



ELWOOD HIGH PERFORMANCE MOTORS

H-SERIES MOTOR DATA

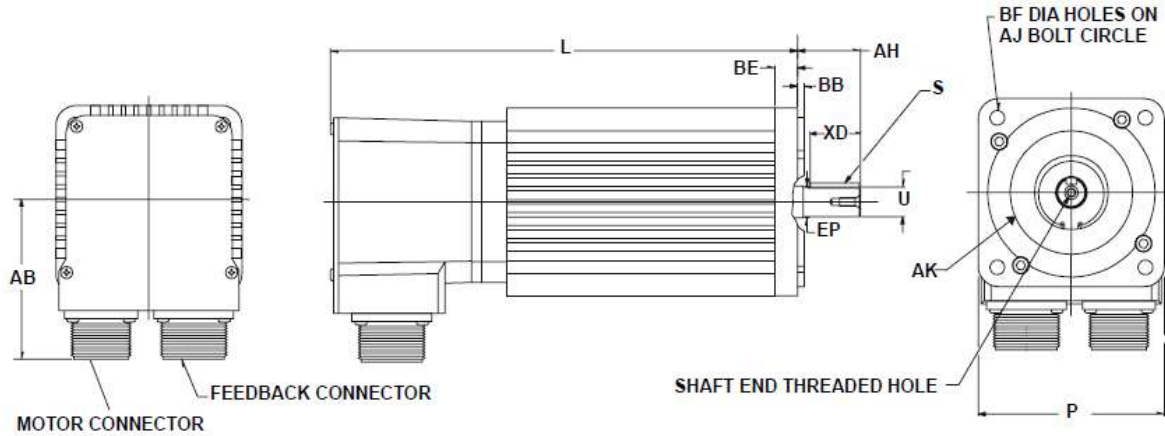
MOTOR MODEL		H-3007	H-3016	H-4030-P	H-4030-M	H-4050	H-4075	H-6100	H-6200	H-6300
MECHANICAL DATA(1)										
Rated Torque	Nm	0.8	2.3	3.4	3.4	6.8	10.2	11.3	22.6	36.7
	lb-in	7.0	20.0	30.0	30.0	60.0	90.3	100.0	200.0	324.8
Peak Torque	Nm	2.5	5.0	8.2	6.8	21.5	30.5	25.42	40.67	79.1
	lb-in	21.9	44.0	72.6	60.0	190.0	269.9	225.0	360.0	700.1
Rated Current	Arms	2.5	6.8	5.7	12.0	12.0	12.0	17.0	32.0	46.0
Rated Power	kW	3.5	0.75	1.1	1.1	1.9	2.6	2.5	3.4	5.1
Rated Voltage	Vrms	230	230	230	230	230	230	230	230	230
Rotor Moment of Inertia	kg-m ²	0.000030	0.000080	0.000250	0.000250	0.000460	0.000680	0.001400	0.002400	0.003400
	lb-in-s ²	0.00027	0.00072	0.00220	0.00220	0.00410	0.00600	0.01200	0.02100	0.03000
Brake Motors	kg-m ²	0.000038	0.000089	0.000330	0.000330	0.000540	0.000760	0.001700	0.002700	0.003700
Rotor Moment of Inertia	lb-in-s ²	0.00034	0.00079	0.00290	0.00290	0.00480	0.00670	0.01500	0.02400	0.03300
Motor Weight	Net	kg/lb	2.6/7.0	4.1/11.0	6.8/18.2	6.8/18.2	9.7/26.0	12.9/34.6	18.3/49.0	27.0/72.3
	Shipping	kg/lb	3.2/8.6	4.7/12.6	7.3/19.6	7.3/19.6	10.9/29.2	14.1/37.8	19.2/51.4	28.6/76.6
Brake Motor Weight	Net	kg/lb	3.4/9.1	4.9/13.1	8.8/23.6	8.8/23.6	11.8/31.6	14.9/39.9	22.5/60.3	31.6/84.7
	Shipping	kg/lb	3.8/10.2	5.5/14.7	9.4/25.2	9.4/25.2	12.7/34.0	16.0/42.9	23.8/63.8	32.9/88.1
Damping	Nm/krpm	0.010	0.014	0.034	0.034	0.045	0.068	0.100	0.160	0.190
	lb-in/krpm	0.09	0.12	0.3	0.3	0.4	0.6	0.9	1.4	1.7
Friction Torque	Nm	0.014	0.028	0.034	0.034	0.068	0.140	0.140	0.240	0.360
	lb-in	0.12	0.25	0.3	0.3	0.6	1.2	1.2	2.1	3.2
Max. Operating Speed	rpm	5000	5000	4000	4000	4000	3000	3000	3000	3000
WINDING DATA (1)										
Poles	#	6	6	6	6	6	6	8	8	8
Sine Wave K _T	Nm/A	0.28	0.28	0.5	0.25	0.5	0.74	0.68	0.66	0.7
Torque Constant (2)	lb-in/A	2.5	2.5	4.4	2.2	4.4	6.6	6.0	5.8	6.2
Square Wave K _T	Nm/A	0.31	0.31	0.54	0.27	0.54	0.81	0.74	0.72	0.77
Torque Constant (3)	lb-in/A	2.7	2.7	4.8	2.4	4.8	7.2	6.6	6.4	6.8
KE Voltage Constant (4)	V/krpm	34	34	60	30	60	90	82	80	85
Winding Resistance (Phase to Phase at 25°C)	Ohms ±10%	6.60	1.30	2.00	0.50	0.69	0.90	0.49	0.18	0.12
Winding Inductance (Phase to Phase)	mH	12.0	3.4	9.0	1.9	3.3	5.4	4.4	2.2	1.2
Thermal Resistance	°C/Watt	1.2	0.89	0.79	0.79	0.57	0.48	0.34	0.31	0.24
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) Peak value of sinusoidal phase to phase Volts				
STORAGE AND OPERATING CONDITIONS										
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									

