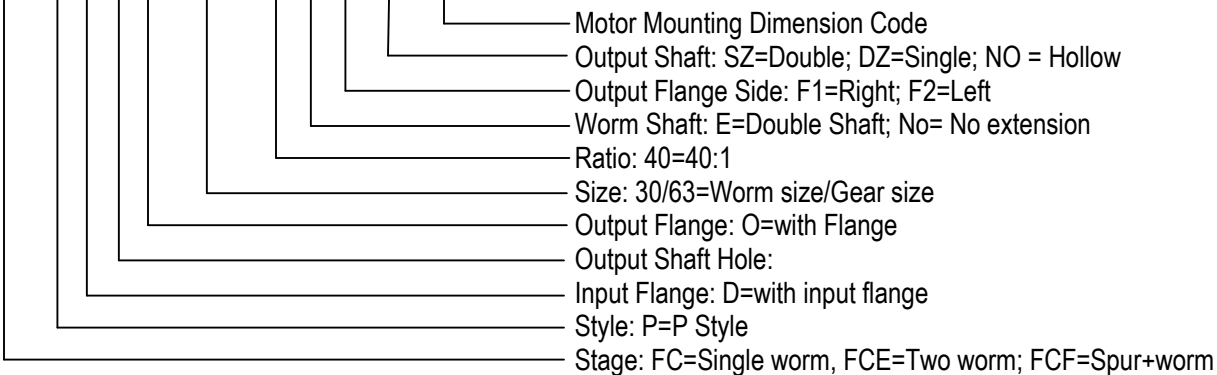


FCSeries Worm Gear Reducers:

FCNDK Ratio: 7.5~100	FCNK Ratio: 7.5~100	FCNDKO Ratio: 7.5~100
FCNKO Ratio: 7.5~100	FCENDK Ratio: 100~3000	FCENK Ratio: 100~3000
FCENDKO Ratio:100~3000	FCENKO Ratio:100~3000	FCENDK Ratio:100~3000
FCFNDK Ratio:72.6~317	FCPK Ratio:7 ~ 100 	FCPDK Ratio:7 ~ 100 

Product Code Number:

FC(E) P D K O 30/(63) 40 E F1 SZ 63B5



● Single Stage FCN Series

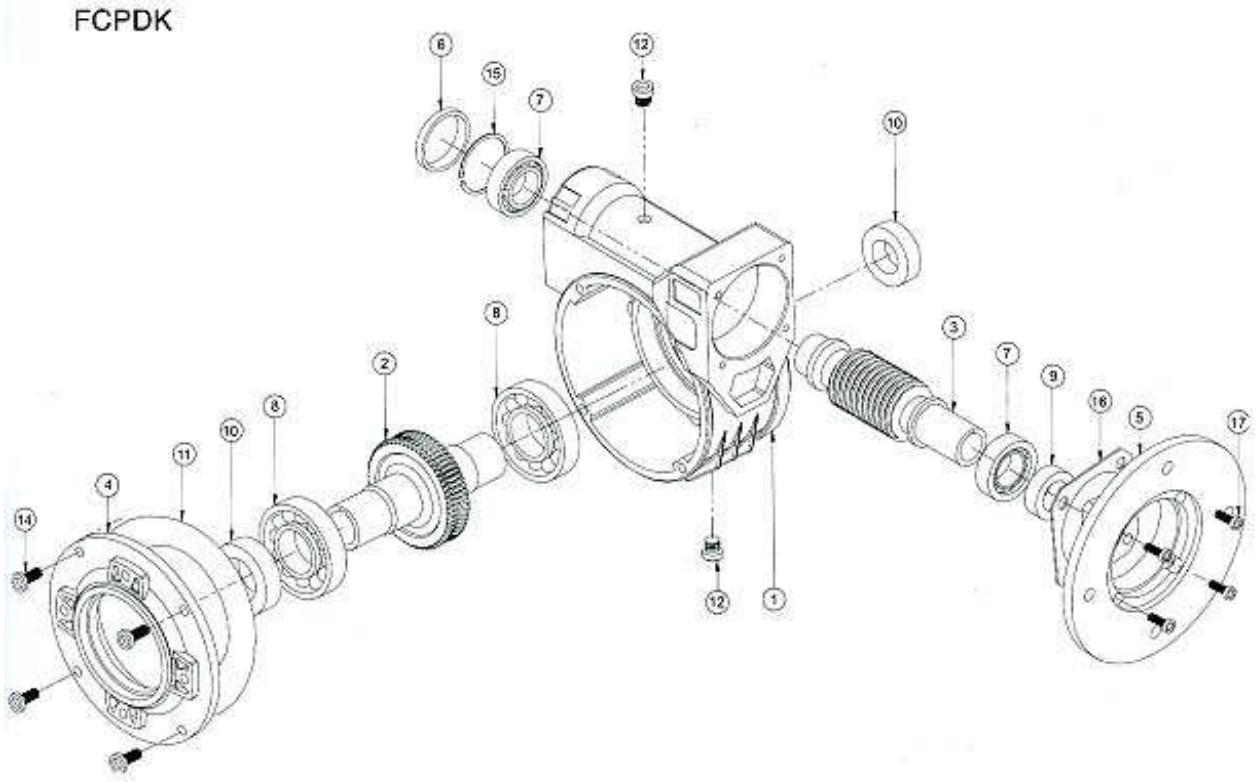
Available Sizes:

Center Distance (mm)	30	45	50	63	63A	85	110
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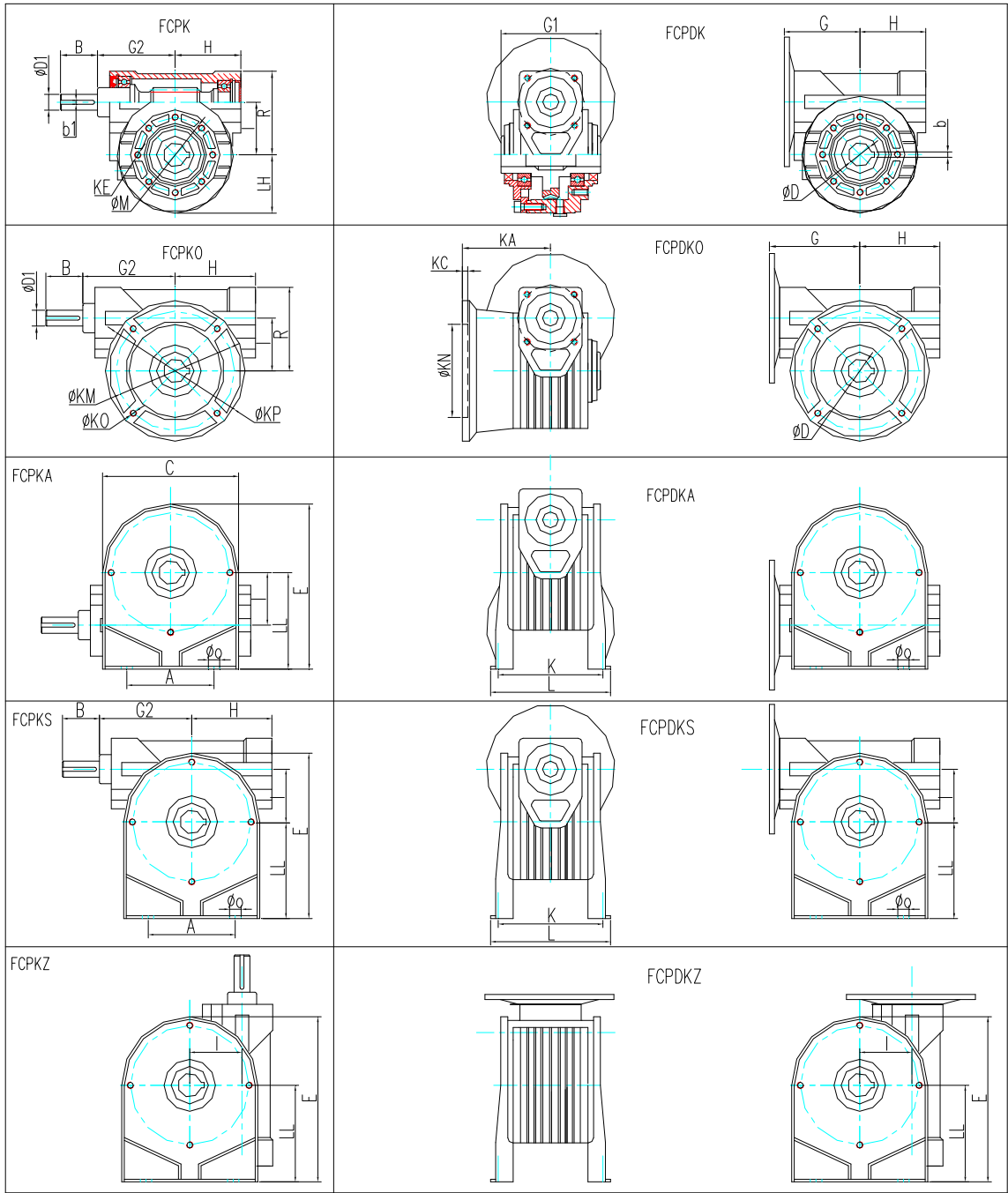
Reduction Ratio (single Stage): 7 ~ 102

