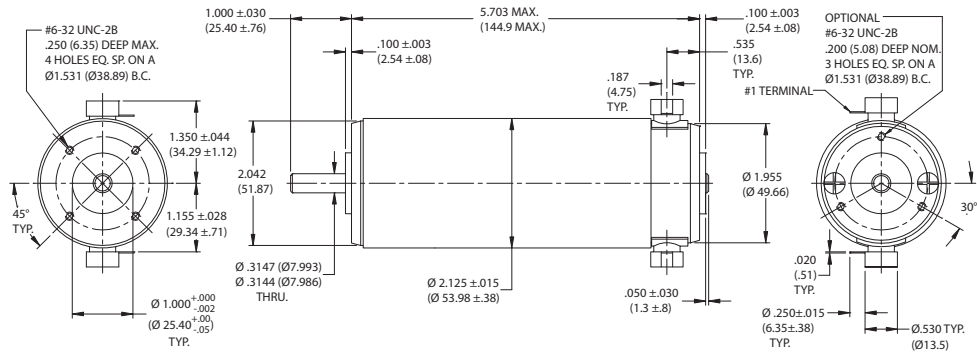


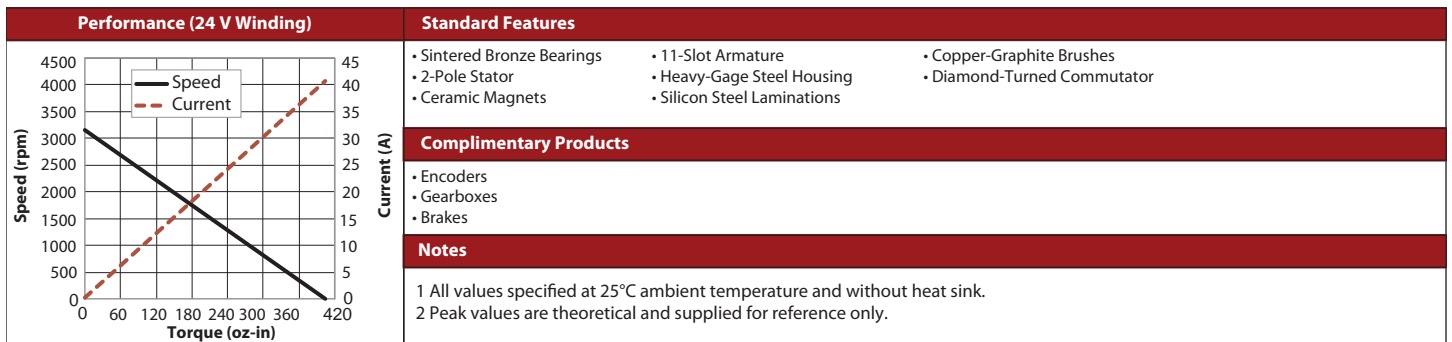
Brush Commutated DC Servo Motors

14207 Series

PITTMAN®



		Part/Model Number							
Specification	Units	14207 15.2 V	14207 19.1 V	14207 24.0 V	14207 30.3 V	14207 38.2 V	14207 48.0 V	14207 60.0 V	14207 76.4 V
Supply Voltage	VDC	15.2	19.1	24.0	30.3	38.2	48.0	60.6	76.4
Continuous Torque	oz-in Nm	50 0.353	50 0.353	50 0.353	50 0.353	50 0.353	50 0.353	50 0.353	50 0.353
Speed @ Cont. Torque	RPM	2910	2770	2810	2810	2820	2840	2830	2830
Current @ Cont. Torque	Amps (A)	9.98	7.48	5.98	4.71	3.74	2.99	2.37	1.87
Continuous Output Power	Watts (W)	108	102	104	104	104	105	105	105
Motor Constant	oz-in/sqrt W Nm/sqrt W	12 0.085	13 0.092	13 0.092	13 0.092	13 0.092	13 0.092	13 0.092	13 0.092
Torque Constant	oz-in/A Nm/A	6.00 0.0424	8.00 0.0565	10.0 0.0706	12.7 0.0897	16.0 0.113	20.0 0.1412	25.3 0.1786	32.0 0.2259
Voltage Constant	V/krpm V/rad/s	4.44 0.0424	5.92 0.0565	7.39 0.0706	9.39 0.0897	11.8 0.1127	14.8 0.1413	18.7 0.1786	23.7 0.2263
Terminal Resistance	Ohms	0.24	0.39	0.59	0.93	1.46	2.29	3.64	5.78
Inductance	mH	0.31	0.56	0.87	1.40	2.23	3.48	5.58	8.93
No-Load Current	Amps (A)	0.51	0.38	0.30	0.24	0.19	0.15	0.12	0.090
No-Load Speed	RPM	3330	3140	3160	3140	3140	3160	3150	3140
Peak Current	Amps (A)	63.3	49.0	40.7	32.6	26.2	21.0	16.6	13.2
Peak Torque	oz-in Nm	377 2.6616	389 2.7463	404 2.8522	411 2.9017	416 2.937	416 2.937	418 2.9511	420 2.9652
Coulomb Friction Torque	oz-in Nm	2.2 0.0155	2.2 0.0155	2.2 0.0155	2.2 0.0155	2.2 0.0155	2.2 0.0155	2.2 0.0155	2.2 0.0155
Viscous Damping Factor	oz-in/krpm Nm s/rad	0.25 1.68E-5	0.25 1.68E-5	0.25 1.68E-5	0.25 1.68E-5	0.25 1.68E-5	0.25 1.68E-5	0.25 1.68E-5	0.25 1.68E-5
Electrical Time Constant	ms	1.3	1.4	1.5	1.5	1.5	1.5	1.5	1.5
Mechanical Time Constant	ms	6.3	5.8	5.6	5.5	5.4	5.4	5.4	5.4
Thermal Time Constant	min	32	32	32	32	32	32	32	32
Thermal Resistance	Celsius/W	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max. Winding Temperature	Celsius	155	155	155	155	155	155	155	155
Rotor Inertia	oz-in-sec ² kg-m ²	0.0067 4.73E-5	0.0067 4.73E-5	0.0067 4.73E-5	0.0067 4.73E-5	0.0067 4.73E-5	0.0067 4.73E-5	0.0067 4.73E-5	0.0067 4.73E-5
Weight (Mass)	oz g	54.5 1545	54.5 1545	54.5 1545	54.5 1545	54.5 1545	54.5 1545	54.5 1545	54.5 1545



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