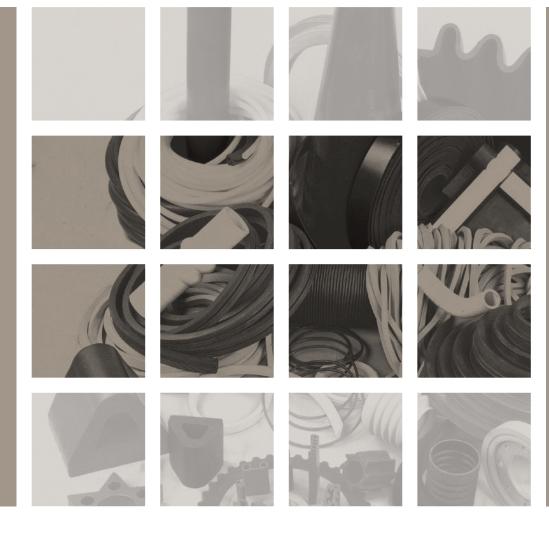
ATAG

SERVING INDUSTRY SINCE 1947



EXTRUDED AND
MOULDED PROFILES,
BUMPERS



PAST, PRESENT, FUTURE



ATAG is serving industry since **1947** and is constantly growing.

The wide range of products, the three domestic locations, the controlled companies, the large warehouses, the extensive sales network, the increasingly stringent internal workings, the website in constant evolution and a service based on the qualified technical expertise offered by our sales department, are the reasons why our customers rely constantly on ATAG.

In recent years we have incorporated complementary companies, using their great competencies to improve our own skills. An efficient export department, our European resellers and long-standing customers, allow us to have a better knowledge of foreign markets and strengthen our presence beyond the Italian borders.

Collaborations and agreements with international prestige partners enable us to offer our country products and solutions that are already appreciated and well established in Europe, and to stimulate our research into improved solutions for the Italian industry.

Rubber Extrusions

ATAG extrudes regular and shaped-section profiles in various types of rubber.

Multiple sizes are in stock, available for prompt delivery. The most common rubbers on sale include: SBR, NR, NBR, CR, EPDM, FKM, and Silicone.



Molded Rubber and Rubber-Metal Components

ATAG molds products in various types of rubber according to customer drawings.

The molding process can combine rubber with metal parts to create complex industrial components.

Expanded and Co-Extruded Profiles

ATAG extrudes profiles with shaped and regular sections in different types of expanded rubbers, including co-extruded and reinforced ones.

The most common sections and compounds - i.e. regular sections in extruded Silicone, CR, and PTFE - are always in stock for prompt delivery.







The technical features of the elastomers mentioned in this catalogue are indicative and refer to the maximum values achievable. Also specific values are detailed that are achievable by the formulation of special compounds. Please do not hesitate to contact our Technical Department for further information and for assistance in choosing the most suitable compound for your application.



RUBBER MOULDINGS

We are able to produce moulded rubber and rubber/metal composite items to your specific designs, with the type of rubber being a function of the application and by means of the most appropriate method (compression, transfer and injection moulding).



FOAM

Our foam products comprise an immense range of materials that differ in density and porosity, chemical resistance derived from their base blend, as well as mechanical and thermal properties. The most common profiles of various foam materials are available ex-stock, with many being self-adhesive on one side.



EXTRUDED PROFILES

The extruded profile designs shown in this catalogue are only available from stock as black EPDM rubber.

We are able to supply non-standard **special profiles**, as per specific designs and in different types of rubber by utilising the most suitable extrusion methods.

Quantità minima producibile per sezioni regolari e speciali a disegno

- · kg 10 ca. Viton®
- kg 20 ca. Peroxide and Platinum cured silicone
- kg 50 ca. For all other types of rubber

Dimensional Tolerances

With reference to the table UNI ISO 3302, the class of tolerance to consider are as follows:

- Class E2 Regular profiles (round, rectangular, tubing and cuffs)
- Class E3 Profiles to design (profile for oblong, draw to a "point" or "U" and others) and for all foam profiles
- Class E1 To a specific design

Nominal I	Dimension	Class E1	Class E2	Class E3
from mm	up to mm	± mm	± mm	± mm
0	2,5	0,20	0,35	0,50
2,5	4,0	0,25	0,40	0,70
4,0	6,3	0,35	0,50	0,80
6,3	10	0,40	0,70	1,00
10	16	0,50	0,80	1,30
16	25	0,70	1,00	1,60
25	40	0,80	1,30	2,00
40	63	*	1,60	2,50
63	100	*	2,00	3,20

The data shown in the tables of this catalog are approximate: ATAG reserves the right to make appropriate changes of compounds, sizes and tolerances, without notice.







