DNV-GL

APPROVAL CERTIFICATE

This is to certify, that the undernoted products have been approved in accordance with the relevant requirements of the DNV GL Approval System.

Certificate No.

94 612 - 10 HH

Company

Frenzelit Werke GmbH

Frankenhammer 7

95460 Bad Berneck, GERMANY

Product

PTFE based Flat Gasket

(structured and modified PTFE, filled with functional fillers)

Type

novaflon® 100, 200, 300, 500

Technical Data / Application

Technical Data

Material 100 200 300 500 Density (DIN 28090-2) - g/cm³ 1,7 2,9 2,1 0,9 Compressibility (ASTMF36J) - % 25 3 5 50 Recovery (ASTM F36J) - % 40 45 45 10 Residual stress 30MPa@150°C (DIN 52913)- N/mm² 14 12 16 18 Cold compressibility (DIN 28090-2) - % 20 3 40 Hot creep 20MPa@150°C (DIN 28090-2) - % 45 40 15 20

Tightness (DIN 3535-6) - mg/(sxm) <0,015
The specified data are for gasket material of 2mm thickness

Dimensions (mm): 1500 x 1500 Thickness (mm): 1,5, 2,0, 3,0

Application Refer to page 2.

Approval Standard

DIN 86076:2007, ASTM F36, DIN 52910, DIN 3535-6, DIN 28090

Documents

- Test report dated 26.04.2010 DIN 52913, DVGW test reports acc. to DIN 3535-6, Quality control reports according to standards referenced.
- Audit report

- Technical data sheets

Remarks

None

Valid until 2020-06-15

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File No.

XI.B.03

Hamburg, 2015-04-29

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www.dnvql.com

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Application

- Ship's piping systems including cargo lines on Chemical and Gas Tankers carrying propylene oxide and mixtures of ethylene / propylene oxide.
- Maximum allowable working pressure and temperature according to the specification of the manufacturer.

The selection of the gasket material for the corresponding service, the storage and the right installation are to be according to the manufacturers instruction.

Valid until 2020-06-15

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Hanspeter Raschle

Hagen Markus