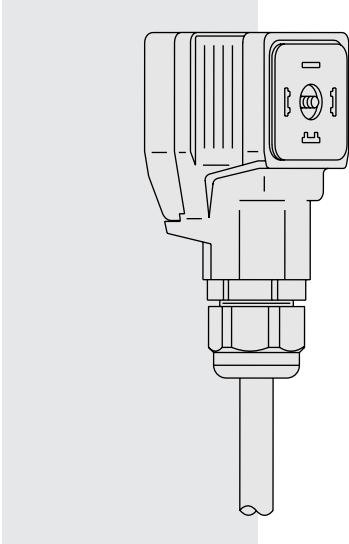


Proportional Valve Controller—DIN Coil Mount—



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° to 85° C; 0 to 85% relative humidity

Environmental Protection: IP65 with cover and base gasket installed

GENERAL SPECIFICATIONS

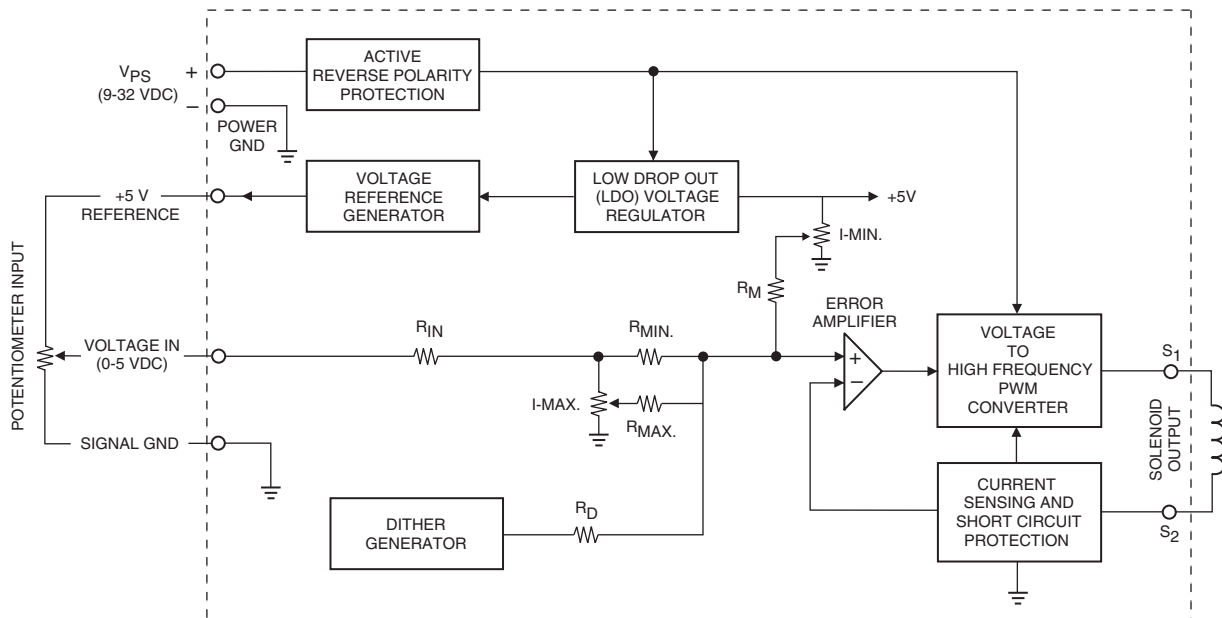
Plug Housing: Polyamide

Plug Lid: Polycarbonate

Weight: 30 g (1.06 oz.) without cable

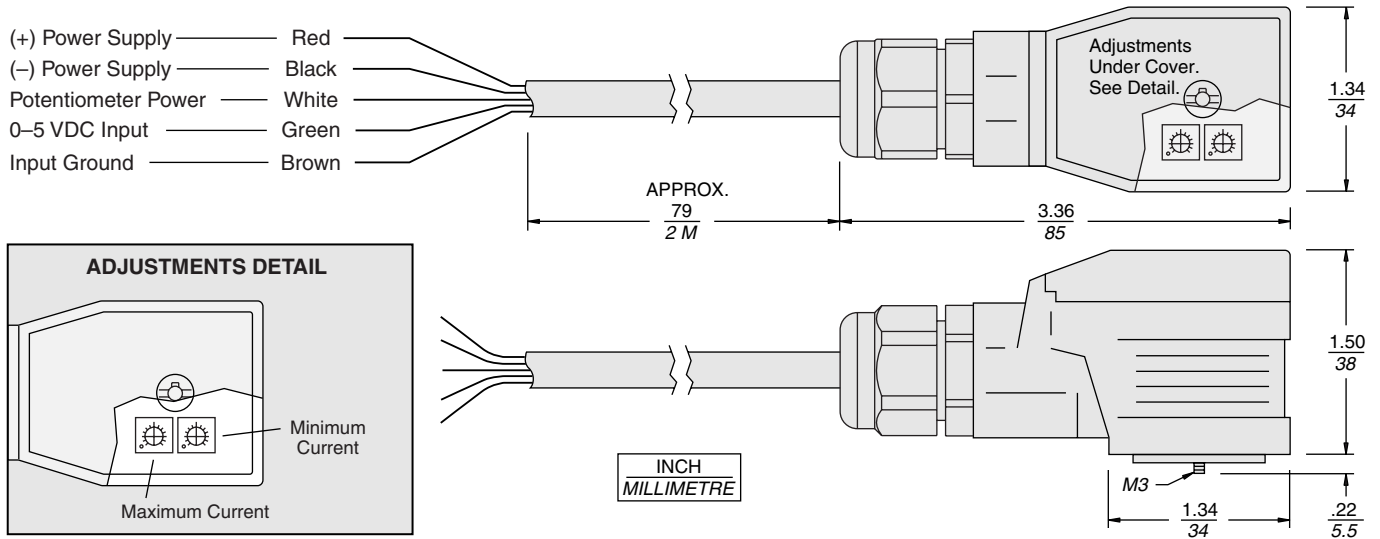
Connections: Mounted cable with unterminated wires provided; Length: approximately 2 meters (79")

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

Supplied by User	Wire Color
(+) Power	Red
(-) Power	Black
(+) Pot.	White
10K Pot.	Green
(-) Pot.	Brown

0 to 5 VDC Control

Supplied by User	Wire Color
(+) Power	Red
(-) Power	Black
Not Used	White
(+) 0-5V	Green
(-) 0-5V	Brown

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