# Cost-Effective, Small Servos with the Best Lead Time in the Industry ... Now with SERCOS!

The PC800 family of digital brushless servo drives are the drives you've been asking for — the cost-effective, small servo with the best lead time in the industry. And now the family is even bigger with the addition of SERCOS connectivity.

The PC840 Series of drives are the newest addition to the PC800 line. Using the latest SERCON816 ASIC, the PC840 delivers network communication rates for distributed motion control up to 16 kHz. The PC840 complies with IEC/EN 61491, the industry's only open control standard, assuring integration with controls or devices supporting SERCOS. Its noise-immune fiber-optic cable and ring network topology greatly reduce wiring costs, installation and set-up time, and speed tuning and troubleshooting by supporting a rich set of diagnostic capabilities. Like all the PC800 drives, the PC840 offers a great value for your drive investment — plus it's available for shipment in just days.

## PC840 PERFORMANCE FEATURES

- 2.7, 3.6 and 7.1$A_{RMS}$ continuous, 5.3, 10.6 and 21.2$A_{RMS}$ peak output power
- All-digital DSP-based
- SERCON816 ASIC allows SERCOS network communications at up to 16 kHz
- Compliant to IEC/EN 61491 specification
- RS-232/485 serial interface allows communication with an IBM-compatible PC for set-up configuration, tuning and diagnostics
  - Digital oscilloscope for tuning and troubleshooting
  - Alter parameters during tuning
  - Command simple velocity moves
- Rugged, PLC-like digital and analog I/O maximize application flexibility:
  - Six optically-isolated inputs
  - Three optically-isolated outputs
  - One relay output, 30V dc @ 1A
  - Differential ±10V analog input
  - Single-end analog input, ±5V dc
  - Two analog outputs, ±5V dc
  - Encoder quadrature output — up to 16,384 PPR
  - Encoder quadrature input (step/direction)

  - Enable input
  - +5V dc @ 200 mA user output
  - +24V dc @ 100 mA power supply for optically-isolated inputs
- Single resolver feedback survives hostile environments
- Hall/Encoder feedback allows application flexibility — making it suitable for use with many popular linear motors
- All connections on front — easy access to clearly marked connectors
- Optional terminal block adapter speeds connections even further
- Separate logic supply input keeps logic power working when bus power is disconnected
- Extensive protection circuits
- 400 Hz velocity loop bandwidth
- Inaudible, high-frequency digital PWM sine wave current control
- IGBT power stage — more efficient, less audible noise

## TYPICAL APPLICATIONS

- Packaging machinery
- Electronic assembly equipment
- Material handling
- Robotics
- Specialty machinery

# THE NEW PC840 SERIES SERCOS DIGITAL BRUSHLESS SERVO DRIVES

## AGENCY APPROVAL

- UL, cUL and CE approvals pending as of publication date

## PAC SCI MOTORS COMPLETE THE PACKAGE

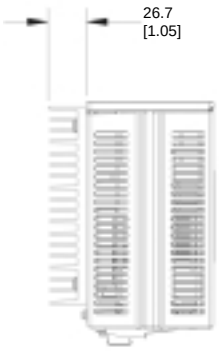
The PMA, PMB and S Series brushless servo-motors pair with the PC840 drives to offer the best solution for your compact servo application needs.

Pacific Scientific is committed to offering you the highest performance products available, tailored to fit your unique applications and backed by unmatched customer support and quality.

