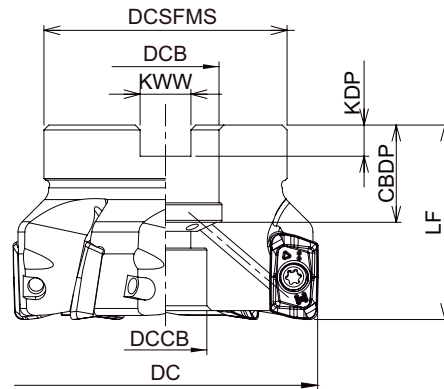


**SSV
TYPE**

Bore Type

Through
coolant
hole



Cat.No.	Stock	No. of inserts	Dimensions (mm)								Max. spindle speed (min ⁻¹)	Arbor set bolt	Weight (kg)	Insert
			DC	LF	DCSFMS	DCB	DCCB	KWW	KDP	CBDP				
SSV-4040R-16	●	4	40	40	35	16	14	8.4	5.6	18	19,000	M8	0.20	ZOMT1605**ZER-PM ZOET1605**ZFR-NL
SSV-5050R-22	●	5	50	40	47	22	17	10.4	6.3	20	16,000	M10	0.33	
SSV-6063R-22	●	6	63	40	50	22	17	10.4	6.3	20	14,000	M10	0.52	
SSV-6063R-27	●	6	63	50	60	27	20	12.4	7	22	14,000	M12X1.75X30*	0.75	
SSV-7080R-27	●	7	80	50	60	27	20	12.4	7	22	12,000	M12X1.75X30*	1.08	
SSV-8100R-32	●	8	100	50	85	32	26	14.4	8	25	11,000	M16X2X30*	1.95	
SSV-8125R-40	●	8	125	63	100	40	32	16.4	9	32	9,600	M20X2.5X40*	3.73	

Note) 1.All cutters are supplied without inserts or wrenches.

● : Stocked Items

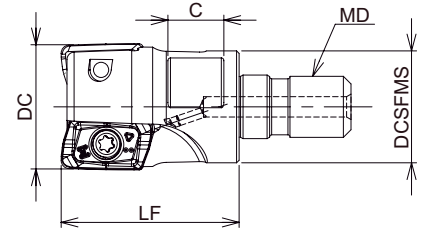
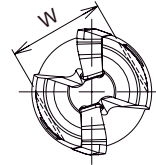
2.When using inserts with corner radius RE4 or RE5, please machine the cutter body to R4 or C4.5.

Screw	Torque(N.m)	Wrench
DSW-4075H	3.6	A-15T

SSV
TYPE

Modular Type

Through
coolant
hole



Cat.No.	Stock	No. of inserts	Dimensions (mm)						Max. spindle speed (min ⁻¹)	Insert
			DC	LF	DCSFMS	MD	C	W		
SSV-2025-M12	●	2	25	35	22	M12	11	19	26,000	ZOMT1605**ZER-PM ZOET1605**ZFR-NL
SSV-2028-M12	○	2	28	35	22	M12	11	19	24,000	
SSV-3030-M16	○	3	30	43	29	M16	12	22	23,000	
SSV-3032-M16	●	3	32	43	29	M16	12	22	22,000	
SSV-3035-M16	●	3	35	43	29	M16	12	22	20,000	
SSV-4040-M16	●	4	40	43	29	M16	12	22	19,000	

Note) 1. All cutters are supplied without inserts or wrenches.

