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FCUY



FCQY



FCWY



FCWDY



FCWDKY



FCWOY



FCWDKOY



FCAY

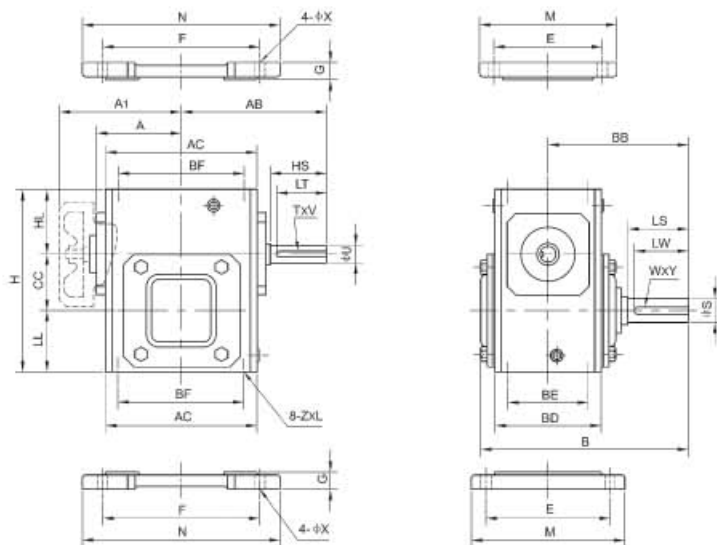
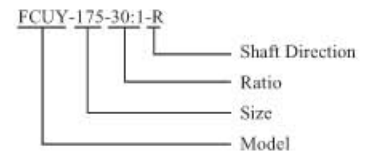


FCDSY

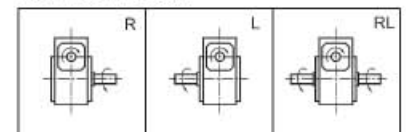
FCUY



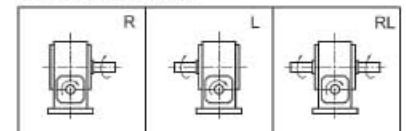
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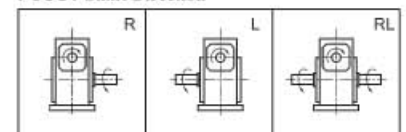
FCUY Shaft Direction



FCUAY Shaft Direction



FCUSY Shaft Direction



Size	Ratio	A	A ₁	AB	AC	B	BB	BD	BE	BF	CC	H	HL	LL	Z	L
133	5:1	2.12		4.03	4.00	6.03	4.00	2.88	2.00	3.25	1.333	4.66	1.61	1.72	5/16-18	0.50
154		2.75		4.69	5.13	6.76	4.31	3.69	2.75	4.19	1.540	5.38	1.92	1.91	5/16-18	0.50
175	10:1	2.75		4.69	4.81	6.75	4.31	3.38	2.75	4.19	1.750	5.75	1.94	2.06	5/16-18	0.60
206		3.00		5.06	5.50	7.25	4.69	3.75	2.88	5.00	2.062	6.38	2.04	2.28	3/8-16	0.60
237	15:1	3.56		5.44	6.13	7.78	5.08	4.06	2.88	5.00	2.375	6.94	2.07	2.50	3/8-16	0.60
262		3.69		6.23	7.12	8.50	5.63	4.44	3.38	6.38	2.625	8.00	2.44	2.94	3/8-16	0.60
300	30:1	4.50	5.93	7.00	8.50	10.25	6.75	5.50	4.00	7.00	3.000	8.88	2.63	3.25	7/16-14	0.80
325		4.50	5.93	7.06	8.50	10.50	7.06	5.00	4.00	7.50	3.250	9.38	2.63	3.50	7/16-14	0.80
375	50:1	5.75	7.42	8.36	9.50	11.88	7.75	6.38	4.75	8.50	3.750	10.44	2.81	3.88	1/2-13	1.00
450		5.63	8.11	9.59	10.88	13.16	8.44	7.38	5.81	9.56	4.500	11.94	2.94	4.50	5/8-11	1.00
516	60:1	6.44	8.92	10.69	12.50	13.91	9.06	7.38	5.81	11.00	5.167	13.75	3.28	5.31	5/8-11	1.00
600		7.44	10.70	11.75	14.50	15.31	10.00	8.13	6.38	12.75	6.000	16.50	4.00	6.50	5/8-11	1.00

Size	Input Shaft				Output Shaft				With Horizontal Base						
	U	HS	T × V	LT	S	LS	W × Y	LW	E	F	M	N	G	X	
133	0.500	1.81	1/8 × 1/16	1.38	0.625	2.00	3/16 × 3/32	1.31	3.31	4.38	4.19	5.38	0.53	0.34	
154	0.625	1.69	3/16 × 3/32	0.94	0.750	1.78	3/16 × 3/32	0.88	4.31	5.25	5.44	6.44	0.59	0.41	
175	0.625	1.81	3/16 × 3/32	1.50	0.875	1.88	3/16 × 3/32	1.00	4.50	5.75	5.56	7.00	0.69	0.41	
206	0.625	1.81	3/16 × 3/32	1.50	1.000	2.00	1/4 × 1/8	1.75	4.69	6.38	5.76	7.69	0.72	0.47	
237	0.750	1.94	3/16 × 3/32	1.31	1.125	2.37	1/4 × 1/8	1.38	4.88	7.06	6.19	8.50	0.75	0.47	
262	0.750	2.31	3/16 × 3/32	1.88	1.125	2.50	1/4 × 1/8	2.00	5.25	8.00	6.50	9.25	0.75	0.53	
300	0.875	2.26	3/16 × 3/32	1.31	1.250	3.25	1/4 × 1/8	2.25	5.88	8.44	7.36	10.16	0.88	0.53	
325	0.875	2.31	3/16 × 3/32	1.65	1.375	3.25	5/16 × 5/32	2.41	6.13	9.50	7.75	11.12	0.88	0.53	
375	1.000	2.91	1/4 × 1/8	1.75	1.625	3.50	3/8 × 3/16	2.19	7.00	10.38	8.63	12.00	0.94	0.59	
450	1.125	3.45	1/4 × 1/8	2.50	1.625	3.66	3/8 × 3/16	2.50	7.63	12.13	9.33	13.88	1.13	0.66	
516	1.250	3.75	1/4 × 1/8	2.56	2.000	4.16	1/2 × 1/4	2.81	8.38	14.13	10.38	16.38	1.13	0.78	
600	1.500	3.75	3/8 × 3/16	2.94	2.250	4.56	1/2 × 1/4	3.38	9.50	16.50	12.00	19.00	1.25	0.91	



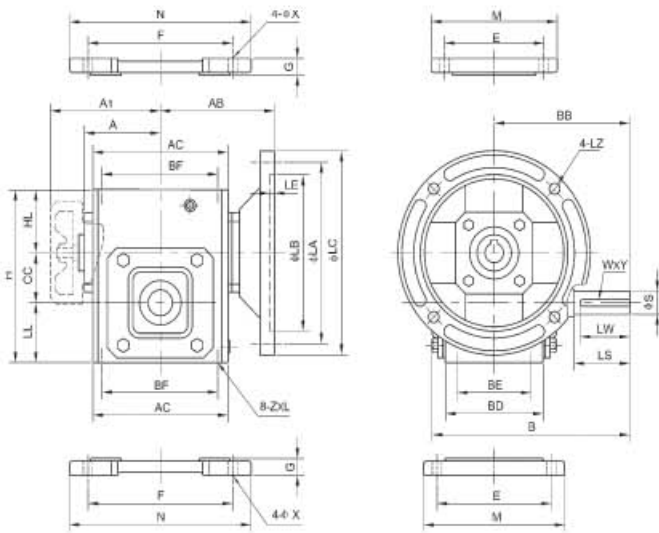
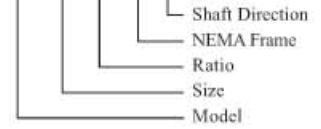
**SPEED REDUCER
FCQY**

