

# INTEGRATED SERVO MOTOR/DRIVE/CONTROLLER

The ACSI is an all-in-one solution (motor/drive/controller) for cost-effective servo control. Mount to a Tolomatic (or any) electric actuator for a complete motion system. The ACSI can be controlled with simple digital I/O, analog input or robust industrial ethernet.

# ACSI

**DIGITAL I/O**

- 24 VDC Digital I/O control for flexible easy operating modes
- Opto-isolated

**ANALOG IN/OUT**

- 0-10VDC or
- 4-20 mA

**DUAL ETHERNET PORTS**

- Supports Star, Daisy Chain and Ring Topologies



**ETHERNET/IP**

- AOP: Add on profile
- AOI: Add on Instructions
- DLR: Device Level Ring

**PROFINET**



**MODBUS TCP**



**INPUT SUPPLY**

- 10 VDC to 60 VDC
- Logic & Drive Power

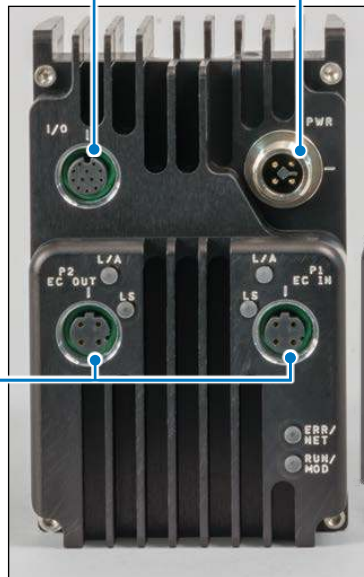
**M12 CONNECTORS**

- Industry standard connectors

**USB CONFIGURATION PORT**

**QUALITY TESTED**

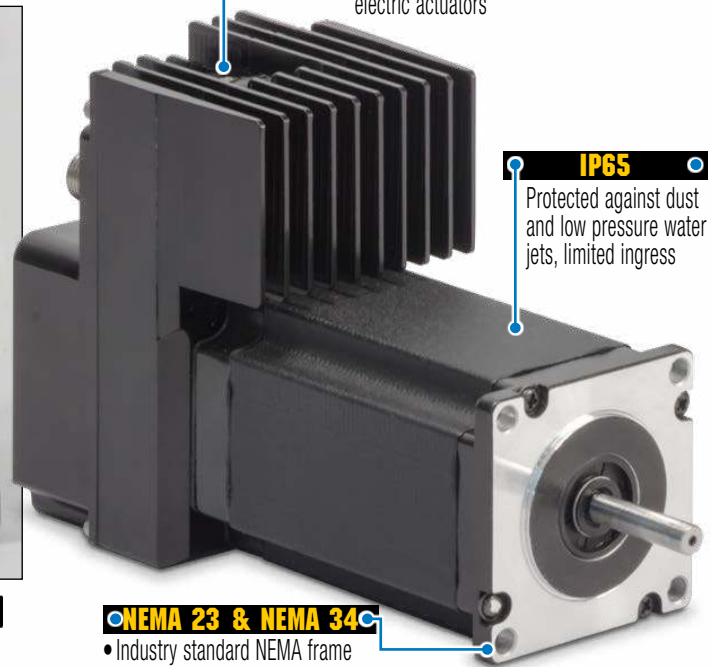
- Each ACSI is performance tested at Tolomatic before shipping
- Mounted, configured and tested on Tolomatic electric actuators