2. When using inserts with corner radius RE4 or RE5, please machine the cutter body to R4 or C4.5.

● : Stocked Items

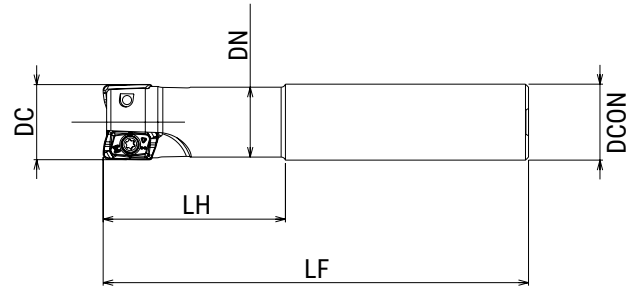
○ : Stock in Japan

Screw	Torque(N.m)	Wrench
DSW-4075H	3.6	A-15



SSV
TYPE

Shank Type



Cat.No.	Stock	No. of inserts	Dimensions (mm)					Insert
			DC	LH	LF	DN	DCON	
SSV-2025-60-S25+A	●	2	25	60	140	23	25	ZOMT1605**ZER-PM ZOET1605**ZFR-NL
SSV-2025-100-S25+A	●	2	25	100	180	23	25	
SSV-3032-70-S32+A	●	3	32	70	150	29	32	
SSV-3032-120-S32+A	●	3	32	120	200	29	32	
SSV-4040-50-S32+A	※	4	40	50	150	37	32	
SSV-4040-50L-S32+A	●	4	40	50	200	37	32	

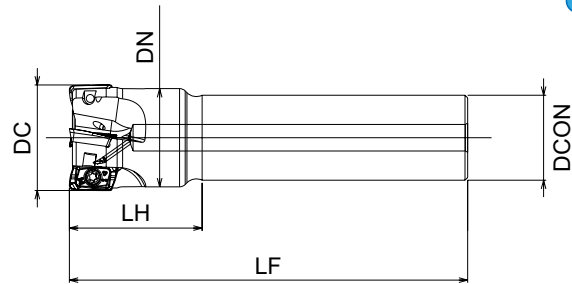
Note) 1.All cutters are supplied without inserts or wrenches.

2.When using inserts with corner radius RE4 or RE5, please machine the cutter body to R4 or C4.5.

● : Stocked Items

※ : Discontinued

Through
coolant
hole



Cat.No.	Stock	No. of inserts	Dimensions (mm)					Insert
			DC	LH	LF	DN	DCON	
SSV-4040-50-S32	●	4	40	50	150	37	32	ZOMT1605**ZER-PM ZOET1605**ZFR-NL

Note) 1.All cutters are supplied without inserts or wrenches.

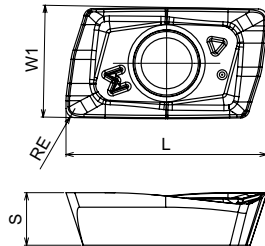
2.When using inserts with corner radius RE4 or RE5, please machine the cutter body to R4 or C4.5.

● : Stocked Items

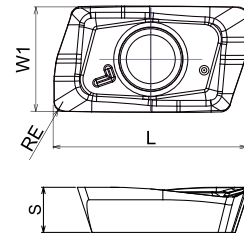
Screw	Torque(N.m)	Wrench
DSW-4075H	3.6	A-15

Insert

For Steel



For Aluminium alloy



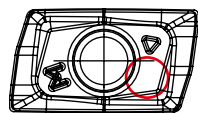
Cat.No.	Tolerance	PVD Coating		Uncoated	Dimensions (mm)			
		JC8050	JC8118		RE	L	W1	S
ZOMT160504ZER-PM	M	●	●		0.4	18	10	4.7
ZOMT160508ZER-PM	M	●	●		0.8	18	10	4.7
ZOMT160516ZER-PM	M	●	●		1.6	18	10	4.7
ZOMT160520ZER-PM	M	●	●		2	18	10	4.7
ZOMT160530ZER-PM	M	●	●		3	18	10	4.7
ZOMT160540ZER-PM	M	●	●		4	17	10	4.7
ZOMT160550ZER-PM	M	●	●		5	17	9.9	4.7
ZOET160504ZFR-NL	E			●	0.4	18	10	4.7
ZOET160508ZFR-NL	E			●	0.8	18	10	4.7
ZOET160516ZFR-NL	E			●	1.6	18	10	4.7
ZOET160520ZFR-NL	E			●	2	18	10	4.7
ZOET160530ZFR-NL	E			●	3	18	10	4.7
ZOET160532ZFR-NL	E			○	3.2	18	10	4.7

Note) 10 inserts per case.

