Next generation FIP gasket from Nolato EMC & Thermal Solutions

## Trishield<sup>®</sup>2.0





## Trishield<sup>®</sup>2.0 Offers the lowest compression force requirements on the market.

- Up to 80 % lower compression force
  - Less fasteners needed
  - Possible to increase tolerances on mechanics
  - Less machining needed on mechanics
  - Thinner and more flexible covers
- Lower material consumption
  - Cost saving
- Optimal height/width ratio (narrow gaskets)
  - Space saving
- Double output
  Possible to run with dual dispensing heads
- Excellent shielding properties
  - Up to 110 dB
- Global access
  - Our production partners are located all over the world







D-shape Ni/C

Trishield 8817

Trishield 2.0/8950

## Trishield® 2.0

Trishield<sup>®</sup>, Nolato's patented dispensing technology, has been widely used by leading companies in high-tech industries requiring EMI shielding for over a decade. Trishield<sup>®</sup> offers a solution that combines excellent shielding effectiveness with superior mechanical performance.

The Trishield<sup>®</sup> technology is used to form the dispensed EMC gaskets into a triangular shape, thus reducing material usage and the compression forces required.

Trishield<sup>®</sup> 2.0 is an innovative development of the Trishield<sup>®</sup> concept that further enhances the original benefits of the Trishield<sup>®</sup> concept. Trishield<sup>®</sup> 2.0 consists of an improved forming unit and a new family of conductive elastomer materials. Trishield<sup>®</sup> 2.0 reduces the compression force required up to 80%, reduces the material usage up to 50 %, and the footprint up to 40% compared to standard D-shaped gaskets, while still providing excellent EMI shielding effectiveness.

Property				Test Standard		Unit	8817	8950
Base material				-		-	Silicon	Silicon
Conductive filler				-		-	Ni/C	Ni/C
Volume resitivity				MIL-DTL-83528C		m0hmcm	12	25
Shielding, average 0.3-20 GHz				Cavity-to cavity		dB	110	110
Density				ISO 2781		g/cm3	1,9	1,8
Hardness				ISO 7619		Shore A	63	45
Tensile strength				ISO 37		MPa	2,6	1,2
Elongation at break				ISO 37		%	260	150
Tear strength				ISO 34-1C		N/mm	16	8
Compression set, 72 h,100°C				ISO 915		%	30	26
Flammability				UL 94		-	V0	VO
Product	Material	Shape	Gasket Width	Gasket Hight	Reduction mtrl usage	Space saving	Comment	
D-shape	Ni/C		1,5mm	1,2mm	-	-	Trishield® 2.0/8950 savings versus D-Shape Ni/C	
Trishield <sup>®</sup> 2.0	8950		0,9mm	1,2mm	-54%	-40%		
Trishield®	8817		1,2mm	1,2mm	-	-	Trishield <sup>®</sup> 2.0/8950 savings versus Trish- ield <sup>®</sup> /8817	
Trishield® 2.0	8950		0,9mm	1,2mm	-47%	-25%		

Test is made inhouse Nolato. We will gladly calculate your savings in your specific project.

Trishield<sup>®</sup> 2.0 can either be directly installed in an existing Trishield<sup>®</sup> forming unit or as a new installment, depending on customer requirements. Nolato offers partner agreements (EMC Production Partner) by licensing the Trishield<sup>®</sup> 2.0 technology. The license also includes technical support and training thereby ensuring a carefree implementation and stable production.



Test is made on a 1,2 mm high gasket.



Shielding effectiveness measured using Nolato cavity to cavity test method



## Nolato EMC & Thermal Solutions

Nolato is a world leading developer and supplier of material and know-how for EMI shielding solutions made of electrically conductive silicon and Thermal Interference Materials. Our headquarters and Nolato Tech Center are located in Hallsberg, Sweden with additional manufacturing sites in Beijing, China and Penang, Malaysia. Nolato offers local production on a global scale with more than fifty EMC Production Partners around the world manufacturing the Trishield gasket.

Founded in 1970, Nolato EMC & Thermal Solutions became a part of the Nolato Group in 1988. Nolato's quality and environmental management systems have been certified with ISO 9001 and ISO14000



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