Elwood Corporation - High Performance Motors Group - 2701 N. Green Bay Road - Racine, WI 53404

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ELWOOD HIGH PERFORMANCE MOTORS H-SERIES DIMENSIONAL DATA



Motor Model	AB mm/in	AH mm/in	AJ mm/in	AK mm/in	BB mm/in	BE mm/in	BF mm/in	EP mm/in	L mm/in	L Brake mm/in	P mm/in	S mm/in	U mm/in	XD mm/in
H-3007	75/2.95	30/1.18	100/3.94	80/3.15	3/12	10.9/4.3	7/28	15/59	172/6.77	211/8.31	89/3.50	5x5/20x.20	14/55	20/79
H-3016	75/2.95	30/1.18	100/3.94	80/3.15	3/12	10.9/4.3	7/28	15/59	223/8.77	262/10.31	89/3.50	5x5/20x.20	14/55	20/79
H-4030	76/3.00	50/1.97	145/5.71	110/4.33	3/12	15.5/6.1	10/39	20/79	213/8.39	266/10.45	121/4.76	6x6/24x.24	19/75	40/1.57
H-4050	76/3.00	50/1.97	145/5.71	110/4.33	3/12	15.5/6.1	10/39	20/79	264/10.39	317/12.48	121/4.76	6x6/24x.24	19/75	40/1.57
H-4075	76/3.00	50/1.97	145/5.71	110/4.33	3/12	15.5/6.1	10/39	20/79	315/12.40	368/14.49	121/4.76	6x6/24x.24	19/75	40/1.57
H-6100	101/4.00	80/3.15	200/7.87	114.3/4.50	4/16	21.3/8.4	13.5/5.3	38/1.50	277/10.91	330/12.99	178/7.01	10x8/39x.31	35/1.38	60/2.36
H-6200	101/4.00	80/3.15	200/7.87	114.3/4.50	4/16	21.3/8.4	13.5/5.3	38/1.50	353/13.90	406/15.98	178/7.01	10x8/39x.31	35/1.38	60/2.36
H-6300	101/4.00	80/3.15	200/7.87	114.3/4.50	4/16	21.3/8.4	13.5/5.3	38/1.50	429/16.89	482/17.40	178/7.01	10x8/39x.31	35/1.38	60/2.36

CABLES FOR H/F-SERIES MOTORS CONTINUOUS FLEX RATED*

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

Power Cables				
"XXX" indicates length in feet				
	H-3000	H-4000	H-6100 & H-6200	H-6300
Rockwell Model	9101-1381	9101-1382	9101-1383	9101-1399
	2090-UXNPAHF-16S	2090-UXNPAHF-14S	2090-UXNPAHF-10S	2090-UXNPAHF-8S
	2090-XXNPHF-16S	2090-XXNPHF-14S	2090-XXNPHF-10S	2090-XXNPHF-8S
Elwood Model	141-HPXXX-01	141-HPXXX-02	141-HPXXX-03	141-HPXXX-04

Feedback Cables		
"XXX" indicates length in feet		
	Ultra 100/200	Ultra 3000
Rockwell Model	9101-1366	2090-UXNFBHF-S
Elwood Model	141-HFXXX-01	141-HFXXX-02

Brake Cables	
"XXX" indicates length in feet	
For All Ultra Drives	
Rockwell Model	n/a
Elwood Model	141-HBXXX-01

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