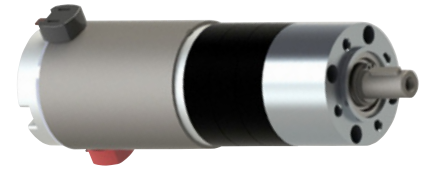


Series 121-8

2.1" DC Planetary Gear Motor (Metal)

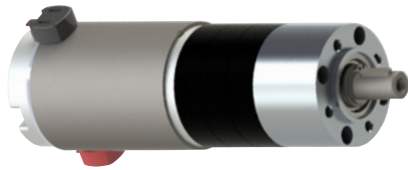
Continued



PERFORMANCE

PART NUMBER	RATIO	VOLTS NOM	NO LOAD SPEED	NO LOAD CURRENT	LOAD SPEED	LOAD TORQUE	LOAD CURRENT	MAX. THEORETICAL TORQUE (* INDICATES GEARBOX LIMIT)			DIM "A" MAX INCH [mm]	DIM "B" MAX INCH [mm]			
			WNL	INL	W	TL	IL	IN-OZ	R.P.M.	AMPS					
			R.P.M.	AMPS	R.P.M.	IN-OZ	AMPS								
			NOM.	MAX.	NOM.	REF.	MAX.						REF.	REF.	REF.
121-81216-5	5:1	12	400	0.7	300	66	2.8	255	STALL	9	5.5 [140]	5.9 [150]			
121-81232-5			670	1.3	570	45	3.8	298	STALL	17					
121-81248-5			935	2.0	845	33	4.7	300	STALL	26					
121-81216-27	27:1		12	80	0.7	55	335	2.8	1037	STALL	7	6.0 [153]	6.4 [163]		
121-81232-27				130	1.5	105	258	4.0	1309	STALL	14				
121-81248-27				180	2.6	160	167	4.9	1550	STALL	24				
121-81216-130	130:1			12	15	0.8	10	1502	2.6	3540*	5	5	6.6 [167]	7.0 [178]	
121-81232-130					25	2.1	25	1024	3.9	3540*	20	9			
121-81248-130					35	3.1	35	751	4.7	3540*	25	11			
121-81216-642	642:1	12			3.3	0.8	2.5	2655	1.7	3540*	2	2	7.1 [181]	7.5 [191]	
121-81232-642					5.5	1.6	5	2655	2.0	3540*	5	2			
121-81248-642					8	2.4	6	2655	3.9	3540*	5	5			
121-82416-5	5:1		24		420	0.4	330	66	1.3	310	STALL	5	5.5 [140]	5.9 [150]	
121-82432-5					700	0.7	605	51	2.0	386	STALL	11			
121-82448-5					1005	1.0	915	39	2.5	437	STALL	18			
121-82416-27	27:1			24	80	0.4	65	335	1.4	1527	STALL	5	6.0 [153]	6.4 [163]	
121-82432-27					135	0.9	115	258	2.2	1699*	15	10			
121-82448-27					190	1.3	175	197	2.5	1699*	50	12			
121-82416-130	130:1	24			15	0.5	15	1500	1.3	3540*	10	3	6.6 [167]	7.0 [178]	
121-82432-130					25	1.0	25	1160	2.1	3540*	15	5			
121-82448-130					40	1.5	35	887	2.5	3540*	30	6			
121-82416-642	642:1				24	3.4	0.5	2.8	2655	0.8	3540*	3	1	7.1 [181]	7.5 [191]
121-82432-642						5.6	1.0	4.8	2655	1.5	3540*	5	2		
121-82448-642						8	1.5	5	2655	2.0	3540*	4	2		

For Encoder, Add C, D, or M to end of part number. (C=100 CPR, D=500 & M=1000)



Series 121-8

2.1" DC Planetary Gear Motor (Metal)

Continued

121-8

2.1" DC Planetary Gear Motor (Metal)

CHARACTERISTICS				
Stages	1 Stage	2 Stages	3 Stages	4 Stages
Max Torque	35.4 inlb	106.2 inlb	221 inlb	221 inlb
GB Eff	80%	75%	70%	65%
Max Backlash	0.70 Deg	0.75 Deg	0.80 Deg	0.85 Deg
Max Radial Load	45 lbf	72 lbf	101 lbf	112 lbf
Max Axial Load	13.5 lbf	22.5 lbf	33.7 lbf	45 lbf
GB Weight	0.88 lb	2 lb	2.43 lb	2.87 lb

