

## TECHNICAL SPECIFICATION

### Metal Gaskets



#### Description

Conductive gaskets made with different concentric metallic wire meshes.

They may have different sections: round, rectangular, round with tail or double round. Standard materials used are: Monel, Copperweld, Tinned-Copper, Stainless Steel and Aluminium. The wire suitable for your needs must be evaluated based upon the shielding and environmental specifications requested.

#### Applications

Full metal gaskets are used for shielding lockers and containers where there is no need for elastic recovery after crushing. These are ideal for EMI/EMP shielding. These are not suitable for applications also requiring a seal from atmospheric conditions or elements, like water.

The Copperweld wire offers excellent shielding both in magnetic and electrical field frequencies.

#### Provision

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

#### Process specification

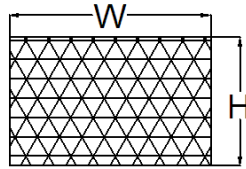
Manufacturing process according to "IO\_PRD1\_05 Knitted mesh macchine circolari Ed. 4".

#### PART NUMBER FORMULATION

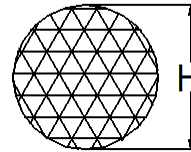
Example: A.R.100.50.SS.100.AD3M6

## 1. Section Type

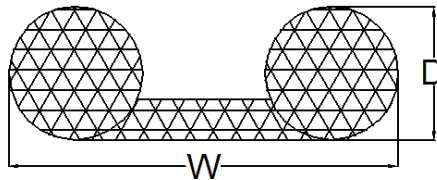
**NOTE: Quotes in millimeters.**



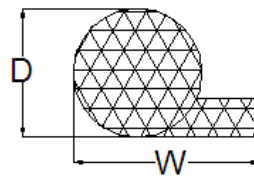
A.R.Wx10.Hx10



A.O.Hx10



A.O.S.Wx10.Dx10



A.O.P.Dx10.Wx10

Tolerances of the product are defined according to "IO\_PRD1\_02 Parameters and Tolerances - Ed. 3".

Ex: **A.R.100.50.SS.100.AD3M6**

## 2. Conductive Wire

Conductive Wire			
Name	Code	Dimensions	Material
Copperweld	CWS	0,09 or 0,11 mm	Tin plated 40% Copper clad steel
Monel	MO	0,09 or 0,11 mm	Main components: Ni-Fe-Cu
Tin-Copper	RS	0,12 mm	Tin coated copper
Stainless steel	SS	0,06 – 0,11 mm	Stainless steel AISI 304
Alluminum	AL	0,11 mm	Alluminum wire n° 3.3555
P-91	P-91	550 dtex 1800 Nm	Flame retardant yarn in Polyacrilonitrile and copper coated with tin – 70% PAN FR – 30% Cu+Sn
NyAg	PaAg	0.170 mm	Nylon 6.6 filament yarn
P-140	P-140	350 dtex 28500 Nm	Flame retardant yarn in Polyacrilonitrile and copper coated with tin – 50% PET – 50% Cu+Sn

**Notes:** MO0,09 indicates Monel wire with 0.09 mm diameter  
 MO. indicates Monel wire with 0.11 mm diameter

Shielding effectiveness				
Material	Magnetic Field – 100 kHz	Electrical Field – 10 MHz	Plane wave – 1 GHz	Plane wave – 10 GHz
MONEL	60	130	90	80
CWS	80	>130	105	95

Ex: A.R.100.50.SS.100.AD3M6

### 3. Side with adhesive

Last three numbers, if present, indicate the sides with the adhesive. Possible without adhesive.

Ex: A.R.100.50.SS.100.AD3M6

### 4. Biadhesive tape

Material	Code	Adhesive	Temperature range
3M Y-9485	AD3M	Long aging acrylic	Up to 149° C (Continuos) 204° C (short period)
MP 2395PW	ADP	Modified acrylic	-40/+120° C
TESA 4914	ADB	Modified acrylic	Up to 200° C

Ex: A.R.100.50.SS.100.AD3M6

### 5. Biadhesive width

Number	Code
3 mm	3
4 mm	4
6 mm	6
9 mm	9

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