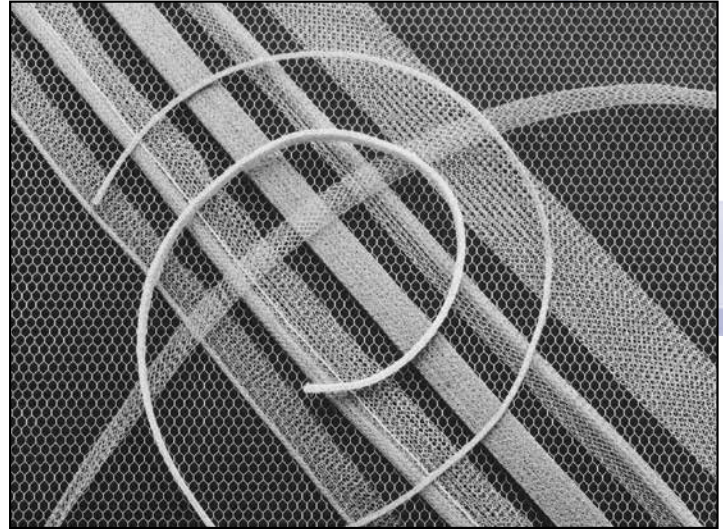


# Knitted Wire Mesh Gasketing (1500 Series)

All Mesh EMI-RFI knitted wire gasketing is available in various cross sections to satisfy the many different requirements encountered in shielding applications. The choice between rectangular, round, round with fin or double round with fin depends on the enclosure or equipment to be shielded.



## Features

- Variety of Materials:** MAJR's provides the widest possible range of knit wire mesh materials. The standard knit wire mesh is either Monel or tin-plated ferrous. While these are standard, aluminum, silver-plated brass, gold-plated copper, tungsten, stainless steel, silver, nickel, iconel, and other wire can be knit and fabricated into special products by MAJR's team of engineering and manufacturing personnel.
- High EMI/RFI Attenuation Levels:** The highest possible attenuation levels are achievable with MAJR's EMI/RFI knitted wire gasketing. Attenuation levels beyond 110 dB in the E-field and 60 dB in the H-field are common with shielding gasketing. Higher levels of attenuation are attainable with special materials and special designs.
- Resilience Material:** MAJR's knit wire gasketing material acts like thousands of tiny spring members which are compressed and released with each opening and closing of a cabinet door or enclosure cover. The spring-like gaskets assure long life with consistent point-to-point contact, providing high shielding effectiveness.

## Mechanical & EMC Characteristics of All Mesh Strip

*Shielding Effectiveness: Strip from lots are formed into gasket whose inner dimension is 12.00 x 12.00 inches (304.8 x 304.8 mm) Gasket is clamped in a test fixture with thickness deflected a minimum of 20%, EMI test is performed using MIL-STD 285 as a guide. The test is performed at frequencies from .2MHz through 10GHz. (See Table 1)*

Table 1

Code	Description
-31	Monel per QQ-N-281 Class A
-32	Aluminum
-33	Silver Plated Brass per QQ-W-321 (3% Silver by Weight)
-34	Tin Plated Copper Clad Steel per ASTM B520

Shielding Effectiveness vs Frequency — Table 2

Field	Material Code - 31 Monel							
	Frequency							
	10 kHz	100 kHz	1 MHz	18 MHz	100 MHz	400 MHz	1 GHz	10 GHz
H	40	60	80	—	—	—	—	—
E	—	—	—	110	—	—	—	—
PW	—	—	—	—	110	110	110	100

