

2.

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

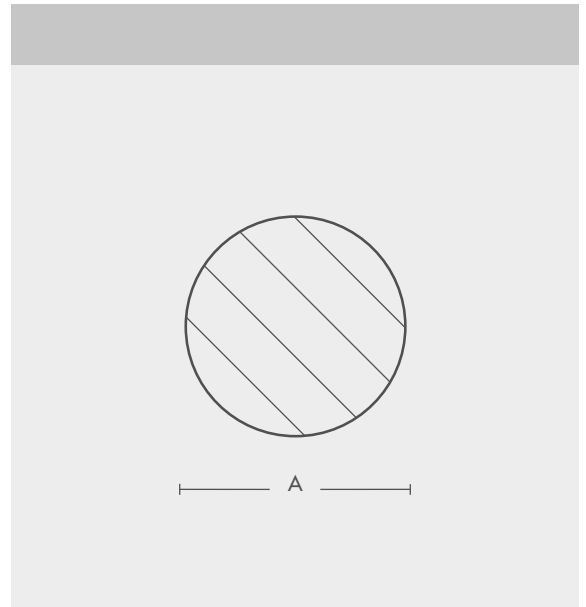
- Ideal for both military and commercial applications.
- Wide choice of profiles to fit large range of applications.
- Custom dies can be built to accommodate specific designs.
- Shielding effectiveness up to 120 dB at 10 GHz.
- MIL-DTL-83528 approved.
- Wide range of operating temperatures (from - 65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

DATA SHEET MATERIAL (Material Specifications)

Product Name		SC	SNG	SSA
Elastomer type		Silicone	Silicone	Silicone
Conductive Filler		Carbon	Nickel-Graphite	Silver-Aluminium
MIL-DTL-83528C Material Type				B
Color	Visual	Black	Dark Gray	Tan
Hardness	Shore A	70	60	65
Volume resistivity	ohm-cm	5	0.1	0.008
Specific gravity	g/cc	1.3	2	2
Elongation	% Min.	100	110	100
Upper Operating Temp.	°C	160	160	160
Lower Operating Temp.	°C	- 55	- 55	- 55
Shielding Effectiveness (from 100 MHz to 2 GHz)	dB	> 60	> 100	> 115

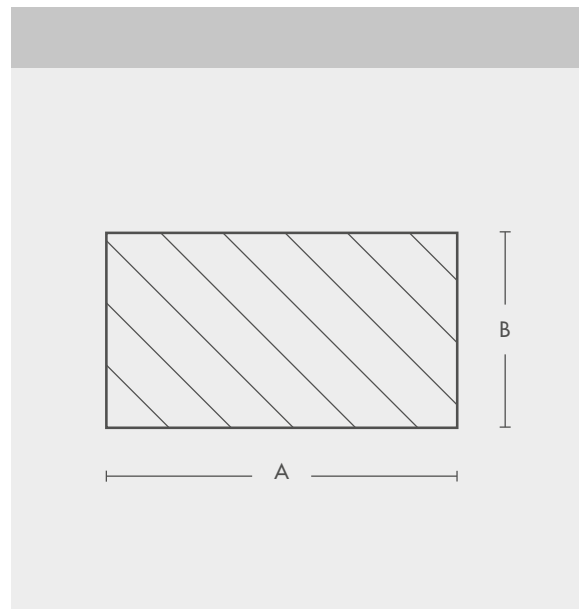
O-STRIP

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



RECTANGULAR STRIP

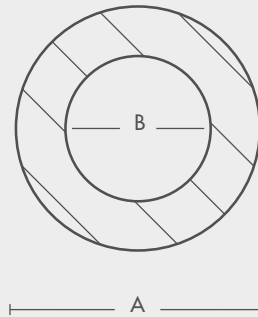
Code	A (mm)	B (mm)
CE-RE-x-yy-001	2.00	1.0
CE-RE-x-yy-002	3.20	1.0
CE-RE-x-yy-003	6.40	1.6
CE-RE-x-yy-004	12.0	0.8
CE-RE-x-yy-005	19.0	1.9
CE-RE-x-yy-006	22.0	2.3



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	M	H		D	C	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

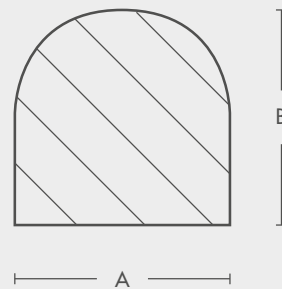
HOLLOW O-STRIP

Code	A (mm)	B (mm)
CE-HO-x-yy-001	2.2	1.3
CE-HO-x-yy-003	2.6	1.0
CE-HO-x-yy-004	3.2	1.1
CE-HO-x-yy-005	3.2	1.6
CE-HO-x-yy-006	4.0	1.3
CE-HO-x-yy-007	6.4	3.2
CE-HO-x-yy-008	7.9	4.8



