



# VULCATEC

VULCANIZED GASKETS



# Vulcaterc your partner for hot vulcanized gaskets

## About us

Vulcaterc has been delivering know-how and high quality products for over 30 years. As a specialist in the field of made-to-measured gaskets, we offer individualized solutions and products for our customers. Our state-of-the-art services range from tailor-made, single pieces to mass productions.



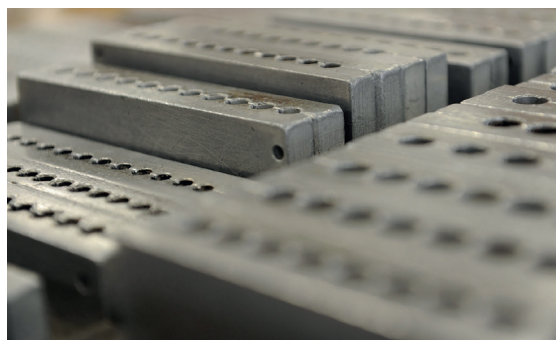
## Core values

Hot-vulcanized rubber gaskets are our core competence. The satisfaction of our customers, partners as well as our employees is crucial to our success now and in the future. Therefore, we pursue only the highest of standards in terms of quality, reliability, and flexibility as a supplier and employer.



## Customised production

The process of hot vulcanization of gaskets involves the permanent cross-linkage of elastomers under the action of pressure and heat. Advantages of hot vulcanization are the barely visible vulcanized joints as well as the almost identical chemical and thermal properties of the vulcanized joints. Furthermore, it is possible to manufacture gaskets with almost any dimensions.



Customised gaskets based on the hot vulcanization method are suitable for static applications. Thanks to the excellent price-performance ratio, even the smallest of quantities or single pieces can be produced.



# Portfolio



## Toroidal gasket rings

Manufactured from extruded round cord. The vulcanized joints are barely visible and the price-performance ratio is excellent.



## Sleeves

Made from panel cut-outs. Can be produced in various styles, such as cone-shaped, with a flange or cylinder-shaped.



## Hose rings

Made from extruded hollow profile. These gaskets can be filled with various materials as needed, to adjust the hardness.



## Custom products

This product range includes inflatable gaskets, flat gaskets, frame gaskets and various profile gaskets with different cross-sections.

## Product overview

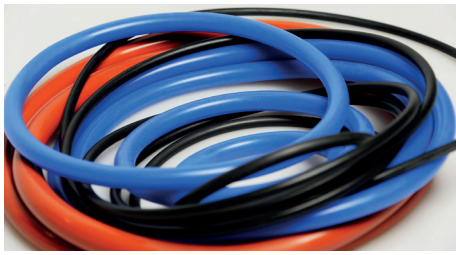
Compound	Description	Colour	Hardness	Temperature-resistance	Resistance							Approval	Standard products			Custom-built		
					Mineral oil (+100 °C)	Acid (25% H2SO4 +50 °C)	Weather a.ozone	Fuel	Water (+100 °C)	Base (50% NaOH +50 °C)	Light		FDA	Toroidal rings	Rubber sleeves	Hose rings	Inflatable gaskets	Frame gaskets
NBR	Nitrile rubber	black	50-75	-30°C to +100°C	6	5	2	5	3	1	3		•	•	•		o	o
NBR	Nitrile rubber	white	60	-30°C to +100°C	6	5	2	5	3	1	3			•			o	o
NR	Natural rubber	red	50	-40°C to +80°C	1	3	3	1	2	5	3	•	•		•		o	o
NR	Natural rubber	beige	45	-40°C to +80°C	1	3	3	1	2	5	3	•	•				o	o
NR	Natural rubber	white	45	-40°C to +80°C	1	3	3	1	2	5	3	•		•			o	o
NR	Natural rubber	black	50	-40°C to +80°C	1	3	3	1	2	5	3			•			o	o
SBR	Styrene butadiene rubber	black	50	-40°C to +70°C	2	3	3	2	2	5	3			•			o	o
CR	Chloroprene rubber	black	50-65	-30°C to +90°C	4	5	5	4	4	5	4		•	•	•		o	o
EPDM	Ethylene propylene diene rubber	black	27-70	-25°C to +120°C	2	6	6	1	6	6	5	•	•	•			o	o
EPDM	Ethylene propylene diene rubber	white	60	-25°C to +120°C	2	6	6	1	6	6	5	•		•			o	o
VMQ	Silicone elastomer	red	50-60	-60°C to +200°C	5	3	6	2	5	2	6	•	•	•	•	o	o	o
VMQ	Silicone elastomer	transparent	50-60	-60°C to +200°C	5	3	6	2	5	2	6	•	•	•	•	o	o	o
VMQ	Silicone elastomer	various	20-70	-60°C to +200°C	5	3	6	2	5	2	6	•	o		o	o	o	o
FKM (Viton®)	Fluoro rubber	black	75	-10°C to +230°C	6	6	6	6	4	6	6	o	•		•	o	o	o
FKM	Fluoro rubber	black	75	-10°C to +200°C	6	6	6	6	4	6	6			•		o	o	o

