4" BOREHOLE PUMPS AND MOTORS

DAVEY®

Davey® 4" Submersible
Borehole Pumps and Motors

Model Numbers: J Series

Slimline submersible borehole pumps suitable for 4" or larger bore holes. Manufactured from corrosion and abrasion resistant materials. Close coupled to a submersible electric motor. Designed for flow rates up to 325 lpm and heads up to 275 metres.

APPLICATIONS

- Domestic water supply
- Turf watering
- Irrigation
- Stock watering
- Dewatering
- Water treatment

WHY CHOOSE THE DAVEY 4" SUBMERSIBLE BOREHOLE PUMP?

- Proven and reliable design for harsh Australian conditions
- Manufactured from quality corrosion resistant materials for long life
- Specific impeller material selection ensures optimal performance in sandy bores
- 25, 40 and 60 lpm models feature independently floating centrifugal (radial) impellers to provide easy starting and long life - automatically adjusting to pumping conditions for each application
- 80, 110, 160 and 250 lpm models feature locked stack partial mixed flow impellers with open waterways to provide easy starting and long life
- Heavy duty stainless steel outer casing shell providing protection and accurate alignment of internal components
- High quality shaft bearings providing low friction and high wear resistance
- Pump and motor are easily serviceable
- Heavy duty cast stainless steel discharge bowl with large durable lifting eye and built-in check valve for long life and ease of installation
- Strong hexagonal section drive shaft of premium stainless steel ensures positive impeller drive and longer life
- Standard 2 pole speed motor (2850rpm) limits internal velocities for longer life

DEPEND ON DAVEY
WATER PRODUCTS

OPERATING LIMITS	
Nominal flows	25, 40, 60, 80, 110, 160 & 250 lpm
Maximum flow	325 lpm (19.5m³/hr)
Heads	275 metres
Motors	0.37kW (½hp) to 7.5kW (10hp)
Maximum water temperate	Up to 35ºC

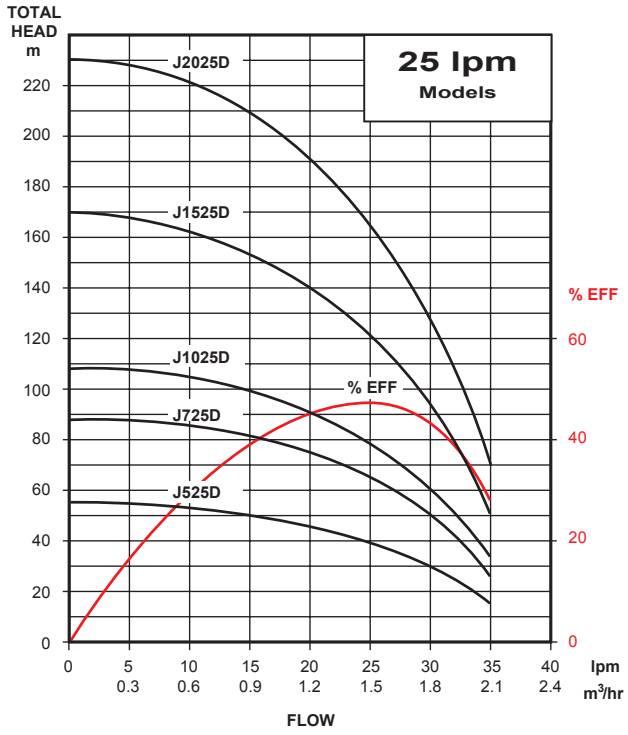
RECOMMENDED FLOW RANGE				
Model	Minimum flow		Maximum flow	
	lpm	gpm	lpm	gpm
J25	15	3.3	31	6.8
J40	30	6.6	45	9.9
J60	44	9.7	70	15.4
J80	50	11.0	100	22.0
J110	80	17.6	140	30.8
J160	100	22.0	210	46.3
J250	150	33.0	310	68.3

