

FIRE SLEEVE FS1072



Meets or exceeds the performance requirements of SAE Aerospace Standard AS 1072.

Recommended For:

Increasing service life of hoses in a variety of hostile environments. It is used as a tough flexible insulation to protect from intense external radiant heat. It can also be used to reduce heat loss from hoses. RYCO FS1072 FIRE SLEEVE sheds molten metal splash, reducing damage to hoses. In the event of fire, hoses carrying flammable or hazardous materials remain intact longer. It can also be used to protect cables, pipes and wire ropes.

Construction:

RYCO FS1072 FIRE SLEEVE is manufactured from high bulk braided glass fibre tubing, coated with silicon rubber. The "danger red" colour of the silicon rubber is due to heavy loading of iron oxide to improve heat resistance.

Temperature Range:

Continuous exposure:
from -54°C to +260°C (-65°F to +500°F)
15 to 20 minutes:
from +260°C to +1090°C (+500°F to +2000°F)
15 to 30 seconds:
from +1090°C to +1640°C (+2000°F to +3000°F)

Typical Properties:

K Value in BTU/°F/hr/in² 1.20
K Value in $\frac{\text{Cal/cm}}{\text{sec-cm}^2\text{-}^\circ\text{C}}$ 0.0004134

Flame Resistance:

7 seconds to extinguish with no afterglow.

Abrasion Resistance:

Wyzenbeck 9500 cycles, 3.1/3 lb pressure, 6 lb tension using fine emery cloth.

Oil and Fluid Resistance:

Remains functional after immersion for 120hr @ 80°F in MIL-H-5606, MIL-L-6082, Skydrol 500 LD and Skydrol 500.

Size Selection:

FS1072 FIRESLEEVE performs best when installed with a loose fit over a hose. However, some end users insist on a tight fit for the sake of appearance. To achieve this tight fit, use compressed air to expand Firesleeve as it is installed over the hose. Length of Firesleeve will shorten as diameter expands, so allow some extra length.

For a loose fit, there is no hard and fast rule to relate Firesleeve inside diameter size with the outside diameter of the hose being covered. However, it is important to take two factors into account: hose length and hose cover.

When considering hose length, for hoses up to 5 metres (16 ft) long, use Nominal Inside Diameter of Fire Sleeve 15% larger than Nominal Outside Diameter of Hose being covered. Over 5 metres (16 ft) long, use a size 20% larger. Remember the Firesleeve must slide over the outside of the hose. The longer the hose, the tougher it is to install, especially if enough tolerance on a long hose has not been allowed.

The hose covering also requires special consideration. A hose with a smooth cover is easier to slide Firesleeve over than a hose with a rough rubber cover.

Be sure to leave a little extra length tolerance for hoses that have covers with a high co-efficient of friction.

Standard coil length is 15,24 metres (50 ft); or cut lengths.

FS1072 FIRESLEEVE can be slit longitudinally to form a flat FIRE TAPE which can be wound around larger diameter hoses and secured with stainless steel ties or FSTAPE-16.

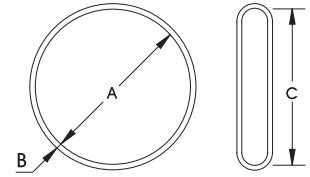
FSTAPE-16 is an iron oxide red silicone rubber tape designed to be self-bonding and self-curing onto FS1072 Firesleeve. It can be used to join sections of FIRESLEEVE and to repair scuffed or nicked areas of FIRESLEEVE. It can be used as an end sealant (instead of clamps) to prevent moisture and hydraulic oils wicking into the inner fibreglass braid.

