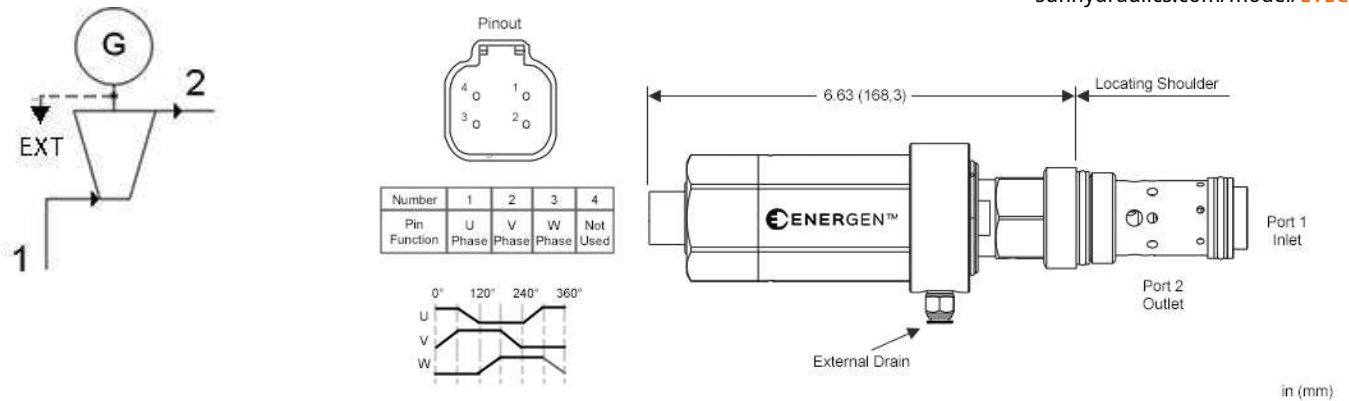




This valve is a 2 port cartridge designed to convert hydraulic power from your application into electrical power. The valve accepts flow from Port 1 to Port 2 and outputs a 3-phase AC voltage signal.

TECHNICAL DATA NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Cavity	T-16A
Series	3
Number of Outputs	1
Vibration	33.3 Hz 6.8g Peak (Spec: S-367 Section 11.0)
Shock	49g Peak (Spec: S-367 Section 12.0)
Maximum Ambient Temperature	160 °F
Minimum Flow Rate to Harvest Energy (No Load)	40 L/min.
Maximum Flow Rate	200 L/min.
External Drain Port Interface	4mm PTC Connector
External Drain Port Leakage Rate	6 drops/hr
Output Voltage - Maximum Flow Rate	30 VDC (After Rectification)
Termination	Deutsch DT04-4P
Maximum Load Current	3A
Maximum Operating Pressure (Port 2)	14 bar
Duty Cycle Rating	100 %
Connector	4-Pin Deutsch (3 Phase AC Output)
Valve Hex Size	31,8 mm
Valve Installation Torque	203 - 217 Nm
IP Rating	IP69K
U.S. Patent #	11,988,185
Seal kit - Cartridge	Viton: 990316006
Model Weight	1.08 kg.

CONFIGURATION OPTIONS Model Code Example: EVECArray

CONTROL	(X)	FUNCTIONAL SETTING RANGE	(X)	SEAL MATERIAL	(V)
X Standard		X No Check		V Viton	

TECHNICAL FEATURES

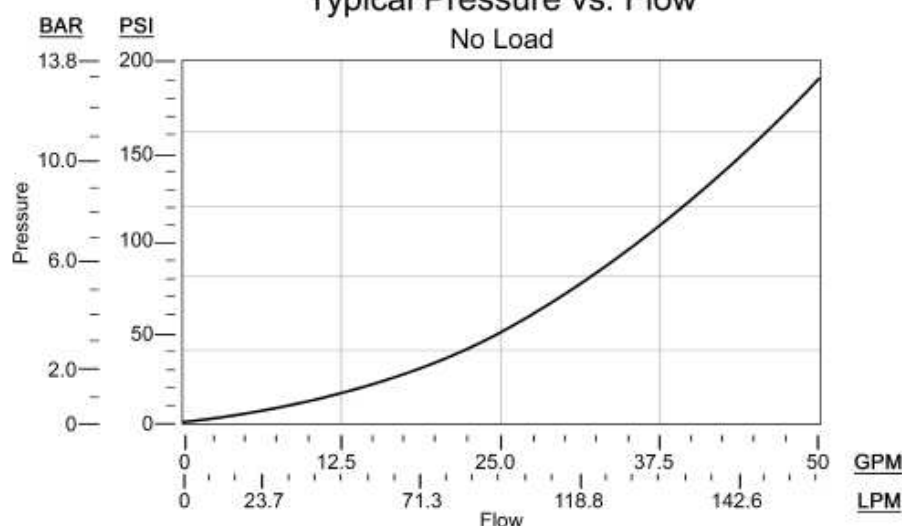
- Power cable with mating connector is required (not included).
- The valve exhibits up to 6 drops per hour of internal leakage into the electronics housing. The auxiliary drain port must be gravity fed and therefore remain at atmospheric pressure to prevent submersion of the electronics.
- Valve must be installed in an upright or horizontal orientation. When installed horizontally, the collar should be positioned so that the drain is oriented downward.
- This product can handle a maximum of 200 PSI (14 bar) at port 2 and is designed to harvest energy from fluid destined to return to tank.
- Higher electrical loads and lower Port 2 pressure have a positive effect in reducing leakage.
- In addition to elevated leakage, higher than rated pressures at Port 2 result in a reduction in the power output.
- The electrical output is unregulated. Most applications will require external rectification/regulation.
- Meets new NFPA test standard T2.6.1 R2014 for fatigue and burst pressure ratings.
- Zinc-nickel plating standard for 1000-hour salt fog protection.
- Only 3 pins of the Deutsch DT04-4P Connector are used. The 4th pin is unused. Please see pinout for reference.
- Do not apply installation torque to the anodized aluminum motor housing.
- This valve is CE compliant. It meets the requirements for RF Radiated Emissions (IEC 61000-6-4), Radiated Immunity (IEC 61000-4-3), and Magnetic Field Immunity (IEC 61000-4-8).
- When torquing this cartridge into its cavity, a crow's foot wrench or similar will be required since the motor housing precludes the use of a deep socket wrench.

