



GETELEC

We protect your electronics

OUR SOLUTIONS FOR INTERIOR CABIN DESIGN



ISO 9001 = AS/EN/JISQ 9100

www.getelec.com



DEDICATED SUPPORT & QUALIFIED EXPERTISE

Listening to your needs is an essential part of our trade policy. The entire design and development of your product is based on trust and working with our customers. This mutual transparency allows us to support you in all points in the development of this one and thus to offer you turnkey solutions for all your projects.

Our highly qualified teams assist you in defining your needs and are at your disposal throughout your project. From the choice of material to the final production of your product, they will be able to advise and guide you to guarantee your technological success.

Our historical expertise allows you to benefit from expertise recognized and certified by many demanding standards such as ISO 9001, EN 9100, AIRBUS ABD0031 and BOEING FAR25.8523. The trust that major actors such as SAFRAN, AIRBUS and DASSAULT place in us shows our commitment to quality.

A UNIQUE BESPOKE SOLUTION

Our historical expertise allows you to benefit from the most efficient and innovative products on the market, adapted to all your mechanical, electrical and environmental constraints.

Your most specific requirements are at the heart of our approach. At Getelec, we work closely with you to shape the aeronautics of tomorrow. The synergy between our design office and our R&D laboratory Getelec Lab allows us to design innovative products, specially adapted to the aeronautics industry.

From low-density products to soft-touch finishes and specific developments, our expertise is at your service to meet your most precise needs.

Innovative EMC solutions
Advanced industry
Customized realization
Personalized support
R&D laboratory
ISO 9001/EN 9100 certifications
Expertise
Design office
Quality

A rigorous **know-how**, a **passion for innovation** and an **expertise** that anticipates your needs.

About us



An independent French company with unique know-how since 1968, Getelec has become a global specialist in EMC shielding and a key partner for prime contractors in many industrial sectors.

Getelec designs and manufactures custom solutions for technical sealing, electromagnetic protection (EMC), microwave absorption and heat dissipation. Getelec's products are particularly suitable for the protection of high-tech equipment under severe environmental constraints.

Our technological advance allows us to continuously develop innovative and tailor-made strategic products to meet the complex specifications and the multi-sectoral demand of our customers.

At Getelec, we share your vision for a more sustainable future. That's why we continually rethink our innovations, putting the environment and sustainability at the heart of our developments.

We design our products with a clear vision: to combine state-of-the-art performance with respect for the environment. By integrating bio-sourced and recyclable materials, we are redefining the standards of innovation tomorrow.

Discover our dedicated product range :



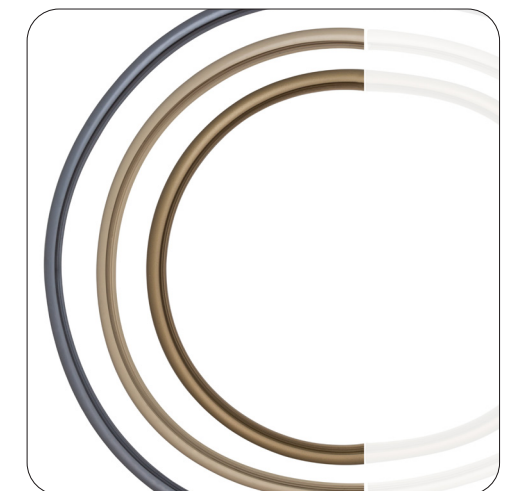
CONDUCTIVE
ELASTOMERS



ANTICORROSIVE
BI-MATERIAL
SOLUTIONS



TECHNICAL SEALING
SOLUTIONS



EXTRUDED PROFILES



EQUIPMENT, ARTICLES AND SERVICE ACCESSORIES

Essential to improving the experience, equipment, articles and accessories for service and galleys must be robust, functional and durable. Thanks to our high-end custom-made silicone solutions, combining robustness, functionality and durability with aesthetics.

Luxury redefined by innovation

At GETELEC we understand the vital importance of uncompromising reliability in the aviation industry. That's why our solutions are designed to deliver optimal performance even in the most demanding environments and over long periods of time.

Our expertise in electromagnetic compatibility ensures a rigorous integration from the design stage, eliminating any risk of interference and ensuring the optimal operation of each component and module.

Thanks to advanced thermal management, our technologies maintain an ideal operating temperature, guaranteeing stability and constant performance.

Benefit from a dedicated team of engineers to support you in all stages of your project. Our production plant, based in our premises in Yvelines, is fully equipped with the latest generation machines in order to offer you a unique product quality in a short times.



