

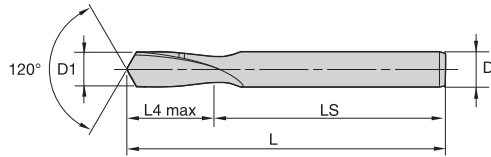


# MASTER CATALOG 2018

VOLUME TWO | **ROTATING TOOLS**



HOLEMAKING | TAPPING | SOLID END MILLING | INDEXABLE MILLING

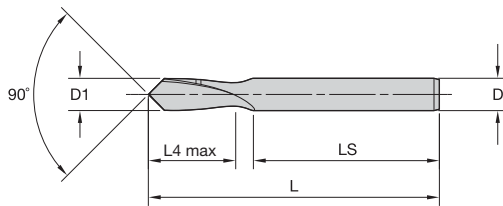


**B501 • 120°**



- first choice
- alternate choice

B501 • K10	D1 diameter				L	L4 max	LS	D
	mm	in	fraction	wire size				
B501Z04000	4,000	.1575	—	—	54	7	33	6
B501Z06000	6,000	.2362	—	—	54	9	33	6
B501Z10000	10,000	.3937	—	—	66	12	45	10
B501Z12000	12,000	.4724	—	—	73	14	52	12



**B505 • 90°**



- first choice
- alternate choice

B505 • K10	D1 diameter				L	L4 max	LS	D
	mm	in	fraction	wire size				
B505Z04000	4,000	.1575	—	—	54	7	33	4
B505Z06000	6,000	.2362	—	—	54	9	33	6
B505Z08000	8,000	.3150	—	—	58	11	37	8
B505Z10000	10,000	.3937	—	—	66	12	40	10
B505Z12000	12,000	.4724	—	—	73	14	52	12
B505Z16000	16,000	.6299	—	—	82	16	61	16
B505Z20000	20,000	.7874	—	—	92	18	71	20

D1	Tolerance • Metric	
	tolerance h8	tolerance h6
>3-6	0,000/-0,018	0,000/-0,008
>6-10	0,000/-0,022	0,000/-0,009
>10-18	0,000/-0,027	0,000/-0,011

D1	Tolerance • Inch	
	tolerance h8	tolerance h6
>.1181-.2362	.0000/-0007	.0000/-0003
>.2362-.3937	.0000/-0009	.0000/-0004
>.3937-.7087	.0000/-0011	.0000/-0004

■ Non-Coolant Spot Drills • B50\_Series • Grade K10 • Dry and Flood Coolant Drill •  
Diameters 3–20mm (.1181–.7874")

