

**ELWOOD HIGH PERFORMANCE MOTORS  
1326AS MOTOR DATA**

[http://www.elwood.com/d1326AS\\_Mtr\\_Data.pdf](http://www.elwood.com/d1326AS_Mtr_Data.pdf)



MOTOR MODEL		1326AS- B310H	1326AS- B330H	1326AS- B420G	1326AS- B440G	1326AS- B460F	1326AS- B630F	1326AS- B660E	1326AS- B690E
<b>MECHANICAL DATA (1)</b>									
Rated Torque, Cont (Stall)	Nm	0.7	2.1	3.2	6.4	9.0	10.7	21.5	36.4
	lb-in	6.1	18.0	28.0	56.0	80.0	95.0	190.0	322.0
Peak Torque (Stall)	Nm	2.1	5.6	7.3	19	21.9	25.4	54.2	79.1
	lb-in	18	50	65	168	194	225	480	700
Rated Current	A <sub>0-PK</sub>	1.1	3	3.7	7.6	8.8	11	16.7	26.9
Rated Power	kW	0.3	0.9	1.2	2.0	2.8	2.4	3.4	5.0
	hp	0.4	1.2	1.6	2.7	3.8	3.2	4.6	6.7
Rated Voltage (Drive Supply)	V <sub>rms</sub>	460	460	460	460	460	460	460	460
Rotor Moment of Inertia	kg-m <sup>2</sup>	0.000045	0.00009	0.0003	0.0005	0.00075	0.0014	0.0025	0.0036
	lb-in-s <sup>2</sup>	0.0004	0.0008	0.0027	0.0046	0.0066	0.012	0.022	0.032
Rotor Moment of Inertia Brake Motors	kg-m <sup>2</sup>	0.00004	0.0001	0.0004	0.0006	0.0008	0.0015	0.0026	0.0037
	lb-in-s <sup>2</sup>	0.00037	0.00087	0.0034	0.0053	0.0073	0.019	0.029	0.039
Motor Shipping Weight	kg	2.8	4.3	8.1	11.7	13.8	18.3	26.9	34.8
	lb	6.2	9.5	17.8	25.7	30.4	40.3	59.2	76.6
Motor Shipping Weight Brake Motors	kg	4.3	5.8	10.1	13.7	15.8	21.3	29.9	37.8
	lb	9.5	12.8	22.2	30.1	34.8	46.9	65.8	83.2
Damping	Nm/krpm	0.01	0.01	0.02	0.03	0.03	0.06	0.06	0.07
	lb-in/krpm	0.1	0.1	0.2	0.2	0.3	0.5	0.6	0.6
Friction Torque	Nm	0.01	0.02	0.04	0.06	0.08	0.12	0.15	0.17
	lb-in	0.1	0.2	0.3	0.5	0.7	1.1	1.3	1.5
Max. Operating Speed	rpm	6200	6500	5250	5250	4300	4500	3000	3000
<b>WINDING DATA (1)</b>									
Poles		6	6	6	6	6	8	8	8
K <sub>T</sub> , Sine Wave Torque Constant (2)	Nm/A <sub>0-PK</sub>	0.74	0.74	0.88	0.88	1.12	1.58	2.09	2.16
	lb-in/A <sub>0-PK</sub>	6.51	6.51	7.85	7.85	9.90	13.983	18.4965	19.116
K <sub>E</sub> , Voltage Constant (4)	V <sub>0-PK</sub> /kRPM	89.1	89.1	107.5	107.5	135.7	135.7	184.7	184.7
Winding Resistance Phase to Phase at 25±5°C	Ohms ±15%	52.4	10.2	6.9	2.5	2.2	1.1	0.76	0.56
Winding Inductance Phase to Phase	mH	72.0	24.0	27.0	10.0	12.0	9.5	8.6	5.8
Thermal Constant (R <sub>th</sub> )	°C/W	0.93	0.79	0.84	0.49	0.39	0.25	0.22	0.20
Thermal Constant (C <sub>th</sub> )	W-s/°C	500	1483	3646	5053	4750	8824	11613	22500
Dielectric Rating		Power Leads (R,S,T) to Ground:1500 VACrms 50/60 Hz for 1 minute.							
(1) Specifications are at 25°C unless otherwise noted.						(3) Peak value of per phase square wave Amperes			
(2) Peak value of per phase sine wave Amperes						(4) Volts 0-peak Line-Line / kRPM			

<b>STORAGE AND OPERATING CONDITIONS</b>	
Ambient Temperature	Operating: 0° to 40°C (32° to 104°F) Storage: -30° to 70°C (-25° to 158°F)
Relative Humidity	5% to 95% non-condensing

