



High Country Tek, Inc.

Single Output Proportional Controller: **HAU**

Electronic Control Solutions for the Global Fluid Power Industry

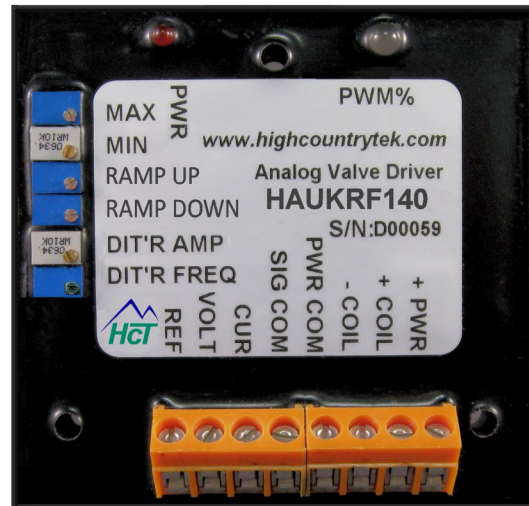


Application Information:

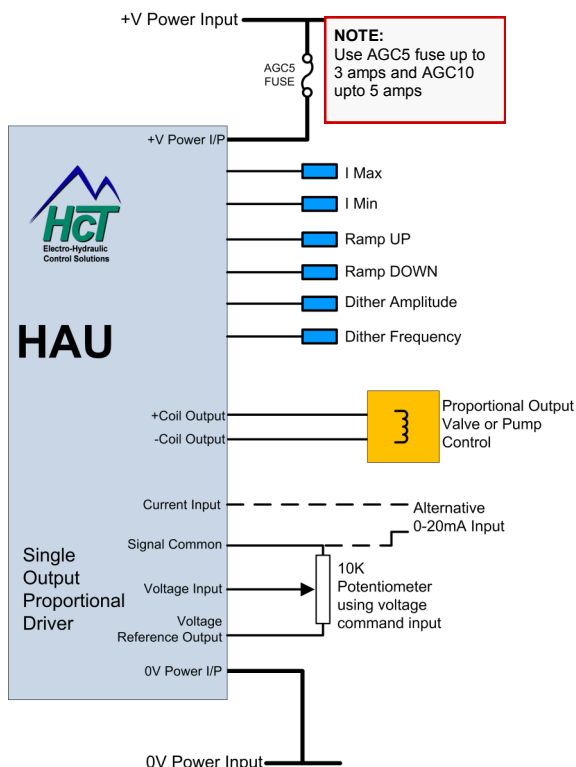
- **Valve coil driver module - single PWM output**
- One module for 12VDC or 24VDC coils/systems
- **Pressure or Flow control valves**
- Direct connection to joystick, potentiometer or remote command

Product Feature Overview:

- **Compatible with all major hydraulic manufacturers products**
- Potentiometer adjustments for simple, quick optimization
- NO software or special tools / skills needed to set-up
- Multiple options for current ranges, up to 5Amps
- Connector options to suit environment of application
- Diagnostic LED indicators
- Mount directly to bulkhead / manifold or where needed



Electrical Connection Diagram:



Controller Specification Overview:

Housing Type:-	HCT 'encapsulated' block.
Input Supply Voltage:	11 – 30VDC (Absolute Maximum)
Input Supply Current:	Valve Current Setting + 200mA Quiescent (Max)
Command Input Type(s):	Voltage (VDC) OR current (mA)
Command Input Value(s):	0 to +5V, 0 to +10V or 0 to 20mA
User Voltage:	5V @ 5mA max (1KOhm limiter)
Proportional Output:	1x PWM up to 5A max current
Dither Frequency :	~30 to 200Hz (adjustable)
Dither Amplitude:	~0 to 100% (adjustable)
Housing Material:-	Black, Polycarbonate potting case
Wire Connections:-	8 way Terminal block with Weatherpack connectors as 'Q' option
Connector type:-	Screw terminals (standard)
Encapsulation:-	Flameproof, 2 part epoxy resin - black
Mounting:-	3 x No. 8 (4.5mm) screws .
Temperature range:-	-20 to +60°C (operational)
IP Rating:	IP67 / 69K (Module only) derate for connector as required.



Single Output Proportional Controller - HAU

Controller Options:

Dimensional Data:

H A U K R F 1 4 0 -

Max. Current Range:

W = 0mA to 63mA
X = 0mA to 125mA
Y = 0mA to 250mA
Z = 0mA to 500mA
E = 0mA to 1A
K = 0A to 1.7A
G = 0A to 3A
M = 0 to 5A

Ramp Select:

S = Single pot. adjustment for up & down
R = Individual adjustments for up & down

Dither Frequency Pre-set by factory:

Nxxx = Pre-set - NO dither frequency adjust potentiometer installed
Fxxx = Pre-set to user chosen dither frequency with dither adjustment

Frequency is in Hertz, use all three digits with leading 0 if required:
i.e. 050 for 50Hz or 140 for 140Hz

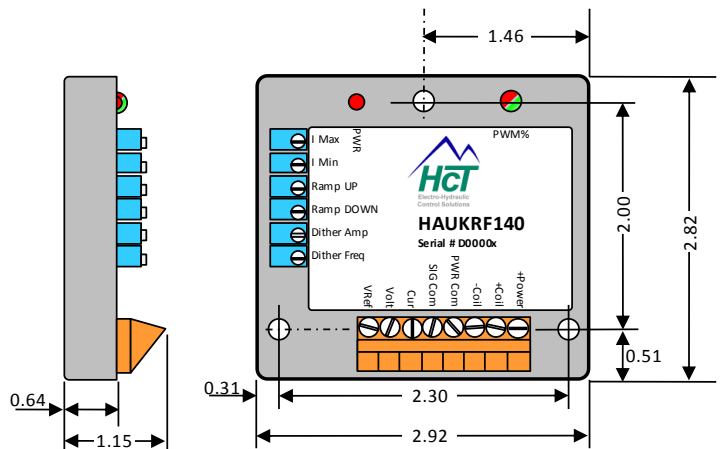
NOTE: If NO dither frequency is specified, the default is 140Hz

Connector Type:

NO Letter (i.e. **Blank**) = Standard screw type terminal block
Q = **WeatherPack option** - 4 way tower and 4 way shroud on 6 inch cables will be provided.

'Q' Option Mating Accessories:

P/n: 999-10169 - Connector kit - 4-pin tower & 4-pin shroud (assembly required)
P/n: 999-10225 - Pre-assembled Harness with 3-Meter flying leads, automotive grade wire and 4-pin tower & 4-pin shroud connectors



Notes:

- All dimensions in inches
- Unit weight is approx. 350 grams
- Mounting is via 3 x No. 8 holes (4.5mm) on to flat surface
- Unit shown with ALL potentiometers possible
- ALL potentiometers are 10 turn variety with end 'clutch'
- ALL potentiometers adjust 'CLOCKWISE' to increase function
- Not to scale, please contact HCT for exact dimensions

Diagnostic Indicators:

PWR LED - Lights when the power supply is above 10.5VDC, the unit WILL NOT FUNCTION correctly if the LED is OFF or BLINKING.

PWM% - This indicates the how much the output is driving the coil, RED (full OFF) to GREEN (full ON). The ratio of red to green indicates the duty cycle of the PWM output and can be used as a visual or troubleshooting aid.



Need More Information ?

For customer service, pricing, order placement and application support, contact us through E-mail at:

www.hctcontrols.com

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