



Mercedes Textiles Limited

"Flowing with Technology"

Boostlite®

Reel Hose

A superior heavy-duty fire hose

Burst Pressure greater than 2000 PSIG / 13,775 kPa

Superior Performance & Durability

5838 Cypihot
Saint Laurent, Quebec
Canada, H4S 1Y5
Tel : 514-335-4337
Fax : 514-335-9633

LIGHTWEIGHT 3/4" (19mm), 1" (25mm), 1 1/2" (38mm) DIAMETER REEL HOSE



Applications

- ▶ Booster Reel Hose
- ▶ Range Control Attack Hose
- ▶ Wildland Brush Fire Truck Attack Hose

Features and Benefits

- ▶ Extremely kink resistant, even at low pressure.
- ▶ Bend radius is less than 3.5" (8.9 cm) for a 3/4 inch (19mm) hose, 4.5" (11.4 cm) for a 1 inch (25mm) hose, and 9" (23 cm) for a 1 1/2 inch (38mm) hose.
- ▶ Non-Collapsible and fits standard Hannay hose reels.
- ▶ Heavy duty spun yarn construction.
- ▶ Our Patented Mertex® lining process produces an amazingly thin but smooth inner waterway, yielding an extremely low friction loss for maximum flow.
- ▶ Standard Strobe Yellow Permatek™ HP treatment for greater visibility & abrasion resistance and greatly reduces moisture absorption through the jacket.
- ▶ Resistant to most chemicals, petrol products, ozone & U.V. exposure, hydrolysis, and rot & mildew.
- ▶ Temperature range of -60° F to 140° F (- 50° C to 60° C).
- ▶ Available with Field Repairable Shank Coupling, Field Repairable Shank splice, and Factory Installed Compression Splice.

Patented Mertex® Lining Process

- ▶ Welds the lining directly to the textile while the hose is being woven.
- ▶ This allows the use of high strength Filament Polyester yarn to be used, due to the Mertex® process superior liner adhesion.
- ▶ Locks fibers together for greater strength while still allowing for a high flexibility.
- ▶ Creates a virtually inseparable bond without the use of adhesives. Huge advantage over competitors.
- ▶ Yields an extremely low friction (pressure) loss because the Mertex® process fills the corrugations of the weave, which creates an amazingly thin and smooth waterway.
- ▶ Mertex® lined hose produces lower elongation under pressure. This means less pull back when water is suddenly shut-off, resulting in a safer hose to work with.
- ▶ Permits manufacturing to special lengths. Consult factory for details.
- ▶ Mertex® Patented process >> Canadian patent # 1,295,104 / U.S. patent # 4,738,735 / plus 15 other countries

Permatek™ Treatment

- ▶ Locks fibers together for greater strength, reduces water pickup and absorption.
- ▶ Provides protection against abrasion.
- ▶ Provides resistance to Petroleum products and Ozone.
- ▶ Provides for shorter drying times.



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How to Specify Boostlite®

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Scope:

- ▶ Hose manufactured to this specification shall be of superior quality and workmanship. This non-collapsible rigid reel hose shall feature a spun polyester jacket with yellow Permatek® treatment. It shall be lined by the Mertex® method using a premium quality polyurethane yielding low friction loss, easy handling, and small bend radius.

Construction and Features:

- ▶ The hose shall be of single jacket construction.
- ▶ The jacket shall be a tight twill weave made with 100% high tenacity polyester spun yarn to assure maximum strength to weight ratio, and excellent abrasion resistance.
- ▶ The hose outer jacket shall have a minimum filler yarns of 14.1 per inch (555 per Meter)
- ▶ The hose shall be resistant to most chemicals and petrol products, rot & mildew, hydrolysis, and resist deterioration due to exposure to UV-rays and ozone.
- ▶ The average weight of an uncoupled 3/4" (19mm) hose shall not exceed 15 lb (6.8 Kg), uncoupled 1" (25mm) hose shall not exceed 20 lb (9.1 Kg), per 100', and uncoupled 1 1/2" (38mm) hose shall not exceed 33 lb (15 Kg), per 100' (30.48M).
- ▶ The hose shall be available with Field Repairable Shank Coupling, Field Repairable Shank splice, and Factory Installed Compression Splice.

Performance:

- ▶ The hose shall have a Burst Pressure per the table below.
- ▶ The hose shall have a maximum flow with minimum friction loss.
- ▶ The hose jacket shall be abrasion resistant, highly flexible, and very snag resistant.
- ▶ There shall, be no defects, dirt, knots, lumps or other irregularities affecting the performance of the hose.
- ▶ The hose must resist kinking and remain flexible in a temperature range of -60° F to 140° F (- 50° C to 60° C).
- ▶ The hose shall have a bend radius of no more than 3.5" (8.9 cm) for a 3/4 inch (19mm) hose, 4.5" (11.4 cm) for a 1 inch (25mm) hose, and 9" (23 cm) for a 1 1/2 inch (38mm) hose.

Lining:

- ▶ The hose lining shall have excellent resistance to most chemicals, petrol products, ozone and U.V.
- ▶ The hose lining shall be capable of being approved for potable water, when so ordered.
- ▶ The thermoplastic lining material used for this specification shall have a flawless record in the fire hose industry.
- ▶ The hose jacket shall be lined by the patented Mertex® method without the use of adhesives or backing material, to lock the fibers in place. The lining material in its molten state shall fill the corrugations of the weave fusing to every warp and filler thread and provide a very smooth and low friction waterway. No adhesive or backing material shall be used to bond the lining and it shall yield maximum flow with minimum friction loss. An inner hose manufactured by inverting an exterior coated hose shall not be considered as meeting this specification. Hose manufactured with the use of adhesives or backing for bonding the liner, or hose made with rubber liners shall not be considered as meeting this specification.

Treatment:

- ▶ The jacket shall be Permatek® treated for greater abrasion resistance, improved visibility & reduced moisture pick-up.

Standards:

- ▶ Fire hose manufactured to this specification shall meet & exceed all performance requirements of NFPA 1961, Underwriter's Laboratories & Factory Mutual.

Technical Chart

Hose Spec	Trade Size		Bowl Size		Wt. 100' (30.5M) Un-coupled		Coil Diameter 100' (30.5M)		Service Pressure		Proof Pressure		Burst PSI	Pressure kPa
	In.	mm	In.	mm	Lbs	Kg	In.	Cm.	PSI	kPa	PSI	kPa		
799	0.75	19	1 1/16	27	14.9	6.8	15.3	38.9	400	2 750	800	5 500	2 000	13 775
800	1.00	25	1 9/32	33	19.3	8.8	18.0	45.7	400	2 750	800	5 500	2 000	13 775
801	1.50	38	1 13/16	46	32.0	14.5	25.0	63.5	400	2 750	800	5 500	1 800	12 400