MATERIALS OF CONSTRUCTION			
Models: 25, 40 and 60 lpm		**Models: 80, 110, 160 and 250 lpm**	
Part	**Material**	**Part**	**Material**
Discharge	303 stainless steel	Discharge	303 stainless steel
Impeller	Polyester with Teflon fill	Impeller	Glass-filled Polycarbonate
Diffuser	Polyester with Teflon fill	Diffuser	Glass-filled Polycarbonate
Shaft guide bearing	Buna-N	Shaft guide bearing	Buna-N
Pump casing	304 stainless steel	Pump casing	304 stainless steel
Shaft and coupling	303 stainless steel	Shaft and coupling	303 stainless steel
Wear rings	304 stainless steel	Wear rings	304 stainless steel
Check valve	Polyester with Teflon fill	Check valve	303 stainless steel and Acetal
Cable guard	304 stainless steel	Cable guard	304 stainless steel
Thrust washer (ea. stage)	Phenolic	Thrust washer (ea. stage)	Nyloil
Fasteners	302-304 stainless steel	Fasteners	302-304 stainless steel
Lower mounting bracket	SS reinforced composite for up to 1.1kW, full SS 1.5 and 2.2kW	Lower mounting bracket	Stainless steel
Suction strainer	304 stainless steel	Suction strainer	Stainless steel
Design Features		**Design Features**	
Impellers	Floating	Impellers	Fixed
Check valve	Internal non-spin	Check valve	External

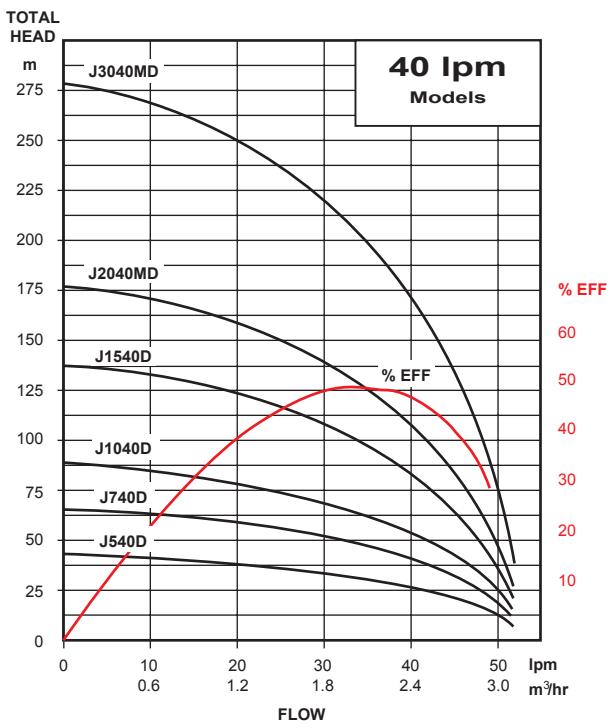
DIMENSIONS (mm) AND WEIGHTS (kg)										
Model	Discharge BSP Female	Motor Power (P_2)		Stages	Pump Details		Assembled Units*			
							Single Phase		Three Phase	
		kW	hp		Length	Weight	Length	Weight	Length	Weight
J525D	1¼”	0.37	1/2	8	432	4.1	757	11.1	757	10.6
J725D	1¼”	0.56	1/2	13	532	5.5	857	13.1	857	12.5
J1025D	1¼”	0.75	1	16	584	6.4	934	15.1	909	14
J1525D	1¼”	1.1	11/2	25	826	8.2	1211	18.5	1176	16.9
J2025D	1¼”	1.5	2	33	990	11.8	1410	23.8	1375	22.2
J540D	1¼”	0.37	1/2	6	327	4.1	652	11.1	652	10.6
J740D	1¼”	0.56	1/2	9	396	4.8	721	12.4	721	11.8
J1040D	1¼”	0.75	1	12	466	5.4	816	14.1	791	13
J1540D	1¼”	1.1	11/2	19	618	7	1003	17.3	968	15.7
J2040MD	1¼”	1.5	2	24	736	8.6	1156	20.6	1121	19
J3040MD	1¼”	2.2	3	38	1075	12.7	1545	26.9	1495	24.7
J760D	1¼”	0.56	1/2	6	352	4.3	677	11.9	677	11.3
J1060D	1¼”	0.75	1	9	431	5	781	13.7	756	12.6
J1560D	1¼”	1.1	11/2	13	537	5.9	922	16.2	887	14.6
J2060MD	1¼”	1.5	2	17	646	7.3	1066	19.3	1031	17.7
J3060MD	1¼”	2.2	3	27	929	10.9	1399	25.1	1349	22.9
J1080D	2”	0.75	1	8	513	6.1	863	14.8	838	13.7
J1580D	2”	1.1	11/2	11	665	7.6	1050	17.9	1015	16.3
J2080MD	2”	1.5	2	15	819	9.1	1239	21.1	1204	19.5
J3080MD	2”	2.2	3	23	1128	12.2	1598	26.4	1548	24.2
J15110D	2”	1.1	11/2	8	618	8.2	1003	18.5	968	16.9
J20110D	2”	1.5	2	11	761	10	1181	22	1146	20.4
J30110D	2”	2.2	3	17	1040	13.7	1510	27.9	1460	25.7
J50110D	2”	3.7	5	28	1554	28.5	2134	50.5	1974	40.5
J15160D	2”	1.1	11/2	7	652	7.6	1037	17.9	1002	16.3
J20160D	2”	1.5	2	10	838	9.4	1258	21.4	1223	19.8
J30160D	2”	2.2	3	15	1148	12.5	1618	26.7	1568	24.5
J50160D	2”	3.7	5	25	1765	27.6	2345	49.6	2185	39.6
J20250D	2”	1.5	2	8	943	9	1363	21	1328	19.4
J30250D	2”	2.2	3	12	1293	20	1763	34.2	1713	32
J50250D	2”	3.7	5	21	2080	27.2	2660	49.2	2500	39.2

