

### APPLICATIONS

Ideal for pumping clean, non-volatile liquids without fibres or solids in such applications as:

- > Household water supply
- > Irrigation
- > Water transfer
- > Washing systems
- > Pressure boosting



## HP Series with Torrium2

Model Numbers:  
HP45-05T, HP65-06T & HP85-08T

Robust and compact, twin stage, centrifugal pump with Torrium2 constant flow control and loss of prime device for automatic water pressure.

Designed for small to medium size, single storey homes.

### WHY CHOOSE THE DAVEY HP SERIES WITH TORRIUM2?

The HP Series Pressure Systems, consist of an HP pump fitted with a Torrium2 controller. The Torrium2 is supplied connected electrically to the HP pump motor for:

- Easy non-tradesmen installation and assembly
- Positive safety under varied weather conditions

The combination of the high pressures supplied by the HP pump and constant flow control provided by the Torrium2, enables consumers to enjoy the benefits of a strong comfortable shower from a pump that does not cycle, plus the reliability of adaptive technology.

The complete HP Pressure System is compact and quiet providing for:

- Easy installation, especially where space is at a premium
- Non-intrusive operation, for consumer enjoyment

All parts of the entire system that are in contact with the water are manufactured from safe, corrosion resistant materials for:

- Consumer confidence that their water supply will be as good coming out as it was going into the system
- Ability to use the HP pressure system on a variety of water qualities

Compliance with the strict requirements of ISO 9001.2000 quality standards ensures consistency of quality of the system.

#### TORRIUM2 CONTROLLER

For more information visit [www.davey.com.au](http://www.davey.com.au)

## PUMP

- Reliable twin stage impeller design
- All stainless steel construction for reliability and the ability to pump hot water up to 50°C
- Carbon/Ceramic mechanical seal for reliable pump operation

## MOTOR

- TEFC motor constructed from corrosion resistant materials
- IP55 international protection rating for a high level of resistance to dust and liquid entry
- Voltage variants:
  - 220-240V, 50Hz, 2 pole
  - 220V, 60Hz, 2 pole (/P models)
- Class F insulation
- Higher than normal 50°C ambient temperature rating for longer life and improved tolerance to voltage variations for peace of mind, even on the hottest days.
- Protected against both high operating temperature and high current draw by a built-in, automatically re-setting, thermal overload
- Permanently split P2 'fail safe' capacitor design
- Motor and pump are designed for frequent starts

## INSTALLATION & PRIMING

- Installations with suction lift require a good quality foot valve to avoid loss of prime - remove in-built check valve.
- To prime, fill pump body and suction line through priming plug hole located above suction inlet and replace plug.

## OPERATING LIMITS

Maximum system pressure	450kPa
Capacities to	140 lpm
Maximum total head	33m
Maximum suction head	6m
Maximum ambient temperature	50°C
Maximum water temperature	50°C
Minimum water temperature	1°C

Torrium2 cut-in pressure is normally 80% of the pumps last shut-off head.

## MATERIALS OF CONSTRUCTION

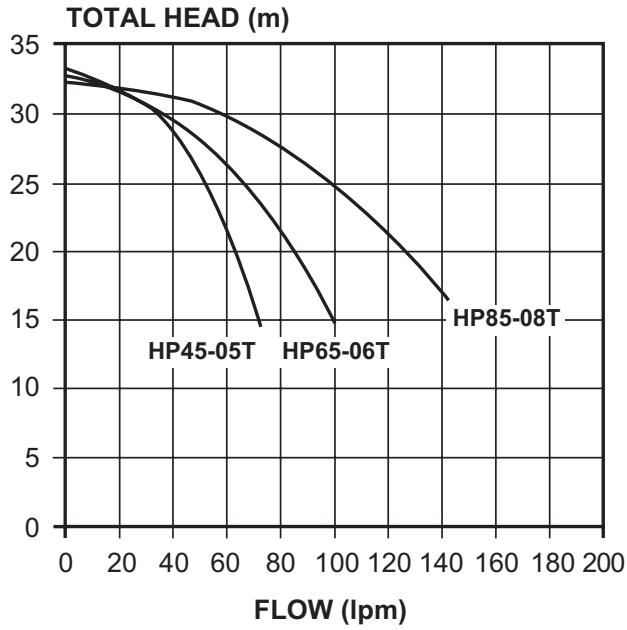
PART	MATERIAL
<b>Pump</b>	
Impellers	Glass filled polycarbonate
Lock nut	304 stainless steel
Pump casing	304 stainless steel
Pump backplate	304 stainless steel
Pump shaft	303 stainless steel
Neck rings	Polypropylene + teflon
Seal ring (stationary)	Ceramic
Seal ring (rotating)	Carbon (synthetic)
Seal spring	304 stainless steel
Orings	Nitrile rubber
Stage body	Glass filled noryl
Suction check valve Body Spring Seal	Polypropylene 304 stainless steel Nitrile
Priming plug	Glass filled noryl
Motor shell	Marine grade aluminium
Lantern/DE endshield	Marine grade aluminium
Shell and lantern finish	Baked polyester
<b>Torrium2</b>	
Housing	Glass fibre reinforced nylon
Pressure tank diaphragm	Santoprene 87
Pressure tank springs	Molybond coated tempered steel
Sensor plate	316 stainless steel
Inlet union	Glass fibre reinforced nylon
Orings	Nitrile
Check valve poppet	Acetal
Check valve spring	304 stainless steel

## ELECTRICAL DATA

Model	HP45-05	HP65-06	HP85-08
Supply Voltage	220-240V ±6%		
Supply frequency	50Hz		
Phase	Single		
Speed	2850rpm		
Full load current	3.4A	3.8A	5.1A
Locked rotor current	12.0A	12.0A	18.0A
Input power (P <sub>1</sub> )	0.77kW	0.9kW	1.14kW
Output power (P <sub>2</sub> )	0.55kW	0.6kW	0.8kW
Enclosure class	IP55		
Insulation class	Class F		
Starting	P.S.C.		

AS/NZS 3350.2.41-1997 Approval No. A/10059EA

## HYDRAULIC PERFORMANCE



## DIMENSIONS (MM)

Type	A	B	C	D	E	F	G	H	Inlet	Outlet	Net Weight (kg)
HP45-05T	329	100	170	183	115	92	75	328	1 1/4" F	1" M	9
HP65-06T	329	100	170	183	115	92	75	328	1 1/4" F	1" M	9
HP85-08T	357	100	170	183	115	92	75	328	1 1/4" F	1" M	10.8

