMT140520ZDSR-JM	M	●	●	●	●	●			●	●	15°	14	5.56	2.8	2	

(Note) Setting height for ST chipbreaker is slightly different from that for other chipbreakers.
 If you use ST chipbreaker, check the setting height.



INDEXABLE MILLING

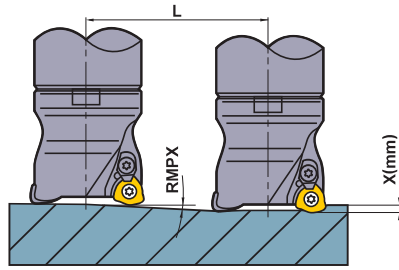
RECOMMENDED CUTTING CONDITIONS

CUTTING SPEED

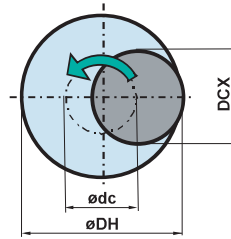
Work Material	Hardness	Cutting speed (m/min) for different grades				
		FH7020	MP6120	MP6130	VP30RT	
P	Mild Steel	≤180HB	170 (120—220)	150 (100—200)	130 (80—180)	110 (60—160)
	Carbon Steel Alloy Steel	180—280HB	150 (100—200)	130 (80—180)	110 (60—160)	90 (40—140)
	Carbon Steel Alloy Steel	280—350HB	130 (80—180)	100 (50—150)	80 (30—130)	60 (20—110)
	Alloy Tool Steel	≤350HB	130 (80—180)	100 (50—150)	80 (30—120)	60 (20—90)
	Pre-hardened Steel	35—45HRC	—	100 (70—130)	80 (50—110)	80 (30—90)
M	Stainless Steel	≤270HB	MP7130	MP7140	—	—
			140 (100—180)	120 (80—160)	—	—
K	Gray Cast Iron	≤350MPa	FH7020	VP15TF	—	—
			150 (100—200)	—	—	—
K	Ductile Cast Iron	≤800MPa	—	120 (80—160)	—	—
			—	—	—	—
S	Heat Resistant Alloy	≤350HB	MP9120	MP9130	—	—
			30 (20—40)	25 (20—35)	—	—
S	Titanium Alloy	—	50 (40—60)	45 (30—55)	—	—
			—	—	—	—
H	Hardened Steel	40—55HRC	VP15TF	—	—	—
			70 (50—90)	—	—	—

MAXIMUM CAPACITIES BY MODE

RAMPING



HELICAL DRILLING



- How to derive a locus of the center of the tool.

$$\text{ødc} = \text{øDH} - \text{DC}$$

Locus of the center of the tool = Desired hole diameter - Tool Diameter

- The depth of cut per pass must not exceed the max. depth of cut APMX.
- Set the machine spindle revolution so that the tool is rotating and cutting in a down cut direction.

- When ramping and helical cutting, please apply a lower feed (60% of the calculated feed rate or less).
- When drilling, please set the feed in the axial direction at 0.2mm/rev or less.
- The long chips generated can disperse, ensure that adequate safety precautions are taken.

