

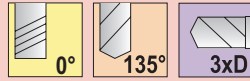
1500 / z = 2

Technical information: page 212-215

TOLERANCES

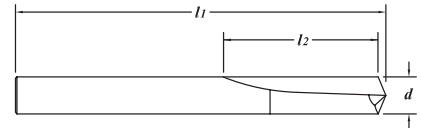
<b>d</b>	+0,0000 -0,0127mm (+.0000" - .0005")	
<b>l<sub>1</sub></b>	≤ 1/8"	+3,175 -1,588mm (+.125" - .062")
	> 1/8"	+3,175 -3,175mm (+.125" - .125")
<b>l<sub>2</sub></b>	≤ 1/8"	+3,175 -1,588mm (+.125" - .062")
	> 1/8"	+3,175 -3,175mm (+.125" - .125")

.0625" - .1660"  
(1,59mm - 4,22mm)



DRILLS

Hard Metal  
Hartmetall  
Metal Duro  
Métal Dur  
Metallo Duro  
硬金属



Solid submicron grain carbide drill  
Straight flute design provides excellent rigidity  
Materials 40 Rc and higher  
**Recommended for high nickel, cobalt based and powdered metals**  
Live tooling recommended on lathe processes  
Shank tolerance: -0,0025 / -0,0100mm (-.0001" - .0004")



Vollhartmetallbohrer aus Feinkornhartmetall  
Gerades Spannutendesign für exzellente Stabilität  
Werkstoffe mit 40HRC und höher  
**Empfohlen für Hoch Nickelhaltige und Kobaltbasislegierungen, Pulvermetall**  
Empfehlung fuer den Einsatz auf der Drehmaschine  
Schaft-Toleranz: -0,0025 / -0,0100mm (-.0001" - .0004")



Broca de submicrograno sólido carburo  
El diseño de ranuras rectas proporciona excelente rigidez  
Materiales 40 Rc y superiores  
**Recomendado para alto contenido en níquel, aleaciones con base de cobalto y metal pulverizado**  
Recomendación para la aplicación en torno  
Tolerancia del vástago: -0,0025 / -0,0100mm (-.0001" - .0004")



Forets carbure submicrograin  
Le design de la goujure apporte une excellente rigidité  
Materiaux de 40 HRC et plus  
**Recommander pour alliages a hautes teneur en nickel, base cobalt et metal fritte**  
Outilage allumé est conseillé pendant les process avec le tour  
Tolerance de la tige: -0,0025 / -0,0100mm (-.0001" - .0004")



Super sub-micrograno metallo duro  
Tagliente dritto che consente un'ottima rigidità  
Materiali a 40 HRC e superiori  
**Raccomandata per lavorazioni su leghe di nickel, cobalto e sinterizzati**  
Giri consigliati per forature su tornio  
Tolleranza gambo: -0,0025 / -0,0100mm (-.0001" - .0004")



整体硬质合金钻头  
直排屑槽结构保证了极好的刚性  
推荐加工洛氏硬度40或40以上的材质  
推荐加工高镍合金、钴基合金和粉末冶金  
推荐在车床加工中  
柄部公差: -0,0025 / -0,0100mm (-.0001" - .0004")

EDP#	d † Diameter		l <sub>1</sub> Overall Length	l <sub>2</sub> Flute Length	
	Decimal	Metric			
59165	.0625	1/16"	1,59	1-5/8"	5/8"
59180	.0700	#50	1,78	1-11/16"	3/4"
59185	.0730	#49	1,85	1-11/16"	3/4"
59190	.0760	#48	1,93	1-11/16"	3/4"
59195	.0781	5/64"	1,98	1-11/16"	3/4"
59200	.0785	#47	1,99	1-3/4"	7/8"
39000	.0787	<b>2,00</b>	<b>50</b>	<b>22</b>	
59210	.0810	#46	2,06	2"	7/8"
59215	.0820	#45	2,08	2"	7/8"
59220	.0860	#44	2,18	2"	7/8"
59225	.0890	#43	2,26	2"	7/8"
59230	.0935	#42	2,37	2"	7/8"
59235	.0938	3/32"	2,38	2"	7/8"
59240	.0960	#41	2,44	2"	7/8"
59245	.0980	#40	2,49	2"	7/8"
39050	.0984	<b>2,50</b>	<b>50</b>	<b>22</b>	
59255	.0995	#39	2,53	2"	7/8"
59260	.1015	#38	2,58	2"	7/8"
59265	.1040	#37	2,64	2"	7/8"
59270	.1065	#36	2,71	2"	7/8"
59275	.1094	7/64"	2,78	2"	1"
59280	.1100	#35	2,79	2"	1"
59285	.1110	#34	2,82	2"	1"
59290	.1130	#33	2,87	2"	1"
59295	.1160	#32	2,95	2"	1"
39100	.1181	<b>3,00</b>	<b>50</b>	<b>25</b>	
59305	.1200	#31	3,05	2"	1"
59310	.1250	1/8"	3,17	2"	1"
59315	.1285	#30	3,26	2"	1"
59320	.1360	#29	3,45	2"	1"
39150	.1378	<b>3,50</b>	<b>50</b>	<b>25</b>	
59330	.1405	#28	3,57	2"	1"
59335	.1406	9/64"	3,57	2"	1"
59340	.1440	#27	3,66	2"	1"
59345	.1470	#26	3,73	2"	1"
59350	.1495	#25	3,80	2"	1"
59355	.1520	#24	3,86	2"	1"
59360	.1540	#23	3,91	2"	1"
59365	.1562	5/32"	3,97	2-1/2"	1-1/8"
59370	.1570	#22	3,99	2-1/2"	1-1/8"
39200	.1575	<b>4,00</b>	<b>63</b>	<b>28</b>	
59380	.1590	#21	4,04	2-1/2"	1-1/8"
59385	.1610	#20	4,09	2-1/2"	1-1/8"
59390	.1660	#19	4,22	2-1/2"	1-1/8"

