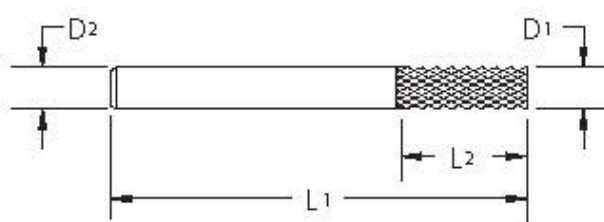


Diamond Grind Routers Series 230 / 231 231B / 231D / 231F



Designed for routing of glass-reinforced printed circuit boards, phenolic-epoxy and other highly abrasive materials.

Series 230

Down Cut
Safe End



- Ultra fine micrograin carbide.
- Routers are available with color coded depth setting rings upon request.

Series 231

Down Cut
End Mill Type Point



Series 231B

Down Cut
Bur End Point



Series 231D

Down Cut
Drill Point



Series 231F

Down Cut
Fishtail Point



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Series 230		Series 231		Series 231B		Series 231D		Series 231F		Diameter			Shank		OAL		Flute Length	
Tool No.	EDP	Tool No.	EDP	Tool No.	EDP	Tool No.	EDP	Tool No.	EDP	D1			D2		L1		L2	
										Inch	mm	Decimal	Inch	mm	Inch	mm	Inch	mm
23003120	90801	23103120	90901	23103120B	90904	23103120D	90907	23103120F	90910	1/32		.0312	1.8		1-1/2		1.8	
23003150	90804	23103150	90913	23103150B	90916	23103150D	90919	23103150F	90922		0.8	.0315		3.175		38		3.0
23003940	90807	23103940	90925	23103940B	90928	23103940D	90931	23103940F	90934		1.0	.0394		3.175		38		4.0
23004690	90810	23104690	90937	23104690B	90940	23104690D	90943	23104690F	90946	3.64		.0469	1.8		1-1/2		5/32	
23004720	90813	23104720	90949	23104720B	90952	23104720D	90955	23104720F	90958		1.2	.0472		3.175		38		4.0
23005910	90816	23105910	90961	23105910B	90964	23105910D	90967	23105910F	90970		1.5	.0591		3.000		38		5.0
23005911	90819	23105911	90973	23105911B	90976	23105911D	90979	23105911F	90982		1.5	.0591		3.175		38		5.0
23006251	90822	23106251	90985	23106251B	90988	23106251D	90991	23106251F	90994	1/16		.0625	1.8		1-1/2		3/16	
23006300	90825	23106300	90997	23106300B	91000	23106300D	91003	23106300F	91006		1.6	.0630		3.175		38		5.0
23007870	90828	23107870	91009	23107870B	91012	23107870D	91015	23107870F	91018		2.0	.0787		3.175		38		8.0
23009370	90831	23109370	91021	23109370B	91024	23109370D	91027	23109370F	91030	3/32		.0937	1.8		1-1/2		3/8	
23009450	90834	23109450	91033	23109450B	91036	23109450D	91039	23109450F	91042		2.4	.0945		3.175		38		9.5
23011810	90837	23111810	91045	23111810B	91048	23111810D	91051	23111810F	91054		3.0	.1181		3.000		38		12.5
23011811	90840	23111811	91057	23111811B	91060	23111811D	91063	23111811F	91066		3.0	.1181		3.175		38		12.5
23012500	90843	23112500	91069	23112500B	91072	23112500D	91075	23112500F	91078	1/8		.1250	1.8		1-1/2		1/2	
23018750	90846	23118750	91081	23118750B	91084	23118750D	91087	23118750F	91090	3/16		.1875	3/16		2		5/8	
23019680	90849	23119680	91093	23119680B	91096	23119680D	91099	23119680F	91102		5.0	.1968		5.000		51		16.0
23023620	90852	23123620	91105	23123620B	91108	23123620D	91111	23123620F	91114		6.0	.2362		6.000		51		19.0
23025000	90855	23125000	91117	23125000B	91120	23125000D	91123	23125000F	91126	1/4		.2500	1/4		2		3/4	
23025010	90858	23125010	91129	23125010B	91132	23125010D	91135	23125010F	91138	1/4		.2500	1/4		2-1/2		3/4	
23025020	90861	23125020	91141	23125020B	91144	23125020D	91147	23125020F	91150	1/4		.2500	1/4		3		3/4	
23031250	90864	23131250	91153	23131250B	91156	23131250D	91159	23131250F	91162	5/16		.3125	5/16		2-1/2		7/8	
23031500	90867	23131500	91165	23131500B	91168	23131500D	91171	23131500F	91174		8.0	.3150		8.000		64		22.0
23037500	90870	23137500	91177	23137500B	91180	23137500D	91183	23137500F	91186	3/8		.3750	3/8		2-1/2		7/8	