Type	Order Number	Tool Diameter DCX (mm)	Machined Face Diameter DC (mm)	Max. Depth of Cut APMX (mm)		Ramping					Helical Drilling		Max. Drilling Depth AZ (mm)
				FT/JM/ST Breaker	JL Breaker	Max. Angle RMPX	L (mm) Required distance for X mm depth				Desired hole diameter DH (mm)		
							X=1	X=1.2	X=1.5	X=2	Min.	Max.	
Shank/screw-in	AJX06R162	16	8	1	—	3°	19.1	—	—	—	23	29	0.3
	AJX06R172	17	9	1	—	2° 30'	22.9	—	—	—	25	31	0.3
	AJX06R203	20	12	1	—	1° 30'	38.2	—	—	—	31	37	0.3
	AJX06R223	22	14	1	—	1°	57.3	—	—	—	35	41	0.3
	AJX08R202	20	11	1.5	—	3° 30'	16.3	19.6	24.5	—	27	36	0.5
	AJX08R222	22	13	1.5	—	3°	19.1	22.9	28.6	—	31	40	0.5
	AJX08R253	25	16	1.5	—	2°	28.6	34.4	43	—	37	46	0.5
	AJX08R283	28	19	1.5	—	1° 42'	33.7	40.4	50.5	—	43	52	0.5
	AJX09R252	25	14	2	1.2	4°	14.3	17.2	21.5	28.6	33	46	1
	AJX09R282	28	17	2	1.2	3°	19.1	22.9	28.6	38.1	39	52	1
	AJX09R303	30	19	2	1.2	2° 42'	21.2	25.4	31.8	42.4	43	56	1
	AJX09R323	32	21	2	1.2	2° 30'	22.9	27.5	34.4	45.8	47	60	1
	AJX09R353	35	24	2	1.2	2°	28.6	34.4	43	57.3	53	66	1
	AJX09R404	40	29	2	1.2	1° 30'	38.2	45.8	57.3	76.4	63	76	1
	AJX12R302	30	18	2	1.2	4° 30'	12.7	15.2	19	25.4	39	56	1.5
	AJX12R322	32	20	2	1.2	4°	14.3	17.2	21.4	28.6	41	60	1.5
	AJX12R352	35	23	2	1.2	3° 30'	16.3	19.6	24.5	32.7	47	66	1.5
	AJX12R402	40	28	2	1.2	3°	19.1	22.9	28.6	38.2	57	76	1.5
AJX12R403	40	28	2	1.2	3°	19.1	22.9	28.6	38.2	57	76	1.5	
AJX14R503	50	38	2	1.2	4° 12'	13.6	16.3	20.4	27.2	72	96	2	
AJX14R634	63	51	2	1.2	2° 48'	20.4	24.5	30.7	40.9	98	122	2	
Arbor	AJX09-050	50	40	2	1.2	1° 06'	52.1	62.5	78.1	104.2	83	96	1
	AJX09R05005B	50	40	2	1.2	1° 06'	52.1	62.5	78.1	104.2	83	96	1
	AJX12-050	50	38	2	1.2	2°	28.6	34.4	43	57.3	77	96	1.5
	AJXR050	50	38	2	1.2	2°	28.6	34.4	43	57.3	77	96	1.5
	AJX12-063	63	51	2	1.2	1° 30'	38.2	45.8	57.3	76.4	103	122	1.5
	AJXR063	63	51	2	1.2	1° 30'	38.2	45.8	57.3	76.4	103	122	1.5
	AJXR080	80	68	2	1.2	1° 06'	52.1	62.5	78.1	104.2	137	156	1.5
	AJXR100	100	88	2	1.2	0° 48'	71.6	85.9	107.4	143.2	177	196	1.5
	AJX14-063	63	51	2	1.2	2° 48'	20.4	24.5	30.7	40.9	98	122	2
	AJXR063	63	51	2	1.2	2° 48'	20.4	24.5	30.7	40.9	98	122	2
	AJXR080	80	68	2	1.2	1° 48'	31.8	38.2	47.7	63.6	132	156	2
	AJXR100	100	88	2	1.2	1° 12'	47.7	57.3	71.6	95.5	172	196	2
	AJXR125	125	113	2	1.2	0° 48'	71.6	85.9	107.4	143.2	222	246	2
	AJXR160	160	148	2	1.2	0° 30'	114.6	137.5	171.9	229.2	292	316	2

