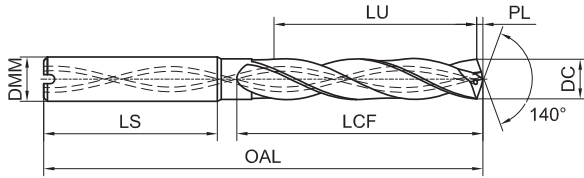


D966-A5C

5D Internal Coolant Twist Drill for Aluminum Alloy Machining



Order No.	DC (m7)	LCF	OAL	DMM (h6)	LS	LU	PL	In Stock
D966-A5C-0300	3.00	28	66.0	6	36	23.5	0.55	●
D966-A5C-0310	3.10	28	66.0	6	36	23.4	0.56	○
D966-A5C-0320	3.20	28	66.0	6	36	23.2	0.58	○
D966-A5C-0330	3.30	28	66.0	6	36	23.1	0.60	●
D966-A5C-0340	3.40	28	66.0	6	36	22.9	0.62	○
D966-A5C-0350	3.50	28	66.0	6	36	22.8	0.64	○
D966-A5C-0360	3.60	28	66.0	6	36	22.6	0.66	○
D966-A5C-0370	3.70	28	66.0	6	36	22.5	0.67	○
D966-A5C-0380	3.80	36	74.0	6	36	30.3	0.69	○
D966-A5C-0390	3.90	36	74.0	6	36	30.2	0.71	○
D966-A5C-0400	4.00	36	74.0	6	36	30.0	0.73	●
D966-A5C-0410	4.10	36	74.0	6	36	29.9	0.75	○
D966-A5C-0420	4.20	36	74.0	6	36	29.7	0.76	●
D966-A5C-0430	4.30	36	74.0	6	36	29.6	0.78	○
D966-A5C-0440	4.40	36	74.0	6	36	29.4	0.80	○
D966-A5C-0450	4.50	36	74.0	6	36	29.3	0.82	○
D966-A5C-0460	4.60	36	74.0	6	36	29.1	0.84	○
D966-A5C-0465	4.65	36	74.0	6	36	29.0	0.85	○
D966-A5C-0470	4.70	36	74.0	6	36	29.0	0.86	○
D966-A5C-0480	4.80	44	82.0	6	36	36.8	0.87	○
D966-A5C-0490	4.90	44	82.0	6	36	36.7	0.89	○
D966-A5C-0500	5.00	44	82.0	6	36	36.5	0.91	●
D966-A5C-0510	5.10	44	82.0	6	36	36.4	0.93	○
D966-A5C-0520	5.20	44	82.0	6	36	36.2	0.95	○
D966-A5C-0530	5.30	44	82.0	6	36	36.1	0.96	○
D966-A5C-0540	5.40	44	82.0	6	36	35.9	0.98	○
D966-A5C-0550	5.50	44	82.0	6	36	35.8	1.00	○

