

# DAVEY



## BT 20-30

### WHY CHOOSE THE DAVEY BT Home Pressure System?

#### WATER PRESSURE SYSTEM

The Davey BT booster pressure system consists of a robust centrifugal pump fitted with the intelligent Davey Torrium®2 water pressure controller to deliver boosted water pressure to your home or other application. Consumers can enjoy strong and seemingly constant water pressure due to Torrium®2's constant flow operation.

Due to large water pathways, Torrium®2 operates with a lower head loss than comparable water pressure controllers to provide superior hydraulic performance with less wasted energy.

#### TORRIUM®2 CONTROLLER

##### Pressure Boosting

Torrium®2 boosts low or fluctuating mains water pressure to give you strong, even water pressure for your comfort and convenience. Torrium®2 can also pressure boost water from rainwater tanks.

##### Constant Flow and Even Water Pressure

To prevent annoying fluctuations in water temperature during showers, Torrium®2 uses its intelligence to provide households with constant flow to provide even water pressure. It does this with its innovative pressure and flow sensors to start the pump on a pressure drop and to stop it on low flow (~0.26 gpm). This avoids pump cycling when there is continuing household demand for water.

##### Quick Cut-in for Even Pressure

To give you strong pressure right from the start, Torrium®2 is designed to cut in quickly when it senses demand for water. It cuts in when the pressure has dropped to 80% of the previous top (shut-off) pressure. Torrium®2 automatically sets this cut-in pressure each time the pump stops. In doing so, Torrium®2 automatically adapts to variations in pump performance or site conditions.



## Economical, Quiet, Easy to Install



**AIRLEAVE**  
HOME PRODUCTS

[WWW.USPUMPSUPPLY.COM](http://WWW.USPUMPSUPPLY.COM)

# BT with Torrium®2 Home Pressure System

**DAVEY**

| OPERATING LIMITS   |          |
|--|----------|
| Capacities to  | 38 gpm   |
| Maximum total head to  | 50 psi   |
| Cut-in pressure – Adapts to 80% of last shut-off head pressure |          |
| Cut-out flow rate  | 0.26 GPM |
| Maximum liquid temperate (Torrium®2)                           | 158° F   |
| Maximum ambient temperature (Torrium®2)                        | 120° F   |
| Maximum suction lift   | 25'      |
| Inlet size   | 1 1/4" F |
| Outlet size  | 1" M     |
| Maximum pump casing pressure                                   | 116 psi  |
| Maximum system pressure  | 100 psi  |

## INSTALLATION AND PRIMING

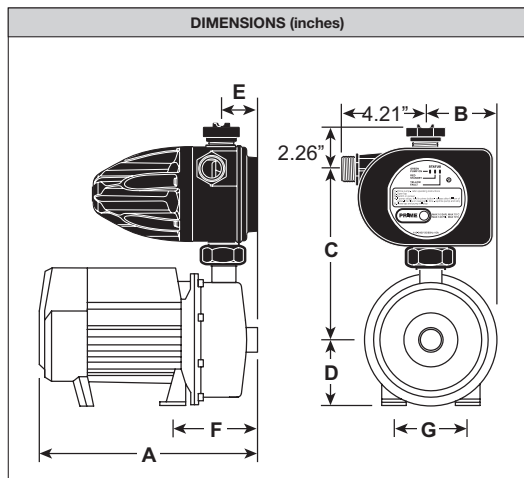
- On installations with suction lifts a good quality foot valve should be installed
- The system is primed by filling the pump and suction line with water through the priming port, and replacing priming plug prior to switching on
- The PRIME button on the Torrium®2 unit should be held in while the pump is establishing prime

| MATERIALS OF CONSTRUCTION      |                       |                     |
|--------------------------------|-----------------------|---------------------|
| Part                           | Material              |                     |
| Impellers                      | 304 stainless steel   |                     |
| Lock nut                       | 304 stainless steel   |                     |
| Pump casing                    | 304 stainless steel   |                     |
| Pump backplate                 | 304 stainless steel   |                     |
| Pump shaft                     | 316 stainless steel   |                     |
| Neckrings                      | Teflon                |                     |
| Seal ring (stationary)         | Ceramic               |                     |
| Seal ring (rotating)           | Carbon (synthetic)    |                     |
| Seal spring                    | 304 stainless steel   |                     |
| Orings                         | Nitrile rubber        |                     |
| Stage body                     | 304 stainless steel   |                     |
| Torrium®2 check valve          | Stem assembly         | Nylon               |
|                                | Spring                | 304 stainless steel |
|                                | Seal                  | Nitrile             |
| Torrium®2 body                 | Glass filled nylon    |                     |
| Priming plug                   | 304 stainless steel   |                     |
| Motor shell                    | Marine grade aluminum |                     |
| Lantern / DE endshield         | Marine grade aluminum |                     |
| Shell & lantern bracket finish | Baked polyester       |                     |



| Model   | A     | B    | C    | D    | E    | F    | Inlet    | Outlet | Net Weight (lbs) | G<br>Hole Diameter @ Centres |      |
|---------|-------|------|------|------|------|------|----------|--------|------------------|------------------------------|------|
| BT20-30 | 17.40 | 3.35 | 8.00 | 3.54 | 5.31 | 8.85 | 1 1/4" F | 1" M   | 27.30            | 0.27                         | 3.93 |

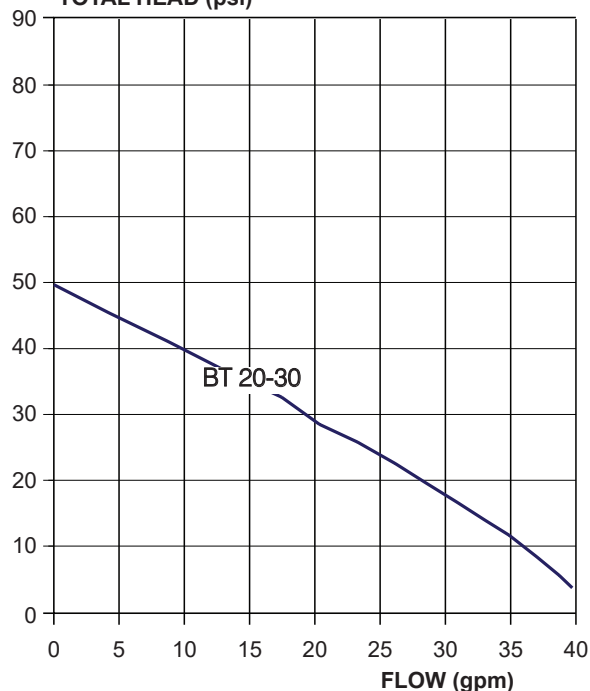
## DIMENSIONS (inches)



## ELECTRICAL DATA

|                          |         |
|--------------------------|---------|
| Model                    | BT20-30 |
| Supply voltage/phase     | 120V/1  |
| Supply frequency         | 60hz    |
| Input power (P1) (kW)    | 0.98    |
| Output power (P2) (kW)   | 0.78    |
| Full load current (A)    | 8.2     |
| Locked rotor current (A) | 38.00   |
| Starting                 | PSC     |
| Insulation class         | Class F |
| Horsepower               | 1hp     |

## TOTAL HEAD (psi)



Add incoming pressure to maximum pump boost for shut off pressure.