

High-Performance Solid Carbide Drills

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solid carbide drills for external coolant or dry machining		series	grade	standard*						hole tolerance	standard range		
				● first choice ○ alternate choice							D1 mm min-max	D1 in min-max	drilling depth L/D1
				P	M	K	N	S	H				
	GOdrill™ for microdrilling applications	B04_CPG	KC7325	●	●	●	●	●	○	IT9-IT10	1,0-12,7	.0394-.500	3-5 x
	TF Drill for high metal removal rates	B/K105	K10	○	●	●	●	○		IT9-IT10	3,0-21,0	.1130-.8101	5 x D
		B/K105	KC7210	○	●	●	●	○		IT9-IT10	3,5-18,5	.1250-.6563	5 x D
	HP Drill for dry applications or flood coolant	B221/B222_HP	KCPK15	●	●	●	●	●		IT9-IT10	3,0-21,0	.1181-.8268	3-5 x
	SPF Drill for composite (CFRP) materials	B/K53_SPF	KDF400	●	●	●	●	●		IT9-IT10	3,2-12,7	.1260-.5010	3-5 x
	KU-Drill for universal applications	B966	KC7315	●	●	●	●	●		IT9-IT10	3,0-20,0	.1181-.7874	3 x D
	NC Spot Drill 120°	B501	K10	●	○	●	○	○		—	6,0-12,0	.2352-.4724	1 x D
	NC Spot Drill 90°	B505	K10	●	○	●	○	○		—	6,0-20,0	.2362-.7874	1 x D

solid carbide drills with internal coolant channel		series	grade	standard*						hole tolerance	standard range		
				● first choice ○ alternate choice							D1 mm min-max	D1 inch min-max	drilling depth L/D1
				P	M	K	N	S	H				
	GOdrill for microdrilling applications	B05_CPG	KC7325	●	●	●	●	●	○	IT9-IT10	1,5-12,7	.0591-.500	3-8 x
	TF Drill for high metal removal rates	B/K125	K715	●	●	●	●	●	○	IT9-IT10	6,0-15,9	.2500-.6250	5 x D
	HP Drill for stainless steel	B/K21_HP	KCM15	○	●	●	●	○		IT9-IT10	3,0-21,0	.1181-.8268	3-8 x
	HP Drill for steel	B224/B225_HP	KCPK15	●	○	●	●	●		IT9-IT10	3,0-21,0	.1181-.8268	3-5 x
	YPC Drill for cast iron materials	B/K25_YPC	KCK10	●	●	●	●	●		IT9-IT10	3,0-25,0	.1181-.9844	3-8 x
	SE Drill for steel	B256	KC7315	●	○	●	●	●		IT9-IT10	5,0-16,0	.1969-.6299	8 x D
	Long-Length Drill for steel, iron, and stainless steel	B269_HP	KCPK15	●	○	○	○	○		IT9-IT10	3,0-20,0	.1181-.7874	12 x D
		B27_HPG	KC7425	●	○	●	●	○		IT9-IT10	2,4-16,0	.0938-.6299	15-30 x
	Deep-Hole Drill for steel, iron, and non-ferrous materials	B27_HPS	KN25	●	○	○	○	○		IT9-IT10	2,4-16,0	.0938-.6299	15-30 x
	HP Drill for high-temperature alloys	B/K28_	K715	●	●	●	○	●		IT9-IT10	3,97-25,0	.1563-.9843	5 x D
	Y-TECH™ Drill for high-temperature alloys	B29_YPL	KC7315	●	●	●	●	●		IT9-IT10	3,0-21,0	.1181-.8268	3-5 x
	TX Drill for close tolerance holes	B411	KF1	●	●	●	●	●		IT8-IT9	3,2-25,0	.1250-.9843	5 x D
	Flat-Bottom Drill for flat-bottom applications	B707_FBG	KC7315	●	●	●	●	●		IT9-IT10	3,0-21,0	.1181-.8268	3 x D
		B707_FBL	KC7315	●	●	●	●	●		IT9-IT10	3,0-21,0	.1181-.8268	3 x D
		B707_FBS	KN15	●	●	●	●	●		IT9-IT10	3,0-21,0	.1181-.8268	3 x D
	HP Step Drill for steel and iron	B73_HP	KCPK15	●	●	●	●	●		IT9-IT10	3,7-19,45	.1470-.7656	short, long
	KU-Drill for universal applications	B97_	KC7315	●	○	●	○	○		IT9-IT10	2,4-20,0	.0938-.7874	3-8 x

* In regard to coatings, anything is possible. If a specific drill is not suitable for your workpiece material, please contact our Engineered Solutions Department for an offer about special coatings and edge preparations.



HIGH-PERFORMANCE SOLID CARBIDE DRILLS

Solid Carbide Drills • Recommendation Chart

standard first choice = bold alternate choice = regular simple special = grey	through coolant	flood coolant	MQL	dry	deep hole	flat bottom	drill and chamfer	universal
P – Steel	B224_HP B225_HP B226_HP B256	B221_HP B222_HP	B221_HP, B222_HP B224_HP, B225_HP B226_HP B256	B221_HP B222_HP	B269_HP B271_HPG B272_HPG B273_HPG B274_HPG	B706_FBG B707_FBG B708_FBG B709_FBG	B731_HP B732_HP	B966 B976, B977, B978 B041_CPG, B042_CPG B051_CPG, B052_CPG, B053_CPG
M – Stainless Steel	B210_HP/K210_HP B211_HP/K211_HP B212_HP/K212_HP					B706_FBL B707_FBL B708_FBL B709_FBL		B966 B976, B977, B978 B041_CPG, B042_CPG B051_CPG, B052_CPG, B053_CPG
K – Cast Iron	B254_YPC/K254_YPC B255_YPC/K255_YPC B256_YPC/K256_YPC	B104/K104 B105/K105 B106/K106	B254_YPC/K254_YPC B255_YPC/K255_YPC B256_YPC/K256_YPC	B104/K104 B105/K105 B106/K106	B269_HP B271_HPG B272_HPG B273_HPG B274_HPG	B706_FBG B707_FBG B708_FBG B709_FBG	B731_HP B732_HP	B966 B976, B977, B978 B041_CPG, B042_CPG B051_CPG, B052_CPG, B053_CPG
N – Non-Ferrous	B410/K410 B411/K411 B412/K412 B413/K413	B104/K104 B105/K105 B106/K106			B271_HPS B272_HPS B273_HPS B274_HPS	B706_FBS B707_FBS B708_FBS B709_FBS		B966 B976, B977, B978 B041_CPG, B042_CPG B051_CPG, B052_CPG, B053_CPG
N – CFRP		B531A/K531A B532A/K532A B533A/K533A		B531A/K531A B532A/K532A B533A/K533A				
S – Heat-Resistant Alloys, Titanium Alloys	B291_YPL, B292_YPL B284/K284, B285/K285 B125/K125					B706_FBL B707_FBL B708_FBL B709_FBL		B966 B976, B977, B978 B041_CPG, B042_CPG B051_CPG, B052_CPG, B053_CPG

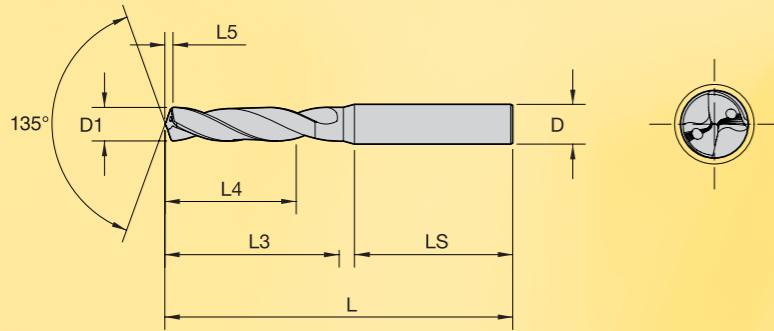
Solid Carbide Drills • Dimension Tables

■ Dimensions for Kennametal Solid Carbide Drills (B_Series) • Metric

mm Ø		DIN 6535		SHORT* ~3 x D			LONG* ~5 x D			EXTRA LONG** ~8 x D		
D1 min	D1 max	D	LS	L	L3	L4 max	L	L3	L4 max	L	L3	L4 max
1,000	1,400	4	28	58	7	5	58	9	6	58	12	10
1,401	1,900	4	28	58	9	6	58	12	9	58	18	15
1,901	2,300	4	28	58	13	9	58	18	14	66	26	22
2,301	2,999	4	28	58	17	12	58	22	17	66	30	25
3,000	3,750	6	36	62	20	14	66	28	23	78	40	33
3,751	4,750	6	36	66	24	17	74	36	29	87	49	41
4,751	6,000	6	36	66	28	20	82	44	35	94	56	48
6,001	7,000	8	36	79	34	24	91	53	43	105	67	57
7,001	8,000	8	36	79	41	29	91	53	43	110	72	61
8,001	10,000	10	40	89	47	35	103	61	49	122	80	68
10,001	12,000	12	45	102	55	40	118	71	56	141	94	79
12,001	14,000	14	45	107	60	43	124	77	60	155	108	91
14,001	16,000	16	48	115	65	45	133	83	63	171	121	101
16,001	18,000	18	48	123	73	51	143	93	71	185	135	113
18,001	20,000	20	50	131	79	55	153	101	77	200	148	124
20,001	22,000	20	50	141	86	60	167	112	85	217	162	136
22,001	25,000	25	56	153	95	65	184	126	98	238	180	150

* D1<20mm to DIN 6537K
D1>20mm to factory standard
** To factory standard

NOTE: Solid Carbide Drills from Kennametal in short and regular lengths conform to DIN 6537.
Drills with long lengths conform to Kennametal factory standard.
Solid Carbide Drills with diameter D1>20mm (not DIN 6537) are also standardised to factory standard.



■ Shank Designs to DIN 6535



Form HE,
2° angle
Design F



Form HA,
straight round
Design A

■ Tolerances of Drills and Holes

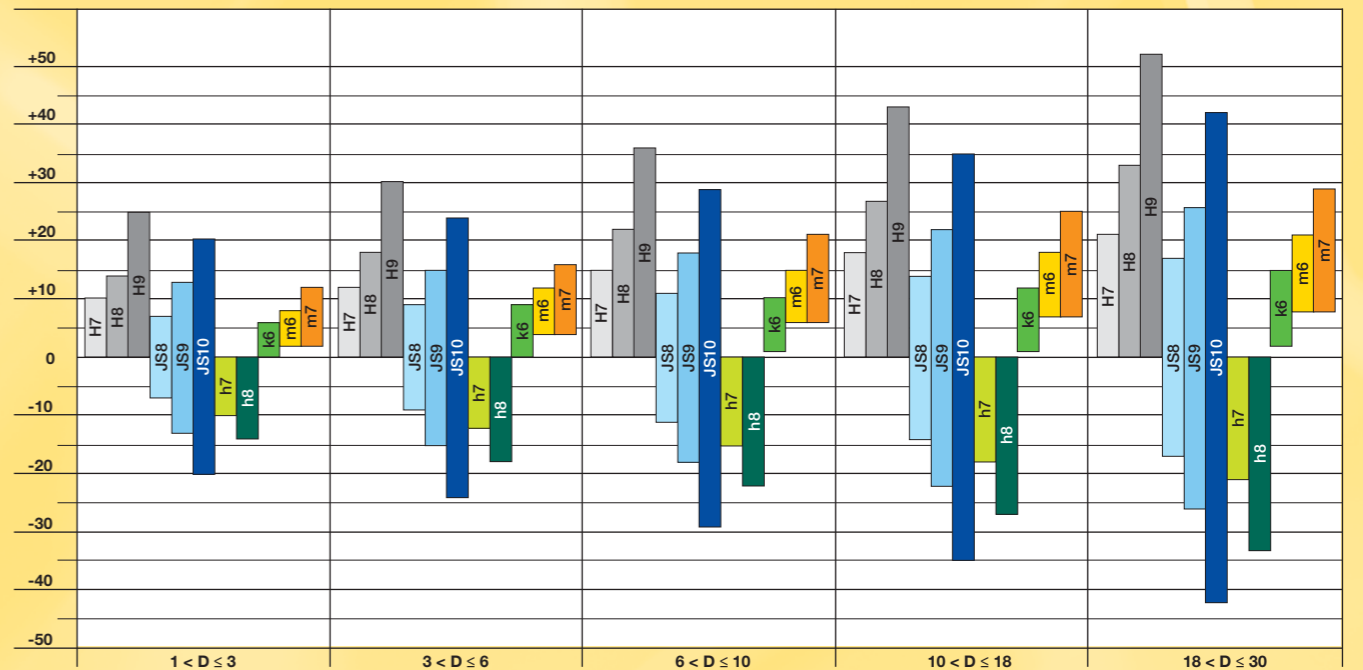
Solid carbide drills with tolerance of m7 (SE Drill, TF Drill, KU Drill) create holes with tolerances of H9. H8 can be achieved in very good conditions. The TX Drill should be used for holes in H8, in favourable conditions H7 can be achieved.

Solid carbide drills (BF Drill) with h7 create holes in JS9–JS11. Other drilling tolerances require special solid carbide drill versions.

■ Holemaking Drilling Portfolio • Diameter Tolerances

drill type	drill tolerance	hole tolerance	hole tolerance (best*)	details
TX	k6	H8	H7	B410, B411, B412
TF	m6	H9	H8	B125
TF	m7	H9	H8	B104, B105, B106
KU	m7	H9	H8	B966, B976, B977, B978
SE	m7	H9	H8	B256
HP	m7	H9	H8	B210_HP, B211_HP, B212_HP; B221_HP, B222_HP, B224_HP, B225_HP, B226_HP; B269_HP; B284, B285
FB*	m7	H9	H8	B706_FB*, B707_FB*, B708_FB*, B709_FB*
YPC	m7	H9	H8	B254_YPC, B255_YPC, B256_YPC
YPL	m7	H9	H8	B291_YPL, B292_YPL, B293_YPL
SPF	m7	H9	H8	B531, B532, B533
BF	h7	JS9	JS8	B343
GO	h7	JS9	JS8	B041_CPG, B042_CPG, B043_CPG, B051_CPG, B052_CPG, B053_CPG
HPG	h7	JS9	JS8	B271_HPG, B272_HPG, B273_HPG, B274_HPG
HPS	h8	JS10	JS9	B271_HPS, B272_HPS, B273_HPS, B274_HPS

* Can be achieved in very good conditions.





GOdrill™ • Kennametal's First Microdrill

The high-performance solid carbide drill tailored for very small- to medium-diameter drilling applications.

Primary Application

The all new GOdrill addresses drilling operations in a diameter range of 1–12,7mm (.0394–.5") in a broad variety of materials and applications such as fuel systems or medical components. Due to its very unique design, the GOdrill expands the advantages of modular drills into the small diameter range: high-end grades, wear-indicator coating, and new, proprietary geometries enable full utilization of the drill's tool life capacity. The GOdrill qualifies as a very cost-effective, throwaway-type tool in the given diameter range.

Features and Benefits

GOdrill Design

- Marginless design for reduced friction and heat — thus longer tool life.
- Very versatile tool works in a wide range of materials.
- Cost effective, no regrind logistics.
- No setup.
- Throw away or recycle.
- Through-coolant option down to diameter 1,5mm (.0591").

CPG Point

- Optimised gashing design for microdrilling ensures free flow of chips in the centre of the drill.
- Excellent centering capabilities.
- Reduced axial forces.
- Good hole quality, roundness, and cylindricity for all materials.

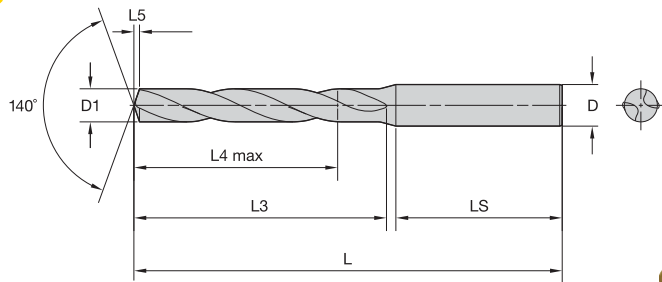
KC7325™ Grade

The grade contains a double coating:

- The multilayer, TiAlN-based coating with high hot hardness enables the drill to run at high cutting speeds as well as in MQL applications.
- A TiN top layer serves as wear indicator for easier monitoring on small drills, which can be difficult to see.
- Improved visibility of wear helps to utilise the tool's full tool life capacity.



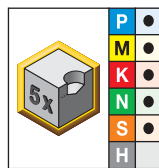
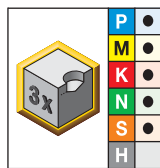
Solid Carbide Drills



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



■ B041A/B042A • ~3 x D/~5 x D

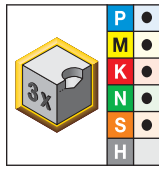


● first choice
○ alternate choice

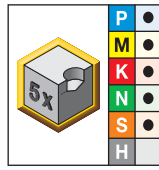
		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
short • KC7325	long • KC7325							
B041A01000CPG	B042A01000CPG	1,000	.0394	—	—	0,1	28	4
B041A01016CPG	B042A01016CPG	1,016	.0400	—	—	0,1	28	4
B041A01041CPG	B042A01041CPG	1,041	.0410	—	—	0,2	28	4
B041A01067CPG	B042A01067CPG	1,067	.0420	—	—	0,2	28	4
B041A01092CPG	B042A01092CPG	1,092	.0430	—	—	0,2	28	4
B041A01100CPG	B042A01100CPG	1,100	.0433	—	—	0,2	28	4
B041A01181CPG	B042A01181CPG	1,181	.0465	—	—	0,2	28	4
B041A01191CPG	B042A01191CPG	1,191	.0469	—	—	0,2	28	4
B041A01200CPG	B042A01200CPG	1,200	.0472	—	—	0,2	28	4
B041A01300CPG	B042A01300CPG	1,300	.0512	—	—	0,2	28	4
B041A01321CPG	B042A01321CPG	1,321	.0520	—	—	0,2	28	4
B041A01397CPG	B042A01397CPG	1,397	.0550	—	—	0,2	28	4
B041A01400CPG	B042A01400CPG	1,400	.0551	—	—	0,2	28	4
B041A01500CPG	B042A01500CPG	1,500	.0591	—	—	0,2	28	4
B041A01600CPG	B042A01600CPG	1,600	.0630	—	—	0,2	28	4
B041A01700CPG	B042A01700CPG	1,700	.0669	—	—	0,3	28	4
B041A01800CPG	B042A01800CPG	1,800	.0709	—	—	0,3	28	4
B041A01900CPG	B042A01900CPG	1,900	.0748	—	—	0,3	28	4
B041A01984CPG	B042A01984CPG	1,984	.0781	—	—	0,3	28	4
B041A02000CPG	B042A02000CPG	2,000	.0787	—	—	0,3	28	4
B041A02100CPG	B042A02100CPG	2,100	.0827	—	—	0,3	28	4
B041A02200CPG	B042A02200CPG	2,200	.0866	—	—	0,3	28	4
B041A02300CPG	B042A02300CPG	2,300	.0906	—	—	0,4	28	4
B041A02383CPG	B042A02383CPG	2,383	.0938	3/32	—	0,4	28	4
B041A02400CPG	B042A02400CPG	2,400	.0945	—	—	0,4	28	4
B041A02439CPG	B042A02439CPG	2,439	.0960	—	41	0,4	28	4
B041A02489CPG	B042A02489CPG	2,489	.0980	—	40	0,4	28	4
B041A02500CPG	B042A02500CPG	2,500	.0984	—	—	0,4	28	4
B041A02578CPG	B042A02578CPG	2,578	.1015	—	38	0,4	28	4
B041A02600CPG	B042A02600CPG	2,600	.1024	—	—	0,4	28	4
B041A02642CPG	B042A02642CPG	2,642	.1040	—	37	0,4	28	4
B041A02700CPG	B042A02700CPG	2,700	.1063	—	—	0,4	28	4
B041A02705CPG	B042A02705CPG	2,705	.1065	—	36	0,4	28	4
B041A02779CPG	B042A02779CPG	2,779	.1094	7/64	—	0,4	28	4
B041A02800CPG	B042A02800CPG	2,800	.1102	—	—	0,5	28	4
B041A02820CPG	B042A02820CPG	2,820	.1110	—	34	0,5	28	4
B041A02870CPG	B042A02870CPG	2,870	.1130	—	33	0,5	28	4
B041A02900CPG	B042A02900CPG	2,900	.1142	—	—	0,5	28	4
B041A02947CPG	B042A02947CPG	2,947	.1160	—	32	0,5	28	4
B041A03000CPG	B042A03000CPG	3,000	.1181	—	—	0,5	36	6

(continued)

(B041A/B042A • ~3 x D/~5 x D continued)



short • KC7325



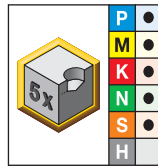
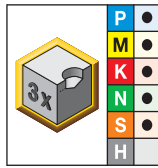
long • KC7325

		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
B041A03048CPG	B042A03048CPG	3,048	.1200	—	31	0,5	36	6
B041A03100CPG	B042A03100CPG	3,100	.1220	—	—	0,5	36	6
B041A03175CPG	B042A03175CPG	3,175	.1250	1/8	—	0,5	36	6
B041A03200CPG	B042A03200CPG	3,200	.1260	—	—	0,5	36	6
B041A03264CPG	B042A03264CPG	3,264	.1285	—	30	0,5	36	6
B041A03300CPG	B042A03300CPG	3,300	.1299	—	—	0,5	36	6
B041A03400CPG	B042A03400CPG	3,400	.1339	—	—	0,6	36	6
B041A03455CPG	B042A03455CPG	3,455	.1360	—	29	0,6	36	6
B041A03500CPG	B042A03500CPG	3,500	.1378	—	—	0,6	36	6
B041A03571CPG	B042A03571CPG	3,571	.1406	9/64	—	0,6	36	6
B041A03600CPG	B042A03600CPG	3,600	.1417	—	—	0,6	36	6
B041A03658CPG	B042A03658CPG	3,658	.1440	—	27	0,6	36	6
B041A03700CPG	B042A03700CPG	3,700	.1457	—	—	0,6	36	6
B041A03734CPG	B042A03734CPG	3,734	.1470	—	26	0,6	36	6
B041A03800CPG	B042A03800CPG	3,800	.1496	—	—	0,6	36	6
B041A03900CPG	B042A03900CPG	3,900	.1535	—	—	0,6	36	6
B041A03970CPG	B042A03970CPG	3,970	.1563	5/32	—	0,7	36	6
B041A04000CPG	B042A04000CPG	4,000	.1575	—	—	0,7	36	6
B041A04039CPG	B042A04039CPG	4,039	.1590	—	21	0,7	36	6
B041A04090CPG	B042A04090CPG	4,090	.1610	—	20	0,7	36	6
B041A04100CPG	B042A04100CPG	4,100	.1614	—	—	0,7	36	6
B041A04200CPG	B042A04200CPG	4,200	.1654	—	—	0,7	36	6
B041A04217CPG	B042A04217CPG	4,217	.1660	—	19	0,7	36	6
B041A04300CPG	B042A04300CPG	4,300	.1693	—	—	0,7	36	6
B041A04366CPG	B042A04366CPG	4,366	.1719	11/64	—	0,7	36	6
B041A04400CPG	B042A04400CPG	4,400	.1732	—	—	0,7	36	6
B041A04500CPG	B042A04500CPG	4,500	.1772	—	—	0,7	36	6
B041A04600CPG	B042A04600CPG	4,600	.1811	—	—	0,8	36	6
B041A04623CPG	B042A04623CPG	4,623	.1820	—	14	0,8	36	6
B041A04700CPG	B042A04700CPG	4,700	.1850	—	13	0,8	36	6
B041A04763CPG	B042A04763CPG	4,763	.1875	3/16	—	0,8	36	6
B041A04800CPG	B042A04800CPG	4,800	.1890	—	12	0,8	36	6
B041A04852CPG	B042A04852CPG	4,852	.1910	—	11	0,8	36	6
B041A04900CPG	B042A04900CPG	4,900	.1929	—	—	0,8	36	6
B041A05000CPG	B042A05000CPG	5,000	.1969	—	—	0,8	36	6
B041A05100CPG	B042A05100CPG	5,100	.2008	—	—	0,8	36	6
B041A05106CPG	B042A05106CPG	5,106	.2010	—	7	0,8	36	6
B041A05159CPG	B042A05159CPG	5,159	.2031	13/64	—	0,9	36	6
B041A05200CPG	B042A05200CPG	5,200	.2047	—	—	0,9	36	6
B041A05300CPG	B042A05300CPG	5,300	.2087	—	—	0,9	36	6
B041A05400CPG	B042A05400CPG	5,400	.2126	—	—	0,9	36	6
B041A05410CPG	B042A05410CPG	5,410	.2130	—	3	0,9	36	6
B041A05500CPG	B042A05500CPG	5,500	.2165	—	—	0,9	36	6
B041A05558CPG	B042A05558CPG	5,558	.2188	7/32	—	0,9	36	6
B041A05600CPG	B042A05600CPG	5,600	.2205	—	—	0,9	36	6
B041A05616CPG	B042A05616CPG	5,616	.2211	—	2	0,9	36	6
B041A05700CPG	B042A05700CPG	5,700	.2244	—	—	1,0	36	6
B041A05800CPG	B042A05800CPG	5,800	.2283	—	—	1,0	36	6
B041A05900CPG	B042A05900CPG	5,900	.2323	—	—	1,0	36	6
B041A05954CPG	B042A05954CPG	5,954	.2344	15/64	—	1,0	36	6
B041A06000CPG	B042A06000CPG	6,000	.2362	—	—	1,0	36	6
B041A06100CPG	B042A06100CPG	6,100	.2402	—	—	1,0	36	8

(continued)

(B041A/B042A • -3 x D/-5 x D continued)

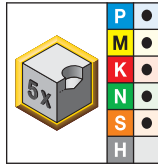
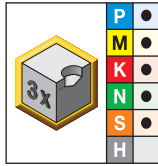
Solid Carbide Drills



		D1 diameter				L5	LS	D
short • KC7325	long • KC7325	mm	in	fraction	wire size			
B041A06200CPG	B042A06200CPG	6,200	.2441	—	—	1,0	36	8
B041A06300CPG	B042A06300CPG	6,300	.2480	—	—	1,1	36	8
B041A06350CPG	B042A06350CPG	6,350	.2500	1/4	E	1,1	36	8
B041A06400CPG	B042A06400CPG	6,400	.2520	—	—	1,1	36	8
B041A06500CPG	B042A06500CPG	6,500	.2559	—	—	1,1	36	8
B041A06528CPG	B042A06528CPG	6,528	.2570	—	F	1,1	36	8
B041A06600CPG	B042A06600CPG	6,600	.2598	—	—	1,1	36	8
B041A06630CPG	B042A06630CPG	6,630	.2610	—	G	1,1	36	8
B041A06700CPG	B042A06700CPG	6,700	.2638	—	—	1,1	36	8
B041A06746CPG	B042A06746CPG	6,746	.2656	17/64	—	1,1	36	8
B041A06800CPG	B042A06800CPG	6,800	.2677	—	—	1,1	36	8
B041A06900CPG	B042A06900CPG	6,900	.2717	—	—	1,2	36	8
B041A07000CPG	B042A07000CPG	7,000	.2756	—	—	1,2	36	8
B041A07100CPG	B042A07100CPG	7,100	.2795	—	—	1,2	36	8
B041A07145CPG	B042A07145CPG	7,145	.2813	9/32	—	1,2	36	8
B041A07200CPG	B042A07200CPG	7,200	.2835	—	—	1,2	36	8
B041A07300CPG	B042A07300CPG	7,300	.2874	—	—	1,2	36	8
B041A07400CPG	B042A07400CPG	7,400	.2913	—	—	1,3	36	8
B041A07500CPG	B042A07500CPG	7,500	.2953	—	—	1,3	36	8
B041A07541CPG	B042A07541CPG	7,541	.2969	19/64	—	1,3	36	8
B041A07600CPG	B042A07600CPG	7,600	.2992	—	—	1,3	36	8
B041A07700CPG	B042A07700CPG	7,700	.3031	—	—	1,3	36	8
B041A07800CPG	B042A07800CPG	7,800	.3071	—	—	1,3	36	8
B041A07900CPG	B042A07900CPG	7,900	.3110	—	—	1,3	36	8
B041A07938CPG	B042A07938CPG	7,938	.3125	5/16	—	1,3	36	8
B041A08000CPG	B042A08000CPG	8,000	.3150	—	—	1,4	36	8
B041A08100CPG	B042A08100CPG	8,100	.3189	—	—	1,4	40	10
B041A08200CPG	B042A08200CPG	8,200	.3228	—	—	1,4	40	10
B041A08300CPG	B042A08300CPG	8,300	.3268	—	—	1,4	40	10
B041A08334CPG	B042A08334CPG	8,334	.3281	21/64	—	1,4	40	10
B041A08400CPG	B042A08400CPG	8,400	.3307	—	—	1,4	40	10
B041A08433CPG	B042A08433CPG	8,433	.3320	—	Q	1,4	40	10
B041A08500CPG	B042A08500CPG	8,500	.3346	—	—	1,4	40	10
B041A08600CPG	B042A08600CPG	8,600	.3386	—	—	1,5	40	10
B041A08700CPG	B042A08700CPG	8,700	.3425	—	—	1,5	40	10
B041A08733CPG	B042A08733CPG	8,733	.3438	11/32	—	1,5	40	10
B041A08800CPG	B042A08800CPG	8,800	.3465	—	—	1,5	40	10
B041A08900CPG	B042A08900CPG	8,900	.3504	—	—	1,5	40	10
B041A09000CPG	B042A09000CPG	9,000	.3543	—	—	1,5	40	10
B041A09100CPG	B042A09100CPG	9,100	.3583	—	—	1,5	40	10
B041A09129CPG	B042A09129CPG	9,129	.3594	23/64	—	1,6	40	10
B041A09200CPG	B042A09200CPG	9,200	.3622	—	—	1,6	40	10
B041A09300CPG	B042A09300CPG	9,300	.3661	—	—	1,6	40	10
B041A09347CPG	B042A09347CPG	9,347	.3680	—	U	1,6	40	10
B041A09400CPG	B042A09400CPG	9,400	.3701	—	—	1,6	40	10
B041A09500CPG	B042A09500CPG	9,500	.3740	—	—	1,6	40	10
B041A09525CPG	B042A09525CPG	9,525	.3750	3/8	—	1,6	40	10
B041A09600CPG	B042A09600CPG	9,600	.3780	—	—	1,6	40	10
B041A09700CPG	B042A09700CPG	9,700	.3819	—	—	1,7	40	10
B041A09800CPG	B042A09800CPG	9,800	.3858	—	—	1,7	40	10
B041A09900CPG	B042A09900CPG	9,900	.3898	—	—	1,7	40	10
B041A09921CPG	B042A09921CPG	9,921	.3906	25/64	—	1,7	40	10

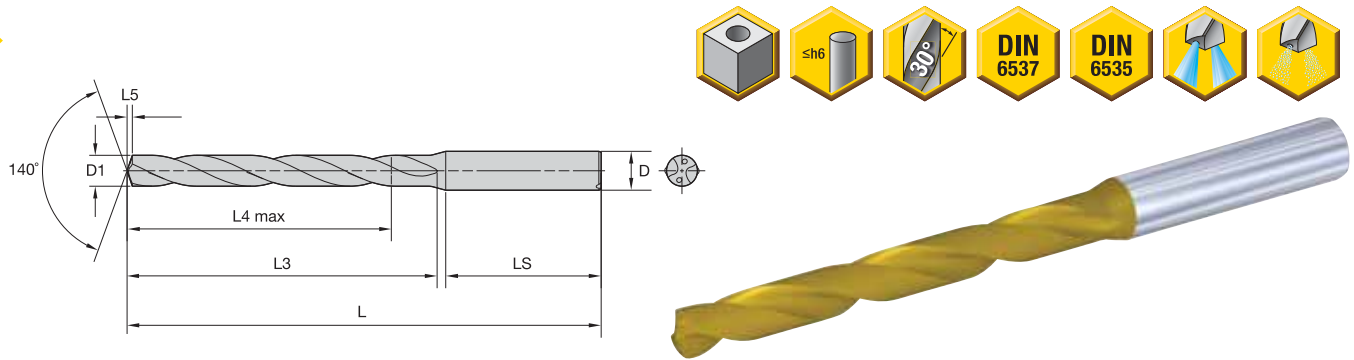
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(B041A/B042A • ~3 x D/~5 x D continued)



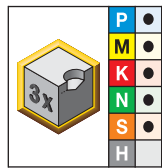
		D1 diameter				L5	LS	D
short • KC7325	long • KC7325	mm	in	fraction	wire size			
B041A1000CPG	B042A1000CPG	10,000	.3937	—	—	1,7	40	10
B041A10100CPG	B042A10100CPG	10,100	.3976	—	—	1,7	45	12
B041A10200CPG	B042A10200CPG	10,200	.4016	—	—	1,7	45	12
B041A10300CPG	B042A10300CPG	10,300	.4055	—	—	1,8	45	12
B041A10320CPG	B042A10320CPG	10,320	.4063	13/32	—	1,8	45	12
B041A10400CPG	B042A10400CPG	10,400	.4094	—	—	1,8	45	12
B041A10500CPG	B042A10500CPG	10,500	.4134	—	—	1,8	45	12
B041A10600CPG	B042A10600CPG	10,600	.4173	—	—	1,8	45	12
B041A10700CPG	B042A10700CPG	10,700	.4213	—	—	1,8	45	12
B041A10716CPG	B042A10716CPG	10,716	.4219	27/64	—	1,8	45	12
B041A10800CPG	B042A10800CPG	10,800	.4252	—	—	1,8	45	12
B041A10900CPG	B042A10900CPG	10,900	.4291	—	—	1,9	45	12
B041A11000CPG	B042A11000CPG	11,000	.4331	—	—	1,9	45	12
B041A11100CPG	B042A11100CPG	11,100	.4370	—	—	1,9	45	12
B041A11113CPG	B042A11113CPG	11,113	.4375	7/16	—	1,9	45	12
B041A11200CPG	B042A11200CPG	11,200	.4409	—	—	1,9	45	12
B041A11300CPG	B042A11300CPG	11,300	.4449	—	—	1,9	45	12
B041A11400CPG	B042A11400CPG	11,400	.4488	—	—	2,0	45	12
B041A11500CPG	B042A11500CPG	11,500	.4528	—	—	2,0	45	12
B041A11509CPG	B042A11509CPG	11,509	.4531	29/64	—	2,0	45	12
B041A11600CPG	B042A11600CPG	11,600	.4567	—	—	2,0	45	12
B041A11700CPG	B042A11700CPG	11,700	.4606	—	—	2,0	45	12
B041A11800CPG	B042A11800CPG	11,800	.4646	—	—	2,0	45	12
B041A11900CPG	B042A11900CPG	11,900	.4685	—	—	2,0	45	12
B041A11908CPG	B042A11908CPG	11,908	.4688	15/32	—	2,0	45	12
B041A12000CPG	B042A12000CPG	12,000	.4724	—	—	2,1	45	12
B041A12100CPG	B042A12100CPG	12,100	.4764	—	—	2,1	45	14
B041A12200CPG	B042A12200CPG	12,200	.4803	—	—	2,1	45	14
B041A12300CPG	B042A12300CPG	12,300	.4843	—	—	2,1	45	14
B041A12304CPG	B042A12304CPG	12,304	.4844	31/64	—	2,1	45	14
B041A12400CPG	B042A12400CPG	12,400	.4882	—	—	2,1	45	14
B041A12500CPG	B042A12500CPG	12,500	.4921	—	—	2,1	45	14
B041A12600CPG	B042A12600CPG	12,600	.4961	—	—	2,2	45	14
B041A12700CPG	B042A12700CPG	12,700	.5000	1/2	—	2,2	45	14

Solid Carbide Drills

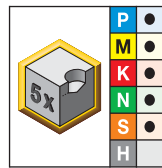


For information on L, L3, and L4 max, see the Solid Carbide foldout table.

