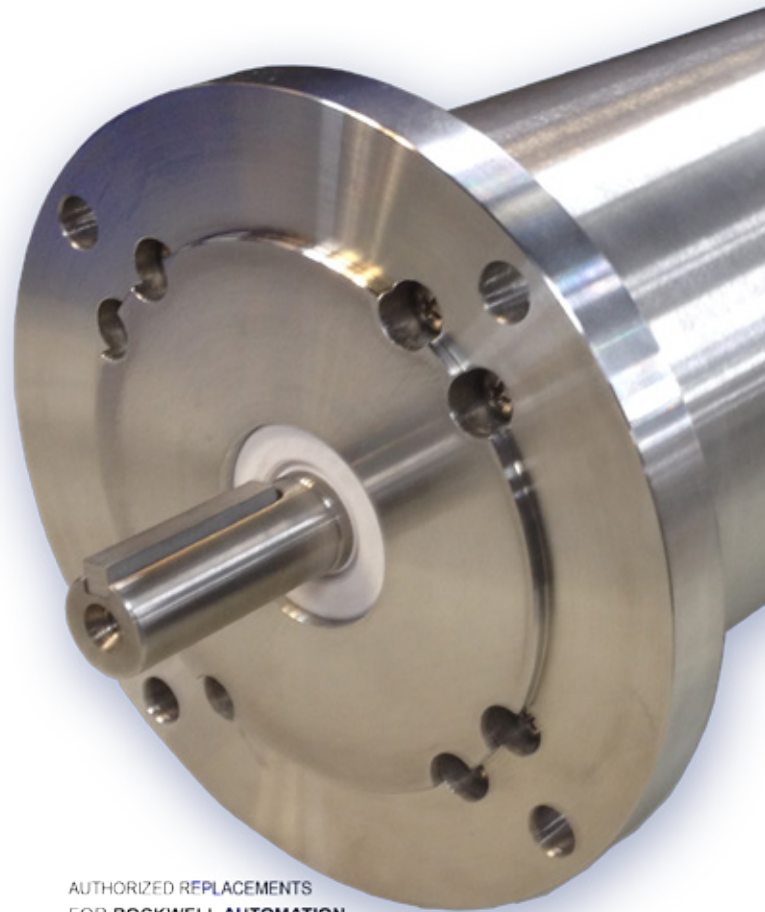


# W-SERIES STAINLESS STEEL SERVO MOTORS

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AUTHORIZED REPLACEMENTS  
FOR ROCKWELL AUTOMATION  
*W-SERIES* SERVO MOTORS

**ELWOOD**<sup>®</sup> HIGH PERFORMANCE  
**MOTORS**  
SERVOS - STEPPERS

ISO 9001  
CERTIFIED COMPANY

**Rockwell  
Automation**  
**Encompass**<sup>™</sup>  
Product Partner  
*Americas*

# ELWOOD W-SERIES SERVO MOTORS

FORM, FIT, FUNCTION REPLACEMENTS FOR W-SERIES MOTORS FROM ROCKWELL AUTOMATION

- ALL 304 STAINLESS STEEL EXTERIOR
- ZERO-MAINTENANCE (TEFLON or VITON) SHAFT SEAL
- ROUND BODY AND FLANGE
- MINIMAL CRACKS AND CREVICES
- 1.7Nm to 7.2Nm CONTINUOUS TORQUE AT STALL
- DROP-IN REPLACEMENT FOR ROCKWELL AUTOMATION W-SERIES



## W-SERIES MOTOR DATA

MOTOR MODEL		W-3016	W-4030-P	W-4030-M	W-4050	W-4075	
<b>MECHANICAL DATA (1)</b>							
Rated Torque	Nm	1.7	2.8	2.8	5.4	7.2	
	lb-in	15.0	24.8	24.8	47.8	63.7	
Rated Current	A <sub>0-PK</sub>	5.1	5.4	11.0	9.1	8.0	
Peak Torque	Nm	5.1	8.4	8.4	16.2	21.6	
	lb-in	45.1	74.3	74.3	143.4	191.2	
Peak Current	A <sub>0-PK</sub>	15.3	16.2	33.0	27.3	24.0	
Rated Power	kW	0.6	0.7	0.7	1.0	1.0	
Rated Voltage (Drive Supply)	V <sub>rms</sub>	230	230	230	230	230	
Rotor Moment of Inertia	kg-m <sup>2</sup>	0.000080	0.000250	0.000250	0.000460	0.000680	
	lb-in-s <sup>2</sup>	0.00072	0.00220	0.00220	0.00410	0.00600	
Brake Motors	kg-m <sup>2</sup>	0.000089	0.000330	0.000330	0.000540	0.000760	
Rotor Moment of Inertia	lb-in-s <sup>2</sup>	0.00079	0.00290	0.00290	0.00480	0.00670	
Motor Weight	Net	kg/lb	4.1/11.0	6.8/18.2	6.8/18.2	9.7/26.0	12.9/34.6
	Shipping	kg/lb	4.7/12.6	7.3/19.6	7.3/19.6	10.9/29.2	14.1/37.8
Brake Motor Weight	Net	kg/lb	4.9/13.1	8.8/23.6	8.8/23.6	11.8/31.6	14.9/39.9
	Shipping	kg/lb	5.5/14.7	9.4/25.2	9.4/25.2	12.7/34.0	16.0/42.9
Damping	Nm/krpm	0.014	0.034	0.034	0.045	0.068	
	lb-in/krpm	0.12	0.3	0.3	0.4	0.6	
Friction Torque	Nm	0.028	0.034	0.034	0.068	0.140	
	lb-in	0.25	0.3	0.3	0.6	1.2	
Max. Operating Speed	rpm	4000	3000	3000	3000	3000	
<b>WINDING DATA (1)</b>							
Poles	#	6	6	6	6	6	
Sine Wave KT	Nm/A <sub>0-PK</sub>	0.28	0.5	0.25	0.5	0.74	
Torque Constant (2)	lb-in/A <sub>0-PK</sub>	2.5	4.4	2.2	4.4	6.6	
Square Wave KT	Nm/A <sub>0-PK</sub>	0.31	0.54	0.27	0.54	0.81	
Torque Constant (3)	lb-in/A <sub>0-PK</sub>	2.7	4.8	2.4	4.8	7.2	
KE Voltage Constant (4)	V/krpm	34	60	30	60	90	
Winding Resistance (Phase to Phase at 25°C)	Ohms ±10%	1.30	2.00	0.50	0.69	0.90	
Winding Inductance (Phase to Phase)	mH	3.4	9.0	1.9	3.3	5.4	
Thermal Resistance	°C/Watt	0.89	0.79	0.79	0.57	0.48	
(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						

**ELWOOD**® **HIGH PERFORMANCE MOTORS**  
SERVOS - STEPPERS

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