Extruded Profiles

Standard Industrial Rubber (SBR)

Caratteristiche	Uses
Colour: black, other colours on request	
Specific weight: Approx 1.5	
Hardness: 65 shore ± 5	
Breaking load: good (up to 250 kg cm²)	
Working temperature: +80 °C	Tuima - la
Low temperature resistance: good, down to -30 °C	Trims, bumper, straps, floor coverings, etc.
Resistance to atmospheric agents: meagre	noor coverings, etc.
Resistance to abrasion, to laceration, to fatigue: excellent	
Chemical resistance in the presence of salts and bases, diluted acids: good	
Resistance to acetone and steam up to 100 °C: moderate	
Chemical resistance in the presence of ozone, hydrocarbons, lubricating oils, petrol: meagre	

PARA Natural Rubber (NR)

Characteristics	Uses
Colour: Avana	
Specific weight: Approx 1.15	
Hardness: 45 shore ± 5	In laboratories for: high
Breaking load: Optimal	vacuum tubing, sealing
Elastic efficiency: excellent	rings of small and large
Low temperature resistance: optimal, down to -40 °C	dimensions, transportation of liquids and elastic
High temperature resistance: up to $+70^{\circ}\text{C}$	bungs. In all applications
Specific resistance ohm/cm ² : up to 10 ¹⁴	where a high level of
Is light-sensitive and changes colour if exposed to light	elasticity and abrasion
Abrasion resistance: exceptional	resistance are required.
Chemical resistance in the presence of dilute acids, salts, bases, alcohols and sea water: good	_
Resistance to ozone, lubricating oils, mineral acids, petrol and solvents (excluding acetone): scarce	

Nitrile Rubber (NBR)

Characteristics	Uses
Colour: black, other colours available on request	
Specific weight: approx 1.4.	
Hardness: 70 shore ± 5	
Breaking load: moderate (up to 110 kg cm²) - good (up to 210 kg cm²) with optimal formulation	
Working temperature: very good +100 °C	Sealing rings, gaskets,
Low temperature resistance: average, down to -15 °C	inking and dragging rollers, bushings for electric
Specific Resistance ohm/cm ² : up to 10 ¹⁰ with optimal formulations	motors, membranes,
Resistance to atmospheric agents: meagre, insufficient to ozone	valves, pressure rooms etc.
Abrasion Resistance: Good	va.ves, p. essare 100s etc.
Impermeability to gas: from good to excellent	
Chemical resistance in the presence of gas, butane, methane, propane: excellent with optimal formulation	
Chemical resistance in the presence of hydrocarbons, lubricating oils, petrol: good	

Neoprene Rubber (CR)

Characteristics	Uses
Colours: black, other colours on request	
Specific weight: Approx. 1.4	
Hardness: 70 shore ± 5	Covering of electrical
Breaking load: moderate (up to 110 kg cm²) - good (up to 230 kg cm²) with optimal formulation	transformers,
Working temperature: +85 ℃	manufactured articles for
Low Temperature resistance: good, down to -25 °C	the electrical industry,
Resistance to atmospheric agents: optimal	gaskets, supporting
Abrasion, laceration and fatigue resistance: optimal	membranes for bridges
Chemical resistance in the presence of salts and bases, diluted acids, to oxidation, to ozone, to heat, to heat ageing: excellent	and building, etc.
Chemical resistance in the presence of aliphatic hydrocarbons, mineral lubricating oils, organics, impermeability to gas: good	



Self-extinguishing: on request UL94v1





Extruded Profiles

Ethylene Propylene Rubber (EPDM)

