

All-Metal Wire Mesh Gaskets



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)	0.11 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
Alloy 601 (2.4851)	0.12mm	

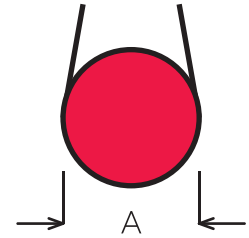
Tolerances on application. Other materials are available to special order such as Phosphor Bronze and Brass.

All-Metal Wire Mesh Gaskets

Circular Section

Material	Part Number
2	8601
3	8024
4	8602
5	8037
6	8083

Diameter A (mm)	Part Number
7	8603
8	8030
9	8604
10	8605
13	8606



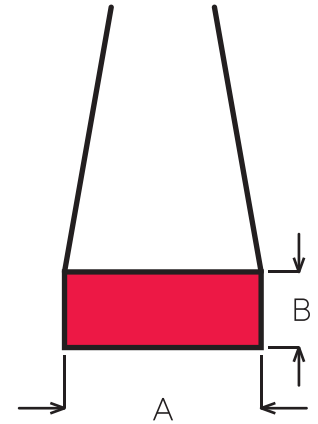
General tolerances on gasket dimensions +/- 0.8mm. Further details on application.

Circular Section

Rectangular Section

Width A (mm)	Thickness B (mm)	Part Number
2	2	8615
2	3	8149
3	3	8066
5	2	8616
5	3	8143
5	4	8617
5	5	8618
6	2	8619
6	3	8015
6	4	8620
6	5	8621
6	6	8622
9	2	8623
9	3	8035
9	4	8624
9	6	8625
9	8	8626
13	2	8627
13	3	8014
13	4	8628
13	6	8629

Width A (mm)	Thickness B (mm)	Part Number
13	8	8630
13	10	8631
16	2	8632
16	3	8120
16	4	8633
16	6	8634
16	8	8635
16	10	8636
19	2	8637
19	3	8185
19	4	8638
19	6	8639
19	8	8640
19	10	8641
32	2	8642
32	3	8050
32	4	8643
32	6	8644
32	8	8645
32	10	8646
-	-	-



Rectangular Section

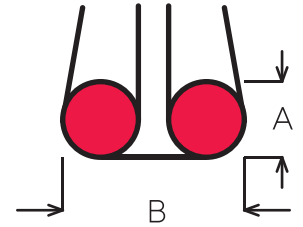
General tolerances on gasket dimensions +/- 0.8mm. Further details on application.

All-Metal Wire Mesh Gaskets

Double Core with Fin

Width A (mm)	Overall Width B (mm)	Part Number
3	13	8654
3	16	8655
3	19	8656
3	22	8657
3	25	8658
5	16	8659
5	19	8660

Width A (mm)	Overall Width B (mm)	Part Number
5	22	8661
5	25	8662
6	19	8663
6	22	8664
6	25	8665
10	25	8666
10	32	8667



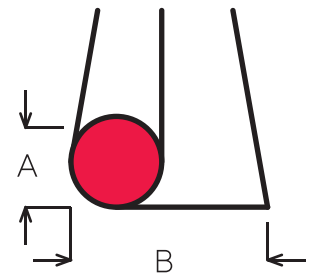
Double Core with Fin

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

'P' Section

Diameter A (mm)	Overall Width B (mm)	Part Number
3	11.5	8026
3	16	8705
3	19	8706
4	13	8707
4	16	8708
4	19	8709
5	13	8710
5	16	8711
5	16.5	8003
5	25	8712
6	13	8713
6	16	8714
6	19	8715
6	25	8716
6	28	8020
7	16	8717
7	19	8718

Diameter A (mm)	Overall Width B (mm)	Part Number
7	25	8719
8	13	8720
8	16	8721
8	19	8722
8	17	8008
8	25	8723
9	16	8724
9	19	8725
9	25	8726
10	13	8727
10	16	8728
10	19	8729
10	25	8730
13	13	8731
13	16	8732
13	19	8733
13	25	8734



'P' Section

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

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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
99:2006 and ISO/TS 16949:2009



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