9234S007

Lo-Cog® DC Servo Motor

Assembly Data	Symbol	Units	Value	
Reference Voltage	E	V	24	
No-Load Speed	S_{NL}	rpm (rad/s)	6,151	(644)
Continuous Torque (Max.)[1]	T_C	oz-in (N-m)	6.1	(4.3E-02)
Peak Torque (Stall)[2]	T_{PK}	oz-in (N-m)	41	(2.9E-01)
Weight	W_M	oz (g)	13	(371)
Motor Data				
Torque Constant	K_T	oz-in/A (N-m/A)	5.17	(3.65E-02)
Back-EMF Constant	K_E	V/krpm (V/rad/s)	3.82	(3.65E-02)
Resistance	R_T	Ω	2.96	
Inductance	L	mH	2.51	
No-Load Current	I_{NL}	A	0.16	
Peak Current (Stall)[2]	I_P	A	8.11	
Motor Constant	K_M	oz-in/√W (N-m/√W)	3.01	(2.13E-02)
Friction Torque	T_F	oz-in (N-m)	0.60	(4.2E-03)
Rotor Inertia	J_M	oz-in-s^2 (kg-m^2)	5.9E-04	(4.2E-06)
Electrical Time Constant	τ_E	ms	0.85	
Mechanical Time Constant	τ_M	ms	9.3	
Viscous Damping	D	oz-in/krpm (N-m-s)	0.039	(2.6E-06)
Damping Constant	K_D	oz-in/krpm (N-m-s)	6.7	(4.5E-04)
Maximum Winding Temperature	θ_{MAX}	ºF (ºC)	311	(155)
Thermal Impedance	R_{TH}	ºF/watt (ºC/watt)	62.8	(17.1)
Thermal Time Constant	τ_{TH}	min	12.0	
Gearbox Data				
Encoder Data				
Channels			3	
Resolution		CPR	500	

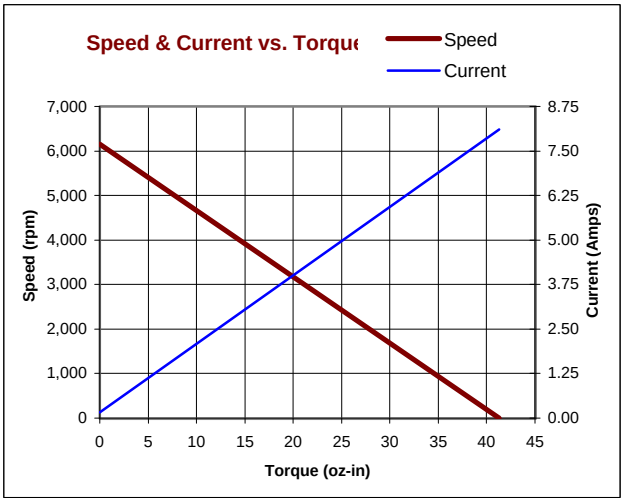
1 - Specified at max. winding temperature at 25ºC ambient without heat sink. 2 - Theoretical values supplied for reference only.

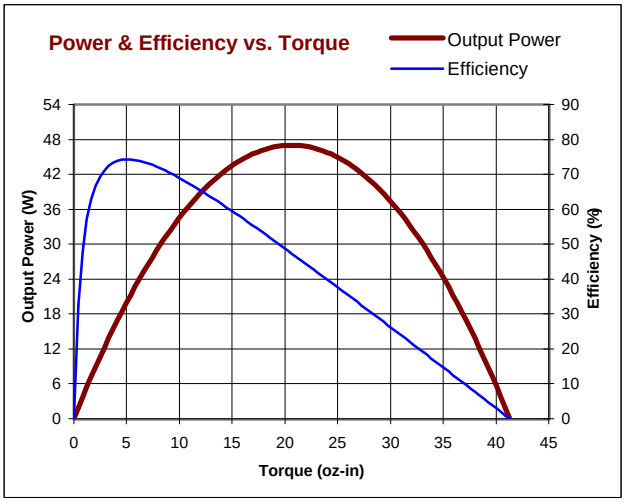
Included Features

2-Pole Stator
Ceramic Magnets
Heavy-Guage 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





