

Kenna Universal™ Drills

Primary Application

Kenna Universal Drills (B96/B97_ Series) are engineered to deliver superior performance in steel, cast iron, and stainless steel applications making it ideal for small- and medium-sized shops. The universal application profile reduces tool change times and the number of drills in inventory. Covering a large spectrum of off-the-shelf diameters and a broad range of applications makes Kenna Universal Drills an excellent alternative to other high-performance products.

The B976Z series is available from 2,383–3mm making it the first standard offering in less than 3mm. This extended diameter offering covers all common tap drill sizes, including an expanded selection of wire, fractional, and letter sizes.

The new B967 series satisfies the demand for non-coolant drills up to 5 x D for applications with flood coolant or dry.

Use as Pilot Drill

- Ideal point angle and tolerance make the Kenna Universal drill the preferred pilot drill for B27_ series solid carbide deep-hole drills.

Features and Benefits

Kenna Universal Drill-Point Design

- Low thrust. Works well on a variety of machines.
- Excellent centring capabilities.
- Easy to regrind.

Four-Margin Land Design

- Improves hole straightness and roundness.
- Provides good alignment and stability in tough drilling applications — even when drilling through cross holes.

KC7315™ Grade

- A multilayer, TiAlN-based coating with high hot hardness enables 30% higher cutting speeds and constant tool life.
- Surface finish ensures chip evacuation when drilling deep holes.

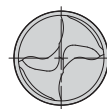
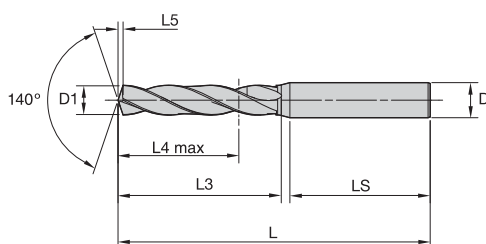
**Universal application profile,
problem solver, and pilot drill.**



Customisation

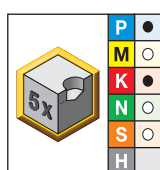
- Intermediate diameters available as semi-standards.
- Length variations and step drills available as engineered solutions.





For information on L, L3, and L4 max, see the Solid Carbide Drills foldout table.

■ B966A/B967A • ~3 x D/~5 x D



● first choice

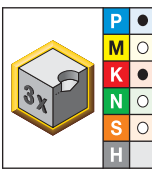
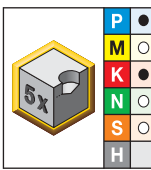
○ alternate choice

D1 diameter

short • KC7315	long • KC7315	mm	in	L5	LS	D
B966A03000	B967A03000	3,000	.1181	0,5	36	6
B966A03100	B967A03100	3,100	.1220	0,5	36	6
B966A03200	B967A03200	3,200	.1260	0,5	36	6
B966A03300	B967A03300	3,300	.1299	0,5	36	6
B966A03400	—	3,400	.1339	0,6	36	6
B966A03500	B967A03500	3,500	.1378	0,6	36	6
B966A03600	—	3,600	.1417	0,6	36	6
B966A03700	—	3,700	.1457	0,6	36	6
B966A03800	B967A03800	3,800	.1496	0,6	36	6
B966A03900	—	3,900	.1535	0,6	36	6
B966A03960	—	3,960	.1559	0,7	36	6
B966A04000	B967A04000	4,000	.1575	0,7	36	6
B966A04100	—	4,100	.1614	0,7	36	6
B966A04200	B967A04200	4,200	.1654	0,7	36	6
B966A04300	B967A04300	4,300	.1693	0,7	36	6
B966A04400	—	4,400	.1732	0,7	36	6
B966A04500	B967A04500	4,500	.1772	0,7	36	6
B966A04600	—	4,600	.1811	0,8	36	6
B966A04700	—	4,700	.1850	0,8	36	6
B966A04800	B967A04800	4,800	.1890	0,8	36	6
B966A04900	—	4,900	.1929	0,8	36	6
B966A05000	B967A05000	5,000	.1969	0,8	36	6
B966A05040	—	5,040	.1984	0,8	36	6
B966A05100	B967A05100	5,100	.2008	0,8	36	6
B966A05200	B967A05200	5,200	.2047	0,9	36	6
B966A05300	—	5,300	.2087	0,9	36	6
B966A05400	—	5,400	.2126	0,9	36	6
B966A05500	B967A05500	5,500	.2165	0,9	36	6
B966A05600	—	5,600	.2205	0,9	36	6
B966A05700	—	5,700	.2244	1,0	36	6
B966A05800	B967A05800	5,800	.2283	1,0	36	6
B966A05900	—	5,900	.2323	1,0	36	6
B966A06000	B967A06000	6,000	.2362	1,0	36	6
B966A06050	—	6,050	.2382	1,0	36	8
B966A06100	B967A06100	6,100	.2402	1,0	36	8
B966A06200	—	6,200	.2441	1,0	36	8

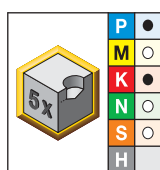
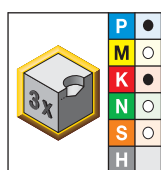
(continued)

(B966A/B967A • ~3 x D/~5 x D — continued)

 		D1 diameter				
short • KC7315	long • KC7315	mm	in	L5	LS	D
B966A06300	—	6,300	.2480	1,1	36	8
B966A06350	—	6,350	.2500	1,1	36	8
B966A06400	—	6,400	.2520	1,1	36	8
B966A06500	B967A06500	6,500	.2559	1,1	36	8
B966A06600	B967A06600	6,600	.2598	1,1	36	8
B966A06700	B967A06700	6,700	.2638	1,1	36	8
B966A06800	B967A06800	6,800	.2677	1,1	36	8
B966A06900	—	6,900	.2717	1,2	36	8
B966A07000	B967A07000	7,000	.2756	1,2	36	8
B966A07100	—	7,100	.2795	1,2	36	8
B966A07200	—	7,200	.2835	1,2	36	8
B966A07300	—	7,300	.2874	1,2	36	8
B966A07400	B967A07400	7,400	.2913	1,3	36	8
B966A07500	B967A07500	7,500	.2953	1,3	36	8
B966A07600	—	7,600	.2992	1,3	36	8
B966A07700	—	7,700	.3031	1,3	36	8
B966A07800	B967A07800	7,800	.3071	1,3	36	8
B966A07900	—	7,900	.3110	1,3	36	8
B966A08000	B967A08000	8,000	.3150	1,4	36	8
B966A08100	B967A08100	8,100	.3189	1,4	40	10
B966A08200	—	8,200	.3228	1,4	40	10
B966A08300	—	8,300	.3268	1,4	40	10
B966A08400	—	8,400	.3307	1,4	40	10
B966A08500	B967A08500	8,500	.3346	1,4	40	10
B966A08600	B967A08600	8,600	.3386	1,5	40	10
B966A08700	B967A08700	8,700	.3425	1,5	40	10
B966A08800	B967A08800	8,800	.3465	1,5	40	10
B966A08900	—	8,900	.3504	1,5	40	10
B966A09000	B967A09000	9,000	.3543	1,5	40	10
B966A09100	—	9,100	.3583	1,5	40	10
B966A09200	—	9,200	.3622	1,6	40	10
B966A09300	B967A09300	9,300	.3661	1,6	40	10
B966A09400	—	9,400	.3701	1,6	40	10
B966A09500	B967A09500	9,500	.3740	1,6	40	10
B966A09600	—	9,600	.3780	1,6	40	10
B966A09700	—	9,700	.3819	1,7	40	10
B966A09800	B967A09800	9,800	.3858	1,7	40	10
B966A09900	—	9,900	.3898	1,7	40	10
B966A10000	B967A10000	10,000	.3937	1,7	40	10
B966A10100	—	10,100	.3976	1,7	45	12
B966A10200	B967A10200	10,200	.4016	1,7	45	12
B966A10300	—	10,300	.4055	1,8	45	12
B966A10400	—	10,400	.4094	1,8	45	12
B966A10500	B967A10500	10,500	.4134	1,8	45	12
B966A10600	—	10,600	.4173	1,8	45	12
B966A10700	B967A10700	10,700	.4213	1,8	45	12
B966A10800	B967A10800	10,800	.4252	1,8	45	12
B966A10900	—	10,900	.4291	1,9	45	12
B966A11000	B967A11000	11,000	.4331	1,9	45	12
B966A11100	—	11,100	.4370	1,9	45	12
B966A11200	—	11,200	.4409	1,9	45	12
B966A11300	B967A11300	11,300	.4449	1,9	45	12