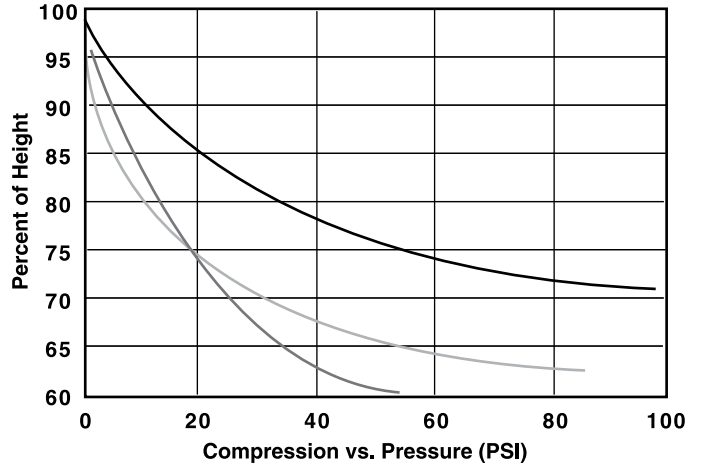
Field	Material Code - 34 Ferrous (FX)							
	Frequency							
	10 kHz	100 kHz	1 MHz	18 MHz	100 MHz	400 MHz	1 GHz	10 GHz
H	65	90	100	—	—	—	—	—
E	—	—	—	110	—	—	—	—
PW	—	—	—	—	110	110	110	100

## Compression

Deflection and recovery characteristics of Knit Wire Mesh Strips are evaluated periodically in accordance with ASTM D395-61.

In order to be assured of obtaining comparable results to those shown in these curves, good design practices must be utilized.

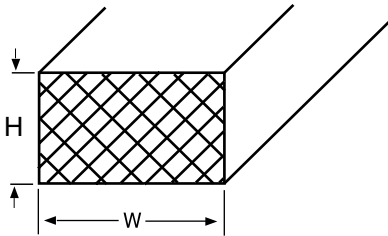
Figure 1



- For All Mesh Rectangular .12 x .25
- For All Mesh Round .25 Diameter
- For all Mesh Double Round .25 x 1.00

## All Mesh Rectangular Strip

Table 3

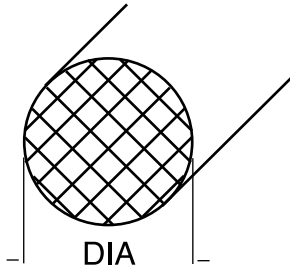


HEIGHT H	WIDTH W	Monel Part Number	Ferrous Part Number (Copper & Tin Plated)
.062 (1.57)	.062 (1.57)	1510-06006-31	1510-06006-34
.062 (1.57)	.125 (3.18)	1510-06012-31	1510-06012-34
.062 (1.57)	.187 (4.75)	1510-06018-31	1510-06018-34
.062 (1.57)	.312 (7.92)	1510-06031-31	1510-06031-34
.062 (1.57)	.375 (9.53)	1510-06038-31	1510-06038-34
.062 (1.57)	.500 (12.70)	1510-06050-31	1510-06050-34
.093 (2.36)	.093 (2.36)	1510-09009-31	1510-09009-34
.093 (2.36)	.125 (3.18)	1510-09012-31	1510-09012-34
.093 (2.36)	.187 (4.75)	1510-09018-31	1510-09018-34
.093 (2.36)	.250 (6.35)	1510-09025-31	1510-09025-34
.093 (2.36)	.375 (9.53)	1510-09038-31	1510-09038-34
.125 (3.18)	.125 (3.18)	1510-12012-31	1510-12012-34
.125 (3.18)	.187 (4.75)	1510-12018-31	1510-12018-34
.125 (3.18)	.250 (6.35)	1510-12025-31	1510-12025-34
.125 (3.18)	.312 (7.92)	1510-12031-31	1510-12031-34
.125 (3.18)	.375 (9.53)	1510-12038-31	1510-12038-34
.125 (3.18)	.500 (12.70)	1510-12050-31	1510-12050-34
.125 (3.18)	.750 (19.05)	1510-12075-31	1510-12075-34
.125 (3.18)	1.000 (25.40)	1510-12100-31	1510-12100-34
.187 (4.75)	.187 (4.75)	1510-18018-31	1510-18018-34
.187 (4.75)	.250 (6.35)	1510-18025-31	1510-18025-34
.187 (4.75)	.312 (7.92)	1510-18031-31	1510-18031-34
.250 (6.35)	.250 (6.35)	1510-25025-31	1510-25025-34
.250 (6.35)	.312 (7.92)	1510-25031-31	1510-25031-34
.250 (6.35)	.375 (9.53)	1510-25038-31	1510-25038-34
.250 (6.35)	.500 (12.70)	1510-25050-31	1510-25050-34
.375 (9.53)	.375 (9.53)	1510-38038-31	1510-38038-34

Note: Aluminum, brass (silver-plated) and other materials are available in sizes above. Other sizes are available upon request.

