

# DS014- Samco (E85 Revision)

**Pro-Fuel™ lined silicone hose with polyester reinforcement**

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)



**This Data Sheet Covers** PE45, PE60, PE90, PE120  
**the Following Hose Types:** PEI35, PRE45, PRE90, PSHL,  
PXFL, PSR, PSCH & PSHH

## General Use

This type of hose is generally used in applications where the medium flowing through the hose is likely to degrade the standard silicone or even Fluorosilicone, pump fuels such as Petrol/Gasoline and similar fuels including E85 Ethanol based pump fuel.

Working Temperature Range: -40°C to +180°C.

## Construction

A lining of Green Pro-Fuel™, covered with plies of Silicone, reinforced with Polyester Fabric. The number of plies will vary depending on the working pressure, bore size, and required wall thickness. See Page 2 for details.

## Material Specifications

### Pro-Fuel™ Rubber Compound

Colour	Green
Hardness (IHRD)	62 ± 3
Specific Gravity (g/cm <sup>3</sup> )	2.05 ± 0.02
Tensile Strength (Mpa)	14.5
Elongation at Break (%)	250

### Silicone Rubber Compound

Colour	Various
Hardness (IHRD)	65 ± 5
Specific Gravity (g/cm <sup>3</sup> )	1.18 ± 0.03
Tensile Strength (Mpa)	8.3
Elongation at Break (%)	308
Tear Strength (KN/m)	16

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 (Pro-Fuel Lining)

Immersion Medium	Temperature Conditions	Resistance
ASTM No1 Oil	150°C	Excellent
ASTM No3 Oil	150°C	Excellent
ASTM Fuel B	40°C	Excellent

The values shown above have been arrived at through the use of immersion tests. Service conditions, however, are usually less severe than immersion tests, as the rubber may only be splashed or partly exposed to the particular medium. Figures for other media are available on request.

The Pro-Fuel™ lining has very low permeability and is inherently self-extinguishing in the case of fire.

**Knitted Polyester Fabric**

Description	Fine Mesh
Yarn Type	100% Polyester
Finish	Scour & Set
Bursting Strength (Fabric) (7" Internal Dia. Ring)	33psi
Extensibility at Burst	60%
Thickness	0.022" (0.56mm)

**Spring Steel Wire Helix (where applicable)**

Constructed from galvanised spring steel wire (to BS5216 HS3) at a spacing of 2-3 tpi, and buried between the plies.

**Working pressure guidelines for Pro-Fuel™ lined silicone hose with polyester reinforcement**

This Data Sheet Covers PE45, PE60, PE90, PE120  
 the Following Hose Types: PE135, PRE45, PRE90, PSHL,  
 PXFL, PSR, PSCH & PSHH.

I.D.		Number Of Plies	Typical Wall Thickness (mm)	Burst pressure		Recommended Max. Working Pressure @ 4:1 safety Factor	
(mm)	(")			(Psi)	(Bar)	(Psi)	(Bar)
6.5mm	1/4"	3	4.2mm	1111	76.6	278	19.2
8mm	5/16"	3	4.2mm	931	64.2	233	16.1
9.5mm	3/8"	3	4.2mm	803	55.4	201	13.9
11mm	7/16"	3	4.2mm	709	48.9	177	12.2
12.7mm	1/2"	3	4.2mm	615	42.4	154	10.6
16mm	5/8"	3	4.2mm	515	35.5	129	8.9
18mm		3	4.2mm	464	32.0	116	8.0
19mm	3/4"	3	4.2mm	444	30.6	111	7.7
20mm		3	4.2mm	425	29.3	106	7.3
22mm	7/8"	3	4.2mm	392	27.0	98	6.8
25mm	1"	3	4.2mm	351	24.2	88	6.1
28mm	1 1/8"	3	4.2mm	319	22.0	80	5.5
30mm	1 3/16"	3	4.2mm	300	20.7	75	5.2



<b>32mm</b>	1 1/4"	3	4.2mm	284	19.6	71	4.9
<b>35mm</b>	1 3/8"	3	4.2mm	262	18.1	66	4.5
<b>38mm</b>	1 1/2"	3	4.2mm	245	16.9	61	4.2
<b>41mm</b>	1 5/8"	3	4.2mm	229	15.8	57	4.0
<b>45mm</b>	1 3/4"	3	4.2mm	212	14.6	53	3.7
<b>48mm</b>	1 7/8"	3	4.2mm	200	13.8	50	3.5
<b>51mm</b>	2"	4	5.2mm	242	16.7	61	4.2
<b>54mm</b>	2 1/8"	4	5.2mm	232	16.0	58	4.0
<b>57mm</b>	2 1/4"	4	5.2mm	222	15.3	56	3.8
<b>60mm</b>	2 3/8"	4	5.2mm	213	14.7	53	3.7
<b>63mm</b>	2 1/2"	4	5.2mm	204	14.1	51	3.5
<b>65mm</b>	2 9/16"	4	5.2mm	200	13.8	50	3.5
<b>68mm</b>	2 11/16"	4	5.2mm	193	13.3	48	3.3
<b>70mm</b>	2 3/4"	4	5.2mm	189	13.0	47	3.3
<b>76mm</b>	3"	4	5.2mm	177	12.2	44	3.1
<b>80mm</b>	3 1/8"	4	5.2mm	170	11.7	43	2.9
<b>83mm</b>	3 1/4"	4	5.2mm	165	11.4	41	2.9
<b>89mm</b>	3 1/2"	5	6.0mm	212	14.6	53	3.7
<b>102mm</b>	4"	5	6.0mm	191	13.2	48	3.3

## Certificates of Conformity

Certificates of conformity can be supplied with deliveries if required.