(continued)

(B966A/B967A • ~3 x D/~5 x D — continued)



● first choice

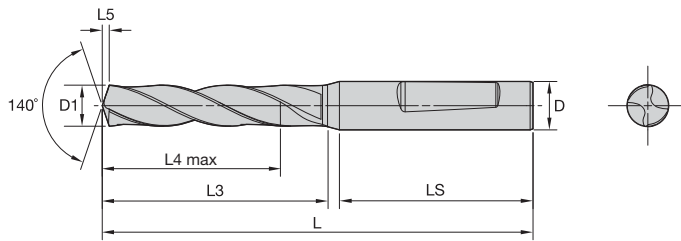
○ alternate choice

D1 diameter

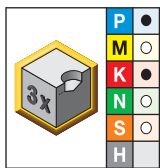
short • KC7315	long • KC7315	D1 diameter		L5	LS	D
mm	in					
B966A11400	—	11,400	.4488	2,0	45	12
B966A11500	B967A11500	11,500	.4528	2,0	45	12
B966A11600	—	11,600	.4567	2,0	45	12
B966A11700	—	11,700	.4606	2,0	45	12
B966A11800	B967A11800	11,800	.4646	2,0	45	12
B966A11900	—	11,900	.4685	2,0	45	12
B966A12000	B967A12000	12,000	.4724	2,1	45	12
B966A12100	—	12,100	.4764	2,1	45	14
B966A12200	—	12,200	.4803	2,1	45	14
B966A12300	—	12,300	.4843	2,1	45	14
B966A12400	—	12,400	.4882	2,1	45	14
B966A12500	B967A12500	12,500	.4921	2,1	45	14
B966A12600	—	12,600	.4961	2,2	45	14
B966A12700	B967A12700	12,700	.5000	2,2	45	14
B966A12800	B967A12800	12,800	.5039	2,2	45	14
B966A12900	—	12,900	.5079	2,2	45	14
B966A13000	B967A13000	13,000	.5118	2,2	45	14
B966A13100	—	13,100	.5157	2,3	45	14
B966A13200	—	13,200	.5197	2,3	45	14
B966A13300	—	13,300	.5236	2,3	45	14
B966A13400	—	13,400	.5276	2,3	45	14
B966A13500	B967A13500	13,500	.5315	2,3	45	14
B966A13700	—	13,700	.5394	2,4	45	14
B966A14000	B967A14000	14,000	.5512	2,4	45	14
B966A14200	—	14,200	.5591	2,5	48	16
B966A14300	—	14,300	.5630	2,5	48	16
B966A14500	B967A14500	14,500	.5709	2,5	48	16
B966A14700	—	14,700	.5787	2,5	48	16
B966A14800	—	14,800	.5827	2,6	48	16
B966A15000	B967A15000	15,000	.5906	2,6	48	16
—	B967A15300	15,300	.6024	2,6	48	16
B966A15500	B967A15500	15,500	.6102	2,7	48	16
B966A15700	—	15,700	.6181	2,7	48	16
B966A16000	B967A16000	16,000	.6299	2,8	48	16
B966A16500	B967A16500	16,500	.6496	2,9	48	18
B966A17000	—	17,000	.6693	2,9	48	18
B966A17500	—	17,500	.6890	3,0	48	18
B966A18000	—	18,000	.7087	3,1	48	18
B966A20000	—	20,000	.7874	3,5	50	20

Tolerance • Metric

nominal size range	D1 tolerance m7	D tolerance h6
>3–6	0,004/0,016	0,000/-0,008
>6–10	0,006/0,021	0,000/-0,009
>10–18	0,007/0,025	0,000/-0,011
>18–25,4	0,008/0,029	0,000/-0,013



■ B966F • ~3 x D



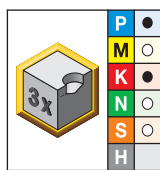
D1 diameter

- first choice
- alternate choice

short • KC7315	mm	in	L	L3	L4 max	L5	LS	D
B966F03000	3,000	.1181	62	20	14	0,5	36	6
B966F03300	3,300	.1299	62	20	14	0,5	36	6
B966F03400	3,400	.1339	62	20	14	0,6	36	6
B966F03500	3,500	.1378	62	20	14	0,6	36	6
B966F03600 *	3,600	.1417	62	20	14	0,6	36	6
B966F04000	4,000	.1575	66	24	17	0,7	36	6
B966F04200	4,200	.1654	66	24	17	0,7	36	6
B966F05000	5,000	.1969	66	28	20	0,8	36	6
B966F05100 *	5,100	.2008	66	28	20	0,8	36	6
B966F05300 *	5,300	.2087	66	28	20	0,9	36	6
B966F05500	5,500	.2165	66	28	20	0,9	36	6
B966F05600 *	5,600	.2205	66	28	20	0,9	36	6
B966F06000	6,000	.2362	66	28	20	1,0	36	6
B966F06300	6,300	.2480	79	34	24	1,1	36	8
B966F06400	6,400	.2520	79	34	24	1,1	36	8
B966F06500	6,500	.2559	79	34	24	1,1	36	8
B966F06700 *	6,700	.2638	79	34	24	1,1	36	8
B966F06800	6,800	.2677	79	34	24	1,1	36	8
B966F07000	7,000	.2756	79	34	24	1,2	36	8
B966F07100 *	7,100	.2795	79	41	29	1,2	36	8
B966F07300 *	7,300	.2874	79	41	29	1,2	36	8
B966F07400 *	7,400	.2913	79	41	29	1,3	36	8
B966F07600 *	7,600	.2992	79	41	29	1,3	36	8
B966F08000	8,000	.3150	79	41	29	1,4	36	8
B966F08200	8,200	.3228	89	47	35	1,4	40	10
B966F08400	8,400	.3307	89	47	35	1,4	40	10
B966F08500	8,500	.3346	89	47	35	1,4	40	10
B966F09000	9,000	.3543	89	47	35	1,5	40	10
B966F09100	9,100	.3583	89	47	35	1,5	40	10
B966F09500	9,500	.3740	89	47	35	1,6	40	10
B966F10000	10,000	.3937	89	47	35	1,7	40	10
B966F10200	10,200	.4016	102	55	40	1,7	45	12
B966F10400	10,400	.4094	102	55	40	1,8	45	12
B966F10500	10,500	.4134	102	55	40	1,8	45	12
B966F10600	10,600	.4173	102	55	40	1,8	45	12
B966F10700	10,700	.4213	102	55	40	1,8	45	12

(continued)

(B966F • ~3 x D — continued)



● first choice

○ alternate choice

short • KC7315	D1 diameter		L	L3	L4 max	L5	LS	D
	mm	in						
B966F10800	10,800	.4252	102	55	40	1,8	45	12
B966F11000	11,000	.4331	102	55	40	1,9	45	12
B966F11800	11,800	.4646	102	55	40	2,0	45	12
B966F12000	12,000	.4724	102	55	40	2,1	45	12
B966F12100 *	12,100	.4764	107	60	43	2,1	45	14
B966F12200	12,200	.4803	107	60	43	2,1	45	14
B966F12500	12,500	.4921	107	60	43	2,1	45	14
B966F12700	12,700	.5000	107	60	43	2,2	45	14
B966F13000	13,000	.5118	107	60	43	2,2	45	14
B966F13500 *	13,500	.5315	107	60	43	2,3	45	14
B966F14000	14,000	.5512	107	60	43	2,4	45	14
B966F14500	14,500	.5709	115	65	45	2,5	48	16
B966F15000	15,000	.5906	115	65	45	2,6	48	16
B966F16000	16,000	.6299	115	65	45	2,8	48	16
B966F16500	16,500	.6496	123	73	51	2,9	48	18
B966F17000	17,000	.6693	123	73	51	2,9	48	18
B966F17500 *	17,500	.6890	123	73	51	3,0	48	18
B966F18000	18,000	.7087	123	73	51	3,1	48	18

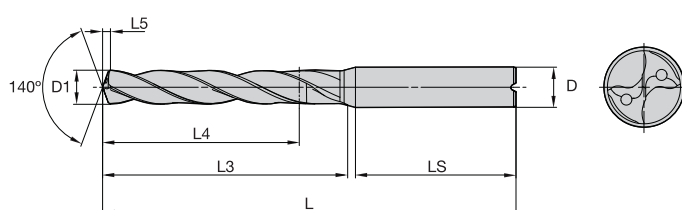
NOTE: *Made-to-order standard item. Standard pricing, manufacturing lead time, and minimum order quantity applies.

