

CANNED HERMETIC MOTORS



PEERLESS[®]
ELECTRIC

PRODUCING MOTOR SOLUTIONS
FOR PUMP MANUFACTURING

- CHEMICAL PROCESSING
- AIR CONDITIONING SYSTEMS
- HEATING SYSTEMS
- REFRIGERATION SYSTEMS
- CUSTOM DESIGNS AND MORE!



PEERLESS ELECTRIC... HELPING CUSTOMERS SOLVE MOTOR PROBLEMS SINCE 1893.

Since being established in 1893, *Peerless Electric* has built a solid reputation as a world class leader in the design and manufacture of specialty AC and DC Electric Motors. Our custom-designed motors serve a diverse group of industries including industrial, military and original equipment manufacturers as well as niche markets such as material handling, motion control, machine tool, nuclear, hoist/lifting cranes and many others. Customers over the last 100 years have come to know *Peerless Electric* as the motor manufacturer to depend on for custom designed, quality made motors that provide high performance and dependable long-term service. ***Peerless Electric...is the solution for your motor problems.***

PEERLESS ELECTRIC... HAS A CANNED MOTOR TO COMPLEMENT YOUR PUMP LINE PRODUCTS.

PROBLEM...CONVENTIONAL PUMP LIMITATIONS

1. Mechanical Seal Leakage Causes:
 - A. Loss of Solution
 - B. Loss of System Pressure or Vacuum
 - C. Excessive Maintenance
 - D. Corrosive Limitations
 - E. Hi-Pressure Limitations
2. Requires Excessive Floor Space
3. Alignment of Motor Stuffing Box and Pump Critical

SOLUTION...CANNED PUMP

1. Hermetically Sealed Pumps can prevent loss of solution. Standard units can handle liquid temperatures up to 400°F and system pressures to 600 PSI.
2. Secondary Containment Available
3. Required Floor Space approximately one-half of that needed for a conventional pump
4. Self-Alignment Automatic
5. Reduced Noise Levels

PEERLESS ELECTRIC CANNED AC MOTOR...TYPICAL DESIGN

Peerless Electric Canned Motors are making a significant contribution to the ever growing popularity of canned pumps. This type of pump eliminates the nuisance of dynamic shaft seals and stuffing boxes. An additional bonus is the vibration and noise free operation.

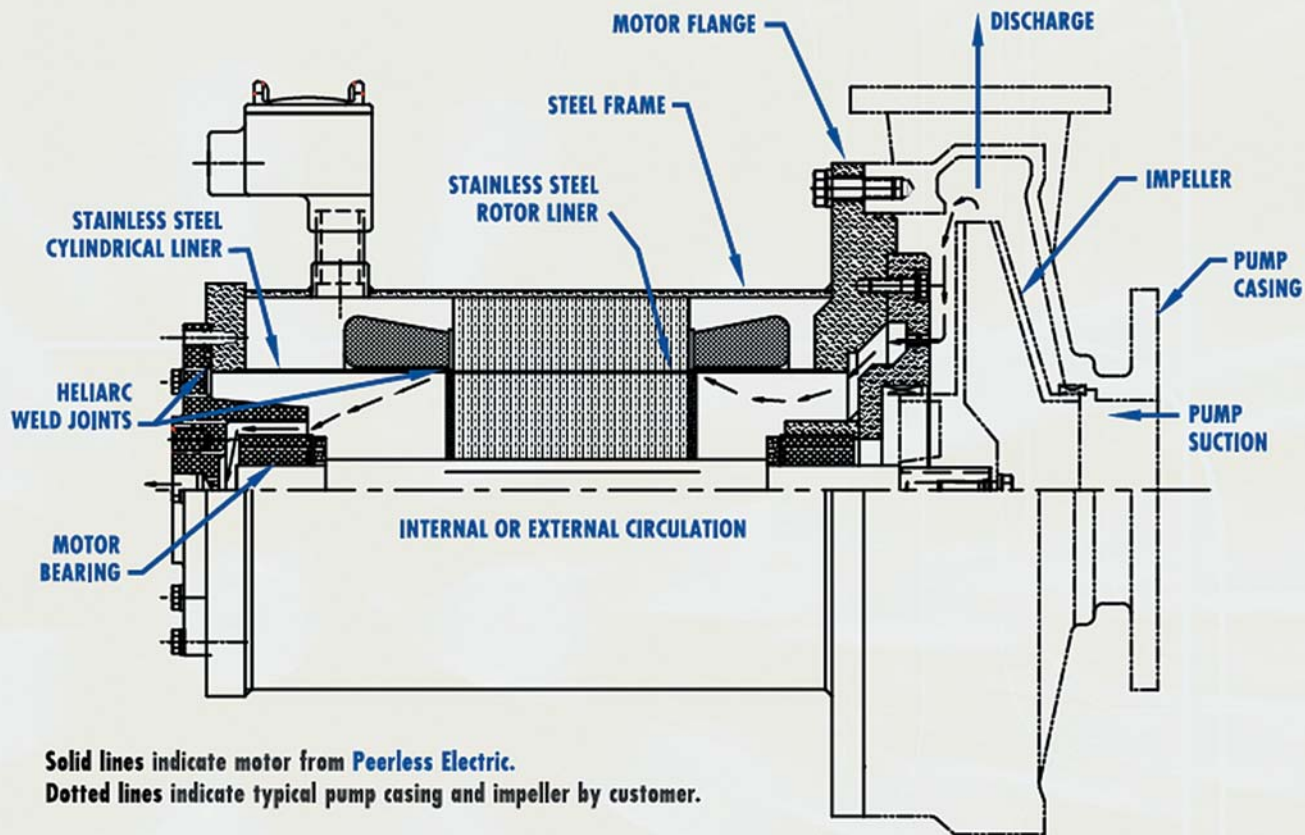
Our canned motors are custom designed to meet the requirements of the pump manufacturer(s). The end product is an integral package of pump and motor drive. The motor bearings and stator winding are lubricated and cooled by a portion of the liquid being pumped. This circulation is forced through the motor gap by the high discharge pressure of the impeller. Therefore, any wetted motor component must be compatible with the circulating liquid.