* Standard motor options shown.

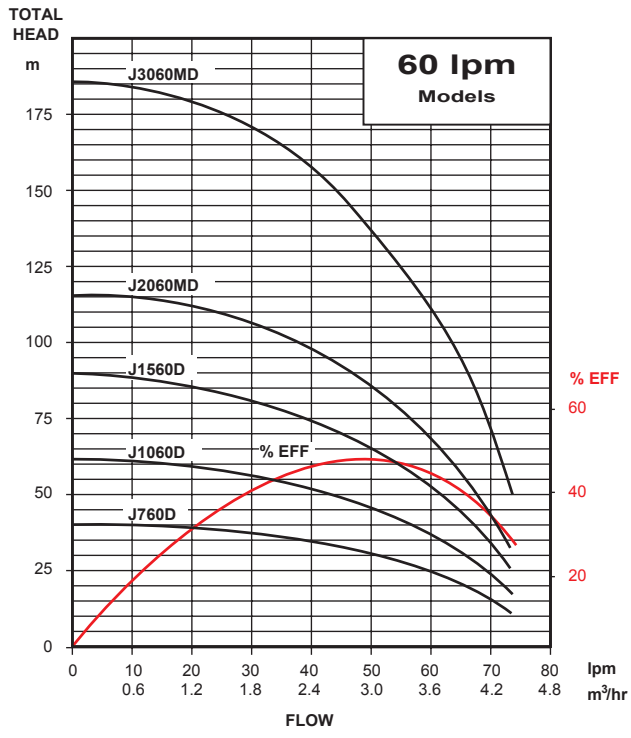
J Series – 25 lpm PERFORMANCE



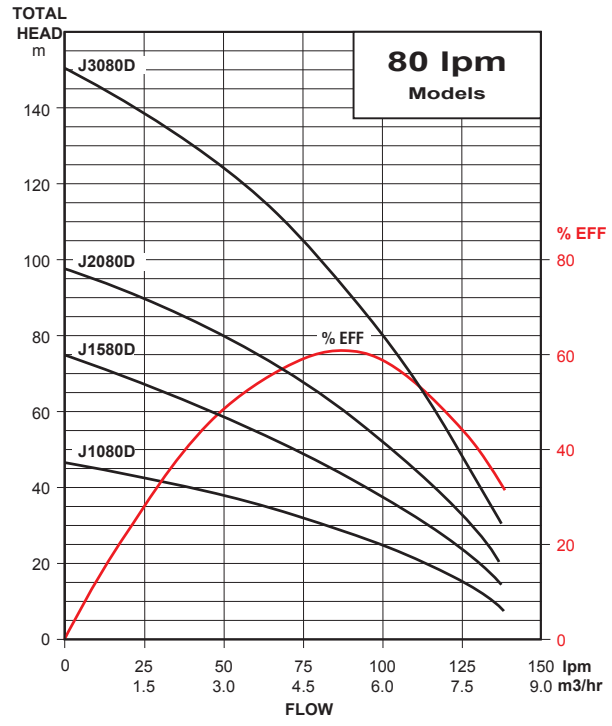
J Series – 40 lpm PERFORMANCE



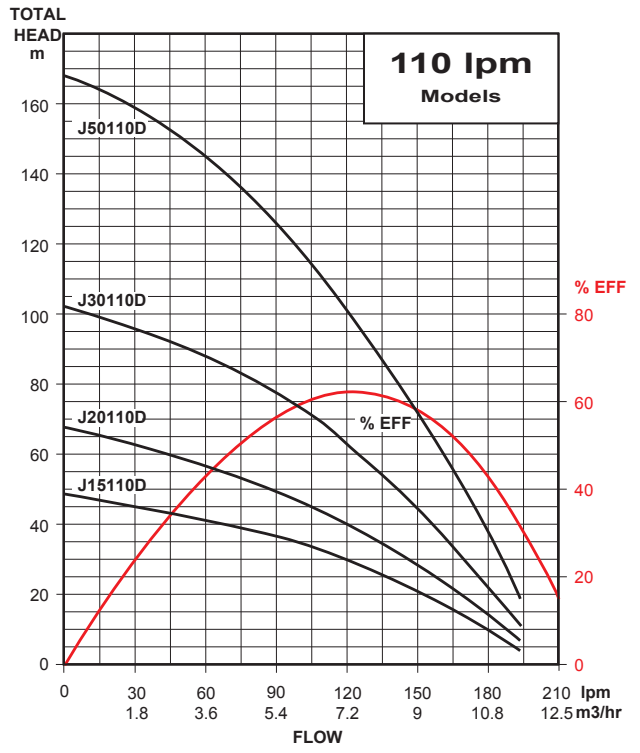
J Series – 60 lpm PERFORMANCE