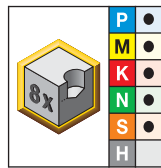
■ B051A/B052A/B053A • ~3 x D/~5 x D/~8 x D



short • KC7325



long • KC7325



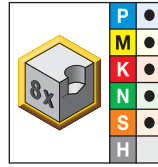
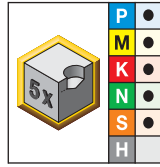
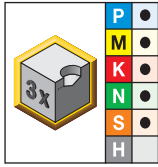
extra long • KC7325

- first choice
- alternate choice

			D1 diameter				L5	LS	D
			mm	in	fraction	wire size			
B051A01500CPG	B052A01500CPG	B053A01500CPG	1,500	.0591	—	—	0,2	28	4
B051A01600CPG	B052A01600CPG	B053A01600CPG	1,600	.0630	—	—	0,2	28	4
B051A01700CPG	B052A01700CPG	B053A01700CPG	1,700	.0669	—	—	0,3	28	4
B051A01800CPG	B052A01800CPG	B053A01800CPG	1,800	.0709	—	—	0,3	28	4
B051A01900CPG	B052A01900CPG	B053A01900CPG	1,900	.0748	—	—	0,3	28	4
B051A01984CPG	B052A01984CPG	B053A01984CPG	1,984	.0781	—	—	0,3	28	4
B051A02000CPG	B052A02000CPG	B053A02000CPG	2,000	.0787	—	—	0,3	28	4
B051A02100CPG	B052A02100CPG	B053A02100CPG	2,100	.0827	—	—	0,3	28	4
B051A02200CPG	B052A02200CPG	B053A02200CPG	2,200	.0866	—	—	0,3	28	4
B051A02300CPG	B052A02300CPG	B053A02300CPG	2,300	.0906	—	—	0,4	28	4
B051A02383CPG	B052A02383CPG	B053A02383CPG	2,383	.0938	3/32	—	0,4	28	4
B051A02400CPG	B052A02400CPG	B053A02400CPG	2,400	.0945	—	—	0,4	28	4
B051A02439CPG	B052A02439CPG	B053A02439CPG	2,439	.0960	—	41	0,4	28	4
B051A02489CPG	B052A02489CPG	B053A02489CPG	2,489	.0980	—	40	0,4	28	4
B051A02500CPG	B052A02500CPG	B053A02500CPG	2,500	.0984	—	—	0,4	28	4
B051A02578CPG	B052A02578CPG	B053A02578CPG	2,578	.1015	—	38	0,4	28	4
B051A02600CPG	B052A02600CPG	B053A02600CPG	2,600	.1024	—	—	0,4	28	4
B051A02642CPG	B052A02642CPG	B053A02642CPG	2,642	.1040	—	37	0,4	28	4
B051A02700CPG	B052A02700CPG	B053A02700CPG	2,700	.1063	—	—	0,4	28	4
B051A02705CPG	B052A02705CPG	B053A02705CPG	2,705	.1065	—	36	0,4	28	4
B051A02779CPG	B052A02779CPG	B053A02779CPG	2,779	.1094	7/64	—	0,4	28	4
B051A02800CPG	B052A02800CPG	B053A02800CPG	2,800	.1102	—	—	0,5	28	4
B051A02820CPG	B052A02820CPG	B053A02820CPG	2,820	.1110	—	34	0,5	28	4
B051A02870CPG	B052A02870CPG	B053A02870CPG	2,870	.1130	—	33	0,5	28	4
B051A02900CPG	B052A02900CPG	B053A02900CPG	2,900	.1142	—	—	0,5	28	4
B051A02947CPG	B052A02947CPG	B053A02947CPG	2,947	.1160	—	32	0,5	28	4
B051A03000CPG	B052A03000CPG	B053A03000CPG	3,000	.1181	—	—	0,5	36	6
B051A03048CPG	B052A03048CPG	B053A03048CPG	3,048	.1200	—	31	0,5	36	6
B051A03100CPG	B052A03100CPG	B053A03100CPG	3,100	.1220	—	—	0,5	36	6
B051A03175CPG	B052A03175CPG	B053A03175CPG	3,175	.1250	1/8	—	0,5	36	6
B051A03200CPG	B052A03200CPG	B053A03200CPG	3,200	.1260	—	—	0,5	36	6
B051A03264CPG	B052A03264CPG	B053A03264CPG	3,264	.1285	—	30	0,5	36	6
B051A03300CPG	B052A03300CPG	B053A03300CPG	3,300	.1299	—	—	0,5	36	6
B051A03400CPG	B052A03400CPG	B053A03400CPG	3,400	.1339	—	—	0,6	36	6
B051A03455CPG	B052A03455CPG	B053A03455CPG	3,455	.1360	—	29	0,6	36	6
B051A03500CPG	B052A03500CPG	B053A03500CPG	3,500	.1378	—	—	0,6	36	6
B051A03571CPG	B052A03571CPG	B053A03571CPG	3,571	.1406	9/64	—	0,6	36	6
B051A03600CPG	B052A03600CPG	B053A03600CPG	3,600	.1417	—	—	0,6	36	6
B051A03658CPG	B052A03658CPG	B053A03658CPG	3,658	.1440	—	27	0,6	36	6
B051A03700CPG	B052A03700CPG	B053A03700CPG	3,700	.1457	—	—	0,6	36	6

(continued)

(B051A/B052A/B053A • ~3 x D/-5 x D/-8 x D continued)

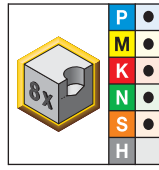
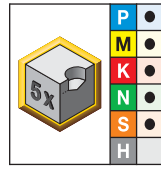
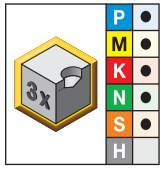


			D1 diameter				L5	LS	D
			mm	in	fraction	wire size			
short • KC7325	long • KC7325	extra long • KC7325							
B051A03734CPG	B052A03734CPG	B053A03734CPG	3,734	.1470	—	26	0,6	36	6
B051A03800CPG	B052A03800CPG	B053A03800CPG	3,800	.1496	—	—	0,6	36	6
B051A03900CPG	B052A03900CPG	B053A03900CPG	3,900	.1535	—	—	0,6	36	6
B051A03970CPG	B052A03970CPG	B053A03970CPG	3,970	.1563	5/32	—	0,7	36	6
B051A04000CPG	B052A04000CPG	B053A04000CPG	4,000	.1575	—	—	0,7	36	6
B051A04039CPG	B052A04039CPG	B053A04039CPG	4,039	.1590	—	21	0,7	36	6
B051A04090CPG	B052A04090CPG	B053A04090CPG	4,090	.1610	—	20	0,7	36	6
B051A04100CPG	B052A04100CPG	B053A04100CPG	4,100	.1614	—	—	0,7	36	6
B051A04200CPG	B052A04200CPG	B053A04200CPG	4,200	.1654	—	—	0,7	36	6
B051A04217CPG	B052A04217CPG	B053A04217CPG	4,217	.1660	—	19	0,7	36	6
B051A04300CPG	B052A04300CPG	B053A04300CPG	4,300	.1693	—	—	0,7	36	6
B051A04366CPG	B052A04366CPG	B053A04366CPG	4,366	.1719	11/64	—	0,7	36	6
B051A04400CPG	B052A04400CPG	B053A04400CPG	4,400	.1732	—	—	0,7	36	6
B051A04500CPG	B052A04500CPG	B053A04500CPG	4,500	.1772	—	—	0,7	36	6
B051A04600CPG	B052A04600CPG	B053A04600CPG	4,600	.1811	—	—	0,8	36	6
B051A04623CPG	B052A04623CPG	B053A04623CPG	4,623	.1820	—	14	0,8	36	6
B051A04700CPG	B052A04700CPG	B053A04700CPG	4,700	.1850	—	13	0,8	36	6
B051A04763CPG	B052A04763CPG	B053A04763CPG	4,763	.1875	3/16	—	0,8	36	6
B051A04800CPG	B052A04800CPG	B053A04800CPG	4,800	.1890	—	12	0,8	36	6
B051A04852CPG	B052A04852CPG	B053A04852CPG	4,852	.1910	—	11	0,8	36	6
B051A04900CPG	B052A04900CPG	B053A04900CPG	4,900	.1929	—	—	0,8	36	6
B051A05000CPG	B052A05000CPG	B053A05000CPG	5,000	.1969	—	—	0,8	36	6
B051A05100CPG	B052A05100CPG	B053A05100CPG	5,100	.2008	—	—	0,8	36	6
B051A05106CPG	B052A05106CPG	B053A05106CPG	5,106	.2010	—	7	0,8	36	6
B051A05159CPG	B052A05159CPG	B053A05159CPG	5,159	.2031	13/64	—	0,9	36	6
B051A05200CPG	B052A05200CPG	B053A05200CPG	5,200	.2047	—	—	0,9	36	6
B051A05300CPG	B052A05300CPG	B053A05300CPG	5,300	.2087	—	—	0,9	36	6
B051A05400CPG	B052A05400CPG	B053A05400CPG	5,400	.2126	—	—	0,9	36	6
B051A05410CPG	B052A05410CPG	B053A05410CPG	5,410	.2130	—	3	0,9	36	6
B051A05500CPG	B052A05500CPG	B053A05500CPG	5,500	.2165	—	—	0,9	36	6
B051A05558CPG	B052A05558CPG	B053A05558CPG	5,558	.2188	7/32	—	0,9	36	6
B051A05600CPG	B052A05600CPG	B053A05600CPG	5,600	.2205	—	—	0,9	36	6
B051A05616CPG	B052A05616CPG	B053A05616CPG	5,616	.2211	—	2	0,9	36	6
B051A05700CPG	B052A05700CPG	B053A05700CPG	5,700	.2244	—	—	1,0	36	6
B051A05800CPG	B052A05800CPG	B053A05800CPG	5,800	.2283	—	—	1,0	36	6
B051A05900CPG	B052A05900CPG	B053A05900CPG	5,900	.2323	—	—	1,0	36	6
B051A05954CPG	B052A05954CPG	B053A05954CPG	5,954	.2344	15/64	—	1,0	36	6
B051A06000CPG	B052A06000CPG	B053A06000CPG	6,000	.2362	—	—	1,0	36	6
B051A06100CPG	B052A06100CPG	B053A06100CPG	6,100	.2402	—	—	1,0	36	8
B051A06200CPG	B052A06200CPG	B053A06200CPG	6,200	.2441	—	—	1,0	36	8
B051A06300CPG	B052A06300CPG	B053A06300CPG	6,300	.2480	—	—	1,1	36	8
B051A06350CPG	B052A06350CPG	B053A06350CPG	6,350	.2500	1/4	E	1,1	36	8
B051A06400CPG	B052A06400CPG	B053A06400CPG	6,400	.2520	—	—	1,1	36	8
B051A06500CPG	B052A06500CPG	B053A06500CPG	6,500	.2559	—	—	1,1	36	8
B051A06528CPG	B052A06528CPG	B053A06528CPG	6,528	.2570	—	F	1,1	36	8
B051A06600CPG	B052A06600CPG	B053A06600CPG	6,600	.2598	—	—	1,1	36	8
B051A06630CPG	B052A06630CPG	B053A06630CPG	6,630	.2610	—	G	1,1	36	8
B051A06700CPG	B052A06700CPG	B053A06700CPG	6,700	.2638	—	—	1,1	36	8
B051A06746CPG	B052A06746CPG	B053A06746CPG	6,746	.2656	17/64	—	1,1	36	8
B051A06800CPG	B052A06800CPG	B053A06800CPG	6,800	.2677	—	—	1,1	36	8
B051A06900CPG	B052A06900CPG	B053A06900CPG	6,900	.2717	—	—	1,2	36	8

(continued)

(B051A/B052A/B053A • ~3 x D/~5 x D/~8 x D continued)

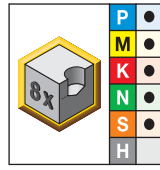
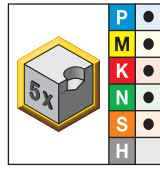
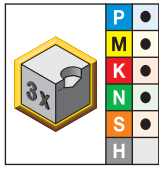
Solid Carbide Drills



			D1 diameter				L5	LS	D
short • KC7325	long • KC7325	extra long • KC7325	mm	in	fraction	wire size			
B051A07000CPG	B052A07000CPG	B053A07000CPG	7,000	.2756	—	—	1,2	36 8	
B051A07100CPG	B052A07100CPG	B053A07100CPG	7,100	.2795	—	—	1,2	36 8	
B051A07145CPG	B052A07145CPG	B053A07145CPG	7,145	.2813	9/32	—	1,2	36 8	
B051A07200CPG	B052A07200CPG	B053A07200CPG	7,200	.2835	—	—	1,2	36 8	
B051A07300CPG	B052A07300CPG	B053A07300CPG	7,300	.2874	—	—	1,2	36 8	
B051A07400CPG	B052A07400CPG	B053A07400CPG	7,400	.2913	—	—	1,3	36 8	
B051A07500CPG	B052A07500CPG	B053A07500CPG	7,500	.2953	—	—	1,3	36 8	
B051A07541CPG	B052A07541CPG	B053A07541CPG	7,541	.2969	19/64	—	1,3	36 8	
B051A07600CPG	B052A07600CPG	B053A07600CPG	7,600	.2992	—	—	1,3	36 8	
B051A07700CPG	B052A07700CPG	B053A07700CPG	7,700	.3031	—	—	1,3	36 8	
B051A07800CPG	B052A07800CPG	B053A07800CPG	7,800	.3071	—	—	1,3	36 8	
B051A07900CPG	B052A07900CPG	B053A07900CPG	7,900	.3110	—	—	1,3	36 8	
B051A07938CPG	B052A07938CPG	B053A07938CPG	7,938	.3125	5/16	—	1,3	36 8	
B051A08000CPG	B052A08000CPG	B053A08000CPG	8,000	.3150	—	—	1,4	36 8	
B051A08100CPG	B052A08100CPG	B053A08100CPG	8,100	.3189	—	—	1,4	40 10	
B051A08200CPG	B052A08200CPG	B053A08200CPG	8,200	.3228	—	—	1,4	40 10	
B051A08300CPG	B052A08300CPG	B053A08300CPG	8,300	.3268	—	—	1,4	40 10	
B051A08334CPG	B052A08334CPG	B053A08334CPG	8,334	.3281	21/64	—	1,4	40 10	
B051A08400CPG	B052A08400CPG	B053A08400CPG	8,400	.3307	—	—	1,4	40 10	
B051A08433CPG	B052A08433CPG	B053A08433CPG	8,433	.3320	—	Q	1,4	40 10	
B051A08500CPG	B052A08500CPG	B053A08500CPG	8,500	.3346	—	—	1,4	40 10	
B051A08600CPG	B052A08600CPG	B053A08600CPG	8,600	.3386	—	—	1,5	40 10	
B051A08700CPG	B052A08700CPG	B053A08700CPG	8,700	.3425	—	—	1,5	40 10	
B051A08733CPG	B052A08733CPG	B053A08733CPG	8,733	.3438	11/32	—	1,5	40 10	
B051A08800CPG	B052A08800CPG	B053A08800CPG	8,800	.3465	—	—	1,5	40 10	
B051A08900CPG	B052A08900CPG	B053A08900CPG	8,900	.3504	—	—	1,5	40 10	
B051A09000CPG	B052A09000CPG	B053A09000CPG	9,000	.3543	—	—	1,5	40 10	
B051A09100CPG	B052A09100CPG	B053A09100CPG	9,100	.3583	—	—	1,5	40 10	
B051A09129CPG	B052A09129CPG	B053A09129CPG	9,129	.3594	23/64	—	1,6	40 10	
B051A09200CPG	B052A09200CPG	B053A09200CPG	9,200	.3622	—	—	1,6	40 10	
B051A09300CPG	B052A09300CPG	B053A09300CPG	9,300	.3661	—	—	1,6	40 10	
B051A09347CPG	B052A09347CPG	B053A09347CPG	9,347	.3680	—	U	1,6	40 10	
B051A09400CPG	B052A09400CPG	B053A09400CPG	9,400	.3701	—	—	1,6	40 10	
B051A09500CPG	B052A09500CPG	B053A09500CPG	9,500	.3740	—	—	1,6	40 10	
B051A09525CPG	B052A09525CPG	B053A09525CPG	9,525	.3750	3/8	—	1,6	40 10	
B051A09600CPG	B052A09600CPG	B053A09600CPG	9,600	.3780	—	—	1,6	40 10	
B051A09700CPG	B052A09700CPG	B053A09700CPG	9,700	.3819	—	—	1,7	40 10	
B051A09800CPG	B052A09800CPG	B053A09800CPG	9,800	.3858	—	—	1,7	40 10	
B051A09900CPG	B052A09900CPG	B053A09900CPG	9,900	.3898	—	—	1,7	40 10	
B051A09921CPG	B052A09921CPG	B053A09921CPG	9,921	.3906	25/64	—	1,7	40 10	

(continued)

(B051A/B052A/B053A • ~3 x D/~5 x D/~8 x D continued)



			D1 diameter				L5	LS	D
short • KC7325	long • KC7325	extra long • KC7325	mm	in	fraction	wire size			
B051A1000CPG	B052A1000CPG	B053A1000CPG	10,000	.3937	—	—	1,7	40 10	
B051A10100CPG	B052A10100CPG	B053A10100CPG	10,100	.3976	—	—	1,7	45 12	
B051A10200CPG	B052A10200CPG	B053A10200CPG	10,200	.4016	—	—	1,7	45 12	
B051A10300CPG	B052A10300CPG	B053A10300CPG	10,300	.4055	—	—	1,8	45 12	
B051A10320CPG	B052A10320CPG	B053A10320CPG	10,320	.4063	13/32	—	1,8	45 12	
B051A10400CPG	B052A10400CPG	B053A10400CPG	10,400	.4094	—	—	1,8	45 12	
B051A10500CPG	B052A10500CPG	B053A10500CPG	10,500	.4134	—	—	1,8	45 12	
B051A10600CPG	B052A10600CPG	B053A10600CPG	10,600	.4173	—	—	1,8	45 12	
B051A10700CPG	B052A10700CPG	B053A10700CPG	10,700	.4213	—	—	1,8	45 12	
B051A10716CPG	B052A10716CPG	B053A10716CPG	10,716	.4219	27/64	—	1,8	45 12	
B051A10800CPG	B052A10800CPG	B053A10800CPG	10,800	.4252	—	—	1,8	45 12	
B051A10900CPG	B052A10900CPG	B053A10900CPG	10,900	.4291	—	—	1,9	45 12	
B051A11000CPG	B052A11000CPG	B053A11000CPG	11,000	.4331	—	—	1,9	45 12	
B051A11100CPG	B052A11100CPG	B053A11100CPG	11,100	.4370	—	—	1,9	45 12	
B051A11113CPG	B052A11113CPG	B053A11113CPG	11,113	.4375	7/16	—	1,9	45 12	
B051A11200CPG	B052A11200CPG	B053A11200CPG	11,200	.4409	—	—	1,9	45 12	
B051A11300CPG	B052A11300CPG	B053A11300CPG	11,300	.4449	—	—	1,9	45 12	
B051A11400CPG	B052A11400CPG	B053A11400CPG	11,400	.4488	—	—	2,0	45 12	
B051A11500CPG	B052A11500CPG	B053A11500CPG	11,500	.4528	—	—	2,0	45 12	
B051A11509CPG	B052A11509CPG	B053A11509CPG	11,509	.4531	29/64	—	2,0	45 12	
B051A11600CPG	B052A11600CPG	B053A11600CPG	11,600	.4567	—	—	2,0	45 12	
B051A11700CPG	B052A11700CPG	B053A11700CPG	11,700	.4606	—	—	2,0	45 12	
B051A11800CPG	B052A11800CPG	B053A11800CPG	11,800	.4646	—	—	2,0	45 12	
B051A11900CPG	B052A11900CPG	B053A11900CPG	11,900	.4685	—	—	2,0	45 12	
B051A11908CPG	B052A11908CPG	B053A11908CPG	11,908	.4688	15/32	—	2,0	45 12	
B051A12000CPG	B052A12000CPG	B053A12000CPG	12,000	.4724	—	—	2,1	45 12	
B051A12100CPG	B052A12100CPG	B053A12100CPG	12,100	.4764	—	—	2,1	45 14	
B051A12200CPG	B052A12200CPG	B053A12200CPG	12,200	.4803	—	—	2,1	45 14	
B051A12300CPG	B052A12300CPG	B053A12300CPG	12,300	.4843	—	—	2,1	45 14	
B051A12304CPG	B052A12304CPG	B053A12304CPG	12,304	.4844	31/64	—	2,1	45 14	
B051A12400CPG	B052A12400CPG	B053A12400CPG	12,400	.4882	—	—	2,1	45 14	
B051A12500CPG	B052A12500CPG	B053A12500CPG	12,500	.4921	—	—	2,1	45 14	
B051A12600CPG	B052A12600CPG	B053A12600CPG	12,600	.4961	—	—	2,2	45 14	
B051A12700CPG	B052A12700CPG	B053A12700CPG	12,700	.5000	1/2	—	2,2	45 14	

Tolerance • Metric

nominal size range	D1 tolerance	D tolerance h6
1-3	0,000/-0,014 (h8)	0,000/-0,006
>3-6	0,000/-0,012 (h7)	0,000/-0,008
>6-10	0,000/-0,015 (h7)	0,000/-0,009
>10-18	0,000/-0,018 (h7)	0,000/-0,011
>18-20	0,000/-0,021 (h7)	0,000/-0,013

■ GOdrill™ • B04_CPG Series • Grade KC7325™ • Flood Coolant for Drill Diameters 1–20mm

Material Group	Cutting Speed – vc			Metric											
	Range – m/min			Recommended Feed Rate (f) by Diameter											
	min	Starting Value	max	1,0	2,0	3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0		
				mm/r											
P	1	60	70	100	mm/r	0,04 - 0,09	0,05 - 0,11	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	0,04 - 0,09	0,05 - 0,11	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	0,05 - 0,11	0,06 - 0,13	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	0,04 - 0,12	0,05 - 0,13	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
M	6	30	40	60	mm/r	0,03 - 0,05	0,04 - 0,06	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	20	30	40	mm/r	0,02 - 0,05	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	30	40	50	mm/r	0,02 - 0,06	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	20	30	40	mm/r	0,02 - 0,05	0,03 - 0,06	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	0,09 - 0,18	0,10 - 0,20	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	0,06 - 0,13	0,08 - 0,15	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	0,05 - 0,11	0,06 - 0,13	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	0,05 - 0,12	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	220	270	mm/r	0,04 - 0,08	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	225	mm/r	0,10 - 0,13	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
	5	90	130	270	mm/r	0,04 - 0,08	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 - 0,40	0,32 - 0,48
S	1	20	25	30	mm/r	0,01 - 0,04	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	30	mm/r	0,01 - 0,03	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	20	25	40	mm/r	0,01 - 0,03	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	20	25	50	mm/r	0,01 - 0,03	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

■ GOdrill™ • B05_CPG Series • Grade KC7325™ • Internal Coolant for Drill Diameters 1–20mm

Material Group	Cutting Speed – vc			Metric											
	Range – m/min			Recommended Feed Rate (f) by Diameter											
	min	Starting Value	max	1,0	2,0	3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0		
				mm/r											
P	1	70	100	140	mm/r	0,04 - 0,09	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	0,04 - 0,09	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	0,05 - 0,10	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	0,05 - 0,10	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
M	6	40	50	70	mm/r	0,03 - 0,05	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	20	30	40	mm/r	0,02 - 0,05	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	30	40	50	mm/r	0,02 - 0,06	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	20	30	40	mm/r	0,02 - 0,05	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	0,08 - 0,16	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	0,10 - 0,14	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	0,05 - 0,13	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	0,05 - 0,12	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	0,04 - 0,08	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	0,10 - 0,13	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
	5	90	135	180	mm/r	0,04 - 0,08	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 - 0,40	0,32 - 0,48
S	1	10	25	30	mm/r	0,01 - 0,04	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	0,01 - 0,03	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	0,01 - 0,03	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	0,01 - 0,03	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

TF Drills for High Metal Removal Rates

Primary Application

B105 Solid Carbide Drills are ideal for high metal removal rates and excellent hole quality in short chipping materials such as grey cast iron, ductile iron, and aluminium as well as in short-hole titanium applications.

Features and Benefits

Three Cutting Edges

- Higher feed rates than with two-edged drills.

Three Spacious Flutes

- Rapid chip evacuation.
- Three-margin lands deliver better hole quality and straightness than two-flute drills.

Wear-Resistant Carbide Grade

- High tool life in abrasive materials such as cast iron and aluminium die cast alloys.

TiAlN-Coated KC7210™ Grade

- Higher wear resistance at elevated speeds.

Uncoated K10™ Grade

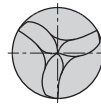
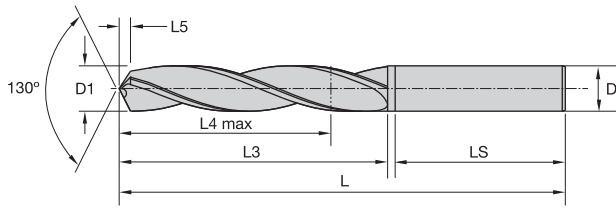
- The uncoated grade helps to prevent built-up edge in drilling aluminium and high-temp alloys.

Customisation

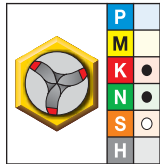
- Intermediate diameters available as engineered solutions.
- Length variations and step drills available as engineered solutions.



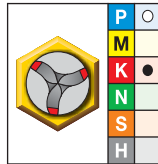
Solid Carbide Drills



■ B105 • ~5 x D



K10



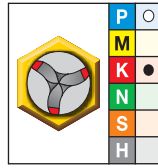
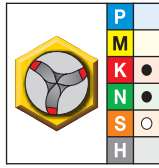
KC7210

- first choice
- alternate choice

		D1 diameter				L	L4 max	L5	LS	D
		mm	in	fraction	wire size					
B105A03000	—	3,000	.1181	—	—	66	23	0,7	36	6
B105A03100	—	3,100	.1220	—	—	66	23	0,8	36	6
B105A03200	—	3,200	.1260	—	—	66	23	0,8	36	6
B105A03300	—	3,300	.1299	—	—	66	23	0,8	36	6
B105A03500	B105A03500	3,500	.1378	—	—	66	23	0,9	36	6
B105A03700	—	3,700	.1457	—	—	66	23	0,9	36	6
B105A03800	—	3,800	.1496	—	—	74	29	0,9	36	6
B105A04000	B105A04000	4,000	.1575	—	—	74	29	1,0	36	6
B105A04100	—	4,100	.1614	—	—	74	29	1,0	36	6
B105A04200	B105A04200	4,200	.1654	—	—	74	29	1,0	36	6
B105A04300	—	4,300	.1693	—	—	74	29	1,1	36	6
B105A04500	—	4,500	.1772	—	—	74	29	1,1	36	6
B105A04650	—	4,650	.1831	—	—	74	29	1,2	36	6
B105A04700	—	4,700	.1850	—	13	74	29	1,2	36	6
B105A04800	—	4,800	.1890	—	12	82	35	1,2	36	6
B105A05000	B105A05000	5,000	.1969	—	—	82	35	1,2	36	6
B105A05100	—	5,100	.2008	—	—	82	35	1,3	36	6
B105A05200	—	5,200	.2047	—	—	82	35	1,3	36	6
B105A05500	B105A05500	5,500	.2165	—	—	82	35	1,4	36	6
B105A05550	—	5,550	.2185	—	—	82	35	1,4	36	6
B105A05700	—	5,700	.2244	—	—	82	35	1,4	36	6
B105A05800	—	5,800	.2283	—	—	82	35	1,4	36	6
B105A06000	B105A06000	6,000	.2362	—	—	82	35	1,5	36	6
B105A06100	—	6,100	.2402	—	—	91	43	1,5	36	8
B105A06300	—	6,300	.2480	—	—	91	43	1,6	36	8
B105A06400	—	6,400	.2520	—	—	91	43	1,6	36	8
B105A06500	B105A06500	6,500	.2559	—	—	91	43	1,6	36	8
B105A06600	—	6,600	.2598	—	—	91	43	1,6	36	8
B105A06700	—	6,700	.2638	—	—	91	43	1,7	36	8
B105A06800	B105A06800	6,800	.2677	—	—	91	43	1,7	36	8
B105A07000	B105A07000	7,000	.2756	—	—	91	43	1,7	36	8
B105A07100	—	7,100	.2795	—	—	91	43	1,8	36	8
B105A07400	—	7,400	.2913	—	—	91	43	1,8	36	8
B105A07500	—	7,500	.2953	—	—	91	43	1,9	36	8
B105A07600	—	7,600	.2992	—	—	91	43	1,9	36	8
B105A07800	—	7,800	.3071	—	—	91	43	1,9	36	8
B105A08000	B105A08000	8,000	.3150	—	—	91	43	2,0	36	8
B105A08100	—	8,100	.3189	—	—	103	49	2,0	40	10
B105A08300	—	8,300	.3268	—	—	103	49	2,1	40	10
B105A08400	—	8,400	.3307	—	—	103	49	2,1	40	10
B105A08500	B105A08500	8,500	.3346	—	—	103	49	2,1	40	10
B105A08600	—	8,600	.3386	—	—	103	49	2,1	40	10

(continued)

(B105 • ~5 x D continued)



		D1 diameter				L	L4 max	L5	LS	D
		mm	in	fraction	wire size					
K10	KC7210									
B105A08700	—	8,700	.3425	—	—	103	49	2,2	40	10
B105A08800	—	8,800	.3465	—	—	103	49	2,2	40	10
B105A09000	B105A09000	9,000	.3543	—	—	103	49	2,2	40	10
B105A09100	—	9,100	.3583	—	—	103	49	2,3	40	10
B105A09300	—	9,300	.3661	—	—	103	49	2,3	40	10
B105A09500	—	9,500	.3740	—	—	103	49	2,4	40	10
B105A09700	—	9,700	.3819	—	—	103	49	2,4	40	10
B105A09800	—	9,800	.3858	—	—	103	49	2,4	40	10
B105A10000	B105A10000	10,000	.3937	—	—	103	49	2,5	40	10
B105A10100	—	10,100	.3976	—	—	118	56	2,5	45	12
B105A10200	B105A10200	10,200	.4016	—	—	118	56	2,5	45	12
B105A10300	—	10,300	.4055	—	—	118	56	2,6	45	12
B105A10500	B105A10500	10,500	.4134	—	—	118	56	2,6	45	12
B105A10700	—	10,700	.4213	—	—	118	56	2,7	45	12
B105A10800	—	10,800	.4252	—	—	118	56	2,7	45	12
B105A11000	B105A11000	11,000	.4331	—	—	118	56	2,7	45	12
B105A11100	—	11,100	.4370	—	—	118	56	2,8	45	12
B105A11200	—	11,200	.4409	—	—	118	56	2,8	45	12
B105A11500	B105A11500	11,500	.4528	—	—	118	56	2,9	45	12
B105A11700	—	11,700	.4606	—	—	118	56	2,9	45	12
B105A11800	—	11,800	.4646	—	—	118	56	2,9	45	12
B105A12000	B105A12000	12,000	.4724	—	—	118	56	3,0	45	12
B105A12100	—	12,100	.4764	—	—	124	60	3,0	45	14
B105A12500	B105A12500	12,500	.4921	—	—	124	60	3,1	45	14
B105A12700	—	12,700	.5000	1/2	—	124	60	3,2	45	14
B105A12800	—	12,800	.5039	—	—	124	60	3,2	45	14
B105A13000	B105A13000	13,000	.5118	—	—	124	60	3,2	45	14
B105A13100	—	13,100	.5157	—	—	124	60	3,3	45	14
B105A13500	B105A13500	13,500	.5315	—	—	124	60	3,4	45	14
B105A13800	—	13,800	.5433	—	—	124	60	3,4	45	14
B105A14000	B105A14000	14,000	.5512	—	—	124	60	3,5	45	14
B105A14200	—	14,200	.5591	—	—	133	63	3,5	48	16
B105A14500	—	14,500	.5709	—	—	133	63	3,6	48	16
B105A15000	B105A15000	15,000	.5906	—	—	133	63	3,7	48	16
B105A15100	—	15,100	.5945	—	—	133	63	3,8	48	16
B105A15500	B105A15500	15,500	.6102	—	—	133	63	3,9	48	16
B105A15800	—	15,800	.6220	—	—	133	63	3,9	48	16
B105A16000	—	16,000	.6299	—	—	133	63	4,0	48	16
B105A16500	—	16,500	.6496	—	—	143	71	4,1	48	18
B105A17000	—	17,000	.6693	—	—	143	71	4,2	48	18
B105A17500	B105A17500	17,500	.6890	—	—	143	71	4,4	48	18
B105A18000	B105A18000	18,000	.7087	—	—	143	71	4,5	48	18
B105A18500	B105A18500	18,500	.7283	—	—	153	77	4,6	50	20
B105A19000	—	19,000	.7480	—	—	153	77	4,7	50	20
B105A19500	—	19,500	.7677	—	—	153	77	4,9	50	20
B105A20000	—	20,000	.7874	—	—	153	77	5,0	50	20
B105A20500	—	20,500	.8071	—	—	167	85	5,1	50	20
B105A21000	—	21,000	.8268	—	—	167	85	5,2	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

TF Drills • B105 Series • Grade K10™ • Flood Coolant for Drill Diameters 3–20mm

		Cutting Speed – vc			Metric								
		Range – m/min			Recommended Feed Rate (f) by Diameter								
Material Group		min	Starting Value	max		3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0
K	1	60	85	110	mm/r	0,11 - 0,20	0,12 - 0,20	0,16 - 0,28	0,20 - 0,35	0,22 - 0,42	0,24 - 0,50	0,28 - 0,61	0,30 - 0,68
	2	70	72	90	mm/r	0,11 - 0,20	0,12 - 0,20	0,16 - 0,28	0,20 - 0,35	0,22 - 0,42	0,24 - 0,50	0,28 - 0,61	0,30 - 0,68
	3	50	51	70	mm/r	0,09 - 0,18	0,10 - 0,18	0,14 - 0,26	0,18 - 0,33	0,20 - 0,40	0,22 - 0,48	0,26 - 0,59	0,28 - 0,66
N	1	100	210	410	mm/r	0,09 - 0,15	0,10 - 0,20	0,18 - 0,33	0,20 - 0,38	0,25 - 0,43	0,33 - 0,51	0,43 - 0,58	0,64 - 0,79
	2	100	248	250	mm/r	0,10 - 0,19	0,12 - 0,21	0,18 - 0,33	0,25 - 0,42	0,30 - 0,50	0,35 - 0,58	0,44 - 0,74	0,52 - 0,88
	5	60	173	250	mm/r	0,08 - 0,15	0,13 - 0,18	0,18 - 0,33	0,20 - 0,36	0,23 - 0,38	0,33 - 0,46	0,38 - 0,48	0,58 - 0,76
S	4	30	20	51	mm/r	0,03 - 0,05	0,04 - 0,07	0,07 - 0,09	0,09 - 0,12	0,11 - 0,15	0,13 - 0,18	0,17 - 0,24	0,22 - 0,30

TF Drills • B105 Series • Grade KC7210™ • Flood Coolant for Drill Diameters 3–20mm

		Cutting Speed – vc			Metric								
		Range – m/min			Recommended Feed Rate (f) by Diameter								
Material Group		min	Starting Value	max		3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0
K	1	80	140	161	mm/r	0,13 - 0,20	0,14 - 0,24	0,17 - 0,31	0,20 - 0,39	0,25 - 0,45	0,29 - 0,51	0,33 - 0,62	0,36 - 0,70
	2	80	120	120	mm/r	0,13 - 0,20	0,15 - 0,23	0,19 - 0,28	0,23 - 0,34	0,26 - 0,38	0,29 - 0,43	0,34 - 0,50	0,36 - 0,54
	3	60	84	130	mm/r	0,09 - 0,18	0,10 - 0,18	0,14 - 0,26	0,18 - 0,33	0,20 - 0,40	0,22 - 0,48	0,26 - 0,59	0,28 - 0,66
N	2	100	298	300	mm/r	0,10 - 0,19	0,12 - 0,21	0,18 - 0,33	0,25 - 0,42	0,30 - 0,50	0,35 - 0,58	0,44 - 0,74	0,52 - 0,88
	5	60	225	300	mm/r	0,08 - 0,15	0,13 - 0,18	0,18 - 0,33	0,20 - 0,36	0,23 - 0,38	0,33 - 0,46	0,38 - 0,48	0,58 - 0,76

TF Drills • B105 Series • Grade KC7210 • MQL (Minimum Quantity Lubricant) or Dry Applications for Drill Diameters 3–20mm

		Cutting Speed – vc			Metric								
		Range – m/min			Recommended Feed Rate (f) by Diameter								
Material Group		min	Starting Value	max		3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0
K	1	60	110	150	mm/r	0,10 - 0,20	0,13 - 0,24	0,16 - 0,31	0,20 - 0,39	0,24 - 0,44	0,27 - 0,51	0,33 - 0,62	0,36 - 0,70
	2	60	94	100	mm/r	0,13 - 0,20	0,16 - 0,23	0,20 - 0,28	0,23 - 0,34	0,26 - 0,38	0,29 - 0,43	0,34 - 0,50	0,36 - 0,54
	3	50	84	110	mm/r	0,10 - 0,19	0,13 - 0,20	0,16 - 0,31	0,20 - 0,37	0,23 - 0,44	0,26 - 0,48	0,31 - 0,58	0,33 - 0,64

TF Drills with Through Coolant for Titanium Materials

Primary Application

B125 Solid Carbide Drills are specifically designed for titanium and titanium alloy workpiece materials.

Features and Benefits

Three Cutting Edges

- Higher feed rates than two-edged drills.

Three-Flute Design

- Three-margin lands deliver better hole quality and straightness than two-flute drills.

Through-Coolant Design

- Improved chip evacuation enables deeper holes.
- More effective cooling of the cutting edges and longer tool life.
- Lubrication of the margin lands and better hole surface quality.

Fine-Grained Carbide Grade

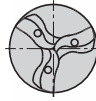
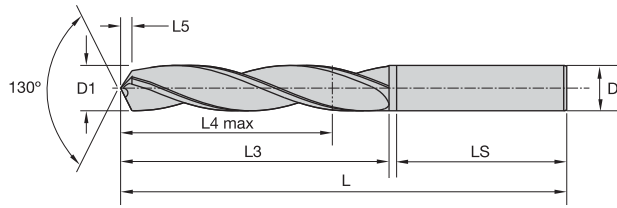
- Optimum combination of toughness and wear resistance for titanium drilling applications.

Customisation

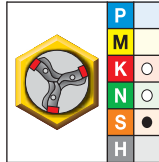
- Intermediate diameters available as semi-standards.
- Length variations and step drills available as engineered solutions.



Solid Carbide Drills



■ B125 • ~5 x D



- first choice
- alternate choice

K715	D1 diameter				L	L4 max	L5	LS	D
	mm	in	fraction	wire size					
B125A06000	6,000	.2362	—	—	94	35	1,6	48	6
B125A06500	6,500	.2559	—	—	105	43	1,7	50	8
B125A06800	6,800	.2677	—	—	105	43	1,8	50	8
B125A07000	7,000	.2756	—	—	105	43	1,9	50	8
B125A07400	7,400	.2913	—	—	110	43	2,0	55	8
B125A07500	7,500	.2953	—	—	110	43	2,0	55	8
B125A08000	8,000	.3150	—	—	110	43	2,1	55	8
B125A08500	8,500	.3346	—	—	122	49	2,3	59	10
B125A09000	9,000	.3543	—	—	122	49	2,4	59	10
B125A09500	9,500	.3740	—	—	122	49	2,5	59	10
B125A10000	10,000	.3937	—	—	122	49	2,7	59	10
B125A10500	10,500	.4134	—	—	141	56	2,8	68	12
B125A11000	11,000	.4331	—	—	141	56	3,0	68	12
B125A12000	12,000	.4724	—	—	141	56	3,2	68	12
B125A14000	14,000	.5512	—	—	155	60	3,8	76	14

Tolerance

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

■ TF Drills • B125 Series • Grade K715™ • Through Coolant for Drill Diameters 3-20mm

Material Group	4	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
S	80	70	90	mm/r	—	—	0,03 - 0,08	0,03 - 0,08	0,03 - 0,08	0,08 - 0,15	0,08 - 0,15	—



HP Beyond™ Drills with Through Coolant for Stainless Steel



Primary Application

B210_HP Series Solid Carbide Drills are designed specifically for stainless steel applications, offering high performance and long tool life in regular steel and titanium materials. By combining unique Kennametal technologies, such as the HP-point, flute geometry, and a new post-coat treatment technology into one tool, the B2_HP Beyond is the ultimate high-volume production tool.

Features and Benefits

HP Drill-Point Design

- Low thrust prevents workpiece flexing.
- Excellent centring capabilities.

Unique Flute Design

- Improved chip evacuation.
- Capability to drill deeper holes in difficult-to-machine materials.

KCM15™ Beyond Grade

- A nanolayer, TiAlN-based coating with high wear resistance and low adhesion to stainless steel materials.
- The highly polished surface ensures superior chip evacuation even when low-pressure coolant is applied.
- The average metal removal rate and tool life dramatically improve (minimum 10–30%).

Customisation

- Intermediate diameters available as engineered solutions.
- Length variations and step drills available as engineered solutions.
- High step diameter ratios and very complex step drill geometries are not recommended for austenitic stainless steel.
- Using Kennametal Slim Line Hydraulic Chucks together with standard B21_HP is recommended if workpiece contours need to be bypassed.

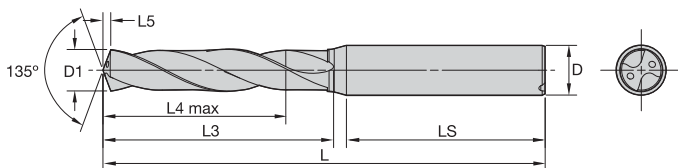
F-Shank

- For standard line items with F-shank, please refer to the e-catalogue on www.kennametal.com.





