

Nolato EMC, Thermal and IP Sealing Solutions

Nolato Silikonteknik is a world-leading developer and supplier of advanced materials and know-how for ingress protection solutions, engineered to meet the toughest IP demands. Expertise in materials science and manufacturing processes ensures high-quality, reliable sealing solutions that protect electronic assemblies from environmental contaminants.

Trishield®

Form-in-Place (FIP) gaskets, are renowned for their triangular shape, low compression force, reliable IP Sealing performance, and excellent aging performance.

Trishield® IP Sealing - High height to width ratio

Trishield® IP Sealing is engineered for applications with limited installation space, requiring low compression forces while still providing reliable IP sealing performance.

Features and Benefits

- Optimized height-to-width ratio – ideal for space-efficient layouts
- Space-saving efficiency – enabling next-generation design
- Reduced material consumption – enabling a sustainable, compact solution
- **Miniaturization:** Enables the design of smaller, more compact products.
- **Low compression force requirements:** Ideal for lightweight assemblies.
- **Sustainability:** Supports lightweight, material-efficient solutions.

Industries and Applications

The Trishield® IP Sealing features an ultra-compact, space-efficient profile that requires less material than a traditional D-shaped IP gasket. This reduces compression force requirements and enables lighter, more compact electronic designs.

Product properties

Trishield® IP Sealing is a silicone material filled with magnetic particles with an operating temperature of -40 °C up to +150 °C and offers good adhesion to metal and plastic surfaces.

Table 1: Trishield® IP Sealing properties and dimensions

Properties	Test procedure	Unit	LU363-11
Filler			Magnetic
Aspect ratio		-	up to 2.0
Hardness	ISO 48-4	ShA	47
Tensile Strength	ISO 37	MPa	4.8
Compression set	ISO 815	%	31

Diagram 1: Compression force as a function of compression degree

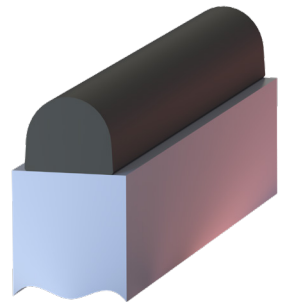
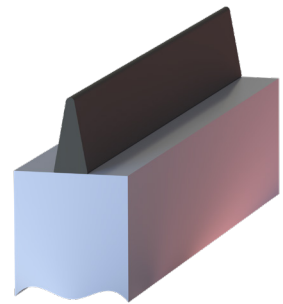
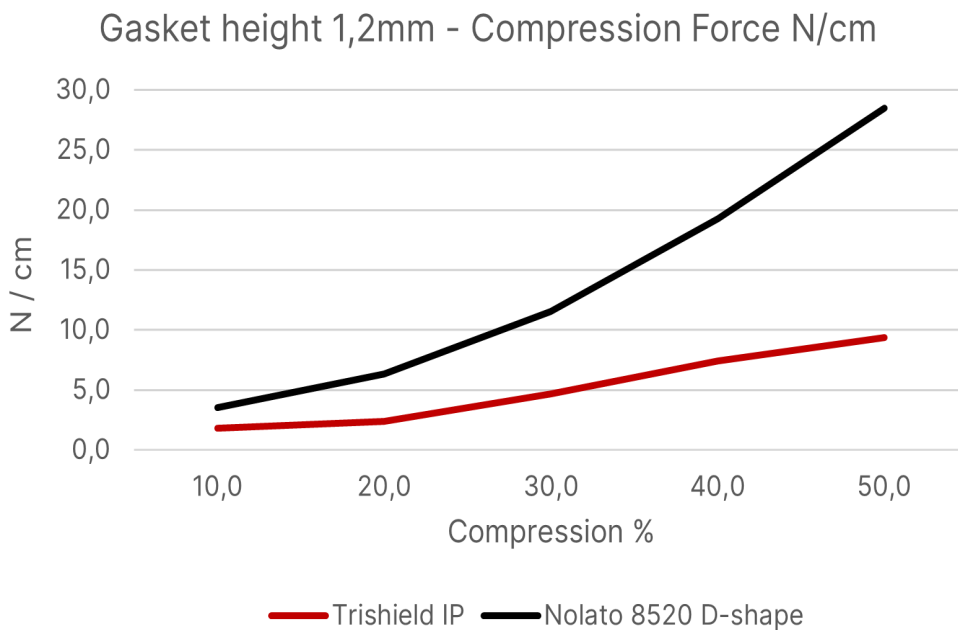


Table 2: Typical Gasket Design Characteristics

Characteristics	Typical Value	Unit
IP rating	up to IP68	-
Recommended compression degree	35-50	%
Typical compression force @ 50%	15-24	N/cm
Recommended wall clearance (wet condition)	≥ 0.2	mm

Environment

Nolato Trishield® LU363-11 fulfill the requirements set by the Directive 2011/65/EU and its amendments (RoHS) as well as EU regulation (EC) 1907/2006 (REACH).

Disclaimer

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Contact us

For further information, and if you would like to discuss how we can assist you in your project—don't hesitate to give us a call or send us an email!

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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 silicone and Thermal Interface Materials.

Our headquarters and Nolato Tech Center are located in Hallsberg, Sweden with additional manufacturing sites in Beijing and Suzhou in China, Penang in Malaysia, New Jersey in USA, Bangalore in India, Querétaro in Mexico and Maldon in UK. 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, ISO14001, IATF 16949 and MIL 83528.