FSTAPE-16 is supplied in a roll
25mm WIDE x 11 metres LONG x 0,5mm THICK
(1 inch x 36 ft x 0.02 inch)



FS1072 Fire Sleeve Specifications

PART NO	NOMINAL ROUND INSIDE DIAMETER		NOMINAL WALL THICKNESS		NOMINAL INSIDE FLAT DIMENSION		NOMINAL WEIGHT	
	A mm	A inch	B mm	B inch	C mm	C inch	kgs/m	lbs/ft
FS1072-08	12,7	0.50	4,3	0.17	20,0	0.79	0,20	0.13
FS1072-11	17,5	0.69	4,3	0.17	27,5	1.08	0,29	0.19
FS1072-14	22,2	0.87	4,4	0.17	34,9	1.37	0,37	0.25
FS1072-16	25,4	1.00	4,8	0.19	39,9	1.57	0,49	0.33
FS1072-22	34,9	1.38	4,8	0.19	54,8	2.17	0,60	0.40
FS1072-30	47,6	1.87	4,0	0.16	74,8	2.93	0,63	0.42
FS1072-32	50,8	2.00	4,0	0.16	79,8	3.14	0,71	0.48
FS1072-44	69,9	2.75	5,0	0.20	109,8	4.32	1,08	0.73
FS1072-64	102,0	4.02	5,0	0.20	160,2	6.32	1,89	1.27
FS1072-80	127,0	5.00	5,0	0.20	199,5	7.89	2,26	1.52
FS1072-104	165,0	6.50	5,0	0.20	259,2	10.21	2,86	1.92



Hose Nominal Outside Diameter Reference Chart

This chart may be used as a quick reference to assist in choosing correct size of Hose Protection. Dimensions are nominal only, and are in millimetres. Divide by 25.4 to convert to inches.

HOSE SIZE			HOSE SERIES													
DIN	INCH	DASH	T1A	T2A	T1D	T2D	H12A H12D	H13A H13D	H15D	TXA2D	AS1D	AS2D	AJ2D	TJ2D	HSPA HSHA	RQP1
5	3/16	-03														
6	1/4	-04	13,4	15,0	13,4	15,0					15,7	17,3	17,3	15,0	17,9	13,4
8	5/16	-05														
10	3/8	-06	17,4	19,0	17,4	19,0	20,2				19,7	21,3			20,0	17,4
12	1/2	-08	20,5	22,0	20,5	22,0	23,8			22,0	22,8	24,5			24,6	20,5
16	5/8	-10	23,7	25,2		25,2	28,2			25,2		27,7			28,2	23,7
20	3/4	-12	27,6	29,1	27,6	29,1	30,7	32,1	32,0	29,1	30,1	31,7			31,7	27,6
25	1	-16	35,7	37,7	35,7	37,7	38,0	38,7	38,2	37,7	37,8	39,5			38,2	35,7
32	1.1/4	-20	43,6	48,0	43,6	48,0	47,0	49,8	49,8	48,0	45,8	50,6			45,2	
40	1.1/2	-24	50,5	54,4	50,5	54,4	53,5	57,3	57,2		52,1	57,0			53,5	
50	2	-32	64,1	67,3	64,1	67,3	66,7	72,0			66,4	69,8			68,0	
63	2.1/2	-40		78,6												

HOSE SIZE			HOSE SERIES														
DIN	INCH	DASH	RQP2	RQP5 T5	DF2A	RTH1	SR	PW2	RQG1	M2G	M1	M2	PL1	PIHT	FB1	MP1	RT7
3	1/8	-02															8,2
5	3/16	-03															10,5
6	1/4	-04	15,0	13,2	13,6	9,4		15,0	13,4	14,3	12,7	14,3	12,7	12,7		13,5	12,6
8	5/16	-05		14,8							14,3		14,3	14,3			
10	3/8	-06	19,0	17,2	17,6	11,7		19,0	17,4	19,0	15,9	19,0	15,9	15,9	19,0	17,5	16,5
12	1/2	-08	22,0	19,4	20,5	15,4			20,5	23,8		23,8	19,8	19,8	23,0	21,4	21,2
16	5/8	-10	25,2	23,4		18,4			23,7				23,0	23,0	25,4	25,4	
20	3/4	-12	29,1	27,4	27,7	22,1	31,5		27,6	31,7		31,7	26,4	26,4		28,6	26,7
25	1	-16	37,7	31,4		28,6	40,0		35,7							37,3	
32	1.1/4	-20	48,0	38,1			46,5									43,9	
40	1.1/2	-24	54,4	44,5			53,1										
50	2	-32	67,3	56,3			65,5										
63	2.1/2	-40					78,5										