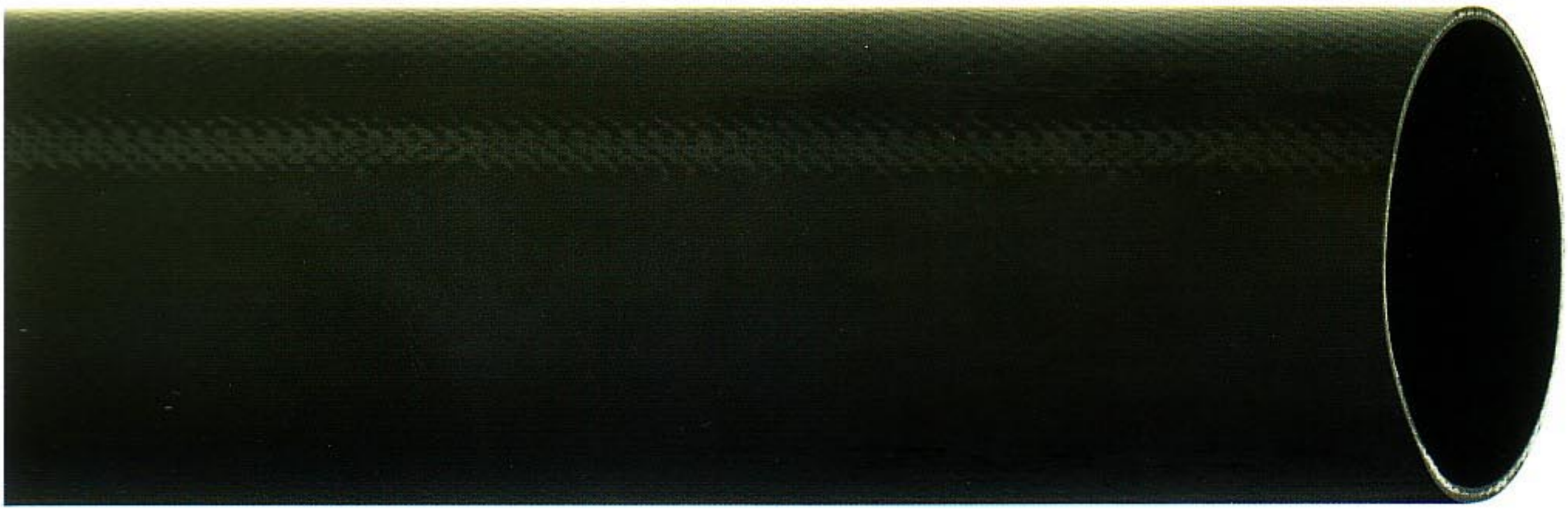
Ultraman



Mandals Ultraman is an extremely hardwearing, multi purpose industrial hose for use in abrasive environments.

Mandals Ultraman 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 high resistance against commonly used chemicals and has excellent resistance to UV radiation, hydrolysis and fungus degradation. The abrasion resistance of the TPU is one of the highest available, making the hose ideal for use in rugged terrain or in applications where the strength and abrasion resistance either for the cover or lining is essential.

The circular woven filament polyester reinforcement ensures very high tensile strength combined with maximum 2% extension in length at recommended working pressure. This prevents "snaking" of the hose when pressurized. Similarly, the interlocking weave gives unequalled high pressure ratings.

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

Standard lengths up to 200 meters. For diameter lower than 6 inches, longer lengths on request.

Mandals Ultraman

Inches	Inner Diameter	Wall Thickness	Weight/Meter	Burst Pressure	Tensile strength*
2	51,0 mm+2,0	2,6 mm	0,51kg	7,0 MPa	5 370 kg
2 1/2	65,0 mm+2,0	2,6 mm	0,64 kg	5,0 MPa	6 530 kg
3	76,0 mm+2,0	2,8 mm	0,75 kg	4,8 MPa	7 890 kg
3 1/2	90,0 mm+2,0	2,9 mm	0,95 kg	4,0 MPa	9 100 kg
4	102,0 mm+2,5	3,0 mm	1,10 kg	3,6 MPa	10 100 kg
4 1/2	114,0 mm+2,5	3,0 mm	1,30 kg	3,4 MPa	10 800 kg
5	127,0 mm+2,5	3,0 mm	1,48 kg	3,0 MPa	12 000 kg
6	152,0 mm+3,0	3,0 mm	1,65 kg	3,2 MPa	14 900 kg
8	203,0 mm+3,0	3,0 mm	2,20 kg	2,6 MPa	18 880 kg
10	254,0 mm+4,0	3,2 mm	2,85 kg	2,1 MPa	23 680 kg
12	305,0 mm+5,0	3,3 mm	3,50 kg	1,5 MPa	38 200 kg

To obtain maximum lifetime for the hose, it is recommended that actual Working Pressure and Working Tensile Stress do not exceed 1/3 of the above listed values.
* Total theorethical longitudinal strength.