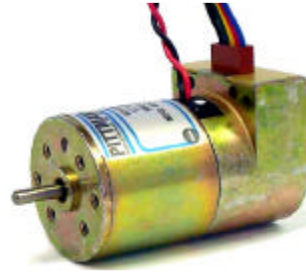


9232S003

Lo-Cog® DC Servo Motor



Assembly Data	Symbol	Units	Value	
Reference Voltage	E	V	24	
No-Load Speed	S _{NL}	rpm (rad/s)	7,015	(735)
Continuous Torque (Max.) ¹	T _C	oz-in (N-m)	2.4	(1.7E-02)
Peak Torque (Stall) ²	T _{PK}	oz-in (N-m)	14	(9.7E-02)
Weight	W _M	oz (g)	10	(283)
Motor Data				
Torque Constant	K _T	oz-in/A (N-m/A)	4.40	(3.11E-02)
Back-EMF Constant	K _E	V/krpm (V/rad/s)	3.25	(3.11E-02)
Resistance	R _T	Ω	7.38	
Inductance	L	mH	4.64	
No-Load Current	I _{NL}	A	0.16	
Peak Current (Stall) ²	I _P	A	3.25	
Motor Constant	K _M	oz-in/√W (N-m/√W)	1.62	(1.14E-02)
Friction Torque	T _F	oz-in (N-m)	0.50	(3.5E-03)
Rotor Inertia	J _M	oz-in-s ² (kg-m ²)	2.7E-04	(1.9E-06)
Electrical Time Constant	τ _E	ms	0.63	
Mechanical Time Constant	τ _M	ms	14.4	
Viscous Damping	D	oz-in/krpm (N-m-s)	0.027	(1.8E-06)
Damping Constant	K _D	oz-in/krpm (N-m-s)	1.9	(1.3E-04)
Maximum Winding Temperature	θ _{MAX}	°F (°C)	311	(155)
Thermal Impedance	R _{TH}	°F/watt (°C/watt)	72.9	(22.7)
Thermal Time Constant	τ _{TH}	min	7.2	
Gearbox Data				
Encoder Data				
Channels			3	
Resolution		CPR	500	

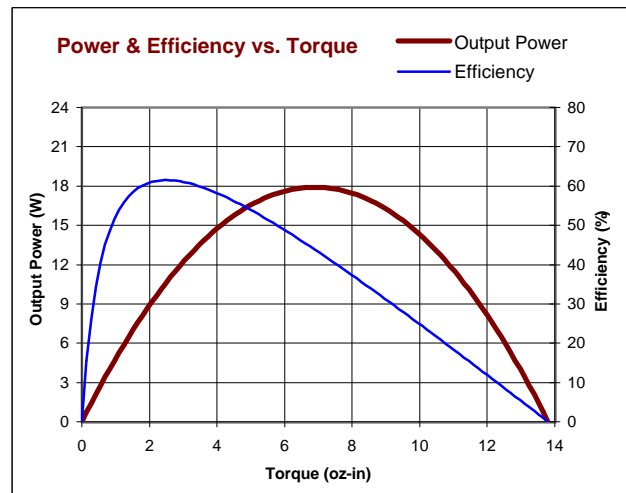
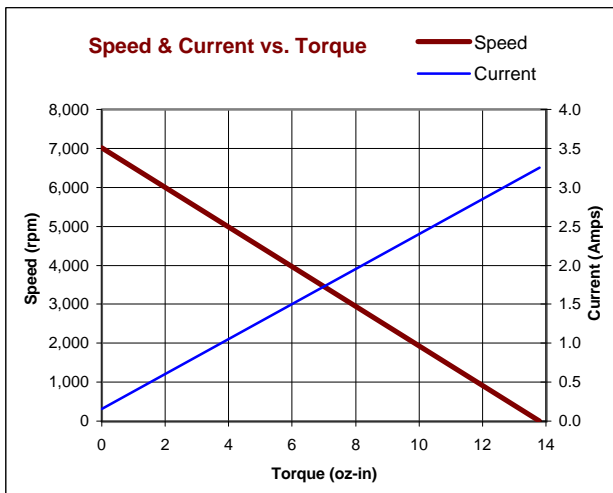
1 - Specified at max. winding temperature at 25°C ambient without heat sink. 2 - Theoretical values supplied for reference only.

Included Features

- 2-Pole Stator
- Ceramic Magnets
- Heavy-Gauge Steel Housing
- 7-Slot Armature
- Silicon Steel Laminations
- Stainless Steel Shaft
- Copper-Graphite Brushes
- Diamond Turned Commutator
- Motor Ball Bearings

Customization Options

- Alternate Winding
- Sleeve or Ball Bearings
- Modified Output Shaft
- Custom Cable Assembly
- Special Brushes
- EMI/RFI Suppression
- Spur or Planetary Gearbox
- Special Lubricant
- Optional Encoder
- Fail-Safe Brake



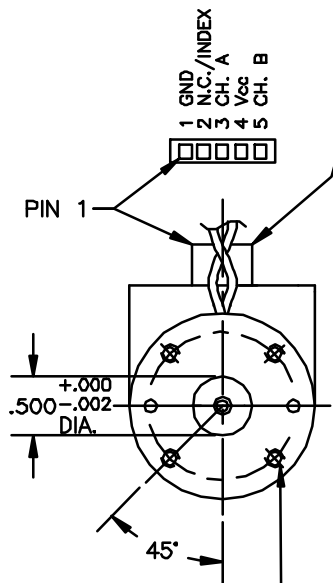
All values are nominal. Specifications subject to change without notice. Graphs are shown for reference only.

