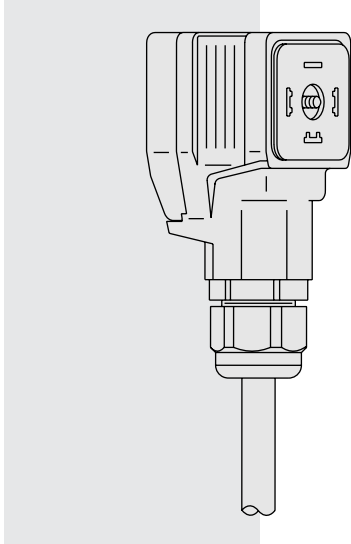


# Proportional Valve Controller—DIN Coil Mount—



## 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 supplies 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:** 187K 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:** 90 or 220 Hz ( $\pm 10\%$  of full scale) Preset at Factory

**Dither Amplitude:** 5% Preset at Factory

**Operating Conditions:**  $-40^{\circ}$  to  $85^{\circ}$ C; 0 to 85% relative humidity

**Environmental Protection:** IP65 with cover and base gasket installed

## GENERAL SPECIFICATIONS

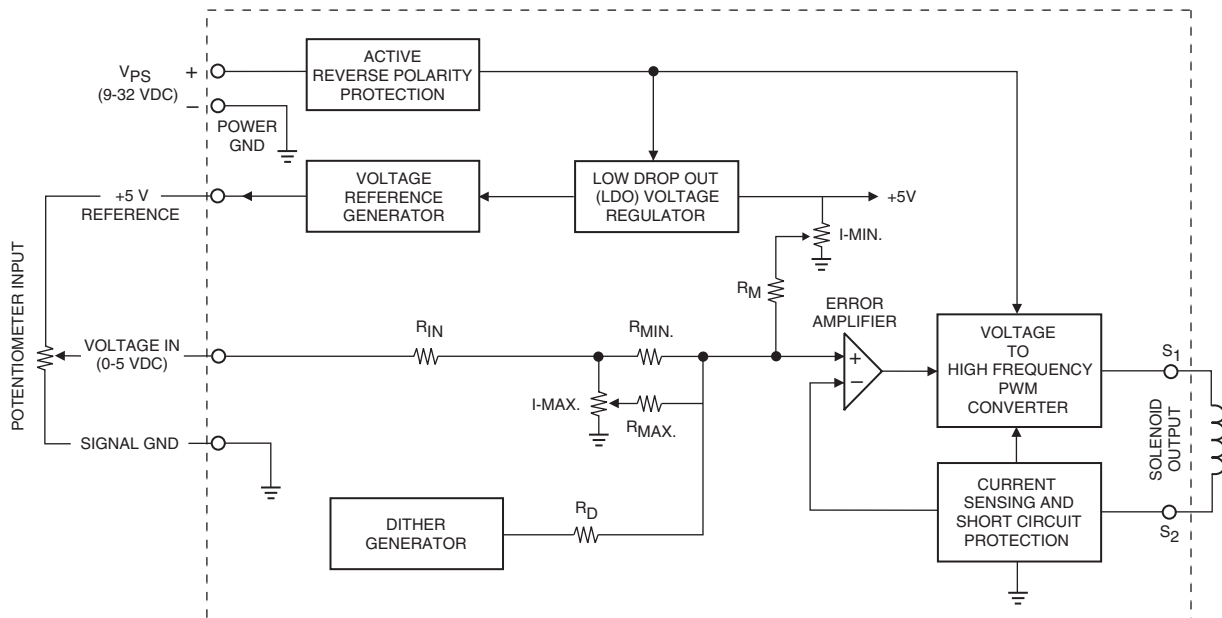
**Plug Housing:** Polyamide

**Plug Lid:** Polycarbonate

**Weight:** 30 g (1.06 oz.) without cable

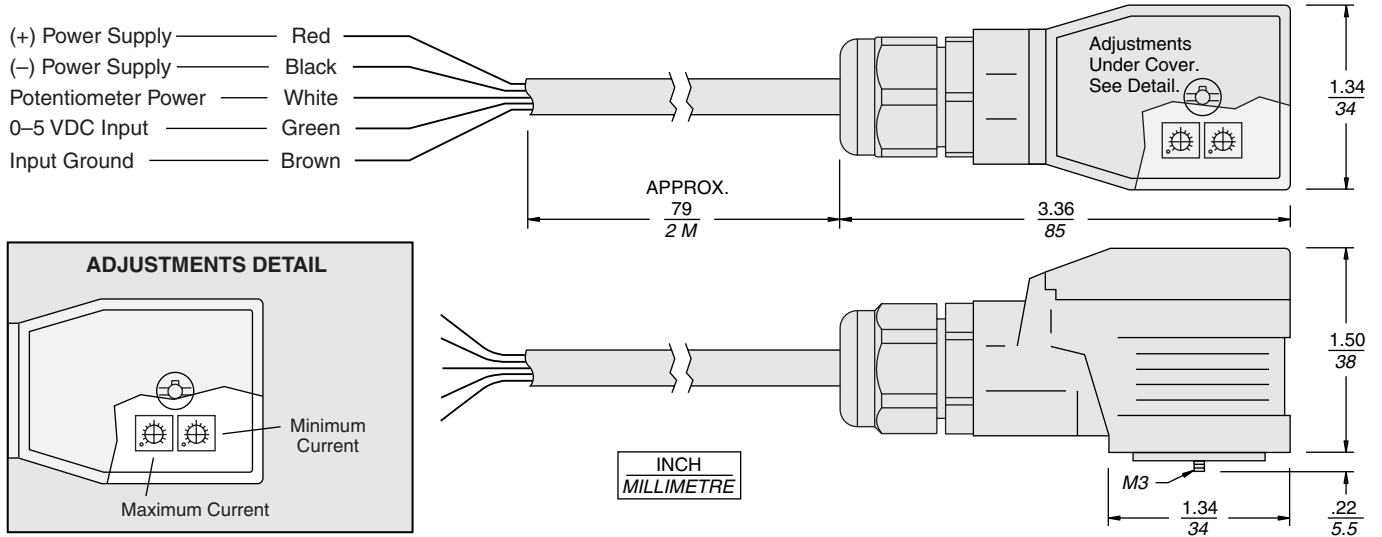
**Connections:** Mounted cable with unterminated wires provided; Length: approximately 2 meters (79")

## SCHEMATIC



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

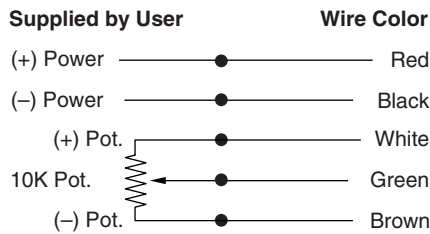
## DIMENSIONS



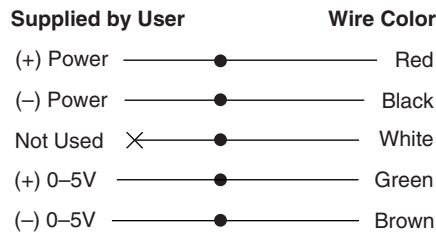
## CONNECTIONS

For Complete Set-Up Instructions, see page 3.439.1

### 10K Potentiometer (Pot.) Control



### 0 to 5 VDC Control



## TO ORDER

Part Number	Dither Freq.	Output	I-Min. Setting	I-Max. Setting	Cable Length
4000172	90 Hz	2000 mA	0 to 500 mA	600 to 2000 mA	2 meters
4000236	220 Hz	2000 mA	0 to 500 mA	600 to 2000 mA	2 meters