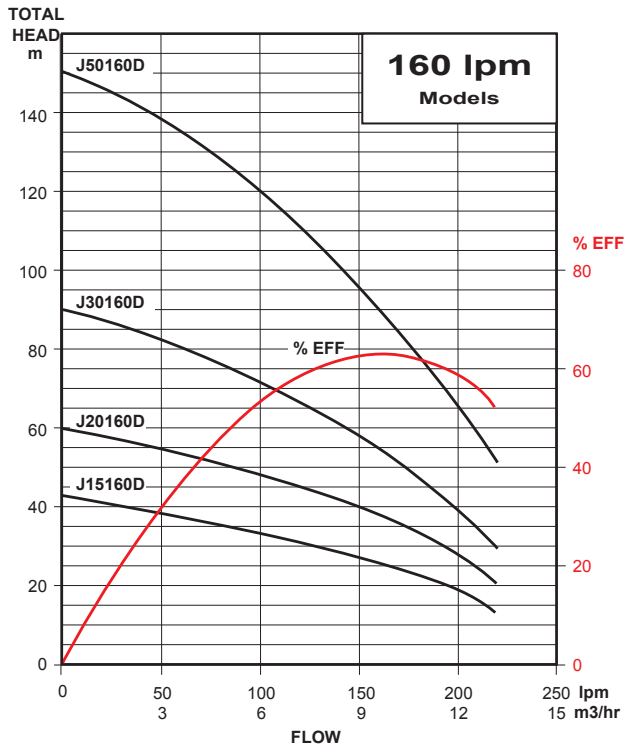
J Series – 80 lpm PERFORMANCE



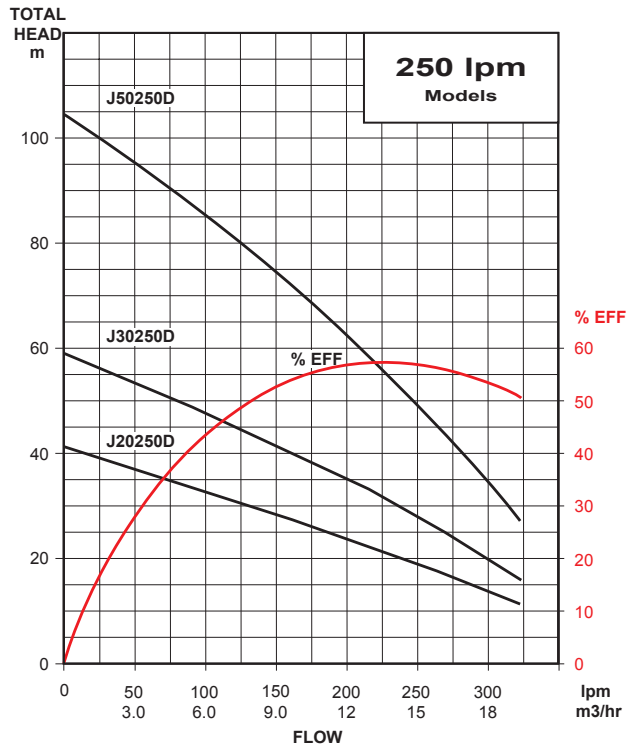
J Series – 110 lpm PERFORMANCE



J Series – 160 lpm PERFORMANCE



J Series – 250 lpm PERFORMANCE



WHY CHOOSE THE DAVEY 4” SUBMERSIBLE BOREHOLE MOTOR?

