



TECH DAVE'S TOP TIP

“ If you need to remove the union from the pump, make sure to drain the spa or close the isolation valves before unthreading it.

HOW TO PUMP UNION SIZING GUIDE

OVERVIEW

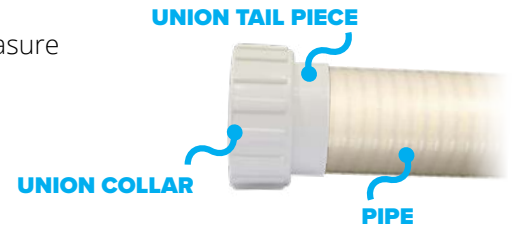
Whether you're replacing a pump like-for-like or retro-fitting a new model pump, it's crucial to get the correct sized union fittings to minimise the possibility of needing to change any plumbing.

It can get confusing because many pump unions are described using imperial sizes, like the common 2.0" specification. However, the actual thread size does not measure 2.0". When evaluating pump unions and their sizes, ensure you're looking at the thread size rather than the union tail piece.

This guide will explain the key components of a pump union and how to measure them accurately.

UNION COLLAR & TAIL PIECE

The union is made up of 3 pieces ; the Collar, the Tail piece and the Rubber seal. The collar is the part which threads onto the pump inlet or outlet. The tail piece is used to glue onto the pre-existing spa pipework.



MEASURING THE UNIONS COLLAR INTERNAL DIAMETER (ID)

If it's easier to access the unions, measure across the widest point of the inside of the collar (Internal diameter, thread to thread), as shown on the diagram.

- If the ID of the collar is 62mm (+/- 1mm), you'll need a 1.5" union
- If the ID of the collar is 78mm (+/- 1mm), you'll need a 2.0" union
- If the ID of the collar is 92mm (+/- 1mm), you'll need a 2.5" union

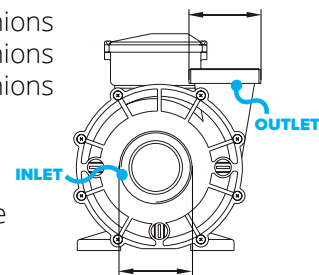


MEASURING AN EXISTING PUMP INLET & OUTLET

If it's easier to access the pumps inlet and outlet, measure across the widest point of the inlet/outlet (thread tip to tip).

- If the pump inlet/outlet (thread tip to tip) measures 62mm (+/- 1mm) across, then it fits 1.5" Unions
- If the pump inlet/outlet (thread tip to tip) measures 78mm (+/- 1mm) across, then it fits 2.0" Unions
- If the pump inlet/outlet (thread tip to tip) measures 92mm (+/- 1mm) across, then it fits 2.5" Unions

63mm = 1.5" Union
79mm = 2.0" Union
93mm = 2.5" Union



MEASURING THE UNION TAIL PIECE

The most common pipes used in spa pools is 1.5", 2.0" and 2.5". In the pool and spa industry, the term 1.5" refers to a pipe that measures 48mm in outer diameter (OD) and has a 1.5" internal diameter (ID). For example, a union tail piece with a 48mm internal diameter (ID) is compatible with a 1.5" pipe.

- If the union tail piece ID measures 48mm (+/- 1mm) , it is compatible with 1.5" pipe
- If the union tail piece ID measures 60mm (+/- 1mm) , it is compatible with 2.0" pipe
- If the union tail piece ID measures 72mm (+/- 1mm) , it is compatible with 2.5" pipe





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“ When retro-fitting a pump, make sure all other specifications (HP, Power consumption, unions, plug etc) are equal to your existing pump.

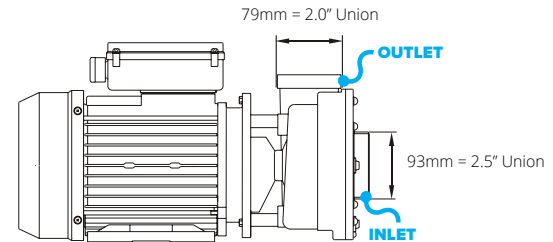
HOW TO PUMP UNION SIZING GUIDE

PUMP EXAMPLE

Once you have confirmed the required union size for your inlet and outlet. Here is an example on how to convert these measurements into pump specifications.

The below table can be found on every pump product page on Spa Supplies. This example is the LX WP-300-II which has a 2.5" inlet and a 2.0" outlet. Locate the specification table and compare your union sizes to the Inlet and outlet union size.

FEATURE	SPECIFICATION
Brand	LX
Model	WP-300-II
Max HP (Horse Power)	3HP
Low Speed	0.62hp, 0.45kw, 3A (220 - 240V)
High Speed	3.0hp, 2.2kw, 10A (220 - 240V 50Hz)
Inlet Union Size	2.5" Union
Outlet Union Size	2.0" Union
Plug	AMP



SPA SUPPLIES PUMP INLET & OUTLET SIZES

To save you some time, here is a table of our most common pumps and their unions sizes.

PUMP MODEL	PUMP TYPE	INLET SIZE	OUTLET SIZE
LX WTC50M	Circulation	1.5"	1.5"
SpaNET XS-3C	Circulation	1.5"	1.5"
LX LP300	Jet/Massage	2.5"	2.0"
SpaNET XS30S	Jet/Massage	2.5"	2.0"
LX WP200-II	Jet/Massage (2-Speed)	2.0"	2.0"
LX WP250-II	Jet/Massage (2-Speed)	2.0"	2.0"
LX WP300-II	Jet/Massage (2-Speed)	2.5"	2.0"
SpaNET XS30-2S	Jet/Massage (2-Speed)	2.5"	2.0"