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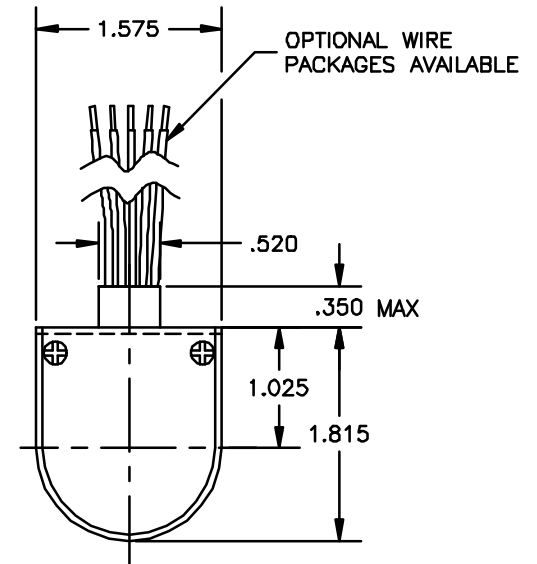
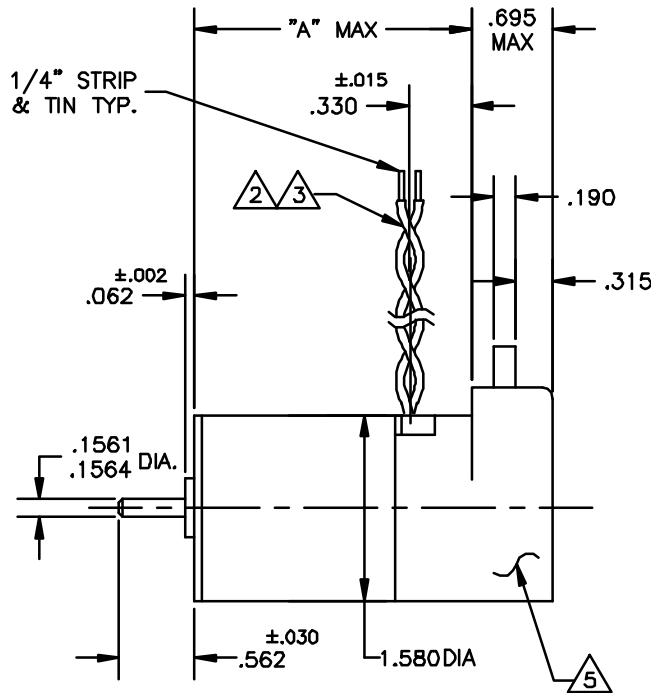
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REVISIONS				
LTR	DESCRIPTION	DRFT/ENGR	DATE	APPR
D	REDRAWN, UPDATED TO CURRENT STDS	KUH/KUH	5/12/98	JRM
E	.330 WAS .315	TMG/DLF	4/3/01	JRM
F	SPECIFIED TOLERANCE FOR DIM. .562	TMG/TMG		

MOLEX CENTER CRIMP TERMINAL HOUSING 2695 WILL ACCEPT MOLEX MATING TERMINALS 2759



#6-32 UNC-2B,
.350 DP. MAX.
4 HOLES EQ. SP.
ON A 1.000 DIA. B.C.



92X6	3.021
92X5	2.671
92X4	2.371
92X3	2.171
92X2	1.796
MODEL NO.	"A" MAX

NOTES:

- SHAFT ROTATION IS CW WHILE VIEWING MOUNTING END WITH POSITIVE (+) VOLTAGE APPLIED TO THE RED LEAD.
- LEADS ARE 22 AWG (7X30), PVC INSULATED, UL STYLE 1569/1007. ONE LEAD IS RED, THE OTHER IS BLACK.
- STANDARD LEAD LENGTH IS 18 ± 1/2 INCHES.
- BALL BEARINGS ARE PRELOADED PER P-107.
- ENCLOSED IS A HP HEDS-91X0 OPTICAL ENCODER MODULE.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		FILE: 150\402		
TOLERANCES ARE:				
FRACTION ±1/64	DECIMAL ±.015	DRAFTED BY KUH	DATE 5/11/98	TITLE: OUTLINE & MOUNTING DIMENSIONS 9200 SERIES MOTOR WITH 9100 H.P. ENCODER MODULE
	ANGLES ±1°	ENGINEERED BY KUH	5/11/98	
	BREAK ALL SHARP EDGES	APPROVED BY JR MELA	5/12/98	
MATERIAL:		NEXT ASSY:		
FINISH:		USED ON:		DWG. NO. B-150-402 SCALE: DNS SHEET 1 OF 1
				REV. F