

**Wellman 120 flexible Drop Pipe** is designed as a permanent alternative to traditional materials such as steel, fiberglass, PVC and polyethylene in water wells with electric submersible pumps.



### ▶ **Rapid installation and 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.

### ▶ **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.

### ▶ **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

### ▶ **Easy to store and 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 Application includes:**

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

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

## Technical Data / Wellman 120

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

**Note:** Safety BP / WP is 2:1 (50%). For all non-hazard and/or non-flammable liquids.

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**Wellman 120** is 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.