WE SHIELD YOUR WORLD



Technologies

COMPANY

Euro Technologies was founded at Concorezzo (Milan) on July 2007.

We are the main European distributor and converter of Shielding, RFI and Thermal products.

Our staff belongs to this industrial sector since 20 years so we have a very huge experience and skills in electromagnetic compatibility and specifically in customization of standard components (EMI, EMC, RFI and THERMAL MGMT).

Our technical department can support the customer in designing and helping to solve any kind of problem of electromagnetic interference or heat dissipation using thermal management interfaces.

During 2007 and 2008 **Euro Technologies** established two sales offices: the first one, at the end of 2007 in Germany, Rosenheim. The second one was founded on beginning of 2008 in Paris, close to Orly airport. In 2010 **Euro Technologies** establish a new facility in China, close to Shanghai.

Thanks to the huge technical skill, and the capability to determine how and which product to use, our products can match all industry demands about Electromagnetic interference (EMI), Thermal management and Environmental sealing gaskets.

From rapid prototyping to volume production runs, **Euro Technologies** is your complete source with fast RFQ responses and high quality parts.

As a premier fabricator/distributor we have an extensive product mix for all your design needs.













EURO TECHNOLOGIES PRODUCTS

SHIELDING MATERIALS

- Silicone Gasket with Embedded Metal Wire.
- Electrically Conductive Elastomers.
- Form In Place.
- Flat Gasket.
- Adhesive Silicone.
- Conductive Tapes.
- Flat Band.
- All Metal Knitted Wire Mesh.
- Wire Mesh Over Elastomer.
- Combi Gasket.
- Board Level Shield.

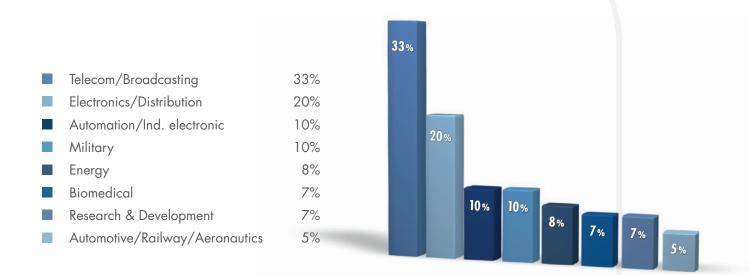
- Fingerstock.
- Fabric Over Foam Profiles.
- Conductive Foam.
- Conductive Fabric.
- Microwave Absorber.
- Ferrite.
- Shielded Windows.
- Honeycomb Vent Panel Filters.
- Electrically Conductive Paint.
- Environmental Sealing Gasket.

THERMAL MANAGEMENT MATERIALS

- Gap Filler Materials.
- Phase Change Materials.
- Thermal Greases.
- Thermally Conductive Insulators.

- Thermally Conductive Circuit Boards.
- Pressure Sensitive Adhesive Material.
- Elettrically & Thermally Conductive Interface Material.

EURO TECHNOLOGIES REFERENCE MARKETS





EURO TECHNOLOGIES CERTIFICATE









INDEX

PRODUCT

1.	SILICONE GASKET WITH EMBEDDED METAL WIRE	Pag	6
2.	ELECTRICALLY CONDUCTIVE ELASTOMERS	Pag	10
3.	ELECTRO-COAT	Pag	16
4.	F.I.P. FORM IN PLACE	Pag	24
5.	FLAT GASKET	Pag	28
6.	ADHESIVE SILICONE	Pag	32
7.	CONDUCTIVE TAPES	Pag	36
8.	FLAT BAND	Pag	40
9.	ALL METAL KNITTED WIRE MESH	Pag	44
10.	WIRE MESH OVER ELASTOMER	Pag	50
11.	COMBI GASKET	Pag	56
12.	B.L.S. BOARD LEVEL SHIELD	Pag	60
13.	FINGERSTOCK	Pag	64
14.	F.O.F. FABRIC OVER FOAM PROFILE	Pag	90
15.	CONDUCTIVE FOAM	Pag	96
16.	CONDUCTIVE FABRIC	Pag	100
17.	MICROWAVE ABSORBER	Pag	104
18.	FERRITE	Pag	110
19.	SHIELDED WINDOWS	Pag	114
	HONEYCOMB VENT PANEL FILTERS	Pag	120
01		Dest	104
	ELECTRICALLY CONDUCTIVE PAINT	Pag	126
22.	ENVIRONMENTAL SEALING GASKET	Pag	130

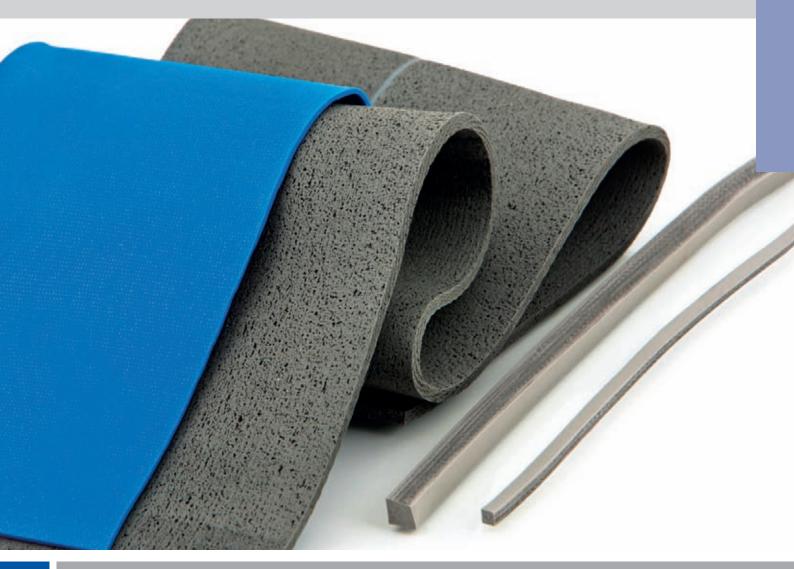
CUSTOMIZATIONS

CUSTOMIZATIONS

Pag 132



SILICONE GASKET WITH EMBEDDED METAL WIRE.



GENERAL INFORMATION

This family of EMI Gasket consists of fine monel or aluminium wires oriented perpendicular to the mating surfaces and embedded in solid or sponge silicone or fluorosilicone elastomer.

The elastomer acts as an environmental seal, while the metal wires provide excellent conductivity to establish EMI/RFI integrity.

Available with or without PSA (pressure sensitive adhesive), in sheet, strip or it can easily be die cut by **Euro Technologies** into complex shapes or fabricated into custom frame gaskets.

FEATURES AND BENEFITS

- Ideal for both military and commercial applications.
- Wide choice of profiles to fit large range of applications.
- Custom dies can be built to accommodate specific designs.
- Shielding effectiveness up to 120 dB at 10 GHz.
- Low contact resistance.
- Electrochemically compatible with most metals and alloys.
- Service temperatures from 60 °C to 200 °C.

Customizations





ALUMINIUM

ø 0.13 ± 0.01mm AMS-4182 Alloy 5056

Grey for Silicone Blue for Fluorosilicone

MONEL

ø 0.11 ± 0.01 mm QQ-N-281-B

SOLID SILICONE

ZZ-R-765 30 shore Temperature Range - 57° to 260°

SPONGE SILICONE

AMS-3195 Temperature Range - 62° to 204°

MECHANICAL TOLERANCES

SHEET SOLID AND SPONGE

Height (mm)	
• 0.80 - 6.35	± 0.25
Width (mm)	

• 19.05 - 228.60 ± 5.00

STRIP SOLID

Height (mm)	
• 1.57 - 6.35	± 0.25
• 6.50 - 12.70	± 0.38
Width (mm) • 1.57 - 6.35 • 6.50 - 12.70	± 0.38 ± 0.51

STRIP SPONGE

Height (mm)	
• 2.36 - 6.35	± 0.38
• 6.50 - 12.70	± 0.51
Width (mm)	+ 0.51
Width (mm) • 2.36 - 6.35 • 6.50 - 12.70	± 0.51 ± 0.76

SHEET MATERIAL

Code	Thickness (mm)	Width (mm)	Lenght (mm)
OWxy-z-0A01-914	0.8 *	228.6	914.0
OWxy-z-0B02-914	1.1 *	228.6	914.0
OWxy-z-0C03-914	1.6 *	228.6	914.0
OWxy-z-0D04-914	2.4	228.6	914.0
OWxy-z-0E05-914	3.2	228.6	914.0
OWxy-z-0F06-914	4.8	228.6	914.0
OWxy-z-0G07-914	6.4	228.6	914.0

Standard Sheet length is 914.0 mm.

* Not available as sponge silicone.

STRIP MATERIAL

Code	Thickness (mm)	Width (mm)
OWxy-z-0A08-914	0.8	9.5
OWxy-z-0C09-914	1.6	3.2
OWxy-z-0D10-914	2.4	6.4
OWxy-z-0E11-914	3.2	7.9
OWxy-z-0F12-914	4.8	4.8
OWxy-z-0G13-914	6.4	19.1

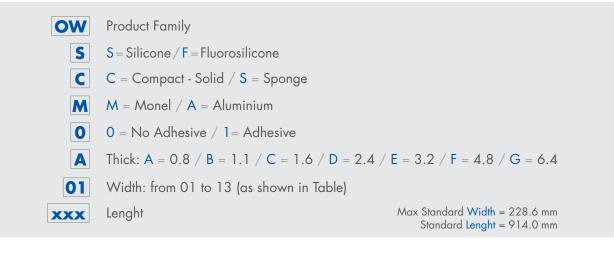
Standard strip length is 914.0 mm.

ANY LONGER LENGTH COULD BE SUPPLIED GLUING STD STRIPS

ANY DIFFERENT WIDTH CAN BE REQUIRED

ORDERING INFORMATION





ORDERING INFO

OWxy-z-0E06-914 Replace "xy-z" with code info Table.



ELECTRICALLY CONDUCTIVE ELASTOMERS.



GENERAL INFORMATION

Euro Technologies E.C.E. (Electrically Conductive Elastomers) products are ideal for both military and commercial applications requiring both environmental sealing and EMI shielding.

They consist of a homogeneous mix with conductive particles in silicone or fluorosilicone.

Compounds can be supplied in sheet form, as moulded part, extruded shapes, die cut part or dispensed bead.

Our comprehensive range of fillers goes from Carbon Black to Pure Silver and it's possible to choose between Commercial Grade materials, for those applications which require very good performance with price sensitivity, and Military Grade materials which are produced to meet the more demanding EMI/RFI requirements of MIL-DTL-83528, missile and weapons specifications.

Customizations



FEATURES AND BENEFITS

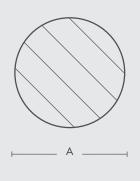
- Ideal for both military and commercial applications.
- Wide choice of profiles to fit large range of applications.
- Custom dies can be built to accommodate specific designs.
- Shielding effectiveness up to 120 dB at 10 GHz.
- MIL-DTL-83528 approved.
- Wide range of operating temperatures (from 65 °C to 160 °C).

DATA SHEET MATERIAL (Material Specifications)

	SC	SNG	SSA
	Silicone	Silicone	Silicone
	Carbon	Nickel-Graphite	Silver-Aluminium
			В
Visual	Black	Dark Gray	Tan
Shore A	70	60	65
ohm-cm	5	0.1	0.008
g/cc	1.3	2	2
% Min.	100	110	100
°C	160	160	160
°C	- 55	- 55	- 55
dB	> 60	> 100	> 115
	Shore A ohm-cm g /cc % Min. °C °C	Silicone CarbonVisualBlackShore A70ohm-cm5g /cc1.3% Min.100°C160°C- 55	Silicone CarbonSilicone Nickel-GraphiteVisualBlackDark GrayShore A7060ohm-cm50.1g/cc1.32% Min.100110°C160160°C- 55- 55

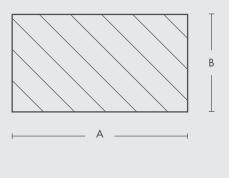
O-STRIP

Code	A (mm)
CE-OS-x-yy-001	1.0
CE-OS-x-yy-002	1.3
CE-OS-x-yy-003	1.6
СЕ-ОЅ-х-уу-004	1.8
СЕ-ОЅ-х-уу-005	2.0
СЕ-ОЅ-х-уу-006	2.4
CE-OS-x-yy-007	2.8
СЕ-ОЅ-х-уу-008	3.2
CE-OS-x-yy-009	3.8
CE-OS-x-yy-010	5.5



RECTANGULAR STRIP

Code	A (mm)	B (mm)
CE-RE-x-yy-001	2.00	1.0
CE-RE-x-yy-002	3.20	1.0
CE-RE-x-yy-003	6.40	1.6
CE-RE-x-yy-004	12.0	0.8
CE-RE-x-yy-005	19.0	1.9
CE-RE-x-yy-006	22.0	2.3



SSC	SSG	SS	FNG	FSA	FSC	FS
Silicone	Silicone	Silicone	Fluorosilicone	Fluorosilicone	Fluorosilicone	Fluorosilicone
Silver-Copper	Silver-Glass	Pure Silver	Nickel-Graphite	Silver-Aluminium	Silver-Copper	Pure Silver
A	Μ	Н		D	С	F
Tan	Tan	Tan	Dark	Blue	Tan	Tan
65	65	80	65	70	75	75
0.004	0.006	0.005	0.1	0.012	0.01	0.01
3.4	1.9	3.7	1.95	2	4.1	4
100	100	100	100	60	100	100
125	160	160	150	160	125	160
- 55	- 55	- 55	- 55	- 55	- 55	- 65
> 120	> 90	> 120	> 100	> 115	> 120	> 120

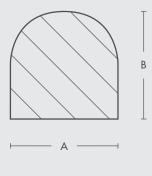
HOLLOW O-STRIP

Code	A (mm)	B (mm)
СЕ-НО-х-уу-001	2.2	1.3
СЕ-НО-х-уу-003	2.6	1.0
СЕ-НО-х-уу-004	3.2	1.1
СЕ-НО-х-уу-005	3.2	1.6
СЕ-НО-х-уу-006	4.0	1.3
СЕ-НО-х-уу-007	6.4	3.2
СЕ-НО-х-уу-008	7.9	4.8



D-STRIP

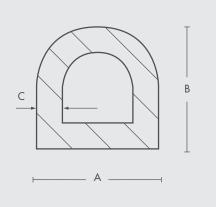
Code	A (mm)	B (mm)
CE-DS-x-yy-001	1.6	1.7
CE-DS-x-yy-002	1.9	4.5
CE-DS-x-yy-003	2.4	2.0
CE-DS-x-yy-004	3.1	3.4
CE-DS-x-yy-005	4.0	4.0
CE-DS-x-yy-006	4.5	2.3
CE-DS-x-yy-007	6.4	6.4





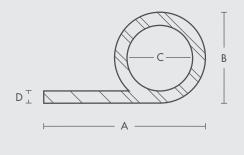
HOLLOW D-STRIP

Code	A (mm)	B (mm)	C (mm)
CE-HD-x-yy-001	1.5	1.6	0.3
CE-HD-x-yy-002	2.8	3.2	0.6
CE-HD-x-yy-003	3.7	3.7	0.4
CE-HD-x-yy-004	4.0	4.0	1.1
CE-HD-x-yy-005	4.0	4.0	0.7
CE-HD-x-yy-006	4.0	3.1	1.1
CE-HD-x-yy-007	7.5	7.9	1.0



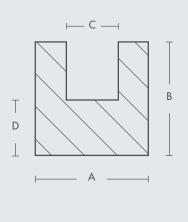
P-STRIP

Code	A (mm)	B (mm)	C (mm)	D (mm)
CE-PS-x-yy-001	6.4	1.0	0.7	0.4
CE-PS-x-yy-002	6.4	2.0	0.9	0.4
CE-PS-x-yy-003	9.5	6.4	3.8	1.6
CE-PS-x-yy-004	14.3	7.9	4.7	1.6
CE-PS-x-yy-005	16.5	5.1	2.0	1.6
CE-PS-x-yy-006	19.0	9.0	5.8	1.6



U-STRIP

Code	A (mm)	B (mm)	C (mm)	D (mm)
CE-US-x-yy-001	2.5	2.5	0.9	0.8
CE-US-x-yy-002	4.0	4.0	1.9	1.2
CE-US-x-yy-003	4.0	4.8	1.5	1.2
CE-US-x-yy-004	4.4	4.0	1.2	1.9
CE-US-x-yy-005	5.6	4.0	2.4	0.8
CE-US-x-yy-006	6.4	6.4	3.2	1.6





O-Ring and Flat Washer are made of conductive silicone either moulded or as bonded parts and perform both EMI/RFI shielding as well as environmental sealing.



SHEET MATERIAL

This table lists thicknesses for our molded sheet material.

Code	Thickness (mm)
CE-SH-x-yy-001	0.5
CE-SH-x-yy-002	0.8
CE-SH-x-yy-003	1.1
CE-SH-x-yy-004	1.5
CE-SH-x-yy-005	2.3
CE-SH-x-yy-006	2.5
CE-SH-x-yy-007	3.2

	STANDARD SHEET DIMENSION: 254 x 254 mm	
H	BIGGER SHEET SIZES ARE AVAILABLE ON REQUEST	H
TOLERANCES		

Sections		Thickness	
Extruded Parts (m	ım)	Sheet Materials	(mm)
• Up to 5.0	± 0.13	• Up to 0.51	± 0.10
• > 5.0 to 9.0	± 0.20	• Up to 0.81	± 0.13
• > 9.0	± 0.25	• Up to 1.57	± 0.18
		• Up to 3.18	± 0.25

ORDERING INFORMATION



CE	Product Family
OS	OS = O-Strip / HO = Hollow Strip / RE = Rectangular Strip / DS = D-Strip / HD = Hollow D-Strip PS = P-Strip / US = U-Strip / SH = Sheet / OR = O-Ring / FW = Flat Washer
S	S = Silicone / F = Fluorosilicone
SA	C = Carbon Black* / NG = Nickel Graphite / SA = Silver Alluminum / SC = Silver Copper SG = Silver Glass* / SS = Pure Silver
001	Dimension

* Available in Silicone only.



ELECTRO COAT.



GENERAL INFORMATION

Electro-coat series material is a very soft gasket with good shielding properties.

The resilient inner core remains free of metal fillers, resulting in optimum compression and ageing properties. Silver conductive material is only present in the outer thin membrane for excellent conductive properties and very low compression force.

The most common inner core used is a standard silicone profile with shore 50. Depending from the material thickness, other shore hardnesses may be possible.

Please ask for feasibilities.

FEATURES AND BENEFITS

- Excellent shielding effectiveness greater than 90 dB.
- Coated foam gaskets have a low compression force with shielding performance approaching that of traditional elastomers filled with silver plated particles.
- Wide compression range from 10% to 70% deflection to accommodate uneven gaps in enclosure housings.
- The coating will maintain the flammability raiting of the inner core material.

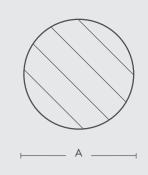
Customizations





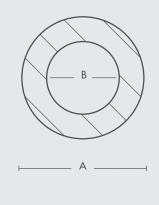
O-STRIP

Code	A (mm)
EC-OS-xx-AG-001	2.0
EC-OS-xx-AG-002	3.2
EC-OS-xx-AG-003	3.5
EC-OS-xx-AG-004	3.8
EC-OS-xx-AG-005	5.0



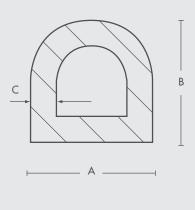
HOLLOW O-STRIP

Code	A (mm)	B (mm)
EC-HO-xx-AG-001	0.9	0.5
EC-HO-xx-AG-002	1.2	0.7
EC-HO-xx-AG-003	2.1	0.8
EC-HO-xx-AG-004	3.2	1.2
EC-HO-xx-AG-005	4.8	2.8



HOLLOW D-STRIP

Code	A (mm)	B (mm)	C (mm)
EC-HD-xx-AG-001	2.8	3.2	0.6
EC-HD-xx-AG-002	3.7	3.7	0.4
EC-HD-xx-AG-003	6.0	6.4	1.0
EC-HD-xx-AG-004	6.4	6.4	1.7
EC-HD-xx-AG-005	7.5	7.9	1.0



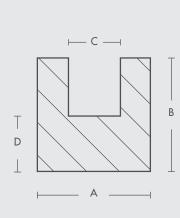


RECTANGULAR STRIP

	∏ B ⊥
н Ан	

Code	A (mm)	B (mm)
EC-RE-xx-AG-001	6.4	1.6
EC-RE-xx-AG-002	25.4	3.2

U-STRIP



Code	A (mm)	B (mm)	C (mm)	D (mm)
EC-US-xx-AG-001	4.0	4.0	1.9	1.2
EC-US-xx-AG-002	6.4	6.4	3.2	1.6

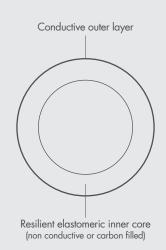
A-STRIP

A		B
	⊢ D	

Code	A (mm)	B (mm)	C (mm)	D (mm)
EC-AS-xx-AG-001	5.0	10.0	1.6	1.6

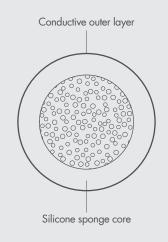


GASKET COSTRUCTION



- A variety of profiles offer also a variety of attachment methods. Some of the profiles can be equipped with a pressure sensitive non conductive silicone adhesive tape.
- Profiles to customer specification can be tooled.

