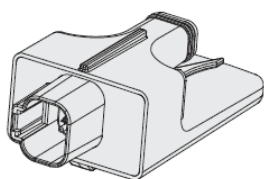




Overview



Description

A compact plug-in style, microprocessor based valve driver designed for use in hydraulic proportional valve applications. Configurable to drive a single coil using an independent signal. The **ECDR-0101A** proportionally controls one coil to a user-defined metering profile. >It is configured with *HF-Impulse*: an easy-to-use, web-accessible configuration tool available as a free download at www.hydraforce.com/electronics. An LED output indicator is located on the front.

Operation

The controller accepts input from commonly available analog operator interface devices (joystick, potentiometer, sensors, etc.) The input signal drives the output current.

Diagnostic Features

- Any supply voltage below 8.5 Vdc causes the controller to default to the valve-off mode.
- The driver output drops and holds at the inactive stand-by condition. Any short or open circuit condition is automatically detected as an error.

Multiple Personalities

The EVDR controller is available in multiple configurations (personalities) to suit the needs of specialized applications. Choose the one that best fits your needs.

EVDR-0101A - General Purpose.

ETDR-0101A - Transmission Apps.

EGDR-0101A - Generator Control.

Ratings

Electrical Parameters

Power requirements	9 to 32 Vdc
Output current	50 to 2000 mA - Note: Continuous 3000 mA - Note: For one sec.

Processor and Memory

Processor	ARM 32-bit Cortex®, M0 CPU, 48 MHz
Flash memory	32 kB
RAM	4 kB

Properties

Mating connectors	Deutsch DT06-4S - Note: Input DT04-2P - Note: Output
Output indicator	Red LED
Environmental rating	IP67
Unit weight	0.079 kg (0.175 lb) - Note: without connectors



I/O

Number of inputs	1
Number of outputs	1

Control Inputs - Analog

Voltage	0 to 5 Vdc 0 to 10 Vdc
Current	0 to 20 mA 4 to 20 mA
Resistive	0 to 6000 Ohm
Temperature	ERT 120 (HydraForce temperature sensor)

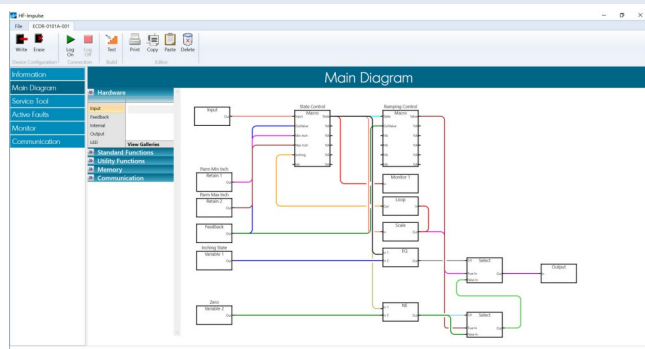
Control Inputs - Digital

Switch	Switch to battery Switch to open Switch to ground
PWM	0 to 100% - Note: 50 to 4000 Hz

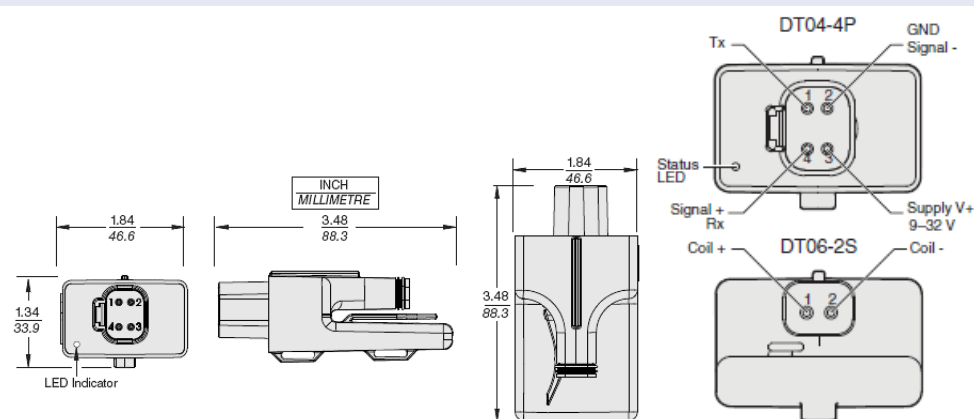
Output

Frequency	20 to 10 000 Hz
Current control	50 to 2000 mA
PWM control	0 to 100% - Note: Duty cycle
PWM frequency range	40 to 400 Hz

Configuration Example



Dimensions





To Order

Single Valve Driver Model ECDR-0101A:Part No. 4204820 (NOTE: If purchasing the ECDR-0101A for the first time, we suggest purchasing both the USB-TTL programming adapter and the test harness)

Configuration Software for ECDR-0101A â€” HF-Impulse:Free download fromwww.hydraforce.com/electronics.

Mating Connector Kit â€” DT06-4S:Part No. 4001953

Mating Connector Kit â€” DT04-2P:Part No. 4001958 (For remote installation)

USB-TTL Programming Adapter: Part No. 4000285

Test Harness: Part No. 4000286 (For testing and bench operation)

Temperature Sensor â€” ERT 120:Part No. 4206200

Mating Connector Kit for ERT 120 Temperature Sensor â€” Deutsch Model DTM06-2SPPart No. 4001970