

# ST.E.P. Plus D Series

4" multi-stage submersible effluent pumps



**The ST.E.P. Plus D Series**  
**4" submersible pump in 10, 20 and**  
**30 GPM models dominate with superior**  
**"draw-down" capability, with reduced**  
**amp draw and with cooler and quieter**  
**operation.**

## APPLICATIONS

**Clean and Gray Water...** for residential, commercial, and agricultural use.

## SPECIFICATIONS

**Motor:** Available in 115 or 230 volt versions. Dry-wound, double ball-bearing, double-seal and thermal overload protected, UL and CSA approved.

**Shell:** Stainless steel (300 grade)

**Discharge:** 1-1/4" Fiberglass-reinforced thermoplastic

**Discharge Bearing:** Nylatron®

**Impellers:** Acetal

**Diffusers:** Polycarbonate

**Suction Caps:** Polycarbonate with stainless steel wear ring

**Thrust Pads:** Proprietary spec.

**Shaft and Coupling:** Stainless steel 300 grade

**Intake:** Fiberglass-reinforced thermoplastic

**Intake Screen:** Stainless steel

**Jacketed Cord:** 300 Volt "SJOW" jacketed 10' leads, 2-wire with ground

**Agency Listing:** CSA

## FEATURES

**ST.E.P. Plus DOMINATES with a...**

**Proven Stage System:** The proven SignaSeal staging system utilizes a patented ceramic wear surface. When incorporated with STA-RITE's "true" independent floating impellers, dominates with 1st-in-class performance, superior sand handling, and a thrust management staging system with industry exclusive "dry-run" capabilities.

**Superior "draw-down" capability:**

The ST.E.P. Plus Dominates in this class with the lowest draw-down of 4-1/2" (a standard 4" NEMA submersible only draws-down to 13-1/2").

**Reduced amp draw:** The ST.E.P. Plus

Dominates in this class with less energy consumption - over 25% less amp draw (9.5 amps vs. 12.7 amps, 115 volt) than a 4" NEMA submersible, reducing operating costs and extending the service life of float switch contacts.

**Cooler and quieter operation:** The ST.E.P.

Plus Dominates by using the pumped liquid to cool the motor as it passes over the motor. The water passing over the motor dampens the motor noise, eliminating expensive "flow-inducer sleeves" required when using a standard 4" NEMA submersible.

**Impellers:** Precision molded for perfect balance... ultra smooth for the highest performance and efficiency. Allows for .080" solids.

**Shaft:** Positive drive, hexagonal 7/16" - 300-grade stainless steel shaft offers generous impeller drive surfaces.

**Shaft bearing:** Exclusive self-lubricating Nylatron® bearing resists surface wear from sand and abrasives.

**Shell:** Corrosion resistant 300-grade stainless steel.

## ORDERING INFORMATION

| Catalog Number | HP  | Max. Load Amps | Volts | Phase/Cycles | Cord Length | Pallet Quantity | Weight (Lbs.) |
|----------------|-----|----------------|-------|--------------|-------------|-----------------|---------------|
| 10DOM05121     | 1/2 | 11.0           | 115   | 1/60         | 10'         | 40              | 17            |
| 10DOM05221     | 1/2 | 5.5            | 230   | 1/60         | 10'         | 40              | 17            |
| 20DOM05121+1   | 1/2 | 10.6           | 115   | 1/60         | 10'         | 40              | 17            |
| 20DOM05221+1   | 1/2 | 5.3            | 230   | 1/60         | 10'         | 40              | 17            |
| 30DOM05121     | 1/2 | 9.5            | 115   | 1/60         | 10'         | 40              | 19            |
| 30DOM05221     | 1/2 | 4.6            | 230   | 1/60         | 10'         | 40              | 19            |
| 20DOM07221     | 3/4 | 6.5            | 230   | 1/60         | 10'         | 40              | 19            |
| 30DOM07221     | 3/4 | 5.6            | 230   | 1/60         | 10'         | 40              | 18            |
| 30DOM10221     | 1   | 7              | 230   | 1/60         | 10'         | 40              | 22            |

