

BXi

The BXi is an integrated motion and machine controller with internally powered servo drives. It features an expandable 100 Mbit Ethernet I/O system, scalable serial ports, and an object based development environment. The BXi provides full *system-centric* machine control including control of servomotors, actuators and process elements. By unifying the control of the entire machine or module, the BXi maximizes performance and reliability while dramatically reducing total system cost and integration effort.

FEATURES

Electronic Line Shafting (ELS) — ELS electronically links the motion of one axis (slave) to another (master) axis, providing a flexible and programmable relationship between the master and slave axes.

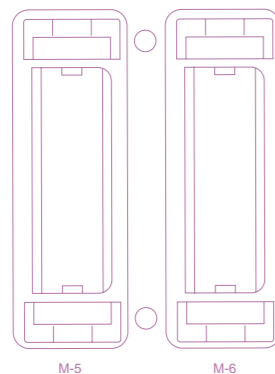
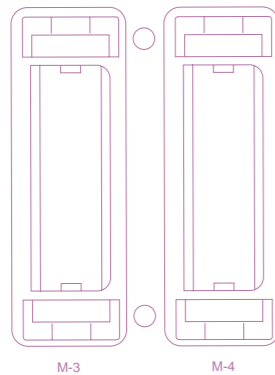
Cam Profiling — Tightly coordinated non-linear motion profiles can be commanded by user defined position-based tables to specify a relationship between any master axis and its slave axis.

Programmable Limit Switch (PLS) — In applications where processes are synchronized by a lineshaft, PLS can electronically actuate control functions at specific points in the machine cycle, and in full coordination with the rest of the machine operation.

Predictive Maintenance — Minimizes unscheduled downtime. Controller monitors machine mechanism calibration values and process loop performance, indicating in advance when machine maintenance should be scheduled.

e-Diagnostics — Enables remote monitoring, trouble shooting and data logging of an entire machine via a corporate intranet, or the Internet. Allows for easy integration of information into enterprise software .

Object-Based Development — The BXi features a sophisticated development environment that can reduce new software development by 95%. Typical machine objects are modeled in the BXi development environment, reducing the software effort to mainly application configuration and scheduling.



SCALE 1:2

Controller Performance:

- 64bit RISC processor
- Multitasking of servo control
- Expandable to 56 axes with networked controllers
- Internally powered servo axes, 80VDC, 5A cont, 10A peak
- Internal temperature monitoring

Controller Models:

- 8 axis control/6 Internal Drives
- 6 axis control/4 Internal Drives
- 4 axis control/2 Internal Drives

Motion Control Features:

- Point to Point motion profile
- Trapezoidal & S-Curve Motion profiles
- Electronic Lineshafting (ELS)
- Electronic cam profiling
- Auto tuning of servo & PID loops
- Torque, speed & position control
- General PID loop control

Internal Inputs/Outputs:

- Programmable Limit Switch (PLS)
- 14 Digital outputs, 24VDC configurable
- 32 Digital inputs, 24VDC configurable
- Pre-integrated E-stop circuit
- Pre-integrated drive power interrupt circuit
- Fully connectorized to reduce point-to-point wiring
- Fully expandable via BXi/o Ethernet modules

Connectivity:

- 100MB OpenLink™ Ethernet Network
- Multi controller network - standard
- Windows NT interface
- Accessories:
 - Ethernet hub 4/8 Ch
 - Serial port module 2/4 Ch

Environmental:

- Operating temp, 0-40°C
- 0-95% humidity, non-condensing
- Fully CE certified
- Passive cooling – standard
- Fan module – option

Power:

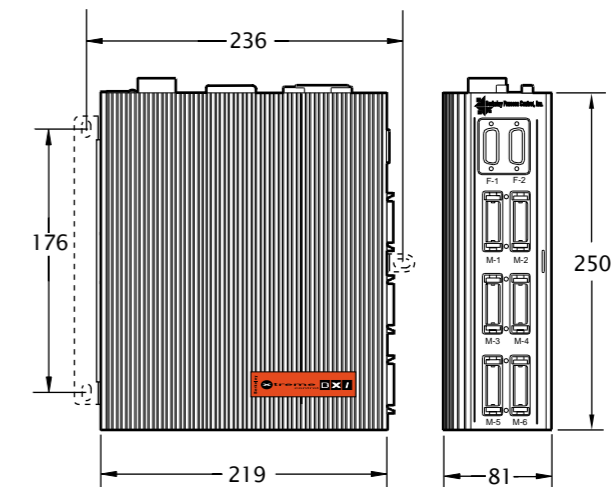
- 120-240VAC/1ph, 208/480 VAC 3ph
- Internal 24VDC optional power supply

Physical:

- 250mm x 219mm x 81mm (9.8" x 8.3" x 3.1")
- Weight: 5kg (11lbs)
- Panel mount, back or side

Approvals:

- UL
- CE



Corporate/USA Headquarters
1003 Canal Blvd.
Richmond, CA 94804
tel 510.236.3333
tel 510.236.1186
www.berkeleyprocess.com
e-mail marketing@berkeleyprocess.com

European Headquarters
tel +44 (0)7041 390 070
e-mail info.eu@berkeleyprocess.com

The products described herein, including without limitation, product features, specifications, designs and availability are subject to change without notice. Autocalibration® is a trademark of Berkeley Process Control, Inc. '1999, Berkeley Process Control, Inc. All rights reserved.