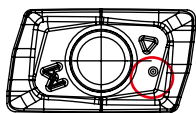


● : Stocked Items
○ : Stock in Japan

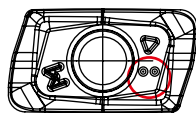
GRADE MARKINGS



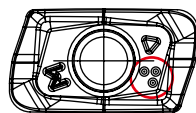
ZO*T160504Z*R-**



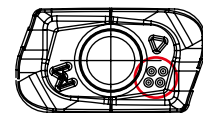
ZO*T160508Z*R-**



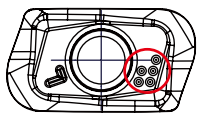
ZO*T160516Z*R-**



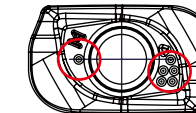
ZO*T160520Z*R-**



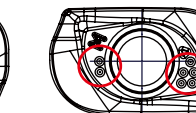
ZO*T160530Z*R-**



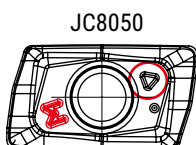
ZOET160532ZFR-NL



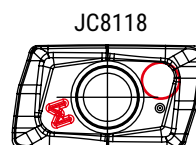
ZOMT160540ZER-PM



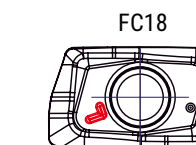
ZOMT160550ZER-PM



JC8050



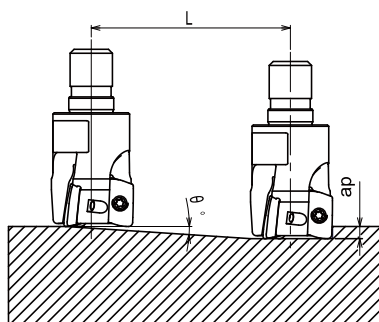
JC8118



FC18

Recommended Data for Profile Milling

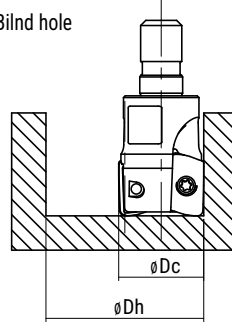
Ramping



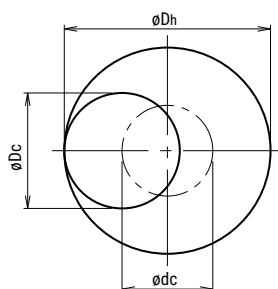
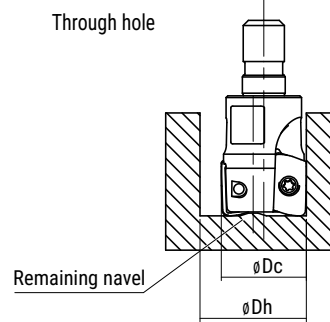
- In case of ramping and helical interpolation, apply 80% or less feed (Vf) from standard cutting condition table
- In case of drilling, apply 50% or less feed (Vf) from standard cutting condition table
- In case of helical interpolation, recommend wet cutting by coolant through the tool
- Long chips may come out in case of drilling, confirm safe operating conditions

Helical interpolation

Blind hole



Through hole



- Calculation of tool pass dia.

$$\phi_{dc} = \phi_{Dh} - \phi_{Dc}$$

Tool pass dia. Bore dia. Tool Dia.

- Depth of cut per one circuit should not exceed max. depth of cut Ap
- Down cutting is recommended, tool pass rotation should be counterclockwise

ZOMT160504ZER-PM

Tool dia. (mm)	Effective cutting dia. (mm)	Max.depth of cut : ap (mm)	Ramping		Helical interpolation			Max. drilling depth: Z
			Max. ramping angle θ	Max. depth of cut (ap) Total cutting length L(mm)	Through hole Min. Bore dia. (mm)	Blind hole Min. Bore dia. (mm)	Blind hole Max. Bore dia. (mm)	
25	23.9	1.5	6.2	13.8	31	48	48.8	1.6
28	26.9	1.5	5.3	16.2	37	54	54.8	1.6
30	28.9	1.5	4.8	17.9	41	58	58.8	1.6
32	30.9	1.5	4.4	19.5	45	62	62.8	1.6
35	33.9	1.5	4.3	19.9	51	68	68.8	1.6
40	38.9	1.5	3.6	23.8	61	78	78.8	1.6
50	48.9	1.5	2.4	35.8	81	98	98.8	1.4
63	61.9	1.5	1.7	50.5	107	124	124.8	1.4
80	78.9	1.5	1.2	71.6	141	158	158.8	1.4
100	98.9	1.5	0.9	95.5	181	198	198.8	1.4
125	123.9	1.5	0.65	132.2	231	248	248.8	1.4