SPONGE COSTRUCTION



MATERIALS

. SPONGE SILICONE Similar to shore:

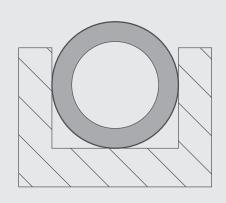
Density approx.: Max temperature: Mechanical tolerances: 8 - 13° (DIN 53505) 0,4 g/cm3 (DIN 53479) 200 °C ± 10%

ATTACHMENT METHODS

• Dart-Press-Fit.

ATTACHMENT METHODS

• Groove.



ATTACHMENT METHODS

• Pressure sensitive adhesive.

• Pressure sensitive adhesive can be provided as optional on Hollow D-Strip.





TOLERANCES

Extruded Parts (mm)

- Up to 5.0 ± 0.10
- > 5.0 to 9.0 ± 0.20 ± 0.25
- > 9.0

Sponge	(mm)
--------	------

• Up to 2.5	± 0.35
• > 2.5 to 4.0	± 0.40
• > 4.0 to 6.3	± 0.50
• > 6.3 to 10.0	± 0.70

• > 10.0 to 16.0 ± 0.80

MATERIAL **Core Material Shore Hardness** XX SF Silicone Foam 5 < D < 10 SS Solid Silicone 50 Flame resistant Foam Silicone FR 5 < D < 10 Coating **Material** Silver/Silicone AG

ORDERING INFORMATION

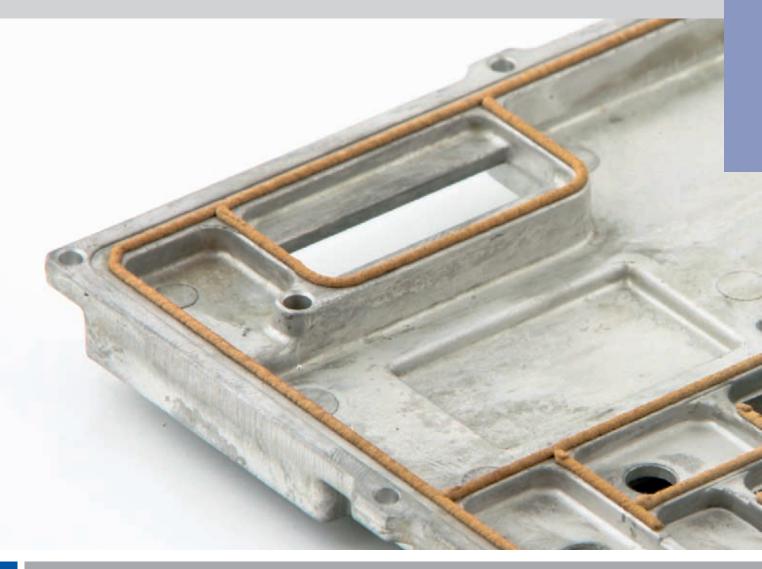


EC	Product Family
OS	OS = O-Strip / HO = Hollow O-Strip / RE = Rectangular Strip / HD = Hollow D-Strip US = U-Strip / AS = A-Strip
XX	SF = Silicone Foam / SS = Solid Silicone / FR = Flame resistant Foam Silicone
AG	Silver Silicone
001	Dimension



F.I.P.

FORM IN PLACE.



GENERAL INFORMATION

Euro Technologies' Form in Place is an automated system for dispensing conductive elastomer EMI shielding and grounding gaskets onto metal or plastic substrates.

This product is particularly ideal for small telecommunication and medical devices, radios and many other cast or plastic enclosures and packaged electronic assemblies.

FEATURES AND BENEFITS

- Small consistent bead can be applied to thin walls, saving labor and eliminating material waste.
- Soft compressible materials.
- Dispense on metal or plastic.
- Automated process capable of irregular shapes and tight tolerances.

APPLICATION

- Cell phones.
- Cellular base stations.
- Hand held devices.
- Electromedical devices.
- Automotive.

Customizations



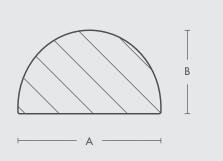
DATA SHEET TABLE

Compound	Test Method	Units	FIP-SSN	FIP-SSC	
Elastomer			Silicone	Silicone	
Filler			Silver/Nickel	Silver/Copper	
Color			Beige	Beige	
Electrical Properties	Test Method	Units			
Volume Resistivity	MIL-DTL-83528 Para 4.5.10	Ohm-cm	0.005	0.006	
Shielding Effectiveness 200 Mhz to 10 Ghz	MIL-DTL-83528 Para 4.5.12	dB	90 - 110	85 - 110	
Physical Properties	Test Method	Units			
Hardness	ASTM D2240	Shore A	48	48	
Compression set	ASTM D575	%	< 20	< 20	
Adhesion Strenght (Al)		N/cm ²	170	150	
At 20% compression		N/cm	1.40	2.10	
At 40% compression		N/cm	7.70	7.88	
Temperature Range		°C	- 50 to 125	- 50 to 125	
Curing Requirements	Test Method	Units			
Time before Handling		Hours	2 - 3	2 - 3	
98% Cure		Hours	12	12	

TOLERANCES

Dimensional Tolerances
± 0.15
± 0.20
± 0.25

Bead height B (mm)	Dimensional Tolerances
> 0.25 to 1.00	± 0.15
> 1.00 to 2.00	± 0.20
> 2.00	± 0.25





FIP-SSA	FIP-SSG	FIP-SNC
Silicone	Silicone	Silicone
Silver/Al	Silver/Glass	Ni/ Carbon
Beige	Beige	Dark Gray
0.008	0.009	0.015
87 - 120	85 - 100	85 - 110
57	54	53
< 20	< 20	< 20
150	120	150
3.15	3.15	2.60
8.20	9.60	13.80
- 50 to 125	- 50 to 125	- 50 to 125
2 - 3	2 - 3	1
12	12	12

ORDERING INFORMATION

FIP - SNC - 055

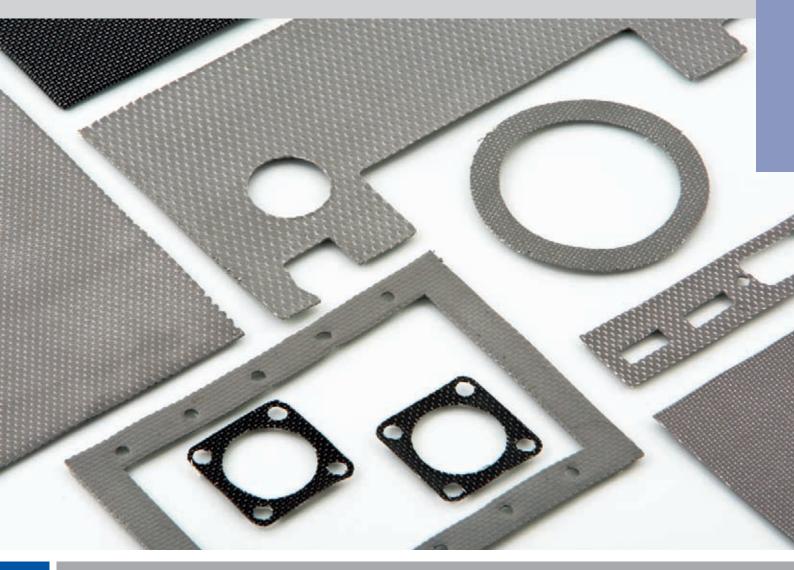
- FIP
 Product Family

 SNC
 SNC = Silicone Nickel/Carbon / SSC = Silicone Silver/Copper / SSA = Silicone Silver/Aluminium

 SSG = Silicone Silver/Glass / SSN = Silicone Silver/Nickel
- **055** Cartridges dim. (cc) 55 300

5.

FLAT GASKET.



GENERAL INFORMATION

A composite of metal mesh impregnated with an elastomer to yield a highly conductive, yet resilient Gasketing material for EMI/RFI shielding as well as a pressure and environmental seal. **Euro Technologies** unique fabrication process allows for unmatched consistency in quality and performance.

Available without elastomer filler for use in applications where an environmental seal is not necessary, or for use in applications as a low performance RF air filter.

FEATURES AND BENEFITS

• Designed for those specific applications where joint unevenness does not exceed 0.1mm and/or where space restrictions occur. Conductivity is achieved on contact due to the protruding contact points, which lends to its use in nearly all types flat connectors.

Customizations







SPECIFICATIONS

Listed below are the most common used mesh and elastomer types.

Code	Metal	Elastomer	Thick (mm)
EMSE-MOA	Expanded Monel	Silicone	0.5
EMSE-AOA	Expanded Aluminium	Silicone	0.5
EMNE-AOA	Expanded Aluminium	Neoprene	0.5
EMNW-AOB	Woven Aluminium	Neoprene	0.4
EMSE-MOB	Expanded Monel	Silicone	0.4

SILICONE

ZZ-R-765 50 shore Temperature: - 62 °C to 260 °C Color: Grey

ALUMINIUM

Alloy 5056QQ - A-430 (AMS - 4182)

NEOPRENE

AMS 3222 Temperature: - 40 °C to 100 °C Color: Black

MONEL

QQ-N-281-B

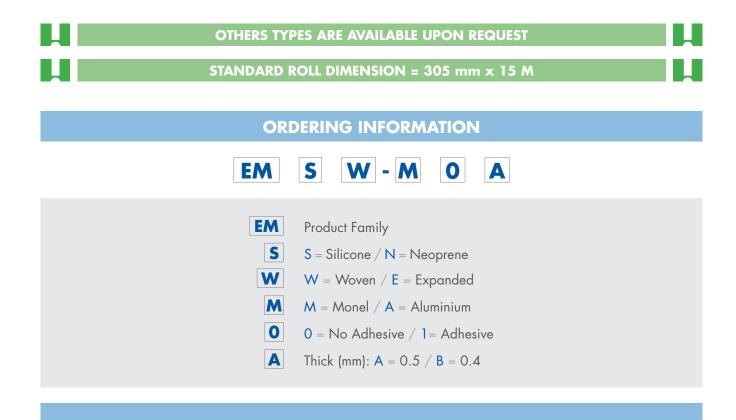
SHIELDING PERFORMANCES

Frequency	Metal Type	Attenuation (dB)
14 kHz	Monel	40
1 MHz	Monel	50
18 MHz	Monel	100
1 GHz	Monel	90
Frequency	Metal Type	Attenuation (dB)
Frequency 14 kHz	Metal Type Aluminium	Attenuation (dB) 35
14 kHz	Aluminium	35



MECHANICAL TOLERANCES

THICKNESS: ± 0.1 mm



CUSTOM DIE CUT SOLUTIONS AVAILABLE



ADHESIVE SILICONE.



GENERAL INFORMATION

To adhere gaskets made from conductive elastomers, different silicone based adhesives have been developed to attach silicone based materials to metal.

We offer the one component adhesive with 4 different particle types to mach elastomers of product series.

FEATURES AND BENEFITS

- Easy and ready to use.
- Room temperature vulcanization.
- Short curing time.

Customizations



SPECIFICATIONS

The **Silicone Adhesive** shows a remarkable working temperature range, stability against ozone and ultraviolet influence as well as a good elastic joint.

Contact factory for Fluorosilicone adhesive and/or technical advise.

There should be no problems in working with the material, however, the usual safety precautions for chemicals must be considered: do not inhale gasses, protect skin, do not eat or drink, keep away from unauthorized persons and children.

Safety instructions according to DIN are available on request.

ONE COMPONENT ADHESIVE

BASE MATERIAL

Silicone RTV.

FILLER

Nickel/Carbon	SNC
Silver/Copper	SSC
Silver/Aluminium	SSA
Silver/Glass	SSG

FILLER VOLUME BY WEIGHT

More than 80% of specific weight.

SPECIFIC RESISTIVITY

0.01 ohm cm or less.

SHEAR STRENGHT

8.8 Kg/cm².

CURING TIME 1-4 days at room temperature depending on relative humidity.

SHELF LIFE

150 days with cooling.180 days with temperature below 0 °C.

ORDERING INFORMATION RTV - SNC - 015		
RTV SNC 015	Product Family SNC = Silicone Nickel/Carbon / SSC = Silicone Silver/Copper SSA = Silicone Silver/Aluminium / SSG = Silicone Silver/Glass Cartridges dim. (cc) = 15 / 30 / 75 / 300	

7.

CONDUCTIVE TAPES.



Euro Technologies offers a large variety of conductive tapes which can be composed by metallic substrates or metallized fabric always with an electrically conductive pressure sensitive adhesive (PSA).

The metal foils can either be supplied with bright surface or with tin plating.

Shielding tapes are an economical solution for a widevariety of commercial applications and they're available in standard widths but other dimensions per customer specification are possible.

FEATURES AND BENEFITS

- Simple installation.
- Excellent conductivity.
- High operating temperature.
- Easy die-cutting and processing.
- Superb adhesion.

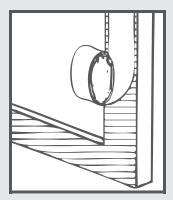
Customizations



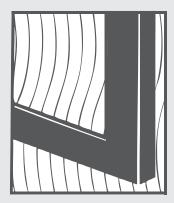


EXAMPLE OF APPLICATION

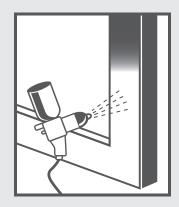
1) Apply copper band to the contact surface



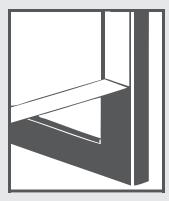
3) Drying the colour



2) Painting



4) Remove protective foil: Contact surface is free



Code Material		
CT-01-xxx-33	Cu/Sn + Electrically conductive adhesive	
CT-02-xxx-33	Cu Bright Clean + Electrically conductive adhesive	
CT-03-xxx-33	Al + Electrically conductive adhesive	
CT-04-xxx-33	Cu/Sn ETMask	
CT-05-xxx-33	Cu Bright Clean + Electrically conductive adhesive on both side	

SPECIFICATIONS

	01	02	03	04	05
Foil material	Copper	Copper	Aluminium	Copper	Copper
Surface	Tin plated	Bright	Bright	Tin plated	Bright
Thickness incl. adhesive (mm)	0.065	0.065	0.070	0.065	0.095
Protective cover over foil material	no	no	no	Polyester shrink foil	no
Max temp. contin. (°C)	150	150	150	150	150

STANDARD LENGHT = ROLLS 33 M	
STANDARD WIDTH = ROLLS 12 - 20 - 25 mm	
ANY OTHER WIDTHS ON REQUEST	

ORDERING INFORMATION



СТ	
00	

025

33

Product Family

Material

Width (mm)

Lenght (m)



FLAT BAND.



Euro Technologies Flat Band tape is a single layer strip of knitted wire mesh to provide effective EMI shielding and grounding for electrical and electronic cable assemblies.

It is particularly useful in applications where the need for EMI protection is determined after cable assembly is completed and standard braided cable jackets cannot be used.

The flexible structure of the Flat Band tape permits it to conform to irregular surfaces and contours during the wrapping process.

FEATURES AND BENEFITS

- Available in several alloys and wire dimensions. Supplied on rolls starting from 25 m to 500 m. (Note: when determining wrapping quantity needed, 50% overlap is recommended).
- Custom alloys available upon request.
- Flat Band tape is 0.5 mm of thick.
- It is available in tin plated copperclad steel ASTM-B-250, with a diameter of 0.1 mm.

Customizations





STANDARD MATERIAL

- . MONEL Alloy of copper (30%) and nickel (67%)
- **. SCF** Tinned Copperclad Steel
 - Steel
 (64%)

 Copper
 (34% min)

 Tin
 (2%)

. ALUMINIUM

. STAINLESS STEEL

MECHANICAL TOLERANCES

HIGHT (mm): ± 0.2 WIDTH (mm): ± 5.0

Code	Width (mm)
FB-xxx-001	25.4
FB-xxx-002	38.1
FB-xxx-003	44.5
FB-xxx-004	57.2

OTHER WIDTHS AVAILABLE ON REQUEST







AL METAL METAL KNITED VIRE MESH.



These gasket are made from knitted metal wire and supplied in different shapes and dimensions.

All commercial metal wires can be used, although Monel; Stainless steel; SCF and Aluminium are the most popular wires.

Standard forms are O-Strip, rectangular, O-Strip with fin and double O-strip with fin.

As all metal gaskets have a limited elasticity, it is important to be aware of the closing force. This should not exceed 20% when opening and closing the enclosure frequently.

With 40% compression permanent deformation should be expected. There for compression > 40% should be used only when gaskets is replaced after each opening of enclosure.

Customizations



FEATURES AND BENEFITS

- Highest attenuation properties.
- Versatile mounting.
- Wide range of alloys.

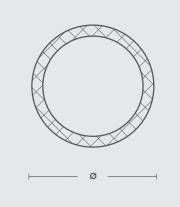


ULTRAFLEX BeCu KNITTED WIRE SHIELDING

MATERIAL: Beryllium Copper. **PLATINGS**: Bright, Tin, Nickel, Silver, Zinc.

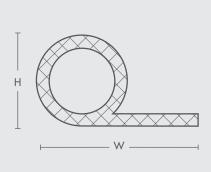
HOLLOW CORE ROUND

Code	Ø (mm)
UF-RO-CUBE-01-x	1.6
UF-RO-CUBE-02-x	2.4
UF-RO-CUBE-03-x	3.2
UF-RO-CUBE-04-x	4.0
UF-RO-CUBE-05-x	6.4
UF-RO-CUBE-06-x	12.7



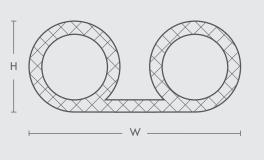
HOLLOW CORE ROUND WITH SINGLE FIN

Code	W (mm)	H (mm)
UF-RF-CUBE-07-x	9.5	3.2
UF-RF-CUBE-08-x	12.7	6.4
UF-RF-CUBE-09-x	15.9	7.9
UF-RF-CUBE-10-x	22.2	7.9
UF-RF-CUBE-11-x	25.4	12.7



HOLLOW CORE DOUBLE ROUND

Code	W (mm)	H (mm)
UF-DR-CUBE-12-x	12.7	1.6
UF-DR-CUBE-13-x	19.1	6.4
UF-DR-CUBE-14-x	25.4	4.8
UF-DR-CUBE-15-x	25.4	9.5

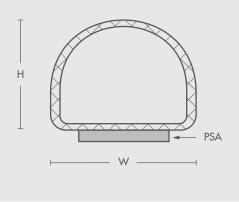




D-SHAPED

Code	W (mm)	H (mm)
UF-DS-CUBE-16-x	6.4	3.2
UF-DS-CUBE-17-x	9.7	7.9
UF-DS-CUBE-18-x	19.1	17.0

+ 0.6 / 0



ULTRAFLEX IS SUPPLIED ON SPOOLS IN CONTINUOS MINIMUM LENGHT OF 7.6 M

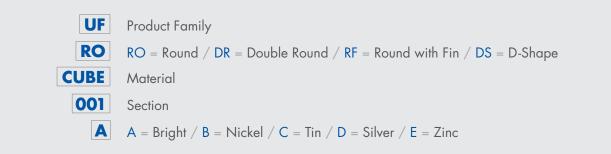
MECHANICAL TOLERANCES

Dimensions in mm

- > 1.5 to 5.0 + 0.4 / 0
- > 5.0 to 10.0
- > 10.0 to 17.0 + 0.8 / 0

ORDERING INFORMATION





ORDERING INFO

UF - DS - CUBE - 16 - x Replace "x" with code info Table.



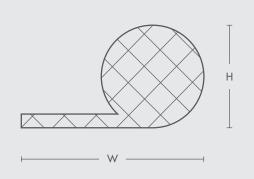
ALL MESH EMI GASKETING

MATERIAL:

MONEL: Ø 0.114 mm / **ALUMINIUM**: Ø 0.127 mm **STAINLESS STEEL**: Ø 0.114 mm (9% Ni, 18% Cr, 73% Fe) / **SCF**: (Sn, Cu, Fe) Ø 0.114 mm.