Tolerance • Metric

nominal size range	D1 tolerance m7	D tolerance h6
>3–6	0,004/0,016	0,000/-0,008
>6–10	0,006/0,021	0,000/-0,009
>10–18	0,007/0,025	0,000/-0,011
>18–25,4	0,008/0,029	0,000/-0,013

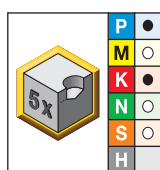
■ Kenna Universal™ Drills • B966, B967 Series • Grade KC7315™ • Flood Coolant •
 Drill Diameters 3–20mm • Metric

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
P	0	70	90	115	mm/r	0,05–0,11	0,08–0,14	0,09–0,19	0,11–0,22	0,13–0,26	0,15–0,30	0,19–0,36	0,24–0,46
	1	60	70	100	mm/r	0,06–0,13	0,09–0,16	0,11–0,22	0,13–0,26	0,15–0,31	0,18–0,35	0,22–0,42	0,28–0,54
	2	80	90	100	mm/r	0,06–0,13	0,08–0,16	0,12–0,22	0,14–0,26	0,17–0,31	0,20–0,35	0,24–0,42	0,31–0,53
	3	50	70	90	mm/r	0,07–0,15	0,09–0,17	0,13–0,23	0,15–0,28	0,19–0,33	0,22–0,38	0,26–0,47	0,34–0,59
	4	50	70	100	mm/r	0,06–0,15	0,08–0,17	0,12–0,23	0,14–0,28	0,17–0,33	0,19–0,38	0,23–0,47	0,29–0,59
	5	40	50	70	mm/r	0,06–0,12	0,08–0,14	0,10–0,18	0,12–0,22	0,16–0,26	0,18–0,28	0,22–0,36	0,26–0,42
M	6	30	40	60	mm/r	0,05–0,07	0,06–0,10	0,08–0,14	0,10–0,18	0,12–0,22	0,14–0,24	0,18–0,32	0,23–0,41
	1	30	40	50	mm/r	0,04–0,07	0,05–0,09	0,08–0,11	0,09–0,12	0,10–0,14	0,12–0,16	0,14–0,18	0,16–0,20
	2	40	50	60	mm/r	0,04–0,08	0,06–0,10	0,08–0,12	0,09–0,14	0,10–0,16	0,12–0,18	0,14–0,20	0,16–0,22
K	3	30	40	50	mm/r	0,04–0,07	0,06–0,09	0,08–0,11	0,09–0,12	0,10–0,14	0,12–0,16	0,14–0,18	0,16–0,20
	1	80	130	170	mm/r	0,11–0,22	0,12–0,24	0,16–0,31	0,20–0,38	0,23–0,44	0,25–0,49	0,31–0,06	0,38–0,47
	2	90	110	120	mm/r	0,10–0,17	0,12–0,19	0,16–0,25	0,20–0,31	0,23–0,36	0,25–0,40	0,31–0,48	0,38–0,60
N	3	80	110	130	mm/r	0,07–0,15	0,09–0,19	0,12–0,25	0,14–0,30	0,17–0,35	0,19–0,40	0,25–0,48	0,30–0,60
	1	90	230	270	mm/r	0,08–0,14	0,10–0,16	0,12–0,20	0,16–0,24	0,20–0,28	0,24–0,32	0,28–0,40	0,32–0,48
	2	90	220	270	mm/r	0,08–0,16	0,10–0,20	0,12–0,24	0,16–0,28	0,20–0,32	0,24–0,36	0,28–0,44	0,32–0,52
	3	90	180	225	mm/r	0,12–0,14	0,13–0,16	0,14–0,20	0,16–0,24	0,20–0,28	0,24–0,32	0,28–0,40	0,32–0,44
S	4	90	130	270	mm/r	0,08–0,16	0,10–0,20	0,12–0,24	0,16–0,28	0,20–0,32	0,24–0,36	0,28–0,40	0,32–0,48
	1	20	25	30	mm/r	0,03–0,06	0,04–0,08	0,06–0,10	0,08–0,12	0,09–0,13	0,10–0,14	0,12–0,16	0,14–0,18
	2	10	20	30	mm/r	0,02–0,04	0,03–0,06	0,05–0,08	0,07–0,10	0,08–0,11	0,09–0,12	0,10–0,14	0,11–0,16
	3	20	25	40	mm/r	0,02–0,04	0,02–0,05	0,04–0,07	0,06–0,09	0,07–0,10	0,08–0,11	0,09–0,13	0,10–0,15
	4	20	25	50	mm/r	0,02–0,04	0,03–0,06	0,05–0,08	0,07–0,10	0,08–0,11	0,09–0,12	0,10–0,14	0,11–0,16



For information on L, L3, and L4 max, see the Solid Carbide Drills foldout table.

■ B976A/B977A • ~3 x D/~5 x D



D1 diameter

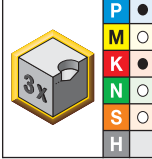
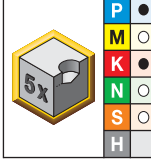
● first choice

○ alternate choice

short • KC7315	long • KC7315	D1 diameter		L5	LS	D
		mm	in			
B976Z02383	—	2,383	.0938	0,4	28	3
B976Z02400	—	2,400	.0945	0,4	28	3
B976Z02439	—	2,439	.0960	0,4	28	3
B976Z02489	—	2,489	.0980	0,4	28	3
B976Z02500	—	2,500	.0984	0,4	28	3
B976Z02578	—	2,578	.1015	0,4	28	3
B976Z02600	—	2,600	.1024	0,4	28	3
B976Z02642	—	2,642	.1040	0,4	28	3
B976Z02705	—	2,705	.1065	0,4	28	3
B976Z02779	—	2,779	.1094	0,4	28	3
B976Z02800	—	2,800	.1102	0,5	28	3
B976Z02820	—	2,820	.1110	0,5	28	3
B976Z02870	—	2,870	.1130	0,5	28	3
B976Z02900	—	2,900	.1142	0,5	28	3
B976Z02947 *	—	2,947	.1160	0,5	28	3
B976A03000	B977A03000	3,000	.1181	0,5	36	6
B976A03100	B977A03100	3,100	.1220	0,5	36	6
B976A03175	B977A03175	3,175	.1250	0,5	36	6
B976A03180	—	3,180	.1252	0,5	36	6
B976A03200	B977A03200	3,200	.1260	0,5	36	6
—	B977A03250	3,250	.1280	0,5	36	6
B976A03300	B977A03300	3,300	.1299	0,5	36	6
—	B977A03400	3,400	.1339	0,6	36	6
B976A03454	B977A03454	3,454	.1360	0,6	36	6
B976A03500	B977A03500	3,500	.1378	0,6	36	6
B976A03600	B977A03600	3,600	.1417	0,6	36	6
B976A03700	B977A03700	3,700	.1457	0,6	36	6
B976A03734	B977A03734	3,734	.1470	0,6	36	6
B976A03797	B977A03797	3,797	.1495	0,6	36	6
B976A03800	B977A03800	3,800	.1496	0,6	36	6
B976A03900	B977A03900	3,900	.1535	0,6	36	6
B976A03970	B977A03970	3,970	.1563	0,7	36	6
B976A04000	B977A04000	4,000	.1575	0,7	36	6
B976A04039	B977A04039	4,039	.1590	0,7	36	6
B976A04100	B977A04100	4,100	.1614	0,7	36	6
B976A04200	B977A04200	4,200	.1654	0,7	36	6

(continued)

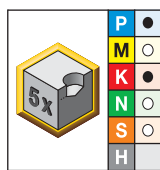
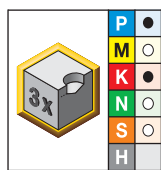
(B976A/B977A • ~3 x D/~5 x D — continued)

