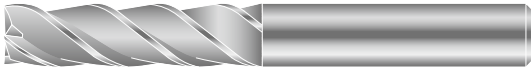


3NFSL

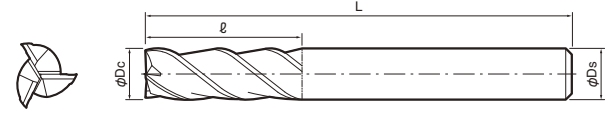
Number of Flutes: 3

Semi-Finishing of Aluminum (Long)



Recommended Material

★ 1st Recommendation

General Use
Hardened material
Difficult-to-Cut Material
Aluminum/Non-ferrous Metal

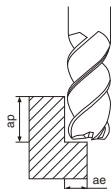
Lineup

(Unit: mm)

Description	Std.	Outside Dia.	Outside Dia. tolerance	Edge Length	Shank Dia.	Total length	Number of Flutes
		øDc		ℓ	øDs	L	Z
3NFSL030-190-06	●	3	-0.014 -0.028	19	6	63	3
3NFSL040-190-06	●	4	-0.020 -0.038	19	6	63	3
3NFSL050-200-06	●	5	-0.020 -0.038	20	6	63	3
3NFSL060-280-06	●	6	0 -0.008	28	6	76	3
3NFSL080-300-08	●	8	0 -0.009	30	8	76	3
3NFSL100-340-10	●	10	0 -0.009	34	10	89	3
3NFSL120-450-12	●	12	0 -0.011	45	12	100	3
3NFSL160-560-16	●	16	0 -0.011	56	16	125	3
3NFSL200-600-20	●	20	0 -0.013	60	20	125	3

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

Recommended Cutting Conditions



Shouldering

Shouldering

Workpiece Materials	Depth of Cut (ap×ae) (mm)	Outside Dia. (mm)	ø6	ø8	ø10	ø12	ø16	ø20	ø25
Aluminum Alloy	2.5Dc×0.5Dc	Spindle Revolution (min ⁻¹)	18,500	9,300	7,000	5,600	4,600	3,500	2,800
		Feed Rate (mm/min)	730	980	980	1,200	1,320	1,040	920
High-silicon Aluminum	1.5Dc×0.5Dc	Spindle Revolution (min ⁻¹)	13,400	6,700	5,000	4,000	3,400	2,500	2,000
		Feed Rate (mm/min)	440	530	530	620	700	810	600

Not Recommended for Slotting.

L



Solid End Mill