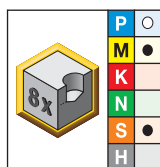
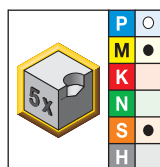
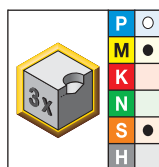
Solid Carbide Drills



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



■ B210/B211/B212_HP • ~3 x D/~5 x D/~8 x D



- first choice
- alternate choice

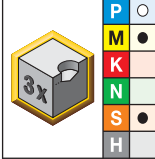
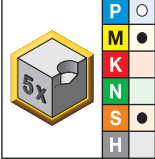
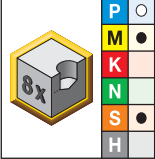
			D1 diameter				L5	LS	D
			mm	in	fraction	wire size			
short • KCM15	long • KCM15	extra long • KCM15							
B210A03000HP	B211A03000HP	B212A03000HP	3,000	.1181	—	—	0,6	36 6	
B210A03048HP	B211A03048HP	B212A03048HP	3,048	.1200	—	31	0,6	36 6	
—	B211A03100HP	—	3,100	.1220	—	—	0,6	36 6	
B210A03175HP	B211A03175HP	B212A03175HP	3,175	.1250	1/8	—	0,6	36 6	
—	B211A03200HP	—	3,200	.1260	—	—	0,6	36 6	
B210A03264HP	B211A03264HP	B212A03264HP	3,264	.1285	—	30	0,6	36 6	
B210A03300HP	B211A03300HP	B212A03300HP	3,300	.1299	—	—	0,6	36 6	
—	B211A03400HP	—	3,400	.1339	—	—	0,6	36 6	
B210A03455HP	B211A03455HP	B212A03455HP	3,455	.1360	—	29	0,7	36 6	
B210A03500HP	B211A03500HP	B212A03500HP	3,500	.1378	—	—	0,7	36 6	
B210A03571HP	B211A03571HP	B212A03571HP	3,571	.1406	9/64	—	0,7	36 6	
—	B211A03600HP	—	3,600	.1417	—	—	0,7	36 6	
B210A03658HP	B211A03658HP	B212A03658HP	3,658	.1440	—	27	0,7	36 6	
B210A03700HP	B211A03700HP	B212A03700HP	3,700	.1457	—	—	0,7	36 6	
B210A03734HP	B211A03734HP	B212A03734HP	3,734	.1470	—	26	0,7	36 6	
—	B211A03800HP	B212A03800HP	3,800	.1496	—	—	0,7	36 6	
—	B211A03861HP	—	3,861	.1520	—	24	0,7	36 6	
—	B211A03900HP	—	3,900	.1535	—	—	0,7	36 6	
B210A04000HP	B211A04000HP	B212A04000HP	4,000	.1575	—	—	0,8	36 6	
B210A04039HP	B211A04039HP	B212A04039HP	4,039	.1590	—	21	0,8	36 6	
B210A04090HP	B211A04090HP	B212A04090HP	4,090	.1610	—	20	0,8	36 6	
—	B211A04100HP	B212A04100HP	4,100	.1614	—	—	0,8	36 6	
B210A04200HP	B211A04200HP	B212A04200HP	4,200	.1654	—	—	0,8	36 6	
B210A04217HP	B211A04217HP	B212A04217HP	4,217	.1660	—	19	0,8	36 6	
—	B211A04300HP	—	4,300	.1693	—	—	0,8	36 6	
B210A04366HP	B211A04366HP	B212A04366HP	4,366	.1719	11/64	—	0,8	36 6	
—	B211A04400HP	—	4,400	.1732	—	—	0,8	36 6	
B210A04500HP	B211A04500HP	B212A04500HP	4,500	.1772	—	—	0,8	36 6	
B210A04700HP	B211A04700HP	B212A04700HP	4,700	.1850	—	13	0,9	36 6	
—	B211A04800HP	B212A04800HP	4,800	.1890	—	12	0,9	36 6	
B210A04852HP	B211A04852HP	B212A04852HP	4,852	.1910	—	11	0,9	36 6	
—	B211A04900HP	—	4,900	.1929	—	—	0,9	36 6	
B210A05000HP	B211A05000HP	B212A05000HP	5,000	.1969	—	—	0,9	36 6	
B210A05100HP	B211A05100HP	B212A05100HP	5,100	.2008	—	—	1,0	36 6	
B210A05106HP	B211A05106HP	B212A05106HP	5,106	.2010	—	7	1,0	36 6	
B210A05159HP	B211A05159HP	B212A05159HP	5,159	.2031	13/64	—	1,0	36 6	
B210A05200HP	B211A05200HP	—	5,200	.2047	—	—	1,0	36 6	
—	B211A05300HP	—	5,300	.2087	—	—	1,0	36 6	
B210A05400HP	B211A05400HP	—	5,400	.2126	—	—	1,0	36 6	
B210A05410HP	—	—	5,410	.2130	—	3	1,0	36 6	

(continued)

(B210/B211/B212_HP • ~3 x D/~5 x D/~8 x D continued)



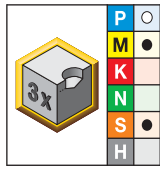
Solid Carbide Drills

			D1 diameter				L5	LS	D
			mm	in	fraction	wire size			
 short • KCM15	 long • KCM15	 extra long • KCM15							
B210A05500HP	B211A05500HP	B212A05500HP	5,500	.2165	—	—	1,0	36	6
—	B211A05600HP	—	5,600	.2205	—	—	1,1	36	6
B210A05616HP	B211A05616HP	B212A05616HP	5,616	.2211	—	2	1,1	36	6
—	B211A05700HP	—	5,700	.2244	—	—	1,1	36	6
B210A05800HP	B211A05800HP	B212A05800HP	5,800	.2283	—	—	1,1	36	6
—	B211A05900HP	—	5,900	.2323	—	—	1,1	36	6
B210A05954HP	B211A05954HP	—	5,954	.2344	15/64	—	1,1	36	6
B210A06000HP	B211A06000HP	B212A06000HP	6,000	.2362	—	—	1,1	36	6
B210A06100HP	B211A06100HP	—	6,100	.2402	—	—	1,1	36	8
B210A06200HP	B211A06200HP	—	6,200	.2441	—	—	1,2	36	8
B210A06300HP	B211A06300HP	—	6,300	.2480	—	—	1,2	36	8
B210A06350HP	B211A06350HP	B212A06350HP	6,350	.2500	1/4	E	1,2	36	8
—	B211A06400HP	—	6,400	.2520	—	—	1,2	36	8
B210A06500HP	B211A06500HP	B212A06500HP	6,500	.2559	—	—	1,2	36	8
B210A06528HP	—	—	6,528	.2570	—	F	1,2	36	8
—	B211A06600HP	—	6,600	.2598	—	—	1,2	36	8
B210A06630HP	B211A06630HP	B212A06630HP	6,630	.2610	—	G	1,2	36	8
B210A06700HP	B211A06700HP	—	6,700	.2638	—	—	1,3	36	8
B210A06800HP	B211A06800HP	B212A06800HP	6,800	.2677	—	—	1,3	36	8
B210A06900HP	B211A06900HP	—	6,900	.2717	—	—	1,3	36	8
B210A07000HP	B211A07000HP	B212A07000HP	7,000	.2756	—	—	1,3	36	8
B210A07100HP	B211A07100HP	—	7,100	.2795	—	—	1,3	36	8
—	B211A07200HP	—	7,200	.2835	—	—	1,3	36	8
—	B211A07300HP	—	7,300	.2874	—	—	1,4	36	8
—	B211A07400HP	—	7,400	.2913	—	—	1,4	36	8
B210A07500HP	B211A07500HP	B212A07500HP	7,500	.2953	—	—	1,4	36	8
—	B211A07600HP	—	7,600	.2992	—	—	1,4	36	8
—	B211A07700HP	—	7,700	.3031	—	—	1,4	36	8
B210A07800HP	B211A07800HP	B212A07800HP	7,800	.3071	—	—	1,5	36	8
—	B211A07900HP	—	7,900	.3110	—	—	1,5	36	8
B210A07938HP	—	—	7,938	.3125	5/16	—	1,5	36	8
B210A08000HP	B211A08000HP	B212A08000HP	8,000	.3150	—	—	1,5	36	8
B210A08100HP	B211A08100HP	—	8,100	.3189	—	—	1,5	40	10
B210A08200HP	B211A08200HP	—	8,200	.3228	—	—	1,5	40	10
—	B211A08300HP	—	8,300	.3268	—	—	1,6	40	10
B210A08400HP	B211A08400HP	B212A08400HP	8,400	.3307	—	—	1,6	40	10
B210A08433HP	—	—	8,433	.3320	—	Q	1,6	40	10
B210A08500HP	B211A08500HP	B212A08500HP	8,500	.3346	—	—	1,6	40	10
B210A08600HP	B211A08600HP	—	8,600	.3386	—	—	1,6	40	10
B210A08700HP	B211A08700HP	—	8,700	.3425	—	—	1,6	40	10
—	B211A08800HP	B212A08800HP	8,800	.3465	—	—	1,6	40	10
—	B211A08900HP	—	8,900	.3504	—	—	1,7	40	10
B210A09000HP	B211A09000HP	B212A09000HP	9,000	.3543	—	—	1,7	40	10
B210A09093HP	—	—	9,093	.3580	—	T	1,7	40	10
—	B211A09100HP	—	9,100	.3583	—	—	1,7	40	10
—	B211A09200HP	—	9,200	.3622	—	—	1,7	40	10
—	B211A09300HP	—	9,300	.3661	—	—	1,7	40	10
—	B211A09400HP	—	9,400	.3701	—	—	1,8	40	10
B210A09500HP	B211A09500HP	B212A09500HP	9,500	.3740	—	—	1,8	40	10
—	B211A09600HP	—	9,600	.3780	—	—	1,8	40	10
B210A09700HP	B211A09700HP	—	9,700	.3819	—	—	1,8	40	10
B210A09800HP	B211A09800HP	—	9,800	.3858	—	—	1,8	40	10

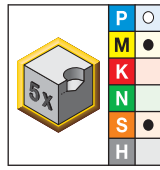
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(B210/B211/B212_HP • ~3 x D/~5 x D/~8 x D continued)

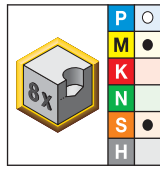
Solid Carbide Drills



short • KCM15



long • KCM15



extra long • KCM15

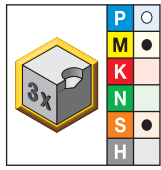
			D1 diameter				L5	LS	D
			mm	in	fraction	wire size			
—	B211A09900HP	—	9,900	.3898	—	—	1,8	40	10
B210A09921HP	—	—	9,921	.3906	25/64	—	1,9	40	10
B210A10000HP	B211A10000HP	B212A10000HP	10,000	.3937	—	—	1,9	40	10
—	B211A10100HP	—	10,100	.3976	—	—	1,9	45	12
B210A10200HP	B211A10200HP	B212A10200HP	10,200	.4016	—	—	1,9	45	12
—	B211A10300HP	—	10,300	.4055	—	—	1,9	45	12
B210A10400HP	B211A10400HP	—	10,400	.4094	—	—	1,9	45	12
B210A10500HP	B211A10500HP	B212A10500HP	10,500	.4134	—	—	2,0	45	12
—	B211A10600HP	—	10,600	.4173	—	—	2,0	45	12
—	B211A10700HP	—	10,700	.4213	—	—	2,0	45	12
B210A10716HP	—	—	10,716	.4219	27/64	—	2,0	45	12
B210A10800HP	B211A10800HP	—	10,800	.4252	—	—	2,0	45	12
—	B211A10900HP	—	10,900	.4291	—	—	2,0	45	12
B210A11000HP	B211A11000HP	B212A11000HP	11,000	.4331	—	—	2,1	45	12
—	B211A11100HP	—	11,100	.4370	—	—	2,1	45	12
B210A11200HP	B211A11200HP	—	11,200	.4409	—	—	2,1	45	12
—	B211A11400HP	—	11,400	.4488	—	—	2,1	45	12
B210A11500HP	B211A11500HP	—	11,500	.4528	—	—	2,1	45	12
B210A11509HP	—	—	11,509	.4531	29/64	—	2,1	45	12
—	B211A11600HP	—	11,600	.4567	—	—	2,2	45	12
—	B211A11700HP	—	11,700	.4606	—	—	2,2	45	12
—	B211A11800HP	B212A11800HP	11,800	.4646	—	—	2,2	45	12
—	B211A11900HP	—	11,900	.4685	—	—	2,2	45	12
B210A12000HP	B211A12000HP	B212A12000HP	12,000	.4724	—	—	2,2	45	12
—	B211A12100HP	—	12,100	.4764	—	—	2,3	45	14
B210A12200HP	B211A12200HP	—	12,200	.4803	—	—	2,3	45	14
—	B211A12300HP	—	12,300	.4843	—	—	2,3	45	14
B210A12304HP	—	—	12,304	.4844	31/64	—	2,3	45	14
B210A12500HP	B211A12500HP	B212A12500HP	12,500	.4921	—	—	2,3	45	14
—	B211A12600HP	—	12,600	.4961	—	—	2,3	45	14
B210A12700HP	B211A12700HP	B212A12700HP	12,700	.5000	1/2	—	2,4	45	14
B210A12800HP	B211A12800HP	—	12,800	.5039	—	—	2,4	45	14
—	B211A12900HP	—	12,900	.5079	—	—	2,4	45	14
B210A13000HP	B211A13000HP	B212A13000HP	13,000	.5118	—	—	2,4	45	14
—	B211A13100HP	—	13,100	.5157	—	—	2,4	45	14
—	B211A13200HP	—	13,200	.5197	—	—	2,5	45	14
—	B211A13300HP	—	13,300	.5236	—	—	2,5	45	14
B210A13495HP	—	—	13,495	.5313	17/32	—	2,5	45	14
B210A13500HP	B211A13500HP	B212A13500HP	13,500	.5315	—	—	2,5	45	14
—	B211A13800HP	—	13,800	.5433	—	—	2,6	45	14
—	B211A13900HP	—	13,900	.5472	—	—	2,6	45	14
B210A14000HP	B211A14000HP	B212A14000HP	14,000	.5512	—	—	2,6	45	14
B210A14100HP	B211A14100HP	—	14,100	.5551	—	—	2,6	48	16
B210A14200HP	B211A14200HP	—	14,200	.5591	—	—	2,6	48	16
—	B211A14300HP	—	14,300	.5630	—	—	2,7	48	16
—	B211A14400HP	—	14,400	.5669	—	—	2,7	48	16
B210A14500HP	B211A14500HP	—	14,500	.5709	—	—	2,7	48	16
—	B211A14600HP	—	14,600	.5748	—	—	2,7	48	16
—	B211A14800HP	—	14,800	.5827	—	—	2,8	48	16
B210A15000HP	B211A15000HP	—	15,000	.5906	—	—	2,8	48	16
—	B211A15100HP	—	15,100	.5945	—	—	2,8	48	16
—	B211A15200HP	—	15,200	.5984	—	—	2,8	48	16

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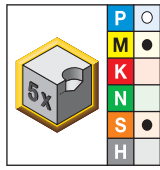
(B210/B211/B212_HP • ~3 x D/-5 x D/-8 x D continued)



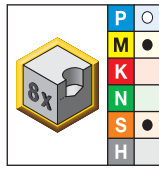
Solid Carbide Drills



short • KCM15



long • KCM15



extra long • KCM15

			D1 diameter				L5	LS	D
			mm	in	fraction	wire size			
—	B211A15300HP	—	15,300	.6024	—	—	2,8	48	16
—	B211A15400HP	—	15,400	.6063	—	—	2,9	48	16
B210A15500HP	B211A15500HP	—	15,500	.6102	—	—	2,9	48	16
—	B211A15600HP	—	15,600	.6142	—	—	2,9	48	16
—	B211A15700HP	—	15,700	.6181	—	—	2,9	48	16
—	B211A15800HP	—	15,800	.6220	—	—	2,9	48	16
B210A15875HP	B211A15875HP	B212A15875HP	15,875	.6250	5/8	—	3,0	48	16
—	B211A15900HP	—	15,900	.6260	—	—	3,0	48	16
B210A16000HP	B211A16000HP	B212A16000HP	16,000	.6299	—	—	3,0	48	16
—	B211A16100HP	—	16,100	.6339	—	—	3,0	48	18
B210A16500HP	B211A16500HP	—	16,500	.6496	—	—	3,1	48	18
B210A16670HP	—	—	16,670	.6563	21/32	—	3,1	48	18
B210A17000HP	B211A17000HP	—	17,000	.6693	—	—	3,2	48	18
B210A17500HP	B211A17500HP	—	17,500	.6890	—	—	3,3	48	18
—	B211A17700HP	—	17,700	.6969	—	—	3,3	48	18
B210A18000HP	B211A18000HP	—	18,000	.7087	—	—	3,3	48	18
—	B211A18400HP	—	18,400	.7244	—	—	3,4	50	20
B210A18500HP	B211A18500HP	—	18,500	.7283	—	—	3,4	50	20
B210A19000HP	B211A19000HP	—	19,000	.7480	—	—	3,5	50	20
B210A19050HP	B211A19050HP	B212A19050HP	19,050	.7500	3/4	—	3,5	50	20
—	B211A19100HP	—	19,100	.7520	—	—	3,5	50	20
—	B211A19200HP	—	19,200	.7559	—	—	3,6	50	20
—	B211A19300HP	—	19,300	.7598	—	—	3,6	50	20
B210A19500HP	B211A19500HP	—	19,500	.7677	—	—	3,6	50	20
B210A20000HP	B211A20000HP	—	20,000	.7874	—	—	3,7	50	20
—	B211A20500HP	—	20,500	.8071	—	—	3,8	50	20
—	B211A21000HP	—	21,000	.8268	—	—	3,9	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

HP Drills • B21_HP Series • Grade KCM15™ • Through Coolant for Drill Diameters 3–20mm

Solid Carbide Drills

		Cutting Speed – vc			Metric								
		Range – m/min			Recommended Feed Rate (f) by Diameter								
Material Group		min	Starting Value	max		3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0
P	1	110	160	210	mm/r	0,05 - 0,13	0,08 - 0,19	0,11 - 0,24	0,14 - 0,30	0,16 - 0,35	0,18 - 0,39	0,20 - 0,46	0,23 - 0,51
	2	130	170	210	mm/r	0,05 - 0,13	0,08 - 0,17	0,11 - 0,20	0,14 - 0,24	0,16 - 0,28	0,18 - 0,32	0,20 - 0,37	0,23 - 0,41
	3	110	150	190	mm/r	0,08 - 0,13	0,12 - 0,19	0,14 - 0,24	0,17 - 0,30	0,20 - 0,35	0,22 - 0,39	0,26 - 0,46	0,29 - 0,51
	4	80	120	150	mm/r	0,08 - 0,12	0,11 - 0,18	0,12 - 0,23	0,15 - 0,28	0,17 - 0,33	0,19 - 0,37	0,22 - 0,43	0,25 - 0,48
	5	60	80	90	mm/r	0,03 - 0,11	0,04 - 0,11	0,05 - 0,11	0,05 - 0,14	0,08 - 0,18	0,11 - 0,21	0,14 - 0,24	0,16 - 0,26
	6	70	120	170	mm/r	0,05 - 0,11	0,08 - 0,14	0,11 - 0,17	0,13 - 0,21	0,15 - 0,24	0,17 - 0,27	0,19 - 0,33	0,22 - 0,36
M	1	60	80	90	mm/r	0,03 - 0,08	0,06 - 0,14	0,08 - 0,19	0,11 - 0,21	0,13 - 0,23	0,14 - 0,24	0,16 - 0,26	0,19 - 0,29
	2	50	80	80	mm/r	0,03 - 0,08	0,06 - 0,14	0,08 - 0,19	0,11 - 0,21	0,13 - 0,23	0,14 - 0,24	0,16 - 0,26	0,19 - 0,29
	3	40	60	70	mm/r	0,03 - 0,08	0,06 - 0,14	0,08 - 0,19	0,11 - 0,21	0,13 - 0,23	0,14 - 0,24	0,16 - 0,26	0,19 - 0,29
S	1	20	20	20	mm/r	0,03 - 0,08	0,04 - 0,09	0,05 - 0,11	0,05 - 0,11	0,08 - 0,14	0,11 - 0,16	0,14 - 0,19	0,16 - 0,21
	2	10	20	30	mm/r	0,03 - 0,11	0,04 - 0,11	0,05 - 0,11	0,05 - 0,11	0,08 - 0,14	0,11 - 0,16	0,14 - 0,19	0,16 - 0,21
	4	30	50	60	mm/r	0,02 - 0,04	0,04 - 0,06	0,05 - 0,07	0,05 - 0,07	0,07 - 0,11	0,07 - 0,11	0,11 - 0,13	0,11 - 0,13



HP Beyond™ Drills for Steel



Primary Application

B221_HP Series Solid Carbide Drills offer the highest metal removal rates and longest tool life in steel and iron materials when dry cutting or using external flood coolant. Dry drilling up to 5 x D possible.

B224_HP Series Solid Carbide Drills are ideal for super high-speed drilling of unalloyed and alloyed steel. Achieve 100% higher cutting speed without compromising tool life. Operate these drills with standard through coolant or MQL.

By combining unique Kennametal technologies, such as the HP-point, flute geometry, and a new Beyond grade technology into one tool, the B2_HP Beyond is the ultimate high-volume production tool.

Features and Benefits

HP Drill-Point Design

- Low thrust prevents workpiece flexing.
- Excellent centring capabilities.

Unique Flute Design

- Improved chip evacuation in dry and mid L/D drilling operations.
- Better hole surface quality.

KCPK15™ Beyond Grade

- The grade is a multilayer, TiAlN-based coating with high hot hardness. High cutting speeds enable use in MQL applications.
- The highly polished surface ensures superior chip evacuation even when low-pressure coolant is applied.
- The average metal removal rate and tool life performance improved dramatically (10–30%).

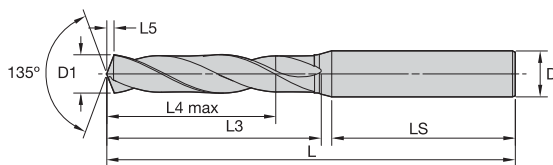
Customisation

- Intermediate diameters available as semi-standards.
- Length variations and step drills available as engineered solutions.
- For holes deeper than 5 x D, internal coolant is recommended.
- Using Kennametal Slim Line Hydraulic Chucks together with standard B22_HP is recommended if workpiece contours need to be bypassed.

F-Shank

- For standard line items with F-shank, please refer to the e-catalogue on www.kennametal.com.

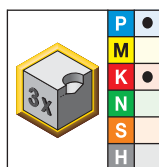




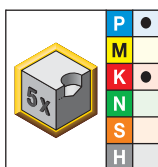
For information on L, L3, and L4 max, see the Solid Carbide foldout table.



■ B221/B222_HP • ~3 x D/~5 x D



short • KCPK15



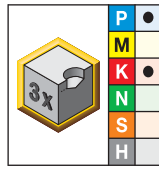
long • KCPK15

- first choice
- alternate choice

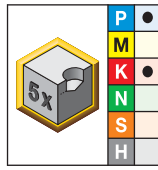
		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
B221A03000HP	B222A03000HP	3,000	.1181	—	—	0,6	36	6
B221A03048HP	B222A03048HP	3,048	.1200	—	31	0,6	36	6
B221A03100HP	—	3,100	.1220	—	—	0,6	36	6
B221A03175HP	B222A03175HP	3,175	.1250	1/8	—	0,6	36	6
B221A03200HP	—	3,200	.1260	—	—	0,6	36	6
B221A03264HP	B222A03264HP	3,264	.1285	—	30	0,6	36	6
B221A03300HP	B222A03300HP	3,300	.1299	—	—	0,6	36	6
B221A03400HP	—	3,400	.1339	—	—	0,6	36	6
B221A03455HP	B222A03455HP	3,455	.1360	—	29	0,7	36	6
B221A03500HP	B222A03500HP	3,500	.1378	—	—	0,7	36	6
B221A03571HP	B222A03571HP	3,571	.1406	9/64	—	0,7	36	6
B221A03600HP	—	3,600	.1417	—	—	0,7	36	6
B221A03658HP	—	3,658	.1440	—	27	0,7	36	6
B221A03700HP	B222A03700HP	3,700	.1457	—	—	0,7	36	6
B221A03734HP	—	3,734	.1470	—	26	0,7	36	6
B221A03800HP	B222A03800HP	3,800	.1496	—	—	0,7	36	6
B221A03900HP	—	3,900	.1535	—	—	0,7	36	6
B221A03970HP	B222A03970HP	3,970	.1563	5/32	—	0,7	36	6
B221A04000HP	B222A04000HP	4,000	.1575	—	—	0,8	36	6
B221A04039HP	—	4,039	.1590	—	21	0,8	36	6
B221A04090HP	—	4,090	.1610	—	20	0,8	36	6
B221A04100HP	—	4,100	.1614	—	—	0,8	36	6
B221A04200HP	B222A04200HP	4,200	.1654	—	—	0,8	36	6
B221A04217HP	—	4,217	.1660	—	19	0,8	36	6
B221A04300HP	—	4,300	.1693	—	—	0,8	36	6
B221A04366HP	B222A04366HP	4,366	.1719	11/64	—	0,8	36	6
B221A04400HP	—	4,400	.1732	—	—	0,8	36	6
B221A04500HP	B222A04500HP	4,500	.1772	—	—	0,8	36	6
B221A04600HP	B222A04600HP	4,600	.1811	—	—	0,9	36	6
B221A04623HP	—	4,623	.1820	—	14	0,9	36	6
B221A04700HP	—	4,700	.1850	—	13	0,9	36	6
B221A04763HP	B222A04763HP	4,763	.1875	3/16	—	0,9	36	6
B221A04800HP	B222A04800HP	4,800	.1890	—	12	0,9	36	6
B221A04852HP	—	4,852	.1910	—	11	0,9	36	6
B221A04900HP	—	4,900	.1929	—	—	0,9	36	6
B221A05000HP	B222A05000HP	5,000	.1969	—	—	0,9	36	6
B221A05100HP	B222A05100HP	5,100	.2008	—	—	1,0	36	6
B221A05106HP	B222A05106HP	5,106	.2010	—	7	1,0	36	6
B221A05159HP	B222A05159HP	5,159	.2031	13/64	—	1,0	36	6
B221A05200HP	—	5,200	.2047	—	—	1,0	36	6

(continued)

(B221/B222_HP • ~3 x D / ~5 x D continued)



short • KCPK15



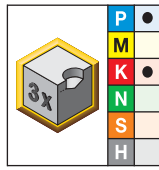
long • KCPK15

		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
B221A05300HP	—	5,300	.2087	—	—	1,0	36	6
B221A05400HP	—	5,400	.2126	—	—	1,0	36	6
B221A05410HP	B222A05410HP	5,410	.2130	—	3	1,0	36	6
B221A05500HP	B222A05500HP	5,500	.2165	—	—	1,0	36	6
B221A05558HP	B222A05558HP	5,558	.2188	7/32	—	1,0	36	6
B221A05600HP	—	5,600	.2205	—	—	1,1	36	6
B221A05616HP	—	5,616	.2211	—	2	1,1	36	6
B221A05700HP	—	5,700	.2244	—	—	1,1	36	6
B221A05800HP	B222A05800HP	5,800	.2283	—	—	1,1	36	6
B221A05900HP	—	5,900	.2323	—	—	1,1	36	6
B221A05954HP	B222A05954HP	5,954	.2344	15/64	—	1,1	36	6
B221A06000HP	B222A06000HP	6,000	.2362	—	—	1,1	36	6
B221A06100HP	—	6,100	.2402	—	—	1,1	36	8
B221A06200HP	—	6,200	.2441	—	—	1,2	36	8
B221A06300HP	—	6,300	.2480	—	—	1,2	36	8
B221A06350HP	B222A06350HP	6,350	.2500	1/4	E	1,2	36	8
B221A06400HP	—	6,400	.2520	—	—	1,2	36	8
B221A06500HP	B222A06500HP	6,500	.2559	—	—	1,2	36	8
B221A06528HP	B222A06528HP	6,528	.2570	—	F	1,2	36	8
B221A06600HP	—	6,600	.2598	—	—	1,2	36	8
B221A06630HP	—	6,630	.2610	—	G	1,2	36	8
B221A06700HP	B222A06700HP	6,700	.2638	—	—	1,3	36	8
B221A06746HP	B222A06746HP	6,746	.2656	17/64	—	1,3	36	8
B221A06800HP	B222A06800HP	6,800	.2677	—	—	1,3	36	8
B221A06900HP	—	6,900	.2717	—	—	1,3	36	8
B221A07000HP	B222A07000HP	7,000	.2756	—	—	1,3	36	8
B221A07100HP	—	7,100	.2795	—	—	1,3	36	8
B221A07145HP	B222A07145HP	7,145	.2813	9/32	—	1,3	36	8
B221A07200HP	—	7,200	.2835	—	—	1,3	36	8
B221A07300HP	—	7,300	.2874	—	—	1,4	36	8
B221A07400HP	—	7,400	.2913	—	—	1,4	36	8
B221A07500HP	B222A07500HP	7,500	.2953	—	—	1,4	36	8
B221A07541HP	B222A07541HP	7,541	.2969	19/64	—	1,4	36	8
B221A07600HP	—	7,600	.2992	—	—	1,4	36	8
B221A07700HP	—	7,700	.3031	—	—	1,4	36	8
B221A07800HP	B222A07800HP	7,800	.3071	—	—	1,5	36	8
B221A07900HP	—	7,900	.3110	—	—	1,5	36	8
B221A07938HP	B222A07938HP	7,938	.3125	5/16	—	1,5	36	8
B221A08000HP	B222A08000HP	8,000	.3150	—	—	1,5	36	8
B221A08100HP	—	8,100	.3189	—	—	1,5	40	10
B221A08200HP	B222A08200HP	8,200	.3228	—	—	1,5	40	10
B221A08300HP	—	8,300	.3268	—	—	1,6	40	10
B221A08334HP	B222A08334HP	8,334	.3281	21/64	—	1,6	40	10
B221A08400HP	—	8,400	.3307	—	—	1,6	40	10
B221A08433HP	B222A08433HP	8,433	.3320	—	Q	1,6	40	10
B221A08500HP	B222A08500HP	8,500	.3346	—	—	1,6	40	10
B221A08600HP	—	8,600	.3386	—	—	1,6	40	10
B221A08700HP	—	8,700	.3425	—	—	1,6	40	10
B221A08733HP	B222A08733HP	8,733	.3438	11/32	—	1,6	40	10
B221A08800HP	B222A08800HP	8,800	.3465	—	—	1,6	40	10
B221A08900HP	—	8,900	.3504	—	—	1,7	40	10
B221A09000HP	B222A09000HP	9,000	.3543	—	—	1,7	40	10

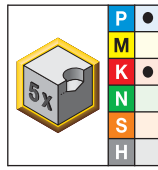
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(B221/B222_HP • ~3 x D/-5 x D continued)

Solid Carbide Drills



short • KCPK15

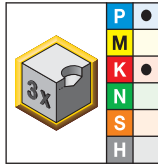


long • KCPK15

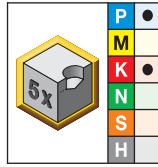
		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
B221A09100HP	—	9,100	.3583	—	—	1,7	40	10
B221A09129HP	B222A09129HP	9,129	.3594	23/64	—	1,7	40	10
B221A09200HP	—	9,200	.3622	—	—	1,7	40	10
B221A09300HP	B222A09300HP	9,300	.3661	—	—	1,7	40	10
B221A09347HP	B222A09347HP	9,347	.3680	—	U	1,7	40	10
B221A09400HP	—	9,400	.3701	—	—	1,8	40	10
B221A09500HP	B222A09500HP	9,500	.3740	—	—	1,8	40	10
B221A09525HP	B222A09525HP	9,525	.3750	3/8	—	1,8	40	10
B221A09600HP	—	9,600	.3780	—	—	1,8	40	10
B221A09700HP	—	9,700	.3819	—	—	1,8	40	10
B221A09800HP	B222A09800HP	9,800	.3858	—	—	1,8	40	10
B221A09900HP	—	9,900	.3898	—	—	1,8	40	10
B221A09921HP	B222A09921HP	9,921	.3906	25/64	—	1,9	40	10
B221A10000HP	B222A10000HP	10,000	.3937	—	—	1,9	40	10
B221A10100HP	—	10,100	.3976	—	—	1,9	45	12
B221A10200HP	B222A10200HP	10,200	.4016	—	—	1,9	45	12
B221A10300HP	—	10,300	.4055	—	—	1,9	45	12
B221A10320HP	B222A10320HP	10,320	.4063	13/32	—	1,9	45	12
B221A10400HP	—	10,400	.4094	—	—	1,9	45	12
B221A10500HP	B222A10500HP	10,500	.4134	—	—	2,0	45	12
B221A10600HP	—	10,600	.4173	—	—	2,0	45	12
B221A10700HP	—	10,700	.4213	—	—	2,0	45	12
B221A10716HP	B222A10716HP	10,716	.4219	27/64	—	2,0	45	12
B221A10800HP	B222A10800HP	10,800	.4252	—	—	2,0	45	12
B221A10900HP	—	10,900	.4291	—	—	2,0	45	12
B221A11000HP	B222A11000HP	11,000	.4331	—	—	2,1	45	12
B221A11100HP	—	11,100	.4370	—	—	2,1	45	12
B221A11113HP	B222A11113HP	11,113	.4375	7/16	—	2,1	45	12
B221A11200HP	—	11,200	.4409	—	—	2,1	45	12
B221A11300HP	—	11,300	.4449	—	—	2,1	45	12
B221A11400HP	—	11,400	.4488	—	—	2,1	45	12
B221A11500HP	B222A11500HP	11,500	.4528	—	—	2,1	45	12
B221A11509HP	B222A11509HP	11,509	.4531	29/64	—	2,1	45	12
B221A11600HP	—	11,600	.4567	—	—	2,2	45	12
B221A11700HP	—	11,700	.4606	—	—	2,2	45	12
B221A11800HP	—	11,800	.4646	—	—	2,2	45	12
B221A11900HP	—	11,900	.4685	—	—	2,2	45	12
B221A11908HP	B222A11908HP	11,908	.4688	15/32	—	2,2	45	12
B221A12000HP	B222A12000HP	12,000	.4724	—	—	2,2	45	12
B221A12100HP	—	12,100	.4764	—	—	2,3	45	14
B221A12200HP	—	12,200	.4803	—	—	2,3	45	14
B221A12300HP	—	12,300	.4843	—	—	2,3	45	14
—	B222A12304HP	12,304	.4844	31/64	—	2,3	45	14
B221A12400HP	—	12,400	.4882	—	—	2,3	45	14
B221A12500HP	B222A12500HP	12,500	.4921	—	—	2,3	45	14
B221A12600HP	—	12,600	.4961	—	—	2,3	45	14
B221A12700HP	B222A12700HP	12,700	.5000	1/2	—	2,4	45	14
B221A12800HP	—	12,800	.5039	—	—	2,4	45	14
B221A12900HP	—	12,900	.5079	—	—	2,4	45	14
B221A13000HP	B222A13000HP	13,000	.5118	—	—	2,4	45	14
B221A13100HP	—	13,100	.5157	—	—	2,4	45	14
B221A13200HP	—	13,200	.5197	—	—	2,5	45	14

(continued)

(B221/B222_HP • ~3 x D / ~5 x D continued)



short • KCPK15



long • KCPK15

		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
B221A13300HP	—	13,300	.5236	—	—	2,5	45	14
B221A13500HP	B222A13500HP	13,500	.5315	—	—	2,5	45	14
B221A13600HP	—	13,600	.5354	—	—	2,5	45	14
B221A13700HP	—	13,700	.5394	—	—	2,6	45	14
B221A13800HP	—	13,800	.5433	—	—	2,6	45	14
B221A13891HP	—	13,891	.5469	35/64	—	2,6	45	14
B221A13900HP	—	13,900	.5472	—	—	2,6	45	14
B221A14000HP	B222A14000HP	14,000	.5512	—	—	2,6	45	14
B221A14100HP	—	14,100	.5551	—	—	2,6	48	16
B221A14200HP	—	14,200	.5591	—	—	2,6	48	16
B221A14288HP	B222A14288HP	14,288	.5625	9/16	—	2,7	48	16
B221A14300HP	—	14,300	.5630	—	—	2,7	48	16
B221A14400HP	—	14,400	.5669	—	—	2,7	48	16
B221A14500HP	B222A14500HP	14,500	.5709	—	—	2,7	48	16
B221A14600HP	—	14,600	.5748	—	—	2,7	48	16
B221A14684HP	—	14,684	.5781	37/64	—	2,7	48	16
B221A14700HP	—	14,700	.5787	—	—	2,7	48	16
B221A14800HP	—	14,800	.5827	—	—	2,8	48	16
B221A14900HP	—	14,900	.5866	—	—	2,8	48	16
B221A15000HP	B222A15000HP	15,000	.5906	—	—	2,8	48	16
B221A15083HP	—	15,083	.5938	19/32	—	2,8	48	16
B221A15100HP	—	15,100	.5945	—	—	2,8	48	16
B221A15200HP	—	15,200	.5984	—	—	2,8	48	16
B221A15300HP	—	15,300	.6024	—	—	2,8	48	16
B221A15400HP	—	15,400	.6063	—	—	2,9	48	16
B221A15479HP	—	15,479	.6094	39/64	—	2,9	48	16
B221A15500HP	B222A15500HP	15,500	.6102	—	—	2,9	48	16
B221A15600HP	—	15,600	.6142	—	—	2,9	48	16
B221A15700HP	—	15,700	.6181	—	—	2,9	48	16
B221A15800HP	—	15,800	.6220	—	—	2,9	48	16
B221A15875HP	B222A15875HP	15,875	.6250	5/8	—	3,0	48	16
B221A15900HP	—	15,900	.6260	—	—	3,0	48	16
B221A16000HP	B222A16000HP	16,000	.6299	—	—	3,0	48	16
B221A16500HP	B222A16500HP	16,500	.6496	—	—	3,1	48	18
B221A17000HP	B222A17000HP	17,000	.6693	—	—	3,2	48	18
B221A17463HP	B222A17463HP	17,463	.6875	11/16	—	3,2	48	18
B221A17500HP	B222A17500HP	17,500	.6890	—	—	3,3	48	18
B221A17700HP	—	17,700	.6969	—	—	3,3	48	18
B221A18000HP	B222A18000HP	18,000	.7087	—	—	3,3	48	18
B221A18500HP	B222A18500HP	18,500	.7283	—	—	3,4	50	20
B221A19000HP	B222A19000HP	19,000	.7480	—	—	3,5	50	20
B221A19050HP	B222A19050HP	19,050	.7500	3/4	—	3,5	50	20
B221A19500HP	—	19,500	.7677	—	—	3,6	50	20
B221A20000HP	B222A20000HP	20,000	.7874	—	—	3,7	50	20
B221A20500HP	—	20,500	.8071	—	—	3,8	50	20
B221A21000HP	—	21,000	.8268	—	—	3,9	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

■ HP Drills • B221_HP, B222_HP Series • Grade KCPK15™ • Flood Coolant for Drill Diameters 3–20mm

Solid Carbide Drills

		Cutting Speed – vc			Metric								
		Range – m/min			Recommended Feed Rate (f) by Diameter								
Material Group		min	Starting Value	max		3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0
	P	1	70	110	150	mm/r	0,08 - 0,16	0,07 - 0,17	0,08 - 0,24	0,08 - 0,29	0,09 - 0,35	0,12 - 0,42	0,25 - 0,55
2		90	120	160	mm/r	0,08 - 0,15	0,07 - 0,14	0,12 - 0,23	0,14 - 0,29	0,16 - 0,28	0,19 - 0,40	0,25 - 0,50	0,33 - 0,60
3		60	90	120	mm/r	0,09 - 0,16	0,09 - 0,17	0,15 - 0,27	0,18 - 0,33	0,20 - 0,35	0,25 - 0,44	0,33 - 0,55	0,37 - 0,67
4		50	80	120	mm/r	0,08 - 0,16	0,08 - 0,17	0,13 - 0,27	0,16 - 0,33	0,17 - 0,33	0,21 - 0,44	0,26 - 0,54	0,32 - 0,62
6		50	80	120	mm/r	0,06 - 0,11	0,07 - 0,13	0,09 - 0,17	0,13 - 0,24	0,15 - 0,24	0,18 - 0,30	0,23 - 0,40	0,28 - 0,49
K		1	70	100	120	mm/r	0,11 - 0,21	0,09 - 0,18	0,14 - 0,28	0,16 - 0,37	0,20 - 0,40	0,22 - 0,45	0,28 - 0,58
	2	70	120	120	mm/r	0,11 - 0,19	0,09 - 0,16	0,14 - 0,23	0,16 - 0,32	0,19 - 0,32	0,22 - 0,37	0,28 - 0,47	0,36 - 0,60
	3	50	90	130	mm/r	0,08 - 0,17	0,07 - 0,14	0,12 - 0,25	0,13 - 0,27	0,16 - 0,29	0,18 - 0,39	0,25 - 0,48	0,29 - 0,58



Carbide Recycling

Help preserve and protect our planet!

It's easy for your company to be environmentally conscious with the Kennametal Carbide Recycling Program.

By sending us your used carbide tools, you help preserve and protect the environment and ensure that these products are recycled responsibly. Kennametal accepts any coated or non-coated carbide items, including inserts, drills, reamers, and taps.

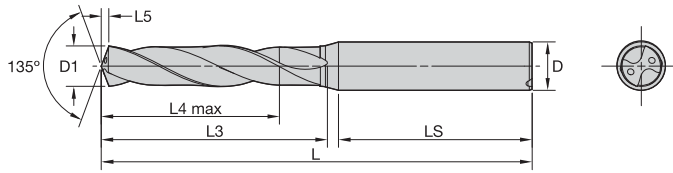


By using the Kennametal Carbide Recycling Program, you will receive:

- A partner who cares about a sustainable environment.
- Easy-to-use web portal to value your used carbide.
- Access to our popular Green Box™ options for carbide collection.
- Systematic and efficient disposal of carbide materials.
- Improved profitability.

Program is not currently available in all geographical areas.

For more information, please visit www.kennametal.com/carbiderecycling.

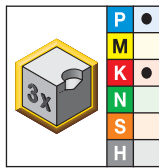


Solid Carbide Drills

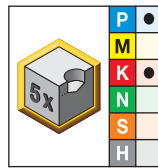
For information on L, L3, and L4 max, see the Solid Carbide foldout table.



