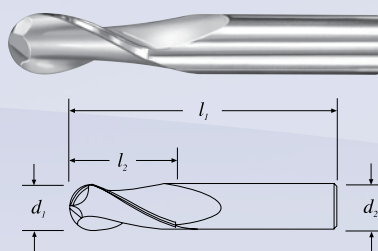


TOLERANCES

$d_1 = +.000 - .002$
 $d_2 = -.0001 - .0004$



Cutting Diameter d_1	Length of Cut l_2	Overall Length l_1	Shank Diameter d_2	Uncoated EDP No.	Ti-NAMITE (TiN) EDP No.	Ti-NAMITE-C (TiCN) EDP No.	Ti-NAMITE-A (AlTiN) EDP No.	DIA-CARB (CVD) [†] EDP No.	Series Number
1/64	1/32	1-1/2	1/8	30302	39302	39502	30471	–	3B
1/32	5/64	1-1/2	1/8	30304	39304	39504	30472	–	3B
3/64	7/64	1-1/2	1/8	30306	39306	39506	30473	–	3B
1/16	3/16	1-1/2	1/8	30308	39308	39508	30474	91267	3B
5/64	3/16	1-1/2	1/8	30310	39310	39510	30475	–	3B
3/32	9/32	1-1/2	1/8	30312	39312	39512	30476	–	3B
7/64	3/8	1-1/2	1/8	30314	39314	39514	30477	–	3B
1/8	3/8	1-1/2	1/8	30378	39378	39578	30599	–	3B
1/8	3/8	2-1/2	1/4	–	32210	32290	32200	–	59B
*1/8	1/2	1-1/2	1/8	30316	39316	39516	30478	91271	3B
1/8	3/4	2-1/4	1/8	33342	31830	31840	31890	–	3LB
1/8	1	3	1/8	33344	31968	31978	31988	–	3ELB
9/64	1/2	2	3/16	30318	39318	39518	30479	–	3B
5/32	1/2	2	3/16	30320	39320	39520	30480	–	3B
11/64	5/8	2	3/16	30322	39322	39522	30481	–	3B
3/16	9/16	3	1/4	–	32211	32291	32201	–	59B
*3/16	5/8	2	3/16	30324	39324	39524	30482	91275	3B
3/16	3/4	2-1/2	3/16	33302	31831	31841	31891	–	3LB
3/16	1-1/8	3	3/16	33322	31969	31979	31989	–	3ELB
13/64	5/8	2-1/2	1/4	30326	39326	39526	30483	–	3B
7/32	5/8	2-1/2	1/4	30328	39328	39528	30484	–	3B
15/64	3/4	2-1/2	1/4	30330	39330	39530	30485	–	3B
1/4	5/8	3-1/2	1/4	–	32212	32292	32202	–	59B
*1/4	3/4	2-1/2	1/4	30332	39332	39532	30486	91279	3B
1/4	1-1/8	3	1/4	33304	31832	31842	31892	–	3LB
1/4	1-1/2	4	1/4	33324	31970	31980	31990	–	3ELB
17/64	3/4	2-1/2	5/16	30334	39334	39534	30487	–	3B
9/32	3/4	2-1/2	5/16	30336	39336	39536	30488	–	3B
19/64	13/16	2-1/2	5/16	30338	39338	39538	30489	–	3B
5/16	11/16	4	5/16	–	32213	32293	32203	–	59B
*5/16	13/16	2-1/2	5/16	30340	39340	39540	30490	91283	3B
5/16	1-1/8	3	5/16	33306	31833	31843	31893	–	3LB
5/16	1-5/8	4	5/16	33326	31971	31981	31991	–	3ELB

→ continued on next page

	3LB
	3ELB
	59B

Series 3B



2-Flute End Mills – Ball End
Micrograin Solid Carbide
30° Right Hand Spiral – Right Hand
Cutting – Center Cutting
[†] CVD = Dia-Carb CVD Diamond
Coatings

Serie 3B



Fresas de 2 filos – Punta radial o
esférica
Carburo sólido con micrograno
Hélice a derecha 30° – Corte a
derecha – Corte al centro
[†] CVD = Recubrimientos de
diamante CVD Dia-Carb