		D1 diameter			
		mm	in	L5	LS
				D	
					
short • KC7315	long • KC7315				
B976A04300	B977A04300	4,300	.1693	0,7	36
B976A04366	B977A04366	4,366	.1719	0,7	36
—	B977A04400	4,400	.1732	0,7	36
B976A04496	B977A04496	4,496	.1770	0,7	36
B976A04500	B977A04500	4,500	.1772	0,7	36
—	B977A04580	4,580	.1803	0,8	36
B976A04600	B977A04600	4,600	.1811	0,8	36
B976A04620	—	4,620	.1819	0,8	36
—	B977A04623	4,623	.1820	0,8	36
—	B977A04650	4,650	.1831	0,8	36
B976A04700	B977A04700	4,700	.1850	0,8	36
B976A04763	B977A04763	4,763	.1875	0,8	36
B976A04800	B977A04800	4,800	.1890	0,8	36
B976A04900	B977A04900	4,900	.1929	0,8	36
B976A05000	B977A05000	5,000	.1969	0,8	36
B976A05100	B977A05100	5,100	.2008	0,8	36
B976A05106	B977A05106	5,106	.2010	0,8	36
B976A05200	B977A05200	5,200	.2047	0,9	36
B976A05250	—	5,250	.2067	0,9	36
B976A05300	B977A05300	5,300	.2087	0,9	36
B976A05400	B977A05400	5,400	.2126	0,9	36
B976A05410	B977A05410	5,410	.2130	0,9	36
B976A05500	B977A05500	5,500	.2165	0,9	36
B976A05530	—	5,530	.2177	0,9	36
B976A05558	B977A05558	5,558	.2188	0,9	36
B976A05575	—	5,575	.2195	0,9	36
B976A05600	B977A05600	5,600	.2205	0,9	36
B976A05700	B977A05700	5,700	.2244	1,0	36
B976A05791	B977A05791	5,791	.2280	1,0	36
B976A05800	B977A05800	5,800	.2283	1,0	36
—	B977A05900	5,900	.2323	1,0	36
B976A05944	B977A05944	5,944	.2340	1,0	36
B976A06000	B977A06000	6,000	.2362	1,0	36
B976A06100	B977A06100	6,100	.2402	1,0	36
—	B977A06150	6,150	.2421	1,0	36
B976A06200	B977A06200	6,200	.2441	1,0	36
—	B977A06300	6,300	.2480	1,1	36
B976A06350	B977A06350	6,350	.2500	1,1	36
—	B977A06400	6,400	.2520	1,1	36
B976A06500	B977A06500	6,500	.2559	1,1	36
B976A06528	B977A06528	6,528	.2570	1,1	36
B976A06530	—	6,530	.2571	1,1	36
B976A06600	B977A06600	6,600	.2598	1,1	36
B976A06700	B977A06700	6,700	.2638	1,1	36
B976A06746	—	6,746	.2656	1,1	36
B976A06750	—	6,750	.2657	1,1	36
B976A06800	B977A06800	6,800	.2677	1,1	36
B976A06900	B977A06900	6,900	.2717	1,2	36
B976A06909	B977A06909	6,909	.2720	1,2	36
B976A07000	B977A07000	7,000	.2756	1,2	36
B976A07100	B977A07100	7,100	.2795	1,2	36
B976A07145	B977A07145	7,145	.2813	1,2	36

● first choice
○ alternate choice

(continued)

(B976A/B977A • ~3 x D/~5 x D — continued)



● first choice

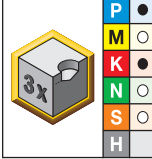
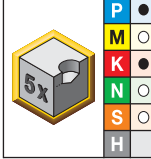
○ alternate choice

D1 diameter

short • KC7315	long • KC7315	D1 diameter		L5	LS	D
mm	in					
B976A07200	B977A07200	7,200	.2835	1,2	36	8
B976A07300	B977A07300	7,300	.2874	1,2	36	8
B976A07366	B977A07366	7,366	.2900	1,2	36	8
B976A07400	B977A07400	7,400	.2913	1,3	36	8
B976A07500	B977A07500	7,500	.2953	1,3	36	8
B976A07541	B977A07541	7,541	.2969	1,3	36	8
B976A07600	B977A07600	7,600	.2992	1,3	36	8
B976A07700	B977A07700	7,700	.3031	1,3	36	8
B976A07800	B977A07800	7,800	.3071	1,3	36	8
B976A07900	B977A07900	7,900	.3110	1,3	36	8
B976A07938	B977A07938	7,938	.3125	1,3	36	8
B976A08000	B977A08000	8,000	.3150	1,4	36	8
B976A08020	B977A08020	8,020	.3157	1,4	40	10
B976A08100	B977A08100	8,100	.3189	1,4	40	10
B976A08200	B977A08200	8,200	.3228	1,4	40	10
B976A08300	B977A08300	8,300	.3268	1,4	40	10
B976A08334	B977A08334	8,334	.3281	1,4	40	10
—	B977A08400	8,400	.3307	1,4	40	10
B976A08430	—	8,430	.3319	1,4	40	10
B976A08433	B977A08433	8,433	.3320	1,4	40	10
B976A08500	B977A08500	8,500	.3346	1,4	40	10
B976A08600	B977A08600	8,600	.3386	1,5	40	10
B976A08700	B977A08700	8,700	.3425	1,5	40	10
B976A08733	B977A08733	8,733	.3438	1,5	40	10
B976A08800	B977A08800	8,800	.3465	1,5	40	10
B976A08839	B977A08839	8,839	.3480	1,5	40	10
—	B977A08900	8,900	.3504	1,5	40	10
B976A09000	B977A09000	9,000	.3543	1,5	40	10
B976A09093	B977A09093	9,093	.3580	1,5	40	10
B976A09100	B977A09100	9,100	.3583	1,5	40	10
B976A09129	B977A09129	9,129	.3594	1,6	40	10
B976A09200	B977A09200	9,200	.3622	1,6	40	10
B976A09300	B977A09300	9,300	.3661	1,6	40	10
—	B977A09347	9,347	.3680	1,6	40	10
B976A09400	B977A09400	9,400	.3701	1,6	40	10
B976A09500	B977A09500	9,500	.3740	1,6	40	10
B976A09525	B977A09525	9,525	.3750	1,6	40	10
B976A09600	B977A09600	9,600	.3780	1,6	40	10
B976A09700	B977A09700	9,700	.3819	1,7	40	10
—	B977A09746	9,746	.3837	1,7	40	10
B976A09750	—	9,750	.3839	1,7	40	10
B976A09800	B977A09800	9,800	.3858	1,7	40	10
—	B977A09900	9,900	.3898	1,7	40	10
B976A09921	B977A09921	9,921	.3906	1,7	40	10
B976A10000	B977A10000	10,000	.3937	1,7	40	10
—	B977A10100	10,100	.3976	1,7	45	12
B976A10200	B977A10200	10,200	.4016	1,7	45	12
B976A10262	B977A10262	10,262	.4040	1,8	45	12
B976A10300	B977A10300	10,300	.4055	1,8	45	12
B976A10320	B977A10320	10,320	.4063	1,8	45	12
B976A10400	B977A10400	10,400	.4094	1,8	45	12
B976A10500	B977A10500	10,500	.4134	1,8	45	12

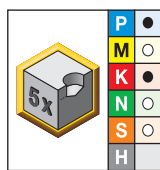
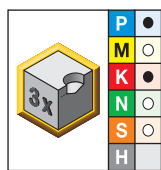
(continued)

(B976A/B977A • ~3 x D/~5 x D — continued)