Characteristics	Uses
Colour: black, other colours on request	
Specific weight: 1.28	
Hardness: 70 shore ± 5	
Breaking load: good (up to 180 kg cm²)	Car windshield seals,
Working temperature: +130°C, intermittent +150 °C	profiled window seals, trim
Low temperature resistance: good, -20°C, intermittent up to -35 °C	and plugs for buildings,
Specific resistance ohm/cm ² : up to 10 ¹²	expansion joints for bridges and viaducts,
Resistance to atmospheric agents: optimal	fenders and jetties,
Resistance to abrasion, to laceration, to fatigue: optimal	printing rollers, sub-aqua
Chemical resistance in the presence of organic and inorganic acids, various esters, bases, salts and polar solvents: excellent	equipment etc.
Resistance to oxidation, ozone, heat and ageing: optimal	
Resistance to high concentration acids: good	
Resistance to petrol, lubricating oils, aromatic solvents and hydrocarbons: bad	

Silicone Rubber (VMQ) peroxide-cured

Characteristics	Uses
Colour: transparent, other colours on request	Seals for technical items
Specific weight: Approx. 1.2 (with colour also approx. 1.3)	where optimum resistance
Hardness: 60 shore ± 5	to heat and cold is required:
Breaking load: fair (up to 90 kg cm²)	quartz lamp reflectors,
High temperature resistance: +180°C intermittent up to +250 °C	transformers, naphtha or gas
Low temperature resistance: optimal, down to -60 °C	burners, containers for solids
Specific resistance ohm/cm ² : up to 10 ¹⁶	and liquids.
Resistance to bad weather and ageing: optimal	The Platinum-cured quality, on request, guarantees the
Permanent deformation: very low	fundamental requirements
Light-sensitive and changes colour if exposed to light	for food and pharmaceutical
Chemical resistance to acids and bases: low	applications: conforms to
For oils: good	FDA and BfR and is total
Resistance to petrol, to aromatic and chlorinated solvents: average	exempt from PAH (Aromatic
Resistance to generic solvents: low	Polycyclic Hydrocarbons).

Silicone Rubber METALDETECTABLE

Characteristics	Uses
Colour: Blue	
Hardness: 70 Shore +-5.	Highly specific products
Elongation to failure : 300%	for the food industry
Compression Set (25% for 24hrs at 150°C): 17%	for the management of foreign bodies in foodstuff
Special characteristic: metaldetectable	processes
The above product contains only ingredients that are listed by the FDA under the 21 CFR number 177-2600	processes

Fluoroelastomer Rubber (FKM grade A)

Characteristics	Uses
Colour: black	Specific technical items
Specific weight: Approx. 1.95.	for the mechanical,
Hardness: 80 shore \pm 5 (other hardness on request from 65 to 95 shore)	_ petro-chemical, chemicals,
Breaking load: good (up to 140 kg cm²)	pharmaceutical,
Working temperature: +200 °C, intermittent to +270°C (special version up to +290 °C on request)	aeronautics, nuclear
Low temperature resistance: fair, down to -15 °C (on request down to -25 °C)	and rocketry industries.
Permanent deformation: low	Indispensable in many
Resistance to atmospheric agents and to heat: optimal	applications where a
Chemical resistance in the presence of trichloroethylene, chloroform, chlorobenzine, fuels, aliphatic and aromatic hydrocarbons, mineral acids, petrol, diluted and concentrated acids, lubricating oils, caustic soda, formaldehyde at 20 °C, perchloroethylene: excellent	specific resistance to chemical agents or solvents in presence of high
Resistance to contact with esters and ethers of low molecular weight, ketones, amines, hot anhydrous fluoric acid: low	temperatures is required.







Extruded Profiles

Here are section details of the **profile extrusions** that we have in stock or that we can supply quickly as we already have the tooling.

They are just a small part of what we can achieve with our **extrusion technology**. Any shape can be manufactured by constructing the appropriate design for the die. Our sales department is able to assist you with this task.

All profiles shown in the catalogue are made of **EPDM rubber** (see compound properties on pages 4 & 5), but we also extrude other types of rubber.

We can also extrude **silicone profiles** which are produced **in clean room** environments for **pharmaceutical and medical applications**. Each standard profile is extruded with tolerances according to DIN 7715, UNI ISO 3302 Cl.E3, but on request, for certain profiles, it is possible to reduce the tolerance specification.

