



Depend on Davey

DAVEY

APPLICATIONS

Ideal for supplying high pressure water for:-

- Water supply from dams, creeks, rivers and bores
- Tank filling
- Stock watering
- Sprinkler supply

WHY CHOOSE THE Davey Prime Jet 240 Shallow & Deep Well Pumps?

Single stage (one impeller) convertible jet assisted centrifugal pump

- Simple design
- Less prone to blockage than multistage pumps

Solid cast iron casing with cast bronze impeller

- Robust construction for long life

Pressure switch fitted and pressure gauge supplied

- Ease of installation

In-built thermal overload protection with automatic reset in 1Ø model

- Provides motor protection against low voltage and/or high ambient temperatures

High TEFC - IP rating

- Long term protection against vermin, dust and water

Convertible to shallow or deep well options by choice of either shallow well or deep well injector kits

- Versatile, suitable for many applications

Deep well models come with automatic demand response (ADR) valve

- Maintains jet drive pressure
- Helps prevent loss of prime



Prime Jet 240 Shallow & Deep Well Pumps

Model Numbers: 48501 & 48503

Single stage convertible jet assisted centrifugal pumps driven by single or three phase TEFC motors. Pump fitted with pressure switch for easy conversion to automatic operation.

OPERATING LIMITS

Maximum shallow well capacity (@210kPa, nil suction)	238 lpm
Maximum shallow well suction head	7.5m
Maximum deep well suction head	50m
Maximum water temperature	50°C
Minimum water temperature	1°C

ELECTRICAL DATA

Type	48501		48503
	Supply voltage	240V	480V
Phase	Single	Single	Three
Hz	50		
Speed	2 pole, 2850 rpm		
Input power (P ₁)	3.2	3.2	3.0
Output power (P ₂)	2.5	2.6	2.3
Capacitor	40µ	40µ	-
Maximum rated current (FL)	14A	7A	5.1A
Locked rotor current	52A	26A	23.6A
Insulation class	F		
IP rating	IP56		
Starting	P.S.C.	D.O.L.	

Single phase units should be restricted to no more than 20 starts per hours. Three phase units must be connected via a magnetic contactor with "quick-trip" or M10 rated overloads. Single phasing protection is strongly recommended.



N2401

MATERIALS OF CONSTRUCTION

Part	Material
Yoke	Cast iron*
Pump body	Cast iron*
Discharge port	Cast iron*
Diffuser	Cast bronze
Shallow well jet / venturi housing	Cast iron*
Deep well injector housing	Cast bronze
Deep well pipe fittings	Brass
Deep well pipe clamps	316 stainless steel
Impeller	Cast bronze
Jet (shallow well)	Brass
Jet (deep well)	Acetyl / brass
Venturi (shallow well)	Brass
Venturi (deep well)	Glass filled nylon
Seal ring (stationary)	Ceramic
Seal ring (rotating)	Carbon
O-rings	Nitrile rubber
Priming plug	Brass

*Grade AS1830/T-180

JET KITS

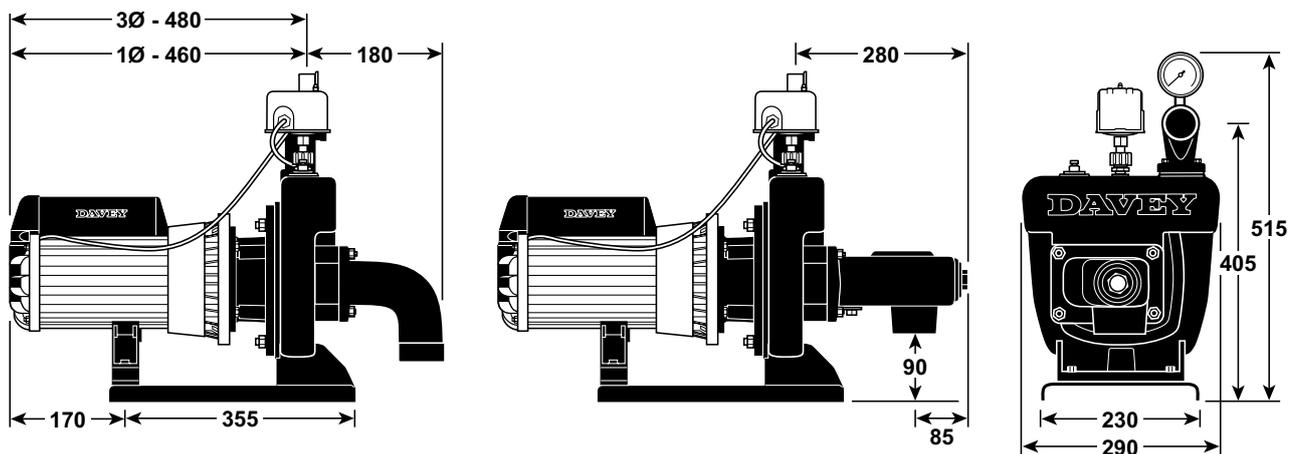
Shallow Well: includes suction housing, jet and venturi

Deep Well: includes deep well elbow, jet, venturi, injector body plus suction and drive pipe fittings.

