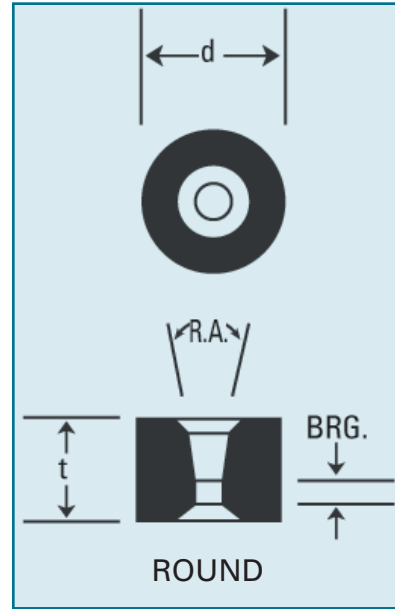


Poly-Di® Polycrystalline Diamond Dies

CORE DIMENSIONS

MILLIMETERS / SPECIFICATIONS

MILLIMETERS						
ADDMA NO.	MFG. NO.	GRAIN SIZE CLASS	NIB FEATURE	THERMAL STABILITY IN AIR	CORE DIM.	
					d	t
D-6	5010	U, F, M	1	1200°C	3.1	1.0
D-12	5015	U, F, M	1	1200°C	3.1	1.5
D-12	5235	M	2	700°C	1.4	1.5
D-15	5823	F	2	700°C	3.8	2.24
D-15	5025	F, M	1	1200°C	5.2	2.5
D-15	5223	M	2	700°C	3.8	2.24
D-15	5430	C	2	700°C	3.8	2.24
D-18	5829	F	2	700°C	3.8	2.84
D-18	5035	F, M	1	1200°C	5.2	3.5
D-18	5229	M	2	700°C	3.8	2.84
D-18	5435	C	2	700°C	3.8	2.84
D-21	5840	F	2	700°C	6.8	3.86
D-21	5240	M	2	700°C	6.8	3.86
D-21	5530	C	2	700°C	6.8	3.86
D-24	5853	F	2	700°C	6.8	5.13
D-24	5253	M	2	700°C	6.8	5.13
D-24	5225	M	2	700°C	12.7	6.98
D-24	5535	C	2	700°C	6.8	5.13
D-24	5725	C	2	700°C	12.7	6.98
D-27	5208	M	2	700°C	12.7	8.7
D-27	5730	C	2	700°C	12.7	8.7
D-30	5211	M	2	700°C	12.7	11.6
D-30	5735	C	2	700°C	12.7	11.6
D-30	5913	M	2	700°C	18.2	13.5
D-33	5915	M	2	700°C	18.2	15.5
D-33	5917	M	2	700°C	18.2	17.5
D-36	5918	M	2	700°C	18.2	18.5



Average Grain Size Designation
 U=Ultra Fine (0-2µ)
 F=Fine (3-10µ)
 M=Medium (11-29µ)
 C=Coarse (30µ & larger)

Nib features:

1. Core is round, self-supported, metal-absent and thermally stable to 1200°C.
2. Diamond core is round, metal-filled, has a tungsten carbide support ring and is thermally stable to 700°C.

