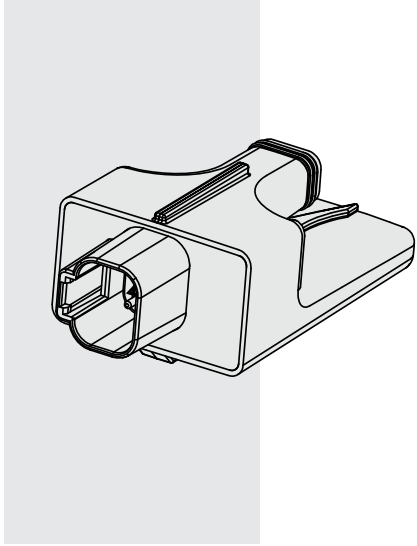


## EVDR-0101A Single Plug-In Style Valve Driver



### 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.

When the fault is corrected, the controller returns to standard operation.

### MULTIPLE PERSONALITIES

The EVDR controller is available in multiple configurations (personalities) to suit the needs of specialized applications. Visit [www.hydraforce.com](http://www.hydraforce.com) and choose the one that best fits your needs. All are configured with *HF-Impulse* software.

**EVDR-0101A** - General Purpose  
**EGDR-0101A** - Generator Applications  
**ETDR-0101A** - Transmission Apps

### DESCRIPTION

A compact, plug-in style, microprocessor-based valve driver designed for use in hydraulic proportional valve applications. The **EVDR-0101A** drives a single coil to a user-defined metering profile using an independent signal. The profile provides either a straight-line or multi-sloped output that you configure with *HF-Impulse*: an easy-to-use software tool available as a free download at [www.hydraforce.com/electronics](http://www.hydraforce.com/electronics). An output LED indicator is located on the front (see *Dimensions and Mounting* on reverse).

### OPERATION

The controller accepts an input from commonly available analog or digital operator interface devices (joystick, potentiometer, sensors, etc.) The input signal drives the output current, enabling accurate and proportional metering of the hydraulic valve. As the input changes, the output follows the defined metering profile, allowing optimum system response. Built-in diagnostics detect fault conditions that automatically deactivate the output. The controller has an LED output indicator.

### RATINGS

**Operating Temperature:** -40 to 85 °C (-40 to 185 °F)

**Molded Enclosure Dimensions:** 46.6 mm (W) x 88.3 mm (H) x 33.9 mm (D);  
 1.84 in. (W) x 3.48 in. (H) x 1.34 in. (D)

**Mating Connectors:** Deutsch DT06-4S and DT04-2P

**Power Requirements:** 9 to 32 Vdc

#### Control Inputs - Analog:

**Voltage:** 0 to 5 or 0 to 10 Vdc

**Current:** 0 to 20 or 4 to 20 mA

**Resistive:** 0 to 6000 ohms

**Temperature:** ERT120 (HydraForce temperature sensor)

#### Control Inputs - Digital:

**Switch:** Switch to battery, switch to open, switch to ground

**PWM:** 0 to 100%, 50 to 4000 Hz

**Frequency:** 50 to 10 000 Hz

#### Control Output:

**Current:** 50 to 2000 mA (up to 3000 mA for a duration of one second)

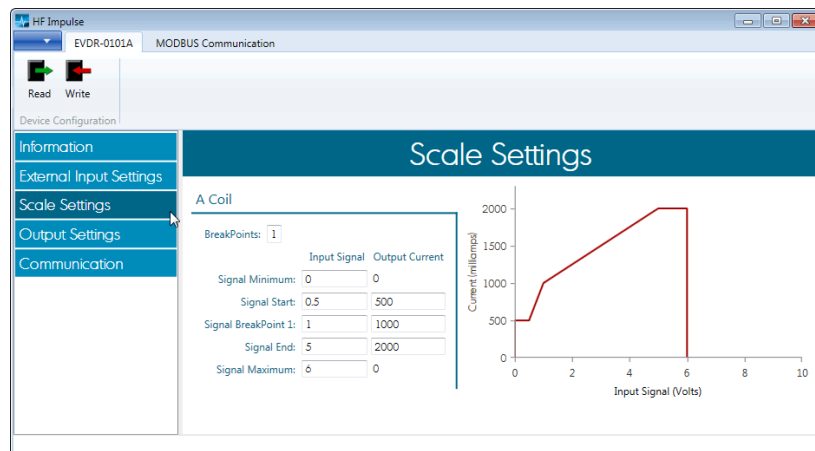
**PWM:** 0 to 100% duty cycle; 40 to 400 Hz