ALL MESH SINGLE ROUND WITH FIN STRIP

Code	W (mm)	H (mm)
AMRF-xxx-001	9.5	3.2
AMRF-xxx-002	12.7	2.4
AMRF-xxx-003	15.9	4.8
AMRF-xxx-004	19.1	3.2



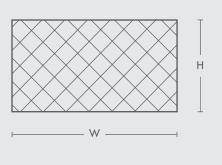
Н

ALL MESH DOUBLE ROUND WITH FIN STRIP

Code	W (mm)	H (mm)
AMDR-xxx-001	12.7	3.2
AMDR-xxx-002	25.4	3.2
AMDR-xxx-003	31.8	6.4
AMDR-xxx-004	50.8	12.7

ALL MESH RECTANGULAR STRIP

Code	W (mm)	H (mm)
AMRE-xxx-001	1.8	1.6
AMRE-xxx-002	3.2	3.2
AMRE-xxx-003	4.0	3.2
AMRE-xxx-004	6.4	2.4

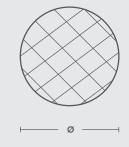


W _



ALL MESH ROUND STRIP

Code	Ø (mm)
AMRO-xxx-001	1.6
AMRO-xxx-002	2.4
AMRO-xxx-003	3.2
AMRO-xxx-004	4.0
AMRO-xxx-005	4.8
AMRO-xxx-006	6.4



OTHER DIMENSIONS ARE AVAILABLE ON REQUEST

MECHANICHAL TOLERANCES

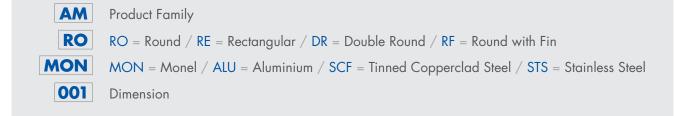
+ 0.6 / 0

Dimensions in mm

- > 1.5 to 5.0 + 0.4 / 0
- > 5.0 to 10.0
- > 10.0 to 17.0 + 0.8 / 0

ORDERING INFORMATION

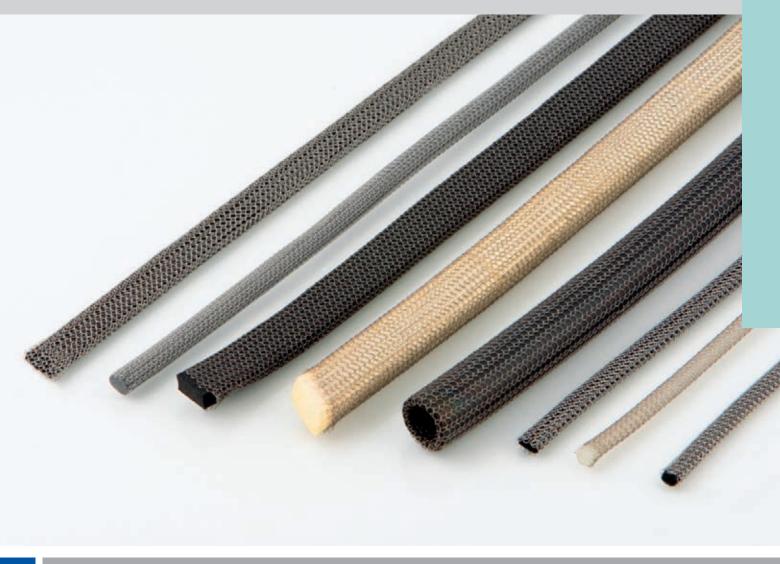




ORDERING INFO

Replace "xxx" with code info Table.





Euro Technologies offers wire mesh over elastomer with low compression requirements and low compression set.

It is available with a wide range of elastomer core materials and configurations, and a full selection of knitted mesh shielding covers.

Combined, they mean greater system design efficiency with the attenuation levels you require.

FEATURES AND BENEFITS

- High resiliency.
- Low compression force requirements.
- Groove or fin mounting.
- Mesh over Elastomer EMI gasketing is available in round or rectangular configurations, with hollow or solid core, in sponge elastomer or solid silicone.
- It is available: Monel; Stainless steel; or Tin-plated Copperclad steel, and is supplied on continuous reel.

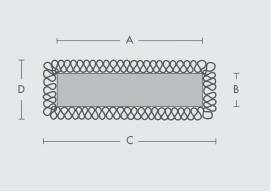
Customizations





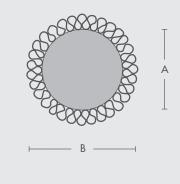
RECTANGULAR WITH SPONGE ELASTOMER

Code	A Elastomer Width (mm)	B Elastomer Height (mm)	C Total Width (mm)	D Total Height (mm)
MERE-xxx-xxx-001	4.8	4.8	5.7	5.7
MERE-xxx-xxx-002	6.4	6.4	7.2	7.2
MERE-xxx-xxx-003	9.5	9.5	10.3	10.3
MERE-xxx-xxx-004	12.7	7.9	13.7	8.9



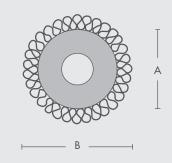
ROUND WITH SPONGE ELASTOMER

Code	A Elastomer Diameter (mm)	B Total Diameter Over Wire (mm)
MERO-xxx-xxx-001	3.2	4.1
MERO-xxx-xxx-002	6.4	7.2
MERO-xxx-xxx-003	7.9	8.8
MERO-xxx-xxx-004	12.7	13.6



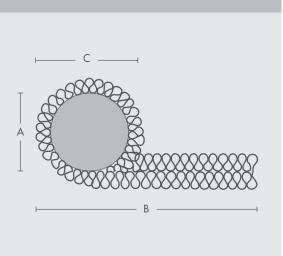
ROUND WITH SILICONE ELASTOMER TUBING

Code	A Tubing Diameter (mm)	B Total Diameter Over Wire (mm)
MERT-xxx-xxx-001	3.2	4.1
MERT-xxx-xxx-002	7.9	8.8
MERT-xxx-xxx-003	9.5	10.4
MERT-xxx-xxx-004	12.7	13.6



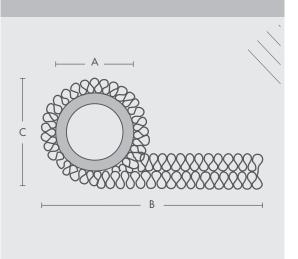
SINGLE FIN WITH SPONGE ELASTOMER

Code	A Elastomer Diameter (mm)	B Overall Width (mm)	C Total Height (mm)
MERF-xxx-xxx-001	3.2	12.7	4.1
MERF-xxx-xxx-002	4.8	15.9	5.7
MERF-xxx-xxx-003	6.4	19.1	7.2
MERF-xxx-xxx-004	12.7	25.4	13.6



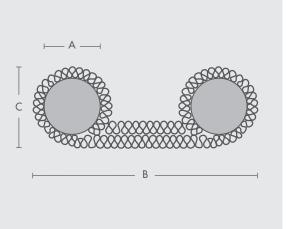
SINGLE FIN WITH SILICONE ELASTOMER TUBING

Code	A Tubing Diameter (mm)	B Overall Width (mm)	C Total Height Over wire (mm)
MERS-xxx-xxx-001	4.8	15.9	5.7
MERS-xxx-xxx-002	7.9	15.9	8.8
MERS-xxx-xxx-003	12.7	25.4	13.6



DOUBLE FIN WITH SPONGE ELASTOMER

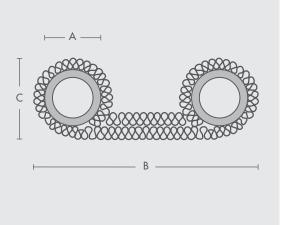
Code	A Elastomer Diameter (mm)	B Overall Width (mm)	C Total Height Over wire (mm)
MEDR-xxx-xxx-001	3.2	19.1	4.1
MEDR-xxx-xxx-002	4.8	19.1	5.7
MEDR-xxx-xxx-003	12.7	33.3	13.6





DOUBLE FIN WITH SILICONE ELASTOMER TUBING

Code	A Tubing Diameter (mm)	B Overall Width (mm)	C Total Height Over wire (mm)
MEDT-xxx-xxx-001	3.2	12.7	4.1
MEDT-xxx-xxx-002	6.4	19.1	7.2
MEDT-xxx-xxx-003	9.5	28.5	10.4



OTHER DIMENSIONS ARE AVAILABLE ON REQUEST

SPECIFICATION MESH

 MONEL:
 Ø 0.114 mm

 ALUMINIUM:
 Ø 0.127 mm

 STAINLESS STEEL:
 Ø 0.114 mm

 SCF:
 Ø 0.114 mm

DIN 17743/17750 AMS-4182, Alloy 5056 DIN 17440 ASTM-B-520

SPECIFICATION ELASTOMER

SPONGE NEOPRENE - NSP 20 shore A (Hardness) Temperature: - 31 °C to 100 °C Color: Black

SPONGE SILICONE - SSP

20 shore A (Hardness) Temperature: - 75 °C to 205 °C Color: White

SOLID NEOPRENE - NSO

70 shore A (Hardness) Temperature: - 54 °C to 100 °C Color: Black

SOLID SILICONE - SSO

60 shore A (Hardness) Temperature: - 62 °C to 260 °C Color: White

MECHANICAL TOLERANCES

Knitted mesh all dimensions (mm)

- > 2.0 to 5.0
 + 0.4 / 0.0
 > 5.0 to 10.0
 + 0.5 / 0.3
- > 10.0 + 1.5 / 0.5

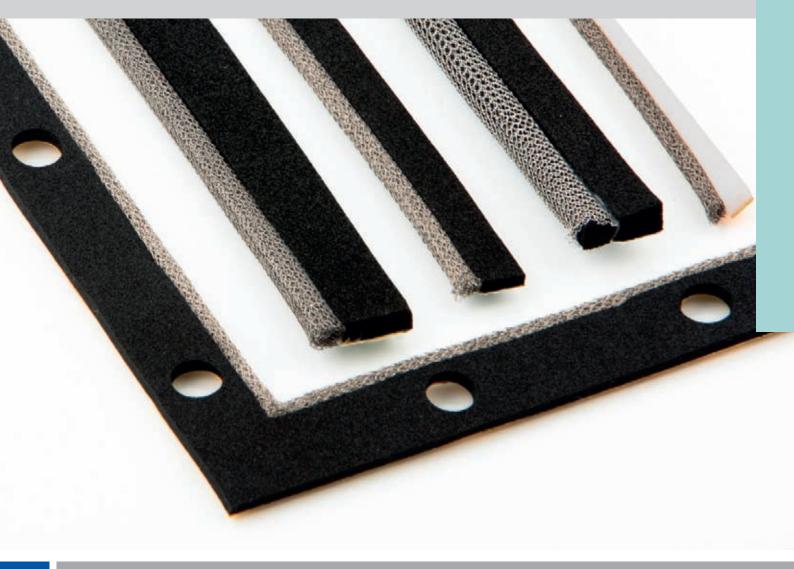
	ORDERING INFORMATION
	ME RO - MON - SSP - 001
ME	Product Family
RO	Shape: RO = Round / RE = Rectangular / DR = Doble Round / RF = Round with Fin RT = Round Tubing / RS = Round Tubing Strip / DT = Doble Round Tubing
MON	MON = Monel / ALU = Aluminium / SCF = Tinned Copperclad Steel / STS = Stainless Steel
SSP	SSP = Silicone Sponge / SSO = Silicone Solid / NSP = Neoprene Sponge NSO = Neoprene Solid / SST = Silicone Solid Tube / NST = Neoprene Solid Tube
001	0 = No Adhesive / 1 = Adhesive

ORDERING INFO

MEDT-xxx-xxx-003 Replace "xxx-xxx" with code info Table.



COMBI GASKET.



Combi Gasketing with neoprene or silicone elastomer is specially designed to combine outstanding attenuation characteristics with environmental sealing for electronic enclosures.

FEATURES AND BENEFITS

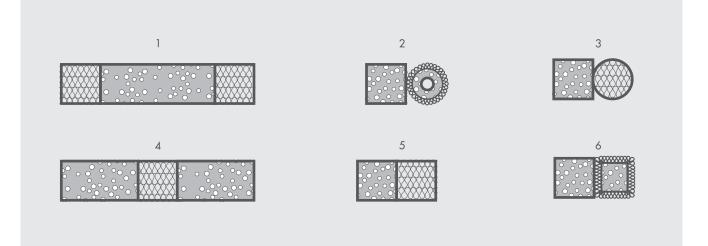
- Effectiveness against severe temperature variations from 75 $^\circ\mathrm{C}$ to 260 $^\circ\mathrm{C}.$
- Protection against dust, dirt and moisture.
- Adhesive backing for ease of installation.
- Shielding material selection including, Monel; Stainless steel and Tin-plated Copperclad steel.
- Other alloys available upon request.

Customizations





CONSTRUCTION TYPE



OTHER CONSTRUCTION TYPE AVAILABLE ON REQUEST

SPECIFICATION MESH

MONEL: **ALUMINIUM**: **STAINLESS STEEL**: Ø 0.114 mm SCF:

Ø 0.114 mm Ø 0.127 mm Ø 0.114 mm DIN 17743/17750 AMS-4182, Alloy 5056 DIN 17440 ASTM-B-520

SPECIFICATION ELASTOMER

SPONGE NEOPRENE - NSP 20 shore A (Hardness)

Temperature: - 31 °C to 100 °C Color: Black

SPONGE SILICONE - SSP 20 shore A (Hardness) Temperature: - 75 °C to 205 °C Color: White

SOLID NEOPRENE - NSO

70 shore A (Hardness) Temperature: - 54 °C to 100 °C Color: Black

SOLID SILICONE - SSO

60 shore A (Hardness) Temperature: - 62 °C to 260 °C Color: White

MECHANICAL TOLERANCES

± 0.4

± 0.8

SPONGE ELASTOMER

Height (mm)

•	~	2.	\cap	to	3	\cap	
	>	∠.	U.	ю	J.	U.	

- > 3.0 to 12.0 ± 0.8
- Width up to (mm)
- 25.0

KNITTED MESH

All dimensions (mm)

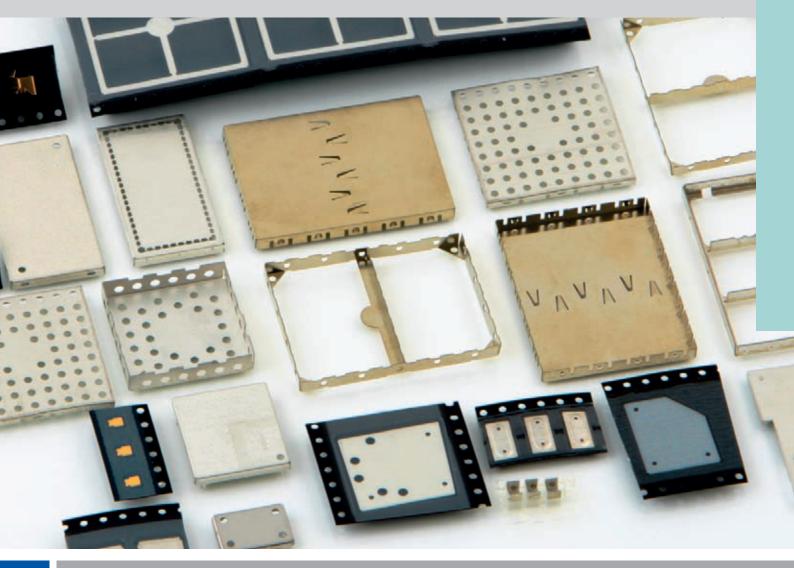
- > 2.0 to 5.0 + 0.4 / 0.0 • > 5.0 to 10.0 + 0.5 / 0.3 • > 10.0 + 1.5 / 0.5

ORDERING INFORMATION



CG	Product Family
1	Construction Type: from 1 to 6
MON	MON = Monel / ALU = Aluminium / SCF = Tinned Copperclad Steel / STS = Stainless Steel
SSP	SSP = Silicone Sponge / SSO = Silicone Solid / NSP = Neoprene Sponge NSO = Neoprene Solid / SST = Silicone Solid Tube / NST = Neoprene Solid Tube
1	0 = No Adhesive / 1= Adhesive
99	Dimension





Euro Technologies is the precision solutions provider of one piece, two piece, multicompartmental and custom Board Level Shielding (BLS).

Metals can be selected from a range of thicknesses and from a variety of pre-plated options for better soldering and shielding performances.

Euro Technologies experienced engineers and technical specialists are always available to help transform your shielding concepts into practical BLS.

Our product range guarantees flexibility for surface mount or thru-hole configurations.

We're your right solutions provider from prototypes, pilot builds to very high run production volume.

Customizations





FEATURES AND BENEFITS

- Standard parts availability without tooling costs.
- Economical shielding protection solutions.
- Custom solutions with technical support.
- Solderability > 99%.
- Tape&Reel packaging for automatic mounting.



ONE-PIECE SHIELD DESIGN

LOW COST/EXCELLENT EFFECTIVENESS

One-piece shields provide six sides of protection, with the sixth side being the board itself.

One-piece designs offer economical shielding alternatives where access to covered components for repair is not necessary.

TWO-PIECE SHIELD DESIGN

QUICK, EASY REPAIR AND INSPECTION OF COVERED COMPONENTS

Two-Piece Board Level Shields offer users the flexibility to inspect or repair shielded components without having to risk board damage by removing the entire shield.

Covers snap on and off with ease, making repairs quicker and easier, and reducing board re-work.

Two-Piece Shields are available preassembled or unassembled.

Large locking dimples snap into slots on covers to provide mechanical retention force.

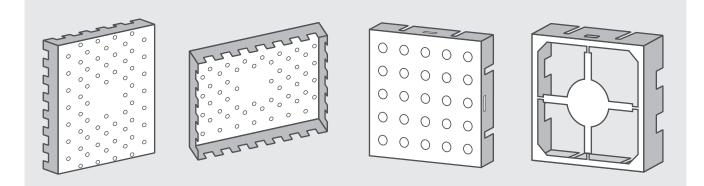
Smaller grounding dimples provide electrical grounding for proper shielding and to prevent rattle.

Two-Piece Shields survive drop, shock and no-rattle tests.

MATERIAL: Pre-plated tinned CRS base box steel 1008/1010 **THICKNESS**: 0.20 mm

STANDARD SURFACE MOUNT SHIELDS ONE-PIECE

Code	Lenght (mm)	Width (mm)	Height (mm)
BLS1-01	13.66	12.10	2.54
BLS1-02	16.50	16.50	3.60
BLS1-03	26.21	26.20	5.08
BLS1-04	32.00	32.00	6.00
BLS1-05	38.10	25.40	6.00
BLS1-06	36.83	33.68	5.08
BLS1-07	44.37	44.37	9.75



STANDARD SURFACE MOUNT SHIELDS TWO-PIECE

Code	Lenght (mm)	Width (mm)	Height (mm)
BLS2-01-x	13.66	12.10	2.54
BLS2-02-x	16.50	16.50	3.60
BLS2-03-x	26.21	26.21	5.08
BLS2-04-x	32.00	32.00	6.00
BLS2-05-x	38.10	25.40	6.00
BLS2-06-x	36.83	33.68	5.08
BLS2-07-x	44.37	44.37	9.75
BLS2-08-x	39.60	39.60	7.00
BLS2-09-x	29.36	32.00	7.00
BLS2-10-x	44.02	30.50	3.00

ORDERING INFO

Replace "x" with: C = Cover; F = Frame.

ALL SHIELDS ARE FULLY SOLDERABLE

TYPICAL PROPERTIES & PERFORMANCE – ALL PART NUMBER

PROPERTY	TEST METHOD	RESULT
Co-planarity	LTWI - 1119	< 0.10 mm
Solderability	ANSI / JSTD - 002	> 99%
Solderability	MIL-STD - 202 Method 208	> 99%
Adhesion	ASTM B - 571	Passes
3 Axis Mechanical Shock	LTES - 461	Passes

ORDERING INFORMATION

- BLS 1 01 C
- BLS
 Product Family

 1
 1 = One piece / 2= Two pieces

 O1
 Dimension

 C*
 C = Cover / F = Frame

 * Only for two pieces version

13. FINGERSTOCK.



Contact strips are used to close and thereby shield gaps between two surfaces. For optimum shielding performance, the contact strip must be in position to span the min. and max. gap. The right strip is selected, if its height is 20% greater than the max. gap and if it can be suppressed to the min. gap.

Contact strips are made from beryllium copper showing an excellent spring quality, material strength and flex survival. Further advantages are corrosion resistance and self cleaning of contacts by opening and closing.

Beryllium copper is neither attacked by air, ozone, solvent, UV light nor even by nuclear radiation. It is applicable over a wide temperature range and shows remarkable thermal and electric conductivity. In comparison to other EMI/RFI gaskets, contact strips are lighter and require less closing force. Also they are inflammable and free from outgassing.

Customizations



The wide assortment with different designs and the simple installation create a universal shielding gasket. Most simple to install is the clip-on and the type with double sided adhesive tape.

The adhesive tape is a non-conductive standard Scotch Y-9469, thickness 0.13 mm, that can be used up to 120° C. Many clip-on strips can be provided with lances to enhance optionally fixing.

Mounting holes allow screw or riveting on. Soldering or spot welding ensure superior transition. With all installation methods the electrochemical reaction must be considered to avoid galvanic corrosion.

Available surface coatings help to eliminate this. Contact strips are stored and delivered cleaned with a bright surface but, upon request, can be chromated, tin plated, zinc plated, as well as silver plated.

When using the correct compression force the contacts will not be damaged and thereby maintain their spring effect. No-snag contact strips are contact springs internally connected to both ends to prevent the contact from breaking off and thus causing shunts in the electronic equipment.

Euro Technologies offers hundreds differents configurations of beryllium copper shielding. Beyond beryllium copper, we also offer shielding and custom-engineered stampings in stainless steel, brass, phosphor bronze and other special alloys.

