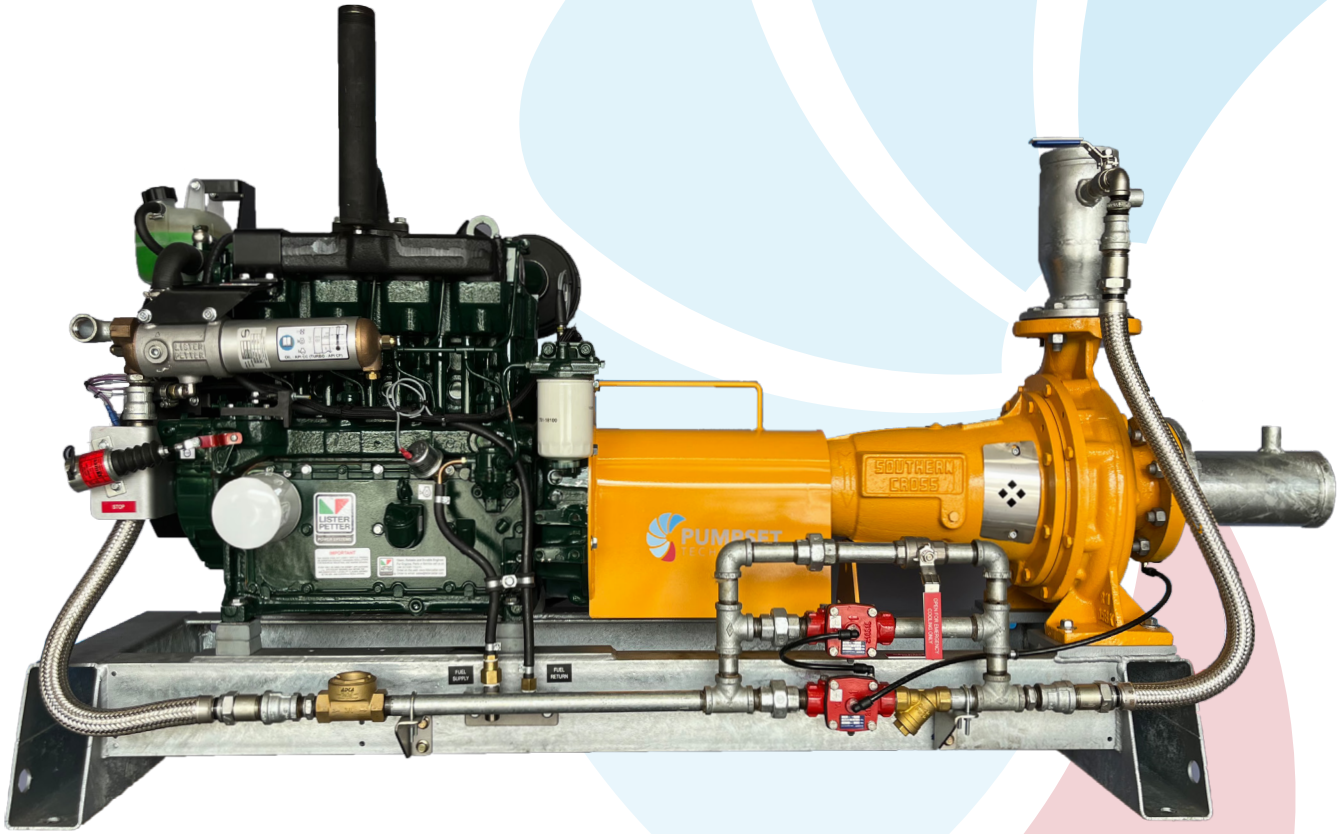
PUMPSET TECHNOLOGY

LPWT4 + SX SOVEREIGN

DATA SHEET



COMPLIES WITH
NZS 4541 & NZS 4510

LPWT4 + SX SOVEREIGN

DATA SHEET

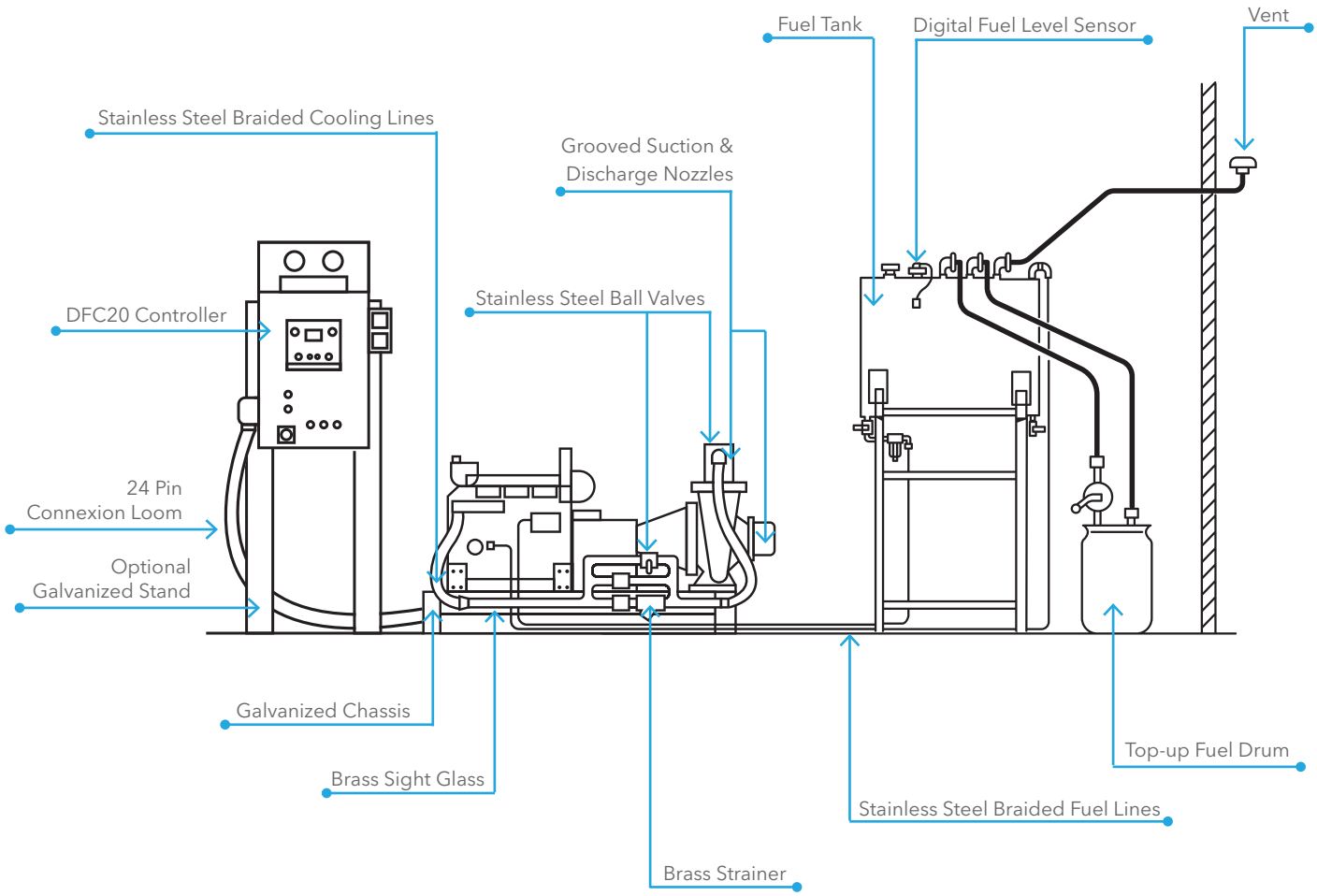
Pumpset Technology designs and builds highly reliable and resilient water pumping solutions. Our products are designed to rigorous fire protection standards and are put through the same stringent testing irrespective of the target industry.

The LPW3 Pumpset is equipped with a reliable UK built Lister Petter four-cylinder turbo compressed diesel engine, coupled with a choice of 5 different models of high efficiency, high performance and high quality ISO Southern Cross Sovereign pumps.

The performance ranges from 180 to 1050 kPa pressure and up to 3300 lpm flow.

The Pumpset is controlled by our DFC20 Controller. The DFC20 Controller is a modern and reliable controller, developed with Elcos, a leader in manufacturing of controls, monitoring panels and switchboards (for more details refer to our DFC20 Controller Data Sheet.)

The Pumpset also comes with our Fuel Supply System which includes a purpose-built mild steel, epoxy paint coated 75l Fuel Tank, a top-up drum, flexible armoured fuel lines with a Fail-Safe Connection System to make fuel connection a no brainer (for more details refer to our Fuel Supply System Data Sheet.)



Accessories provided with pumpset:

- Batteries & Battery Tray
- Standard Muffler, Rain Cap & Flexi Connection (contact us for specific sizing and long distance installation)
- Oil Resistant Pads and Bushes

ENGINE DATA

Rating definitions, to ISO 3046. ISO Standard Conditions - Barometric pressure 100kPa, Relative Humidity 30%, Temperature at Manifold 25°C.

