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## **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	Hasse & Wrede GmbH
Address	Georg-Knorr-Straße 4, 12681 Berlin, Germany
Place of Production	Hasse & Wrede CVS Dalian, China ltd.
	Automobile Parts Industrial Park, Block No. 48, DDA, Dalian, 116620, China
Place of Production	Bendix Commercial Vehicle Systems LLC
	Plant 2, 2051 Riverfork Drive, Huntington, IN, 46750, United States
Туре	Torsional Vibration Damper
Description	Torsional Vibration Damper
Trade Name	AA, AL, AP, AM, AU, GG, FV, HA, HE, HB, ND, HV
Application	As torsional vibration dampers for main and auxiliary diesel engines
Specified Standard	Lloyd's Register Rules and Regulations for the Classification of Ships, 2020
Other Conditions	Size and types of dampers to be in accordance with the producer's instructions and recommendations

**Olaf Schmidt** 

Lead Specialist to Lloyd's Register EMEA A member of the Lloyd's Register group

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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.

**Previous Version:** 00/20001 (E4)

The Design Appraisal Document HPC/HMD 2045-00, Issue No. 6 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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