Order No.	DC (m7)	LCF	OAL	DMM (h6)	LS	LU	PL	In Stock
D966-A5C-0560	5.60	44	82.0	6	36	35.6	1.02	○
D966-A5C-0570	5.70	44	82.0	6	36	35.5	1.04	○
D966-A5C-0580	5.80	44	82.0	6	36	35.3	1.06	○
D966-A5C-0590	5.90	44	82.0	6	36	35.2	1.07	○
D966-A5C-0600	6.00	44	82.0	6	36	35.0	1.09	●
D966-A5C-0610	6.10	53	91.0	8	36	43.9	1.11	○
D966-A5C-0620	6.20	53	91.0	8	36	43.7	1.13	○
D966-A5C-0630	6.30	53	91.0	8	36	43.6	1.15	○
D966-A5C-0640	6.40	53	91.0	8	36	43.4	1.16	○
D966-A5C-0650	6.50	53	91.0	8	36	43.3	1.18	○
D966-A5C-0660	6.60	53	91.0	8	36	43.1	1.20	○
D966-A5C-0670	6.70	53	91.0	8	36	43.0	1.22	○
D966-A5C-0680	6.80	53	91.0	8	36	42.8	1.24	●
D966-A5C-0690	6.90	53	91.0	8	36	42.7	1.26	○
D966-A5C-0700	7.00	53	91.0	8	36	42.5	1.27	●
D966-A5C-0710	7.10	53	91.0	8	36	42.4	1.29	○
D966-A5C-0720	7.20	53	91.0	8	36	42.2	1.31	○
D966-A5C-0730	7.30	53	91.0	8	36	42.1	1.33	○
D966-A5C-0740	7.40	53	91.0	8	36	41.9	1.35	○
D966-A5C-0750	7.50	53	91.0	8	36	41.8	1.36	○
D966-A5C-0760	7.60	53	91.0	8	36	41.6	1.38	○
D966-A5C-0770	7.70	53	91.0	8	36	41.5	1.40	○
D966-A5C-0780	7.80	53	91.0	8	36	41.3	1.42	○
D966-A5C-0790	7.90	53	91.0	8	36	41.2	1.44	○
D966-A5C-0800	8.00	53	91.0	8	36	41.0	1.46	●
D966-A5C-0810	8.10	61	103.0	10	40	48.9	1.47	○
D966-A5C-0820	8.20	61	103.0	10	40	48.7	1.49	○

● Stock ○ Available Upon Order

Notes: Non-standard customization is available for D3-D20 tools

Unit (mm)

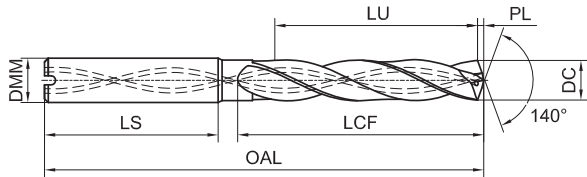
Workpiece Material													
P			M	K			N			S	H		
1 2 3 4	5	6 7	1 2 3	1 2	3	1 2	3	4	5	1 2 3	4	1	2
Carbon Steel, Alloy Steel	Alloy Steel, Tool Steel	PH and Ferritic/Martensitic Steel	Stainless Steel	Gray Cast Iron, Nodular Cast Iron	High Alloy Cast Iron	Forged Aluminum Alloy, Cast Aluminium Alloy	Cast Aluminum Alloy	Copper Alloy	Composite Material	High-temperature Alloy	Titanium Alloy	Hardened Steel	Hardened Steel
<35HRC	35-48HRC			<32HRC	35-45HRC	Si<12%	Si>12%	<HB200		<HB450	<HB400	45-55HRC	55-60HRC
						○	○	○	○				

○ Most Suitable ○ Suitable

Recommended Cutting Data ※ P133

D966-A5C

5D Internal Coolant Twist Drill for Aluminum Alloy Machining



Continued

Order No.	DC (m7)	LCF	OAL	DMM (h6)	LS	LU	PL	In Stock
D966-A5C-0830	8.30	61	103.0	10	40	48.6	1.51	○
D966-A5C-0840	8.40	61	103.0	10	40	48.4	1.53	○
D966-A5C-0850	8.50	61	103.0	10	40	48.3	1.55	○
D966-A5C-0860	8.60	61	103.0	10	40	48.1	1.57	○
D966-A5C-0870	8.70	61	103.0	10	40	48.0	1.58	○
D966-A5C-0880	8.80	61	103.0	10	40	47.8	1.60	○
D966-A5C-0890	8.90	61	103.0	10	40	47.7	1.62	○
D966-A5C-0900	9.00	61	103.0	10	40	47.5	1.64	●
D966-A5C-0910	9.10	61	103.0	10	40	47.4	1.66	○
D966-A5C-0920	9.20	61	103.0	10	40	47.2	1.67	○
D966-A5C-0930	9.30	61	103.0	10	40	47.1	1.69	○
D966-A5C-0940	9.40	61	103.0	10	40	46.9	1.71	○
D966-A5C-0950	9.50	61	103.0	10	40	46.8	1.73	○
D966-A5C-0960	9.60	61	103.0	10	40	46.6	1.75	○
D966-A5C-0970	9.70	61	103.0	10	40	46.5	1.77	○
D966-A5C-0980	9.80	61	103.0	10	40	46.3	1.78	○
D966-A5C-0990	9.90	61	103.0	10	40	46.2	1.80	○
D966-A5C-1000	10.00	61	103.0	10	40	46.0	1.82	●
D966-A5C-1010	10.10	71	118.0	12	45	55.9	1.84	○
D966-A5C-1020	10.20	71	118.0	12	45	55.7	1.86	○
D966-A5C-1025	10.25	71	118.0	12	45	55.6	1.87	○
D966-A5C-1030	10.30	71	118.0	12	45	55.6	1.87	○
D966-A5C-1040	10.40	71	118.0	12	45	55.4	1.89	○
D966-A5C-1050	10.50	71	118.0	12	45	55.3	1.91	●
D966-A5C-1060	10.60	71	118.0	12	45	55.1	1.93	○
D966-A5C-1070	10.70	71	118.0	12	45	55.0	1.95	○
D966-A5C-1080	10.80	71	118.0	12	45	54.8	1.97	○

