

# FUEL CELL POWERED VEHICLES & MATERIAL HANDLING

Hydrogen fuel cell technology is increasingly used in forklifts, delivery vehicles, and medium- to heavy-duty trucks as a clean alternative to traditional battery and combustion systems. Fuel cells replace lead-acid batteries, offering longer operating life, faster refueling, and reduced environmental impact. Effective liquid cooling is critical to manage heat generated within fuel cell stacks and associated power electronics, ensuring safe and efficient operation.

## MARKET ADVANTAGES

### Motors

- Brushless DC (BLDC)
- 12–48V operation range
- Manufactured in-house by GRI
- Designed for OEM customization
- Motor winding tailored to meet application-specific flow and pressure requirements

### Magnetic Drive Technology

- Seal-less, leak-free design
- Motor fully isolated from fluid
- Increased system reliability and reduced maintenance risk

### Thermal Performance

- Supports fluid temperatures up to 225°F (107°C) (application limitations may apply)
- Enables efficient heat removal from fuel cell stacks and power systems

### OEM Configuration Options

- Multiple configurations available to meet system design requirements
- Flexible solutions for forklifts, delivery vehicles, and fuel cell-powered trucks



Pump Series	Maximum Flow GPM, (LPM)	Maximum Head (FT, (PSI))	Maximum System Pressure	Motor Specs/Voltages
INTG1	3.0, (12.0)	22.0, (10.0)	50 PSI	12-36 VDC
INTG3	8.85, (33.5)	37.0, (16.0)	75 PSI	12-24 VDC
INTG7	22.0, (83.0)	80.0, (35.0)	75 PSI	12-48 VDC
INTG8	39.0, (145.0)	70.0, (30.0)	75 PSI	12-48 VDC

INTEGRITY<sup>series</sup>™

