



# BIT20-30

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!



### BIT with Torrium®2 Home Pressure System



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	1¹/₄" F						
Outlet size	1" M						
Maximum pump casing pressure	116 psi						
Maximum system pressure	100 psi						

INSTALLATION	AND	<b>PRIMING</b>
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- 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

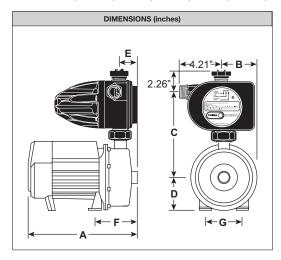
MATERIALS OF CONSTRUCTION						
Part	Material					
Impellers	304 stainless steel					
Lock nut	304 stainless steel					
Pump casing	304 stainless steel					
Pump backplate	304 stainless steel					
Pump shaft	316 stainless steel					
Neckrings	Teflon					
Seal ring (stationary)	Ceramic					
Seal ring (rotating)	Carbon (synthetic)					
Seal spring	304 stainless steel					
Orings	Nitrile rubber					
Stage body	304 stainless steel					
Torrium®2 check valve Stem assembly Spring Seal	Nylon 304 stainless steel Nitrile					
Torrium <sup>®</sup> 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	В	С	D	E	F	Inlet	Outlet	Net Weight (lbs)	Hole Diamet	G er @ Centres
BIT20-30	17.40	3.35	8.00	3.54	5.31	8.85	1 <sup>1</sup> / <sub>4</sub> " F	1" M	27.30	0.27	3.93



ELECTRICAL DATA						
Model	BIT20-30					
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					

