Wellman 300
Datasheet

mandals since 1775
A Michelin Group Company

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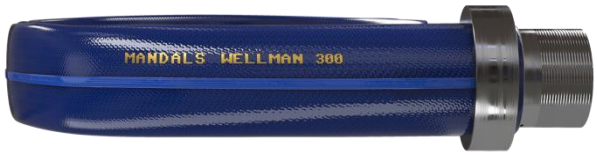

Wellman 300 flexible rising main is designed as a permanent alternative to traditional materials such as steel, fiberglass, UPVC and polyethylene in water wells with electric submersible pumps. The Wellman riser has been in international markets for over 30 years and operating in numerous industrial locations.

The Wellman 300 is comparable to Boreman 300, but with potable water approvals and designed for potable applications.

DVGW CERT W270 | AS/NZS 4020 | KTW-BWGL | WRAS APPROVED PRODUCT | NSF Certified to NSF/ANSI 61

Primary Uses & Applications

- Groundwater extraction – potable and brackish
- Water supply wells in RO desalination
- Food processing
- Irrigation & agriculture
- Mine de-watering
- Land stabilization
- Solar power systems
- Offshore rig firewater and service pumps
- Environmental monitoring

Construction

- A high tensile polyester reinforcement jacket enveloped by a high-grade polyurethane lining and cover material resistant to hydrocarbon fuels, many chemicals, ozone, UV, abrasion, and microbial attacks. The one-piece composite gives an excellent stability and removes any risk of delamination.
- The textile reinforcement is designed to swell under operating conditions up to 15%, reducing scale build-up. This feature gives a nominal increase in riser diameter, reducing friction loss, and improving hydraulic performance.

Features

- Superior hydraulic performance.
- Allows rapid installation and retrieval of the submersible pump.
- Small storage footprint compared to rigid pipe, allowing transportation by smaller vehicles, and requiring less manpower.
- Light weight and easy to deploy.
- Low longitudinal elongation.
- Low maintenance and no corrosion.
- Torque on pump start-up is accommodated without damage to the riser.

Properties

- Lengths up to 300 meters.
- Color options: Blue (standard).
- Couplings BSPT (standard) and NPT (optional).
- 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 2:1 safety factor.
- NSF/ANSI/CAN61, WRAS6920-1, KTW-BWGL, AS/NZS 4020 and DVGW W270 drinking water certified.

Wellman 300

Article Number	-	WMS051	WMS076	WMS102	WMS127	WMS152
Inner Diameter	mm Inch	51 mm 2"	76 mm 3"	102 mm 4"	127 mm 5"	152 mm 6"
Wall Thickness	mm Inch	3.3 0.13	3.4 0.13	4.0 0.16	4.4 0.17	4.6 0.18
Default Number of Straps	-	1	1	2	2	2
Maximum Pump Setting	m ft	300 1000	300 1000	300 1000	300 1000	300 1000
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 lbs	4600 10150	8000 17650	14000 31000	20000 44100	23000 50700
Maximum Continuous End Load	kg lbs	2300 5070	4000 8820	7000 15430	10000 22040	11500 25350
Weight *(hose only)*	kg/m lbs/ft	0.7 0.5	1.0 0.7	1.6 1.1	2.0 1.3	2.5 1.7
Weight *(standard coupling)*	kg lbs	1.4 3.1	3.4 7.5	6.3 13.9	11.3 25.0	15.6 34.4
Mandals Coupling Outer Diameter	mm Inch	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 Diameter Temperature	°C °F	- 40 to + 50. (with intermittent use up to 80) - 40 to +120 (with intermittent use up to 176)				
Water Quality	pH	4 – 9 (Below 30 °C / 86 °F) 5 – 9 (Above 30 °C / 86 °F)				
Velocity at Maximum Flow	m/s ft/s	2.4 8	3.0 10	3.0 10	4.2 14	4.5 15
Velocity Flow Rate at Maximum Pump Setting	L/s gpm	8 127	18 285	41 650	78 1238	105 1665

Note: Minimum safety factor burst to maximum working pressure is 2:1 for non-hazardous/non-flammable liquids.