

DAVEY DynaDrive™



Model Numbers:
DD15-35NPT, DD60-10NPT,
DD90-11NPT



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 (Models DD60-10NPT and DD90-11NPT only):

- 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 (model DD15-35NPT - 6 points):

- 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	DD15-35NPT	DD60-10 (CE/NPT)	DD90-11 (CE/NPT)
Max. flow rate @ 300kPa (43psi)	45L/min (12 US gallons)	60L/min (16 US gallons)	92L/min (24 US gallons)
Max. flow rate @ 400kPa (58psi)	18L/min (5 US gallons)	48L/min (13 US gallons)	72L/min (19 US gallons)
Max. flow rate @ 500kPa (73psi)	N/A	32L/min (8 US gallons)	35L/min (9 US gallons)
Max. casing pressure	800kPa (116psi)	1,000kPa (145psi)	
'Out of Box' constant pressure	414kPa (60psi)		
Max. set pressure	600kPa (87psi)		
Min. cut-in pressure (gauge)	10kPa (1½psi)		
Default cut-in pressure	50kPa (7psi) less than set pressure		
Max. cut-in pressure	20kPa (3psi) less than set pressure		
Operating water temp range	0 – 80°C (32 – 176°F)		
Operating ambient/air temp range	0 – 50°C (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 (DD60-10 & DD90-11)	UNE-EN 55014-1; UNE-EN 61000-3-2; UNE-EN61000-3-3; UNE-EN 55014-2; IEC 60335-2-41; IEC 60335-1 + A1 + A2; AS/NZS 60335.2.41; AS/NZS 60335.1 + A1 + A2 + A3 + A4; AS4020		
Applicable approvals (DD60-10CE & DD90-11CE)	EN 60335-2-41 + A1 + A2 EN 60335-1 + A11 + A13 EN 62233		
Applicable approvals (DD15-35NPT, DD60-10NPT & DD90-11NPT)	UL 778; UL61800-5-1; CSA-C22.2 No. 108-14		

ELECTRICAL DATA

Models	DD15-35NPT	DD60-10NPT	DD90-11NPT
Voltage	110 – 120V ~	220 – 240V ~	
Max motor speed	2,900rpm		
Frequency (incoming power)	50 – 60Hz		
Input power P ₁	0.8kW	1.1kW	1.3kW
Output power P ₂	0.55kW	0.8kW	0.9kW
Running current	9.4A	7.4A	8.6A
Insulation class	F		
IP rating	55		

MATERIALS OF CONSTRUCTION

PART	MATERIAL	
	DD15-35NPT	DD60-10(CE/NPT) DD90-11(CE/NPT)
Model		
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 (rotating)	Carbon	
Mechanical seal (stationary)	Silicone Carbide (Ceramic)	Ceramic
Mechanical seal (spring)	316 stainless steel	
Mechanical seal (bellows)	EPDM	
O-rings	EPDM	
Plugs	304 stainless steel	316 stainless steel
Motor shell and lantern bracket	Aluminium with baked polyester powder coat finish	
Motor feet	Aluminium with baked polyester powder coat finish	Xenoy
Fan cowl/rear foot		Polypropylene
Adaptor VSD		Polypropylene
5-way tee piece	304 stainless steel	
Pump coupling to 5-way tee piece	N/A	304 stainless steel
Bearings	6202ZZ Greased and Sealed for life	C3 greased and sealed for life

