



## 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.

<b>Manufacturer</b>	<b>Boss Paslanmaz Hidrolik Baglanti Elemanlari San. Tic. Ltd. Sti</b>
<b>Address</b>	Evliya celebi Mahallesi Fedai Sokak No:, 15/1 Tuzla, Istanbul, 34944, Türkiye
<b>Type</b>	Ancillary Equipment for Flexible Pipes
<b>Description</b>	Stainless steel hose & pipe end fitting for high pressure CO2 hoses and hydraulic pipes
<b>Trade Name</b>	End fitting, nipple and socket
<b>Application</b>	As end fittings for flexible hose assemblies in high pressure CO2 systems as a connection between CO2 cylinders, the valves and manifolds. As end fittings for pipes in hydraulic systems.
<b>Specified Standard</b>	Lloyd's Register's Rules and Regulations for the Classification of Ships, July 2023 EN 853
<b>Ratings</b>	Sizes: 3/16 to 2 inch (5 mm to 50 mm) Temperature range: -40 °C to +100 °C Design Pressure: 300 bar
<b>Other Conditions</b>	For application on a LR classed vessel, the following conditions are to be complied with: 1. The fittings are to be selected and installed in accordance with the

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manufacturer's instructions and recommendations.

2. Each hose and their associated fittings are to be tested at the manufacturer's production facility to a hydrostatic pressure not less than 1.5 times of the rated pressure.

3. For use in Class I and Class II piping systems on Ships with Lloyd's Register, Materials are to be manufactured and tested in accordance with LR Rules for Materials.

4. Use of the fittings is only accepted in combination with an adequately type approved flexible hose. Flexible hose assembly complete with end fittings is to be tested acc. to Part 5, Chapter 12, section 7.3.2 to the same standard as the flexible hose, including pressure and impulse testing.

5. 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 .
- Designation type reference.
- Nominal diameter.
- Pressure rating .
- Temperature range

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:** 19/00014(E1)

The Design Appraisal Document TSO/24-010253 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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