

DAVEY



BIT20-40



WHY CHOOSE THE DAVEY BIT Home Pressure System?

WATER PRESSURE SYSTEM

The Davey BIT 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 water where the supply is not pressurized 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

**Applications where incoming water
supply is not pressurized.
Great for cisterns!**



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BIT with Torrium®2 Home Pressure System

DAVEY

| OPERATING LIMITS | |
|--|----------|
| Capacities to | 25 gpm |
| Maximum total head to | 78 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" F |
| Outlet size | 1" M |
| Maximum pump casing pressure | 116 psi |
| Maximum system pressure | 100 psi |

INSTALLATION AND PRIMING

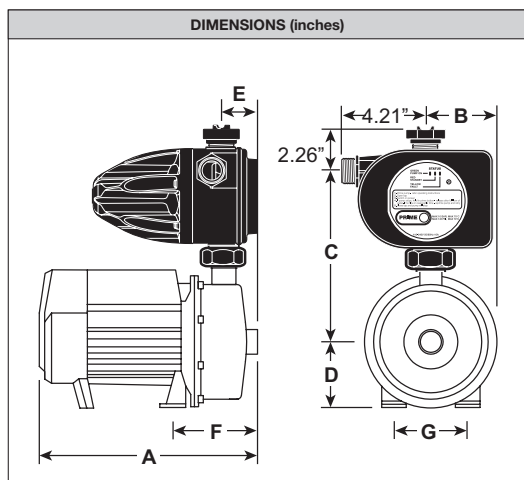
- On installations with suction lifts a good quality foot valve should be installed
- The system is primed by filling the pump and suction line with water through the priming port, and replacing priming plug prior to switching on
- The PRIME button on the Torrium®2 unit should be held in while the pump 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 Hole Diameter @ Centres | |
|----------|-------|------|------|------|------|------|-------|--------|------------------|------------------------------|------|
| BIT20-40 | 17.40 | 3.35 | 8.00 | 3.54 | 5.31 | 8.85 | 1" F | 1" M | 27.30 | 0.27 | 3.93 |

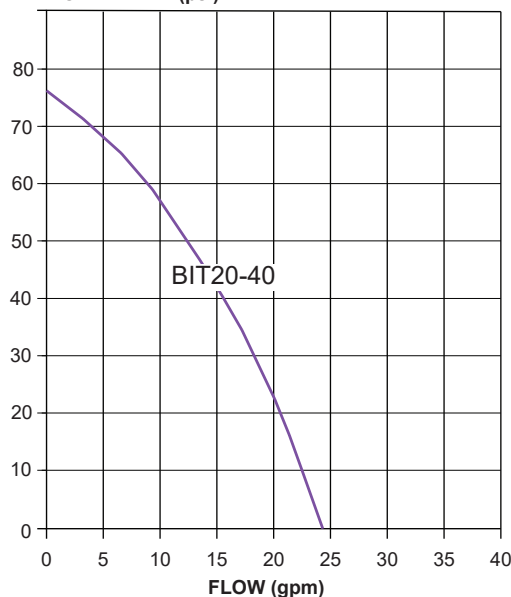
DIMENSIONS (inches)



ELECTRICAL DATA

| | |
|--------------------------|----------|
| Model | BIT20-40 |
| Supply voltage/phase | 220V/1 |
| Supply frequency | 60hz |
| Input power (P1) (kW) | 1.10 |
| Output power (P2) (kW) | 0.92 |
| Full load current (A) | 4.70 |
| Locked rotor current (A) | 23.00 |
| Starting | PSC |
| Insulation class | Class F |
| Horsepower | 1.25hp |

TOTAL HEAD (psi)



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