FCQY

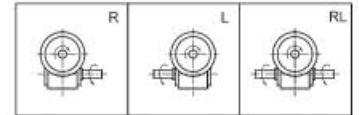


How to order

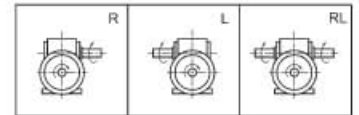
FCQY-175-30:1-56C-R



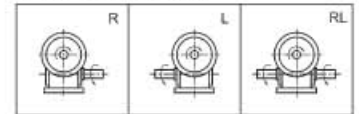
FCQY Shaft Direction



FCQAY Shaft Direction



FCQSY Shaft Direction



NEMA Frame	LA	LB	LC	LE	LZ	Input	
						Bore	Keyway
56C	5.875	4.50	6.50	0.16	0.43	0.625	3/16 × 3/32
143TC/145TC	5.875	4.50	6.50	0.16	0.43	0.875	3/16 × 3/32
182TC/184TC	7.250	8.50	9.00	0.23	0.55	1.125	1/4 × 1/8
213TC/215TC	7.250	8.50	9.00	0.23	0.55	1.375	5/16 × 5/32

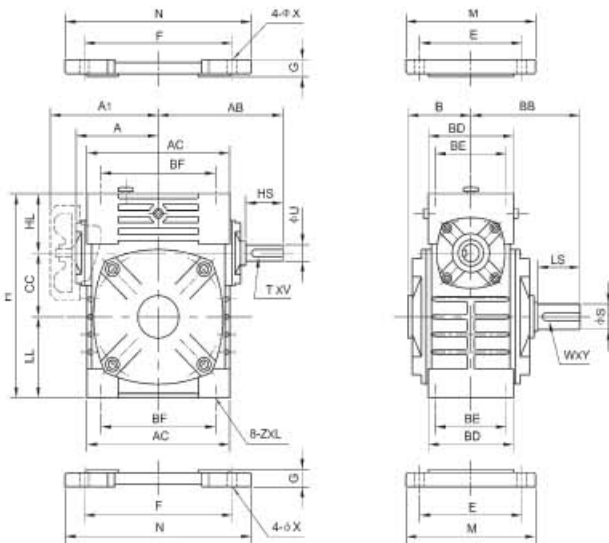
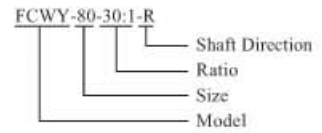
Size	Ratio	A	A ₁	ΔB	AC	B	BB	BD	BE	BF	CC	H	NEMA Frame	
133	5:1	2.12		3.96	4.00	6.03	4.00	2.88	2.00	3.25	1.333	4.66	56C	
154		2.75		4.50	5.13	6.76	4.31	3.69	2.75	4.19	1.540	5.38	56C	
175		2.75		4.37	4.81	6.75	4.31	3.38	2.75	4.19	1.750	5.75	56C	
206		3.00		4.76	5.50	7.25	4.69	3.75	2.88	5.00	2.062	6.38	56C	
237		3.56		5.10	6.13	7.78	5.08	4.06	2.88	5.00	2.375	6.94	56C, 140TC	
262		3.69		5.69	7.12	8.50	5.63	4.44	3.38	6.38	2.625	8.00	56C, 140TC, 180TC	
300		15:1	4.50	5.93	5.67	8.50	10.25	6.75	5.50	4.00	7.00	3.000	8.88	56C, 140TC
		20:1			6.45									180TC
325		30:1	4.50	5.93	5.69	8.50	10.50	7.06	5.00	4.00	7.50	3.250	9.38	56C, 140TC
		40:1			6.47									180TC
375		50:1	5.75	7.42	6.01	9.50	11.88	7.75	6.38	4.75	8.50	3.750	10.44	56C, 140TC
		60:1			6.79									180TC, 210TC
450		50:1	5.63	8.11	6.69	10.88	13.16	8.44	7.38	5.81	9.56	4.500	11.94	140TC
					7.47									180TC, 210TC
516		6.44	8.92	8.28	12.50	13.91	9.06	7.38	5.81	11.00	5.167	13.75	180TC, 210TC	
600		7.44	10.70	9.68	14.50	15.31	10.00	8.13	6.38	12.75	6.000	16.50	180TC, 210TC	

Size	HL	LL	Z	L	Output Shaft				With Horizontal Base						
					S	LS	W × Y	LW	E	F	M	N	G	X	
133	1.61	1.72	5/16-18	0.50	0.625	2.00	3/16 × 3/32	1.31	3.31	4.38	4.19	5.38	0.53	0.34	
154	1.92	1.91	5/16-18	0.50	0.750	1.78	3/16 × 3/32	0.88	4.31	5.25	5.44	6.44	0.59	0.41	
175	1.94	2.06	5/16-18	0.60	0.875	1.88	3/16 × 3/32	1.00	4.50	5.75	5.56	7.00	0.69	0.41	
206	2.04	2.28	3/8-16	0.60	1.000	2.00	1/4 × 1/8	1.75	4.69	6.38	5.76	7.69	0.72	0.47	
237	2.07	2.50	3/8-16	0.60	1.125	2.37	1/4 × 1/8	1.38	4.88	7.06	6.19	8.50	0.75	0.47	
262	2.44	2.94	3/8-16	0.60	1.125	2.50	1/4 × 1/8	2.00	5.25	8.00	6.50	9.25	0.75	0.53	
300	2.63	3.25	7/16-14	0.80	1.250	3.25	1/4 × 1/8	2.25	5.88	8.44	7.36	10.16	0.88	0.53	
325	2.63	3.50	7/16-14	0.80	1.375	3.25	5/16 × 5/32	2.41	6.13	9.50	7.75	11.12	0.88	0.53	
375	2.81	3.88	1/2-13	1.00	1.625	3.50	3/8 × 3/16	2.19	7.00	10.38	8.63	12.00	0.94	0.59	
450	2.94	4.50	5/8-11	1.00	1.625	3.66	3/8 × 3/16	2.50	7.63	12.13	9.33	13.88	1.13	0.66	
516	3.28	5.31	5/8-11	1.00	2.000	4.16	1/2 × 1/4	2.81	8.38	14.13	10.38	16.38	1.13	0.78	
600	4.00	6.50	5/8-11	1.00	2.250	4.56	1/2 × 1/4	3.38	9.50	16.50	12.00	19.00	1.25	0.91	

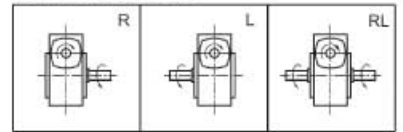
FCWY



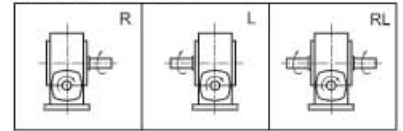
How to order



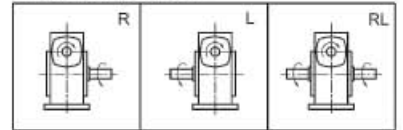
FCWY Shaft Direction



FCWAY Shaft Direction



FCWSY Shaft Direction



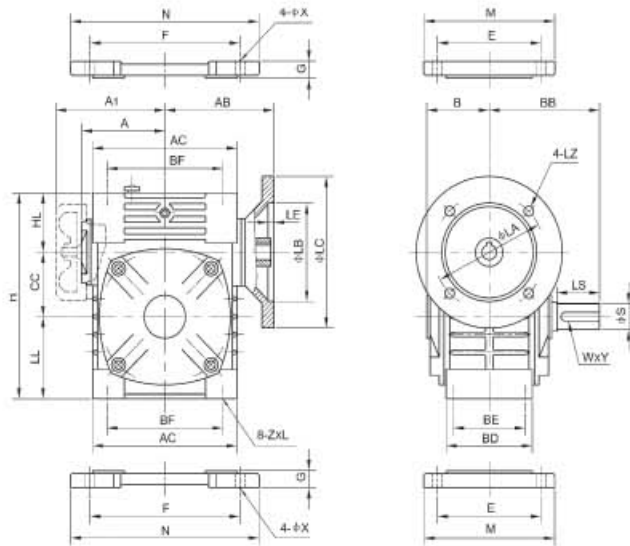
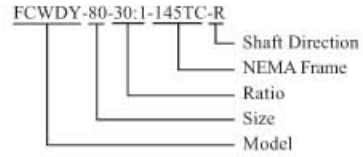
Size	Ratio	A	A ₁	AB	AC	B	BB	BD	BE	BF	CC	H	HL	LL	Z	L
40	5:1	2.58		3.78	3.94	1.85	3.31	2.68	2.13	3.15	1.575	5.00	1.34	2.09	5/16-18	0.63
50		2.85		4.13	4.48	2.08	3.82	2.72	1.97	3.54	1.969	5.91	1.38	2.56	5/16-18	0.63
60	10:1	3.15		4.72	5.00	2.20	4.33	2.99	2.13	3.94	2.362	6.97	1.65	2.95	3/8-16	0.75
63		3.37		5.08	5.51	2.36	4.45	3.46	2.69	4.87	2.480	7.32	1.89	2.95	3/8-16	0.75
70	15:1	3.76		5.51	6.10	2.52	5.12	3.31	2.56	4.92	2.756	8.46	2.16	3.54	3/8-16	0.75
80	20:1	4.11		6.30	6.69	2.85	5.51	3.94	2.76	5.51	3.150	9.84	2.56	4.13	3/8-16	0.75
100	30:1	4.78		7.00	8.03	3.33	6.42	4.49	3.54	7.09	3.937	12.20	3.15	5.12	1/2-13	0.94
120	40:1	6.10	8.26	9.06	10.24	3.94	7.28	5.04	3.94	8.66	4.724	14.57	3.74	6.10	1/2-13	0.94
135	50:1	6.89	9.06	10.24	11.65	4.33	8.27	5.91	4.33	10.24	5.315	16.73	4.13	7.28	5/8-11	1.13
155	60:1	7.64	10.24	11.89	12.99	5.20	9.92	6.69	4.72	11.02	6.102	18.15	4.05	7.99	5/8-11	1.13
175		8.78	11.42	12.80	14.57	5.71	10.31	7.32	5.51	12.60	6.890	20.51	4.84	8.78	3/4-10	1.38
200		9.61	12.60	13.78	16.30	6.89	12.01	9.06	5.91	14.17	7.874	22.64	5.12	9.65	3/4-10	1.38

