

PRIME JET 240
 Model Numbers: 48501 & 48503

DEPEND ON
DAVEY

WATER PRODUCTS

CONVERTIBLE JET PUMPS

PRODUCT DESCRIPTION

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.

APPLICATIONS

Ideal for supplying high pressure water for :-

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



FEATURES & BENEFITS

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 prevents loss of prime

OPERATING LIMITS

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



TECHNICAL SPECIFICATIONS

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
Orings	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 & drive pipe fittings.

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

ELECTRICAL DATA

Model	48501		48503
Supply voltage	240V	480V	415V
Phase	Single	Single	Three
Hz	50		
Speed	2 pole, 2850rpm		
Input power (P ₁)	3.2	3.2	3.0
Output power (P ₂)	2.5	2.6	2.3
Capacitor	40μ	40μ	-
Max. rated current (FL)	14A	7A	5.1A
Locked rotor current	52A	26A	23.6A
Insulation class	F	F	F
IP rating	IP56	IP56	IP56
Starting	P.S.C.	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.

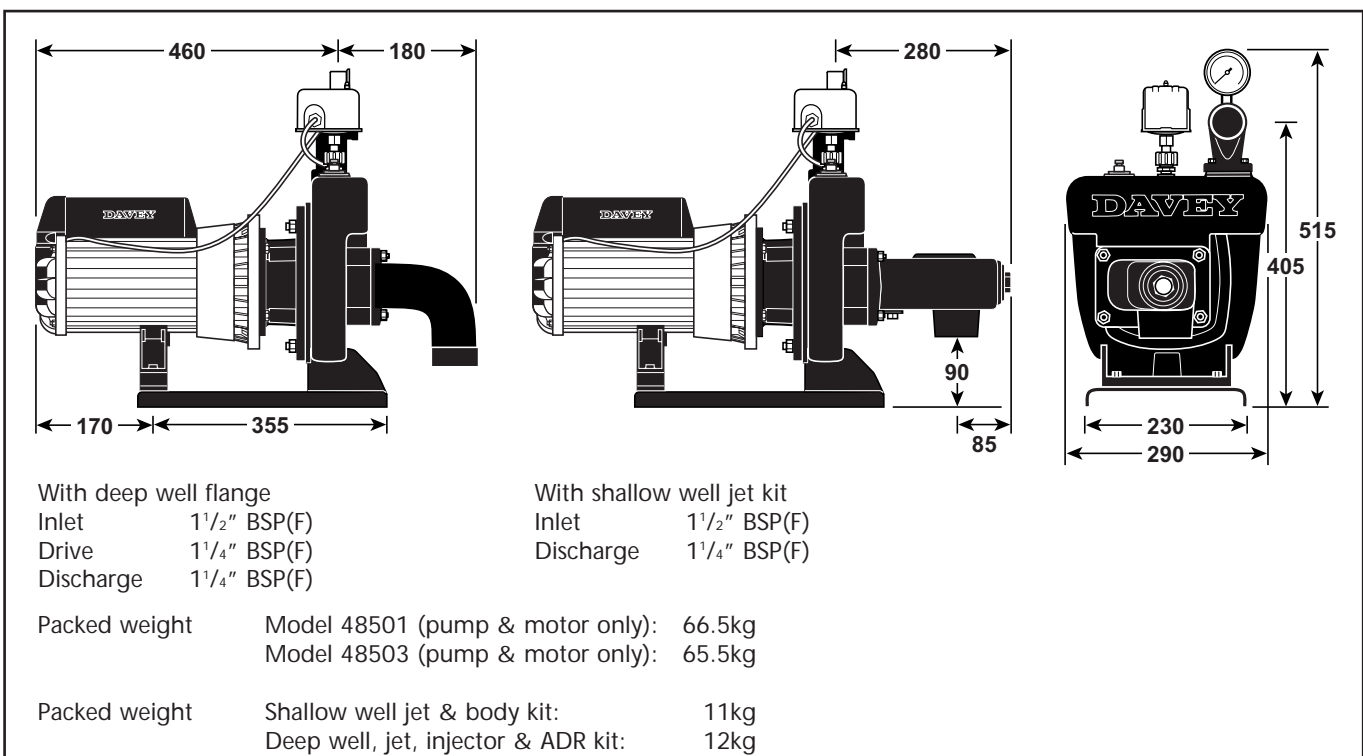


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INSTALLATION & PRIMING

- 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



All dimensions in mm unless otherwise stated.

TECHNICAL SPECIFICATIONS

SHALLOW WELL PERFORMANCE

	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																					
Prime Jet 240	22680 Jet, P/No 6076-11	0 0 1.5 5 4.0 13			228	50.1	164	3.60	130	28.5											470	68	240	35
	Venturi, P/No 6075-8	6.0 20 7.5 25			208	45.7	150	32.9	112	24.6											455	66	to	to
					165	36.2	114	25.0	75	16.4											435	63	to	to
					132	29.0	82	18.0	46	10.1											415	60	370	54
1ph 3.2kW	22681 Jet, P/No 6076-4	0 0 1.5 5 4.0 13			192	42.2	178	39.1	157	34.5	128	28.1	78	17.1							570	83	300	44
	Venturi, P/No 6075-5	6.0 20 7.5 25			170	37.3	164	36.0	146	32.1	114	25.0	64	14.0							555	80	to	to
					134	29.4	127	27.9	118	25.9	88	19.3	45	9.8							535	78	to	to
					108	23.7	104	22.8	98	21.5	74	16.2	34	7.4							515	75	470	68
14.0A 3ph 3.1kW	22682 Jet, P/No 6076-7	0 0 1.5 5 4.0 13									130	28.5	110	24.1	78	17.1	46	10.1			735	107	400	58
	Venturi, P/No 6075-9	6.0 20 7.5 25									117	25.7	98	21.5	66	14.5	36	7.9			710	103	to	to
											94	20.6	81	17.8	48	10.5	19	4.1			670	97	to	to
											75	16.4	68	14.9	36	7.9	6	1.3			635	92	590	86
2.4kW 4.6A	22863 Jet, P/No 6076-8	0 0 1.5 5 4.0 13											101	22.2	77	16.9	50	10.9	41	9.1	790	115	500	73
	Venturi, P/No 6075-10	6.0 20 7.5 25											90	19.7	74	16.2	46	10.1	35	7.8	770	112	to	to
													72	18.8	58	12.7	34	7.4	25	5.6	740	107	to	to
													57	12.5	48	10.5	26	5.7	18	4.0	720	104	690	100
												34	7.4	45	9.8	21	4.6	13	2.9	700	102			

★ Input kW (P1)

⊙ Output kW (P2)

INSTALLATION NOTES

- ★ Denotes standard configuration. Specify Jet Kit No. when ordering.
- Plumbing Connections: Inlet - 1 1/2" (38mm) BSPP female. Outlet - 1/4" (32mm) BSPP 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.
- Above performances are obtained at or near sea level. Higher altitude's will reduce pump suction capabilities.

PRIME JET ORDERING INFORMATION

Model No.	Pump & Motor Only	
	Single Phase	Three Phase
Prime Jet 240	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.

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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WATER PRODUCTS

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