



**Boreman 150 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. Based on our Wellman riser, which has been in international markets for over 30 years and operating in numerous industrial locations, Boreman has been developed specifically for the mining and desalination industries.**

The Boreman 150 is comparable to Boreman 300, but for wells up to 150m depth

### Primary Uses & Applications

- Mine dewatering
- Land stabilization in open cut mines
- Beach well supply to reverse osmosis desalination plants
- Environmental monitoring
- Onshore oil and gas field water supply

### 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.

### 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 20%, reducing scale build-up. This feature gives a nominal increase in riser diameter, reducing friction loss, and improving hydraulic performance.

### Properties

- Lengths up to 150 meters.
- Color options: Black (standard).
- Couplings NPT (standard).
- 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.

### Boreman 150

<b>Article Number</b>	-	<b>BML203</b>
<b>Inner Diameter<sup>1</sup></b>	<b>mm</b> Inch	<b>203</b> 8
<b>Wall Thickness</b>	<b>mm</b> Inch	<b>4.2</b> 0.17
<b>Default Number of Straps</b>	-	<b>2</b>
<b>Maximum Pump Setting</b>	<b>m</b> ft	<b>150</b> 500
<b>Burst Pressure</b>	<b>bar</b> psi	<b>42</b> 610
<b>Maximum Operating Pressure<sup>2</sup></b>	<b>bar</b> psi	<b>21</b> 305
<b>Effective Tensile Strength</b>	<b>kg</b> lbs	<b>27700</b> 61000
<b>Maximum Continuous End Load</b>	<b>kg</b> lbs	<b>13800</b> 30500
<b>Weight (hose only)</b>	<b>kg/m</b> lbs/ft	<b>3.2</b> 2.15
<b>Weight (standard coupling)</b>	<b>kg</b> lbs	<b>26</b> 57
<b>Mandals Coupling Outer Diameter</b>	<b>mm</b> Inch	<b>250</b> 9.8
<b>Maximum Extension under Load Conditions</b>	%	<b>•5</b>
<b>Maximum Diameter Swell</b>	%	<b>•10</b>
<b>Maximum Diameter Temperature</b>	<b>°C</b> <b>°F</b>	<b>- 40 to + 50.</b> (with intermittent use up to 80)
<b>Water Quality</b>	<b>pH</b>	<b>4 - 9</b> (Below 30 °C / 86 °F)
<b>Velocity at Maximum Flow</b>	<b>m/s</b> ft/s	<b>4.9</b> 16
<b>Velocity Flow Rate at Maximum Pump Setting</b>	<b>L/s</b> gpm	<b>175</b> 2774

**Note:** <sup>1</sup>Tolerance range based on ISO1307 Type C. <sup>2</sup>Values are for hose only; allowed working pressure can not exceed coupling pressure rating. For questions about chemical resistance please check [mandals.com/support](http://mandals.com/support).