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KENNAMETAL®

MASTER CATALOG 2018

VOLUME TWO | **ROTATING** TOOLS

HOLEMAKING | TAPPING | SOLID END MILLING | INDEXABLE MILLING

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 centering capabilities.
- Eliminates the need for pilot drilling.

Unique Flute Design

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

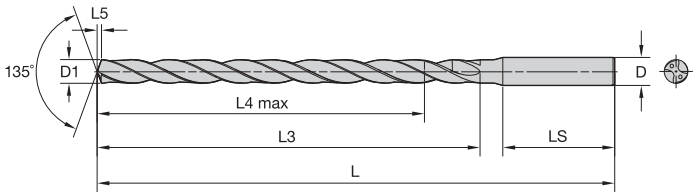
KCPK15™ Beyond Grade

- 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.

Designed for deep-hole applications without pilot drill.

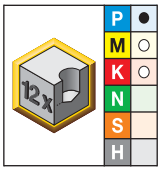
Customization

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



beyond

B269_HP • ~12 x D

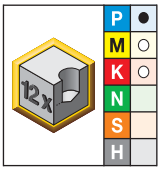


● first choice
○ alternate choice

extra long • KCPK15	D1 diameter mm	in	fraction	wire size	L	L3	L4 max	L5	LS	D
B269A02400KMG	2,400	.0945	–	–	75	42	35	0,5	28	4
B269A02500KMG	2,500	.0984	–	–	75	42	35	0,5	28	4
B269A02600KMG	2,600	.1024	–	–	75	42	35	0,5	28	4
B269A02800KMG	2,800	.1102	–	–	75	43	36	0,6	28	4
B269A02900KMG	2,900	.1142	–	–	75	43	36	0,6	28	4
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
B269A03300HP	3,300	.1299	–	–	93	53	44	0,6	36	6
B269A03400HP *	3,400	.1339	–	–	93	53	44	0,6	36	6
B269A03500HP	3,500	.1378	–	–	93	53	44	0,7	36	6
B269A03600HP	3,600	.1417	–	–	93	54	45	0,7	36	6
B269A03700HP	3,700	.1457	–	–	93	54	45	0,7	36	6
B269A03800HP	3,800	.1496	–	–	107	65	55	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
B269A04100HP	4,100	.1614	–	–	107	66	55	0,8	36	6
B269A04200HP	4,200	.1654	–	–	107	67	56	0,8	36	6
B269A04300HP	4,300	.1693	–	–	107	67	56	0,8	36	6
B269A04500HP	4,500	.1772	–	–	107	67	56	0,8	36	6
B269A04550HP	4,550	.1791	–	–	107	68	57	0,9	36	6
B269A04600HP	4,600	.1811	–	–	107	68	57	0,9	36	6
B269A04700HP	4,700	.1850	–	13	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

(continued)

(B269_HP • ~12 x D — continued)

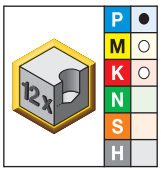


● first choice
○ alternate choice

extra long • KCPK15	D1 diameter mm	in	fraction	wire size	L	L3	L4 max	L5	LS	D
B269A06100HP	6,100	.2402	–	–	139	97	82	1,1	36	8
B269A06200HP	6,200	.2441	–	–	139	97	82	1,2	36	8
B269A06350HP	6,350	.2500	1/4	–	139	98	83	1,2	36	8
B269A06400HP	6,400	.2520	–	–	139	98	83	1,2	36	8
B269A06500HP	6,500	.2559	–	–	139	98	83	1,2	36	8
B269A06528HP	6,528	.2570	–	–	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	–	–	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
B269A08200HP	8,200	.3228	–	–	185	136	116	1,5	40	10
B269A08334HP	8,334	.3281	21/64	–	185	137	117	1,6	40	10
B269A08433HP	8,433	.3320	–	–	185	137	117	1,6	40	10
B269A08500HP	8,500	.3346	–	–	185	137	117	1,6	40	10
B269A08600HP	8,600	.3386	–	–	185	138	118	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
B269A09800HP	9,800	.3858	–	–	185	141	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
B269A10400HP	10,400	.4094	–	–	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
B269A11200HP	11,200	.4409	–	–	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
B269A12200HP	12,200	.4803	–	–	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

(continued)

(B269_HP • ~12 x D — continued)



