



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	SERTO AG
Address	Langfeldstrasse 117, Frauenfeld, 8500, Switzerland
Type	Compression Fittings
Description	SERTO metric brass bite type compression ferrule tube unions in conjunction with copper pipes
Trade Name	SERTO 4000 Series / Program Ms-M
Application	For use as general purpose in piping systems for liquids or gases compatible with the materials of construction on board of ships classed or intended for classification with Lloyd's Register. <u>Restrictions:</u> Pressure piping systems that are required to remain operational after a fire casualty
Specified Standard	Lloyd's Register Rules and Regulations for the Classification of Ships, 2023
Ratings	For copper pipes pipe sizes: Ø 2 -35 mm Nominal pressure up to: 250 – 16 bar* Temperature range: - 40°C to +180°C

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For temperatures exceeding 120°C the max. pressure is to be reduced to 75 %.

Other Conditions

*) The minimum pipe thicknesses are to be in compliance with the Rules. The manufacturer's installation instruction is to be sought.

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: 14 /20006(E1)

The Design Appraisal Document HTS/ENS 30344-14, Issue No. 2 and its supplementary Type Approval Terms and Conditions form part of this Certificate.