Assembly Drawing:

#	Parts	#	Parts	#	Parts
1	Body	7	Bearing	13	Key
2	Worm wheel	8	Bearing	14	Screw
3	Worm Shaft	9	Oil Seal	15	Snap Ring
4	End Bell	10	Oil Seal	16	Oring
5	Flange	11	Oring	17	Screw
6	Seal Cover	12	Oil Plug		



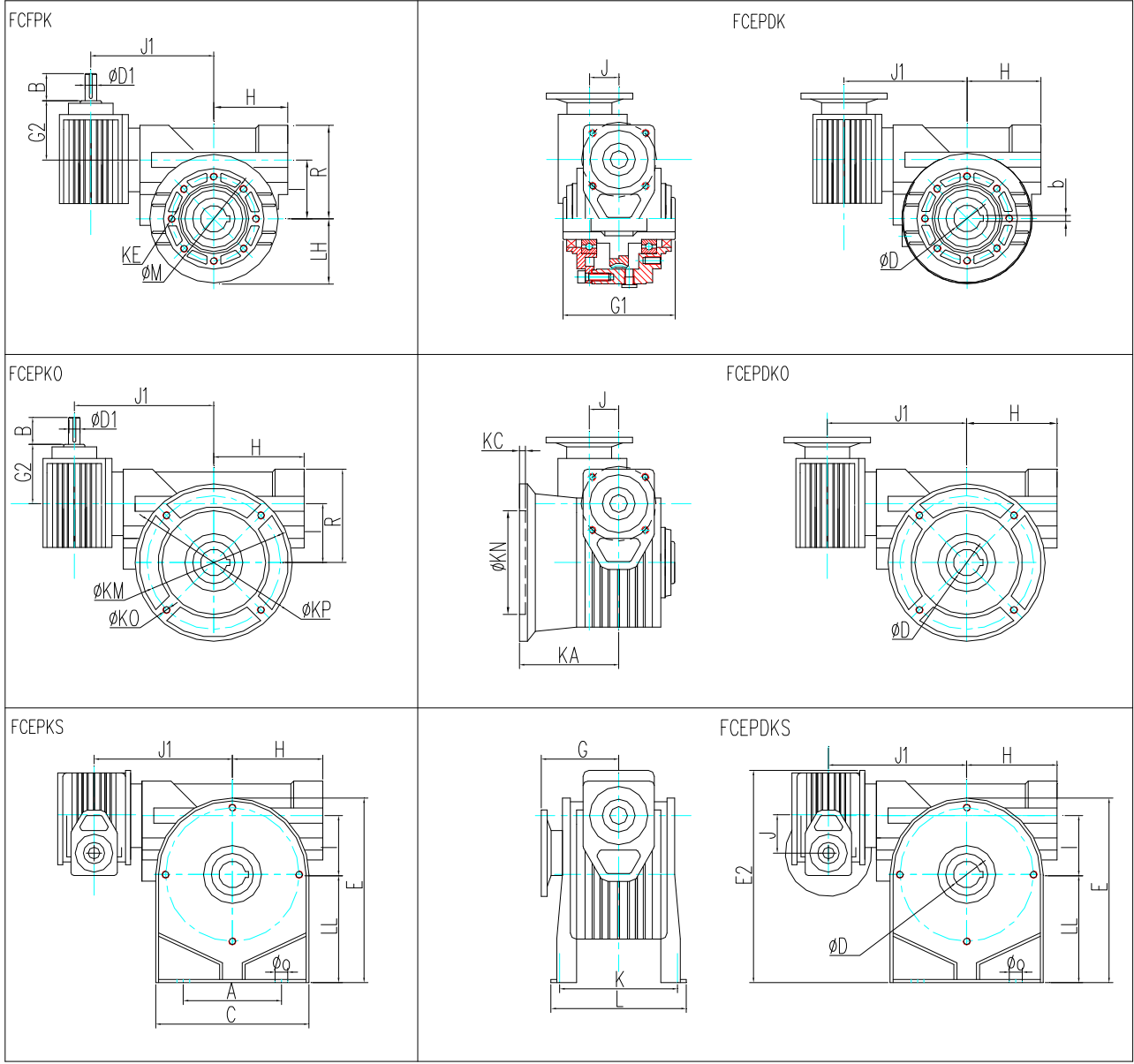
Single Stage FCN Series Mounting Dimensions:



