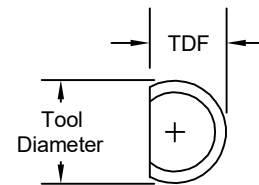
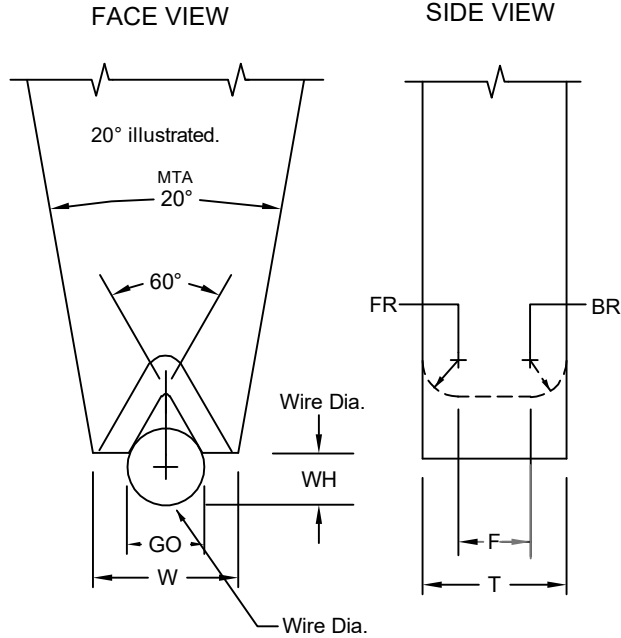


SERIES GE

LARGE WIRE, V GROOVE

FOR MANUAL, AUTOMATIC AND SEMI-AUTOMATIC BONDERS

20° OR 30° MAIN TAPER ANGLE (MTA)



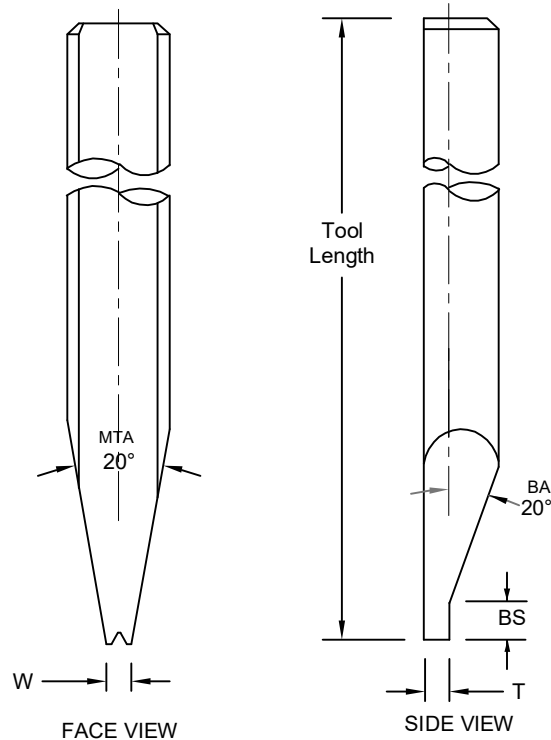
MTA = MAIN TAPER ANGLE
SA = SIDE-VIEW ANGLE
BA = BACK ANGLE
GO= GROOVE OPENING

Standard				
	TD		TDF	
	in.	mm	in.	mm
1/8	.1249	3.17	.1100	2.79

1/8" diameter tools illustrated.

	TD		TDF	
	in.	mm	in.	mm
1/16	.0624	1.59	.0460	1.17
1/16	.0624	1.59	.0590	1.50
	.0784	1.99	.0630	1.60
	.0784	1.99	.0720	1.83
3/32	.0937	2.38	.0880	2.24
	.1180	3.00	.0985	2.50
1/8	.1249	3.17	.0937	2.38
1/8	.1249	3.17	.1180	3.00

Standard Back Step supplied unless otherwise specified. See **Tool Options** for other options. (A4, A5)