ZOMT160508ZER-PM

Tool dia. (mm)	Effective cutting dia. (mm)	Max.depth of cut : ap (mm)	Ramping		Helical interpolation			Max. drilling depth: Z
			Max. ramping angle θ	Max. depth of cut (ap) Total cutting length L(mm)	Through hole Min. Bore dia. (mm)	Blind hole Min. Bore dia. (mm)	Blind hole Max. Bore dia. (mm)	
25	23.1	1.5	6.4	13.4	31	47.2	48	1.6
28	26.1	1.5	5.4	15.9	37	53.2	54	1.6
30	28.1	1.5	4.8	17.9	41	57.2	58	1.6
32	30.1	1.5	4.4	19.5	45	61.2	62	1.6
35	33.1	1.5	4.3	19.9	51	67.2	68	1.6
40	38.1	1.5	3.6	23.8	61	77.2	78	1.6
50	48.1	1.5	2.4	35.8	81	97.2	98	1.4
63	61.1	1.5	1.7	50.5	107	123.2	124	1.4
80	78.1	1.5	1.2	71.6	141	157.2	158	1.4
100	98.1	1.5	0.9	95.5	181	197.2	198	1.4
125	123.1	1.5	0.65	132.2	231	247.2	248	1.4

ZOMT160516ZER-PM

Tool dia. (mm)	Effective cutting dia. (mm)	Max.depth of cut : ap (mm)	Ramping		Helical interpolation			Max. drilling depth: Z
			Max. ramping angle θ	Max. depth of cut (ap) Total cutting length L(mm)	Through hole Min. Bore dia. (mm)	Blind hole Min. Bore dia. (mm)	Blind hole Max. Bore dia. (mm)	
25	21.5	1.5	6.7	12.8	31	45.8	46.4	1.5
28	24.5	1.5	5.6	15.3	37	51.8	52.4	1.5
30	26.5	1.5	5	17.1	41	55.8	56.4	1.5
32	28.5	1.5	4.7	18.2	45	59.8	60.4	1.5
35	31.5	1.5	4.6	18.6	51	65.8	66.4	1.5
40	36.5	1.5	3.8	22.6	61	75.8	76.4	1.5
50	46.5	1.5	2.5	34.4	81	95.8	96.4	1.4
63	59.5	1.5	1.8	47.7	107	121.8	122.4	1.4
80	76.5	1.5	1.2	71.6	141	155.8	156.4	1.4
100	96.5	1.5	0.9	95.5	181	195.8	196.4	1.4
125	121.5	1.5	0.65	132.2	231	245.8	246.4	1.4

ZOMT160520ZER-PM

Tool dia. (mm)	Effective cutting dia. (mm)	Max.depth of cut : ap (mm)	Ramping		Helical interpolation			Max. drilling depth: Z
			Max. ramping angle θ	Max. depth of cut (ap) Total cutting length L(mm)	Through hole Min. Bore dia. (mm)	Blind hole Min. Bore dia. (mm)	Blind hole Max. Bore dia. (mm)	
25	20.7	1.5	6.9	12.4	31	45	45.6	1.5
28	23.7	1.5	5.7	15	37	51	51.6	1.5
30	25.7	1.5	5	17.1	41	55	55.6	1.5
32	27.7	1.5	4.7	18.2	45	59	59.6	1.5
35	30.7	1.5	4.6	18.6	51	65	65.6	1.5
40	35.7	1.5	3.8	22.6	61	75	75.6	1.5
50	45.7	1.5	2.5	34.4	81	95	95.6	1.4
63	58.7	1.5	1.8	47.7	107	121	121.6	1.4
80	75.7	1.5	1.2	71.6	141	155	155.6	1.4
100	95.7	1.5	0.9	95.5	181	195	195.6	1.4
125	120.7	1.5	0.65	132.2	231	245	245.6	1.4

