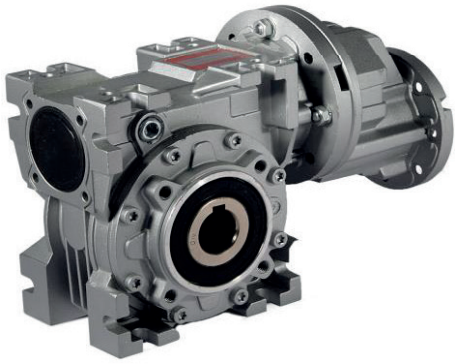
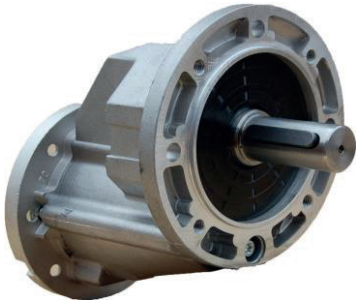
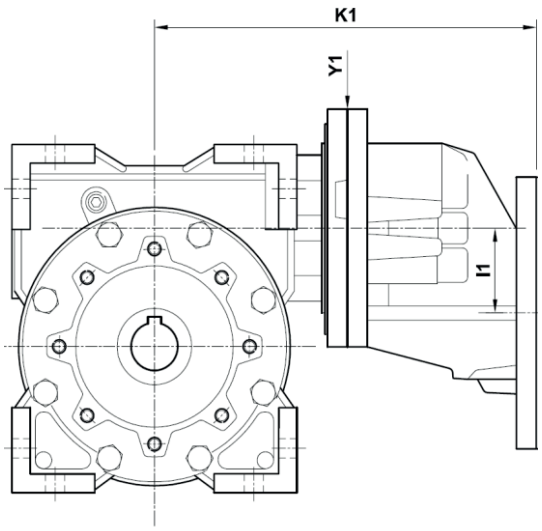




Summary

The helical gearboxes series FXA are manufactured as follows: aluminium die cast housing and covers, helical gears in alloy steel, case hardened, tempered and shaved. Gears - designed and verified according to ISO 6336 and DIN 3990 - and bearings are calculated for at least 15,000 running hour average lifetime. Keyways according to DIN 6884.

Dimensions



Size	I1	K1	Y1	Wt (kg)
FCNDK40/FXA63	32	153	105	3.8
FCNDK50/FXA63	32	163	105	5.0
FCNDK50/FXA71	40	170	120	5.7
FCNDK63/FXA63	32	278	105	7.7
FCNDK63/FXA71	40	185	120	8.4
FCNDK63/FXA80	50	209	140	9.2
FCNDK75/FXA71	40	203	120	11.2
FCNDK75/FXA80	50	227	140	12.0
FCNDK90/FXA71	40	220	120	15.2
FCNDK90/FXA80	50	244	140	16.0
FCNDK110/FXA80	50	274	140	38.0
FCNDK110/FXA100	63	337	200	42.0
FCNDK130/FXA100	63	357	200	55.0

Size	Performance			Motor Input Options					
	Ratio	KW	Nm	56B14-B5	63B14-B5	71B14-B5	80B14-B5	90B14-B5	100B14-B5
FXA63	**3.53**	0.50	12						
	6.18	0.23	10						
	7.77	0.18	9						
FXA71	**3.53**	1.10	26						
	6.40	0.52	22						
	8.00	0.37	20						
FXA80	**3.42**	3.10	68						
	6.40	1.50	65						
	8.30	1.10	60						
FXA100	**3.88**	8.70	235						
	6.23	4.00	163						
	8.40	2.20	136						

The FXA gearboxes are delivered filled With synthetic long-life oil (without plugs) and in the appropriate quantity to install them in any mounting position without prior specification.

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	19
i1xi2	116.55	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.
i1xi2 is the combined ratio of the helical and the worm gear.