PEERLESS ELECTRIC CANNED AC MOTOR...SPECIFIC ADVANTAGES

1. Hermetically sealed enclosure of rotor is obtained without use of static o-rings, gaskets or epoxy.
2. Fully welded joint construction and all welds are gas tested to an allowable rate of .0005 ounces/year of standard air.
3. Copper rotor is fully encased in stainless steel if liquid pumped is not CU compatible.
4. Varnish and encapsulation of stator winding offer maximum protection against high humidity environment.
5. Bearings are lubricated by the solution being pumped.
6. UL, CSA and CE compliance and product markings are available.
7. RoHS Compliant.



PEERLESS ELECTRIC CANNED MOTOR...TYPICAL CONSTRUCTION DRAWING



Solid lines indicate motor from Peerless Electric.
Dotted lines indicate typical pump casing and impeller by customer.

DATA TO SPECIFY:

HP _____ RPM _____ VOLTAGE _____ CYCLE _____ PHASE _____

BRIEF DESCRIPTION OF APPLICATION AND DRIVEN EQUIPMENT _____

MAXIMUM INTERNAL PRESSURE _____

PREFERRED METALLURGY _____

OPERATING TEMPERATURE RANGE _____

LIQUID _____

RADIAL THRUST LOAD _____

AXIAL THRUST LOAD _____

IMPELLER WEIGHT _____

APPROXIMATE ID OF PUMP CASING RABBIT-TO-MOTOR MOUNT _____

CUSTOM DESIGNED CANNED MOTOR – DATA TO SPECIFY

SIZE RANGES: 1/2 through 75 hp, 3600 through 900 RPM, 3 phase, 6" through 12" diameter frame. Larger horsepower ratings are also available.

TYPICAL CONSTRUCTION: 316 stainless steel essential components with a balance of mild steel and gray iron.

OPTIONAL CONSTRUCTION: All-wetted components of other special alloys are also available as options.

STATOR INSULATION: Class H and C are suitable to handle liquids from -120°F to +400°F. Inverter magnet wire is standard.

BEARING MATERIALS: Various carbon-graphite materials are selected for liquid compatibility and wear resistance. Anti-friction ball bearings are suitable for clean oil service.

INTERNAL OR EXTERNAL CIRCULATION IS AVAILABLE.



PEERLESS ELECTRIC... IS THE SOLUTION TO YOUR MOTOR PROBLEMS!

Peerless Electric is a manufacturer of quality, high performance AC and DC Electric Motors. Since 1893, we have been a world class leader in the design and production of specialty AC/DC Electric Motors, such as: single phase AC, DC servo, military, pump, traction and hermetic AC. Peerless Electric produces reliable, high performance motors serving a wide variety of markets, including:

- Commercial Industries
- Centrifugal Pumps
- Material Handling
- Military
- Motion Control
- Nuclear
- Specialty, Custom Design and OEM



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Peerless Electric is an affiliate company of HBD Industries, Inc. HBD Companies manufacture quality, application-engineered custom designed and standard industrial products serving many diverse industries and markets. Products manufactured by HBD Industries, Inc. include AC/DC/BLDC electric motors, aerospace precision components, budding strips, cemented tungsten carbide parts, closed die forgings, coated rubber fabrics, conveyor belting, drives, ducting, gear reducers, hose (automotive, aviation, hand-built, industrial, marine and petroleum), material handling products (metal separators/detectors and electro-magnetic lifting equipment), power transmission belts, rubber bands, rubber roll coverings and ventilation equipment (fans and blowers). For complete details on HBD Industries, Inc. log onto www.hbdindustries.com.