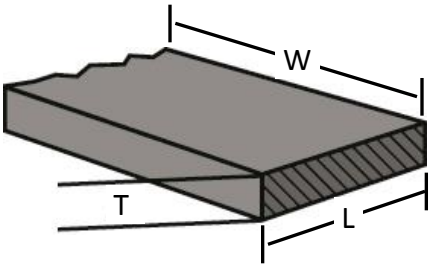
ELECTRICALLY CONDUCTIVE ELASTOMERS

SPL-LxWxT-NIC / FSPL-LxWxT-NIC



Silicone / Fluorosilicone sheet material is loaded with a variety of highly conductive particles providing superior EMI/RFI shielding performance combined with excellent environmental sealing.
It is recommended to use fluorosilicone as elastomer if the conductive elastomer should be resistant against aggressive substances like fuel oils and kerosene.

Nickel plated graphite is a high quality cost effective material with increased use in the military market.

ISO 9001 14001 | RoHS ✓ | REACH ✓

REEL

Features
Filler material: Nickel plated graphite (NIC)
Conductive filler ensures galvanic compatability
Wide range of standard thicknesses; customer-specific thicknesses and sheet sizes available
Self adhesive backing on request
Low contact resistance between mating surfaces
Fluorosilicone for harsh environments: fuel oils and solvents

Property	Value		Unit	Test method
Conductive filler material	Nickel plated graphite (NIC)		-	-
Basic material	Silicone	Fluorosilicone	-	-
Hardness	60 ± 5	65 ± 5	Shore A	ASTM D2240
Volume resistivity	0,05	0,05	Ω-cm	MIL-DTL 83528 C
Elongation	450	270	%	ASTM D412
Tear strength	12,2	7,0	N/mm	ASTM D624
Specific gravity	2,0 ± 0,1	2,2 ± 0,1	-	ASTM D792
Compression set	8,6	14,0	70h @ 100°C (%)	ASTM D395
Tensile strength	52,5	33,2	N/mm	ASTM D412
Operating temperature	-55 – 160	-55 – 160	°C	-
Colour	Dark grey	Dark green	-	-
Standard sheet sizes (LxW)	150x150 / 250x300 / 300x300		mm	-
Thickness range (T)	0,5 – 3,2		mm	-