Size	Input Shaft			Output Shaft			With Horizontal Base					
	U	HS	T × V	S	LS	W × Y	E	F	M	N	G	X
40	0.500	1.10	1/8 × 1/16	0.625	1.38	3/16 × 3/32	3.54	3.94	4.33	4.92	0.51	0.39
50	0.625	1.18	3/16 × 3/32	0.750	1.57	3/16 × 3/32	3.74	4.33	4.72	5.51	0.59	0.43
60	0.750	1.57	3/16 × 3/32	1.000	1.97	1/4 × 1/8	4.13	4.72	5.12	5.91	0.71	0.43
63	0.750	1.57	3/16 × 3/32	1.000	1.97	1/4 × 1/8	4.33	5.91	5.51	7.09	0.71	0.43
70	0.875	1.57	3/16 × 3/32	1.125	2.36	1/4 × 1/8	4.53	5.91	5.91	7.48	0.71	0.59
80	1.125	1.97	1/4 × 1/8	1.375	2.56	5/16 × 5/32	5.31	7.09	6.69	8.66	0.71	0.59
100	1.375	1.97	5/16 × 5/32	1.500	2.95	3/8 × 3/16	6.10	8.66	7.48	10.63	0.79	0.59
120	1.500	2.56	3/8 × 3/16	1.750	3.35	3/8 × 3/16	7.09	10.24	9.06	12.60	0.98	0.71
135	1.625	2.95	3/8 × 3/16	2.250	3.74	1/2 × 1/4	7.87	11.42	9.84	13.78	1.18	0.71
155	1.625	3.35	3/8 × 3/16	2.500	4.33	5/8 × 5/16	8.66	12.60	11.02	14.96	1.26	0.79
175	1.875	3.35	1/2 × 1/4	2.750	4.33	5/8 × 5/16	9.84	13.78	12.20	16.14	1.46	0.79
200	2.000	3.74	1/2 × 1/4	2.875	4.92	3/4 × 3/8	11.42	13.78	14.17	17.13	1.77	0.87

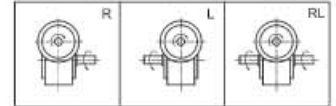
FCWDY



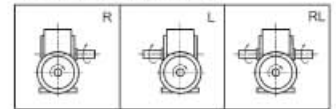
How to order



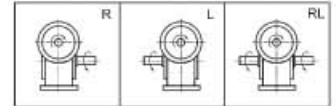
FCWDY Shaft Direction



FCWDY Shaft Direction



FCWDY Shaft Direction



NEMA Frame	LA	LB	LC	LE	LZ	Input	
						Bore	Keyway
56C	5.875	4.50	6.50	0.16	0.43	0.625	3/16 × 3/32
143TC/145TC	5.875	4.50	6.50	0.16	0.43	0.875	3/16 × 3/32
182TC/184TC	7.250	8.50	9.00	0.23	0.55	1.125	1/4 × 1/8
213TC/215TC	7.250	8.50	9.00	0.23	0.55	1.375	5/16 × 5/32
254TC/256TC	7.250	8.50	10.00	0.23	0.55	1.625	3/8 × 3/16

Size	Ratio	A	A ₁	AB	AC	B	BB	BD	BE	BF	CC	H	HL	L.L	Z	L
40	5:1	2.58		3.92	3.94	1.85	3.31	2.68	2.13	3.15	1.575	5.00	1.34	2.09	5/16-18	0.63
50		2.85		4.19	4.48	2.08	3.82	2.72	1.97	3.54	1.969	5.91	1.38	2.56	5/16-18	0.63
60		3.15		4.43	5.00	2.20	4.33	2.99	2.13	3.94	2.362	6.97	1.65	2.95	3/8-16	0.75
63	10:1	3.37		4.67	5.51	2.36	4.45	3.46	2.69	4.87	2.480	7.32	1.89	2.95	3/8-16	0.75
70		3.76		4.63	6.10	2.52	5.12	3.31	2.56	4.92	2.756	8.46	2.16	3.54	3/8-16	0.75
80	20:1	4.11		5.84	6.69	2.85	5.51	3.94	2.76	5.51	3.150	9.84	2.56	4.13	3/8-16	0.75
100		4.78		6.51	8.03	3.33	6.42	4.49	3.54	7.09	3.937	12.20	3.15	5.12	1/2-13	0.94
120	50:1	6.10	8.26	7.48	10.24	3.94	7.28	5.04	3.94	8.66	4.724	14.57	3.74	6.10	1/2-13	0.94
135		6.89	9.06	8.32	11.65	4.33	8.27	5.91	4.33	10.24	5.315	16.73	4.13	7.28	5/8-11	1.13
155	60:1	7.64	10.24	9.35	12.99	5.20	9.92	6.69	4.72	11.02	6.102	18.15	4.05	7.99	5/8-11	1.13
175		8.78	11.42	11.02	14.57	5.71	10.31	7.32	5.51	12.60	6.890	20.51	4.84	8.78	3/4-10	1.38

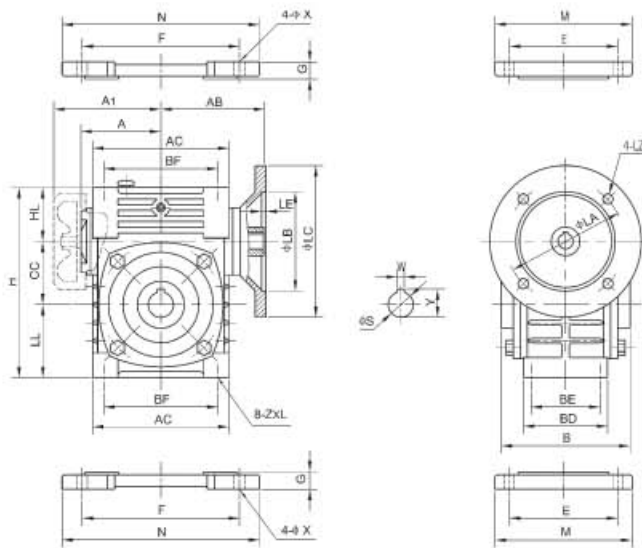
Size	Output Shaft			With Horizontal Base						NEMA Frame	
	S	LS	W × Y	E	F	M	N	G	X		
40	0.625	1.38	3/16 × 3/32	3.54	3.94	4.33	4.92	0.51	0.39	56C	
50	0.750	1.57	3/16 × 3/32	3.74	4.33	4.72	5.51	0.59	0.43	56C, 140TC	
60	1.000	1.97	1/4 × 1/8	4.13	4.72	5.12	5.91	0.71	0.43	56C, 140TC	
63	1.000	1.97	1/4 × 1/8	4.33	5.91	5.51	7.09	0.71	0.43	56C, 140TC	
70	1.125	2.36	1/4 × 1/8	4.53	5.91	5.91	7.48	0.71	0.59	56C, 140TC	
80	1.375	2.56	5/16 × 5/32	5.31	7.09	6.69	8.66	0.71	0.59	56C, 140TC, 180TC	
100	1.500	2.95	3/8 × 3/16	6.10	8.66	7.48	10.63	0.79	0.59	56C, 140TC, 180TC	
120	1.750	3.35	3/8 × 3/16	7.09	10.24	9.06	12.60	0.98	0.71	180TC, 210TC	
135	2.250	3.74	1/2 × 1/4	7.87	11.42	9.84	13.78	1.18	0.71	180TC, 210TC	
155	2.500	4.33	5/8 × 5/16	8.66	12.60	11.02	14.96	1.26	0.79	180TC, 210TC	
175	2.750	4.33	5/8 × 5/16	9.84	13.78	12.20	16.14	1.46	0.79	180TC, 210TC, 250TC	