AVAILABLE RATIOS													
1 Stage		2 Stages				3 Stages				4 Stages			
Spur	Helical	Spur	Helical	Spur	Helical	Spur	Helical	Spur	Helical	Spur	Helical	Spur	Helical
3:1 (3.70)	4:1 (3.65)	14:1 (13.73)	14:1 (13.53)	51:1 (50.89)	50:1 (50.16)	189:1 (188.61)	186:1 (185.88)						
4:1 (4.28)	5:1 (4.59)	16:1 (15.88)	16:1 (15.65)	59:1 (58.85)	58:1 (58.01)	218:1 (218.12)	215:1 (214.96)						
5:1 (5.18)	5:1 (5.36)	18:1 (18.36)	18:1 (17.01)	68:1 (68.06)	67:1 (67.08)	252:1 (252.24)	249:1 (248.59)						
7:1 (6.75)	7:1 (6.55)	19:1 (19.20)	19:1 (18.92)	71:1 (71.16)	70:1 (70.13)	264:1 (263.72)	260:1 (259.91)						
	9:1 (8.63)	22:1 (22.20)	22:1 (22.96)	79:1 (78.71)	81:1 (81.11)	292:1 (291.71)	287:1 (287.49)						
		25:1 (25.01)	25:1 (24.65)	93:1 (92.70)	91:1 (91.36)	305:1 (304.99)	301:1 (300.57)						
		27:1 (26.85)	27:1 (27.76)	95:1 (95.17)	98:1 (98.07)	337:1 (337.35)	339:1 (338.56)						
		29:1 (28.93)	29:1 (28.05)	100:1 (99.50)	101:1 (101.89)	344:1 (343.54)	348:1 (347.60)						
		35:1 (34.97)	35:1 (33.92)	107:1 (107.20)	106:1 (105.65)	353:1 (352.71)	361:1 (361.17)						
		46:1 (45.56)	46:1 (44.69)	115:1 (115.07)	115:1 (114.77)	369:1 (368.76)	365:1 (364.66)						
			58:1 (58.22)	124:1 (123.97)	123:1 (123.20)	397:1 (397.29)	392:1 (391.53)						
				130:1 (129.62)	128:1 (127.74)	408:1 (407.89)	420:1 (420.28)						
				139:1 (139.13)	137:1 (136.99)	426:1 (426.46)	425:1 (425.34)						
				150:1 (149.90)	145:1 (145.36)	459:1 (459.45)	457:1 (456.56)						
				169:1 (168.84)	166:1 (166.40)	480:1 (480.36)	473:1 (473.40)						
				181:1 (181.24)	176:1 (175.75)	493:1 (493.18)	492:1 (491.89)						
				195:1 (195.26)	192:1 (191.54)	516:1 (515.62)	515:1 (515.24)						
				236:1 (236.09)	232:1 (231.59)	531:1 (531.34)	533:1 (533.08)						
				308:1 (307.54)	302:1 (301.68)	556:1 (555.52)	547:1 (547.47)						
					393:1 (392.98)	596:1 (596.30)	595:1 (594.73)						
						626:1 (625.73)	623:1 (622.97)						
						642:1 (642.42)	638:1 (638.40)						
						672:1 (671.67)	679:1 (678.94)						
						721:1 (720.98)	713:1 (713.15)						
						724:1 (723.63)	745:1 (745.38)						
						777:1 (776.76)	775:1 (774.72)						
						837:1 (836.86)	832:1 (831.60)						
						875:1 (874.94)	862:1 (862.27)						
						939:1 (939.18)	925:1 (924.65)						
						1012:1 (1011.84)	1046:1 (1046.08)						
						1140:1 (1139.73)	1123:1 (1123.21)						
						1223:1 (1223.41)	1200:1 (1200.07)						
						1318:1 (1318.05)	1393:1 (1292.91)						
						1594:1 (1593.65)	1563:1 (1563.24)						
						2076:1 (2075.94)	2036:1 (2036.33)						
							2653:1 (2652.59)						

Note: Ratios in () denote actual values.