**VIBRATION TESTED**

- 0-500 Hz, 2 G, 3-Axis, 1-hour

**ETHERCAT**



**IP65**

- Protected against dust and low pressure water jets, limited ingress

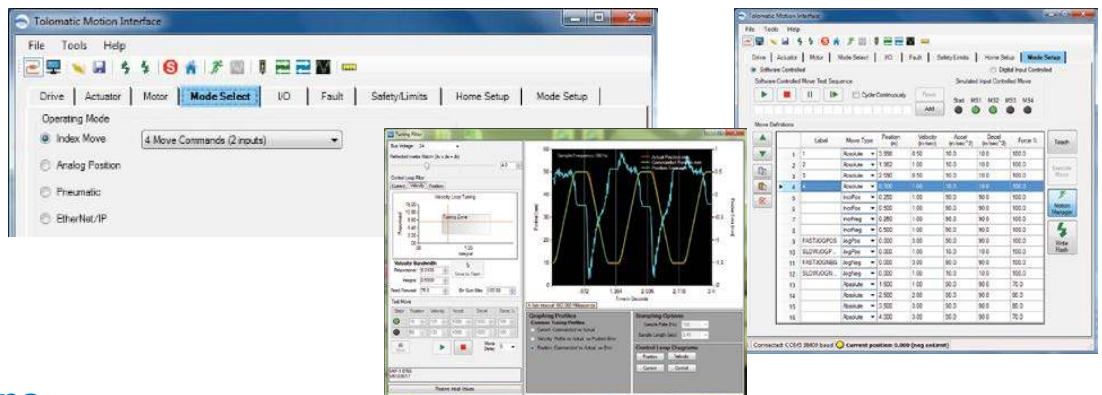
**NEMA 23 & NEMA 34**

- Industry standard NEMA frame sizes

## Easy to Use Operating Modes & Configuration Software

**OPERATING MODES**

- Index position via digital I/O
- Pneumatic Logic
- Analog Position
- Ethernet
  - EtherNet/IP
  - PROFINET
  - Modbus TCP
  - EtherCAT
- Supports rotary actuator: position and velocity moves



### Available Options:

**Cables**

3m, 5m or 10m lengths

**Planetary Gearboxes**

Available ratios - 3:1, 5:1, 10:1

**Power Supply**

48VDC; 5 Amp or 10 Amp

# INTEGRATED SERVO MOTOR/DRIVE/CONTROLLER

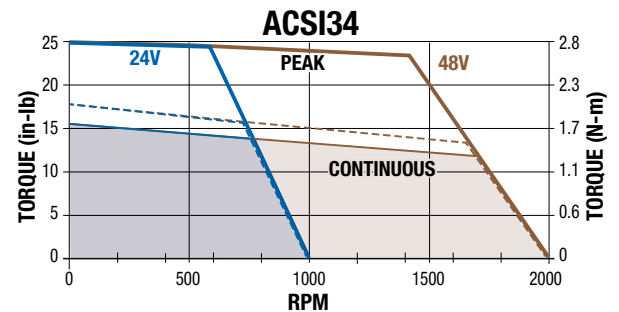
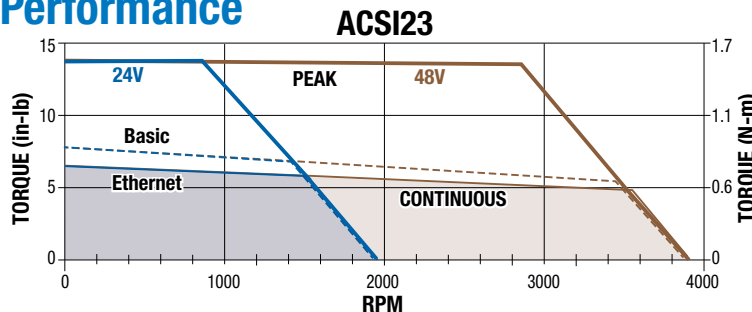
## Specifications