## All Mesh Round Strip

Table 4

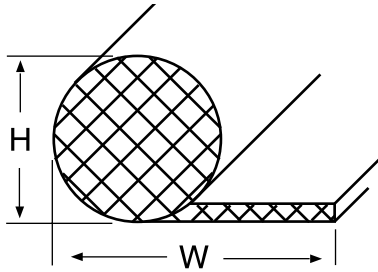


Diameter	Monel Part Number	Ferrous Part Number (Copper & Tin Plated)
.062 (1.57)	1511-06000-31	1511-06000-34
.093 (2.36)	1511-09000-31	1511-09000-34
.125 (3.18)	1511-12000-31	1511-12000-34
.156 (3.96)	1511-16000-31	1511-16000-34
.187 (4.75)	1511-18000-31	1511-18000-34
.250 (6.35)	1511-25000-31	1511-25000-34
.312 (7.92)	1511-31000-31	1511-31000-34
.375 (9.53)	1511-38000-31	1511-38000-34
.500 (12.70)	1511-50000-31	1511-50000-34

Note: Aluminum, brass (silver-plated) and other materials are available in sizes above. Other sizes are available upon request.

## All Mesh Single Round with Fin Strip

Table 5

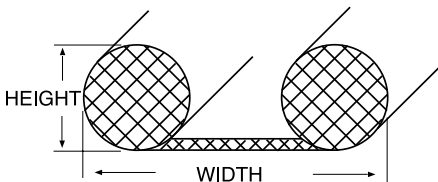


HEIGHT Round Portion	WIDTH Fin Portion	Monel Part Number	Ferrous Part Number (Copper & Tin Plated)
.062 (1.57)	.375 (9.53)	1512-06038-31	1512-06038-34
.062 (1.57)	.500 (12.70)	1512-06050-31	1512-06050-34
.093 (2.36)	.500 (12.70)	1512-09050-31	1512-09050-34
.125 (3.18)	.375 (9.53)	1512-12038-31	1512-12038-34
.125 (3.18)	.625 (15.88)	1512-12063-31	1512-12063-34
.125 (3.18)	.750 (19.05)	1512-12075-31	1512-12075-34
.156 (3.96)	.500 (12.70)	1512-16050-31	1512-16050-34
.187 (4.75)	.625 (15.88)	1512-18063-31	1512-18063-34
.250 (6.35)	.500 (12.70)	1512-25050-31	1512-25050-34
.250 (6.35)	.750 (19.05)	1512-25075-31	1512-25075-34
.250 (6.35)	1.000 (25.40)	1512-25100-31	1512-25100-34
.312 (7.92)	.625 (15.88)	1512-31063-31	1512-31063-34
.312 (7.92)	.875 (22.23)	1512-31087-31	1512-31087-34
.375 (9.53)	1.000 (25.40)	1512-38100-31	1512-38100-34
.437 (11.10)	1.000 (25.40)	1512-44100-31	1512-44100-34
.500 (12.70)	1.000 (25.40)	1512-50100-31	1512-50100-34

Note: Aluminum, brass (silver-plated) and other materials are available in sizes above. Other sizes are available upon request.

## All Mesh Double Round with Fin Strip

Table 6



Round HEIGHT	Connecting WIDTH	Monel Part Number	Ferrous Part Number (Copper & Tin Plated)
.062 (1.57)	.500 (12.70)	1514-06050-31	1514-06050-34
.125 (3.18)	.500 (12.70)	1514-12050-31	1514-12050-34
.125 (3.18)	.750 (19.05)	1514-12075-31	1514-12075-34
.125 (3.18)	1.000 (25.40)	1514-12100-31	1514-12100-34
.187 (4.75)	.625 (15.88)	1514-18063-31	1514-18063-34
.187 (4.75)	1.000 (25.40)	1514-18100-31	1514-18100-34
.250 (6.35)	.750 (19.05)	1514-25075-31	1514-25075-34
.250 (6.35)	1.000 (25.40)	1514-25100-31	1514-25100-34
.375 (9.53)	1.000 (25.40)	1514-38100-31	1514-38100-34

Note: Aluminum, brass (silver-plated) and other materials are available in sizes above. Other sizes are available upon request.