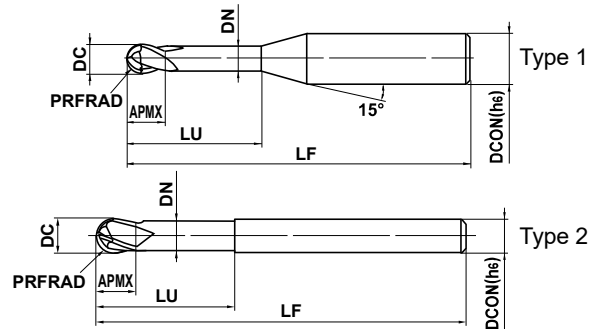


MS4XLB - Inch sizes

Ball nose, 4 flute, Long neck



Carbon Steel, Alloy Steel, Cast Iron (<30HRC)	Tool Steel, Pre-Hardened Steel, Hardened Steel (<=45HRC)	Hardened Steel (<=55HRC)	Hardened Steel (>55HRC)	Austenitic Stainless Steel	Titanium Alloy, Heat Resistant Alloy	Copper Alloy	Aluminum Alloy
☉	☉	○	○	○	○		



R	±.0004"			
h6	0 -.0008"			
	DCON=.1250"	DCON=.1875"	DCON=.2500"	
	-.00024"	-.00031"	-.00035"	

● 4 flute, long neck, ball nose end mill for general purpose.

Unit : inch

Order Number	PRFRAD	DC	APMX	LU	DN	LF	DCON	No. of Flutes	Stock	Type
MS4XLBD1/16N0375	.03125	.0625	.0625	.3750	.0601	2.0	.1250	4	●	1
MS4XLBD1/16N0500	.03125	.0625	.0625	.5000	.0601	2.0	.1250	4	●	1
MS4XLBD1/16N0750	.03125	.0625	.0625	.7500	.0601	2.0	.1250	4	●	1
MS4XLBD3/32N0562	.04688	.0938	.0938	.5625	.0898	2.0	.1250	4	●	1
MS4XLBD3/32N0750	.04688	.0938	.0938	.7500	.0898	2.0	.1250	4	●	1
MS4XLBD3/32N1125	.04688	.0938	.0938	1.1250	.0898	2.5	.1250	4	●	1
MS4XLBD1/8N0750	.06250	.1250	.1250	.7500	.1211	2.0	.1250	4	●	2
MS4XLBD3/16N1125	.09375	.1875	.1875	1.1250	.1836	2.5	.1875	4	●	2
MS4XLBD1/4N1500	.1250	.2500	.2500	1.5000	.2441	3.0	.2500	4	●	2

CARBIDE

SQUARE

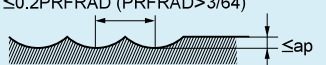
BALL

RADIUS

TAPER

SOLID END MILLS

RECOMMENDED CUTTING CONDITIONS

Work material		Hardened steel (45–55HRC) AISI H13 etc.		
PRFRAD (inch)	LU (inch)	Revolution (min ⁻¹)	Table feed (IPM)	Depth of cut ap (inch)
.0313	.3750	40000	151.2	.0028
	.5000	30000	113.4	.0016
	.7500	10000	37.8	.0008
.0156	.5625	40000	189.0	.003
	.7500	20000	94.4	.002
	1.1250	10000	47.3	.001
.0625	.7500	30000	165.4	.004
.0938	1.1250	20000	141.7	.006
.1250	1.5000	15000	141.7	.008
Depth of cut		$\leq 0.1 \text{PRFRAD}$ (PRFRAD $\leq 3/64$) $\leq 0.2 \text{PRFRAD}$ (PRFRAD $> 3/64$) 		

- 1) If the depth of cut is smaller than this table, feed rate can be increased.
- 2) Cutting conditions may differ considerably due to the overhang, depth of cut, and machine tool conditions. Please use the above table as a start reference point.

● : Inventory maintained.