

APPLICATIONS

Automatic pressure system for:

- > Household and domestic water supply
- > Farming and agricultural water systems
- > Irrigation and turf watering systems
- > Automatic general water transfer

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



Davey HM Series Water Pressure Systems

Torium Model Numbers:
 HM160-15T, HM60-08T, HM90-11T, HM160-19T

Pressure Switch Model Numbers:
 HM270-19P, HM270-25P

Compact, all stainless steel horizontal multistage centrifugal pump pressure system control options to suit application. Flows to 430 lpm and heads to 65m.

WHY CHOOSE THE DAVEY HM PRESSURE SYSTEMS?

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

- Suitable for high water temperatures
- Corrosion & wear resistant

Axial suction & vertical discharge:

- 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 & 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:

- Single-phase motors have built in thermal overload protection with automatic reset and 1.8m long power lead and Australian 3 pin plug
- Sealed and greased for life motor bearings
- Over sized drive bearing
- Longer life
- Easy service



Torium2 controlled HM Series provides a constant flow water supply system with an all stainless steel pump unit. The Torrium2 is adaptive, eliminating cycling, provides loss of prime protection and over temperature cut out. Pressure tanks can be added if site conditions require additional draw off.

OPERATING LIMITS

Maximum continuous flow rate	200 lpm
Maximum operating pressure	700 kPa*
Maximum current	10 amp
Cut-in pressure range	80% of pump shut-off head
Maximum water temperature	65°C

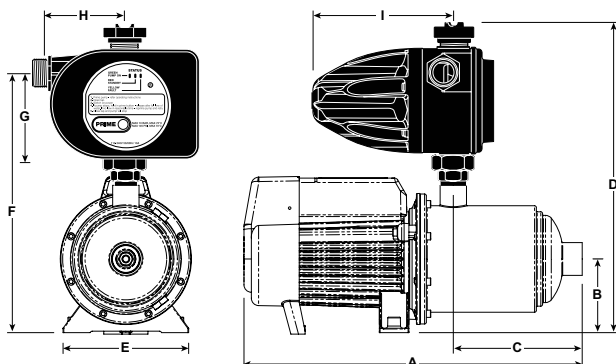
*Dependent on optional tank pressure rating, operating pressure to 820kPa may be achieved.

HYDRAULIC PERFORMANCE

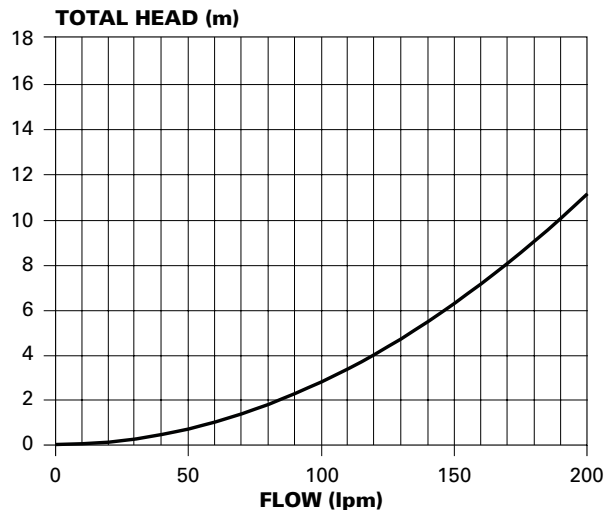
Models Single Phase	Motor		Amps		Ports (BSP)		Nominal Operating Pressure kPa	Maximum Pump Pressure kPa	Tank Air Pre-charge kPa	Nominal Flow lpm
	P1 kW	P2 kW	Run	Start	Suction	Discharge				
HM60-06T	0.85	0.58	4	18	1¼" F	1" M	280	460	320	60
HM60-08T	1	0.72	4.5	18	1¼" F	1" M	360	575	400	60
HM60-10T	1.25	0.94	5.9	28	1¼" F	1" M	430	690	480	60
HM90-08T	1.1	0.78	4.9	20	1¼" F	1" M	310	460	320	90
HM90-11T	1.4	1.05	6.5	28	1¼" F	1" M	420	585	410	90
HM90-13T	1.7	1.4	7.2	40	1¼" F	1" M	480	680	475	90
HM160-15T	1.9	1.5	8	40	1½" F	1" M	340	460	320	160
HM160-19T	2.3	1.8	9.7	40	1½" F	1" M	400	600	420	160