Order No.	DC (m7)	LCF	OAL	DMM (h6)	LS	LU	PL	In Stock
D966-A5C-1090	10.90	71	118.0	12	45	54.7	1.98	○
D966-A5C-1100	11.00	71	118.0	12	45	54.5	2.00	●
D966-A5C-1110	11.10	71	118.0	12	45	54.4	2.02	○
D966-A5C-1120	11.20	71	118.0	12	45	54.2	2.04	○
D966-A5C-1130	11.30	71	118.0	12	45	54.1	2.06	○
D966-A5C-1140	11.40	71	118.0	12	45	53.9	2.07	○
D966-A5C-1150	11.50	71	118.0	12	45	53.8	2.09	○
D966-A5C-1160	11.60	71	118.0	12	45	53.6	2.11	○
D966-A5C-1170	11.70	71	118.0	12	45	53.5	2.13	○
D966-A5C-1180	11.80	71	118.0	12	45	53.3	2.15	○
D966-A5C-1190	11.90	71	118.0	12	45	53.2	2.17	○
D966-A5C-1200	12.00	71	118.0	12	45	53.0	2.18	●
D966-A5C-1205	12.05	71	118.0	12	45	52.9	2.19	○
D966-A5C-1210	12.10	77	124.0	14	45	58.9	2.20	○
D966-A5C-1220	12.20	77	124.0	14	45	58.7	2.22	○
D966-A5C-1230	12.30	77	124.0	14	45	58.6	2.24	○
D966-A5C-1240	12.40	77	124.0	14	45	58.4	2.26	○
D966-A5C-1250	12.50	77	124.0	14	45	58.3	2.27	○
D966-A5C-1260	12.60	77	124.0	14	45	58.1	2.29	○
D966-A5C-1270	12.70	77	124.0	14	45	58.0	2.31	○
D966-A5C-1280	12.80	77	124.0	14	45	57.8	2.33	○
D966-A5C-1300	13.00	77	124.0	14	45	57.5	2.37	○
D966-A5C-1310	13.10	77	124.0	14	45	57.4	2.38	○
D966-A5C-1320	13.20	77	124.0	14	45	57.2	2.40	○
D966-A5C-1350	13.50	77	124.0	14	45	56.8	2.46	○
D966-A5C-1360	13.60	77	124.0	14	45	56.6	2.47	○
D966-A5C-1370	13.70	77	124.0	14	45	56.5	2.49	○

● Stock ○ Available Upon Order

Notes: Non-standard customization is available for D3-D20 tools

Unit (mm)

