

# CONDUCTIVE FABRIC OVER FOAM GASKETS

# **PRODUCT OVERVIEW**

This product is manufactured from a synthetic polyester or nylon yarn which is plated to give electrical conductivity over the surface of the fibre and then woven in a traditional way so as to produce a conductive cloth. The cloth is then slit and wrapped over a soft polyether polyurethane foam core in a range of profiles and results in an economically priced conformable conductive gasket strip suitable for many applications.

## **Applications**

The versatility of Conductive Fabric Over Foam and the huge variety of profiles available makes the product suitable for a wide range of applications where full EMC screening is required between component parts especially in high cycling and wiping applications and where low compression and excellent abrasion resistance are considerations.

Typical applications include:

- Cabinet doors
- Panel gaskets
- Grounding contacts
- Card cage gaskets
- Connector and I/O gaskets

## Availability

Profiles are available in 2100mm lengths with some obtainable in continuous length. Depending on the profile the product can be:

- Cut to length
- Die cut to form fabricated gaskets
- Notched for 90 degree fabrication
- Mitred
- Supplied with clip on and edge mounting or with self-adhesive backing
- Have fire resistant properties to UL94 V-0
- Compression between 10% and 70%

## **Design Considerations**

- Whilst a limited dust seal can be achieved, additional environmental sealing, if needed, is required
- Consideration must be given to compression forces and corrosion compatibility
- Consider the minimum land area on die cut parts, we would suggest that it is equal to the thickness of the material

### **Production Capability**

Kemtron holds large stocks of Conductive Fabric Over Foam profiles, which can be supplied to customers off the shelf or die or kiss cut or fabricated to their requirements. Gasket fabrication is a routine feature of our work enabling us to produce economic gaskets by maximising material usage, using a range of in-house cutting and stamping equipment, which is suitable for prototype, short and medium production runs, up to commercial quantities.

## **Ordering Information**

Exx	X	X	X	XXXXX
Profile	Foam	Fabric	Finishing / Attachment System	Length

#### **Profile Guide**

### Select from list

#### Foam

1 = UL94 H-B

5 = UL94 V-0 Bromine free

7 = UL94 V-0 Recognised soft foam under the component program of Underwriters Laboratories Inc. In specified claddings and thickness.

#### Fabric

3 = Nickel / Copper C70 (Polyester Ripstop)

4 = Nickel / Copper C12 (Polyester Woven)

9 = Silver C2 (Nylon Ripstop)

Finishing / Attachment System	
- = No pressure sensitive adhesive	
E = Die cut	
N = Narrow tape	
H = High shear PSA	
C = PSA in the centre	
P = PSA on inside leg	
Z = Wide release liner	
2Z / 2T / 2H = 2 rows PSA on the same side	
A = PSA on adjacent side	
B = PSA on back side	
T = PSA	
L = PSA on lead edge or opposite seam side	
W = Wide PSA	
K = Kiss cut + PSA	
D = Conductive PSA for mechanical reasons	
Length example	

Length example 08400 = 84" 04800 = 48"

\* IN INCHES; 00000 IF CONTINUOUS

#### CONDUCTIVE FABRIC OVER FOAM GASKETS

Fabric	Nickel/Copper C12 (Polyester Woven)	Nickel/Copper C70 (Polyester Ripstop)	Silver C2 (Nylon Ripstop)
Shielding Effectiveness MIL-DTL 83528C (20 MHz - 10 GHz) Test Gasket - 6.4mm x 9.5mm	97.4 dB	96 dB	95 dB
Surface Resistivity ASTM F390 Modified	0.02_	0.066_	0.05_
Abrasion Resistance ASTM D3886	1,000,000	800,000	800,000

	Cycles	Cycles	Cycles
Contact Resistance Schlegel LP-3001 1kg load at 25.4mm	0.08	0.11	<1.0
Compression set 70°C at 50% compression for 22 hours	<5%	<5%	<5%

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#### CONDUCTIVE FABRIC OVER FOAM GASKETS

