

All-Metal Wire Mesh Gaskets



Description:

Knitex[®] all metal EMI shielding gaskets are constructed from knitted wire mesh which has many interlocked spring like loops making it highly resilient. It is available in round, 'P'-section, and double core with fin profiles as illustrated in the tables below. Knitex produces all metal gaskets in the widest range of materials available on the market including Monel, Tin Plated Copper Clad Steel (SN-FE-CU), Tinned Copper, Stainless Steel, Silver Clad Copper, Aluminium, Copper and others such as Nickel Plated Copper and Phosphor Bronze to special order.

Application

All metal gaskets are frequently used on cast, machined and sheet metal enclosures and are particularly suitable for groove mounting where they are held in place by sidewall friction. They may also be fixed in place by gluing, riveting, spot welding, soldering and via the fin on the 'P'-section and double core with fin gaskets by means of a metal plate. Being all-metal they can also operate at very high temperatures.

Generally they should not be used where doors or access panels are frequently opened as a compression set may form after several openings. All metal gaskets also do not form a weather or pressure seal and in these situations the Knitex range of mesh covered elastomer gaskets should be considered.

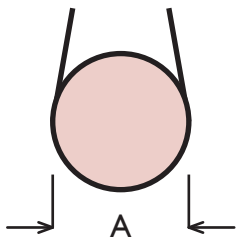
Materials of Construction - Wires

Knitex EMI shielding materials can be manufactured from any metal that can be drawn into a filament. However the majority of shielding requirements can be satisfied by using the materials listed in the table below.

Material	Wire Diameter	Material Ref.
Monel (BS 3075-NA13)	0.11mm	MO
Tin Plated Copper Clad Steel (SN-FE-CU)	0.11mm	SN-FE-CU
Stainless Steel (AISI 304)	0.11mm	SS
Tinned Copper (BS 4109 with 0.7-1 micron tin plate)	0.11mm	TC
Silver Clad Copper (BS 4190 with 0.7-1 micron silver cladding)	0.12mm	SCC
Nickel Plated Copper	0.15mm	NI-CU
Aluminium (ALMG5)	0.14mm	AL
Copper (BS 4109)	0.12mm	CO
Alloy 601 (2.4851)	0.12mm	-

Other materials are available to special order such as Phosphor Bronze and Brass.

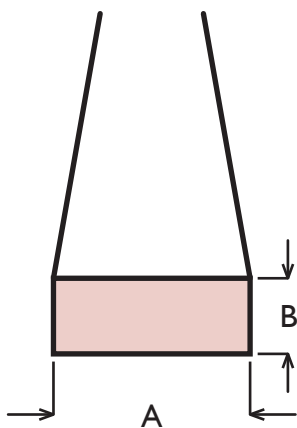
Circular Section



Diameter A (mm)	Part Number	Diameter A (mm)	Part Number
2	8601	7	8603
3	8024	8	8030
4	8602	9	8604
5	8037	10	8605
6	8083	13	8606

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

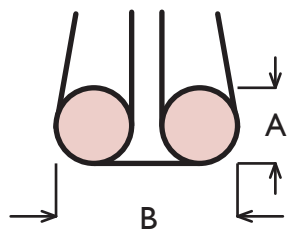
Rectangular Section



Width A (mm)	Thickness B (mm)	Part Number	Width A (mm)	Thickness B (mm)	Part Number
2	2	8615	13	8	8630
2	3	8149	13	10	8631
3	3	8066	16	2	8632
5	2	8616	16	3	8120
5	3	8143	16	4	8633
5	4	8617	16	6	8634
5	5	8618	16	8	8635
6	2	8619	16	10	8636
6	3	8015	19	2	8637
6	4	8620	19	3	8185
6	5	8621	19	4	8638
6	6	8622	19	6	8639
9	2	8623	19	8	8640
9	3	8035	19	10	8641
9	4	8624	32	2	8642
9	6	8625	32	3	8050
9	8	8626	32	4	8643
13	2	8627	32	6	8644
13	3	8014	32	8	8645
13	4	8628	32	10	8646
13	6	8629	-	-	-

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

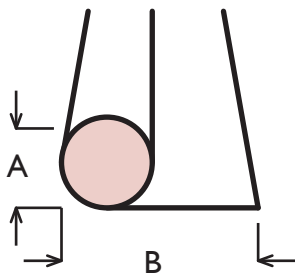
Double Core with Fin



Diameter A (mm)	Overall Width B (mm)	Part Number	Diameter A (mm)	Overall Width B (mm)	Part Number
3	13	8654	5	22	8661
3	16	8655	5	25	8662
3	19	8656	6	19	8663
3	22	8657	6	22	8664
3	25	8658	6	25	8665
5	16	8659	10	25	8666
5	19	8660	10	32	8667

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

'P' Section



Diameter A (mm)	Overall Width B (mm)	Part Number	Diameter A (mm)	Overall Width B (mm)	Part Number
3	11.5	8026	7	25	8719
3	16	8705	8	13	8720
3	19	8706	8	16	8721
4	13	8707	8	19	8722
4	16	8708	8	17	8008
4	19	8709	8	25	8723
5	13	8710	9	16	8724
5	16	8711	9	19	8725
5	16.5	8003	9	25	8726
5	25	8712	10	13	8727
6	13	8713	10	16	8728
6	16	8714	10	19	8729
6	19	8715	10	25	8730
6	25	8716	13	13	8731
6	28	8020	13	16	8732
7	16	8717	13	19	8733
7	19	8718	13	25	8734

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

Additional Information

For effective shielding all metal gaskets should be compressed by 15-30% of its height. Samples are available generally free of charge (please contact the sales department). Special resilient stainless steel hollow core gaskets have also been developed by Knitex and are available in diameters from 3mm up to 15mm. Delivery lead times are quantity dependant but emergency deliveries can be organised within a few days or less. Custom made mesh profiles in other sizes not shown in the tables are also available.

Ordering

To order, simply state the quantity required, part number, material reference and if you have any special roll length or packaging requirements. Cut to length and fabricated picture frame type gaskets are also available.

Example of how to order a standard Knitex gasket:

Gasket Type 8143 / MO = a rectangular section 5mm x 3mm and is constructed from Monel.

Quality Assurance

KnitMesh Technologies® is accredited to:

ISO9001:2008, ISO14001:2004, OHSAS18001:2007, PAS 99:2012 and ISO/TS 16949:2009



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