MOTOR FEATURES AND BENEFITS	
Oil Filled Submersible Motor: 2 Wire, Single Phase	**Oil Filled Submersible Motor: 3 Wire, Single Phase and Three Phase**
• Ideal for reticulation (gardening watering) with its easy installation • Cooling fluid is a non-toxic FDA approved food grade oil. • The oil provides lubrication of the moving parts to give an increased motor life. Oil, with its high thermal capacity gives the motor superior overload capacities. • Hard face mechanical seal – Silicon Carbide/Ceramic (Sic/Al) • High corrosion resistant upper bracket constructed of nickel plated cast iron. • Motor casing constructed of 304 stainless steel. • Rotor shaft constructed of 303 stainless steel. • Compensation diaphragm to accommodate the expansion of the cooling fluid. • Sand slinger protection to stop sand from entering the motor. • Built in thermal over-load protection to avoid het damage to the motor. • Axial thrust 1500N. • Removable cable connector with 1.75 metres of cable. • 4” NEMA standard coupling flange. • Insulation: class F • Protection rating: IP58 • CCW Rotation	• Ideal for domestic water supply, turf watering, small scale irrigation, stock watering. • Cooling fluid is a non-toxic FDA approved food grade oil. • The oil provides lubrication of the moving parts to give an increased motor life. Oil, with its high thermal capacity gives the motor superior overload capacities. • Hard face mechanical seal – Silicon Carbide/Ceramic • High corrosion resistant upper bracket constructed of nickel plated cast iron. • Oversized compensation diaphragm and sand slinger protection • Mounting position: horizontal operating position: up to 5.5kW • Motor casing constructed of 304 stainless steel. • Rotor shaft constructed of 303 stainless steel. • Axial and radial thrust bearings. • Axial thrust: 1500N from 0.37kW up to 2.2kW 2500N from 2.2kW up to 5.5kW 4400N from 2.2kW up to 7.5kW • Removable cable connector with cable tail. • 4” NEMA standard coupling flange • Insulation class F • Protection rating: IP58

MOTOR FEATURES AND BENEFITS	
Water Filled Submersible Motor: 2 Wire, Single Phase	**Water Filled Submersible Motor: 3 Wire, Single Phase and Three Phase**
• Ideal for reticulation (gardening watering) with its easy installation • Stator is filled with a special epoxy resin and hermetically sealed for better insulation of the winding and greater heat exchange. • Rotor and thrust bearing are lubricated by water mixed with a propylene glycol. • Hard face mechanical seal – Silicon Carbide/Ceramic • Motor casing constructed of 304 stainless steel. • Rotor shaft constructed of 303 stainless steel. • Mounting position: vertical / horizontal operating position. • Upper bracket constructed of cast iron • Bracket’s cover is constructed of 304 stainless steel. • Shaft sealing system comprises of a labyrinth seal, sand slinger and lip seal. • Pressure equalising diaphragm and valve for restoring the cooling liquid. • Built in electronic starter. • Lightning arrestor. • 4” NEMA standard coupling flange • Insulation class B • Protection rating: IP68	• Ideal for domestic water supply, turf watering, small scale irrigation, stock watering. • Stator is filled with a special epoxy resin and hermetically sealed for better insulation of the winding and greater heat exchange. • Rotor and thrust bearing are lubricated by water mixed with a propylene glycol. • Hard face mechanical seal – Silicon Carbide/Ceramic • Motor casing constructed of 304 stainless steel. • Rotor shaft constructed of 303 stainless steel. • Mounting position: vertical / horizontal operating position. • Upper bracket constructed of cast iron • Bracket’s cover is constructed of 304 stainless steel. • Shaft sealing system comprises of a labyrinth seal, sand slinger and lip seal. • Pressure equalising diaphragm and valve for restoring the cooling liquid. • Axial thrust: 1500N up to 0.75kW 3000N from 1.1kW up to 2.2kW 6500N from 2.2kW up to 7.5kW • 4” NEMA standard coupling flange • Insulation class F • Protection rating: IP68

