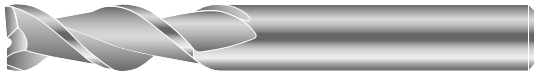


2NFSM, 3NFSM

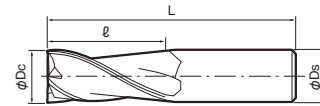
Number of Flutes: 2, 3

Semi-Finishing of Aluminum (Medium)



Recommended Material

★ 1st Recommendation



Lineup

(Unit: mm)

Description	Std.	Outside Dia. øDc	Outside Dia. tolerance	Length of edge l	Shank Dia. øDs	Overall length L	Number of Flutes Z
2NFSM010-040-04	●	1	-0.014 -0.028	4	4	38	2
2NFSM015-060-04	●	1.5	-0.014 -0.028	6	4	38	2
2NFSM020-080-04	●	2	-0.014 -0.028	8	4	38	2
2NFSM025-080-04	●	2.5	-0.014 -0.028	8	4	38	2
2NFSM030-080-06	●	3	-0.014 -0.028	8	6	50	2
2NFSM040-080-06	●	4	-0.020 -0.038	8	6	50	2
2NFSM050-140-06	●	5	-0.020 -0.038	14	6	50	2
2NFSM060-160-06	●	6	0 -0.008	16	6	50	2
2NFSM080-200-08	●	8	0 -0.009	20	8	63	2
2NFSM100-220-10	●	10	0 -0.009	22	10	76	2
2NFSM120-250-12	●	12	0 -0.011	25	12	76	2

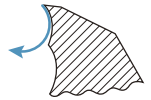
(Unit: mm)

Description	Std.	Outside Dia. øDc	Outside Dia. tolerance	Length of edge l	Shank Dia. øDs	Overall length L	Number of Flutes Z
2NFSM160-320-16	●	16	0 -0.011	32	16	89	2
2NFSM200-380-20	●	20	0 -0.013	38	20	104	2
3NFSM030-120-06	●	3	-0.014 -0.028	12	6	50	3
3NFSM040-120-06	●	4	-0.020 -0.038	12	6	50	3
3NFSM050-140-06	●	5	-0.020 -0.038	14	6	50	3
3NFSM060-160-06	●	6	0 -0.008	16	6	50	3
3NFSM080-200-08	●	8	0 -0.009	20	8	63	3
3NFSM100-220-10	●	10	0 -0.009	22	10	76	3
3NFSM120-250-12	●	12	0 -0.011	25	12	76	3
3NFSM160-320-16	●	16	0 -0.011	32	16	89	3
3NFSM200-380-20	●	20	0 -0.013	38	20	104	3

* Outside dia. of over 6mm (øDc) has margin.

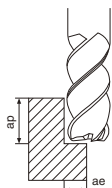
- Sharp cutting oriented for Aluminum machining. 45° helix angle achieves good chip evacuation.

A convex shape in the slot improves chip evacuation.

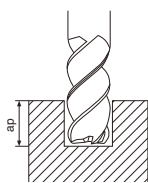


NFSM type rake angle

Recommended Cutting Conditions



Shouldering



Slotting

Shouldering

2 Flute

Workpiece Materials	Depth of Cut (ap×ae) (mm)	Outside Dia. (mm)	ø3	ø6	ø8	ø10	ø12	ø16	ø20
Aluminum Alloy	1Dc×0.5Dc	Spindle Revolution (min ⁻¹)	26,500	13,300	10,000	8,000	6,600	5,000	4,000
		Feed Rate (mm/min)	690	950	950	1,130	1,260	1,000	880
High-silicon Aluminum	1Dc×0.5Dc	Spindle Revolution (min ⁻¹)	19,100	9,600	7,200	5,700	4,800	3,600	2,900
		Feed Rate (mm/min)	420	500	500	600	670	770	570

3 Flute

Workpiece Materials	Depth of Cut (ap×ae) (mm)	Outside Dia. (mm)	ø3	ø6	ø8	ø10	ø12	ø16	ø20
Aluminum Alloy	1Dc×0.5Dc	Spindle Revolution (min ⁻¹)	26,500	13,300	10,000	8,000	6,600	5,000	4,000
		Feed Rate (mm/min)	1,040	1,400	1,400	1,700	1,890	1,490	1,310
High-silicon Aluminum	1Dc×0.5Dc	Spindle Revolution (min ⁻¹)	19,100	9,600	7,200	5,700	4,800	3,600	2,900
		Feed Rate (mm/min)	630	750	750	890	1,000	1,160	860

Please refer to page L46 about Slotting.

● : Std. Item ○ : Check Availability R : Std. Item (R-hand Only) L : Std. Item (L-hand Only)

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