



Mandals Aquaman L is designed for the effective rehabilitation of drinking water mains in low pressure systems. The liner is drinking water approved and is designed to have a lifespan of more than 50 years.

With Mandals Aquaman L we offer a more sustainable solution for the rehabilitation of old pipelines with minimal disruption to traffic, pedestrians, and the environment in general, with an improved CO₂ footprint and HSE performance. The liner is tested and approved for use with potable water, and it is flexible in terms of the diameter variation of the original pipe, effortlessly passing bends even at long section lengths. Aquaman L is similar to the higher pressure Aquaman M.



AS/NZS
4020

KTW-BWGL



Installation

Mandals supplies the leak-proof tested liner already tape-wrapped in a "U"-shape. A regular cleaning procedure, including CCTV inspection, is required of the host pipe prior to installation.

The liner is pulled through the host pipe by using a winch. It can be installed in pipes with bends up to 45° (R/D ≥ 5)¹. No steaming is needed to cure the liner on-site. Only a small amount of pressure is required to break the tape. Thereafter the liner is re-coupled and connected again to the existing infrastructure and the system is ready to be put back into operation.

Features

- Resistant to a wide range of chemicals.
- Full diameter recovery after pressure release.
- Excellent hydrolysis and fungus resistance.
- Outstanding wear and tear properties.
- Accelerated aging tests performed at a chlorine dosage up to 4ppm indicate a Service Lifetime of more than 50 years².

Construction

- Mandals Aquaman L is a semi-structural, stand-alone liner which will absorb all internal pressure while in operation.
- The "extrusion through the weave" production technology gives excellent bonding between thermoplastic polyether-based polyurethane cover and lining as well as firmly encapsulating the circular woven polyester reinforcement.

Properties

- Color options: Blue (standard).
- Lengths up to 600m (≤ 6") and 400m (> 6")
- Max. recommended operational temperature is +23° (+73°F) at a 4-9 pH range.
- NSF/ANSI/CAN61, KTW-BWGL, AS/NZS 4020, and DVGW W270 drinking water certified.

Aquaman L

Article Number	Nominal Pipe Size DN		Inner Diameter ³		Wall Thickness		Nominal Weight		Maximum Working Pressure ⁴		Burst Pressure		Actual Total Tensile Strength	
	inch	mm	inch	mm	inch	mm	lbs/ft	kg/m	psi	bar	psi	bar	X1000 lbs	X1000 kg
AQL020	3/4	20	0.59	15	0.05	1.2	0.05	0.07	260	18	650	45	1.2	0.5
AQL025	1	25	0.80	20	0.05	1.2	0.06	0.09	260	18	650	45	1.6	0.7
AQL065	2 1/2	65	2.00	51	0.11	2.8	0.33	0.52	320	22	800	55	6.4	2.9
AQL080	3	80	2.50	65	0.12	3.0	0.41	0.70	260	18	650	45	8.6	3.9
AQL100	4	100	3.00	76	0.13	3.3	0.57	0.85	260	18	650	45	11.9	5.4
AQL125	5	125	4.00	102	0.13	3.4	0.85	1.28	245	17	610	42	16.1	7.3
AQL150	6	150	4.50	113	0.14	3.6	1.03	1.54	245	17	610	42	22.9	10.3
AQL200	8	200	6.10	154	0.16	4.0	1.63	2.45	245	17	610	42	45.9	20.7
AQL250	10	250	7.60	193	0.17	4.2	2.09	3.14	245	17	610	42	57.5	25.9
AQL300	12	300	8.90	227	0.17	4.4	2.47	3.70	200	14	490	35	66.4	29.9
AQL350	14	350	10.70	274	0.18	4.6	3.22	4.80	175	12	435	30	78.8	35.5

Note:

¹Will depend on Operating Pressure and the R/D ratio. A higher R/D and/or Operating Pressure can allow a higher bend angle.

²Service Lifetime will depend on important factors such as proper and correct installation, condition of the existing pipe, dosage of and type of disinfectants used.

³Tolerance range based on ISO1307 Type C. ⁴Values are for hose only; allowed working pressure can not exceed coupling pressure rating. For questions about chemical resistance please check mandals.com/support.