SERIES GE

LARGE WIRE
V-GROOVE IN WIRE DIRECTION

ORDERING INFORMATION
LARGE WIRE BONDING WEDGES
FOR GOLD AND ALUMINUM WIRE

SAMPLE PART NUMBER: M-GE-100-1-1/8-1.97-M-*

SYMBOL EXPLANATION: 1 2 3 4 5 6

1. **MATERIAL:** _____
 M = Ceramic
 C = Tungsten Carbide
 T = Titanium
 All other: See Material Selection Guide
2. **PART NUMBER : GE** _____
 Wire Ø (100 in µ) and Revision Number (1)
3. **SHANK DIA.:** Please Specify Diameter _____
 Select TD from chart on page
4. **TOOL LENGTH:**
 Please Specify Length
5. **FOOT FINISH:**
 M = Matte finish (FR, BR, & Bond Flat)
 P = Polish finish (FR, BR, & Bond Flat)
 MP= Polish finish (FR, BR), and
 Matte finish (Bond Flat)
6. **See Tool Options**

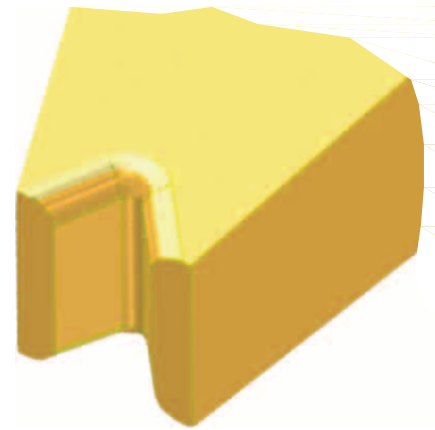
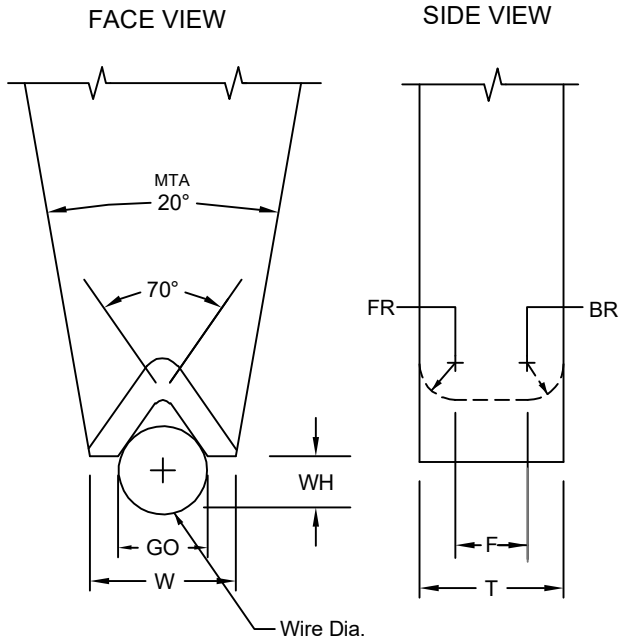
GE SERIES: STANDARD CHART FOR WIRE DIAMETERS .0040 THROUGH .0200																	
PART NUMBER	MTA ANGLE W	FR		BR		GD		GO		BS		T		W		WIRE DIAMETER	
		in.	µ	in.	µ	in.	µ	in.	µ	in.	µ	in.	µ	in.	µ	in.	µ
Tolerance small Tools	(Ref)	±.0002	±5	±.0002	±5	±.0005 -0.0002	+13 -5	±.0004	±10	±.0040	±102	±.0004	±10	±.0005	±13		
GE-100-1	30°	.0020	51	.0020	51	.0033	84	.0044	112	.0200	508	.0106	270	.0098	250	.0040	102
GE-125-1	30°	.0025	64	.0025	64	.0041	104	.0055	140	.0200	508	.0138	350	.0118	300	.0050	127
GE-150-1	30°	.0030	76	.0030	76	.0050	127	.0066	168	.0200	508	.0157	400	.0138	350	.0060	152
Tolerance large Tools	(Ref)	±.0004	±10	±.0004	±13	±.0010 -0.0002	+25 -5	±.0006	±15	±.0040	±102	±.0004	±10	±.0010	±25		
GE-175-1	30°	.0035	89	.0035	89	.0058	147	.0077	195	.0200	508	.0181	460	.0157	400	.0070	178
GE-200-1	30°	.0040	102	.0040	102	.0066	168	.0088	224	.0200	508	.0205	520	.0177	450	.0080	203
GE-250-1	20°	.0050	127	.0050	127	.0083	211	.0110	279	.0390	991	.0268	680	.0217	550	.0100	254
GE-300-1	20°	.0060	152	.0060	152	.0098	249	.0130	330	.0390	991	.0307	780	.0256	650	.0120	305
GE-350-1	20°	.0070	178	.0070	178	.0116	295	.0154	391	.0390	991	.0331	840	.0295	750	.0140	356
GE-380-1	20°	.0075	191	.0075	191	.0124	315	.0165	419	.0590	1499	.0346	880	.0315	800	.0150	381
GE-400-1	20°	.0080	203	.0080	203	.0130	330	.0173	439	.0590	1499	.0354	900	.0335	850	.0160	406
GE-500-1	20°	.0098	249	.0098	249	.0170	432	.0217	551	.0590	1499	.0445	1130	.0413	1050	.0200	508