■ B224/B225_HP • ~3 x D/~5 x D



short • KCPK15



long • KCPK15

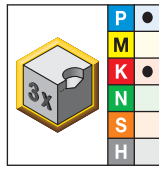
- first choice
- alternate choice

		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
B224A03000HP	B225A03000HP	3,000	.1181	—	—	0,6	36	6
B224A03048HP	B225A03048HP	3,048	.1200	—	31	0,6	36	6
B224A03100HP	B225A03100HP	3,100	.1220	—	—	0,6	36	6
B224A03175HP	B225A03175HP	3,175	.1250	1/8	—	0,6	36	6
B224A03200HP	B225A03200HP	3,200	.1260	—	—	0,6	36	6
B224A03264HP	B225A03264HP	3,264	.1285	—	30	0,6	36	6
B224A03300HP	B225A03300HP	3,300	.1299	—	—	0,6	36	6
B224A03400HP	B225A03400HP	3,400	.1339	—	—	0,6	36	6
B224A03455HP	B225A03455HP	3,455	.1360	—	29	0,7	36	6
B224A03500HP	B225A03500HP	3,500	.1378	—	—	0,7	36	6
B224A03571HP	B225A03571HP	3,571	.1406	9/64	—	0,7	36	6
B224A03600HP	B225A03600HP	3,600	.1417	—	—	0,7	36	6
B224A03658HP	—	3,658	.1440	—	27	0,7	36	6
B224A03700HP	B225A03700HP	3,700	.1457	—	—	0,7	36	6
B224A03734HP	—	3,734	.1470	—	26	0,7	36	6
B224A03797HP	B225A03797HP	3,797	.1495	—	25	0,7	36	6
B224A03800HP	B225A03800HP	3,800	.1496	—	—	0,7	36	6
B224A03900HP	B225A03900HP	3,900	.1535	—	—	0,7	36	6
B224A03970HP	B225A03970HP	3,970	.1563	5/32	—	0,7	36	6
B224A04000HP	B225A04000HP	4,000	.1575	—	—	0,8	36	6
B224A04039HP	—	4,039	.1590	—	21	0,8	36	6
B224A04090HP	—	4,090	.1610	—	20	0,8	36	6
—	B225A04100HP	4,100	.1614	—	—	0,8	36	6
B224A04200HP	B225A04200HP	4,200	.1654	—	—	0,8	36	6
B224A04217HP	—	4,217	.1660	—	19	0,8	36	6
—	B225A04300HP	4,300	.1693	—	—	0,8	36	6
B224A04366HP	B225A04366HP	4,366	.1719	11/64	—	0,8	36	6
—	B225A04400HP	4,400	.1732	—	—	0,8	36	6
B224A04496HP	B225A04496HP	4,496	.1770	—	16	0,8	36	6
—	B225A04500HP	4,500	.1772	—	—	0,8	36	6
—	B225A04600HP	4,600	.1811	—	—	0,9	36	6
B224A04623HP	—	4,623	.1820	—	14	0,9	36	6
B224A04700HP	B225A04700HP	4,700	.1850	—	13	0,9	36	6
—	B225A04760HP	4,760	.1874	—	—	0,9	36	6
B224A04763HP	—	4,763	.1875	3/16	—	0,9	36	6
—	B225A04800HP	4,800	.1890	—	12	0,9	36	6
B224A04852HP	—	4,852	.1910	—	11	0,9	36	6
—	B225A04900HP	4,900	.1929	—	—	0,9	36	6
B224A05000HP	B225A05000HP	5,000	.1969	—	—	0,9	36	6
B224A05100HP	B225A05100HP	5,100	.2008	—	—	1,0	36	6

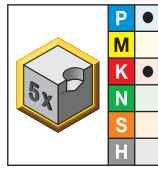
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(B224/B225_HP • ~3 x D/-5 x D continued)

Solid Carbide Drills



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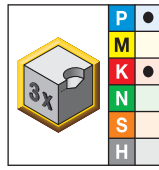


long • KCPK15

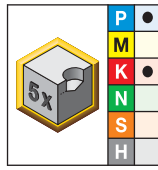
		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
B224A05106HP	B225A05106HP	5,106	.2010	—	7	1,0	36	6
B224A05159HP	B225A05159HP	5,159	.2031	13/64	—	1,0	36	6
—	B225A05200HP	5,200	.2047	—	—	1,0	36	6
—	B225A05300HP	5,300	.2087	—	—	1,0	36	6
—	B225A05400HP	5,400	.2126	—	—	1,0	36	6
B224A05410HP	B225A05410HP	5,410	.2130	—	3	1,0	36	6
B224A05500HP	B225A05500HP	5,500	.2165	—	—	1,0	36	6
B224A05558HP	B225A05558HP	5,558	.2188	7/32	—	1,0	36	6
B224A05600HP	B225A05600HP	5,600	.2205	—	—	1,1	36	6
B224A05616HP	—	5,616	.2211	—	2	1,1	36	6
—	B225A05700HP	5,700	.2244	—	—	1,1	36	6
B224A05791HP	B225A05791HP	5,791	.2280	—	1	1,1	36	6
—	B225A05800HP	5,800	.2283	—	—	1,1	36	6
—	B225A05900HP	5,900	.2323	—	—	1,1	36	6
B224A05944HP	B225A05944HP	5,944	.2340	—	A	1,1	36	6
B224A05954HP	B225A05954HP	5,954	.2344	15/64	—	1,1	36	6
B224A06000HP	B225A06000HP	6,000	.2362	—	—	1,1	36	6
—	B225A06100HP	6,100	.2402	—	—	1,1	36	8
—	B225A06200HP	6,200	.2441	—	—	1,2	36	8
—	B225A06300HP	6,300	.2480	—	—	1,2	36	8
B224A06350HP	B225A06350HP	6,350	.2500	1/4	E	1,2	36	8
—	B225A06400HP	6,400	.2520	—	—	1,2	36	8
B224A06500HP	B225A06500HP	6,500	.2559	—	—	1,2	36	8
B224A06528HP	B225A06528HP	6,528	.2570	—	F	1,2	36	8
—	B225A06600HP	6,600	.2598	—	—	1,2	36	8
B224A06630HP	—	6,630	.2610	—	G	1,2	36	8
B224A06700HP	B225A06700HP	6,700	.2638	—	—	1,3	36	8
B224A06746HP	B225A06746HP	6,746	.2656	17/64	—	1,3	36	8
B224A06800HP	B225A06800HP	6,800	.2677	—	—	1,3	36	8
—	B225A06900HP	6,900	.2717	—	—	1,3	36	8
B224A06909HP	B225A06909HP	6,909	.2720	—	I	1,3	36	8
B224A07000HP	B225A07000HP	7,000	.2756	—	—	1,3	36	8
—	B225A07100HP	7,100	.2795	—	—	1,3	36	8
B224A07145HP	B225A07145HP	7,145	.2813	9/32	—	1,3	36	8
—	B225A07200HP	7,200	.2835	—	—	1,3	36	8
—	B225A07300HP	7,300	.2874	—	—	1,4	36	8
B224A07366HP	B225A07366HP	7,366	.2900	—	L	1,4	36	8
B224A07400HP	B225A07400HP	7,400	.2913	—	—	1,4	36	8
B224A07500HP	B225A07500HP	7,500	.2953	—	—	1,4	36	8
B224A07541HP	B225A07541HP	7,541	.2969	19/64	—	1,4	36	8
—	B225A07600HP	7,600	.2992	—	—	1,4	36	8
—	B225A07700HP	7,700	.3031	—	—	1,4	36	8
—	B225A07800HP	7,800	.3071	—	—	1,5	36	8
—	B225A07900HP	7,900	.3110	—	—	1,5	36	8
B224A07938HP	B225A07938HP	7,938	.3125	5/16	—	1,5	36	8
B224A08000HP	B225A08000HP	8,000	.3150	—	—	1,5	36	8
—	B225A08100HP	8,100	.3189	—	—	1,5	40	10
B224A08200HP	B225A08200HP	8,200	.3228	—	—	1,5	40	10
—	B225A08300HP	8,300	.3268	—	—	1,6	40	10
B224A08334HP	B225A08334HP	8,334	.3281	21/64	—	1,6	40	10
—	B225A08400HP	8,400	.3307	—	—	1,6	40	10
B224A08433HP	B225A08433HP	8,433	.3320	—	Q	1,6	40	10

(continued)

(B224/B225_HP • ~3 x D / ~5 x D continued)



short • KCPK15



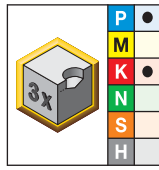
long • KCPK15

		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
B224A08500HP	B225A08500HP	8,500	.3346	—	—	1,6	40	10
—	B225A08600HP	8,600	.3386	—	—	1,6	40	10
B224A08700HP	B225A08700HP	8,700	.3425	—	—	1,6	40	10
B224A08733HP	B225A08733HP	8,733	.3438	11/32	—	1,6	40	10
B224A08800HP	B225A08800HP	8,800	.3465	—	—	1,6	40	10
B224A08839HP	B225A08839HP	8,839	.3480	—	S	1,7	40	10
—	B225A08900HP	8,900	.3504	—	—	1,7	40	10
B224A09000HP	B225A09000HP	9,000	.3543	—	—	1,7	40	10
B224A09093HP	B225A09093HP	9,093	.3580	—	T	1,7	40	10
—	B225A09100HP	9,100	.3583	—	—	1,7	40	10
B224A09129HP	B225A09129HP	9,129	.3594	23/64	—	1,7	40	10
—	B225A09200HP	9,200	.3622	—	—	1,7	40	10
—	B225A09300HP	9,300	.3661	—	—	1,7	40	10
—	B225A09347HP	9,347	.3680	—	U	1,7	40	10
B224A09400HP	B225A09400HP	9,400	.3701	—	—	1,8	40	10
B224A09500HP	B225A09500HP	9,500	.3740	—	—	1,8	40	10
B224A09525HP	B225A09525HP	9,525	.3750	3/8	—	1,8	40	10
—	B225A09600HP	9,600	.3780	—	—	1,8	40	10
—	B225A09700HP	9,700	.3819	—	—	1,8	40	10
—	B225A09800HP	9,800	.3858	—	—	1,8	40	10
—	B225A09900HP	9,900	.3898	—	—	1,8	40	10
B224A09921HP	B225A09921HP	9,921	.3906	25/64	—	1,9	40	10
B224A10000HP	B225A10000HP	10,000	.3937	—	—	1,9	40	10
—	B225A10100HP	10,100	.3976	—	—	1,9	45	12
B224A10200HP	B225A10200HP	10,200	.4016	—	—	1,9	45	12
B224A10300HP	B225A10300HP	10,300	.4055	—	—	1,9	45	12
B224A10320HP	B225A10320HP	10,320	.4063	13/32	—	1,9	45	12
B224A10400HP	B225A10400HP	10,400	.4094	—	—	1,9	45	12
B224A10500HP	B225A10500HP	10,500	.4134	—	—	2,0	45	12
—	B225A10600HP	10,600	.4173	—	—	2,0	45	12
—	B225A10700HP	10,700	.4213	—	—	2,0	45	12
B224A10716HP	B225A10716HP	10,716	.4219	27/64	—	2,0	45	12
B224A10800HP	B225A10800HP	10,800	.4252	—	—	2,0	45	12
—	B225A10900HP	10,900	.4291	—	—	2,0	45	12
B224A11000HP	B225A11000HP	11,000	.4331	—	—	2,1	45	12
—	B225A11100HP	11,100	.4370	—	—	2,1	45	12
B224A11113HP	B225A11113HP	11,113	.4375	7/16	—	2,1	45	12
—	B225A11200HP	11,200	.4409	—	—	2,1	45	12
—	B225A11300HP	11,300	.4449	—	—	2,1	45	12
—	B225A11400HP	11,400	.4488	—	—	2,1	45	12
B224A11500HP	B225A11500HP	11,500	.4528	—	—	2,1	45	12
B224A11509HP	B225A11509HP	11,509	.4531	29/64	—	2,1	45	12
—	B225A11600HP	11,600	.4567	—	—	2,2	45	12
—	B225A11700HP	11,700	.4606	—	—	2,2	45	12
—	B225A11800HP	11,800	.4646	—	—	2,2	45	12
—	B225A11900HP	11,900	.4685	—	—	2,2	45	12
B224A11908HP	B225A11908HP	11,908	.4688	15/32	—	2,2	45	12
B224A12000HP	B225A12000HP	12,000	.4724	—	—	2,2	45	12
—	B225A12100HP	12,100	.4764	—	—	2,3	45	14
—	B225A12200HP	12,200	.4803	—	—	2,3	45	14
B224A12300HP	B225A12300HP	12,300	.4843	—	—	2,3	45	14
B224A12304HP	B225A12304HP	12,304	.4844	31/64	—	2,3	45	14

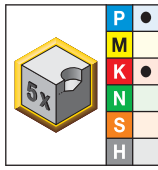
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(B224/B225_HP • ~3 x D/-5 x D continued)

Solid Carbide Drills



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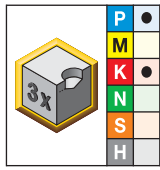
		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
—	B225A12400HP	12,400	.4882	—	—	2,3	45	14
B224A12500HP	B225A12500HP	12,500	.4921	—	—	2,3	45	14
—	B225A12600HP	12,600	.4961	—	—	2,3	45	14
B224A12700HP	B225A12700HP	12,700	.5000	1/2	—	2,4	45	14
B224A12800HP	B225A12800HP	12,800	.5039	—	—	2,4	45	14
—	B225A12900HP	12,900	.5079	—	—	2,4	45	14
B224A13000HP	B225A13000HP	13,000	.5118	—	—	2,4	45	14
B224A13096HP	—	13,096	.5156	33/64	—	2,4	45	14
B224A13100HP	B225A13100HP	13,100	.5157	—	—	2,4	45	14
—	B225A13200HP	13,200	.5197	—	—	2,5	45	14
—	B225A13300HP	13,300	.5236	—	—	2,5	45	14
—	B225A13400HP	13,400	.5276	—	—	2,5	45	14
B224A13495HP	B225A13495HP	13,495	.5313	17/32	—	2,5	45	14
B224A13500HP	B225A13500HP	13,500	.5315	—	—	2,5	45	14
—	B225A13600HP	13,600	.5354	—	—	2,5	45	14
—	B225A13700HP	13,700	.5394	—	—	2,6	45	14
—	B225A13800HP	13,800	.5433	—	—	2,6	45	14
B224A13891HP	B225A13891HP	13,891	.5469	35/64	—	2,6	45	14
—	B225A13900HP	13,900	.5472	—	—	2,6	45	14
B224A14000HP	B225A14000HP	14,000	.5512	—	—	2,6	45	14
—	B225A14100HP	14,100	.5551	—	—	2,6	48	16
—	B225A14200HP	14,200	.5591	—	—	2,6	48	16
B224A14288HP	B225A14288HP	14,288	.5625	9/16	—	2,7	48	16
—	B225A14300HP	14,300	.5630	—	—	2,7	48	16
—	B225A14400HP	14,400	.5669	—	—	2,7	48	16
B224A14500HP	B225A14500HP	14,500	.5709	—	—	2,7	48	16
—	B225A14600HP	14,600	.5748	—	—	2,7	48	16
B224A14684HP	B225A14684HP	14,684	.5781	37/64	—	2,7	48	16
—	B225A14700HP	14,700	.5787	—	—	2,7	48	16
—	B225A14800HP	14,800	.5827	—	—	2,8	48	16
—	B225A14900HP	14,900	.5866	—	—	2,8	48	16
—	B225A15000HP	15,000	.5906	—	—	2,8	48	16
B224A15083HP	B225A15083HP	15,083	.5938	19/32	—	2,8	48	16
—	B225A15100HP	15,100	.5945	—	—	2,8	48	16
—	B225A15200HP	15,200	.5984	—	—	2,8	48	16
—	B225A15300HP	15,300	.6024	—	—	2,8	48	16
—	B225A15400HP	15,400	.6063	—	—	2,9	48	16
B224A15479HP	B225A15479HP	15,479	.6094	39/64	—	2,9	48	16
B224A15500HP	B225A15500HP	15,500	.6102	—	—	2,9	48	16
B224A15600HP	B225A15600HP	15,600	.6142	—	—	2,9	48	16
—	B225A15700HP	15,700	.6181	—	—	2,9	48	16
—	B225A15800HP	15,800	.6220	—	—	2,9	48	16
B224A15875HP	B225A15875HP	15,875	.6250	5/8	—	3,0	48	16
—	B225A15900HP	15,900	.6260	—	—	3,0	48	16
B224A16000HP	B225A16000HP	16,000	.6299	—	—	3,0	48	16
—	B225A16100HP	16,100	.6339	—	—	3,0	48	18
B224A16500HP	B225A16500HP	16,500	.6496	—	—	3,1	48	18
—	B225A16670HP	16,670	.6563	21/32	—	3,1	48	18

(continued)

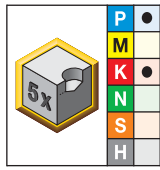
(B224/B225_HP • ~3 x D/-5 x D continued)



Solid Carbide Drills



short • KCPK15



long • KCPK15

		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
B224A17000HP	B225A17000HP	17,000	.6693	—	—	3,2	48	18
B224A17463HP	B225A17463HP	17,463	.6875	11/16	—	3,2	48	18
B224A17500HP	B225A17500HP	17,500	.6890	—	—	3,3	48	18
—	B225A17700HP	17,700	.6969	—	—	3,3	48	18
B224A18000HP	B225A18000HP	18,000	.7087	—	—	3,3	48	18
—	B225A18500HP	18,500	.7283	—	—	3,4	50	20
B224A19000HP	B225A19000HP	19,000	.7480	—	—	3,5	50	20
B224A19050HP	B225A19050HP	19,050	.7500	3/4	—	3,5	50	20
—	B225A19200HP	19,200	.7559	—	—	3,6	50	20
—	B225A19250HP	19,250	.7579	—	—	3,6	50	20
—	B225A19300HP	19,300	.7598	—	—	3,6	50	20
—	B225A19500HP	19,500	.7677	—	—	3,6	50	20
B224A20000HP	B225A20000HP	20,000	.7874	—	—	3,7	50	20
—	B225A20500HP	20,500	.8071	—	—	3,8	50	20
—	B225A21000HP	21,000	.8268	—	—	3,9	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

■ HP Drills • B224HP, B225HP Series • Grade KCPK15™ • Through Coolant or MQL (Minimum Quantity Lubricant) for Drill Diameters 3–20mm

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	1	130	240	290	mm/r	0,09 - 0,18	0,11 - 0,21	0,14 - 0,25	0,16 - 0,34	0,18 - 0,39	0,20 - 0,43	0,22 - 0,51	0,26 - 0,58
	2	190	230	270	mm/r	0,09 - 0,18	0,11 - 0,21	0,14 - 0,25	0,16 - 0,34	0,18 - 0,39	0,20 - 0,43	0,22 - 0,51	0,26 - 0,58
	3	130	160	190	mm/r	0,01 - 0,11	0,12 - 0,21	0,14 - 0,24	0,16 - 0,34	0,18 - 0,39	0,20 - 0,43	0,22 - 0,51	0,26 - 0,58
	4	110	150	170	mm/r	0,07 - 0,15	0,09 - 0,18	0,12 - 0,20	0,15 - 0,28	0,17 - 0,33	0,19 - 0,37	0,22 - 0,43	0,25 - 0,48
	5	110	150	190	mm/r	0,07 - 0,13	0,11 - 0,11	0,12 - 0,20	0,15 - 0,28	0,17 - 0,33	0,19 - 0,37	0,22 - 0,43	0,25 - 0,48
	6	110	150	190	mm/r	0,07 - 0,13	0,11 - 0,11	0,12 - 0,20	0,15 - 0,28	0,17 - 0,33	0,19 - 0,37	0,22 - 0,43	0,25 - 0,48



YPC Beyond™ Drills with Through Coolant for Iron Materials



Primary Application

The all new B25_YPC Series Solid Carbide Drills are specifically engineered to deliver best-in-class hole quality and longest tool life in cast iron, ductile iron, CGI, and ADI. Operate these drills with standard through coolant or MQL.

The B25_YPC Beyond Solid Carbide Drill combines unique Kennametal technologies, such as the Y-TECH™ flute spacing, the HP-point geometry, the KCK10™ Beyond grade, and the latest, proprietary post-coat treatment technology into one tool.

Features and Benefits

Y-TECH Technology with Uneven Flute-to-Flute Angle

- Unbalanced forces by design avoid chipping on margin lands.

Three-Margin Lands

- Reduce pendulum motion by directing forces towards third margin for superior hole accuracy (cylindricity, constant diameter, hole straightness).

New HP Drill-Point Design

- Low thrust prevents workpiece flexing.
- Excellent centring capabilities.
- Highest possible feed rates.

Corner Chamfer

- Avoids breakout when drilling through holes in grey iron.
- Significantly increases tool life at elevated speeds and feeds.

KCK10 Beyond Grade

- The grade contains multiple layers of PVD coating offering outstanding wear resistance for the drilling of cast irons.
- The highly polished surface ensures superior chip evacuation even when low-pressure coolant or MQL is applied.

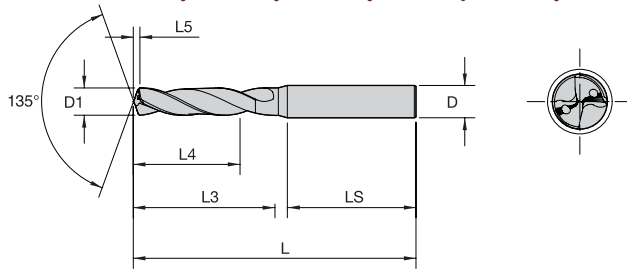
Customisation

- Intermediate diameters available as semi-standards.
- Length variations and step drills available as engineered solutions.
- Using Kennametal Slim Line hydraulic chucks together with standard B25_YPC is recommended if workpiece contours need to be bypassed.

F-Shank

- For standard line items with F-shank, please refer to the e-catalogue on www.kennametal.com.





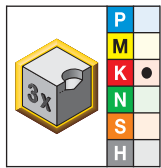
Solid Carbide Drills

NEW!

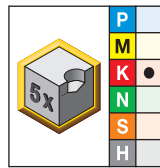
beyond

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

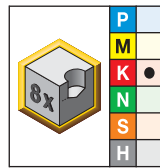
■ B254/B255/B256_YPC • ~3 x D/~5 x D/~8 x D



short • KCK10



long • KCK10



extra long • KCK10

- first choice
- alternate choice

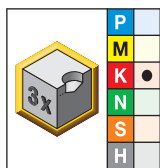
D1 diameter

			D1 diameter						
			mm	in	fraction	wire size	L5	LS	D
B254A03000YPC	B255A03000YPC	B256A03000YPC	3,000	.1181	—	—	0,9	36	6
B254A03048YPC	B255A03048YPC	B256A03048YPC	3,048	.1200	—	31	0,9	36	6
B254A03175YPC	B255A03175YPC	B256A03175YPC	3,175	.1250	1/8	—	0,9	36	6
B254A03200YPC	B255A03200YPC	B256A03200YPC	3,200	.1260	—	—	0,9	36	6
B254A03250YPC	B255A03250YPC	—	3,250	.1280	—	—	0,9	36	6
—	—	B256A03264YPC	3,264	.1285	—	30	0,9	36	6
B254A03300YPC	B255A03300YPC	B256A03300YPC	3,300	.1299	—	—	0,9	36	6
—	B255A03400YPC	—	3,400	.1339	—	—	1,0	36	6
B254A03454YPC	B255A03454YPC	—	3,454	.1360	—	29	1,0	36	6
B254A03500YPC	B255A03500YPC	B256A03500YPC	3,500	.1378	—	—	1,0	36	6
B254A03571YPC	B255A03571YPC	B256A03571YPC	3,571	.1406	9/64	—	1,0	36	6
B254A03600YPC	B255A03600YPC	—	3,600	.1417	—	—	1,0	36	6
—	—	B256A03658YPC	3,658	.1440	—	27	1,0	36	6
B254A03700YPC	B255A03700YPC	B256A03700YPC	3,700	.1457	—	—	1,0	36	6
B254A03734YPC	B255A03734YPC	—	3,734	.1470	—	26	1,1	36	6
B254A03797YPC	B255A03797YPC	—	3,797	.1495	—	25	1,1	36	6
B254A03800YPC	B255A03800YPC	B256A03800YPC	3,800	.1496	—	—	1,1	36	6
B254A03861YPC	B255A03861YPC	—	3,861	.1520	—	24	1,1	36	6
B254A03970YPC	B255A03970YPC	B256A03970YPC	3,970	.1563	5/32	—	1,1	36	6
B254A04000YPC	B255A04000YPC	B256A04000YPC	4,000	.1575	—	—	1,1	36	6
B254A04039YPC	B255A04039YPC	—	4,039	.1590	—	21	1,1	36	6
—	—	B256A04090YPC	4,090	.1610	—	20	1,1	36	6
B254A04100YPC	B255A04100YPC	B256A04100YPC	4,100	.1614	—	—	1,1	36	6
B254A04200YPC	B255A04200YPC	B256A04200YPC	4,200	.1654	—	—	1,2	36	6
—	B255A04217YPC	—	4,217	.1660	—	19	1,2	36	6
—	B255A04300YPC	B256A04300YPC	4,300	.1693	—	—	1,2	36	6
B254A04366YPC	B255A04366YPC	B256A04366YPC	4,366	.1719	11/64	—	1,2	36	6
B254A04496YPC	B255A04496YPC	—	4,496	.1770	—	16	1,2	36	6
B254A04500YPC	B255A04500YPC	B256A04500YPC	4,500	.1772	—	—	1,2	36	6
B254A04572YPC	B255A04572YPC	—	4,572	.1800	—	15	1,3	36	6
—	B255A04600YPC	—	4,600	.1811	—	—	1,3	36	6
—	—	B256A04623YPC	4,623	.1820	—	14	1,3	36	6
B254A04700YPC	B255A04700YPC	B256A04700YPC	4,700	.1850	—	13	1,3	36	6
B254A04763YPC	B255A04763YPC	—	4,763	.1875	3/16	—	1,3	36	6
B254A04800YPC	B255A04800YPC	B256A04800YPC	4,800	.1890	—	12	1,3	36	6
—	—	B256A04852YPC	4,852	.1910	—	11	1,3	36	6
—	B255A04900YPC	—	4,900	.1929	—	—	1,3	36	6
B254A05000YPC	B255A05000YPC	B256A05000YPC	5,000	.1969	—	—	1,4	36	6
B254A05055YPC	B255A05055YPC	—	5,055	.1990	—	8	1,4	36	6
B254A05100YPC	B255A05100YPC	B256A05100YPC	5,100	.2008	—	—	1,4	36	6

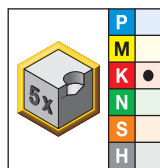
(continued)

(B254/B255/B256_YPC • ~3 x D/~5 x D/~8 x D continued)

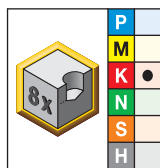
Solid Carbide Drills



short • KCK10



long • KCK10



extra long • KCK10

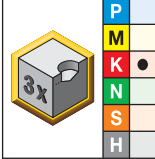
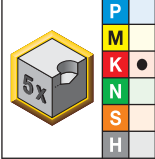
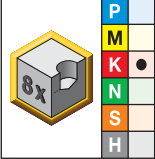
			D1 diameter				L5	LS	D
			mm	in	fraction	wire size			
B254A05106YPC	B255A05106YPC	—	5,106	.2010	—	7	1,4	36	6
B254A05159YPC	B255A05159YPC	B256A05159YPC	5,159	.2031	13/64	—	1,4	36	6
—	B255A05200YPC	B256A05200YPC	5,200	.2047	—	—	1,4	36	6
—	B255A05250YPC	—	5,250	.2067	—	—	1,4	36	6
B254A05300YPC	B255A05300YPC	B256A05300YPC	5,300	.2087	—	—	1,4	36	6
—	B255A05400YPC	—	5,400	.2126	—	—	1,5	36	6
B254A05410YPC	B255A05410YPC	—	5,410	.2130	—	3	1,5	36	6
B254A05500YPC	B255A05500YPC	B256A05500YPC	5,500	.2165	—	—	1,5	36	6
B254A05558YPC	B255A05558YPC	—	5,558	.2188	7/32	—	1,5	36	6
B254A05600YPC	B255A05600YPC	B256A05600YPC	5,600	.2205	—	—	1,5	36	6
—	—	B256A05616YPC	5,616	.2211	—	2	1,5	36	6
B254A05700YPC	B255A05700YPC	B256A05700YPC	5,700	.2244	—	—	1,5	36	6
B254A05791YPC	B255A05791YPC	—	5,791	.2280	—	1	1,6	36	6
B254A05800YPC	B255A05800YPC	B256A05800YPC	5,800	.2283	—	—	1,6	36	6
—	—	B256A05900YPC	5,900	.2323	—	—	1,6	36	6
B254A05944YPC	B255A05944YPC	—	5,944	.2340	—	A	1,6	36	6
B254A05954YPC	B255A05954YPC	B256A05954YPC	5,954	.2344	15/64	—	1,6	36	6
B254A06000YPC	B255A06000YPC	B256A06000YPC	6,000	.2362	—	—	1,6	36	6
B254A06100YPC	B255A06100YPC	—	6,100	.2402	—	—	1,6	36	8
B254A06200YPC	B255A06200YPC	B256A06200YPC	6,200	.2441	—	—	1,7	36	8
—	B255A06300YPC	—	6,300	.2480	—	—	1,7	36	8
B254A06350YPC	B255A06350YPC	B256A06350YPC	6,350	.2500	1/4	E	1,7	36	8
—	B255A06400YPC	B256A06400YPC	6,400	.2520	—	—	1,7	36	8
B254A06500YPC	B255A06500YPC	B256A06500YPC	6,500	.2559	—	—	1,7	36	8
B254A06528YPC	B255A06528YPC	—	6,528	.2570	—	F	1,7	36	8
B254A06600YPC	B255A06600YPC	B256A06600YPC	6,600	.2598	—	—	1,8	36	8
—	B255A06630YPC	—	6,630	.2610	—	G	1,8	36	8
B254A06700YPC	B255A06700YPC	B256A06700YPC	6,700	.2638	—	—	1,8	36	8
B254A06746YPC	B255A06746YPC	—	6,746	.2656	17/64	—	1,8	36	8
B254A06800YPC	B255A06800YPC	B256A06800YPC	6,800	.2677	—	—	1,8	36	8
B254A06900YPC	B255A06900YPC	—	6,900	.2717	—	—	1,8	36	8
B254A06909YPC	B255A06909YPC	—	6,909	.2720	—	I	1,8	36	8
B254A07000YPC	B255A07000YPC	B256A07000YPC	7,000	.2756	—	—	1,9	36	8
B254A07100YPC	—	—	7,100	.2795	—	—	1,9	36	8
—	B255A07145YPC	—	7,145	.2813	9/32	—	1,9	36	8
—	B255A07200YPC	—	7,200	.2835	—	—	1,9	36	8
—	B255A07300YPC	B256A07300YPC	7,300	.2874	—	—	1,9	36	8
B254A07366YPC	B255A07366YPC	—	7,366	.2900	—	L	1,9	36	8
B254A07400YPC	B255A07400YPC	—	7,400	.2913	—	—	2,0	36	8
B254A07493YPC	B255A07493YPC	—	7,493	.2950	—	M	2,0	36	8
B254A07500YPC	B255A07500YPC	B256A07500YPC	7,500	.2953	—	—	2,0	36	8
B254A07541YPC	B255A07541YPC	—	7,541	.2969	19/64	—	2,0	36	8
B254A07600YPC	B255A07600YPC	B256A07600YPC	7,600	.2992	—	—	2,0	36	8
—	B255A07700YPC	—	7,700	.3031	—	—	2,0	36	8
B254A07800YPC	B255A07800YPC	B256A07800YPC	7,800	.3071	—	—	2,1	36	8
B254A07900YPC	B255A07900YPC	—	7,900	.3110	—	—	2,1	36	8
B254A07938YPC	B255A07938YPC	—	7,938	.3125	5/16	—	2,1	36	8
B254A08000YPC	B255A08000YPC	B256A08000YPC	8,000	.3150	—	—	2,1	36	8
B254A08100YPC	B255A08100YPC	—	8,100	.3189	—	—	2,1	40	10
B254A08200YPC	B255A08200YPC	B256A08200YPC	8,200	.3228	—	—	2,1	40	10
—	B255A08300YPC	B256A08300YPC	8,300	.3268	—	—	2,2	40	10
B254A08334YPC	B255A08334YPC	—	8,334	.3281	21/64	—	2,2	40	10

(continued)

(B254/B255/B256_YPC • ~3 x D/~5 x D/~8 x D continued)



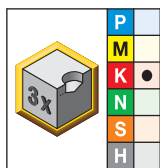
Solid Carbide Drills

	 short • KCK10	 long • KCK10	 extra long • KCK10	D1 diameter				L5	LS	D
				mm	in	fraction	wire size			
B254A08400YPC		—	—	8,400	.3307	—	—	2,2	40	10
B254A08433YPC		B255A08433YPC	—	8,433	.3320	—	Q	2,2	40	10
B254A08500YPC		B255A08500YPC	B256A08500YPC	8,500	.3346	—	—	2,2	40	10
B254A08600YPC		B255A08600YPC	B256A08600YPC	8,600	.3386	—	—	2,2	40	10
B254A08700YPC		B255A08700YPC	B256A08700YPC	8,700	.3425	—	—	2,3	40	10
B254A08733YPC		B255A08733YPC	—	8,733	.3438	11/32	—	2,3	40	10
B254A08800YPC		B255A08800YPC	B256A08800YPC	8,800	.3465	—	—	2,3	40	10
B254A08839YPC		B255A08839YPC	—	8,839	.3480	—	S	2,3	40	10
B254A08900YPC		B255A08900YPC	—	8,900	.3504	—	—	2,3	40	10
B254A09000YPC		B255A09000YPC	B256A09000YPC	9,000	.3543	—	—	2,3	40	10
B254A09093YPC		B255A09093YPC	—	9,093	.3580	—	T	2,4	40	10
B254A09100YPC		B255A09100YPC	B256A09100YPC	9,100	.3583	—	—	2,4	40	10
B254A09129YPC		B255A09129YPC	—	9,129	.3594	23/64	—	2,4	40	10
B254A09200YPC		B255A09200YPC	B256A09200YPC	9,200	.3622	—	—	2,4	40	10
—		B255A09300YPC	B256A09300YPC	9,300	.3661	—	—	2,4	40	10
—		—	B256A09347YPC	9,347	.3680	—	U	2,4	40	10
B254A09400YPC		B255A09400YPC	B256A09400YPC	9,400	.3701	—	—	2,4	40	10
B254A09500YPC		B255A09500YPC	B256A09500YPC	9,500	.3740	—	—	2,5	40	10
B254A09525YPC		B255A09525YPC	—	9,525	.3750	3/8	—	2,5	40	10
—		B255A09600YPC	B256A09600YPC	9,600	.3780	—	—	2,5	40	10
—		B255A09700YPC	B256A09700YPC	9,700	.3819	—	—	2,5	40	10
B254A09800YPC		B255A09800YPC	B256A09800YPC	9,800	.3858	—	—	2,5	40	10
B254A09921YPC		B255A09921YPC	—	9,921	.3906	25/64	—	2,6	40	10
B254A10000YPC		B255A10000YPC	B256A10000YPC	10,000	.3937	—	—	2,6	40	10
B254A10200YPC		B255A10200YPC	B256A10200YPC	10,200	.4016	—	—	2,6	45	12
B254A10262YPC		B255A10262YPC	—	10,262	.4040	—	Y	2,6	45	12
B254A10300YPC		B255A10300YPC	B256A10300YPC	10,300	.4055	—	—	2,6	45	12
B254A10320YPC		B255A10320YPC	—	10,320	.4063	13/32	—	2,7	45	12
B254A10400YPC		B255A10400YPC	B256A10400YPC	10,400	.4094	—	—	2,7	45	12
B254A10490YPC		B255A10490YPC	—	10,490	.4130	—	Z	2,7	45	12
B254A10500YPC		B255A10500YPC	B256A10500YPC	10,500	.4134	—	—	2,7	45	12
—		B255A10600YPC	—	10,600	.4173	—	—	2,7	45	12
B254A10700YPC		—	B256A10700YPC	10,700	.4213	—	—	2,7	45	12
B254A10716YPC		B255A10716YPC	—	10,716	.4219	27/64	—	2,7	45	12
B254A10800YPC		B255A10800YPC	B256A10800YPC	10,800	.4252	—	—	2,8	45	12
B254A10900YPC		B255A10900YPC	—	10,900	.4291	—	—	2,8	45	12
B254A11000YPC		B255A11000YPC	B256A11000YPC	11,000	.4331	—	—	2,8	45	12
B254A11100YPC		B255A11100YPC	—	11,100	.4370	—	—	2,8	45	12
B254A11113YPC		B255A11113YPC	—	11,113	.4375	7/16	—	2,8	45	12
B254A11200YPC		B255A11200YPC	B256A11200YPC	11,200	.4409	—	—	2,9	45	12
—		B255A11300YPC	B256A11300YPC	11,300	.4449	—	—	2,9	45	12
B254A11500YPC		B255A11500YPC	B256A11500YPC	11,500	.4528	—	—	2,9	45	12
B254A11509YPC		B255A11509YPC	—	11,509	.4531	29/64	—	2,9	45	12
—		—	B256A11600YPC	11,600	.4567	—	—	3,0	45	12
—		B255A11700YPC	—	11,700	.4606	—	—	3,0	45	12
B254A11800YPC		B255A11800YPC	B256A11800YPC	11,800	.4646	—	—	3,0	45	12
B254A11900YPC		B255A11900YPC	—	11,900	.4685	—	—	3,0	45	12
B254A11908YPC		B255A11908YPC	—	11,908	.4688	15/32	—	3,0	45	12
B254A12000YPC		B255A12000YPC	B256A12000YPC	12,000	.4724	—	—	3,1	45	12
—		B255A12100YPC	—	12,100	.4764	—	—	3,1	45	14
B254A12200YPC		B255A12200YPC	B256A12200YPC	12,200	.4803	—	—	3,1	45	14
B254A12251YPC		B255A12251YPC	—	12,251	.4823	—	—	3,1	45	14

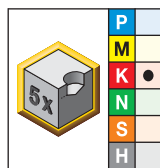
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(B254/B255/B256_YPC • ~3 x D/-5 x D/-8 x D continued)

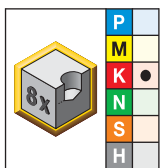
Solid Carbide Drills



short • KCK10



long • KCK10



extra long • KCK10

				D1 diameter				L5	LS	D
				mm	in	fraction	wire size			
—	B255A12300YPC	B256A12300YPC		12,300	.4843	—	—	3,1	45	14
B254A12304YPC	B255A12304YPC	—		12,304	.4844	31/64	—	3,1	45	14
—	—	B256A12400YPC		12,400	.4882	—	—	3,1	45	14
B254A12500YPC	B255A12500YPC	B256A12500YPC		12,500	.4921	—	—	3,2	45	14
B254A12700YPC	B255A12700YPC	B256A12700YPC		12,700	.5000	1/2	—	3,2	45	14
B254A12800YPC	B255A12800YPC	B256A12800YPC		12,800	.5039	—	—	3,2	45	14
B254A13000YPC	B255A13000YPC	B256A13000YPC		13,000	.5118	—	—	3,3	45	14
B254A13096YPC	B255A13096YPC	B256A13096YPC		13,096	.5156	33/64	—	3,3	45	14
B254A13100YPC	—	—		13,100	.5157	—	—	3,3	45	14
B254A13200YPC	B255A13200YPC	B256A13200YPC		13,200	.5197	—	—	3,3	45	14
B254A13300YPC	—	—		13,300	.5236	—	—	3,4	45	14
B254A13400YPC	—	—		13,400	.5276	—	—	3,4	45	14
B254A13495YPC	B255A13495YPC	B256A13495YPC		13,495	.5313	17/32	—	3,4	45	14
B254A13500YPC	B255A13500YPC	B256A13500YPC		13,500	.5315	—	—	3,4	45	14
—	—	B256A13700YPC		13,700	.5394	—	—	3,5	45	14
B254A13800YPC	—	B256A13800YPC		13,800	.5433	—	—	3,5	45	14
B254A13891YPC	B255A13891YPC	B256A13891YPC		13,891	.5469	35/64	—	3,5	45	14
B254A14000YPC	B255A14000YPC	B256A14000YPC		14,000	.5512	—	—	3,5	45	14
B254A14100YPC	B255A14100YPC	—		14,100	.5551	—	—	3,6	48	16
B254A14288YPC	B255A14288YPC	—		14,288	.5625	9/16	—	3,6	48	16
B254A14500YPC	B255A14500YPC	B256A14500YPC		14,500	.5709	—	—	3,6	48	16
—	B255A14600YPC	—		14,600	.5748	—	—	3,7	48	16
B254A14684YPC	B255A14684YPC	B256A14684YPC		14,684	.5781	37/64	—	3,7	48	16
—	B255A14700YPC	—		14,700	.5787	—	—	3,7	48	16
B254A14750YPC	B255A14750YPC	—		14,750	.5807	—	—	3,7	48	16
B254A14800YPC	B255A14800YPC	B256A14800YPC		14,800	.5827	—	—	3,7	48	16
B254A15000YPC	B255A15000YPC	B256A15000YPC		15,000	.5906	—	—	3,8	48	16
B254A15083YPC	B255A15083YPC	B256A15083YPC		15,083	.5938	19/32	—	3,8	48	16
B254A15200YPC	B255A15200YPC	B256A15200YPC		15,200	.5984	—	—	3,8	48	16
B254A15250YPC	B255A15250YPC	—		15,250	.6004	—	—	3,8	48	16
—	—	B256A15300YPC		15,300	.6024	—	—	3,8	48	16
B254A15400YPC	B255A15400YPC	B256A15400YPC		15,400	.6063	—	—	3,9	48	16
B254A15479YPC	B255A15479YPC	B256A15479YPC		15,479	.6094	39/64	—	3,9	48	16
B254A15500YPC	B255A15500YPC	B256A15500YPC		15,500	.6102	—	—	3,9	48	16
B254A15600YPC	—	—		15,600	.6142	—	—	3,9	48	16
B254A15800YPC	B255A15800YPC	B256A15800YPC		15,800	.6220	—	—	4,0	48	16
B254A15875YPC	B255A15875YPC	—		15,875	.6250	5/8	—	4,0	48	16
B254A16000YPC	B255A16000YPC	B256A16000YPC		16,000	.6299	—	—	4,0	48	16
—	B255A16271YPC	B256A16271YPC		16,271	.6406	41/64	—	4,1	48	18
—	B255A16300YPC	B256A16300YPC		16,300	.6417	—	—	4,1	48	18
B254A16500YPC	B255A16500YPC	B256A16500YPC		16,500	.6496	—	—	4,1	48	18
B254A16670YPC	B255A16670YPC	B256A16670YPC		16,670	.6563	21/32	—	4,2	48	18
B254A16800YPC	B255A16800YPC	B256A16800YPC		16,800	.6614	—	—	4,2	48	18
—	B255A16900YPC	—		16,900	.6654	—	—	4,2	48	18
B254A17000YPC	B255A17000YPC	B256A17000YPC		17,000	.6693	—	—	4,2	48	18
—	B255A17200YPC	—		17,200	.6772	—	—	4,3	48	18
B254A17300YPC	B255A17300YPC	—		17,300	.6811	—	—	4,3	48	18
—	B255A17400YPC	B256A17400YPC		17,400	.6850	—	—	4,3	48	18
B254A17463YPC	B255A17463YPC	—		17,463	.6875	11/16	—	4,3	48	18
B254A17500YPC	B255A17500YPC	B256A17500YPC		17,500	.6890	—	—	4,3	48	18
B254A17800YPC	B255A17800YPC	B256A17800YPC		17,800	.7008	—	—	4,4	48	18
B254A17859YPC	B255A17859YPC	B256A17859YPC		17,859	.7031	45/64	—	4,4	48	18

(continued)

(B254/B255/B256_YPC • ~3 x D/~5 x D/~8 x D continued)



Solid Carbide Drills

	 short • KCK10	 long • KCK10	 extra long • KCK10	D1 diameter				L5	LS	D
				mm	in	fraction	wire size			
B254A18000YPC	B254A18000YPC	B255A18000YPC	B256A18000YPC	18,000	.7087	—	—	4,5	48	18
B254A18200YPC	—	—	—	18,200	.7165	—	—	4,5	50	20
B254A18258YPC	B254A18258YPC	B255A18258YPC	B256A18258YPC	18,258	.7188	23/32	—	4,5	50	20
B254A18500YPC	B254A18500YPC	B255A18500YPC	B256A18500YPC	18,500	.7283	—	—	4,6	50	20
B254A18800YPC	B254A18800YPC	B255A18800YPC	B256A18800YPC	18,800	.7402	—	—	4,7	50	20
B254A19000YPC	B254A19000YPC	B255A19000YPC	B256A19000YPC	19,000	.7480	—	—	4,7	50	20
B254A19050YPC	B254A19050YPC	B255A19050YPC	—	19,050	.7500	3/4	—	4,7	50	20
—	—	B255A19446YPC	B256A19446YPC	19,446	.7656	49/64	—	4,8	50	20
B254A19446YPC	—	—	—	19,446	.7656	49/64	—	4,8	50	20
B254A19500YPC	B254A19500YPC	B255A19500YPC	B256A19500YPC	19,500	.7677	—	—	4,8	50	20
B254A19700YPC	B254A19700YPC	B255A19700YPC	—	19,700	.7756	—	—	4,9	50	20
B254A19800YPC	B254A19800YPC	B255A19800YPC	B256A19800YPC	19,800	.7795	—	—	4,9	50	20
B254A20000YPC	B254A20000YPC	B255A20000YPC	B256A20000YPC	20,000	.7874	—	—	4,9	50	20
—	—	B255A20500YPC	—	20,500	.8071	—	—	5,1	50	20
B254A20638YPC	B254A20638YPC	B255A20638YPC	B256A20638YPC	20,638	.8125	13/16	—	5,1	50	20
B254A21000YPC	B254A21000YPC	B255A21000YPC	—	21,000	.8268	—	—	5,2	50	20
B254A22000YPC	B254A22000YPC	B255A22000YPC	B256A22000YPC	22,000	.8661	—	—	5,4	50	20
B254A22225YPC	B254A22225YPC	B255A22225YPC	B256A22225YPC	22,225	.8750	7/8	—	5,5	56	25
B254A23416YPC	B254A23416YPC	B255A23416YPC	—	23,416	.9219	59/64	—	5,7	56	25
B254A24000YPC	B254A24000YPC	B255A24000YPC	—	24,000	.9449	—	—	5,9	56	25
B254A25000YPC	B254A25000YPC	B255A25000YPC	—	25,000	.9843	—	—	6,1	56	25
—	—	—	B256A25004YPC	25,004	.9844	63/64	—	6,1	56	25

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

YPC Drills • B25_YPC Series • Grade KCK10™ • Through Coolant for Drill Diameters 3–20mm

Material Group				Metric									
				Cutting Speed — vc 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
K	1	130	160	210	mm/r	0,08 - 0,12	0,15 - 0,21	0,21 - 0,29	0,26 - 0,37	0,30 - 0,42	0,34 - 0,45	0,38 - 0,53	0,42 - 0,58
	2	90	130	180	mm/r	0,08 - 0,12	0,14 - 0,18	0,20 - 0,27	0,24 - 0,32	0,26 - 0,38	0,32 - 0,42	0,36 - 0,48	0,39 - 0,53
	3	70	90	130	mm/r	0,07 - 0,11	0,11 - 0,15	0,16 - 0,22	0,20 - 0,27	0,23 - 0,32	0,25 - 0,35	0,29 - 0,40	0,32 - 0,43

SE 4-Margin Drills with Through Coolant for Steel

Primary Application

B256 Series Solid Carbide Drills are the high-performance platform for mid-L/D applications in steel that require high accuracy and consistent hole straightness combined with excellent metal removal rates and long tool life.

