



DAVEY DynaDrive™ PRO

WARRANTY
2 YEARS

Model Number:
DD160-19

APPLICATIONS

Ideal for larger household and domestic water supply, including pressure boosting applications*, farming and agricultural water systems, irrigation and turf watering systems and automatic general water transfer.

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

COMPACT ALL-IN-ONE CONSTANT PRESSURE SYSTEM

FEATURES & BENEFITS

Flows up to 245 lpm and heads up to 58m
PUMP

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-centring 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 & quiet running

CONTROLLER

Variable Speed Drive

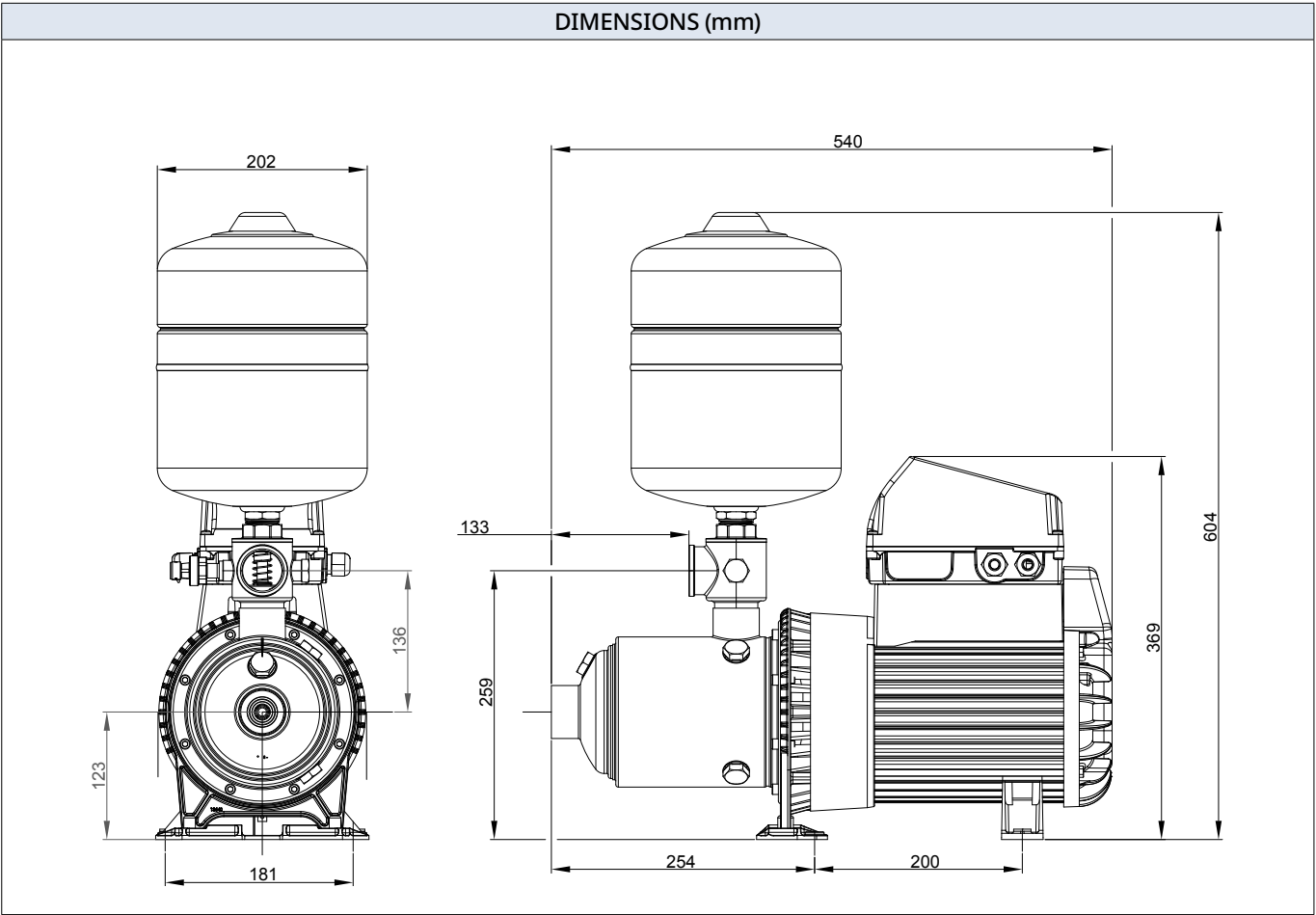
- Warning indication for system faults
- Adjustable pressure settings
- Constant pressure at high flow rates
- Loss of prime protection
- Capable of daisy chain applications of four pumps in parallel
- Easy service
- Economical and quiet running

*Pressure boosting subject to local regulations

OPERATING LIMITS	
Models	DD160-19
Flow rate @ 200kPa (20m)	208 lpm
Flow rate @ 300kPa (30m)	177 lpm
Flow rate @ 400kPa (40m)	135 lpm (Factory set point)
Max. casing pressure	1,000kPa
Max. set pressure	600kPa
Min. cut-in pressure adjustment	10kPa (gauge pressure)
Default cut-in pressure	50kPa less than set pressure
Max. cut-in pressure	20kPa less than set pressure
Operating water temp range	0 – 80°C
Operating ambient/air temp range	0 – 50°C
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	UNE-EN 55014-1:2017; UNE-EN 61000-3-2:2014; UNE-EN 61000-3-3:2013; UNE-EN 55014-2:2015; IEC 60335-2-41; IEC 60335-1 + A1:2013 + A2:2016; AS/NZS 60335.2.41:2013; AS/NZS 60335.1:2011 + A1:2012 + A2:2014 + A3:2015 + A4:2017; AS4020

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	Polycarbonate
Fan cowl/rear foot	Polycarbonate
Adaptor VSD	25% Glass filled nylon
5-way tee piece	304 stainless steel

ELECTRICAL DATA	
Models	DD160-19
Voltage	220 – 240V ~
Max motor speed	2,900rpm
Frequency (incoming power)	50 – 60Hz
Input power P ₁	2.3kW
Output power P ₂	1.9kW
Running current	13A
Insulation class	F
IP rating	55



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The figure consists of three vertically stacked graphs sharing a common x-axis representing Flow in liters per minute (lpm), ranging from 0 to 250.

- Top Graph: TOTAL HEAD (m) vs FLOW (lpm)**
 - The y-axis ranges from 0 to 70 meters.
 - The curve, labeled **DD160-19**, starts at approximately 58m head at 0 lpm and decreases to about 4m head at 250 lpm.
 - A horizontal dashed line at 40m head is labeled **40m (400kPa) Factory set point**.
 - The text **DD160 50Hz** is located in the top right corner.
- Middle Graph: Efficiency (%) and NPSHr (m) vs FLOW (lpm)**
 - The left y-axis represents Efficiency (%) from 0 to 50.
 - The right y-axis represents NPSHr (m) from 0 to 5.
 - The **Efficiency** curve starts at 0% at 0 lpm, peaks at approximately 45% between 100 and 150 lpm, and then declines.
 - The **NPSHr** curve starts at 0m at 0 lpm and increases steadily to about 2.8m at 250 lpm.
 - A label **11%** is placed near the efficiency curve at approximately 50 lpm.
- Bottom Graph: POWER (P1) kw vs FLOW (lpm)**
 - The y-axis ranges from 0 to 2.5 kW.
 - The curve starts at approximately 0.8 kW at 0 lpm, rises to a peak of about 2.1 kW around 180 lpm, and then slightly decreases to 2.0 kW at 250 lpm.