OIL FILLED MOTOR SPECIFICATIONS																
Part No.	Motor Size kW	Motor Type	Diameter		In	Istart	Efficiency @ Full Load	RPM	Cosφ	Ts/Tn	C start µF	Thrust N	Mechanical Seal	Weight Kg	Length mm	Cable m
			Nom	mm	Amps											
2 Wire, Single Phase																
DM1037W2	0.37	Oil Filled	4"	96	3.4	10.2	53%	2860	0.96	0.75	20	1500	Hard Face - Sic/Al	7	325	1.75
DM1055W2	0.55	Oil Filled	4"	96	4.5	13.6	58%	2855	0.98	0.63	25	1500	Hard Face - Sic/Al	7.6	325	1.75
DM1075W2	0.75	Oil Filled	4"	96	5.8	18.5	63%	2830	0.98	0.56	30	1500	Hard Face - Sic/Al	8.7	350	1.75
DM1110W2	1.1	Oil Filled	4"	96	7.9	26	67%	2820	0.98	0.52	30	1500	Hard Face - Sic/Al	10.3	385	1.75
3 Wire, Single Phase																
DM1037	0.37	Oil Filled	4"	96	3.6	10.2	53%	2860	0.94	0.75	20	1500	Hard Face - Sic/Al	7	325	1.75
DM1055	0.55	Oil Filled	4"	96	4.5	13.6	61%	2855	0.94	0.63	25	1500	Hard Face - Sic/Al	7.6	325	1.75
DM1075	0.75	Oil Filled	4"	96	6	18.5	63%	2855	0.96	0.62	35	1500	Hard Face - Sic/Al	8.7	350	1.75
DM1110	1.1	Oil Filled	4"	96	8.2	26	67%	2855	0.97	0.62	40	1500	Hard Face - Sic/Al	10.3	385	1.75
DM1150	1.5	Oil Filled	4"	96	11	34	65%	2855	0.98	0.62	60	1500	Hard Face - Sic/Al	12	420	1.75
DM1220	2.2	Oil Filled	4"	96	14.8	48	68%	2820	0.96	0.64	80	1500	Hard Face - Sic/Al	14.2	470	2.5
DM1220HT	2.2	Oil Filled	4"	96	14.8	48	68%	2820	0.96	0.64	80	4400	Hard Face - Sic/Al	15.5	520	2.5
DM1370HT	3.7	Oil Filled	4"	96	22	125	69%	2820	0.95	0.50	80	4400	Hard Face - Sic/Al	22	580	4
3 Phase																
DM3037	0.37	Oil Filled	4"	96	1.1	4	58%	2840	0.72	2.8		1500	Hard Face - Sic/Al	6.5	325	1.75
DM3055	0.55	Oil Filled	4"	96	1.6	6	62%	2830	0.75	3.1		1500	Hard Face - Sic/Al	7	325	1.75
DM3075	0.75	Oil Filled	4"	96	2.2	9	64%	2830	0.74	3.3		1500	Hard Face - Sic/Al	7.6	325	1.75
DM3110	1.1	Oil Filled	4"	96	3.3	13	65%	2820	0.74	3.2		1500	Hard Face - Sic/Al	8.7	350	1.75
DM3150	1.5	Oil Filled	4"	96	4.2	16	65%	2820	0.72	3.4		1500	Hard Face - Sic/Al	10.4	385	1.75
DM3220	2.2	Oil Filled	4"	96	5.6	24	66%	2820	0.76	3.1		1500	Hard Face - Sic/Al	12	420	2.5
DM3220HT	2.2	Oil Filled	4"	96	5.6	23	78%	2850	0.82	2.9		2500	Hard Face - Sic/Al	11	383	2.5
DM3400	4	Oil Filled	4"	96	9.7	45	78%	2825	0.82	2.8		2500	Hard Face - Sic/Al	15.3	468	2.5
DM3550	5.5	Oil Filled	4"	96	13.5	55	78%	2820	0.82	3.0		2500	Hard Face - Sic/Al	18.6	538	3
DM3750	7.5	Oil Filled	4"	96	17	70	77%	2820	0.78	3.2		4400	Hard Face - Sic/Al	27	810	4

NOTE: 3 wire, single phase motors require a starter box.

