

HM SERIES WATER PRESSURE SYSTEMS PRESSURE SWITCH TORRIUM®

DEPEND ON
DAVEY

WATER PRODUCTS

PRESSURE SYSTEMS



PRODUCT DESCRIPTION

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

APPLICATIONS

Automatic pressure system for :-

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

FEATURES & BENEFITS

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

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 oring 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

OPERATING LIMITS

Capacities up to:	
Pressure Switch models	430lpm (26m ³ /hr)
Torrium models	200lpm (12m ³ /hr)

Pressure heads up to 65m

Maximum operating pressure 1000kPa
(depends on controller & pressure tank)

Maximum ambient temperature 50°C

Frequency 50Hz

Suitable fluids
Clean potable water of neutral ph containing no solids or abrasives.

TECHNICAL SPECIFICATIONS



DESCRIPTION

Torrium® controlled HM Series provides a constant flow water supply system with an all stainless steel pump unit. The Torrium® 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.

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.

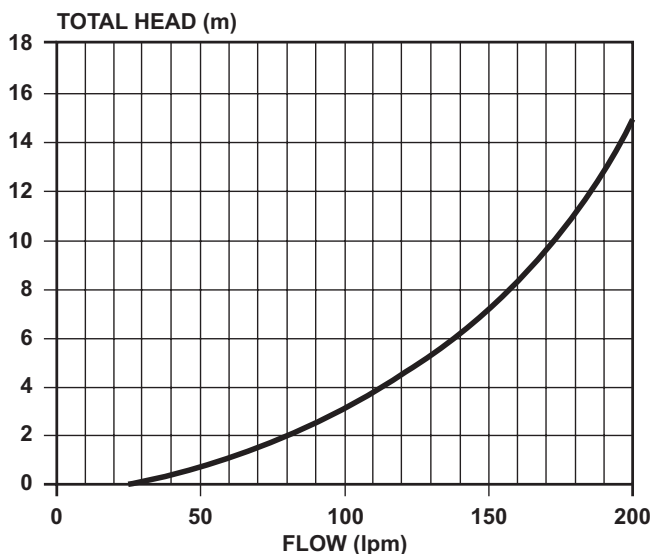
HYDRAULIC PERFORMANCE*

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

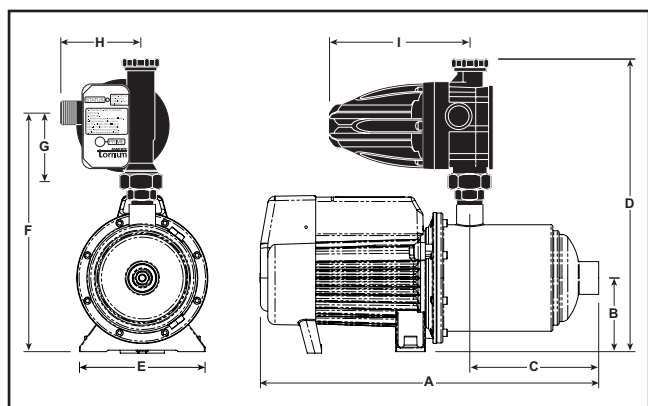
For detailed performance graphs, please refer to the HM Series technical datasheet, available at www.davey.com.au.

*Allow for hydraulic loss in Torrium® (refer below).

HYDRAULIC LOSS



DIMENSIONS



Model	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	502	124	175	435	206	340	98	115	215	23.6
HM160-15T	509	124	178	435	206	340	98	115	215	23.2
HM160-19T	509	124	178	435	206	340	98	115	215	23.5

All dimensions in mm unless otherwise stated.

TECHNICAL SPECIFICATIONS



DESCRIPTION

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

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

* Dependent on tank pressure and temperature rating

HYDRAULIC PERFORMANCE*

Models Single Phase	Motor (P ₂)	Ports		Pressure Settings			Nominal Flow lpm
		Suction	Discharge	Cut-In kPa	Cut-Out kPa	Tank Air kPa	
HM60-06P	0.58	1" F	1" F	250	400	230	60
HM60-08P	0.72	1" F	1" F	300	500	280	60
HM60-10P	0.94	1" F	1" F	350	620	330	60
HM90-08P	0.78	1 1/4" F	1" F	250	400	230	90
HM90-11P	1.05	1 1/4" F	1" F	300	500	280	90
HM90-13P	1.4	1 1/4" F	1" F	350	620	330	90
HM160-15P	1.5	1 1/2" F	1" F	250	400	230	160
HM160-19P	1.8	1 1/2" F	1" F	300	500	280	160
HM270-19P	1.9	2" F	1 1/2" F	200	300	180	270
HM270-25P	2.5	2" F	1 1/2" 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.

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.

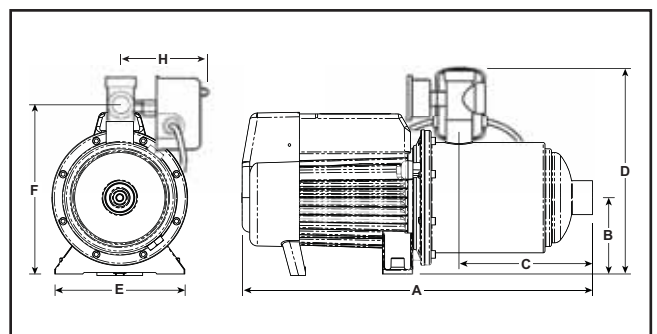
PACKAGED SETS

Complete packaged systems are available on request. Pressure tank and pump mounted on common base plate.