The norms indicated are the more restricted class E1, applicable to extrusions, however, only up to certain dimensions (see reference standard).

Our production uses continuous vulcanization technology.

This allows the manufacture of considerable length profiles and enables dimensional stability to be obtained immediately after extrusion, thereby avoiding unwanted deformation due to the use of pans for positioning the raw extrusions into ovens.

If, however, due to the size and shape of a profile it is more expedient to cure at low temperatures over a long duration, we are able to offer the solution of **autoclave vulcanisation**.

Specifically for the **food industry**, but also increasingly in the **pharmaceutical industry**, the use of **metal detectable** plastics and rubbers is today an important criteria.

The management of **foreign bodies** in foodstuff processes is a critical factor, especially in relation to international quality standards.

We are able to extrude any packing or seal, of either regular or irregular shape or to customer specific designs, using fully compliant and **metal detectable FDA** blends.

The characteristics of this material allow industry to have immediate control on the end product, thereby hastening quality control processes and minimising the potential for economic loss.







Profiles

Rubber profiles: Quality black EPDM (available on request other compounds kinds)



126 g/m



106 g/m



154 g/m



134 g/m



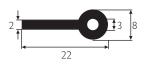
204 g/m



150 g/m



106 g/m



90 g/m



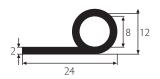
180 g/m



104 g/m



104 g/m



110 g/m



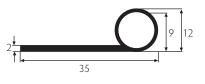
102 g/m



140 g/m



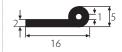
170 g/m



160 g/m



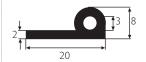
82 g/m



60 g/m



120 g/m



124 g/m



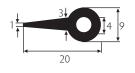
106 g/m



158 g/m



136 g/m



24 In esaurimento







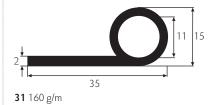
Profiles

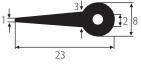


84 g/m



102 g/m

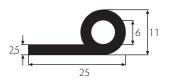




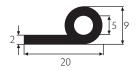
120 g/m



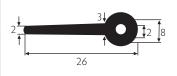
70 g/m



136 g/m



92 g/m



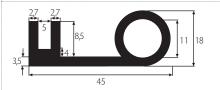
140 g/m



116 g/m



112 g/m



362 g/m



130 g/m



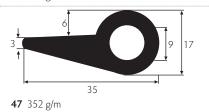
140 g/m



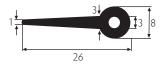
124 g/m



142 g/m



50 g/m



