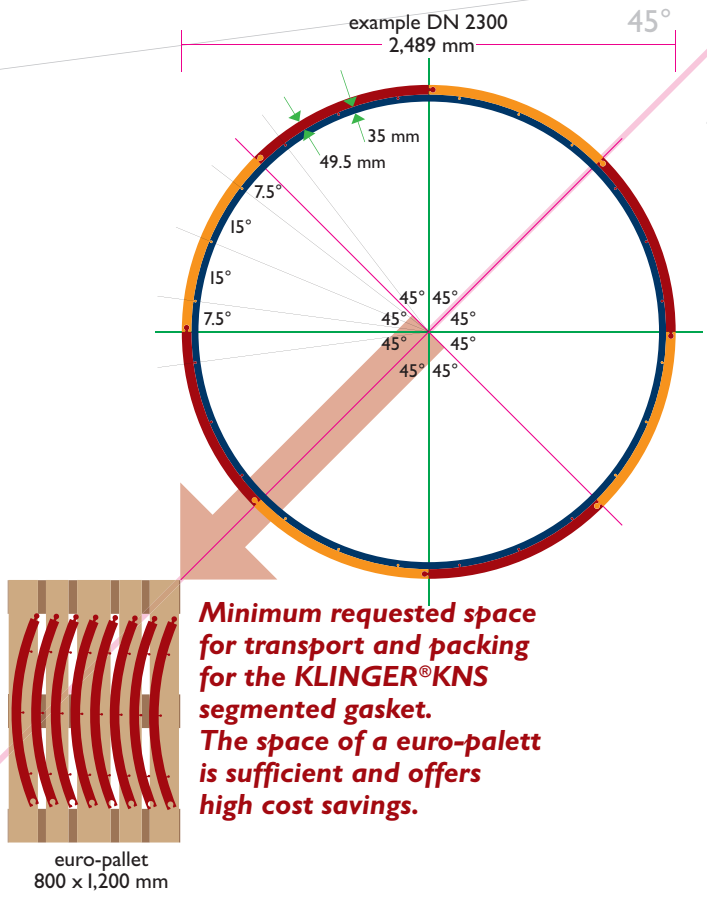
KLINGER® KNS

The revolutionary segmented, high pressure rubber gasket



euro-pallet
800 x 1,200 mm

Minimum requested space for transport and packing for the KLINGER®KNS segmented gasket. The space of a euro-palett is sufficient and offers high cost savings.

KLINGER®KNS
The revolutionary segmented, highpressure rubber gasket

Designed for use in pipelines and nonstandard equipment they make installation easier and cheaper.
Gaskets larger than DN 2000 in diameter are complicated to produce and generate high packing and transportation costs, which could be much higher than the cost of the gasket itself.
Also the handling of gaskets in these sizes, e.g. DN 4000, is difficult.

KLINGER® has cared for this problem

KLINGER® has developed a high pressure gasket with compression stop which can be separated into segments and therefore packed and transported in euro-pallets.

This was possible as KLINGER® has defined the exact roles of the different elements of the gasket.

