

4FESM

Number of Flutes: 4

General use / Finishing (Medium)

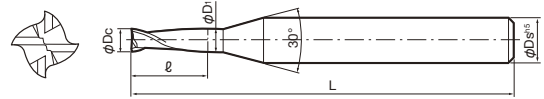


MEGACOAT is applied

Super Micro-grain carbide

Recommended Material

★ 1st Recommendation



Lineup

(Unit: mm)

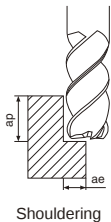
Description	Std.	Outside Dia. øDc	Outside Dia. tolerance 0 -0.015	Length of edge l	Neck Dia. øD1	Shank Dia. øDs	Overall length L	Number of Flutes Z
4FESM010-025-04	●	1.0	0 -0.015	2.5	1.1	4	45	4
4FESM015-040-04	●	1.5	0 -0.015	4.0	1.6	4	45	4
4FESM020-060-04	●	2.0	0 -0.015	6.0	2.1	4	45	4
4FESM025-080-04	●	2.5	0 -0.015	8.0	2.6	4	45	4
4FESM030-100-06	●	3.0	0 -0.015	10.0	3.2	6	50	4
4FESM035-100-06	●	3.5	0 -0.015	10.0	3.7	6	50	4
4FESM040-110-06	●	4.0	0 -0.015	11.0	4.2	6	50	4
4FESM045-110-06	●	4.5	0 -0.015	11.0	4.7	6	50	4
4FESM050-130-06	●	5.0	0 -0.015	13.0	5.2	6	50	4

(Unit: mm)

Description	Std.	Outside Dia. øDc	Outside Dia. tolerance 0 -0.015	Length of edge l	Neck Dia. øD1	Shank Dia. øDs	Overall length L	Number of Flutes Z
4FESM055-130-06	●	5.5	0 -0.015	13.0	5.7	6	50	4
4FESM060-130-06	●	6.0	0 -0.020	13.0	-	6	50	4
4FESM080-190-08	●	8.0	-0.005 -0.025	19.0	-	8	60	4
4FESM100-220-10	●	10.0	-0.005 -0.025	22.0	-	10	70	4
4FESM120-260-12	●	12.0	-0.010 -0.030	26.0	-	12	75	4
4FESM140-260-16	●	14.0	-0.010 -0.030	26.0	14.2	16	75	4
4FESM150-300-16	●	15.0	-0.010 -0.030	30.0	15.2	16	90	4
4FESM160-320-16	●	16.0	-0.010 -0.030	32.0	-	16	90	4

Recommended Cutting Conditions

Shouldering



Shouldering

Workpiece Materials	Depth of Cut (ap×ae) (mm)	Outside Dia. (mm)	ø1	ø2	ø4	ø6	ø8	ø12	ø16
Carbon Steel	1.5Dc×0.05Dc (Dc<ø3)	Spindle Revolution (min ⁻¹)	25,500	13,000	6,600	4,400	3,300	2,200	1,700
	1.5Dc×0.1Dc (Dc≥ø3)	Feed Rate (mm/min)	335	345	580	620	625	630	600
Alloy Steel	1.5Dc×0.05Dc (Dc<ø3)	Spindle Revolution (min ⁻¹)	22,000	11,000	5,600	3,700	2,800	1,900	1,400
	1.5Dc×0.1Dc (Dc≥ø3)	Feed Rate (mm/min)	290	290	395	455	455	470	460
Pre-hardened Steel 30~45HRC	1.5Dc×0.05Dc (Dc<ø3)	Spindle Revolution (min ⁻¹)	12,000	7,200	4,200	3,000	2,200	1,500	1,100
	1.5Dc×0.1Dc (Dc≥ø3)	Feed Rate (mm/min)	105	125	150	160	160	165	140
Stainless Steel	1.5Dc×0.05Dc (Dc<ø3)	Spindle Revolution (min ⁻¹)	22,000	11,000	5,600	3,700	2,800	1,900	1,400
	1.5Dc×0.1Dc (Dc≥ø3)	Feed Rate (mm/min)	130	145	165	165	170	175	155

* Machining with coolant is recommended for stainless steel.

Not Recommended for Slotting.