To solve sealing problem of two elements that come into contact intermittently, the safest, most effective and simple solution is the inflatable seal.

Infla-Sealing inflatable gaskets are custom designed to meet machine requirements and customer needs.

They are seals that can work in a wide range of temperatures from - 60 ° C to + 220 ° C with pressure and vacuum. They can be applied in food, pharmaceutical and in all other industries.

Thanks to many years of experience in the field of inflatable seals, Infal-Sealing has developed a technology and know-how for the production and marketing of its products, thanks above all to control and verification systems adopted for individual applications that allow to give confirmation with specific tests on possible duration of the gasket in the specific application.

Gaskets can be manufactured using various rubbers with different elastomers or silicone compounds that can also be used in the pharmaceutical sector with FDA and USP Pharma Class VI certifications.

APPLICATIONS

Aerospace:	*Doors/hatches, wind tunnels, jet engine test cells, cockpit canopies*
Paper mills:	*Suction rollers for pulp / paper, doctor blader, cutters, markers*
Telecommunications:	*Processing of semiconductors, filters, actuators, washers, robotics, optics*
Transportation:	*Door seals for high-speed trains, freight containers marine portholes, lifting platforms, loading hatches, maintenance drive shafts*
Textile Industry:	*Locks, door seals for pressure chambers*
Primary Metals:	*Door seals, doctor blades, continuous casting, oven seals*
Medicals:	*Medical sterilizers, clean rooms, optics, robotics*
Lav. Chemistry:	*Processing equipment, mixers, hoppers, mixers, chutes, valves*
Food:	*Door seals, mixers, robotics, conveyor brakes, dryers, autoclaves*
Pharmaceutical:	*Mixers, robotics, autoclaves, ovens, clean rooms*
Nuclear:	*Access doors, cofferdams, tank doors, nozzle dams*

OPERATION

The inflatable Infla-Sealing gaskets, thanks to the adherence to the seat where they are inserted, swell and deflate thanks to elastomer elasticity used. It is advisable not to inflate gaskets if not completely installed in their operating site, in order to prevent them from bursting in an uncontrolled environment.

Once assembled and inserted in their seat, seals must be brought to the design pressure to obtain the desired seal (the gasket must be inflated between 1.3 and 1.5 bars, in order to counteract internal pressure

CONSTRUCTION

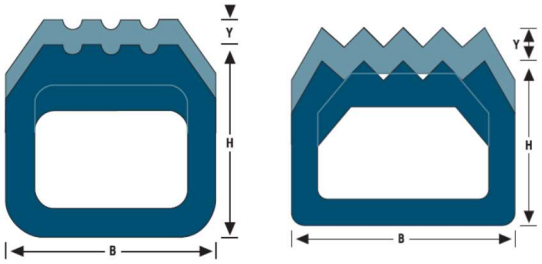
The elements that characterize the quality of the Inflatable seals are:

a) *the quality of the raw material for the extrusion of the desired profile*
b) *the joint of the sections of the profile*
c) *the joint of the valve*

The correct execution of the test joint on the head of the inflatable gasket, such as that of the valve, are the key to the best durability of the gasket, bringing the element to be in continuity with the extruded profile itself.

