

# Guardman



Mandals Guardman is a high quality fire hose made from a blend of nitrile rubber and PVC.

Mandals Guardman is a fully extruded hose where the rubber blend has been extruded through the circular woven polyester jacket. The inner and outer cover is directly connected through the openings in the woven polyester and the result is exceptionally good bonding and no delamination of the inner and outer cover.

After extrusion, the hose is vulcanized and hydrotested. The hose is designed to absorb the pressure increase by swelling rather than stretching. This means increased diameter under pressure and reduced friction loss.

The special rubber blend renders Mandals Guardman light and pliable with no adverse effects on operability all the way from +70°C down to -30°C. Intermittent use up to +100°C. The rubber blend has added UV barrier to prevent damage to the rubber from UV radiation. It can tolerate most low aromatic oil products as well as commonly used chemicals.

Mandals Guardman has been chosen by the most demanding of customers over the years. Offshore oil rigs and installations in the Norwegian North Sea sector has standardized on this firehose. So has also international shipping - a proof of quality in the most demanding of markets. Mandals Guardman has been approved by a large number of national authorities and has obtained the maritime "wheel - mark" certification.

Mandals Guardman is tested in accordance with:

- NS 4016 - 4018
- SS 2840
- DIN 14811
- NEN 2242
- BS 6391 type 3

Standard lengths:  
 15 - 20 - 25 - 30 - 60 meters  
 50 - 75 - 100 - 200 ft.  
 Lengths up to 200 meters on request.

Mandals Guardman

Inches	Inner Diameter	Wall thickness	Weight/Meter	Burst pressure	Coil dia. (25m)
1	25,4 mm+1,6	2,5 mm	0,275 kg	10,0 MPa	0,45 meter
1 1/2	38,0 mm+1,6	2,2 mm	0,300 kg	5,5 MPa	0,45 meter
	42,0 mm +1,6	2,2 mm	0,310 kg	5,0 MPa	0,45 meter
1 3/4	45,0 mm +1,6	2,2 mm	0,360 kg	5,0 MPa	0,45 meter
2	51,0 mm+2,0	2,2 mm	0,380 kg	4,5 MPa	0,45 meter
2 1/2	65,0 mm+2,0	2,2 mm	0,530 kg	4,5 MPa	0,45 meter
3	76,0 mm+2,0	2,6 mm	0,700 kg	4,0 MPa	0,45 meter
3 1/2	90,0 mm+2,0	2,8 mm	1,000 kg	4,0 MPa	0,45 meter
4	102,0 mm+2,5	2,7 mm	1,050 kg	3,5 MPa	0,48 meter
6 *	150,0 mm+3,0	3,0 mm	1,700 kg	3,6 MPa	0,50 meter

To obtain maximum lifetime for the hose, it is recommended that actual Working Pressure does not exceed 1/3 of the above listed values.

\* Redesigned to NEN standard

Inner Diameter	Wall Thickness	Weight/Ft.	Burst Pressure	Coil Dia. pr 100 ft.
3/4" + 1/16"	1/11"	0,14 lbs	1500 psi	1' 7 2/3"
1" + 1/16"	1/10"	0,18 lbs	1500 psi	1' 7 2/3"
1 1/2" + 1/16"	1/12"	0,20 lbs	800 psi	1' 7 2/3"
1 2/3" + 1/16"	1/12"	0,20 lbs	725 psi	1' 7 2/3"
1 3/4" + 1,16"	1/12"	0,24 lbs	725 psi	1' 7 2/3"
2" + 1/13"	1/12"	0,25 lbs	650 psi	1' 7 2/3"
2 1/2" + 1/13"	1/12"	0,35 lbs	650 psi	1' 7 2/3"
3" + 1/13"	1/10"	0,47 lbs	580 psi	1' 7 2/3"

<b>3 1/2" + 1/13"</b>	1/9"	0,67 lbs	580 psi	1' 7 2/3"
<b>4" + 1/10"</b>	1/9"	0,70 lbs	500 psi	1' 9"
<b>6" + 1/8"</b>	1/8"	1,13 lbs	525 psi	1' 9"