

## 7000 - Standard shield



### Standard shield 7000

Standard Shield 7000 is an economical HF gasket which can be supplied in a wide range of dimensions. It is very effective in combination with stainless steel, copper and chromated constructions. All gaskets can be provided with or without a (conductive) self-adhesive strip. Standard Shield 7000 consists of a neoprene or PVC foam core covered with textile.

This guarantees excellent shielding performance and very great strength. For special applications, different foam cores and conductive foils and fabrics are available. If you want to know more concerning the possibilities with this product you can contact us for technical support and questions. (see contact details below)

#### Shielding Performance

Shielding effectiveness depends on surface, shape of gaskets and material used.

Frequency Hz	Mode	Screening dB
1Mhz	Electric	115dB
10 Mhz	Electric	108dB
100 Mhz	Electric	102dB
500 Mhz	Electric	92dB
1Ghz	Plane wave	90dB
10Ghz	Plane wave	87dB

These values are measured under laboratory conditions. In your situation results may differ, please read our Guarantee.

#### Benefits

- Self-adhesive EMC gasket
- Easy to fit, can be cut with scissors
- Good water resistance
- Gasket can be die-cut (screwholes, bites for easy bending etc...)
- Roll length of 1 until 1000 meters. (Depending on width and height of the EMI gasket)
- High EMI/RFI shielding performance
- Low closure force
- EXTREMELY STRONG
- Deflection 50%

#### Options

- CNC cut into specific lengths
- Can be made into any shape or as a frame
- Combination with water seal
- UL94V-0 flame retardant foam core (Foam code F)
- Chemical resistant rubbers like EPDM
- Silicone sponge for high temperatures up to 220°C
- Different conductive foils and fabrics
- With cutouts so that the gasket can be easily bend

### Standard self-adhesive tape specifications (Tape code 01)

#### Product description

Our tape is a transparent double-sided tape consisting of a PP-film backing and a tackied acrylic adhesive.

#### The tape features especially:

- Secure bond on PE and PP
- Product can be easily cut with common hot wire systems

#### Main Applications

- Permanent bag sealing for PE/PP and polymer bags
- Permanent bag sealing for medical pouches

#### Adhesive specifications

Our adhesive is a transparent conductive or a non-conductive double-sided tape consisting of a PP-film backing and a tackified acrylic adhesive.

Backing material	PP film
Color	Transparent
Thickness of adhesive	100 µm
Type of adhesive	Tackified acrylic
Elongation at break	140 %
Tensile strength	20 N/cm
Type of line	MOPP
Colour of liner	red
Thickness of liner	80 µm
Adhesion to steel	(after 14 days) 13,7 N/cm
Adhesion to PET	(after 14 days) 8,5 N/cm

#### Data Properties

Static shear resistance at 23°C	+
Static shear resistance at 40°C	+
Tack	+
Resistance to chemicals	+
Ageing resistance (UV)	++
Humidity resistance	++
Temperature resistance (short & long term)	150 & 80 °C
Softener resistance	o
++ very good, + good, o medium, - low	

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### Adhesion to

Adhesion to Steel	(initial)8.7 N/cm
Adhesion to ABS	(initial)7.9 N/cm
Adhesion to Aluminium	(initial)6.6 N/cm
Adhesion to PC	(initial)8.5 N/cm
Adhesion to PE	(initial)3.5 N/cm
Adhesion to PET	(initial)6 N/cm
Adhesion to PP	(initial)5.1 N/cm
Adhesion to PS	(initial)7.2 N/cm
Adhesion to PVC	(initial)6.8 N/cm
Adhesion to Steel	(after 14 days)13.7 N/cm
Adhesion to ABS	(after 14 days)10.7 N/cm
Adhesion to Aluminium	(after 14 days)9.7 N/cm
Adhesion to PC	(after 14 days)11.3 N/cm
Adhesion to PE	(after 14 days)4.3 N/cm
Adhesion to PET	(after 14 days)8.5 N/cm
Adhesion to PP	(after 14 days)6.2 N/cm
Adhesion to PS	(after 14 days)10.7 N/cm
Adhesion to PVC	(after 14 days)11.5 N/cm

