

K Series DISCO

Specifications

DISCO infinitely variable speed drive K series	
Characteristics	Constant torque and constant horsepower interim characteristics
Output shaft torque	At low speed, twice the high-speed torque
Variable speed ratio	6 to 1 (Note: for 15 h.p. and above — 5 to 1)
Output shaft speed	200 to 1,200 rpm with 60 Hz - 4P Motor directly connected (Note: 240 to 1200 rpm for 15 h.p. and above)
Use and selection points	Use for applications where load torque is constant regardless of speed, and select by calculating the load torque at maximum speed
Available Type	Basic (without speed reducer)
	With helical gear speed reducer (2.5:1 through 45:1)

NOTE: DISCO selection covered on pages D-79 and D-80.

Output Shaft Torque vs. Output Shaft Speed (Basic Type)

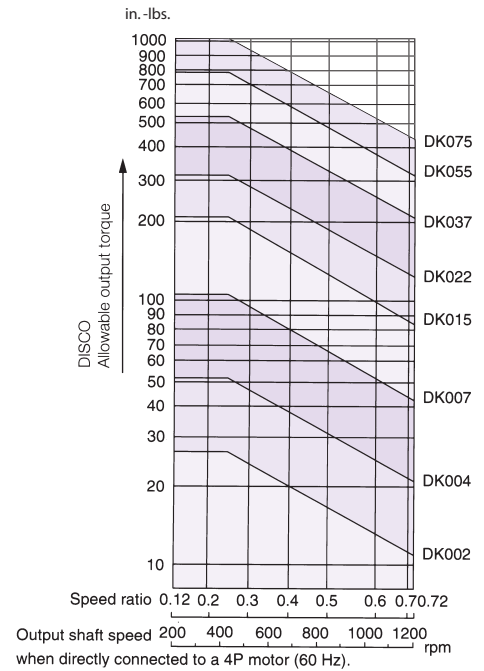


Table of Standard Characteristics

Please refer to the "Output Shaft Torque vs. Output Shaft Speed" graph for the relationship between speed and output shaft torque.

Basic type

Model number			Variable Speed Range	Ratio Range Output rpm / Input rpm	Output shaft speed when directly connected to a 4P-60HZ motor rpm	Output shaft torque in./lbs.		Allowable overhang load lbs.		Allowable thrust load lbs.	
NEMA C-flange input type		Free input type				Input shaft speed up to 1800 rpm		Input shaft	Output shaft	Input shaft	Output shaft
Foot mounted	NEMA C-flange mounted	Foot mounted									
DK002AFN	DK002FNFN	DK002A	6 to 1	1/8.4 ~ 1/1.4	200 ~ 1200	26.0 ~ 11.2	66	88	44	66	
DK004AFN	DK004FNFN	DK004A				52.0 ~ 21.6	88	132	77	110	
DK007AFN	DK007FNFN	DK007A				104 ~ 43	110	220	96	220	
DK015AFN	DK015FNFN	DK015A				208 ~ 87	165	286	136	286	
DK022AFN	DK022FNFN	DK022A				312 ~ 130	330	418	308	374	
DK037AFN	DK037FNFN	DK037A				520 ~ 217	330	418	308	374	
DK055AFN	—	DK055A				780 ~ 329	385	484	330	440	
DK075AFN	—	DK075A				1,040 ~ 433	385	484	330	440	

Note: Output shaft turns same direction as input.
Ratio range is ratio of output rpm to input rpm.

D - PT COMPONENTS

STANDARD MODEL CHARACTERISTICS AND SELECTION PROCEDURE

With R type speed reducer (reduction ratio 2.5:1 and 5:1)

Speed reducer reduction ratio	Model number		Variable Speed Range	Ratio Range (Output rpm / Input rpm)	Output shaft speed when directly connected to a 4P-60HZ motor rpm	Output shaft torque in./lbs.	Allowable overhang load lbs.		Allowable thrust load lbs.	
	NEMA C-flange input type	Free input type				Input shaft speed up to 1800 rpm	Input shaft	Output shaft	Input shaft	Output shaft
	Foot mounted	Foot mounted								
2.5:1	DK002A R2.5FN DK004A R2.5FN DK007A R2.5FN	DK002A R2.5 DK004A R2.5 DK007A R2.5	6 to 1	1/21 ~ 1/3.5	80 ~ 480	62 ~ 27	66	154	44	50
						124 ~ 51	88	242	77	81
						247 ~ 102	110	374	96	125
	444 ~ 207	165				726	136	242		
	741 ~ 309	330				1,057	308	352		
	1,235 ~ 515	330				1,057	308	352		
DK055A R2.5FN DK075A R2.5FN	DK055A R2.5 DK075A R2.5	6 to 1	1/42 ~ 1/7	40 ~ 240	1,855 ~ 771	385	1,431	330	477	
					2,470 ~ 1,031	385	1,431	330	477	
					124 ~ 54	66	154	44	50	
5:1	DK002A R5FN DK004A R5FN DK007A R5FN	DK002A R5 DK004A R5 DK007A R5	6 to 1	1/42 ~ 1/7	40 ~ 240	248 ~ 102	88	242	77	81
						494 ~ 204	110	374	96	125
						988 ~ 414	165	726	136	242
	1,482 ~ 618	330				1,057	308	352		
	2,470 ~ 1,030	330				1,057	308	352		
	3,710 ~ 1,543	385				1,431	330	477		
DK055A R5FN DK075A R5FN	DK055A R5 DK075A R5	6 to 1	1/42 ~ 1/7	40 ~ 240	4,841 ~ 2,063	385	1,431	330	477	

Output shaft turns opposite direction as input.

