Tolomatic™
EXCELLENCE *IN MOTION*

JVL
www.jvl.dk

INTEGRATED SERVO & STEPPER MOTORS

TECHNOLOGY SOLUTION: ELECTRIC LINEAR MOTION

TOLOMATIC ACTUATOR & JVL INTEGRATED MOTOR

LINEAR SOLUTIONS MADE EASY

TOLOMATIC AND JVL PARTNERSHIP

Tolomatic has partnered with JVL to provide integrated servo and stepper motors paired with Tolomatic's broad range of configurable actuators. JVL's innovative motors are integrated with the drive control electronics, providing a flexible motion control solution that can exist outside of the control cabinet.

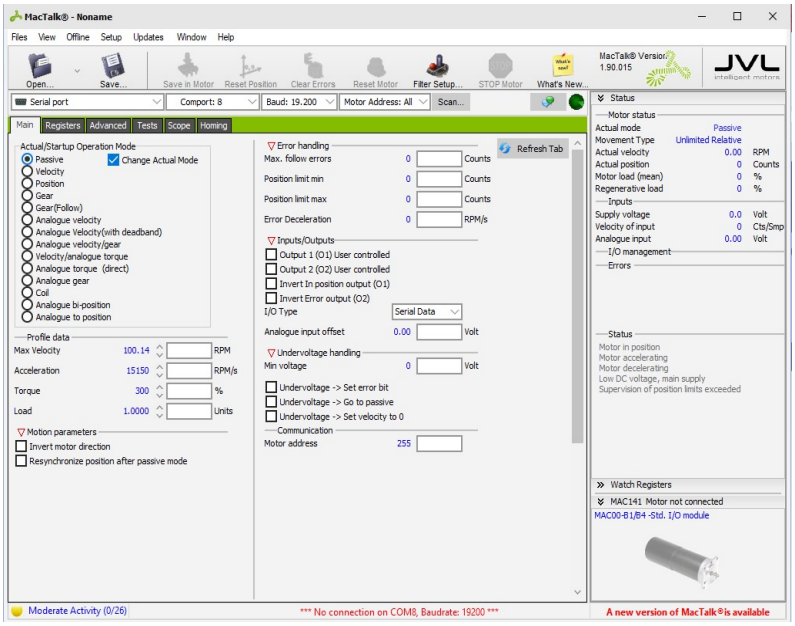
JVL INTEGRATED MOTOR FEATURES

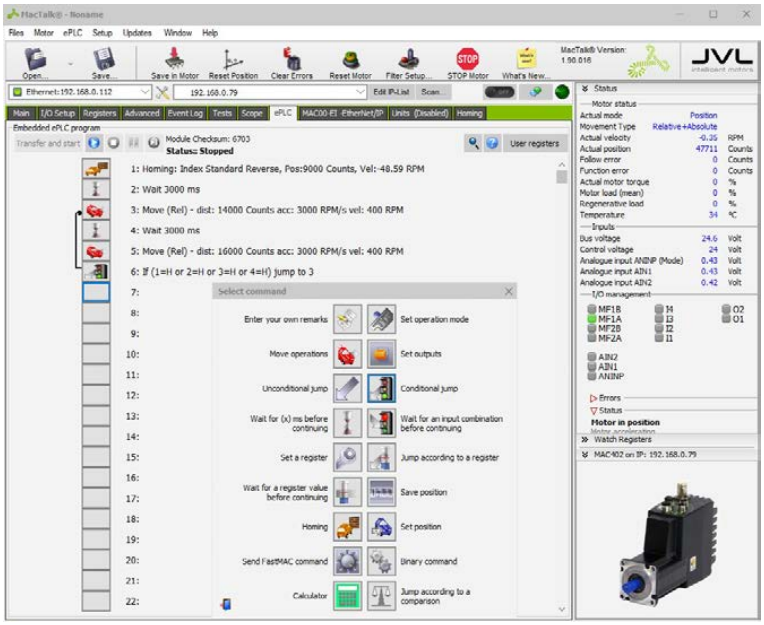
- Added features like **Safe-Torque-Off** and **Absolute multi-turn encoders** on listed premium configurations (see table)
- High efficiency, quiet and maintenance free operation
- Fast installation with fewer opportunities for wiring errors
- Easy setup and configuration, featuring JVL's MacTalk® software
- Broad range of communication options

