Certificate No: LR25235219TA
Issue Date: 07/10/2025
Expiry Date: 06/10/2030

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**Vulkan Kupplungs- und Getriebebau**
Address	B. Hackforth GmbH & Co. KG, Heerstrasse 66, Herne, 44653, Germany
Type	Flexible Shaft Couplings
Description	Torsional flexible rubber couplings, compensating axial and angular and to a certain degree, radial displacement of connected machinery, 4 rubber qualities or alternatively silicone are available for the flexible elements, 3 duty class factors.
Trade Name	VULASTIK-L
Application	For essential and non-essential services on ships and offshore installations classed or intended for Classification with Lloyd's Register. In single engine propulsion systems only couplings with a "get you home" device to be installed
Specified Standard	Lloyd's Register Rules and Regulations for the Classification of Ships, 2025

Ratings

	Natural Rubber	Silicone
Size:	X1411 to X43DA	X1611S to X4311S
Dimension Group:	X1410 to X43D0	X1610 to X4310
Nom. Torque (kNm):	0,52 to 52	1.04 – 26.0
Max. Perm. Speed (1/min):	5300 to 2500	4100 - 2500

Downloaded Copy

Flans Kemp

Global Machinery Team Manager to Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Type Approval Certificate

Other Conditions

1. The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations
2. If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply
3. The MGDA No. TSO/24-015398A-M-0, revision No. 1 dated 07.10.2025 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Downloaded Copy

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.