### Standard Neoprene Foam core Closed Cell Cellular Rubber (Foam code N)

#### Product discription

Elastomer Base	Neoprene
Colour	Black
Maximum width	1000mm
Thickness	From 2mm to 40mm
Thickness tolerances	2-8mm +/-0,5mm; 10-15mm +/-1mm; 20-40mm +/-2mm
Executions	Die-cut, Self adhesive, On strips

#### Material properties

Volume weight	140 / 180 kg / m <sup>3</sup>
Hardness shore 00	38-55 Sh 00
Resistance when compressed	25% 350-630 g / cm <sup>2</sup>
Temperature °C (continuous/peak)	-40° + 85° / 100°
Water absorption (volume)	< 5%
Linear shrinkage (22 hr 70°C)	< 5%
Maximum deformation when compressed	25%, 22 hrs at 70°C 12%
Recommended max. compression	25%

#### Specic characteristics

Fulfills Following	Norms
ASTM D – 1056 – 79	SCE42 B2 E1
ASTM D – 1056 – 85	2C2 A1 B2 C E1
SAE J – 18	SCE42

### Specic characteristics

Resistance to wear	Good
Resistance to cold	Good
Resistance to air and ozone	Good
Straining: white sealing wax / plast	Not
Resistance to mineral oils	Good
Resistance to vegetable oils	Good
Resistance to acids	Good
Resistance to caustic solution	Good
Resistance to alifates	Medium
Resistance to aromates	Not
Resistance to chlorine solutions	Good
Resistance to cetonic solutions	Not
Flame retardancy (1)	[UL94 HBF (not approved by UL organisation)] FMVSS 302 cat. 1 - B
Flame retardancy (2)	Self extinguishing

### EPDM Foam core Closed Cell Cellular Rubber (Foam code E)

#### Product discription

Elastomer Base	EPDM
Colour	Black
Maximum width	1000mm
Thickness	From 2mm to 40mm
Thickness tolerances	2-8mm +/-0,5mm; 10-15mm +/-1mm; 20-40mm +/-2mm

#### Advantages

- Easy to compress
- Good resistance to solvents
- Free from harmful substances

#### Application

- Application temperature : higher than 0°C.
- Application: by hand directly from reel
- Surface preparation: must be clean, dry and free from grease and dust.

#### Material properties

Denisty	0,25-0, 40 g/cm <sup>3</sup>
Nominal	0,28 g/cm <sup>3</sup>
Hardness shore 00	40 - 50
Health hazard	None
Water absorption	Negligible
Resistance to ozone	Excellent

The maximum temperature that EPDM can withstand for short periods of time is 245°c.  
Normal operating temperatures are a minimum of -50°c to a maximum of +175°c

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### Specic characteristics

Resistance to wear	Good
Resistance to cold	Good
Resistance to air and ozone	Good
Straining: white sealing wax / plast	Not
Resistance to mineral oils	Good
Resistance to vegetable oils	Good
Resistance to acids	Good
Resistance to caustic solution	Good
Resistance to alifates	Medium
Resistance to aromates	Not
Resistance to chlorine solutions	Good
Resistance to cetonic solutions	Not

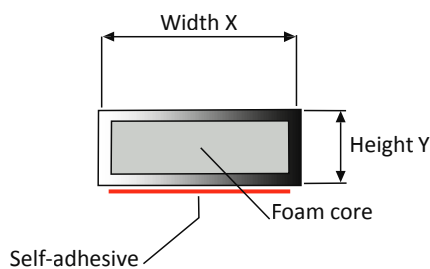
### Tape Specification

- 01: Standard self-adhesive placed in the middle
- 02: Without self-adhesive
- 03: With conductive self-adhesive  
(only recommended on small sizes)
- 06: Standard self-adhesive, asymmetrical
- 07: Standard self-adhesive placed on the side

### Foam Specification

- N : Standard Neoprene Foam
- E : EPDM foam core
- P : low closure force PVC Foam, slow recovery
- F : Flame retardant Foam (UL94V-0)