PROFINET® EtherCAT® SERCOS interface EtherNet/IP™ ETHERNET POWERLINK Modbus

MacTalk® ALL-IN-ONE SOFTWARE

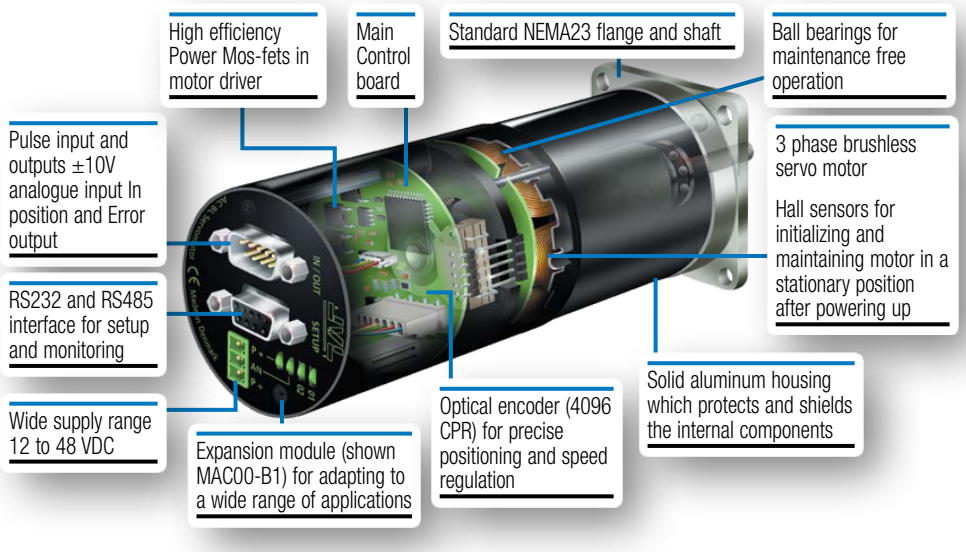
- Simple, intuitive software for drive commissioning and E-PLC programing
- E-PLC allows JVL motors to function without use of a standard PLC; allows for system/software modularization when used with a standard PLC
- Easy IO – IO mapping not required
- Automatic bus voltage detection
- Flexible motion command options; commands can be updated mid-move
- Programming for electronic gearing, axis synchronization





JVL INTEGRATED SERVO MOTORS

- Torque range; Nominal = 0.11Nm - 14.3Nm, Peak 0.32 Nm – 52 Nm
- Tolomatic standard offering includes: MAC 140, 141, 402 motors
- Other MAC motors available as extended product offering: MAC050, 095, 100, 101, 400, 800, 1200, 1500, 3000, 4500



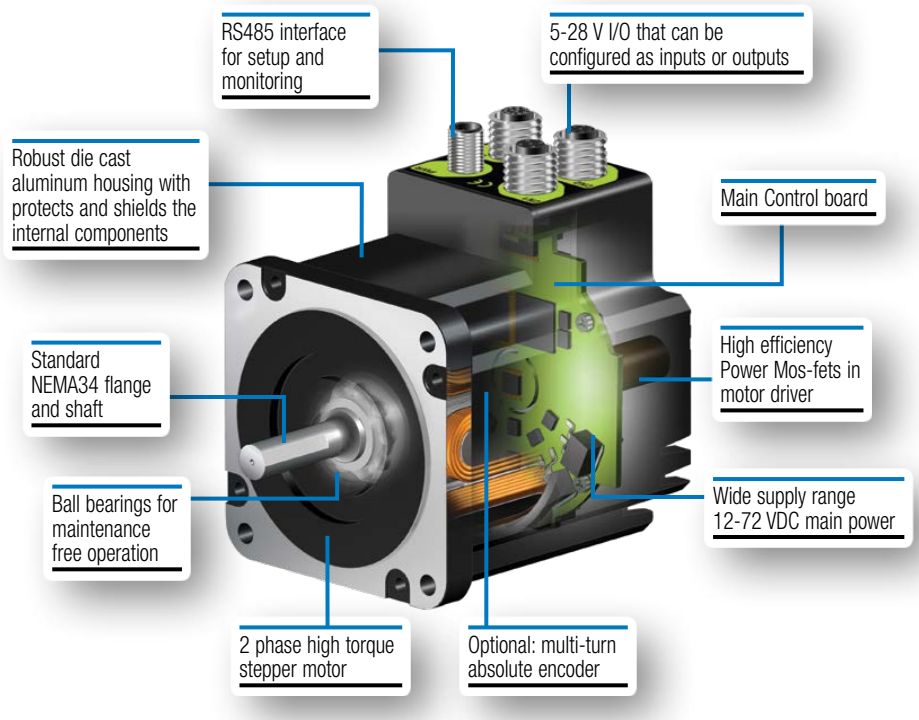
MAC 140

MAC 141

MAC 402

JVL INTEGRATED STEPPER MOTORS

- Torque range; Nominal = 0.36 Nm – 25.0 Nm, with closed-loop control and up to 3,000 RPM
- Tolomatic standard offering includes: MIS 173, 232, 341 motors
- Other NEMA size stepper motors available as extended product offering