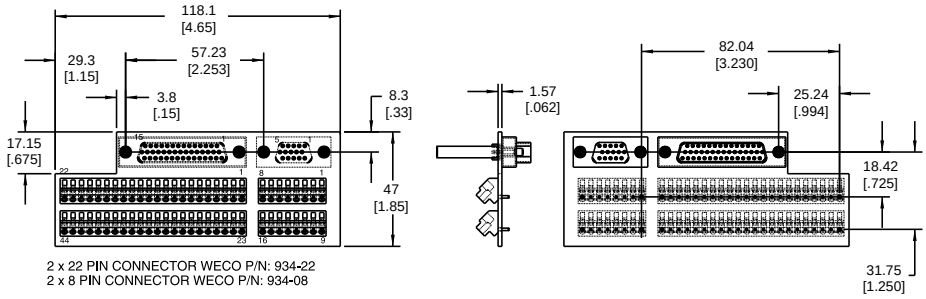
PACIFIC SCIENTIFIC
HIGH PERFORMANCE MOTORS & DRIVES

## PC840 SERIES SERCOS DRIVES

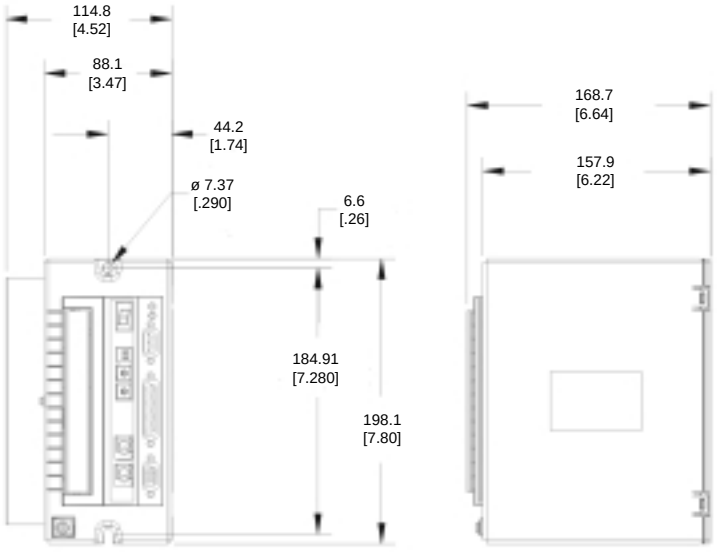
dimensions mm
(in.)



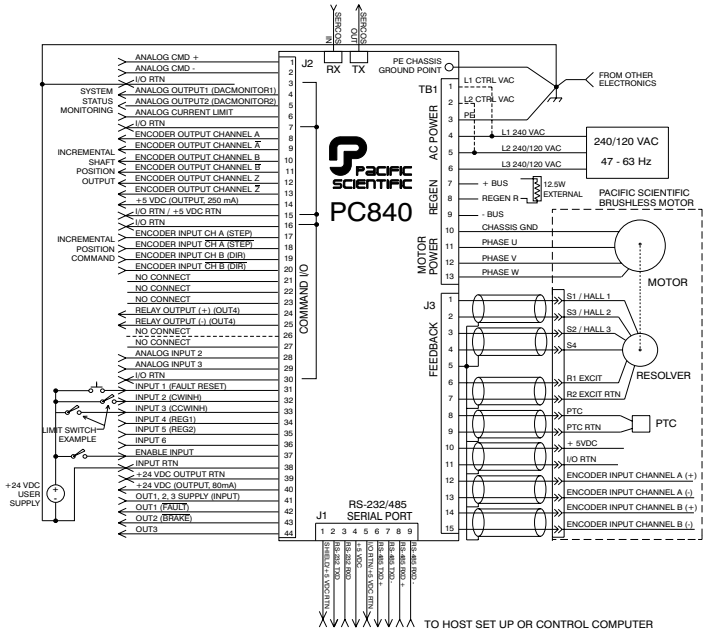

## TERMINAL BLOCK ADAPTER




2 x 22 PIN CONNECTOR WECO P/N: 934-22
2 x 8 PIN CONNECTOR WECO P/N: 934-08

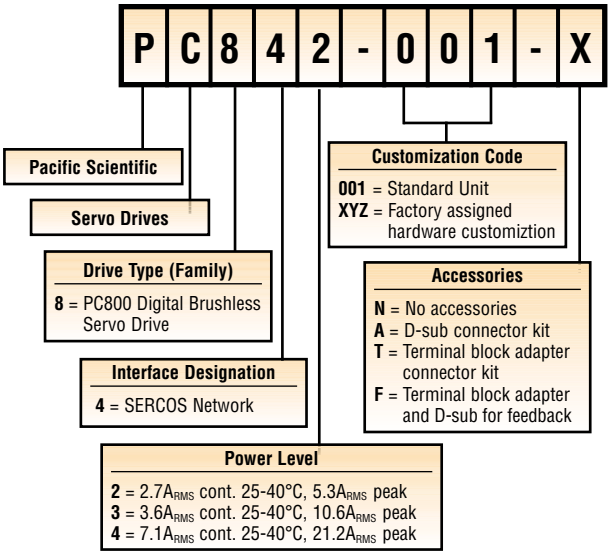



## CONNECTION DIAGRAM




## MODEL NUMBER CODES

To construct a motor model number code, select the combination of features required and put all the coded information in the proper sequence. Please account for an entry in each field. The model number shown is an example of a properly specified motor.




To learn more about Pacific Scientific and our solutions for your motion control needs, call **1-800-4-PACSCI** or visit our website at **www.pacsci.com**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