Power Output to ISO 3046 & Fuel Consumption									
Model	**Power**	**rpm**	**1500**	**1800**	**2000**	**2200**	**2500**	**2800**	**3000**
LPWT4	Continuous	kW	18.9	24.2	26.4	28.6	31.0	32.8	34.0
	Maximum Fuel Consumption	litre/hr	4.9	6.0	6.6	7.4	8.5	9.7	10.6

The figures given are for 100% load and are subject to 5% tolerance

Combustion Air Consumption				
rpm	**1500**	**1800**	**2500**	**3000**
LPWT4 l/Sec	27	35	49	57

Heat Rejection Figures				
rpm	**Heat Input**	**Heat to Coolant %**	**Heat to Work %**	**Heat to Environment %**
1500	100	32.77	35.05	32.18
1800	100	30.25	36.11	33.64
2000	100	29.18	36.58	34.24
2500	100	27.05	36.11	36.84
3000	100	25.12	34.34	40.54

Notes:

Heat to Coolant Kw =

$$\frac{\text{Heat to Work Kw} \times \text{Heat to Coolant \%}}{\text{Heat to Work \%}}$$

Heat Input = Heat from Fuel

Technical Data					
Type of fuel injection		Direct	Number of flywheel ring gear teeth		96
Number of cylinders		4	Gear end power take-off - maximum inline - maximum side load using a drive belt	kW	12
Aspiration		Turbocharged			
Direction of rotation (flywheel end)		Anticlockwise		kW	8.0
Nominal cylinder bore	mm	86.0	Maximum continuous crankshaft end thrust	kgf	180
Stroke	mm	80.0	Maximum permissible intake restriction at full rated speed and load	mbar	25
Total cylinder capacity	litre	1.860			
Compression ratio		16:2:1	Maximum permissible exhaust back pressure	mbar	50
Firing order (number 1 cylinder is at the gear end)		1 - 3 - 4 - 2	Lubricating oil pressure at 3000r/min and with the oil at 110°C (230°F)	bar	2.0
Minimum idling speed					
Minimum full load speed	rpm	1500	Lubricating oil pressure at idle	bar	1.0

