

**DESIGNED AS A PERMANENT ALTERNATIVE TO TRADITIONAL MATERIALS SUCH AS STEEL, FIBREGLASS, PVC & POLYETHYLENE IN WATER WELLS WITH ELECTRIC SUBMERSIBLE PUMPS**



## FEATURES

### RAPID INSTALLATION & RETRIEVAL OF THE SUBMERSIBLE PUMP

- Transfer large volumes of water with high working pressures.
- Lightweight and easy to deploy.
- Premium abrasion resistance.
- Minimum extension in length.

### LOW MAINTENANCE

All synthetic materials of construction mean that there is zero corrosion and no scale build up. The high grade polyurethane lining and cover material is resistant to hydrocarbon fuels, many chemicals, ozone and UV, abrasion and microbial attack.

### SUPERIOR HYDRAULIC PERFORMANCE

The textile reinforcement is designed to swell under operating conditions up to 20%. This feature gives a nominal increase in riser diameter, reducing friction loss and improving hydraulic performance.

### EASY TO STORE & TRANSPORT

Wellman has a small storage footprint compared to rigid pipe, allowing transportation by smaller vehicles and requiring less manpower. In certain circumstances, Wellman 120 can be installed by hand. Particularly useful when installation is required in remote locations with poor access.

### TYPICAL APPLICATIONS INCLUDE

- Domestic systems
- Light industrial applications
- Environmental monitoring
- Well testing
- Golf Courses

## APPLICATIONS



**BEST OPTION FOR WELLS WITH ELECTRIC SUBMERSIBLE PUMPS**

**Suitable for pump settings up to 120 metres, Wellman 120 is used in applications such as domestic, light industrial, remote areas and well test pumping.**

**A one piece composite, giving excellent stability and removing any risk of delamination. A reinforced cable attachment strap prevents the power cable stretching the strap which can lead to full detachment.**



ISO 9001:2015  
ISO 14001:2015  
ISO 45001:2018

Certified by  
**intertek**  
Total Quality Assured.

## TECHNICAL DATA

Diameter	mm	<b>32 mm</b>	<b>51 mm</b>
	Inch	1 1/4 "	2"
Wall thickness	mm	<b>2.2</b>	<b>2.4</b>
	Inch	0.09	0.09
Maximum pump setting	m	<b>120</b>	<b>120</b>
	ft	400	400
Burst pressure	bar	<b>50</b>	<b>48</b>
	psi	725	700
Maximum operating pressure	bar	<b>25</b>	<b>24</b>
	psi	365	350
Effective tensile strength	kg	<b>2.000</b>	<b>3.100</b>
	lb	4.400	6.850
Maximum continuous end load	kg	<b>800</b>	<b>1.200</b>
	lb	1.770	2.650
Weight (Hose only)	kg / m	<b>0.31</b>	<b>0.50</b>
	lb / ft	0.21	0.34
Weight (Mandals coupling)	kg	<b>0.3</b>	<b>0.6</b>
	lb	0.6	1.2
Mandals coupling O/D	mm	<b>59</b>	<b>80</b>
	in	2.3	3.1
Maximum extension under load conditions	%	<b>+ 2</b>	
Maximum diameter swell	%	<b>+ 20</b>	
Operational temperature range	°C	- 40 to + 50 (with intermittent use up to 80)	
	°F	- 40 to + 120 (with intermittent use up to 176)	
Water quality Below 30 °C / 86 °F Above (or equal) 30 °C / 86 °F	pH	<b>4 - 9</b>	
		<b>5 - 9</b>	
Pressure loss at maximum flow	bar	<b>2</b>	
	psi	29	
Velocity at maximum flow	m/s	<b>2.9</b>	<b>3.7</b>
	f/s	1	1.3
Velocity flow rate a nominal 120m / 400 ft pump setting	l/s	<b>2.9</b>	<b>9.2</b>
	gpm	44	146

Designed for use with pump settings up to 120 metres, our unique manufacturing process allows drums of up to 1,000 metres in a single length to optimize efficiencies for stocking distributors.

Wellman 120 is manufactured using -Through-the-Weave- technology, where the high grade polyurethane lining and cover are formed in a single process to provide a tough composite riser. The textile reinforcement is designed to support the weight of the submersible pump, the column of water, the power cable and the riser itself, with a minimum 2.5:1 safety factor.

Additionally, torque on pump start-up is accommodated without damage to the riser. The Mandals company also manufactures the textile weaving machines used by all the major hose companies throughout the world so our understanding of textile design and technology is unparalleled.



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SUBMERSIBLE PUMPS**



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