CONSTANT CONDUCTIVE ELASTOMERS
Silicone nickel plated graphite

Silicone / Fluorosilicone profiles are 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. It is optionally available as flame retardant version.

- Filler material: Nickel plated graphite (NIC)
- Conductive filler ensures galvanic compatability
- Wide variety of profiles as standard
- Customer-specific lenghts, cross-section designs and pasted O-rings available
- Low contact resistance between mating surfaces
- Fluorosilicone for harsh environments: fuel oils and solvents

RoHS ✓ REACH ✓ 12 13 REEL

PRODUCT SPECIFICATIONS

PROPERTY		VALUE / TOLERANCE		TEST METHOD
Conductive filler material		Nickel plated Graphite (NIC)		-
Basic material		Silicone	Fluorosilicone	-
Hardness		60 Shore A ± 5	65 Shore A ± 5	ASTM D2240
Volume resistivity		0,04 Ω*cm	0,05 Ω*cm	ASTM D991
Elongation (min)		Min. 450 %	340%	ASTM D412
Tear strength		9,00 N/mm	6,15 N/mm	ASTM D624
Specific gravity		2,0 g/cm³ ± 0,25%	2,2 g/cm³ ± 0,25%	ASTM D792
Compression set (72h @ 100°C)		Max. 9,0 %	Max. 16,0 %	ASTM D395
Tensile strength (min)		0,75 MPa	0,73 MPa	ASTM D412
Operating temperature		-55 - 160°C	-55 – 160 °C	-
Shielding Effectiveness	10 MHz	115 dB	116 dB	MIL-DTL 83528 C
	100 MHz	121 dB	122 dB	
	400 MHz	119 dB	119 dB	
	1 GHz	122 dB	122 dB	
	2 GHz	122 dB	122 dB	
	6 GHz	115 dB	114 dB	
	10 GHz	114 dB	107 dB	
	18 GHz	106 dB	105 dB	