

SILICONE COOLANT/TURBO HOSE WITH POLYESTER REINFORCEMENT

Silflex Limited

Coed Cae Lane , Pontyclun , Mid Glam , CF72 9HJ, UK

Tel: +44 (0)1443 238464 Fax: +44 (0)1443 237781

www.samcosport.com e-mail: sales@samcosport.com

This Data Sheet Covers

the Following Hose Types: E90, E45, E135, E60, E120, RE90, RE45, SHL, SFL, XFL, SR, SCH, SHH, STP, E180, BCP

General Use

Samco® Sport coolant/turbo hose has been specifically designed for the demanding requirements of the motorsport and fast road car tuning markets. It meets or exceeds the requirements of SAE J20 R1 Class A. It is primarily designed for use in coolant and turbo systems, and is not adversely affected by anti-freeze solutions, although it is not suitable for use with OAT coolants in certain applications. It can however be used in many other applications where the properties of silicone are preferable to those of other rubbers, or where a flexible joint is required between rigid pipes

Working Temperature Range: -50°C to +180°C. (-58°F to +356°F)

Working Pressures: Dependant on hose construction and customer requirements.

Construction

Plies of 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

Materials Specifications

Silicone Rubber Compound

Colour	Various
Hardness (IHRD)	65 ± 5
Specific Gravity (g/cm ³)	1.18 ± 0.05
Tensile Strength (Mpa)	8.6
Elongation at Break (%)	308
Tear Strength (KN/m)	13

The above physical properties refer to a test sheet press cured for 5mins at 115°C (239°F), and post cured for 4 hrs @ 200°C (392°F). Tested to the relevant BS903 standard.

Fluid resistance figures can be supplied on request.

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 embedded between the plies.

Certificates of Conformity

Certificates of conformity can be supplied with deliveries if required.



**CONNECT
TO VICTORY**

**WORKING PRESSURE GUIDELINES FOR
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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	4mm	1111	76.6	278	19.2
8mm	5/16"	3	4mm	931	64.2	233	16.1
9.5mm	3/8"	3	4mm	803	55.4	201	13.9
11mm	7/16"	3	4mm	709	48.9	177	12.2
12.7mm	1/2"	3	4mm	615	42.4	154	10.6
16mm	5/8"	3	4mm	515	35.5	129	8.9
19mm	3/4"	3	4mm	444	30.6	111	7.7
22mm	7/8"	3	4mm	392	27.0	98	6.8
25mm	1"	3	4mm	351	24.2	88	6.1
28mm	1 1/8"	3	4mm	319	22.0	80	5.5
30mm	1 3/16"	3	4mm	300	20.7	75	5.2
32mm	1 1/4"	3	4mm	284	19.6	71	4.9
35mm	1 3/8"	3	4mm	262	18.1	66	4.5
38mm	1 1/2"	3	4mm	245	16.9	61	4.2
41mm	1 5/8"	3	4mm	229	15.8	57	4.0
45mm	1 3/4"	3	4mm	212	14.6	53	3.7
48mm	1 7/8"	3	4mm	200	13.8	50	3.5
51mm	2"	4	5mm	242	16.7	61	4.2
54mm	2 1/8"	4	5mm	232	16.0	58	4.0
57mm	2 1/4"	4	5mm	222	15.3	56	3.8
60mm	2 3/8"	4	5mm	213	14.7	53	3.7
63mm	2 1/2"	4	5mm	204	14.1	51	3.5
65mm	2 9/16"	4	5mm	200	13.8	50	3.5
68mm	2 11/16"	4	5mm	193	13.3	48	3.3
70mm	2 3/4"	4	5mm	189	13.0	47	3.3
76mm	3"	4	5mm	177	12.2	44	3.1
80mm	3 1/8"	4	5mm	170	11.7	43	2.9
83mm	3 1/4"	4	5mm	165	11.4	41	2.9
89mm	3 1/2"	5	6.3mm	212	14.6	53	3.7
102mm	4"	5	6.3mm	191	13.2	48	3.3
110mm	4 1/3"	5	6.3mm	181	12.5	45	3.1
114mm	4 1/2"	5	6.3mm	177	12.2	44	3.1
127mm	5"	5	6.3mm	162	11.2	41	2.8
152mm	6"	5	6.3mm	142	9.8	36	2.5
200mm	8"	5	6.3mm	115	7.9	29	2.0

This data applies to all standard polyester reinforced hoses in the Samco Sport range.