Single Stage FCN Series Mounting Dimension Data Table

Size I	A	B	C	Output		Input		E	G	G <sub>1</sub>	G <sub>2</sub>	H	L	LL	LH	M	K	KE	Output Flange						O	R	Kg
				D	b	D <sub>1</sub>	b <sub>1</sub>												KA	KC	KM	KN	KO	KP			
30	50	20	78	14	5	9	3	106	62.5	55	58	46	87	55	39	65	65	M6	50.5	6	68	50	7	80	6.5	51	1
45	52	30	98	18	6	11	4	144	74	65	68	55	100	72	49	65	80	M6	60.5	9	87	60	8.5	110	10.5	72	2.4
50	65	30	113	25	8	16	5	163	81.5	81	74.5	65	123	82	54.5	94	98	M6	85	9	90	70	10.5	123	10.5	81	3
63	95	45	133	25	8	18	6	200	99.5	120	93	79	144	100	70	90	110	M8	86	7	150	115	10.5	175	10.5	100	6
63A	120	45	156	28	8	18	6	215	99.5	120	93	79	142	115	70	90	115	M8	85	7	165	130	13	200	11	100	6
85	140	50	180	35	10	25	8	280	124	135	112	98	182	142	94.5	130	145	M10	108	5	176	152	14	205	10.5	138	11
110	200	56	240	42	12	25	8	340	148	155	138	125	224	170	120	165	180	M12	170	11	230	170	15	270	13	170	35

