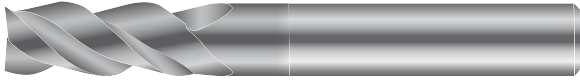


3UFSM

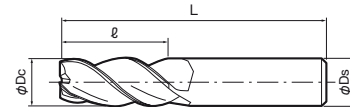
Number of Flutes: 3

General use / Semi-Finishing



Recommended Material

★ 1st Recommendation



Lineup

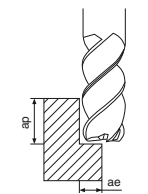
(Unit: mm)

Description	Std.	Outside Dia.	Outside Dia. tolerance	Edge Length	Shank Dia.	Total length	Number of Flutes
		øDc		l	øDs	L	Z
3UFSM010-030-04	●	1	-0.014 -0.028	3	4	50	3
3UFSM015-030-04	●	1.5	-0.014 -0.028	3	4	50	3
3UFSM020-030-04	●	2	-0.014 -0.028	3	4	50	3
3UFSM025-040-04	●	2.5	-0.014 -0.028	4	4	50	3
3UFSM030-080-06	●	3	-0.014 -0.028	8	6	50	3
3UFSM040-120-06	●	4	-0.020 -0.038	12	6	50	3
3UFSM050-140-06	●	5	-0.020 -0.038	14	6	50	3
3UFSM060-160-06	●	6	-0.020 -0.038	16	6	50	3
3UFSM080-200-08	●	8	-0.025 -0.047	20	8	63	3
3UFSM100-220-10	●	10	-0.025 -0.047	22	10	76	3
3UFSM120-250-12	●	12	-0.032 -0.059	25	12	76	3
3UFSM160-320-16	●	16	-0.032 -0.059	32	16	89	3
3UFSM200-380-20	●	20	-0.040 -0.073	38	20	104	3

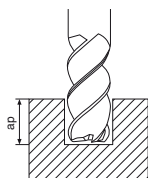
- Products emphasizing high efficiency machining, three flutes type for general semi finishing. It is available for slotting and shouldering of wide range of work materials.

Recommended Cutting Conditions

Shouldering



Shouldering



Slotting

Workpiece Materials	Depth of Cut (ap×ae) (mm)	Outside Dia. (mm)	ø2	ø3	ø4	ø5	ø6	ø8	ø10	ø12	ø16	ø20
Carbon Steel Cast Iron	1.0Dc×0.1Dc	Spindle Revolution (min ⁻¹)	16,000	10,600	8,000	6,400	5,300	4,000	3,200	2,700	2,000	1,600
		Feed Rate (mm/min)	330	330	390	420	430	450	480	480	510	530
Alloy Steel (~30HRC)	1.0Dc×0.1Dc	Spindle Revolution (min ⁻¹)	11,000	7,400	5,600	4,500	3,700	2,800	2,200	1,900	1,400	1,100
		Feed Rate (mm/min)	240	290	290	310	330	330	340	340	340	340
Pre-hardened Steel Stainless Steel (30~40HRC)	1.0Dc×0.1Dc	Spindle Revolution (min ⁻¹)	8,000	5,300	4,000	3,200	2,700	2,000	1,600	1,300	1,000	800
		Feed Rate (mm/min)	140	140	140	170	180	180	190	190	190	190
Titanium Alloy Heat-resistant Alloy (40~50HRC)	1.0Dc×0.1Dc	Spindle Revolution (min ⁻¹)	4,000	2,700	2,000	1,600	1,300	1,000	800	700	500	400
		Feed Rate (mm/min)	40	50	60	60	70	70	70	70	80	80
Aluminum Alloy	1.0Dc×0.1Dc	Spindle Revolution (min ⁻¹)	32,000	21,000	16,000	12,800	10,600	8,000	6,400	5,300	4,000	3,200
		Feed Rate (mm/min)	670	700	760	820	860	880	1,000	1,100	1,100	1,250

* Machining with coolant is recommended for stainless steel.

For Slotting, see page L44

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

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