

Model: JHMG Family of GearMotor Door Operators

GearMotor and Control Panel

FEATURES

- High quality advanced brushless motor technology with unique features
- High energy density in a compact package
- Range of power configurations capable of 1/2 HP, 1 HP and 2 HP equivalent of induction and brush gear motor systems
- Planetary gears for high efficiency and high reliability
- Electronic, programmable clutch; no mechanical clutches
- Electronic holding brake and lock
- Gear and motor combination provide braking action with power off
- Double shielded, precision stainless steel ball bearings
- NEMA 4 gearmotor
- Light weight and compact operator; can be mounted by one person
- Controller electronics and user interface is mounted inside the control panel



BENEFITS

- Back drivable gear system
- Simple mechanical installation
- High performance alternative to induction motor and brush DC motor systems.
- Light weight; only 18 lbs
- Electronic overload protection
- Automatic locked door detection

POWER and TORQUE

- Configurable for output torques up to 800 in. lb. and output speeds from 20 to 300 RPM
- Battery backup capable for hundreds of door cycles

MECHANICAL

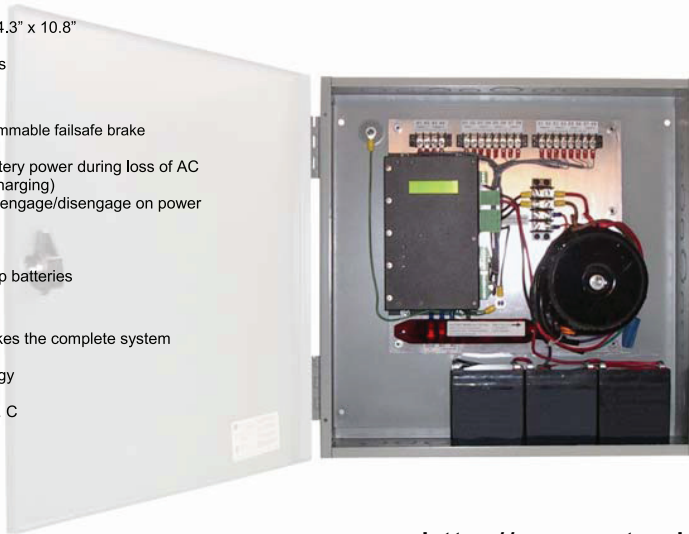
- 1" Dia. output shaft with keyway
- GearMotor case dimensions; 4.3" x 4.3" x 10.8"
- Mounted with four bolts
- High reliability, precision components

OPTIONS

- Optional electrically operated programmable failsafe brake
- 3/4" Dia. output shaft with keyway
- Continuous system operation on battery power during loss of AC power (Includes intelligent battery charging)
- AutoChain™ automatic chain wheel engage/disengage on power off/on or by user control
- Multiple door interlock capability
- GearMotor mounting bracket
- Panel enclosure sized to hold backup batteries

RELIABILITY

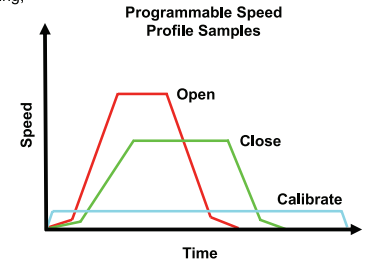
- NEMA4 control panel enclosure makes the complete system into NEMA4 package
- Advanced brushless motor technology
- All electronic control
- Environment: -40 deg. C to +50 deg. C
- One year warranty



Adaptive Control System

FEATURES

- Programmable open and close motion profile for smooth and precise door movement
- Obstruction sensing (can replace pressure sensing edge)
- SystemMonitor™- continuously monitors and records door motion and logs operation into memory for later retrieval
- 8 programmable 'activation' inputs for a wide variety of sensors including;
 - Loop sensors, Ultrasonic sensors,
 - Many other types of activation sensors,
 - Partial open position input activation
- 2 programmable outputs for applications including;
 - Door motion warning
 - Electronic lock that can be activated with key-switch control
- LCD display – Easy to understand text display graphics for status and buttons on the panel to view status or to program the unit
- Controlled smooth, immediate reversing or delayed reversing
- Total operational control utilizing;
 - 4-Quad closed loop, Position, Torque, Speed, Top Speed, Acceleration and Deceleration control for Open and Close
- Many other programmable functions including;
 - Obstruction sensing (replaces sensing edge)
 - Holding force (Open/Close), Programmable delay close
 - Motor direction (for left or right doormounting), Warning alert for movement,
 - Partial open position, Time delay to auto close start, Programmable force for manual opening of door
- Electronic brake, holding brake and lock
- Cycle counter, maintenance indicator
- Direct programming via RS-232 /CAN communication interface
- Precisely control multiple door operators to work synchronously
- Internet ready! For remote service analysis, monitoring, control and review of new installation operation
- CAN / DEVICE NET and SDS network communications capability



BENEFITS

- Self calibrating to any door size; no mechanical limit switches required
- Closed loop system position and speed feedback ensures consistent motion profile with mechanical wear over time
- System status LCD display/control panel for simplified on-site service
- All electronic control of operator; no mechanical limit switches, contactors or clutches
- Polarized connectors simplify installation and maintenance
- Wide range of AC voltages; 115, 208, 230, 460, 575VAC at 60Hz, 1 phase and 3 phase systems
- 24VAC to power accessories

ENERGY EFFICIENCY

- "EVENT-DRIVEN" control algorithms maintain efficient operation under high torque demands in start/stop applications
- "REAL TIME" dynamic optimization for efficient start/stop and high-speed operation
- EnergyStore™ system stores regenerative energy when using battery backup; can provide significant energy savings
- Limits peak current energy to control utility costs

OPTIONS

- NetworkPower™ enables control of up to 128 GDI motor systems via a PC or over the Internet
- Continuous system operation on battery power during loss of AC power (Includes intelligent battery charging)
- Power factor correction to optimize energy efficient operation

RELIABILITY

- Controls electrical and mechanical stresses through peak current limiting
- Electronic overload protection. No mechanical clutches
- Proven reliable operation in extreme environments
- One year warranty

<http://www.steelworksandsupply.com>

Phone: (919) 639 - 3002

INSULATED DOORS