

Next generation FIP gasket from Nolato Silikonteknik AB

Trishield[®]Soft

Nolato Silikonteknik is a well-known name in the industry. We supply various kinds of EMI shielding solutions made from electrically conductive silicone rubber. We are innovators, constantly developing new, improved dispensing, moulding or extrusion products and methods for high-tech industries (telecom, automotive, military and medical). Nolato Silikonteknik's head office and testing/pilot facilities are located in Hallsberg, Sweden. Our production partners, the EMC production centres and customers are based all over the world.

Nolato Silikonteknik AB

Founded in 1970, Nolato Silikonteknik became part of the Nolato Group in 1988. Nolato Silikonteknik's quality and environmental management systems have been certified in accordance with ISO 9001:2008 and ISO 14001:2004.



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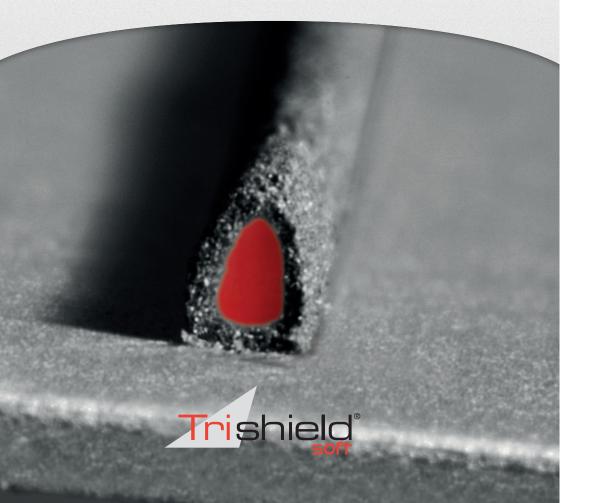




Trishield®Soft offers up to 70% lower compression force compared to other FIP gaskets.

This means that there is greater room for improvements.

- Excellent shielding properties Up to 110 dB
- Saves space on PCB by reducing the number of screws
- Reduced over-all cost Less machining, fewer screws, thinner and more flexible covers
- Global access Our production partners are located all over the world



Trishield® Soft

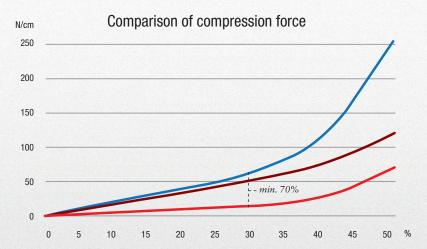
Nolato Silikonteknik's Trishield®, is a unique dispensing technology widely used for over a decade by the leading players in the telecom industry and other high-tech industries as defence, automotive and medical. With the current rise in demand for 4G/LTE mobile phone networks, shielding gaskets face new challenges. We at Nolato have taken innovation a step further and created Trishield®Soft.

Trishield® Soft is an innovative development of the patented Trishield® gasket, in which two materials are dispensed at the same time – a soft non-conductive core material and a highly conductive shell material. This results in up to 70% lower compression force and a low compression set.

Trishield[®] Soft is available in gasket heights of 1.2 - 2.5 mm, and in a range of metal fillers, e.g. Ni/C, Ag/Ni or Ni/Al, depending on customer requirements.

In the production of Trishield®Soft gaskets, Nolato produced a specific Trishield®Soft dispensing head that is a ready-to-use device that can be directly installed onto any standard dispensing machine. Nolato offers a separate agreement for renting dispensing head and will provide any technical training necessary.

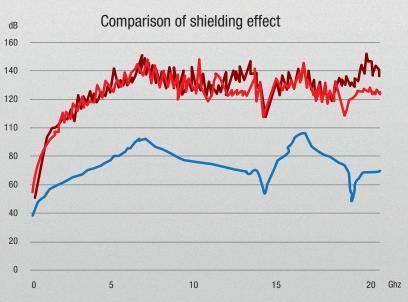
Property	Test	Unit	8510	8801	8818	8843
Base material	-	-	Silicone	Silicone	Silicone	Silicone
Conductive filler	-	-	-	Ag/Ni	Ni/C	Ni/AI
Volume resistivity, as moulded	MIL-DTL- 83528C	m0hmcm	-	5	5	7
Volume resistivity, aged 125C/1000h	MIL-DTL- 83528C	m0hmcm	-	6	8	na
Shielding effect Average 0.3-20 GHz Trishield Soft gasket	Nolato cavity- to-cavity	dB	-	70	110	110
Density	ISO 2781	g/cm3	1,1	3,2	2,2	2,3
Hardness	ISO 7619	Shore A	23	70	80	80
Tensile strength	ISO 37	MPa	7,9	2,9	2,7	2,1
Elongation at break	ISO 37	%	750	190	120	110
Tear strength	ISO 34-1C	N/mm	21	14	13	15
Compression set, 72 h,100°C	ISO 815	%	8	30	53	43
Flammability	UL 94	-	V0	V0	V0	V0



Test is made on 8818/8510 gaskets with 1,6 mm in height.

Recommended compression degree is from 10% to 50% in the assembled state.

Trishield®Soft offers at least 70% lower compression force than the other FIP gaskets.



Test is made on with Nolato Cavity-to Cavity test method on a gasket of 8818/8510 with 1,6 mm height compressed to 1,0 mm.

Trishield®Soft has the same excellent shielding properties as the standard Trishield® gasket, but about 30dB better than the D-shape gasket.

