Certificate No: LR2567992TA
Issue Date: 28/05/2025
Expiry Date: 27/05/2030

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	**Ningbo Qingze Electromechanical Equipment Co., Ltd.**
Address	Room 209-130, No.10 of Guian Road, Guisi Street, High-tech Zone, Ningbo, 315200, China
Place of Production	Ningbo Qingze Electromechanical Equipment Co., Ltd. No.2 Zhongjiasha Village, Wuxiang Town, Yinzhou District, Ningbo City, 315111, China
Type	Flexible Hoses
Description	QZ-08DH flexible hose assemblies: 1SN-1/2" DN12.5 one steel wire braid reinforced rubber hose with end fittings (Interface specification: M22~27, W21.8,7/8UNF, 1/2 BSP ,5/8 BSP,3/4 BSP Etc.) QZ-04PH flexible hose assemblies: 1SN-1/4" DN6.3 one steel wire braid reinforced rubber hose with end fittings (Interface specification: M14~M18,1/8BSP,1/4 BSP,3/8BSP,3/8UNF Etc.)
Trade Name	QZ-08DH&QZ-04PH Flexible Hose Assemblies for CO2 Systems
Application	Marine/Offshore CO2 Fire Extinguishing Systems（CO2, N2)
Specified Standard	Lloyd's Register's Rules and Regulations for the Classification of Ships 2024, Part 5, Chapter 12, Section 7. ISO1436:2009 GB/T3683:2011

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Engineering - Piping/ Decarbonisation - Senior Specialist to Lloyd's Register EMEA
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EN853:2015

Ratings

QZ-08DH(1SN-1/2”):

Nominal Diameter : 12.5mm
Maximum Working Pressure: 160 bar
Temperature Range : -40 deg C to +100 deg C
Hydrostatic test pressure : 240bar

QZ-04PH(1SN-1/4”):

Nominal Diameter : 6.3mm
Maximum Working Pressure: 225 bar
Temperature range : -40 deg C to +100 deg C.
Hydrostatic test pressure : 337.5bar

Other Conditions

For application on a LR classed vessel, the following conditions are to be complied with: -
1. Materials for hoses and fittings are to be manufactured and tested in accordance with the requirements for Class I piping systems.
2. The Co2 installation is to be installed in accordance with the manufacturer's instructions and recommendations and the statutory requirements for fire & safety systems.
3. Each flexible hose with end fittings is to be provided with the manufacturer's pressure test report and conformity of the production and the following details are to be permanently marked:
• Manufacturer's name or trademark.
• Date of manufacture (month/ year).
• Designation type reference.
• Nominal diameter.
• Pressure rating.
• Temperature range.

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Type Approval 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 LR2567992TA_DAD and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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