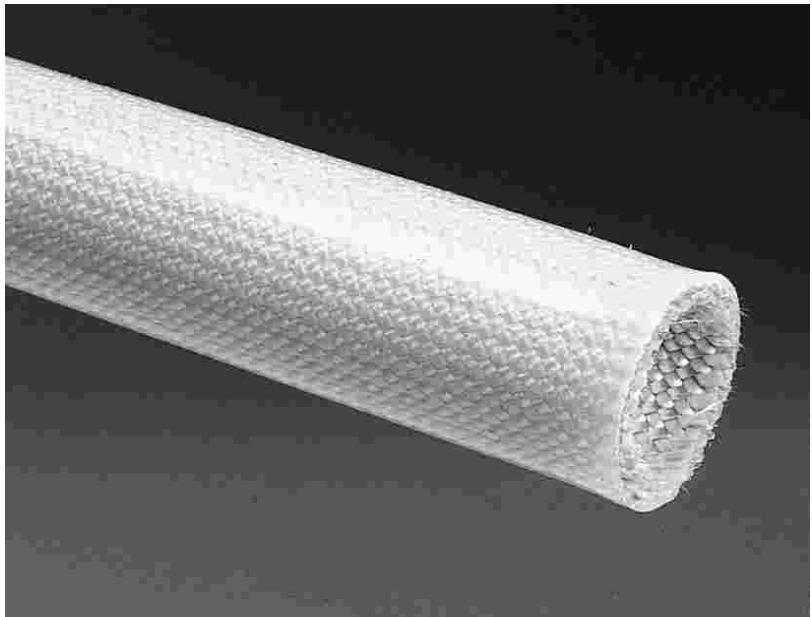


## Product Highlights

- Grade A (7,000 V)
- Rated to 200°C Class H
- UL Recognized Component
- CSA File #LR58703
- MIL-I-3190/6 - QPL
- NEMA 5
- Applicable Documents  
ASTM D-350  
ASTM D-372  
UL 1441  
NEMA TF-1
- Excellent low temperature flexibility
- Available in sizes AWG #24 - 1" I.D.
- Available in amber/transparent, white, and black



# Ben-Har™ 1151-XL-200 Grade A Silicone Rubber Coated Fiberglass Sleeving

Bentley-Harris® Ben-Har 1151-XL-200 is a reinforced silicone rubber coated fiberglass sleeving with outstanding mechanical and electrical properties. The specially formulated extrusion coating is highly resistant to cut-through and abrasion, making it ideal for heavy duty applications. It exhibits high tear strength, good push back and expandability, excellent flex life and fatigue resistance. The sleeving is rated for 200°C service life (Class H.)

Ben-Har 1151-XL-200 Grade A is resistant to inorganic acids, alkalis, and aliphatic hydrocarbons. Slight swelling may be produced by aromatic solvents and chlorinated hydrocarbons. Ketones and esters have a softening effect. Ben-Har shows no discernible effects when exposed to 10 megarads of radiation.

Ben-Har 1151-XL-200 Grade A is designed to be used where superior mechanical performance and high dielectric strength are needed, such as transformer lead protection, motor coil leads, component isolation and power supply wiring.

**BentleyHarris®**  
Protection Products

# Performance Data – Ben-Har™ 1151-XL-200 Grade A

Property	Result
Hardness, durometer A	70 +/- 5
Tensile strength	1200 psi
Elongation	600%
Tear resistance, die B	225 p pi
Tensile modulus at 100% elongation	280 psi
Dielectric constant (100 Hz - 100 kHz)	3.07
Dissipation factor (100 Hz)	0.0002
Dissipation factor (10,000 Hz)	0.00016
Volume resistivity	2.06 x 10 <sup>16</sup> ohm-cm
Dielectric strength	510 volts / mil

°C	°F
538	1000
527	980
516	960
504	940
493	920
482	900
471	880
460	860
449	840
438	820
427	800
416	780
404	760
393	740
382	720
371	700
360	680
349	660
338	640
327	620
316	600
304	580
293	560
282	540
271	520
260	500
249	480
238	460
227	440
216	420
204	400
193	380
182	360
171	340
160	320
149	300
138	280
127	260
116	240
104	220
99	210
88	190
77	170
66	150
54	130
43	110
38	100
35	95
30	86
25	77
20	68
15	59
10	50
5	41
0	32
-5	23
-10	14
-15	5
-18	0
-20	-4
-40	-40
-60	-76
-70	-94

## Product Specifications

NEMA Size	Nominal Diameter (inches)	Nominal Diameter (mm)	Bentley-Harris Part Number	Maximum Diameter (inches)	Minimum Diameter (inches)
24	0.022	0.56	33001924XX	0.027	0.020
22	0.027	0.69	33001922XX	0.032	0.025
20	0.034	0.86	33001920XX	0.039	0.032
18	0.042	1.07	33001918XX	0.049	0.040
16	0.053	1.35	33001916XX	0.061	0.051
14	0.066	1.68	33001914XX	0.072	0.064
12	0.085	2.16	33001912XX	0.089	0.081
10	0.106	2.69	33001910XX	0.112	0.102
9	0.118	3.00	33001909XX	0.124	0.114
8	0.133	3.38	33001908XX	0.141	0.129
7	0.148	3.76	33001907XX	0.158	0.144
6	0.166	4.22	33001906XX	0.178	0.162
5	0.186	4.72	33001905XX	0.198	0.182
4	0.208	5.28	33001904XX	0.224	0.204
3	0.234	5.94	33001903XX	0.249	0.229
2	0.263	6.68	33001902XX	0.278	0.258
1	0.294	7.47	33001901XX	0.311	0.289
0	0.330	8.38	33001900XX	0.347	0.325
3/8"	0.375	9.52	33001010XX	0.399	0.375
7/16"	0.438	11.12	33001011XX	0.462	0.438
1/2"	0.500	12.70	33001013XX	0.524	0.500
5/8"	0.625	15.87	33001016XX	0.655	.0625
3/4"	0.750	19.05	33001019XX	0.786	0.750
7/8"	0.875	22.22	33001022XX	0.911	0.875
1"	1.000	25.40	33001025XX	1.036	1.000

XX = Color Code

02 = White

03 = Black

12 = Amber/Transparent



Systems Protection Group

241 Welsh Pool Road  
Exton, PA 19341

Toll-free: 800-926-2472

Tel: (610) 363-2600

Fax: (610) 524-9086

The information and illustrations given herein are believed to be reliable. Federal-Mogul makes no warranties as to their accuracy or completeness and disclaims any liability in connection with their use. Federal-Mogul's only obligations are those in the standard terms of sale for this product and Federal-Mogul will not be liable for any consequential or other damages arising out of the use or misuse of this product. Users should make their own evaluation to determine the suitability of the product for specific applications.