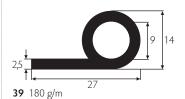
124 g/m



100 g/m



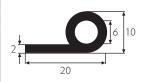
100 g/m



56 g/m



114 g/m



124 g/m

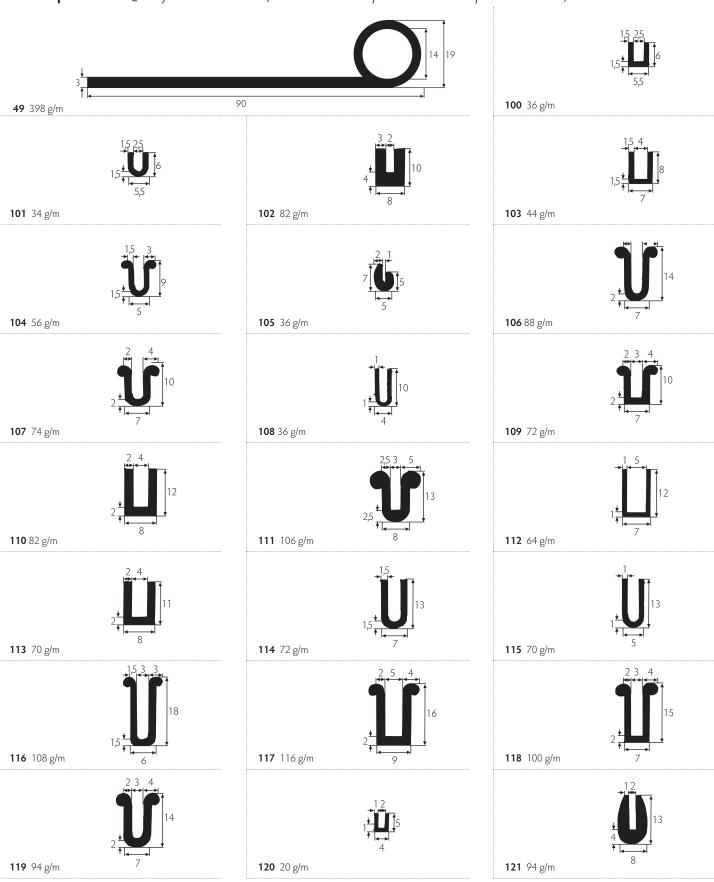






Profiles

Rubber profiles: Quality black EPDM (available on request other compounds kinds)



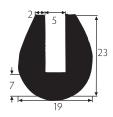




EXTRUDED AND MOULDED PROFILES, BUMPERS



Profiles



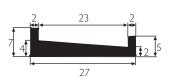
388 g/m



74 g/m



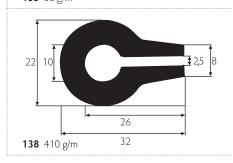
86 g/m



144 g/m



36 g/m





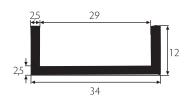
186 g/m



56 g/m



54 g/m



186 g/m



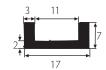
94 g/m



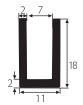
24 g/m



88 g/m



96 g/m



152 g/m



64 g/m



25 g/m



76 g/m



122 g/m





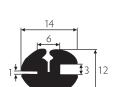


Profiles

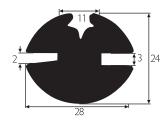
Rubber profiles: Quality black EPDM (available on request other compounds kinds)



26 g/m



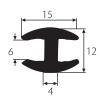
134 g/m (con spina 260P)



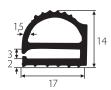
592 g/m (con spine: 260, 205 e 206)



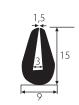
38 g/m



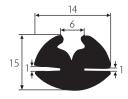
145 g/m



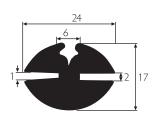
132 g/m



130 g/m



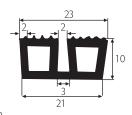
200 246 g/m (con spina 260)



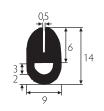
203 358 g/m (con spina 260)



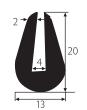
40 g/m



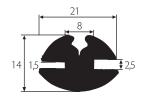
184 g/m



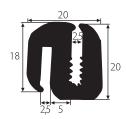
213 125 g/m



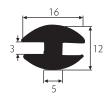
200 g/m



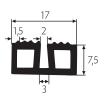
290 g/m (con spina 260P(



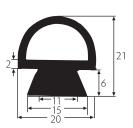
364 g/m



200 g/m



112 g/m



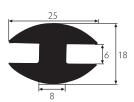
276 g/m



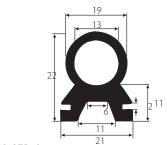




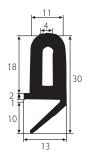
Profiles



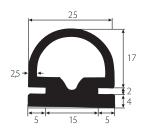
350 g/m



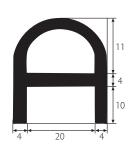
375 g/m



316 g/m



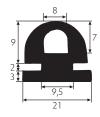
334 g/m



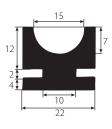
410 g/m



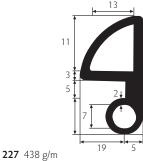
131 g/m



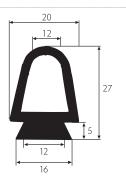
356 g/m



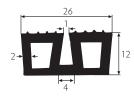
500 g/m



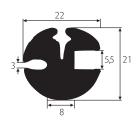
425 g/m



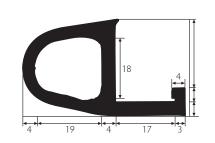
273 g/m



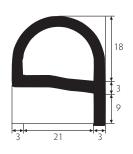
224 g/m



360 g/m (con spina 260)



