

Wellman 300 Flexible Rising Main 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

Supplied in a single length to the required pump setting, there are no flanges or joints, except at the pump and headworks. Installation options include by crane or with a vehicle allowing for rapid restoration of service in the event of routine maintenance or pump failure.

▶ Superior hydraulic performance

The textile reinforcement is designed to swell under operating conditions up to 15%. This feature gives a nominal increase in drop pipe diameter, reducing friction loss and improving hydraulic performance. Often this can be translated into a smaller Wellman diameter than conventional rigid pipe, giving additional financial benefits

▶ 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. Particularly useful when installation is required in remote locations with poor access.

International Drinking Water Certification

Australia and New Zealand

AS/NZS 4020:2005 approved



North and South America

NSF/ANSI/CAN 61 approved



UK & Ireland

WRAS BS6920-1 approved



Germany

KTW-BWGL approved



Germany

DVGW W270 approved



Poland

PZH approved



Typical Applications Include:

- Groundwater abstraction - potable and brackish
- Water supply wells in R.O. desalination plant app.
- Food processing
- Irrigation / Agriculture
- Environmental monitoring
- Mine de-watering
- Land stabilization
- Solar power systems
- Offshore rig fire water and service pumps

The 5 inch (127mm) and 6 inch (152mm) Wellman diameters now have two straps, one each on opposite sides as a standard feature. To spread the weight of heavy cables and other monitoring equipment in the well.

Technical Data / Wellman 300

Diameter	mm Inch	51 mm 2"	76 mm 3"	102 mm 4"	127 mm 5"	152 mm 6"
Maximum pump setting	m ft	300 1,000	300 1,000	300 1,000	280 930	280 930
Burst pressure	bar psi	62 900	62 900	62 900	58 840	58 840
Maximum operating pressure	bar psi	31 450	31 450	31 450	29 420	29 420
Effective tensile strength	kg lb	4,600 10,150	8,000 17,650	14,000 31,000	20,000 44,100	23,000 50,700
Maximum continuous end load	kg lb	1,800 4,000	3,200 7,050	5,600 12,350	8,000 17,650	9,200 20,300
Weight (hose only)	kg/m lb/ft	0.7 0.5	1.0 0.7	1.6 1.1	2.0 1.3	2.5 1.7
Weight (Mandals coupling)	kg lb	1.4 3.1	3.4 7.5	6.3 13.9	11.3 25.0	15.6 34.4
Mandals coupling O/D	mm in	80 3.1	115 4.5	145 5.7	177 7.0	200 8.0
Maximum extension under load conditions	%	+ 2				
Maximum diameter swell	%	+ 15				
Maximum water temperature	°C °F	- 40 to + 50. (with intermittent use up to 80) - 40 to +122 (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	2.4 8	3.0 10	3.0 10	4.2 14	4.5 15
Velocity flow rate a nominal 250m / 820 ft pump setting	l/s gpm	8 127	18 285	41 650	78 1,238	105 1,665

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

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Wellman 300 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.

Wellman 300 is the main component of a complete system, which includes couplings, power cable attachment equipment, lifting clamps and wellhead rollers. All ancillary equipment can be supplied and factory-trained installation engineers are available to provide assistance and training if required.

It is important that only approved accessories are used with the Wellman riser. The use of alternative components will compromise the integrity of the complete system