Note: For deep well offset applications, offset flange (P/No. 26363) is available.

INSTALLATION & PRIMING

- Fit strainer to bottom of suction pipe; a foot valve is required on all models and is included with deep well injectors
- To prime, fill pump body and suction line with water then allow pump to run until drawing water
- Ensure pump operates at or above minimum operating pressure.

DIMENSIONS (mm)


With deep well flange	With shallow well jet kit
Inlet 1½" BSP(F)	Inlet 1½" BSP(F)
Drive 1¼" BSP(F)	Discharge 1¼" BSP(F)
Discharge 1¼" BSP(F)	

Packed weight Model 48501 (pump & motor only): 66.5kg
 Model 48503 (pump & motor only): 65.5kg

Packed weight Shallow well jet & body kit: 11kg
 Deep well, jet, injector & ADR kit: 12kg

DEEP WELL PUMP PERFORMANCE																		
Pump Model	Injector Kit No. Nominal Bore Size	*Max Shut Off Pressure kPa psi	Outlet Pressure kPa psi	Depth to water metres/feet														
				6	9	12	15	18	21	24	27	30	33	36	39	42	45	50
				20	30	39	49	59	69	79	89	98	108	118	128	138	148	164
Output per minute in litres/gallons																		
Prime Jet 240	22427 (4") 100mm	550 80	210 30 350 50 480 70	165 36.2 104 22.8 32 7.0	134 29.4 80 17.5 16 3.5	110 24.1 62 13.6 21 4.6	81 17.8 45 9.8 15 3.2	59 12.9 39 8.5 9 1.9										
	22428 (4") 100mm	815 118	210 30 350 50 480 70			81 17.8 75 16.4 53 11.6 27 5.9	77 16.9 67 14.7 45 9.8 21 4.6	72 15.8 57 12.5 37 8.1 15 3.2	60 13.0 47 10.3 30 6.5 9 1.9	48 10.5 37 8.1 22 4.8 9 1.9	40 8.7 29 6.3 9 1.9	32 7.0 22 4.8						
1ph 3.2kW * 2.5kW ◊ 14.0A	22566 (5") 125mm	525 76	210 30 350 50 480 70	194 42.6 116 25.5 30 6.5	166 36.5 96 21.1 10 2.1	132 29.0 72 15.8	104 22.8 58 12.7											
	22567 (5") 125mm	560 81	210 30 350 50 480 70			158 34.7 98 21.5 33 7.2	130 28.5 84 18.4 20 4.3	108 23.7 64 14.0	84 18.4 48 10.5	64 14.0 28 6.1								
3ph 3.0kW * 2.3kW ◊	22568/22468 (5") 125mm		210 30 350 50			101 22.2 96 21.1	95 20.8 86 18.9	88 19.3 73 16.0	82 18.0 64 14.0	71 15.6 54 11.8	62 13.6 45 9.8	51 11.2 37 8.1	41 9.0 29 6.3					
	(4") 100mm	830 120	480 70 620 90	69 15.1 35 7.6	61 13.4 29 6.3	51 11.2 21 4.6	41 9.0 15 3.2	33 7.2 9 1.9	26 5.7 9 1.9	19 4.1	12 2.6							
5.1A	22569 (5") 125mm	830 120	210 30 350 50 480 70 620 90							52 11.4 45 9.8 34 7.4 18 3.9	49 10.7 42 9.2 30 6.5 15 3.2	47 10.3 39 8.5 25 5.4 11 2.4	46 10.1 34 7.4 21 4.6	42 9.2 31 6.8 18 3.9	40 8.7 30 6.5 16 3.5	37 8.1 26 5.7 13 2.8	35 7.8 23 5.1 10 2.2	32 7.1 20 4.4

★ Input kW (P₁) ◊ Output kW (P₂)

Important Information

- Pump outlet: 1¼" (32 mm) BSP Female. 'Automatic Demand Response' valve fitted as standard on all models.
- Suction pipe sizes: 1½" and 1¼" I.D imperial polypipe for injector kit nos 22469 – 22475 and 22427 – 22428. 2" and 1½" I.D Imperial polypipe for injector kit nos 22570 – 22573 and 22566 – 22569. 2" and 1¼" I.D Imperial polypipe for injector kit no. 22468.
- Max. shut-off pressures are at shallowest depth to water for each injector. Reduce by 10kPa for every 1 metre of extra depth to water.
- All performances are with injector submergence of 3m and minimum pipe length of 12m.
- All pipe fittings and hose clips are included with deep well injectors.
- For offset applications, performance will be reduced if suction pipe lengths exceed depths indicated for borehole installations. Consult your Davey dealer for recommendations on pipe sizes.
- Pumps are supplied with pressure switches connected, suitable for automatic pressure system operation in conjunction with Davey Supercell tanks.
- To convert litres/min to gallons/hour multiply by 13.2. All imperial data is an approximation of metric figures. Specifications subject to change without notice.
- All single phase models supplied with plug and lead for 10amp (Prime Jet 240, 15amp) 220/250 volt 50Hz operation. Prime Jet 240 only may be re-connected for use on nominal 480 volt 50Hz single phase supply. 3 phase 415 volt available in models 165D and Prime Jet 240 only – specify when ordering.