468 g/m



375 g/m

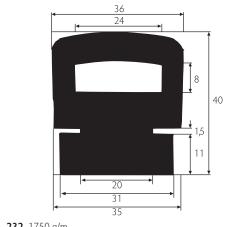


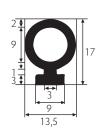




Profiles

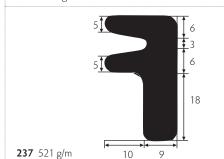
Rubber profiles: Quality black EPDM (available on request other compounds kinds)







1750 g/m



0,146 g/m

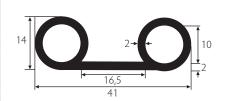
125 g/m

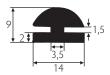


500 g/m



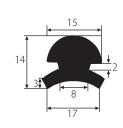
133 g/m



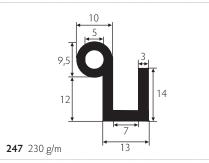




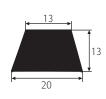
313 g/m



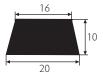
133 g/m







263 g/m





252 150 g/m



275 g/m

275 g/m

313 g/m





EXTRUDED AND MOULDED PROFILES, BUMPERS



Profiles



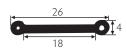
193 g/m



63 g/m



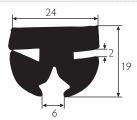
56 g/m



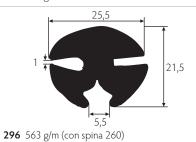
525 g/m

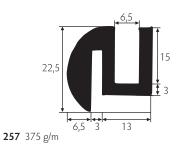


138 g/m



563 g/m



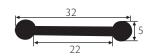




260/P 40 g/m



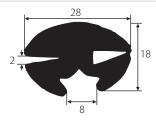
50 g/m



103 g/m



78 g/m



563 g/m (con spina 260)



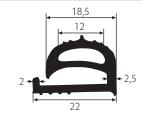
81 g/m



163 g/m



45 g/m



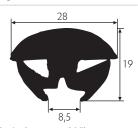
172 g/m



195 g/m



102 g/m



402 g/m (con spina 205)







Profiles

D-Shaped Bumpers and cylindrical bumpers in Ethylene Propylene: EPDM

Light, robust and easy to mount; these **D-shaped bumpers** have a wide range of uses: for **nautical applications** such as fenders for boats, paths and jetties; for **industry and commerce** such as the protection of masonry, prefabricated structures, scaffolding and machinery when moving indoors; for the protection of loading bays and docks from the rear of trucks.

STRUCTURE

Mixture of black rubber particularly designed for resistance to: hitting, abrasion, laceration, ageing,

atmospheric agents and sea water.

STANDARD LENGTH

Section 40 x 22: 20 metre (max), for all the other sections: 4 metre (max)

SPECIAL VERSIONS

On request we can supply bumpers to your specific design and in non-standard rubbers.

FIXING

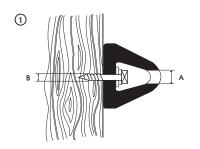
To mount types $\bigcirc \bigcirc$ and \bigcirc

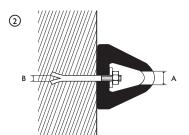
Drill the profile at point A with a hole diameter slightly greater than the head of the bolt, to allow the insertion of an allen key, or if using an hexagonal head (type brugola) the diameter of the hole will be that of the head of the bolt; then drill the base of the profile at point B with a hole diameter the same size as the fixing.

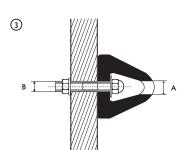
To mount type 4

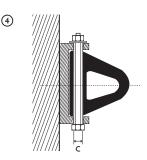
Drill a hole passing through the base of the profile at point C with the Ø the same as that of the fixing.

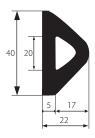
To best avoid damaging the bumper when mounting it is advisable to use washers and to tighten bolts only until the point where the rubber starts to deform, ensuring that the bolt thread is not visible. In case of additional gluing clean the bumper perfectly and degrease the mounting surface; if necessary lightly sand the bumper's mounting surface.