FCWDKY



How to order

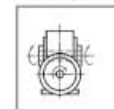
FCWDKY-80-30:1-145TC-R



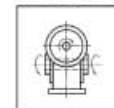
FCWDKY Shaft Direction



FCWDKAY Shaft Direction



FCWDKSY Shaft Direction

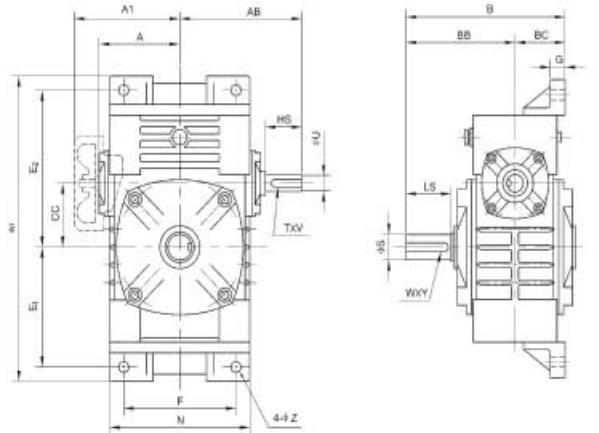


NEMA Frame	LA	LB	LC	LE	LZ	Input	
						Bore	Keyway
56C	5.875	4.50	6.50	0.16	0.43	0.625	3/16 × 3/32
143TC/145TC	5.875	4.50	6.50	0.16	0.43	0.875	3/16 × 3/32
182TC/184TC	7.250	8.50	9.00	0.23	0.55	1.125	1/4 × 1/8
213TC/215TC	7.250	8.50	9.00	0.23	0.55	1.375	5/16 × 5/32
254TC/256TC	7.250	8.50	10.00	0.23	0.55	1.625	3/8 × 3/16

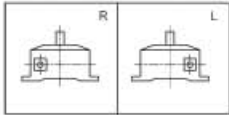
Size	Ratio	A	A ₁	AB	AC	B	BD	BE	BF	CC	H	HL	LL	Z	L
40	5:1	2.58		3.92	3.94	4.02	2.68	2.13	3.15	1.575	5.00	1.34	2.09	5/16-18	0.63
50		2.85		4.19	4.48	4.21	2.72	1.97	3.54	1.969	5.91	1.38	2.56	5/16-18	0.63
60	10:1	3.15		4.43	5.00	4.61	2.99	2.13	3.94	2.362	6.97	1.65	2.95	3/8-16	0.75
63	15:1	3.37		4.67	5.51	5.04	3.46	2.69	4.87	2.480	7.32	1.89	2.95	3/8-16	0.75
70	20:1	3.76		4.63	6.10	5.16	3.31	2.56	4.92	2.756	8.46	2.16	3.54	3/8-16	0.75
80	30:1	4.11		5.84	6.69	5.67	3.94	2.76	5.51	3.150	9.84	2.56	4.13	3/8-16	0.75
100	40:1	4.78		6.51	8.03	6.89	4.49	3.54	7.09	3.937	12.20	3.15	5.12	1/2-13	0.94
120	50:1	6.10	8.26	7.48	10.24	7.87	5.04	3.94	8.66	4.724	14.57	3.74	6.10	1/2-13	0.94
135	60:1	6.89	9.06	8.32	11.65	8.35	5.91	4.33	10.24	5.315	16.73	4.13	7.28	5/8-11	1.13
155		7.64	10.24	9.35	12.99	12.28	6.69	4.72	11.02	6.102	18.15	4.05	7.99	5/8-11	1.13
175		8.78	11.42	11.02	14.57	13.15	7.32	5.51	12.60	6.890	20.51	4.84	8.78	3/4-10	1.38

Size	Output Shaft			With Horizontal Base						NEMA Frame
	S	W	Y	E	F	M	N	G	X	
40	0.625	3/16	0.71	3.54	3.94	4.33	4.92	0.51	0.39	56C
50	0.750	3/16	0.84	3.74	4.33	4.72	5.51	0.59	0.43	56C, 140TC
60	1.125	1/4	1.24	4.13	4.72	5.12	5.91	0.71	0.43	56C, 140TC
63	1.125	1/4	1.24	4.33	5.91	5.51	7.09	0.71	0.43	56C, 140TC
70	1.250	1/4	1.37	4.53	5.91	5.91	7.48	0.71	0.59	56C, 140TC
80	1.375	5/16	1.52	5.31	7.09	6.69	8.66	0.71	0.59	56C, 140TC, 180TC
100	1.500	3/8	1.67	6.10	8.66	7.48	10.63	0.79	0.59	56C, 140TC, 180TC
120	1.750	3/8	1.92	7.09	10.24	9.06	12.60	0.98	0.71	180TC, 210TC
135	2.250	1/2	2.48	7.87	11.42	9.84	13.78	1.18	0.71	180TC, 210TC
155	2.500	5/8	2.78	8.66	12.60	11.02	14.96	1.26	0.79	180TC, 210TC
175	2.750	5/8	3.03	9.84	13.78	12.20	16.14	1.46	0.79	180TC, 210TC, 250TC

FCWOY



Shaft Direction



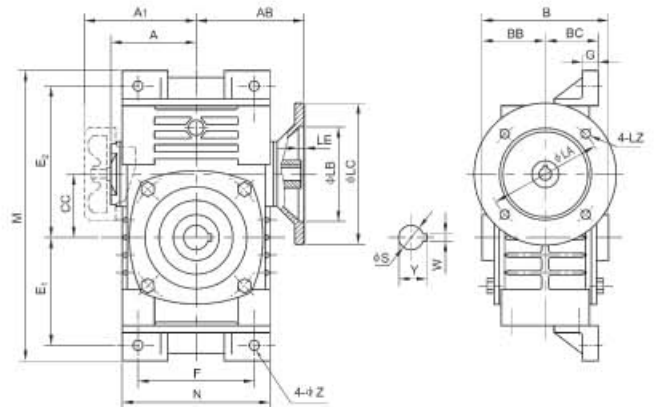
How to order

FCWOY-80-30-1-R

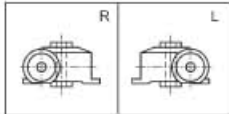
- Shaft Direction
- Ratio
- Size
- Model

Size	Ratio	A	A ₁	AB	B	BB	BC	CC	E ₁	E ₂	F	M	N	G	Z	Input Shaft			Output Shaft		
																U	HS	T × V	S	LS	W × Y
40	5:1	2.58		3.78	5.16	3.31	1.85	1.575	2.95	3.78	3.15	7.68	4.09	0.39	0.39	0.500	1.10	1/8 × 1/16	0.625	1.38	3/16 × 3/32
50		2.85		4.13	5.79	3.82	1.97	1.969	3.54	4.33	3.54	8.86	4.53	0.55	0.43	0.625	1.18	3/16 × 3/32	0.750	1.57	3/16 × 3/32
60	10:1	3.15		4.72	6.50	4.33	2.17	2.362	4.02	5.08	3.94	10.12	4.92	0.59	0.43	0.750	1.57	3/16 × 3/32	1.000	1.97	1/4 × 1/8
63		3.37		5.08	6.93	4.45	2.48	2.480	4.13	5.55	4.33	10.87	5.90	0.59	0.43	0.750	1.57	3/16 × 3/32	1.000	1.97	1/4 × 1/8
70	15:1	3.76		5.51	7.68	5.12	2.56	2.756	4.72	6.10	4.72	12.01	6.18	0.71	0.59	0.875	1.57	3/16 × 3/32	1.125	2.36	1/4 × 1/8
80		4.11		6.30	8.27	5.51	2.76	3.150	5.51	7.09	5.51	13.78	6.85	0.71	0.59	1.125	1.97	1/4 × 1/8	1.375	2.56	5/16 × 5/32
100	30:1	4.78		7.00	9.96	6.42	3.54	3.937	6.50	8.46	7.48	16.14	8.82	0.79	0.59	1.375	1.97	5/16 × 5/32	1.500	2.95	3/8 × 3/16
120		6.10	8.26	9.06	11.22	7.28	3.94	4.724	7.68	10.04	8.66	19.49	10.39	0.98	0.71	1.500	2.56	3/8 × 3/16	1.750	3.35	3/8 × 3/16
135	50:1	6.89	9.06	10.24	12.60	8.27	4.33	5.135	9.06	11.22	10.24	22.05	11.97	1.18	0.71	1.625	2.95	3/8 × 3/16	2.250	3.74	1/2 × 1/4
155		7.64	10.24	11.89	15.43	9.92	5.51	6.102	9.84	12.00	11.02	23.82	12.99	1.38	0.79	1.625	3.35	3/8 × 3/16	2.500	4.33	5/8 × 5/16
175	60:1	8.78	11.42	12.80	16.22	10.31	5.91	6.890	10.75	13.70	12.60	26.57	14.57	1.57	0.79	1.875	3.35	1/2 × 1/4	2.750	4.33	5/8 × 5/16