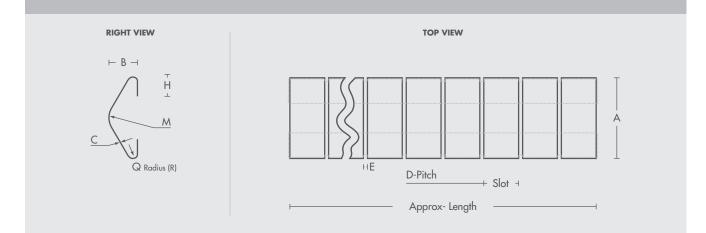


SLOT MOUNT SERIES

Euro Technologies' **Slot Mount Series** of beryllium copper shielding gaskets is designed for use in a wide variety of slotted applications. This economical product line is ideal for both grounding and shielding applications.

- Minimal slot fabrication cost.
- Easy and cost-effective installation since fasteners and adhesives are not required.
- Bi-directional wiping and compression action to accommodate a wide variety of designs.
- Ideal for grounding and shielding in the following electronic enclosure applications.
- Front panel handles Chassis covers.
- Plug-in units Backplanes.
- Subrack assemblies.
- Some standards are also available in coils with length of 7,6 m.

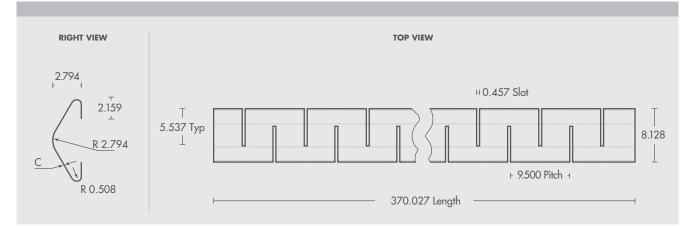
Series	Α	В	C	D	E	н	Μ	Q (R)	Approx. Lenght
FGSH-001-0X1600	8.128	2.794	0.102	4.750	0.457	2.159	2.794	0.508	406.4
FGSH-002-0X1600	15.240	5.588	0.127	7.163	0.813	3.556	4.572	1.016	406.4
FGSH-003-0X0123	9.398	3.301	0.127	6.350	0.635	2.159	2.794	2.286	31.1



ALTERNATE SLOT SERIES

Euro Technologies Alternating Slot/Cut design is designed for use in a wide variety of slotted applications, such as front panel handles, plug-in units, subrack assemblies, chassis covers and backplanes.

The **Alternating Slot/Cut** design serves to enhance the gasket strength, while providing enough flexibility to allow the part to be folded in half with no resultant finger damage. This is especially significant in during installation or repair.



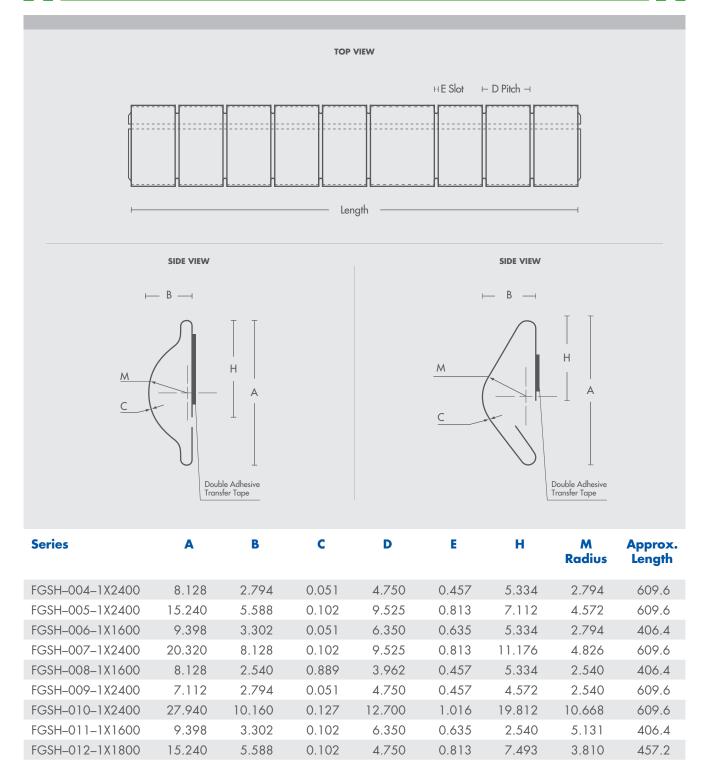
All dimensions, if not different specified, are in mm.

NO SNAG GASKET

Euro Technologies No Snag Series shielding gaskets offer the designer a low compression, no snag design. Provided self-adhesive tape, these beryllium copper shielding gaskets provide easy and secure mounting.

- Shielding effectiveness of > 100 db and 80 dB for a 100 MHz plane wave.
- Easy, cost-effective installation since fasteners are not required.
- Ideal as an all-purpose contact strip for metal cabinets and electronic enclosures.
- Supplied in standard 609 mm lengths or other specified lengths.

AVAILABLE IN A WIDE VARIETY OF PLATED FINISHES



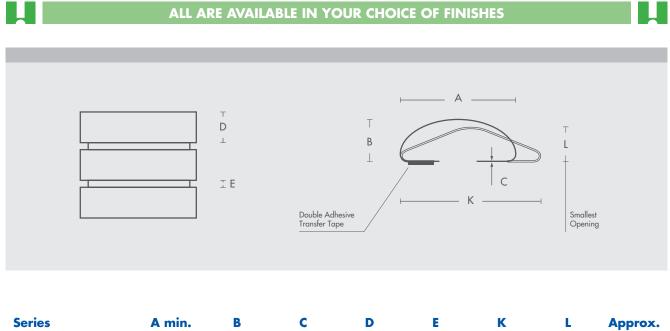
• All dimensions, if not different specified, are in mm.



SYMMETRICAL SLOTTED SHIELDING

Symmetrical Slotted Shielding fingers are low compression, adhesive mounted beryllium copper shielding strips. Designed as a continuous band, the strip is slotted to permit spring contact throughout its length.

A wide radius profile creates the greatest contact for maximum conductivity with minimum compression requirements. As with all Sticky Fingers shielding strips, a self-adhesive tape makes mounting easy and secure.

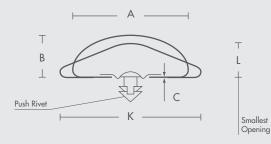


Series	A min.	в	C	U	E	ĸ		Approx. Length
FGSH-013-1X1500	11.430	3.556	0.076	6.350	0.559	12.954	1.778	381.0

RIVET MOUNT

Series	Α	B min.	c	D	E	К	L	Approx. Length
FGSH-014-0X0940	15.748	5.588	0.102	9.525	0.762	19.304	2.540	381.0
FGSH-015-0X0880	11.430	3.556	0.076	6.350	0.559	12.954	1.778	381.0
FGSH-016-0X0840	8.890	2.794	0.076	4.750	0.457	9.652	1.778	381.0
FGSH-077-1X1500	8.890	2.794	0.076	4.750	0.457	9.652	1.397	381.0

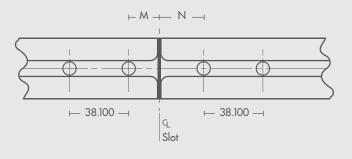




• All dimensions, if not different specified, are in mm.

RIVET SPACING

Series	Μ	Ν	N. of Rivets
FGSH-014-0X0940	14.224	23.876	10
FGSH-015-0X0880	16.002	22.352	10
FGSH-016-0X0840	16.764	21.336	10



SOLID TOP SYMMETRICAL SLOTTED SHIELDING GASKET

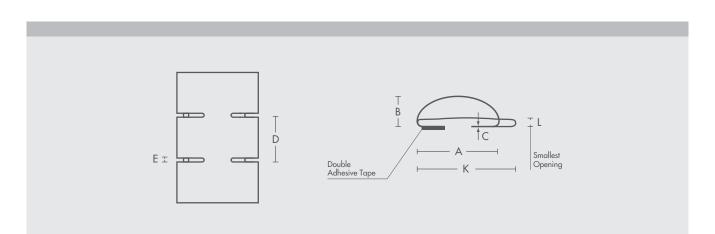
Euro Technologies offers their **Solid Top Symmetrical Slotted Shielding Gaskets**. This product is uniquely designed for those applications where a lid or cover is closed using a sliding motion to complete the closure.

The solid top design allows the cover to slide either perpendicularly or parallel to the fingerstock without snagging or damaging the gasket.

The newly designed symmetrical shielding offers all the advantages, having a large radius for maximum conductivity with minimum compression forces.

- Solid top provides an additional 10 dB of shielding effectiveness.
- Offered in both rivet mount and tape mount versions.
- Generous radii provide maximum conductivity with minimum compression forces.
- Parts can be modified and/or cut to any specific length.
- For longitudinal sliding applications, a retention clip is recommended for secure mounting.

AVAILABLE IN STANDARD OR SOFT VERSIONS



• All dimensions, if not different specified, are in mm.

Series	A min.	В	С	D	E	К	L	Approx. Length
FGSH-017-0X1500	11.430	3.556	0.076	6.350	0.559	12.954	1.778	381.0
FGSH-018-0X1500	8.890	2.794	0.076	4.750	0.457	9.652	1.778	381.0

CLIP-ON SYMMETRICAL SHIELDING

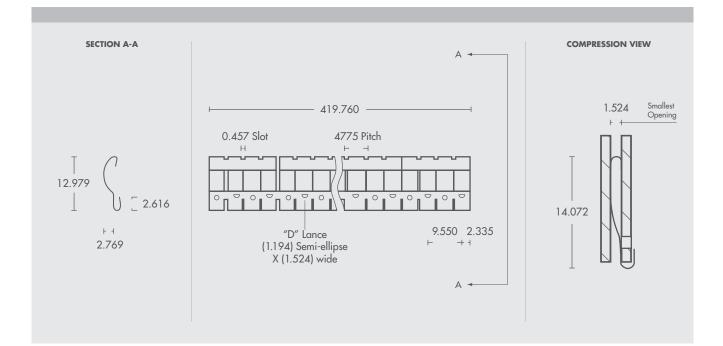
Euro Technologies has designed a new **Clip-on Shielding** gasket for applications where bi-directional engagement is required.

Symmetrical Shielding Gaskets have been designed to function equally well in applications requiring sliding movement or direct compression.

- Supplied with standard "D" Lance ensuring secure holding power when snapped into a prefabricated hole.
- "D" Lance provides both multi-directional grip and excellent conductivity.
- Wide radius profile allows for maximum contact with minimum compression force.
- Clip-On feature allows part to be used in high temperature (120 °C) applications where adhesives will not function
- Ideally suited for cardcage handles, PC board grounding or any other application requiring clip-on feature and wiping action.
- Shielding effectiveness of 100 dB @ 100 MHz.



AVAILABLE IN A WIDE VARIETY OF PLATING FINISHES



• All dimensions, if not different specified, are in mm.

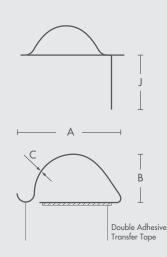
ALL-PURPOSE SERIES

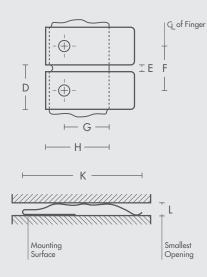
These versatile gaskets are made from high-performance beryllium copper with self-adhesive backing. They provide an extremely tight, instant bond and are ideal as an all-purpose contact strip for metal cabinets and electronic enclosures, particularly where space is critical.

Magnetic field shielding effectiveness of these strips has been proven to be > 46 dB for a 14 kHz plane wave and 108 dB for a 10 GHz plane wave. When tested per MIL-STD-285 for electromagnetic shielding, these strips showed superior performance under minimum compression.

They proved to be especially effective where variations exist in the space to be shielded and in applications that require high shielding performance despite frequent opening and closing of the cabinet.

ALL ARE AVAILABLE IN YOUR CHOICE OF FINISHES													
Series	A Min.	В	с	D	E	F	G	н	I	J	К	L	Approx. Length
FGSH-019-1X2400	15.240	5.842	0.102	9.525	0.813	9.652	7.874	12.700	2.032	N/A	19.558	1.016	609.6
FGSH-020-1X2400	15.240	5.842	0.102	9.525	0.813	9.652	7.874	12.700	2.032	N/A	19.558	1.016	609.6
FGSH-021-1X2400	17.018	7.874	0.102	9.525	1.016	9.652	9.652	13.462	3.556	N/A	23.876	3.556	609.6
FGSH-022-1X2400	19.812	6.350	0.127	9.525	1.016	9.652	9.652	13.462	3.556	N/A	23.876	2.032	609.6
FGSH-023-1X1600	7.112	2.794	0.076	4.775	0.457	4.826	2.032	5.842	1.524	N/A	9.398	1.651	406.4
FGSH-024-1X1600	6.604	2.794	0.076	4.775	0.457	4.826	2.032	N/A	1.524	6.096	9.398	1.651	406.4





AVAILABLE IN COIL



CLIP-ON SERIES

This series from **Euro Technologies** is designed for use where high temperature or other design considerations preclude the use of adhesive-mounted gasketing. Yet it provides the same shielding characteristics and effectiveness as on mounted series. **Clip-On Gaskets** offer shielding effectiveness >100 dB for 100 MHz plane wave.

ALL ARE AVAILABLE IN YOUR CHOICE OF FINISHES

"D" LANCE

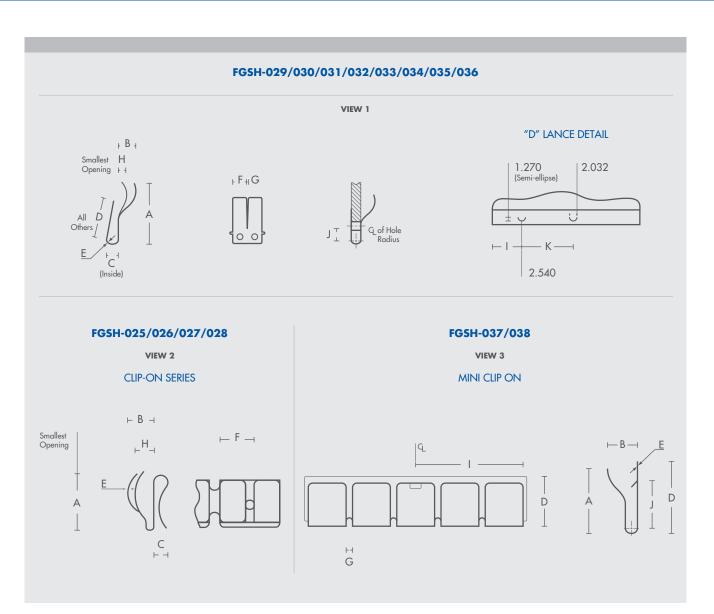
This configuration has been designed specifically to provide outstanding holding power. "**D**" **Lances** snap into drilled or punched holes in the mounting surface to create a strong omni-directional grip with excellent conductivity.

"T" LANCE

Ideal for use with softer materials, such as aluminium or plated plastic. "**T**" **Lances** bite into the mounting surface and preserve electrical conductivity. **Euro Technologies' Mini Clip-On Gaskets** are designed for use on today's thinner, lighter materials.

Series	Α	В	С	D	E	F	G	н
FGSH-025-0X1600	9.652	5.080	2.540	8.382	0.127	6.350	1.016	1.524
FGSH-026-0X1600	8.382	7.112	1.778	9.652	0.127	6.350	1.016	2.540
FGSH-027-0X1600	9.652	5.080	1.778	9.652	0.127	6.350	1.016	1.524
FGSH-028-0X1600	8.382	7.112	1.778	9.652	0.127	6.350	1.016	2.540
FGSH-029-0X1600	7.620	2.540	1.778	4.826	0.127	4.623	1.194	1.524
FGSH-030-0X1600	10.668	3.048	2.540	6.350	0.127	4.750	1.194	2.413
FGSH-031-0X1600	11.176	2.032	1.270	4.826	0.127	4.750	1.194	1.143
FGSH-032-0X1600	11.176	2.032	1.778	4.826	0.127	4.750	1.194	1.143
FGSH-033-0X1600	11.176	3.048	1.778	4.826	0.127	4.902	1.168	1.905
FGSH-034-0X1600	10.668	2.032	1.778	4.750	0.127	4.750	1.194	1.143
FGSH-035-0X1600	15.240	5.334	2.540	5.842	0.127	4.750	1.194	1.778
FGSH-036-0X1600	27.686	6.604	1.778	7.112	0.127	9.525	1.016	1.524
FGSH-037-0X2400	5.334	1.778	1.143	6.350	0.076	5.080	0.762	0.254
FGSH-038-0X2400	6.985	2.036	1.016	7.112	0.152	6.350	0.762	0.762



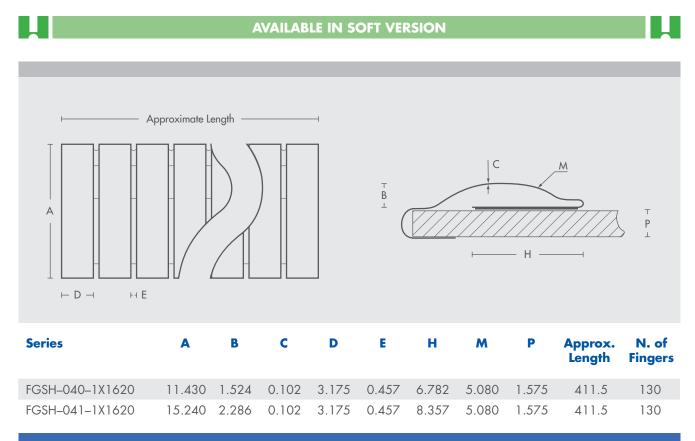


Approx. Length	No Lance	Square Lance	"T" Lance	"D" Lance	1	J	К	Slot	Sol
406.4	-	-	-	Х	6.350	2.515	12.700	Х	-
406.4	-	-	Х	-	5.842	5.182	12.700	Х	-
406.4	-	-	-	Х	6.350	4.089	12.700	Х	-
406.4	-	-	-	Х	6.350	4.089	12.700		
406.4	-	-	-	Х	9.246	1.372	18.491	Х	-
406.4	Х	-	-	-	-	-	-	-	Х
406.4	Х	-	#	#	-	-	-	-	Х
406.4	Х	-	#	#	-	-	-	-	Х
406.4	-	-	-	Х	7.366	1.524	18.415	Х	-
406.4	-	-	-	Х	13.462	1.626	25.400	-	Х
406.4	Х	-	#	#	-	-	-	-	Х
406.4	Х	-	#	#	-	-	-	-	Х
609.6	-	-	-	Х	12.319	3.378	25.400	Х	-
609.6	-	-	-	Х	12.700	12.700	25.400	-	Х

LOW PROFILE HOOK-ON GASKET

Euro Technologies offers its line of **Low Profile** beryllium copper shielding fingerstock. Simple installation is accomplished by hooking one end of the gasket onto the edge of the housing. The other end is secured with pressure sensitive adhesive (PSA) with extra-wide release liner and designed with a teardrop feature to improve surface contact. Ideally suited for low profile, bi-directional applications such as the rack mounting of linecards in telecommunications equipment. The gaskets offer high shielding performance in applications where space may be limited.

- Dual attachment provides a no snag gasket with secure retention, which allows bi-directional wiping action.
- Incorporates extra wide release liner to facilitate easy installation.
- Wide variety of plating finishes are available to meet your galvanic compatibility requirements.
- Offered in standard lengths of 411.480 mm or cut to your desired length.



LOW PROFILE GASKET

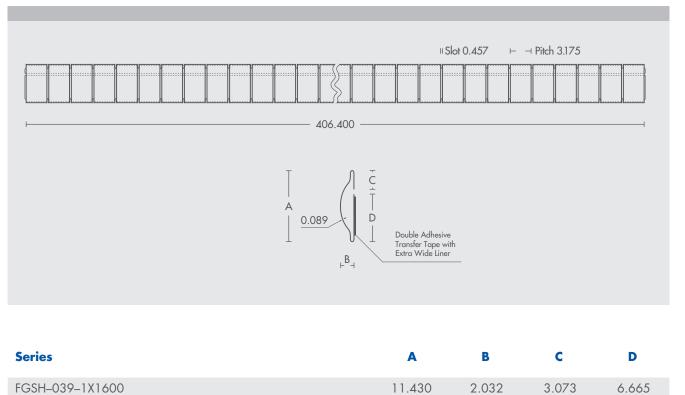
Euro Technologies offers its line of low profile beryllium copper shielding fingerstock. The gaskets are provided with pressure sensitive adhesive tape with an extra wide release liner to facilitate secure placement and ease of application.

- Ideally suited for limited space applications as low as 1.52 mm.
- Works well in both compression and bi-directional applications.
- High shielding effectiveness; average 90 dB from 10 kHz to 1 GHz.
- Extra wide release liner of pressure sensitive tape provides for easy, cost-effective installation.
- Low compression force.
- Offered in standard lengths of 406.4 mm, or cut to your desired length.