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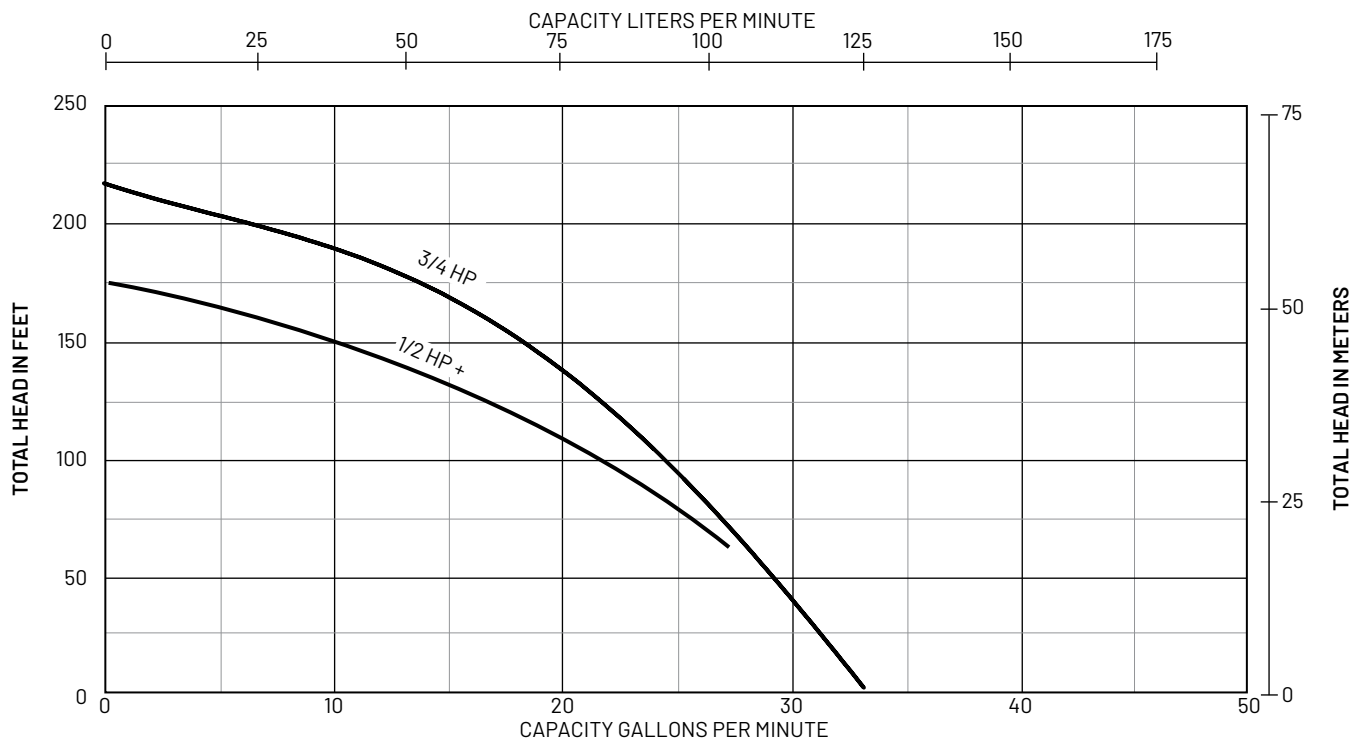
# ST.E.P. Plus D Series

