

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

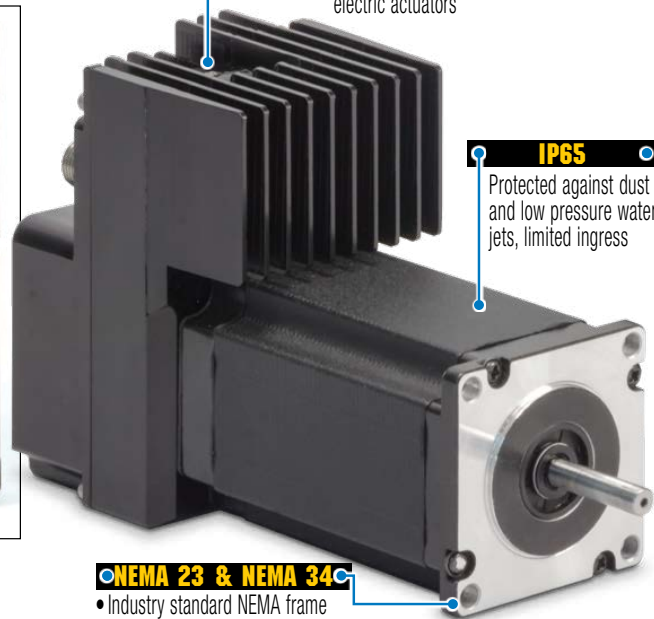
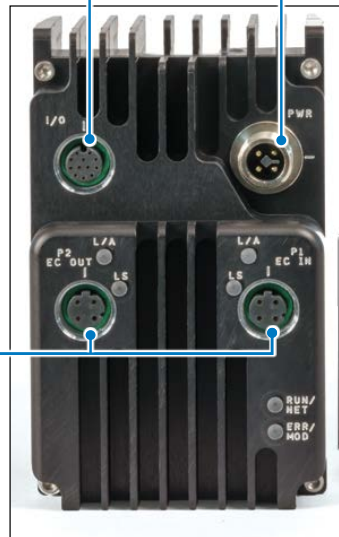
USB CONFIGURATION PORT

QUALITY TESTED

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

IP65

Protected against dust and low pressure water jets, limited ingress



VIBRATION & SHOCK TESTED

- 2 brms, 5-500 Hz, 2 G, 3-axis, 1 hr
- 20 bpeak, half sine, 11 ms, 3-axis

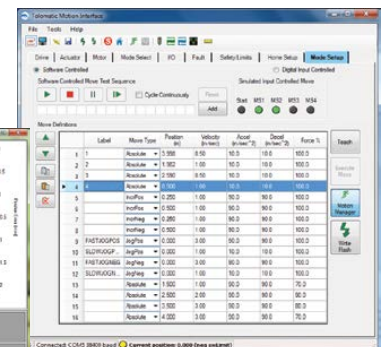
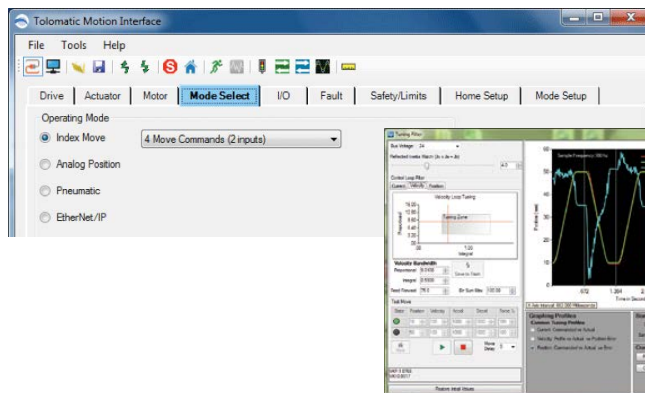
NEMA 23 & NEMA 34

