

DATASHEET SPECIFICATION



FLOW @BEP  
440 mc/h



HEAD @BEP  
28 mt



CORNELL PUMP  
6NNT-RP-EM16-4



PERKINS DIESEL ENGINE  
404D-22T



SOLIDS DIAMETER  
3" – 76 mm



PRIMING SYSTEM  
Redi Prime

**EUROMACCHINE WATER TRANSFER APPLICATIONS**

**Water pumping is our natural environment.** For this reason, we've been addressing always new pumping problems, delivering functional solutions which provide practical answers to any kind of pumping needs.

Floods and emergencies, water transfer and slurry pumping. Our comprehensive range of high performance pump units are designed to be easy to use, prolong lifespan and reduce downtime & operational costs.

**WATER TRANSFER DURA-PRIME SERIES**

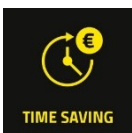
The Duraprime series of pumps are designed with Cornell's renowned quality and durability. Duraprime pumps feature tangential volutes and come in two configurations. Duraprime CP pumps feature a semi-open impeller and the Duraprime T models include an enclosed impeller. Cornell's patented Cycloseal® design is standard, with a Type 2 single mechanical seal with DuPont Viton® elastomers, stainless steel hardware and silicon carbide vs. silicon carbide seal faces for abrasion resistance.

**FEATURES & BENEFITS**

- More than 40 countries covered by our support Team
- More than 12 languages spoken by our Team
- More than 15,000 codes available on stock
- 8 Assembly lines – Lean Manufacturing
- More than 40 years of experience
- Custom build available
- Testing Facility in internal control room

**ALL DURAPRIME PUMP INCLUDES**

- Standard cast iron construction
- Ductile impeller and stainless steel shaft and sleeve
- Redi-prime system
- Atmospheric vent in bearing frame to detect lip seal leakage.
- Cylco seal® mechanical seal system
- Impeller backvanes reducing axial thrust
- Replaceable shaft sleeves



**EFFICIENCY**

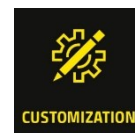
- Less fuel consumption
- Oversized shaft & bearings
- Easily replaceable wear parts



**RELIABILITY**

**LESS WEAR**

- Less Maintenance
- Less Parts
- Less Downtime



**CUSTOMIZATION**

**MADE ON YOUR NEEDS**

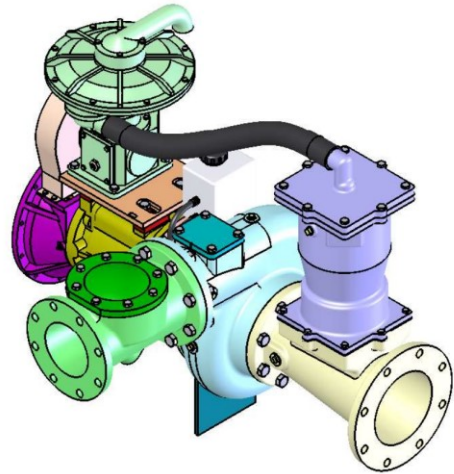
- Customized solutions
- Taylor made products
- MADE IN ITALY



**STANDARD TECHNICAL SPECIFICATION**

CORNELL PUMP:

**6NNT**



PUMP		
Brand	CORNELL PUMP	
Model	6NNT	
Version	Engine Mounted	
Suction size	152,4 mm	6"
Delivery size	152,4 mm	6"
Solid handling	76.2 mm	3"
Impeller	256,3 mm	10,09"
Min Flow	90 mc/h	397 GPM
MAX Flow	624,6 m <sup>3</sup> /h	2750 GPM
MAX Head	46.00 m	140 feet
MAX Speed	2,100 Rpm	
BEP Point	430 mc/h @ 26 mt - 80%	
Shaft	2,0"	50,8 mm
Shaft Seal	Mechanical	
Pump Weight	971 Lb	437 kg

MATERIALS	STANDARD	OPTION
Volute	Cast iron	CD4MCU
Impeller	Cast iron	CD4MCU
Wear ring	Cast iron	2205 Duplex SS
Shaft	Stressproof steel	17-4PH
Shaft sleeve	416 SS	316 SS
Backplate	Cast iron	CD4MCU
Mechanical seal	Tungsten Carbide vs. Silicon Carbide	
Bearing frame	Cast iron	Cast iron

PRIMING SYSTEM		
Brand	CORNELL PUMP	
Model	REDI – PRIME	
Air Handling	50 mc/h	
MAX Vacuum	8,5 mt	
Drive	Toothed belt – Continuous drive	
Delivery	Non return valve	

