## Water Pressure Systems



### **APPLICATIONS**

Automatic pressure system for:

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



# HM Series Water Pressure Systems Pressure Switch & Torrium2

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

### WHY CHOOSE THE Davey HM Pressure System?

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 & 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
- · Economical & quiet running



## HM Series Water Pressure System



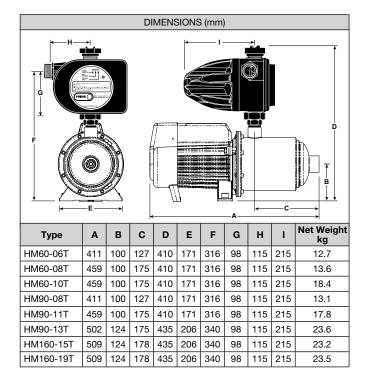
DAVEY

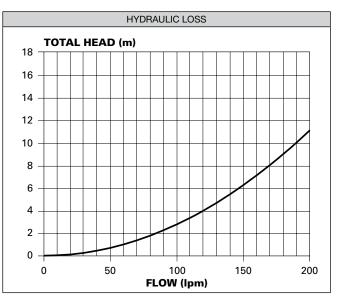
Torrium2 controlled HM Series provides a constant flow water supply system with an all stainless steel pump unit. The Torrium2 is adaptive, eliminating cycling, provides loss of prime protection and over temperature cut out. Pressure tanks can be added if site conditions require additional draw off.

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							
		Ports (BSP)		Nominal	Maximum	Tank Air	
Models Single Phase	Motor (P2)	Suction	Discharge	Operating Pressure kPa	Pump Pressure kPa	Pre-charge kPa	Nominal Flow lpm
HM60-06T	0.58	11/4" F	1" M	280	460	320	60
HM60-08T	0.72	11/4" F	1" M	360	575	400	60
HM60-10T	0.94	11/4" F	1" M	430	690	480	60
HM90-08T	0.78	11/4" F	1" M	310	460	320	90
HM90-11T	1.05	11/4" F	1" M	420	585	410	90
HM90-13T	1.4	11/4" F	1" M	480	680	475	90
HM160-15T	1.5	11/2" F	1" M	340	460	320	160
HM160-19T	1.8	11/2" F	1" M	400	600	420	160





## HM Series Water Pressure System





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

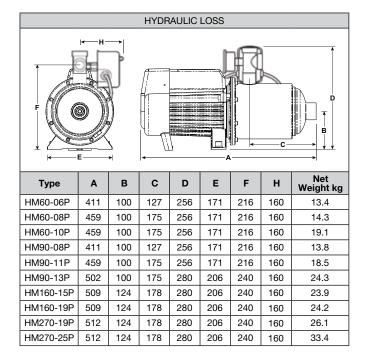
OPERATING LIMITS			
Maximum continuous flow rate	430 lpm		
Maximum operating pressure	1000 kPa*		
Maximum inlet pressure	600 kPa		
Maximum water temperature	95°C		

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

HYDRAULIC PERFORMANCE							
		Ports (BSP)		Nominal	Maximum	Tank Air	
Models Single Phase	Motor (P2)	Suction	Discharge	Operating Pressure kPa	Pump Pressure kPa	Pre-charge kPa	Nominal Flow lpm
HM60-06P	0.58	1¼" F	1" F	250	400	230	60
HM60-08P	0.72	1¼" F	1" F	300	500	280	60
HM60-10P	0.94	1¼" F	1" F	350	620	330	60
HM90-08P	0.78	1¼" F	1" F	250	400	230	90
HM90-11P	1.05	1¼" F	1" F	300	500	280	90
HM90-13P	1.4	1¼" F	1" F	350	620	330	90
HM160-15P	1.5	1½" F	1" F	250	400	230	160
HM160-19P	1.8	1½" F	1" F	300	500	280	160
HM270-19P	1.9	2" F	1½" F	200	300	180	270
HM270-25P	2.5	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.



#### 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.

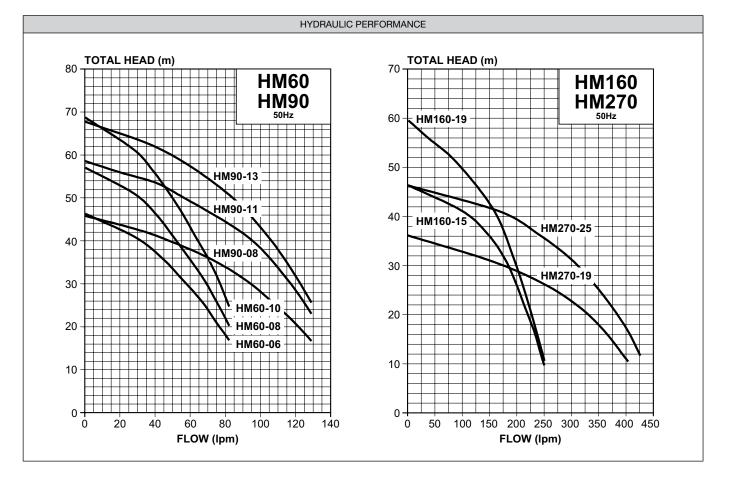
Optional control panels also available for single and three phase models.



# HM Series Water Pressure System

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	Carbon/ceramic		
Orings	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		





#### davey.com.au | daveynz.co.nz

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