Boreman 300
Datasheet

mandals since 1775
A Michelin Group Company

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Boreman 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. Based on our Wellman riser, which has been in international markets for over 30 years and operating in numerous industrial locations, Boreman 300 has been developed specifically for the mining and desalination industries.

The Boreman 300 is comparable to Wellman 300, but without potable water approvals and designed for specific applications.

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

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.

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: Black (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.

Boreman 300

Article Number	-	BMS051	BMS076	BMS102	BMS127	BMS152
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	60 870
Maximum Operating Pressure	bar psi	31 450	31 450	31 450	29 420	30 435
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				+20
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.