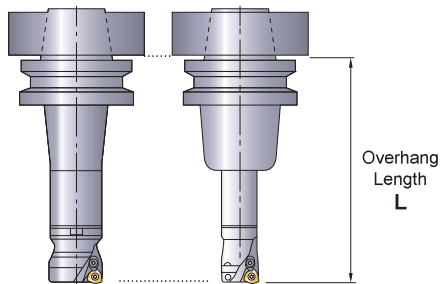
RECOMMENDED CUTTING CONDITIONS

DEPTH OF CUT AND FEEDRATE

Work Material	Hardness	Shank Type / Screw-In Type								
		ø16, ø17			ø20, ø22			ø25, ø28		
		Overhang Length (mm)	Axial depth of cut (mm)	Feed per Tooth (mm/t.)	Overhang Length (mm)	Axial depth of cut (mm)	Feed per Tooth (mm/t.)	Overhang Length (mm)	Axial depth of cut (mm)	Feed per Tooth (mm/t.)
P Mild Steel (ASTM A36, AISI 1010) Carbon Steel, Alloy Steel (AISI 1045, AISI 4140) Carbon Steel, Alloy Steel (AISI 4340) Alloy Tool Steel (SKD,SKT) Pre-hardened Steel	≤180HB	140	0.8	0.8	160	1.0	1.0	170	1.0	1.2
		180	0.6	0.6	210	0.8	0.8	230	0.8	1.0
		210	0.4	0.4	240	0.6	0.6	290	0.6	0.8
	180—280HB	140	0.8	0.8	160	1.0	1.0	170	1.0	1.2
		180	0.6	0.6	210	0.8	0.8	230	0.8	1.0
		210	0.4	0.4	240	0.6	0.6	290	0.6	0.8
	280—350HB	140	0.7	0.8	160	0.8	1.0	170	0.8	1.2
		180	0.5	0.6	210	0.6	0.8	230	0.6	1.0
		210	0.3	0.4	240	0.4	0.6	290	0.4	0.8
	≤350HB	140	0.7	0.8	160	0.8	1.0	170	0.8	1.2
		180	0.5	0.6	210	0.6	0.8	230	0.6	1.0
		210	0.3	0.4	240	0.4	0.6	290	0.4	0.8
35—45HRC	140	0.7	0.7	160	0.8	0.8	170	0.8	1.0	
	180	0.5	0.5	210	0.6	0.6	230	0.6	0.8	
	210	0.3	0.3	240	0.4	0.4	290	0.4	0.6	
M Stainless Steel	≤270HB	140	0.8	0.7	160	1.0	0.8	170	1.0	1.0
		180	0.6	0.5	210	0.8	0.6	230	0.8	0.8
		210	0.4	0.3	240	0.6	0.4	290	0.6	0.6
K Gray Cast Iron (FC300) Ductile Cast Iron (FCD450)	Tensile Strength ≤350MPa	140	0.8	1.0	160	1.0	1.2	170	1.0	1.4
		180	0.6	0.8	210	0.8	1.0	230	0.8	1.2
		210	0.4	0.6	240	0.6	0.8	290	0.6	1.0
	Tensile Strength ≤800MPa	140	0.7	0.8	160	0.8	1.0	170	0.8	1.2
		180	0.5	0.6	210	0.6	0.8	230	0.6	1.0
		210	0.3	0.4	240	0.4	0.6	290	0.4	0.8
S Heat Resistant Alloy Titanium Alloy (Ti-6Al-4V)	≤350HB	—	—	—	—	—	—	170	1.0	0.6
	—	—	—	—	—	—	—	230	0.8	0.4
H Hardened Steel (SKD,SKT)	40—55HRC	140	0.5	0.5	160	0.5	0.6	170	0.5	0.8
		180	0.4	0.3	210	0.4	0.4	230	0.4	0.6
		210	0.3	0.2	240	0.3	0.2	290	0.3	0.4

MILLING

① Overhang Length L



② Main Spindle Revolution

$$n(\text{min}^{-1}) = (\text{Recommended Cutting Speed} \times 1000) \div (\text{Outer Tool Diameter} \times 3.14)$$

③ Table Feed Rate

$$vf(\text{mm/min}) = n \times \text{Feed per Tooth} \times \text{Number of Teeth}$$

④ Recommended width of cut (ae) is more than 60% of the cutting edge diameter.

⑤ The above cutting conditions are guides to cutting on a #50 BT machine. In case of #40 BT and #63 HSK machines, a cutting edge diameter of under 35mm is recommended. In the case also, reduce the axial direction depth of cut and table feed rate.

⑥ Use of **ST** chipbreaker with tougher cutting edges is recommended for machining parts that require interrupted cutting. First recommended insert grade for non-standard 06/08/09 **ST** chipbreakers is **VP30RT** irrespective of the workpiece material.

⑦ Cutter body with coarse pitch is recommended for the unstable cutting caused by the long tool overhang.

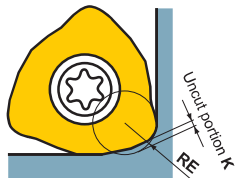
⑧ Use the "sharp" **JM** chipbreaker to lower cutting forces or when long tool overhangs are used.

⑨ Heavy chips are generated when machining with the **AJX**. To avoid chip jamming-related problems, use air blow while machining to discharging chips effectively.