**Output Indicator:** LED

**Sealing:** IP69K rated

**Weight:** 0.072 kg (0.159 lb) without connectors

### CONFIGURATION EXAMPLE

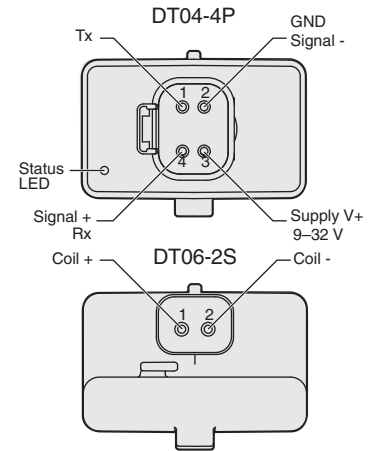


# General Purpose

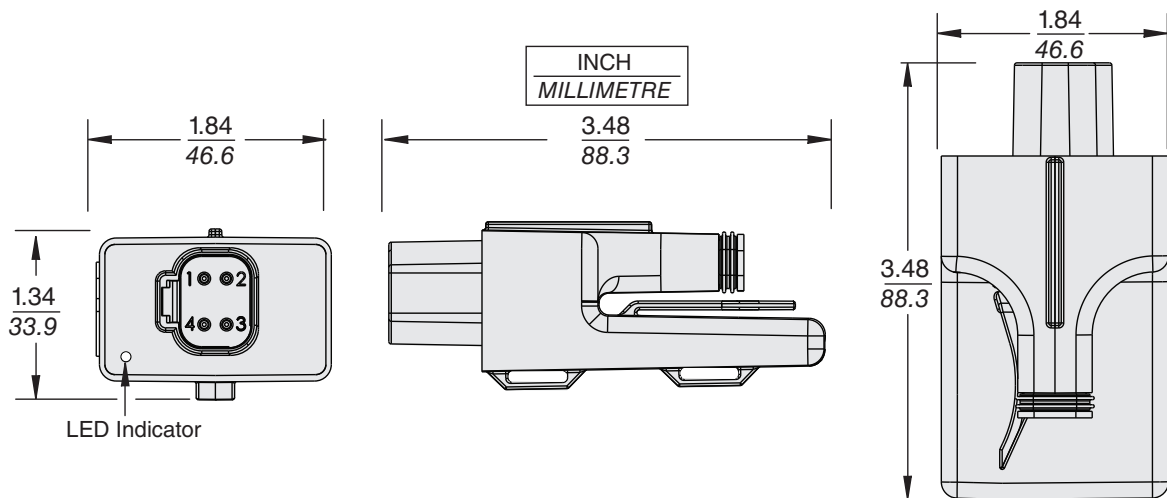
# EVDR-0101A

## CONNECTIONS & WIRING

Description	Interface	Pin	Mating Connector
Battery, 9-32 V	Power + Power -	3 2	DT06-4S
Serial TTL and Voltage/ Current, Resistance Input	Serial in	4	
Serial TTL (For Configuration Only)	Serial out	1	
Solenoid	Sol A + Sol A -	1 2	DT04-2P



## DIMENSIONS & MOUNTING



## TO ORDER

**Single Valve Driver Model EVDR-0101A** - Part No. **4204800** (NOTE: If purchasing the EVDR-0101A for the first time, it is suggested to purchase both the Configuration Cable P/N 4000285 and the Monitoring Cable P/N 4000286.)

**EVDR-0101A Configuration Software** - *HF-Impulse* - free download from [www.hydraforce.com/electronics](http://www.hydraforce.com/electronics)

**Mating Connector Kit: DT06-4S** - Part No. **4001953**

**Mating Connector Kit: 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:** ERT 120 (Part No. **4206200**); Mating Connector Kit for ERT 120 Temperature Sensor: Deutsch Model DTM06-2S (HF Part No. **4001970**)