# ACSI

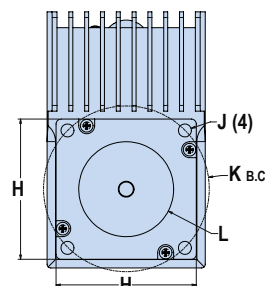
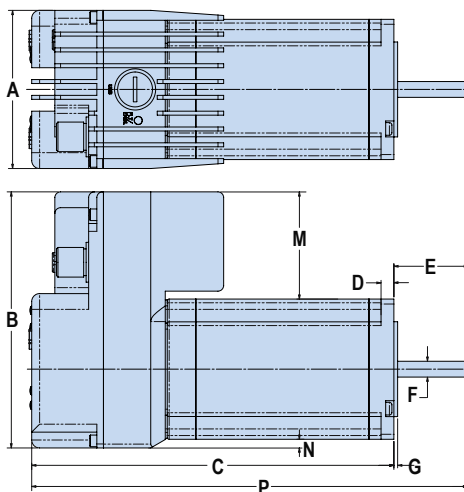
	NEMA 23		NEMA 34	
	Basic	Ethernet	Basic	Ethernet
<b>Continuous Torque</b>	0.61 N-m	0.55 N-m	1.53 N-m	1.35 N-m
<b>Peak Torque</b>	1.56 N-m		2.82 N-m	
<b>Max. Continuous Current</b>	11.46 Amps	9.6 Amps	12.7 Amps	11.37 Amps
<b>Max. Peak Current</b>	20 Amps		20 Amps	
<b>Rated Speed</b>	3500 RPM		1750 RPM	
<b>Max. Speed</b>	3850 RPM		2050 RPM	
<b>Rotor Inertia</b>	0.220 kg-cm <sup>2</sup>		1.600 kg-cm <sup>2</sup>	
<b>Unit Weight</b>	1.72 kg		3.27 kg	
<b>Motor Poles</b>	8			
<b>Max Case Temp</b>	85°C			
<b>Encoder</b>	Differential 1024 lines/rev (4096 counts per rev)			



## Performance



## Dimensions



	23	34
A	63.5	63.5
B	102.8	113.9
C	145.4	150.4
D	5.2	10.0
E	22.86	31.8
F	6.350	12.700
G	1.50	1.60
H	56.3	85.8
J	5.2	5.5
K	66.68	98.43
L	38.10	73.03
M	43.1	28.3
N	3.5	0.0
P	168.26	182.20

Dimensions in millimeters

	23	34
A	2.50	2.50
B	4.05	4.49
C	5.73	5.92
D	0.20	0.39
E	0.900	1.25
F	0.2500	0.5000
G	0.059	0.063
H	2.22	3.38
J	0.20	0.22
K	02.625	03.875
L	01.500	02.875
M	1.70	1.11
N	0.14	0.00
P	6.63	7.17

Dimensions in inches



**USA**  
3800 County Road 116  
Hamel, MN 55340, USA  
**Phone:** (763) 478-8000  
**Fax:** (763) 478-8080  
Toll-Free: **1-800-328-2174**  
sales@tolomatic.com  
[www.tolomatic.com](http://www.tolomatic.com)

**EUROPE**  
**Tolomatic Europe GmbH**  
Zeilweg 42  
60439 Frankfurt am Main  
Germany  
**Phone:** +49 69-2045-7837  
EuropeSales@tolomatic.com

**CHINA**  
**Tolomatic Automation Products (Suzhou) Co. Ltd.**  
*(ServoWeld® inquiries only)*  
No. 60 Chuangye Street, Building 2  
Huqiu District, SND Suzhou  
Jiangsu 215011 - P.R. China  
**Phone:** +86 (512) 6750-8506  
**Fax:** +86 (512) 6750-8507  
ServoWeldChina@tolomatic.com

All brand and product names are trademarks or registered trademarks of their respective owners. Information in this document is believed accurate at time of printing. However, Tolomatic assumes no responsibility for its use or for any errors that may appear in



this document. Tolomatic reserves the right to change the design or operation of the equipment described herein and any associated motion products without notice. Information in this document is subject to change without notice.

Visit [www.tolomatic.com](http://www.tolomatic.com) for the most up-to-date technical information