WD=WIREØ GO= GROOVE OPENING PLEASE SPECIFY WIRE SIZE AND WIRE MATERIAL WHEN ORDERING
 *Other sizes available upon request *All dimensions and tolerances are for reference only

SERIES GF

LARGE WIRE, V GROOVE

FOR MANUAL, AUTOMATIC AND SEMI-AUTOMATIC BONDERS



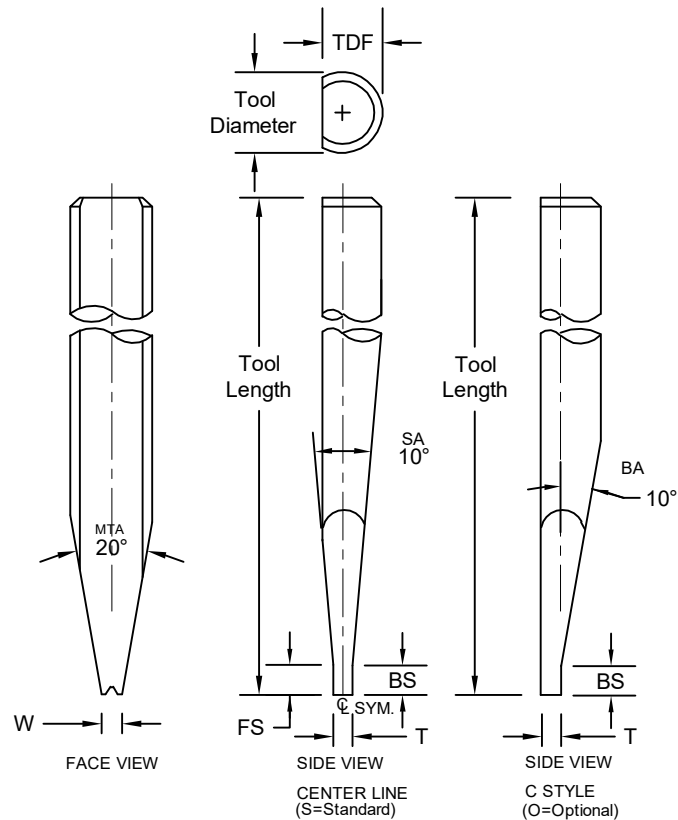
MTA = MAIN TAPER ANGLE
SA = SIDE-VIEW ANGLE
BA = BACK ANGLE
GO = GROOVE OPENING

Standard				
	TD		TDF	
	in.	mm	in.	mm
1/8	.1249	3.17	.1100	2.79

Illustrated Tool: Diameter 1/8"

	TD		TDF	
	in.	mm	in.	mm
1/16	.0624	1.59	.0460	1.17
1/16	.0624	1.59	.0590	1.50
	.0784	1.99	.0630	1.60
	.0784	1.99	.0720	1.83
3/32	.0937	2.38	.0880	2.24
	.1180	3.00	.0985	2.50
1/8	.1249	3.17	.0937	2.38
1/8	.1249	3.17	.1180	3.00

Standard Front Step and Back Step supplied unless otherwise specified. See **Tool Options** for other options. (A4, A5)



SERIES GF

LARGE WIRE

V-GROOVE IN WIRE DIRECTION

ORDERING INFORMATION
LARGE WIRE BONDING WEDGES
FOR GOLD AND ALUMINUM WIRE

SAMPLE PART NUMBER: **M-S-GF-100-1-1/8-1.97-M-***

SYMBOL EXPLANATION: 1 2 3 4 5 6 7 *

1. **MATERIAL:**
 - M = Ceramic
 - C = Tungsten Carbide
 - T = Titanium
 - All other: See Material Selection Guide
2. **S=** Standard, Center line
O = Optional, C Style
3. **PART NUMBER :** GF
Wire Ø (100 in µ) and Revision Number (1)
4. **SHANK DIA.:** Please Specify Diameter
Select TD from chart on page
5. **TOOL LENGTH:**
Please Specify Length
6. **FOOT FINISH:**
 - M** = Matte finish (FR, BR, & Bond Flat)
 - P** = Polish finish (FR, BR, & Bond Flat)
 - MP** = Polish finish (FR, BR), and Matte finish (Bond Flat)
7. **See Tool Options**

