

# plaromaster®

*Elastohydrodynamic Mechanical  
Variable Speed Drive*



**planetroll®**  
the driving power

Infinite Variable Speed

Explosion Proof

Full Torque to Zero Speed

**DIEQUA**  
Corporation

[www.diequa.com](http://www.diequa.com)

DieQua Corporation is a manufacturer and supplier of precision motion control and power transmission components. We offer the widest range of standard and specialty gearbox and speed reducing solutions available from a single source. Featuring right angle and inline designs, unique configurations, the largest number of ratios, and several mounting and output options, we have the drive that meets your needs.

**Planetroll's** patented design offers several significant advantages over traditional friction drives and frequency inverters in applications requiring high torque at startup, explosion proof operation, infinite variable speed to zero RPM, and reliable overload protection.

### ***Specifications:***

- 7 sizes from fractional to 10 HP capacity
- Torque ranges from 0.8 to 110 Nm (higher torque available with integral speed reducer)
- Output speed with infinite variability from 4% motor speed to zero RPM

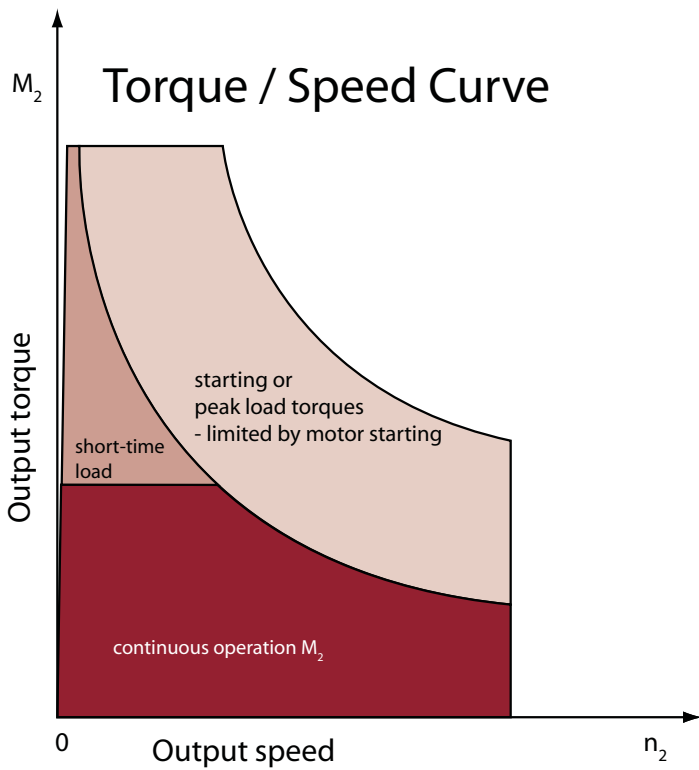
### ***Features:***

- Overload Protection
- NEMA and IEC motor mounting
- Configured for all mounting positions
- Hand wheel or motor control
- Remote control capability
- Precision speed settings for repeatability
- Explosion proof - conforms to ATEX for zones 1 and 21
- Optional monitoring of speed, torque, and temperature
- Meets FDA, USDA-H1, and GMP standards
- Silicone free available
- Low temperature application options



### ***Control System Options:***

- **Variable Speed Adjustment**  
Standard hand wheel or gauged handwheel for precise repeatable adjustment. Electric remote control is also available.
- **Plarotronic Electronic Speed Control**  
Provides automated speed monitoring and control. The programmable controller can vary or maintain speed and display parameters.
- **Plarotorque Electronic Torque Meter**  
Monitors, calculates, and displays actual torque for process control. Provides precise information on efficiency, power demand, temperature, and torque utilization.



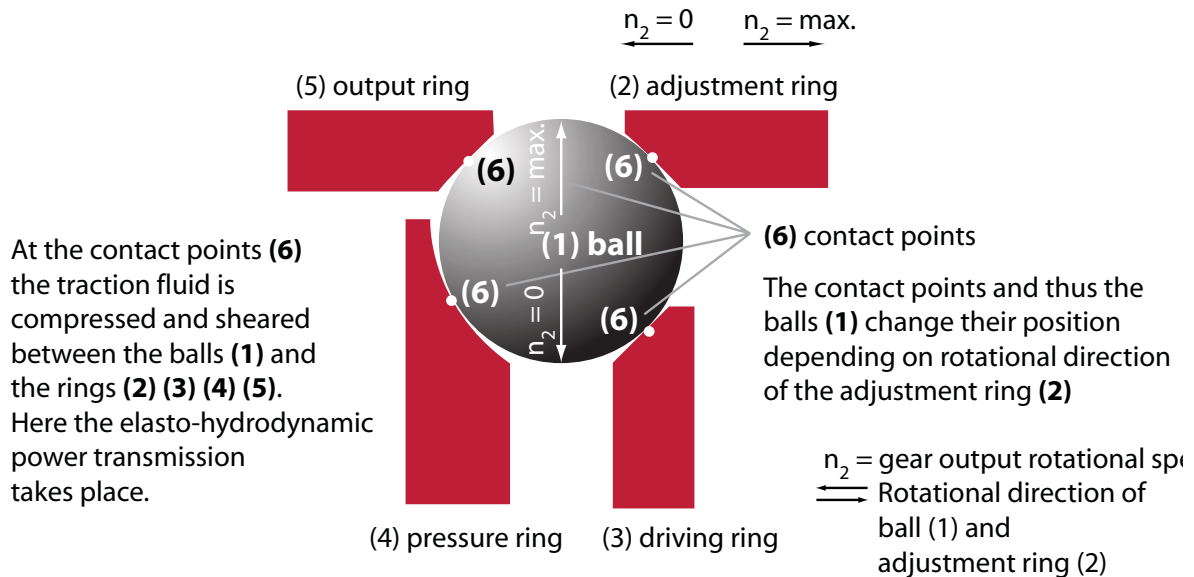
### Benefits Over Frequency Inverters:

- Maximum output torque available at zero to full speed
- Higher power density
- Less costly explosion proof solution
- Maximum starting and break-away torque

### Benefits Over Friction Drives:

- No possibility of slippage
- Speed range to zero RPM
- Longer life
- Explosion proof

### The functional principle of the Planetroll Variable Speed Gearbox



### Typical Applications and Industries

Agitating  
 Mixing  
 Pump Control  
 Chemical Processing  
 Crushing

Grinding  
 Powder Processing  
 Material Handling  
 Pharmaceutical Manufacturing  
 Cosmetics Manufacturing

# Other Products & Services



Planetary Gearheads



Servo Worm Reducers



Helical Gearmotors and Speed Reducers



Spiral Bevel Gearboxes



Speed Correction Drives



Zero Backlash Couplings



Screwjacks

## Engineering Support

DieQua Corporation has several decades of combined experience specifying power transmission and motion control components. This assures the proper selection of components and systems for your unique requirements.



## Manufacturing

DieQua Corporation's manufacturing capabilities allow production of many of the components used in the drives we provide. Mounting components and design modifications are also available from our full service machine shop.



## Assembly

DieQua Corporation has a team of factory trained technicians that assemble the majority of the drives we provide. This allows prompt delivery of your production requirements or service repairs.



## Warehousing

DieQua Corporation maintains an extensive inventory of common speed reducer and motor components for quick delivery of small orders, prototypes, and spare parts.



## Manufacturing Partners



Motion Components and Engineering Services

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