SHALLOW WELL PUMP PERFORMANCE																							
Pump Model	Jet Kit No.	Total Suction Head m ft		Delivery Head in metres/feet												Maximum Shut-Off Pressure kPa psi	Pressure Switch Setting kPa psi						
				26	85	28	92	34	112	38	125	41	135	48	157			55	180	62	203	66	217
				Delivery Head in kPa/psi																			
				260	38	280	41	340	49	380	55	410	59	480	70			550	80	620	90	660	96
Output per minute in litres/gallons														kPa	psi	kPa	psi						
Prime Jet 240	22680 Jet-	0	0			228 50.1	164 36.0	130 28.5												470 68			
	P/No 6076-11	1.5	5			208 45.7	150 32.9	112 24.6												455 66			
	Venturi-	4.0	13			165 36.2	114 25.0	75 16.4												435 63	to	to	
	P/No 6075-8	6.0	20			132 29.0	82 18.0	46 10.1												415 60	370	54	
		7.5	25			108 23.7	64 14.0	31 6.8												405 59			
1ph 3.2kW *	22681 Jet-	0	0	234 51.5	192 42.2	178 39.1	157 34.5	128 28.1	78 17.1											570 83			
	P/No 6076-4	1.5	5	211 46.4	170 37.3	164 36.0	146 32.1	114 25.0	64 14.0											555 80	300	44	
	Venturi-	4.0	13	167 36.7	134 29.4	127 27.9	118 25.9	88 19.3	45 9.8											535 78	to	to	
	P/No 6075-5	6.0	20	133 29.3	108 23.7	104 22.8	98 21.5	74 16.2	34 7.4											515 75	470	68	
		7.5	25	108 23.7	86 18.9	86 18.9	86 18.9	66 14.5	22 4.8											500 73			
2.5kW ◊ 14.0A	22682 Jet-	0	0					130 28.5	110 24.1	78 17.1	46 10.1								735 107				
	P/No 6076-7	1.5	5					117 25.7	98 21.5	66 14.5	36 7.9								710 103	400	58		
	Venturi-	4.0	13					94 20.6	81 17.8	48 10.5	19 4.1								670 97	to	to		
	P/No 6075-9	6.0	20					75 16.4	68 14.9	36 7.9	6 1.3								635 92	590	86		
		7.5	25					62 13.6	58 12.7	28 6.1									610 88				
3ph 3.0kW * 2.3kW ◊ 5.1A	22683 Jet-	0	0						101 22.2	77 16.9	50 10.9	41 9.1							790 115				
	P/No 6076-8	1.5	5						90 19.7	74 16.2	46 10.1	35 7.8							770 112	500	73		
	Venturi-	4.0	13						72 15.8	58 12.7	34 7.4	25 5.6							740 107	to	to		
	P/No 6075-10	6.0	20						57 12.5	48 10.5	26 5.7	18 4.0							720 104	690	100		
		7.5	25						34 7.4	45 9.8	21 4.6	13 2.9							700 102				

★ Input kW (P₁) ◊ Output kW (P₂)

Important Information

- * Denotes standard configuration. Models 95S, 125S & 165S may be converted to higher pressure by fitting relevant Jet & Venturi. Specify Jet Kit No. when ordering Prime Jet 240.
- Plumbing Connections: Inlet – 1½" (38 mm) BSP Female. Outlet – 1¼" (32mm) BSP Female – all models.
- Pumps are supplied with pressure switches connected, suitable for automatic pressure system operation.
- To convert litres/minute to gallons/hour multiply by 13.2. All imperial data is an approximation of metric figures. Specifications subject to change without notice.
- All single phase models supplied with plug and lead for 220/250 volt 50Hz operation. Prime Jet 240 only may be re-connected for use on nominal 480 volt 50Hz single phase supply. For 3 phase nominal 415 volt, specify when ordering (available for 165S and Prime Jet 240 only).

PRIME JET ORDERING INFORMATION		
Type	Pump & Motor only	
Prime Jet 240	Single Phase	Three Phase
	48501	48503

Prime Jet 240 supplied with 15amp plug and lead for 220/250V 50Hz operation, and may be re-connected for use on nominal 480V single phase power supply.

Three phase 415 volt models must be wired with a suitable contactor - refer Installation and Operating Instructions.

Jet kits must be ordered separately - specify type.



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This literature is not a complete guide to product usage. All images provided in this document are for illustration purposes only. Further information is available from your Davey Dealer, Davey Support Centre and from the relevant product Installation and Operating Instructions. Must be read in conjunction with the relevant product Installation and Operating Instructions and all applicable statutory requirements. Product specifications may change without notice. © Davey is a registered trademark of Davey Water Products Pty Ltd. © Davey Water Products Pty Ltd 2016.