Fire Retardant Silicone Hose

For more information or data, please visit **www.silflex.com** or contact us by phone: **+44 (0) 1443 238 464** or email: **hosesolutions@silflex.com**

Silflex flame retardant hose has been specifically designed for the demanding requirements of mass transit applications. Generally it is used in applications that require the material to be flame-retardant and give off low smoke & low toxic fumes. This compound has been tested against BS6853 & AFNOR NFF 16-101. It is classified as category II AGAINST BS 6853 & AS F1,IO against NFF16-101.

Construction

Plies of flame retardant silicone, reinforced with polyester fabric. The number of plies will vary depending on the working pressure, bore size, and required wall thickness. A galvanised spring steel wire helix may also be added for high or low pressure applications, or where extra flexibility is required.

Production Volumes

As a result of our unique manufacturing process we are extremely flexible with production volumes. Silflex has a very diverse range of customers and we understand that each requires individual silicone hose solutions. Many specialist customers require low run and prototype orders however others need high volume mass produced parts. We are a self contained unit capable of offering what other companies cannot, a personally tailored service designed to meet our customers needs.

Bespoke Hose Design

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Design Parameters

Significant factors influencing design include the maximum application pressures, operating temperature ranges (internal and external), fluid or gases to be carried, vibration and flexing, misalignment, fixing and location. Silflex engineers are experts in designing hose solutions to suit even the most complex operating conditions.

BSI Approved

Silflex is a BSI approved company and holds the ISO 9001:2008 certificate of quality assurance. Silflex is proud to manufacture products that are made to meet or exceed SAE J20 International Automotive Standards.

Engineering Options

Wire Reinforcement - A wire helix between the plies helps to prevent collapse in negative pressure conditions.

Anti Abrasion Sleeves - Anti Abrasion Sleeves to protect against localised abrasion.

Part Marking - Part marking with Silflex or customer logos and part numbers assists with product identification and traceability.

Location Marking - Marks can be added to the hose to specify where components are to be placed such as clips helping speed up installation.

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Materials
Silicone Rubber Compound

Colour	-	Various
Hardness	-	65 ± 5
Specific Gravity	(g/cm3)	1.18 ± 0.05
Tensile Strength	(Mpa)	8.6
Elongation at Break	(%)	308
Tear Strength	-	13

The above physical properties refer to a test sheet press cured for 5mins at 115°C, and post cured for 4 hrs @ 200°C. Tested to the relevant BS903 standard. Fluid resistance figures can be supplied

Materials
Knitted Polyester Fabric

Description	-	Fine Mesh
Yarn Type	-	100% Polyester
Finish	-	Pad Scour & Set
Bursting Strength	(Psi)	33*
Extensibility at Burst	(%)	60
Thickness	(mm)	0.5 ± 0.1

*Fabric. 7” Internal diameter ring.

Materials
Knitted Aramid Fabric

Description	-	Fine Mesh
Yarn Type	-	100% Aramid
Finish	-	Scour & Set Resin
Bursting Strength	(Kpa)	258*
Extensibility at Burst	(%)	25-35
Weight	(g/Cm2)	115

Other Aramid fabrics are also available depending on the working parameters of the hose. *Fabric. 7.98cm diameter ring.

Specifications

-50°C - 180°C (356°F) (Standard)

-50ºC - 250ºC (483ºF) (High Temp)

Build Options

Standard (Polyester Reinforced)

High Temperature (Aramid Reinforced)