

TECHNICAL SPECIFICATION

Wire mesh over Elastomer



Description:

Metal elastomer gaskets obtained with the cladding of layers in concentric metallic mesh around an elastomer material that accomplishes the function of elastic recovery after compression. Various sections are available and dimensions upon client request. This type is not suitable for water tight sealing; for this specific application refer to the Twinshield type of gasket. The possibility of combining elastomer and metallic mesh and overlapping layers is very broad and left to the needs of the client.

Applications:

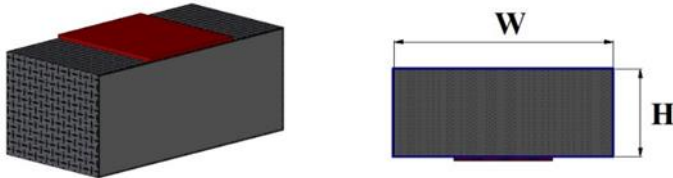
Gasket for the shielding of electric and magnetic fields where there is no requirement for water tight sealing as well. Elastic recovery is obtained with expanded materials of various types such as Silicone, Neoprene and EPDM. These are recommended for panel systems, electrical control panels, doors, etc., which must be disassembled or opened with a certain frequency, therefore the need for the elastic recovery of the gasket.

Provision:

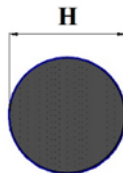
In spools or in pieces pre-cut to size, in section and dimension upon client request.

1. SANDARD PROFILE TYPE

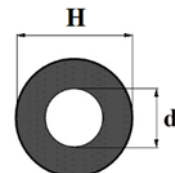
Shape "B.R"



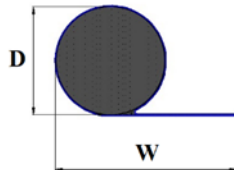
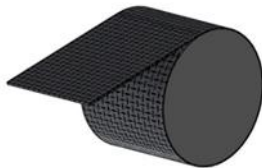
Shape "B.O."



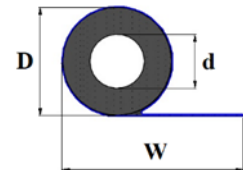
Shape "B.O.T."



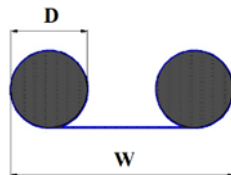
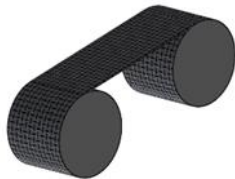
Shape "B.O.P."



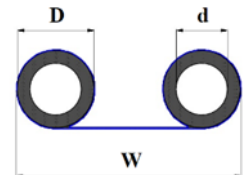
Shape "B.O.T.P."



Shape "B.O.S."



Shape "B.O.T.S."



NOTE 1: The dimensions include the metal mesh.

NOTE 2: Quotes in millimeters.

Tolerances of the product are defined according to "IO.85.1 Rev.0 - Documento Tecnico di Transcodifica".

2. ELASTOMER TYPE

Material	EPDM Sponge EDPM-cr	Neoprene Sponge cr201	Neoprene Sponge cr205	Socaprene	Polyurethane sponge: PU90	Silicone Sponge
Code	EPDM341	N201	N205	CIG3	PU90	SE
Color	Black	Black	Black	Gray	Dark gray	White
Density	110-150 kg/m3	120-200 kg/m3	210-300 kg/m3	170-220 kg/m3	70-95 kg/m3	0,5-0,6 g/cm3
Hardness	20-40 SH 00	40-55 SH 00	45-65 SH 00	38-55 SH 00	/	/
Compression Resistance	15/35 Kpa (25% 22 h Room T.)	20/63 kPa (25% 22 h Room T.)	63/91 kPa (25% 22 h Room T.)	35/63 kPa (25% 22 h Room T.)	2,0 kPa (50%)	/
Flame resistance	HBF >4mm (UL94)	94 HF1 >2mm (UL94)	94 HB (UL94)	94 V0 >4mm (UL94)	/	Up to 200 - 260°C
Using temperature (in continue)	From -50 to +100°C	From -40 to +100°C	From -40 to +85°C	From -40 to +85°C	From -40 to +120°C	From -40 to +120°C

3. STANDARD BIADHESIVE TAPE TYPE

Code	Material	Width	Adhesive	Temperature range
AD3M	3M	4 - 6 - 9 mm	Long aging acrylic	Up to +149° C

4. SIDE WITH ADHESIVE

Only on B.R. shape.