DIMENSIONS (MM)

Models	A	B	C	D	E	F	G	H	I	Net Weight kg
HM60-06T	411	100	127	410	171	316	98	115	215	12.7
HM60-08T	459	100	175	410	171	316	98	115	215	13.6
HM60-10T	459	100	175	410	171	316	98	115	215	18.4
HM90-08T	411	100	127	410	171	316	98	115	215	13.1
HM90-11T	459	100	175	410	171	316	98	115	215	17.8
HM90-13T	503	124	175	435	206	340	98	115	215	23.6
HM160-15T	510	124	178	435	206	340	98	115	215	23.2
HM160-19T	540	124	178	435	206	340	98	115	215	23.5



HYDRAULIC LOSS





All stainless steel HM Series pump unit with adjustable pressure switch and pressure gauge. Provision for Davey Supercell large draw-off capacity tank.

OPERATING LIMITS

Maximum continuous flow rate	430 lpm
Maximum operating pressure	1000 kPa*
Maximum inlet pressure	600 kPa
Maximum water temperature	95°C

*Dependent on optional tank pressure rating, operating pressure to 820kPa may be achieved.

HYDRAULIC PERFORMANCE

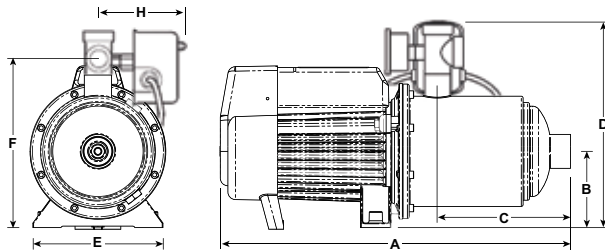
Models Single Phase	Motor		Amps		Ports (BSP)		Nominal Operating Pressure kPa	Maximum Pump Pressure kPa	Tank Air Pre-charge kPa	Nominal Flow lpm
	P1 kW	P2 kW	Run	Start	Suction	Discharge				
HM270-19P	2.4	1.9	10	40	2" F	1½" F	200	300	180	270
HM270-25P	3.2	2.5	13.8	66	2" F	1½" F	250	400	230	270

For detailed performance graphs, please refer to the HM Series technical datasheet, available at www.davey.com.au.

*Three phase units on request.

DIMENSIONS (MM)

Models	A	B	C	D	E	F	H	Net Weight kg
HM270-19P	514	124	178	280	206	240	160	26.1
HM270-25P	562	124	178	280	206	240	160	33.4



INSTALLATION

Pressure switch settings assume zero suction. If the pump is to be operated on suction lift or positive inlet pressure application, pressure settings must be adjusted to suit.

PACKAGED SETS

Complete packaged systems are available on request. Pressure tank and pump mounted on common base plate. Optional control panels also available for single and three phase models.

ELECTRICAL DATA

Pump	
Speed	2900rpm
Supply Voltage Single phase Three phase (selected models)	230V ±10% 415V ±10%
Supply frequency	50Hz
Enclosure class HM60-06, HM60-08, HM60-10, HM90-08 & HM90-11 All other models	IP55 IP56
Insulation class	Class F
Torrium2	
Voltage	220V-240V ± 10%
Phase	Single
Hz	50 / 60
IP rating	56
Maximum load current	10A
Maximum motor size @ 240V input	1.8kW
Surge protection	Varistor

MATERIALS OF CONSTRUCTION

Part	Material
Casing	304 stainless steel
Impellers	304 stainless steel
Stages (casing)	304 stainless steel
Pump shaft	316L stainless steel
Stage centring device	304 stainless steel
Mechanical seal:	
Rotating	Carbon
Stationary	Ceramic
Spring	316SS
Bellows	EPDM
O-rings	EPDM
Plugs	316L stainless steel
Motor shell & lantern bracket	Aluminium with baked polyester powder coat finish
Motor feet	Xenoy
Fan cowl / rear foot (models up to 1.05kW)	Polypropylene

HYDRAULIC PERFORMANCE

