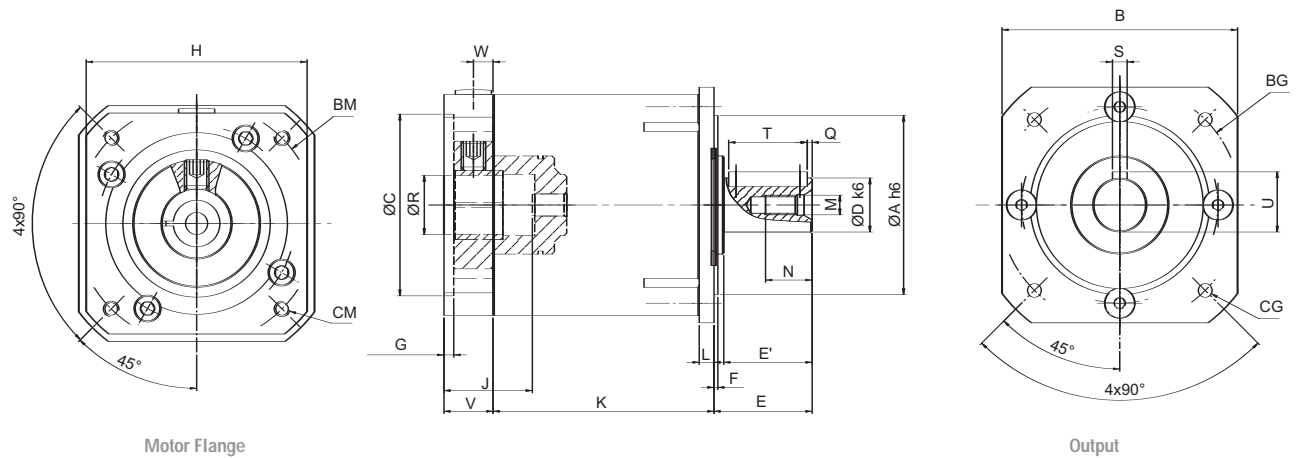


NEMA Speed Reducers



NEMA Dimensions (mm)

Size			NEMA-017	NEMA-023	NEMA-034	NEMA-042
Square Flange	B		2.13	2.99	3.78	5.00
Pilot Ø	A	h6	0.867	1.500	2.875	2.185
Output Shaft Ø	D	k6	0.472	0.630	0.866	1.260
Mounting Bolt Circle	BG		1.725	2.625	3.875	4.950
Mounting Holes	CG		0.126	0.204	0.220	0.283
Shaft Length from Mount Face	E		0.689	1.122	1.575	2.256
Output Shaft Length	E'		0.591	1.060	1.417	2.194
Pilot Length	F		0.098	0.062	0.158	0.062
Flange thickness	L		0.18	0.20	0.24	0.50
Keyway Length	T		0.551	0.866	1.260	1.969
Keyway Position	Q		0.079	0.118	0.079	0.157
Height with Key	U		0.531	0.708	0.965	1.378
Key Width	S	h9	0.157	0.197	0.236	0.394
Thread Size	M		M4	M5	M8	M12
Thread Depth	N		0.315	0.394	0.512	0.866
Reducer Body Length	K	1 stage	2.95	3.69	3.54	4.58
		2 stage	3.58	4.54	4.57	5.85

Motor Interface Dimensions

Motor Pilot Ø	C		1.259	1.535	2.875	2.185
Pilot Length	G		0.098	0.062	0.158	0.185
Square Flange	H		2.165	2.756	3.543	4.724
Bolt Circle for Motor	BM		1.725	2.625	3.875	4.950
Mounting Holes	CM		(4) #4-40 UNC	(4) #10-32 UNC	(4) 1/4-20 UNC	(4) 1/4-20 UNC
Flange Thickness	V		0.790	0.649	0.788	1.024
Maximum Motor Shaft Length	J		0.985	0.945	1.377	1.653
Minimum Motor Shaft Length	J		0.708	0.708	0.945	1.023
Maximum Motor Shaft Ø	R		0.551	0.629	0.945	1.259
Position of Access Hole	W		0.236	0.275	0.315	0.394



NEMA Ratings

Size	U/M		NEMA-017			NEMA-023		NEMA-034		NEMA-042	
			Ratio	Rated TN	Peak TP	Rated TN	Peak TP	Rated TN	Peak TP	Rated TN	Peak TP
Output Torque	Lb-In	1 stage	3	NA	NA	195	390	354	708	885	1770
			5	53	106	195	390	354	708	885	1770
			10	49	97	177	354	327	654	797	1594
		2 stage	15	NA	NA	195	390	354	708	885	1770
			25	53	106	195	390	354	708	885	1770
			30	53	106	195	390	354	708	885	1770
			50	53	106	195	390	354	708	885	1770
100	49	97	177	354	327	654	797	1594			
Backlash	arc min	1 stage	≤ 12		≤ 12		≤ 12		≤ 12		
		2 stage	≤ 15		≤ 15		≤ 15		≤ 15		
Torsional Stiffness	Lb In/arc min	1 stage	3	NA		29.2		79.6		212	
			5	7.16		29.2		79.6		212	
			10	6.64		24.8		66.4		177	
		2 stage	15	NA		29.2		79.6		212	
			25	7.16		29.2		79.6		212	
			30	7.16		29.2		79.6		212	
			50	7.16		29.2		79.6		212	
100	6.64		24.8		66.4		177				
Continuous Input Speed	RPM		4000		3700		3400		2600		
Maximum Input Speed	RPM	8000	6000		6000		4800				
Maximum Radial Load	Lb		150		326		540		613		
Maximum Axial Load	Lb		157		350		427		900		
Efficiency	%	1 stage					> 97				
		2 stage					> 95				
Input Inertia	kgcm ²	1 stage	5.31 x 10 ⁻⁵		2.57 x 10 ⁻⁴		1.53 x 10 ⁻³		4.87 x 10 ⁻³		
		2 stage	4.42 x 10 ⁻⁵		2.30 x 10 ⁻⁴		1.31 x 10 ⁻³		4.07 x 10 ⁻³		
Weight	kg	1 stage	6.64 x 10 ⁻⁴		1.50 x 10 ⁻³		3.54 x 10 ⁻³		7.79 x 10 ⁻³		
		2 stage	8.14 x 10 ⁻⁴		1.86 x 10 ⁻³		4.34 x 10 ⁻³		9.65 x 10 ⁻³		
Noise Level	dB (A)	Measured @ 3000 rpm	≤ 69		≤ 70		≤ 72		≤ 74		
Life	h						20,000				
Lubrication							Grease				
Orientation							Any				