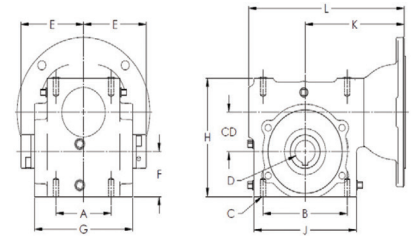


Solid Shaft

Brand	Product Line	CD	A	B	C	D	E	F	G	H	J	QUILL INPUT				COUPLED INPUT			
												K		L		K		L	
												56C 140TC	180TC	56C 140TC	180TC	56C 140TC	180TC	56C 140TC	180TC
Winsmith	RD	1.33	2.00	3.25	5/16-18 x .56	0.625	4.00	1.72	3.88	4.63	3.94	4.38	-	6.63	-	4.38	-	6.63	-
Grove	GR	1.33	2.00	3.25	5/16-18 x .51	0.625	4.00	1.72	3.90	4.66	3.80	3.46	-	6.07	-	6.07	-	8.68	-
Winsmith	RD	1.75	2.75	4.19	5/16-18 x .63	0.875	4.31	1.99	4.63	5.25	5.09	4.94	-	7.94	-	4.94	-	7.94	-
Grove	GR	1.75	2.75	4.19	5/16-18 x .64	0.875	4.31	2.06	4.73	5.75	5.06	4.09	-	7.33	-	6.70	-	9.94	-
Winsmith	RD	2.00	2.88	5.00	3/8-16 x .63	1.000	4.69	2.28	4.38	5.81	5.91	5.06	-	8.19	-	5.06	-	8.19	-
Grove	GR	2.06	2.88	5.00	5/16-18 x .63	1.000	4.69	2.28	4.99	6.38	5.80	4.46	-	8.07	-	7.07	-	10.68	-
Winsmith	RD	2.38	2.88	5.00	3/8-16 x .75	1.125	5.14	2.50	5.63	6.81	6.10	5.50	6.02	9.12	9.64	5.50	6.02	9.12	9.64
Grove	GR	2.38	2.88	5.00	3/8-16 x .70	1.125	5.14	2.50	5.18	6.94	6.12	4.63	5.06	8.40	8.83	7.76	8.76	11.53	12.53
Winsmith	RD	2.63	3.38	6.38	3/8-16 x .75	1.125	5.63	2.94	5.63	7.50	7.36	5.70	6.22	9.58	10.10	5.70	6.22	9.58	10.10
Grove	GR	2.63	3.38	6.38	3/8-16 x .71	1.125	5.63	2.94	6.01	8.00	7.12	5.19	5.19	9.52	9.97	8.32	9.32	12.66	13.66
Winsmith	RD	3.00	4.00	7.00	7/16-14 x .88	1.250	6.75	3.25	7.50	8.25	8.13	6.05	6.56	10.24	10.75	6.05	6.56	10.24	10.75
Grove	GR	3.00	4.00	7.00	7/16-14 x .89	1.250	6.75	3.25	6.54	8.88	8.12	5.95	6.15	10.79	10.99	8.82	9.82	13.66	14.66



Hollow Shaft

Brand	Product Line	CD	A	B	C	D	E	F	G	H	J	QUILL INPUT				COUPLED INPUT			
												K		L		K		L	
												56C 140TC	180TC	56C 140TC	180TC	56C 140TC	180TC	56C 140TC	180TC
Winsmith	RD	1.75	2.75	4.19	5/16-18 x .63	.625, .750, .875, .938, 1.000	3.13	1.99	4.88	5.25	5.09	4.94	-	7.94	-	4.94	-	7.94	-
Grove	GR	1.75	2.75	4.19	5/16-18 x .64	.625, .688, .750, .875, 1.000	2.75	2.06	4.73	5.75	5.19	4.09	-	-	-	6.70	-	9.94	-
Winsmith	RD	2.00	2.88	5.00	3/8-16 x .63	.750, .938, 1.000, 1.125, 1.188, 1.250, 1.438	3.31	2.28	5.25	5.81	5.91	5.06	-	8.19	-	5.06	-	8.19	-
Grove	GR	2.06	2.88	5.00	5/16-18 x .63	1.000, 1.125, 1.188, 1.250, 1.438, 1.500	3.00	2.28	4.99	6.38	5.80	4.46	-	-	-	7.07	-	10.68	-
Winsmith	RD	2.38	2.88	5.00	3/8-16 x .75	1.000, 1.063, 1.125, 1.188, 1.250, 1.313, 1.438, 1.500	3.44	2.50	5.50	6.81	6.10	5.50	6.02	9.12	9.64	5.50	6.02	9.12	9.64
Grove	GR	2.38	2.88	5.00	3/8-16 x .70	1.000, 1.125, 1.188, 1.250, 1.438, 1.500	3.00	2.50	5.18	6.94	6.12	4.63	5.06	8.40	8.83	7.76	8.76	11.53	12.53
Winsmith	RD	2.63	3.38	6.38	3/8-16 x .75	1.000, 1.063, 1.125, 1.188, 1.250, 1.313, 1.375, 1.438, 1.500, 1.625, 1.688	3.50	2.94	5.38	7.50	7.36	5.70	6.22	9.58	10.10	5.70	6.22	9.58	10.10
Grove	GR	2.63	3.38	6.38	3/8-16 x .71	1.000, 1.125, 1.188, 1.250, 1.438, 1.500	3.50	2.94	6.01	8.00	7.38	5.19	5.63	9.53	9.97	8.32	9.32	12.66	13.66
Winsmith	RD	3.00	4.00	7.00	7/16-14 x .88	1.188, 1.250, 1.375, 1.438, 1.500, 1.625, 1.688, 1.750, 1.875, 1.938, 2.000	3.69	3.25	7.50	8.25	8.13	6.05	6.56	10.24	10.75	6.05	6.56	10.24	10.75
Grove	GR	3.00	4.00	7.00	7/16-14 x .89	1.188, 1.250, 1.438, 1.500, 1.625, 1.688, 1.750, 1.875, 1.938, 2.000, 2.188	3.75	3.25	6.53	8.88	8.12	5.95	6.15	10.79	10.99	8.82	9.82	13.66	14.66