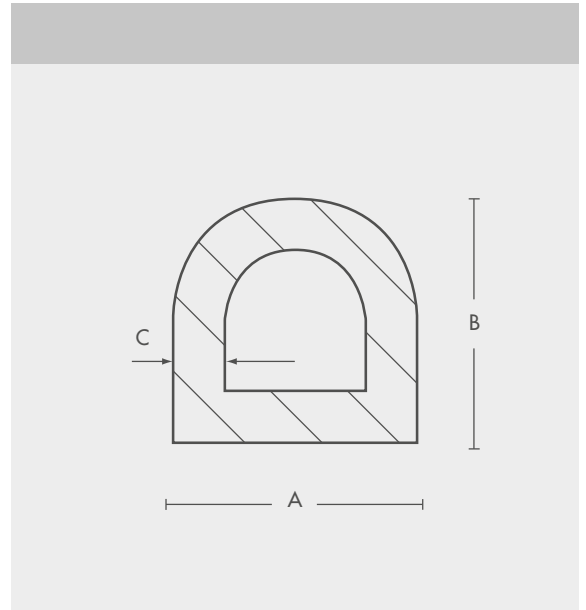
D-STRIP

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



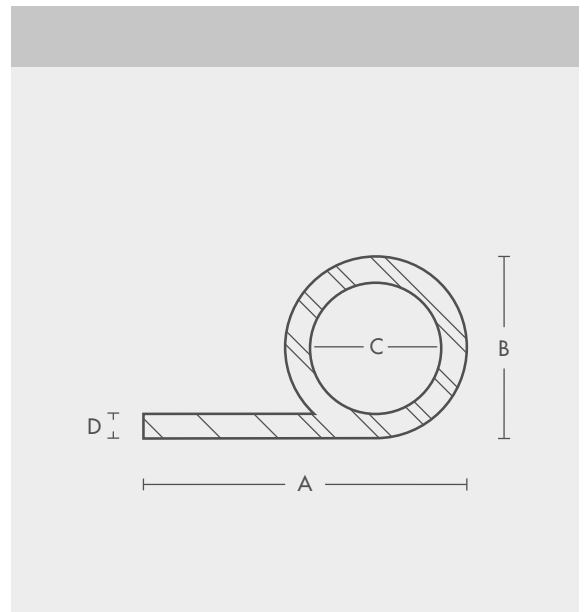
HOLLOW D-STRIP

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



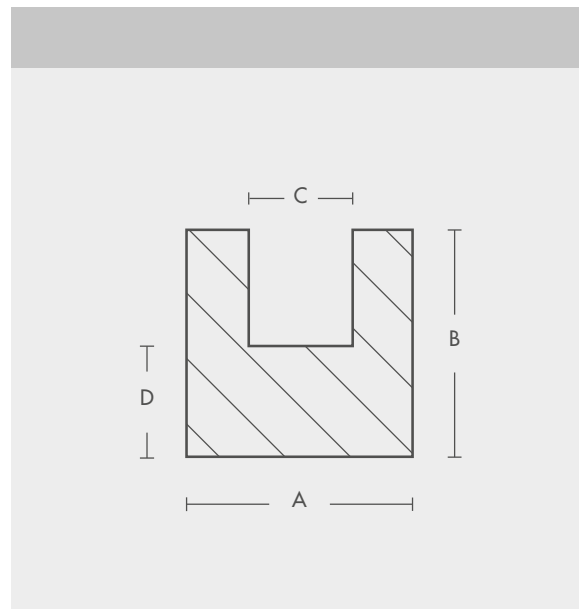
P-STRIP

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.

ASK FOR O-RING AND FLAT WASHER GASKET WHICH FIT YOUR APPLICATION

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

BIGGER SHEET SIZES ARE AVAILABLE ON REQUEST

TOLERANCES

Sections

Extruded Parts (mm)

- Up to 5.0 ± 0.13
- > 5.0 to 9.0 ± 0.20
- > 9.0 ± 0.25

Thickness

Sheet Materials (mm)

- Up to 0.51 ± 0.10
- Up to 0.81 ± 0.13
- Up to 1.57 ± 0.18
- Up to 3.18 ± 0.25

ORDERING INFORMATION

CE - OS - S - CB - 001

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

CB CB = Carbon Black* / NC = Nickel Graphite / SA = Silver Alluminum / SC = Silver Copper
SG = Silver Glass* / PS = Pure Silver

001 Dimension

* Available in Silicone only.