AVAILABLE IN SOFT VERSION

AVAILABLE IN A WIDE VARIETY OF PLATED FINISHES



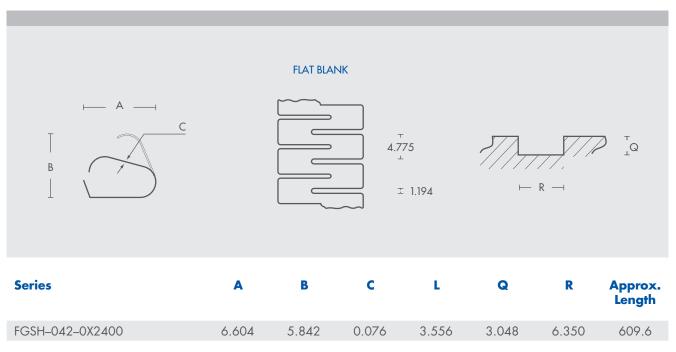
FGSH-039-1X1600

FLEXIBLE LOW COMPRESSION SERIES

Are low compression, flexible beryllium copper contact strips for applications where a continuous shield must conform to irregular shapes and turn tight radius corners in either direction.

Simple snap-in installation is possible. However, soft solder or conductive adhesive can be used for mounting to flat surfaces. Shielding effectiveness is >115 dB for a 100 MHz plane wave.

AVAILABLE IN STANDARD 609.6 MM LENGTHS IN ALL STANDARD FINISHES





TWIST SERIES

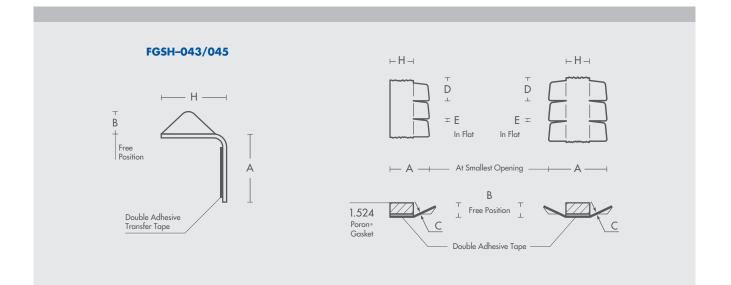
Adhesive-mounted beryllium copper contact strips with scientific twist design offer narrow electronic gaskets for general shielding applications.

Different widths are available to suit your specific application for single edge contact strips. Also available are two 90 degree versions to provide alternate mounting capability.

Their unique double-edge design permits panels to be removed easily and replaced without damage to the installed strip.

- All Twist Series strips are furnished in 609.6 mm lengths.
- Some strips are also available in standard coils in length of 7.6 m.
- Right angle product configurations are not available in coils.

ALL ARE AVAILABLE IN YOUR CHOICE OF FINISHES



Series	Α	В	С	D Pitch	E Slot	н	Approx. Length
FGSH-043-1X2400	4.064	0.762	0.076	2.413	0.381	2.032	609.6
FGSH-044-1X2400	8.636	1.778	0.076	4.191	0.381	4.572	609.6
FGCH-044-1X	8.636	1.778	0.076	4.191	0.381	4.572	7.6 m
FGSH-045-1X2400	5.080	1.778	0.076	4.191	0.381	2.794	609.6
FGSH-046-1X2400	7.620	1.778	0.076	4.191	0.381	4.572	609.6
FGCH-046-1X	7.620	1.778	0.076	4.191	0.381	4.572	7.6 m
FGSH-047-1X2400	12.700	1.778	0.076	4.191	0.381	4.826	609.6
FGCH-047-1X	12.700	1.778	0.076	4.191	0.381	4.826	7.6 m

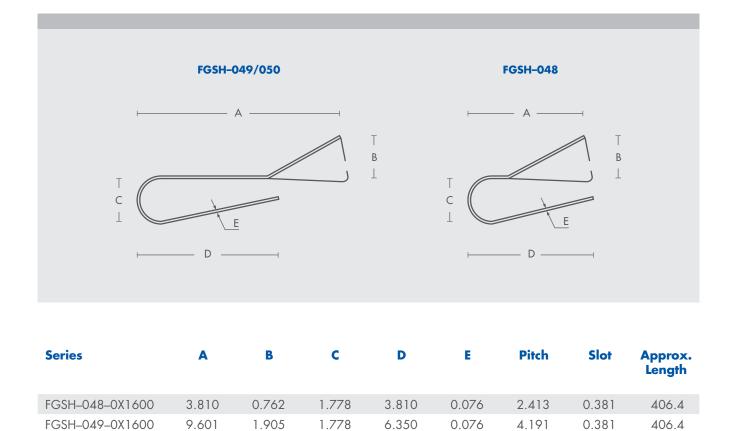
CLIP-ON TWIST SERIES

Ideal for general shielding applications where mounting space is at a premium, **Clip-On Twist Series** strips combine the performance advantages of scientific twist design with the strength of clip-on mounting.

Clip-On Twist Series gaskets are offered in four different widths, each available in either equal leg or offset leg configurations. In addition, each offset leg configuration is available with Poron rubber environmental gaskets for dust and moisture resistance, as well as with "D" lances that snap into 2.54 mm diameter holes to provide added mounted strength.

This series offers shielding effectiveness > 115 dB for a 100 MHz plane wave and is provided in standard 406.4 mm lengths.

ALL ARE AVAILABLE IN YOUR CHOICE OF FINISHES



0.762

1.270

4.445

0.076

2.413

6.985

FGSH-050-0X1600

0.381

406.4

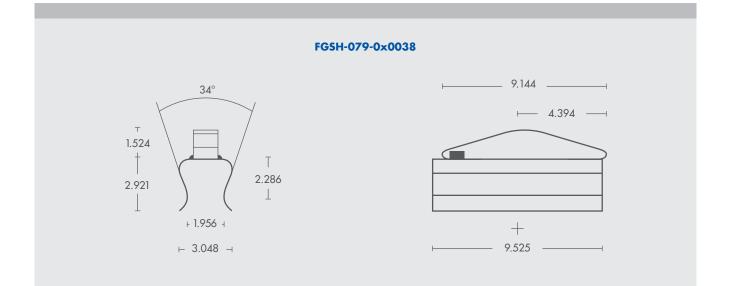


CARD GUIDE CLIP-ON

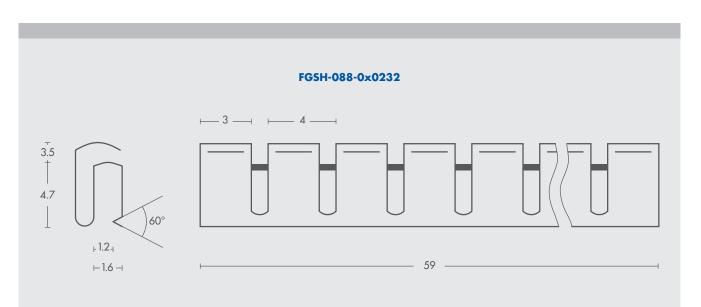
Euro Technologies introduces the **Card Guide Clip-On**, which offers excellent grounding contact from the PC board to a card guide on a rack. The unique snap-in feature of the contact finger prevents any potential snagging. This allows for bi-directional sliding contact. The **Card Guide Clip-On** gasket installs to the edge of the board and makes contact with ground trace on the card.

The card then slides into the card guide on the rack. Low compression forces allow for easy installation of the card.

- Easily installs onto PC board.
- Provides for bi-directional wiping that eliminates snagging.
- Ideal, inexpensive solution for grounding applications.
- High-performance beryllium copper can be plated with a wide variety of finishes for galvanic compatibility.
- Designed for board thicknesses of 2.16 mm to 2.54 mm.
- Design capabilities available to handle other board thicknesses and custom applications.



POSSIBILITY TO BE SUPPLIED FROM 1 TO 15 SPRINGS



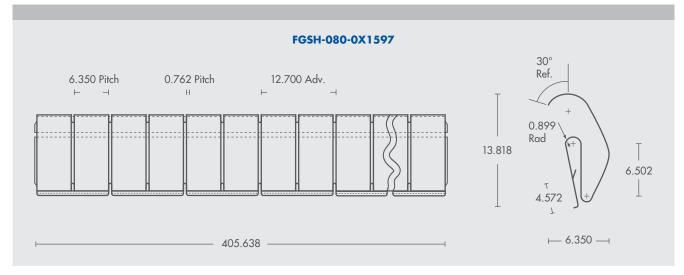
• All dimensions, if not different specified, are in mm.



CLIP-ON PERPENDICULAR SHIELDING

This product offers a **Clip-On** design that permits shielding to a perpendicular surface.

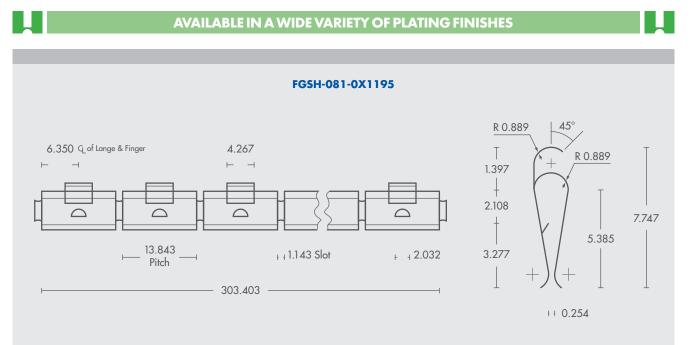
- Finger design allows for continuous contact across the length of the strip.
- Clip-on design is ideal where high temperature or other design considerations preclude the use of adhesivemounted gasketing.
- "D" Lance design provides excellent retention of gasket and allows for a strong omni directional grip.
- Supplied in a wide variety of plating finishes.
- Shielding effectiveness of > 80 dB for a 10 MHz plane wave. For load/deflection data.



CLIP-ON PERPENDICULAR GROUNDING STRIP

Euro Technologies offers **the first Clip-On design** which allows grounding to occur between perpendicular surfaces.

- Unique finger extension provides grounding from card or motherboard to a backplane housing.
- Finger height provides wide operating range.
- Wide clip-on area with "D" Lance gives additional reliable retention.





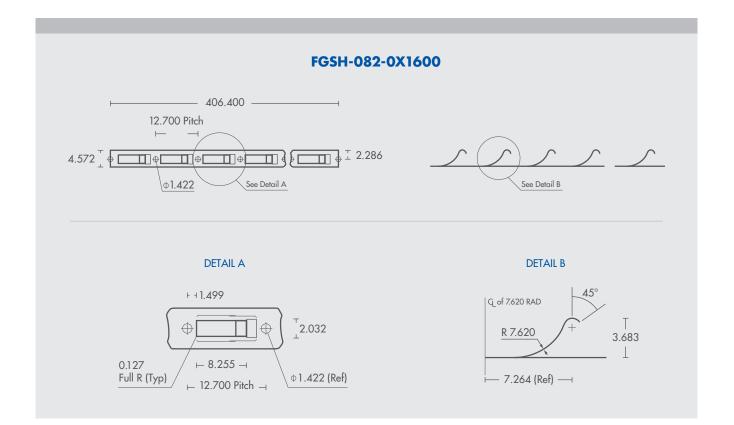
MINI-LONGITUDINAL GROUNDING GASKET

The **Mini-Longitudinal Grounding Gasket** is designed to accommodate small applications which often require lower compression forces.

- Allows a longitudinal sliding motion over the length of the gasket.
- Ideal for rack-mounted, sliding door or side panel and drawer assemblies.
- Mounting methods include conductive tapes, rivets or screws.
- Miniaturized design includes extremely narrow width and low standing height.

AVAILABLE IN A WIDE VARIETY OF PLATED FINISHES

AVAILABLE IN SOFT LOW COMPRESSION VERSION



[•] All dimensions, if not different specified, are in mm.

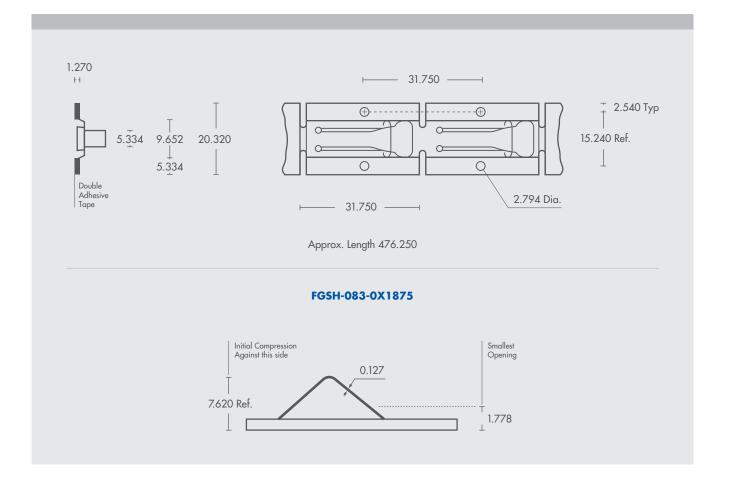


LONGITUDINAL GROUNDING SERIES

This series of beryllium copper strips combines finger compression with the direction of motion in the longitudinal axis.

- Ideal for use with rack-mounted and slide drawer assemblies.
- Provides reliable and complete grounds.
- Typical installation methods include hardware mounting or use of self-adhesive strip.
- In standard finishes.

AVAILABLE IN SOFT COMPRESSION VERSION

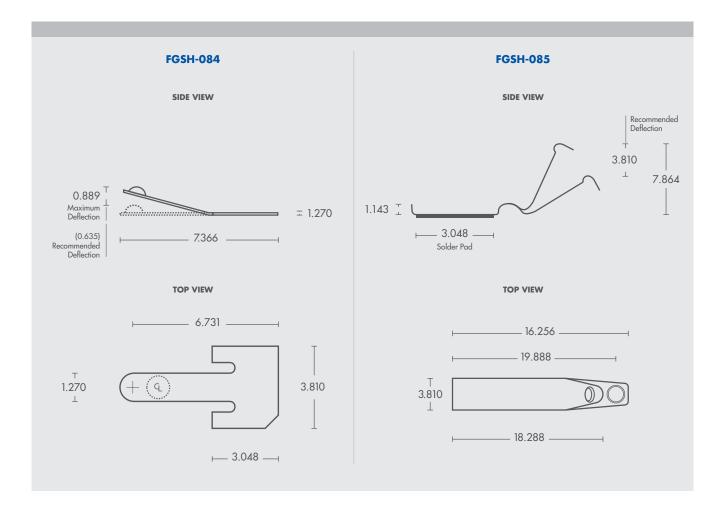




BATTERY CONTACTS

Euro Technologies announces the addition of a **Battery Contact** product line. These high-performance battery contacts are suitable for coin battery applications, battery pack contact applications and AA/AAA battery applications. Supplied in heat treated beryllium copper, the contacts offer superb contact force and a large compression range.

- All contacts are surface mounted and require solder pads, which is thru-pin mounted and requires mount holes.
- Custom designs can be developed by calling our application engineers.



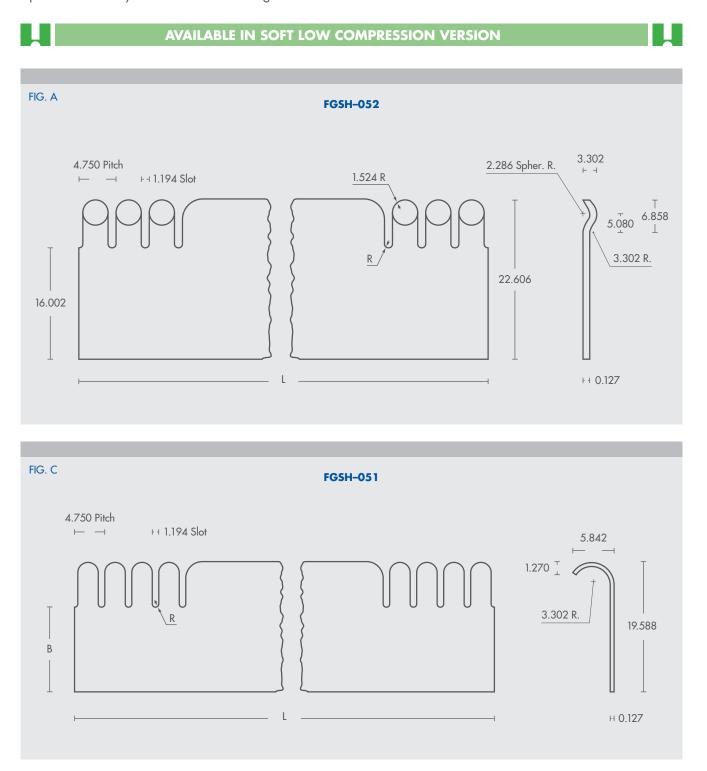


AVAILABLE IN A VARIETY OF PLATED FINISHES FOR GALVANIC COMPATIBILITY

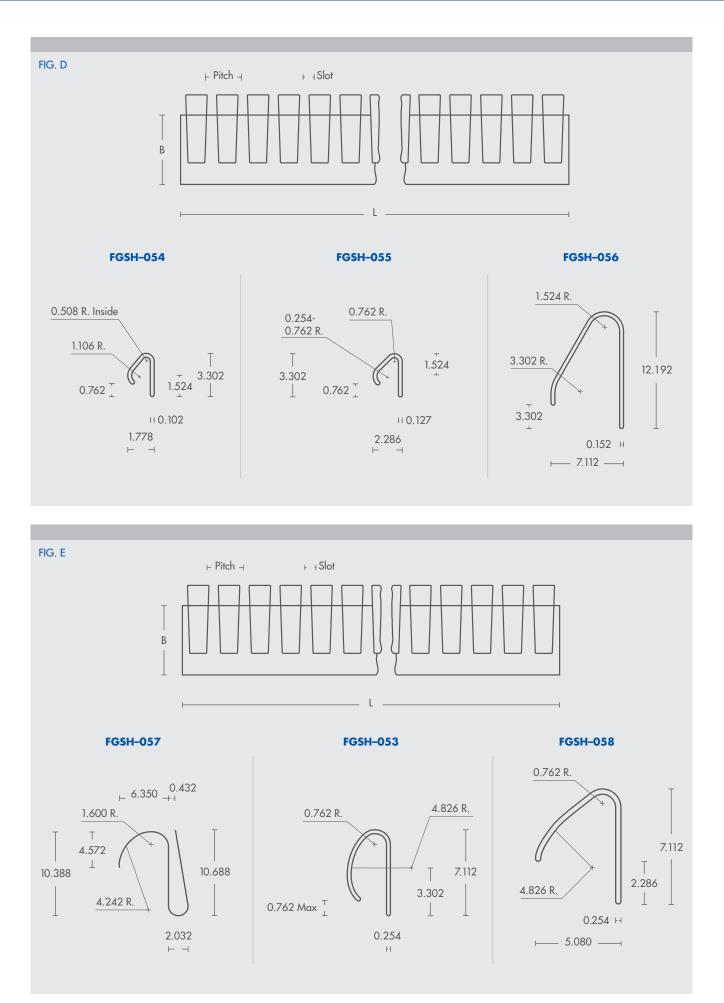


CONTACT STRIPS

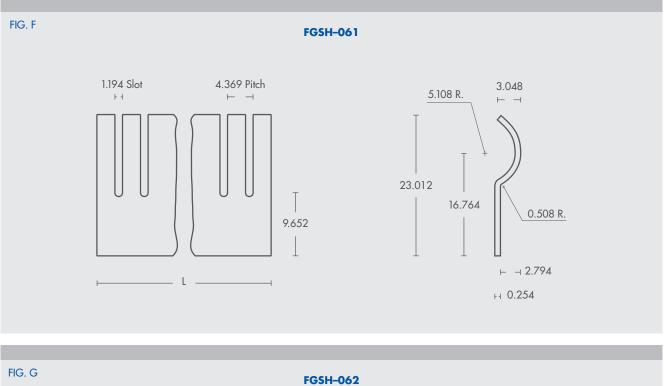
Contact Strips are used for grounding and shielding in high-frequency equipment and for forming large diameter contact rings. A wide variety of beryllium copper **Contact Strips** provides engineers and designers with flexibility in solving grounding and shielding problems. Various lengths, widths, thicknesses, contours and hole locations are possible for many of the standard catalog items shown here.

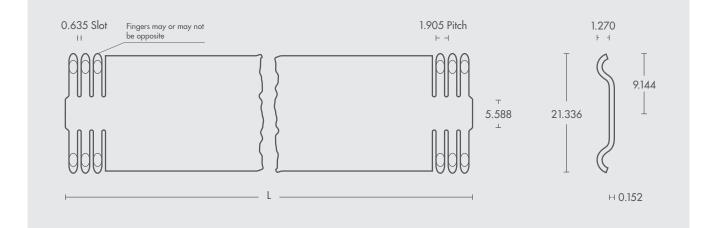


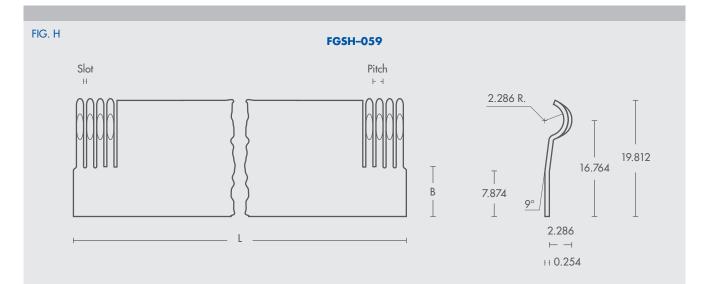




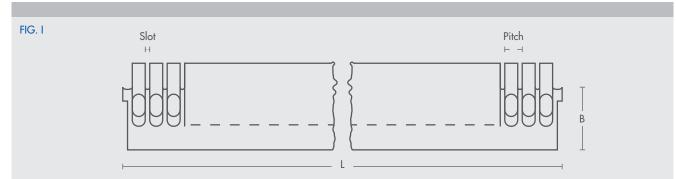
• All dimensions, if not different specified, are in mm.