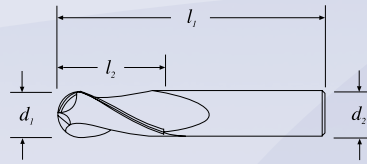
Série 3B



Fraises 2 dents – Bout
hémisphérique
Carbure monobloc, micrograin
Hélice à droite, 30° – Coupe à droite
– Coupe au centre
[†] CVD = Revêtements de diamant
Dia-Carb CVD



2 Flute – Single End – Ball End



TOLERANCES

$d_1 = +.000 - .002$
 $d_2 = -.0001 - .0004$

Series 3B • 3MB



2-Flute End Mills – Ball End
Micrograin Solid Carbide
30° Right Hand Spiral – Right Hand
Cutting – Center Cutting
† CVD = Dia-Carb CVD Diamond
Coatings

Serie 3B • 3MB



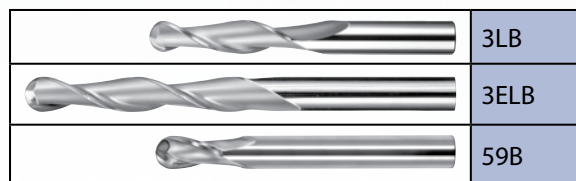
Fresas de 2 filos – Punta radial o
esférica
Carburo sólido con micrograno
Hélice a derecha 30° – Corte a
derecha – Corte al centro
† CVD = Recubrimientos de
diamante CVD Dia-Carb

Série 3B • 3MB

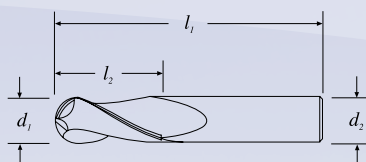


Fraises 2 dents – Bout
hémisphérique
Carbure monobloc, micrograin
Hélice à droite, 30° – Coupe à droite
– Coupe au centre
† CVD = Revêtements de diamant
Dia-Carb CVD

Cutting Diameter d_1	Length of Cut l_2	Overall Length l_1	Shank Diameter d_2	Uncoated EDP No.	Ti-NAMITE (TiN) EDP No.	Ti-NAMITE-C (TiCN) EDP No.	Ti-NAMITE-A (AlTiN) EDP No.	DIA-CARB (CVD)† EDP No.	Series Number
21/64	1	2-1/2	3/8	30342	39342	39542	30491	–	3B
11/32	1	2-1/2	3/8	30344	39344	39544	30492	–	3B
23/64	1	2-1/2	3/8	30346	39346	39546	30493	–	3B
*3/8	1	2-1/2	3/8	30348	39348	39548	30494	91287	3B
3/8	7/8	4	3/8	–	32214	32294	32204	–	59B
3/8	1-1/8	3	3/8	33308	31834	31844	31894	–	3LB
3/8	1-3/4	4	3/8	33328	31972	31982	31992	–	3ELB
25/64	1	2-3/4	7/16	30350	39350	39550	30495	–	3B
13/32	1	2-3/4	7/16	30352	39352	39552	30496	–	3B
27/64	1	2-3/4	7/16	30354	39354	39554	30497	–	3B
7/16	1	2-3/4	7/16	30356	39356	39556	30498	–	3B
7/16	2	4-1/2	7/16	33310	31835	31845	31895	–	3LB
7/16	3	6	7/16	33330	31973	31983	31993	–	3ELB
29/64	1	3	1/2	30358	39358	39558	30499	–	3B
15/32	1	3	1/2	30360	39360	39560	30500	–	3B
31/64	1	3	1/2	30362	39362	39562	30591	–	3B
*1/2	1	3	1/2	30364	39364	39564	30592	91291	3B
1/2	1	4-1/2	1/2	–	32215	32295	32205	–	59B
1/2	2	4-1/2	1/2	33312	31836	31846	31896	–	3LB
1/2	3	6	1/2	33332	31974	31984	31994	–	3ELB
9/16	1-1/8	3-1/2	9/16	30366	39366	39566	30593	–	3B
5/8	1-1/4	3-1/2	5/8	30368	39368	39568	30594	–	3B
5/8	1-1/8	5	5/8	–	32216	32296	32206	–	59B
5/8	2-1/4	5	5/8	33314	31837	31847	31897	–	3LB
5/8	3	6	5/8	33334	31975	31985	31995	–	3ELB
11/16	1-3/8	4	3/4	30370	39370	39570	30595	–	3B
3/4	1-3/8	5-1/4	3/4	–	32217	32297	32207	–	59B
3/4	1-1/2	4	3/4	30372	39372	39572	30596	–	3B
3/4	2-1/4	5	3/4	33316	31838	31848	31898	–	3LB
3/4	3	6	3/4	33336	31976	31986	31996	–	3ELB
7/8	1-1/2	4	7/8	30374	39374	39574	30597	–	3B
1	1-1/2	4	1	30376	39376	39576	30598	–	3B
1	2-1/4	5	1	33318	31839	31849	31899	–	3LB
1	3	6	1	33338	31977	31987	31997	–	3ELB
* Series 3B Set				30390	39390	39590	30600	–	3B



