

GASKETS

TECHNICAL TEXTILES

EXPANSION IOINTS

INSULATION

NEW MATERIALS





Application areas

novaform® HPG is the ideal choice for a wide range of different applications. novaform® HPG stands for innovative high-performance gaskets – from standard DIN flanges to special gaskets with additional functions. novaform® HPG demonstrates its potential not only in many different automotive applications but also in industrial and for auxiliary devices.

Substrate materials and coatings

The basis for unique requirements is our variety of substrates:

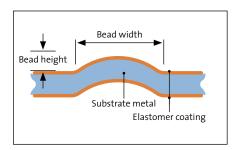
- Fibre-reinforced composite materials
- Construction steel
- Stainless steel
- Aluminium
- High-temperature alloys

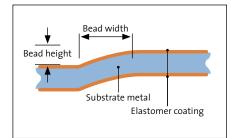
Innovative coatings guarantee ideal combinations for your application, such as:

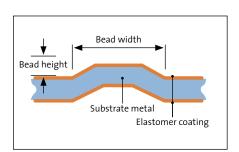
- NBR
- FKM
- Silicone
- High-temperature coating
- Anti-friction coating

Sealing principles

The individually designed bead geometry of the novaform® HPG is the main principle of the macrosealing.







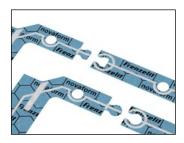
Full bead Half bead Trapezoidal bead



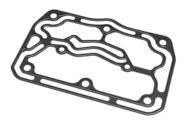
Individual variety – optimum potential

Coating processes

The high-tech layers used for macrosealing purposes are applied by solid or partial coating processes.



Multi-piece flexible gasket with puzzle joins and screen printing



Metal bead gasket



Screen-printed gasket



Dispenser bead



Moulded sealing lip

Special solutions

Innovative products require innovative solutions. Thanks to the integration of additional functions, novaform® HPG is an excellent way to increase your added value.



Filter element for cooling agent decolourisation



Deep draw gasket with attachment clips and an integrated heat shielding function



Sealing end shield with a bearing function and thermal + acoustic insulation



EGR gasket with attachment clips and screen



Slanted half-bead gasket for hose clamp connection



Subassembly challenges are most welcome. Just contact us!

automotive@frenzelit.de



Design matrix

The material and coating is determined by temperature and pressure.

Substrate materials:

- Stainless steel
- High-temperature alloys

Coatings:

- FKM
- High-temperature coating

Substrate materials:

- Fibre-reinforced composite materials
- Stainless steel
- High-temperature alloys

Coatings:

• FKM

• High-temperature coating

Substrate materials:

- Fibre-reinforced composite materials
- Construction steel
- Stainless steel
- Aluminium

Coatings:

- NBR
- FKM
- Silicone
- Anti-friction coating

Substrate materials:

- Fibre-reinforced composite materials
- Construction steel
- Stainless steel
- Aluminium
- High-temperature alloys

Coatings:

- NBR
- FKM
- Silicone
- High-temperature coating
- Anti-friction coating

Surface pressure

Gasket design questionnaire

Please complete and return by fax (+49 9273 72-220) or e-mail (automotive@frenzelit.de)

Customer			Data	
Customer:		Phone	· · · · · · · · · · · · · · · · · · ·	
		rnone	E-mail	
Technical: Mr/Ms				
Commercial: Mr/Ms				
Project/heading				
Project/heading Status: Feasibility	retudy Drainet	New developme	ont Ontimication	n Series
Status: Feasibility	rstudy Project	New developme	ent Optimisatio	n Series
Operating conditions		T_{min}	т	T _{max}
Flange temperatures in the sealing area [°C]		' min	T _{permanent} operation	' max
riange temperatures in the scaling area [e]		P _{min}	D	P _{max}
Pressure levels [bar]		r min	Ppermanent operation	гmax
Pulsating Yes	No	Relative pressure	Absolute pre	essure
i disatilig 165	NO	Relative pressure		
Sealed media				
Type of sealing Static Dynamic Contact arrangement Floating arrangement				
Others:				
Bolts				
Number: Bolt dimensions: M Quality Tightening torque Nm				
Flanges				
Material		Thickness [mm]	Roughness [Rz]	Flatness [mm]
Leakage criteria/sealing location				
Loss prevention device/positioning				
Regulations/specifications				
Planned dates				
Quotation	Concept	Prototypes	Initial samples	SOP
Planned numbers	Prototypes	Initial series	Series (1st year)	Series (subsequent years)
Comments				

If you have any questions about technical applications, we will be delighted to help you:

Good for people and the environment.

From research and development to manufacturing at our factory and use of the product by the customer: quality assurance and a responsible attitude to resources and the environment are central features of all we do – throughout the life cycle of every single product.

The Frenzelit Automotive Gaskets Division has obtained certification of its compliance with the requirements not only of ISO 9001 and ISO/TS 16949 but also of ISO 14001. This means complete transparency in all areas and therefore guarantees maximum safety and security – for our employees, for the environment and for our customers.

Quality management

ISO 9001

ISO/TS 16949

Environmental management

ISO 14001



Further automotive products from Frenzelit:



novapress® Fibre gaskets



novaplan®Facing materials for cylinder head gaskets, heat shield paper



isoTHERM® SGMoulded 3D parts
for high-temperature
insulation

GASKETS

TECHNICAL TEXTILES

EXPANSION JOINTS

INSULATION

NEW MATERIALS

Frenzelit Werke GmbH P.O. Box 11 40 95456 Bad Berneck Germany Phone +49 9273 72-0 Fax +49 9273 72-220 info@frenzelit.de www.frenzelit.com