FINISHING OF EQUIPMENT AND SEATS IN BUSINESS AND FIRST CLASSES

Demand the best for the finishing of your interior designs thanks to our tailor-made solutions adapted to all the equipment located in business and first class. Our products, qualified according to AIRBUS ABD0031 and BOEING FAR25.8523 standards, fully customizable, will enhance your concept and guarantee you a sustainable and high-end result, thanks to our soft-touch anti-scratch finishes and our custom colors treated against yellowing.



MULTIMEDIA & CONNECTED OBJECTS

The new generation of in-flight entertainment systems (IFEs) used in commercial flights includes many services such as touch screens, audio and video services, internet access and telephone. However, these systems require special treatment in the management of problems related to emissions/receptions of electromagnetic interference and in heat dissipation management. Discover all our ranges that address these issues.

EQUIPMENT, ARTICLES AND SERVICE ACCESSORIES COMBINE ROBUSTNESS & PERFORMANCE



Technical sealing reinvented

Thanks to our wide range of sealing silicone we meet all your technical sealing needs. With hardnesses ranging from 20 to 90 Shore A and extreme temperature resistance, our materials guarantee your products a durable **robustness and optimal performance, even in the most demanding environments.**



Know-how that makes difference

Our production center is equipped with the most advanced technologies on the market. From the prototype to the large series, we master all the molding, cutting, extrusion, overmolding and vulcanization processes, to guarantee you a high-end finished products, in accordance with your strictest requirements, in an optimized timeframe.



Innovation for quality

All our products comply with the strictest French and international standards to guarantee premium quality without obsolescence. This policy allows us, for more than 25 years, to benefit from **dual ISO 90001 and EN 9100 certification**



The perfect combination of **endurance and performance**

In demanding air service environments, every piece of equipment and accessory must combine performance, robustness, durability and efficiency, while complying with strict aeronautical standards such as AIRBUS ABD0031 and BOEING FAR25.8523.

That's why, we have developed a range of aeronautically qualified technical sealing elastomers, designed to meet the most complex challenges. Whether it's silicone engine door stops, trolley bumpers or galley seals, each component ensures **exceptional durability and high-end finishing.**

Thanks to our expertise in advanced extrusion, we realize bespoke solutions, adapted to all geometries, with complex profiles, unlimited lengths, and optimized delays

The quality of our environmental sealing elastomers :

- Flame retardant UL94 HB, V0
- Aeronautical grade silicone
- Low degassing rate (Standard ASTM E 595)
- Soft-touch finish

FINISHING OF EQUIPMENT AND SEATS
IN BUSINESS AND FIRST CLASSES



GT70 RF - Performance without compromise

With a hardness of 70 Shore A, our GT 70 RF combines robustness and reliability thanks to optimal resistance to fire, smoke and toxicity and compliance with the strictest aeronautical standards: **BOEING FAR 25.853 and AIRBUS ABD0031.**



From idea to series - Innovation without delay

Thanks to our know-how and our optimized production capacity, we design bespoke solutions in a short time. From die engineering to mass extrusion, our comprehensive expertise ensures **quality, performance, and precision for all your complex finished parts and extruded profiles**



Soft-touch finish: Combine style with resistance

Give a new sensory dimension to your equipment thanks to our soft-touch finish. Its silky feel and refined visual rendering bring a **unique signature**. Beyond the aesthetic aspect, this ultra-smooth finish acts as a **protective barrier against everyday scratches and impacts.**



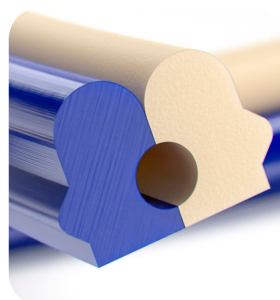
Technical data of **GT 70 RF**

Properties	Standards - Tests	GT 70 E RF-2	GT 70 M RF-2	GT 70 E RF-4
Density (g/cm³)	ASTM D 792	1.35 ± 0.05	1.35 ± 0.05	1.39
Hardness (shore A)	ASTM D 2240	70 ± 5	70 ± 5	71
Break resistance (MPa)	ASTM D 412	> 6	> 6	8.2
Tear strength (kN/m)	ASTM D 624	> 10	> 10	34.1
Elongation at break (%)	ASTM D 412	> 180	> 180	376
Residual deformation after compression 70 hours at 150 °C (%)	ASTM D 395	< 50	< 50	< 50
Continuous operating temperature		-60°C to +200°C (peak at +230°C)	-60°C to +200°C (peak at +230°C)	-60°C to +200°C (peak at 230)
Color		On request	On request	On request
Available format		■	■ ■ ■ ■ ■	■ ■ ■ ■ ■