● first choice
○ alternate choice

extra long • KCPK15	D1 diameter mm	in	fraction	wire size	L	L3	L4 max	L5	LS	D
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
B269A13800HP *	13,800	.5433	—	—	246	197	168	2,6	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
B269A14600HP *	14,600	.5748	—	—	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
B269A15200HP *	15,200	.5984	—	—	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
B269A17100HP	17,100	.6732	—	—	305	251	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
B269A17600HP *	17,600	.6929	—	—	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
B269A18600HP *	18,600	.7323	—	—	334	277	237	3,5	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

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

Tolerance • Metric

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

Tolerance • Inch

nominal size range	D1 tolerance m7	D tolerance h6
>.1181–.2362	.0002/.0006	.0000/-.0003
>.2362–.3937	.0002/.0008	.0000/-.0004
>.3937–.7087	.0003/.0010	.0000/-.0004
>.7087–1.0000	.0003/.0011	.0000/-.0005

HP Drills • B269_HP Series • Grade KCPK15™ • Through Coolant • Drill Diameters 3–20mm (.1181–.7874")

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	0	110	**140**	170	mm/r	0,10–0,14	0,12–0,20	0,14–0,20	0,17–0,25	0,25–0,28	0,20–0,35	0,23–0,43	0,28–0,48
	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
	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	80	**150**	160	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
M	1	50	**60**	80	mm/r	0,04–0,08	0,06–0,13	0,08–0,16	0,10–0,18	0,12–0,20	0,13–0,22	0,15–0,24	0,18–0,28
	2	40	**50**	80	mm/r	0,04–0,08	0,06–0,13	0,08–0,16	0,10–0,18	0,12–0,20	0,13–0,22	0,15–0,24	0,18–0,28
	3	40	**50**	70	mm/r	0,03–0,07	0,05–0,10	0,06–0,14	0,08–0,16	0,10–0,18	0,12–0,20	0,14–0,22	0,16–0,26
K	1	90	**150**	150	mm/r	0,10–0,15	0,14–0,20	0,20–0,30	0,22–0,36	0,26–0,42	0,30–0,45	0,36–0,59	0,40–0,72
	2	80	**120**	120	mm/r	0,10–0,15	0,14–0,20	0,20–0,30	0,22–0,36	0,26–0,42	0,30–0,45	0,36–0,59	0,40–0,72
	3	80	**80**	140	mm/r	0,11–0,15	0,15–0,21	0,22–0,32	0,22–0,39	0,26–0,45	0,28–0,50	0,30–0,60	0,34–0,72

Material Group		Cutting Speed — vc Range — SFM			Inch Recommended Feed Rate (f) by Diameter								
		min	Starting Value	max		1/8 .125	3/16 .188	1/4 .250	5/16 .313	3/8 .375	1/2 .500	5/8 .625	3/4 .750
P	0	360	**460**	560	IPR	.004–.006	.005–.008	.006–.008	.007–.010	.010–.011	.008–.014	.009–.017	.011–.019
	1	330	**470**	490	IPR	.005–.007	.006–.009	.007–.009	.008–.011	.011–.013	.009–.016	.011–.020	.013–.022
	2	230	**330**	360	IPR	.005–.007	.005–.008	.006–.010	.009–.013	.009–.015	.011–.020	.013–.025	.015–.030
	3	230	**300**	360	IPR	.005–.007	.006–.009	.007–.009	.008–.011	.011–.013	.009–.016	.011–.020	.013–.022
	4	200	**230**	300	IPR	.004–.006	.004–.008	.006–.008	.007–.009	.007–.010	.008–.013	.009–.016	.010–.018
	5	200	**260**	300	IPR	.001–.004	.002–.004	.002–.004	.002–.006	.003–.007	.004–.008	.006–.009	.006–.010
	6	260	**490**	520	IPR	.003–.005	.004–.004	.005–.008	.006–.011	.007–.013	.008–.015	.009–.017	.010–.019
M	1	160	**200**	260	IPR	.002–.003	.002–.005	.003–.006	.004–.007	.005–.008	.005–.009	.006–.009	.007–.011
	2	130	**160**	260	IPR	.002–.003	.002–.005	.003–.006	.004–.007	.005–.008	.005–.009	.006–.009	.007–.011
	3	130	**160**	230	IPR	.001–.003	.002–.004	.002–.006	.003–.006	.004–.007	.005–.008	.006–.009	.006–.010
K	1	300	**490**	490	IPR	.004–.006	.006–.008	.008–.012	.009–.014	.010–.017	.012–.018	.014–.023	.016–.028
	2	260	**400**	400	IPR	.004–.006	.006–.008	.008–.012	.009–.014	.010–.017	.012–.018	.014–.023	.016–.028
	3	260	**260**	460	IPR	.004–.006	.006–.008	.009–.013	.009–.015	.010–.018	.011–.020	.012–.024	.013–.028