TOLERANCES

 $d_1 = +0,000 - 0,05$ $d_2 = +0,000 - 0,01$ 

Cutting Diameter d_1 mm	Length of Cut l_2 mm	Overall Length l_1 mm	Shank Diameter d_2 mm	Uncoated	Ti-NAMITE (TiN)	Ti-NAMITE-C (TiCN)	Ti-NAMITE-A (AlTiN)	Series Number
				EDP No.	EDP No.	EDP No.	EDP No.	
1	4	38	3	40306	48692	48714	48735	3MB
1,5	4,5	38	3	40310	48693	48715	48736	3MB
2	6,3	38	3	40314	48694	48716	48737	3MB
2,5	9,5	38	3	40318	48695	48717	48738	3MB
3	9	60	6	43900	49622	49632	49642	59MB
3	12	38	3	40322	48696	48718	48739	3MB
3	25	75	3	43302	49544	49557	49570	3XLMB
3,5	12	50	4	40326	48697	48719	48740	3MB
4	12	70	6	43901	49623	49633	49643	59MB
4	14	50	4	40330	48698	48720	48741	3MB
4	25	75	4	43304	49545	49558	49571	3XLMB
4,5	16	50	6	40334	48699	48721	48742	3MB
5	16	50	6	40338	48700	48722	48743	3MB
5	25	75	5	43308	49547	49560	49573	3XLMB
6	15	80	6	43902	49624	49634	49644	59MB
6	19	50	6	40342	48701	48723	48744	3MB
6	25	75	6	43306	49546	49559	49572	3XLMB
7	19	63	8	40346	48702	48724	48745	3MB
8	20	63	8	40350	48703	48725	48746	3MB
8	20	90	8	43903	49625	49635	49645	59MB
8	25	75	8	43316	49548	49561	49574	3XLMB
9	22	75	10	40354	48704	48726	48747	3MB
10	22	75	10	40358	48705	48727	48748	3MB
10	25	100	10	43904	49626	49636	49646	59MB
10	38	100	10	43326	49549	49562	49575	3XLMB
11	25	75	12	40362	48706	48728	48749	3MB
12	25	75	12	40366	48707	48729	48750	3MB
12	30	110	12	43905	49627	49637	49647	59MB
12	50	100	12	43336	49550	49563	49576	3XLMB
12	75	150	12	43346	49551	49564	49577	3XLMB
14	32	89	14	40370	48708	48730	48751	3MB
14	35	120	16	43906	49628	49638	49648	59MB
14	75	150	14	43356	49552	49565	49578	3XLMB
16	32	89	16	40374	48709	48731	48752	3MB
16	40	120	16	43907	49629	49639	49649	59MB
16	75	150	16	43366	49553	49566	49579	3XLMB
18	38	100	18	40378	48710	48732	48753	3MB
18	40	130	20	43908	49630	49640	49650	59MB
18	75	150	18	43376	49554	49567	49580	3XLMB
20	38	100	20	40382	48711	48733	48754	3MB
20	45	130	20	43909	49631	49641	49651	59MB
20	75	150	20	43386	49555	49568	49581	3XLMB
25	38	100	25	40386	48712	48734	48755	3MB
25	75	150	25	43396	49556	49569	49582	3XLMB