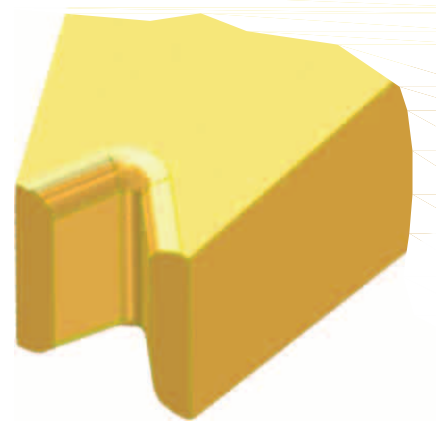
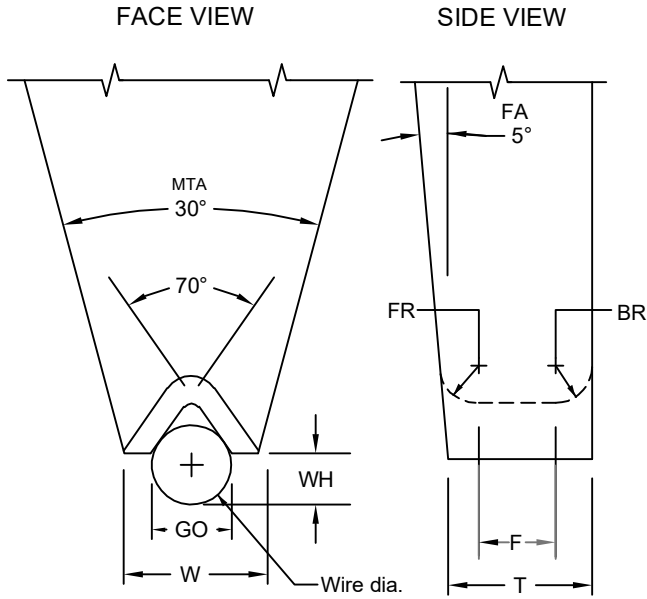
STANDARD CHART		GF LARGE WIRE: FOR WIRE DIAMETERS .0040" THROUGH .0200"																	
PART NUMBER	F		FR		BR		GO		WH		FS & BS		T		W		WIRE DIAMETER		
	in.	µ	in.	µ	in.	µ	in.	µ	in.	µ	in.	µ	in.	µ	in.	µ	in.	µ	
Tolerance small Tools		(Ref)		±.0003	±8	±.0003	±8	±.0003	±8	±0.002	±5	±0.020	±51	±0.004	±5	±0.004	±10		
GF-100-1	.0074	188	.0012	30	.0012	30	.0039	99	.0027	69	.0394	1001	.0098	249	.0078	198	.0040	102	
GF-125-1	.0088	224	.0015	38	.0015	38	.0054	137	.0030	76	.0394	1001	.0118	300	.0098	249	.0050	127	
GF-150-1	.0102	259	.0018	46	.0018	46	.0066	168	.0035	89	.0394	1001	.0138	351	.0118	300	.0060	152	
GF-150-2	.0112	284	.0018	46	.0018	46	.0066	168	.0035	89	.0394	1001	.0148	376	.0120	305	.0060	152	
GF-150-3	.0125	318	.0018	46	.0018	46	.0066	168	.0035	89	.0394	1001	.0161	409	.0120	305	.0060	152	
Tolerance large Tools		(Ref)		±.0005	±13	±.0005	±13	±.0005	±13	±0.004	±10	±0.020	±51	±0.005	±5	±0.006	±15		
GF-175-1	.0116	295	.0021	53	.0021	53	.0076	193	.0042	107	.0394	1001	.0158	401	.0136	345	.0070	178	
GF-200-1A	.0129	328	.0024	61	.0024	61	.0087	221	.0048	122	.0394	1001	.0177	450	.0158	401	.0080	203	
GF-200-1B	.0062	157	.0028	71	.0028	71	.0087	221	.0048	122	.0394	1001	.0118	300	.0157	399	.0080	203	
GF-200-1C	.0042	107	.0028	71	.0028	71	.0087	221	.0048	122	.0394	1001	.0098	249	.0157	399	.0080	203	
GF-200-1D	.0082	208	.0028	71	.0028	71	.0087	221	.0048	122	.0394	1001	.0138	351	.0157	399	.0080	203	
GF-250-1	.0157	399	.0030	76	.0030	76	.0108	274	.0060	152	.0590	1499	.0217	551	.0196	498	.0100	254	
GF-300-1	.0184	467	.0036	91	.0036	91	.0130	330	.0072	183	.0590	1499	.0256	650	.0236	599	.0120	305	
GF-350-1	.0215	546	.0042	107	.0042	107	.0152	386	.0084	213	.0590	1499	.0299	759	.0276	701	.0140	356	
GF-350-2	.0238	605	.0042	107	.0042	107	.0152	386	.0084	213	.0590	1499	.0322	818	.0276	701	.0140	356	
GF-380-1	.0233	592	.0045	114	.0045	114	.0165	419	.0088	224	.0590	1499	.0323	820	.0300	762	.0150	381	
GF-400-1	.0247	627	.0048	122	.0048	122	.0174	442	.0095	241	.0590	1499	.0343	871	.0316	803	.0160	406	
GF-450-1	.0282	716	.0054	137	.0054	137	.0195	495	.0108	274	.0590	1499	.0390	991	.0354	899	.0180	457	
GF-500-1	.0313	795	.0060	152	.0060	152	.0217	551	.0118	300	.0590	1499	.0433	1100	.0394	1001	.0200	508	