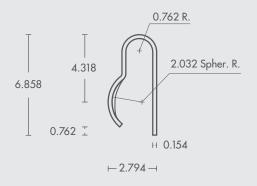


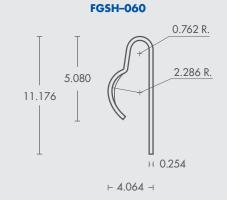












Series	Fig.	Pitch	Slot	В	Approx. Length	Approx. n. of Fingers
FGSH-051-0X1600	С	4.750	1.194	14.986	406.400	86
FGSH-052-0X1600	A	4.750	1.194	-	406.400	86
FGSH-053-0X1600	Е	3.429	1.016	5.842	406.400	119
FGSH-054-0X1200	D	1.524	0.508	2.286	304.800	200
FGSH-055-0X1200	D	3.226	1.270	2.286	304.800	95
FGSH-056-0X1500	D	4.750	1.575	9.652	381.000	86
FGSH-057-0X1600	Е	4.750	1.575	7.493	406.400	86
FGSH-058-0X1600	Е	3.404	1.016	5.842	406.400	119
FGSH-059-0X1600	Н	2.388	0.787	7.874	406.400	170
FGSH-060-0X1600		2.388	0.787	7.874	406.400	170
FGSH-061-0X1600	F	4.369	1.194	9.652	406.400	93
FGSH-062-0X1600	G	1.905	0.635	-	406.400	213
FGSH-063-0X1600	I	1.905	0.635	5.588	406.400	213

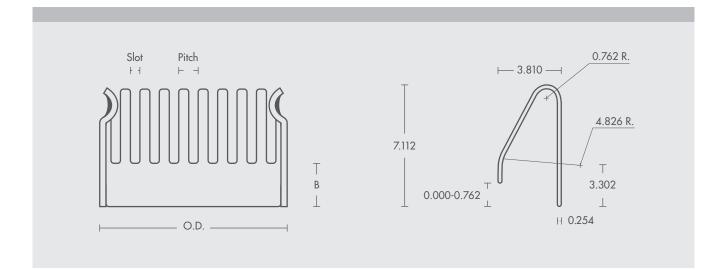
CONTACT RINGS

The large variety of sizes and shapes of **Contact Rings** offers engineers a wide choice in meeting design requirements for microwave cavities, tuning, shielding and grounding applications. Rings are made from strip stock formed into an unclosed circle which, when assembled, becomes a complete ring.

• These rings are furnished in any diameter, greater than the minimum shown in the chart below, and must contain an integral number of fingers.

Series	Pitch	Slot	OD	N. of Fingers	Rec. Pin diameter	В	Made from strip	Small ø from strip
FGSH-064-0X0550	3.912	1.499	19.812	15	13.716	6.350	N/A	13.970





DIN CONNECTOR SERIES

Euro Technologies' DIN Connector Gasket Series is designed to ground connector plugs to the chassis of electronic systems. Manufactured in beryllium copper, these connector gaskets provide excellent conductivity and shielding characteristics.

- Large compression range between board and chassis.
- Wide footprint to accommodate misalignment of plug to chassis opening.
- Unique slide-on design for ease of assembly.

FGSH-068

FGSH-070

15

25

44.196

57.912

• Grounds circuit boards, as well as keyboards and audio equipment.

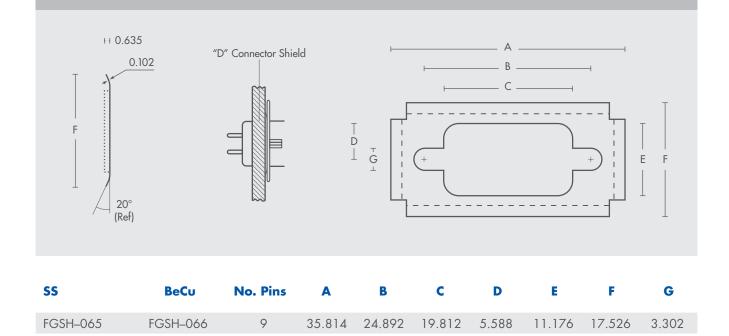
AVAILABLE IN TWO SIZES TO ACCOMMODATE A VARIETY OF DIN CONNECTOR PLUGS



FGSH-067

FGSH-069

AVAILABLE IN A WIDE VARIETY OF PLATED FINISHES



33.274

46.990

28.194

41.910

5.588

5.588

• All dimensions, if not different specified, are in mm.

17.526

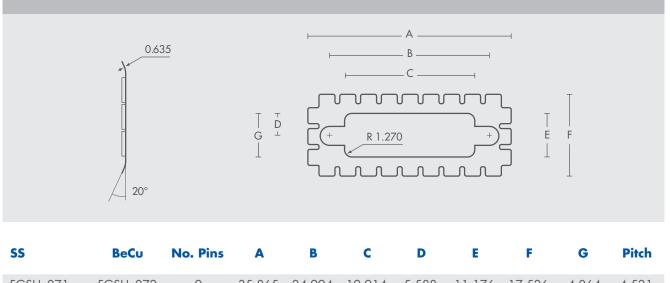
17.526

11.176

11.176

3.302

3.302



FGSH-071	FGSH-072	9	35.865	24.994	19.914	5.588	11.176	17.526	4.064	4.521
FGSH-073	FGSH-074	15	44.196	33.325	28.245	5.588	9.144	17.526	4.064	4.445
FGSH-075	FGSH-076	25	57.912	47.041	41.960	5.588	11.176	17.526	4.064	4.420

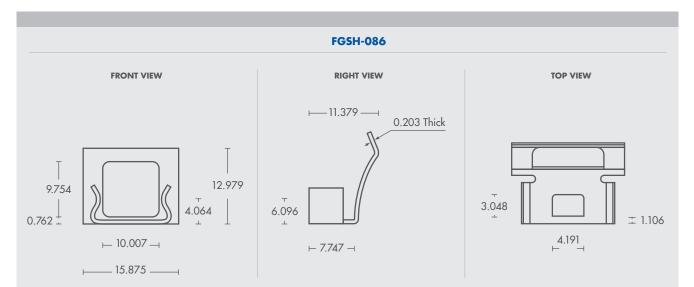
USB CONNECTOR

Euro Technologies offers the **USB** (Universal Serial Bus) **Type B Connector** gasket. The unique design easily snaps onto the connector prior to placement on the printed circuit board and fits all Series B USB right angle connector brands.

Made from high performance beryllium copper, these gaskets provide superior grounding characteristics and enhances the shielding of the connector due to the short electrical path to the ground plane provided when the gasket makes contact with the connector.

- Gasket easily snaps onto the connector for a secure fit.
- Connector/gasket assembly can be placed onto the board via pick-and-place.
- High clip force attaches clip to connector body for good electrical contact and secure transport prior to soldering.
- Once the shielded connector assembly is soldered to the PCB, the shield is captivated between board and connector and provides reliable contact between the connector and faceplate.
- Simple compact design fits within 15.875 mm x 15.875 mm windows.

AVAILABLE IN A VARIETY OF PLATING FINISHES





IEEE 1394 HORIZONTAL CONNECTOR GASKET

Euro Technologies offers an addition to our connector gasket line, which is designed to fit all IEEE 1394 Horizontal Connectors. Made from copper beryllium, these gaskets provide superior grounding and reduce emissions from the connector by providing a low-impedance grounding path from the connector shell to the faceplate. The gasket is mounted over the top of a Horizontal IEEE 1394 Connector and soldered to the board. Contact with both the faceplate and the connector shell is accomplished once the board is assembled into its housing. These

gaskets can be provided in trays to facilitate pick-and-place assembly onto the board and wave soldering automation.

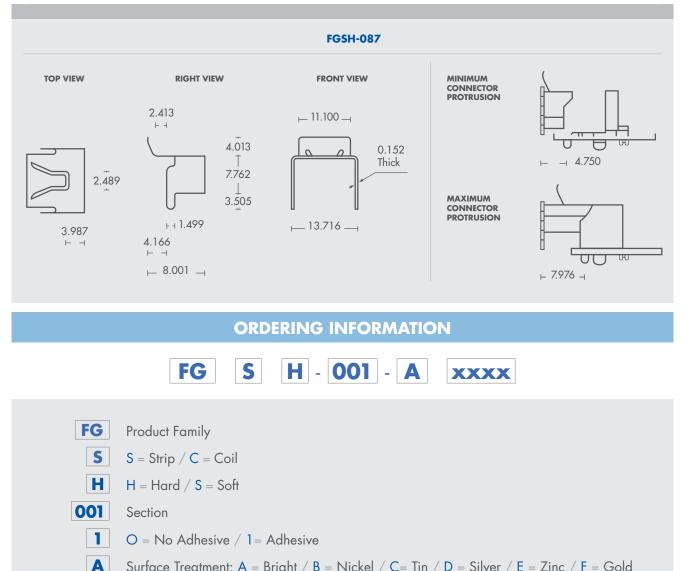
- Accommodates a wide range of connector protrusion positions.
- Fits all IEEE 1394 horizontal connectors.
- Gasket can be placed onto the printed circuit board via pick-and-place.
- Packaging to accommodate high-speed assembly is optional.
- Simple thru-pin mounting method.

XXXX

Lenght

• Grounds the connector to the faceplate.





Surface Treatment: A = Bright / B = Nickel / C= Tin / D = Silver / E = Zinc / F = Gold





GENERAL INFORMATION

Euro Technologies has a comprehensive range of conductive fabric over foam gaskets.

This solution is formed by placing highly flexible nickel over copper plated fabric over an open cell polyurethane foam core.

Our fabric over foam gasket provides high conductivity, shielding capability, abrasion resistance, galvanic compatibility and low compression forces.

The gaskets are normally fitted with Pressure Sensitive Adhesive (PSA) for an easy application.

Customizations



FEATURES AND BENEFITS

- Shielding effectiveness of > 100 dB.
- Extremely low compression forces.
- Low Surface Resistivity of < 0.07 ohms/square.
- UL recognized per UL94-HB or UL94-VO.
- Abrasion resistance of >1.000.000 cycles.
- Service temperatures from 40 °C to 70 °C.

TOLERANCES

Cut to Length (mm)	
• > 25 to 152	± 0.8

Cross Section (mm) • < 2.5 ± 0.5

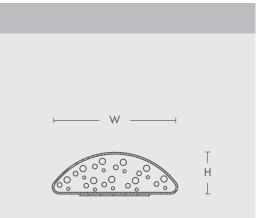
• > 2.5

- > 152 to 280 ± 1.3
- > 280 to 1220 ± 2.6
- > 1220 to 1780 ± 4.8
- > 1780 to 3650 ± 6.4

 ± 0.8

D-SHAPED

Code	H (mm)	W (mm)
FOFD-x-01-7900	1.5	3.8
FOFD-x-02-7900	2.0	2.0
FOFD-x-03-7900	2.3	2.3
FOFD-x-04-7900	2.3	3.8
FOFD-x-05-7900	2.5	7.6
FOFD-x-06-7900	3.0	3.8
FOFD-x-07-7900	3.0	6.4
FOFD-x-08-7900	3.3	4.8
FOFD-x-09-7900	3.8	9.0
FOFD-x-10-7900	4.0	11.0
FOFD-x-11-7900	4.1	6.1
FOFD-x-12-7900	9.5	12.7
FOFD-x-13-7900	12.7	12.7



RECTANGULAR SHAPED

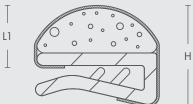
Code	H (mm)	W (mm)
FOFR-x-01-7900	0.5	5.0
FOFR-x-02-7900	1.0	5.1
FOFR-x-03-7900	1.0	4.0
FOFR-x-04-7900	1.0	10.0
FOFR-x-05-7900	1.5	3.2
FOFR-x-06-7900	1.5	5.1
FOFR-x-07-7900	1.5	12.7
FOFR-x-08-7900	1.5	19.1
FOFR-x-09-7900	1.6	7.6
FOFR-x-10-7900	2.0	4.1
FOFR-x-11-7900	2.0	7.0
FOFR-x-12-7900	2.0	10.2
FOFR-x-13-7900	2.3	5.1
FOFR-x-14-7900	2.5	9.5
FOFR-x-15-7900	3.0	3.9
FOFR-x-16-7900	3.0	3.2
FOFR-x-17-7900	3.0	5.0
FOFR-x-18-7900	3.0	10.0
FOFR-x-19-7900	3.2	6.4
FOFR-x-20-7900	3.3	4.8
FOFR-x-21-7900	3.8	12.7
FOFR-x-22-7900	4.0	8.0
FOFR-x-23-7900	5.0	15.0
FOFR-x-24-7900	6.4	9.5
FOFR-x-25-7900	6.4	12.7

⊢ ₩i		
	т	

Н

D-SHAPED CLIP

 	W	



Code	H (mm)	W (mm)	L1 (mm)
FOFDC-x-01-7900	5.2	6.4	3.2
FOFDC-x-02-7900	6.2	6.4	4.2
FOFDC-x-03-7900	9.1	6.4	7.1

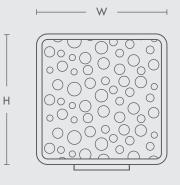
C-FOLD SHAPED

Code	H (mm)	W (mm)	L1 (mm)	L2 (mm)
FOFC-x-01-7900	6.4	7.1	3.2	1.5
FOFC-x-02-7900	8.0	8.0	2.0	2.0
FOFC-x-03-7900	9.8	10.7	2.9	1.5
FOFC-x-04-7900	10.5	11.4	3.4	1.7
FOFC-x-05-7900	17.1	15.0	4.2	4.0



SQUARE SHAPED

Code	H (mm)	W (mm)
FOFS-x-01-7900	3.0	3.0
FOFS-x-02-7900	4.0	4.0
FOFS-x-03-7900	12.7	12.7
FOFS-x-04-7900	17.0	17.0



94

P-SHAPED

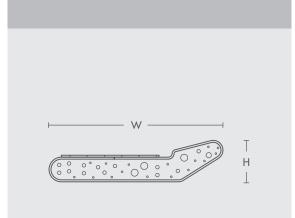
Code	H (mm)	W (mm)	L1 (mm)	L2 (mm)
FOFP-x-01-7900	3.0	13.2	6.1	0.5
FOFP-x-02-7900	5.5	12.0	4.3	2.3

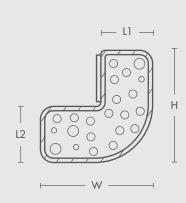
KNIFE SHAPED

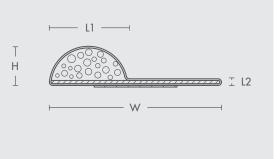
Code	H (mm)	W (mm)
FOFK-x-01-7900	2.7	11.3
FOFK-x-02-7900	6.4	19.1

J-SHAPED

Code	H (mm)	W (mm)	L1 (mm)	L2 (mm)
FOFJ-x-01-7900	5.3	3.3	1.6	1.8
FOFJ-x-02-7900	10.2	7.6	4.4	3.6







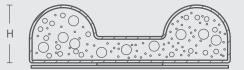
Т Н

-

BELL SHAPED

Code	H (mm)	W (mm)
FOFB-x-01-7900	1.20	10.0
FOFB-x-02-7900	2.00	17.1
FOFB-x-03-7900	2.50	7.6
FOFB-x-04-7900	2.54	10.0
FOFB-x-05-7900	3.05	10.1

DOUBLE D-SHAPED

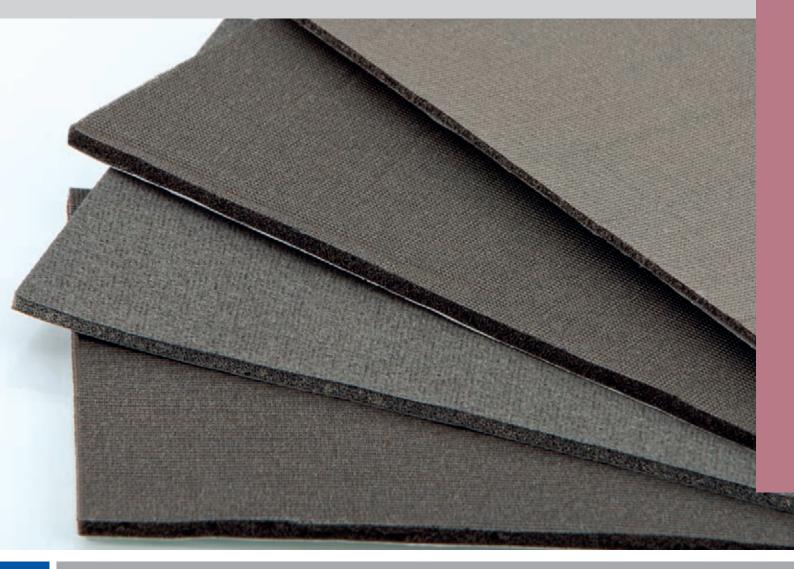


⊢_____ ₩ _____

			——————————————————————————————————————
Code	H (mm)	W (mm)	
FOFDD-x-01-7900	2.8	9.7	
	STA	NDARD LENGHT 2	2 M (79″)
ОТН	ER DIMENSIONS (OF PROFILES ARE	AVAILABLE UPON REQUEST
	ORD		MATION
	FOF -	D - U - 01	- 7900
	FOF	Product Family Shape	
	U	U = Urethane / T	= Thermoplastic
	01	Section	
	7900	Lenght in inches	



CONDUCTIVE FOAM.



GENERAL INFORMATION

Euro Technologies has developed a new line of conductive foam gasketing that offers an innovative alternative to traditional EMI/RFI shielding and grounding products by providing X,Y and Z-axis conductivity.

It's ideal for use in non-dynamic applications such as input/output (I/O) and other standard connector configurations, such as D-subs, USB port, IEEE 1394, SCSI and RJ-45.

Available in a wide range of thickness and in both UL94 HB and VO fire rated versions, conductive foam can be supplied with or without electrically conductive adhesive.

Maximum size availability: reel 1.37 meter width.

FEATURES AND BENEFITS

- Shielding effectiveness of > 90 dB across a wide range of frequencies.
- Wide range of thickness (from 1.0 to 5.0 mm).
- Flame retardant version.
- Excellent in compressibility.
- Excellent electric conductivity in vertical direction.
- Standard and custom die-cut versions available.

Customizations





MECHANICAL TOLERANCES

Profile (mm)

Height & Width	± 0.5
Length (mm)	
• > 25.4 to 152.4	± 0.8
• > 152.4 to 279.4	± 1.3
• > 279.4 to 1219.2	± 2.5

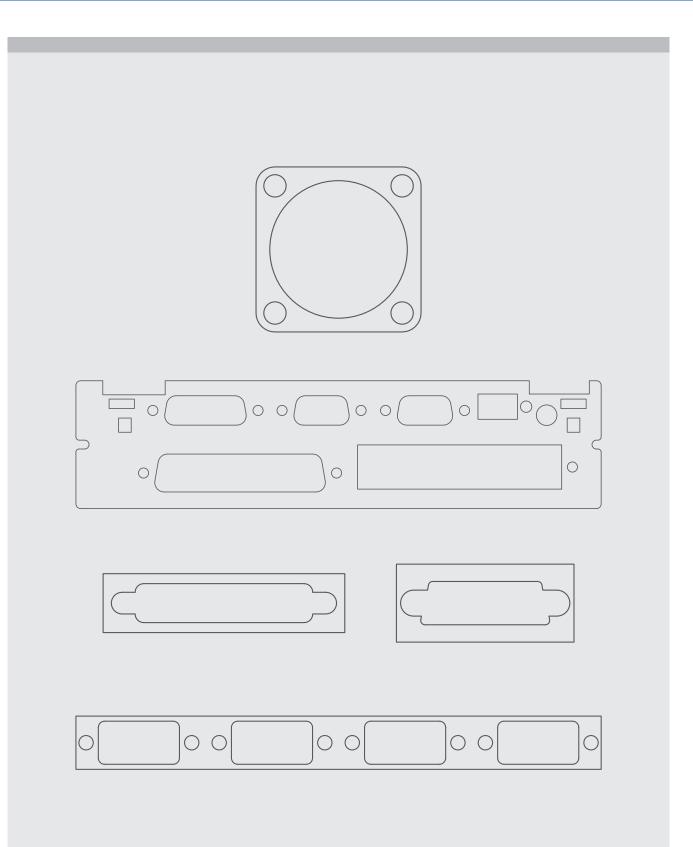
- > 1219.2 to 1778.0 ± 4.7
- > 1778.0 to 2438.4 ± 6.4

AVAILABLE ROLLS HEIGHT 560 AND 1370 mm











CONDUCTIVE FABRIC.