- 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; 2.5, 5Amp or 10Amp

INTEGRATED SERVO MOTOR/DRIVE/CONTROLLER

Specifications

ACSI

	NEMA 23 (C1)		NEMA 23 (C2)		NEMA 34 (D1)		NEMA 34 (D2)	
	Basic	Ethernet	Basic	Ethernet	Basic	Ethernet	Basic	Ethernet
Cont. Torque	0.61 N-m	0.55 N-m	0.38 N-m	0.34 N-m	1.53 N-m	1.32 N-m	3.28 N-m	2.82 N-m
Max. Cont. Current	11.46 Amps	9.6 Amps	7.7 Amps	7.0 Amps	12.7 Amps	11.37 Amps	7.0 Amps	6.2 Amps
Peak Torque	1.56 N-m		0.99 N-m		2.82 N-m		5.88 N-m	
Max. Peak Current	20 Amps		20 Amps		20 Amps		12.72 Amps	
Rated Speed*	3500 RPM		5800 RPM		1750 RPM		450 RPM	
Max. Speed*	3850 RPM		6350 RPM		2050 RPM		650 RPM	
KT	0.09 N-m/Arms		0.07 N-m/Arms		0.16 N-m/Arms		0.573 N-m/Arms	
KE	10 V/kRPM		7.059 V/kRPM		16.55 V/kRPM		60 V/kRPM	
Rotor Inertia	0.220 kg-cm ²		0.220 kg-cm ²		1.600 kg-cm ²		2.4 kg-cm ²	
Shaft Max. Radial Load**	115 N		116 N		220 N		221 N	
Shaft Max. Axial Load**	45 N		46 N		60 N		61 N	
Unit Weight	1.72 kg		1.72 kg		3.27 kg		4.47 kg	
Motor Poles	8							
Max Case Temp	85°C (185°F)							
Encoder	Differential 1024 lines/rev (4096 counts per rev)							

23 Frame



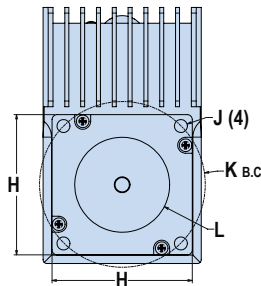
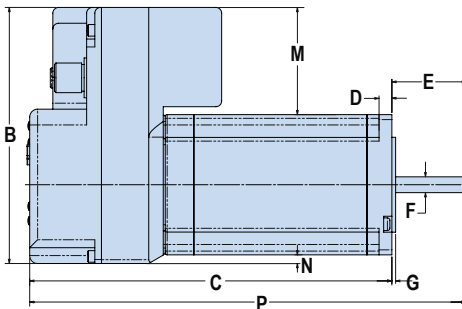
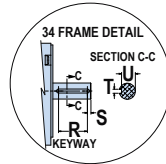
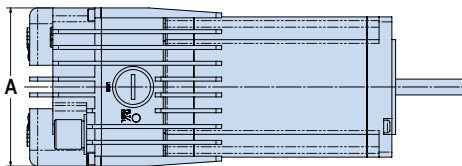
34 Frame



EtherCAT



Dimensions



	23 (C1)	23 (C2)	34 (D1)	34 (D2)
A	63.5	63.5	63.5	63.5
B	102.8	102.8	113.9	113.9
C	145.4	145.4	150.4	180.4
D	5.2	5.2	10	10
E	22.86	22.86	31.8	31.8
F	6.35	6.35	12.7	12.7
G	1.5	1.5	1.6	1.6
H	56.3	56.3	85.8	85.8
J	5.2	5.2	5.5	5.5
K	66.68	66.68	98.43	98.43
L	38.1	38.1	73.03	73.03

	23 (C1)	23 (C2)	34 (D1)	34 (D2)
M	43.1	43.1	28.3	28.3
N	3.5	3.5	0	0
P	168.26	168.26	182.2	182.2
R	-	-	22.9	22.9
S	-	-	2.79	2.79
T	-	-	3.18 (+0.05, -0.00)	3.18 (+0.05, -0.00)
U	-	-	10.92 (+0.00, -0.38)	10.92 (+0.00, -0.38)

Dimensions in millimeters



COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =
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