ZOMT160530ZER-PM

Tool dia. (mm)	Effective cutting dia. (mm)	Max.depth of cut : ap (mm)	Ramping		Helical interpolation			Max. drilling depth: Z
			Max. ramping angle θ	Max. depth of cut (ap) Total cutting length L(mm)	Through hole Min. Bore dia. (mm)	Blind hole Min. Bore dia. (mm)	Blind hole Max. Bore dia. (mm)	
25	18.7	1.5	7.2	11.9	31	43	43.6	1.5
28	21.7	1.5	6	14.3	37	49	49.6	1.5
30	23.7	1.5	5.3	16.2	41	53	53.6	1.5
32	25.7	1.5	4.8	17.9	45	57	57.6	1.5
35	28.7	1.5	4.7	18.2	51	63	63.6	1.5
40	33.7	1.5	3.9	22	61	73	73.6	1.5
50	43.7	1.5	2.5	34.4	81	93	93.6	1.4
63	56.7	1.5	1.8	47.7	107	119	119.6	1.4
80	73.7	1.5	1.3	66.1	141	153	153.6	1.4
100	93.7	1.5	0.95	90.5	181	193	193.6	1.4
125	118.7	1.5	0.65	132.2	231	243	243.6	1.4

ZOMT160540ZER-PM

Tool dia. (mm)	Effective cutting dia. (mm)	Max.depth of cut : ap (mm)	Ramping		Helical interpolation			Max. drilling depth: Z
			Max. ramping angle θ	Max. depth of cut (ap) Total cutting length L(mm)	Through hole Min. Bore dia. (mm)	Blind hole Min. Bore dia. (mm)	Blind hole Max. Bore dia. (mm)	
25	23.1	1.5	5.6	15.3	33	39	49	1
28	26.1	1.5	4.4	19.5	39	45	55	1
30	28.1	1.5	3.8	22.6	43	49	59	1
32	30.1	1.5	3.4	25.2	47	53	63	1
35	33.1	1.5	2.9	29.6	53	59	69	1
40	38.1	1.5	2.3	37.3	63	69	79	1
50	48.1	1.5	1.5	57.3	83	89	99	1
63	61.1	1.5	1.1	78.1	109	115	125	1
80	78.1	1.5	0.8	107.4	143	149	159	1
100	98.1	1.5	0.6	143.2	183	189	199	1
125	123.1	1.5	0.45	191	233	239	249	1

ZOMT160550ZER-PM

Tool dia. (mm)	Effective cutting dia. (mm)	Max.depth of cut : ap (mm)	Ramping		Helical interpolation			Max. drilling depth: Z
			Max. ramping angle θ	Max. depth of cut (ap) Total cutting length L(mm)	Through hole Min. Bore dia. (mm)	Blind hole Min. Bore dia. (mm)	Blind hole Max. Bore dia. (mm)	
25	23.1	1.5	5.6	15.3	33	39	49	1
28	26.1	1.5	4.4	19.5	39	45	55	1
30	28.1	1.5	3.8	22.6	43	49	59	1
32	30.1	1.5	3.4	25.2	47	53	63	1
35	33.1	1.5	2.9	29.6	53	59	69	1
40	38.1	1.5	2.3	37.3	63	69	79	1
50	48.1	1.5	1.5	57.3	83	89	99	1
63	61.1	1.5	1.1	78.1	109	115	125	1
80	78.1	1.5	0.8	107.4	143	149	159	1
100	98.1	1.5	0.6	143.2	183	189	199	1
125	123.1	1.5	0.45	191	233	239	249	1

ZOET160504ZFR-NL

Tool dia. (mm)	Effective cutting dia. (mm)	Max.depth of cut : ap (mm)	Ramping		Helical interpolation			Max. drilling depth: Z
			Max. ramping angle θ	Max. depth of cut (ap) Total cutting length L(mm)	Through hole Min. Bore dia. (mm)	Blind hole Min. Bore dia. (mm)	Blind hole Max. Bore dia. (mm)	
25	23.9	7	6.8	58.7	33	45	49	1.6
28	26.9	7	6	66.6	39	51	55	1.6
30	28.9	7	5.3	75.5	43	55	59	1.6
32	30.9	7	4.8	83.4	47	59	63	1.6
35	33.9	7	4.7	85.1	53	65	69	1.6
40	38.9	7	3.9	102.7	63	75	79	1.6
50	48.9	7	2.5	160.3	83	95	99	1.4
63	61.9	7	1.8	222.7	109	121	125	1.4
80	78.9	7	1.3	308.5	143	155	159	1.4
100	98.9	7	0.95	422.1	183	195	199	1.4
125	123.9	7	0.65	617.0	233	245	249	1.4