GENERAL INFORMATION

Euro Technologies offers a large variety of polyester woven, non-woven and mesh shielding conductive fabric with copper, nickel, and copper and nickel plated.

These have been developed with a lightweight fabric and special finished coating to meet a diverse range of EMI/RFI shielding requirements.

Whether used as an architectural shielding product to shield complete rooms, or as the shielding material in EMI gaskets, tapes and shield laminates, our fabrics provide a highly effective shielding system that is cost-effective and easily applied.

Maximum size availability: reel 1.37 meter width.

FEATURES AND BENEFITS

- Shielding effectiveness up to 100 dB.
- Excellent conductivity.
- Good abrasion resistance.
- Excellent in flexibility and bending durability.
- UL94 V0 flame retardant rating available.
- Custom die-cut versions available.

Customizations





PRODUCTS DATA SUMMARY

	Product No.	Nominal Thickness (mm)	Surface Resistivity (Ohms/square) (ASTM F390)
Ni/Cu Polyester non-woven	ZFTT-CuNi	0.4	< 0.07
Ni/Cu Polyester Taffeta UL94 V0	ZFTT-CuNi-FR	0.2	< 0.07
Ni/Cu Nylon Ripstop	ZFTR-CuNi	0.1	< 0.07
Ni/Cu Nylon Ripstop UL94 V0	ZFTR-CuNi-FR	0.2	< 0.07
Ni/Cu Polyester Ripstop	ZFTR-Cu	0.2	< 0.10

Metallized fabric combines highly conductive metal with lightweight to match a diverse range of EMI/RFI shielding requirements. **Conductive Fabric** is available in various woven and non-woven substrate configurations.

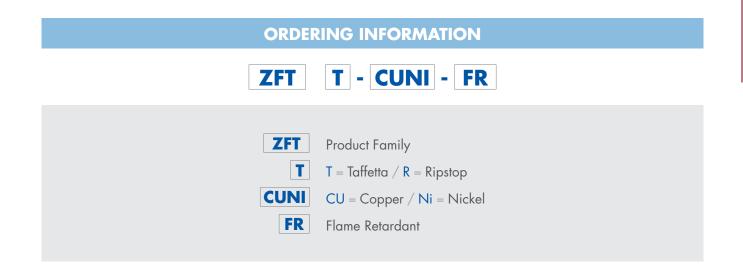
Wheter used as an architectural shielding product to shield complete rooms, or as the shielding material in EMI gasket, tapes, and shield laminates, **Euro Technologies** fabrics provide a highly effective shielding system that is cost-effective and easily applied.

Euro Technologies uses a complex technology for applying thin metal coatings of copper or nickel to woven and non-woven fabrics. As a result, our metallized materials have the flexibility, conformability and breathability of a fabric with the electrical properties of a metal. This means low surface and through resistivity and excellent shielding effectiveness.

Code	Material	Thickness (mm)
ZFTR-CUNI	Ni/Cu Ripstop	0.1
ZFTT-CUNI-FR	Ni/Cu Polyester Taffeta UL94 VO	0.2
ZFTR-CUNI-FR	Ni/Cu Nylon Ripstop UL94V0	0.2
ZFTR-CU	Cu Polyester Ripstop	0.2
ZFTT-CUNI	Cu Polyester	0.4

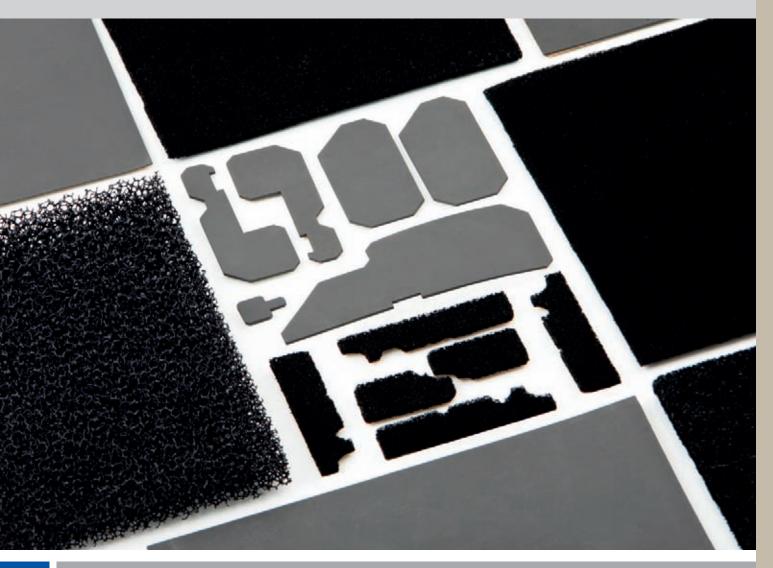


Shielding at 100Mhz/1GHz (dB) (Mil-Std 285)	Tensile Strength CD/MD4 (lb/in) (ASTM D5035)	Air Flow (ft3/min/ft)	Weight (oz/yd²) (LT 500)	Max. Short Duration Temperature (°C)
105 / 90	7.5 / 18.5	690	1.8 - 3.0	210
80 / 70	50 / 75	N.A.	Nominal Value: 8	100
85 / 75	52 / 56	97	2.2 - 2.6	200
85 / 75	52 / 56	N.A.	5.5 - 7.0	100
90 / 80	60 / 65	68	2.0 - 2.7	210
	,			





MICROWAVE ABSORBER.



GENERAL INFORMATION

Interest in microwave-absorbing material technology has been growing.

As the name implies, microwave-absorbing materials are coatings whose electrical and/or magnetic properties have been altered to allow absorption of microwave energy at discrete or broadband frequencies.

There are several techniques to achieve these properties. The goal of the absorber manufacturer is to balance electrical performance, thickness, weight, mechanical properties and cost.

FEATURES AND BENEFITS

- Available in wide range of dimensions can easy be die-cut or supplied in kiss cut parts.
- Environmental friendly: Halogen free and Rohs certified excellent performance at low, medium and Hi frequencies.
- Supplied with pressure sensitive adhesive for ease of installation.
- Fire retardant rating up to UL94 VO.
- Sheets are offered in nominal sizes 24" x 24" (609.6 x 609.6 mm), although custom sizes and moulded components are available upon request.

Customizations



PRINCIPLES OF OPERATION

Altering the dielectric and magnetic properties of existing materials will produce microwave absorbers.

For purposes of analysis, the dielectric properties of a material are categorized as its permittivity and the magnetic properties as its permeability.

Both are complex numbers with real and imaginary parts. Common dielectric materials used for absorbers, such as foams, plastics and elastomers, have no magnetic properties, giving them permeability of 1.

Magnetic materials, such as ferrites, iron and cobalt-nickel alloys, are used to alter the permeability of the base materials. High dielectric materials, such as carbon, graphite and metal flakes, are used to modify the dielectric properties.

When an electromagnetic wave, propagating through a free-space impedance of Z0, is incident upon a semiinfinite dielectric or magnetic dielectric boundary of impedance Z1, a partial reflection occurs.

The magnitude of the reflection coefficient is governed by the following equation:

ABSORBER TYPES

ELASTOMERIC ABSORBERS

These thin, flexible absorbers are best for outdoor use.

The method of application is adhesive bonding to a metal substrate. Adhesives vary with the type of elastomer chosen and include: epoxies, urethanes, contact adhesives and pressure-sensitive adhesives (PSA).

In general, nitrile are the easiest elastomers to bond and have a variety of compatible adhesive systems available. Bond strengths in excess of 10 pounds per inch are typical. In some cases, it is necessary to cover a tight radius or complex curvature.

An alternative to flat sheet material is conformally molded parts.

Conformal molds increase the ease of bonding and reduce the likelihood of applying any built-in stresses into the material. For gasket applications, the elastomeric absorber may be extruded.

To improve weather resistance, the absorber is painted. Typically, an epoxy - or urethane-based paint is used.

To avoid gaps between sheets, absorptive gap fillers are used to minimize any impedance mismatches from sheet to sheet. This technique also limits the formation of surface waves and reflections.

Newer non-corrosive fillers, such as iron silicide, are also available for corrosive environments.

BROADBAND ABSORBERS

Open-cell foam absorbers are normally used in a protected environment, i.e. radomes or nacelles. Therefore, application becomes much less critical than for those on the exterior of a vehicle.

The typical method of application is adhesive bonding. Again, a wide class of adhesives may be used, including contact cements, epoxies and acrylic PSA. In general, cohesive failure of the material will result before adhesive failure. The front surfaces may be painted or coated to further protect the absorber.

Euro Technologies uses two methods to produce broadband absorbers for external use.

The first method involves taking broadband foam or netting absorber and encapsulating it in a reinforced coated fabric. The bagging material is completely enclosed around the absorber making it weather proof.

This radar-absorptive cover can then be used in external environments with no physical degradation to the absorbing medium. A second method uses a closed-cell foam filling technique to produce rigid structural absorptive panels.

The absorber, **MWA6**, is lightweight and may be molded to a variety of shapes. It has broadband absorptive characteristics similar to the flexible foam **MWA3** absorbers.

The rigid, closed-cell form may be painted and will be impervious to external environments. A variety of highstrength, lightweight, flexible fillers for **MWA6** are being developed. **MWA6** and absorptive honeycomb may be used as the inner core for structural panels.

The panel would consist of face sheets of fiberglass the radar and graphite or metal as the ground plane. These panels are lightweight and high strength and can be used as structure in certain applications.

MWA1 - SINGLE BAND ABSORBERS

MWA1 absorbers are resonantly tuned to discrete frequencies between 500 MHz and 100 GHz. They are designed to reduce energy reflections off of a conductive ground plane by > 99% (- 20 dB) at normal angles of incidence.

The performance is based upon the principle of phase cancellation by the incident energy reflection being out of phase with the ground plane reflection.

The materials are thin, flexible and easy to cut and install. They are elastomer based with a variety of choices available. For example, silicone is chosen for high-temperature applications, nitrile for fuel and oil resistance and natural rubber for commercial applications.

Several magnetic fillers are available; carbonyl iron powder is standard, but other materials such as iron silicide (FeSi) are used for corrosion-resistant applications. The density of the materials is based on the volume percentage of magnetic filler. The relationship between resonant frequency, weight and thickness.

MATERIAL TYPES AVAILABLE

- **R** Natural Rubber
- S Silicone
- **U** Urethane
- N Nitrile

AVAILABLE IN STANDARD SHEET OF 24" x 24"

Code	Thickness (mm)	Freq (Ghz)	DB Loss
MWA1-R-040-1	1.0	18.200	- 20.0
MWA1-S-045-0	1.1	14.000	- 20.0
MWA1-R-055-1	1.4	11.200	- 20.0
MWA1-N-063-1	1.6	9.400	- 20.0
MWA1-R-075-1	1.9	6.500	- 20.0
MWA1-R-100-1	2.5	2.400	- 20.0
MWA1-N-115-0	2.9	3.000	- 20.0
MWA1-R-150-1	3.8	1.500	- 15.0

MWA2 - SURFACE WAVE ABSORBERS

MWA2 surface wave absorbers are thin, magnetically loaded elastomeric sheets designed to provide attenuation at high angles of incidence for surface wave attenuation. They are nominally manufactured in the thickness range of 0.015" to 0.125" (0.4 mm to 3.2 mm).

They are elastomer-based with a variety of choices available. For example, silicone is chosen for high-temperature applications, nitrile for fuel and oil resistance and natural rubber for commercial applications. Several magnetic fillers are available; carbonyl iron powder is standard, but other materials such as iron silicide (FeSi) are used for corrosion resistant applications. The materials are available in UL fire retardant versions for use in commercial devices.

Euro Technologies can provide the material die-cut and with a pressure-sensitive adhesive for ease of installations. Sheets are offered in nominal sizes of 24" x 24" (609.6 mm x 609.6 mm), although custom sizes and molded components are available.

APPLICATIONS

The material can be used inside of microwave housings to reduce internal resonance and to lower the "Q" of the microwave cavity. They are also effective in isolating antennas from ground plane reflections.

MWA2 can be used with board level shielding and other types of EMI shielding to enhance the shielding effectiveness at frequencies from 2-40 GHz.

17. MICROWAVE ABSORBER

Thickness (mm)	Opt. Freq. Range (Ghz)
0.8	12 - 18
1.0	8 - 12
1.0	8 - 12
1.3	8 - 12
2.0	4 - 8
2.5	2 - 4
4.6	< 2
	0.8 1.0 1.3 2.0 2.5

MWA3 - RETICULATED FOAM ABSORBERS

MWA3 is a reticulated foam absorber. Reticulated foam is an urethane-based foam with a well-defined open-cell structure. The cell size can be chosen to optimize penetration of the conductive coating to which it is adhered.

Euro Technologies uses two separate processes to produce its reticulated foam absorber.

This unique spray process applies a coating that is graded through the thickness of the foam.

The grading of the coating also produces an electrical grading that results in a material with excellent broadband reflectivity reduction. **Euro Technologies** also uses a dip process to produce foam with uniform electrical properties.

Euro Technologies also dips MWA3, a convoluted egg-crate shaped foam. This shaping allows for graded impedance, which provides broadband reflectivity reduction. MWA3 is produced in thicknesses from 1.5" to 4" (38.1 mm to 101.6 mm) and is used when broadband performance from 2 to 18 GHz is required.

The product can be supplied with a bonded-on ground plane and pressure-sensitive adhesive.

APPLICATIONS

MWA3 broadband foam is commonly used around antennas to provide isolation or side lobe reduction. It can be die-cut into components for EMI reduction inside microwave cavities and is used to manufacture antenna hats and test boxes.

It can be encapsulated into a textile cover for use outdoors and fabricated into blankets, covers and other components. Recently, it has been used for a combination air/EMI filter in networking equipment.

THE PRODUCT CAN BE MADE UL94 HF1 FOR SUCH APPLICATIONS	

Code	Thickness (mm)	Freq. Range (Ghz) 20 Db
MWA3-U-750-0	19.1	6 - 18
MWA3-U-1125-0	28.6	4 - 18
MWA3-U-1250-0	31.8	4 - 18
MWA3-U-2000-0-FR	50.8	2 - 18

- 25.0

MWA4-U-500-1

MWA4 - SINGLE LAYER "LOSY" FOAM ABSORBERS

MWA4 is a series of single layer "lossy" sheets produced by dipping lightweight open-celled urethane foam into a resistive solution. The end product is a uniform, lightweight, loaded sheet material with a specified insertion loss at a given frequency.

MWA4 offers the lowest cost in microwave absorber products. Thickness of the sheets range from 0.125" to 1.5" (3.2 mm to 38.1 mm) and are generally 24" x 24" (609.6 x 609.6 mm).

Custom sizes and components can be fabricated. The insertion loss of the product is measured in an insertion tunnel over the 2 to 18 GHz frequency range. Specifications are generally given at 3 or 10 GHz.

THE MATERIAL CAN BE DIE-CUT INTO COMPONENTS AND SUPPLIED
WITH A PRESSURE-SENSITIVE ADHESIVE FOR EASE OF APPLICATIONCodeThickness (mm)Insertion Loss per in at 3 Ghz (DB/IN)MWA4-U-125-13.2-15.0MWA4-U-250-06.4-2.5MWA4-U-375-09.5-32.0

ORDERING INFORMATION

12.7









GENERAL INFORMATION

Euro Technologies distributes an extensive line of ferrite products for signal line and EMI filtering applications.

Products include ferrite cable cores, connector plates, unique common mode chokes, CAN-Bus chokes, high current thru hole and surface mount components, chip beads, surface mount inductors and toroid inductor cores.

FEATURES AND BENEFITS

- Wide range of product gamma.
- Product always available on stock.
- Very good quality price level.



DESCRIPTION

Euro Technologies' nickel-zinc ferrite parts are used extensively in the suppression of electromagnetic interference. Suppression of EMI has become a major concern in the transmission, reception, and processing of electronic signals and data.

Ferrite materials exhibit varying magnetic properties depending on the frequency at which they are excited. In electronic applications, the relation of the magnetic loss to frequency is used to design the equivalent of band pass filters, attenuating high frequency interference where the material's losses are high, yet passing lower bands where data is carried.

FEATURES AND BENEFITS

By changing the composition of ferrite, it is possible to enhance attenuation in selected frequency ranges.

Euro Technologies offers a family of ferrites with varying compositions to allow the user to select the optimal type of the application, as well as cable core, SMT common mode, differential mode and other configurations. **Euro Technologies'** wide band transformer and filter cores, and manganese-zinc and nickel-zinc ferrite toroids

range in initial permeabilities from 16 to 10.000.

These products are used primarily in:

- Pulse transformers.
- Isolation transformers.
- Dataline.
- Power filters.
- Ground fault interrupters.
- Parts are available bare or coated.
- Ferrite Cable Cores.
- Ferrite Chip Beads.
- Ferrite Common Mode Chokes.
- Ferrite Chip Inductors.

- Ferrite Disks & Plates.
- Ferrite Beads on Wire.
- Ferrite Differential Arrays.
- Ferrite Toroids.

CONTACT EURO TECHNOLOGIES TODAY FOR YOUR COMPLETE APPLICATION SOLUTIONS

PLEASE REQUIRE TO EURO TECHNOLOGIES THE COMPLETE CATALOGUE OF FERRITES WITH ALL TECHNICAL INFORMATIONS



SHIELDED WINDOWS.



GENERAL INFORMATION

Shielded windows consist of one or more window layers with a conductive intermediate layer.

They are applicable for all visual display systems, e.g. in meters and monitors.

Due to the variety of possibilities, our standard is custom-made production.

FEATURES AND BENEFITS

The window should be selected according to following criteria:

- Window material.
- Color of material.
- Dimensions.
- Anti-reflectivity.
- Intermediate layers.
- Construction.
- Gasket type.
- Frame finish.
- Shielded windows are generally used for all kinds of electric displays, e.g. LCD, LED, plasma and displays.

Orientation of the mesh:

• 90° - 45° - 30° - 15°.

Customizations





PRINCIPLES OF OPERATION

WINDOW MATERIAL

Glass, plexiglass (acryl), makrolon (polycarbonate) and PVC can be selected.

COLOR

Base color of all materials is transparent/clear. However, for some applications it may be more advantageous to color the material yellow, green, red or amber.

The base material for acrylic windows is colored, whereas for glass windows, the adhesive foil between the panels is colored.

Please consider that with colored materials, the light transmission will be affected.

DIMENSIONS

Outer dimensions: there is no standard outer dimension, all windows are custom-made.

Material thickness: the material thickness for glass starts from 0.8 - 1.2 mm, for acrylic from 0.8 mm and for polycarbonate from 1.5 mm. The variety of available material thicknesses helps to meet almost all customer requirements. For a final glass-glass window, the shielding mesh and the adhesive add 0.8 mm to the thickness when laminated together.

ANTI-REFLECTIVITY

All materials can be supplied with anti reflective surface to avoid glaring and to enhance contrast.

Different procedures can be used.

Anti-reflectivity for glass

Multi-layer coating per MIL SPEC 675 B (less than 0,6% remaining reflection).

Single-layer coating per DIN 58197 (less than 1,5% remaining reflection).

Chemical etching: 5% reflection (R11G or GW 80). 9% reflection (R19G or GW 100). 13% reflection (R27G or GW 120).

Anti-reflectivity for plastics

Chemical etching is the standard procedure for a good anti reflectivity with plastics which comes out very strong. A special coating, giving a scratch resistance in addition to anti reflectivity, can influence the intensity of reflectivity.

INTERMEDIATE LAYERS

The intermediate layer for EMI/RFI shielding is a woven microstructure mesh. Mesh materials are copper, stainless steel or silver plated stainless steel.

The mesh can be blackened so as to enhance contrast on the display. This does not affect the shielding performance. To avoid interferences between mesh grid pattern and monitor or display ("Moiré fringes"), simply change the orientation of the mesh by turning it a little. The number of openings per inch (opi) determine the shielding effectiveness, but also the light transmission.

In applications with a very high resolution display which does not allow the use of a mesh, a highly conductive, transparent foil can be laminated onto the glass, or it can be equipped with a conductive ITO coating.

CONSTRUCTION

The window consists of a carrier with a laminated mesh on the rear or laminated between two carriers, depending on the application.

The mesh overlaps the carrier to serve as contact area for the gasket or installation.

Plastic will be laminated either with adhesives or with high temperatures.

Glass will be laminated in a vacuum with double sided adhesive foils. Please note that a fully laminated glass window using a PVB interlayer (PVB = Polyvinyl Butyral) as an adhesive cannot be cleaned with solvents, because the solvent will damage the PVB interlayer.

GASKET TYPE

To achieve shielding effectiveness, a good contact between mesh and enclosure is required. The contact can either be established in a direct way or by means of a conductive gasket. When selecting the gasket, you should consider the environmental seal (IP-protection etc.) characteristics that have to be met by the finished product.

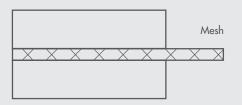
FRAME FINISH

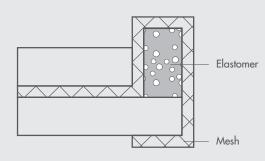
Windows can be supplied from the factory as complete units. The finish is made according to customer specification and facilitates the assembly. The appropriate gasket is integrated in the frame to provide a good contact between mesh and enclosure.

