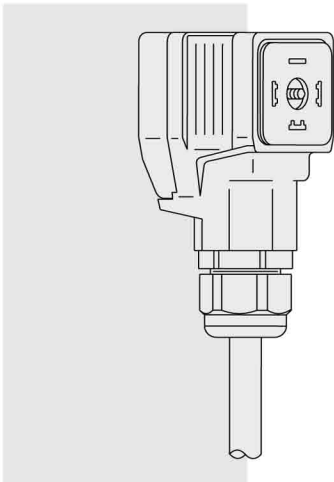


Part number:

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COILS AND ELECTRONIC CONTROLS

Proportional Valve Controller—DIN Coil Mount—



DESCRIPTION 10K Pot or 0–5 VDC Input—Economy Version

A convenient, plug-mounted control amplifier for controlling HydraForce proportional valves that have solenoids with DIN 43650A/ISO 4400 electrical connectors.

OPERATION

This control module utilizes high frequency switching (PWM) to supply a proportional valve solenoid with a proportional control signal. The input signal to this controller can be from a 10K potentiometer or a 0–5 VDC source. This economy version has no ramp adjustments. Dither frequency and amplitude are factory pre-set.

FEATURES

- Mounts directly to solenoid coils with DIN 43650A connectors.
- IP65 weather resistant when used with base gasket (supplied).
- Adjustments accessible with a removable cover.
- One unit covers supply voltages from 9 to 32 VDC.
- No internal fuses; circuit limits current electronically.
- Short circuit proof and reverse polarity protected.
- Connector can be disconnected from coil when powered.
- Maximum current adjustment does not affect minimum current setting.
- Internal supply for potentiometer.

RATINGS

Supply Voltage: 9–32 VDC

Coil rating must be matched with supply voltage: $R_{COIL} \leq (V_{SUPPLY} - 1.5 V) / I_{MAX}$.

Control Input Signal Options: 10K external potentiometer (accepts 5K to 50K pots), or 0–5 VDC current signal (see connection diagrams)

Input Resistance: 200K Ohms

Output Current: up to 2000 mA (see ordering info.)

Minimum Current Range: 0–500 mA (adjustable)

Maximum Current Range: 600–2000 mA (adjustable)

Internal Supply for Setpoint Potentiometer: +5VDC

Dither Frequency: 200 Hz ($\pm 10\%$ of full scale) Preset at Factory

Dither Amplitude: 5% Preset at Factory

Operating Conditions: –20° to 85°C; 0 to 85% relative humidity

Environmental Protection: IP65 with cover and base gasket installed

GENERAL SPECIFICATIONS

Plug Housing: Polyamide

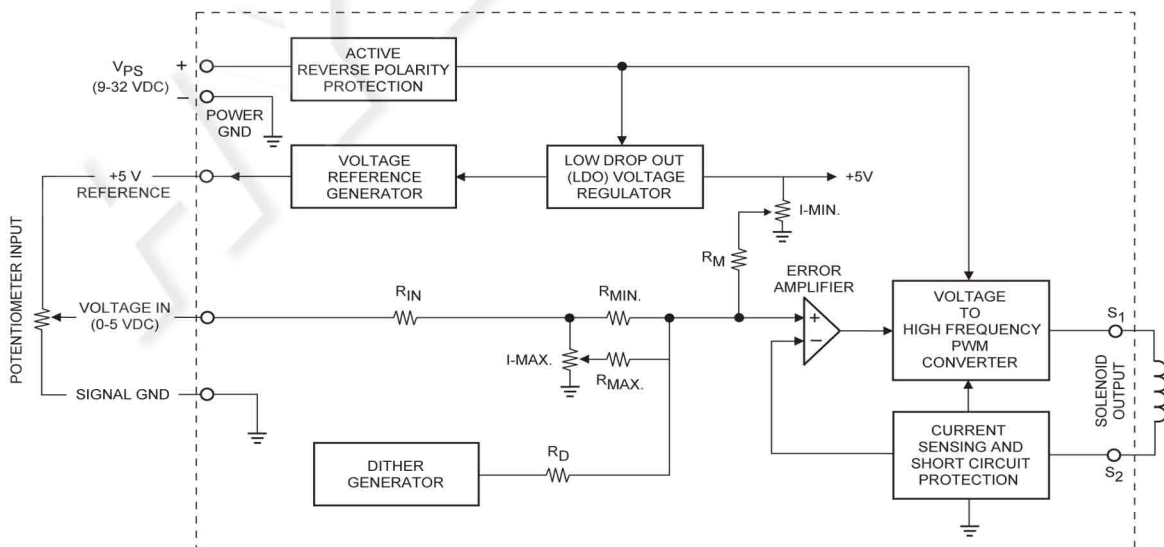
Plug Lid: Polycarbonate

Weight: 30 g (1.06 oz.) without cable

Connections: Mounted cable with unterminated wires provided; Length: approximately 2 meters (79")

