

# AirLock

Bridging the gap in your sealing requirements



# AirLock: Bridging the gap in your sealing requirements

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## Introduction

AirLock inflatable seals provide a proven sealing solution ideal for sealing against fluids, gases, powders and granules and as an environment seal in a multitude of applications where a variable sealing gap is present. Used extensively on fabricated panels and doors for regularly accessed closures. Designs also available for gripping and positioning devices.

## Manufacture

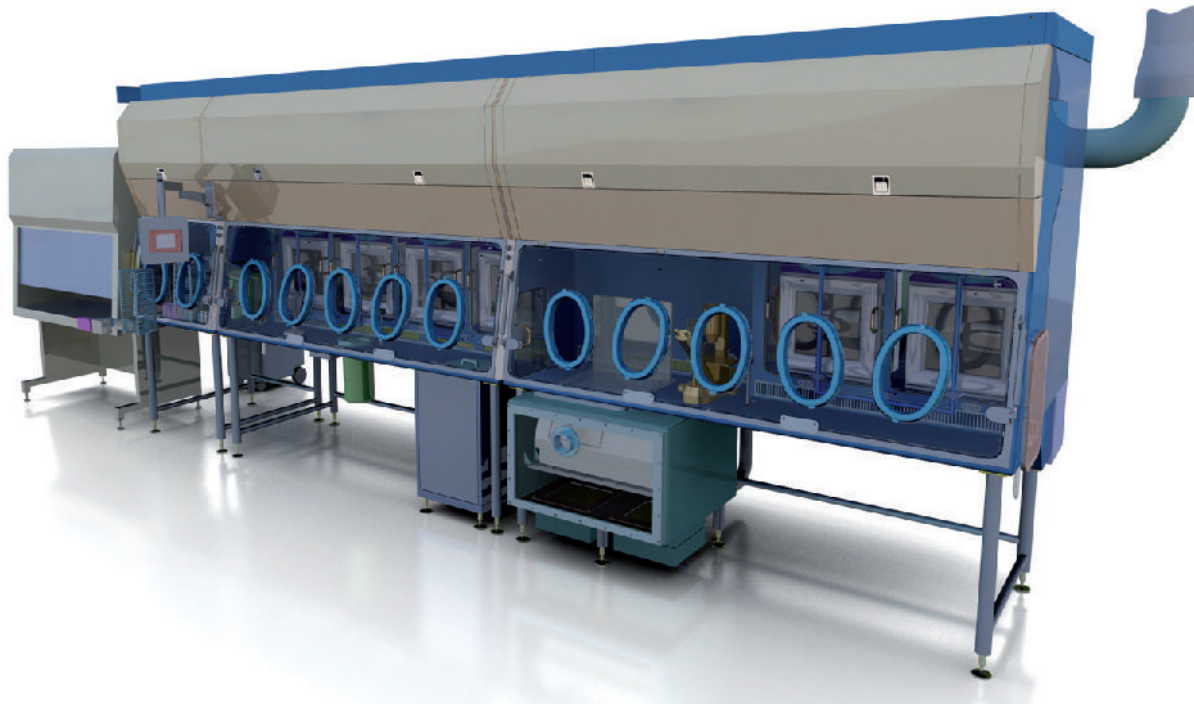
Manufactured in a range of elastomers including FDA compliant Silicone, EPDM, Nitrile and Viton® and in a multitude of extruded sections. AirLock can be manufactured to any length and joined, shaped and then vulcanised to produce the desired seal. The vulcanised in place valve is positioned to enable ease of connection for control equipment allowing inflation of the seal with compressed air. Standard working pressure is 1 bar for Silicone but can be higher with other materials.

AirLock standard profiles are available from stock enabling fast turnaround of your seal requirements. Garlock GB also has the resources and capability to design, manufacture and supply to new requirements within two – three weeks.

AirLock silicone inflatable seals can be made in a wide range of colours for identification purposes or for aesthetic reasons such as matching corporate colours .

## How do inflatable seals work

An AirLock inflatable seal is a hollow extruded profile which then has a vulcanised joint forming a complete seal. When air is introduced via the integral valve the seal expands to close the gap.



