

COMMERCIAL PUMP SYSTEMS

PRODUCT DESCRIPTION

High quality, fully packaged diesel driven ISOspec[®] pumpset.

The Davey ISOspec[®] range has been designed to international standard **ISO2858** ensuring a sturdy & reliable, long lasting, high performing product that consumers have come to depend on from Davey.

APPLICATIONS

- Irrigation
- Water supply
- Dewatering

FEATURES & BENEFITS

- Driven via a high quality Yanmar Diesel engine, fully mounted on a high quality, purpose built, heavy duty steel skid base allowing easy on site installation.
- Manual variable engine speed controller providing total pump performance control.
- Easy to view control panel and engine protection kit incorporating :-
 - Rev tachometer
 - Low oil pressure
 - High water temperature
 - Low radiator fluid level
 - 24 hour timer
 - Pump high/low liquid level switch - loss of prime
- Other standard features included are key start, easy to access fuel & air filters and battery leads. Please refer page 3 for optional extra's.
- Pump casing - highly efficient cast iron volute casings, with flanges rated to PN1.6MPa (16bar), drilled to AS2129, Table E. Material options: 304SS or 316SS.
- Casing oring - re-usable orings in Nitrile for ease of re-assembly (optional materials available).
- Shaft seal - single, high quality John Crane or approved equivalent mechanical seal with **carbon vs ceramic** fitted as standard to all ISOspec[®] Series pumps with other options such as Silicone vs Silicone or high temp also available.
- Tappings - convenient suction & discharge pressure gauge tappings plus volute drain, fitted as standard to all ISOspec[®] Series pumps.
- Back pull-out design - allowing for easy removal of rotating element without disturbing the pipework or pump volute casing. This is proven to reduce downtime whilst performing routine maintenance.

OPERATING LIMITS

Flow to	450m ³ /hr
Maximum total head	160m
Liquid temperature	1 to 95°C
Operating pressure	16 Bar
Maximum speed	Refer to ISOspec [®] technical datasheet Ref: DPM158/5K/0304/SC
Direction of rotation	Counter clockwise (suction end)

TECHNICAL SPECIFICATIONS

HP@... RPM (CONTINUOUS RATING)

To correctly match the ISOspec® pump selected to the correct Yanmar diesel, use the maximum operating kilowatts converted to horsepower, plus site de-rating of 20%, to arrive at the required continuous rating horsepower, ie. pump max kW x 1.34 x 1.2 or pump max kW x 1.61.

Model	Cyl	Cooling	1500	1600	1800	2000	2200	2400	2600	2800	3000	Fuel Cons. @ 2200rpm approx. l/hr
3TNE68IP	3	Water	7.47	8.28	9.09	10.35	11.34	12.47	13.50	14.49	15.57	2.10
3TNE74IP	3	Water	9.54	10.66	11.61	13.32	14.58	15.93	17.28	18.72	20.07	2.70
3TNE78IP	3	Water	11.97	13.25	14.40	15.93	17.64	19.17	20.79	22.32	24.03	2.87
3TNE84IP	3	Water	14.94	16.65	18.10	19.80	21.87	23.76	25.74	27.72	29.70	3.50
3TNE88IP	3	Water	16.29	18.15	19.80	21.69	24.03	26.10	28.35	30.42	32.67	3.92
4TNE84IP	4	Water	19.80	21.85	23.70	26.46	29.07	31.77	34.38	37.08	39.69	4.75
4TNE88IP	4	Water	21.69	24.15	26.30	29.07	31.95	34.74	37.80	40.68	43.47	5.20
4TNE84TIP	4	Water	25.74	29.17	32.60	33.75	36.81	40.41	43.11	46.71	49.77	6.00
4TNE94IP*	4	Water	35.10	38.55	42.00	42.57	46.08	50.22	51.93	-	-	9.45
4TNE98IP*	4	Water	41.40	45.35	49.30	50.58	55.08	59.49	61.65	-	-	11.30
4TNE106IP*	4	Water	55.30	58.80	65.80	68.30	74.07	79.02	81.70	-	-	15.40
4TNE106TIP*	4	Water	68.80	73.36	82.50	84.30	91.44	98.46	101.61	-	-	19.63
SA Variable Speed Engine												

*2500rpm maximum speed. All power ratings are in horsepower. To convert see example:- 1 horsepower (hp) = 0.7457 kilowatts (kW). Model: 3TNE68IP develops 10.35 horsepower @ 2000rpm. kW = 10.35 x 0.7457 = 7.71kW.