<b>THERMOSTAT RATINGS</b>	
Rated Voltage	0-250 Volts DC or 50/60 Hz AC*
Rated Current	2.5 Amps @ Power Factor of 1.0 1.6 Amps @ Power Factor of 0.6
Maximum Switching Current	5 Amps
Contact Resistance	<0.10 Ohms maximum
Contacts	Normally closed
Insulation Dielectric	Mylar Nomex capable of withstanding 1500 VAC RMS 50/60 Hz for 1 minute
Opening Temperature (+/- 5°C)	140°C

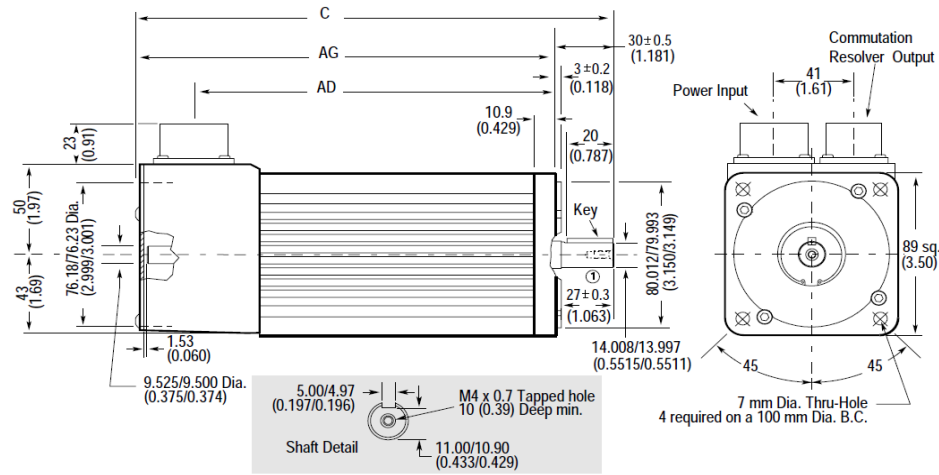
\*The thermostat is normally used as a switch for a 15VDC logic signal.

**ELWOOD HIGH PERFORMANCE MOTORS  
1326AS DIMENSIONAL DATA**

[http://www.elwood.com/d1326AS\\_Mtr\\_Data.pdf](http://www.elwood.com/d1326AS_Mtr_Data.pdf)



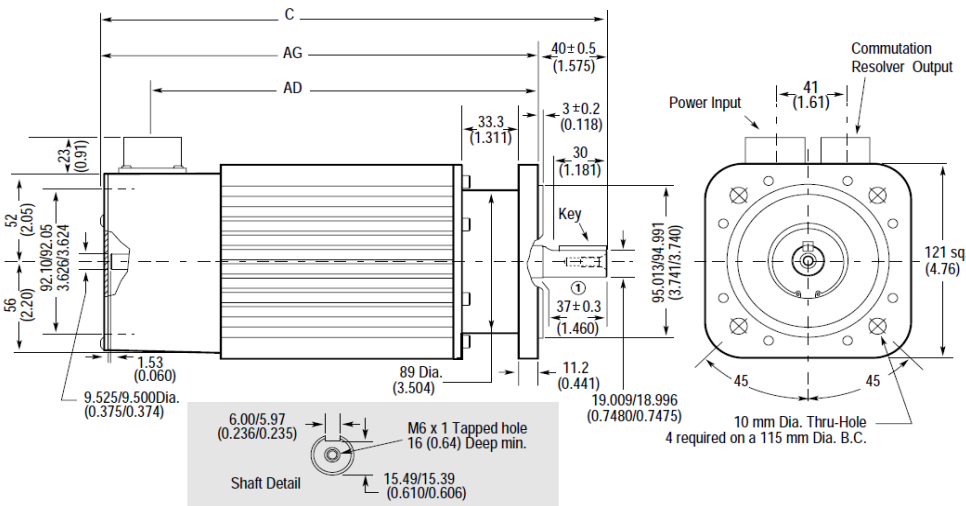
Motor Dimensions - 1326AS-B3 Series Servo Motor



FLANGE MOUNT						
Catalog Number	Description	AD (in/mm)	AG (in/mm)	C (in/mm)	Key (in/mm)	End milled keyway (full depth) (in/mm)
1326AS-B310x-21	without brake <sup>1</sup>	5.32 (135)	6.50 (165)	7.68 (195)	0.197x0.197x0.79 (5x5x20)	0.79 (20)
1326AS-B330x-21	without brake <sup>1</sup>	7.32 (186)	8.50 (216)	9.68 (246)	0.197x0.197x0.79 (5x5x20)	0.79 (20)

<sup>1</sup> If you are ordering a 1326AS-B3xxx-21-K3 with an optional 24V DC 2.26 N-m (20 lb-in.) brake, add 39 mm (1.54 in.) to AD, AG and C. Dimensions are per NEMA Standards MG 7-2.4.1.3 and IEC 72-1. Shaft and pilot tolerances are per DIN 42955, N tolerance.