Features and Benefits

SE Drill-Point Design

- Sculptured edge enables high feed rates.

Four-Margin Lands

- Improves hole straightness.
- Improves hole alignment when drilling through cross holes.

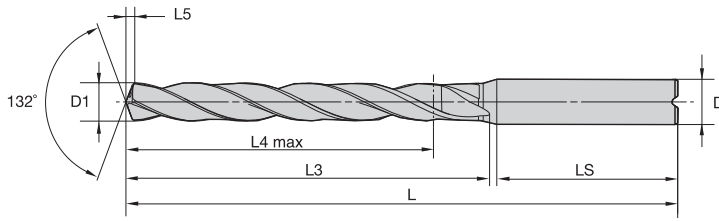
KC7315™ Grade

- Multilayer, TiAlN-based coating with high hot hardness allows 30% higher cutting speeds and constant tool life.
- Optimised tool surface finish ensures chip evacuation when drilling deeper holes.

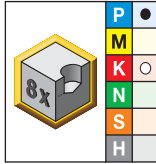
Customisation

- Intermediate diameters available as semi-standards.
- Length variations and step drills available as engineered solutions.
- For follow-up operations, such as machining screw holes in connecting rods, the point angle of the step drill for the screw head should be adjusted.





B256 • ~8 x D



- first choice
- alternate choice

	D1 diameter				L5	LS	D
	mm	in	fraction	wire size			
extra long • KC7315							
B256A05000	5,000	.1969	—	—	1,0	36	6
B256A05100	5,100	.2008	—	—	1,0	36	6
B256A05500	5,500	.2165	—	—	1,1	36	6
B256A05800	5,800	.2283	—	—	1,2	36	6
B256A06000	6,000	.2362	—	—	1,2	36	6
B256A06500	6,500	.2559	—	—	1,3	36	8
B256A06800	6,800	.2677	—	—	1,4	36	8
B256A07000	7,000	.2756	—	—	1,4	36	8
B256A07800	7,800	.3071	—	—	1,6	36	8
B256A08000	8,000	.3150	—	—	1,6	36	8
B256A08400	8,400	.3307	—	—	1,7	40	10
B256A08500	8,500	.3346	—	—	1,7	40	10
B256A08800	8,800	.3465	—	—	1,8	40	10
B256A09000	9,000	.3543	—	—	1,8	40	10
B256A09500	9,500	.3740	—	—	1,9	40	10
B256A10000	10,000	.3937	—	—	2,0	40	10
B256A10200	10,200	.4016	—	—	2,0	45	12
B256A10500	10,500	.4134	—	—	2,1	45	12
B256A11000	11,000	.4331	—	—	2,2	45	12
B256A11800	11,800	.4646	—	—	2,3	45	12
B256A12000	12,000	.4724	—	—	2,4	45	12
B256A12500	12,500	.4921	—	—	2,5	45	14
B256A13000	13,000	.5118	—	—	2,6	45	14
B256A13500	13,500	.5315	—	—	2,7	45	14
B256A14000	14,000	.5512	—	—	2,8	45	14
B256A15000	15,000	.5906	—	—	3,0	48	16
B256A16000	16,000	.6299	—	—	3,2	48	16

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

SE Drills • B256 Series • Grade KC7315™ • Through Coolant for Drill Diameters 3–20mm

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	
P	1	120	145	175	mm/r	0,08 - 0,11	0,09 - 0,15	0,11 - 0,15	0,13 - 0,19	0,13 - 0,22	0,15 - 0,27	0,18 - 0,33	0,22 - 0,37
	2	80	100	120	mm/r	0,08 - 0,11	0,08 - 0,13	0,09 - 0,17	0,15 - 0,21	0,16 - 0,25	0,18 - 0,33	0,22 - 0,42	0,26 - 0,50
	3	80	90	120	mm/r	0,08 - 0,11	0,09 - 0,15	0,11 - 0,15	0,13 - 0,19	0,13 - 0,22	0,15 - 0,27	0,18 - 0,33	0,22 - 0,37
	4	60	70	80	mm/r	0,06 - 0,09	0,07 - 0,13	0,09 - 0,13	0,11 - 0,15	0,11 - 0,17	0,13 - 0,22	0,15 - 0,27	0,17 - 0,30



HP Beyond™ 4-Margin Long-Length Drills with Through Coolant



Primary Application

B269_HP Series Solid Carbide Drills are 12 x D, long-length drills, closing the gap between 8 x D drill (B256_SE) and 15 x D (B271_HP). They are designed for deep-hole applications without pilot drill in steel, cast iron, and stainless steel materials. Operate these drills with standard through coolant or MQL. The drills have a standard A-shank according to DIN 6535 HA (round cylindrical with 2mm steps).

Features and Benefits

Four-Margin Lands

- Improves hole straightness.
- Improves hole alignment when drilling through cross holes or inclined exits.

HP Drill-Point Design

- Low thrust prevents workpiece flexing.
- Excellent centring capabilities.
- Eliminates the need for pilot drilling.

Unique Flute Design

- Drastically improved chip evacuation.
- Better hole surface quality.

KCPK15™ Beyond Grade

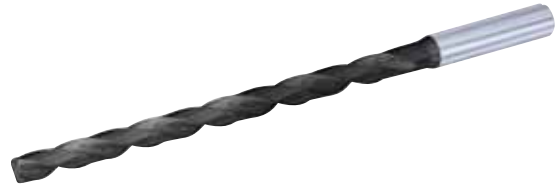
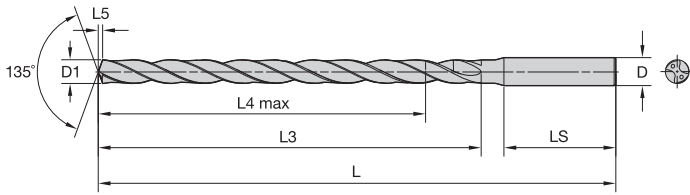
- The grade is a multilayer, TiAlN-based coating with high hot hardness. It enables highest cutting speeds and enables the use in MQL applications.
- The highly polished surface ensures superior chip evacuation even when low-pressure coolant is applied.

Customisation

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

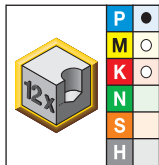


Solid Carbide Drills



beyond

■ B269_HP • ~12 x D

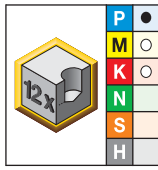


● first choice
○ alternate choice

KCPK15	D1 diameter				L	L3	L4 max	L5	LS	D
	mm	in	fraction	wire size						
B269A03000HP	3,000	.1181	—	—	93	52	44	0,6	36	6
B269A03175HP	3,175	.1250	1/8	—	93	52	44	0,6	36	6
B269A03264HP	3,264	.1285	—	30	93	53	44	0,6	36	6
B269A03500HP	3,500	.1378	—	—	93	53	44	0,7	36	6
B269A03970HP	3,970	.1563	5/32	—	107	66	56	0,7	36	6
B269A04000HP	4,000	.1575	—	—	107	66	56	0,8	36	6
B269A04500HP	4,500	.1772	—	—	107	67	56	0,8	36	6
B269A04600HP	4,600	.1811	—	—	107	68	57	0,9	36	6
B269A04763HP	4,763	.1875	3/16	—	125	82	69	0,9	36	6
B269A04800HP	4,800	.1890	—	12	125	82	69	0,9	36	6
B269A05000HP	5,000	.1969	—	—	125	83	70	0,9	36	6
B269A05100HP	5,100	.2008	—	—	125	83	70	1,0	36	6
B269A05200HP	5,200	.2047	—	—	125	83	70	1,0	36	6
B269A05300HP	5,300	.2087	—	—	125	84	71	1,0	36	6
B269A05410HP	5,410	.2130	—	3	125	84	71	1,0	36	6
B269A05500HP	5,500	.2165	—	—	125	84	71	1,0	36	6
B269A05558HP	5,558	.2188	7/32	—	125	84	71	1,0	36	6
B269A05600HP	5,600	.2205	—	—	125	85	72	1,1	36	6
B269A05700HP	5,700	.2244	—	—	125	85	72	1,1	36	6
B269A05800HP	5,800	.2283	—	—	125	85	71	1,1	36	6
B269A06000HP	6,000	.2362	—	—	125	86	72	1,1	36	6
B269A06200HP	6,200	.2441	—	—	139	97	82	1,2	36	8
B269A06350HP	6,350	.2500	1/4	E	139	98	83	1,2	36	8
B269A06500HP	6,500	.2559	—	—	139	98	83	1,2	36	8
B269A06528HP	6,528	.2570	—	F	139	98	83	1,2	36	8
B269A06600HP	6,600	.2598	—	—	139	99	84	1,2	36	8
B269A06746HP	6,746	.2656	17/64	—	139	99	83	1,3	36	8
B269A06800HP	6,800	.2677	—	—	139	99	83	1,3	36	8
B269A06909HP	6,909	.2720	—	I	139	100	84	1,3	36	8
B269A07000HP	7,000	.2756	—	—	139	100	84	1,3	36	8
B269A07145HP	7,145	.2813	9/32	—	153	111	94	1,3	36	8
B269A07500HP	7,500	.2953	—	—	153	112	95	1,4	36	8
B269A07541HP	7,541	.2969	19/64	—	153	112	95	1,4	36	8
B269A07700HP	7,700	.3031	—	—	153	113	96	1,4	36	8
B269A07800HP	7,800	.3071	—	—	153	113	95	1,5	36	8
B269A07938HP	7,938	.3125	5/16	—	153	114	96	1,5	36	8
B269A08000HP	8,000	.3150	—	—	153	114	96	1,5	36	8
B269A08100HP	8,100	.3189	—	—	185	136	116	1,5	40	10
B269A08334HP	8,334	.3281	21/64	—	185	137	117	1,6	40	10
B269A08433HP	8,433	.3320	—	Q	185	137	117	1,6	40	10

(continued)

(B269_HP • ~12 x D continued)



	D1 diameter				L	L3	L4 max	L5	LS	D
	mm	in	fraction	wire size						
KCPK15										
B269A08500HP	8,500	.3346	—	—	185	137	117	1,6	40	10
B269A08700HP	8,700	.3425	—	—	185	138	118	1,6	40	10
B269A08733HP	8,733	.3438	11/32	—	185	138	117	1,6	40	10
B269A09000HP	9,000	.3543	—	—	185	139	118	1,7	40	10
B269A09100HP	9,100	.3583	—	—	185	139	118	1,7	40	10
B269A09129HP	9,129	.3594	23/64	—	185	139	118	1,7	40	10
B269A09500HP	9,500	.3740	—	—	185	140	119	1,8	40	10
B269A09525HP	9,525	.3750	3/8	—	185	140	119	1,8	40	10
B269A09921HP	9,921	.3906	25/64	—	185	142	120	1,9	40	10
B269A10000HP	10,000	.3937	—	—	185	142	120	1,9	40	10
B269A10200HP	10,200	.4016	—	—	218	164	140	1,9	45	12
B269A10300HP	10,300	.4055	—	—	218	165	141	1,9	45	12
B269A10320HP	10,320	.4063	13/32	—	218	165	141	1,9	45	12
B269A10500HP	10,500	.4134	—	—	218	165	141	2,0	45	12
B269A10716HP	10,716	.4219	27/64	—	218	166	142	2,0	45	12
B269A10800HP	10,800	.4252	—	—	218	166	141	2,0	45	12
B269A11000HP	11,000	.4331	—	—	218	167	142	2,1	45	12
B269A11113HP	11,113	.4375	7/16	—	218	167	142	2,1	45	12
B269A11500HP	11,500	.4528	—	—	218	168	143	2,1	45	12
B269A11800HP	11,800	.4646	—	—	218	169	143	2,2	45	12
B269A12000HP	12,000	.4724	—	—	218	170	144	2,2	45	12
B269A12100HP	12,100	.4764	—	—	246	192	164	2,3	45	14
B269A12304HP	12,304	.4844	31/64	—	246	193	165	2,3	45	14
B269A12500HP	12,500	.4921	—	—	246	193	165	2,3	45	14
B269A12700HP	12,700	.5000	1/2	—	246	194	166	2,4	45	14
B269A13000HP	13,000	.5118	—	—	246	195	166	2,4	45	14
B269A13100HP	13,100	.5157	—	—	246	195	166	2,4	45	14
B269A13500HP	13,500	.5315	—	—	246	196	167	2,5	45	14
B269A14000HP	14,000	.5512	—	—	246	198	168	2,6	45	14
B269A14100HP	14,100	.5551	—	—	277	220	188	2,6	48	16
B269A14288HP	14,288	.5625	9/16	—	277	220	188	2,7	48	16
B269A14500HP	14,500	.5709	—	—	277	221	189	2,7	48	16
B269A14684HP	14,684	.5781	37/64	—	277	222	190	2,7	48	16
B269A15000HP	15,000	.5906	—	—	277	223	190	2,8	48	16
B269A15500HP	15,500	.6102	—	—	277	224	191	2,9	48	16
B269A15875HP	15,875	.6250	5/8	—	277	225	192	3,0	48	16
B269A16000HP	16,000	.6299	—	—	277	226	192	3,0	48	16
B269A16500HP	16,500	.6496	—	—	305	249	213	3,1	48	18
B269A17000HP	17,000	.6693	—	—	305	250	214	3,2	48	18
B269A17463HP	17,463	.6875	11/16	—	305	252	215	3,2	48	18
B269A17500HP	17,500	.6890	—	—	305	252	215	3,3	48	18
B269A18000HP	18,000	.7087	—	—	305	253	216	3,3	48	18
B269A18500HP	18,500	.7283	—	—	334	277	237	3,4	50	20
B269A19000HP	19,000	.7480	—	—	334	278	238	3,5	50	20
B269A19050HP	19,050	.7500	3/4	—	334	279	239	3,5	50	20
B269A19500HP	19,500	.7677	—	—	334	280	239	3,6	50	20
B269A20000HP	20,000	.7874	—	—	334	281	240	3,7	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

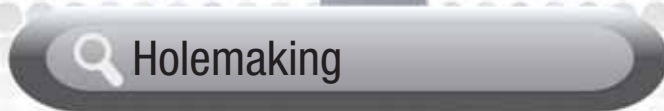
HP Drills • B269_HP Series • Grade KCPK15™ • Through Coolant for Drill Diameters 3–20mm

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	
P	1	100	140	150	mm/r	0,12 - 0,17	0,14 - 0,23	0,17 - 0,23	0,20 - 0,29	0,29 - 0,33	0,23 - 0,41	0,27 - 0,50	0,33 - 0,56
	2	70	100	110	mm/r	0,12 - 0,17	0,12 - 0,20	0,14 - 0,26	0,23 - 0,32	0,24 - 0,38	0,27 - 0,50	0,33 - 0,63	0,39 - 0,75
	3	70	90	110	mm/r	0,12 - 0,17	0,14 - 0,23	0,17 - 0,23	0,20 - 0,29	0,29 - 0,33	0,23 - 0,41	0,27 - 0,50	0,33 - 0,56
	4	60	70	90	mm/r	0,09 - 0,14	0,11 - 0,20	0,14 - 0,20	0,17 - 0,23	0,17 - 0,26	0,20 - 0,33	0,23 - 0,41	0,26 - 0,45
M	1	50	60	80	mm/r	0,03 - 0,08	0,06 - 0,13	0,08 - 0,10	0,10 - 0,20	0,12 - 0,22	0,13 - 0,23	0,15 - 0,25	0,18 - 0,28
	2	40	50	80	mm/r	0,03 - 0,08	0,06 - 0,13	0,08 - 0,10	0,10 - 0,20	0,12 - 0,22	0,13 - 0,23	0,15 - 0,25	0,18 - 0,28
	3	40	50	70	mm/r	0,03 - 0,08	0,06 - 0,13	0,08 - 0,10	0,10 - 0,20	0,12 - 0,22	0,13 - 0,23	0,15 - 0,25	0,18 - 0,28
K	1	90	150	150	mm/r	0,12 - 0,17	0,21 - 0,30	0,30 - 0,42	0,38 - 0,42	0,38 - 0,53	0,44 - 0,60	0,54 - 0,75	0,60 - 0,83
	2	80	120	120	mm/r	0,12 - 0,17	0,20 - 0,26	0,29 - 0,39	0,35 - 0,45	0,38 - 0,54	0,45 - 0,60	0,51 - 0,69	0,56 - 0,75
	3	80	80	140	mm/r	0,11 - 0,15	0,15 - 0,21	0,23 - 0,32	0,29 - 0,39	0,33 - 0,45	0,36 - 0,50	0,42 - 0,57	0,45 - 0,62

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HP Solid Carbide Deep-Hole Drills for Steel, Cast Iron, and Non-Ferrous Materials

Primary Application

B27_HPG Series Solid Carbide Drills are the optimum platform for drilling holes up to 30 x D in steel, cast iron, and stainless steel materials. Drill deep holes up to 4x faster than conventional HSS and gun drills. Application of MQL is possible.

The B27_HPS in the new uncoated KN25™ grade now offers the same advantages for drilling in non-ferrous materials such as aluminium, copper, and brass. These series are now available from 2,3–16mm (.09–.63") diameter and in lengths from 15–30 x D.

Features and Benefits

HP Drill-Point Design

- Low thrust.
- Excellent centring capabilities.
- Highest possible feed rates.

Four-Margin Lands

- Improves hole straightness.
- Improves hole alignment when drilling through cross holes.

Unique Flute Design

- Drastically improved chip evacuation.
- Better hole surface quality.

KC7425™ Grade (B27_HPG)

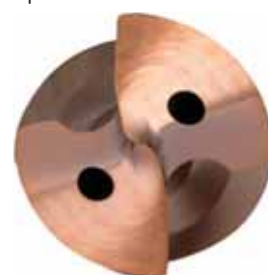
- A multilayer, AlCrN-TiSiN PVD coating provides outstanding wear resistance.
- New ultra-fine-grain carbide ensures process reliability at high feed rates.

KN25 Grade (B27_HPS)

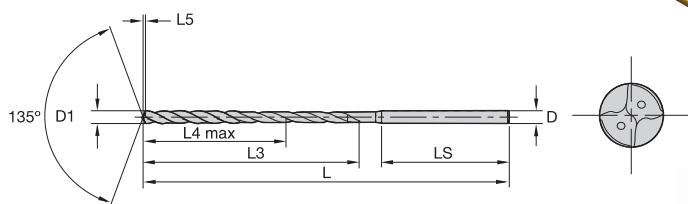
- The uncoated grade helps to prevent built-up edge when drilling aluminium and high-temp alloys.
- The highly polished surfaces of both grades ensure superior chip evacuation, even when low-pressure coolant or MQL is applied.

Customisation

- Intermediate diameters available as semi-standards.
- Length variations — including even longer versions — available as engineered solutions.

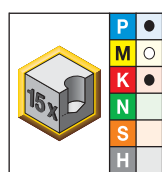


Solid Carbide Drills

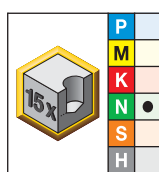


NEW!

B271Z_HPG/HPS • 15 x D



KC7425



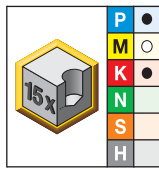
KN25

● first choice
○ alternate choice

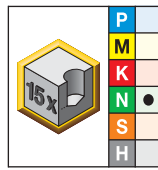
		D1 diameter										
		mm	in	fraction	wire size	L	L3	L4 max	L5	LS	D	
B271Z02383KMG	B271Z02383KMS	2,383	.0938	3/32	—	86	51	44	0,4	30	3	
B271Z02400KMG	B271Z02400KMS	2,400	.0945	—	—	86	51	44	0,4	30	3	
B271Z02439KMG	B271Z02439KMS	2,439	.0960	—	41	86	51	44	0,5	30	3	
B271Z02489KMG	B271Z02489KMS	2,489	.0980	—	40	86	51	44	0,5	30	3	
B271Z02500KMG	B271Z02500KMS	2,500	.0984	—	—	86	51	44	0,5	30	3	
B271Z02578KMG	B271Z02578KMS	2,578	.1015	—	38	86	51	44	0,5	30	3	
B271Z02600KMG	B271Z02600KMS	2,600	.1024	—	—	86	51	44	0,5	30	3	
B271Z02642KMG	B271Z02642KMS	2,642	.1040	—	37	86	51	44	0,5	30	3	
B271Z02705KMG	B271Z02705KMS	2,705	.1065	—	36	86	52	45	0,5	30	3	
B271Z02779KMG	B271Z02779KMS	2,779	.1094	7/64	—	86	52	45	0,5	30	3	
B271Z02800KMG	B271Z02800KMS	2,800	.1102	—	—	86	52	45	0,5	30	3	
B271Z02820KMG	B271Z02820KMS	2,820	.1110	—	34	86	52	45	0,5	30	3	
B271Z02870KMG	B271Z02870KMS	2,870	.1130	—	33	86	52	45	0,5	30	3	
B271Z02900KMG	B271Z02900KMS	2,900	.1142	—	—	86	52	45	0,5	30	3	
B271Z02947KMG	B271Z02947KMS	2,947	.1160	—	32	86	52	45	0,5	30	3	
B271Z03000HPG	B271Z03000HPS	3,000	.1181	—	—	86	52	45	0,6	30	3	
B271Z03175HPG	B271Z03175HPS	3,175	.1250	1/8	—	105	67	58	0,6	32	4	
—	B271Z03200HPS	3,200	.1260	—	—	105	67	58	0,6	32	4	
B271Z03500HPG	B271Z03500HPS	3,500	.1378	—	—	105	68	59	0,6	32	4	
B271Z03970HPG	B271Z03970HPS	3,970	.1563	5/32	—	105	70	60	0,7	32	4	
B271Z04000HPG	B271Z04000HPS	4,000	.1575	—	—	105	70	60	0,7	32	4	
B271Z04500HPG	B271Z04500HPS	4,500	.1772	—	—	124	85	74	0,8	34	5	
B271Z04623HPG	—	4,623	.1820	—	14	124	86	75	0,9	34	5	
B271Z04763HPG	B271Z04763HPS	4,763	.1875	3/16	—	124	86	75	0,9	34	5	
B271Z05000HPG	B271Z05000HPS	5,000	.1969	—	—	124	87	75	0,9	34	5	
B271Z05260HPG	—	5,260	.2071	—	—	143	102	89	1,0	36	6	
B271Z05410HPG	—	5,410	.2130	—	3	143	102	89	1,0	36	6	
B271Z05500HPG	B271Z05500HPS	5,500	.2165	—	—	143	102	89	1,0	36	6	
B271Z05558HPG	—	5,558	.2188	7/32	—	143	102	89	1,0	36	6	
B271Z05800HPG	—	5,800	.2283	—	—	143	103	89	1,1	36	6	
B271Z06000HPG	B271Z06000HPS	6,000	.2362	—	—	143	104	90	1,1	36	6	
B271Z06200HPG	B271Z06200HPS	6,200	.2441	—	—	162	118	103	1,1	38	7	
B271Z06350HPG	B271Z06350HPS	6,350	.2500	1/4	E	162	119	104	1,2	38	7	
B271Z06500HPG	B271Z06500HPS	6,500	.2559	—	—	162	119	104	1,2	38	7	

(continued)

(B271Z_HPG/HPS • 15 x D continued)

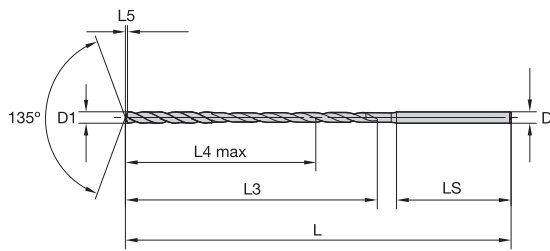


KC7425



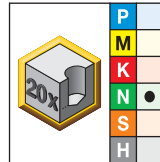
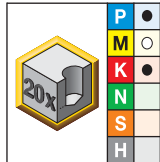
KN25

		D1 diameter				L	L3	L4 max	L5	LS	D
		mm	in	fraction	wire size						
B271Z06528HPG	—	6,528	.2570	—	F	162	119	104	1,2	38	7
B271Z06746HPG	B271Z06746HPS	6,746	.2656	17/64	—	162	120	104	1,2	38	7
B271Z06909HPG	—	6,909	.2720	—	I	162	121	105	1,3	38	7
B271Z07000HPG	B271Z07000HPS	7,000	.2756	—	—	162	121	105	1,3	38	7
B271Z07145HPG	B271Z07145HPS	7,145	.2813	9/32	—	181	135	118	1,3	40	8
B271Z07500HPG	B271Z07500HPS	7,500	.2953	—	—	181	136	119	1,4	40	8
B271Z07541HPG	—	7,541	.2969	19/64	—	181	136	119	1,4	40	8
B271Z07938HPG	—	7,938	.3125	5/16	—	181	138	120	1,5	40	8
B271Z08000HPG	B271Z08000HPS	8,000	.3150	—	—	181	138	120	1,5	40	8
B271Z08334HPG	—	8,334	.3281	21/64	—	200	153	134	1,5	42	9
B271Z08433HPG	—	8,433	.3320	—	Q	200	153	134	1,6	42	9
B271Z08500HPG	B271Z08500HPS	8,500	.3346	—	—	200	153	134	1,6	42	9
B271Z08733HPG	B271Z08733HPS	8,733	.3438	11/32	—	200	154	134	1,6	42	9
B271Z09000HPG	B271Z09000HPS	9,000	.3543	—	—	200	155	135	1,7	42	9
B271Z09100HPG	—	9,100	.3583	—	—	219	169	148	1,7	44	10
B271Z09500HPG	B271Z09500HPS	9,500	.3740	—	—	219	170	149	1,8	44	10
B271Z09525HPG	B271Z09525HPS	9,525	.3750	3/8	—	219	170	149	1,8	44	10
B271Z09750HPG	—	9,750	.3839	—	—	219	171	149	1,8	44	10
B271Z10000HPG	B271Z10000HPS	10,000	.3937	—	—	219	172	150	1,8	44	10
B271Z10200HPG	B271Z10200HPS	10,200	.4016	—	—	238	186	163	1,9	46	11
B271Z10500HPG	B271Z10500HPS	10,500	.4134	—	—	238	187	164	1,9	46	11
B271Z10720HPG	B271Z10720HPS	10,720	.4220	—	—	238	188	165	2,0	46	11
B271Z11000HPG	B271Z11000HPS	11,000	.4331	—	—	238	189	165	2,0	46	11
B271Z11500HPG	B271Z11500HPS	11,500	.4528	—	—	257	204	179	2,1	48	12
B271Z12000HPG	B271Z12000HPS	12,000	.4724	—	—	257	206	180	2,2	48	12
B271Z12500HPG	B271Z12500HPS	12,500	.4921	—	—	276	221	194	2,3	50	13
B271Z12700HPG	B271Z12700HPS	12,700	.5000	1/2	—	276	222	195	2,3	50	13
B271Z13000HPG	B271Z13000HPS	13,000	.5118	—	—	276	223	195	2,4	50	13
B271Z13100HPG	B271Z13100HPS	13,100	.5157	—	—	295	237	208	2,4	52	14
B271Z13500HPG	B271Z13500HPS	13,500	.5315	—	—	295	238	209	2,5	52	14
B271Z14000HPG	B271Z14000HPS	14,000	.5512	—	—	295	240	210	2,6	52	14
B271Z14290HPG	B271Z14290HPS	14,290	.5626	—	—	314	255	224	2,6	54	15
B271Z14500HPG	B271Z14500HPS	14,500	.5709	—	—	314	255	224	2,7	54	15
B271Z15000HPG	B271Z15000HPS	15,000	.5906	—	—	314	257	225	2,8	54	15
B271Z15500HPG	B271Z15500HPS	15,500	.6102	—	—	333	272	239	2,9	56	16
B271Z15870HPG	B271Z15870HPS	15,870	.6248	—	—	333	273	240	2,9	56	16
B271Z16000HPG	B271Z16000HPS	16,000	.6299	—	—	333	274	240	3,0	56	16



NEW!

B272Z_HPG/HPS • 20 x D

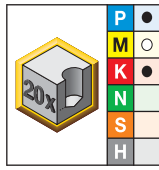


● first choice
○ alternate choice

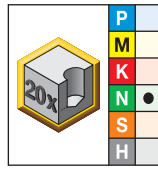
		D1 diameter				L	L3	L4 max	L5	LS	D
		mm	in	fraction	wire size						
KC7425	KN25										
B272Z02383KMG	B272Z02383KMS	2,383	.0938	3/32	—	101	63	56	0,4	30	3
B272Z02400KMG	B272Z02400KMS	2,400	.0945	—	—	101	63	56	0,4	30	3
B272Z02439KMG	B272Z02439KMS	2,439	.0960	—	41	101	63	56	0,5	30	3
B272Z02489KMG	B272Z02489KMS	2,489	.0980	—	40	101	63	56	0,5	30	3
B272Z02500KMG	B272Z02500KMS	2,500	.0984	—	—	101	63	56	0,5	30	3
B272Z02578KMG	B272Z02578KMS	2,578	.1015	—	38	101	64	57	0,5	30	3
B272Z02600KMG	B272Z02600KMS	2,600	.1024	—	—	101	64	57	0,5	30	3
B272Z02642KMG	B272Z02642KMS	2,642	.1040	—	37	101	65	58	0,5	30	3
B272Z02705KMG	B272Z02705KMS	2,705	.1065	—	36	101	65	58	0,5	30	3
B272Z02779KMG	B272Z02779KMS	2,779	.1094	7/64	—	101	66	59	0,5	30	3
B272Z02800KMG	B272Z02800KMS	2,800	.1102	—	—	101	66	59	0,5	30	3
B272Z02820KMG	B272Z02820KMS	2,820	.1110	—	34	101	66	59	0,5	30	3
B272Z02870KMG	B272Z02870KMS	2,870	.1130	—	33	101	66	59	0,5	30	3
B272Z02900KMG	B272Z02900KMS	2,900	.1142	—	—	101	67	60	0,5	30	3
B272Z02947KMG	B272Z02947KMS	2,947	.1160	—	32	101	67	60	0,5	30	3
B272Z03000HPG	B272Z03000HPS	3,000	.1181	—	—	101	67	60	0,6	30	3
B272Z03175HPG	B272Z03175HPS	3,175	.1250	1/8	—	125	83	74	0,6	32	4
—	B272Z03300HPS	3,300	.1299	—	—	125	84	75	0,6	32	4
B272Z03500HPG	B272Z03500HPS	3,500	.1378	—	—	125	86	77	0,6	32	4
B272Z03970HPG	B272Z03970HPS	3,970	.1563	5/32	—	125	89	79	0,7	32	4
B272Z04000HPG	B272Z04000HPS	4,000	.1575	—	—	125	90	80	0,7	32	4
B272Z04500HPG	B272Z04500HPS	4,500	.1772	—	—	149	108	97	0,8	34	5
B272Z04623HPG	—	4,623	.1820	—	14	149	109	98	0,9	34	5
B272Z04763HPG	B272Z04763HPS	4,763	.1875	3/16	—	149	110	99	0,9	34	5
B272Z05000HPG	B272Z05000HPS	5,000	.1969	—	—	149	112	100	0,9	34	5
B272Z05260HPG	—	5,260	.2071	—	—	173	128	115	1,0	36	6
B272Z05410HPG	—	5,410	.2130	—	3	173	129	116	1,0	36	6
B272Z05500HPG	B272Z05500HPS	5,500	.2165	—	—	173	130	117	1,0	36	6
B272Z05558HPG	—	5,558	.2188	7/32	—	173	130	117	1,0	36	6
B272Z05800HPG	—	5,800	.2283	—	—	173	132	118	1,1	36	6
B272Z06000HPG	B272Z06000HPS	6,000	.2362	—	—	173	134	120	1,1	36	6
B272Z06200HPG	B272Z06200HPS	6,200	.2441	—	—	197	149	134	1,1	38	7
B272Z06350HPG	B272Z06350HPS	6,350	.2500	1/4	E	197	151	136	1,2	38	7
B272Z06500HPG	B272Z06500HPS	6,500	.2559	—	—	197	152	137	1,2	38	7
B272Z06528HPG	—	6,528	.2570	—	F	197	152	137	1,2	38	7
B272Z06746HPG	B272Z06746HPS	6,746	.2656	17/64	—	197	154	138	1,2	38	7
B272Z06909HPG	—	6,909	.2720	—	I	197	155	139	1,3	38	7
B272Z07000HPG	B272Z07000HPS	7,000	.2756	—	—	197	156	140	1,3	38	7
B272Z07145HPG	B272Z07145HPS	7,145	.2813	9/32	—	221	171	154	1,3	40	8
B272Z07500HPG	B272Z07500HPS	7,500	.2953	—	—	221	174	157	1,4	40	8
B272Z07541HPG	—	7,541	.2969	19/64	—	221	174	157	1,4	40	8
B272Z07938HPG	—	7,938	.3125	5/16	—	221	177	159	1,5	40	8

(continued)

(B272Z_HPG/HPS • 20 x D continued)



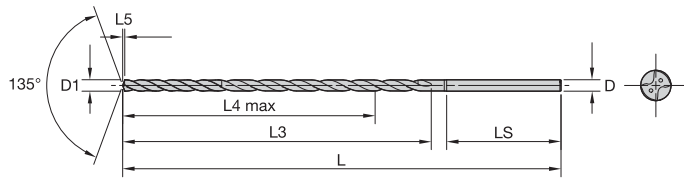
KC7425



KN25

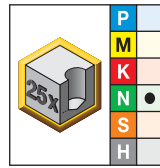
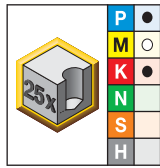
		D1 diameter									
		mm	in	fraction	wire size	L	L3	L4 max	L5	LS	D
B272Z08000HPG	B272Z08000HPS	8,000	.3150	—	—	221	178	160	1,5	40	8
B272Z08334HPG	—	8,334	.3281	21/64	—	245	194	175	1,5	42	9
B272Z08433HPG	—	8,433	.3320	—	Q	245	195	176	1,6	42	9
B272Z08500HPG	B272Z08500HPS	8,500	.3346	—	—	245	196	177	1,6	42	9
B272Z08733HPG	B272Z08733HPS	8,733	.3438	11/32	—	245	198	178	1,6	42	9
B272Z09000HPG	B272Z09000HPS	9,000	.3543	—	—	245	200	180	1,7	42	9
B272Z09100HPG	—	9,100	.3583	—	—	269	215	194	1,7	44	10
B272Z09500HPG	—	9,500	.3740	—	—	269	218	197	1,8	44	10
B272Z09525HPG	B272Z09525HPS	9,525	.3750	3/8	—	269	218	197	1,8	44	10
B272Z09750HPG	B272Z09750HPS	9,750	.3839	—	—	269	220	198	1,8	44	10
B272Z10000HPG	B272Z10000HPS	10,000	.3937	—	—	269	222	200	1,8	44	10
B272Z10200HPG	B272Z10200HPS	10,200	.4016	—	—	293	237	214	1,9	46	11
B272Z10500HPG	B272Z10500HPS	10,500	.4134	—	—	293	240	217	1,9	46	11
B272Z10720HPG	B272Z10720HPS	10,720	.4220	—	—	293	242	219	2,0	46	11
B272Z11000HPG	B272Z11000HPS	11,000	.4331	—	—	293	244	220	2,0	46	11
B272Z11500HPG	B272Z11500HPS	11,500	.4528	—	—	317	262	237	2,1	48	12
B272Z12000HPG	B272Z12000HPS	12,000	.4724	—	—	317	266	240	2,2	48	12
B272Z12500HPG	B272Z12500HPS	12,500	.4921	—	—	341	284	257	2,3	50	13
B272Z12700HPG	B272Z12700HPS	12,700	.5000	1/2	—	341	285	258	2,3	50	13
B272Z13000HPG	B272Z13000HPS	13,000	.5118	—	—	341	288	260	2,4	50	13
B272Z13100HPG	B272Z13100HPS	13,100	.5157	—	—	365	302	273	2,4	52	14
B272Z13500HPG	B272Z13500HPS	13,500	.5315	—	—	365	306	277	2,5	52	14
B272Z14000HPG	B272Z14000HPS	14,000	.5512	—	—	365	310	280	2,6	52	14
B272Z14290HPG	B272Z14290HPS	14,290	.5626	—	—	389	326	295	2,6	54	15
B272Z14500HPG	B272Z14500HPS	14,500	.5709	—	—	389	328	297	2,7	54	15
B272Z15000HPG	B272Z15000HPS	15,000	.5906	—	—	389	332	300	2,8	54	15
B272Z15500HPG	B272Z15500HPS	15,500	.6102	—	—	413	350	317	2,9	56	16
B272Z15870HPG	B272Z15870HPS	15,870	.6248	—	—	413	353	320	2,9	56	16
B272Z16000HPG	B272Z16000HPS	16,000	.6299	—	—	413	354	320	3,0	56	16

Solid Carbide Drills



NEW!

