

# Knitex<sup>®</sup> Fluid Seals

## EMI/RFI Shielding Gaskets



**Knitex<sup>®</sup> gaskets provide enhanced levels of EMI shielding and incorporate the additional benefit of an effective seal against fluid and dust ingress.**

Applications include: the sealing of enclosure lids, doors and removable cover plates and as interface gaskets for use in vent panels and windows.



### Principles of Operation

Knitex<sup>®</sup> gaskets with fluid seals are designed to provide high levels of EMI shielding with the advantage of an effective seal to prevent the ingress of fluids and dust.

Shielding gaskets with fluid seals are commonly used to seal enclosure lids and doors, removable cover plates and as interface gaskets for vent panels and windows.

Compression should be limited to between 25% and 35% of nominal gasket height and compression stops can be fitted if required.

Knitex<sup>®</sup> gaskets are available in two styles as illustrated in the tables below. The standard material for the fluid seal is neoprene, which can be adhesive-backed for ease of installation. Should the application demand then silicone sponge is available as an alternative to neoprene.

### Features & Benefits

- Enhanced levels of EMI shielding
- Low cost tooling and rapid prototyping
- Available in a variety of profiles and materials
- Easy installation and minimal maintenance
- More cost effective than alternative solutions
- Tested to exacting industry standards
- State-of-the-art manufacturing equipment

### Quality Assurance

KnitMesh Technologies<sup>®</sup> is accredited to:  
ISO 9001 : 2015, ISO 14001 : 2015, ISO 45001 : 2018,  
PAS 99 : 2012 and IATF 16949 : 2016



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## EMI/RFI Shielding Gaskets



### Materials of Construction - Wires

Knitex<sup>®</sup> EMI shielding materials and gaskets can be manufactured from any metal that can be drawn into a filament. The majority of shielding requirements can be satisfied by using materials selected from the list below.

Material	Wire Diameter	Material Ref.
Monel (BS 3075-NA13)	0.11 mm	MO
Tin Plated Copper Clad Steel (SN-FE-CU)	0.11 mm	SN-FE-CU
Stainless Steel (AISI 304)	0.11 mm	SS
Tinned Copper (BS 4109 with 0.7-1 micron tin plate)	0.11 mm	TC
Silver Clad Copper (BS 4190 with 0.7-1 micron silver cladding)	0.12 mm	SCC
Nickel Plated Copper	0.15 mm	NI-CU
Aluminium (ALMG5)	0.14 mm	AL
Copper (BS 4109)	0.12 mm	CO

Other materials are available such as Phosphor Bronze and Brass.

### Materials of Construction - Elastomer

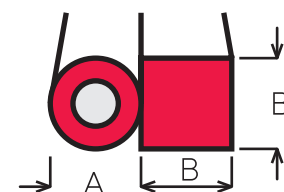
Material	Temperature Range	Colour
Neoprene Sponge	-30°C to +100°C	Black
Silicone Sponge	-60°C to +200°C	Cream
Silicone Tube	-60°C to +260°C	Grey

General tolerances on gasket dimensions +/-0.8mm. Further details on application.

### Circular EMI/RFI Gasket with Fluid Seal

EMI/RFI Shielding Gasket Core	Neoprene Fluid Seal	Elastomer Core Material	Part Number
A (mm)*	B (mm)	-	-
3	3.5	Silicone Tube	8214
4	5	Silicone Tube	8211
5	6	Silicone Tube	8213

Core dimensions specified do not include thickness of mesh layers.



Circular Section EMI/RFI Gasket with Fluid Seal

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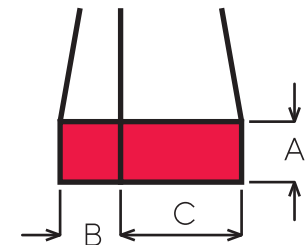
## EMI/RFI Shielding Gaskets



Protecting People, Property and our Planet

### Circular EMI/RFI Gasket with Fluid Seal

EMI/RFI Shielding Gasket Core Diameter		Neoprene Fluid Seal Gasket Dimension		Part Number
A (mm)	B (mm)	A (mm)	C (mm)	-
2	3	2	6	8751
2	3	2	9	8752
2	3	2	12	8753
2	3	2	15	8754
3	3	3	6	8755
3	3	3	9	8756
3	3	3	12	8757
3	3	3	15	8758
3	3	3	19	8759
3	4	3	6	8760
3	5	3	6	8761
3	6	3	6	8762
3	6	3	12	8763
3	6	3	19	8764
3	13	3	12	8765
5	3	5	6	8766
5	3	5	9	8767
5	3	5	12	8768
5	3	5	15	8769
5	6	5	15	8770
5	6	5	19	8771
6	3	6	6	8772
6	3	6	9	8773
6	3	6	12	8774
6	3	6	15	8775
6	6	6	19	8776
9	6	9	12	8777
9	6	9	15	8778
9	6	9	19	8779



All Metal Rectangular Section  
EMI/RFI Gasket with Fluid Seal

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