• = Standard o = On request

6 = excellent; 5 = good; 4 = medium; 3 = sufficient; 2 = unsuitable; 1 = not consistent



# TOROIDAL GASKET RINGS



Hot vulcanised toroidal gasket rings are manufactured from extruded round cord. After measuring out the required dimension, the joint is cut and hot vulcanized. By using special vulcanization mixtures matching the respective material, the chemical and thermal stability of the vulcanized joint is almost the same as the one of the used elastomers. Consequently, toroidal gasket rings are an economical and readily available solution for static applications instead of form-rings.

The advantage is that almost any desired sizes can be produced without incurring any tooling costs, even when manufacturing the smallest of quantities. Furthermore, toroidal gasket rings feature an excellent price-performance ratio.

Range of round cord									
Cord ø	NBR 70 Sh.	NBR 50 Sh.	NR 45 Sh. beige	NR 50 Sh. red	CR 60 Sh.	EPDM 70 Sh.	VMQ 55 Sh. red	VMQ 60 Sh. transp.	FKM (Viton®) 75 Sh.
1	•								
1.5	•								
1.78	•								
2	•	•	•		•	•	•		•
2.5	•	•				•			
2.6							•	•	•
3	•	•	•	•	•	•	•	•	•
3.2	•								
3.5	•					•	•		•
4	•	•	•	•	•	•	•	•	•
4.5	•								•
4.75	•								
5	•	•	•	•	•	•	•	•	•
5.3	•					•	•		•
5.7	•					•	•		•
6	•	•	•	•	•	•	•	•	•
6.4	•								
6.5									•
7	•	•	•	•	•	•	•	•	•
7.5	•								
8	•	•	•	•	•	•	•	•	•
8.4	•								•
9	•	•	•		•	•	•	•	•
9.5	•					•			
10	•	•	•	•	•	•	•	•	•
11	•					•			•
12	•	•	•	•	•	•	•	•	•
12.7	•								
13	•					•			
14	•	•		•		•	•		•
15	•	•	•	•	•	•	•		•
16	•	•					•		
18	•					•	•		
20	•	•	•	•	•	•	•		•
22	•								
25	•		•						
30	•	•	•						
FDA-conform			•	•		•	•	•	
Temp. range	-30°C +100°C	-30°C +100°C	-40°C +80°C	-40°C +80°C	-30°C +90°C	-25°C +120°C	-60°C +200°C	-60°C +200°C	-10°C +230°C
Tolerance: DIN ISO 3302-1	E1	E2	E2	E2	E2	E1	E1	E2	E1

• = In stock    Special ø or colours on request

## Good to know



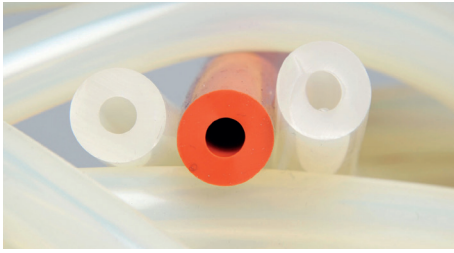
Manufacture using a bevelled cut with an angle of 45° and vertical pressure. Enlarged bonding surface promises excellent tear strength values.



