

CORNELL PUMP COMPANY

DURAPRIME PUMPS

FOR GENERAL APPLICATIONS



 **DURA
PRIME**



DURAPRIME PUMPS



CORNELL DURAPRIME SERIES

The Duraprime series of pumps from Cornell Pump is designed for rental and construction applications, with models available in 3", 4", and 6". These pumps feature robust construction, efficient operation, and competitive pricing, making them an ideal choice for various applications. In addition, the Duraprime series has a rebuildable pump design and comes standard with the reliable Cornell Cycloseal® sealing system.

FEATURES AND BENEFITS

The Duraprime series of pumps by Cornell are engineered with outstanding quality and durability. These pumps are equipped with tangential volutes and come in two configurations. The Duraprime CP model features a semi-open impeller, while the Duraprime T version includes an enclosed impeller—the Cycloseal® design, which Cornell patents, comes as a standard feature. The Type 2 single mechanical seal has DuPont Viton® elastomers, stainless steel hardware, and silicon carbide vs. silicon carbide seal faces resisting abrasion. The DE bearings are angular contact bearings, while the PE bearings are deep groove ball bearings.

ALL DURAPRIME PUMPS INCLUDE

- ✓ Standard ductile iron construction with ductile impeller
- ✓ Atmospheric vent in bearing frame to detect lip seal leakage.
- ✓ Cycloseal® mechanical seal system
- ✓ Impeller backvanes to reduce axial thrust
- ✓ Replaceable wear plate (CP models)
- ✓ Dynamically balanced impeller

DURAPRIME ADVANTAGES

- ✓ Renowned Cornell quality
- ✓ Low-operating costs
- ✓ Efficient operation; up to 82% at BEP
- ✓ Ease in servicing and maintaining pumps
- ✓ Low maintenance, long life
- ✓ Two-year warranty

CYCLOSEAL® BENEFITS

No Flush Water or Packing: Cycloseal eliminates the need for flush water or packing by utilizing the backplate and sweeping vanes, saving on expenses and service time and avoiding messy drips.

Extended Seal Life: Cornell's Cycloseal design has demonstrated its effectiveness in the most demanding applications, often extending the seal life to more than three times the expected lifespan.

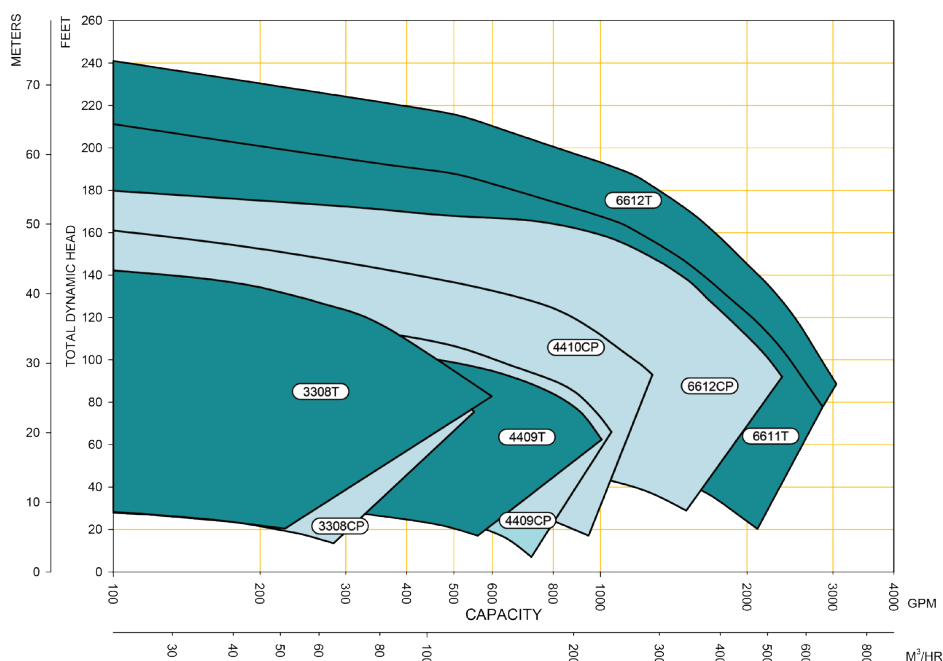
System Savings: The Cycloseal system eliminates the need for external water flush, filters, grease

cups, or piping typically required for packing or mechanical seals in other pumps. This results in a longer-lasting seal, reducing downtime and lower maintenance costs throughout the pump's lifespan.

Better for Abrasive Applications: Cycloseal is more resilient than packing and standard mechanical seals exposed to abrasives. It prevents solids from reaching the seal area, reducing wear.

Greater Reliability: The positive seating of the Cycloseal system allows end-users to confirm a perfect fit. Its enhanced ability to withstand grit results in longer service intervals.