MATERIALS OF CONSTRUCTION

PART	MATERIAL
PUMP	
Pump casing	Casing iron
Impeller	Bronze
Wear rings	Bronze
Bearing frame	Casing iron
Pump shaft	420 stainless steel
Mechanical seal	Carbon / ceramic
Bearings	Ball / greased for life
Casing oring	Nitrile
BASE	
Drive coupling	Flexible "tyre"
Coupling Guard	Carbon steel fabricated/painted
Baseplate	Carbon steel fabricated/painted

MOUNTING

For optimum performance, position the pumpset on the foundation and align using a spirit level (on the pump discharge nozzle).

When permanently installing, it is recommended to fit shims to left and right of the anchor bolts near the bolts, between the baseplate/foundation from and the foundation. If the shims are more than 800mm apart, position extra shims an equal distance between them. All shims must be perfectly flush. Uniformly tighten up securing means.

For full details please refer the relevant product/s Installation & Operating instructions.

USAGE GUIDE

These Diesel powered pumps are intended for permanent applications with the use of long range fuel tanks.

It is important to incorporate in the fuel tank and system, a sufficient water trap, vent & level indicator, reducing the likelihood of under performance.

Care must be taken to ensure the operator is fully briefed on safe operation of these pump units, especially as regards to the engine maintenance requirements (refer to TNE operating manual).

TECHNICAL SPECIFICATIONS

OPTIONAL AUTO START / STOP SYSTEM



Model ACP100CT

This system is designed to be flexible, yet easy to operate. It can be used as a “demand start” for irrigation utilising any of its 6 different programmable 7 day programs or simply stopped or started by float or pressure switch operation.

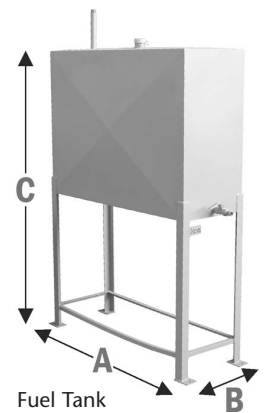
It has inbuilt engine protection to guard against low oil, high water temperature, low radiator level (TNE only) and fan belt failure.

Can be remote mounted.

OPTIONAL FUEL TANKS

These fuel tanks are free standing and feature a water trap fuel filter, aluminium vent, dip stick level indicator, tank drain plug and 2 metres of fuel hose for both the main fuel supply line and fuel return line.

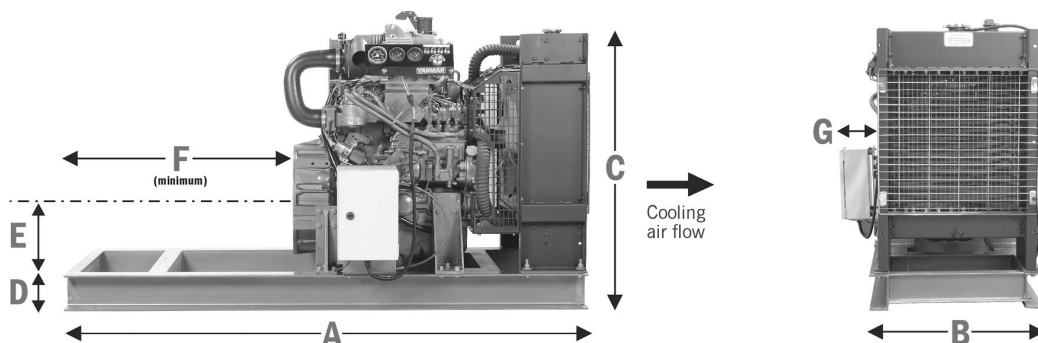
Model	Tank Capacity	Dimensions		
		A	B	C
TNE-FUELTANK-200L	200 litres	600	600	600
TNE-FUELTANK-500L	500 litres	1200	450	900
TNE-FUELTANK-650L	650 litres	1200	600	900
TNE-FUELTANK-800L	800 litres	1500	600	1200
TNE-FUELTANK-1100L	1100 litres	1500	600	1200