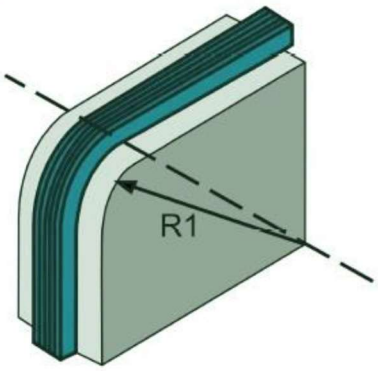
STANDARD HIGH PRESSURE PROFILES

FEATURES

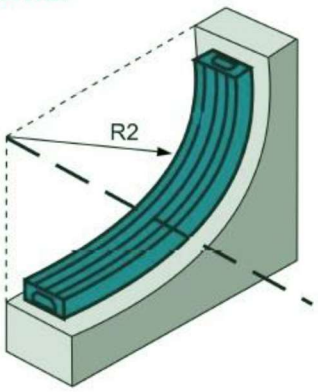


code	A x B	B	H	Y
IS201001	14,0 x 10,0	14	11	3
IS201002	14,0 x 10,0	14	11	3
IS201003	14,0 x 14,0	14	15	2
IS201004	16,0 x 14,0	16	15	3
IS201005	24,0 x 22,5	24	23	4
IS201006	27,0 x 16,0	27	17	3
IS201007	27,0 x 18,0	27	19	4
IS201008	28,0 x 18,0	28	19	3
IS201009	31,5 x 16,5	32	17	4
IS201010	34,0 x 21,0	34	22	3
IS201011	34,0 x 26,5	34	27	5
IS201012	35,0 x 23,0	35	24	3
IS201013	36,0 x 32,0	36	33	3

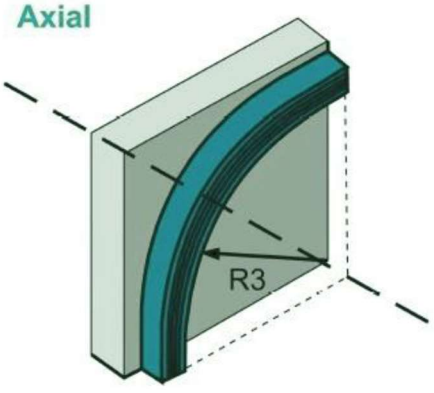
External



Internal



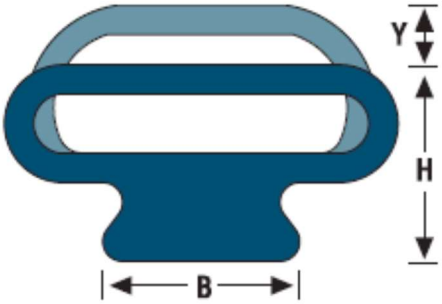
Axial



Profile	Dim.	External R1	Internal R2	Axial R3
IS201014	16,0 x 14,0	50	78	48
IS201015	27,0 x 16,0	70	83,5	111
IS201016	34,0 x 21,0	70	87,5	106
IS201017	36,0 x 32,0	80	87,5	122

STANDARD LOW PRESSURE PROFILES

FEATURES



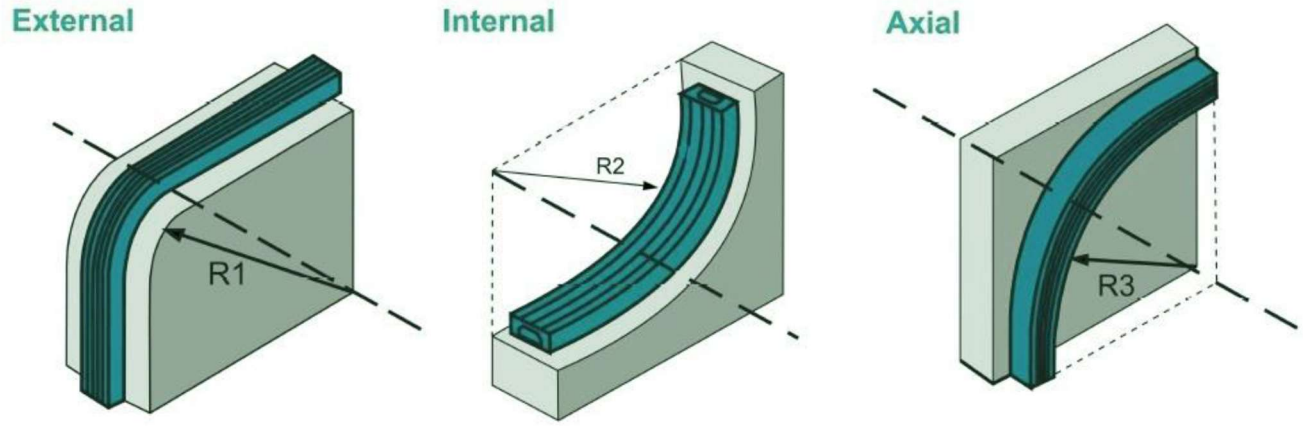
code	A x B	B	H	Y
IS202001	23,0 x 13,5	23	14	5
IS202002	30,0 x 19,5	30	20	5
IS202003	30,0 x 20,0	30	20	5
IS202004	40,0 x 27,0	40	27	13
IS202005	60,0 x 33,0	60	33	12
IS202006	60,0 x 35,0	60	35	15