The outer ring

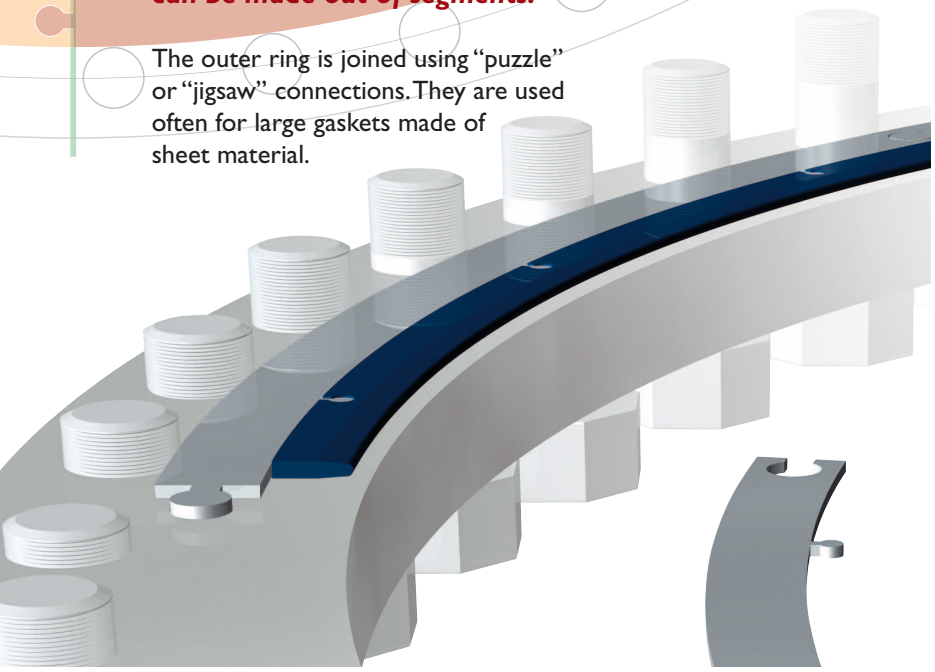
The gasket's compression stop design is necessary for large sizes, as there are high forces to withstand at the flange, caused by expansion forces and high bolt loads.

The outer ring – several materials are possible from stainless steel to plastic – is directly loaded by the flange faces and is able to transfer these high forces through to the flange. So, a mechanically secure, high stability flange connection is ensured.

The forces applied to this ring manifest themselves mainly in an axial direction. The forces resulting from the internal pressure and acting in radial direction are quite small in comparison to the axial forces, even with high internal pressures.

For these reasons, the outer ring can be made out of segments.

The outer ring is joined using "puzzle" or "jigsaw" connections. They are used often for large gaskets made of sheet material.



The sealing ring

The seal is achieved using a one-piece rubber profiled ring. As the ring itself is very flexible it can be easily packed for transport on a euro-pallet.

This inner sealing ring is thicker than the outer ring and will be compressed during bolting the flange. After compression to the thickness of the outer ring, the flange forces are directed beside the sealing ring through the outer ring and therefore the sealing ring cannot be destroyed by the high forces.

The sealing ring will be mounted into the outer ring in the same manner as the outer ring with puzzle connections.

The installation is quite simple

A At first the parts of the outer ring have to be assembled together, then the sealing ring has to be notched into the outer ring and the gasket is finished.

No specific tools are needed for the assembly of the gasket.

B When all elements of the pipeline are mounted, the KLINGER®KNS gasket is assembled aside, raised through the "ears" provided for this purpose and then slipped between the flanges.

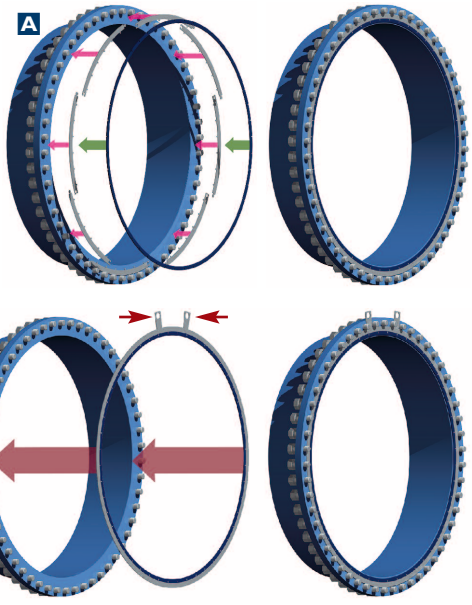
Material variety

Due to the flexible methods of production, the outer ring could be made of a high variety of materials – from stainless steel to plastics e.g. for plastic parts in the water and wastewater industries.

Also the sealing ring could be offered in different rubber types.

The dimensions of the gasket are not limited.

Use the new flexibility and reliefs which we offer to you with this new gasket KLINGER® KNS and contact us.