B273Z_HPG/HPS • 25 x D

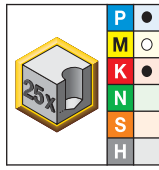
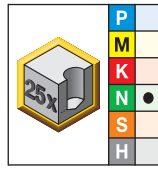


● first choice
○ alternate choice

		D1 diameter				L	L3	L4 max	L5	LS	D	
		mm	in	fraction	wire size							
KC7425	B273Z02383KMG	B273Z02383KMS	2,383	.0938	3/32	—	116	74	67	0,4	30	3
	B273Z02400KMG	B273Z02400KMS	2,400	.0945	—	—	116	75	68	0,4	30	3
KC7425	B273Z02439KMG	B273Z02439KMS	2,439	.0960	—	41	116	75	68	0,5	30	3
	B273Z02489KMG	B273Z02489KMS	2,489	.0980	—	40	116	76	69	0,5	30	3
KC7425	B273Z02500KMG	B273Z02500KMS	2,500	.0984	—	—	116	76	69	0,5	30	3
	B273Z02578KMG	B273Z02578KMS	2,578	.1015	—	38	116	77	70	0,5	30	3
KC7425	B273Z02600KMG	B273Z02600KMS	2,600	.1024	—	—	116	77	70	0,5	30	3
	B273Z02642KMG	B273Z02642KMS	2,642	.1040	—	37	116	78	71	0,5	30	3
KC7425	B273Z02705KMG	B273Z02705KMS	2,705	.1065	—	36	116	79	72	0,5	30	3
	B273Z02779KMG	B273Z02779KMS	2,779	.1094	7/64	—	116	80	73	0,5	30	3
KC7425	B273Z02800KMG	B273Z02800KMS	2,800	.1102	—	—	116	80	73	0,5	30	3
	B273Z02820KMG	B273Z02820KMS	2,820	.1110	—	34	116	80	73	0,5	30	3
KC7425	B273Z02870KMG	B273Z02870KMS	2,870	.1130	—	33	116	81	74	0,5	30	3
	B273Z02900KMG	B273Z02900KMS	2,900	.1142	—	—	116	81	74	0,5	30	3
KC7425	B273Z02947KMG	B273Z02947KMS	2,947	.1160	—	32	116	82	75	0,5	30	3
	B273Z03000HPG	B273Z03000HPS	3,000	.1181	—	—	116	82	75	0,6	30	3
KC7425	B273Z03175HPG	B273Z03175HPS	3,175	.1250	1/8	—	145	99	90	0,6	32	4
	B273Z03500HPG	B273Z03500HPS	3,500	.1378	—	—	145	103	94	0,6	32	4
KC7425	B273Z04000HPG	B273Z04000HPS	4,000	.1575	—	—	145	110	100	0,7	32	4
	B273Z04500HPG	B273Z04500HPS	4,500	.1772	—	—	174	130	119	0,8	34	5
KC7425	B273Z05000HPG	B273Z05000HPS	5,000	.1969	—	—	174	137	125	0,9	34	5
	B273Z05500HPG	B273Z05500HPS	5,500	.2165	—	—	203	157	144	1,0	36	6
KC7425	B273Z06000HPG	B273Z06000HPS	6,000	.2362	—	—	203	164	150	1,1	36	6
	B273Z06350HPG	B273Z06350HPS	6,350	.2500	1/4	E	232	182	167	1,2	38	7
KC7425	B273Z06500HPG	B273Z06500HPS	6,500	.2559	—	—	232	184	169	1,2	38	7
	B273Z06746HPG	B273Z06746HPS	6,746	.2656	17/64	—	232	187	171	1,2	38	7
KC7425	B273Z07000HPG	B273Z07000HPS	7,000	.2756	—	—	232	191	175	1,3	38	7
	B273Z08000HPG	B273Z08000HPS	8,000	.3150	—	—	261	218	200	1,5	40	8
KC7425	B273Z08500HPG	B273Z08500HPS	8,500	.3346	—	—	290	238	219	1,6	42	9
	B273Z08733HPG	B273Z08733HPS	8,733	.3438	11/32	—	290	241	221	1,6	42	9
KC7425	B273Z09000HPG	B273Z09000HPS	9,000	.3543	—	—	290	245	225	1,7	42	9
	B273Z09100HPG	—	9,100	.3583	—	—	319	260	239	1,7	44	10
KC7425	B273Z09525HPG	B273Z09525HPS	9,525	.3750	3/8	—	319	266	245	1,8	44	10
	B273Z10000HPG	B273Z10000HPS	10,000	.3937	—	—	319	272	250	1,8	44	10

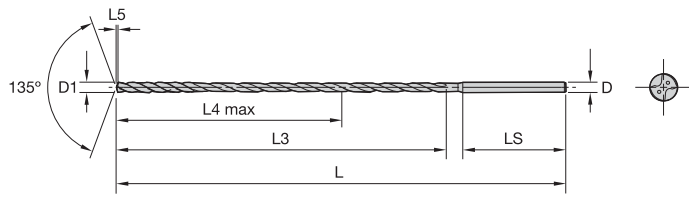
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(B273Z_HPG/HPS • 25 x D continued)


KC7425

KN25

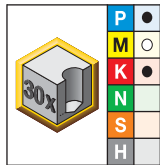
		D1 diameter									
		mm	in	fraction	wire size	L	L3	L4 max	L5	LS	D
B273Z10200HPG	B273Z10200HPS	10,200	.4016	—	—	348	288	265	1,9	46	11
B273Z10500HPG	B273Z10500HPS	10,500	.4134	—	—	348	292	269	1,9	46	11
B273Z10720HPG	B273Z10720HPS	10,720	.4220	—	—	348	295	272	2,0	46	11
B273Z11000HPG	B273Z11000HPS	11,000	.4331	—	—	348	299	275	2,0	46	11
B273Z11500HPG	B273Z11500HPS	11,500	.4528	—	—	377	319	294	2,1	48	12
B273Z12000HPG	B273Z12000HPS	12,000	.4724	—	—	377	326	300	2,2	48	12
B273Z12500HPG	B273Z12500HPS	12,500	.4921	—	—	406	346	319	2,3	50	13
B273Z12700HPG	B273Z12700HPS	12,700	.5000	1/2	—	406	349	322	2,3	50	13
B273Z13000HPG	B273Z13000HPS	13,000	.5118	—	—	406	353	325	2,4	50	13
B273Z13100HPG	B273Z13100HPS	13,100	.5157	—	—	435	368	339	2,4	52	14
B273Z13500HPG	B273Z13500HPS	13,500	.5315	—	—	435	373	344	2,5	52	14
B273Z14000HPG	B273Z14000HPS	14,000	.5512	—	—	435	380	350	2,6	52	14
B273Z14290HPG	B273Z14290HPS	14,290	.5626	—	—	464	397	366	2,6	54	15
B273Z14500HPG	B273Z14500HPS	14,500	.5709	—	—	464	400	369	2,7	54	15
B273Z15000HPG	B273Z15000HPS	15,000	.5906	—	—	464	407	375	2,8	54	15

Solid Carbide Drills

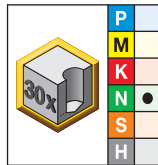


NEW!

■ B274Z_HPG/HPS • 30 x D



KC7425



KN25

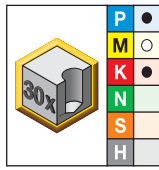
● first choice
○ alternate choice

		D1 diameter				L	L3	L4 max	L5	LS	D
		mm	in	fraction	wire size						
B274Z02383KMG	B274Z02383KMS	2,383	.0938	3/32	—	131	86	79	0,4	30	3
B274Z02400KMG	B274Z02400KMS	2,400	.0945	—	—	131	87	80	0,4	30	3
B274Z02439KMG	B274Z02439KMS	2,439	.0960	—	41	131	87	80	0,5	30	3
B274Z02489KMG	B274Z02489KMS	2,489	.0980	—	40	131	88	81	0,5	30	3
B274Z02500KMG	B274Z02500KMS	2,500	.0984	—	—	131	88	81	0,5	30	3
B274Z02578KMG	B274Z02578KMS	2,578	.1015	—	38	131	90	83	0,5	30	3
B274Z02600KMG	B274Z02600KMS	2,600	.1024	—	—	131	90	83	0,5	30	3
B274Z02642KMG	B274Z02642KMS	2,642	.1040	—	37	131	91	84	0,5	30	3
B274Z02705KMG	B274Z02705KMS	2,705	.1065	—	36	131	92	85	0,5	30	3
B274Z02779KMG	B274Z02779KMS	2,779	.1094	7/64	—	131	94	87	0,5	30	3
B274Z02800KMG	B274Z02800KMS	2,800	.1102	—	—	131	94	87	0,5	30	3
B274Z02820KMG	B274Z02820KMS	2,820	.1110	—	34	131	94	87	0,5	30	3
B274Z02870KMG	B274Z02870KMS	2,870	.1130	—	33	131	95	88	0,5	30	3
B274Z02900KMG	B274Z02900KMS	2,900	.1142	—	—	131	96	89	0,5	30	3
B274Z02947KMG	B274Z02947KMS	2,947	.1160	—	32	131	97	90	0,5	30	3
B274Z03000HPG	B274Z03000HPS	3,000	.1181	—	—	131	97	90	0,6	30	3
B274Z03175HPG	B274Z03175HPS	3,175	.1250	1/8	—	165	115	106	0,6	32	4
B274Z03500HPG	B274Z03500HPS	3,500	.1378	—	—	165	121	112	0,6	32	4
B274Z03970HPG	—	3,970	.1563	5/32	—	165	129	119	0,7	32	4
B274Z04000HPG	B274Z04000HPS	4,000	.1575	—	—	165	130	120	0,7	32	4
B274Z04300HPG	—	4,300	.1693	—	—	199	149	138	0,8	34	5
B274Z04500HPG	B274Z04500HPS	4,500	.1772	—	—	199	153	142	0,8	34	5
B274Z04763HPG	—	4,763	.1875	3/16	—	199	157	146	0,9	34	5
B274Z05000HPG	B274Z05000HPS	5,000	.1969	—	—	199	162	150	0,9	34	5
B274Z05500HPG	B274Z05500HPS	5,500	.2165	—	—	233	185	172	1,0	36	6
B274Z06000HPG	B274Z06000HPS	6,000	.2362	—	—	233	194	180	1,1	36	6
B274Z06350HPG	B274Z06350HPS	6,350	.2500	1/4	E	267	214	199	1,2	38	7
B274Z06500HPG	B274Z06500HPS	6,500	.2559	—	—	267	217	202	1,2	38	7
—	B274Z06746HPS	6,746	.2656	17/64	—	267	221	205	1,2	38	7
B274Z06800HPG	—	6,800	.2677	—	—	267	222	206	1,3	38	7
B274Z07000HPG	B274Z07000HPS	7,000	.2756	—	—	267	226	210	1,3	38	7
B274Z07938HPG	—	7,938	.3125	5/16	—	301	257	239	1,5	40	8

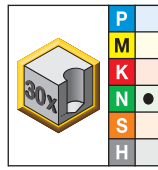
(continued)

(B274Z_HPG/HPS • 30 x D continued)

Solid Carbide Drills



KC7425



KN25

		D1 diameter				L	L3	L4 max	L5	LS	D
		mm	in	fraction	wire size						
B274Z08000HPG	B274Z08000HPS	8,000	.3150	—	—	301	258	240	1,5	40	8
B274Z08334HPG	—	8,334	.3281	21/64	—	335	278	259	1,5	42	9
B274Z08500HPG	B274Z08500HPS	8,500	.3346	—	—	335	281	262	1,6	42	9
—	B274Z08733HPS	8,733	.3438	11/32	—	335	285	265	1,6	42	9
B274Z09000HPG	B274Z09000HPS	9,000	.3543	—	—	335	290	270	1,7	42	9
B274Z09100HPG	—	9,100	.3583	—	—	369	306	285	1,7	44	10
B274Z09525HPG	B274Z09525HPS	9,525	.3750	3/8	—	369	313	292	1,8	44	10
B274Z10000HPG	B274Z10000HPS	10,000	.3937	—	—	369	322	300	1,8	44	10
B274Z10200HPG	B274Z10200HPS	10,200	.4016	—	—	403	339	316	1,9	46	11
B274Z10500HPG	B274Z10500HPS	10,500	.4134	—	—	403	345	322	1,9	46	11
B274Z10720HPG	B274Z10720HPS	10,720	.4220	—	—	403	349	326	2,0	46	11
B274Z11000HPG	B274Z11000HPS	11,000	.4331	—	—	403	354	330	2,0	46	11
B274Z11500HPG	—	11,500	.4528	—	—	437	377	363	2,1	48	12
—	B274Z11500HPS	11,500	.4528	—	—	437	377	352	2,1	48	12
B274Z12000HPG	B274Z12000HPS	12,000	.4724	—	—	437	386	360	2,2	48	12
B274Z12500HPG	B274Z12500HPS	12,500	.4921	—	—	471	409	382	2,3	50	13
B274Z12700HPG	B274Z12700HPS	12,700	.5000	1/2	—	471	412	385	2,3	50	13
B274Z13000HPG	B274Z13000HPS	13,000	.5118	—	—	471	418	390	2,4	50	13

Tolerance • Metric

nominal size range	D1 HPG tolerance h7	D1HPS tolerance h8	D tolerance h6
1-3	0,000/-0,010	0,000/-0,014	0,000/-0,006
>3-6	0,000/-0,012	0,000/-0,018	0,000/-0,008
>6-10	0,000/-0,015	0,000/-0,022	0,000/-0,009
>10-18	0,000/-0,018	0,000/-0,027	0,000/-0,011

The B27_ deep-hole drill series offers an increase of up to 100% in metal removal rates (MRR) compared to competitive gun and HSS drills. It also enables up to 20–30% increased MRR compared to competitive solid carbide products. This MRR increase means bottom-line savings to customers in throughput, machine time, and personnel hours.

Increased Drill Head

Reduces contact with hole wall.



135° HP Point Geometry

Excellent centring ability.

Four-Margin Design

Stability increases tool life.

To achieve the best tool performance, we recommend using the deep-hole drill with a hydraulic chuck.

Reduction sleeves are available to hold the drill shank with the hydraulic chuck.

Unique New Polished Surface

Reduction of friction in the chip flute and on the lands. Shorter drilling time through omission of reversing cycles.

Ultra-Fine-Grain Substrate

Reduces risk of fracture.

Advanced PVD Coating

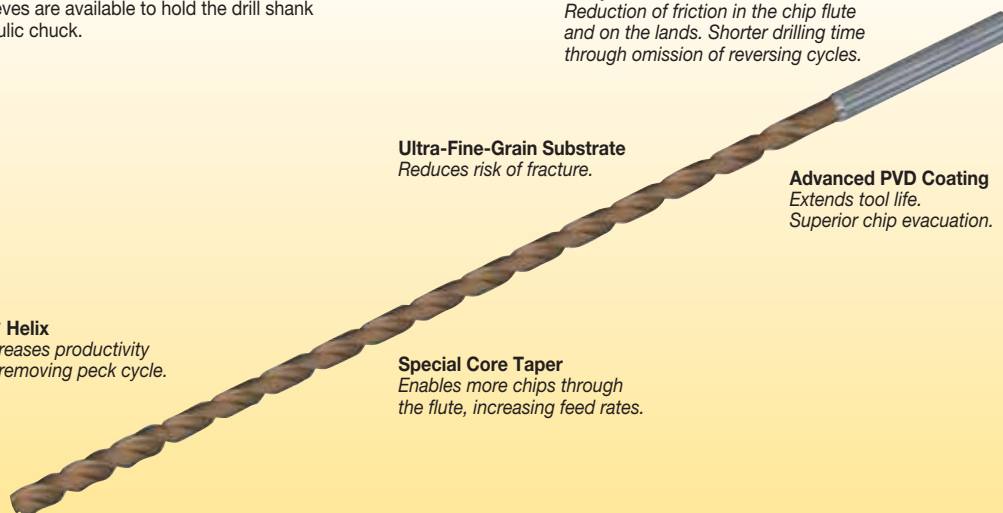
Extends tool life. Superior chip evacuation.

30° Helix

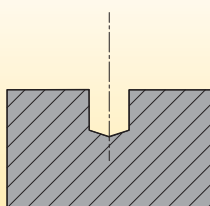
Increases productivity by removing peck cycle.

Special Core Taper

Enables more chips through the flute, increasing feed rates.



D1	12mm hydraulic reducer sleeve		20mm hydraulic reducer sleeve		25mm hydraulic reducer sleeve		32mm hydraulic reducer sleeve		.500" hydraulic reducer sleeve		.750" hydraulic reducer sleeve	
	order number	catalogue number	order number	catalogue number	order number	catalogue number	order number	catalogue number	order number	catalogue number	order number	catalogue number
3	3026450	12MHC030M	3026648	20MHC030M	3026662	25MHC030M	—	—	2248993	50HC030M	2248995	75HC030M
4	3026451	12MHC040M	3026649	20MHC040M	3026663	25MHC040M	—	—	1606050	50HC040M	2248996	75HC040M
5	3026452	12MHC050M	3026650	20MHC050M	3026664	25MHC050M	—	—	2248994	50HC050M	2248997	75HC050M
6	3026643	12MHC060M	3026651	20MHC060M	3026665	25MHC060M	3026675	32MHC060M	1606061	50HC060M	1093271	75HC060M
7	3026644	12MHC070M	3026652	20MHC070M	3026666	25MHC070M	3026676	32MHC070M	—	—	—	—
8	3026645	12MHC080M	3026653	20MHC080M	3026667	25MHC080M	3026677	32MHC080M	1606062	50HC080M	1093272	75HC080M
9	3026646	12MHC090M	3026654	20MHC090M	3026668	25MHC090M	3026678	32MHC090M	—	—	—	—
10	3026647	12MHC100M	3026655	20MHC100M	3026669	25MHC100M	3026679	32MHC100M	1606064	50HC100M	1093273	75HC100M
11	—	—	3026656	20MHC110M	—	—	3026680	32MHC110M	—	—	—	—
12	—	—	3026657	20MHC120M	3026670	25MHC120M	3026681	32MHC120M	—	—	1093524	75HC120M
13	—	—	3026658	20MHC130M	—	—	3026682	32MHC130M	—	—	—	—
14	—	—	3026659	20MHC140M	3026671	25MHC140M	3026683	32MHC140M	—	—	1093525	75HC140M
15	—	—	3026660	20MHC150M	—	—	3026684	32MHC150M	—	—	—	—
16	—	—	3026661	20MHC160M	3026672	25MHC160M	3026685	32MHC160M	—	—	1093526	75HC160M

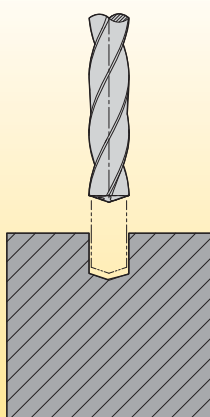


1) Pilot/Pre-Drill Hole

- Drill: B976A... KC7315™ or another drill with a 140° point angle.
- Depth of pilot: minimum 2 x D.
- Drill Ø = nominal Ø up to nominal +0,010mm (+.0004").
- Apply catalogue recommended speeds and feeds.

Recommendations:

- Use only a conical (B976A) or split-point drill to pilot (do not use an SE-HP drill).
- Use a hydraulic chuck to achieve minimum tool runout.
- Be sure the machine tool and setup are rigid.
- Check the pilot drill for wear. Excessive wear can lead to premature wear on the B27_ cutting edge and possibly catastrophic failure.



2) Feed B27_ into Pilot Hole:

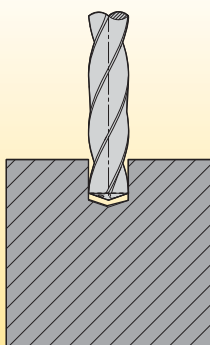
- Drill: B27_
- 1.000 RPM and recommended feed rate, no rapid traverse.
- Depth: 0,25–0,30mm (.010–.012") above the bottom of pilot hole.

Recommendations:

The coolant channels of the B27_ are smaller than typical Kennametal drills. Be sure that a steady supply of coolant is delivered through the coolant channels to the cutting edges. If coolant supply is not steady or is unequal through both channels, check:

1. Coolant filtering system.
2. Sealing of adaptor/spindle.
3. Chips blocking the coolant hole on the drill shank.

NOTE: Reduce cutting speed to minimise imbalances in machine spindle/adaptor. On MQL applications, make sure that the coolant is directly supplied from the chuck into the back end of the drill shank.



3) Drill Hole:

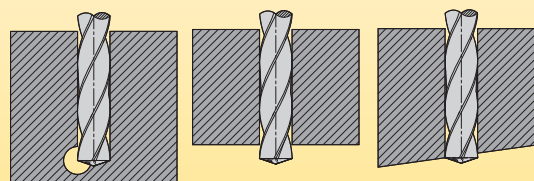
Cutting Parameters: start recommended speed and feed rate at 0,25–0,30mm (.010–.012") from the bottom of the pilot hole.

Recommendations:

DO NOT PECK OR DWELL up to 30 x D!

With long-chipping steel materials, it may be necessary to increase feed rate by 10–20% to provide optimal chip control. For long-chipping aluminium materials, it may be necessary to decrease feed rate and increase speed.

Reduce feed rate on angled exits and cross holes by 50–60%.



NOTE: Feed recommendations are usually higher than with conventional solid carbide drills.

4) Drill Retraction:

Cutting Parameters: 50 RPM and feed rate 2 m/min (40mm/rev or 1.6 IPR).

NOTE: Reduce cutting speed to minimise imbalances in machine spindle/adaptor.

■ Deep-Hole Drills • B27_HPG Series • Grade KC7425™ • Through Coolant for Drill Diameters 3–16mm

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	14,0	16,0
P	1	70	80	90	mm/r	0,15 - 0,18	0,16 - 0,19	0,18 - 0,25	0,22 - 0,30	0,25 - 0,37	0,30 - 0,42	0,35 - 0,48	0,40 - 0,54
	2	70	80	90	mm/r	0,15 - 0,18	0,16 - 0,19	0,18 - 0,25	0,22 - 0,30	0,25 - 0,37	0,30 - 0,42	0,35 - 0,48	0,40 - 0,54
	3	60	75	90	mm/r	0,15 - 0,18	0,16 - 0,19	0,18 - 0,25	0,22 - 0,30	0,25 - 0,37	0,30 - 0,42	0,35 - 0,48	0,40 - 0,54
	4	60	70	80	mm/r	0,15 - 0,18	0,16 - 0,19	0,18 - 0,25	0,22 - 0,30	0,25 - 0,37	0,30 - 0,42	0,35 - 0,48	0,40 - 0,54
M	1	40	50	60	mm/r	0,05 - 0,09	0,07 - 0,12	0,09 - 0,14	0,10 - 0,15	0,11 - 0,16	0,12 - 0,17	0,13 - 0,18	0,14 - 0,19
	2	30	40	50	mm/r	0,04 - 0,08	0,06 - 0,10	0,08 - 0,13	0,09 - 0,14	0,10 - 0,15	0,11 - 0,16	0,12 - 0,17	0,13 - 0,18
	3	30	40	50	mm/r	0,04 - 0,08	0,06 - 0,10	0,08 - 0,13	0,09 - 0,14	0,10 - 0,15	0,11 - 0,16	0,12 - 0,17	0,13 - 0,18
K	1	60	80	100	mm/r	0,15 - 0,19	0,17 - 0,20	0,19 - 0,26	0,24 - 0,32	0,27 - 0,40	0,32 - 0,45	0,38 - 0,52	0,45 - 0,59
	2	60	70	80	mm/r	0,15 - 0,18	0,16 - 0,19	0,18 - 0,25	0,22 - 0,30	0,25 - 0,37	0,30 - 0,42	0,35 - 0,48	0,40 - 0,54
	3	40	70	100	mm/r	0,15 - 0,18	0,16 - 0,19	0,18 - 0,25	0,22 - 0,30	0,25 - 0,37	0,30 - 0,42	0,35 - 0,48	0,40 - 0,54

■ Deep-Hole Drills • B27_HPS Series • Grade KN25™ • Through Coolant for Drill Diameters 3–16mm

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	14,0	16,0
N	1	120	200	300	mm/r	0,12 - 0,17	0,13 - 0,18	0,15 - 0,24	0,19 - 0,29	0,26 - 0,35	0,31 - 0,40	0,35 - 0,45	0,41 - 0,51
	2	120	170	300	mm/r	0,13 - 0,18	0,14 - 0,19	0,16 - 0,25	0,20 - 0,30	0,28 - 0,37	0,33 - 0,42	0,38 - 0,48	0,44 - 0,54
	3	100	150	300	mm/r	0,13 - 0,18	0,14 - 0,19	0,16 - 0,25	0,20 - 0,30	0,28 - 0,37	0,33 - 0,42	0,38 - 0,48	0,44 - 0,54
	5	80	200	300	mm/r	0,03 - 0,05	0,03 - 0,06	0,03 - 0,06	0,04 - 0,06	0,05 - 0,07	0,05 - 0,08	0,05 - 0,08	0,06 - 0,09

HP Drills with Through Coolant for High-Temperature Alloys

Primary Application

B28_ Series Solid Carbide Drills offer a material-specific design and grade for machining high-temperature-resistant alloys such as titanium alloys and nickel-based alloys in aerospace applications. This drill minimises subsurface deformation.

Features and Benefits

HP Drill-Point Design

- Low thrust prevents workpiece flexing.
- Excellent centring capabilities.

Straight Cutting Edge

- Optimised chip formation with less stress and heat generation.
- Rigid wedge at the cutting corner to withstand high thermal and mechanical stress.

Unique Flute Design

- Drastically improved chip evacuation.

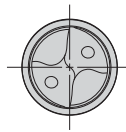
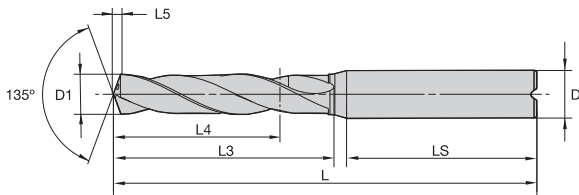
K715™ Grade

- Specified, uncoated 9% cobalt fine-grain carbide.
- The uncoated grade helps to prevent built-up edge in drilling aluminium and high-temp alloys.

Customisation

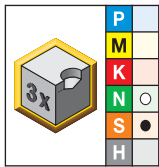
- Intermediate diameters available as semi-standards.
- Length variations and step drills available as engineered solutions.



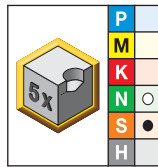


For information on L, L3, and L4 max, see the Solid Carbide foldout table.

■ B284/B285 • ~3 x D/~5 x D



short • K715



long • K715

- first choice
- alternate choice

		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
B284A04000	—	4,000	.1575	—	—	0,7	36	6
B284A04200	—	4,200	.1654	—	—	0,8	36	6
B284A04500	—	4,500	.1772	—	—	0,8	36	6
B284A05000	B285A05000	5,000	.1969	—	—	0,9	36	6
B284A05100	—	5,100	.2008	—	—	0,9	36	6
B284A05500	B285A05500	5,500	.2165	—	—	1,0	36	6
—	B285A05900	5,900	.2323	—	—	1,1	36	6
B284A06000	B285A06000	6,000	.2362	—	—	1,1	36	6
—	B285A06350	6,350	.2500	1/4	E	1,2	36	8
B284A06800	—	6,800	.2677	—	—	1,3	36	8
B284A07000	—	7,000	.2756	—	—	1,3	36	8
B284A07500	—	7,500	.2953	—	—	1,4	36	8
—	B285A08000	8,000	.3150	—	—	1,5	36	8
B284A08500	—	8,500	.3346	—	—	1,6	40	10
B284A08800	—	8,800	.3465	—	—	1,6	40	10
—	B285A09540	9,540	.3756	—	—	1,8	40	10
—	B285A10000	10,000	.3937	—	—	1,8	40	10
—	B285A10500	10,500	.4134	—	—	1,9	45	12
B284A11700	—	11,700	.4606	—	—	2,2	45	12
—	B285A12000	12,000	.4724	—	—	2,2	45	12
B284A15500	—	15,500	.6102	—	—	2,9	48	16
B284A25000	—	25,000	.9843	—	—	4,6	56	25

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

■ HP Drills • B28_Series • Grade K715™ • Through Coolant for Drill Diameters 3–20mm

Solid Carbide Drills

Material Group	Cutting Speed – vc Range – m/min			Metric 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	
	N	1	120	200	400	mm/r	0,13 - 0,19	0,14 - 0,20	0,17 - 0,26	0,21 - 0,32	0,27 - 0,37	0,33 - 0,42	0,37 - 0,47
	2	120	170	400	mm/r	0,14 - 0,20	0,15 - 0,22	0,17 - 0,29	0,22 - 0,35	0,29 - 0,42	0,34 - 0,48	0,39 - 0,54	0,45 - 0,61
	3	100	150	400	mm/r	0,13 - 0,18	0,14 - 0,19	0,16 - 0,25	0,20 - 0,30	0,28 - 0,37	0,33 - 0,42	0,38 - 0,48	0,44 - 0,54
	5	80	200	300	mm/r	0,03 - 0,05	0,03 - 0,06	0,03 - 0,06	0,04 - 0,06	0,05 - 0,07	0,05 - 0,08	0,05 - 0,08	0,06 - 0,09
S	1	20	25	30	mm/r	0,03 - 0,05	0,04 - 0,06	0,06 - 0,09	0,08 - 0,12	0,10 - 0,14	0,11 - 0,16	0,14 - 0,19	0,16 - 0,23
	2	10	15	20	mm/r	0,03 - 0,04	0,04 - 0,05	0,06 - 0,08	0,08 - 0,10	0,10 - 0,12	0,11 - 0,13	0,12 - 0,16	0,14 - 0,18
	4	20	35	50	mm/r	0,03 - 0,04	0,04 - 0,05	0,06 - 0,08	0,08 - 0,10	0,11 - 0,13	0,13 - 0,15	0,14 - 0,18	0,16 - 0,21

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Check the Kennametal website!



Online product catalogue available 24/7

Visit <http://www.kennametal.com/holemaking/> to browse our electronic catalogue any time you're looking for Kennametal's best tooling solutions. It's fast, free, and always available. The online e-catalogue is updated weekly with products and solutions for milling, turning, drilling, and tooling systems applications.

Y-TECH™ Drills with Through Coolant for Difficult-to-Machine Materials

Primary Application

The B29_YPL Series Solid Carbide Drills are specifically engineered to drill stainless steel, high-temp alloys, and difficult-to-machine materials.

Y-TECH drills deliver best-in-class hole quality and longest tool life in these difficult-to-machine workpiece materials. Operate these drills with standard through coolant or MQL.

Features and Benefits

YPL Drill-Point Design

- Ensures good centring and chip formation.
- No jamming of chips and enables easy reconditioning.

Uneven Flute-to-Flute Angle

- Unbalanced forces by design eliminate chipping on margin lands.

Three-Margin Lands

- Reduce pendulum motion by directing forces towards third margin, which results in superior hole accuracy (cylindricity, constant diameter, hole straightness).

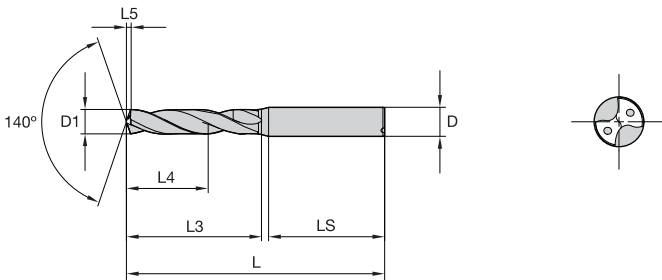
KC7315™ Grade

- A multilayer, TiAlN-based coating with high hot hardness enables higher cutting speeds and outstanding wear resistance.
- Optimised surface finish of the tool ensures chip evacuation in high-speed drilling and MQL applications.

Customisation

- Intermediate diameters available as semi-standards.
- Length variations and step drills available as engineered solutions.
- Using Kennametal Slim Line Hydraulic Chucks together with standard B29_YPL is recommended if workpiece contours need to be bypassed.

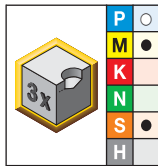




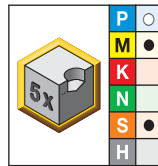
For information on L, L3, and L4 max, see the Solid Carbide foldout table.



■ B291/B292_YPL • ~3 x D/~5 x D



short • KC7315



long • KC7315

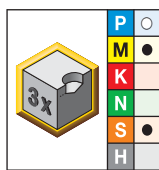
- first choice
- alternate choice

		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
B291A03000YPL	B292A03000YPL	3,000	.1181	—	—	0,6	36	6
B291A03100YPL	B292A03100YPL	3,100	.1220	—	—	0,6	36	6
B291A03175YPL	B292A03175YPL	3,175	.1250	1/8	—	0,6	36	6
B291A03200YPL	B292A03200YPL	3,200	.1260	—	—	0,6	36	6
B291A03300YPL	B292A03300YPL	3,300	.1299	—	—	0,7	36	6
B291A03400YPL	B292A03400YPL	3,400	.1339	—	—	0,7	36	6
B291A03454YPL	B292A03454YPL	3,454	.1360	—	29	0,7	36	6
B291A03500YPL	B292A03500YPL	3,500	.1378	—	—	0,7	36	6
B291A03600YPL	B292A03600YPL	3,600	.1417	—	—	0,7	36	6
B291A03700YPL	B292A03700YPL	3,700	.1457	—	—	0,7	36	6
B291A03800YPL	B292A03800YPL	3,800	.1496	—	—	0,8	36	6
B291A03900YPL	B292A03900YPL	3,900	.1535	—	—	0,8	36	6
B291A03970YPL	B292A03970YPL	3,970	.1563	5/32	—	0,8	36	6
B291A04000YPL	B292A04000YPL	4,000	.1575	—	—	0,8	36	6
B291A04100YPL	B292A04100YPL	4,100	.1614	—	—	0,8	36	6
—	B292A04200YPL	4,200	.1654	—	—	0,8	36	6
B291A04300YPL	B292A04300YPL	4,300	.1693	—	—	0,8	36	6
B291A04400YPL	—	4,400	.1732	—	—	0,9	36	6
B291A04500YPL	B292A04500YPL	4,500	.1772	—	—	0,9	36	6
—	B292A04700YPL	4,700	.1850	—	13	0,9	36	6
B291A04763YPL	B292A04763YPL	4,763	.1875	3/16	—	0,9	36	6
B291A04800YPL	B292A04800YPL	4,800	.1890	—	12	0,9	36	6
B291A04851YPL	B292A04851YPL	4,851	.1910	—	11	0,9	36	6
B291A04900YPL	—	4,900	.1929	—	—	0,9	36	6
B291A04915YPL	B292A04915YPL	4,915	.1935	—	10	1,0	36	6
B291A05000YPL	B292A05000YPL	5,000	.1969	—	—	1,0	36	6
B291A05100YPL	B292A05100YPL	5,100	.2008	—	—	1,0	36	6
B291A05200YPL	B292A05200YPL	5,200	.2047	—	—	1,0	36	6
B291A05410YPL	B292A05410YPL	5,410	.2130	—	3	1,1	36	6
B291A05500YPL	B292A05500YPL	5,500	.2165	—	—	1,1	36	6
—	B292A05558YPL	5,558	.2188	7/32	—	1,1	36	6
B291A05600YPL	B292A05600YPL	5,600	.2205	—	—	1,1	36	6
—	B292A05800YPL	5,800	.2283	—	—	1,1	36	6
B291A05900YPL	—	5,900	.2323	—	—	1,1	36	6
B291A06000YPL	B292A06000YPL	6,000	.2362	—	—	1,2	36	6
B291A06200YPL	B292A06200YPL	6,200	.2441	—	—	1,2	36	8
B291A06350YPL	B292A06350YPL	6,350	.2500	1/4	E	1,2	36	8
B291A06500YPL	B292A06500YPL	6,500	.2559	—	—	1,3	36	8
—	B292A06528YPL	6,528	.2570	—	F	1,3	36	8
—	B292A06600YPL	6,600	.2598	—	—	1,3	36	8

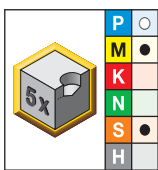
(continued)

(B291/B292_YPL • ~3 x D/-5 x D continued)

Solid Carbide Drills



short • KC7315

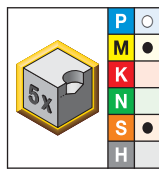
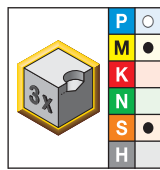


long • KC7315

		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
—	B292A06746YPL	6,746	.2656	17/64	—	1,3	36	8
B291A06747YPL	—	6,747	.2656	17/64	—	1,3	36	8
B291A06800YPL	B292A06800YPL	6,800	.2677	—	—	1,3	36	8
—	B292A06900YPL	6,900	.2717	—	—	1,3	36	8
B291A07000YPL	B292A07000YPL	7,000	.2756	—	—	1,4	36	8
—	B292A07100YPL	7,100	.2795	—	—	1,4	36	8
B291A07144YPL	—	7,144	.2813	9/32	—	1,4	36	8
—	B292A07145YPL	7,145	.2813	9/32	—	1,4	36	8
B291A07200YPL	B292A07200YPL	7,200	.2835	—	—	1,4	36	8
—	B292A07400YPL	7,400	.2913	—	—	1,4	36	8
B291A07500YPL	B292A07500YPL	7,500	.2953	—	—	1,4	36	8
—	B292A07600YPL	7,600	.2992	—	—	1,5	36	8
—	B292A07900YPL	7,900	.3110	—	—	1,5	36	8
B291A07938YPL	B292A07938YPL	7,938	.3125	5/16	—	1,5	36	8
B291A08000YPL	B292A08000YPL	8,000	.3150	—	—	1,5	36	8
—	B292A08100YPL	8,100	.3189	—	—	1,6	40	10
—	B292A08200YPL	8,200	.3228	—	—	1,6	40	10
B291A08334YPL	B292A08334YPL	8,334	.3281	21/64	—	1,6	40	10
—	B292A08433YPL	8,433	.3320	—	Q	1,6	40	10
B291A08500YPL	B292A08500YPL	8,500	.3346	—	—	1,6	40	10
B291A08600YPL	B292A08600YPL	8,600	.3386	—	—	1,7	40	10
B291A08733YPL	B292A08733YPL	8,733	.3438	11/32	—	1,7	40	10
B291A08800YPL	B292A08800YPL	8,800	.3465	—	—	1,7	40	10
B291A08900YPL	B292A08900YPL	8,900	.3504	—	—	1,7	40	10
B291A09000YPL	B292A09000YPL	9,000	.3543	—	—	1,7	40	10
B291A09129YPL	—	9,129	.3594	23/64	—	1,8	40	10
—	B292A09130YPL	9,130	.3594	23/64	—	1,8	40	10
B291A09200YPL	B292A09200YPL	9,200	.3622	—	—	1,8	40	10
B291A09300YPL	—	9,300	.3661	—	—	1,8	40	10
—	B292A09347YPL	9,347	.3680	—	U	1,8	40	10
B291A09500YPL	B292A09500YPL	9,500	.3740	—	—	1,8	40	10
B291A09525YPL	B292A09525YPL	9,525	.3750	3/8	—	1,8	40	10
—	B292A09600YPL	9,600	.3780	—	—	1,8	40	10
B291A09700YPL	B292A09700YPL	9,700	.3819	—	—	1,9	40	10
B291A09800YPL	B292A09800YPL	9,800	.3858	—	—	1,9	40	10
B291A10000YPL	B292A10000YPL	10,000	.3937	—	—	1,9	40	10
—	B292A10100YPL	10,100	.3976	—	—	1,9	45	12
B291A10200YPL	B292A10200YPL	10,200	.4016	—	—	2,0	45	12
B291A10320YPL	B292A10320YPL	10,320	.4063	13/32	—	2,0	45	12
B291A10500YPL	B292A10500YPL	10,500	.4134	—	—	2,0	45	12
B291A10600YPL	—	10,600	.4173	—	—	2,0	45	12
B291A10716YPL	B292A10716YPL	10,716	.4219	27/64	—	2,0	45	12
B291A11000YPL	B292A11000YPL	11,000	.4331	—	—	2,1	45	12
—	B292A11112YPL	11,112	.4375	7/16	—	2,1	45	12
B291A11113YPL	—	11,113	.4375	7/16	—	2,1	45	12
B291A11500YPL	B292A11500YPL	11,500	.4528	—	—	2,2	45	12
B291A11509YPL	B292A11509YPL	11,509	.4531	29/64	—	2,2	45	12
B291A11800YPL	—	11,800	.4646	—	—	2,2	45	12
B291A11908YPL	B292A11908YPL	11,908	.4688	15/32	—	2,3	45	12
B291A12000YPL	B292A12000YPL	12,000	.4724	—	—	2,3	45	12

(continued)

(B291/B292_YPL • ~3 x D/-5 x D continued)



		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
short • KC7315	long • KC7315							
B291A12300YPL	—	12,300	.4843	—	—	2,3	45	14
—	B292A12304YPL	12,304	.4844	31/64	—	2,3	45	14
B291A12500YPL	B292A12500YPL	12,500	.4921	—	—	2,4	45	14
B291A12700YPL	B292A12700YPL	12,700	.5000	1/2	—	2,4	45	14
B291A12900YPL	—	12,900	.5079	—	—	2,5	45	14
B291A13000YPL	B292A13000YPL	13,000	.5118	—	—	2,5	45	14
—	B292A13500YPL	13,500	.5315	—	—	2,6	45	14
—	B292A13650YPL	13,650	.5374	—	—	2,6	45	14
B291A13800YPL	—	13,800	.5433	—	—	2,6	45	14
—	B292A13900YPL	13,900	.5472	—	—	2,6	45	14
B291A14000YPL	B292A14000YPL	14,000	.5512	—	—	2,7	45	14
—	B292A14200YPL	14,200	.5591	—	—	2,7	48	16
B291A14288YPL	B292A14288YPL	14,288	.5625	9/16	—	2,7	48	16
B291A14500YPL	B292A14500YPL	14,500	.5709	—	—	2,8	48	16
B291A14900YPL	—	14,900	.5866	—	—	2,8	48	16
B291A15000YPL	B292A15000YPL	15,000	.5906	—	—	2,8	48	16
—	B292A15500YPL	15,500	.6102	—	—	2,9	48	16
—	B292A15600YPL	15,600	.6142	—	—	3,0	48	16
B291A15800YPL	—	15,800	.6220	—	—	3,0	48	16
B291A15875YPL	B292A15875YPL	15,875	.6250	5/8	—	3,0	48	16
B291A16000YPL	B292A16000YPL	16,000	.6299	—	—	3,0	48	16
B291A16100YPL	B292A16100YPL	16,100	.6339	—	—	3,1	48	18
—	B292A16500YPL	16,500	.6496	—	—	3,1	48	18
B291A17000YPL	B292A17000YPL	17,000	.6693	—	—	3,2	48	18
B291A17463YPL	B292A17463YPL	17,463	.6875	11/16	—	3,3	48	18
B291A17500YPL	B292A17500YPL	17,500	.6890	—	—	3,3	48	18
B291A17900YPL	—	17,900	.7047	—	—	3,4	48	18
B291A18000YPL	B292A18000YPL	18,000	.7087	—	—	3,4	48	18
—	B292A18500YPL	18,500	.7283	—	—	3,5	50	20
—	B292A19000YPL	19,000	.7480	—	—	3,6	50	20
B291A19050YPL	B292A19050YPL	19,050	.7500	3/4	—	3,6	50	20
—	B292A19100YPL	19,100	.7520	—	—	3,6	50	20
—	B292A19446YPL	19,446	.7656	49/64	—	3,7	50	20
—	B292A19500YPL	19,500	.7677	—	—	3,7	50	20
B291A19800YPL	—	19,800	.7795	—	—	3,7	50	20
—	B292A20000YPL	20,000	.7874	—	—	3,8	50	20
—	B292A20500YPL	20,500	.8071	—	—	3,9	50	20
—	B292A21000YPL	21,000	.8268	—	—	4,0	50	20

NOTE: YPL drills are designed specifically for high-temp alloys, duplex stainless steels, and other difficult-to-machine materials.

