

PRESSURE PUMP SIZING GUIDE

Fill in the form on page 3, so the Dowdens Pumping Team can determine the correct pump size and type required to deliver water efficiently for your application.

COMMON AVERAGE WATER REQUIREMENTS

The average water requirements, shown in Table 1 below, may vary due to specific application concerns. Water requirements should be supplied within acceptable daily running times. This time will vary according to the nature of the application.

Table 1.

SHOWER: 15 L/min at 140kPa (3.3 gph at 20psi)	CATTLE: 30-55 litres/day (6.5-12 gallons/day)
LAWN SPRINKLER: 15 L/min at 140kPa (3.3 gph at 20psi)	MILKING COWS: 70 litres/day (15.4 gallons/day)
1/2" TAP: 12-15 L/min at 140kPa (2.6-3.3 gph at 20psi)	SHEEP: 5-10 litres/day (1-2 gallons/day)
3/4" HOSE & 1/4" NOZZLE: 40 L/min at 210kPa (8.8 gph at 30psi)	PIGS: 10 litres/day (2 gallons/day)
1" HOSE & 3/4" NOZZLE: 75 L/min at 210kPa (16.5 gph at 30psi)	HORSES: 55-60 litres/day (12-13.2 gallons/day)
100 CHICKENS: 25 litres/day (5.5 gallons/day)	

SUCTION LIFT

Pumps do not suck; instead, pumps create a partial vacuum into which atmospheric pressure pushes the water via the suction pipework. Practically, a maximum lift of 6.7 metres at sea level is standard, but Altitude, Pump Suction Performance, Water Temperature and Friction Loss should be considered.

Please Note: The figures in Table 2 & 3 below are taken from the Australian Pipe Friction Handbook (6th Edition) published by Pump Industry Australia.

Table 2.

Elevation	Maximum Practical Suction Lift (metres)	Absolute Atmospheric Pressure (cold water - Metres)
Sea Level	6.7	10.33
500m	6.2	9.55
750m	6.0	9.25
1,000m	5.8	8.99
1,500m	5.4	8.40
2,000m	5.0	7.85

Table 3.

Water Temperature (°C)	Suction Lift Reduction (metres)
15	0
20	0.06
30	0.22
40	0.52
50	0.98
60	1.73
70	2.85
80	4.51

Need help?

Call the Dowdens Pumping team on 07 4969 4949 for help if you get stuck answering any questions. A pumping specialist will also contact you with any further questions after you have completed the form and emailed it back to us. Once we have all the information, a quote will be supplied.

MACKAY

9-15 Industrial St, Mackay 4740
Phone: 07 4969 4949
info@dowdens.com.au

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HOW MUCH FLOW - WATER PRESSURE SYSTEMS

Table 4 below shows the standard flow rates associated with different size homes, providing a better understanding the typical water use and efficiency for each type of dwelling.

Please note: The flow rates in Table 4 below are a guide only and may vary based on the number of residents in the dwelling and other water use, such as irrigation.

Table 4.

Weekend Cottage	10 to 20 L/min
Small Home	20 to 30 L/min
Average Home	30 to 50 L/min
Large Home	50 to 90 L/min

WHY USE DOWDENS AS YOUR PUMPING SUPPLIER?

Expert advice

At Dowdens, we're here to provide pumping solutions tailored to your needs. With decades of experience, we've earned a reputation you can rely on. Whether you're managing a farm, industrial site, or commercial property, our team delivers expert advice and solutions that go above and beyond.

Top Quality Products

When you choose Dowdens, you're getting more than just a pump. We offer a wide range of top-quality products for all applications, backed by seamless installation, maintenance, and repair services. Our focus is on ensuring your equipment delivers long-term value and reliability.

Exceptional Customer Service

We pride ourselves on exceptional customer service. Our friendly team works closely with you, providing practical solutions, clear communication, and ongoing support. With Dowdens, it's not just a purchase—it's the start of a partnership built to last.

We Service and Supply



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CONTACT INFORMATION

First Name:	<input type="text"/>	Last Name:	<input type="text"/>
Email Address:	<input type="text"/>		
Business Phone:	<input type="text"/>	Mobile:	<input type="text"/>
Business Name:	<input type="text"/>	City:	<input type="text"/>
Address:	<input type="text"/>	State:	<input type="text"/>
	<input type="text"/>	Post Code:	<input type="text"/>

PUMP SELECTION DETAILS

Requirements

Household	Single Story	<input type="checkbox"/>	Number of People:	<input type="text"/>	Max Taps Running:	<input type="text"/>
	Double Story	<input type="checkbox"/>				
Irrigation	Brand/Type of Sprinkler:	<input type="text"/>	Number of Sprinklers:	<input type="text"/>		
	Existing Pump Make:	<input type="text"/>	Existing Pump Model:	<input type="text"/>		
	Power Supply:	<input type="text"/>	Location/ Distance to:	<input type="text"/>		
Water Treatment	Does the Customer Require any Water Treatment (please specify): <input type="text"/>					

Delivery

Delivery Static Head:	<input type="text"/>	Distance to Target:	<input type="text"/>
Pipe Type & Size:	<input type="text"/>	Pipe Friction Loss:	<input type="text"/>
Discharge Pressure:	<input type="text"/>	Total Delivery Head:	<input type="text"/>

Suction

Suction Static Head:	<input type="text"/>
Pipe Friction:	<input type="text"/>
Total Suction Head:	<input type="text"/>



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OUR STORY



Queensland's Leading Pumping & Water Treatment Organisation

We are now known as Dowdens Pumping & Water Treatment to acknowledge our full Pumping and Water Treatment capabilities. Our strength is our ability to provide expert advice and offer our customers specifically designed or purpose-engineered equipment, offering practical and efficient solutions to most, if not all, pumping and water treatment applications.

Established by Trevor Dowden in 1973

Dowdens Pumping was established in 1973 by our founder – Trevor Dowden. We originated in Mackay, where Trevor started as a sole operator developing the local market and establishing his business on the foundations of finding solutions and old-fashioned customer service. While the years have gone by and Trevor is now retired, Dowdens Pumping has grown into a statewide organisation with more than 200 employees; however, the founding principles of the business remain the same – solutions and customer-focused.

We Understand the Importance of Water

We understand our customers' needs, from domestic and household to general and specific industry requirements. We understand the importance of water in every application, the importance of minimising downtime, the importance of utilising quality products, and the importance of providing service, backup, and support.

Our Core Principles

Dowdens Group's core principles revolve around a strong foundation of accountability, teamwork, and community service. We are driven by a vision to be the most respected business in their industry within Australia, upholding high professional standards to consistently deliver the best products and services to their customers. Our customer-focused and performance-driven approach underscores our dedication to excellence. At the same time, our positive, enthusiastic, reliable, and professional values reflect our commitment to fostering a supportive and inclusive culture.

4 Branches Located Throughout Queensland

With the significant growth of the business since 1973, we now operate branches in Brisbane, Rockhampton, and Proserpine, with our Mackay operation still the head office. This growth is driven by the opportunity to grow with customers and the industries we serve. Our people's commitment, enthusiasm and drive have made it possible to ensure that our solutions are the most effective for the applications presented.

Mackay (head office)



Brisbane



Rockhampton



Proserpine



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