

DAVEY DynaDrive™



COMPACT ALL-IN-ONE CONSTANT PRESSURE SYSTEM

APPLICATION

Ideal for household and domestic water supply, farming and agricultural water systems, irrigation and turf watering systems and automatic general water transfer.

FEATURES & BENEFITS

Flows up to 36 gpm and heads up to 91 psi

Horizontal multistage centrifugal pump with all hydraulic parts in stainless steel:

- Suitable for high water temperatures
- Corrosion and wear resistant
- Compact design
- Easy to install

Stainless steel impellers with high efficiency impeller profile and thick self-centering impeller neck rings for:

- High efficiency
- Reduced power consumption:
- Low noise output

Air purging valve and stage porting:

- Easier priming
- Less susceptible to air leaks
- Improved dependability

Impellers mounted directly on extended motor shaft:

- Maximise performance per stage
- High efficiency
- Long motor and pump life
- Increased wear resistance

Pump casing assembly attached to motor bracket at 8 points with O-ring seal:

- Complete stainless casing
- Better sealing
- Longer service life

Davey built, totally enclosed fan cooled (TEFC) electric motor:

- Sealed and greased for life motor bearings
- Oversized drive end bearing
- Longer life
- Easy service
- Economical and quiet running
- Solid copper windings

CONTROLLER

- Warning indication for system faults
- Adjustable pressure settings
- Constant pressure at high flow rates
- Loss of prime protection
- Capable of daisy chain applications of two pumps in parallel
- Easy service
- Economical and quiet running

Constant Pressure System

OPERATING LIMITS

| Models | DD60-10NPT | DD90-11NPT |
|----------------------------------|---|------------|
| Max. flow rate @ 300kPa (43psi) | 16 gpm | 24 gpm |
| Max. flow rate @ 400kPa (58psi) | 13 gpm | 19 gpm |
| Max. flow rate @ 500kPa (73psi) | 8 gpm | 9 gpm |
| Max. casing pressure | 145 psi | |
| Max. set pressure | 87 psi | |
| Min. cut-in pressure (gauge) | 1½ psi | |
| Default cut-in pressure | 7psi less than set pressure | |
| Max. cut-in pressure | 3psi less than set pressure | |
| Operating water temp range | 32° - 176°F | |
| Operating ambient/air temp range | 32° - 122°F | |
| Maximum humidity | 95% | |
| Nature of fluids | Clean, clear, non-corrosive, non-flammable liquids with no fibers and little sand/silica or abrasives (maximum concentration 40g/m ³) | |
| Applicable approvals | UL 778; UL61800-5-1; CSA-C22.2 No. 108-14 | |

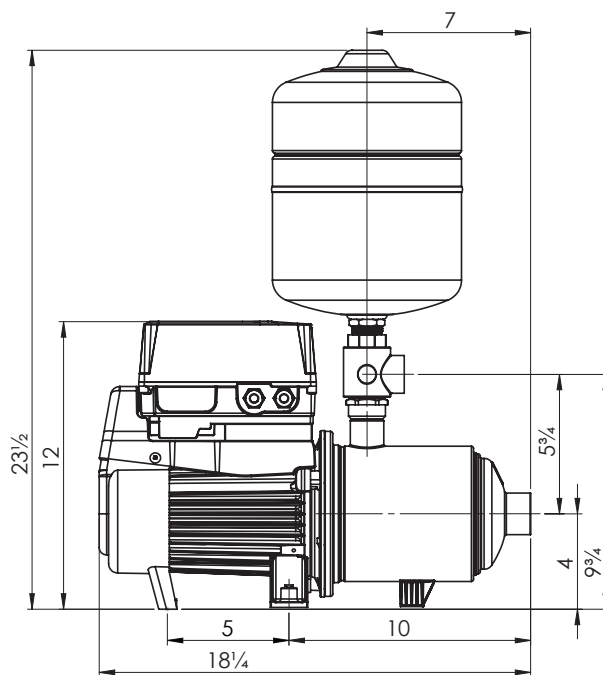
MATERIALS OF CONSTRUCTION

| PART | MATERIAL |
|----------------------------------|---|
| Casing | 304 stainless steel |
| Impellers | 304 stainless steel |
| Stages (casing) | 304 stainless steel |
| Pump shaft | 316 stainless steel |
| Stage centring device | 304 stainless steel |
| Mechanical seal | Carbon/ceramic |
| O-rings | EPDM |
| Plugs | 316 stainless steel |
| Motor shell and lantern bracket | Aluminium with baked polyester powder coat finish |
| Motor feet | Xenoy |
| Fan cowl/rear foot | Polypropylene |
| Adaptor VSD | Polypropylene |
| 5-way tee piece | 304 stainless steel |
| Pump coupling to 5-way tee piece | Brass |

ELECTRICAL DATA

| Models | DD60-10NPT | DD90-11NPT |
|-----------------------------|--------------|------------|
| Voltage | 220 - 240V ~ | |
| Max motor speed | 2,900rpm | |
| Frequency (incoming power) | 50 - 60Hz | |
| Input power P ₁ | 1.1kW | 1.3kW |
| Output power P ₂ | 0.8kW | 0.9kW |
| Running current | 7.4A | 8.6A |
| Insulation class | F | |
| IP rating | 55 | |

DIMENSIONS (inches)



Constant Pressure System

| HYDRAULIC PERFORMANCE | | |
|------------------------------------|------------|------------|
| Models | DD60-10NPT | DD90-11NPT |
| Inlet | 1¼" NPT F | |
| Discharge outlet (BSP M) | 1" NPT F | |
| Default nominal operating pressure | 60psi | |
| Number of stages (impellers) | 6 | 5 |
| Maximum pump pressure (head) | 91 Psi | 80 Psi |
| Pressure tank outlet | 1" NPT M | |
| Tank pre-charge (Default) | 42psi | |