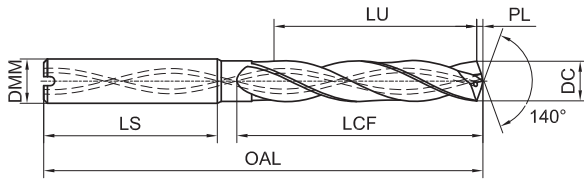
Workpiece Material													
P			M	K		N				S	H		
1 2 3 4	5	6 7	1 2 3	1 2	3	1 2	3	4	5	1 2 3	4	1	2
Carbon Steel, Alloy Steel	Alloy Steel, Tool Steel	PH and Ferritic/Martensitic Steel	Stainless Steel	Gray Cast Iron, Nodular Cast Iron	High Alloy Cast Iron	Forged Aluminum Alloy, Cast Aluminum Alloy	Cast Aluminum Alloy	Copper Alloy	Composite Material	High-temperature Alloy	Titanium Alloy	Hardened Steel	Hardened Steel
<35HRC	35-48HRC			<32HRC	35-45HRC	Si<12%	Si>12%	<HB200		<HB450	<HB400	45-55HRC	55-60HRC
						○	○	○	○				

○ Most Suitable ○ Suitable

Recommended Cutting Data ※ P133

D966-A5C

5D Internal Coolant Twist Drill for Aluminum Alloy Machining



Continued

Order No.	DC (m7)	LCF	OAL	DMM (h6)	LS	LU	PL	In Stock
D966-A5C-1380	13.80	77	124.0	14	45	56.3	2.51	○
D966-A5C-1390	13.90	77	124.0	14	45	56.2	2.53	○
D966-A5C-1400	14.00	77	124.0	14	45	56.0	2.55	○
D966-A5C-1410	14.10	83	133.0	16	48	61.9	2.57	○
D966-A5C-1420	14.20	83	133.0	16	48	61.7	2.58	○
D966-A5C-1430	14.30	83	133.0	16	48	61.6	2.60	○
D966-A5C-1450	14.50	83	133.0	16	48	61.3	2.64	○
D966-A5C-1460	14.60	83	133.0	16	48	61.1	2.66	○
D966-A5C-1470	14.70	83	133.0	16	48	61.0	2.68	○
D966-A5C-1480	14.80	83	133.0	16	48	60.8	2.69	○
D966-A5C-1500	15.00	83	133.0	16	48	60.5	2.73	○
D966-A5C-1510	15.10	83	133.0	16	48	60.4	2.75	○
D966-A5C-1520	15.20	83	133.0	16	48	60.2	2.77	○
D966-A5C-1530	15.30	83	133.0	16	48	60.1	2.78	○
D966-A5C-1550	15.50	83	133.0	16	48	59.8	2.82	○
D966-A5C-1570	15.70	83	133.0	16	48	59.5	2.86	○
D966-A5C-1580	15.80	83	133.0	16	48	59.3	2.88	○
D966-A5C-1600	16.00	83	133.0	16	48	59.0	2.91	○

Order No.	DC (m7)	LCF	OAL	DMM (h6)	LS	LU	PL	In Stock
D966-A5C-1630	16.30	93	143.0	18	48	68.6	2.97	○
D966-A5C-1650	16.50	93	143.0	18	48	68.3	3.00	○
D966-A5C-1680	16.80	93	143.0	18	48	67.8	3.06	○
D966-A5C-1690	16.90	93	143.0	18	48	67.7	3.08	○
D966-A5C-1700	17.00	93	143.0	18	48	67.5	3.09	○
D966-A5C-1720	17.20	93	143.0	18	48	67.2	3.13	○
D966-A5C-1750	17.50	93	143.0	18	48	66.8	3.18	○
D966-A5C-1770	17.70	93	143.0	18	48	66.5	3.22	○
D966-A5C-1780	17.80	93	143.0	18	48	66.3	3.24	○
D966-A5C-1800	18.00	93	143.0	18	48	66.0	3.28	○
D966-A5C-1810	18.10	101	153.0	20	50	73.9	3.29	○
D966-A5C-1850	18.50	101	153.0	20	50	73.3	3.37	○
D966-A5C-1860	18.60	101	153.0	20	50	73.1	3.38	○
D966-A5C-1880	18.80	101	153.0	20	50	72.8	3.42	○
D966-A5C-1900	19.00	101	153.0	20	50	72.5	3.46	○
D966-A5C-1950	19.50	101	153.0	20	50	71.8	3.55	○
D966-A5C-1980	19.80	101	153.0	20	50	71.3	3.60	○
D966-A5C-2000	20.00	101	153.0	20	50	71.0	3.64	○

