

# SW - SERIES

Wash Down Servo Motor  
11" Frame

## Motor Data (230V)

Performance Data (40 °C)	Symbol	Unit	M341	M344	M347
Continuous Rated Torque (Stall)	$T_o$	lb-in [Nm]	412.3 [46.6]	561.0 [63.4]	705.5 [79.7]
Continuous Rated Current (RMS)	$I_o$	Amps (RMS)	31.50	50.40	54.00
Max. Continuous Power	$P_{max}$	HP [kW]	7.02 [5.24]	10.32 [7.70]	13.38 [9.98]
Torque @ Max. Power	$T_p$	lb-in [Nm]	340.3 [38.5]	433.6 [49.0]	648.7 [73.3]
Current @ Maximum Power	$I_p$	Amps (RMS)	29.00	46.40	49.70
Speed @ Max. Power (Amp. Dependent)	$N_p$	RPM	1300	1500	1300
Max. Continuous Speed (Amp. Dependent)	$N_{max}$	RPM	1915	2116	1957
Maximum Current (RMS)	$I_m$	Amps (RMS)	100.80	161.30	172.80
Peak Torque	$T_{pk}$	lb-in [Nm]	1273 [140]	1683 [190]	2117 [239]
Rotor Inertia	$J_m$	lb-in-sec <sup>2</sup> [kg-m <sup>2</sup> ]	0.294 [0.0332]	0.387 [0.0437]	0.479 [0.0541]
Torque Constant (@ Max. Winding Temp.)	$K_t$	lb-in/Amps [Nm/Amp]	13.1 [1.5]	11.1 [1.3]	13.1 [1.5]
Back EMF Constant (L-L RMS) @ 25°C (77°F)	$K_e$	V/KRPM [V*Sec/Rad]	108.6 [1.0]	98.3 [0.9]	106.3 [1.0]
Stator Resistance ±10% (L-L) @ 25°C (77°F)	$R_a$	Ohm	0.30	0.15	0.12
Stator Inductance ±10% (L-L) @ 25°C (77°F)	$L_a$	millihenry	4.32	2.20	1.96
Max. Theoretical Acceleration @ Stall [brake]	AE	Rad/sec <sup>2</sup>	4487	4639	4713
Thermal Time Constant [brake]	$T_{th}$	minute	75	90	105
Electrical Time Constant	$T_e$	msec	14.40	14.70	13.60
Mechanical Time Constant [brake]	$T_m$	msec	6.50	5.60	4.30
Static Friction	$T_f$	lb-in [Nm]	5.0 [0.6]	5.0 [0.6]	5.0 [0.6]
Weight	W	lb [kg]	197 [89.3]	242 [109.9]	298 [135.1]
Line Voltage	V	VAC	230	230	230

### Brake Information:

Fail safe, Electric release

Rated Holding Torque	$T_s$	lb-in [Nm]	600 [67.8]
Rated voltage	V	VDC	24
Rated current	I	Amp	0.56
Inertia	$J_b$	lb-in-sec <sup>2</sup> [kg-m <sup>2</sup> ]	0.036 [0.0041]
Weight Adder	W	lb [kg]	35 [5.3]

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## Connection Data

### Motor Connector

PIN	AWG	FUNCTION
A	ØA	
B	ØB	
C	ØC	

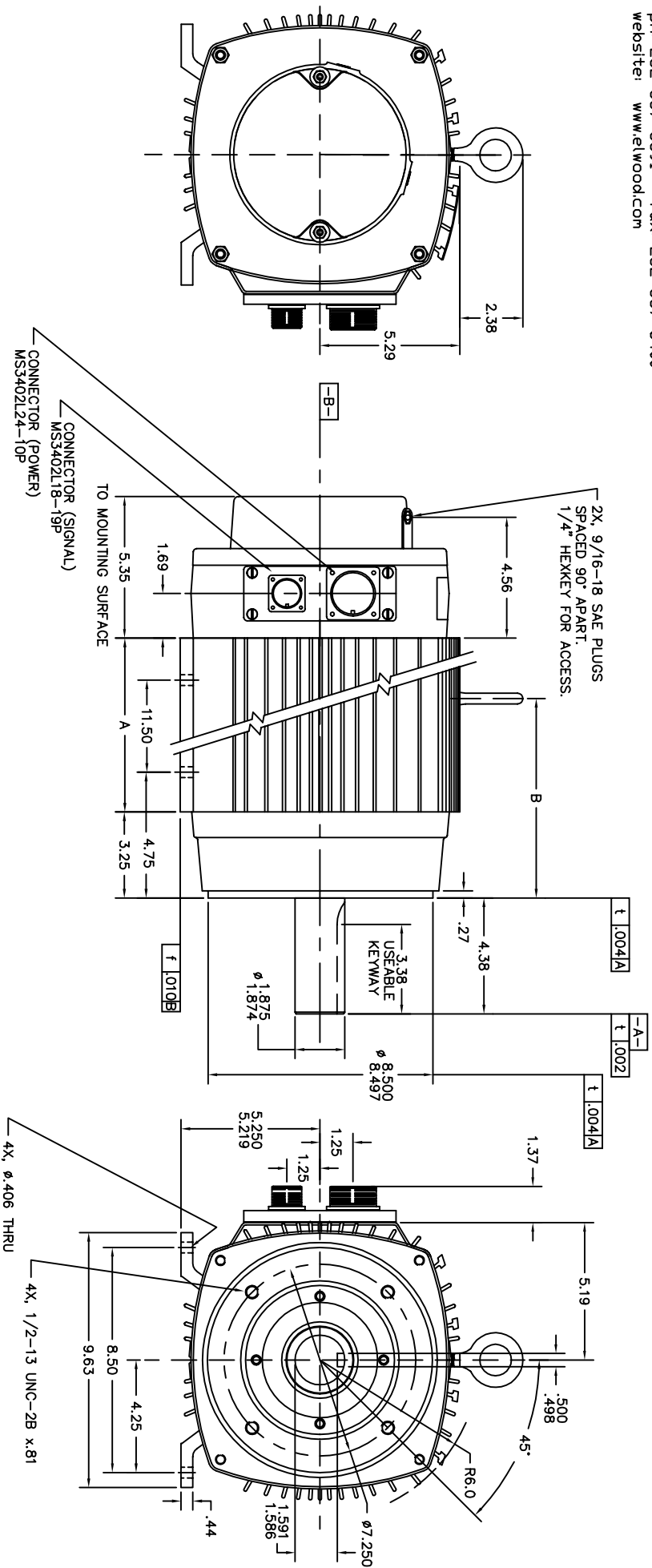
### Resolver Connector

PIN	AWG	FUNCTION
A	24	R1 (+REF)
B	24	R2 (-REF)
E	24	S1 (+COSINE)
F	24	S3 (-COSINE)
K	24	S2 (+SINE)
L	24	S4 (-SINE)
G	24	SHIELD
W	18	BRAKE (+) Optional
X	18	BRAKE (-) Optional
R	18	OTL
S	18	OTL

# GETTYS

## HIGH PERFORMANCE MOTORS

Elwood Corporation - GETTYS Group  
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 Racine, WI 53404 USA  
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 website: www.elwood.com



# M34X OUTLINE

		MOTOR				
	M341	M344	M347			
	NO BRAKE	BRAKE	NO BRAKE	BRAKE	NO BRAKE	BRAKE
DIM. A	13.54	15.17	16.54	18.17	19.54	21.17
DIM. B	9.16	9.54	10.66	11.04	12.16	12.54