Manufacture using a bevelled cut with an angle of 90° and horizontal pressure. The fusion of the film and base material achieves excellent adhesion.



# HOSE RINGS



Hose rings are manufactured using extruded hollow profile. They are customised in the same fashion as toroidal gasket rings. Analogously, almost any desired sizes can be produced, without incurring any tooling costs, even when manufacturing the smallest of quantities.

The advantage of hose rings is that major irregularities can be equalised. As well, resistances can be influenced with additional filler elements.

Range of tube						
Inside- $\phi$ x Outside- $\phi$	CR 60 Sh.	NBR 65 Sh.	NBR 75 Sh.	VMQ 60 Sh. transparent	NR 40 Sh. red	FKM (Viton®) 75 Sh.
1 x 3				•		
2 x 4				•		•
3 x 5				•		
3 x 6		•		•		•
3.2 x 6.4			•			
4 x 6				•		
4 x 7	•	•		•	•	•
4.8 x 9.5			•			
5 x 8	•			•		•
5 x 9		•				
6 x 9	•			•	•	•
6 x 10		•		•		
6 x 12					•	
6.4 x 12.7			•			
7 x 10	•			•	•	•
8 x 11	•					
8 x 12	•	•		•	•	•
9 x 13	•					
9.5 x 15.8			•			
10 x 14	•			•	•	•
10 x 16		•				
12 x 16				•		
12 x 17	•	•		•		
12 x 18						•
12.7 x 19			•			
14 x 18				•		
14 x 20	•					
16 x 22	•			•		
19 x 25.4			•			
20 x 26				•		
20 x 28	•					
25 x 31				•		
FDA-conform				•		
Temp.-range	-30°C +90°C	-25°C +80°C	-20°C +100°C	-50°C +180°C	-40°C +80°C	-20°C +200°C

• = In stock Special  $\phi$  or colours on request

## Good to know



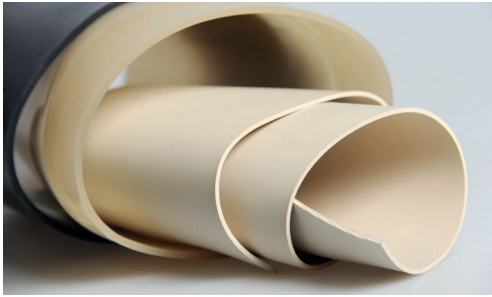
The hollow space of the hose profile achieves increased compressibility of the gasket. The endurance or hardness of the gasket rises with increasing wall strength.



Hose rings can be filled with round cord made of sponge rubber. This option allows for an individual gasket hardness.



# RUBBER SLEEVES



Sleeves are produced from rubber sheets. If their height is 1000 mm and lower and the wall strength not smaller than 2 mm, they can be vulcanized using a 45° vulcanization spot. If the wall strengths are smaller or the heights greater than 1000 mm, they are vulcanized with overlapping joints that are approximately 20 mm wide. Additional sealing is available for uses in which the vulcanization joint is exposed to increased stress.

- Types:
- cylindrical sleeves
  - cone shaped sleeves
  - funnel shaped sleeves
  - sleeves with flange and/or boreholes