 		D1 diameter				
short • KC7315	long • KC7315	mm	in	L5	LS	D
B976A10600	B977A10600	10,600	.4173	1,8	45	12
B976A10700	B977A10700	10,700	.4213	1,8	45	12
B976A10716	B977A10716	10,716	.4219	1,8	45	12
B976A10800	B977A10800	10,800	.4252	1,8	45	12
—	B977A10900	10,900	.4291	1,9	45	12
B976A11000	B977A11000	11,000	.4331	1,9	45	12
—	B977A11100	11,100	.4370	1,9	45	12
B976A11113	B977A11113	11,113	.4375	1,9	45	12
B976A11200	B977A11200	11,200	.4409	1,9	45	12
B976A11300	B977A11300	11,300	.4449	1,9	45	12
—	B977A11400	11,400	.4488	2,0	45	12
B976A11500	B977A11500	11,500	.4528	2,0	45	12
B976A11509	B977A11509	11,509	.4531	2,0	45	12
B976A11600	B977A11600	11,600	.4567	2,0	45	12
B976A11700	B977A11700	11,700	.4606	2,0	45	12
B976A11800	B977A11800	11,800	.4646	2,0	45	12
—	B977A11900	11,900	.4685	2,0	45	12
B976A11908	B977A11908	11,908	.4688	2,0	45	12
B976A12000	B977A12000	12,000	.4724	2,1	45	12
—	B977A12100	12,100	.4764	2,1	45	14
—	B977A12200	12,200	.4803	2,1	45	14
B976A12300	B977A12300	12,300	.4843	2,1	45	14
B976A12304	B977A12304	12,304	.4844	2,1	45	14
—	B977A12400	12,400	.4882	2,1	45	14
B976A12500	B977A12500	12,500	.4921	2,1	45	14
—	B977A12600	12,600	.4961	2,2	45	14
B976A12700	B977A12700	12,700	.5000	2,2	45	14
B976A12800	B977A12800	12,800	.5039	2,2	45	14
—	B977A12900	12,900	.5079	2,2	45	14
B976A13000	B977A13000	13,000	.5118	2,2	45	14
—	B977A13096	13,096	.5156	2,3	45	14
—	B977A13100	13,100	.5157	2,3	45	14
—	B977A13200	13,200	.5197	2,3	45	14
B976A13300	B977A13300	13,300	.5236	2,3	45	14
B976A13495	B977A13495	13,495	.5313	2,3	45	14
B976A13500	B977A13500	13,500	.5315	2,3	45	14
B976A13700	B977A13700	13,700	.5394	2,4	45	14
—	B977A13800	13,800	.5433	2,4	45	14
B976A14000	B977A14000	14,000	.5512	2,4	45	14
B976A14100	B977A14100	14,100	.5551	2,4	48	16
B976A14200	B977A14200	14,200	.5591	2,5	48	16
B976A14288	B977A14288	14,288	.5625	2,5	48	16
B976A14500	B977A14500	14,500	.5709	2,5	48	16
—	B977A14600	14,600	.5748	2,5	48	16
B976A14700	B977A14700	14,700	.5787	2,5	48	16
—	B977A14900	14,900	.5866	2,6	48	16
B976A15000	B977A15000	15,000	.5906	2,6	48	16
—	B977A15100	15,100	.5945	2,6	48	16
—	B977A15200	15,200	.5984	2,6	48	16
—	B977A15300	15,300	.6024	2,6	48	16
B976A15500	B977A15500	15,500	.6102	2,7	48	16
—	B977A15700	15,700	.6181	2,7	48	16

(continued)

(B976A/B977A • ~3 x D/~5 x D — continued)



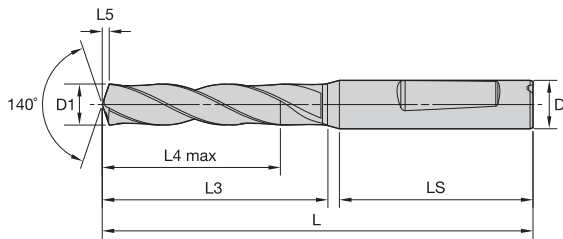
● first choice

○ alternate choice

D1 diameter

short • KC7315	long • KC7315	D1 diameter		L5	LS	D
mm	in					
—	B977A15800	15,800	.6220	2,7	48	16
B976A15875	B977A15875	15,875	.6250	2,7	48	16
—	B977A15900	15,900	.6260	2,8	48	16
B976A16000	B977A16000	16,000	.6299	2,8	48	16
—	B977A16078	16,078	.6330	2,8	48	18
B976A16200	B977A16200	16,200	.6378	2,8	48	18
—	B977A16300	16,300	.6417	2,8	48	18
—	B977A16400	16,400	.6457	2,8	48	18
B976A16500	B977A16500	16,500	.6496	2,9	48	18
—	B977A16600	16,600	.6535	2,9	48	18
B976A16670	B977A16670	16,670	.6563	2,9	48	18
—	B977A16700	16,700	.6575	2,9	48	18
B976A16800	—	16,800	.6614	2,9	48	18
B976A17000	B977A17000	17,000	.6693	2,9	48	18
B976A17100	—	17,100	.6732	3,0	48	18
B976A17463	B977A17463	17,463	.6875	3,0	48	18
B976A17500	B977A17500	17,500	.6890	3,0	48	18
—	B977A17700	17,700	.6969	3,1	48	18
B976A18000	B977A18000	18,000	.7087	3,1	48	18
—	B977A18400	18,400	.7244	3,2	50	20
B976A18500	B977A18500	18,500	.7283	3,2	50	20
—	B977A18600	18,600	.7323	3,2	50	20
—	B977A18800	18,800	.7402	3,3	50	20
B976A19000	B977A19000	19,000	.7480	3,3	50	20
B976A19050	B977A19050	19,050	.7500	3,3	50	20
—	B977A19200	19,200	.7559	3,3	50	20
—	B977A19253	19,253	.7580	3,3	50	20
—	B977A19446	19,446	.7656	3,4	50	20
B976A19500	B977A19500	19,500	.7677	3,4	50	20
B976A19700	B977A19700	19,700	.7756	3,4	50	20
B976A19840 *	B977A19840	19,840	.7811	3,5	50	20
B976A20000	B977A20000	20,000	.7874	3,5	50	20
—	B977A21000	21,000	.8268	3,7	50	20

NOTE: *Made-to-order standard item. Standard pricing, manufacturing lead time, and minimum order quantity applies.

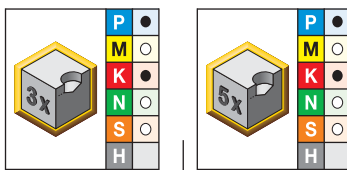


For information on L, L3, and L4 max, see the Solid Carbide Drills foldout table.



Solid Carbide Drills

■ B976F/B977F • ~3 x D/~5 x D

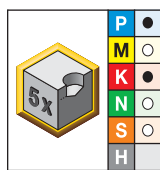
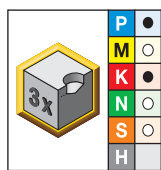


- first choice
- alternate choice

		D1 diameter		L5	LS	D
short • KC7315	long • KC7315	mm	in			
B976F03000	B977F03000	3,000	.1181	0,5	36	6
–	B977F03100	3,100	.1220	0,5	36	6
–	B977F03200	3,200	.1260	0,5	36	6
–	B977F03300	3,300	.1299	0,5	36	6
–	B977F03400	3,400	.1339	0,6	36	6
–	B977F03500	3,500	.1378	0,6	36	6
–	B977F03600	3,600	.1417	0,6	36	6
–	B977F03700	3,700	.1457	0,6	36	6
–	B977F03800	3,800	.1496	0,6	36	6
B976F03900 *	B977F03900	3,900	.1535	0,6	36	6
–	B977F04000	4,000	.1575	0,7	36	6
–	B977F04100	4,100	.1614	0,7	36	6
B976F04200 *	B977F04200	4,200	.1654	0,7	36	6
–	B977F04300	4,300	.1693	0,7	36	6
B976F04500 *	B977F04500	4,500	.1772	0,7	36	6
–	B977F04550	4,550	.1791	0,8	36	6
B976F04600 *	B977F04600	4,600	.1811	0,8	36	6
–	B977F04650	4,650	.1831	0,8	36	6
–	B977F04700	4,700	.1850	0,8	36	6
–	B977F04800	4,800	.1890	0,8	36	6
–	B977F04900	4,900	.1929	0,8	36	6
–	B977F05000	5,000	.1969	0,8	36	6
B976F05000	–	5,000	.1969	1,4	36	6
B976F05100 *	B977F05100	5,100	.2008	0,8	36	6
B976F05200 *	B977F05200	5,200	.2047	0,9	36	6
–	B977F05300	5,300	.2087	0,9	36	6
–	B977F05400	5,400	.2126	0,9	36	6
B976F05500	B977F05500	5,500	.2165	0,9	36	6
–	B977F05550	5,550	.2185	0,9	36	6
–	B977F05558	5,558	.2188	0,9	36	6
B976F05600	B977F05600	5,600	.2205	0,9	36	6
–	B977F05700	5,700	.2244	1,0	36	6