FCWDKOY



Shaft Direction



How to order

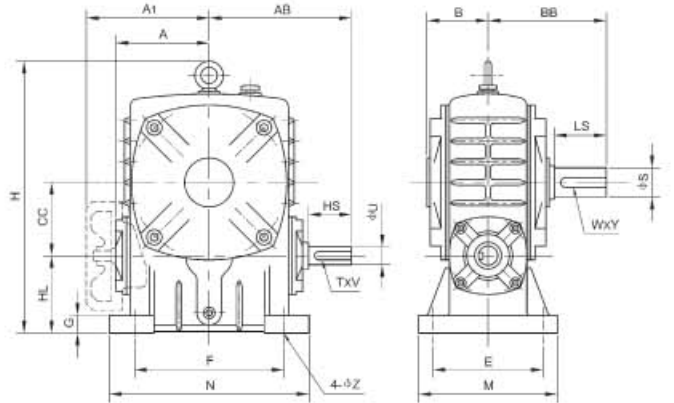
FCWDKOY-80-30-1-145TC-R

- Shaft Direction
- NEMA Frame
- Ratio
- Size
- Model

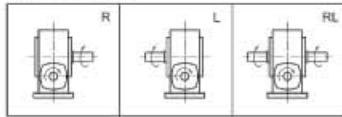
NEMA Frame	LA	LB	LC	LE	LZ	Input	
						Bore	Keyway
56C	5.875	4.50	6.50	0.16	0.43	0.625	3/16 × 3/32
143TC/145TC	5.875	4.50	6.50	0.16	0.43	0.875	3/16 × 3/32
182TC/184TC	7.250	8.50	9.00	0.23	0.55	1.125	1/4 × 1/8
213TC/215TC	7.250	8.50	9.00	0.23	0.55	1.375	5/16 × 5/32
254TC/256TC	7.250	8.50	10.00	0.23	0.55	1.625	3/8 × 3/16

Size	Ratio	A	A ₁	AB	B	BB	BC	CC	E ₁	E ₂	F	M	N	G	Z	Output Shaft			NEMA Frame
																S	W	Y	
40	5:1	2.58		3.92	4.02	2.01	1.85	1.575	2.95	3.78	3.15	7.68	4.09	0.39	0.39	0.625	3/16	0.71	56C
50		2.85		4.19	4.21	2.11	1.97	1.969	3.54	4.33	3.54	8.86	4.53	0.55	0.43	0.750	3/16	0.84	56C, 140TC
60	10:1	3.15		4.43	4.61	2.31	2.17	2.362	4.02	5.08	3.94	10.12	4.92	0.59	0.43	1.125	1/4	1.24	56C, 140TC
63		3.37		4.67	5.04	2.52	2.48	2.480	4.13	5.55	4.33	10.87	5.90	0.59	0.43	1.125	1/4	1.24	56C, 140TC
70	15:1	3.76		4.63	5.16	2.58	2.56	2.756	4.72	6.10	4.72	12.01	6.18	0.71	0.59	1.250	1/4	1.37	56C, 140TC
80		4.11		5.84	5.67	2.84	2.76	3.150	5.51	7.09	5.51	13.78	6.85	0.71	0.59	1.375	5/16	1.52	56C, 140TC, 180TC
100	30:1	4.78		6.51	6.89	3.45	3.54	3.937	6.50	8.46	7.48	16.14	8.82	0.79	0.59	1.500	3/8	1.67	56C, 140TC, 180TC
120		6.10	8.26	7.48	7.87	3.94	3.94	4.724	7.68	10.04	8.66	19.49	10.39	0.98	0.71	1.750	3/8	1.92	180TC, 210TC
135	50:1	6.89	9.06	8.32	8.35	4.18	4.33	5.135	9.06	11.22	10.24	22.05	11.97	1.18	0.71	2.250	1/2	2.48	180TC, 210TC
155		7.64	10.24	9.35	12.28	6.14	5.51	6.102	9.84	12.00	11.02	23.82	12.99	1.38	0.79	2.500	5/8	2.78	180TC, 210TC
175	60:1	8.78	11.42	11.02	13.15	6.58	5.91	6.890	10.75	13.70	12.60	26.57	14.57	1.57	0.79	2.750	5/8	3.03	180TC, 210TC, 250TC