MAXIMUM RECOMMENDED HOLE SIZE RANGE**

MILLIMETERS																
BEARING PERCENTAGE (BRG.)	REDUCTION ANGLE (R.A.)	10%					30%					50%				
		8	12	16	20	24	8	12	16	20	24	8	12	16	20	24
D-6	5010	0.41	0.59	0.76	0.93	1.08	0.36	0.49	0.61	0.71	0.79	0.32	0.42	0.50	0.57	0.63
D-12	5015	0.69	1.00	1.29	1.56	1.83	0.60	0.83	1.02	1.19	1.34	0.54	0.71	0.85	0.96	1.06
D-12	5235	0.69	0.81	0.81	0.81	0.81	0.60	0.81	0.81	0.81	0.81	0.54	0.71	0.81	0.81	0.81
D-15	5823	1.14	1.65	2.14	2.60	2.84	1.00	1.38	1.70	1.98	2.22	0.89	1.18	1.41	1.60	1.75
D-15	5025	1.27	1.84	2.38	2.90	3.38	1.12	1.54	1.90	2.21	2.48	1.00	1.32	1.57	1.78	1.95
D-15	5223	1.14	1.65	2.14	2.60	2.84	1.00	1.38	1.70	1.98	2.22	0.89	1.18	1.41	1.60	1.75
D-15	5430	1.14	1.65	2.14	2.60	2.84	1.00	1.38	1.70	1.98	2.22	0.89	1.18	1.41	1.60	1.75
D-18	5829	1.44	2.09	2.71	2.78	2.78	1.27	1.75	2.15	2.51	2.78	1.13	1.50	1.79	2.02	2.22
D-18	5035	1.78	2.58	3.34	3.88	3.88	1.56	2.15	2.65	3.09	3.47	1.39	1.85	2.20	2.49	2.74
D-18	5229	1.44	2.09	2.71	2.78	2.78	1.27	1.75	2.15	2.51	2.78	1.13	1.50	1.79	2.02	2.22
D-18	5435	1.44	2.09	2.71	2.78	2.78	1.27	1.75	2.15	2.51	2.78	1.13	1.50	1.79	2.02	2.22
D-21	5840	1.96	2.85	3.68	4.47	5.18	1.72	2.37	2.93	3.41	3.82	1.54	2.04	2.43	2.75	3.02
D-21	5240	1.96	2.85	3.68	4.47	5.18	1.72	2.37	2.93	3.41	3.82	1.54	2.04	2.43	2.75	3.02
D-21	5530	1.96	2.85	3.68	4.47	5.18	1.72	2.37	2.93	3.41	3.82	1.54	2.04	2.43	2.75	3.02
D-24	5853	2.60	3.78	4.89	5.04	5.04	2.29	3.15	3.89	4.53	5.04	2.04	2.70	3.23	3.66	4.01
D-24	5253	2.60	3.78	4.89	5.04	5.04	2.29	3.15	3.89	4.53	5.04	2.04	2.70	3.23	3.66	4.01
D-24	5225	3.54	5.15	6.66	8.09	9.45	3.11	4.29	5.29	6.16	6.92	2.78	3.68	4.39	4.97	5.46
D-24	5535	2.60	3.78	4.89	5.04	5.04	2.29	3.15	3.89	4.53	5.04	2.04	2.70	3.23	3.66	4.01
D-24	5725	3.54	5.15	6.66	8.09	9.45	3.11	4.29	5.29	6.16	6.92	2.78	3.68	4.39	4.97	5.46
D-27	5208	4.41	6.41	8.30	9.61	9.61	3.88	5.35	6.60	7.68	8.62	3.46	4.59	5.48	6.20	6.80
D-27	5730	4.41	6.41	8.30	9.61	9.61	3.88	5.35	6.60	7.68	8.62	3.46	4.59	5.48	6.20	6.80
D-30	5211	5.89	8.55	9.29	9.29	9.29	5.18	7.13	8.80	9.29	9.29	4.62	6.12	7.30	8.26	9.07
D-30	5735	5.89	8.55	9.29	9.29	9.29	5.18	7.13	8.80	9.29	9.29	4.62	6.12	7.30	8.26	9.07
D-30	5913	6.85	9.95	12.88	13.71	13.71	6.02	8.30	10.24	11.91	13.38	5.38	7.12	8.50	9.62	10.55
D-33	5915	8.06	11.71	13.71	13.71	13.71	7.09	9.76	12.04	13.71	13.71	6.32	8.37	9.99	11.31	12.41
D-33	5917	9.26	13.46	13.71	13.71	13.71	8.15	11.22	13.71	13.71	13.71	7.27	9.62	11.49	13.01	13.71
D-36	5918	9.87	13.71	13.71	13.71	13.71	8.68	11.96	13.71	13.71	13.71	7.74	10.25	12.24	13.71	13.71

**The above chart designates the maximum recommended hole size for the various polycrystalline cores assuming a given reduction angle, bearing length and 20.7% area of reduction.