Height	Width	Profile Code
0.5mm	4.0mm	E83
0.5mm	5.0mm	E59
0.5mm	6.0mm	ES1
0.5mm	7.0mm	E88
0.5mm	10.0mm	E91
		E91 EU1
0.5mm 0.5mm	15.0mm 17.0mm	
		ES2
0.5mm	22.5mm	ET8
1.0mm	3.0mm	E37
1.0mm	4.0mm	E03
1.0mm	5.0mm	E12
1.0mm	7.0mm	E06
1.0mm	10.0mm	E11
1.0mm	11.0mm	ET3
1.0mm	13.0mm	E99
1.0mm	13.6mm	ET4
1.0mm	15.0mm	EJ6*
1.0mm	16.0mm	ET5
1.0mm	18.0mm	E39
1.0mm	25.4mm	E29
1.0mm	41.3mm	EC5*
1.2mm	8.0mm	E97*
1.5mm	3.8mm	EN6
1.5mm	5.0mm	ED9
1.5mm	7.0mm	E61
1.5mm	10.0mm	EG2
1.5mm	14.0mm	EB5
1.5mm	16.2mm	ET7
1.5mm	27.0mm	EA8*
2.0mm	2.5mm	EU2
2.0mm	3.0mm	EU4
2.0mm	4.0mm	E81
2.0mm	7.0mm	E77
2.0mm	7.5mm	EC7*
2.0mm	10.0mm	E08
2.0mm	12.7mm	E24
2.0mm	17.5mm	ED3
2.0mm	18.0mm	EN8
2.0mm	19.0mm	EG7*
2.0mm	21.0mm	E58
2.0mm	21.0mm	E38 EH4*
2.0mm	22.01111 28.6mm	E09*
2.0mm	41.3mm	
2.0mm 2.0mm	60.0mm	E07* E30*
-		
3.0mm	2.0mm	EU5
3.0mm	3.0mm	E18
3.0mm	4.0mm	E01
3.0mm	5.0mm	EM8
3.0mm	7.0mm	ES5
3.0mm	16.0mm	ES6

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Height	Width	Profile Code
3.0mm	25.4mm	E44
3.0mm	40.9mm	EC6*
3.0mm	43.0mm	ED5*
3.2mm	6.4mm	E70
3.2mm	9.5mm	EQ1
3.2mm	9.5mm	E62
3.2mm	12.7mm	E28
3.2mm	17.5mm	EM7*
3.2mm	19.0mm	EN9*
3.2mm	20.2mm	EM9*
3.3mm	4.8mm	E74
3.7mm	21.0mm	E65
4.0mm	4.0mm	EB4
4.0mm	8.0mm	EP6
4.0mm	10.0mm	EN1
4.0mm	15.0mm	E78
4.6mm	41.3mm	E47*
5.0mm	5.5mm	EN2
5.0mm	8.0mm	E73
5.0mm	9.0mm	EJ7
5.0mm	12.0mm	ES7
5.0mm	14.5mm	EP2
5.1mm	5.1mm	E14
5.1mm	6.4mm	EP8
5.5mm	10.0mm	EN3
6.0mm	6.0mm	E79
6.0mm	6.5mm	EN4
6.0mm	8.0mm	EJ4
6.0mm	25.4mm	ES8
6.2mm	22.0mm	ES9
6.2mm	28.5mm	ET1
6.4mm	9.5mm	E66
6.4mm	12.7mm	E25
6.4mm	41.3mm	EG9*
6.5mm	10.0mm	EN5
6.5mm	14.5mm	EP3
7.0mm	7.0mm	EP9
7.5mm	15.0mm	E05*
8.0mm	8.0mm	EG8
9.5mm	9.5mm	E63
9.5mm	12.7mm	E68
9.5mm	20.0mm	E84*
9.5mm	25.4mm	E20*
10.0mm	10.0mm	EP5*
11.5mm	10.5mm	E80
15.9mm	25.4mm	E75*
17.0mm	17.0mm	E49*
25.0mm		E36*
23.011111	20.0mm	ESU

\* SPECIAL MINIMUM ORDER QUANTITY MAY APPLY.

### Wedge





**E60** 3.3mm x 13.2mm .130" x .402"

**EA7\*** 11.4mm x 16.0 0mm .448" x .630"

**E52\*** 4.00mm x 8.2mm .157" x .324"

## Self-Mounting





**E93\*** 2.5mm x 8.4mm .100" x .330"

**EB9** 3.7mm x 6.5mm .145" x .256"

**E86**\* 18.8mm x 9.7mm .740" x .380"



## Knife Edge

2.7mm x 8.0 0mm



E96

**E67** 2.7mm x 11.3mm .106" x .445"

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EH6*
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2.7mm x 11.3mm .106" x .445"

**E31** 2.mm x 11.3mm .106" x .445"



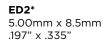
**E19\*** 6.4mm x 19.1mm .250" x .750"

## L Shape

.106" x .315"



**EA2\*** 3.8mm x 10.2mm .150" x .400"



**E13\*** 5.5mm x 12.00mm .217" x .472"



**E48\*** 7.9mm x 18.6mm .312" x .731"

## **Bell Shaped**



 $\bigtriangleup$ 

**EU7** 2.5mm x 7.6mm .098" x .300"

**ET2** 3.00mm x 8.00mm

.118" x .315"

## **U-Fold**



**EG5** 9.5mm x 12.7mm .374" x .500"

#### **T-Shape**



ED4\* 3.9mm x 6.00mm .152" x .235"



E41\* 5.1mm x 4.8mm .200" x .190"