PERFORMANCE CURVES

EVEC

Typical Pressure vs. Flow

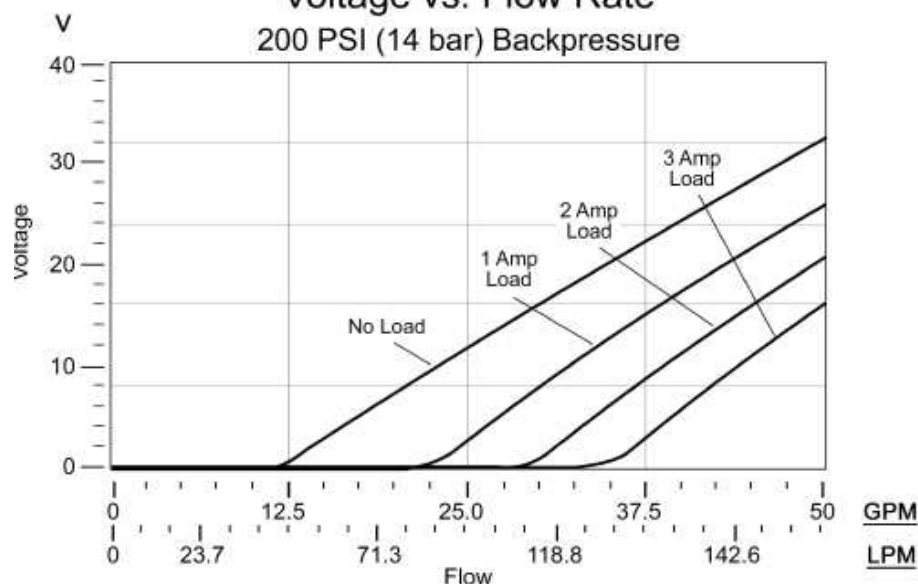
No Load



EVEC

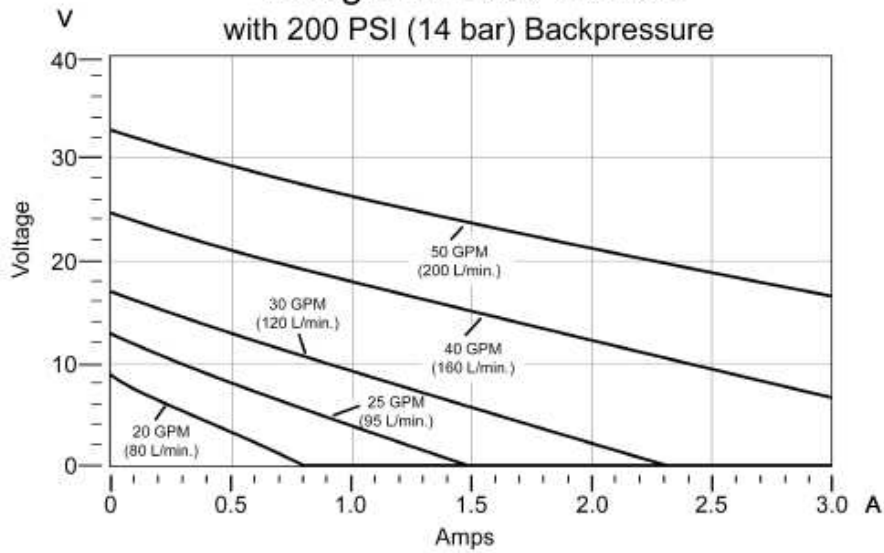
Voltage vs. Flow Rate

200 PSI (14 bar) Backpressure



EVEC

Voltage vs. Load Current
with 200 PSI (14 bar) Backpressure



EVEC

Power Output vs. Load Current
with 200 PSI (14 bar) Backpressure

