



Product Highlights

- Operating temperature
-70°C to +200°C
(-94°F to +392°F)
Class H
- Grade B (4,000V)
- Meets VW-1 (sizes up to 1")
- FAR Part 25
- DMS 2109
- NEMA 5
- Expands 25% or more in diameter without damage
- Available in blue/gray color only

Ben-Har™ 1151-FRB Grade B is a rugged, flame-retardant, silicone rubber coated sleeving that provides excellent cut-through and abrasion protection for wiring systems in applications with temperatures ranging from -70°C to +200°C. Because the specially formulated silicone rubber is extrusion coated over the non-combustible fiberglass braid, it results in a reinforced sleeving that is superior to ordinary dip-coated sleeving and unreinforced rubber or plastic tubing.

The improved flame-retardant characteristics mean that 1151-FRB Grade B is difficult to ignite, has a very slow rate of burn travel and self-extinguishes promptly - even after bottom ignition of a vertical specimen. 1151-FRB Grade B is used to separate/isolate/insulate critical circuits and conductors, as a thermal barrier for limited periods, as identification marking, or as a wire bundling mechanism. It is ideal for protecting wiring systems in modern jet aircraft against abrasion, impact, harmful drip, splash or spray. Qualified by major U.S. airframe manufacturers, 1151-FRB Grade B meets all of the performance requirements of DMS 2109.

Ben-Har 1151-FRB Grade B is resistant to hydraulic fluids (including Skydrol LD), jet fuels, inorganic acids, and alkalis. Some swelling occurs in aromatic hydrocarbons and chlorinated solvents.



Our manufacturing sites are certified ISO 9001, IATF 16949, or AS/EN 9100, ISO 14001 and ISO 45001 (Selected Sites)

Performance Data – Ben-Har™ 1151-FRB Grade B

Property	Test Method	Result
Operating temperature	MIL-I-3190/6	-70°C to +200°C (-94°F to +392°F)
Hardness, durometer	ASTM D240, Shore A	50 +/- 5
Fungus Resistance	MIL-I-631	No Growth
Smoke Density	ASTM E-662 (4 minutes)	D _s < 70
Dielectric Breakdown	ASTM D149	4 kV Minimum
Flammability	FAR Part 25 (12 seconds, vertical)	Pass

All numeric performance data shows average or typical values. Please consult your sales representative for product drawings, test reports and OEM approvals.

Product Specifications

Commercial Part Number	Recommended Application Range mm (in)		Maximum Weight g/m (lb/ft)	Standard Packaging m (ft)
	Min Ø	Max Ø		
Ben-Har 1151-FR B Grade B 2.4-6	2.3 (0.091)	2.6 (0.101)	9.8 (0.0066)	305 (1,000)
Ben-Har 1151-FR B Grade B 3.4-6	3.2 (0.125)	3.6 (0.140)	17.9 (0.0120)	305 (1,000)
Ben-Har 1151-FR B Grade B 4-6	3.9 (0.152)	4.1 (0.161)	21.7 (0.0146)	305 (1,000)
Ben-Har 1151-FR B Grade B 4.2-6	4.1 (0.162)	4.5 (0.178)	22.3 (0.015)	152 (500)
Ben-Har 1151-FR B Grade B 4.7-6	4.6 (0.182)	5.0 (0.198)	22.3 (0.015)	152 (500)
Ben-Har 1151-FR B Grade B 5.3-6	5.2 (0.204)	5.7 (0.224)	25.3 (0.017)	152 (500)
Ben-Har 1151-FR B Grade B 6.7-6	6.4 (0.250)	6.9 (0.270)	34.2 (0.023)	76 (250)
Ben-Har 1151-FR B Grade B 8-6	7.9 (0.312)	8.3 (0.328)	53.6 (0.036)	76 (250)
Ben-Har 1151-FR B Grade B 10-6	9.5 (0.375)	10.1 (0.397)	55.1 (0.037)	76 (250)
Ben-Har 1151-FR B Grade B 13-6	12.7 (0.500)	13.3 (0.524)	77.4 (0.052)	38 (125)
Ben-Har 1151-FR B Grade B 16-6	15.9 (0.625)	16.6 (0.655)	135.5 (0.091)	15 (50)
Ben-Har 1151-FR B Grade B 19-6	19.1 (0.750)	20.0 (0.786)	137.0 (0.092)	15 (50)
Ben-Har 1151-FR B Grade B 25-6	25.4 (1.000)	26.3 (1.036)	157.8 (0.106)	* 15.5 (51)
Ben-Har 1151-FR B Grade B 32-6	31.8 (1.250)	32.8 (1.290)	204.0 (0.137)	15.5 (51)
Ben-Har 1151-FR B Grade B 38-6	38.1 (1.500)	39.0 (1.536)	208.5 (0.14)	15.5 (51)
Ben-Har 1151-FR B Grade B 51-6	50.8 (2.000)	51.8 (2.040)	297.8 (0.20)	15.5 (51)
Ben-Har 1151-FR B Grade B 76-6	76.2 (3.000)	78.1 (3.075)	685.0 (0.46)	15.5 (51)

* NOTE: Sizes 25 mm (1") and above are supplied in 3 ft. lengths.

Part Numbering System

Example	Product Name	Size	Color	Quantity
	Ben-Har 1151-FRB Grade B	19	6 (blue/gray)	15m (50 ft)



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