KLINGER®

KLINGER®KNS

Intended purpose

A gasket with a compression stop is necessary at large diameters to cover the enormous forces at the flange, resulting from the pipe tensions and the high number of bolts.

Function and durability

The performance and service life of KLINGER® gaskets depend in large measure on proper storage and fitting, factors beyond the manufacture's control. We can, however, vouch for the excellent quality of our products.

With this in mind, please also observe our installation instructions.

Dimensions

DN 2000 and bigger.
Smaller than DN 2000 on request.

The typical advantages are at diameters > DN 2000 and bigger.

However, we can provide smaller dimensions for which we will design the corresponding layout.

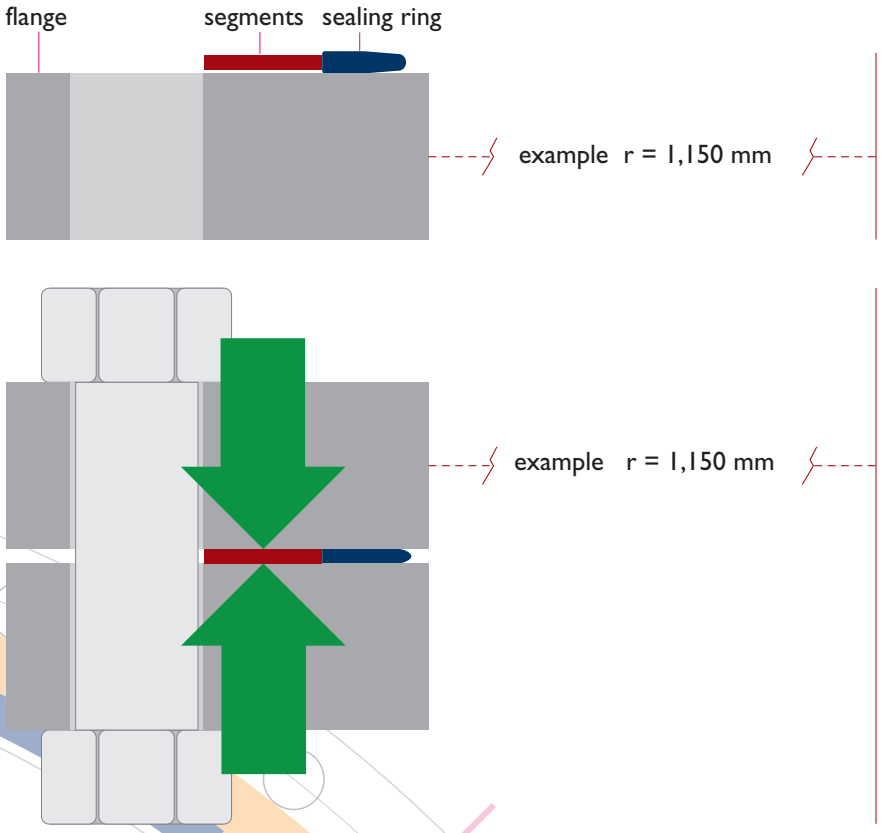
We can deliver according all standards as DIN, EN, ASME/ANSI, JIS, factory standards as well as special dimensions.

Tests and certificates

EPDM:
EN 681-1, ACS, DVGW, W270, Elastomerleitlinie, WRAS
NBR:
EN 682, DVGW

Registered for patent approval.

The principle of the off load gasket design



BLUEcoMPETENCE Alliance Member
Partner der Nachhaltigkeitsinitiative des Maschinen- und Anlagenbaus

45°

45°

KLINGER Portugal

Klinger Portugal, Lda.
Via José Régio, 36
Centro Empresarial Vilar do Pinheiro
4485-860 Vila do Conde
T: +351 22 947 0910
E-mail: geral@klinger.pt

Delegação Lisboa
Rua de Cabo Verde, 8
Prior Velho 2685-316
T: +351 21 940 6620
E-mail: lisboa@klinger.pt