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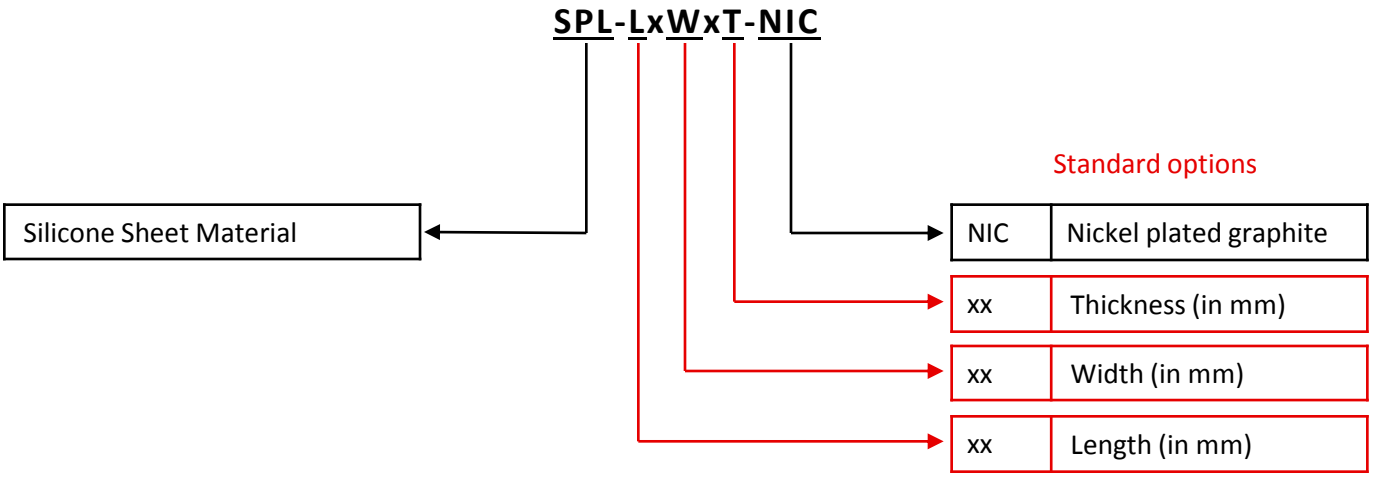
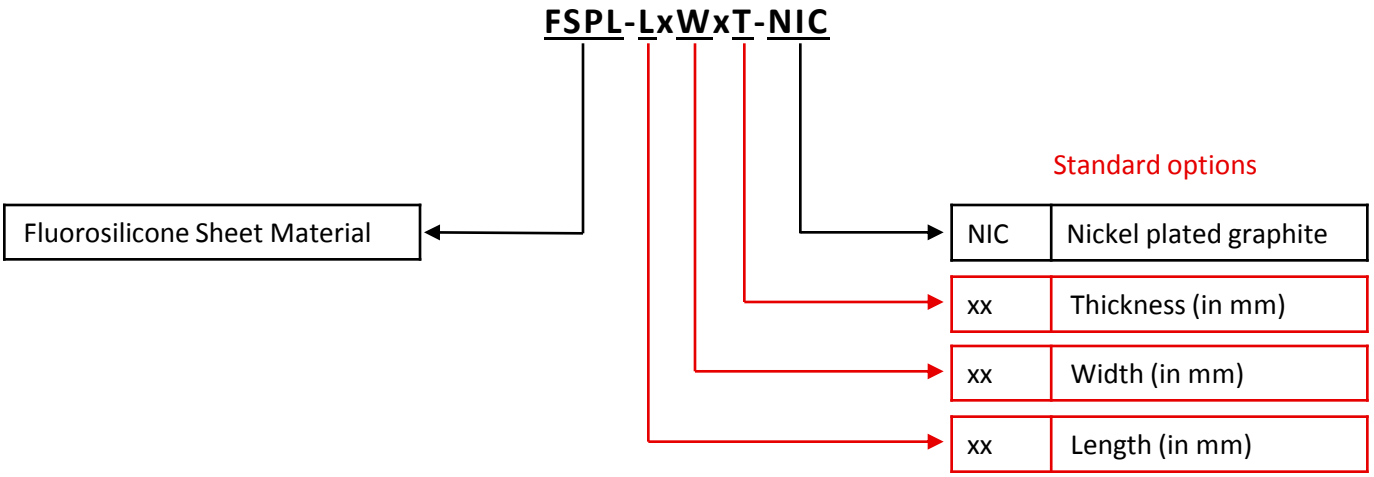
BUILDING AN ITEM NUMBER



Example: SPL-150x150x1,6-NIC
Silicone sheet material; sheet size: 150x150; thickness: 1,6 mm; filler material: Nickel plated graphite



Example: FSPL-150x150x1,6-NIC
Fluorosilicone sheet material; sheet size: 150x150; thickness: 1,6 mm; filler material: Nickel plated graphite

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THICKNESSES AVAILABLE (in mm)

- 0,5
- 0,8
- 1,0
- 1,2
- 1,5
- 1,6
- 1,8
- 2,0
- 2,5
- 3,0
- 3,2

TOLERANCES (in mm)

Sheet size		Tolerance
Thickness	< 2,0	± 0,15
	> 2,0	± 0,25
Length/width		± 0,8

SELF ADHESIVE BACKING

Our silicone sheet material can be supplied with a conductive or non-conductive adhesive. This adhesive has a shelf life of six months and is intended as an assembly aid only.

Self adhesive backing is not recommended for use with fluorosilicone sheets.

SHIELDING EFFECTIVENESS in dB (according to MIL-DTL 83528 C)

	Silicone	Fluorosilicone
20 MHz	106	106
40 MHz	105	105
60 MHz	106	105
80 MHz	114	110
100 MHz	111	108
200 MHz	116	114
400 MHz	119	116
600 MHz	112	106
800 MHz	114	116

	Silicone	Fluorosilicone
1 GHz	118	108
2 GHz	111	100
4 GHz	100	104
6 GHz	104	104
8 GHz	110	106
10 GHz	110	105

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