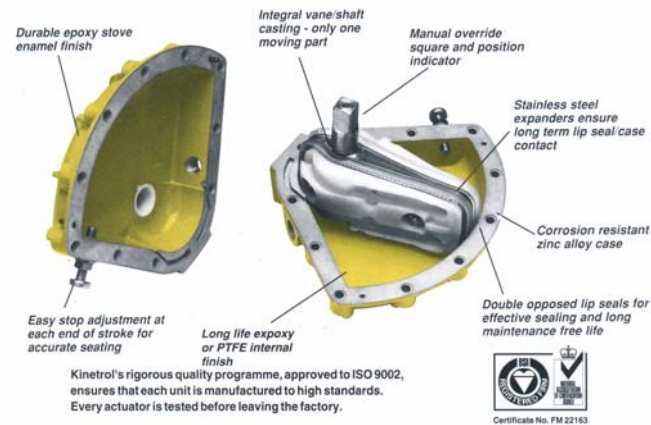


## Other *Power Drive*® Products

### Pneumatic *Power Drive*



### Electro-Hydraulic *Power Drive*



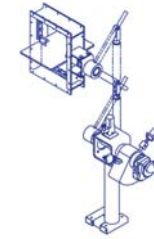
**EIM Electric Actuators** – Include such standard features as limit switches, manual overrides and a variety of various voltages.

**Kerry Electro-Hydraulic Actuators** – Is a closed loop self contained unit. Available in both rotary and linear

Some of the control schemes of the *Power Drive* are: Base or direct mount; positioners with or without transmitters; manual override; pneumatic and or electronic “fail freeze” devices; and limit switches.

Contact your *Power Drive* representative for more information.

Represented by:

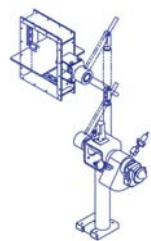


## The Electric *Power Drive*®

The Solution for Controlling Dampers and Valves



The *Power Drive*® is Designed to Provide Accurate Control and a Long Life Performance.



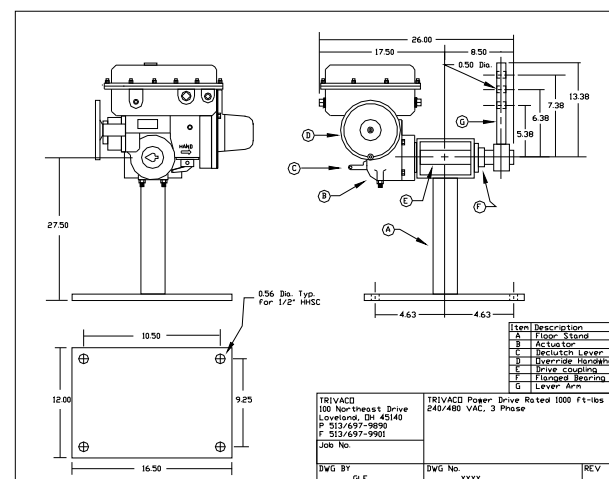
# Power Drive® Features



- The mounting hardware, support column, and lever arm are made from carbon steel or stainless steel.
- The drive shaft is stainless steel and is supported by flanged ball bearings.
- The lever arm is infinitely adjustable, both radially and axially.
- Field retrofits are designed to match the critical dimensions of the old drive unit. Remove the old unit, bolt in and connect the **Power Drive**.
- The control characteristic has superior positioning accuracy, typically within 1/4 % of supply signal.



# Power Drive® Design



The **Power Drive** design assures high quality and structural soundness. Lower torque output units utilize a stand design, while large units have a frame design.

Each design is modeled in a 3D modeling program.

The stainless steel drive shaft is supported by bearings, to prevent actuator side loading.

The lever arm position is infinitely adjustable through the use of the shaft locking device.

The design of the field retrofit unit ensures exact interchangeability with the unit being replaced.

This design significantly simplifies the change out. Merely unbolt and disconnect the linkage and power of the old unit, inspect the linkage for reuse, then simply install the new **Power Drive**.

# The Force behind the Power Drive®

**SERIES 2000 ELECTRIC ACTUATOR**

**Motor options** include cost savings of single phase or three phase alternating current and direct current. Motors are available with built-in thermal protection.

**Motor Gear** selections allow for speed and torque output combinations.

**Handwheel Gearset** allows user to limit the torque required to operate valve manually regardless of torque required.

**Transformer** is fully encapsulated and tightly integrated.

**Reversing Contactor** is DIN rail mounted for quick maintenance.

**Power Module (PWM)** provides transformer primary fuses and terminal strips for motor voltage.

**Terminal Board Module (TBM)** provides connection points for user wiring and transformer secondary lines.

**Override Relay** senses over-current to provide motor thermal protection.

**Intermediate Switch Module (ISM)** allows combinations of position limit switches, torque switches, push buttons, pilot lights and indicator relays.

**Limit Switch Module (LSM)** allows combinations of position limit switches, torque switches, push buttons, pilot lights and indicator relays.

**LED's** (light emitting diodes) are used to provide reliable service and long life.

**Torque Switch** protects the valve and actuator in both the open and close directions.

**Power Shaft** Clutch requires minimal force to operate even when valve is tightly seated.

**Clutch Handle** is glockable in either hand or motor position to prevent unauthorized use.

**Handwheel Shaft** is supported by bearings and is splined at both ends to eliminate keys.

**Drive Sleeve** consists of a bronze worm gear and drive sleeve supported by tapered roller bearings for maximum radial and thrust load support.

**Main Housing** is high strength die-cast zinc alloy for Series 2000 design in general maximum strength and durability.

**Handwheel** for manual valve operation in emergency or power outage.

**Control Link Drive Assembly** maintains its grip with valve position at all times.

**Worm Shaft** is heat-treated alloy steel.

**Torque Springs** accurately sense torque independent of electronics and regardless of voltage fluctuations.

**Roller Bearings** support the worm shaft.

**Torque Limit Assembly** receives rotary mechanical feedback from torque springs directly through main worm shaft.

**Cylindrical Impartment Enclosure** features forged cover, O-ring seals, stainless steel hardware, and multiple conduit entries.



The floorstand/frame is carbon steel powder coated; an option of stainless steel is available.



The Lever Arm is *infinitely adjustable*.



Flanged ball bearings support the drive shaft.



The Lever Arm locking device allows infinite adjustment.



Teflon tubing stainless steel braided with stainless steel fittings and bleed valves

The **Power Drive** is designed, manufactured, assembled and tested in our Loveland, Ohio facility.

After the shop receives the design drawings the parts are machined to the required dimensions, holding the design tolerances.

During the assembly process each part is fit checked to ensure proper performance.

Once assembled any mechanical stops are adjusted, limit switches are set, positioners and transmitters are calibrated.