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## Application

Typical applications for AirLock include isolation booths, door seals and vessel sealing. Our materials expertise mean we can produce seals for a variety of application that encompass food machinery, bag filling, tablet making machinery, mixers, grippers handling delicate components and also for isolating equipment for maintenance purposes and more. The versatile nature of the product is such that applications for AirLock are almost limitless.

Garlock engineers offer design support as part of the overall service.  
Some examples:

<b>Pulp/Paper:</b>	Suction rolls, doctor blade bladders, slitters, scorers
<b>Transportation:</b>	Door seals, transport containers
<b>Marine:</b>	Portholes, elevator platforms, cargo hatches, propeller shaft maintenance
<b>Textile Industry:</b>	Clamping, door seals for pressure chambers
<b>Chemical Processing:</b>	Processing equipment, mixers, hoppers, blenders, chutes, valves
<b>Food Processors:</b>	Door seals, mixers, robotics, conveyor brakes, dryers, autoclaves
<b>Pharmaceutical:</b>	Mixers, robotics, autoclaves, ovens, clean rooms

## Examples

Food Processors



Pharmaceutical

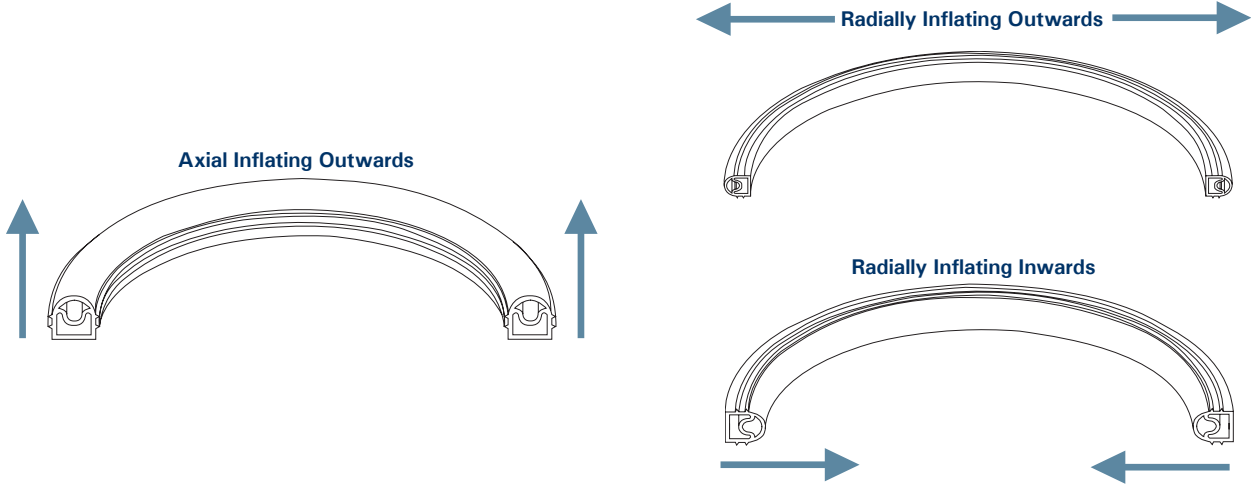


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## Type of Expansion

### Seal retention

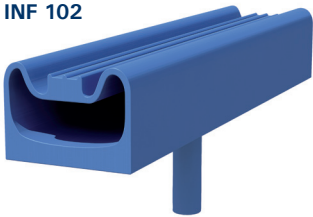
Click fix or barbed retention can be built into the profile design.



### Extrusion Profiles

Standard profiles are held as stock items to suit your applications; however, other profiles and elastomers are available for special sealing, locking, gripping, and handling applications.