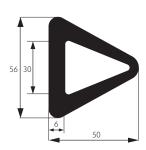


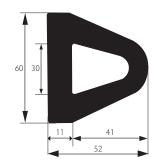












V4PD040 SECTION 40X22 kg/m 0,7 ca. **V4PD056 SECTION 56X50** kg/m 1,5 ca.

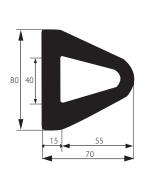
V4PD060 SECTION 60X52 kg/m 2 ca.



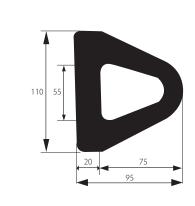




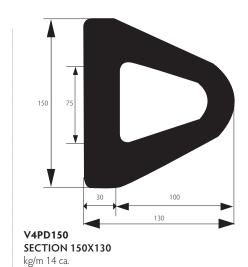
Profiles



V4PD080 SECTION 80X70 kg/m 4 ca.

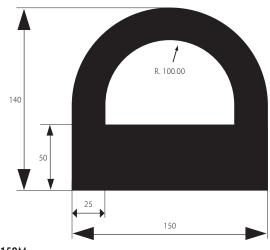


V4PD110 SECTION 110X95 kg/m 7 ca.

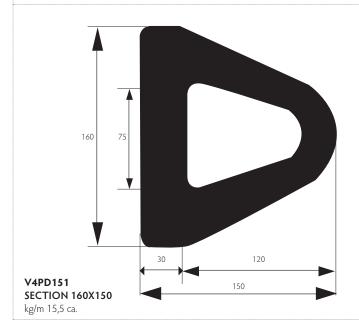


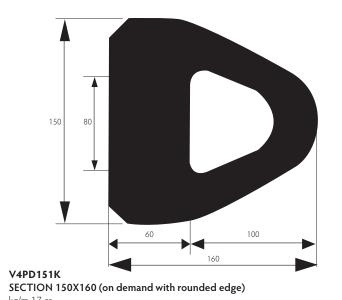
R. 100.00 140 150

V4PD150K **SECTION 150X140** kg/m 16 ca.



V4PD150M **SECTION 150X140** kg/m 16 ca.





kg/m 17 ca.







EXTRUDED AND MOULDED PROFILES, BUMPERS



Normal Sponge Rubber - Bright Grey

Characteristics	Note
Polymer: SBR	
Colour: Bright Grey	TI 1 "
Density: 0.6 - 0.7 g/cm ³	The density canvary as a function
Flame Resistance: not resistant	of the dimensio
Dilute acids resistance: good	of the finished
Base resistance: good	product due to
Ozone resistance: meagre	the production process.
Maximum working temperature: 70°C	ргоссзз.
Water absorption after 3 days immersion: 5%	

Neoprene Sponge Rubber - Dark Grey

Characteristics	Note
Polymer: Neoprene / SBR	
Colour: Dark Grey	
Density: 0.65 - 0.80 g/cm ³	The density can
Flame Resistance: wak	vary as a function
Dilute acids resistance: good	of the dimensions of the finished
Base resistance: good	product due to the
Ozone resistance: good	production process.
Maximum working temperature: 90°C	
Water absorption after 3 days immersion: 4%	

EPDM Mousse

Characteristics	Note	
Polymer: EPDM		
Colour: Black		
Density: 120 +/-20 kg/m ³	_	
Flame Resistance (UL94): catches fire	Good mechanical	
Ozone resistance: reasonable	atmospheric agents.	
Continuous working temperature: -40°C to 80°C	atmospherie agents	
Maximum intermittent temperature: 105°C		
Water absorption (ASTM D1056): =<5%		

Neoprene Mousse

Characteristics	Note
Polymer: CR/NBR	Good weather, flame and oil and chemical product resistance.
Colour: Black	
Density: 150 +/- 25 kg/m ³	
Flame Resistance (UL94): $SP \ge 2 \text{ mm HF1/SP} \ge 10 \text{ mm V} \emptyset$	
Ozone resistance: good	
Continuous working temperature: -40°C to 100°C	
Maximum intermittent temperature: 115°C	
Water absorption (ASTM D1056): =<5%	

