

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

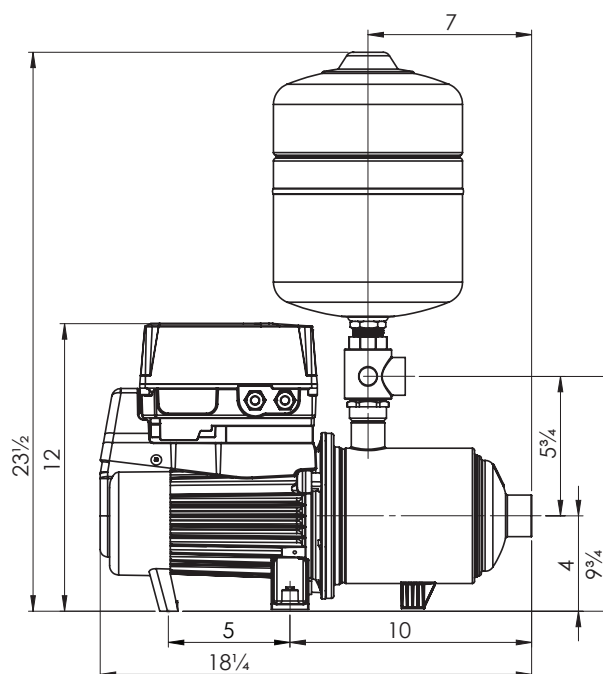
Constant Pressure System

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/m³)	
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	