4" multi-stage submersible effluent pumps

## PUMP PERFORMANCE: 10 GPM



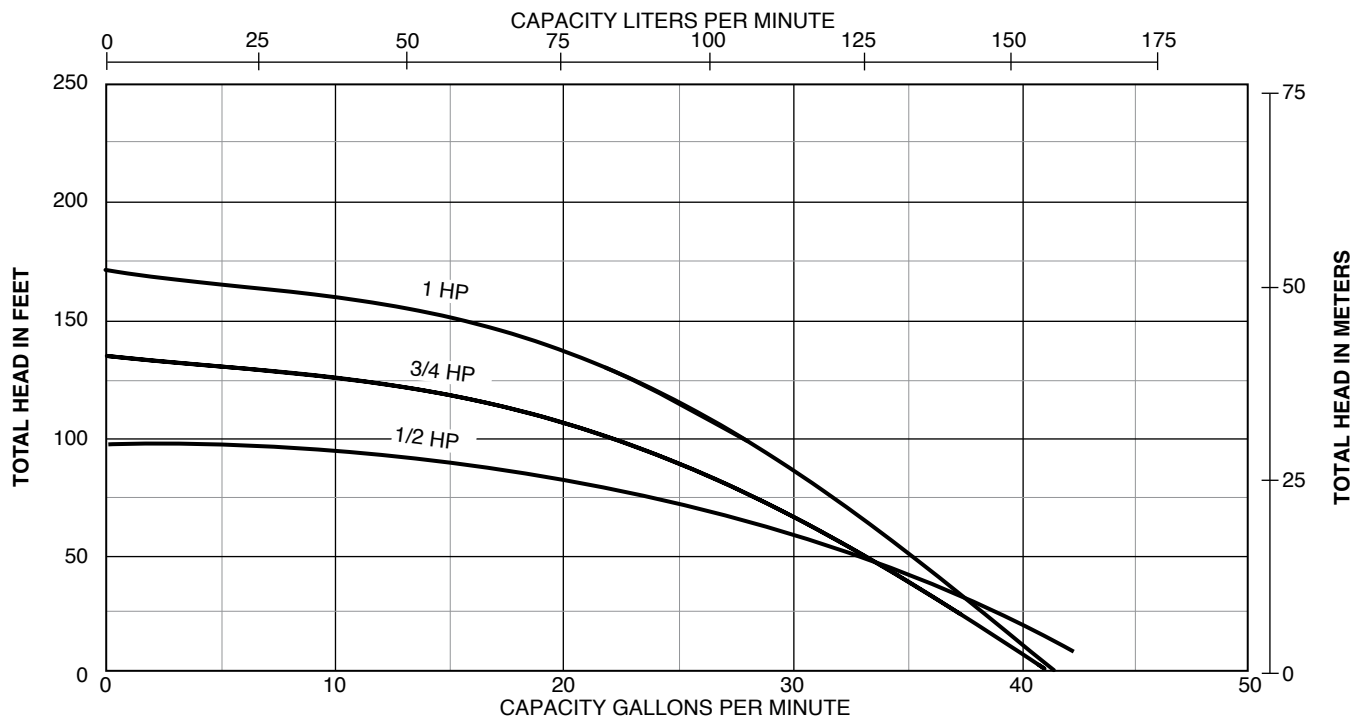
## PUMP PERFORMANCE: 20 GPM



# ST.E.P. Plus D Series

4" multi-stage submersible effluent pumps

## PUMP PERFORMANCE: 30 GPM

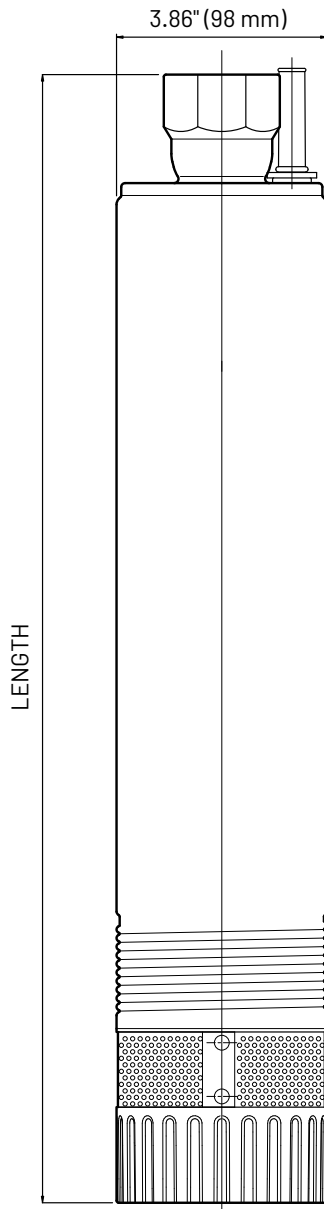


| PUMP PERFORMANCE (Capacity in gallons per minute) |           |   |      |      |      |      |      |      |      |      |     |     |     |     |     |     |     |     |
|---------------------------------------------------|-----------|---|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| HP                                                | Flow Rate | 0 | 10   | 20   | 30   | 40   | 50   | 60   | 70   | 80   | 90  | 100 | 110 | 120 | 130 | 140 | 150 | 160 |
| 1/2                                               | 10        | - | -    | 15.0 | 13.7 | 12.7 | 11.5 | 10.2 | 8.4  | 6.5  | 4.3 | 1.0 |     |     |     |     |     |     |
| 1/2                                               | 20        | - | -    | 30.0 | 27.5 | 24.0 | 20.0 | 13.5 | 6.0  |      |     |     |     |     |     |     |     |     |