DURAPRIME PUMPS



3308CP/3308T

- Flow rates from 80 to 600 GPM
- Pressure from 14' to 139' (6 to 60 PSI)
- 69% efficient at Best Efficiency Point

4409CP/4409T

- Flow rates from 140 to 1,050 GPM
- Pressure from 12' to 116' (5 to 50 PSI)
- 73% efficient at Best Efficiency Point

4410CP

- Flow rates from 165 to 1,280 GPM
- Pressure from 23' to 143' (10 to 62 PSI)
- 67% efficient at Best Efficiency Point

6611T

- Flow rates from 400 to 2,860 GPM
- Pressure from 20' to 182' (9 to 79 PSI)
- 81% efficient at Best Efficiency Point

6612CP/6612T

- Flow rates from 60 to 3,050 GPM
- Pressure from 28' to 205' (13 to 89 PSI)
- 68% efficient at Best Efficiency Point (CP)
- 82% efficient at Best Efficiency Point (T)

CYCLOSEAL® SEALING SYSTEM

Cornell Pumps' patented Cycloseal design is crucial to our service advantage over competitors. This innovative cyclonic action extends seal life by removing solids and abrasive materials from the seal area and purging air and gas pockets. It eliminates the need for venting or flushing water. Duraprime pumps are equipped with Cycloseal.

DURAPRIME - EFFICIENT BY DESIGN

The Duraprime series boasts sturdy construction, efficient operation, and the convenience of replaceable parts. It is ideal for cost-conscious applications requiring dry priming/repriming capabilities and Cornell's renowned quality. Although primarily designed for construction, rental, and OEM applications, the Duraprime pumps are also suitable for construction, rental, and water treatment applications. The engine drive mount ensures reliable operation.

REDI-PRIME SYSTEM™

Cornell's Redi-Prime™ system is a patented technology that enables pumps to prime or re-prime themselves automatically without constant monitoring. The system features oversized suctions to provide greater flow, reduced friction losses, and higher suction lift. It can handle large solids and air/liquid mixtures while maintaining premium hydraulic efficiency and lower energy consumption. The system ensures environmental

safety through a positive sealing float box and a diaphragm vacuum pump to prevent water carry-over and contamination. It offers fully automatic priming and re-priming, efficient air/liquid mixture handling, rapid and unattended priming and re-priming, and premium hydraulic efficiency.

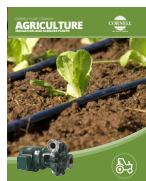
VENTURI PRIME PRIMING SYSTEM OPTION

The Duraprime pumps from Cornell can be equipped with a venturi priming system as an option. This system uses a compressor driven by the pump shaft, lubricated by the engine oil, to blow air through the venturi, which helps to remove air from the suction line and pump casing. This robust priming system is cost-effective to operate.

Operates in temperatures below 25° Fahrenheit (-4° Celsius)

- Economical
- Automatic priming and repriming
- Primes with reasonable speed
- Can handle some solids
- Can operate unattended
- Energy efficiency
- Available with manual valve for operation in colder climates

CORNELL PUMP COMPANY MARKET & PRODUCT LINE



AGRICULTURE



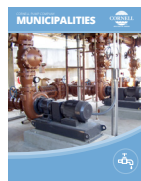
FOOD PROCESS



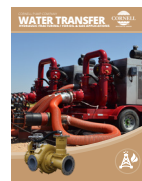
INDUSTRIAL



MINING



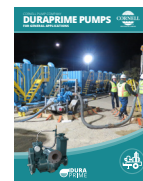
MUNICIPAL



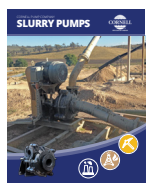
WATER
TRANSFER



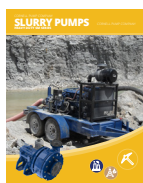
REFRIGERATION



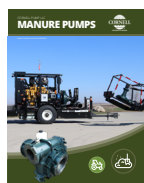
CONSTRUCTION



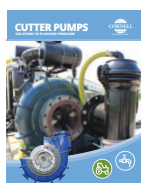
SLURRY



SLURRY SM



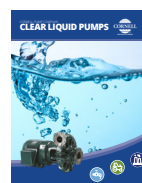
MANURE



CUTTERS



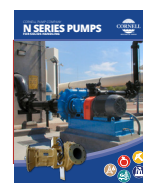
SELF PRIMING



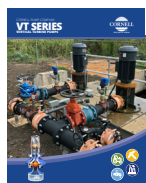
CLEAR LIQUIDS



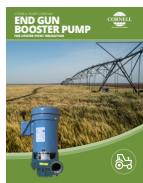
MX SERIES



N SERIES



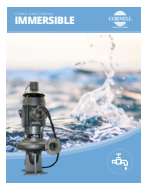
CYCLONE™



EDGE™



HYDRAULIC
SUBS



IMMERSIBLE



CD4MCU



RUN-DRY™



PRIMING
SYSTEMS



CYCLOSEAL®

Cycloseal® and Redi-Prime® are Registered Trademarks of Cornell Pump Company.

Cornell pumps and products are the subject of one or more of the following U.S.
and foreign patents:

6,074,554; 6,036,434; 6,079,958; 6,309,169; 6,104,949.

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