WATER FILLED MOTOR SPECIFICATIONS																	
Part No.	Motor Size kW	Motor Type	Diameter		In	Istart	RPM	Cosφ	Ts/Tn PSC	Efficiency @ Full Load	C run µF	C start µF	Thrust N	Mechanical Seal	Weight Kg	Length mm	Cable m
			Nom	mm	Amps												
2 Wire, Single Phase																	
DME1037W2	0.37	Water Filled	4"	96	4.4	26	2850	0.75	0.85	58%			1500	Hard Face - Sic/Al	7.5	260	1.75
DME1055W2	0.55	Water Filled	4"	96	5.9	35	2860	0.72	0.81	60%			1500	Hard Face - Sic/Al	8.8	285	1.75
DME1075W2	0.75	Water Filled	4"	96	7.4	49	2860	0.75	0.82	62%			1500	Hard Face - Sic/Al	11.4	305	1.75
3 Wire, Single Phase																	
DME1037	0.37	Water Filled	4"	96	3.4	11	2850	0.91	0.65	58%	16	36-46	1500	Hard Face - Sic/Al	6.8	250	1.75
DME1055	0.55	Water Filled	4"	96	4.4	16.6	2840	0.92	0.63	62%	20	72-86	1500	Hard Face - Sic/Al	8.1	265	1.75
DME1075	0.75	Water Filled	4"	96	5.9	19.8	2860	0.94	0.62	65%	30	88-106	1500	Hard Face - Sic/Al	10.6	295	1.75
DME1110	1.1	Water Filled	4"	96	7.8	29.5	2850	0.94	0.62	66%	40	88-106	3000	Hard Face - Sic/Al	11.2	340	1.75
DME1150	1.5	Water Filled	4"	96	10.2	36.4	2850	0.95	0.61	68%	50	130-156	3000	Hard Face - Sic/Al	14	375	1.75
DME1220	2.2	Water Filled	4"	96	15	52.5	2850	0.94	0.55	69%	70	189-227	3000	Hard Face - Sic/Al	16.4	430	2.5
DME1220HT	2.2	Water Filled	4"	96	15	52.5	2840	0.94	0.55	69%	70	189-227	6500	Hard Face - Sic/Al	16.4	430	2.5
DME1370HT	3.7	Water Filled	4"	96	24	102	2840	0.92	0.50	72%	100	189-227	6500	Hard Face - Sic/Al	29.3	675	4
3 Phase																	
DME3037	0.37	Water Filled	4"	96	1.2	5.1	2840	0.73	2.1	63%			1500	Hard Face - Sic/Al	5.8	235	1.75
DME3055	0.55	Water Filled	4"	96	1.7	6.5	2840	0.73	2.0	64%			1500	Hard Face - Sic/Al	7	250	1.75
DME3075	0.75	Water Filled	4"	96	2.2	9.2	2840	0.75	1.9	67%			1500	Hard Face - Sic/Al	8.3	265	1.75
DME3110	1.1	Water Filled	4"	96	3	14.2	2840	0.76	2.3	71%			3000	Hard Face - Sic/Al	10.9	295	1.75
DME3150	1.5	Water Filled	4"	96	4	18.5	2830	0.78	2.1	72%			3000	Hard Face - Sic/Al	11.4	340	1.75
DME3220	2.2	Water Filled	4"	96	5.6	26.5	2830	0.79	2.4	74%			3000	Hard Face - Sic/Al	14.2	375	2.5
DME3220HT	2.2	Water Filled	4"	96	5.6	26.5	2830	0.79	2.4	74%			6500	Hard Face - Sic/Al	14.2	375	2.5
DME3400	4	Water Filled	4"	96	10.1	44	2840	0.77	2.3	75%			6500	Hard Face - Sic/Al	23.4	555	2.5
DME3550	5.5	Water Filled	4"	96	13.6	62	2840	0.80	2.2	76%			6500	Hard Face - Sic/Al	29.4	675	4
DME3750	7.5	Water Filled	4"	96	18.3	90	2830	0.80	2.2	75%			6500	Hard Face - Sic/Al	33.8	765	4

NOTE: 3 wire, single phase motors require a starter box.

MOTOR FEATURES				
Model	**Oil Filled**		**Water Filled**	
	2 Wire	**3 Wire / 3 Phase**	**2 Wire**	**3 Wire / 3 Phase**
Cooling fluid	FDA approved Food Grade Oil	FDA approved Food Grade Oil	Water mixed with Propylene Glycol	Water mixed with Propylene Glycol
Mechanical Seal	Hard Face - Sic/Al	Hard Face - Sic/Al	Hard Face - Sic/Al	Hard Face - Sic/Al
Motor Casing	304ss	304ss	304ss	304ss
Upper Bracket	Cast iron/nickel plated	Cast iron/nickel plated	Cast Iron w/304ss cover	Cast Iron w/304ss cover
Bearings	Ball bearings (axial and radial loading)		Kingsbury bearing	Kingsbury bearing
Compensation diaphram	Standard	Oversized	Not applicable	Not applicable
Valve for restoring cooling liquid	Not applicable	Not applicable	✓	✓
Sand slinger protection	✓	✓	✓	✓
Insulation Class	F	F	B	F
Protection Rating	IP68	IP68	IP68	IP68
Removeable cable connector w/cable	✓	✓	✓	✓
Motor/pump coupling	4" NEMA coupling	4" NEMA coupling	4" NEMA coupling	4" NEMA coupling
Easy to disassemble and rewind	✓	✓	Hermetically sealed	Hermetically sealed
Built in thermal overload protection	✓	Not applicable	✓	Not applicable
Horizontal operating position	Yes	up to 5.5kW	Yes	Yes
Rotation	CCW	CCW	CCW	CCW
Lightening arrestor	Yes	Not applicable	Yes	Not applicable