(continued)

(B976F/B977F • ~3 x D/~5 x D — continued)



● first choice

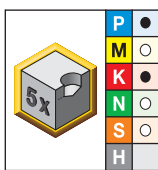
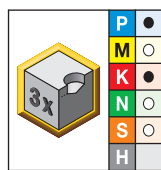
○ alternate choice

D1 diameter

short • KC7315	long • KC7315	D1 diameter		L5	LS	D
B976F05800	B977F05800	mm	in			
—	B977F05900	5,800	.2283	1,0	36	6
B976F06000	B977F06000	5,900	.2323	1,0	36	6
—	B977F06100	6,000	.2362	1,0	36	6
—	B977F06200	6,100	.2402	1,0	36	8
B976F06300	—	6,200	.2441	1,0	36	8
B976F06400	B977F06400	6,300	.2480	1,1	36	8
—	B977F06500	6,400	.2520	1,1	36	8
—	B977F06600	6,500	.2559	1,1	36	8
—	B977F06700	6,600	.2598	1,1	36	8
B976F06800	B977F06800	6,700	.2638	1,1	36	8
—	B977F06900	6,800	.2677	1,1	36	8
B976F07000	B977F07000	6,900	.2717	1,2	36	8
B976F07100	B977F07100	7,000	.2756	1,2	36	8
—	B977F07200	7,100	.2795	1,2	36	8
—	B977F07300	7,200	.2835	1,2	36	8
B976F07400	B977F07400	7,300	.2875	1,3	36	8
B976F07500	B977F07500	7,400	.2913	1,3	36	8
B976F07600	B977F07600	7,500	.2953	1,3	36	8
B976F07700	B977F07700	7,600	.3000	1,3	36	8
B976F07800	B977F07800	7,700	.3047	1,3	36	8
B976F07900	B977F07900	7,800	.3094	1,3	36	8
B976F08000	B977F08000	7,900	.3141	1,4	36	8
—	B977F08100	8,000	.3189	1,4	40	10
—	B977F08200	8,100	.3236	1,4	40	10
B976F08300 *	—	8,200	.3283	1,4	40	10
B976F08400	B977F08400	8,300	.3330	1,4	40	10
B976F08500	B977F08500	8,400	.3377	1,4	40	10
B976F08600 *	B977F08600	8,500	.3424	1,5	40	10
B976F08700	B977F08700	8,600	.3471	1,5	40	10
B976F08800 *	B977F08800	8,700	.3518	1,5	40	10
B976F08900	B977F08900	8,800	.3565	1,5	40	10
B976F09000	B977F09000	8,900	.3612	1,5	40	10
—	B977F09100	9,000	.3659	1,5	40	10
—	B977F09200	9,100	.3706	1,6	40	10
B976F09300	B977F09300	9,200	.3753	1,6	40	10
—	B977F09400	9,300	.3800	1,6	40	10
—	B977F09500	9,400	.3847	1,6	40	10
—	B977F09600	9,500	.3894	1,7	40	10
B976F09700	B977F09700	9,600	.3941	1,7	40	10
B976F09800	B977F09800	9,700	.3988	1,7	40	10
B976F09900	B977F09900	9,800	.4035	1,7	40	10
B976F10000	B977F10000	9,900	.4082	1,7	40	10
—	B977F10100 *	10,000	.4129	1,7	45	12
B976F10200	B977F10200	10,100	.4176	1,7	45	12
—	B977F10300	10,200	.4223	1,7	45	12
—	B977F10400	10,300	.4270	1,8	45	12
B976F10500 *	B977F10500	10,400	.4317	1,8	45	12
B976F10600 *	B977F10600	10,500	.4364	1,8	45	12
B976F10700	B977F10700	10,600	.4411	1,8	45	12
B976F10800	B977F10800	10,700	.4458	1,8	45	12
B976F10900	B977F10900	10,800	.4505	1,9	45	12
—	B977F11000	10,900	.4552	1,9	45	12
—	B977F11100	11,000	.4599	1,9	45	12
B976F11200	B977F11200	11,100	.4646	2,0	45	12
—	B977F11300	11,200	.4693	2,0	45	12
B976F11400	B977F11400	11,300	.4740	2,0	45	12
—	B977F11500	11,400	.4787	2,1	45	12
B976F11600	B977F11600	11,500	.4834	2,1	45	12
B976F11700	B977F11700	11,600	.4881	2,1	45	12
—	B977F11800	11,700	.4928	2,1	45	12
B976F11900	B977F11900	11,800	.4975	2,1	45	12
B976F12000	B977F12000	11,900	.5022	2,2	45	14
B976F12100	B977F12100	12,000	.5069	2,2	45	14
B976F12200	B977F12200	12,100	.5116	2,2	45	14
B976F12300	B977F12300	12,200	.5163	2,2	45	14
B976F12400	B977F12400	12,300	.5210	2,2	45	14
B976F12500	B977F12500	12,400	.5257	2,2	45	14
B976F12600	B977F12600	12,500	.5304	2,2	45	14
B976F12700 *	B977F12700	12,600	.5351	2,2	45	14
B976F12800	B977F12800	12,700	.5398	2,2	45	14
B976F12900	B977F12900	12,800	.5445	2,2	45	14
B976F13000	B977F13000	12,900	.5492	2,2	45	14

(continued)

(B976F/B977F • ~3 x D/~5 x D — continued)

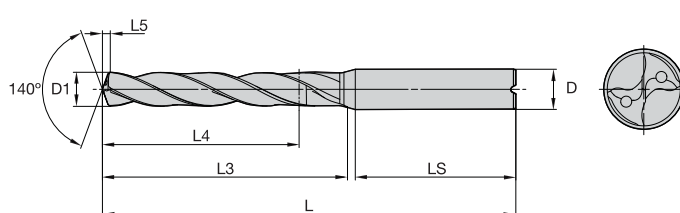


- first choice
- alternate choice

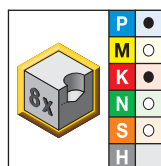
				D1 diameter			
short • KC7315	long • KC7315	mm	in	L5	LS	D	
B976F13500	B977F13500	13,500	.5315	2,3	45	14	
B976F13700 *	—	13,700	.5394	2,4	45	14	
—	B977F13800 *	13,800	.5433	2,4	45	14	
B976F14000	B977F14000	14,000	.5512	2,4	45	14	
—	B977F14200	14,200	.5591	2,5	48	16	
B976F14500 *	B977F14500	14,500	.5709	2,5	48	16	
B976F15000	B977F15000	15,000	.5906	2,6	48	16	
—	B977F15200	15,200	.5984	2,6	48	16	
B976F15400	—	15,400	.6063	2,7	48	16	
—	B977F15500	15,500	.6102	2,7	48	16	
—	B977F15700	15,700	.6181	2,7	48	16	
—	B977F15800	15,800	.6220	2,7	48	16	
B976F16000	B977F16000	16,000	.6299	2,8	48	16	
B976F16500	B977F16500	16,500	.6496	2,9	48	18	
B976F17000	B977F17000	17,000	.6693	2,9	48	18	
B976F17500	B977F17500	17,500	.6890	3,0	48	18	
B976F18000	B977F18000	18,000	.7087	3,1	48	18	
B976F18500	B977F18500	18,500	.7283	3,2	50	20	
—	B977F19000	19,000	.7480	3,3	50	20	
—	B977F19500	19,500	.7677	3,4	50	20	
—	B977F20000	20,000	.7874	3,5	50	20	
—	B977F21000	21,000	.8268	3,7	50	20	

NOTE: *Made-to-order standard item. Standard pricing, manufacturing lead time, and minimum order quantity applies.