Solid Carbide Drills

Material Group		Cutting Speed – vc			Metric								
		Range – m/min			Recommended Feed Rate (f) by Diameter								
		min	Starting Value	max		3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0
		mm/r											
P	0	50	65	100		0,05–0,10	0,06–0,12	0,08–0,14	0,10–0,16	0,12–0,18	0,14–0,20	0,16–0,24	0,18–0,28
	1	40	55	80		0,05–0,10	0,06–0,12	0,08–0,14	0,10–0,16	0,12–0,18	0,14–0,20	0,16–0,24	0,18–0,28
	2	40	55	80		0,05–0,10	0,06–0,12	0,08–0,14	0,10–0,16	0,12–0,18	0,14–0,20	0,16–0,24	0,18–0,28
	3	40	55	80		0,05–0,10	0,06–0,12	0,08–0,14	0,10–0,16	0,12–0,18	0,14–0,20	0,16–0,24	0,18–0,28
	4	40	55	80		0,05–0,08	0,05–0,10	0,06–0,12	0,08–0,14	0,10–0,16	0,12–0,18	0,14–0,22	0,16–0,24
	5	30	40	60		0,03–0,05	0,03–0,06	0,04–0,08	0,06–0,10	0,08–0,12	0,10–0,14	0,12–0,18	0,14–0,20
M	1	30	35	50		0,04–0,07	0,05–0,09	0,06–0,11	0,08–0,13	0,09–0,15	0,10–0,17	0,11–0,20	0,12–0,23
	2	30	40	50		0,03–0,05	0,04–0,08	0,05–0,09	0,06–0,10	0,07–0,12	0,08–0,14	0,09–0,17	0,10–0,20
	3	25	30	40		0,03–0,05	0,04–0,08	0,05–0,09	0,06–0,10	0,07–0,12	0,08–0,14	0,09–0,17	0,10–0,20
K	1	60	90	120		0,06–0,12	0,08–0,14	0,10–0,16	0,12–0,18	0,14–0,20	0,16–0,22	0,18–0,26	0,20–0,30
	2	60	80	100		0,06–0,12	0,08–0,14	0,10–0,16	0,12–0,18	0,14–0,20	0,16–0,22	0,18–0,26	0,20–0,30
	3	60	90	120		0,06–0,12	0,08–0,14	0,10–0,16	0,12–0,18	0,14–0,20	0,16–0,22	0,18–0,26	0,20–0,30
N	1	90	230	270		0,06–0,13	0,08–0,15	0,10–0,18	0,12–0,25	0,15–0,28	0,18–0,32	0,20–0,34	0,22–0,38
	2	90	220	270		0,06–0,13	0,08–0,15	0,10–0,18	0,12–0,25	0,15–0,28	0,18–0,32	0,20–0,34	0,22–0,38
	3	90	180	225		0,06–0,13	0,08–0,15	0,10–0,18	0,12–0,25	0,15–0,28	0,18–0,32	0,20–0,34	0,22–0,38
	4	90	130	270		0,06–0,13	0,08–0,15	0,10–0,18	0,12–0,25	0,15–0,28	0,18–0,32	0,20–0,34	0,22–0,38
S	1	20	25	30		0,03–0,05	0,04–0,07	0,05–0,09	0,06–0,10	0,07–0,11	0,08–0,13	0,09–0,16	0,10–0,20
	2	10	20	30		0,03–0,05	0,04–0,07	0,05–0,09	0,06–0,10	0,07–0,11	0,08–0,13	0,09–0,16	0,10–0,20
	3	20	25	40		0,03–0,05	0,04–0,07	0,05–0,09	0,06–0,10	0,07–0,11	0,08–0,13	0,09–0,16	0,10–0,20
	4	20	25	50		0,03–0,05	0,04–0,07	0,05–0,09	0,06–0,10	0,07–0,11	0,08–0,13	0,09–0,16	0,10–0,20
Material Group		Cutting Speed – vc			Inch								
		Range – SFM			Recommended Feed Rate (f) by Diameter								
		min	Starting Value	max		1/8 .125	3/16 .188	1/4 .250	5/16 .313	3/8 .375	1/2 .500	5/8 .625	3/4 .750
		IPR											
P	0	160	210	330		.002–.004	.002–.005	.003–.006	.004–.006	.005–.007	.006–.008	.006–.009	.007–.011
	1	130	180	260		.002–.004	.002–.005	.003–.006	.004–.006	.005–.007	.006–.008	.006–.009	.007–.011
	2	130	180	260		.002–.004	.002–.005	.003–.006	.004–.006	.005–.007	.006–.008	.006–.009	.007–.011
	3	130	180	260		.002–.004	.002–.005	.003–.006	.004–.006	.005–.007	.006–.008	.006–.009	.007–.011
	4	130	180	260		.002–.003	.002–.004	.002–.005	.003–.006	.004–.006	.005–.007	.006–.009	.006–.009
	5	100	130	200		.001–.002	.001–.002	.002–.003	.002–.004	.003–.005	.004–.006	.005–.007	.006–.008
M	1	100	110	160		.002–.003	.002–.004	.002–.004	.003–.005	.004–.006	.004–.007	.004–.008	.005–.009
	2	100	130	160		.001–.002	.002–.003	.002–.004	.002–.004	.003–.005	.003–.006	.004–.007	.004–.008
	3	80	100	130		.001–.002	.002–.003	.002–.004	.002–.004	.003–.005	.003–.006	.004–.007	.004–.008
K	1	200	300	390		.002–.005	.003–.006	.004–.006	.005–.007	.006–.008	.006–.009	.007–.010	.008–.012
	2	200	260	330		.002–.005	.003–.006	.004–.006	.005–.007	.006–.008	.006–.009	.007–.010	.008–.012
	3	200	300	390		.002–.005	.003–.006	.004–.006	.005–.007	.006–.008	.006–.009	.007–.010	.008–.012
N	1	300	750	890		.002–.005	.003–.006	.004–.007	.005–.010	.006–.011	.007–.013	.008–.013	.009–.015
	2	300	720	890		.002–.005	.003–.006	.004–.007	.005–.010	.006–.011	.007–.013	.008–.013	.009–.015
	3	300	590	740		.002–.005	.003–.006	.004–.007	.005–.010	.006–.011	.007–.013	.008–.013	.009–.015
	4	300	430	890		.002–.005	.003–.006	.004–.007	.005–.010	.006–.011	.007–.013	.008–.013	.009–.015
S	1	70	80	100		.001–.002	.002–.003	.002–.004	.002–.004	.003–.004	.003–.005	.004–.006	.004–.008
	2	30	70	100		.001–.002	.002–.003	.002–.004	.002–.004	.003–.004	.003–.005	.004–.006	.004–.008
	3	70	80	130		.001–.002	.002–.003	.002–.004	.002–.004	.003–.004	.003–.005	.004–.006	.004–.008
	4	70	80	160		.001–.002	.002–.003	.002–.004	.002–.004	.003–.004	.003–.005	.004–.006	.004–.008