ZOET160508ZFR-NL

Tool dia. (mm)	Effective cutting dia. (mm)	Max.depth of cut : ap (mm)	Ramping		Helical interpolation			Max. drilling depth: Z
			Max. ramping angle θ	Max. depth of cut (ap) Total cutting length L(mm)	Through hole Min. Bore dia. (mm)	Blind hole Min. Bore dia. (mm)	Blind hole Max. Bore dia. (mm)	
25	23.1	7	6.8	58.7	33	45	49	1.6
28	26.1	7	6	66.6	39	51	55	1.6
30	28.1	7	5.3	75.5	43	55	59	1.6
32	30.1	7	4.8	83.4	47	59	63	1.6
35	33.1	7	4.7	85.1	53	65	69	1.6
40	38.1	7	3.9	102.7	63	75	79	1.6
50	48.1	7	2.5	160.3	83	95	99	1.4
63	61.1	7	1.8	222.7	109	121	125	1.4
80	78.1	7	1.3	308.5	143	155	159	1.4
100	98.1	7	0.95	422.1	183	195	199	1.4
125	123.1	7	0.65	617.0	233	245	249	1.4

ZOET160516ZFR-NL

Tool dia. (mm)	Effective cutting dia. (mm)	Max.depth of cut : ap (mm)	Ramping		Helical interpolation			Max. drilling depth: Z
			Max. ramping angle θ	Max. depth of cut (ap) Total cutting length L(mm)	Through hole Min. Bore dia. (mm)	Blind hole Min. Bore dia. (mm)	Blind hole Max. Bore dia. (mm)	
25	21.5	7	6.8	58.7	33	45	49	1.6
28	24.5	7	6	66.6	39	51	55	1.6
30	26.5	7	5.3	75.5	43	55	59	1.6
32	28.5	7	4.8	83.4	47	59	63	1.6
35	31.5	7	4.7	85.1	53	65	69	1.6
40	36.5	7	3.9	102.7	63	75	79	1.6
50	46.5	7	2.5	160.3	83	95	99	1.4
63	59.5	7	1.8	222.7	109	121	125	1.4
80	76.5	7	1.3	308.5	143	155	159	1.4
100	96.5	7	0.95	422.1	183	195	199	1.4
125	121.5	7	0.65	617.0	233	245	249	1.4

ZOET160520ZFR-NL

Tool dia. (mm)	Effective cutting dia. (mm)	Max.depth of cut : ap (mm)	Ramping		Helical interpolation			Max. drilling depth: Z
			Max. ramping angle θ	Max. depth of cut (ap) Total cutting length L(mm)	Through hole Min. Bore dia. (mm)	Blind hole Min. Bore dia. (mm)	Blind hole Max. Bore dia. (mm)	
25	20.7	7	6.8	58.7	33	45	49	1.6
28	23.7	7	6	66.6	39	51	55	1.6
30	25.7	7	5.3	75.5	43	55	59	1.6
32	27.7	7	4.8	83.4	47	59	63	1.6
35	30.7	7	4.7	85.1	53	65	69	1.6
40	35.7	7	3.9	102.7	63	75	79	1.6
50	45.7	7	2.5	160.3	83	95	99	1.4
63	58.7	7	1.8	222.7	109	121	125	1.4
80	75.7	7	1.3	308.5	143	155	159	1.4
100	95.7	7	0.95	422.1	183	195	199	1.4
125	120.7	7	0.65	617.0	233	245	249	1.4

ZOET160530ZFR-NL

Tool dia. (mm)	Effective cutting dia. (mm)	Max.depth of cut : ap (mm)	Ramping		Helical interpolation			Max. drilling depth: Z
			Max. ramping angle θ	Max. depth of cut (ap) Total cutting length L(mm)	Through hole Min. Bore dia. (mm)	Blind hole Min. Bore dia. (mm)	Blind hole Max. Bore dia. (mm)	
25	18.7	7	7.2	55.4	33	43	49	1.6
28	21.7	7	6.2	64.4	39	49	55	1.6
30	23.7	7	5.6	71.4	43	53	59	1.6
32	25.7	7	5.2	76.9	47	57	63	1.6
35	28.7	7	4.5	88.9	53	63	69	1.6
40	33.7	7	3.6	111.3	63	73	79	1.6
50	43.7	7	2.5	160.3	83	93	99	1.4
63	56.7	7	1.8	222.7	109	119	125	1.4
80	73.7	7	1.3	308.5	143	153	159	1.4
100	93.7	7	0.95	422.1	183	193	199	1.4
125	118.7	7	0.65	617.0	233	243	249	1.4

