



Type Approval Certificate

Germanischer Lloyd

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

Certificate No. 84 530 - 92 HH

Company Semperit Technische Produkte Gesellschaft mbH
Triester Bundesstr. 26
2632 Wimpassing, AUSTRIA

Product Description FLAME RESISTANT HYDRAULIC HOSES

Type 4SP corresponding to EN 856

Environmental Category None

Technical Data / TECHNICAL DATA

Range of Application	Inner tube	synth. rubber
	Reinforcement	four steel wire braids
	Cover	synth. rubber
	Fitting types	swage ferrules, pipe connectors, tapered nipples and flanges acc. to Semperflex Rivalit GmbH design
	Size range [DN]	DN 10 to DN 51
	Pressure range [bar]	acc. to EN 853
	Temperature range	-40 [°C] to 100 [°C] (depending on media used)

RANGE OF APPLICATION

The a.m. hose type may be used acc. to their suitability in:

- Fuel oil, lubricating oil and hydraulic oil systems
- Bilge and ballast systems
- Fresh and seawater cooling systems

(continued on page 2)

Test Standard In acc. with Chapter 8, Guidelines for the Performance of Type Tests, Part 6 - Test Requirements for Mechanical Components and Equipment, Edition 1998.

Documents

- Test report no.: 13/04; 16/04; 42/04, WTD 71 Eckernförde, dated 15.06.2004
- Technical Data
- Catalogue

Remarks

- The use of hose assemblies is not permitted in permanently pressurized starting air lines of diesel engines.

Valid until 2012-10-08

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File No. II.D.01

Hamburg, 2007-08-29

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RANGE OF APPLICATIONS

- Compressed air systems*
- Secondary piping systems

* Pin prick cover is required for air or gas applications above 17 [bar].

PRODUCTION PLACES

HOSES: Semperit Technische Produkte Gesellschaft mbH
Triester Bundesstraße 26
A-2632 Wimpassing

FITTINGS: Semperflex Rivalit GmbH
Steinhardter Straße 32 A
D-55596 Waldböckelheim

Semperflex Optimit a.s.
Vitkovska ul. 391
CZ-74235 Odry

REMARKS / LIMITATIONS

- The current Rules of Germanischer Lloyd Chapter 2-Machinery installation, Section 11 are to be observed.
- The use of the hoses outside the range of application is subject to special consideration by Germanischer Lloyd in each individual case.
- The combination of high temperatures and high pressure reduce the hose life.
- The use of hose assemblies is not permitted in permanently pressurized starting air lines of diesel engines.
- Type approved hoses may be assembled with fittings by recognized manufacturers* of hose assemblies only.

* See VI - Additional Rules and Guidelines, Part 3 - Machinery Installations, Chapter 9 - Guidelines for the Recognition of Manufacturers of Hose Assemblies and Compensators.

The selection of the hoses for the corresponding application and the proper assembly are to be in accordance with the instructions of the manufacturer.

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This certificate is issued on the basis of "Guidelines for the Performance of Type Approvals Part 1, Procedure".