NOISE FIGURES

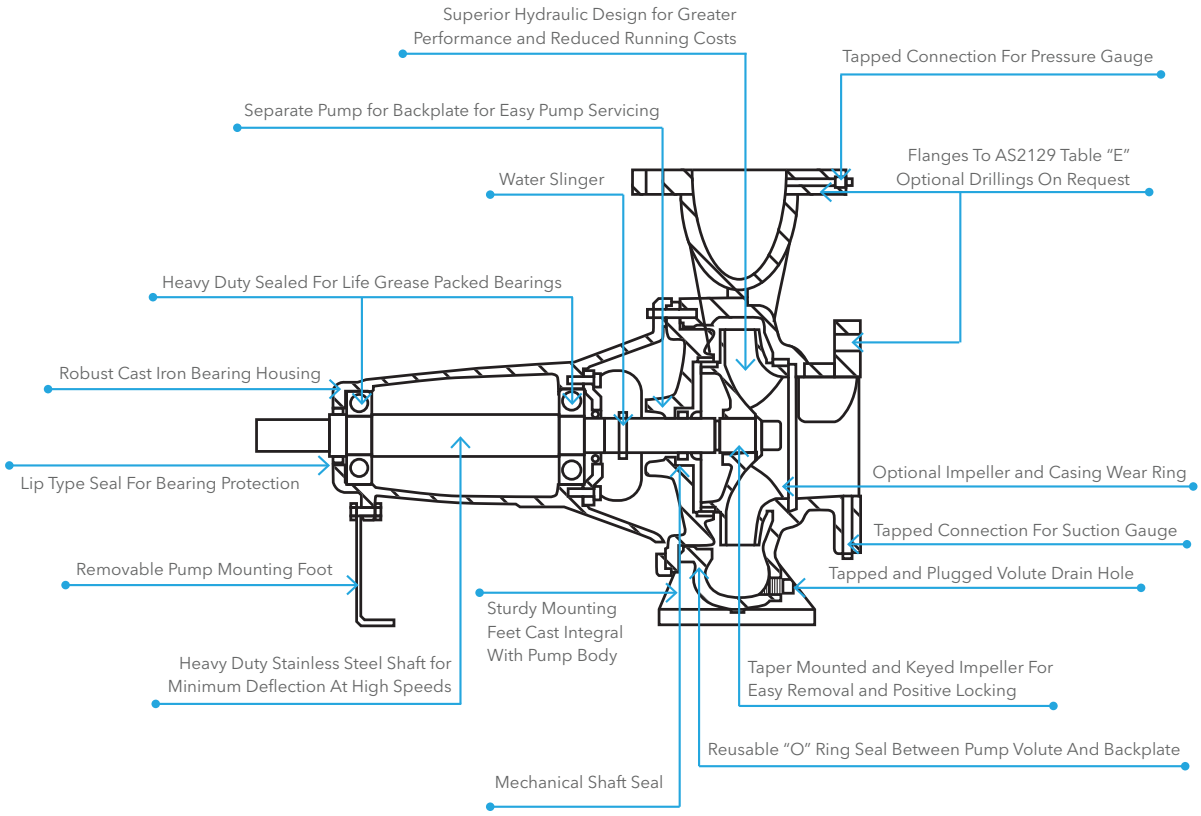
Noise Definitions

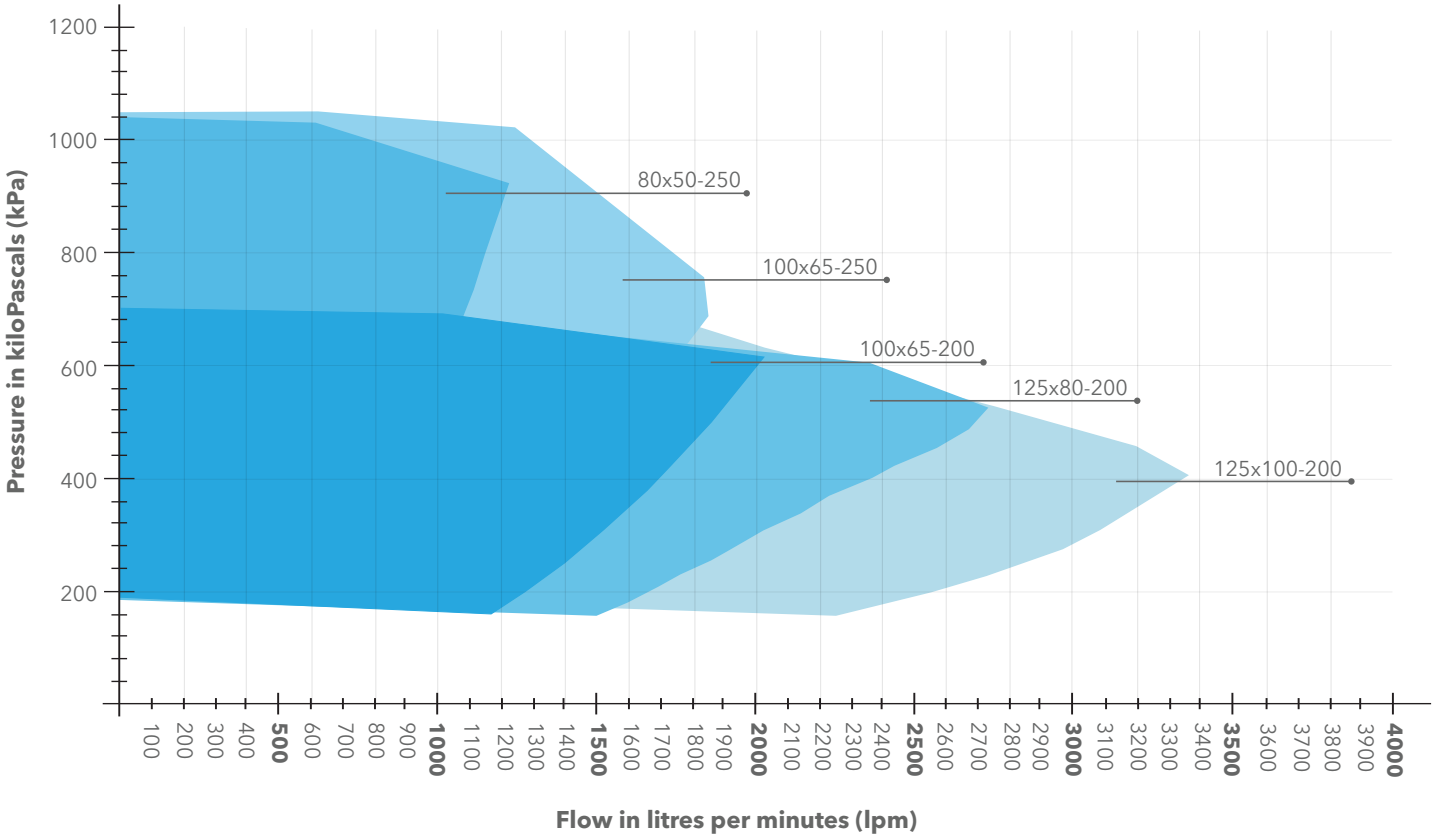
Sound Pressure is measured in decibels (dB) at a specific distance from the source

In general:
Pressure = sound power level - (20 + log d + 7.8)
where d = the distance away from the source.