**DIESEL ENGINE**

Brand	PERKINS
Model	404D – 22T
Power	38 kW / 51 HP @2,200 Rpm
Aspiration	N/A
Emission	Stage III
Displacement	2.200 cc
Cylinders	4 in line
Cooling system	Liquid
SAE – Fly Wheel	#4 – 7,5"
Torque	192 Nm @ 1,800 Rpm

**FUEL SYSTEM**

Tank Type	Bunded – Double wall
Tank Capacity:	260 liters
Fuel Tank Cap:	Ø80 mm – 3"

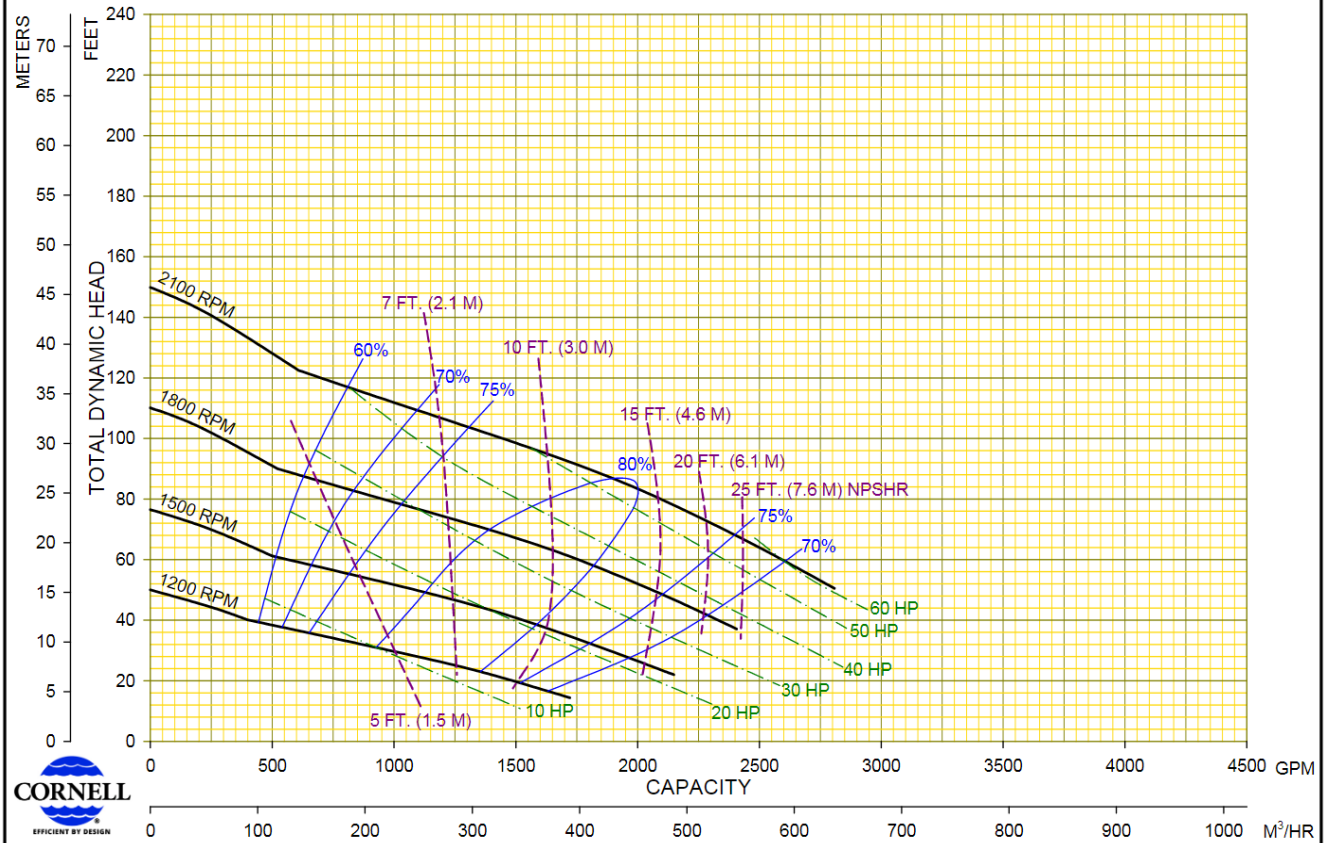
**CONTROL PANEL**

L x W x H	mm	2600 x 1100 x 1710	
	inches	102.40 x 43.30 x 67.30	
Dry Weight	2.000 kg	4.410 lb	



### PUMP CURVE SELECTION

Performances shown are for S.G. 1.0 60°F water, close-coupled configuration. Other mounting styles or S.G. may require curve adjustments.	Speed	Impeller Dia.	Style	Volute	Solids Dia.	N <sub>s</sub>	Suction	Discharge	No. Vanes
	VARIOUS	10.09"	ENCLOSED	SINGLE	3.0"	3300	6"	6"	2