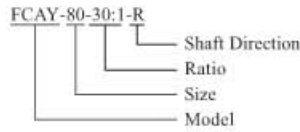
FCAY



Shaft Direction

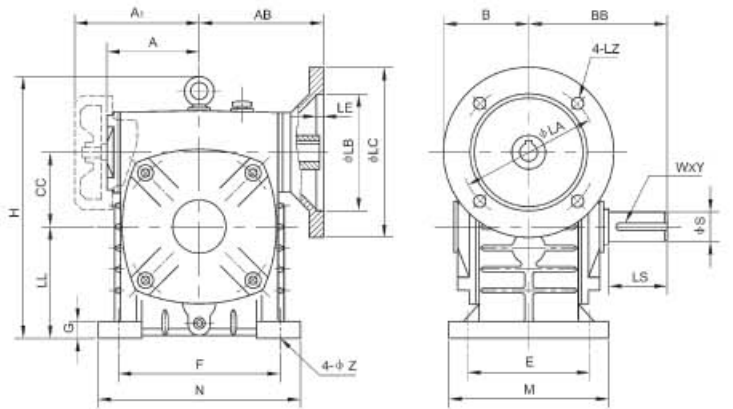


How to order

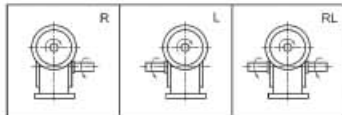


Size	Ratio	A	A ₁	AB	B	BB	CC	E	F	M	N	H	HL	LL	G	Z	Input Shaft			Output Shaft		
																	U	HS	T × V	S	LS	W × Y
40	5:1	2.24		3.35	1.57	2.91	1.575	2.76	3.15	3.54	3.94	5.31	1.57	3.15	0.47	0.39	0.500	1.10	1/8 × 1/16	0.625	1.38	3/16 × 3/32
50		2.76		4.13	2.08	3.82	1.969	3.74	4.33	4.72	5.51	7.09	1.97	3.94	0.59	0.43	0.625	1.18	3/16 × 3/32	0.750	1.57	3/16 × 3/32
60		3.09		4.72	2.20	4.33	2.362	4.13	4.72	5.12	5.91	8.27	2.36	4.72	0.70	0.43	0.750	1.57	3/16 × 3/32	1.000	1.97	1/4 × 1/8
70	10:1	3.76		5.51	2.52	5.12	2.756	4.53	5.91	7.48	9.57	2.76	5.51	0.79	0.59	0.875	1.57	3/16 × 3/32	1.125	2.36	1/4 × 1/8	
80	15:1	4.11		6.30	2.85	5.51	3.150	5.31	7.09	6.69	8.66	10.75	3.15	6.30	0.79	0.59	1.125	1.97	1/4 × 1/8	1.375	2.56	5/16 × 5/32
100	20:1	4.78		7.00	2.95	6.10	3.937	6.10	8.66	7.48	10.24	13.39	3.94	7.87	0.98	0.59	1.375	1.97	5/16 × 5/32	1.500	2.95	3/8 × 3/16
120	30:1	6.10	8.26	9.06	4.02	7.28	4.724	7.09	10.24	9.06	12.60	16.14	4.72	9.45	1.18	0.71	1.500	2.56	3/8 × 3/16	1.750	3.35	3/8 × 3/16
135	40:1	6.89	9.06	10.24	4.33	8.27	5.135	7.87	11.42	9.84	13.78	18.50	5.31	10.63	1.18	0.71	1.625	2.95	3/8 × 3/16	2.250	3.74	1/2 × 1/4
155	50:1	7.64	10.24	11.89	5.20	9.92	6.102	8.66	12.60	11.02	15.35	19.49	5.31	11.42	1.38	0.79	1.625	3.35	3/8 × 3/16	2.500	4.33	5/8 × 5/16
175	60:1	8.78	11.42	12.80	5.71	10.31	6.890	9.84	13.78	12.20	16.93	21.89	6.30	13.19	1.46	0.79	1.875	3.35	1/2 × 1/4	2.750	4.33	5/8 × 5/16
200		9.61	12.60	13.78	6.89	12.01	7.874	11.42	15.35	14.17	18.90	24.61	6.89	14.76	1.65	0.87	2.000	3.74	1/2 × 1/4	2.875	4.92	3/4 × 3/8
250		11.42	16.00	16.54	7.87	14.17	9.843	14.96	18.90	18.11	22.05	29.72	7.87	17.72	1.89	1.06	2.250	4.33	1/2 × 1/4	3.500	6.10	7/8 × 7/16

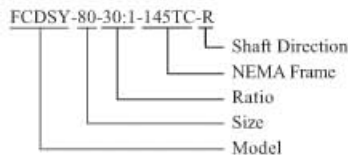
FCDSY



Shaft Direction



How to order



NEMA Frame	LA	LB	LC	LE	LZ	Input	
						Bore	Keyway
56C	5.875	4.50	6.50	0.16	0.43	0.625	3/16 × 3/32
145TC/145TC	5.875	4.50	6.50	0.16	0.43	0.875	3/16 × 3/32
182TC/184TC	7.250	8.50	9.00	0.23	0.55	1.125	1/4 × 1/8
213TC/215TC	7.250	8.50	9.00	0.23	0.55	1.375	5/16 × 5/32
254TC/256TC	7.250	8.50	10.00	0.23	0.55	1.625	3/8 × 3/16

Size	Ratio	A	A ₁	AB	BB	CC	E	F	M	N	H	HL	LL	G	Z	Output Shaft			NEMA Frame
																S	LS	W × Y	
60	5:1	3.09		4.43	4.33	2.362	4.13	4.72	5.12	5.91	8.07	5.91	3.54	0.75	0.43	1.000	1.97	1/4 × 1/8	56C, 140TC
70	10:1	3.76		4.63	5.12	2.756	4.53	5.91	5.91	7.48	9.25	6.89	4.13	0.87	0.59	1.125	2.36	1/4 × 1/8	56C, 140TC
80	15:1	4.11		5.84	5.51	3.150	5.31	7.09	6.69	8.66	10.43	7.87	4.72	0.87	0.59	1.375	2.56	5/16 × 5/32	56C, 140TC, 180TC
100	20:1	4.78		6.51	6.10	3.937	6.10	8.66	7.48	10.24	12.87	9.84	5.91	0.98	0.59	1.500	2.95	3/8 × 3/16	56C, 140TC, 180TC
120	30:1	6.10	8.26	7.48	7.28	4.724	7.09	10.24	9.06	12.60	15.28	11.81	7.09	1.18	0.71	1.750	3.35	3/8 × 3/16	180TC, 210TC
135	40:1	6.89	9.06	8.32	8.27	5.315	7.87	11.42	9.84	13.78	17.52	13.78	8.46	1.18	0.71	2.250	3.74	1/2 × 1/4	180TC, 210TC
155	50:1	7.64	10.24	9.35	9.92	6.102	8.66	12.60	11.02	15.35	19.02	15.35	9.25	1.38	0.79	2.500	4.33	5/8 × 5/16	180TC, 210TC
175	60:1	8.78	11.42	11.02	10.31	6.890	9.84	13.78	12.20	16.93	21.26	17.13	10.24	1.46	0.79	2.750	4.33	5/8 × 5/16	180TC, 210TC, 250TC



**SPEED REDUCER
RATING TABLES**

Rating Tables

Input Speed		1750 rpm			1450 rpm			1150 rpm		
Size	Ratio	Input	Output		Input	Output		Input	Output	
		HP	Torque (in-lbs)	O.H.L. (lbs)	HP	Torque (in-lbs)	O.H.L. (lbs)	HP	Torque (in-lbs)	O.H.L. (lbs)
133	5:1	1.20	170	160	1.05	180	160	0.93	200	160
	10:1	0.78	216	160	0.70	226	160	0.60	240	160
	15:1	0.62	230	160	0.56	242	160	0.48	260	160
	20:1	0.52	230	160	0.46	244	160	0.39	260	160
	30:1	0.36	240	160	0.32	250	160	0.27	265	160
	40:1	0.31	232	160	0.28	240	160	0.24	260	160
154	5:1	1.56	240	285	1.42	258	285	1.27	290	285
	10:1	1.09	306	285	0.96	316	285	0.82	340	285
	15:1	0.82	330	285	0.74	344	285	0.65	380	285
	20:1	0.70	330	285	0.63	352	285	0.54	380	285
	30:1	0.52	340	285	0.47	362	285	0.40	390	285
	40:1	0.45	335	285	0.40	352	285	0.34	378	285
	50:1	0.37	318	285	0.33	330	285	0.28	350	285
175	5:1	2.05	305	285	1.82	314	285	1.60	345	285
	10:1	1.40	410	285	1.26	432	285	1.10	475	285
	15:1	1.05	440	285	0.94	472	285	0.80	505	285
	20:1	0.89	450	285	0.80	490	285	0.68	520	285
	30:1	0.65	455	285	0.58	482	285	0.50	520	285
	40:1	0.56	450	285	0.50	484	285	0.43	520	285
	50:1	0.44	420	285	0.39	444	285	0.33	470	285
	60:1	0.37	395	285	0.33	426	285	0.27	440	285
206	5:1	2.90	430	500	2.66	468	500	2.30	505	500
	10:1	2.02	600	500	1.84	638	500	1.60	700	500
	15:1	1.50	650	500	1.38	700	500	1.20	770	500
	20:1	1.20	660	500	1.10	708	500	0.97	780	500
	30:1	0.90	670	500	0.82	710	500	0.73	790	500
	40:1	0.76	665	500	0.68	708	500	0.60	780	500
	50:1	0.62	640	500	0.56	685	500	0.49	750	500
237	5:1	3.91	590	535	3.62	644	535	3.19	710	535
	10:1	2.72	820	535	2.50	890	535	2.20	980	535
	15:1	2.00	890	535	1.84	960	535	1.65	1080	535
	20:1	1.62	920	535	1.48	990	535	1.30	1090	535
	30:1	1.20	930	535	1.10	968	535	1.00	1100	535
	40:1	1.00	925	535	0.91	980	535	0.80	1080	535
	50:1	0.83	880	535	0.75	950	535	0.65	1030	535
	60:1	0.69	830	535	0.62	860	535	0.55	950	535
262	5:1	4.90	720	725	4.50	812	725	3.95	890	725
	10:1	3.40	1000	725	3.10	1130	725	2.76	1250	725
	15:1	2.60	1100	725	2.30	1200	725	2.10	1360	725
	20:1	2.00	1140	725	1.80	1250	725	1.56	1350	725
	30:1	1.54	1175	725	1.40	1316	725	1.20	1400	725
	40:1	1.18	1140	725	1.08	1230	725	0.96	1360	725
	50:1	1.04	1100	725	0.94	1190	725	0.83	1300	725
60:1	0.87	1050	725	0.78	1110	725	0.68	1200	725	

1.O.H.L.:Overhung Load.

2.Applies for continuous service free from recurrent shock loading and does not exceed 8 hours per day.