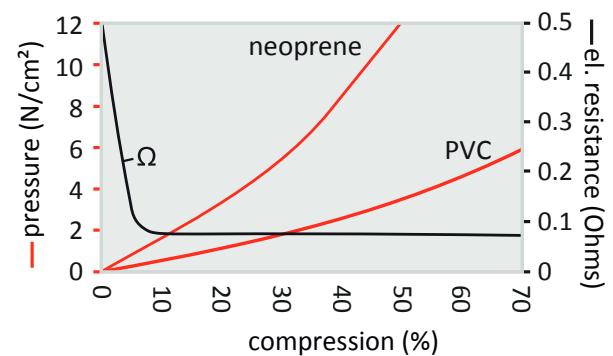
### Standard dimensions



### High temperatures version

The standard neoprene foam core can withstand temperatures up to 85°C. If you have an application where a higher maximum temperature is required we can deliver the same type of EMI gasket with a FUBA foam core wich also has a high deflection up to 65 %. This FUBA foam can withstand temperatures up to 220°C. For more information see our 7100 series FUBA foam EMI shielding gasket series. When your application requires an even higher temperature, we can deliver this type of gasket with silicone foam core on request.

### Mechanical properties



### Optionally with cutouts for easy bendings

Optionally, these EMI gaskets can be provided with bites, cuts, holes or other cutouts. These cut-outs may be used for easy bending or easy assembly of the EMI gasket. For more information look at our website at the EMI gaskets with cutouts according to drawing

		Width X (mm)															
		2	3	4	5	6	7	8	9	10	12	15	18	20	25	32	50
Height	1	<b>7021</b>	<b>7031</b>	<b>7041</b>	7051	<b>7061</b>	7071	<b>7081</b>	7091	<b>70101</b>	<b>70121</b>	<b>70151</b>	70181	<b>70201</b>	<b>70251</b>	70321	70501
	2	<b>7022</b>	<b>7032</b>	<b>7042</b>	<b>7052</b>	<b>7062</b>	<b>7072</b>	<b>7082</b>	7092	<b>70102</b>	<b>70122</b>	70152	70182	70202	70252	70322	70502
	3		<b>7033</b>	7043	7053	<b>7063</b>	<b>7073</b>	<b>7083</b>	<b>7093</b>	<b>70103</b>	70123	70153	70183	70203	70253	70323	70503
	4			<b>7044</b>	7054	<b>7064</b>	7074	<b>7084</b>	7094	<b>70104</b>	70124	70154	70184	70204	70254	70324	70504
	5				7055	7065	7075	7085	7095	70105	<b>70125</b>	70155	70185	70205	70255	70325	70505
	6					<b>7066</b>	7076	<b>7086</b>	7096	<b>70106</b>	70126	70156	70186	70206	70256	70326	70506
	8						7078	7088	7098	70108	70128	<b>70158</b>	70188	<b>70208</b>	70258	70328	70508
	9							7099	70109	10129	<b>70159</b>	70189	<b>70209</b>	70259	70329	70509	
	10								<b>701010</b>	701210	701510	<b>701810</b>	702010	702510	703210	705010	
	12									<b>701212</b>	701512	701812	702012	702512	703212	705012	

Item numbers marked **bold** are 98% stock items. Other dimensions on request

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### Special profile shapes

EPDM rubber	700072	700068	700058	700062	700064	700076	700051
							
Y x X mm	2 x 4 mm	3 x 6 mm	4 x 8 mm	8 x 6 mm	8 x 12 mm	10 x 12 mm	16 x 20 mm
Y x X inch	.079" x .157"	.118" x .236"	.157" x .315"	.315" x .236"	.315" x .472"	.394" x .472"	.630" x .787"

### How to order

When you want to order the 7000 - Standard shield series specify the following.

Part number	Tape code	Foam code
<b>7000</b>	<b>01</b>	<b>N</b>
	<p><b>01</b> : standard self-adhesive placed in the middle</p> <p><b>02</b> : without self-adhesive</p> <p><b>03</b> : with conductive self-adhesive (only recommended on small sizes)</p> <p><b>06</b> : standard self-adhesive, asymmetrical</p> <p><b>07</b> : standard self-adhesive placed on the side</p>	<p><b>N</b> : standard neoprene foam</p> <p><b>E</b> : EPDM foam core</p> <p><b>P</b> : low closure force PVC foam, slow recovery</p> <p><b>F</b> : flame retardant UL94V-0 foam</p>