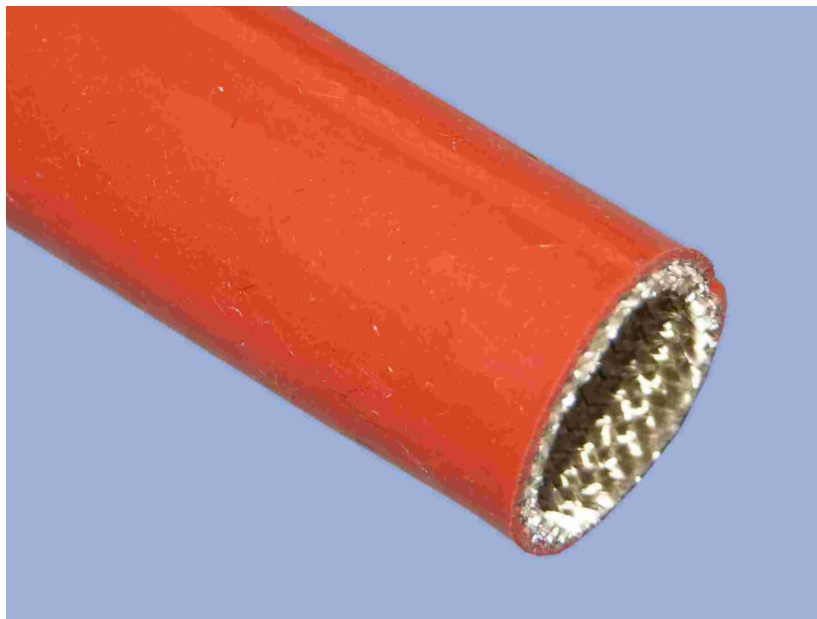


Product Highlights

- Rated to 200°C Class H
- Grade A (7,000V)
- VW-1 sizes up to 2"
- UL Recognized Component for sizes up to 2"
- 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 AWG sizes #24 through 3" I.D.
- Available in red iron oxide, white, and black



Ben-Har™ 1151-FR Grade A

Silicone Rubber Coated Fiberglass Sleeving

Bentley-Harris® Ben-Har 1151-FR sleeving is an extremely flexible silicone rubber coated fiberglass sleeving with outstanding flame retardant properties. It is a UL Recognized Component, meeting VW-1 flammability requirements, recommended for Class H (200°C) systems. The special combination of a smooth fiberglass bore and flexible, elastomeric silicone coating allows this sleeving to expand and conform over larger dimensions, assuring a snug fit, permanent placement, and elastic selffitting on components or terminals. The excellent bond of rubber coating to the braid insures against damage from rough assembly handling.

Ben-Har 1151-FR is resistant to acids, alkalis, organic solvents, and aliphatic hydrocarbons. Slight swelling is produced by aromatic solvents and chlorinated hydrocarbons. Ketones and esters may cause deterioration. Ben-Har 1151-FR is compatible with common Class H insulating varnishes.

Ben-Har 1151-FR is commonly used in appliance assemblies, wire harnesses, transformer leads, power supplies, and motor coil and heater leads. This product can be obtained in colors for identification and appearance.

BentleyHarris®
Protection Products

Performance Data – Ben-Har™ 1151-FR Grade A

°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

Property	Result
Hardness, durometer A	35 +/- 5
Tensile strength	875 psi
Elongation	500%
Tear resistance, die B	70 p pi
Tensile modulus at 100% elongation	150 psi
Dielectric constant (100 Hz - 100 kHz)	3.10
Dissipation factor (100 Hz)	0.00320
Dissipation factor (10,000 Hz)	0.00016
Volume resistivity	2.48 x 10 ¹⁴ ohm-cm
Dielectric strength	485 volts / mil

* UL Recognized Component for sizes up to 2"

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	32001924XX	0.027	0.020
22	0.027	0.69	32001922XX	0.032	0.025
20	0.034	0.86	32001920XX	0.039	0.032
18	0.042	1.07	32001918XX	0.049	0.040
16	0.053	1.35	32001916XX	0.061	0.051
14	0.066	1.68	32001914XX	0.072	0.064
12	0.085	2.16	32001912XX	0.089	0.081
10	0.106	2.69	32001910XX	0.112	0.102
9	0.118	2.10	32001909XX	0.124	0.114
8	0.133	3.38	32001908XX	0.141	0.129
7	0.148	3.76	32001907XX	0.158	0.144
6	0.166	4.22	32001906XX	0.178	0.162
5	0.186	4.72	32001905XX	0.198	0.182
4	0.208	5.28	32001904XX	0.224	0.204
3	0.234	5.94	32001903XX	0.249	0.229
2	0.263	6.68	32001902XX	0.278	0.258
1	0.294	7.47	32001901XX	0.311	0.289
0	0.330	8.38	32001900XX	0.347	0.325
3/8"	0.375	9.52	32001010XX	0.399	0.375
7/16"	0.438	11.12	32001011XX	0.462	0.438
1/2"	0.500	12.70	32001013XX	0.524	0.500
5/8"	0.625	15.87	32001016XX	0.655	.0625
3/4"	0.750	19.05	32001019XX	0.786	0.750
7/8"	0.875	22.22	32001022XX	0.911	0.875
1"	1.000	25.40	32001025XX	1.036	1.000
1 1/4"	1.250	31.75	32001032XX		
1 1/2"	1.500	38.10	32001038XX		
*2"	2.000	50.80	32001051XX		

XX = Color Code 02 = White 03 = Black 14 = Red iron oxide

* Size not available in white

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