

Section 2 TEC FCNDK-FXA Helical Worm Gearbox

Performance (n1 with 4 pole 1400 rpm motor, SF = 1.0)

Size	40/63	50/63	63/63	50/71	63/71	75/71	90/71	63/80	75/80	90/80	110/80	110/100	130/100
n2 (rpm)	22.6	22.6	22.6	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	22.5	22.5
KW	0.25	0.42	0.74	0.42	0.74	0.95	1.60	0.74	0.95	1.60	3.20	3.20	4.94
Nm	76	131	234	135	242	315	537	242	315	537	1102	1073	1677
i1xi2	61.8	61.8	61.8	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	62.3	62.3
n2 (rpm)	18.0	18.0	18.0	17.5	17.5	17.5	17.5	16.9	16.9	16.9	16.9	16.7	16.7
KW	0.23	0.41	0.68	0.41	0.68	0.88	1.42	0.68	0.88	1.42	2.75	2.75	3.00
Nm	87	157	267	163	278	365	596	288	378	618	1212	1226	1338
i1xi2	77.7	77.7	77.7	80.0	77.7	77.7	77.7	83.0	83.0	83.0	83.0	84.0	84.0
n2 (rpm)	15.1	15.1	15.1	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	15.0	15.0
KW	0.17	0.30	0.52	0.30	0.52	0.68	1.10	0.52	0.68	1.10	2.40	2.40	3.72
Nm	72	127	230	131	238	316	518	238	316	518	1161	1146	1776
i1xi2	92.7	92.7	92.7	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	93.45	93.45
n2 (rpm)	12.0	12.0	12.0	11.7	11.7	11.7	11.7	11.2	11.2	11.2	11.2	11.1	11.1
KW	0.16	0.28	0.49	0.28	0.49	0.63	1.07	0.49	0.63	1.07	1.97	1.97	3.00
Nm	82	148	266	153	276	360	620	288	376	647	1226	1237	1884
i1xi2	116.60	116.55	116.55	120.0	120.0	120.0	120.0	124.5	124.5	124.5	124.5	126.0	126.0
n2 (rpm)	11.3	11.3	11.3	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	11.2	11.2
KW	0.12	0.20	0.40	0.20	0.40	0.50	0.84	0.40	0.50	0.84	1.80	1.80	2.71
Nm	61	106	226	110	235	298	508	235	298	508	1120	1090	1687
i1xi2	123.6	123.6	123.6	128.0	128.0	128.0	128.0	128.0	128.0	128.0	128.0	124.6	124.6
n2 (rpm)	9.0	9.0	9.0	8.8	8.8	8.8	8.8	8.4	8.4	8.4	8.4	8.3	8.3
KW	0.11	0.20	0.34	0.20	0.34	0.44	0.85	0.34	0.44	0.85	1.50	1.50	2.20
Nm	68	128	231	133	241	322	621	251	335	647	1210	1225	1797
i1xi2	155.4	155.4	155.4	160.0	160.0	160.0	160.0	166.0	166.0	166.0	166.0	168.0	168.0
n2 (rpm)	7.2	7.2	7.2	7.0	7.0	7.0	7.0	6.7	6.7	6.7	6.7	6.7	6.7
KW	0.10	0.18	0.32	0.18	0.32	0.49	0.67	0.32	0.49	0.67	1.35	1.35	1.80
Nm	75	134	201	142	262	421	576	278	440	602	1250	1257	1727
i1xi2	194.25	194.25	194.25	200.0	200.0	200.0	200.0	207.5	207.5	207.5	207.5	210.0	210.0
n2 (rpm)	6.0	6.0	6.0	5.8	5.8	5.8	5.8	5.6	5.6	5.6	5.6	5.6	5.6
KW	0.11	0.18	0.31	0.18	0.30	0.48	0.65	0.31	0.48	0.64	1.26	1.26	1.75
Nm	87	155	276	160	281	474	642	301	482	643	1289	1290	1780
i1xi2	233.1	233.1	233.1	240.0	240.0	240.0	240.0	249.0	249.0	249.0	249.0	252.0	252.0
n2 (rpm)	4.5	4.5	4.5	4.4	4.4	4.4	4.4	4.2	4.2	4.2	4.2	4.2	4.2
KW	0.08	0.13	0.21	0.13	0.21	0.28	0.48	0.21	0.28	0.48	0.97	0.97	1.20
Nm	74	130	227	132	232	322	562	243	337	589	1222	1230	1555
i1xi2	310.8	310.8	310.8	320.0	320.0	320.0	320.0	332.0	332.0	332.0	332.0	336.0	336.0
n2 (rpm)	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.4	3.3	3.3
KW	0.06	0.10	0.16	0.10	0.16	0.24	0.40	0.16	0.24	0.40	0.72	0.72	1.05
Nm	65	117	208	120	218	327	567	220	330	573	1045	1062	1670
i1xi2	388.5	388.5	388.5	400.0	400.0	400.0	400.0	415.0	415.0	415.0	415.0	420.0	420.0
n2 (rpm)	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.8	2.8	2.8	2.8	2.8	2.8
KW	0.05	0.08	0.13	0.09	0.13	0.18	0.32	0.14	0.18	0.31	0.62	0.62	0.80
Nm	60	102	170	118	176	255	506	196	264	508	1015	1015	1419
i1xi2	466.2	466.2	466.2	480.0	480.0	480.0	480.0	498.0	498.0	498.0	498.0	504.0	504.0

Nominal ratio in helical is 8:1 except for the shaded area which is 6:1. Other speeds are available.
available. i1xi2 is the combined ratio of the helical and the worm gear.



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