Engine Noise Levels	
Parameter	**Engine Model**
	LPWT4
Sound Pressure level at 1m	≤ 88.0

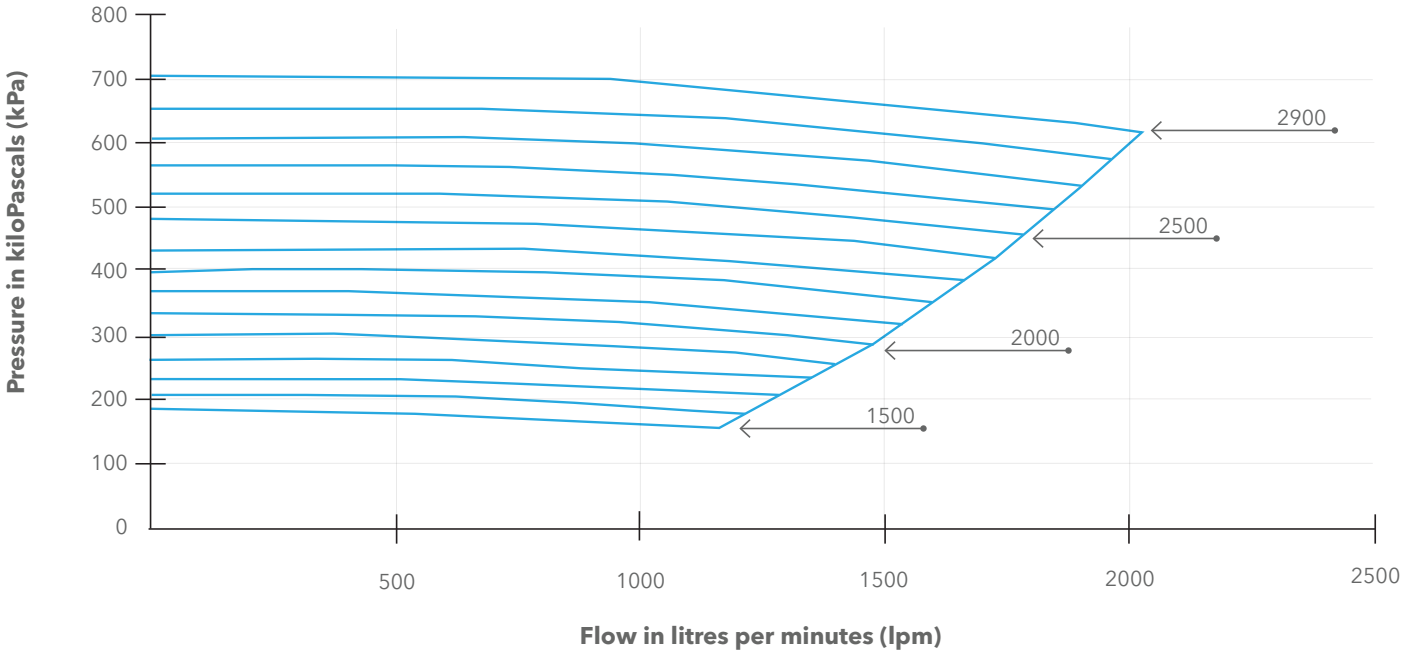
PUMP DATA & HYDRAULICS