	Tolerance • Metric	
nominal size range	D1 tolerance m7	D tolerance h6
>3-6	0,004/0,016	0,000/-0,008
>6-10	0,006/0,021	0,000/-0,009
>10-18	0,007/0,025	0,000/-0,011
>18-25,4	0,008/0,029	0,000/-0,013



■ B978A • ~8 x D



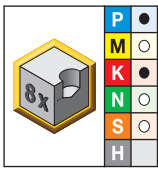
● first choice

○ alternate choice

D1 diameter								
extra long • KC7315	mm	in	L	L3	L4 max	L5	LS	D
B978A03000	3,000	.1181	78	40	33	0,6	36	6
B978A03300	3,300	.1299	78	40	33	0,7	36	6
B978A03400	3,400	.1339	78	40	33	0,7	36	6
B978A03600	3,600	.1417	78	40	33	0,7	36	6
B978A03700	3,700	.1457	78	40	33	0,8	36	6
B978A03800	3,800	.1496	87	49	41	0,8	36	6
B978A03970	3,970	.1563	87	49	41	0,8	36	6
B978A04000	4,000	.1575	87	49	41	0,8	36	6
B978A04200	4,200	.1654	87	49	41	0,9	36	6
B978A04500	4,500	.1772	87	49	41	0,9	36	6
B978A04600	4,600	.1811	87	49	41	0,9	36	6
B978A04763	4,763	.1875	94	56	48	1,0	36	6
B978A04800	4,800	.1890	94	56	48	1,0	36	6
B978A05000	5,000	.1969	94	56	48	1,0	36	6
B978A05100	5,100	.2008	94	56	48	1,1	36	6
B978A05200	5,200	.2047	94	56	48	1,1	36	6
B978A05300	5,300	.2087	94	56	48	1,1	36	6
B978A05500	5,500	.2165	94	56	48	1,1	36	6
B978A05558	5,558	.2188	94	56	48	1,2	36	6
B978A05600	5,600	.2205	94	56	48	1,2	36	6
B978A05700	5,700	.2244	94	56	48	1,2	36	6
B978A05800	5,800	.2283	94	56	48	1,2	36	6
B978A05900	5,900	.2323	94	56	48	1,2	36	6
B978A06000	6,000	.2362	94	56	48	1,2	36	6
B978A06100	6,100	.2402	105	67	57	1,3	36	8
B978A06200	6,200	.2441	105	67	57	1,3	36	8
B978A06300	6,300	.2480	105	67	57	1,3	36	8
B978A06350	6,350	.2500	105	67	57	1,3	36	8
B978A06400	6,400	.2520	105	67	57	1,3	36	8
B978A06500	6,500	.2559	105	67	57	1,4	36	8
B978A06600	6,600	.2598	105	67	57	1,4	36	8
B978A06700	6,700	.2638	105	67	57	1,4	36	8
B978A06746	6,746	.2656	105	67	57	1,4	36	8
B978A06800	6,800	.2677	105	67	57	1,4	36	8
B978A07000	7,000	.2756	105	67	57	1,5	36	8
B978A07145	7,145	.2813	110	72	61	1,5	36	8

(continued)

(B978A • ~8 x D — continued)

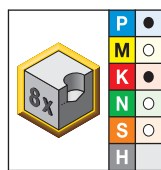


● first choice
○ alternate choice

extra long • KC7315	D1 diameter							
	mm	in	L	L3	L4 max	L5	LS	D
B978A07400	7,400	.2913	110	72	61	1,6	36	8
B978A07500	7,500	.2953	110	72	61	1,6	36	8
B978A07541	7,541	.2969	110	72	61	1,6	36	8
B978A07700	7,700	.3031	110	72	61	1,6	36	8
B978A07800	7,800	.3071	110	72	61	1,6	36	8
B978A07938	7,938	.3125	110	72	61	1,7	36	8
B978A08000	8,000	.3150	110	72	61	1,7	36	8
B978A08100	8,100	.3189	122	80	68	1,7	40	10
B978A08200	8,200	.3228	122	80	68	1,7	40	10
B978A08334	8,334	.3281	122	80	68	1,8	40	10
B978A08500	8,500	.3346	122	80	68	1,8	40	10
B978A08600	8,600	.3386	122	80	68	1,8	40	10
B978A08700	8,700	.3425	122	80	68	1,8	40	10
B978A08733	8,733	.3438	122	80	68	1,8	40	10
B978A08800	8,800	.3465	122	80	68	1,9	40	10
B978A09000	9,000	.3543	122	80	68	1,9	40	10
B978A09100	9,100	.3583	122	80	68	1,9	40	10
B978A09129	9,129	.3594	122	80	68	1,9	40	10
B978A09300	9,300	.3661	122	80	68	2,0	40	10
B978A09500	9,500	.3740	122	80	68	2,0	40	10
B978A09525	9,525	.3750	122	80	68	2,0	40	10
B978A09700	9,700	.3819	122	80	68	2,0	40	10
B978A09750	9,750	.3839	122	80	68	2,1	40	10
B978A09800	9,800	.3858	122	80	68	2,1	40	10
B978A09900	9,900	.3898	122	80	68	2,1	40	10
B978A09921	9,921	.3906	122	80	68	2,1	40	10
B978A10000	10,000	.3937	122	80	68	2,1	40	10
B978A10100	10,100	.3976	141	94	79	2,1	45	12
B978A10200	10,200	.4016	141	94	79	2,2	45	12
B978A10300	10,300	.4055	141	94	79	2,2	45	12
B978A10320	10,320	.4063	141	94	79	2,2	45	12
B978A10500	10,500	.4134	141	94	79	2,2	45	12
B978A10716	10,716	.4219	141	94	79	2,3	45	12
B978A10800	10,800	.4252	141	94	79	2,3	45	12
B978A11000	11,000	.4331	141	94	79	2,3	45	12
B978A11113	11,113	.4375	141	94	79	2,4	45	12
B978A11200	11,200	.4409	141	94	79	2,4	45	12
B978A11300	11,300	.4449	141	94	79	2,4	45	12
B978A11400	11,400	.4488	141	94	79	2,4	45	12
B978A11500	11,500	.4528	141	94	79	2,4	45	12
B978A11509	11,509	.4531	141	94	79	2,4	45	12
B978A11700	11,700	.4606	141	94	79	2,5	45	12
B978A11800	11,800	.4646	141	94	79	2,5	45	12
B978A11908	11,908	.4688	141	94	79	2,5	45	12
B978A12000	12,000	.4724	141	94	79	2,5	45	12
B978A12304 *	12,304	.4844	155	108	91	2,6	45	14
B978A12500	12,500	.4921	155	108	91	2,7	45	14
B978A12700	12,700	.5000	155	108	91	2,7	45	14

(continued)

(B978A • ~8 x D — continued)



● first choice

○ alternate choice

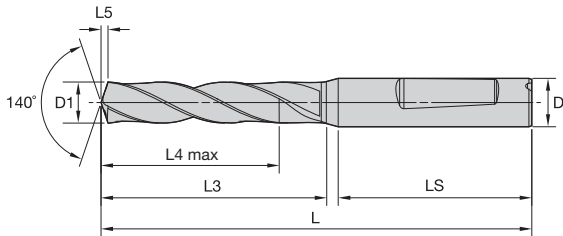
extra long • KC7315	D1 diameter		L	L3	L4 max	L5	LS	D
	mm	in						
B978A12800	12,800	.5039	155	108	91	2,7	45	14
B978A13000	13,000	.5118	155	108	91	2,8	45	14
B978A13100	13,100	.5157	155	108	91	2,8	45	14
B978A13500	13,500	.5315	155	108	91	2,9	45	14
B978A14000	14,000	.5512	155	108	91	3,0	45	14
B978A14288	14,288	.5625	171	121	101	3,0	48	16
B978A14500	14,500	.5709	171	121	101	3,1	48	16
B978A15000	15,000	.5906	171	121	101	3,2	48	16
B978A15100	15,100	.5945	171	121	101	3,2	48	16
B978A15200	15,200	.5984	171	121	101	3,2	48	16
B978A15300	15,300	.6024	171	121	101	3,3	48	16
B978A15500	15,500	.6102	171	121	101	3,3	48	16
B978A15800	15,800	.6220	171	121	101	3,4	48	16
B978A15875	15,875	.6250	171	121	101	3,4	48	16
B978A16000	16,000	.6299	171	121	101	3,4	48	16
B978A16078	16,078	.6330	185	135	113	3,4	48	18
B978A16200	16,200	.6378	185	135	113	3,5	48	18
B978A16500	16,500	.6496	185	135	113	3,5	48	18
B978A17000	17,000	.6693	185	135	113	3,6	48	18
B978A17463	17,463	.6875	185	135	113	3,7	48	18
B978A17500	17,500	.6890	185	135	113	3,7	48	18
B978A18000	18,000	.7087	185	135	113	3,9	48	18
B978A18500	18,500	.7283	200	148	124	4,0	50	20
B978A19000	19,000	.7480	200	148	124	4,1	50	20
B978A19050 *	19,050	.7500	200	148	124	4,1	50	20
B978A19253 *	19,253	.7580	200	148	124	4,1	50	20
B978A19500 *	19,500	.7677	200	148	124	4,2	50	20
B978A19800	19,800	.7795	200	148	124	4,2	50	20
B978A19840	19,840	.7811	200	148	124	4,3	50	20
B978A20000	20,000	.7874	200	148	124	4,3	50	20

NOTE: The point angle on B978 series is 132°.