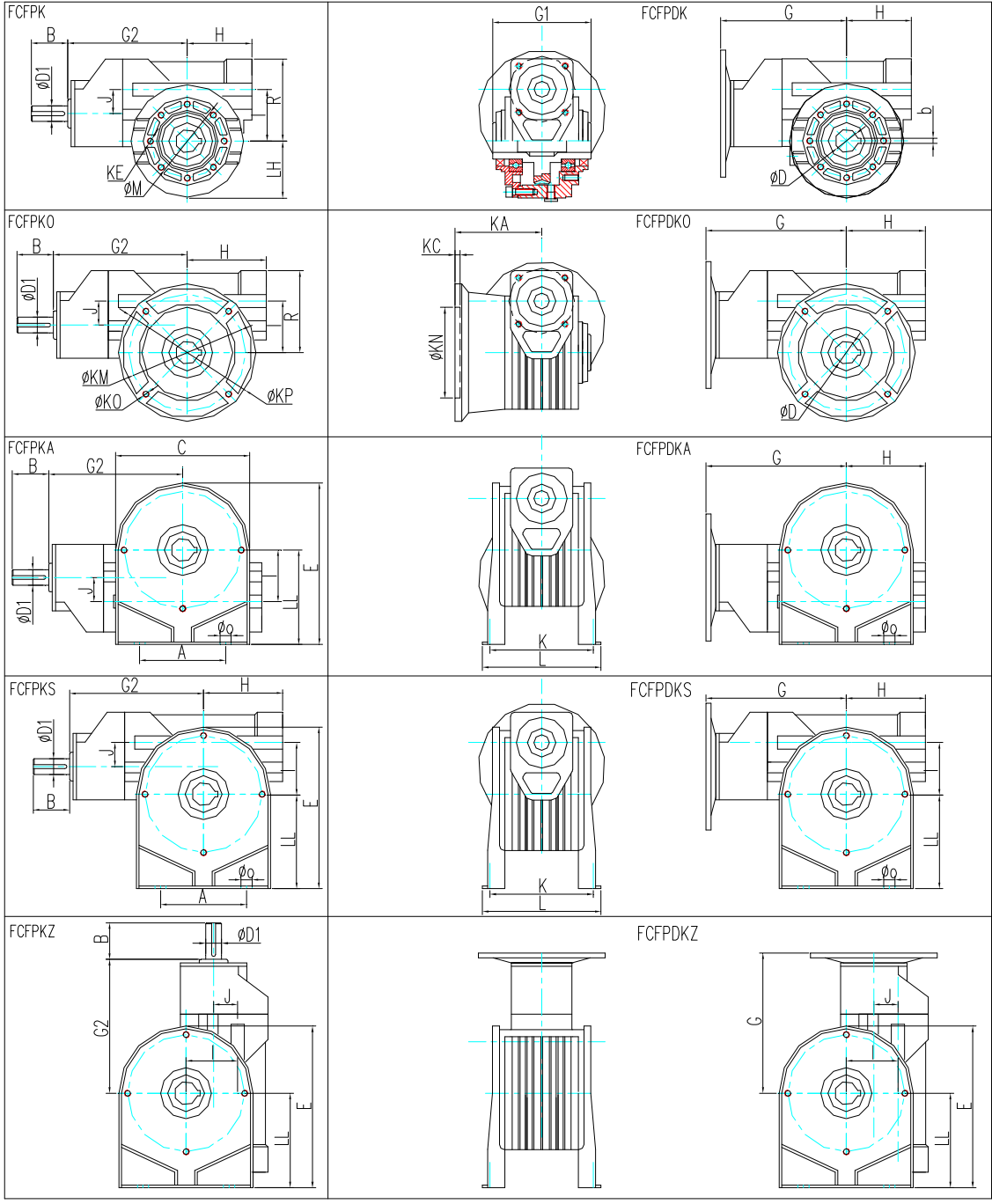
Double Stage FCEN (Worm-Worm) Series Mounting Dimensions:



Double Stage FCEN (Worm-Worm) Series Mounting Dimension Data Table:

SIZE		A	B	C	Output		Input		E	E <sub>2</sub>	G	G <sub>1</sub>	G <sub>2</sub>	H	J <sub>1</sub>	K	KE	Output Flange						L	LL	LH	M	O	R	Kg
J	I				D	b	D <sub>1</sub>	b <sub>1</sub>										KA	KC	KM	KN	KO	KP							
30	45	50	20	98	18	6	9	3	144	141	62.5	65	58	55	106	80	M6	60.5	9	87	60	8.5	110	100	71	49	49	10.5	72	3.6
30	50	63	20	113	25	8	9	3	163	171	62.5	81	58	65	110	98	M6	85	9	90	70	10.5	123	123	85	54.5	54.5	10.5	81	4.2
30	63	95	20	133	25	8	8	3	200	202	62.5	120	58	79	141	110	M8	86	7	150	115	10.5	175	144	100	70	100	10.5	100	7.5
30	63	120	20	156	28	8	9	3	215	217	62.5	120	58	79	141	115	M8	85	7	165	130	13	200	142	115	70	115	11	100	7.5
45	63	95	30	133	25	8	11	4	200	212	74	120	68	79	146	110	M8	86	7	150	115	10.5	175	144	100	70	100	10.5	100	8.9
45	63	120	30	156	28	8	11	4	215	227	74	120	68	79	146	115	M8	85	7	165	130	13	200	142	115	70	115	11	100	8.9
45	85	140	30	180	35	10	11	4	280	276	74	135	68	98	172	145	M10	108	5	176	152	13	205	182	142	95	142	10.5	138	20
50	110	200	30	240	42	12	16	5	340	335	81.5	155	74.5	125	218	180	M12	132	11	230	170	13	270	224	172	120	170	13	170	38