	Shank Type / Screw-In Type												Arbor Type					
	ø30, ø32, ø35			ø40 (ø32 Shank)			ø40 (ø42 Shank)			ø50, ø63			ø50, ø63			ø80, ø100, ø125, ø160		
	Overhang Length (mm)	Axial depth of cut (mm)	Feed per Tooth (mm/t.)	Overhang Length (mm)	Axial depth of cut (mm)	Feed per Tooth (mm/t.)	Overhang Length (mm)	Axial depth of cut (mm)	Feed per Tooth (mm/t.)	Overhang Length (mm)	Axial depth of cut (mm)	Feed per Tooth (mm/t.)	Overhang Length (mm)	Axial depth of cut (mm)	Feed per Tooth (mm/t.)	Overhang Length (mm)	Axial depth of cut (mm)	Feed per Tooth (mm/t.)
	180	1.2	1.4	180	1.2	1.4	180	1.2	1.5	180	1.4	1.5	150	1.5	1.5	170	1.5	1.5
	230	1.0	1.2	240	1.0	1.2	240	1.0	1.3	240	1.2	1.3	250	1.3	1.3	300	1.3	1.3
	290	0.8	1.0	300	0.8	1.0	300	0.8	1.1	—	—	—	350	1.1	1.1	450	1.0	1.0
	180	1.2	1.4	180	1.2	1.4	180	1.2	1.5	180	1.4	1.5	150	1.5	1.5	170	1.5	1.5
	230	1.0	1.2	240	1.0	1.2	240	1.0	1.3	240	1.2	1.3	250	1.3	1.3	300	1.3	1.3
	290	0.8	1.0	300	0.8	1.0	300	0.8	1.1	—	—	—	350	1.1	1.1	450	1.0	1.0
	180	1.0	1.4	180	1.0	1.4	180	1.0	1.5	180	1.2	1.5	150	1.3	1.5	170	1.3	1.5
	230	0.8	1.2	240	0.8	1.2	240	0.8	1.3	240	1.0	1.3	250	1.1	1.3	300	1.1	1.3
	290	0.6	1.0	300	0.6	1.0	300	0.6	1.1	—	—	—	350	0.9	1.1	450	0.8	1.0
	180	1.0	1.4	180	1.0	1.4	180	1.0	1.5	180	1.2	1.5	150	1.3	1.5	170	1.3	1.5
	230	0.8	1.2	240	0.8	1.2	240	0.8	1.3	240	1.0	1.3	250	1.1	1.3	300	1.1	1.3
	290	0.6	1.0	300	0.6	1.0	300	0.6	1.1	—	—	—	350	0.9	1.1	450	0.8	1.0
	180	1.0	1.2	180	1.0	1.2	180	1.0	1.3	180	1.2	1.3	150	1.3	1.3	170	1.3	1.3
	230	0.8	1.0	240	0.8	1.0	240	0.8	1.1	240	1.0	1.1	250	1.1	1.1	300	1.1	1.1
	290	0.6	0.8	300	0.6	0.8	300	0.6	0.9	—	—	—	350	0.9	0.9	450	0.8	0.8
	180	1.2	1.2	180	1.2	1.2	180	1.2	1.3	180	*1.4	1.3	150	*1.5	1.3	170	*1.5	1.3
	230	1.0	1.0	240	1.0	1.0	240	1.0	1.1	240	1.2	1.1	250	*1.3	1.1	300	*1.3	1.1
	290	0.8	0.8	300	0.8	0.8	300	0.8	0.9	—	—	—	350	1.1	0.9	450	1.0	0.8
	180	1.2	1.6	180	1.2	1.6	180	1.2	1.7	180	1.4	1.7	150	1.5	1.7	170	1.5	1.7
	230	1.0	1.4	240	1.0	1.4	240	1.0	1.5	240	1.2	1.5	250	1.3	1.5	300	1.3	1.5
	290	0.8	1.2	300	0.8	1.2	300	0.8	1.3	—	—	—	350	1.1	1.3	450	1.0	1.2
	180	1.0	1.4	180	1.0	1.4	180	1.0	1.5	180	1.2	1.5	150	1.3	1.5	170	1.3	1.5
	230	0.8	1.2	240	0.8	1.2	240	0.8	1.3	240	1.0	1.3	250	1.1	1.3	300	1.1	1.3
	290	0.6	1.0	300	0.6	1.0	300	0.6	1.1	—	—	—	350	0.9	1.1	450	0.8	1.0
	180	1.2	0.6	180	1.2	0.6	180	1.2	0.6	180	1.2	0.6	150	1.2	0.6	170	1.2	0.6
	230	1.0	0.4	240	1.0	0.4	240	1.0	0.4	240	1.0	0.4	250	1.0	0.4	300	1.0	0.4
	290	0.8	0.3	300	0.8	0.3	300	0.8	0.3	—	—	—	350	0.8	0.3	450	0.8	0.3
	180	0.6	1.0	180	0.6	1.0	180	0.6	1.1	180	0.8	1.1	150	0.9	1.1	170	0.9	1.1
	230	0.5	0.8	240	0.5	0.8	240	0.5	0.9	240	0.6	0.9	250	0.7	0.9	300	0.7	0.9
	290	0.4	0.6	300	0.4	0.6	300	0.4	0.7	—	—	—	—	—	—	—	—	—

* The JL breaker depth of cut is up to 1.2mm.

NOTE FOR PROGRAMMING



When using the **AJX**, please programme as an R3 radius cutter. The approximate uncut portions for the programme are as follows.

Size	Breaker	Approx. RE(mm)	Uncut portion K(mm)
06	FT / JM	2.0	0.33
08	FT / JM	2.5	0.46
09	FT / JM	3.0	0.47
	JL	3.0	0.46
12	FT / JM / ST	3.0	0.63
	JL	3.0	0.53
14	FT / JM / ST	3.0	0.64
	JL	3.0	0.55

(Note) The uncut portion may change slightly depending on cutting conditions.