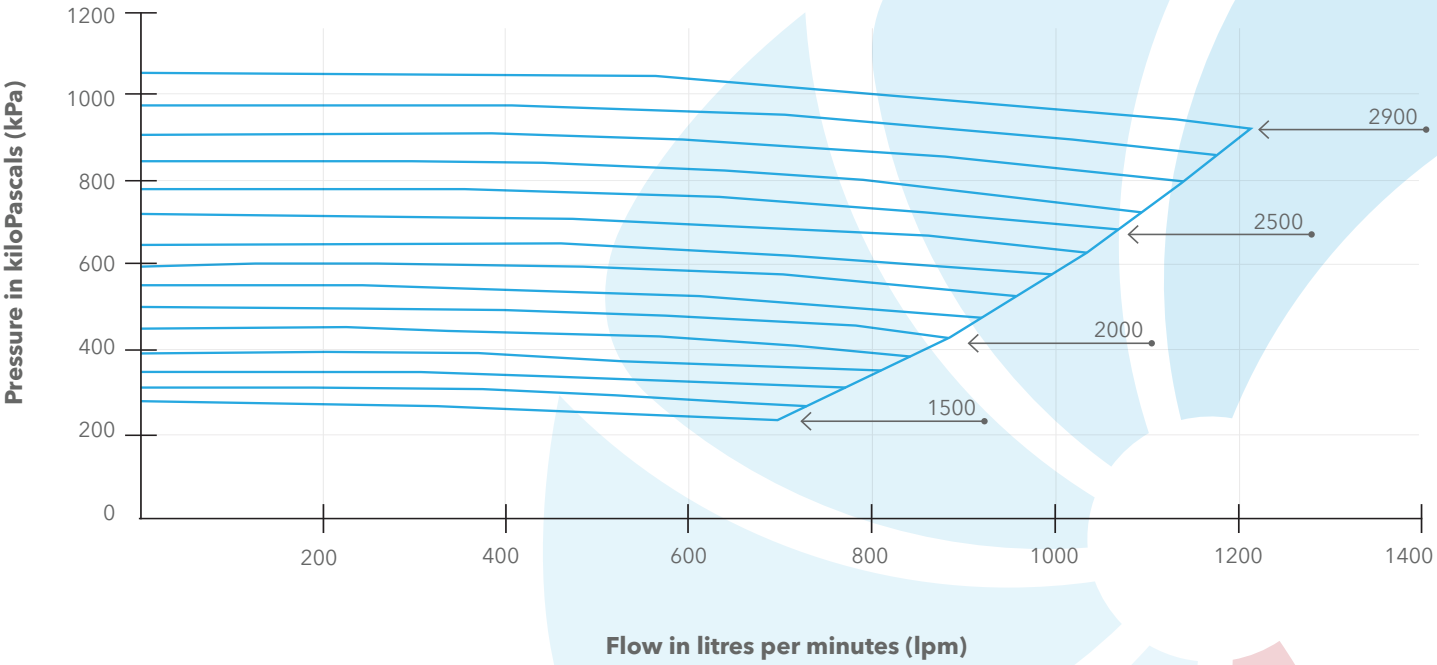


COMPLIES WITH NZS 4541 & NZS 4510

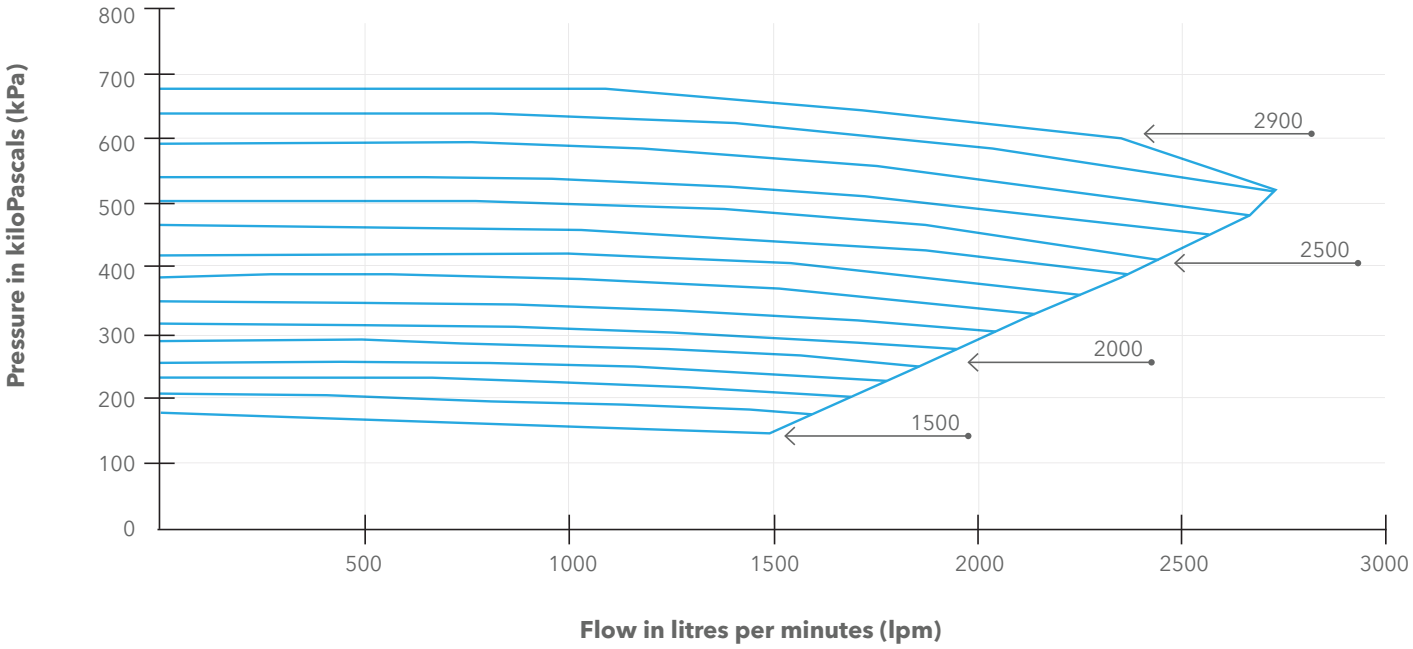
100X65-200 each line represent 100rpm increment, from 1500 up to 2900rpm