■ Molded ■ Extruded ■ Cut ■ Adherized by vulcanization ■ Sheet

MULTIMEDIA AND CONNECTED OBJECTS

BESPOKE EMC SOLUTIONS



Our bi-material IP/EMC solutions

Our bi-material gaskets are composed of a conductive part and an insulating part, all combined into a single gasket by the principle of coextrusion. By separating the microwave shielding function from the environmental sealing function, the seal is more resistant to extreme environments. Resistant to water, pressure and corrosion, they provide optimum technical sealing and electromagnetic shielding, even in harsh environments.

The advantages of our bi-material elastomers

- Dual IP/EMC solutions
- Small footprint
- Customized realization
- Longer lifetime than single material gasket



Our conductive elastomers

Our conductive elastomers are developed in every way by our chemical engineers. From the selection of raw materials to the final processing, they produce specific formulations to each application and master all the processes and processes of development. The conductive particles (10 to 40 microns) that make up the filler of our conductive mixes (between 60 and 80% filler ratio) allow you to acquire optimal EMC shielding.

The three guarantees of our conductive elastomers:

- Electrical continuity performance
- Mechanical performance
- Extreme temperature resistance



Bespoke solutions

Every step of the design and development of your product is based on a relationship of trust and total transparency. Through close collaboration with our design office, we support you from end to end to transform your ideas into ready-to-use solutions, perfectly adapted to your challenges and issues.

Our highly qualified teams assist you in defining your needs and are at your disposal throughout your project. From the construction of the specifications to the choice of the material and the final production of your product, we put at your service our know-how to guarantee the technological success of your projects.

Our production unit is equipped with the most advanced technologies available. Thanks to continuous quality control, we produce bespoke parts with optimum precision, in controlled time and cost from prototype to large series.

Our historical know-how is not limited to the development of materials and the mastery of manufacturing processes. Thanks to our R&D laboratory Getelec Lab, we are also able to support you in your search for solutions and new materials. We also have the possibility to design our own extrusion lines in-house to meet all your projects requiring complex profiles in an optimized time and cost.

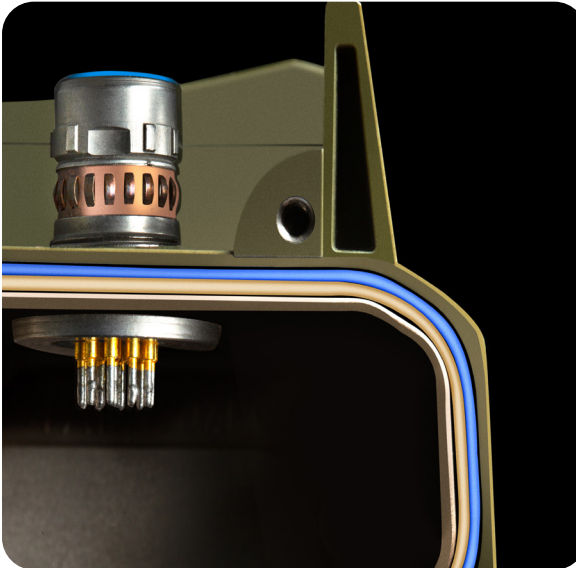
This complete control of the value chain allows us to meet your most complex innovative needs.

Performance at the heart of your equipment

At GETELEC we understand the vital importance of uncompromising reliability in the aviation industry. That's why our solutions for embedded electronics are designed to deliver optimal performance even in the most demanding environments and over extended periods of time.

Our electromagnetic compatibility (EMC) control allows seamless integration from the design stage, eliminating any risk of interference and ensuring the optimal operation of each component and module.

Thanks to our expertise in advanced thermal management, we ensure a controlled operating temperature, synonymous with stability, safety and sustainable performance.



NAVIGATION AND CONTROL

Modern aircraft rely on advanced electronic systems to navigate, communicate and anticipate risks. To ensure reliability, every component matters. Our microwave shielding gaskets offer a lightweight, efficient and compact solution, ideal for display systems, control units, antennas and IFF devices.

And because performance tolerates no compromise, we also offer thermal dissipation and technical sealing solutions, designed to withstand the most extreme environments.

