DNV·GL

Certificate No:
TAM000011X

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Elastic Couplings

with type designation(s)
PERIFLEX SERIES PVN / PVP

Issued to
Stromag GmbH
Unna, Nordrhein-Westfalen, Germany

is found to comply with
DNV GL rules for classification – Ships
DNV GL rules for classification – High speed and light craft

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.

Issued at **Hamburg** on **2019-02-26**
This Certificate is valid until **2024-02-25**.
DNV GL local station: **Essen**

Approval Engineer: **Wolfgang Schütz**

for **DNV GL**

Burkhard Lilienthal
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Product description

Flexible rubber coupling

Application/Limitation

The coupling series is approved for auxiliary and propulsion duty. Ratings and coupling charateristics according to catalogue "Catalogue D-812-90000F 9/17" and with the limitations given below.

Permissible damping power and other coupling characteristics to be adjusted for the actual application according to the guidelines given in the approved catalogues. An application factor of min. 1,2 is recommended.

The connection to driven member is not covered by the approval and details have to be submitted for approval in each separate case. Keyed connections are only permitted for unidirectional drives with low torque amplitudes and insignificant bending stresses.

Couplings for single propulsion plants have either to be fitted with an emergency claw device or other approved arrangement which could be monitoring and alarm system according to RU-Ships Pt.4, Ch.4, Sec.5 [5].

Approved sizes of "natural rubber (NR)":

Coupling Size	**Tyre**				
Periflex VN 183	VN 18311	VN 18331	VN 18321	VN 18341	VN 18351
Periflex VN 230	VN 23011	VN 23031	VN 23021	VN 23041	VN 23051
Periflex VN 280	VN 28011	VN 28031	VN 28021	VN 28041	VN 28051
Periflex VN 283	VN 28311	VN 28331	VN 28321	VN 28341	VN 28351
Periflex VN 350	VN 35011	VN 35031	VN 35021	VN 35041	VN 35051
Periflex VN 358	VN 35811	VN 35831	VN 35821	VN 35841	VN 35851
Periflex VN 430	VN 43011	VN 43031	VN 43021	VN 43041	VN 43051
Periflex VN 433	VN 43311	VN 43331	VN 43321	VN 43341	VN 43351
Periflex VN 436	VN 43611	VN 43631	VN 43621	VN 43641	VN 43651
Periflex VN 439	VN 43911	VN 43931	VN 43921	VN 43941	VN 43951
Periflex VN 544	VN 54411	VN 54431	VN 54421	VN 54441	VN 54451
Periflex VN 549	VN 54911	VN 54931	VN 54921	VN 54941	VN 54951
Periflex VN 666	VN 66611	VN 66631	VN 66621	VN 66641	VN 66651
Periflex VN 726	VN 72611	VN 72631	VN 72621	VN 72641	VN 72651
Periflex VP 433	VN 43311	VN 43331	VN 43321	VN 43341	VN 43351
Periflex VP 436	VN 43611	VN 43631	VN 43621	VN 43641	VN 43651
Periflex VP 439	VN 43911	VN 43931	VN 43921	VN 43941	VN 43951
Periflex VP 544	VN 54411	VN 54431	VN 54421	VN 54441	VN 54451
Periflex VP 549	VN 54911	VN 54931	VN 54921	VN 54941	VN 54951
Periflex VP 666	VN 66611	VN 66631	VN 66621	VN 66641	VN 66651
Periflex VP 726	VN 72611	VN 72631	VN 72621	VN 72641	VN 72651

Type Approval documentation
Tests carried out

Marking of product

The product to be marked with manufacturer's name or trademark and type number identification

Periodical assessment

For retention of the Type Approval, a DNV GL surveyor shall perform an assessment after 2 years and after 3.5 years to verify that the conditions of the Type Approval are complied with. A renewal assessment will be performed at renewal of the certificate.

The objective of the Periodical Assessment is to verify that the conditions for the Type Approval are not altered since the Type Approval Certificate was issued. The main scope of the Periodical Assessment will normally include:

- Verification of the Type Approval applicant's production and quality system w.r.t. ensuring continued consistent production of the Type Approved products at the Type Approval applicant's own premises and at other companies that are given the responsibility for manufacturing of the products
- Review of the Type Approval documentation and that this is still used as basis for the production
- Review of possible changes to the design, the material and the performance of the product
- Verification of the product marking

In cases where the Type Approved product is manufactured at other companies, the Periodical Assessment shall verify that the Type Approval applicant has a quality control system for consistent production at their licensees/subcontractors. Furthermore Periodical Assessment shall be carried out randomly at these companies.

When a Type Approved product is manufactured at other companies, the Type Approval applicant takes the sole responsibility for the conformity of the product to the applicable requirements.

Other conditions

DNV GL Product certificate is not required for couplings for auxiliary duty with power rating below 500 kW and rated torque less than 5 kNm, where torsional vibration calculations are not required.

This certificate replaces DNV certificate no. M-12631 and GL certificate 12 376 – 98 HH.

END OF CERTIFICATE