

Mercury Servo Controller

COST- EFFICIENT AND NETWORK- CAPABLE, FOR DC MOTORS AND BRUSHLESS DC MOTORS



C-863

- + High- speed encoder input to 60 MHz
- + Macro programmable for stand- alone functionality
- + Data recorder
- + Non- volatile EEPROM for macros and parameters
- + Daisy- chain networking with Mercury class controllers
- + Digital I/ O ports (TTL)
- + Control signal for motor brake
- + Interfaces: RS-232 and USB
- + Optional joystick for manual control

Digital motion controller for DC servo motors

1 channel. Motion control of PI precision positioning systems with DC motors: direct motor control (analog out) and PWM output for fast PI stages with integrated ActiveDrive amplifiers or with brushless motors and integrated block commutation. PID controller. Supports motor brake

Extensive functionality

Powerful macro command language. Non- volatile macro storage, e. g. for stand- alone functionality with autostart macro. Data recorder. Parameter changes on the fly. Extensive software support, e. g. for LabVIEW, shared libraries for Windows and Linux

Mercury class motion controller

Daisy- chain networking for up to 16 axes operated via a common computer interface.

Interfaces: USB and RS-232 for commands. A/ B (quadrature) encoder input. TTL inputs for limit and reference point switches.

I/ O ports (analog / digital) for automation. Interface for analog joystick.

Delivery scope including wide- range power supply, USB and RS-232 cable, daisy- chain network cable

Specifications

C-863.11	
Function	DC servo- motor controller, 1 channel
Channels	1
Motion and control	
Servo characteristics	PID controller, parameter changes on the fly
Servo cycle time	50 μ s
Profile generator	Trapezoid velocity profile
Encoder input	AB (quadrature) single- ended or differential TTL signal acc. to RS-422; 60 MHz
Stall detection	Servo off, triggered by programmable position error
Limit switches	2 \times TTL (polarity programmable)
Reference point switch	1 \times TTL
Motor brake	1 \times TTL, software controlled
Electrical properties	
Max. output voltage*	0 to \pm 15 V for direct control of DC motor
Max. output power	30 W

Current limitation	2 A
Interface and operation	
Communication interfaces	USB; RS-232, Sub- D 9- pin (m)
Motor connector	Sub- D 15- pin (f)
Controller network	Up to 16 units** on a single interface
I/ O ports	4 analog/ digital in, 4 digital out (TTL), 5 V TTL
Command set	PI General Command Set (GCS)
User software	PI MikroMove
Software drivers	LabVIEW driver, shared libraries for Windows and Linux
Supported functionality	Point- to- point motion, start- up macro, data recorder for recording parameters as motor input voltage, velocity, position or position error; internal safety circuitry: watchdog timer
Manual control	Optional: Pushbutton box, joystick (for 2 axes), Y- cable for 2- D motion
Miscellaneous	
Operating voltage	15 to 30 V, in the scope of delivery: external power supply 15 V / 2 A
Max. operating current	80 mA plus motor current (max. 3 A)
Operating temperature range	5 to 50 °C
Mass	0.3 kg
Dimensions	130 mm × 76 mm × 40 mm

* The output voltage depends on the connected power supply.

** 16 units via USB; 6 units via RS-232.

Order Information

C-863.11

Mercury DC Motor Controller, 1 Channel, with Wide- Range Power Supply

Related Products

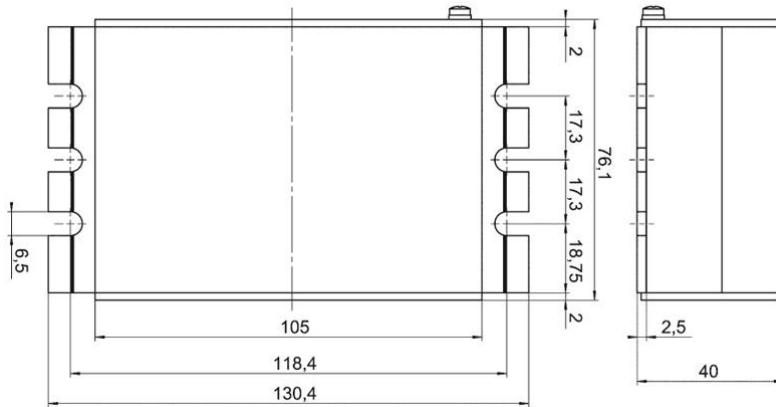
[C-663 Mercury Step Controller](#)

[E-861 PiezoWalk® NEXACT® Controller / Driver](#)

[C-867 PILine® Motion Controller](#)

[C-884 Four Axis Motion Controller](#)

Drawings / Images



C-863, dimensions in mm