MOTOR OPERATING LIMITS						
	Oil Filled			Water Filled		
	2 Wire	3 Wire	3 Phase	2 Wire	3 Wire	3 Phase
Max. borewater temperature	35°C					
Max. starts per hour	30					
Mimimum flow rate	0.08m/sec					
Voltage tolerance	±10%				+6%/-10%	
Maximum immersion depth	150m					
Horizontal mounting	Yes	Up to 5.5kW		Yes		
Liquid Characteristics	Ph from 5.8 to 8.6					

FREQUENCY OF STARTS

The average number of starts per day over a period of months or years influences the life of a submersible pumping system. Excessive cycling affects the life of control components such as pressure switches, starters, relays and capacitors, plus splines and bearings. Rapid cycling can also cause motor overheating and winding failures.

The pump size, tank size and other controls should be selected to keep the starts per day as low as practical for longest life. The maximum allowable number of starts per hour is 30.

Motors should be allowed to run a minimum of one minute to dissipate heat build up from starting current.

USE OF CHECK VALVES

All Davey submersible pumps are fitted with a check valve.

It is recommended that check valves be used in all submersible pump installations. A check valve should be installed in the discharge pipe within 7 metres of the pump, if the built-in check valve is not used.

Immediate motor or pump failure, or shortened service life can be the result of the following conditions:

Backspin: When no check valve is used or when a check valve becomes defective, the water in the drop pipe can flow back down when the pump stops. This back flow can keep thrust on the motor while it comes to a stop which can cause excessive thrust bearing wear.

Up thrust: When no check valve is used or the valve leaks the pump starts each time at no head. Many pumps exert an upward thrust on the impeller stack at low heads which can lift the rotor of the motor until the developing water column causes down thrust. Repeated up thrust at each start can cause wear and failure.

Water hammer: If the lowest check valve is more than 9 metres above the bore water level, the weight of the falling water column draws a vacuum or evacuates a void below the check valve when the pump stops. On the next pump start, water moving at a high velocity fills this void and strikes the closed valve and the stationary water in the pipe causing a hydraulic shock. This shock can split pipes, break joints or damage the pump and motor.

3 WIRE MOTOR CONTROL BOXES

Oil Filled Motors

Power	Davey	CB Type	Cap Start µF	Cap Run µF
0.37	DM1037	PSC	20	-
0.55	DM1055	PSC	25	-
0.75	DM1075	PSC	35	-
1.1	DM1110	PSC	40	-
1.5	DM1150	PSC	60	-
2.2	DM1220	PSC	80	-
3.7	DM1370HT	CSCR	100	150

Water Filled Motors

Power	Davey	CB Type	Cap Start µF	Cap Run µF
0.37	DM1037	CSIR	36-46	-
0.55	DM1055	CSIR	72-86	-
0.75	DM1075	CSIR	88-106	-
1.1	DM1110	PSC	88-106	40
1.5	DM1150	PSC	130-156	50
2.2	DM1220	PSC	189-227	70
3.7	DM1370HT	CSCR	189-227	30

ELECTRICAL DATA – DROP CABLE

Single Phase: 240V 50Hz 2 Wire and 3 Wire Motors						
Motor kW	Cable size in mm² (3 core plus earth)					
	1.5	2.5	4	6	10	16
0.37	75	125				
0.55	57	95	152			
0.75	45	75	120	174		
1.1	33	53	85	127	210	
1.5	23	38	63	92	154	246
2.2		28	45	67	112	180

Three Phase: 415V 50Hz Motors						
Motor kW	Cable size in mm² (3 core plus earth)					
	1.5	2.5	4	6	10	16
0.37						
0.55	246					
0.75	200	333				
1.1	146	244	390			
1.5	109	180	290	435		
2.2	78	130	207	310	516	
3.7	62	104	167	250	416	
4	46	77	124	186	310	496
5.5	33	56	90	135	225	360
7.5			66	100	165	270

DAVEY®

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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