Peroxide / Platinum Cored Silicone Foam

Characteristics	Note
Polymer: VMQ	Good mechanical and atmospheric agent resistance. FDA certificate for platinum cured version.
Colour: White	
Density: 0,5 g/cm³	
Alongation at brake: 370%	
Compression set: ca.20%	
Continuous working temperature: -50°C to 200°C	
Maximum intermittent temperature: 220°C	
Water absorption (ASTM D1056): =< 5%	

Socaprene

Characteristics	Note
Polymer: CR	Good weather, flame and oil and chemical product resistance. CFC free (2000/53/CE).
Colour: Black	
Density: 0.15 - 0.20 g/cm ³	
Flame Resistance (UL94): 94HF1	
Ozone resistance: very good	
Continuous working temperature: -40°C to 115°C	
Maximum intermittent temperature: 130°C	
Water absorption (ASTM D1056): =<5%	

Softseals

Characteristics	Note
Polymer: PTFE 100%	Good weather, oil and chemical product resistance.
Colour: White	
Density: 0,55 g/cm ³	
Pressure: 210 bar	
Chemical: PH 0-14	
Continuous working temperature: -200°C +280°C	
Maximum intermittent temperature: 315°C	
FDA and WRC norms respected	

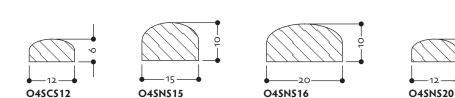
Polyurethane Foam

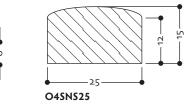
Characteristics	Note
Polymer: PU	Special profiles for environmental protection of edges and corners. Also used as a bumper or stopper. Good mechanical properties.
Colour: black, black/yellow	
Density: 0,30 g/cm ³	
Available in range of temperature : $-40^{\circ}\text{C} - +100^{\circ}\text{C}$	
Self adhesive	
Smooth surface	
Surface on air with yellow/black stripes for immediate detection of danger.	





SPONGE RUBBER - NORMAL - SKIN - GREY CLEAR - SPECIAL PROFILES

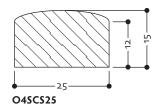




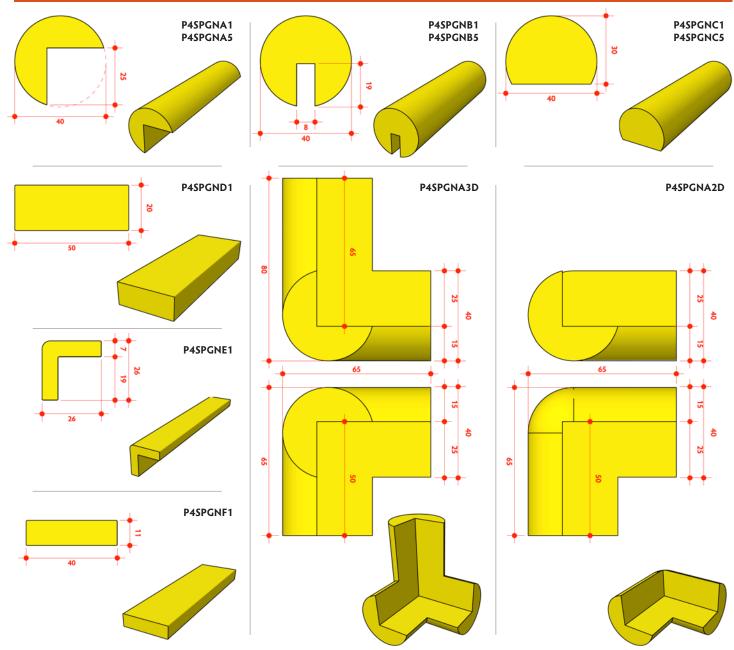
SPONGE RUBBER - NEOPRENE - WITH FILM - DARK GREY - SPECIAL SECTIONS







PU FOAM - SELF-ADHESIVE - BLACK/YELLOW** - SPECIAL SECTIONS











IT_20128 MILANO ph. +39 02 255.22.51 mob. +39 329 68.78.260 ufftec@atag-europe.com

WWW.ATAG-EUROPE.COM