TECHNICAL DATA SHEET

SHIELDING SOLUTIONS IWG-AN001 EMBEDDED WOVEN ALUMINIUM WIRE MESH IN SYNTHETIC ELASTOMER GASKET MATERIAL

Product overview

IWG-AN001 is an EMI gasket material comprising of a woven aluminium cloth infilled or ‘over’ moulded with a synthetic elastomer. The elastomer used is resistant to hot lubricating oils and meets or exceeds the requirements of AMS 3222c. It can provide a watertight or pressure seal where sealing faces have a flatness tolerance of >0.05mm. A high level of EMI shielding performance is reliably achieved by virtue of the array of aluminium mesh contact points exposed at the surface. This material also has the advantage that the woven mesh layer acts as an internal compression limit allowing small cross-sectional area gaskets to be designed in without the requirement for additional mechanical compression stops.

Key features

- Synthetic elastomer to AMS 3222c provides excellent resistance to hot lubricating oils and a wide range of other organic fluids
- Low impedance contact provides a high level of EMI shielding over a wide frequency range
- Aluminium mesh to AMS 4182
- Excellent resistance to extremes of temperature / ageing
- External compression limits/control not normally required
- Ideally suited for applications such as connector and waveguide gaskets
- Available in continuous lengths up to 600mm in width or pre-cut gaskets

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Material Properties	
Thickness	0.5mm +/- 0.1mm
Aluminium mesh count	24 opi
Elastomer colour	Black
Elastomer hardness	50 IRHD
Shielding performance (attenuation) to MIL-STD 285 -	
- 100kHz H field	>60 dB
- 100MHz E field	>100 dB
- 1GHz Plane wave	>75 dB
Recommended closure pressure	520 kPa (75 psi)
Gasket resistance	<10 $m\Omega cm^{-2}$
Service temperature range	$-40^{o}C$ to $125^{o}C$

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