Fuel Tank

DIMENSIONS

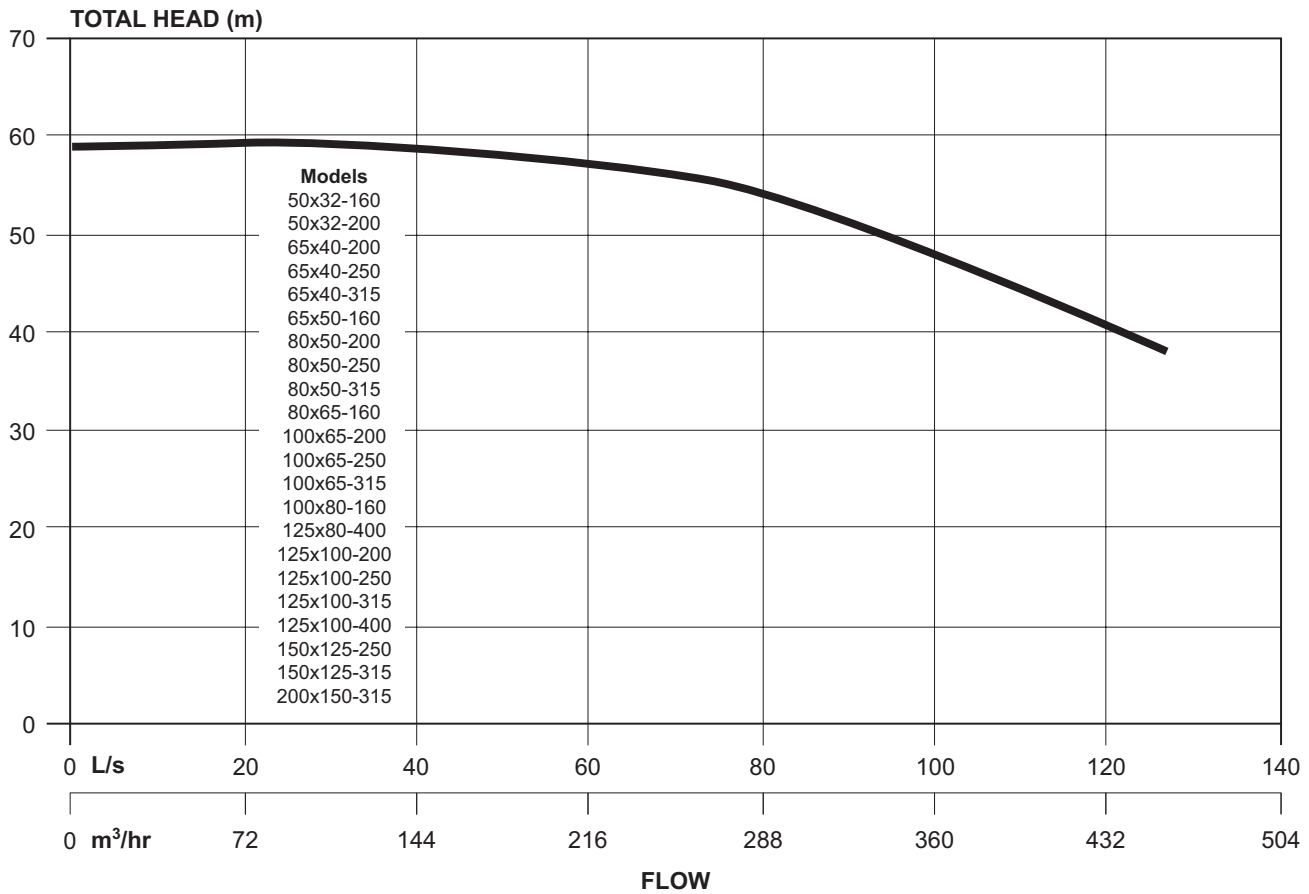
Model	A	B	C	D	E	F (min)	G	PTO Shaft	Weight (kg)		Shipping Vol (cum)
									IP	GP	
3TNE68	1750	525	948	150	210	750	150	40 x 80	254	272	1.10
3TNE74	1750	525	950	150	210	750	150	40 x 80	289	286	1.10
3TNE78A	1750	525	933	150	210	750	150	40 x 80	304	327	1.08
3TNE84/88	1750	525	948	150	210	750	150	40 x 80	348	351	1.10
4TNE84/88/84T	1750	525	983	150	210	750	150	40 x 80	381	383	1.14
4TNE94/98	1810	600	1150	150	266	750	150	50 x 90	500	471	1.54
4TNE106/106T	2055	670	1398	150	248	750	150	50 x 90	628	609	2.44



