

COMPACT, ALL STAINLESS STEEL, MULTISTAGE PRESSURE SYSTEM

APPLICATION

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

FEATURES & BENEFITS

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

- Suitable for high water temperatures
- Corrosion and wear resistant

Axial suction and 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 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:

- 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
- Economical & quiet running

TORRIUM2 CONTROLLER

For more information visit www.davey.com.au



Home Pressure Systems



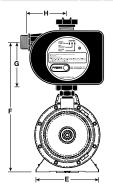
Torrium2 controlled HM Series provides a constant flow water supply system with an all stainless steel pump unit. The Torrium2 is adaptive, eliminating cycling, provides loss of prime protection and over temperature cut out. Pressure tanks can be added if site conditions require additional draw off.

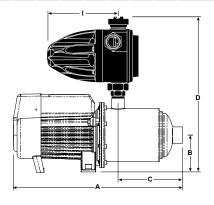
OPERATING LIMITS							
Maximum continuous flow rate	200 lpm						
Maximum operating pressure	700 kPa*						
Maximum current	10 amp						
Cut-in pressure range	80% of pump shut-off head						
Maximum water temperature	65°C						

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

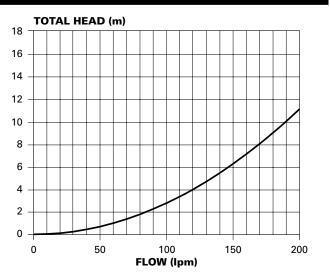
HYDRAULIC PERFORMANCE										
Models	Мо	otor	An	nps	Ports (BSP)		Nominal Operating	Maximum	Tank Air	Nominal
Single Phase	P1 kW	P2 kW	Run	Start	Suction	Discharge	Pressure kPa	Pump Pressure kPa	Pre-charge kPa	Flow lpm
HM60-06T	0.85	0.58	4	18	11⁄4" F	1" M	280	460	320	60
HM60-08T	1	0.72	4.5	18	11⁄4" F	1" M	360	575	400	60
HM60-10T	1.25	0.94	5.9	28	11⁄4" F	1" M	430	690	480	60
HM90-08T	1.1	0.78	4.9	20	11⁄4" F	1" M	310	460	320	90
HM90-11T	1.4	1.05	6.5	28	11⁄4" F	1" M	420	585	410	90
HM90-13T	1.7	1.4	7.2	40	11⁄4" 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	Α	В	С	D	E	F	G	Н	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





Home Pressure Systems with Pressure Switch



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℃							

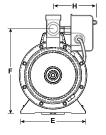
^{*}Dependent on optional tank pressure rating, operating pressure to 820kPa may be achieved.

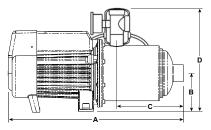
HYDRAULIC PERFORMANCE										
Models	Мо	tor	An	nps	Ports	(BSP)	Nominal	Maximum	Tank Air	Nominal
Single Phase	P1 kW	P2 kW	Run	Start	Suction	Discharge	Operating Pressure kPa	Pump Pressure kPa	Pre-charge kPa	Flow lpm
HM270-19P	2.4	1.9	10	40	2" F	11/2" F	200	300	180	270
HM270-25P	3.2	2.5	13.8	66	2" F	11⁄2" 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	Α	В	С	D	E	F	Н	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

Optional control panels also available for single and three phase models.



Home Pressure Systems

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 Stationary Spring Bellows	Carbon Ceramic 316SS 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