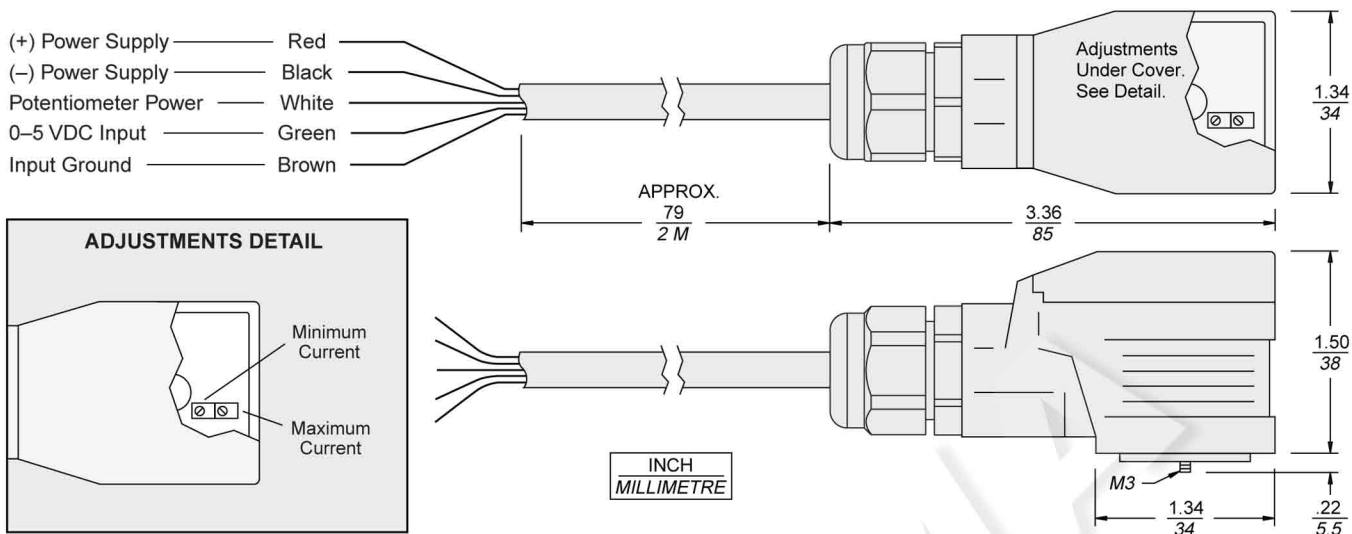
Note: The standard version of this controller is not UL Listed, but with the substitution of an alternate cable, it could be UL Listed. Consult factory.

SCHEMATIC



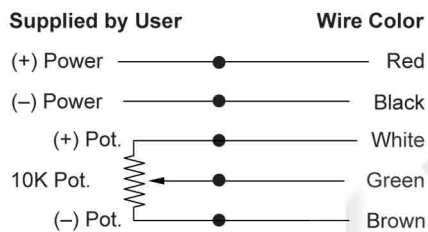
10K Pot or 0-5 VDC Input—Economy Version

DIMENSIONS

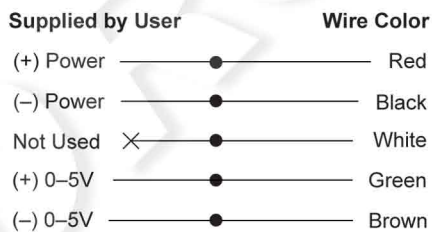


CONNECTIONS For Complete Set-Up Instructions,

10K Potentiometer (Pot.) Control



0 to 5 VDC Control



TO ORDER

Part Number	Output	I-Min. Setting	I-Max. Setting	Cable Length
4000172	2000 mA	0 to 500 mA	600 to 2000 mA	2 meters