Double Stage FCFN (Worm-Gear) Series Mounting Dimensions:



Double Stage FCFN (Worm-Gear) Series Mounting Dimension Data Table

SIZE		A	B	C	Output		Input		E	G	G <sub>1</sub>	G <sub>2</sub>	H	K	L	LL	LH	M	O	KE	R	Output Flange						Kg
I	J				D	b	D <sub>1</sub>	b <sub>1</sub>														KA	KC	KM	KN	KO	KP	
45	28	50	25	98	19	6	14	5	144	136	65	135	55	80	100	72	49	65	10.5	M6	72	60.5	9	87	60	8.5	110	3.2
50	28	63	25	113	24	8	14	5	163	141	81	135	65	98	123	82	55	94	10.5	M6	81	85	9	90	70	10.5	123	3.8
63	38	95	35	133	25	8	19	6	200	178	120	170	79	110	144	100	70	90	10.5	M8	100	86	7	150	115	10.5	175	7.8
63	38	120	35	156	28	8	19	6	215	178	120	170	79	115	142	115	70	90	11	M8	100	85	7	165	130	13	200	7.8
85	38	140	35	180	35	10	19	6	280	197	135	188	98	145	182	142	95	130	10.5	M10	138	108	5	176	152	13	205	19.3
110	48	200	50	240	42	12	24	8	340	239	155	225	125	180	224	170	120	165	13	M12	170	132	11	230	170	13	270	41

FCP Series Worm Gear Reducer Mounting Dimensions:

Motor Mounting Dimensions	Input Power (kW)	IEC		B5				B14		
		Frame	D	N	M	P	N	M	P	
	0.06/0.09	56	9	80	100	120	50	65	80	
	0.12/0.18	63	11	95	115	140	60	75	90	
	0.25/0.37	71	14	110	130	160	70	85	105	
	0.55/0.75	80	19	130	165	200	80	100	120	
	1.1/1.5/1.8	90	24	130	165	200	95	115	140	
	2.2/3.0	100	28	180	215	250	110	130	160	
	4	112	28	180	215	250	110	130	160	
	5.5/7.5	132	38	230	265	300				

Torque Arm

Size	A	d	d0	D1	D2	D3	G	R	b
30	100	80	7	50	8	65	14	18	4
45	100	90	7	50	8	65	14	18	4
50	100	110	7	68	8	94	14	18	4
63	150	110	9	75	10	90	20	30	6
63A	150	110	9	75	20	90	20	30	6
85	200	160	11	110	20	130	25	40	6
110	200	200	13	130	20	165	25	41	6

Double Worm Shaft

Size	d(h6)	B	G2
30	9	20	47
45	11	30	56
50	16	30	67
63	18	45	81
63A	18	45	81
85	25	50	100
110	25	60	127

Output Shaft Dimensions:

Size	d	B	B <sub>1</sub>	G <sub>1</sub>	L	L <sub>1</sub>	b <sub>1</sub>	t <sub>1</sub>
30	14	25	35.5	55	95	126	5	16
45	18	32	43	65	113	151	6	20.5
50	25	52	60	81	146	200	8	28
63	25	60	63	120	190	246	8	28
63A	28	60	63	120	191	247	8	31
85	35	60	73.5	135	214	282	10	38
110	42	75	96.5	155	260	348	12	45

Performance Data of Single Stage FCP Series Worm Reducer Y[in-lb]=8.85075\*X[Nm]