Rating Tables

Input Speed		1750 rpm			1450 rpm			1150 rpm		
Size	Ratio	Input	Output		Input	Output		Input	Output	
		HP	Torque (in-lbs)	O.H.L. (lbs)	HP	Torque (in-lbs)	O.H.L. (lbs)	HP	Torque (in-lbs)	O.H.L. (lbs)
300	5:1	7.70	1150	800	7.20	1360	850	6.32	1480	900
	10:1	5.50	1650	900	5.00	1880	900	4.50	2100	900
	15:1	4.20	1800	900	3.70	1990	900	3.15	2100	900
	20:1	3.42	1900	900	3.00	2030	900	2.50	2100	900
	30:1	2.49	1930	900	2.20	2050	900	1.87	2160	900
	40:1	2.00	1960	900	1.76	2065	900	1.51	2200	900
	50:1	1.66	1880	900	1.50	2015	900	1.32	2200	900
325	60:1	1.38	1780	900	1.25	1925	900	1.10	2100	900
	5:1	9.10	1435	1000	8.50	1640	1050	7.62	1820	1150
	10:1	6.55	2070	1150	6.10	2350	1150	5.45	2600	1150
	15:1	4.85	2250	1150	4.50	2500	1150	4.06	2800	1150
	20:1	3.98	2310	1150	3.60	2540	1150	3.20	2800	1150
	30:1	2.75	2300	1150	2.60	2580	1150	2.35	2900	1150
	40:1	2.30	2320	1150	2.15	2580	1150	1.92	2850	1150
375	50:1	1.95	2300	1150	1.75	2510	1150	1.52	2700	1150
	60:1	1.74	2300	1150	1.55	2580	1150	1.26	2600	1150
	5:1	12.40	1980	1150	11.60	2230	1150	10.50	2500	1250
	10:1	8.90	2850	1240	8.30	3200	1240	7.55	3600	1250
	15:1	6.66	3100	1370	6.15	3460	1370	5.60	3900	1370
	20:1	5.35	3200	1370	4.95	3550	1370	4.50	4000	1370
	30:1	3.83	3200	1370	3.60	3655	1370	3.26	4100	1370
450	40:1	3.10	3200	1370	2.90	3500	1370	2.68	4000	1370
	50:1	2.70	3300	1370	2.40	3605	1370	2.04	3800	1370
	60:1	2.37	3200	1370	2.10	3480	1370	1.75	3600	1370
	5:1	18.20	2950	1800	16.90	3280	1370	15.60	3750	2100
	10:1	13.20	4300	2085	12.20	4750	1950	11.20	5400	2290
	15:1	10.00	4600	2300	9.30	5520	2150	8.48	5900	2300
	20:1	8.00	4600	2300	7.50	5350	2300	6.90	6100	2300
516	30:1	5.70	4800	2300	5.30	5440	2300	4.80	6100	2300
	40:1	4.73	4800	2300	4.40	5460	2300	4.10	6300	2300
	50:1	3.86	4800	2300	3.50	5190	2300	3.10	5700	2300
	60:1	3.40	4700	2300	3.05	4850	2300	2.64	5200	2300
	10:1	17.80	5800	2430	16.40	6460	2500	14.95	7300	2675
	15:1	13.80	6440	2700	12.70	7070	2700	11.60	8000	2700
	20:1	10.90	6500	2700	10.05	7310	2700	9.15	8250	2700
600	30:1	7.70	6600	2700	7.10	7320	2700	6.50	8300	2700
	40:1	6.05	6550	2700	5.60	7300	2700	5.14	8300	2700
	50:1	4.96	6300	2700	4.58	7110	2700	4.16	8000	2700
	60:1	4.18	5900	2700	3.90	6760	2700	3.54	7600	2700
	10:1	24.00	7380	3200	22.10	8300	3200	20.20	9860	3200
	15:1	18.60	8580	3200	17.10	9300	3200	15.60	10700	3200
	20:1	14.70	8700	3200	13.50	9560	3200	12.30	11090	3200
600	30:1	10.40	8910	3200	9.50	9780	3200	8.60	10980	3200
	40:1	8.15	8830	3200	7.55	9840	3200	6.95	11200	200
	50:1	6.60	8380	3200	6.10	9470	3200	5.60	10750	3200
	60:1	5.55	7830	3200	5.10	8840	3200	4.55	9770	3200

1.O.H.L.:Overhung Load.

2.Applies for continuous service free from recurrent shock loading and does not exceed 8 hours per day.



**SPEED REDUCER
RATING TABLES**

Rating Tables

Input Speed		1750 rpm			1450 rpm			1150 rpm		
Size	Ratio	Input	Output		Input	Output		Input	Output	
		HP	Torque (in-lbs)	O.H.L. (lbs)	HP	Torque (in-lbs)	O.H.L. (lbs)	HP	Torque (in-lbs)	O.H.L. (lbs)
40	5:1	1.24	178	154	1.16	200	154	1.02	220	154
	10:1	0.83	230	154	0.78	248	154	0.67	274	154
	20:1	0.40	186	154	0.35	203	154	0.31	221	154
	30:1	0.43	292	154	0.40	310	154	0.35	336	154
	40:1	0.27	221	154	0.24	230	154	0.21	248	154
	50:1	0.26	247	154	0.23	265	154	0.20	283	154
	60:1	0.20	212	154	0.19	230	154	0.16	238	154
50	5:1	2.17	274	198	1.97	283	198	1.74	310	220
	10:1	1.45	398	220	1.32	424	236	1.17	468	254
	15:1	1.07	415	254	0.98	451	254	0.83	468	254
	20:1	0.66	336	254	0.59	362	254	0.51	398	254
	30:1	0.68	468	254	0.59	468	254	0.48	468	254
	40:1	0.44	389	254	0.41	416	254	0.35	442	254
	50:1	0.39	398	254	0.35	424	254	0.31	451	254
60:1	0.31	380	254	0.28	398	254	0.24	416	254	
60	5:1	3.48	451	220	3.14	486	220	2.81	530	232
	10:1	2.34	645	220	2.09	690	232	1.89	760	254
	15:1	1.73	681	254	1.56	725	270	1.36	778	292
	20:1	1.22	619	300	1.11	664	320	0.99	716	345
	30:1	1.15	805	335	1.06	867	350	0.92	920	380
	40:1	0.83	708	390	0.75	760	415	0.67	814	440
	50:1	0.78	840	440	0.71	884	440	0.63	955	440
60:1	0.64	796	440	0.59	840	440	0.51	902	440	
70	5:1	5.24	690	242	4.68	725	250	4.18	796	260
	10:1	3.50	973	280	3.12	1035	300	2.79	1132	320
	15:1	2.54	1008	338	2.31	1088	355	2.04	1176	384
	20:1	1.94	1018	395	1.76	1088	413	1.56	1186	445
	30:1	1.70	1200	435	1.56	1300	458	1.37	1398	496
	40:1	1.24	1132	515	1.14	1212	544	1.02	1300	585
	50:1	1.12	1238	586	1.03	1318	622	0.91	1416	660
60:1	0.95	1212	638	0.87	1265	660	0.77	1354	660	
80	5:1	7.38	1000	350	6.68	1044	375	5.88	1132	410
	10:1	4.96	1380	395	4.46	1478	420	3.92	1610	450
	15:1	3.60	1442	474	3.23	1540	502	2.84	1680	537
	20:1	2.55	1310	555	2.32	1416	588	2.05	1540	635
	30:1	2.40	1716	610	2.16	1832	645	1.92	1990	696
	40:1	1.72	1522	718	1.56	1628	764	1.40	1770	820
	50:1	1.58	1743	800	1.43	1876	850	1.28	2008	880
60:1	1.30	1637	880	1.19	1770	880	1.06	1876	880	
100	5:1	11.85	1747	380	11.00	1908	380	10.46	2078	400
	10:1	8.80	2478	395	7.98	2672	395	6.98	2902	418
	15:1	6.38	2584	450	5.70	2743	478	5.12	3052	508
	20:1	5.06	2708	526	4.60	2938	555	4.05	3203	592
	30:1	4.22	3106	585	3.84	3318	620	3.36	3566	665
	40:1	3.19	2955	697	2.88	3256	742	2.56	3548	790
	50:1	2.40	2760	802	2.18	2955	852	1.95	3212	915
60:1	1.97	2636	880	1.80	2858	935	1.60	3035	1010	

1.O.H.L.:Overhung Load.

2.Applies for continuous service free from recurrent shock loading and does not exceed 8 hours per day.