ZOET160532ZFR-NL

Tool dia. (mm)	Effective cutting dia. (mm)	Max.depth of cut : ap (mm)	Ramping		Helical interpolation			Max. drilling depth: Z
			Max. ramping angle θ	Max. depth of cut (ap) Total cutting length L(mm)	Through hole Min. Bore dia. (mm)	Blind hole Min. Bore dia. (mm)	Blind hole Max. Bore dia. (mm)	
25	18.3	7	7.2	55.4	33	43	49	1.6
28	21.3	7	6.2	64.4	39	49	55	1.6
30	23.3	7	5.6	71.4	43	53	59	1.6
32	25.3	7	5.2	76.9	47	57	63	1.6
35	28.3	7	4.5	88.9	53	63	69	1.6
40	33.3	7	3.6	111.3	63	73	79	1.6
50	43.3	7	2.5	160.3	83	93	99	1.4
63	56.3	7	1.8	222.7	109	119	125	1.4
80	73.3	7	1.3	308.5	143	153	159	1.4
100	93.3	7	0.95	422.1	183	193	199	1.4
125	118.3	7	0.65	617.0	233	243	249	1.4

Recommended Cutting Conditions - Shoulder Milling -

Material	Grade	Vc (m/min)	fz (mm/t)		Tool dia. (mm)							
					25	32	40	50	63	80	100	125
Carbon Steel below 250HB	JC8050	160 - 200	0.20 - 0.35	ap	~10.0	~12.0	~15.0	~15.0	~15.0	~15.0	~15.0	~15.0
				ap x ae	~15	~24	~30	~40	~45	~45	~45	~45
Cast Steel below 285HB	JC8050	140 - 180	0.20 - 0.30	ap	~10.0	~12.0	~15.0	~15.0	~15.0	~15.0	~15.0	~15.0
				ap x ae	~15	~24	~30	~40	~45	~45	~45	~45
Tool & Die Steel below 255HB	JC8050	160 - 200	0.20 - 0.35	ap	~10.0	~12.0	~15.0	~15.0	~15.0	~15.0	~15.0	~15.0
				ap x ae	~15	~24	~30	~40	~45	~45	~45	~45
Mold Steel 30-36HRC	JC8118	120 - 150	0.20 - 0.35	ap	~10.0	~12.0	~15.0	~15.0	~15.0	~15.0	~15.0	~15.0
				ap x ae	~15	~24	~30	~40	~45	~45	~45	~45
Mold Steel 38-43HRC	JC8118	90 - 120	0.15 - 0.25	ap	~10.0	~12.0	~15.0	~15.0	~15.0	~15.0	~15.0	~15.0
				ap x ae	~12	~18	~20	~30	~30	~45	~45	~45
Hardened Die Steel 42-52HRC	JC8118	80 - 100	0.10 - 0.20	ap	~10.0	~12.0	~12.0	~15.0	~15.0	~15.0	~15.0	~15.0
				ap x ae	~8	~12	~12	~18	~25	~45	~45	~45
Grey Cast Iron below 160-260HB	JC8118	210 - 250	0.20 - 0.35	ap	~10.0	~12.0	~15.0	~15.0	~15.0	~15.0	~15.0	~15.0
				ap x ae	~15	~24	~30	~40	~45	~45	~45	~45
Nodular Cast Iron below 170-300HB	JC8118	110 - 150	0.15 - 0.30	ap	~10.0	~12.0	~15.0	~15.0	~15.0	~15.0	~15.0	~15.0
				ap x ae	~15	~24	~30	~40	~45	~45	~45	~45
Austenitic Stainless Steel	JC8050	100 - 120	0.10 - 0.20	ap	~10.0	~12.0	~15.0	~15.0	~15.0	~15.0	~15.0	~15.0
				ap x ae	~15	~24	~30	~40	~45	~45	~45	~45
Martensitic Stainless Steel	JC8118	140 - 180	0.15 - 0.30	ap	~10.0	~12.0	~15.0	~15.0	~15.0	~15.0	~15.0	~15.0
				ap x ae	~15	~24	~30	~40	~45	~45	~45	~45
Aluminium	FC18	700 - 900	0.07 - 0.20	ap	~15.0	~15.0	~15.0	~15.0	~15.0	~15.0	~15.0	~15.0
				ap x ae	~75	~75	~75	~75	~75	~75	~75	~75