STRUCTURE AND ENGINE

Electromagnetic seals (EMC) built into aircraft structures must meet strict normative requirements for reliability, functional safety and durability in harsh environments (extreme temperatures, humidity, salt spray, vibration).

The concept of corrosion resistance is a subject on which GETELEC responds with a range of bi-material conductive gaskets specifically designed to meet these constraints.

Microwave absorbers

Microwave absorbers integrated on a radar antenna to attenuate the electromagnetic waves on a given frequency.

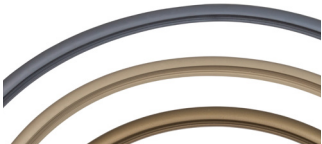


Cockpit solutions

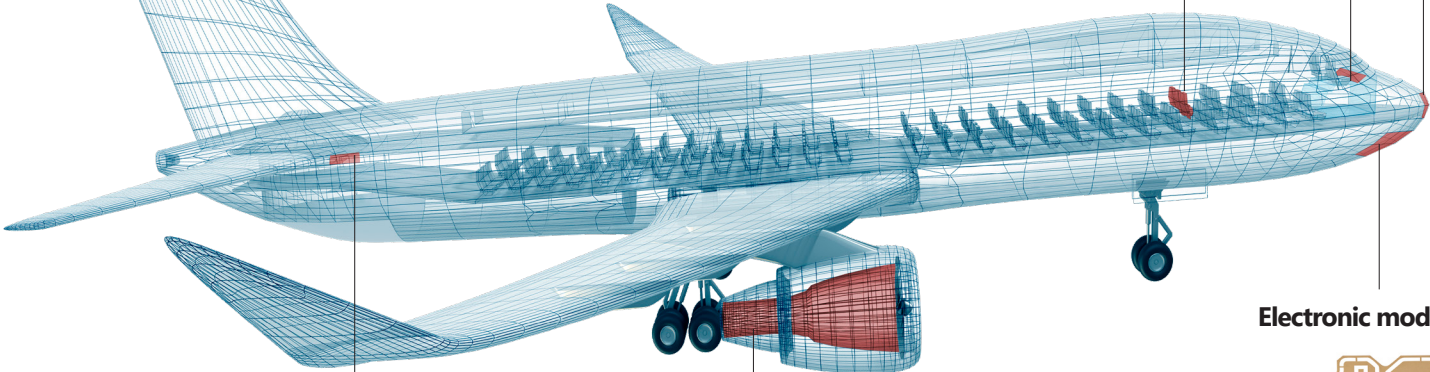


Our shielded windows provide electromagnetic protection for the front of display screens. They maintain light transmission of up to 90%.

Finished of business and first class seats



Silicone seals quality fire-smoke-toxicity according to Airbus ABD00031 and Boeing FAR25.853 standards for seat finishing (custom coloring).



Electronic module

Our conductive elastomers ensure the protection of the transmission/reception equipment against electromagnetic interference.



Our heat sinks stabilize the temperature of components to ensure optimal performance.



Flight recorders



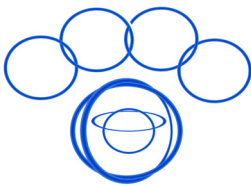
Nickel graphite conductive gasket for flight recorders, providing EMC shielding and anti-corrosion protection in saline environment.

Silicone shock absorber



Overmolded on a treated aluminum plate, this silicone stop absorbs shocks when opening the engine hatches.

Sealing o-ring gaskets



From our wide range of aircraft grade elastomers, these o-rings guarantee an optimal seal for an application in a severe environment.

Aeronautical quality formulations

BUTADIENNE – NITRILE - ACRYLIC (NBR – Perbunan – Krynac - Hycar)			
Material reference	Standards	Hardness (shore A)	Extreme temperature of use
20 A5	NFL17-120	50	-30°C to +140°C
20A6		60	
20A7		70	
20A8		80	
20 B5	NFL17-120	50	-50°C to +120°C
20 B6		60	
20 B7		70	
20 B8		80	
21 A6	NFL17-121	60	-20°C to+140°C
21 A7		70	
21 B4	NFL17-121	40	-40°C to +120°C
21 B6		60	
21 B8		80	
23 B7	NFL17-123	70	-50°C to +120°C
24 B7	NFL17-124	70	-50°C to +120°C
FLUOROCARBONS (Viton, Fluorel, Technoflon)			
60 C7	NFL17-160	75	-20°C to +260°C
60 C9		90	-15°C to +260°C
64 C6	NFL17-164	60	-20°C to +260°C
64 C8		80	
FLUROSILICONE (FMVQ, Silastic)			
61 D6	NFL17-161	60	-50°C to +200°C
61 D8		80	
SILICONE (VMP – PVMQ – Silastic – Rhodorsil)			
50 D5	NFL17-150	50	-55°C to +260°C
50 D6		60	
50 D7		70	
53 D5	NFL17-153	50	-70°C to +225°C
ETHYLENE – PROPYLENE - EPDM			
41 B8	NFL17-141	80	-55°C to +140°C
POLYCHLOROPRENE - NEOPRENE			
31 B3	NFL17-131	30	-40°C to +120°C
31 B4		40	
31 B5		50	
31 B6		60	
31 B7		70	
31 B8		80	

