

LLOYD'S REGISTER TYPE APPROVAL – DESIGN APPRAISAL DOCUMENT

Issued by: Hamburg Technical Support Office (HPC 1461117)

Issued to: HKS GmbH

For: CORRUGATED PTFE HOSE ASSEMBLY

SO __/16/B-DN __/B-DN __-800

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 03 (July 2017) and this Design Appraisal Document forms part of the Certificate.

COMMENTS

1. Each flexible hose assembly is to be tested by hydraulic pressure 1,5 times the design pressure to the surveyor's satisfaction.
2. Flexible hose assemblies are not to be installed where they may be subjected to torsional deformation.
3. For flexible hose assemblies conveying flammable fluids in close proximity to hot surfaces, electrical installation or other sources of ignition, the risk of ignition due to failure of the hose assembly and subsequent release of fluids is to be migrated as far as practicable by the use of screens or other suitable protection.
4. The installation of flexible hose assemblies is to be in accordance with the manufacturer's instructions and use limitations with particular attention to the following: orientation, end connection support, avoid of hose contact that could cause rubbing and abrasion, minimum bend radii.

APPROVAL DOCUMENTATION

Form 2571	Application for Type Approval	28.09.2019
09/20033(E1)	Previous LR-TA Certificate	27.11.2014
2906334-05	Fuel hose S032/016/B-DN32/B-DN32-800	02.06.2009
2906334-02	Fuel hose S050/016/B-DN50/B-DN50-800	02.06.2009
2906334-01	Fuel hose S050/016/B-DN65/B-DN65-800	02.06.2009

TEST REPORTS

-	Production Quality Assessment	23.12.2019
-	Burst pressure test of hose assemblies at HKS Rostock witnessed by LR Surveyor	12.10.2009
76238465	Pressure impulse test based on ISO 6802 and 6803 for sizes DN50 and 65 at TÜV Süd Automotive GmbH in Garching witnessed by LR Surveyor	28.09.2009
60/08	Fire endurance test according ISO 15540 for types S050/016/B-DN65/B-DN65-800 and S032/016/B-DN32/B-DN32-800 at WTD71 in Eckernförde	12.08.2009

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Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations. Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.