Motor Dimensions - 1326AS-B4 Series Servo Motor

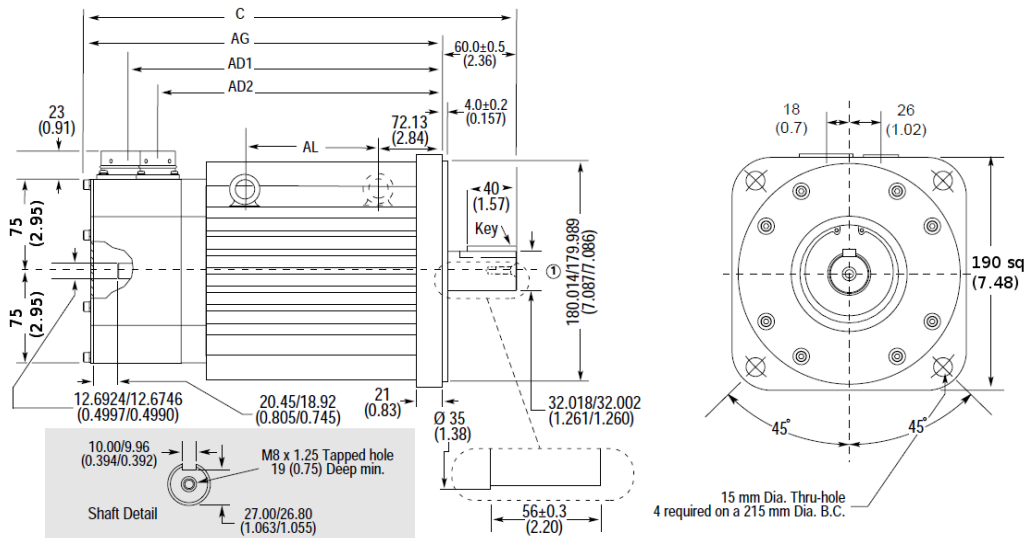


FLANGE MOUNT						
Catalog Number	Description	AD (in/mm)	AG (in/mm)	C (in/mm)	Key (in/mm)	End milled keyway (full depth) (in/mm)
1326AS-B420x-21	without brake <sup>1</sup>	8.19 (208)	9.38 (238)	10.95 (278)	0.236x0.236x.18 (6x6x30)	1.18 (30.0)
1326AS-B440x-21	without brake <sup>1</sup>	10.19 (259)	11.38 (289)	12.95 (329)	0.236x0.236x.18 (6x6x30)	1.18 (30.0)
1326AS-B460x-21	without brake <sup>1</sup>	12.19 (310)	13.38 (340)	14.95 (380)	0.236x0.236x.18 (6x6x30)	1.19 (30.0)

<sup>1</sup> If you are ordering a 1326AS-B4xxx-21-K4 with an optional 24V DC 10.2 N-m (90 lb-in.) brake, add 46 mm (1.81 in.) to AD, AG and C. Dimensions are per NEMA Standards MG 7-2.4.1.3 and IEC 72-1. Shaft and pilot tolerances are per DIN 42955, N tolerance.



Motor Dimensions - 1326AS-B6 Series Servo Motor



FLANGE MOUNT								
Catalog Number	Description	AL (in/mm)	AD1 (in/mm)	AD2 (in/mm)	AG (in/mm)	C (in/mm)	Key (in/mm)	End milled keyway (full depth) (in/mm)
1326AS-B630x-21	without brake <sup>1</sup>	2.71 (69)	10.03 (255)	9.09 (231)	11.45 (291)	13.81 (351)	0.394x0.315x1.57 (10x8x40)	1.57 (40.0)
1326AS-B660x-21	without brake <sup>1</sup>	5.71 (145)	13.03 (331)	12.09 (307)	14.45 (367)	16.81 (427)	0.394x0.315x1.57 (10x8x40)	1.57 (40.0)
1326AS-B690x-21	without brake <sup>1</sup>	8.71 (221)	16.03 (407)	15.09 (383)	17.45 (443)	19.81 (503)	0.394x0.315x1.57 (10x8x40)	1.57 (40.0)

<sup>1</sup> If you are ordering a 1326AS-B6xxx-21-K6 with an optional 24V DC 36.7 N-m (325 lb-in.) brake, add 54 mm (2.13 in.) to AL, AD1, AD2, AG, and C. Dimensions are per NEMA Standards MG 7-2.4.1.3 and IEC 72-1. Shaft and pilot tolerances are per DIN 42955, N tolerance. The eye bolt diameter is 30.48 mm (1.20in) O.D.x 19.05 mm (0.75 in) I.D.