Range of plaques																			
Wall thickness	NBR 70 Sh.	NBR/SBR 65 Sh.	NBR/SBR 50 Sh.	NBR 60 Sh.	NR/SBR 40 Sh.	NR/SBR 45 Sh.	SBR 50 Sh.	EPDM 70 Sh.	EPDM 60 Sh.	EPDM 50 Sh.	EPDM 70 Sh. KTW	EPDM 27 Sh.	CR/SBR 65 Sh.	CR/SBR 50 Sh.	VMQ 50 Sh.	VMQ 60 Sh.	VMQ 60 Sh.	FKM 75 Sh.	
0.5	•				•														
1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•
1.5	•		•						•				•	•	•			•	•
2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•
3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•
4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•
5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•
6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•
8	•	•		•	•	•	•	•	•	•		•	•	•	•			•	•
10	•	•		•	•	•	•	•	•			•	•	•		•		•	•
12	•	•			•		•	•					•	•					
15		•		•	•								•	•					
20	•				•									•					
Colour	black	black	black	white	beige	white	black	black	white	black	black	black	black	black	transp.	transp.	red	black	
FDA-conform				•		•			•						•	•	•		
Temp.-range	-30°C +100°C	-10°C +70°C	-10°C +70°C	-35°C +110°C	-30°C +70°C	-30°C +70°C	-35°C +70°C	-40°C +100°C	-30°C +100°C	-40°C +100°C	-40°C +120°C	-45°C +100°C	-10°C +70°C	-20°C +70°C	-60°C +200°C	-60°C +200°C	-60°C +220°C	-10°C +200°C	

• = In stock

## Good to know



Cylindrical sleeves



Cone shaped sleeves



Funnel shaped sleeves

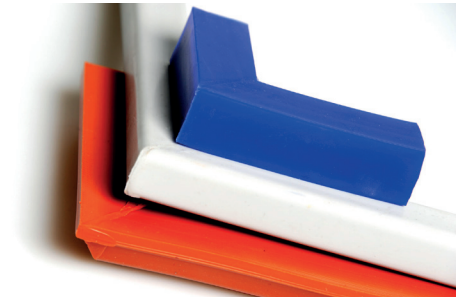


# PROFILES, CUSTOM PRODUCTS



## Inflatable gaskets

Inflatable gaskets are made according to individual customer specifications. These gaskets can be continuous or designed with an end plug. As for the selection of valves and the valve safety clip, the optimal solution is determined in cooperation with the customer.



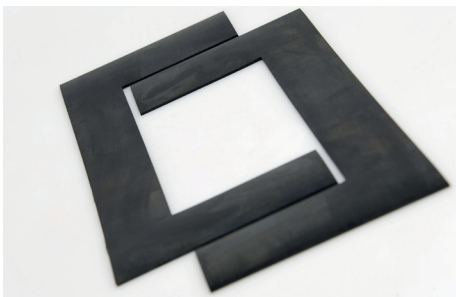
## Frame gaskets

Frame gaskets are hot vulcanized in the corners using special tools. The methods developed for this purpose promise excellent adhesion values and the option to add sealant to the vulcanization joints in the corners.



## Profile gaskets

Profile gaskets do exist in many different versions. Almost every customer-specific profile can be extruded and hot vulcanized. The production of profile gaskets implies most likely a pre-investment in vulcanization tools.



## Flat gaskets

Flat gaskets are cut out of panels. Depending on the dimension, gaskets can consist of several segments joined by vulcanization. The advantage of this manufacturing solution is that gasket dimensions greater than the original plaques are possible. In addition, the manufacture of segments helps minimise surplus material.

## Good to know



Custom products are not deliverable as standard items from stock. These articles are produced according to individual customer specifications. Additional tooling costs may be incurred for these products.

The expected costs for possible tools depend on product specifics. We are happy to consult and inform you about the best alternatives for your custom-made specifications and wishes.

## Our services

Our expertise and experience allow us to develop individual solutions, by providing you with know-how and advice.

Thanks to our extensive range of standard products as well as short processing and planning timeframes, we are able to guarantee special express production within a very short lead time.

In addition to express productions and individual packaging options, we offer special tolerance solutions and optimisations.



## Quality management

Our quality management system according to ISO 9001:2008 is aimed at the continuous improvement of the entirety of our corporate processes.

Both the product and service quality have the highest priority at Vulcatec. This helps us provide our customers with a smooth and reliable management of their needs.



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