80X50-250 each line represent 100rpm increment, from 1500 up to 2900rpm



125X80-200 each line represent 100rpm increment, from 1500 up to 2900rpm



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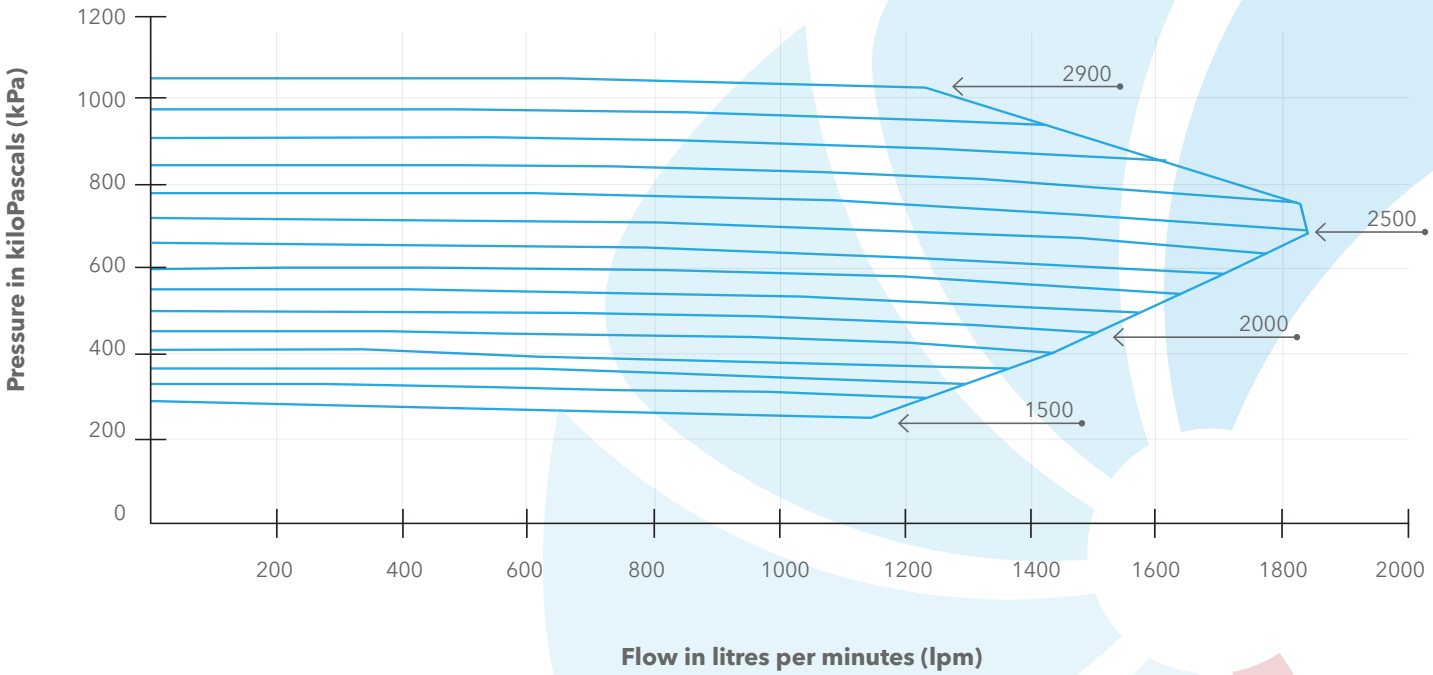
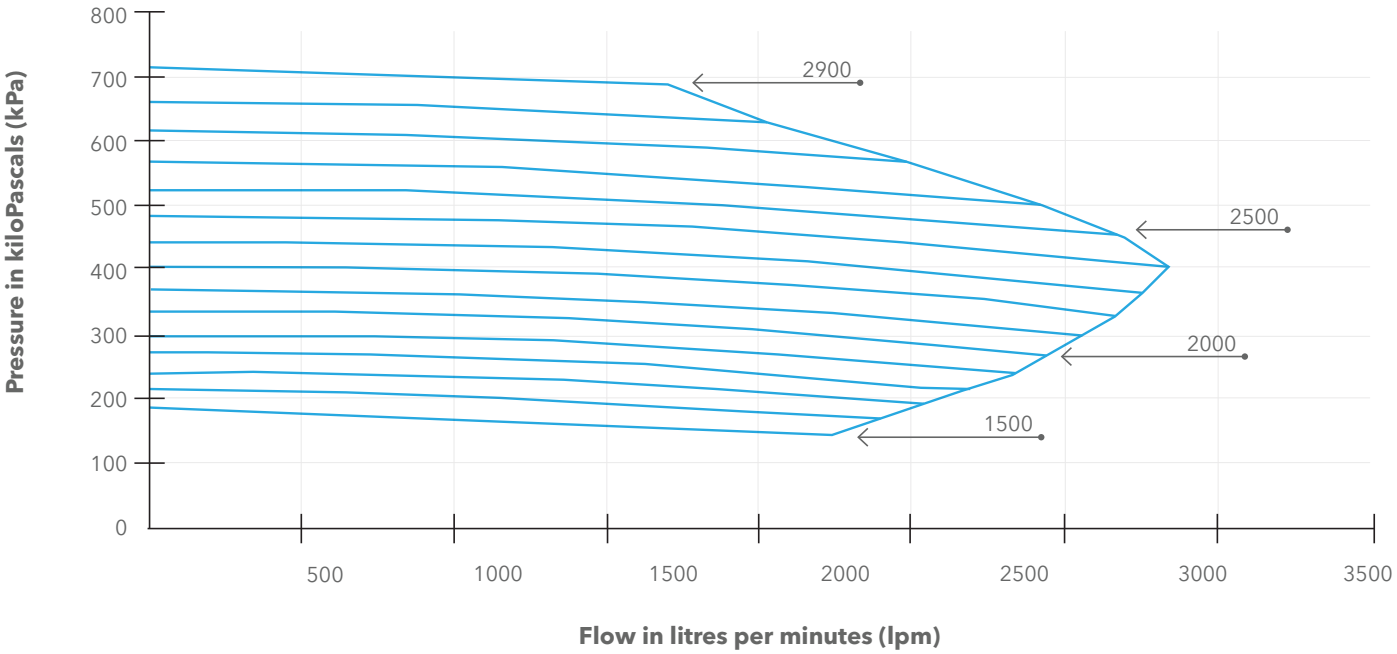
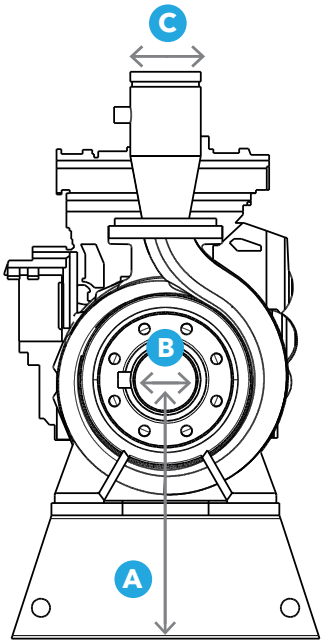


