mandals Wellman

Mandals Wellman is used as riser main in wells and has drinking water approval.

Mandals Wellman is made from extruded thermoplastic polyether based polyurethane (TPU) with excellent wear & tear properties. The reinforcement is made from circular woven filament polyester yarn. The "extrusion through the weave" production method gives a very strong bonding between cover and lining as well as firmly encapsulating the woven polyester.

The hose has the following certifications:

- WRAS approved to BS 6920, UK
- KTW-DVGW approval, Germany
- W270 approval, Germany
- NSF 61 listing, USA

Mandals Wellman is an important part of a system where also the coupling is central. The hose is mainly used in a borehole with a submersible pump mounted at the end of the hose. This is possible due to the high tensile strength of the hose. The use of such pumps is the reason why there is an incorporated strap at the outside of the hose, so that the electrical cables for the pump can be strapped to the hose.

Mandals Wellman can operate in a temperature range from -50°C to +75°C. It can withstand intermittent use up to + 80°C.

Maximum length extension under recommended operation is 2 % and maximum diameter swell under recommended operation is 15 %.

Standard lengths up to 200 meters. Longer lengths can be made on request.

Mandals Wellman

Inner Diameter		Wall Thickness		Weight*		Burst Pressure		Max.Well Depth		Max. continuous end load**	
inch	mm	inch	mm	lbs/ft	kg/m	psi	bar	ft	m	lbs	kg
1/4	32 +1,5	0,07	l ,8	0,51	0,23	870	60	820	250	I 550	700
2	5 I +2,0	0,10	2,6	1,15	0,52	870	60	820	250	3 750	700
3	76 +2,0	0,12	3,1	2,01	0,91	870	60	820	250	6 600	3 000
4	102 +2,5	0,14	3,5	2,76	I,25	870	60	820	250	12 100	5 500
5	127 +2,5	0,15	3,7	4,14	I ,88	870	60	820	250	15 900	7 200
6	I 52 +3,0	0,16	4,0	5,07	2,30	870	60	820	250	19 850	9 000

To obtain maximum lifetime for the hose, it is recommended that actual Working Pressure does not exceed 30 bar / 435 psi at the submerged pump head.

* Dry hose without any attachments.

** Including weight of water, pump, power cable, coupling, attachments etc.

The use of Mandals Wellman

The hose is part of a total system.

The coupling at the bottom is designed by Mandals and is therefore optimized for this use. The construction makes it easy to use and ensures that the hose is coupled properly.

Mandals can supply the couplings together with the hose.

Our long experience and knowledge have been central when constructing the Wellman hose.

- The weave is constructed to meet the necessary demands for such hoses and it does!
- The loops make sure that the electrical cables can be easily strapped to the hose.
- And; the hose is approved for potable water!

The submersible pump is also an important part of the system, but this part is not sold by Mandals. We can advice if you need information in this area.

Advantages / important issues regarding use of the Wellman system:

- Easy to handle. The hose is far easier and more flexible to handle than pipes made by steel, fibreglass or poly/PVC pipes. This benefit also counts when it comes to packing, transport etc.
- Simple installation and retrieval.
- Low risk of damage at the equipment such as cables and the submersible pump.
- Very good hydraulic characteristics. Some diameter swell is good for the capacity; gives less friction and more flow.
- No corrosion.
- Simple maintenance.



Riser main

Potable/drinking water