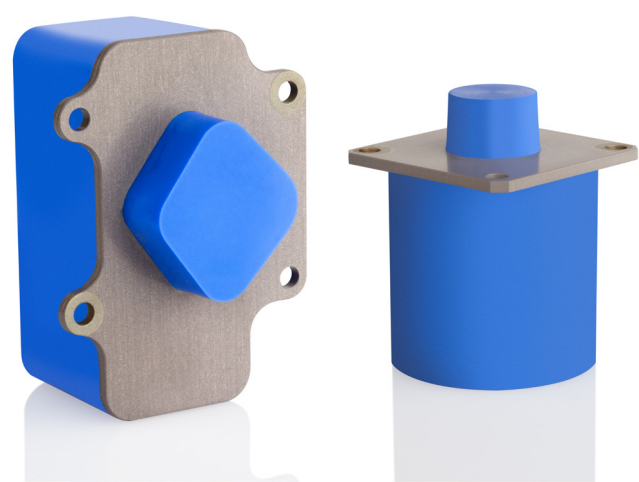
Available format :

Molded

Cut

Sheet

Extruded



The quality of our environmental sealing elastomers :

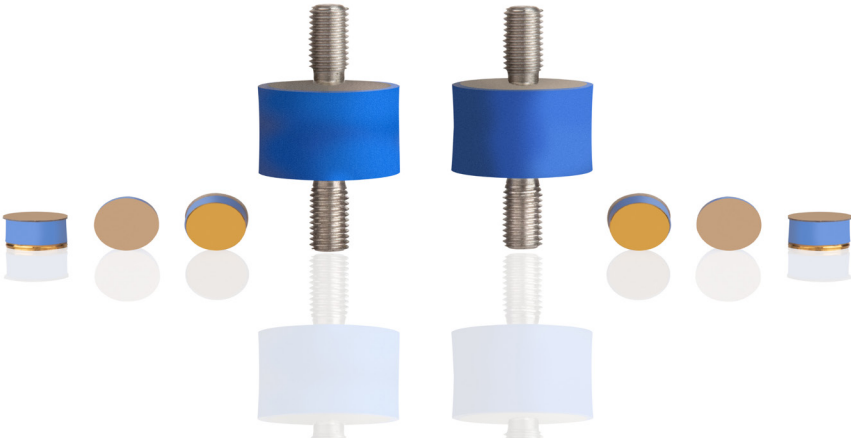
- Flame retardant UL94 HB, V0
- Aeronautical grade silicone
- Low degassing rate
- Soft-touch finish

Properties Tests	GT 21	GT 30	GT 50	GT 60	GT 67	GT 70
Elastomer	Expanded silicone Closed cell	Silicone	Silicone	Silicone	Fluorosilicone	Silicone
Hardness (shore A ± 5) [ASTM D 2240]	20	30	50	60	60	70
Specific mass at 25°C (g/cm³) [ASTM D 792]	0.60	1.11	1.19	1.27	1.46	1.35
Tensile strength Psi MPa [ASTM D 412]	-	980 6.75	980 6.75	950 6.55	1200 8.30	1000 6.89
Elongation (%) [ASTM D 412]	-	850	380	300	300	180
Residual deformation after compression 22 hours at 177°C (%) [ASTM D 395 Method B]	-	20	32	33	25	34
Continuous operating temperature (°C)	-55°C to +200°C (Peak at 250°C)	-73°C to +232°C	-73°C to +232°C	-73°C to +232°C	-60°C to +230°C	-73°C to +232°C
Color	Off-white	White	Red	Blue	Blue	Red

Find all our environmental sealing solutions on our website.

Available format

Our know-how and our support policy also includes taking into account your constraints and tolerances, which is why all of our solutions can be made to measure according to your specific plans and manufacturing processes within a short time-frame.





www.getelec.com

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