**C-Fold** 

6.1mm x 7.4mm

.240" x .292"

E56\*



ED1\* 4.00mm x 6.2mm .157" x .244"



E53\* 7.6mm x 6.9mm .300" x .272"



EA9 4.00mm x 6.2mm .157" x .244"



EJ2 4.00mm x 6.2mm .157" x .224"



EQ2\* 4.8mm x 6.4mm .190" x .250"





E21

E98

ED8\*

6.4mm x 5.9mm

9.8mm x 10.7mm

11.4mm x 16.00mm

.448" x .630"

.385" x .420"

.250" x .234"

**EH8**\* 10.00mm x 10.00mm .395" x .395"

EC3 6.4mm x 7.1mm .250" x .280"



E98 Riveted\* 9.8mm x 10.7mm .385" x .420"

.315" x .315"

EH3



EH9\* 9.8mm x 10.7mm .385" x .420"

8.00mm x 8.00mm



FP7 11.8mm x 10.7mm .465" x .420"



6.1mm x 7.4mm .240" x .292"



EM4\* 9.8mm x 10.7mm .385" x .420"



EG3\*

E55\* 9.8mm x 12.2mm .385" x .480"

9.8mm x 10.7mm

.385" x .420"



17.1mm x 14.7mm .675" x .580"



ED8\*

18mm x 14.2mm

.710" x .560"

10.00mm x 10.9mm .385" x .430"

E85 23.9mm x 14.00mm .940" x .550"

E85

11.8mm x 10.7mm .465" x .420"

PERFORMANCE MATERIAL / CONDUCTIVE FABRIC OVER FOAM GASKETS

#### **D-Shape**



**E17** 1.5mm x 3.8mm .060" x .150"



**EJ8** 2.00mm x 10.00mm .079" x .394"



**E45** 2.3mm x 3.9mm .090" x .155"



**ET9** 2.5mm x 7.6mm .100" x .300"



**EJ5** 3.00mm x 12.7mm .118" x .500"



**EK7** 3.3mm x 12.7mm .130" x .500"



**EK8** 3.8mm x 12.7mm .150" x .500"



**EH7** 4.00mm x 12.7mm .157" x .500"



1.5mm x 6.4mm .060" x .250"



**EK4** 2.00mm x 12.7mm .079" x .500"



**EJ9** 2.3mm x 10.00mm .090" x .394"



**EU8** 2.5mm x 8.00mm .100" x .315"

**EA3** 3.1mm x 3.8mm .120" x .150"



**EM6** 3.5mm x 9.5mm .140" x .375"



**EA5** 4.00mm x 6.00mm .156" x .236"

**EM3\*** 4.00mm x 12.7mm .157" x .500"



**EG6\*** 1.8mm x 4.6mm .070" x .180"



**E51** 2.00mm x 17.1mm .080" x .675"



**EK5** 2.3mm x 12.7mm .090" x .500"



**EK1** 2.7mm x 10.00mm .106" x .394"



**EA1** 3.1mm x 6.4mm .120" x .250"

**E90** 3.6mm x 6.4mm .140" x .250"



**E35** 4.00mm x 7.4mm .156" x .292"



**E50\*** 4.3mm x 9.7mm .170" x .380"



ES3 2.00mm x 6.00mm .079" x .236"



**EH2** 2.00mm x 17.2mm .080" x .675"



**ED7** 2.3mm x 12.7mm .090" x .500"



**EK6** 2.7mm x 12.7mm .106" x .500"

**E26** 3.1mm x 9.1mm .120" x .360"



**EG4** 3.8mm x 3.8mm .150" x .150"



**E43\*** 4.00mm x 7.4mm .156" x .292"



**EM5** 4.3mm x 9.7mm .170" x .380"



**EP1** 2.00mm x 8.00mm .079" x .315"



**E57** 2.3mm x 2.3mm .090" x .090"



**ES4** 2.5mm x 6.4mm .100" x .250"



**E87** 2.8mm x 9.7mm .100" x .380"



**EK2** 3.3mm x 10.00mm .130" x .394"



**EK3** 3.8mm x 10.00mm .150" x .394"

**EH1** 4.00mm x 12.7mm .157" x .500"



**E64\*** 4.7mm x 12.2mm .185" x .480"

#### **D-Shape**



4.7mm x 12.2mm .185" x .480"



E10 6.4mm x 9.5mm .250" x .375"



E04 4.8mm x 7.6mm .189" x .300"



EA6\* 6.4mm x 9.5mm .250" x .375"



E50\* 5mm x 17.2mm .197" x .675"





FP4 8.4mm x 10.00mm .335" x .394"



EM2\* 5.00mm x 17.2mm .197" x .675"



EJ1 5.5mm x 12.7mm .217" x .500"



EH5 9.53mm x 12.7mm .375" x .500"

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