WD=WIREØ GO= GROOVE OPENING PLEASE SPECIFY WIRE SIZE AND WIRE MATERIAL WHEN ORDERING
*Other sizes available upon request *All dimensions and tolerances are for reference only

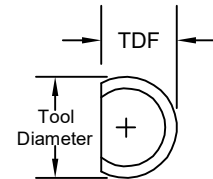
SERIES GFK

LARGE WIRE, V GROOVE
FOR F&K DELVOTEC

FOR MANUAL BONDERS AND SEMI-AUTOMATIC
BONDERS-MODEL 5450 AUTOMATIC BONDERS-MODEL 6600

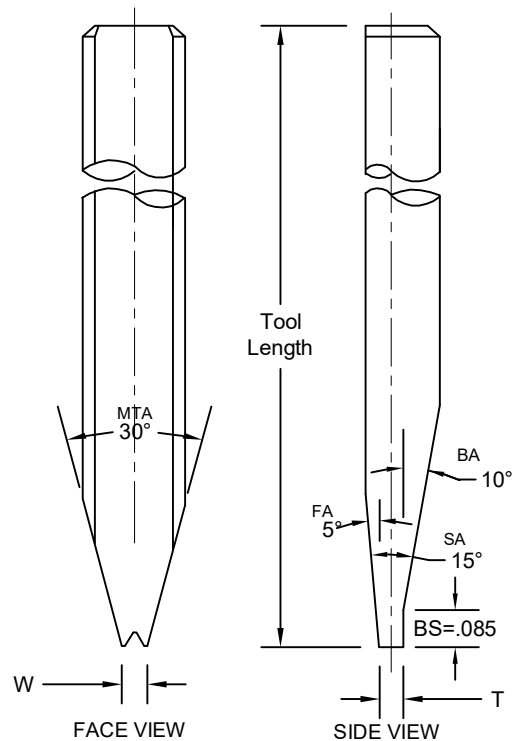


MTA = MAIN TAPER ANGLE
SA = SIDE-VIEW ANGLE
BA = BACK ANGLE
FA = FRONT ANGLE
GO = GROOVE OPENING



TD		TDF	
	in.	mm	
1/8	.1249	3.17	.1100 2.79

Standard Back Step supplied unless otherwise specified. See **Tool Options** for other options. (A4, A5)



SERIES GFK

LARGE WIRE
V-GROOVE IN WIRE DIRECTION

ORDERING INFORMATION
LARGE WIRE BONDING WEDGES
FOR GOLD AND ALUMINUM WIRE

SAMPLE PART NUMBER: **M-GFK-100-1-1/8-1.97-M-***

SYMBOL EXPLANATION: 1 2 3 4 5 6

1. **MATERIAL:**
 - M = Ceramic
 - C = Tungsten Carbide
 - T = Titanium
 - All other: See Material Selection Guide
2. **PART NUMBER : GFK** _____
Wire Ø (100 in µ) and Revision Number (1)
3. **SHANK DIA.:** Please Specify Diameter _____
4. **TOOL LENGTH:** Please Specify Length _____
5. **FOOT FINISH:**
 - M = Matte finish (FR, BR, & Bond Flat)
 - P = Polish finish (FR, BR, & Bond Flat)
 - MP= Polish finish (FR, BR), and Matte finish (Bond Flat)
6. **See Tool Options**