型号 Size	减速比 i Ratio	输入功率(kw) Input Power	输出 Output	
			n <sub>2</sub> (r/min)	M <sub>2</sub> (N.m)
30	7	0.42	200	16
	10.6	0.28	132	16
	15	0.24	93	18
	19	0.2	74	18
	30	0.16	47	20
	39	0.13	36	19
	61	0.09	23	19
	80	0.06	18	15
45	7	0.76	200	29
	10	0.54	140	29
	14	0.39	100	29
	21	0.41	67	39
	28	0.31	50	39
	37	0.25	38	39
	46	0.21	30	39
	60	0.17	23	39
	70	0.11	20	29
	102	0.08	14	28
50	7	1.4	200	54
	10	1.1	140	59
	14	0.86	100	65
	18	0.64	78	59
	26	0.52	54	63
	36	0.41	39	69
	43	0.34	33	65
	60	0.25	23	59
	68	0.21	21	55
	80	0.18	18	54
100	0.14	14	49	
63	7	3	200	119
	10	2.3	140	128
	15	1.6	93	131
	19	1.3	74	131
	24	1.1	58	135
	30	0.92	47	139
	36	0.84	39	140
	45	0.63	31	129
	67	0.43	21	118

型号 Size	减速比 i Ratio	输入功率(kw) Input Power	输出 Output	
			n <sub>2</sub> (r/min)	M <sub>2</sub> (N.m)
63	80	0.36	0	113
	94	0.31	0	103
63A	7	3.9	0	155
	10	3	0	165
	15	2.1	0	169
	19	1.7	0	169
	24	1.4	0	176
	30	1.2	0	180
	36	1.1	0	181
	45	0.82	0	167
	67	0.55	0	151
	80	0.47	0	146
94	0.37	0	124	
85	7	5.8	0	245
	10	4.9	0	270
	14	3.9	0	290
	20	2.6	0	280
	22	2.4	0	280
	28	2.3	0	330
	38	1.7	0	320
	46	1.4	0	310
	52	1.2	0	275
	67	0.93	0	275
74	0.87	0	255	
96	0.66	0	230	
110	7	10.9	0	460
	10	8.5	0	500
	16	5.7	0	510
	20	4.6	0	520
	23	3.9	0	490
	30	4	0	620
	38	3.2	0	610
	45	2.5	0	570
	53	2.3	0	590
	64	1.7	0	510
84	1.3	0	470	
99	1.1	0	460	

**Performance Data of Two Stage FCEP Series (Worm-Worm) Reducer  $Y[in-lb]=8.85075 \times X[Nm]$**

型号 Size	减速比 i Ratio	输入功率(kw) Input Power	输出 Output	
			n <sub>2</sub> (r/min)	M <sub>2</sub> (N.m)
30/45	133	0.13	10.5	60
	190	0.1	7.4	60
	266	0.07	5.3	60
	399	0.06	3.5	60
	532	0.05	2.6	60
	703	0.04	2	60
	874	0.04	1.6	60
	1092	0.03	1.3	60
	1443	0.03	1	60
	1794	0.02	0.8	60
	2340	0.02	0.6	60
30/50	252	0.12	5.6	95
	382	0.09	3.7	95
	540	0.07	2.6	95
	684	0.06	2	95
	817	0.05	1.7	95
	1140	0.04	1.2	95
	1404	0.04	1	95
	1677	0.03	0.8	95
	2340	0.03	0.6	90
30/63	252	0.25	5.6	200
	382	0.19	3.7	200
	540	0.15	2.6	200
	684	0.12	2	200
	1080	0.09	1.3	200
	1404	0.08	1	200
	2745	0.05	0.5	200
	30/63A	252	0.32	5.6
382		0.24	3.7	252
540		0.19	2.6	252
684		0.16	2	252
1080		0.11	1.3	252
1404		0.1	1	252
2745		0.05	0.5	210
45/63		252	0.29	5.6
	360	0.22	3.9	230
	504	0.17	2.8	230