INF 102



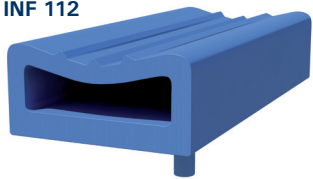
Relaxed height	12.7 mm
Inflated height	18.5 mm
Width	17.4 mm
Working Pressure	1 bar

INF 104



Relaxed height	23.0 mm
Inflated Height	37.0 mm
Width	23.6 mm
Working Pressure	1 bar

INF 112



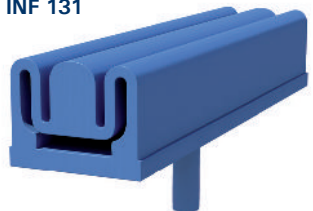
Relaxed height	23 mm
Inflated height	45.0 mm
Width	50.0 mm
Working Pressure	1 bar

INF 117



Relaxed height	7.0 mm
Inflated height	13.5 mm
Width	16.5 mm
Working Pressure	1 bar

INF 131



Relaxed height	16.5 mm
Inflated height	33.0 mm
Width	22.7 mm
Working Pressure	1 bar

INF 133

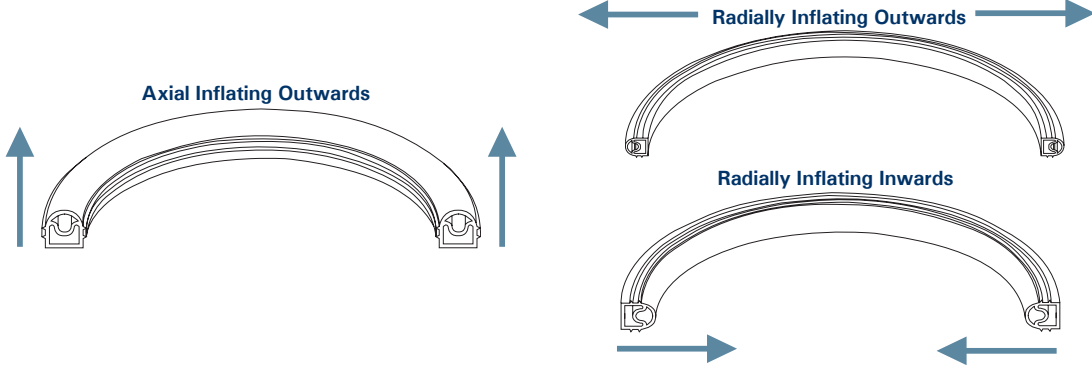


Relaxed height	16.0 mm
Inflated height	26.0 mm
Width	23.5 mm
Working Pressure	1 bar

### Fittings and valves

AirLock inflatable seals are fitted as standard with moulded valves, manufactured from the same silicon compound used in the manufacture of the extrusions. As with the jointing of each seal, the valve joint is vulcanised to ensure a leak free connection, proven to be more reliable than standard metallic fittings.

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<b>Information</b>		Please copy and email, fax or post back
<b>Customer Information:</b>		
Company: _____	Contact: _____	
Industry: _____	Position: _____	
Address: _____	Telephone: _____	
City: _____	Fax: _____	
County: _____ Postcode: _____	Email: _____	
<b>Current Seal</b>		
Manufacturer: _____	Target price: _____	
Material: _____	Monthly usage: _____	
Housing Material: _____	Valve Type: _____	
Sealing Face Material: _____	Drawing of Profile: _____	
<b>Seal Dimensions</b>		
Height of Seal (Relaxed): _____		
Height of Seal (Inflated): _____		
Width of Seal (at base): _____		
<b>Housing Dimensions</b>		
Housing height: _____		
Housing width: _____		
Total Depth to Sealing Face: _____		Drawing of housing and sealing face: _____
Orientation of Inflation: _____		
		
<b>Application Information</b>		
Process Media: _____	Pressure: _____	
Process Temperature: _____		
Environmental Conditions: _____	Cleaning Fluids: _____	
Notes: _____		

**WARNING:**

Properties/applications shown throughout this brochure are typical. Your specific application should not be under taken without independent study and evaluation for suitability. For specific application recommendations consult Garlock. Failure to select the proper sealing products could result in property damage and/or serious personal injury. Performance data published in this brochure has been developed from field testing, customer field reports and/or in-house testing. While the utmost care has been used in compiling this brochure, we assume no responsibility for errors. Specifications subject to change without notice. This edition cancels all previous issues. Subject to change without notice.



*“Sealing the future for over 125 years”  
“Dedicated to the safety of our people, our products and the community”*

**GARLOCK**

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