We will then show you other possibilities of usable profiles with different characteristics for each application

ASSEMBLY

This profile, called OMEGA, is normally installed with a strap that blocks it to the surface of the machine or from an element that allows it to remain adherent to the lower surface.

By applying a pressure of 1.5 bar, a maximum extension of the H + Y seal is obtained

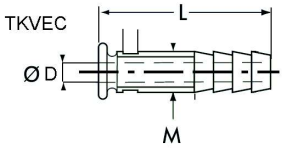


Profile	Dim.	External R1	Internal R2	Axial R3
IS202002	30,0 x 19,5	60	100	90
IS202003	30,0 x 20,0	60	100	90
IS202004	40,0 x 27,0	90	117	160
IS202005	60,0 x 33,0	100	165	230
IS202006	60,0 x 35,0	100	165	230

FITTINGS AND VALVES

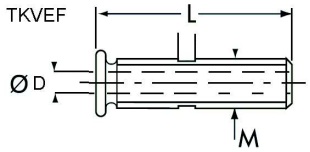
Our standard fittings and valves are made of AISI 316 Stainless Steel. We also produce fittings in any other material, such as bronze, brass and elastomers.

TKVEC



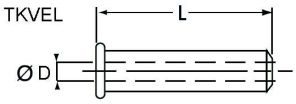
Ø D		1,5		3		5		6		6	
L		30/35 40/50		30/35/40 50/50		40/45/50 60/70/80		40/50/60 70/80/90		50/60/70 80/90/100	
M		M6		M8		M10		M12		M14	

TKVEF



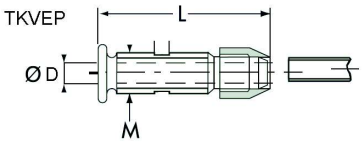
Ø D	1,2	3	3	3	5	5	5	6	6	6	8
L	15/20/25 30/35/40 50	15/20/25 30/35/40 50	20/25/30 35/40/50 60	15/20/25 30/35/40 50/60	20/25/30 35/40/50 60/70	20/25/30 35/40/50 60/70	20/25/30 35/40/50 60/70	20/25/30 35/40/50 60/70	20/25/30 35/40/50 60/70	30/35/40 45/50/60 70/80	40/45/50 60/70/80 90/100
M	M4	M6	7,65x0,79	M8	1/8 G	M10	1/8 NPT	M12	1/4 G	M14	M16

TKVEL



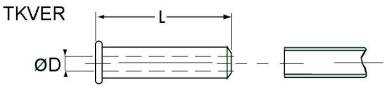
Ø D	1,5	3,4		3,4		5		6,8		6,8	8,5
L	15/20/25 30/40	15/20/25 30/35/40 50		20/25/30 35/40/50		25/30/35 40/45/50 60		30/35/40 45/50/60 70		35/40/45 50/60/70 80	45/50/60 70/80/90

TKVEP



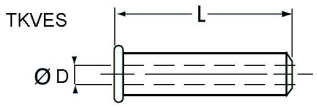
M						M10		M12		M14	
Ø D						3		5		7	
L						50/60/70		50/60/70 80		60/70/80 90	

TKVER



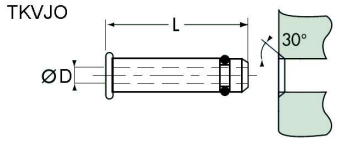
Ø D	1	3		5		7		9		11	
L	25	35		50		60		75		85	