MIS 173

MIS 232

MIS 341

TOLOMATIC OFFERING

For our customers' convenience, a selection of JVL servo and stepper motors have been pre-configured and are offered in the form of either a standard or a premium option. JVL's complete offering can be purchased through Tolomatic as an extended catalog product. For more information on the JVL offering, please visit: www.jvl.dk

NEED TO OPTIMIZE ON COST?

JVL's ServoStep™ motion technology and closed-loop control allow the JVL integrated stepper line to be considered a viable, lower-cost alternative to the integrated servo motor. For applications where these motion control advantages are unnecessary, a configuration option for the MIS232 with basic I/O and open-loop control is available to reduce system costs even more.

SPECIFICATIONS

	Config.	Supply Voltage	Speed Range	Cont. Torque		Peak Torque		Rated Power	Rotor Inertia		Encoder	Communication Options	Extras
				Nm	lb-in	Nm	lb-in		kg*cm²	lb*in²			
Integrated Servo Motors	MAC140, standard	12-48VDC	0-4000 RPM	0.32	2.83	0.90	7.97	134 W	0.173	0.059	4096 CPR, incremental	Serial (RS232/485), Basic I/O	ePLC™
	MAC140, premium	12-48VDC	0-4000 RPM	0.32	2.83	0.90	7.97	134 W	0.173	0.059	8192 CPR, abs multiturn	All Ethernet-based protocols, Basic I/O	ePLC™, Axis Synch
	MAC141 standard	12-48VDC	0-2700 RPM	0.48	4.25	1.59	14.07	134 W	0.227	0.078	4096 CPR, incremental	Serial (RS232/485), Basic I/O	ePLC™
	MAC141 premium	12-48VDC	0-2700 RPM	0.48	4.25	1.59	14.07	134 W	0.227	0.078	4096 CPR, incremental	All Ethernet-based protocols, Basic I/O	ePLC™
	MAC402, standard	12-48VDC	0-3000 RPM	1.28	11.33	3.80	33.63	400 W	0.340	0.116	8192 CPR, incremental	Serial (RS232/485), Basic I/O	ePLC™
	MAC402, premium	12-48VDC	0-3000 RPM	1.28	11.33	3.80	33.63	400 W	0.340	0.116	8192 CPR, abs multiturn	All Ethernet-based protocols, Basic I/O	ePLC™, STO, Axis Synch
Integrated Stepper Motors	MIS173, standard	12-72VDC, 7-28VDC control power	0-3000 RPM	0.56	4.96	–	–	142 W	0.054	0.018	1600 CPR, magnetic	Serial (RS232/485), Basic I/O	ePLC™
	MIS173, premium	12-72VDC, 7-28VDC control power	0-3000 RPM	0.56	4.96	–	–	142 W	0.054	0.018	1600 CPR, magnetic + abs multiturn	All Ethernet-based protocols, Basic I/O	ePLC™, STO,
	MIS232, standard	12-72VDC, 7-28VDC control power	0-3000 RPM	1.78	15.75	–	–	85 W	0.480	0.164	1600 CPR, magnetic	Serial (RS232/485), Basic I/O	ePLC™
	MIS232, premium	12-72VDC, 7-28VDC control power	0-3000 RPM	1.78	15.75	–	–	85 W	0.480	0.164	1600 CPR, magnetic + abs multiturn	All Ethernet-based protocols, Basic I/O	ePLC™, STO,
	MIS232, open-loop	12-48VDC, 12-28VDC control power	0-1023 RPM	1.78	15.75	–	–	85 W	0.480	0.164	–	Basic I/O	–
	MIS341, standard	12-72VDC, 7-28VDC control power	0-3000 RPM	5.02	44.43	–	–	220 W	2.700	0.923	4096 CPR, magnetic	Serial (RS232/485), Basic I/O	ePLC™
	MIS341, premium	12-72VDC, 7-28VDC control power	0-3000 RPM	5.02	44.43	–	–	220 W	2.700	0.923	4096 CPR, magnetic + abs multiturn	All Ethernet-based protocols, Basic I/O	ePLC™, STO,

Temperature range for all motors 0-40°C (32-104°F)

MADE IN U.S.A.

Tolomatic™ EXCELLENCE IN MOTION

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