

ELECTRICAL INSULATION

GES

Product Highlights

- Working temperature:
–60°C to +220°C
(-76°F to +428°F)
(class H)
- Diametrical expansion 1.3
- Flame resistant
- Zero Halogen
- 4 kV or 10kV dielectric strength

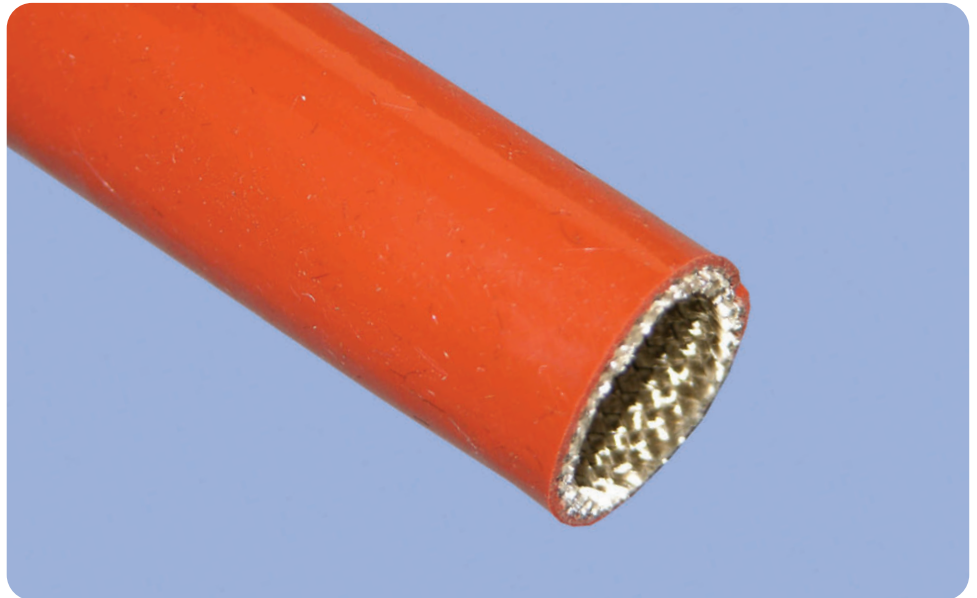
Installation Features

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



Our manufacturing sites are certified ISO 9000, QS 9000 or ISO/TS 16949 and ISO 14001

E_GES 10/01/07



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 relative diametrical expansion (approximately 1.3) This product provides electrical insulation for a wide range of industries and applications, including winding, engines and transformer outlets.

BentleyHarris®
Protection Products

Performance Data - GES

Property	Test Method	Result
Working 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	Pass I2-F0
Dielectric measurements	NF standard C93.641	See table below
Volume resistivity		10 ¹² ohms/cm
Resistance to transformer fluids	NF standard C.93641	Pass

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)
0.5 (1/64")	± 0.2	200 (656)
1.0 (1/32")	± 0.2	200 (656)
1.5 (1/16")	± 0.2	200 (656)
2 (5/64")	± 0.2	200 (656)
2.5 (3/32")	± 0.2	200 (656)
3 (7/64")	± 0.2	100 (328)
4 (5/32")	± 0.2	100 (328)
5 (13/64")	± 0.3	100 (328)
6 (1/4")	± 0.3	100 (328)
7 (9/32")	± 0.3	100 (328)
8 (5/16")	± 0.3	100 (328)

Internal Diameter (mm) (in)	Diameter Tolerance (mm)	Standard Packaging (m) (ft)
9 (23/64")	± 0.5	50 (164)
10 (25/64")	± 0.5	50 (164)
12 (15/32")	± 0.5	50 (164)
14 (35/64")	± 0.5	25 (82)
16 (5/8")	± 0.7	25 (82)
18 (23/32")	± 1.0	25 (82)
20 (51/64")	± 1.5	25 (82)
22 (7/8")	± 1.5	25 (82)
25 (63/64")	± 2.0	25 (82)
32 (1-1/2")	± 2.0	25 (82)

Availability

Bentley-Harris® GES is available in sizes from 0.5 to 32 mm (1/64" to 1-1/2"). The standard colour is red iron oxide.

Please consult the factory with needs for special colours, 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)	1000m (3280 ft)

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 term 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 evaluations to determine the suitability of the product for specific applications.

©2007 Federal-Mogul Systems Protection, manufacturer of Bentley-Harris protection products

Europe: (33) 3 44 30 39 00
China: (86) 21 5588 0898
Japan: (81) 45 938 8711
USA: (1) 800.926.2472

www.federal-mogul.com/sp

BentleyHarris®
Protection Products