Cornell Pump Company • Clackamas, Oregon	01	08/12/15	CTG	MODEL : 6NNT	CURVE NO: <b>6NNTVA</b>
	00	01/16/00		TYPE :SOLIDS HANDLING	

### STANDARD & BENEFITS

- Canopy: SUPERSILENT
- Doors: 7 Lockable Doors
- Roof: REMOVABLE – Complete Top Access
- Basic Frame: HOT DIP GALVANIZED
- Frame: Double Wall Tank
- Tank: Metal tank – 260 liters
- Autonomy: 24 Hours
- Exhaust system: Internal in the canopy
- Forklift Pockets: Fitted with 2 Forklift pockets
- Lifting Point: Central Balanced

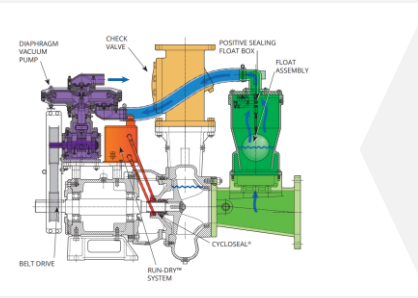
- Voltage: Nominal 12V
- Battery: 105 Ah – Premium Quality
- Electrical Isolation: Battery Isolator Switch
- Oil Indicator: Murphy MPC-10
- Filter: Fuel/Water Filter Separator
- Fuel Tank Cap: Ø80 mm – 3"
- Fuel Level: Electronic Fuel Injection
- Fuel Connectors: In/Out external Diesel tank
- Fuel Valve: 3 Ways Valve
- Documentation: User Manual

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 [service@euromacchine.it](mailto:service@euromacchine.it)



**FEATURES & BENEFITS**

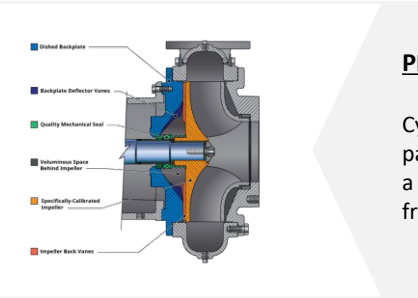
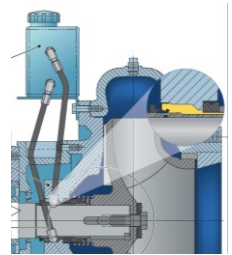


**PRIMING SYSTEM REDI-PRIME:**

Cornell Redi-Prime pumps are designed with oversized suction to provide more flow, reduced friction losses, and higher suction lift. The priming system was designed with the environment in mind. By using a positive sealing float box and a diaphragm vacuum pump, there is no water carry-over to contaminate the environment.

**CORNELL RUN-DRY:**

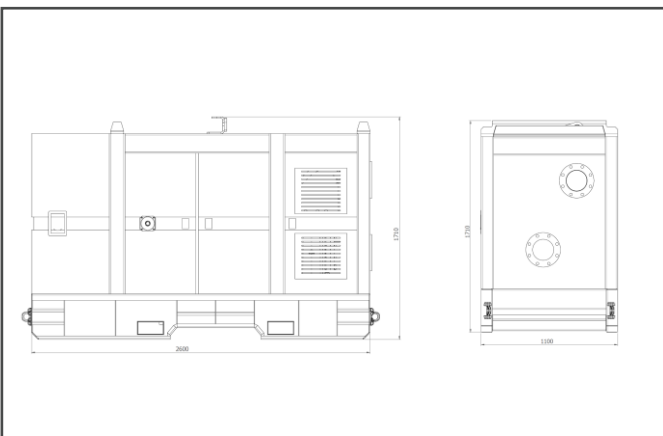
The Cornell Run Dry system is an inventive solution to provide continual lubrication of mechanical seals. Run-Dry provides a gland on the backside of the mechanical seal through which a lubricant can circulate providing lubrication and cooling to the hardened seal faces of the mechanical seal. The result is exceptional seal life regardless of operating conditions, from maximum flow to no flow – Run-Dry.



**PROTECTION SYSTEM CYCLOSEAL:**

Cycloseal® is patented system with a self-contained single mechanical seal. The Cycloseal pattern cast into the pump backplate in conjunction with contoured impeller back vanes and a dished backplate, creates a pressure gradient that move solids and entrained vapor away from the seal faces.

**DIMENSIONS & WEIGHT**



**DIMENSIONS & WEIGHT**

L x W x H	mm	2600 x 1100 x 1710	
	inches	102.40 x 43.30 x 67.30	
Dry Weight		2.000 kg	4.410 lb



**Euromacchine Pump Academy** is held by our technicians who share their experience and show the best way to analyze the problem and find the right solution.

For more information about courses, contact us by sending an e-mail to [info@euromacchine.it](mailto:info@euromacchine.it).