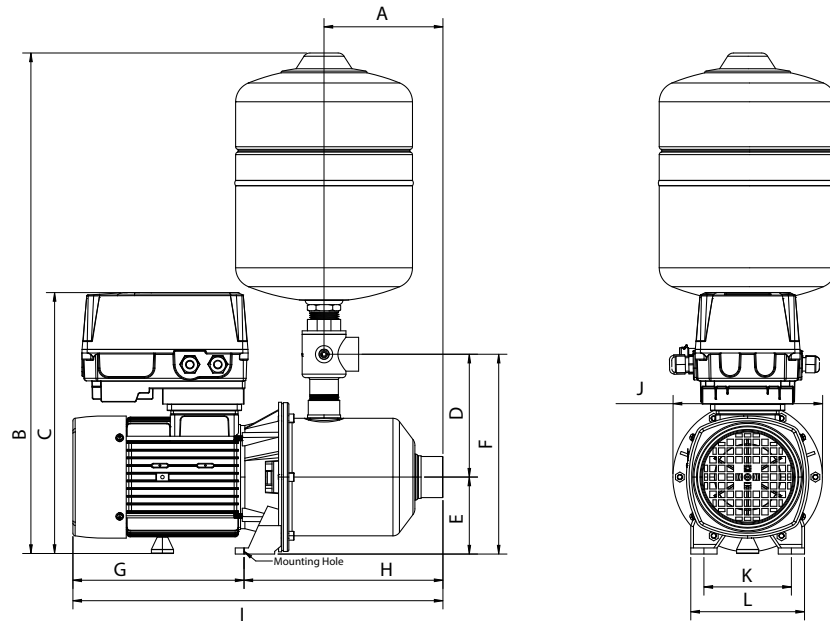
HYDRAULIC PERFORMANCE

Models	DD15-35NPT	DD60-10NPT	DD90-11NPT
Inlet	1" NPT F	1¼" NPT F	
Discharge outlet (BSP M)	1" NPT F		
Default nominal operating pressure	60psi		
Number of stages (impellers)	5	6	5
Maximum pump pressure (head)	65psi	91psi	80psi
Pressure tank outlet	1" NPT M		
Tank pre-charge (Default)	42psi		

Constant Pressure System

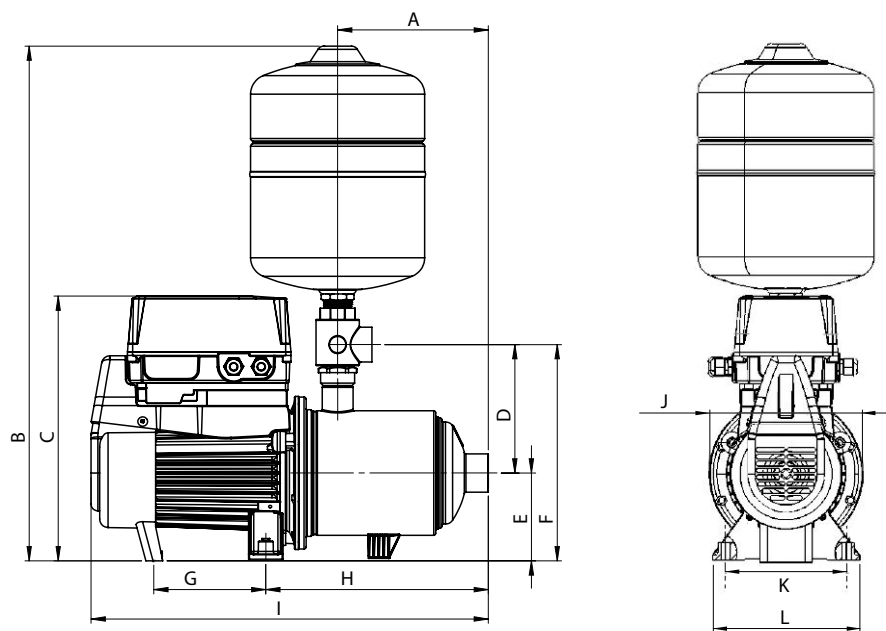
DIMENSIONS (inches)

Model	A	B	C	D	E	F	G	H	I	J	K	L
DD15-35NPT	5 1/4	22 1/2	11 3/4	5 1/2	3 1/2	9	7 3/4	9	16 1/2	6 3/4	4	5 1/4



DIMENSIONS (inches)

Model	A	B	C	D	E	F	G	H	I	J	K	L
DD60-10NPT	6 7/8	23 1/2	12	5 7/8	4	9 7/8	5 1/8	10 1/8	18 1/8	6 3/4	4	5 1/4
DD90-11NPT												



Constant Pressure System

HYDRAULIC PERFORMANCE