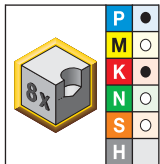
*Made-to-order standard item. Standard pricing, manufacturing lead time, and minimum order quantity applies.

Tolerance • Metric

nominal size range	D1 tolerance m7	D tolerance h6
>3–6	0,004/0,016	0,000/-0,008
>6–10	0,006/0,021	0,000/-0,009
>10–18	0,007/0,025	0,000/-0,011
>18–25,4	0,008/0,029	0,000/-0,013



■ B978F • ~8 x D



- first choice
- alternate choice

D1 diameter								
extra long • KC7315	mm	in	L	L3	L4 max	L5	LS	D
B978F03600	3,600	.1417	78	40	33	0,7	36	6
B978F04700 *	4,700	.1850	87	49	41	1,0	36	6
B978F05000	5,000	.1969	94	56	48	1,0	36	6
B978F06800	6,800	.2677	105	67	57	1,4	36	8
B978F07000	7,000	.2756	105	67	57	1,5	36	8
B978F07400 *	7,400	.2913	110	72	61	1,6	36	8
B978F07500	7,500	.2953	110	72	61	1,6	36	8
B978F08500	8,500	.3346	122	80	68	1,8	40	10
B978F09000	9,000	.3543	122	80	68	1,9	40	10
B978F09500	9,500	.3740	122	80	68	2,0	40	10
B978F10200	10,200	.4016	141	94	79	2,2	45	12
B978F12000	12,000	.4724	141	94	79	2,5	45	12
B978F12500 *	12,500	.4921	155	108	91	2,7	45	14
B978F13000	13,000	.5118	155	108	91	2,8	45	14
B978F14000	14,000	.5512	155	108	91	3,0	45	14
B978F14500 *	14,500	.5709	171	121	101	3,1	48	16
B978F15000	15,000	.5906	171	121	101	3,2	48	16
B978F16000	16,000	.6299	171	121	101	3,4	48	16
B978F17000 *	17,000	.6693	185	135	113	3,6	48	18
B978F17500	17,500	.6890	185	135	113	3,7	48	18
B978F18000 *	18,000	.7087	185	135	113	3,9	48	18
B978F20000 *	20,000	.7874	200	148	124	4,3	50	20

NOTE: The point angle on B978 series is 132°.

*Made-to-order standard item. Standard pricing, manufacturing lead time, and minimum order quantity applies.

Tolerance • Metric

nominal size range	D1 tolerance m7	D tolerance h6
>3-6	0,004/0,016	0,000/-0,008
>6-10	0,006/0,021	0,000/-0,009
>10-18	0,007/0,025	0,000/-0,011
>18-25,4	0,008/0,029	0,000/-0,013

Kenna Universal™ Drills • B97_Series • Grade KC7315™ • Through Coolant • Drill Diameters 2–20mm • Metric

Solid Carbide Drills

Material Group														
		Cutting Speed — vc			Metric									
		Range — m/min			Recommended Feed Rate (f) by Diameter									
		min	Starting Value	max		2,0	3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0
P	0	80	120	160	mm/r	0,04–0,10	0,06–0,12	0,07–0,14	0,09–0,19	0,11–0,22	0,13–0,26	0,15–0,30	0,19–0,36	0,24–0,46
	1	70	100	140	mm/r	0,05–0,12	0,07–0,14	0,08–0,16	0,11–0,22	0,13–0,26	0,15–0,31	0,18–0,35	0,22–0,42	0,28–0,54
	2	90	120	140	mm/r	0,05–0,12	0,07–0,14	0,08–0,16	0,12–0,22	0,14–0,26	0,17–0,31	0,20–0,35	0,24–0,42	0,31–0,53
	3	60	80	100	mm/r	0,06–0,13	0,08–0,15	0,09–0,17	0,13–0,23	0,15–0,28	0,19–0,33	0,22–0,38	0,26–0,47	0,34–0,59
	4	50	80	100	mm/r	0,06–0,13	0,07–0,15	0,08–0,17	0,12–0,23	0,14–0,28	0,17–0,33	0,19–0,38	0,23–0,47	0,29–0,59
	5	50	60	80	mm/r	0,06–0,12	0,08–0,13	0,10–0,15	0,12–0,19	0,16–0,24	0,20–0,27	0,24–0,30	0,28–0,38	0,32–0,44
M	6	40	50	70	mm/r	0,04–0,06	0,05–0,08	0,06–0,10	0,08–0,14	0,10–0,18	0,13–0,22	0,14–0,24	0,18–0,32	0,23–0,41
	1	30	40	50	mm/r	0,03–0,06	0,04–0,07	0,05–0,09	0,08–0,11	0,09–0,12	0,10–0,14	0,12–0,16	0,14–0,18	0,16–0,20
	2	40	50	60	mm/r	0,03–0,07	0,04–0,08	0,06–0,10	0,08–0,12	0,09–0,14	0,10–0,16	0,12–0,18	0,14–0,20	0,16–0,22
K	3	30	40	50	mm/r	0,03–0,06	0,04–0,07	0,05–0,09	0,08–0,11	0,09–0,12	0,10–0,14	0,12–0,16	0,14–0,18	0,16–0,20
	1	80	120	170	mm/r	0,09–0,17	0,11–0,22	0,12–0,24	0,16–0,31	0,20–0,38	0,23–0,44	0,25–0,49	0,31–0,60	0,38–0,74
	2	80	110	140	mm/r	0,11–0,15	0,12–0,16	0,13–0,19	0,16–0,25	0,20–0,31	0,23–0,36	0,25–0,40	0,31–0,48	0,38–0,60
N	3	80	100	130	mm/r	0,07–0,15	0,08–0,17	0,09–0,19	0,12–0,25	0,14–0,30	0,17–0,35	0,19–0,40	0,24–0,48	0,30–0,60
	1	90	230	315	mm/r	0,06–0,13	0,08–0,14	0,10–0,16	0,12–0,20	0,16–0,24	0,20–0,28	0,24–0,32	0,28–0,40	0,32–0,48
	2	90	225	270	mm/r	0,06–0,12	0,08–0,16	0,10–0,20	0,12–0,24	0,16–0,28	0,20–0,32	0,24–0,36	0,28–0,44	0,32–0,52
	3	90	180	270	mm/r	0,11–0,14	0,12–0,14	0,13–0,16	0,14–0,20	0,16–0,24	0,20–0,28	0,24–0,32	0,28–0,40	0,32–0,44
S	4	90	135	180	mm/r	0,06–0,12	0,08–0,16	0,01–0,20	0,12–0,24	0,16–0,28	0,20–0,32	0,24–0,36	0,28–0,40	0,32–0,48
	1	10	25	30	mm/r	0,02–0,05	0,03–0,06	0,04–0,08	0,06–0,10	0,08–0,12	0,09–0,13	0,10–0,14	0,12–0,16	0,14–0,18
	2	10	20	25	mm/r	0,02–0,03	0,02–0,04	0,03–0,06	0,05–0,08	0,07–0,10	0,08–0,11	0,09–0,12	0,10–0,14	0,11–0,16
	3	10	25	30	mm/r	0,02–0,03	0,02–0,04	0,02–0,05	0,04–0,07	0,06–0,09	0,07–0,10	0,08–0,11	0,09–0,13	0,10–0,15
	4	10	25	40	mm/r	0,02–0,03	0,02–0,04	0,03–0,06	0,05–0,08	0,07–0,10	0,08–0,11	0,09–0,12	0,10–0,14	0,11–0,16