Rating Tables

Input Speed		1750 rpm			1450 rpm			1150 rpm		
Size	Ratio	Input	Output		Input	Output		Input	Output	
		HP	Torque (in-lbs)	O.H.L. (lbs)	HP	Torque (in-lbs)	O.H.L. (lbs)	HP	Torque (in-lbs)	O.H.L. (lbs)
120	5:1	18.60	2688	380	17.03	2956	400	14.94	3230	420
	10:1	13.95	3964	395	12.68	4344	407	11.07	4672	436
	15:1	10.06	4158	480	9.08	4433	510	8.13	4893	537
	20:1	7.21	3822	596	6.45	4159	630	5.76	4450	674
	30:1	6.71	4964	629	6.04	5318	665	5.34	5751	716
	40:1	4.71	4398	785	4.21	4654	838	3.80	5070	896
	50:1	3.96	4725	890	3.57	5017	946	3.16	5504	1012
135	60:1	3.16	4247	998	2.86	4504	1060	2.54	4866	1142
	10:1	19.80	5730	670	18.10	6308	700	15.97	6740	750
	15:1	14.70	6180	790	13.10	6590	845	11.88	7280	896
	20:1	11.38	6280	938	10.37	6795	990	9.03	7274	1066
	30:1	8.77	6713	1030	8.76	7964	1090	7.76	8583	1170
	40:1	7.03	7008	1240	6.41	7530	1320	5.64	8123	1420
	50:1	5.31	6440	1430	4.80	6820	1520	4.26	7440	1634
155	60:1	4.17	5822	1590	3.77	6176	1690	3.32	6680	1820
	10:1	26.50	7284	1655	24.05	7907	1900	21.26	8672	1980
	15:1	20.78	8266	1800	18.60	8896	2360	16.40	9676	2470
	20:1	15.02	8194	2700	13.56	8848	2810	11.98	9540	3040
	30:1	12.05	8744	3035	10.97	9525	3150	10.46	11273	3300
	40:1	8.44	8275	3150	8.32	9715	3300	7.45	10583	3300
	50:1	7.18	8574	3300	6.46	9105	3300	5.80	9892	3300
175	60:1	5.89	8264	3300	5.41	8848	3300	4.75	9450	3300
	10:1	35.34	9756	1870	32.11	10618	2160	30.38	12487	2300
	15:1	26.63	10682	2300	23.84	11447	2630	20.83	12487	2860
	20:1	20.66	11006	2810	18.48	11787	2970	16.20	12875	3150
	30:1	17.16	12740	3150	15.58	13737	3465	15.06	16470	3600
	40:1	11.96	11627	3665	10.79	12408	3820	10.47	14830	3965
	50:1	9.85	11716	3965	8.81	12495	3965	8.04	13875	3965
200	60:1	8.28	11450	3965	7.80	12742	3965	6.67	13184	3965
	10:1	42.42	12558	2210	38.44	13592	2535	33.72	14916	2645
	20:1	27.24	15060	2645	24.52	16087	3190	24.02	19600	3485
	30:1	22.56	18140	3080	20.53	19432	3620	18.00	23410	3960
	40:1	16.55	16620	3845	14.98	17951	4070	14.36	21414	4845
	50:1	13.95	16910	4410	12.38	17963	4845	11.28	20034	4845
250	60:1	11.58	16299	4845	10.37	17344	4845	9.70	19768	4845
	10:1	73.00	22405	2430	66.60	23029	2630	59.20	27198	3310
	20:1	44.58	25456	3510	39.60	27100	3730	34.90	29371	5060
	30:1	35.64	27767	4180	31.91	29720	4410	29.85	34617	5400
	40:1	26.52	27820	4850	24.05	30332	5510	20.85	32464	5945
	50:1	18.98	25350	5945	17.07	26630	5945	15.97	31170	5945
60:1	16.32	24281	5945	14.50	25750	5945	14.38	31402	5945	

1.O.H.L.:Overhung Load.

2.Applies for continuous service free from recurrent shock loading and does not exceed 8 hours per day.

Specification For Select Type

The correct selection is necessary to use **RBL** worm speed reducer efficiently. Therefore please refer to the following specification before ordering.

Input Shaft Speed

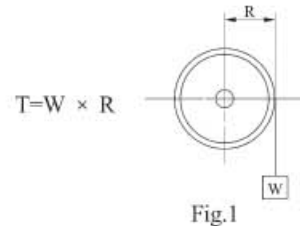
The general input shaft speed is 600~1500r/min, the maximum is 1800r/min. Too low input shaft speed could affect efficiency and lubrication.

Output Shaft Speed

Depends upon the input shaft speed and reduction ratio.

Output Torque T

The transmission torque of reducer depends upon the force that causes the output shaft rotate and the rotary radius. See Fig.1:



Load Factor f

The rating input power and output torque of reducer is established on the basis of an ideal condition that the reducer are operating continuously 8 hours per day under a constant load .If the load or operating condition changes. the output torque changes also .So select suitable type must according to the flowing table 1.

Overhung Load Coefficient f_1

It is due to the O.H.L. that the shaft of the speed reducer bent or its casing cracked. According to table 2, the selected reducer type must meet the following formula:

$$\text{O.H.L.} = \frac{\text{Output torque T}}{\text{Rotary radius R}} \times \text{O.H.L. coefficient } f_1$$

≤ The max. allowed O.H.L. (See page 8~11)

Table1:Load Factor f

Prime Mover	Duration Of Service Per Day	Load Factor f		
		Uniform Load	Moderate Shock	Heavy Shock
Electric Motor	Occasional 1/2h	0.80	0.90	1.00
	Intermittent 2h	0.90	1.00	1.25
	8~10h	1.00	1.25	1.50
	24h	1.25	1.50	1.75

Note: For frequent starts and stops multiply the values listed in the above table by 1.25.

Table 2:Overhung Load (O.H.L.) Coefficient f_1

Transmission Method	Sprocket	Gear	V-belt	Flat Belt
O.H.L. Coefficient f_1	1.00	1.25	1.50	2.50

Example

One conveying machine needs to select a worm speed reducer (input shaft is lower). Its input shaft speed is 1450r/min. Its output shaft speed is 29r/min.Chain pulley transmission, the tensile force is 1000 lbs on full load. The diameter of sprocket's reference circle is 10 in. Operating 10 hours continuously per day. Moderate shook.

Selecting As Follows:

Ratio $i=1450 \div 29=50$

Refer to table 1 , $f=1.25$

Load torque $T=W \times R \times f=1000 \times 10/2 \times 1.25$
 $=6250$ in-lbs

Refer to table 2 , $f_1=1$

O.H.L. $=W \times f_1=1000 \times 1=1000$ lbs

Refer to page 11, select Type 135(50:1),Its max. allowed torque is 6820 in-lbs ,Its max.allowed O.H.L. is 1520 lbs.Thus, FCAY135-50:1 is selected. Otherwise refer to page 9,select Type 516(50:1), Its max. allowed torque is 7110 in-lbs and its max. allowed O.H.L. is 2700 lbs,You can select FCUAY516-50:1 also.

Choice Of Lubricants

The reducer should be filled with the appropriate oil to the center of the oil gauge before putting in operation. Excessive oil levels result in higher operating temperatures which is as undesirable as using too little oil.

After approximately 24 hours of operation the reducer must be drained, flushed thoroughly with light oil, and refilled with fresh recommended oil. This flushing and refilling should be repeated every 2000 to 2500 hours.

Manufacturer's recommended lubricants

Lubricant	Mineral Oil		Compounded Oil		Extreme Pressure Oil	
	15 to 60F -9 to 16C	50 to 125F 10 to 50C	15 to 60F -9 to 16C	50 to 125F 10 to 50C	15 to 60F -9 to 16C	50 to 125F 10 to 50C
AGMA	5	6	7	8	7 EP	8 EP
	Turbo oil 220	Turbo oil 320	Valvata J 460	Valvata J 680	Omala 460	Omala 680
Mobil	DTE oil BB	DTE oil AA	Mobil 600w cylinder oil	Mobil 600w super cylinder oil	Mobil gear 634	Mobil gear 636
	Regal oil R & O 220	Regal oil R & O 320	Vanguard cylinder oil 460	Honor Cylinder oil 680	Meropa 460	Meropa 680
	Teresstic 220	Teresstic 320	Cylesstic TK460	Cylesstic TK680	SPARTAN EP460	SPARTAN EP680
Union 76 div. Union oil co. of CA	Union Turbine oil 220	Union Turbine oil 320	Union steaval A	Union worm gear lube 140	Extra duty NL gear lube 7EP	Extra duty NL gear lube 8EP

Other Products

Worm gear and worm



Worm gear speed reducer



FCG

FCDG

Flexible coupling



FL

Gear rack



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