Tolerance • Metric

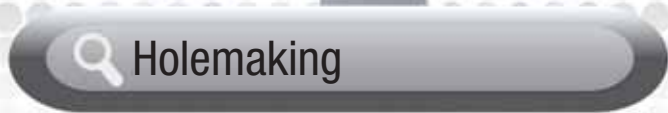
nominal size range	D1 tolerance m7	D tolerance h6
>3-6	0,004/0,016	0,000/-0,008
>6-10	0,006/0,021	0,000/-0,009
>10-18	0,007/0,025	0,000/-0,011
>18-25,4	0,008/0,029	0,000/-0,013

Y-TECH™ Drill • B29_YPL Series • Grade KC7315™ • Through Coolant for Drill Diameters 3–20mm

Solid Carbide Drills

Material Group	Cutting Speed – vc Range – m/min			Metric 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	5	45	65	80	mm/r	0,04 - 0,08	0,06 - 0,09	0,07 - 0,12	0,09 - 0,16	0,11 - 0,19	0,13 - 0,21	0,15 - 0,26
M	1	40	50	60	mm/r	0,07 - 0,11	0,08 - 0,12	0,13 - 0,17	0,14 - 0,21	0,14 - 0,21	0,17 - 0,23	0,19 - 0,25	0,22 - 0,27
	2	40	50	80	mm/r	0,07 - 0,11	0,07 - 0,12	0,08 - 0,17	0,13 - 0,21	0,14 - 0,22	0,17 - 0,28	0,19 - 0,32	0,22 - 0,34
	3	40	50	70	mm/r	0,04 - 0,06	0,04 - 0,07	0,04 - 0,07	0,05 - 0,08	0,06 - 0,09	0,06 - 0,10	0,06 - 0,10	0,07 - 0,11
S	1	15	20	30	mm/r	0,06 - 0,08	0,06 - 0,08	0,07 - 0,10	0,10 - 0,13	0,11 - 0,14	0,12 - 0,16	0,14 - 0,19	0,17 - 0,22
	2	20	10	30	mm/r	0,05 - 0,07	0,05 - 0,07	0,06 - 0,08	0,08 - 0,11	0,09 - 0,12	0,10 - 0,13	0,12 - 0,16	0,14 - 0,18
	3	25	30	50	mm/r	0,03 - 0,05	0,03 - 0,05	0,04 - 0,08	0,05 - 0,10	0,05 - 0,10	0,05 - 0,10	0,07 - 0,11	0,08 - 0,12
	4	30	25	50	mm/r	0,03 - 0,05	0,03 - 0,05	0,04 - 0,08	0,05 - 0,10	0,05 - 0,10	0,05 - 0,10	0,07 - 0,11	0,08 - 0,12

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TX Drills with Through Coolant for Close Tolerance Holes

Primary Application

B411 Solid Carbide Drills have an X-shaped, free-cutting 130° point design and are designed for grey cast iron, nodular iron, and non-ferrous and aluminium alloy materials. Best suited for high-quality, close tolerance holes that require a very good surface finish.

Features and Benefits

Two Cutting Edges with Straight Flutes

- Precise shape of the hole even if used as platform for complex step drills.
- Can run into cored holes.

X-Shaped Drill Point

- Excellent centring capabilities.

Four-Margin Land Design

- Second set of cutting margin lands improves the surface quality.
- Achieve tight diameter tolerances.
- Can run through cross holes and exit on inclined surfaces.

Wear-Resistant Carbide KF1™ Grade

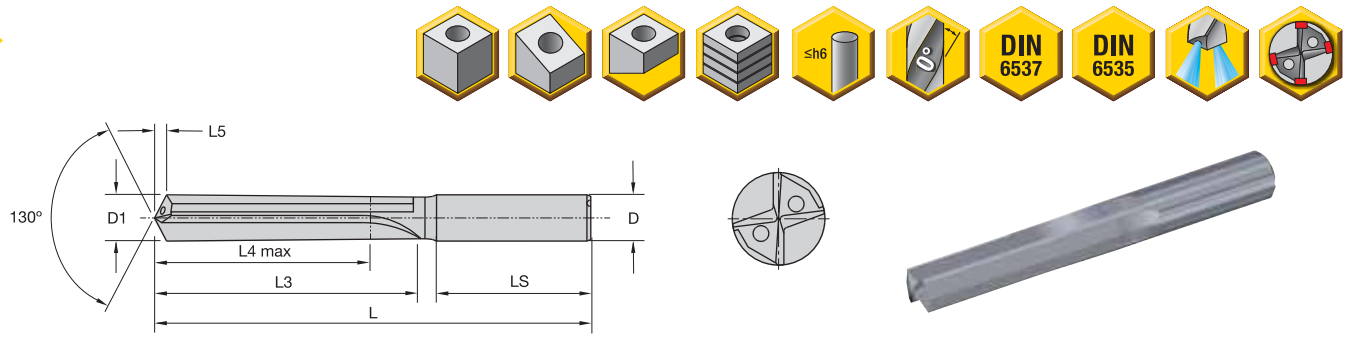
- Long tool life in abrasive materials, such as cast iron and aluminium die cast alloys.
- The uncoated grade KF1 helps to prevent built-up edge in drilling aluminium.

Customisation

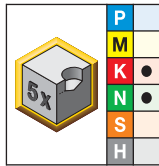
- Intermediate diameters available as semi-standards.
- Length variations and step drills available as engineered solutions.
- Coated KC7205™ grade delivers high wear resistance with very high diameter accuracy.



Solid Carbide Drills



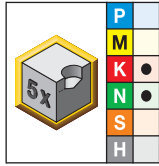
■ B411 • ~5 x D



- first choice
- alternate choice

KF1	D1 diameter				L	L4 max	L5	LS	D
	mm	in	fraction	wire size					
B411A03200	3,200	.1260	—	—	66	23	0,7	36	6
B411A03300	3,300	.1299	—	—	66	23	0,8	36	6
B411A03800	3,800	.1496	—	—	74	29	0,9	36	6
B411A04000	4,000	.1575	—	—	74	29	0,9	36	6
B411A04200	4,200	.1654	—	—	74	29	1,0	36	6
B411A04500	4,500	.1772	—	—	74	29	1,0	36	6
B411A04600	4,600	.1811	—	—	74	29	1,1	36	6
B411A04650	4,650	.1831	—	—	74	29	1,1	36	6
B411A04800	4,800	.1890	—	12	82	35	1,1	36	6
B411A04900	4,900	.1929	—	—	82	35	1,1	36	6
B411A05000	5,000	.1969	—	—	82	35	1,2	36	6
B411A05100	5,100	.2008	—	—	82	35	1,2	36	6
B411A05200	5,200	.2047	—	—	82	35	1,2	36	6
B411A05500	5,500	.2165	—	—	82	35	1,3	36	6
B411A05550	5,550	.2185	—	—	82	35	1,3	36	6
B411A05800	5,800	.2283	—	—	82	35	1,4	36	6
B411A06000	6,000	.2362	—	—	82	35	1,4	36	6
B411A06300	6,300	.2480	—	—	91	43	1,5	36	8
B411A06400	6,400	.2520	—	—	91	43	1,5	36	8
B411A06500	6,500	.2559	—	—	91	43	1,5	36	8
B411A06600	6,600	.2598	—	—	91	43	1,5	36	8
B411A06800	6,800	.2677	—	—	91	43	1,6	36	8
B411A07000	7,000	.2756	—	—	91	43	1,6	36	8
B411A07400	7,400	.2913	—	—	91	43	1,7	36	8
B411A07500	7,500	.2953	—	—	91	43	1,7	36	8
B411A07800	7,800	.3071	—	—	91	43	1,8	36	8
B411A08000	8,000	.3150	—	—	91	43	1,9	36	8
B411A08400	8,400	.3307	—	—	103	49	2,0	40	10
B411A08500	8,500	.3346	—	—	103	49	2,0	40	10
B411A09000	9,000	.3543	—	—	103	49	2,1	40	10
B411A09300	9,300	.3661	—	—	103	49	2,2	40	10
B411A09500	9,500	.3740	—	—	103	49	2,2	40	10
B411A09800	9,800	.3858	—	—	103	49	2,3	40	10
B411A10000	10,000	.3937	—	—	103	49	2,3	40	10
B411A10200	10,200	.4016	—	—	118	56	2,4	45	12
B411A10500	10,500	.4134	—	—	118	56	2,4	45	12
B411A11000	11,000	.4331	—	—	118	56	2,6	45	12
B411A11200	11,200	.4409	—	—	118	56	2,6	45	12
B411A11500	11,500	.4528	—	—	118	56	2,7	45	12
B411A11800	11,800	.4646	—	—	118	56	2,8	45	12

(continued)



KF1	D1 diameter				L	L4 max	L5	LS	D
	mm	in	fraction	wire size					
B411A12000	12,000	.4724	—	—	118	56	2,8	45	12
B411A12500	12,500	.4921	—	—	124	60	2,9	45	14
B411A13000	13,000	.5118	—	—	124	60	3,0	45	14
B411A13500	13,500	.5315	—	—	124	60	3,1	45	14
B411A13800	13,800	.5433	—	—	124	60	3,2	45	14
B411A14000	14,000	.5512	—	—	124	60	3,3	45	14
B411A14500	14,500	.5709	—	—	133	63	3,4	48	16
B411A15000	15,000	.5906	—	—	133	63	3,5	48	16
B411A15500	15,500	.6102	—	—	133	63	3,6	48	16
B411A16000	16,000	.6299	—	—	133	63	3,7	48	16
B411A16500	16,500	.6496	—	—	143	71	3,8	48	18
B411A17000	17,000	.6693	—	—	143	71	4,0	48	18
B411A17500	17,500	.6890	—	—	143	71	4,1	48	18
B411A18000	18,000	.7087	—	—	143	71	4,2	48	18
B411A19000	19,000	.7480	—	—	153	77	4,4	50	20
B411A19500	19,500	.7677	—	—	153	77	4,5	50	20
B411A20000	20,000	.7874	—	—	153	77	4,7	50	20
B411A21000	21,000	.8268	—	—	167	85	4,9	50	20
B411A22000	22,000	.8661	—	—	167	85	5,1	50	20
B411A23000	23,000	.9055	—	—	184	98	5,4	56	25
B411A24000	24,000	.9449	—	—	184	98	5,6	56	25
B411A25000	25,000	.9843	—	—	184	98	5,8	56	25

Tolerance • Metric

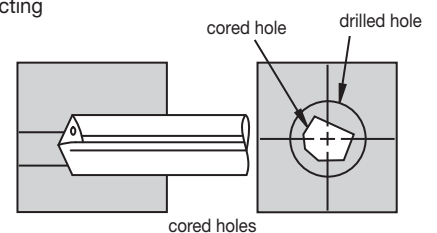
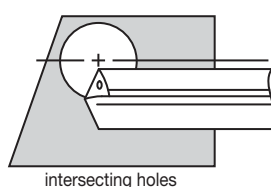
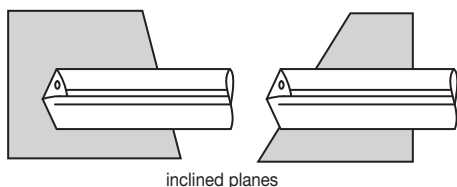
nominal size range	D1 tolerance k6	D tolerance h6
>3-6	0,001/0,009	0,000/-0,008
>6-10	0,001/0,010	0,000/-0,009
>10-18	0,001/0,012	0,000/-0,011
>18-25,4	0,002/0,015	0,000/-0,013

TX Drills • B411 Series • Grade KF1™ • Through Coolant for Drill Diameters 3-20mm

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	25,4		
K	1	115	60	140	mm/r	0,11 - 0,20	0,12 - 0,24	0,15 - 0,28	0,18 - 0,33	0,20 - 0,38	0,23 - 0,44	0,30 - 0,53	0,34 - 0,65	0,40 - 0,76
N	1	100	250	450	mm/r	0,16 - 0,25	0,19 - 0,29	0,23 - 0,35	0,27 - 0,42	0,31 - 0,50	0,36 - 0,57	0,44 - 0,69	0,52 - 0,82	0,62 - 0,96
N	2	200	100	300	mm/r	0,15 - 0,23	0,17 - 0,28	0,21 - 0,34	0,25 - 0,39	0,30 - 0,46	0,34 - 0,54	0,42 - 0,67	0,52 - 0,82	0,61 - 0,96
S	5	100	170	250	mm/r	0,16 - 0,28	0,15 - 0,32	0,19 - 0,36	0,23 - 0,40	0,25 - 0,44	0,28 - 0,48	0,32 - 0,56	0,35 - 0,63	0,42 - 0,72
S	4	20	40	50	mm/r	0,04 - 0,07	0,04 - 0,07	0,06 - 0,09	0,08 - 0,10	0,10 - 0,14	0,13 - 0,18	0,18 - 0,26	0,22 - 0,32	0,27 - 0,38

TX Drill Applications

The excellent stability of the TX drill enables it to be used for drilling through inclined planes, intersecting holes, and cored holes:



SPF Drills for Composite (CFRP) Materials

Primary Application

B53_ Series Solid Carbide Drills offer a material-specific design and grade to machine carbon fibre-reinforced polymer (CFRP) composite materials by minimising delamination and increasing tool life.

Features and Benefits

SPF Drill-Point Design

- Special 90° point angle increases centring capability.
- Low thrust and improved hole quality.

Unique Geometry

- Combination of point design, substrate, and coating provides longer tool life and requires substantially less cutting force.

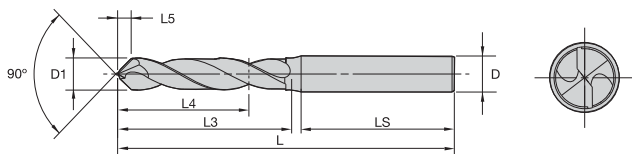
KDF400™ Grade

- CVD multilayer diamond coating provides more wear resistance and reduced friction, increasing tool life and improving chip flow.

Customisation

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



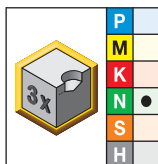


For information on L, L3, and L4 max, see the Solid Carbide foldout table.

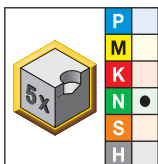


Solid Carbide Drills

■ B531/B532_SPF • ~3 x D/~5 x D • Metric



short • KDF400



long • KDF400

- first choice
- alternate choice

		D1 diameter				L5	LS	D
		mm	in	fraction	wire size			
B531A03200SPF	B532A03200SPF	3,200	.1260	—	—	1,5	36	6
B531A03300SPF	B532A03300SPF	3,300	.1299	—	—	1,5	36	6
B531A03600SPF	B532A03600SPF	3,600	.1417	—	—	1,6	36	6
B531A04000SPF	B532A04000SPF	4,000	.1575	—	—	1,8	36	6
B531A04366SPF	B532A04366SPF	4,366	.1719	11/64	—	2,0	36	6
B531A04851SPF	B532A04851SPF	4,851	.1910	—	11	2,2	36	6
B531A04864SPF	B532A04864SPF	4,864	.1915	—	—	2,2	36	6
B531A05100SPF	B532A05100SPF	5,100	.2008	—	—	2,3	36	6
B531A05200SPF	B532A05200SPF	5,200	.2047	—	—	2,4	36	6
B531A06000SPF	B532A06000SPF	6,000	.2362	—	—	2,7	36	6
B531A06375SPF	B532A06375SPF	6,375	.2510	—	—	2,9	36	8
B531A06400SPF	B532A06400SPF	6,400	.2520	—	—	2,9	36	8
B531A06500SPF	B532A06500SPF	6,500	.2559	—	—	3,0	36	8
—	B532A06700SPF	6,700	.2638	—	—	3,0	36	8
—	B532A07200SPF	7,200	.2835	—	—	3,3	36	8
B531A07938SPF	B532A07938SPF	7,938	.3125	5/16	—	3,6	36	8
B531A08153SPF	B532A08153SPF	8,153	.3210	—	—	3,7	40	10
B531A09550SPF	B532A09550SPF	9,550	.3760	—	—	4,3	40	10
B531A09563SPF	B532A09563SPF	9,563	.3765	—	—	4,3	40	10
B531A11125SPF	B532A11125SPF	11,125	.4380	—	—	5,1	45	12
B531A12725SPF	B532A12725SPF	12,725	.5010	—	—	5,8	45	14

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

■ SPF Drills • B53_ Series • Grade KDF400™ • Dry Applications for Drill Diameters 3–12mm

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	
N 6	90	120	150	mm/r	0,03 - 0,20	0,03 - 0,20	0,03 - 0,20	0,03 - 0,20	0,03 - 0,20	0,03 - 0,20



FB Drills with Through Coolant for Flat-Bottom Applications

Primary Application

B707_FB Series Solid Carbide Drills are productivity tools that combine two operations in one:

- 1) Eliminate the 180° end mill in flat-bottom drilling or when preparing an inclined or curved surface for drilling.
- 2) After full cylindrical engagement, the drill runs at normal solid carbide drilling parameters.

The B707_FBS Series with the new uncoated KN15™ grade now offers the same advantages for drilling in non-ferrous materials, such as aluminium, copper, and brass. The B707_FBL Series is designed for applications in stainless steel and high-temperature alloys.

Features and Benefits

Unique FB Drill-Point Design

- Two effective cutting edges over centre enable high feed rates.
- Creates a true flat-bottom hole from O.D. to centre.
- Four-margin lands improve hole straightness and roundness providing good alignment even in cross holes.

Straight Cutting Edge

- Guarantees a true 180° hole ground.
- Rake angle correction improves chip control.

KC7315™ Grade on B702_FBG and _FBL

- Enables high drill-like penetration rates and superior tool life.

KN15 Grade on B707_FBS

- The uncoated grade prevents built-up edge reducing the risk of fracture.
- The highly polished surfaces ensure superior chip evacuation even when low-pressure coolant or MQL is applied.

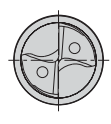
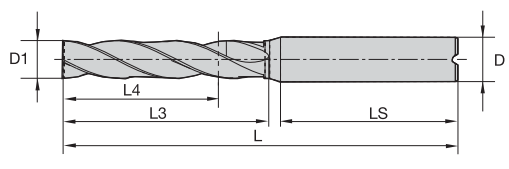
Customisation

- Intermediate diameters available as semi-standards.
- Length variations available as semi-standard:
 - B706_ 1,5 x D
 - B708_ 5 x D
 - B709_ 8 x D
- Other length variations and step drills are available as engineered solutions.

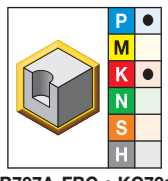




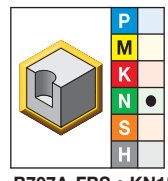
Solid Carbide Drills



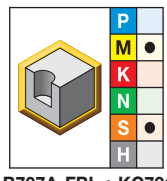
■ B707_FBG/FBS/FBL • ~3 x D



B707A-FBG • KC7315



B707A-FBS • KN15



B707A-FBL • KC7315

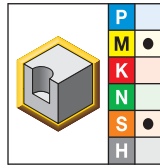
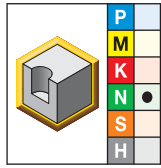
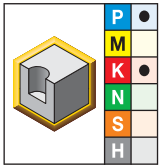
- first choice
- alternate choice

			D1 diameter				L4 max	L3	L	LS	D
			mm	in	fraction	wire size					
B707A03000FBG	B707A03000FBS	B707A03000FBL	3,000	.1181	—	—	14	20	62	36	6
B707A03175FBG	B707A03175FBS	B707A03175FBL	3,175	.1250	1/8	—	14	20	62	36	6
B707A03500FBG	B707A03500FBS	B707A03500FBL	3,500	.1378	—	—	14	20	62	36	6
B707A03970FBG	—	—	3,970	.1563	5/32	—	17	24	66	36	6
B707A04000FBG	B707A04000FBS	B707A04000FBL	4,000	.1575	—	—	17	24	66	36	6
B707A04200FBG	—	—	4,200	.1654	—	—	17	24	66	36	6
B707A04400FBG	B707A04400FBS	B707A04400FBL	4,400	.1732	—	—	17	24	66	36	6
B707A04500FBG	B707A04500FBS	B707A04500FBL	4,500	.1772	—	—	17	24	66	36	6
B707A04763FBG	—	—	4,763	.1875	3/16	—	20	28	66	36	6
B707A04800FBG	B707A04800FBS	B707A04800FBL	4,800	.1890	—	12	20	28	66	36	6
B707A04900FBG	—	—	4,900	.1929	—	—	20	28	66	36	6
B707A05000FBG	B707A05000FBS	B707A05000FBL	5,000	.1969	—	—	20	28	66	36	6
B707A05560FBG	B707A05560FBS	B707A05560FBL	5,560	.2189	—	—	20	28	66	36	6
B707A05900FBG	B707A05900FBS	B707A05900FBL	5,900	.2323	—	—	20	28	66	36	6
B707A06000FBG	B707A06000FBS	B707A06000FBL	6,000	.2362	—	—	20	28	66	36	6
B707A06350FBG	B707A06350FBS	B707A06350FBL	6,350	.2500	1/4	E	24	34	79	36	8
B707A06500FBG	B707A06500FBS	B707A06500FBL	6,500	.2559	—	—	24	34	79	36	8
B707A06800FBG	B707A06800FBS	B707A06800FBL	6,800	.2677	—	—	24	34	79	36	8
B707A07000FBG	B707A07000FBS	B707A07000FBL	7,000	.2756	—	—	24	34	79	36	8
B707A07145FBG	—	—	7,145	.2813	9/32	—	29	41	79	36	8
B707A07500FBG	B707A07500FBS	B707A07500FBL	7,500	.2953	—	—	29	41	79	36	8
B707A07800FBG	—	—	7,800	.3071	—	—	29	41	79	36	8
B707A07938FBG	B707A07938FBS	B707A07938FBL	7,938	.3125	5/16	—	29	41	79	36	8
B707A08000FBG	B707A08000FBS	B707A08000FBL	8,000	.3150	—	—	29	41	79	36	8
B707A08334FBG	—	—	8,334	.3281	21/64	—	35	47	89	40	10
B707A08500FBG	B707A08500FBS	B707A08500FBL	8,500	.3346	—	—	35	47	89	40	10
B707A08800FBG	B707A08800FBS	B707A08800FBL	8,800	.3465	—	—	35	47	89	40	10
B707A09000FBG	B707A09000FBS	B707A09000FBL	9,000	.3543	—	—	35	47	89	40	10
B707A09129FBG	—	—	9,129	.3594	23/64	—	35	47	89	40	10
B707A09500FBG	B707A09500FBS	B707A09500FBL	9,500	.3740	—	—	35	47	89	40	10
B707A09525FBG	B707A09525FBS	B707A09525FBL	9,525	.3750	3/8	—	35	47	89	40	10
B707A10000FBG	B707A10000FBS	B707A10000FBL	10,000	.3937	—	—	35	47	89	40	10
B707A10320FBG	B707A10320FBS	B707A10320FBL	10,320	.4063	13/32	—	40	55	102	45	12
B707A10500FBG	B707A10500FBS	B707A10500FBL	10,500	.4134	—	—	40	55	102	45	12

(continued)

(B707_FBG/FBS/FBL • ~3 x D continued)

Solid Carbide Drills



B707A-FBG • KC7315	B707A-FBS • KN15	B707A-FBL • KC7315	D1 diameter				L4 max	L3	L	LS	D
			mm	in	fraction	wire size					
B707A10600FBG	—	—	10,600	.4173	—	—	40	55	102	45	12
B707A11000FBG	B707A11000FBS	B707A11000FBL	11,000	.4331	—	—	40	55	102	45	12
B707A11111FBG	B707A11111FBS	B707A11111FBL	11,111	.4374	—	—	40	55	102	45	12
B707A11509FBG	B707A11509FBS	B707A11509FBL	11,509	.4531	29/64	—	40	55	102	45	12
B707A11570FBG	B707A11570FBS	B707A11570FBL	11,570	.4555	—	—	40	55	102	45	12
B707A11700FBG	B707A11700FBS	B707A11700FBL	11,700	.4606	—	—	40	55	102	45	12
B707A11800FBG	B707A11800FBS	B707A11800FBL	11,800	.4646	—	—	40	55	102	45	12
B707A11908FBG	—	—	11,908	.4688	15/32	—	40	55	102	45	12
B707A12000FBG	B707A12000FBS	B707A12000FBL	12,000	.4724	—	—	40	55	102	45	12
B707A12100FBG	B707A12100FBS	B707A12100FBL	12,100	.4764	—	—	43	60	107	45	14
B707A12500FBG	B707A12500FBS	B707A12500FBL	12,500	.4921	—	—	43	60	107	45	14
B707A12700FBG	B707A12700FBS	B707A12700FBL	12,700	.5000	1/2	—	43	60	107	45	14
B707A12800FBG	B707A12800FBS	B707A12800FBL	12,800	.5039	—	—	43	60	107	45	14
B707A13000FBG	B707A13000FBS	B707A13000FBL	13,000	.5118	—	—	43	60	107	45	14
B707A13500FBG	B707A13500FBS	B707A13500FBL	13,500	.5315	—	—	43	60	107	45	14
B707A14000FBG	B707A14000FBS	B707A14000FBL	14,000	.5512	—	—	43	60	107	45	14
B707A14288FBG	B707A14288FBS	B707A14288FBL	14,288	.5625	9/16	—	45	65	115	48	16
B707A14500FBG	B707A14500FBS	B707A14500FBL	14,500	.5709	—	—	45	65	115	48	16
B707A15000FBG	B707A15000FBS	B707A15000FBL	15,000	.5906	—	—	45	65	115	48	16
B707A15250FBG	B707A15250FBS	B707A15250FBL	15,250	.6004	—	—	45	65	115	48	16
B707A15500FBG	B707A15500FBS	B707A15500FBL	15,500	.6102	—	—	45	65	115	48	16
B707A15875FBG	B707A15875FBS	B707A15875FBL	15,875	.6250	5/8	—	45	65	115	48	16
B707A16000FBG	B707A16000FBS	B707A16000FBL	16,000	.6299	—	—	45	65	115	48	16
B707A16500FBG	B707A16500FBS	B707A16500FBL	16,500	.6496	—	—	51	73	123	48	18
B707A17000FBG	B707A17000FBS	B707A17000FBL	17,000	.6693	—	—	51	73	123	48	18
B707A17463FBG	—	—	17,463	.6875	11/16	—	51	73	123	48	18
B707A17500FBG	B707A17500FBS	B707A17500FBL	17,500	.6890	—	—	51	73	123	48	18
B707A18000FBG	B707A18000FBS	B707A18000FBL	18,000	.7087	—	—	51	73	123	48	18
B707A18500FBG	—	—	18,500	.7283	—	—	55	79	131	50	20
B707A19000FBG	B707A19000FBS	B707A19000FBL	19,000	.7480	—	—	55	79	131	50	20
B707A19050FBG	B707A19050FBS	B707A19050FBL	19,050	.7500	3/4	—	55	79	131	50	20
B707A20000FBG	B707A20000FBS	B707A20000FBL	20,000	.7874	—	—	55	79	131	50	20
B707A21000FBG	B707A21000FBS	B707A21000FBL	21,000	.8268	—	—	60	86	141	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

■ Flat-Bottom Drills • B707_FBG Series • Grade KC7315™ • Through Coolant for Drill Diameters 3–20mm

		Cutting Speed – vc			Metric								
		Range – m/min			Recommended Feed Rate (f) by Diameter								
Material Group		min	Starting Value	max		3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0
							mm/r						
P	1	100	133	170	mm/r	0,07 - 0,16	0,12 - 0,20	0,10 - 0,23	0,13 - 0,29	0,21 - 0,33	0,17 - 0,37	0,19 - 0,44	0,22 - 0,49
	2	130	150	180	mm/r	0,07 - 0,13	0,10 - 0,16	0,16 - 0,19	0,13 - 0,23	0,18 - 0,27	0,17 - 0,30	0,19 - 0,35	0,22 - 0,39
	3	80	106	130	mm/r	0,09 - 0,16	0,13 - 0,20	0,13 - 0,23	0,16 - 0,24	0,20 - 0,31	0,21 - 0,37	0,25 - 0,44	0,28 - 0,46
	4	70	98	130	mm/r	0,08 - 0,16	0,12 - 0,19	0,11 - 0,22	0,14 - 0,27	0,21 - 0,31	0,18 - 0,35	0,21 - 0,41	0,24 - 0,46
	6	70	98	130	mm/r	0,07 - 0,12	0,10 - 0,14	0,10 - 0,16	0,12 - 0,20	0,16 - 0,23	0,16 - 0,26	0,18 - 0,31	0,21 - 0,34
K	1	70	85	100	mm/r	0,09 - 0,17	0,13 - 0,21	0,12 - 0,25	0,15 - 0,31	0,23 - 0,35	0,20 - 0,39	0,23 - 0,46	0,26 - 0,52
	2	100	113	130	mm/r	0,09 - 0,15	0,12 - 0,18	0,12 - 0,21	0,15 - 0,26	0,21 - 0,30	0,20 - 0,33	0,23 - 0,39	0,26 - 0,44
	3	70	105	140	mm/r	0,07 - 0,13	0,10 - 0,16	0,11 - 0,19	0,13 - 0,23	0,18 - 0,27	0,17 - 0,30	0,20 - 0,35	0,22 - 0,37

Solid Carbide Drills

■ Flat-Bottom Drills • B707_FBL Series • Grade KC7315 • Through Coolant for Drill Diameters 3–20mm

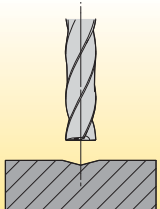
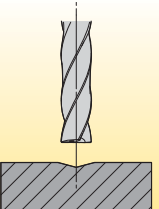
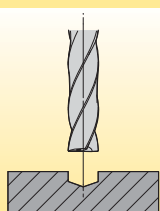
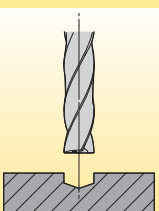
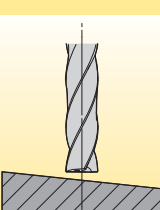
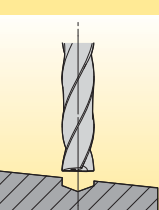
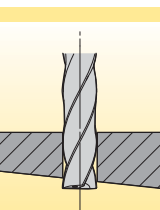
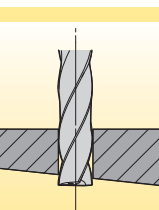
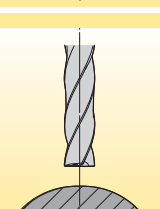
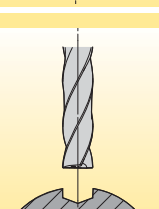
		Cutting Speed – vc			Metric								
		Range – m/min			Recommended Feed Rate (f) by Diameter								
Material Group		min	Starting Value	max		3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0
							mm/r						
P	1	45	65	60	mm/r	0,04 - 0,08	0,05 - 0,09	0,06 - 0,12	0,09 - 0,15	0,10 - 0,16	0,12 - 0,20	0,14 - 0,23	0,16 - 0,24
M	1	40	50	60	mm/r	0,04 - 0,08	0,05 - 0,09	0,06 - 0,12	0,09 - 0,15	0,10 - 0,16	0,12 - 0,20	0,14 - 0,23	0,16 - 0,24
	2	40	50	80	mm/r	0,06 - 0,11	0,07 - 0,11	0,08 - 0,16	0,12 - 0,20	0,13 - 0,21	0,16 - 0,27	0,18 - 0,31	0,21 - 0,33
	3	40	55	70	mm/r	0,03 - 0,04	0,03 - 0,05	0,04 - 0,06	0,04 - 0,07	0,05 - 0,08	0,06 - 0,10	0,07 - 0,11	0,08 - 0,12
S	1	20	25	30	mm/r	0,06 - 0,08	0,06 - 0,08	0,07 - 0,10	0,10 - 0,13	0,11 - 0,14	0,12 - 0,16	0,14 - 0,19	0,17 - 0,22
	2	10	20	30	mm/r	0,05 - 0,07	0,05 - 0,07	0,06 - 0,08	0,08 - 0,11	0,09 - 0,12	0,10 - 0,13	0,12 - 0,16	0,14 - 0,18
	3	30	25	50	mm/r	0,03 - 0,05	0,03 - 0,05	0,04 - 0,08	0,05 - 0,10	0,05 - 0,10	0,05 - 0,10	0,07 - 0,11	0,08 - 0,12
	4	30	25	50	mm/r	0,03 - 0,05	0,03 - 0,05	0,04 - 0,08	0,05 - 0,10	0,05 - 0,10	0,05 - 0,10	0,07 - 0,11	0,08 - 0,12

■ Flat-Bottom Drills • B707_FBS Series • Grade KN15™ • Through Coolant for Drill Diameters 3–20mm

		Cutting Speed – vc			Metric								
		Range – m/min			Recommended Feed Rate (f) by Diameter								
Material Group		min	Starting Value	max		3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0
							mm/r						
N	1	120	260	400	mm/r	0,07 - 0,11	0,08 - 0,12	0,13 - 0,17	0,14 - 0,21	0,15 - 0,22	0,17 - 0,23	0,19 - 0,25	0,22 - 0,27
	2	120	250	280	mm/r	0,08 - 0,12	0,08 - 0,13	0,09 - 0,19	0,14 - 0,23	0,15 - 0,24	0,19 - 0,31	0,21 - 0,35	0,24 - 0,37
	3	100	200	260	mm/r	0,08 - 0,13	0,08 - 0,14	0,09 - 0,20	0,15 - 0,24	0,16 - 0,26	0,20 - 0,33	0,22 - 0,37	0,26 - 0,40
	5	60	150	200	mm/r	0,03 - 0,05	0,03 - 0,06	0,03 - 0,06	0,04 - 0,06	0,05 - 0,07	0,05 - 0,08	0,05 - 0,08	0,06 - 0,09

The B707_FBG drill eliminates the traditional two-step process to create a flat-bottom hole using a drill and an end mill and can perform the operation 25%–40% faster. It also eliminates the two-step process of using an end mill to pre-machine a flat on the workpiece material for inclined surfaces.

Solid Carbide Drills

Workpiece Application	B707A..FBG Standard Length	B708/B709A...FBG Custom Long Length
<ul style="list-style-type: none"> Tapped hole with lead chamfer larger than FBG diameter. 	 <p>No feed reduction.</p>	 <p>50% feed reduction.</p>
<ul style="list-style-type: none"> Nominal diameter pilot required. 	 <p>Rough or hardened surfaces. No feed reduction.</p>	 <p>Pilot on all surfaces. No feed reduction.</p>
<ul style="list-style-type: none"> >6° angled entrances. 	 <p>Reduce feed by 30% until full diameter, or use pilot.</p>	 <p>Pilot with short FBG on all surfaces. No feed reduction.</p>
<ul style="list-style-type: none"> Angled exits. 	 <p>30% feed reduction.</p>	 <p>30% feed reduction.</p>
<ul style="list-style-type: none"> Round surfaces. 	 <p>Reduce feed by 30% until full diameter, or use pilot.</p>	 <p>Pilot with short FBG on all surfaces. No feed reduction.</p>

HP Beyond™ Step Drills with Through Coolant for Steel and Iron



Primary Application

Most tapped holes require a chamfer. The B731_HP and B732_HP Step Drills offer a one-pass solution in steels and irons in traditional tap sizes to reduce cycle time and increase productivity. An extensive range of step drills are available to cover Kennametal's taps products.

Features and Benefits

HP Drill-Point Design

- Low thrust prevents workpiece flexing.
- Excellent centring capabilities.

Unique Flute Design

- Drastically improved chip evacuation.
- Better hole surface quality.

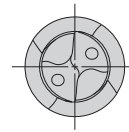
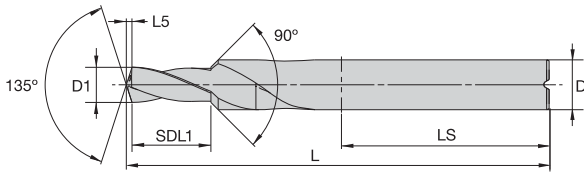
KCPK15™ Beyond Grade

- The grade is a multilayer, TiAlN-based coating with high hot hardness. High cutting speeds enable usage in MQL applications.
- The highly polished surface ensures superior chip evacuation even when low-pressure coolant is applied.
- Improves average metal removal rate and tool life by 10–20%.

Customisation

- Intermediate diameters available as semi-standards.
- Using Kennametal Slim Line Hydraulic Chucks is recommended if workpiece contours need bypassed.



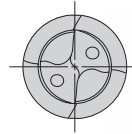
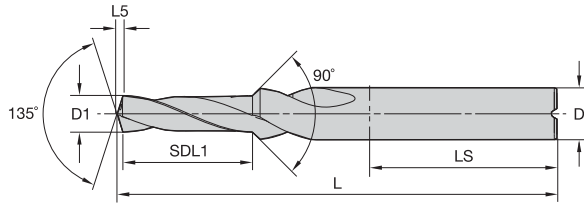


■ B731_HP • Short



- first choice
- alternate choice

short • KCPK15	D1 diameter		L	SDL1	L5	LS	D
	mm	in					
B731A03734HP	3,734	.1470	66	10	0,7	36	6
B731A04200HP	4,200	.1654	66	12	0,8	36	6
B731A04496HP	4,496	.1770	79	13	0,9	36	8
B731A05000HP	5,000	.1969	79	13	0,9	36	8
B731A05106HP	5,106	.2010	79	15	1,0	36	8
B731A05410HP	5,410	.2130	79	16	1,0	36	8
B731A06528HP	6,528	.2570	89	17	1,2	40	10
B731A06800HP	6,800	.2677	89	16	1,3	40	10
B731A06909HP	6,909	.2720	89	18	1,3	40	10
B731A07938HP	7,938	.3125	89	19	1,5	45	12
B731A08433HP	8,433	.3320	102	21	1,6	45	12
B731A08500HP	8,500	.3346	102	19	1,6	45	12
B731A09921HP	9,921	.3906	107	23	1,9	45	14
B731A10200HP	10,200	.4016	107	22	1,9	45	14
B731A10500HP	10,500	.4134	107	22	2,0	45	14
B731A10716HP	10,716	.4219	107	27	2,0	45	14
B731A12000HP	12,000	.4724	115	27	2,2	48	16
B731A12304HP	12,304	.4844	115	28	2,3	48	16
B731A12500HP	12,500	.4921	115	27	2,3	48	16
B731A13096HP	13,096	.5156	115	31	2,4	48	16
B731A13495HP	13,495	.5313	123	32	2,5	48	18
B731A14000HP	14,000	.5512	123	29	2,6	48	18
B731A16670HP	16,670	.6563	131	38	3,1	50	20
B731A17463HP	17,463	.6875	131	40	3,2	50	20
B731A19446HP	19,446	.7656	153	43	3,6	56	25



Solid Carbide Drills

■ B732_HP • Long

P	●
M	○
K	●
N	○
S	○
H	○

- first choice
- alternate choice

long • KCPK15	D1 diameter		L	SDL1	L5	LS	D
	mm	in					
B732A03734HP	3,734	.1470	66	16	0,7	36	6
B732A04200HP	4,200	.1654	66	17	0,8	36	6
B732A04496HP	4,496	.1770	79	17	0,9	36	8
B732A05000HP	5,000	.1969	79	20	0,9	36	8
B732A05106HP	5,106	.2010	79	20	1,0	36	8
B732A05410HP	5,410	.2130	79	21	1,0	36	8
B732A06528HP	6,528	.2570	89	24	1,2	40	10
B732A06800HP	6,800	.2677	89	25	1,3	40	10
B732A06909HP	6,909	.2720	89	25	1,3	40	10
B732A07938HP	7,938	.3125	102	27	1,5	45	12
B732A08433HP	8,433	.3320	102	29	1,6	45	12
B732A08500HP	8,500	.3346	102	30	1,6	45	12
B732A09921HP	9,921	.3906	107	33	1,9	45	14
B732A10200HP	10,200	.4016	107	35	1,9	45	14
B732A10500HP	10,500	.4134	107	35	2,0	45	14
B732A10716HP	10,716	.4219	107	37	2,0	45	14
B732A12000HP	12,000	.4724	115	40	2,2	48	16
B732A12304HP	12,304	.4844	115	41	2,3	48	16
B732A12500HP	12,500	.4921	115	40	2,3	48	16
B732A13096HP	13,096	.5156	123	44	2,4	48	16
B732A13495HP	13,495	.5313	123	45	2,5	48	18
B732A14000HP	14,000	.5512	123	43	2,6	48	18
B732A16670HP	16,670	.6563	141	55	3,1	50	20
B732A17463HP	17,463	.6875	141	58	3,2	50	20
B732A19446HP	19,446	.7656	184	76	3,6	56	25

Tolerance • Metric

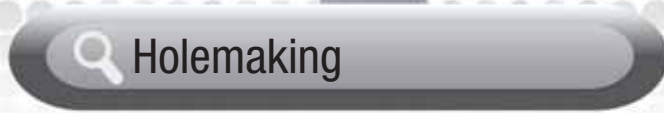
nominal size range	D1 tolerance m7	D tolerance h6
>3-6	0,004/0,016	0,000/-0,008
>6-10	0,006/0,021	0,000/-0,009
>10-18	0,007/0,025	0,000/-0,011
>18-25,4	0,008/0,029	0,000/-0,013

HP Step Drills • B73_HP Series • Grade KCPK15™ • Through Coolant for Drill Diameters 3–16mm

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	mm/r	mm/r	mm/r	mm/r	mm/r	mm/r	mm/r		
P	1	140	220	240	0,07 - 0,17	0,09 - 0,21	0,11 - 0,24	0,14 - 0,30	0,16 - 0,35	0,18 - 0,39	0,20 - 0,46	0,24 - 0,50	
	2	180	210	240	0,07 - 0,14	0,09 - 0,17	0,11 - 0,20	0,14 - 0,24	0,16 - 0,28	0,18 - 0,32	0,20 - 0,37	0,24 - 0,43	
	3	120	150	180	0,09 - 0,17	0,12 - 0,21	0,14 - 0,24	0,17 - 0,30	0,20 - 0,35	0,22 - 0,39	0,26 - 0,46	0,29 - 0,50	
	4	100	140	180	0,08 - 0,17	0,11 - 0,20	0,12 - 0,23	0,15 - 0,28	0,17 - 0,33	0,19 - 0,37	0,22 - 0,43	0,25 - 0,45	
	6	140	100	180	0,07 - 0,13	0,09 - 0,15	0,11 - 0,17	0,13 - 0,21	0,15 - 0,24	0,17 - 0,27	0,19 - 0,33	0,21 - 0,36	
	K	1	140	160	180	0,09 - 0,18	0,12 - 0,22	0,13 - 0,26	0,16 - 0,33	0,19 - 0,37	0,21 - 0,41	0,24 - 0,48	0,27 - 0,51
2		100	150	200	0,09 - 0,16	0,12 - 0,19	0,13 - 0,22	0,16 - 0,27	0,19 - 0,32	0,21 - 0,35	0,24 - 0,41	0,27 - 0,45	
3		100	140	180	0,07 - 0,14	0,09 - 0,17	0,12 - 0,20	0,14 - 0,24	0,16 - 0,28	0,18 - 0,32	0,21 - 0,37	0,24 - 0,39	

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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 new B976Z series is available from 2,383–3mm (.0938-.1181") 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.