● Stock ○ Available Upon Order

Notes: Non-standard customization is available for D3-D20 tools

Unit (mm)

Range of Sizes	DC(m7)	DMM(h6)
≥2—3	+0.002/+0.012	0.000/-0.006
>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—20	+0.008/+0.029	0.000/-0.013

Workpiece Material													
P			M	K			N				S	H	
1 2 3 4	5	6 7	1 2 3	1 2	3	1 2	3	4	5	1 2 3	4	1	2
Carbon Steel, Alloy Steel	Alloy Steel, Tool Steel	PH and Ferritic/Martensitic Steel	Stainless Steel	Gray Cast Iron, Nodular Cast Iron	High Alloy Cast Iron	Forged Aluminum Alloy, Cast Aluminum Alloy	Cast Aluminum Alloy	Copper Alloy	Composite Material	High-temperature Alloy	Titanium Alloy	Hardened Steel	Hardened Steel
<35HRC	35-48HRC			<32HRC	35-45HRC	Si<12%	Si>12%	<HB200		<HB450	<HB400	45-55HRC	55-60HRC
						○	○	○	○				

○ Most Suitable ○ Suitable

Recommended Cutting Data ※ P133

Recommended Cutting Data

D966 Aluminum Alloy Machining Twist Drill

Workpiece Material		Cutting Speed Vc (m/min)		Feed Fn (mm/rev)				
				Φ3	Φ4	Φ6	Φ8	Φ10
N	Forged Aluminum Alloy (Si<12%)	250-150-80	315-230-90	0.06-0.09-0.11	0.13-0.20-0.26	0.16-0.22-0.28	0.18-0.26-0.32	0.20-0.30-0.38
	Cast Aluminum Alloy (Si<12%)	230-150-80	315-230-90	0.06-0.09-0.11	0.13-0.20-0.26	0.16-0.22-0.28	0.18-0.26-0.32	0.20-0.30-0.38
	Cast Aluminum Alloy (Si>12%)	230-150-80	270-180-90	0.06-0.09-0.11	0.13-0.20-0.26	0.16-0.22-0.28	0.18-0.26-0.32	0.20-0.30-0.38
	Copper, Copper Alloy (<200HB)	160-120-70	180-135-90	0.06-0.09-0.11	0.13-0.20-0.26	0.16-0.22-0.28	0.18-0.26-0.32	0.20-0.30-0.38

Workpiece Material		Cutting Speed Vc (m/min)		Feed Fn (mm/rev)				
				Φ12	Φ14	Φ16	Φ18	Φ20
N	Forged Aluminum Alloy (Si<12%)	250-150-80	315-230-90	0.22-0.34-0.42	0.24-0.36-0.44	0.28-0.38-0.46	0.32-0.40-0.48	0.34-0.42-0.48
	Cast Aluminum Alloy (Si<12%)	230-150-80	315-230-90	0.22-0.34-0.42	0.24-0.36-0.44	0.28-0.38-0.46	0.32-0.40-0.48	0.34-0.42-0.48
	Cast Aluminum Alloy (Si>12%)	230-150-80	270-180-90	0.22-0.34-0.42	0.24-0.36-0.44	0.28-0.38-0.46	0.32-0.40-0.48	0.34-0.42-0.48
	Copper, Copper Alloy (<200HB)	160-120-70	180-135-90	0.22-0.34-0.42	0.24-0.36-0.44	0.28-0.38-0.46	0.32-0.40-0.48	0.34-0.42-0.48

[Notes]

1. Please use a machine with relatively high rigidity. It is recommended to adopt hydraulic tool holders, thermal expansion tool holders and powerful handles with spring collets.
2. When installing the tool, it is necessary to ensure that the radial bounce of the drill bit tip is less than 0.02mm.
3. This standard cutting condition table is suitable for water-soluble cutting fluids
4. For the tool edge diameter specifications not listed in the table, please refer to the closest edge diameter specifications in the table to select the cutting data. Meanwhile, during the machining process, please adjust the cutting data appropriately according to the actual machining situation.