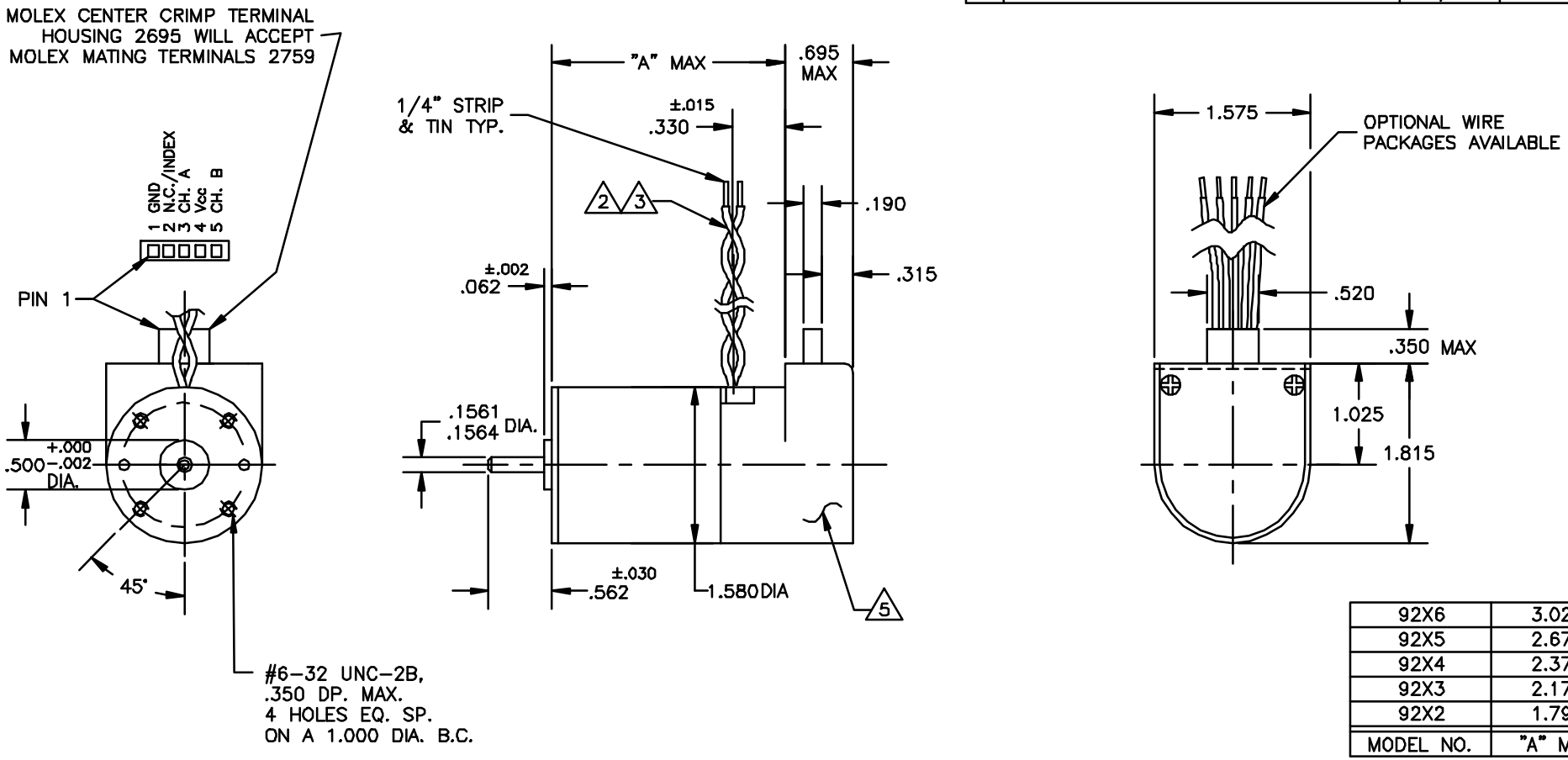
All values are nominal. Specifications subject to change without notice. Graphs are shown for reference only.

PITTMAN, 343 Godshall Drive, Harleysville, PA 19438, Phone: 877-PITTMAN, Fax: 215-256-1338, E-mail: info@pittmannet.com, Web Site: www.pittmannet.com

UNCONTROLLED

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		



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

NOTES:

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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTION ±1/64 DECIMAL .X ±.015 .XX ±.010 .XXX±.005 ANGLES ±1°
BREAK ALL SHARP EDGES

MATERIAL:

FINISH:

FILE: 150\402

DRAFTED BY	KUH	DATE 5/11/98
ENGINEERED BY	KUH	5/11/98
APPROVED BY	JR MELA	5/12/98

NEXT ASSY:

USED ON:

PITTMAN

TITLE: OUTLINE & MOUNTING DIMENSIONS 9200 SERIES MOTOR WITH 9100 H.P. ENCODER MODULE

DWG. NO. B- 150-402 REV. F

SCALE: DNS SHEET 1 OF 1