

Product Highlights

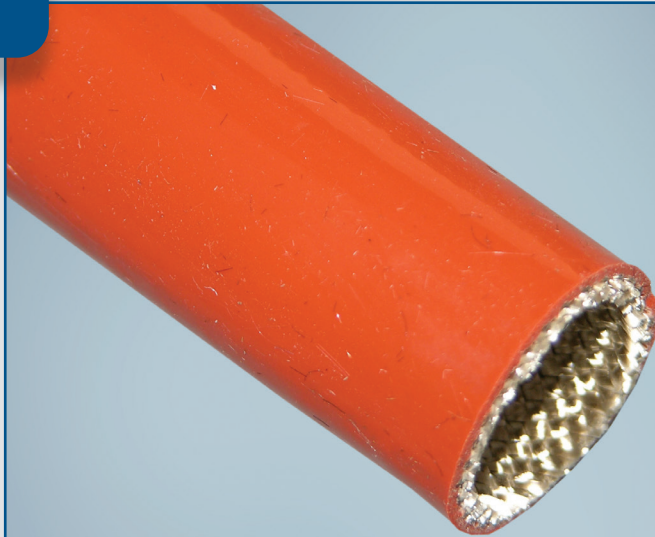
- Operating temperature from -60°C to +220°C (-76°F to +428°F) (Class H)
- Expansion Ratio: 1 : 1.3
- Flame resistant
- EN 45545-2
- ASTM E-162
ASTM E-662
BSS 7239
SMP 800-C
- Zero Halogen
- 4 kV or 10kV dielectric strength

Installation Features

- Very flexible
- Local reinforcement of electrical insulation
- Electrical Cabinet
- Protection of ground shunts



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



GES is a braided fiberglass sleeve with a silicone rubber coating designed to provide electrical insulation. The thickness of the silicone coating determines the dielectric strength, which ranges from 4 to 10 kV.

The high flexibility of GES allows for a relative expansion ratio of approximately 30%. This product provides electrical insulation for a wide range of industries and applications, including winding, engines and transformer outlets.

Performance Data – GES

Property	Test Method	Result
Operating Temperature	MIL standard 1003190C (class +220°C (+428°F)), type D, category C	-60°C (-76°F) to +220°C (+428°F) (continuous) Meets requirement
Flame Resistance	UL 1441 (VW1) NF 16.101 - 16.102 DIN 5510-2 & 54837 DIN EN ISO 5659-2 EN 45545-2 ASTM E 662 – ASTM E 162 SMP 800-C – BSS 7239	Pass I2-F0 S4, SR2 & ST2 (from sizes 12 to 32) CIT 8 min: 0,024 ; FED 30 min: 0,020 R22 HL3 R23 HL3 Pass Pass
Dielectric measurements	NF standard C93.641	See table below
Volume resistivity		10 ¹² ohms/cm
Resistance to transformer fluids	NF standard C.93641	Pass

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

Electrical Performances

GES is available in 2 versions with the following dielectric strength:

Description	Dielectric Strength (average value)	Dielectric Strength (minimum)
GES 40	4.0 kV	2.5 kV
GES 100	10.0 kV	7.0 kV

Product Specifications

Internal Diameter (mm) (in)	Diameter Tolerance (mm)	Standard Packaging (m) (ft)	Internal Diameter (mm) (in)	Diameter Tolerance (mm)	Standard Packaging (m) (ft)
0.5 (1/64")	± 0.2	250 (820)	9 (23/64")	± 0.5	100 (328)
1.0 (1/32")	± 0.2	250 (820)	10 (25/64")	± 0.5	100 (328)
1.5 (1/16")	± 0.2	250 (820)	12 (15/32")	± 0.5	100 (328)
2 (5/64")	± 0.2	250 (820)	14 (35/64")	± 0.5	100 (328)
2.5 (3/32")	± 0.2	250 (820)	16 (5/8")	± 0.7	50 (164)
3 (7/64")	± 0.2	250 (820)	18 (23/32")	± 1.0	50 (164)
4 (5/32")	± 0.2	250 (820)	20 (51/64")	± 1.5	50 (164)
5 (13/64")	± 0.3	250 (820)	22 (7/8")	± 1.5	25 (82)
6 (1/4")	± 0.3	250 (820)	25 (63/64")	± 2.0	25 (82)
7 (9/32")	± 0.3	100 (328)	28* (1-1/8")	± 2.0	25 (82)
8 (5/16")	± 0.3	100 (328)			

* Only available in GES 40

** Only available in GES 100

Availability

Bentley-Harris® GES is available in sizes from 0.5 to 28 mm (1/64" to 1-1/8"). The standard color is red iron oxide.

Please consult the factory with needs for special colors, which are available on a minimum order basis.

All numeric data show average or typical values.

Part Numbering System:

Example:	Description	Size	Color	Quantity
	GES 40	10	12 (red iron oxide)	100m (328ft)



United States: (1) 800 926 2472 • México: (52) 442 101 8100 • Brazil: (55) 19 3116 1600

EMEA: (33) 3 44 39 06 06 • Japan: (81) 45 330 0300 • China: (86) 21 6182 7560

Southeast Asia: (66) 35 276 400 • Korea: (82) 44 861 6368 • India: (91) 124 4784565

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