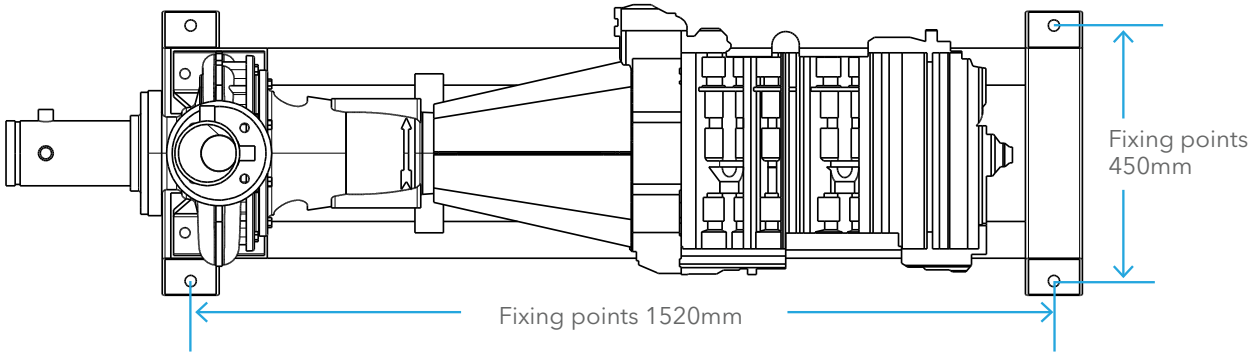
125X100-200 each line represent 100rpm increment, from 1500 up to 2900rpm



DIMENSIONS

Pump Model	80x50-250	100x65-250	100x65-200	125x80-200	125x100-200
A Suction centreline height	400	430	410	398	418
B Suction diameter (grooved connection)	100	100	100	150	150
C Discharge diameter (grooved connection)	100	100	100	100	100





Approximate max dimensions in mm: length 1900, width 650, height 920
Contact us for more detailed dimensions

Optional Features

Engine:	Pump:
- Block Heater - Radiator Fan Cooling - ETC21 (Electronic Throttle Control) - Extra Large Fuel Tank for NFPA20 Compliance - Geothermal / Marine Environment Specific Packages	- ISO Pro Upgrade - Stainless Steel Impeller

For further information, please refer to our **Fuel Supply System Data Sheet** and **DFC20 Controller Data Sheet**.

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