# 1500 / z = 2 (continued)

.1695" - .5000"  
(4,30mm - 12,70mm)

EDP#	$d$ † Diameter		$l_1$ Overall Length	$l_2$ Flute Length	
	Decimal	Metric			
59395	.1695	#18	4,30	2-1/2"	1-3/16"
59400	.1719	11/64"	4,37	2-1/2"	1-3/16"
59405	.1730	#17	4,39	2-1/2"	1-3/16"
59410	.1770	#16	4,49	2-1/2"	1-3/16"
39250	.1772		<b>4,50</b>	<b>63</b>	<b>28</b>
59420	.1800	#15	4,57	2-1/2"	1-3/16"
59425	.1820	#14	4,62	2-1/2"	1-3/16"
59430	.1850	#13	4,70	2-1/2"	1-3/16"
59435	.1875	3/16"	4,76	2-1/2"	1-3/16"
59440	.1890	#12	4,80	2-1/2"	1-3/16"
59445	.1910	#11	4,85	2-1/2"	1-3/16"
59450	.1935	#10	4,91	2-1/2"	1-1/4"
59455	.1960	#9	4,98	2-1/2"	1-1/4"
39300	.1969		<b>5,00</b>	<b>63</b>	<b>32</b>
59465	.1990	#8	5,05	2-1/2"	1-1/4"
59470	.2010	#7	5,10	2-1/2"	1-1/4"
59475	.2031	13/64"	5,16	2-1/2"	1-1/4"
59480	.2040	#6	5,18	2-1/2"	1-1/4"
59485	.2055	#5	5,22	2-1/2"	1-1/4"
59490	.2090	#4	5,31	2-1/2"	1-1/4"
59495	.2130	#3	5,41	2-1/2"	1-1/4"
39350	.2165		<b>5,50</b>	<b>63</b>	<b>32</b>
59505	.2188	7/32"	5,56	2-1/2"	1-1/2"
59510	.2210	#2	5,61	2-1/2"	1-1/2"
59515	.2280	#1	5,79	2-1/2"	1-1/2"
59525	.2344	15/64"	5,95	2-1/2"	1-1/2"
39400	.2362		<b>6,00</b>	<b>63</b>	<b>38</b>
59550	.2500	1/4"	6,35	2-1/2"	1-1/2"
39450	.2559		<b>6,50</b>	<b>63</b>	<b>38</b>
59570	.2656	17/64"	6,75	2-1/2"	1-1/2"
39500	.2756		<b>7,00</b>	<b>63</b>	<b>38</b>
59600	.2812	9/32"	7,14	2-1/2"	1-1/2"
39520	.2953		<b>7,50</b>	<b>63</b>	<b>41</b>
59620	.2969	19/64"	7,54	2-1/2"	1-5/8"
59630	.3125	5/16"	7,94	2-1/2"	1-5/8"
39540	.3150		<b>8,00</b>	<b>63</b>	<b>41</b>
59650	.3281	21/64"	8,33	3"	1-5/8"
39560	.3346		<b>8,50</b>	<b>76</b>	<b>41</b>
59670	.3438	11/32"	8,73	3"	1-5/8"
39580	.3543		<b>9,00</b>	<b>76</b>	<b>41</b>
59690	.3594	23/64"	9,13	3"	1-3/4"
39600	.3740		<b>9,50</b>	<b>76</b>	<b>41</b>
59705	.3750	3/8"	9,52	3"	1-3/4"
59720	.3906	25/64"	9,92	3"	1-3/4"
39620	.3937		<b>10,00</b>	<b>76</b>	<b>44</b>
59740	.4062	13/32"	10,32	3"	1-3/4"
39640	.4134		<b>10,50</b>	<b>76</b>	<b>44</b>
59755	.4219	27/64"	10,72	3"	1-3/4"
39660	.4331		<b>11,00</b>	<b>76</b>	<b>44</b>
59765	.4375	7/16"	11,11	3"	1-3/4"
39680	.4528		<b>11,50</b>	<b>76</b>	<b>44</b>
59775	.4531	29/64"	11,51	3"	1-3/4"
59780	.4688	15/32"	11,91	3"	1-3/4"
39700	.4724		<b>12,00</b>	<b>76</b>	<b>44</b>
59790	.4844	31/64"	12,30	3"	1-3/4"
39720	.4921		<b>12,50</b>	<b>76</b>	<b>44</b>
59800	.5000	1/2"	12,70	3"	1-3/4"