*Dimensions subject to change without notice. Shipping weight indicated do not include pump weight. This must be added accordingly.

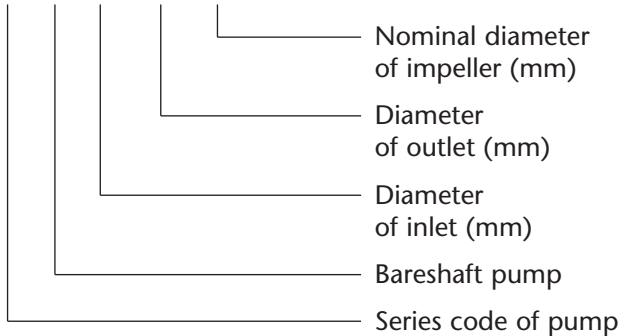
TECHNICAL SPECIFICATIONS

HYDRAULIC PERFORMANCE



MODEL DESIGNATION (EG)

ISO CF 125x100-250



The Davey ISOspec® Series is comprised of 29 standard sizes. Pumps with different impeller diameters and speeds are available to satisfy various performance ranges. Performance curves within this catalogue are in compliance with ISO2858 standards.

For full performance details, please refer to the ISOspec® Technical Reference Guide (DPM158/5K/0304/SC) or contact your nearest Davey dealer.

ISOspec® technical information can also be downloaded from www.davey.com.au.

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. © Davey and ISOspec are registered trademarks of Davey Products Pty Ltd. © Davey Products Pty Ltd 2005.



Visit Davey Pumps on-line for further information
www.davey.com.au

DEPEND ON
DAVEY

Davey Products Pty Ltd

Member of the GUD Holdings Ltd Group
ABN 18 066 327 517
Head Office and Manufacturing
6 Lakeview Drive,
Scoresby, Australia 3179
Ph: +61 3 9730 9222
Fax: +61 3 9753 4100
Website: www.davey.com.au
Customer Service Centre
Ph: 1300 367 866
Fax: 1300 369 119
E-mail: sales@davey.com.au
Interstate Offices
Sydney - Brisbane - Adelaide
Perth - Townsville

International

6 Lakeview Drive,
Scoresby, Australia 3179
Ph: +61 3 9730 9121
Fax: +61 3 9753 4248
E-mail: export@davey.com.au

Germany

Kantstrasse 47,
04275 Leipzig
Ph: +49 341 301 0412
Fax: +49 341 301 0413
E-mail: akrenz@daveyeurope.com

New Zealand

2 Rothwell Avenue,
North Harbour, Auckland 1330
Ph: +64 9 914 3680
Fax: +64 9 914 3685
Website: www.daveynz.co.nz
E-mail: sales@daveynz.co.nz

USA

Davey Pumps Inc.
1005 N. Commons Drive
Aurora, Illinois 60504
Ph: +1 630 898 6976
Fax: +1 630 851 7744
Website: www.daveyusa.com
E-mail: sales@daveyusa.com