Base plate dimensions 970 x 520 x 50mm with option of 50C, 105C or HP105C Supercell tank.

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

DIMENSIONS



Model	A	B	C	D	E	F	H	Net Weight kg
HM60-06P	411	100	127	256	171	216	160	13.4
HM60-08P	459	100	175	256	171	216	160	14.3
HM60-10P	459	100	175	256	171	216	160	19.1
HM90-08P	411	100	127	256	171	216	160	13.8
HM90-11P	459	100	175	256	171	216	160	18.5
HM90-13P	502	100	175	280	206	240	160	24.3
HM160-15P	509	124	178	280	206	240	160	23.9
HM160-19P	509	124	178	280	206	240	160	24.2
HM270-19P	512	124	178	280	206	240	160	26.1
HM270-25P	512	124	178	280	206	240	160	33.4

All dimensions in mm unless otherwise stated.

TECHNICAL SPECIFICATIONS

ELECTRICAL DATA

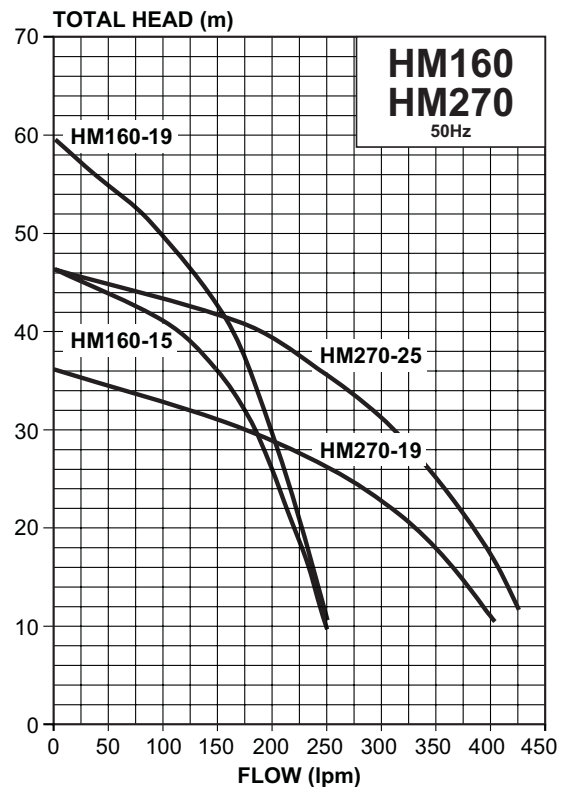
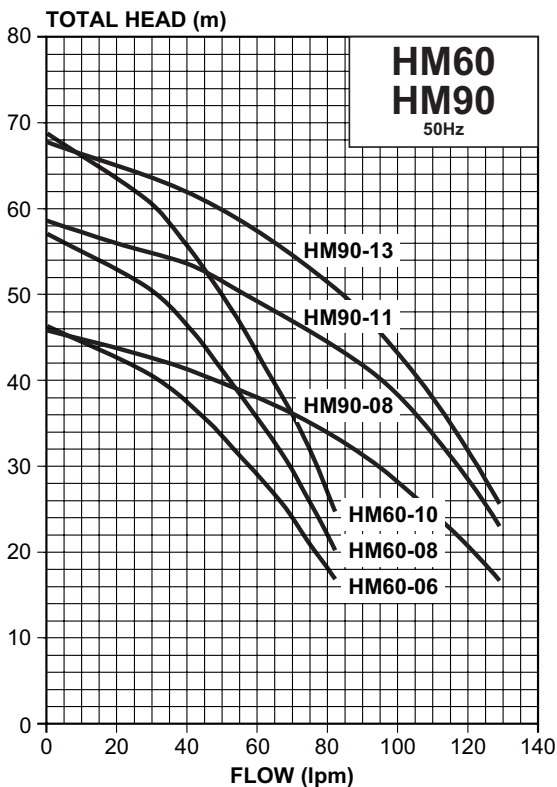
Speed	2900rpm
Supply voltage	
Single phase	230V ±10%
Three phase (selected models)	415V ±10%
Supply frequency	50Hz
Insulation class	Class F
Enclosure class	
HM60-06, HM60-08, HM60-10, HM90-08 & HM90-11	IP55
All other models	IP56

TORRIUM®	
Voltage	220V-240V ± 10%
Phase	Single
Hz	50 / 60
IP rating	56
Maximum load current	10A
Maximum motor size*	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	Polypropylene

HYDRAULIC PERFORMANCE



This literature is not a complete guide to product usage. Further information is available from your Davey dealer, Davey Customer Service Centre and from the relevant product installation and Operating Instructions. This data sheet must be read in conjunction with the relevant product Installation and Operating Instructions and all applicable statutory requirements. Product specifications may change without notice.

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DEPEND ON
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