GFK SERIES: STANDARD CHART FOR WIRE DIAMETERS .0040 THROUGH .0200																			
PART NUMBER	F		FR		BR		GD		WH		BS		T		W		WIRE DIAMETER		
	in.	µ	in.	µ	in.	µ	in.	µ	in.	µ	in.	µ	in.	µ	in.	µ	in.	µ	
Tolerance small Tools		(Ref)		±.0003	±8	±.0003	±8	±.0005 ±.0002	+13 -5	±.0002	±5	±.0020	±51	±.0002	±5	±.0004	±10		
GFK—100—1	.0077	196	.0012	30	.0012	30	.0027	69	.0023	58	.0850	2159	.0098	249	.0080	203	.0040	102	
GFK—125—1	.0092	234	.0015	38	.0015	38	.0034	86	.0029	74	.0850	2159	.0118	300	.0100	254	.0050	127	
GFK—150—1	.0107	272	.0018	46	.0018	46	.0040	102	.0035	89	.0850	2159	.0138	351	.0120	305	.0060	152	
GFK—150—2	.0117	297	.0018	46	.0018	46	.0040	102	.0035	89	.0850	2159	.0148	376	.0120	305	.0060	152	
GFK—150—3	.0130	330	.0018	46	.0018	46	.0040	102	.0035	89	.0850	2159	.0161	409	.0120	305	.0060	152	
Tolerance large Tools		(Ref)		±.0005	±13	±.0005	±13	+0.010 ±.0002	+25 -5	±.0004	±10	±.0020	±51	±.0002	±5	±.0006	±15		
GFK—175—1	.0122	310	.0021	53	.0021	53	.0048	122	.0040	102	.0850	2159	.0158	401	.0140	356	.0070	178	
GFK—200—1A	.0136	345	.0024	61	.0024	61	.0054	137	.0046	117	.0850	2159	.0177	450	.0160	406	.0080	203	
GFK—200—1B	.0077	196	.0024	61	.0024	61	.0054	137	.0046	117	.0850	2159	.0118	300	.0160	406	.0080	203	
GFK—200—1C	.0057	145	.0024	61	.0024	61	.0054	137	.0046	117	.0850	2159	.0098	249	.0160	406	.0080	203	
GFK—200—1D	.0097	246	.0024	61	.0024	61	.0054	137	.0046	117	.0850	2159	.0138	351	.0160	406	.0080	203	
GFK—250—1	.0166	422	.0030	76	.0030	76	.0075	191	.0050	127	.0850	2159	.0217	551	.0200	508	.0100	254	
GFK—300—1	.0195	495	.0036	91	.0036	91	.0090	229	.0060	152	.0850	2159	.0256	650	.0240	610	.0120	305	
GFK—350—1	.0228	579	.0042	107	.0042	107	.0105	267	.0070	178	.0850	2159	.0299	759	.0280	711	.0140	356	
GFK—350—2	.0252	640	.0042	107	.0042	107	.0105	267	.0070	178	.0850	2159	.0322	818	.0280	711	.0140	356	
GFK—380—1	.0247	627	.0045	114	.0045	114	.0113	287	.0075	191	.0850	2159	.0323	820	.0300	762	.0150	381	
GFK—400—1	.0262	665	.0048	122	.0048	122	.0120	305	.0080	203	.0850	2159	.0343	871	.0320	813	.0160	406	
GFK—450—1	.0298	757	.0054	137	.0054	137	.0135	343	.0090	229	.0850	2159	.0390	991	.0360	914	.0180	457	
GFK—500—1	.0331	841	.0060	152	.0060	152	.0150	381	.0100	254	.0850	2159	.0433	1100	.0400	1016	.0200	508	

WD=WIRE Ø GO= GROOVE OPENING PLEASE SPECIFY WIRE SIZE AND WIRE MATERIAL WHEN ORDERING
*Other sizes available upon request *All dimensions and tolerances are for reference only