

GVM310/300-400

Global Vehicle Motor for Traction & Electro Hydraulic Pump Range Extension

Description:

PMAC servomotors offer the best solution to meet the requirements of vehicle duty performance. The torque density and speed capabilities of Parker Permanent Magnet AC motors (PMAC) combined with a voltage matched inverter provide the speed and torque required to achieve breakthrough performance in a variety of vehicle platforms.

The GVM is a powerful choice for both on and off-road vehicles, engineered for Traction and Electro-hydraulic Pumps (EHP).

The GVM motor line has been designed to be used in a wide variety of vehicle applications including; commercial, forestry, material handling and medium to large construction vehicles.



Applications:

- Electric motors/generators for hybrid applications
- Traction applications
- Electro Hydraulic Pump applications

Benefits:

- Outstanding power density
- New thinner lamination design to reduce losses
- Performance enhancements (low flux for high speed and high flux for low speed applications)
- Patented cooling system
- Can be used either as motor or generator
- Traction applications
- HVIL loop available
- High efficiency



Dimensions

Motor data with water cooling @65°C.

Dimensions

GVM310 WD

Front View (Left): Shows the motor's base with a central circular opening. Dimensions include a total width of 310, a total height of 310, and a central circular feature with a diameter of 170. A label points to the "Membrane breather vent Do not cover".

Side View (Middle): Shows the motor's profile. Key dimensions include a total length of L1 ± 0.5, a mounting flange width of L4, and a central shaft length of L2. The shaft diameter is Ø152.55 G7 (152.604 / 152.564). The shaft has a keyway with a width of 13.5 and a depth of 1.5. The motor is mounted on a base with a height of 140. The base has a width of 161.6 and a total height of 228.6. The motor is labeled "COG" (Center of Gravity). A label points to the "Toric seal (145.72 x 2.62) supplied with the motor".

Rear View (Right): Shows the motor's rear with cooling inlets and outlets. Dimensions include a total width of 310, a total height of 310, and a central circular feature with a diameter of 170. A label points to the "Cooling Inlet and Outlet 2 x 3/4\" ORB-12 SAE J1926-1 with thread 1 1/16-12 UN-2B".

Labels and Notes:

- F VIEW**: Indicated by an arrow pointing to the front view.
- Membrane breather vent Do not cover**: Points to the central circular feature on the front view.
- Toric seal (145.72 x 2.62) supplied with the motor**: Points to the seal on the side view.
- Cooling Inlet and Outlet 2 x 3/4\" ORB-12 SAE J1926-1 with thread 1 1/16-12 UN-2B**: Points to the cooling ports on the rear view.
- Shaft seal : Max pressure 5 bars**: Points to the shaft seal on the side view.
- 12x M10x1.5 depth 15 on 3 sides for mounting, lifting and grounding**: Points to the mounting holes on the side view.
- 8 x M16 Depth 32**: Points to the mounting holes on the side view.

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