型号 Size	减速比 i Ratio	输入功率(kw) Input Power	输出 Output	
			n <sub>2</sub> (r/min)	M <sub>2</sub> (N.m)
45/63	756	0.14	1.9	230
	1008	0.11	1.4	230
	1332	0.09	1.1	230
	1656	0.07	0.8	230
	2160	0.06	0.6	230
	2520	0.06	0.6	230
	45/63A	252	0.34	5.6
360		0.26	3.9	264
504		0.2	2.8	264
756		0.16	1.9	264
1008		0.12	1.4	264
1332		0.1	1.1	264
1656		0.08	0.8	264
2160		0.06	0.6	264
2520		0.06	0.6	264
45/85	140	0.58	10	320
	196	0.46	7.1	320
	280	0.5	5	450
	392	0.39	3.6	450
	588	0.31	2.4	450
	784	0.25	1.8	450
	1036	0.2	1.4	450
	1288	0.17	1.1	450
	1960	0.12	0.7	450
	2856	0.09	0.5	450
50/110	210	0.96	6	750
	300	0.85	4.7	850
	420	0.62	3.3	850
	540	0.55	2.6	850
	780	0.42	1.8	850
	1080	0.31	1.3	850
	1290	0.28	1.1	850
	1800	0.24	0.8	850
	2040	0.21	0.7	850
	2400	0.19	0.6	850
	3000	0.17	0.5	850

Performance Data of Two Stage FCFP Series (Worm-Gear) Reducer  $Y[in-lb]=8.85075 \times X[Nm]$

型号 Size	减速比 i Ratio	输入功率(kw) Input Power	输出 Output		型号 Size	减速比 i Ratio	输入功率(kw) Input Power	输出 Output	
			n <sub>2</sub> (r/min)	M <sub>2</sub> (N.m)				n <sub>2</sub> (r/min)	M <sub>2</sub> (N.m)
45	30.1	0.33	47	50	63A	47.1	0.83	30	187
	43	0.24	33	50		56.6	0.76	25	187
	60.2	0.2	23	50		70.7	0.64	19.8	187
	90.3	0.14	15.5	50		87.8	0.46	15.9	198
	120	0.11	11.6	50		111	0.37	12.6	198
	159	0.09	8.8	50		139	0.32	10.1	198
	198	0.08	7.1	50		166	0.29	8.4	198
	258	0.06	5.4	50		208	0.23	6.7	176
	301	0.04	4.7	35		310	0.16	4.5	176
	439	0.03	3.2	35		370	0.15	3.8	176
50	30.1	0.45	47	70	85	434	0.1	3.2	130
	43	0.32	33	70		59.7	1.39	23.5	380
	60.2	0.25	23	70		72.3	1.17	19.4	370
	77.4	0.25	18.1	80		81.7	1.12	17.1	380
	112	0.17	12.5	80		105	0.81	13.3	350
	155	0.14	9	80		176	0.53	8	400
	185	0.11	7.6	70		213	0.43	6.6	370
	258	0.08	5.4	70		240	0.44	5.8	380
	292	0.07	4.8	60		328	0.32	4.3	380
	344	0.04	4.1	40		422	0.23	3.3	350
63	430	0.04	3.3	40	110	466	0.21	3	300
	29.9	0.99	47	150		605	0.18	2.3	300
	37.7	0.8	37	150		42	3	33	650
	47.1	0.76	30	170		48	2.7	29	650
	56.6	0.69	25	170		63	2.3	22	680
	70.7	0.57	19.8	170		80	2	17.5	730
	87.8	0.39	15.9	170		94	1.4	14.9	600
	111	0.32	12.6	170		125	1.1	11.2	650
	139	0.27	10.1	170		164	0.92	8.5	680
	166	0.25	8.4	170		207	0.83	6.8	730
	208	0.18	6.7	170		245	0.58	5.7	600
	310	0.14	4.5	150		289	0.55	4.8	600
	370	0.12	3.8	150		349	0.41	4	540
434	0.1	3.2	125	458	0.32	3.1	500		
63A	29.9	1.09	47	165	540	0.29	2.6	500	
	37.7	0.88	37	165					