

HP Series



Tested in compliance with
AS/NZS 4020
for use in contact with safe drinking water

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



ROBUST AND COMPACT TWIN STAGE HOME PRESSURE SYSTEM

APPLICATION

Ideal for pumping clean, non-volatile liquids without fibres or solids in such applications as household water supply, irrigation, water transfer, washing systems and pressure boosting.

FEATURES & BENEFITS

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

Torrium2 CONTROLLER

For more information visit daveywater.com

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

Home Pressure Systems

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 |

Torium2 cut-in pressure is normally 80% of the pumps last shut-off head.

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 ₁) | 0.77kW | 0.9kW | 1.14kW |
| Output power (P ₂) | 0.55kW | 0.6kW | 0.8kW |
| Enclosure class | IP55 | | |
| Insulation class | Class F | | |
| Starting | P.S.C. | | |

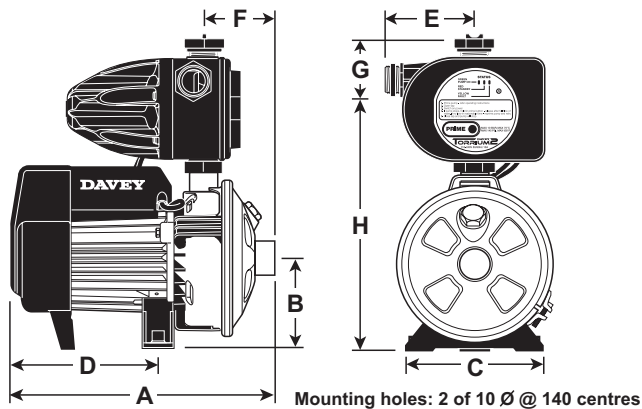
AS/NZS 3350.2.41-1997 Approval No. A/10059EA

INSTALLATION AND 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.

DIMENSIONS (mm)

| Model | 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 |



MATERIALS OF CONSTRUCTION

| PART | MATERIAL |
|--------------------------|--------------------------------|
| Pump | |
| 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 |
| O-rings | Nitrile rubber |
| Stage body | Glass filled noryl |
| Suction check valve | |
| Body | Polypropylene |
| Spring | 304 stainless steel |
| Seal | Nitrile |
| Priming plug | Glass filled noryl |
| Motor shell | Marine grade aluminium |
| Lantern/DE endshield | Marine grade aluminium |
| Shell and lantern finish | Baked polyester |
| Torium2 | |
| 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 |
| O-rings | Nitrile |
| Check valve poppet | Acetal |
| Check valve spring | 304 stainless steel |

HYDRAULIC PERFORMANCE