**ELWOOD HIGH PERFORMANCE MOTORS  
1326AS CONNECTOR DATA**

[http://www.elwood.com/d1326AS\\_Mtr\\_Data.pdf](http://www.elwood.com/d1326AS_Mtr_Data.pdf)



1326AS Motor Resolver	
Pin	Signal
A	Axis R1
B	Axis R2
C	no connection
D	Axis S1
E	Axis S3
F	no connection
G	Axis S4
H	Axis S2
I	no connection
J	no connection

1326AS Motor Power and Brake	
Pin	Signal
1	Power
2	Power
3	Power
4	Brake
5	Thermostat
6	Brake
7	Braided shield
8	Ground
9	Thermostat

**SHAFT SEALS**

**1326AS-Series Motor Shaft Seals**

Motor Series	Part Number	Size (OD x ID x Thickness)
1326AS-B3xx	0019-1047	35mm x 15mm x 7mm
1326AS-B4xx	0019-1058	52mm x 20mm 7mm
1326AS-B6xx	0019-1036	80mm x 35mm x 8mm

**CABLES: CONTINUOUS FLEX RATED\***

\*Elwood's continuous flex rated cables replace both flexing and non-flexing cables for 1326 Series motors.

**Power Cables**

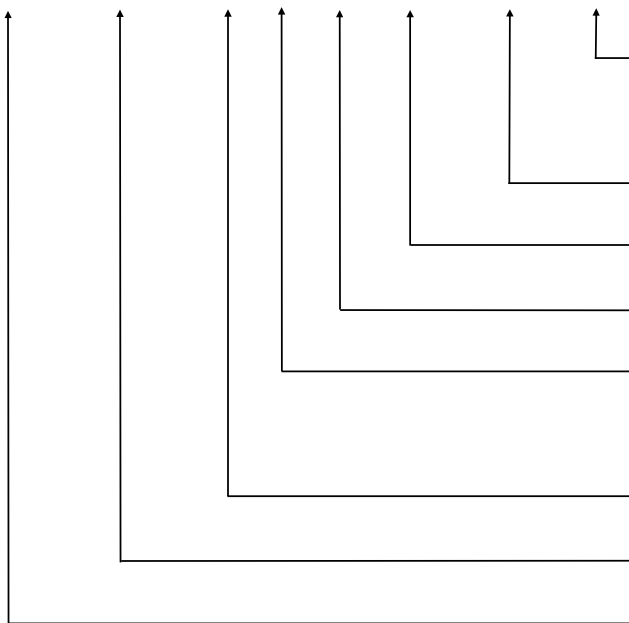
Cable Type/Description	1326AS-B3xx, 1326AS-B4xx	1326AS-B6xx, 1326AS-B8xx
	1326-CPB1T-L-0xx	1326-CPC1T-L-0xx
Rockwell Model (xx=length in meters)	1326-CPB1T-RAL-0xx	1326-CPC1T-RAL-0xx
	1326-CPB1T-RBL-0xx	1326-CPC1T-RBL-0xx
Elwood Model (xxx=length in feet)	141-APxxx-01	141-APxxx-02
	141-APxxx-03	141-APxxx-04
	141-APxxx-05	141-APxxx-06

**Feedback Cables (Resolver)**

Cable Type/Description	Any 1326
	1326-CCUT-L-0xx
Rockwell Model (xx=length in meters)	1326-CCUT-RAL-0xx
	1326-CCUT-RBL-0xx
Elwood Model (xxx=length in feet)	141-AFxxx-01
	141-AFxxx-02
	141-AFxxx-03



**1326 AS - B 4 20 G - 21 K4**



**STANDARD OPTIONS**

- K3 = 2.26 Nm (20 lb-in) Holding Brake with 24VDC coil for 3in frame series
- K4 = 10.2 Nm (90 lb-in) Holding Brake with 24VDC coil for 4in frame series
- K6 = 2.26 N-m (20 lb in.) Holding Brake with 24VDC coil for 3in frame series

**FLANGE AND SHAFT SERIES**

- 21 = IEC metric flange with keyway

**MOTOR WINDING DESIGNATOR**

Letter designation for rated motor speed (See Motor Data for rated speeds)

**MOTOR LENGTH**

Sequentially numbered to indicate the magnetic stack length within a given frame size

**FRAME SERIES**

- 3 = 75 mm (Approximate stator size)
- 4 = 100 mm (Approximate stator size)
- 6 = 150 mm (Approximate stator size)

**VOLTAGE**

- B = 460V AC

**TYPE**

- AS = Rare Earth Low Inertia AC servo motor

**SERIES DESIGNATOR**

- 1326 = Bulletin Number