SELECTION OF MESH

Mesh	Surface	Open. Per inch	Wire Diameter (mm)	Max Sixe Available (mm)	Open area (%)	Mesh Type
Copper	Blackened	70	0.07	1200 x 1000	65	1
Copper	Blackened	100	0.05	1200 x 1000	64	2
Stainless Steel	Bright	100	0.025	1200 x 1000	81	3
Silver plated Stainless Steel	Blackened	100	0.025	700 x 700	81	4
Silver plated Stainless Steel	Blackened	165	0.05	700 x 700	46	5
Silver plated Stainless Steel	Blackened	200	0.025	700 x 700	64	6

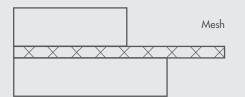
SCHEMATIC ILLUSTRATION



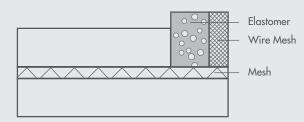


Step Construction with Mesh Over Elastomer Core

Plain Ending



Step Construction



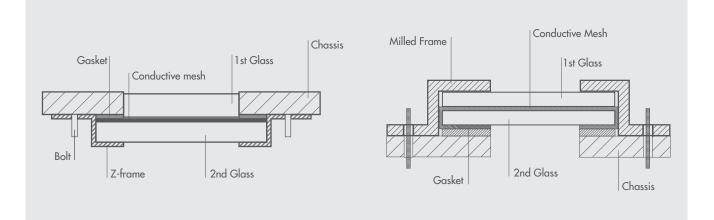
Conductive Silicone

Plain End with Conductive Silicone Gasket

Step Construction with RF-Gasket



ASSEMBLY EXAMPLE



SHIELDED ACRYLIC WINDOW

GENERAL DESCRIPTION

A micro-structure wire mesh is stretched in a mould and then cast into acrylic. Due to a special moulding technique, the wire mesh is smoothly embedded in the sheet and will therefore only cause a minimum of optical disturbances. If the shielded window is placed in front of a data display, there might occur interference phenomena followed by varying light intensities on the screen (Moiré fringes).

A turn of the mesh by a few degrees may reduce these disturbances. Custom-made shielded windows with specific dimensions will be cut out of the sheet. Afterwards, a groove will be milled all the way around the edge of the sheet in a step construction.

This groove will be plated with silver (silver busbar) and provides the contact to the wire mesh. The window can then be mounted on the chassis by means of a conductive gasket or by using a conductive adhesive. Shielded windows used in front of a display should be mounted in a way that the mesh side of the window is placed as close to the LED/LCD as possible.

MATERIAL

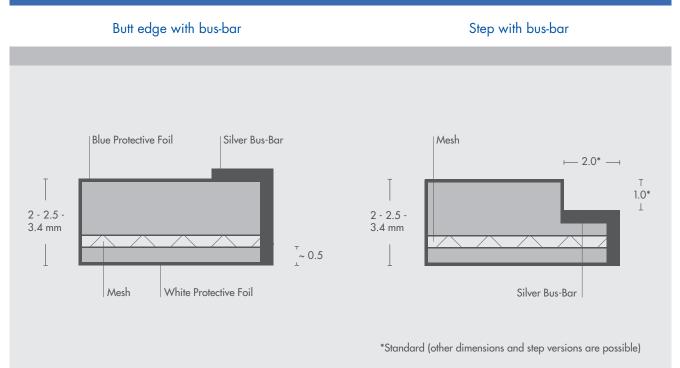
Type of Plastic: Cast Acrylic. Max. size: 1150 x 850 mm. Thickness: 2.0 mm, 2.5 mm, 3.0 mm, 4.0 mm. Tolerances: ± 0.2 mm. Working Temp. Range: - 40 to 70 °C. Mesh - stainless steel, 100 OPI Surface: bright or blackened Wire diameter: 0.025 mm. Light transmission: 78%.

FILTER

In addition to being used as an EMI shield, the shielded window can be used as a contrast filter. More than 55 different transparent colors are available, making it possible to choose a contrast filter adapted to the wave length (color) of the signal source (display).

This allows for the greatest possible light transmission while simultaneously excluding secondary light to achieve a clear and easily read signal.









HONEYCOMB VENT PANEL FILTERS.



GENERAL INFORMATION

Euro Technologies offers EMI Shielding Ventilation Panels.

Available in a wide choice of materials, platings, and mounting configurations, it offers the designer new versatility to meet EMI, environmental, and mechanical requirements of system specifications.

Customizations

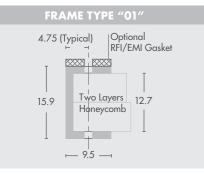


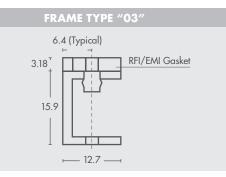
FEATURES AND BENEFITS

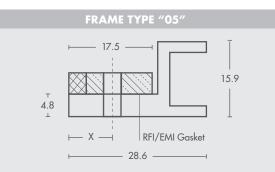
- Wide choice of materials and finishes to meet a broad range of shielding effectiveness requirements.
- Varied mounting configurations to meet environmental and space considerations.
- Protective grille can be supplied.
- Panel supplied with 6.4 mm thick or 12.7 mm thick honeycomb.
- Full EMI test of panel to MIL-STD-285 to aid in the early stages of equipment panel design.

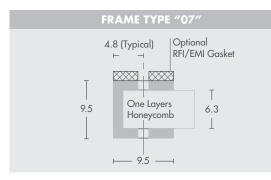


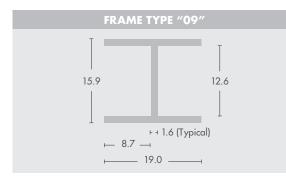
STANDARD FRAMES

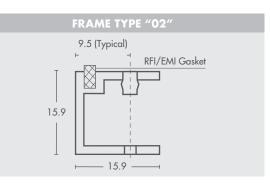


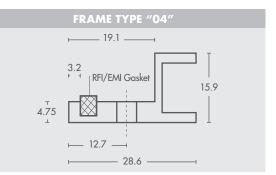


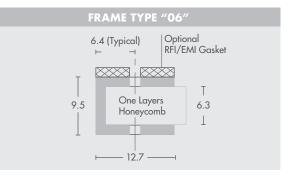


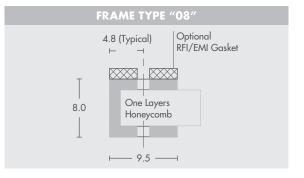






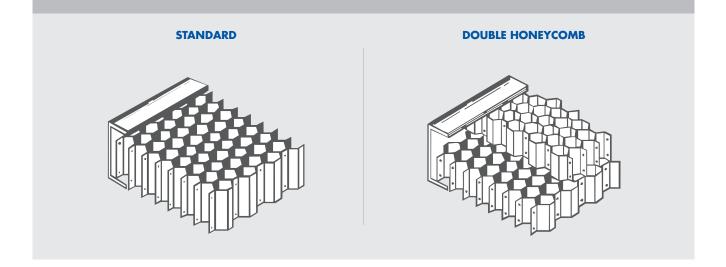








HONEYCOMB



SPECIFICATIONS

HONEYCOMB

Material	corrosion resistant aluminium
Surface finish	Chromated, Tin plated, Nickel plated (when framed)
Dimensions (mm)	O = 3.18O = 6.35D = 6.35 and 12.7D = 25.4M = 0.05M = 0.05
Honeycomb compound	adhered and perforated
Honeycomb slant	90° (30°, 45°, 60° high volume only)
Max Honeycomb size (mm)	арргох. 2000 х 1000
FRAME	
Material	ALMgSi 0.5, DIN 1725/48
Surface finish	Chromated MIL-G-5541 Tin plated MIL-G-10727

MECHANICAL TOLERANCES

Dimensions in mm

- up to 200 ± 0.4
- > 200 to 600 ± 0.8
- > 600 ± 1.6



MAX AIR VENT PANELS

Euro Technologies introduces our **MaxAir Vent Panel** product line, an innovative cost effective approach to provide increased airflow along with EMI protection. This nickel copper plated polymeric honeycomb material provides a rigid medium which eliminates the need for costly frame designs. This patent-pending frameless design allows greater airflow through the entire area of the honeycomb surface.

ADVANTAGES

- Metallized polymeric honeycomb provides excellent product rigidity and dent resistance.
- Eliminates frames, rivets and costly labor to install.
- Increases usable air flow area compared to framed vent panels by 10% to 20%.
- Special features can be machined into honeycomb, such as recesses and rabbet cuts to customize panel.
- Honeycomb available in 1/4" (6.35 mm), 1/8" (3.18 mm) and 3/32" (2.38 mm).

Lightweight-half the weight of traditional honeycomb vent panels.

Standard honeycomb thicknesses of 1/4" (6.35) and 1/2" (12.7).

Compressible conductive foam band provides extensive tolerance to accommodate variations in shelf widths or vent panel opening dimensions.

Can be inserted with slide-in motion or by compression fit utilizing compression stops and minimal hardware.

OTHER THICKNESSES AVAILABLE UPON REQUEST

ELECTRO-AIR EMI/DUST FILTRATION PANEL

Euro Technologies has a proven solution to air filtration and EMI shielding in electronic enclosures.

These panels consisting of layered, woven, and crimped wire mesh plus filtering media (as needed), captures microscopic airborne contaminants while providing minimal air flow impedance. Better yet, the panel's specially designed EMI gasket prevents signal migration to the enclosed sensitive electronic equipment.

In fact, when measured according to MIL-STD-285, the panel provides shielding effectiveness in excess of 60 dB for a range of 18 MHz to 1 GHz plane wave.

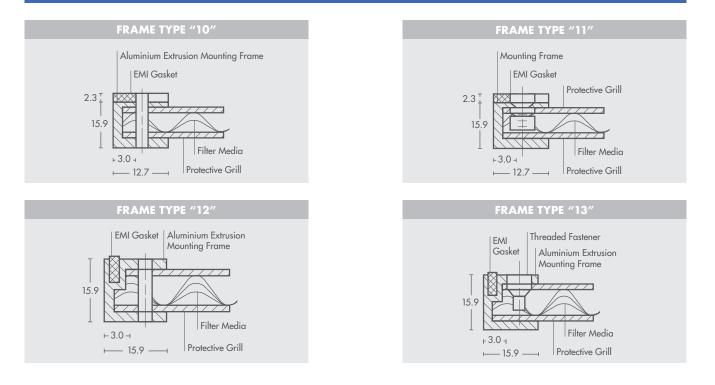
ADVANTAGES

- Universal applications-ideal for small enclosures, large housings, high traffic areas, even room size facilities.
- Extensive service life-built to outlast the equipment it protects.
- Variety of design specifications-modular construction is available in assorted standard sizes 19.35 to 116.13 sq. cm
- Easy installation-pre-drilled through holes or captive fasteners allow for quick mounting and removal.
- Simple maintenance-washing with mild soap solution, rinsing, and drying as often as necessary will not degrade performance.
- Design assistance **Euro Technologies'** engineering and EMC lab offers technical assistance and testing data to help solve the toughest application challenges.

MATERIAL AND PLATING CODES

Frame Material	Filter Media	EMI Gasket	Plating Finish
Aluminium Alloy	Grill: Aluminium Alloy Media: Wire Fabric Aluminium	Ground: Knit Monel Wire Elastomer: Neoprene Sponge	Chromate Coating
Aluminium Alloy	Aluminium Alloy with Polyethylene	Knit Monel Wire	Chromate Coating

ELECTRO-AIR EMI/DUST FILTRATION PANEL



ORDERING INFORMATION







ELECTRICALLY CONDUCTIVE PAINT.



GENERAL INFORMATION

The conductive paints are formulated to provide good adhesion to almost any plastic substrate.

Only minimal surface preparation is required prior to spraying. The resulting finish is resistant to abrasion and unimpaired by humidity and heat. The coating adherence meets the current standards and specifications of the electronics industry.

FEATURES AND BENEFITS

- A specially selected resin matrix binds the conductive material to the surface while permitting the establishment of an efficient conductive network.
- Resin-bonding eliminates a problem encountered with shielding techniques based on metal alone: flaking due to differences in thermal coefficient of expansion.
- Conductive paint coatings expand without loss of coating integrity.
- Furthermore, the resin protects the conductive pigment from oxidative attack, as well as from physical damage.



CP-00 SILVER

Sprayable silver paint for use on plastic substrates. It is unique in that it is formulated in very mild solvents that can tolerate higher built-in stresses which can be found on molded parts.

This product offers effective shielding at less than 0.5 mil (12.5 µ) dry film thickness.

The dried conductive film is extremely hard, tough and durable.

CP-00 contains no methyl ethyl ketone (MEK) or other strong solvents which can attack solvent-sensitive substrates, such as polycarbonate and polycarbonate blends. It is designed with a fast drying solvent blend which is desirable in high volume production.

Percent Solids	47 ± 1.5% by weight
Density	1.38
Viscosity (as supplied)	thixotropic mixture
Dilution	1:1 by volume
Resistivity	less than 0.015 Ohm/cm at 0.5 mil (12.5 μ) dry film thickness
Environmental testing	no change in resistivity after 7 day exposure to 85 °C at 85% R.H.
RCA Abrader	more than 500 turns at 1.0 mil dry film with 55 g weight
Coverage	18.40 m² / Liter at 0.5 mil (12.5 μ) dry film thickness
Shelf life	Nine (9) month from date of manufacture

CP-01 SILVER COPPER HYBRID

Sprayable hybrid paint for use on plastic substrates. It is unique in that it is formulated in very mild solvents that can tolerate higher built-in stresses which can be found on molded parts.

This product offers effective shielding at less than 0.5 mil (12.5 μ) dry film thickness.

The dried conductive film is extremely hard, tough and durable.

CP-01 contains no methyl ethyl ketone (MEK) or other strong solvents which can attack solvent-sensitive substrates, such as polycarbonate and polycarbonate blends. It is designed with a fast drying solvent blend which is desirable in high volume production.

Percent Solids	25 ± 1% by weight
Density	1.11
Viscosity (as supplied)	thixotropic mixture
Dilution	not necessary, but if required than MEK to use
Resistivity	less than 0.1 Ohm/cm at 1.0 mil (25 μ) dry film thickness
Environmental testing	no change in resistivity after 7 day exposure to 85 °C at 85% R.H.
RCA Abrader	more than 500 turns at 1.0 mil dry film with 55 g weight
Coverage	9.9 m² / Liter at 1.0 mil (25 μ) dry film thickness
Shelf life	Nine (9) month from date of manufacture

CP-02 SILVER COPPER

Sprayable silver copper loaded paint for use on plastic substrates. It is unique in that it is formulated in very mild solvents that can tolerate higher built-in stresses which can be found on molded parts.

This product offers effective shielding at less than 1.0 mil (25 µ) dry film thickness.

The dried conductive film is extremely hard, tough and durable.

CP-02 contains no methyl ethyl ketone (MEK) or other strong solvents which can attack solvent-sensitive substrates, such as polycarbonate and polycarbonate blends. It is designed with a fast drying solvent blend which is desirable in high volume production.

Percent Solids	25 ± 1% by weight
Density	1.11
Viscosity (as supplied)	thixotropic mixture
Dilution	not necessary, but if required than MEK to use
Resistivity	less than 0.1 Ohm/cm at 1.0 mil (25 μ) dry film thickness
Environmental testing	no change in resistivity after 7 day exposure to 85 °C at 85% R.H.
RCA Abrader	more than 500 turns at 1.0 mil dry film with 55 g weight
Coverage	9.9 m² / Liter at 1.0 mil (25 μ) dry film thickness
Shelf life	Nine (9) month from date of manufacture

CP-03 NICKEL

A new finer particle sprayable hybrid paint for use on plastic substrates. It is formulated to compete with nickel in conductivity without creating environmental issues.

It is unique in that it is formulated in very mild solvents that can tolerate higher built-in stresses which can be found on molded parts.

This product offers effective shielding at less than 1.0 mil (25 μ) dry film thickness.

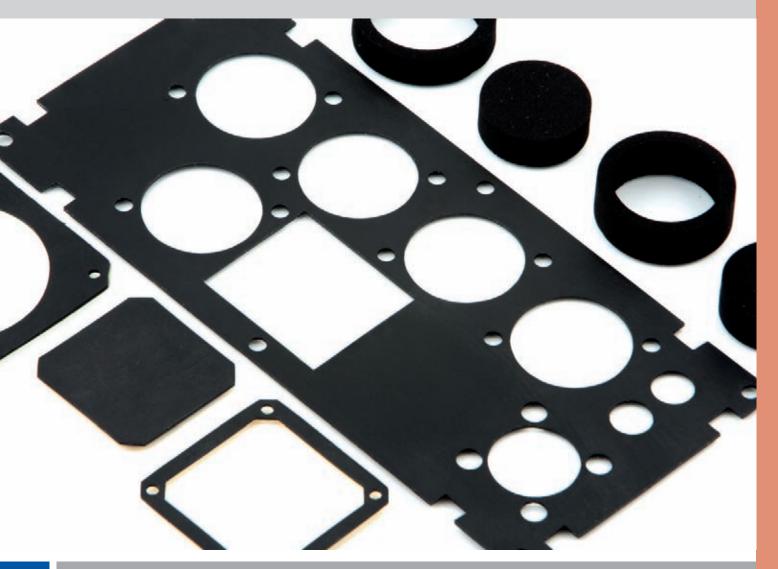
The dried conductive film is extremely hard, tough and durable.

CP-03 contains no methyl ethyl ketone (MEK) or other strong solvents which can attack solvent-sensitive substrates, such as polycarbonate and polycarbonate blends. It is designed with a fast drying solvent blend which is desirable in high volume production.

Percent Solids	19 ± 1% by weight
Density	1
Viscosity (as supplied)	thixotropic mixture
Dilution	20 - 25% with ethyl alcohol
Resistivity	less than 0.1 Ohm/cm at 1.0 mil (25 μ) dry film thickness
Environmental testing	no change in resistivity after 7 day exposure to 85 °C at 85% R.H.
RCA Abrader	passes 500 + cycles
Coverage	5.9 m² / Liter at 1.0 mil (25 μ) dry film thickness
Shelf life	Nine (9) month from date of manufacture



ENVIRON-MENTAL SEALING GASKET.



GENERAL INFORMATION

Euro Technologies offers a wide range of non conductive gaskets used to guarantee the environmental seal. We can supply materials which work in critical conditions such as high temperature or exposition to aggressive fluids.

Our materials can also meet flame retardant requirements (UL 94 HB or VO).

Euro Technologies' technical dept. is at your disposal and we can help you about the identification of the right basic material and about the complete manufacturing process of your custom-made gasket.

Typical material used: Neoprene, Polyurethane, Silicone, Fluorosilicone and NBR.

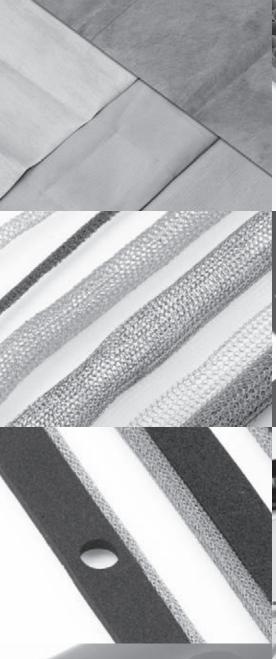
FEATURES AND BENEFITS

- Wide range of material available from stock.
- Offered with precision Die cutting, Slitting, Kiss cutting and Form in Place dispensing direct to surface.
- Hard customization possibility.

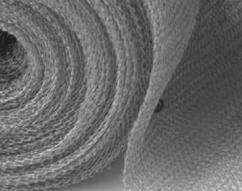
Customizations

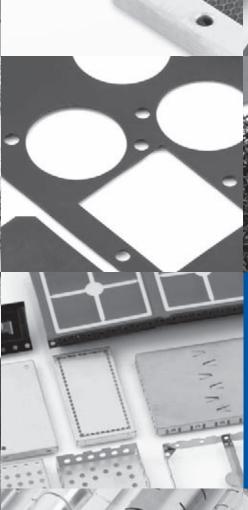


CUSTOMIZATIONS.











E



EUCO Technologies





Cutting









Dispensing



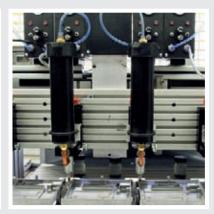


F.I.P.









ET.CG - rev 1.1 – March 2013



ITALY

Via Walter Tobagi, 10 20863 Concorezzo (MB) Ph. +39 039 6042234 Fax +39 039 648348

FRANCE

45, Rue De Villeneuve 94573 Rungis Cedex Ph. + 33 1 41735417 Fax + 33 1 41735425

GERMANY

Kirchenweg 41 83026 Rosenheim Ph. +49 8031 35211-0 Fax +49 8031 35211-111

CHINA

1st floor, n. 50 Huanghen Rd (N) Fenpu Industrial Park, Fengxian Country Shanghai

info@euro-technologies.eu www.euro-technologies.eu