The three numbers after the type of biadhesive tape, if present, indicate the sides with the adhesive.
 Possible without adhesive.

For the other shape, the type biadhesive tape will be supplied separately in rolls.

5. CONDUCTIVE WIRE

Name	Code	Dimensions	Material
Copperweld	CWS	0,11 mm	Tin plated 40% Copper clad steel
Monel	MO	0,11 mm	Main components: Ni-Fe-Cu
Tin-Copper	RS	0,12 mm	Tin coated copper
Stainless steel	SS	0,11 mm	Stainless steel AISI 304

6. NUMBER OF LAYERS

Greater is the numbers of layer, greater is the shielding effectiveness.
 It is possible also with layers of different types of wire (Ex: 2.MO.2.CWS).

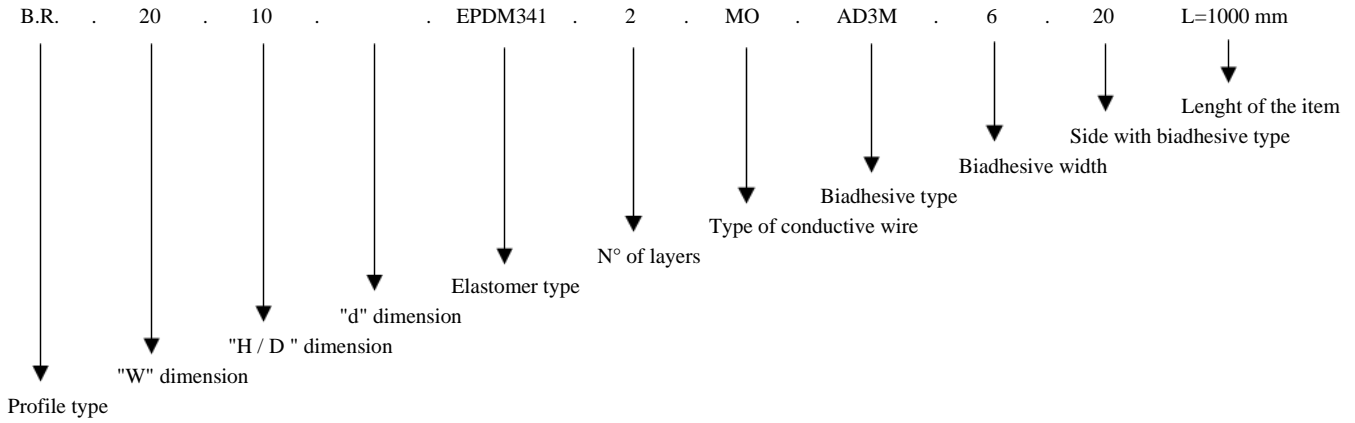
7. SHIELDING EFFECTIVENESS

Material	Layers	Magnetic Field – 100 kHz	Electrical Field – 10 MHz	Plane wave 1 GHz	Plane wave 10 GHz
MONEL	1		65	80	
MONEL	2	30-45	75	84	60
MONEL + CWS	2+2	30-45	85	92	>60
MONEL + CWS	2+3	68	90	>100	75

8. TYPE OF SUPPLY

Standard supply is in spool (the length is not present).
 If the length is indicated, it means that the gasket is supplied in pieces.
 Particular supply can also be requested (i.e., twisted, etc...)

ARTICLE DEFINITION FOR ORDER:



The data in this data sheet are purely indicative and refer to the sample tested in laboratory, therefore we recommend our customers to carry out their own checks in order to determine the conformity of our article in respect to their own needs before any further processing.