



# CLAMP SEALS

**Clamp seals** are the ideal sealing element for flange connections in continuously operated systems. Freudenberg has developed clamp seals for simple and reliable pipe connections for a wide range of applications in the process industry. The portfolio includes clamp seals made of five approved high-performance materials:

- EPDM (black)
- EPDM (white)
- Fluoroprene® XP (light blue)
- VMQ (transparent), peroxide cross-linked
- VMQ (transparent), platinum cross-linked

Please see page 2 for a detailed overview of the materials.

## Dimensions of conventional clamp seals according to DIN 32676:

- Series A (metric) nominal dimensions from DN6 – DN200
- Series B DN/OD 10.2 – DN/OD 219.1
- Series C (imperial) 0.25" – 6"

Other dimensions available on request.



Watch our installation video!

## EVERYTHING FROM A SINGLE SOURCE

Our expertise in the field of clamp seals – your benefits



### MATERIAL EXPERTISE

- Material portfolio with all internationally relevant approvals
- Very good chemical resistance
- Very good resistance to CIP/SIP processes and media
- Extractables and leachables studies show very low migration values



### PRODUCT AND MANUFACTURING EXPERTISE

- Made in Europe
- Standardized dimensions and close to norm variants available
- Good elasticity and easy assembly, even with distorted flange joints
- Reusability after opening the joint
- High operating performance
- Also available without outer lip on request



### CONSULTING AND SERVICE EXPERTISE

- Profound advice on material selection
- Complete documentation of material approvals and conformities
- Rapid delivery capability thanks to worldwide presence and extensive stockholding
- Customized packaging concepts (individual and kit packaging, customer-specific packaging bags and labels)
- Complete traceability
- Additional possibility for traceability through laser marking

## MATERIAL OVERVIEW

MATERIAL				CONFORMITIES / APPROVALS										
				FOOD & BEVERAGE INDUSTRY						PHARMA				
MATERIAL NAME	COLOR	CROSS-LINKING	CHARACTERISTICS	EU (REG.) 1935/2004	EU (REG.) 2023/2006	MOCA / DECREE 21.03.1973	BNIC (COGNAC)	FDA	NSF 51	3-A <sup>®</sup> SANITARY STANDARDS	ADI FREE	GB 4806 / GB 9685	USP CLASS VI CH. 88 (IN VIVO)	USP CHAPTER 87 (IN VITRO)
70 EPDM 291	black	peroxide	<ul style="list-style-type: none"> <li>Broad resistance</li> <li>Excellent elasticity behavior</li> </ul>	●	●			●	●	●	●		●	●
70 EPDM 253815 (on demand)	white	peroxide	<ul style="list-style-type: none"> <li>For highest purity requirements</li> <li>Broad resistance</li> <li>Excellent elasticity behavior</li> </ul>	●	●			●		●	●		●	●
75 Fluoroprene <sup>®</sup> XP 41	light blue	peroxide	Excellent resistance to aggressive cleaning media, high temperatures and fatty media	●	●	●	●	●	●	●	●		●	●
70 VMQ 117055	transp.	peroxide	<ul style="list-style-type: none"> <li>Very good chemical and thermal resistance</li> <li>Very good low-temperature flexibility</li> </ul>	●	●			●		●	●	●	●	●
70 VMQ (on demand)	transp.	platinum	High-purity, platinum cross-linked silicone material for the pharmaceutical and medical sectors					●			●		●	

The information contained herein is believed to be reliable, but no representation, guarantees or warranties of any kind are made to its accuracy or suitability for any purpose. The information presented herein is based on laboratory testing and does not necessarily indicate end product performance. Full scale testing and end product performance are the responsibility of the user.

[www.fst.com](http://www.fst.com)