

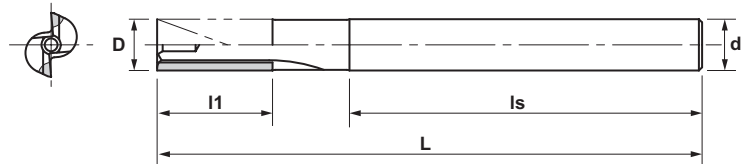


METRIC

Beam End Mill

VN-ALES2 Type

- 2 Flute with 30° Helix for Aluminum



CATALOG NUMBER	STK	DIMENSIONS				
		D	l1	ls	L	d
VN-ALES2-030	•	3	6	45	60	4
VN-ALES2-040	•	4	7	43	60	4
VN-ALES2-050	•	5	7	48	65	6
VN-ALES2-060	•	6	9	46	65	6
VN-ALES2-080	•	8	9	66	85	8
VN-ALES2-100	•	10	12	78	100	10
VN-ALES2-120	•	12	12	98	120	12

Material	Aluminum Alloy	Copper Alloy	Quartz Glass (Note: tool needs to be modified for this material)			
Type of Machining - Shoulder Cutting	$V_c=350\text{m/min}$ $a_p=0.5D$ $a_e=0.33D$	$V_c=200\text{m/min}$ $a_p=0.5D$ $a_e=0.05D$	$V_c=60\text{m/min}$ $a_p=0.5D$ $a_e=0.1D$			
Diameter	N (min ⁻¹)	Vc (mm/min)	N (min ⁻¹)	Vc (mm/min)	N (min ⁻¹)	Vc (mm/min)
3	37,000	750	21,000	1,250	6,300	190
4	28,000	1,100	16,000	1,300	4,800	190
5	22,000	1,100	13,000	1,550	3,800	210
6	19,000	1,300	10,000	1,700	3,200	220
8	14,000	1,400	8,000	1,900	2,400	220
10	11,000	1,500	6,400	2,000	2,000	200
12	9,000	1,800	5,300	2,100	1,600	200

Material	Aluminum Alloy	Copper Alloy	Quartz Glass (Note: tool needs to be modified for this material)			
Type of Machining - Slotting	$V_c=350\text{m/min}$ $a_p=0.5D$ $a_e=D$	$V_c=200\text{m/min}$ $a_p=0.5D$ $a_e=D$	$V_c=60\text{m/min}$ $a_p=0.1D$ $a_e=D$			
Diameter	N (min ⁻¹)	Vc (mm/min)	N (min ⁻¹)	Vc (mm/min)	N (min ⁻¹)	Vc (mm/min)
3	37,000	700	21,000	500	6,300	100
4	28,000	1,000	16,000	550	4,800	100
5	22,000	1,050	13,000	650	3,800	120
6	19,000	1,200	10,000	700	3,200	120
8	14,000	1,300	8,000	800	2,400	130
10	11,000	1,400	6,400	800	2,000	110
12	9,000	1,700	5,300	850	1,600	110