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.

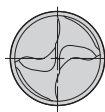
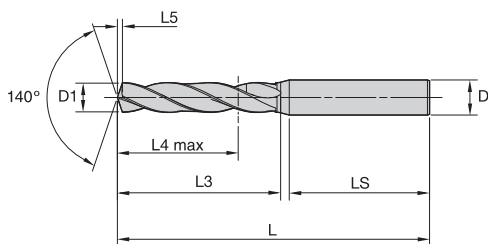
Customisation

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

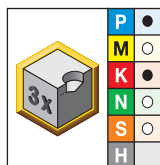
F-Shank

- For standard line items with F-shank, please refer to the e-catalogue on www.kennametal.com.





■ B966 • ~3 x D

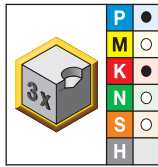


- first choice
- alternate choice

short • KC7315	D1 diameter				L	L4 max	L5	LS	D
	mm	in	fraction	wire size					
B966A03000	3,000	.1181	—	—	62	14	0,5	36	6
B966A03100	3,100	.1220	—	—	62	14	0,5	36	6
B966A03200	3,200	.1260	—	—	62	14	0,5	36	6
B966A03300	3,300	.1299	—	—	62	14	0,5	36	6
B966A03400	3,400	.1339	—	—	62	14	0,6	36	6
B966A03500	3,500	.1378	—	—	62	14	0,6	36	6
B966A03600	3,600	.1417	—	—	62	14	0,6	36	6
B966A03700	3,700	.1457	—	—	62	14	0,6	36	6
B966A03800	3,800	.1496	—	—	66	17	0,6	36	6
B966A03900	3,900	.1535	—	—	66	17	0,6	36	6
B966A04000	4,000	.1575	—	—	66	17	0,7	36	6
B966A04100	4,100	.1614	—	—	66	17	0,7	36	6
B966A04200	4,200	.1654	—	—	66	17	0,7	36	6
B966A04300	4,300	.1693	—	—	66	17	0,7	36	6
B966A04400	4,400	.1732	—	—	66	17	0,7	36	6
B966A04500	4,500	.1772	—	—	66	17	0,7	36	6
B966A04600	4,600	.1811	—	—	66	17	0,8	36	6
B966A04700	4,700	.1850	—	13	66	17	0,8	36	6
B966A04800	4,800	.1890	—	12	66	20	0,8	36	6
B966A04900	4,900	.1929	—	—	66	20	0,8	36	6
B966A05000	5,000	.1969	—	—	66	20	0,8	36	6
B966A05100	5,100	.2008	—	—	66	20	0,8	36	6
B966A05200	5,200	.2047	—	—	66	20	0,9	36	6
B966A05300	5,300	.2087	—	—	66	20	0,9	36	6
B966A05400	5,400	.2126	—	—	66	20	0,9	36	6
B966A05500	5,500	.2165	—	—	66	20	0,9	36	6
B966A05600	5,600	.2205	—	—	66	20	0,9	36	6
B966A05700	5,700	.2244	—	—	66	20	1,0	36	6
B966A05800	5,800	.2283	—	—	66	20	1,0	36	6
B966A05900	5,900	.2323	—	—	66	20	1,0	36	6
B966A06000	6,000	.2362	—	—	66	20	1,0	36	6
B966A06100	6,100	.2402	—	—	79	24	1,0	36	8
B966A06200	6,200	.2441	—	—	79	24	1,0	36	8
B966A06300	6,300	.2480	—	—	79	24	1,1	36	8
B966A06400	6,400	.2520	—	—	79	24	1,1	36	8
B966A06500	6,500	.2559	—	—	79	24	1,1	36	8

(continued)

(B966 • ~3 x D continued)



short • KC7315	D1 diameter				L	L4 max	L5	LS	D
	mm	in	fraction	wire size					
B966A06600	6,600	.2598	—	—	79	24	1,1	36	8
B966A06700	6,700	.2638	—	—	79	24	1,1	36	8
B966A06800	6,800	.2677	—	—	79	24	1,1	36	8
B966A06900	6,900	.2717	—	—	79	24	1,2	36	8
B966A07000	7,000	.2756	—	—	79	24	1,2	36	8
B966A07100	7,100	.2795	—	—	79	29	1,2	36	8
B966A07200	7,200	.2835	—	—	79	29	1,2	36	8
B966A07300	7,300	.2874	—	—	79	29	1,2	36	8
B966A07400	7,400	.2913	—	—	79	29	1,3	36	8
B966A07500	7,500	.2953	—	—	79	29	1,3	36	8
B966A07600	7,600	.2992	—	—	79	29	1,3	36	8
B966A07700	7,700	.3031	—	—	79	29	1,3	36	8
B966A07800	7,800	.3071	—	—	79	29	1,3	36	8
B966A07900	7,900	.3110	—	—	79	29	1,3	36	8
B966A08000	8,000	.3150	—	—	79	29	1,4	36	8
B966A08100	8,100	.3189	—	—	89	35	1,4	40	10
B966A08200	8,200	.3228	—	—	89	35	1,4	40	10
B966A08300	8,300	.3268	—	—	89	35	1,4	40	10
B966A08400	8,400	.3307	—	—	89	35	1,4	40	10
B966A08500	8,500	.3346	—	—	89	35	1,4	40	10
B966A08600	8,600	.3386	—	—	89	35	1,5	40	10
B966A08700	8,700	.3425	—	—	89	35	1,5	40	10
B966A08800	8,800	.3465	—	—	89	35	1,5	40	10
B966A08900	8,900	.3504	—	—	89	35	1,5	40	10
B966A09000	9,000	.3543	—	—	89	35	1,5	40	10
B966A09100	9,100	.3583	—	—	89	35	1,5	40	10
B966A09200	9,200	.3622	—	—	89	35	1,6	40	10
B966A09300	9,300	.3661	—	—	89	35	1,6	40	10
B966A09400	9,400	.3701	—	—	89	35	1,6	40	10
B966A09500	9,500	.3740	—	—	89	35	1,6	40	10
B966A09600	9,600	.3780	—	—	89	35	1,6	40	10
B966A09700	9,700	.3819	—	—	89	35	1,7	40	10
B966A09800	9,800	.3858	—	—	89	35	1,7	40	10
B966A09900	9,900	.3898	—	—	89	35	1,7	40	10
B966A10000	10,000	.3937	—	—	89	35	1,7	40	10
B966A10100	10,100	.3976	—	—	102	40	1,7	45	12
B966A10200	10,200	.4016	—	—	102	40	1,7	45	12
B966A10300	10,300	.4055	—	—	102	40	1,8	45	12
B966A10400	10,400	.4094	—	—	102	40	1,8	45	12
B966A10500	10,500	.4134	—	—	102	40	1,8	45	12
B966A10600	10,600	.4173	—	—	102	40	1,8	45	12
B966A10700	10,700	.4213	—	—	102	40	1,8	45	12
B966A10800	10,800	.4252	—	—	102	40	1,8	45	12
B966A10900	10,900	.4291	—	—	102	40	1,9	45	12
B966A11000	11,000	.4331	—	—	102	40	1,9	45	12
B966A11100	11,100	.4370	—	—	102	40	1,9	45	12
B966A11200	11,200	.4409	—	—	102	40	1,9	45	12
B966A11300	11,300	.4449	—	—	102	40	1,9	45	12

(continued)

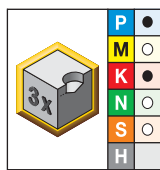
Solid Carbide Drills

Kenna Universal™ Drills • Without Coolant

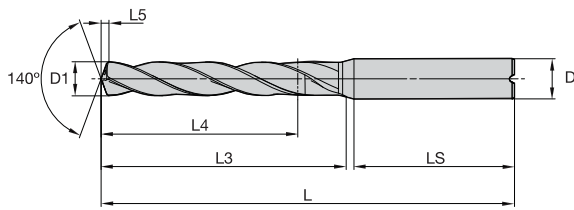


(B966 • ~3 x D continued)

Solid Carbide Drills

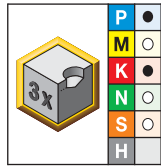


short • KC7315	D1 diameter				L	L4 max	L5	LS	D
	mm	in	fraction	wire size					
B966A11400	11,400	.4488	—	—	102	40	2,0	45	12
B966A11500	11,500	.4528	—	—	102	40	2,0	45	12
B966A11600	11,600	.4567	—	—	102	40	2,0	45	12
B966A11700	11,700	.4606	—	—	102	40	2,0	45	12
B966A11800	11,800	.4646	—	—	102	40	2,0	45	12
B966A11900	11,900	.4685	—	—	102	40	2,0	45	12
B966A12000	12,000	.4724	—	—	102	40	2,1	45	12
B966A12100	12,100	.4764	—	—	107	43	2,1	45	14
B966A12200	12,200	.4803	—	—	107	43	2,1	45	14
B966A12300	12,300	.4843	—	—	107	43	2,1	45	14
B966A12400	12,400	.4882	—	—	107	43	2,1	45	14
B966A12500	12,500	.4921	—	—	107	43	2,1	45	14
B966A12600	12,600	.4961	—	—	107	43	2,2	45	14
B966A12700	12,700	.5000	1/2	—	107	43	2,2	45	14
B966A12800	12,800	.5039	—	—	107	43	2,2	45	14
B966A12900	12,900	.5079	—	—	107	43	2,2	45	14
B966A13000	13,000	.5118	—	—	107	43	2,2	45	14
B966A13100	13,100	.5157	—	—	107	43	2,3	45	14
B966A13200	13,200	.5197	—	—	107	43	2,3	45	14
B966A13300	13,300	.5236	—	—	107	43	2,3	45	14
B966A13500	13,500	.5315	—	—	107	43	2,3	45	14
B966A13700	13,700	.5394	—	—	107	43	2,4	45	14
B966A14000	14,000	.5512	—	—	107	43	2,4	45	14
B966A14200	14,200	.5591	—	—	115	45	2,5	48	16
B966A14300	14,300	.5630	—	—	115	45	2,5	48	16
B966A14500	14,500	.5709	—	—	115	45	2,5	48	16
B966A14700	14,700	.5787	—	—	115	45	2,5	48	16
B966A14800	14,800	.5827	—	—	115	45	2,6	48	16
B966A15000	15,000	.5906	—	—	115	45	2,6	48	16
B966A15500	15,500	.6102	—	—	115	45	2,7	48	16
B966A15700	15,700	.6181	—	—	115	45	2,7	48	16
B966A16000	16,000	.6299	—	—	115	45	2,8	48	16
B966A16500	16,500	.6496	—	—	123	51	2,9	48	18
B966A17000	17,000	.6693	—	—	123	51	2,9	48	18
B966A17500	17,500	.6890	—	—	123	51	3,0	48	18
B966A18000	18,000	.7087	—	—	123	51	3,1	48	18
B966A20000	20,000	.7874	—	—	131	55	3,5	50	20

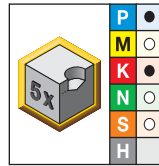


Solid Carbide Drills

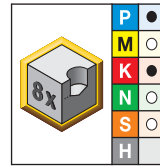
■ B976/B977/B978 • ~3 x D/~5 x D/~8 x D



short • KC7315



long • KC7315



extra long • KC7315

- first choice
- alternate choice

	D1 diameter			L5	LS	D			
	mm	in	fraction						
B976Z02383	2,383	.0938	3/32	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	7/64	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		
—	—	B978A03000	3,000	.1181	—	0,6	36	6	
B976A03100	B977A03100	3,100	.1220	—	0,5	36	6		
B976A03175	B977A03175	3,175	.1250	1/8	—	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	—	29	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	—	26	0,6	36	6	
B976A03797	B977A03797	3,797	.1495	—	25	0,6	36	6	
B976A03800	B977A03800	3,800	.1496	—	—	0,6	36	6	
—	B977A03900	3,900	.1535	—	—	0,6	36	6	
B976A03970	B977A03970	3,970	.1563	5/32	—	0,7	36	6	
—	—	B978A03970	3,970	.1563	5/32	—	0,8	36	6
B976A04000	B977A04000	4,000	.1575	—	—	0,7	36	6	
—	—	B978A04000	4,000	.1575	—	—	0,8	36	6
B976A04039	B977A04039	4,039	.1590	—	21	0,7	36	6	
—	B977A04100	4,100	.1614	—	—	0,7	36	6	
B976A04200	B977A04200	4,200	.1654	—	—	0,7	36	6	
—	—	B978A04200	4,200	.1654	—	—	0,9	36	6
B976A04300	B977A04300	4,300	.1693	—	—	0,7	36	6	
B976A04366	B977A04366	4,366	.1719	11/64	—	0,7	36	6	

(continued)

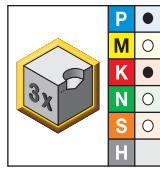
Solid Carbide Drills

Kenna Universal™ Drills • Through Coolant

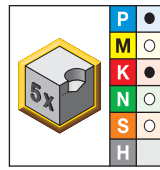


(B976/B977/B978 • ~3 x D/-5 x D/-8 x D continued)

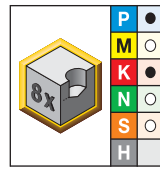
Solid Carbide Drills



short • KC7315



long • KC7315



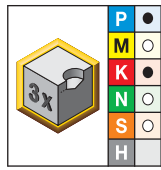
extra long • KC7315

			D1 diameter				L5	LS	D
			mm	in	fraction	wire size			
—	B977A04400	—	4,400	.1732	—	—	0,7	36	6
B976A04496	B977A04496	—	4,496	.1770	—	16	0,7	36	6
B976A04500	B977A04500	—	4,500	.1772	—	—	0,7	36	6
—	—	B978A04500	4,500	.1772	—	—	0,9	36	6
—	B977A04580	—	4,580	.1803	—	15	0,8	36	6
B976A04600	B977A04600	—	4,600	.1811	—	—	0,8	36	6
B976A04620	—	—	4,620	.1819	—	—	0,8	36	6
—	B977A04623	—	4,623	.1820	—	14	0,8	36	6
—	B977A04650	—	4,650	.1831	—	—	0,8	36	6
B976A04700	B977A04700	—	4,700	.1850	—	13	0,8	36	6
B976A04763	B977A04763	—	4,763	.1875	3/16	—	0,8	36	6
—	—	B978A04763	4,763	.1875	3/16	—	1,0	36	6
B976A04800	B977A04800	—	4,800	.1890	—	12	0,8	36	6
B976A04900	B977A04900	—	4,900	.1929	—	—	0,8	36	6
B976A05000	B977A05000	—	5,000	.1969	—	—	0,8	36	6
—	—	B978A05000	5,000	.1969	—	—	1,0	36	6
B976A05100	B977A05100	—	5,100	.2008	—	—	0,8	36	6
—	—	B978A05100	5,100	.2008	—	—	1,1	36	6
B976A05106	B977A05106	—	5,106	.2010	—	7	0,8	36	6
B976A05200	B977A05200	—	5,200	.2047	—	—	0,9	36	6
—	—	B978A05200	5,200	.2047	—	—	1,1	36	6
B976A05250	—	—	5,250	.2067	—	—	0,9	36	6
B976A05300	B977A05300	—	5,300	.2087	—	—	0,9	36	6
—	—	B978A05300	5,300	.2087	—	—	1,1	36	6
B976A05400	B977A05400	—	5,400	.2126	—	—	0,9	36	6
B976A05410	B977A05410	—	5,410	.2130	—	3	0,9	36	6
B976A05500	B977A05500	—	5,500	.2165	—	—	0,9	36	6
—	—	B978A05500	5,500	.2165	—	—	1,1	36	6
B976A05558	B977A05558	—	5,558	.2188	7/32	—	0,9	36	6
—	—	B978A05558	5,558	.2188	7/32	—	1,2	36	6
B976A05575	—	—	5,575	.2195	—	—	0,9	36	6
B976A05600	B977A05600	—	5,600	.2205	—	—	0,9	36	6
B976A05700	B977A05700	—	5,700	.2244	—	—	1,0	36	6
—	—	B978A05700	5,700	.2244	—	—	1,2	36	6
B976A05791	B977A05791	—	5,791	.2280	—	1	1,0	36	6
B976A05800	B977A05800	—	5,800	.2283	—	—	1,0	36	6
—	B977A05900	—	5,900	.2323	—	—	1,0	36	6
B976A05944	B977A05944	—	5,944	.2340	—	A	1,0	36	6
B976A06000	B977A06000	—	6,000	.2362	—	—	1,0	36	6
—	—	B978A06000	6,000	.2362	—	—	1,2	36	6
—	B977A06100	—	6,100	.2402	—	—	1,0	36	8
—	—	B978A06100	6,100	.2402	—	—	1,3	36	8
B976A06200	B977A06200	—	6,200	.2441	—	—	1,0	36	8
—	—	B978A06200	6,200	.2441	—	—	1,3	36	8
—	B977A06300	—	6,300	.2480	—	—	1,1	36	8
—	—	B978A06300	6,300	.2480	—	—	1,3	36	8
B976A06350	B977A06350	—	6,350	.2500	1/4	E	1,1	36	8
—	—	B978A06350	6,350	.2500	1/4	E	1,3	36	8
—	B977A06400	—	6,400	.2520	—	—	1,1	36	8
—	—	B978A06400	6,400	.2520	—	—	1,3	36	8
B976A06500	B977A06500	—	6,500	.2559	—	—	1,1	36	8
—	—	B978A06500	6,500	.2559	—	—	1,4	36	8

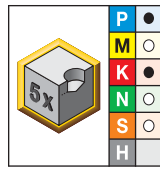
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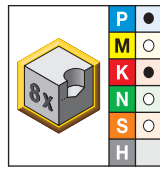
(B976/B977/B978 • ~3 x D/-5 x D/-8 x D continued)



short • KC7315



long • KC7315



extra long • KC7315

			D1 diameter				L5	LS	D
			mm	in	fraction	wire size			
B976A06528	B977A06528	—	6,528	.2570	—	F	1,1	36	8
B976A06530	—	—	6,530	.2571	—	—	1,1	36	8
B976A06600	B977A06600	—	6,600	.2598	—	—	1,1	36	8
—	—	B978A06600	6,600	.2598	—	—	1,4	36	8
B976A06700	B977A06700	—	6,700	.2638	—	—	1,1	36	8
—	—	B978A06700	6,700	.2638	—	—	1,4	36	8
B976A06746	—	—	6,746	.2656	17/64	—	1,1	36	8
—	—	B978A06746	6,746	.2656	17/64	—	1,4	36	8
B976A06750	—	—	6,750	.2657	—	—	1,1	36	8
B976A06800	B977A06800	—	6,800	.2677	—	—	1,1	36	8
—	—	B978A06800	6,800	.2677	—	—	1,4	36	8
—	B977A06900	—	6,900	.2717	—	—	1,2	36	8
B976A06909	B977A06909	—	6,909	.2720	—	I	1,2	36	8
B976A07000	B977A07000	—	7,000	.2756	—	—	1,2	36	8
—	—	B978A07000	7,000	.2756	—	—	1,5	36	8
—	B977A07100	—	7,100	.2795	—	—	1,2	36	8
B976A07145	B977A07145	—	7,145	.2813	9/32	—	1,2	36	8
—	—	B978A07145	7,145	.2813	9/32	—	1,5	36	8
B976A07200	B977A07200	—	7,200	.2835	—	—	1,2	36	8
—	B977A07300	—	7,300	.2874	—	—	1,2	36	8
B976A07366	B977A07366	—	7,366	.2900	—	L	1,2	36	8
B976A07400	B977A07400	—	7,400	.2913	—	—	1,3	36	8
B976A07500	B977A07500	—	7,500	.2953	—	—	1,3	36	8
—	—	B978A07500	7,500	.2953	—	—	1,6	36	8
B976A07541	B977A07541	—	7,541	.2969	19/64	—	1,3	36	8
—	—	B978A07541	7,541	.2969	19/64	—	1,6	36	8
—	B977A07600	—	7,600	.2992	—	—	1,3	36	8
—	B977A07700	—	7,700	.3031	—	—	1,3	36	8
—	—	B978A07700	7,700	.3031	—	—	1,6	36	8
B976A07800	B977A07800	—	7,800	.3071	—	—	1,3	36	8
—	—	B978A07800	7,800	.3071	—	—	1,6	36	8
B976A07900	B977A07900	—	7,900	.3110	—	—	1,3	36	8
B976A07938	B977A07938	—	7,938	.3125	5/16	—	1,3	36	8
—	—	B978A07938	7,938	.3125	5/16	—	1,7	36	8
B976A08000	B977A08000	—	8,000	.3150	—	—	1,4	36	8
—	—	B978A08000	8,000	.3150	—	—	1,7	36	8
B976A08100	B977A08100	—	8,100	.3189	—	—	1,4	40	10
—	—	B978A08100	8,100	.3189	—	—	1,7	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	21/64	—	1,4	40	10
—	—	B978A08334	8,334	.3281	21/64	—	1,8	40	10
—	B977A08400	—	8,400	.3307	—	—	1,4	40	10
B976A08430	—	—	8,430	.3319	—	—	1,4	40	10
B976A08433	B977A08433	—	8,433	.3320	—	Q	1,4	40	10
B976A08500	B977A08500	—	8,500	.3346	—	—	1,4	40	10
—	—	B978A08500	8,500	.3346	—	—	1,8	40	10
B976A08600	B977A08600	—	8,600	.3386	—	—	1,5	40	10
—	—	B978A08600	8,600	.3386	—	—	1,8	40	10
B976A08700	B977A08700	—	8,700	.3425	—	—	1,5	40	10
—	—	B978A08700	8,700	.3425	—	—	1,8	40	10
B976A08733	B977A08733	—	8,733	.3438	11/32	—	1,5	40	10

(continued)

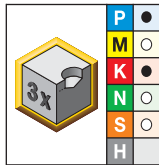
Solid Carbide Drills

Kenna Universal™ Drills • Through Coolant

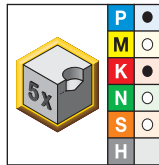


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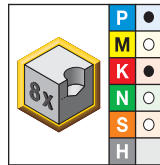
Solid Carbide Drills



short • KC7315



long • KC7315



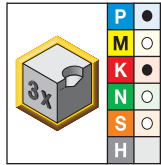
extra long • KC7315

			D1 diameter						
			mm	in	fraction	wire size	L5	LS	D
—	—	B978A08733	8,733	.3438	11/32	—	1,8	40	10
B976A08800	B977A08800	—	8,800	.3465	—	—	1,5	40	10
—	—	B978A08800	8,800	.3465	—	—	1,9	40	10
B976A08839	B977A08839	—	8,839	.3480	—	S	1,5	40	10
—	B977A08900	—	8,900	.3504	—	—	1,5	40	10
B976A09000	B977A09000	—	9,000	.3543	—	—	1,5	40	10
—	—	B978A09000	9,000	.3543	—	—	1,9	40	10
B976A09093	B977A09093	—	9,093	.3580	—	T	1,5	40	10
B976A09100	B977A09100	—	9,100	.3583	—	—	1,5	40	10
—	—	B978A09100	9,100	.3583	—	—	1,9	40	10
B976A09129	B977A09129	—	9,129	.3594	23/64	—	1,6	40	10
—	—	B978A09129	9,129	.3594	23/64	—	1,9	40	10
B976A09200	B977A09200	—	9,200	.3622	—	—	1,6	40	10
B976A09300	B977A09300	—	9,300	.3661	—	—	1,6	40	10
—	B977A09347	—	9,347	.3680	—	U	1,6	40	10
B976A09400	B977A09400	—	9,400	.3701	—	—	1,6	40	10
B976A09500	B977A09500	—	9,500	.3740	—	—	1,6	40	10
—	—	B978A09500	9,500	.3740	—	—	2,0	40	10
B976A09525	B977A09525	—	9,525	.3750	3/8	—	1,6	40	10
—	—	B978A09525	9,525	.3750	3/8	—	2,0	40	10
B976A09600	B977A09600	—	9,600	.3780	—	—	1,6	40	10
B976A09700	B977A09700	—	9,700	.3819	—	—	1,7	40	10
—	—	B978A09700	9,700	.3819	—	—	2,0	40	10
—	B977A09703	—	9,703	.3820	—	—	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
—	—	B978A09800	9,800	.3858	—	—	2,1	40	10
—	B977A09900	—	9,900	.3898	—	—	1,7	40	10
—	—	B978A09900	9,900	.3898	—	—	2,1	40	10
B976A09921	B977A09921	—	9,921	.3906	25/64	—	1,7	40	10
—	—	B978A09921	9,921	.3906	25/64	—	2,1	40	10
B976A10000	B977A10000	—	10,000	.3937	—	—	1,7	40	10
—	—	B978A10000	10,000	.3937	—	—	2,1	40	10
—	B977A10100	—	10,100	.3976	—	—	1,7	45	12
—	—	B978A10100	10,100	.3976	—	—	2,1	45	12
B976A10200	B977A10200	—	10,200	.4016	—	—	1,7	45	12
—	—	B978A10200	10,200	.4016	—	—	2,2	45	12
B976A10262	B977A10262	—	10,262	.4040	—	Y	1,8	45	12
—	B977A10300	—	10,300	.4055	—	—	1,8	45	12
—	—	B978A10300	10,300	.4055	—	—	2,2	45	12
B976A10320	B977A10320	—	10,320	.4063	13/32	—	1,8	45	12
—	—	B978A10320	10,320	.4063	13/32	—	2,2	45	12
—	B977A10400	—	10,400	.4094	—	—	1,8	45	12
B976A10500	B977A10500	—	10,500	.4134	—	—	1,8	45	12
—	—	B978A10500	10,500	.4134	—	—	2,2	45	12
—	B977A10600	—	10,600	.4173	—	—	1,8	45	12
B976A10700	B977A10700	—	10,700	.4213	—	—	1,8	45	12
B976A10716	B977A10716	—	10,716	.4219	27/64	—	1,8	45	12
—	—	B978A10716	10,716	.4219	27/64	—	2,3	45	12
B976A10800	B977A10800	—	10,800	.4252	—	—	1,8	45	12
—	—	B978A10800	10,800	.4252	—	—	2,3	45	12
—	B977A10900	—	10,900	.4291	—	—	1,9	45	12
B976A11000	B977A11000	—	11,000	.4331	—	—	1,9	45	12

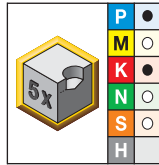
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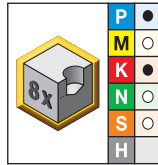
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short • KC7315



long • KC7315



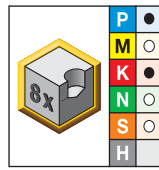
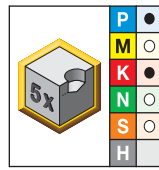
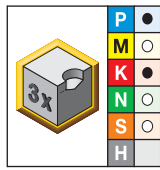
extra long • KC7315

			D1 diameter						
			mm	in	fraction	wire size	L5	LS	D
—	—	B978A11000	11,000	.4331	—	—	2,3	45	12
—	B977A11100	—	11,100	.4370	—	—	1,9	45	12
B976A11113	B977A11113	—	11,113	.4375	7/16	—	1,9	45	12
—	—	B978A11113	11,113	.4375	7/16	—	2,4	45	12
B976A11200	B977A11200	—	11,200	.4409	—	—	1,9	45	12
—	—	B978A11200	11,200	.4409	—	—	2,4	45	12
B976A11300	B977A11300	—	11,300	.4449	—	—	1,9	45	12
—	—	B978A11300	11,300	.4449	—	—	2,4	45	12
—	B977A11400	—	11,400	.4488	—	—	2,0	45	12
—	—	B978A11400	11,400	.4488	—	—	2,4	45	12
B976A11500	B977A11500	—	11,500	.4528	—	—	2,0	45	12
—	—	B978A11500	11,500	.4528	—	—	2,4	45	12
B976A11509	B977A11509	—	11,509	.4531	29/64	—	2,0	45	12
—	—	B978A11509	11,509	.4531	29/64	—	2,4	45	12
—	B977A11600	—	11,600	.4567	—	—	2,0	45	12
B976A11700	B977A11700	—	11,700	.4606	—	—	2,0	45	12
—	—	B978A11700	11,700	.4606	—	—	2,5	45	12
—	B977A11800	—	11,800	.4646	—	—	2,0	45	12
—	—	B978A11800	11,800	.4646	—	—	2,5	45	12
—	B977A11900	—	11,900	.4685	—	—	2,0	45	12
B976A11908	B977A11908	—	11,908	.4688	15/32	—	2,0	45	12
—	—	B978A11908	11,908	.4688	15/32	—	2,5	45	12
B976A12000	B977A12000	—	12,000	.4724	—	—	2,1	45	12
—	—	B978A12000	12,000	.4724	—	—	2,5	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	31/64	—	2,1	45	14
—	—	B978A12304	12,304	.4844	31/64	—	2,6	45	14
—	B977A12400	—	12,400	.4882	—	—	2,1	45	14
B976A12500	B977A12500	—	12,500	.4921	—	—	2,1	45	14
—	—	B978A12500	12,500	.4921	—	—	2,7	45	14
—	B977A12600	—	12,600	.4961	—	—	2,2	45	14
B976A12700	B977A12700	—	12,700	.5000	1/2	—	2,2	45	14
—	—	B978A12700	12,700	.5000	1/2	—	2,7	45	14
B976A12800	B977A12800	—	12,800	.5039	—	—	2,2	45	14
—	—	B978A12800	12,800	.5039	—	—	2,7	45	14
—	B977A12900	—	12,900	.5079	—	—	2,2	45	14
—	B977A12903	—	12,903	.5080	—	—	2,2	45	14
B976A13000	B977A13000	—	13,000	.5118	—	—	2,2	45	14
—	—	B978A13000	13,000	.5118	—	—	2,8	45	14
—	B977A13096	—	13,096	.5156	33/64	—	2,3	45	14
—	B977A13100	—	13,100	.5157	—	—	2,3	45	14
B976A13300	B977A13300	—	13,300	.5236	—	—	2,3	45	14
B976A13495	B977A13495	—	13,495	.5313	17/32	—	2,3	45	14
B976A13500	B977A13500	—	13,500	.5315	—	—	2,3	45	14
—	—	B978A13500	13,500	.5315	—	—	2,9	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
—	—	B978A14000	14,000	.5512	—	—	3,0	45	14
B976A14100	—	—	14,100	.5551	—	—	2,4	48	16
B976A14200	B977A14200	—	14,200	.5591	—	—	2,5	48	16
B976A14288	B977A14288	—	14,288	.5625	9/16	—	2,5	48	16

(continued)

(B976/B977/B978 • ~3 x D/~5 x D/~8 x D continued)

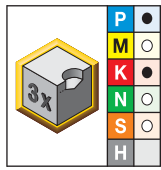
Solid Carbide Drills



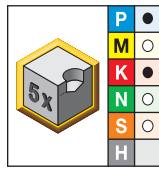
			D1 diameter						
short • KC7315	long • KC7315	extra long • KC7315	mm	in	fraction	wire size	L5	LS	D
—	—	B978A14288	14,288	.5625	9/16	—	3,0	48	16
B976A14500	B977A14500	—	14,500	.5709	—	—	2,5	48	16
—	—	B978A14500	14,500	.5709	—	—	3,1	48	16
—	B977A14600	—	14,600	.5748	—	—	2,5	48	16
B976A14700	B977A14700	—	14,700	.5787	—	—	2,5	48	16
—	B977A14900	—	14,900	.5866	—	—	2,6	48	16
B976A15000	B977A15000	—	15,000	.5906	—	—	2,6	48	16
—	—	B978A15000	15,000	.5906	—	—	3,2	48	16
—	B977A15100	—	15,100	.5945	—	—	2,6	48	16
—	—	B978A15100	15,100	.5945	—	—	3,2	48	16
—	—	B978A15200	15,200	.5984	—	—	3,2	48	16
—	—	B978A15300	15,300	.6024	—	—	3,3	48	16
B976A15500	B977A15500	—	15,500	.6102	—	—	2,7	48	16
—	—	B978A15500	15,500	.6102	—	—	3,3	48	16
—	B977A15700	—	15,700	.6181	—	—	2,7	48	16
—	B977A15800	—	15,800	.6220	—	—	2,7	48	16
—	—	B978A15800	15,800	.6220	—	—	3,4	48	16
B976A15875	B977A15875	—	15,875	.6250	5/8	—	2,7	48	16
—	—	B978A15875	15,875	.6250	5/8	—	3,4	48	16
—	B977A15900	—	15,900	.6260	—	—	2,8	48	16
B976A16000	B977A16000	—	16,000	.6299	—	—	2,8	48	16
—	—	B978A16000	16,000	.6299	—	—	3,4	48	16
—	B977A16078	—	16,078	.6330	—	—	2,8	48	18
—	—	B978A16078	16,078	.6330	—	—	3,4	48	18
—	B977A16200	—	16,200	.6378	—	—	2,8	48	18
—	—	B978A16200	16,200	.6378	—	—	3,5	48	18
—	B977A16400	—	16,400	.6457	—	—	2,8	48	18
B976A16500	B977A16500	—	16,500	.6496	—	—	2,9	48	18
—	—	B978A16500	16,500	.6496	—	—	3,5	48	18
—	B977A16600	—	16,600	.6535	—	—	2,9	48	18
—	B977A16667	—	16,667	.6562	—	—	2,9	48	18
B976A16670	B977A16670	—	16,670	.6563	21/32	—	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
—	—	B978A17000	17,000	.6693	—	—	3,6	48	18
B976A17100	—	—	17,100	.6732	—	—	3,0	48	18
B976A17463	B977A17463	—	17,463	.6875	11/16	—	3,0	48	18
—	—	B978A17463	17,463	.6875	11/16	—	3,7	48	18
B976A17500	B977A17500	—	17,500	.6890	—	—	3,0	48	18
—	—	B978A17500	17,500	.6890	—	—	3,7	48	18
—	B977A17700	—	17,700	.6969	—	—	3,1	48	18
B976A18000	B977A18000	—	18,000	.7087	—	—	3,1	48	18
—	—	B978A18000	18,000	.7087	—	—	3,9	48	18
—	B977A18400	—	18,400	.7244	—	—	3,2	50	20
—	B977A18500	—	18,500	.7283	—	—	3,2	50	20

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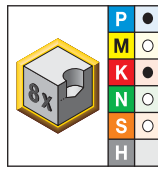
(B976/B977/B978 • ~3 x D/~5 x D/~8 x D continued)



short • KC7315



long • KC7315



extra long • KC7315

			D1 diameter				L5	LS	D
			mm	in	fraction	wire size			
—	—	B978A18500	18,500	.7283	—	—	4,0	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
—	—	B978A19000	19,000	.7480	—	—	4,1	50	20
B976A19050	B977A19050	—	19,050	.7500	3/4	—	3,3	50	20
—	—	B978A19050	19,050	.7500	3/4	—	4,1	50	20
—	B977A19200	—	19,200	.7559	—	—	3,3	50	20
—	B977A19253	—	19,253	.7580	—	—	3,3	50	20
—	—	B978A19253	19,253	.7580	—	—	4,1	50	20
—	B977A19446	—	19,446	.7656	49/64	—	3,4	50	20
B976A19500	B977A19500	—	19,500	.7677	—	—	3,4	50	20
B976A19700	B977A19700	—	19,700	.7756	—	—	3,4	50	20
—	—	B978A19800	19,800	.7795	—	—	4,2	50	20
B976A19840	B977A19840	—	19,840	.7811	—	—	3,5	50	20
—	—	B978A19840	19,840	.7811	—	—	4,3	50	20
B976A20000	B977A20000	—	20,000	.7874	—	—	3,5	50	20
—	—	B978A20000	20,000	.7874	—	—	4,3	50	20

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

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 for Drill Diameters 2–20mm

Solid Carbide Drills

		Cutting Speed – vc			Metric									
		Range – m/min			Recommended Feed Rate (f) by Diameter									
Material Group		min	Starting Value	max		2,0	3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0
	P	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
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
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
M	1	50	20	40	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	30	50	50	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
	3	20	55	40	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
K	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
	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
N	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
	5	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
S	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



Carbide Recycling

Help preserve and protect our planet!

It's easy for your company to be environmentally conscious with the Kennametal Carbide Recycling Program.

By sending us your used carbide tools, you help preserve and protect the environment and ensure that these products are recycled responsibly. Kennametal accepts any coated or non-coated carbide items, including inserts, drills, reamers, and taps.

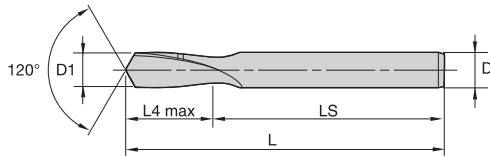


By using the Kennametal Carbide Recycling Program, you will receive:

- A partner who cares about a sustainable environment.
- Easy-to-use web portal to value your used carbide.
- Access to our popular Green Box™ options for carbide collection.
- Systematic and efficient disposal of carbide materials.
- Improved profitability.

Program is not currently available in all geographical areas.

For more information, please visit www.kennametal.com/carbiderecycling.

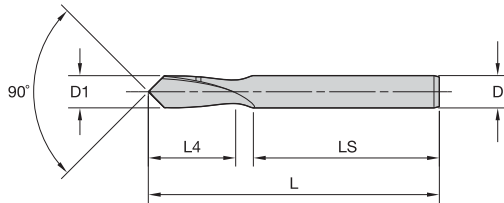


B501 • Z-Shank



- first choice
- alternate choice

B501 • K10	D1 diameter				L	L4 max	LS	D
	mm	in	fraction	wire size				
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



- first choice
- alternate choice

B505 • K10	D1 diameter				L	L4 max	LS	D
	mm	in	fraction	wire size				
B505Z06000	6,000	.2362	—	—	54	9	33	6
B505Z08000	8,000	.3150	—	—	58	11	37	8
B505Z10000	10,000	.3937	—	—	66	12	45	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

Tolerance • Metric

D1	tolerance h8	D	tolerance h6
>3-6	0,000/-0,018	6	0,000/-0,008
>6-10	0,000/-0,022	8-10	0,000/-0,009
>10-18	0,000/-0,027	12-18	0,000/-0,011
>18-21	0,000/-0,033	20	0,000/-0,013