| 3/4                                               | 20        | - | -    | 29.5 | 27.4 | 25   | 22.4 | 19.5 | 16.1 | 11.9 | 5.0 |     |     |     |     |     |     |     |
| 1/2                                               | 30        | - | 38.5 | 33.3 | 25.8 | 16.0 |      |      |      |      |     |     |     |     |     |     |     |     |
| 3/4                                               | 30        | - | 38.1 | 34   | 29.3 | 23.7 | 16.1 |      |      |      |     |     |     |     |     |     |     |     |
| 1                                                 | 30        | - | 39.1 | 36.1 | 32.8 | 29.1 | 24.7 | 19.3 | 11.1 |      |     |     |     |     |     |     |     |     |

# ST.E.P. Plus D Series

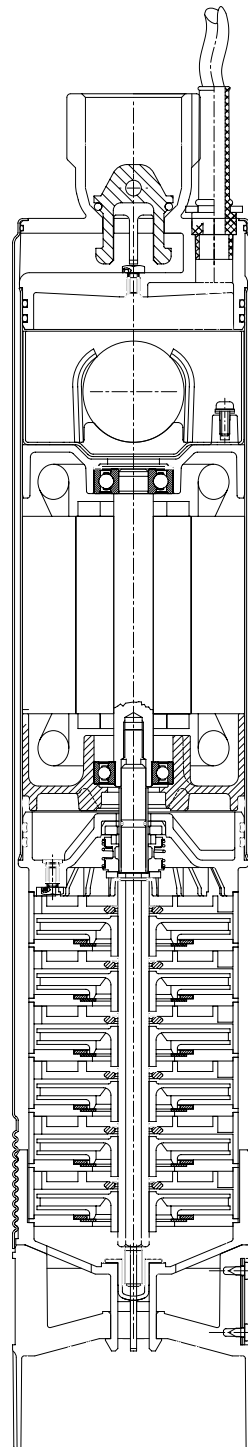
4" multi-stage submersible effluent pumps

## OUTLINE DIMENSIONS



| Pump         | Length |
|--------------|--------|
| 10DOM05121   | 21.6   |
| 20DOM05121+1 | 22.3   |
| 30DOM05121   | 20.6   |
| 10DOM05221   | 21.6   |
| 20DOM05221+1 | 22.3   |
| 30DOM05221   | 20.6   |
| 20DOM07221   | 24.9   |
| 30DOM07221   | 22.3   |
| 30DOM10221   | 24.6   |