Note

1. Please adjust cutting conditions according to machine rigidity or work rigidity.
2. In case of chatter occurring, recommended to reduce ap or rpm and keep feed per tooth.
3. ap should be reduced when using on low rigidity machine.
4. Use airflow. (For Aluminium machining Wet cutting is recommended.)

■ Recommended Cutting Conditions - Face Milling -

Material	Grade	Vc (m/min)	fz (mm/t)		Tool dia. (mm)							
					25	32	40	50	63	80	100	125
Carbon Steel below 250HB	JC8050	110 - 150	0.20 - 0.35	ap	~3.0	~3.5	~3.5	~4.0	~4.0	~4.0	~4.0	~4.0
				ae	~25	~32	~40	~50	~63	~80	~100	~125
Cast Steel below 285HB	JC8050	110 - 150	0.20 - 0.35	ap	~3.0	~3.5	~3.5	~4.0	~4.0	~4.0	~4.0	~4.0
				ae	~25	~32	~40	~50	~63	~80	~100	~125
Tool & Die Steel below 255HB	JC8050	110 - 150	0.15 - 0.30	ap	~3.0	~3.5	~3.5	~4.0	~4.0	~4.0	~4.0	~4.0
				ae	~25	~32	~40	~50	~63	~80	~100	~125
Mold Steel 30-36HRC	JC8118	110 - 130	0.15 - 0.30	ap	~3.0	~3.5	~3.5	~4.0	~4.0	~4.0	~4.0	~4.0
				ae	~25	~32	~40	~50	~63	~80	~100	~125
Mold Steel 38-43HRC	JC8118	90 - 110	0.15 - 0.25	ap	~2.0	~2.5	~2.5	~3.0	~3.0	~3.0	~3.0	~3.0
				ae	~25	~32	~40	~50	~63	~80	~100	~125
Hardened Die Steel 42-52HRC	JC8118	70 - 90	0.10 - 0.20	ap	~1.5	~2.0	~2.0	~2.5	~2.5	~2.5	~2.5	~2.5
				ae	~20	~26	~32	~40	~55	~65	~80	~100
Grey Cast Iron below 160-260HB	JC8118	130 - 200	0.20 - 0.35	ap	~5.0	~5.5	~5.5	~6.0	~6.0	~6.0	~6.0	~6.0
				ae	~25	~32	~40	~50	~63	~80	~100	~125
Nodular Cast Iron below 170-300HB	JC8118	110 - 130	0.15 - 0.30	ap	~3.0	~3.5	~3.5	~4.0	~4.0	~4.0	~4.0	~4.0
				ae	~25	~32	~40	~50	~63	~80	~100	~125
Austenitic Stainless Steel	JC8050	90 - 110	0.10 - 0.20	ap	~3.0	~3.5	~3.5	~4.0	~4.0	~4.0	~4.0	~4.0
				ae	~20	~26	~32	~40	~55	~65	~80	~100
Martensitic Stainless Steel	JC8118	110 - 150	0.15 - 0.30	ap	~3.0	~3.5	~3.5	~4.0	~4.0	~4.0	~4.0	~4.0
				ae	~25	~32	~40	~50	~63	~80	~100	~125
Aluminium	FC18	700 - 900	0.07 - 0.20	ap	~7.0	~7.0	~7.0	~7.0	~7.0	~7.0	~7.0	~7.0
				ae	~18	~22	~28	~35	~44	~56	~70	~87

Note

1. Please adjust cutting conditions according to machine rigidity or work rigidity.
2. In case of chatter occurring, recommended to reduce ap or rpm and keep feed per tooth.
3. ap should be reduced when using on low rigidity machine.
4. Use airflow. (For Aluminium machining Wet cutting is recommended.)