M-Series Controller (Catalog # 0956)

The M-Series Controller module is an intelligent stepper motor controller and driver optimized for syringe pump applications. The module can be controlled via an RS485 or optional CAN interface. Using industry standard high level commands, rapid development of motion control applications is guaranteed for bus orientation or stand-alone control.

Programs can be stored in the on-board EEPROM for stand-alone operation. With the StallGuard™ feature it is possible to detect motor overload or motor stall for homing without a sensor. Expansion boards can be provided to add up to two more motor drivers (higher current available), additional solenoid drivers, or any other features needed for your application.

Electrical Data
- Up to 1.1 A coil current RMS (1.5 A peak)
- 9 V to 30 V motor supply voltage

Supported Motors
- Two-phase bipolar motors with 0.3 A to 1.1 A RMS current coil

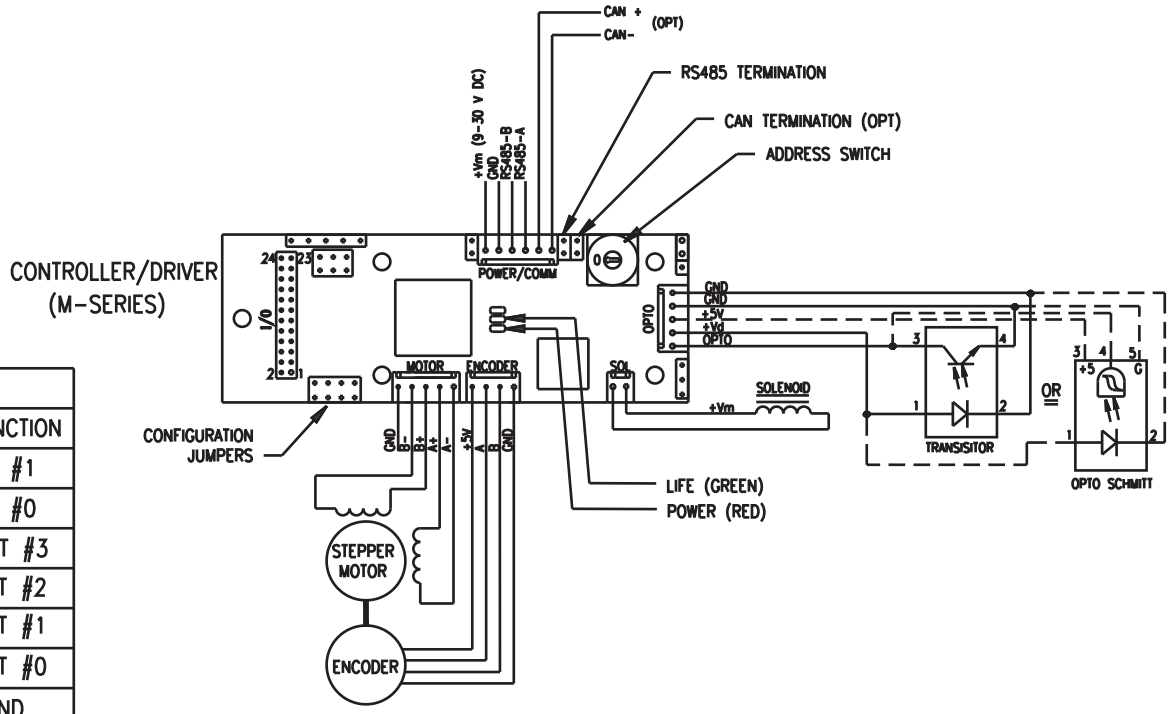
Interface
- RS485 or optional CAN 2.0 b host interface
- Single 4-wire bus for linking up to 16 modules
- Switch selectable addressing, EEPROM configurable
- One solenoid driver output
- Two general purpose inputs and four outputs on expansion connector

Features
- Encoder feedback for position verification
- Up to 16X micro stepping
- Automatic ramp generation in hardware
- On-the-fly alteration of motion parameters (e.g. position, velocity, acceleration)
- StallGuard™ option for sensor less motor stall detection
- Dynamic current control
- Low power dissipation driver technology: No heatsink required
- On-board diagnostic LEDs and status commands

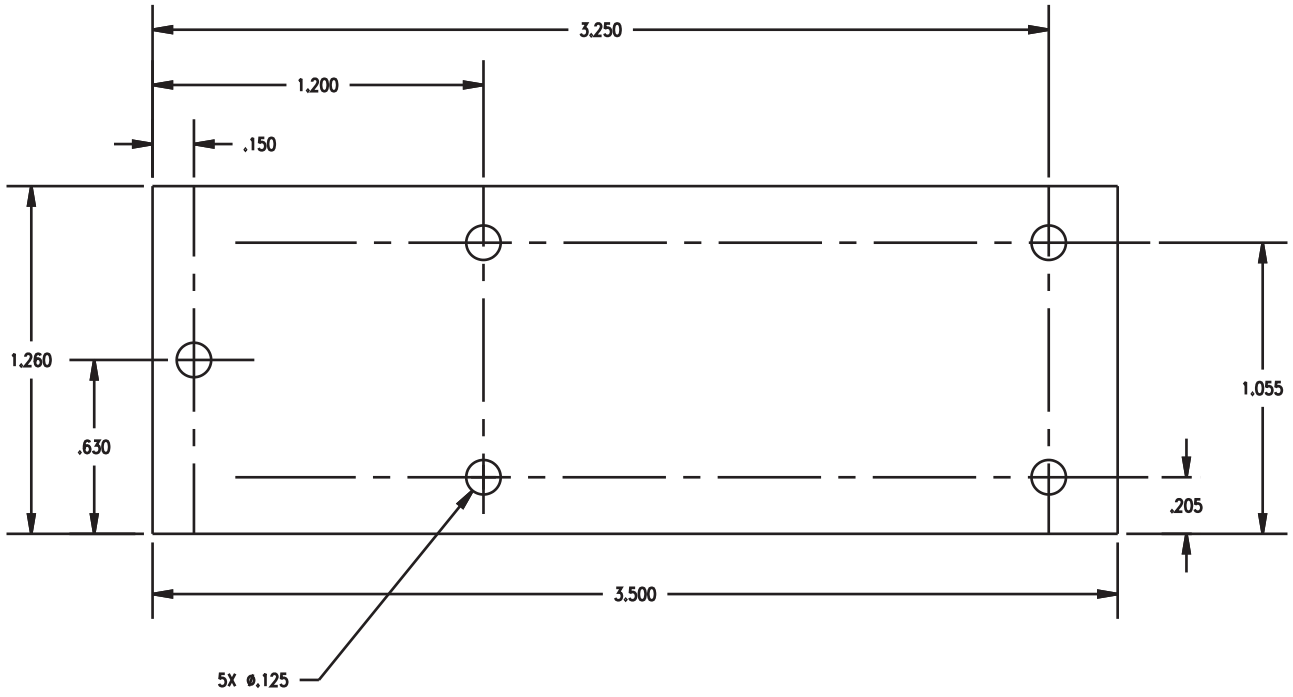
Status
- Industry standard protocol and pump command set
- Stand-alone operation or remote controlled operation

Other
- RoHS compliant
- Size: 32 x 83 mm, multiple panel mount options
- Expansion board options:
  - 1X high current driver
  - 2X driver
  - 8X solenoid driver

M-Series Controller Envelope Drawing



I/O	
PIN	FUNCTION
24	IN #1
23	IN #0
22	OUT #3
21	OUT #2
20	OUT #1
19	OUT #0
15	GND
14	GND
13	+Vm
12	+Vm
11	+5V



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