



High Country Tek, Inc.

Electronic Pump Controller **epc**

Multi-Function SAE J1939 Compatible Module

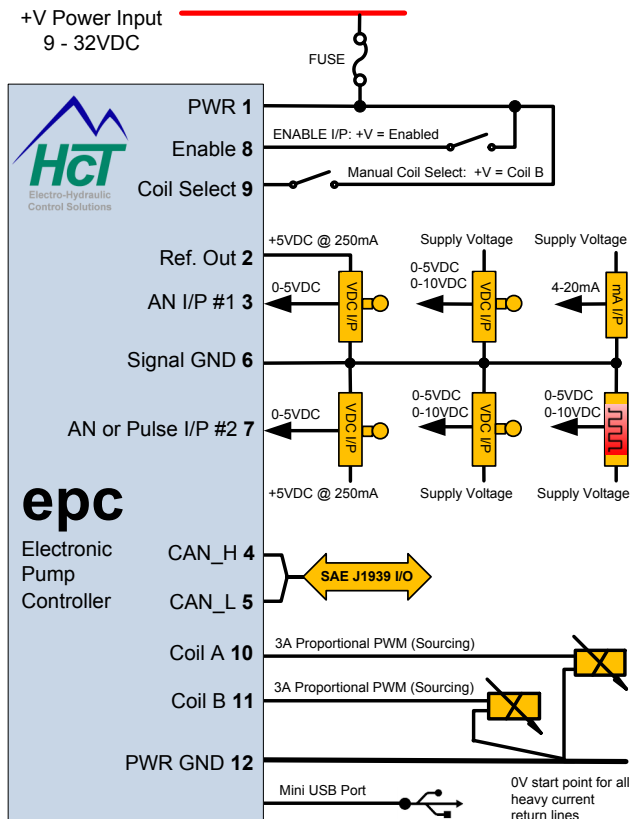
Electronic Control Solutions for the Global Fluid Power Industry

Application Information

- Controls 2x proportional pressure / flow / directional valves
- Multiple open and closed loop mode options
- SAE J1939 expansion 'Node' and/or system compatibility
- SAE J1455 (load dump) compliant power protection
- Windows™ software user interface for configuration
- System "Status" LED with blink code & data logging
- Mini USB connection to PC for set-up/diagnostics



Electrical Connection Diagram



Controller Specification

Housing Type	HCT encapsulated block
Power Supply Voltage	9 to 32VDC (<i>Absolute maximum</i>)
Current Consumption	Valve current + 50mA Quiescent (<i>Max</i>)
Command Inputs	SAE J1939 2x switched inputs (<i>ON/Off</i>) 2x analog inputs One with (0-5V, 0-10V, 4-20mA) One with (0-5V, 0-10V, Pulse or Freq. - 3 to 30KHz)
Input Impedance	Voltage & Freq. inputs = 100kΩ 4-20mA input = 100Ω
Outputs	2x 3A proportional PWM (<i>Sourcing</i>) (<i>Short circuit protection and open circuit alert</i>) 1x 5VDC ±10% (<i>Regulated voltage @ 250mA</i>)
PWM Dither Freq.	Software adjustable - 33 to 500Hz
Module Connector	DTF15-12PB, 12-way Male
Communication	Mini-B USB standard
Housing Material	Black, Polycarbonate
Encapsulation	Flameproof epoxy resin
Mounting	2x No.8 (5mm) screws
Temperature Range	-40 to +85°C (<i>Operational</i>) -60 to +90°C (<i>Storage</i>)
NEMA/IP Rating	NEMA 6P/IP67

Accessories



023-00259

- PC set-up software
- System diagnostics
- Data logging feature



Connectors / Cables

- 999-10156 Prototype harness
- 108-00134 Communication cable



Joysticks

- SAE J1939 / Hall Effect
- Single or dual axis
- Spring return to center or detent

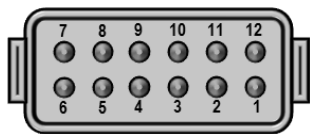


Foot pedals

- SAE J1939 / Hall Effect
- Uni or bi-directional
- 30° or 45° pedal deflection

Connector Details

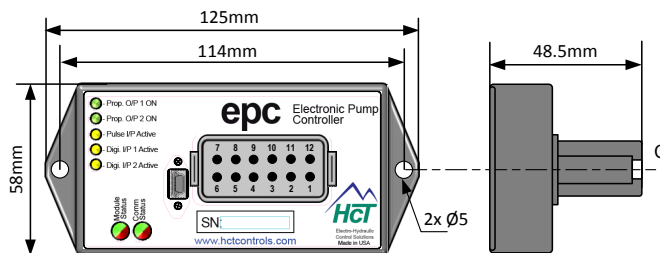
View of 12 way male module connector **DTF15-12PB**



- Pin 1 +Vin, 9 to 32VDC power supply input
- Pin 2 +5VDC @ 250mA regulated voltage output
- Pin 3 Command input (0-5V, 0-10V, 4-20mA)
- Pin 4 CAN_HI (**SAE J1939**)
- Pin 5 CAN_LO (**SAE J1939**)
- Pin 6 0V - Signal GND
- Pin 7 Pulse input or analog input 2
- Pin 8 Controller enable input (high = enable)
- Pin 9 Manual selection of coil A or B
- Pin 10 Coil A proportional PWM output + (3A, sourcing)
- Pin 11 Coil B proportional PWM output + (3A, sourcing)
- Pin 12 0V - Power GND

- Mating 12 Way Connector Kit **999-10155**
- Qwik-Pick Solution Kit **999-10260**

Dimensions



Notes:

- Controller weight is approx. 200g
- Mount to flat, cool surface.
- Use BOTH mounting lugs for security

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