## CROSS SECTION

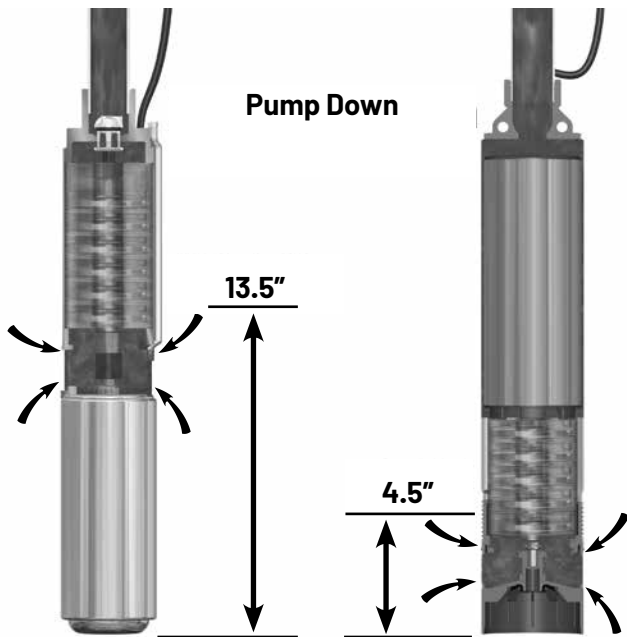


Dimensions are for estimating purposes only.

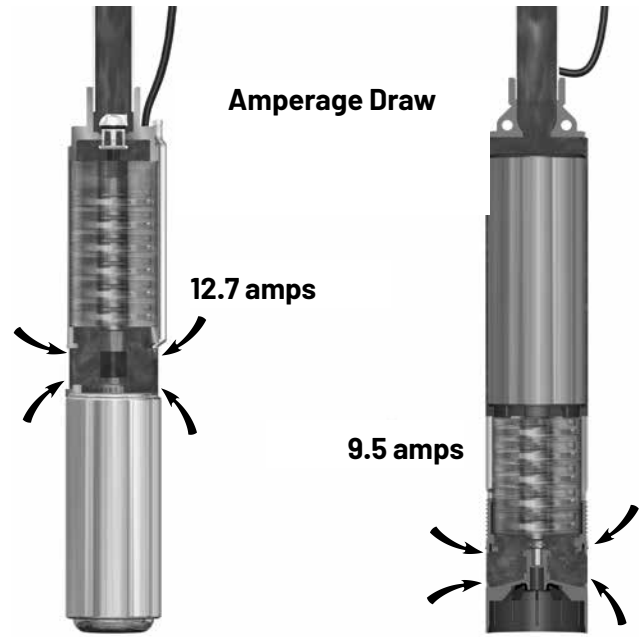
# ST.E.P. Plus D Series

4" multi-stage submersible effluent pumps

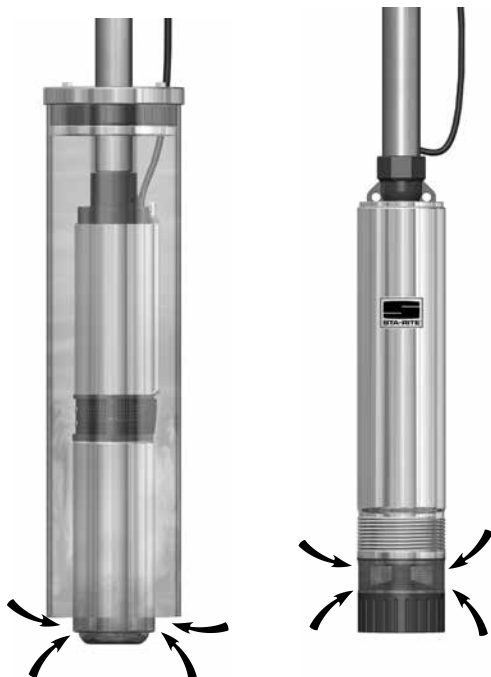
## INCREASED DRAWDOWN



## REDUCED AMP DRAW

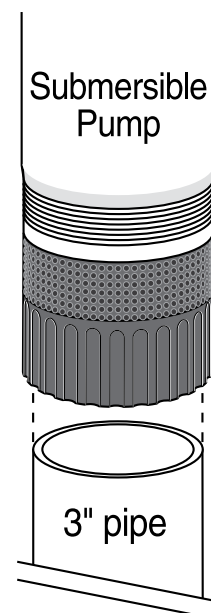


## ELIMINATES FLOW-INDUCER



## ADJUSTABLE DEPTH SETTING

Pump depth can be adjusted with standard 3" PVC pipe fitted to the bottom of the intake.





## **ST.E.P. Plus D Series**

4" multi-stage submersible effluent pumps

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4" multi-stage submersible effluent pumps

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