TKVES



Ø D		3	3	3							
L		minimum lengths of 200 mm (by multiple of 100 mm)									

TKVJO

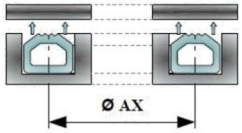


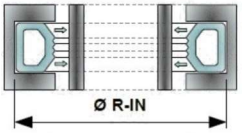
Ø D	1	1,5		2		4		5		6,8	
L	15/20/25 30/40	15/20/25/30 35/40/50		15/20/25/30 35/40/50		20/25/30/5 40/45/50/60		25/30/35/40 45/50/60/70		35/40/45/50 60/70/80	

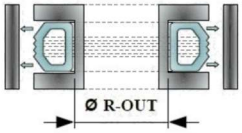
Technical Information for New Applications

Application description

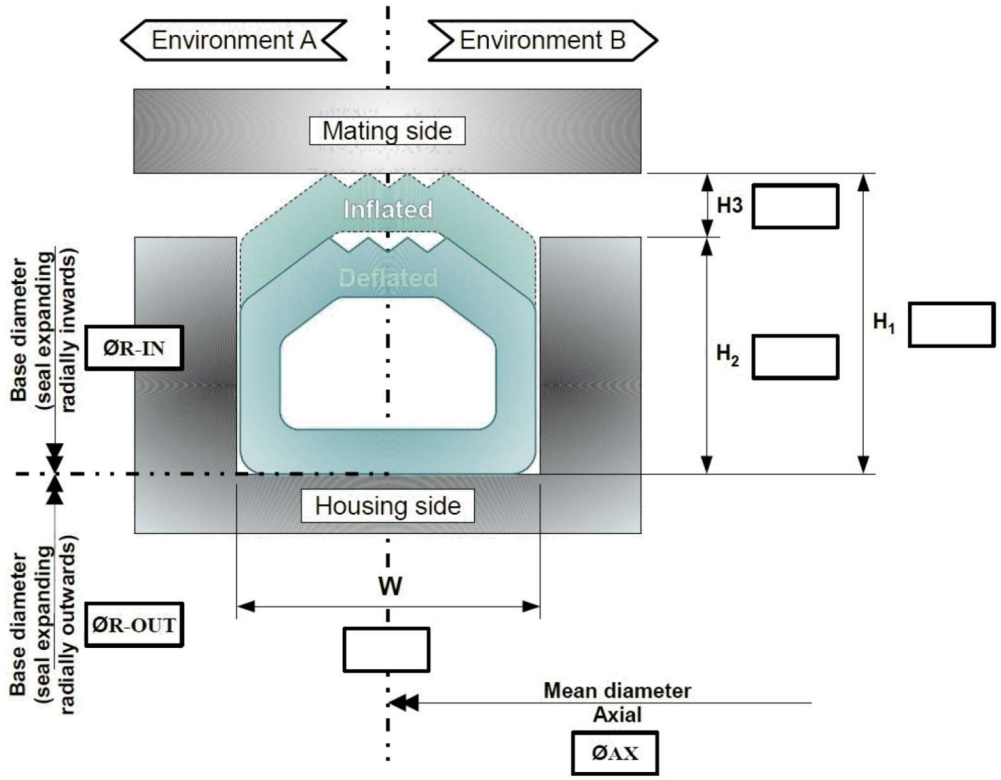
Select one configuration and detail the diameter







Detail the following dimensions: H_1, H_2, H_3 and W on the diagram below



Media to be used to inflate the seal

Air.... ☐	Gas.... ☐	Liquid.... ☐
Do you already have a regulated air supply?..... ☐	Do you already have a regulated gas supply?..... ☐	Do you already have a hydraulic supply?..... ☐

If you already have an Air, Gas or Liquid supply to inflate the seal – please detail the type of fittings used and the gender required to be fitted onto the inflatable seal: