



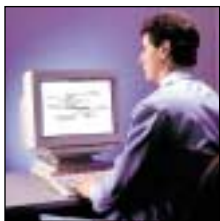
# K N I T T E D W I R E M E S H G A S K E T S

## CUSTOM-ENGINEERED SHIELDING PRODUCTS

METEX has been a pioneer in EMI/RFI gasketing and shielding products for more than five decades. In fact, METEX developed the very first EMI/RFI gasket to help MIT solve a severe interference problem for the earliest high-power, high-frequency airborne radar.

That pioneering spirit is still alive today—with a complete line of military and commercial-grade EMI/RFI shielding solutions.

As communications and information technologies expand, the need to provide EMI/RFI solutions becomes more critical than ever before.



Complete support—  
from technical review to  
design and application  
assistance



World-class EMI/RFI  
manufacturing capabilities

Metex all metal mesh gasketing is a versatile material used in a wide variety of applications where:

- High attenuation is required
- Ease of installation or field replacement is required
- Extremes in temperature or atmospheric conditions are encountered

Metex mesh gaskets have been proven, in aerospace, avionics, automotive and electronics systems, solving the most demanding shielding and sealing problems.

Mesh gaskets can be made from any ductile material that can be drawn to form a wire. Wire diameters are typically in a range of .0035" to .011", with other diameters available for specific applications.

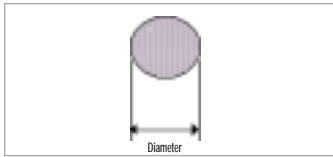
The most common materials include:

- **Monel**—An alloy of nickel and copper with good electrical performance and excellent corrosion resistance.
- **Tin-plated, copper-clad steel**—SnCuFe is a 1005-1010 steel wire, with a copper outer cladding and a tin-plated exterior. This material has excellent electrical properties and provides EM attenuation over a wide range of frequencies.
- **Aluminum**—Alloy 5056 wire provides good electrical performance, is light-weight and is also useful in applications where galvanic corrosion is a concern.
- **Stainless Steel**—Good electrical performance. This material is often used for its mechanical characteristics and corrosion resistance.

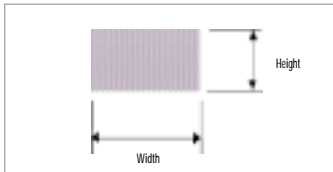
All-metal mesh gaskets are typically installed using mechanical fasteners, press fit into a groove or return flange on a sheet metal enclosure, or bonded in place using a conductive adhesive.



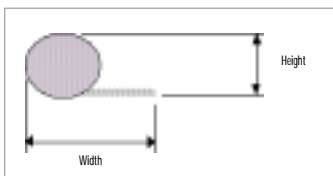
## Standard Cross Sections



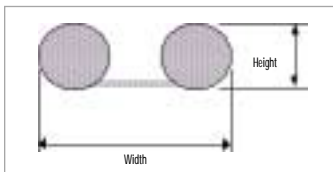
All Mesh Round



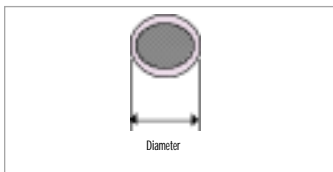
All Mesh Rectangular



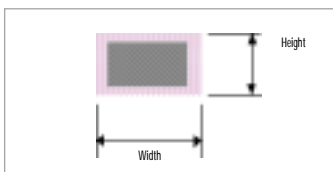
All Mesh Single Fin



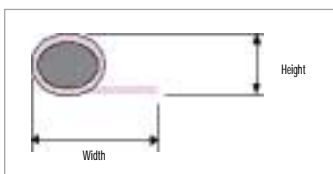
All Mesh Double Round



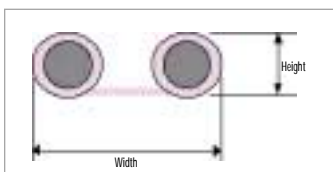
Elastomer/Mesh Round



Elastomer/Mesh Rectangular



Elastomer/Mesh Single Fin



Elastomer/Mesh Double Round

## Standard Materials and Cross Sections

Materials		Cross Section			
Core	Cover	Round	Rectangular	Single Fin	Double Round
Monel	Monel	701- 1111-	701- 2111-	701- 1131-	701- 1141-
Neoprene Sponge	Monel	701- 1221-	701- 2221-	701- 1231-	701- 1241-
Silicone Sponge	Monel	701- 1421-	701- 2421-	701- 1431-	701- 1441-
Silicone Tubing	Monel	701- 3521-	701- 4521-	701- 3531-	701- 3541-
Aluminum	Aluminum	701- 1112-	701- 2112-	701- 1132-	701- 1142-
Neoprene Sponge	Aluminum	701- 1222-	701- 2222-	701- 1232-	701- 1242-
Silicone Sponge	Aluminum	701- 1422-	701- 2422-	701- 1432-	701- 1442-
Silicone Tubing	Aluminum	701- 3522-	701- 4522-	701- 3532-	701- 3542-
Tin/Copper/Steel	Tin/Copper/Steel	701- 1113-	701- 2113-	701- 1133-	701- 1143-
Neoprene Sponge	Tin/Copper/Steel	701- 1223-	701- 2223-	701- 1233-	701- 1243-
Silicone Sponge	Tin/Copper/Steel	701- 1423-	701- 2423-	701- 1433-	701- 1443-
Silicone Tubing	Tin/Copper/Steel	701- 3523-	701- 4523-	701- 3533-	701- 3543-
304 S. Steel	304 S. Steel	701- 1114-	701- 2114-	701- 1134-	701- 1144-
Neoprene Sponge	304 S. Steel	701- 1224-	701- 2224-	701- 1234-	701- 1244-
Silicone Sponge	304 S. Steel	701- 1424-	701-2424-	701- 1434-	701- 1444-
Silicone Tubing	304 S. Steel	701- 3524-	701- 4524-	701- 3534-	701- 3544-

By choosing the correct material, wire diameter, mesh density and mesh profile, knitted wire mesh can be used to solve an extremely wide range of shielding, gasketing, electrical grounding, vibration and filtration design applications.

Key features of the product include: high attenuation, suitable for harsh environments, extreme temperature range, custom profiles, densities and a wide range of materials.

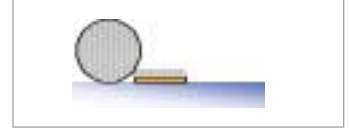
## Standard Strip Dimensions and Part Numbers

Insert the four-digit code from the Materials and Cross-Sections tables to form the complete part number. For dimensions not shown, please contact our Metex Shielding Sales Engineering department.

Height	Width	Part Number	Height	Width	Part Number
.062	.062	701- XXXX- 0060- 06	.093	.750	701- XXXX- 0090- 75
.062	.125	701- XXXX- 0060- 12	.187	.187	701- XXXX- 0180- 18
.062	.187	701- XXXX- 0060- 18	.187	.250	701- XXXX- 0180- 25
.062	.250	701- XXXX- 0060- 25	.187	.312	701- XXXX- 0180- 31
.062	.312	701- XXXX- 0060- 31	.187	.375	701- XXXX- 0180- 37
.062	.375	701- XXXX- 0060- 37	.187	.500	701- XXXX- 0180- 50
.062	.500	701- XXXX- 0060- 50	.187	.750	701- XXXX- 0180- 75
.062	.625	701- XXXX- 0060- 62	.187	1.00	701- XXXX- 0181- 00
.062	.750	701- XXXX- 0060- 75	.125	.125	701- XXXX- 0120- 12
.156	.156	701- XXXX- 0150- 15	.125	.156	701- XXXX- 0120- 15
.156	.250	701- XXXX- 0150- 25	.125	.187	701- XXXX- 0120- 18
.156	.312	701- XXXX- 0150- 31	.125	.250	701- XXXX- 0120- 25
.156	.375	701- XXXX- 0150- 37	.125	.312	701- XXXX- 0120- 31
.156	.500	701- XXXX- 0150- 50	.125	.375	701- XXXX- 0120- 37
.156	.750	701- XXXX- 0150- 75	.125	.500	701- XXXX- 0120- 50
.156	1.00	701- XXXX- 0151- 00	.125	.625	701- XXXX- 0120- 62
.093	.093	701- XXXX- 0090- 09	.125	.750	701- XXXX- 0120- 75
.093	.125	701- XXXX- 0090- 12	.250	.250	701- XXXX- 0250- 25
.093	.187	701- XXXX- 0090- 18	.250	.312	701- XXXX- 0250- 31
.093	.250	701- XXXX- 0090- 25	.250	.375	701- XXXX- 0250- 37
.093	.312	701- XXXX- 0090- 31	.250	.500	701- XXXX- 0250- 50
.093	.375	701- XXXX- 0090- 37	.250	.750	701- XXXX- 0250- 75
.093	.500	701- XXXX- 0090- 50	.250	1.00	701- XXXX- 0251- 00
.093	.625	701- XXXX- 0090- 62	.250	1.25	701- XXXX- 0251- 25

This is only a small listing of possible sizes, shapes and combinations. For other sizes and materials, please contact Metex Shielding Sales Engineering at 732-287-0800.

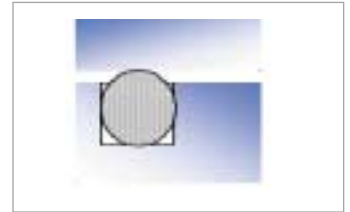
## TYPICAL MOUNTING CONFIGURATIONS



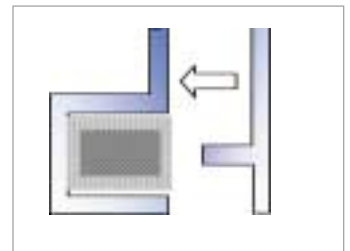
Single Fin with Adhesive Mounting



Single Fin Strip with Retention Bar/Compression Stop



Round Strip between Tongue and Groove



Enclosure Door Gasket with Elastomer Core to Reduce Compression Loading



## Metex Electronic Shielding Products

The diversity and versatility of our product line enables Metex to offer a wide range of custom solutions to optimize shielding effectiveness. We provide both off-the-shelf and custom designs in commercial and military-grade materials to ensure EMC integrity and quality. From prototype to volume production, our product line includes:

- Knitted Wire Mesh
- Vent Panels/Mesh Screens
- Spring Fingers
- Conductive Fabric
- Oriented Wire
- Braided Sleeving
- Shielded Windows, Instrumentation and Rooms
- Conductive Silicone Adhesive
- Shielding Tape/Foil Laminates
- Fabric Over Foam Gaskets
- Connector Gaskets
- Braided Rope
- Wire Mesh Gaskets

Our **Knitted Wire Mesh Gaskets** continue a long-standing Metex tradition of integrating the right designs, materials and production methods to meet customer needs for optimal performance at the lowest possible cost.



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