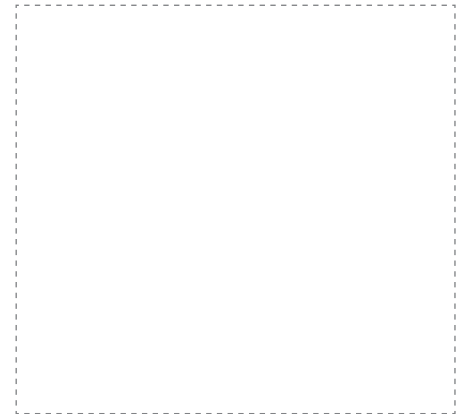


# Bespoke Silicone Hose Design

Data Sheet 5.1  
Page 1 of 2

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

Silflex pride themselves on their customer service and interaction when helping to define a hose design for the operational requirements. With a specialist design process and everything needed for production under one roof, we are able to cater for a wide range of volume orders from one-off prototypes to mass production. Our in-house production design team, tooling facility and testing laboratory also mean that we are able to offer a highly bespoke service tailored to meet our customers needs.



## The Silicone Experts

Silflex has over 25 years experience in designing silicone hose solutions. Our engineers work closely with customers to ensure that no design parameters are overlooked, ensuring the final product meets the specification with precision. Silicone may not seem the obvious choice for hose assemblies due to its apparent high cost, but custom designed hose can actually reduce costs when compared to conventional hydrocarbon rubber assemblies. Joiners and clips become unnecessary and leak paths are minimised.

## The Silicone Experts

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 an individual silicone hose solution. 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.

## 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.

## 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.

## Design Aid +

Our unique manufacturing process methods allow us to make custom

designed hoses including one piece assemblies limiting possible joint failure and therefore leak possibilities, whilst improving flow. Inserts and branches can also be designed into the hose.

## Specifications

-50°C to +180°C (Standard)

-50°C to +250°C (High Temp)

-50°C to +305°C (Extreme Temp)

## Build Options

Standard (Polyester Reinforced)

High Temperature (Aramid Reinforced)

Fluorosilicone Lined (Oil & Diesel Resistant)

ProFuel™ Lined (Permanent Fuel Use)

Extreme Temperature (Glass Fabric)

Wire Helix (Intense Vibration or Flex Required)

## Advantages

Saves on component cost

Saves on assembly time

Improves aesthetic appearance

Extreme working temperature range

Rapid prototype development