

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	Hy-lok Corporation																					
Address	97 Noksansandan 27-Ro Gangseo-Gu, Busan, 46751, Republic of Korea																					
Type	Tube Fittings																					
Description	Carbon steel, stainless steel and brass single sleeve compression type tube fittings																					
Trade Name	24° Tube fittings - DIN 2353 & ISO 8434-1																					
Application	High pressure tube connections for use in marine, offshore and industrial piping systems with hydraulic system fluids, fuel oil, lubricating oil, fresh water, salt water, sanitary, gas, steam and condensate																					
Specified Standard	Lloyd’s Register’s Rules and Regulations for the Classification of Ships, Part 5, Chapters 12 July 2021																					
Ratings	<div>Carbon steel and stainless steel tube fittings:</div> <table><tr><th>Series</th><th>Tube O.D (mm)</th><th>Nominal pressure ratings (bar)</th></tr><tr><td>LL</td><td>4 - 12</td><td>100</td></tr><tr><td>L</td><td>6 - 18</td><td>315</td></tr><tr><td>L</td><td>22 - 42</td><td>160</td></tr><tr><td>S</td><td>6 - 14</td><td>630</td></tr><tr><td>S</td><td>16 - 30</td><td>400</td></tr><tr><td>S</td><td>38</td><td>315</td></tr></table>	Series	Tube O.D (mm)	Nominal pressure ratings (bar)	LL	4 - 12	100	L	6 - 18	315	L	22 - 42	160	S	6 - 14	630	S	16 - 30	400	S	38	315
Series	Tube O.D (mm)	Nominal pressure ratings (bar)																				
LL	4 - 12	100																				
L	6 - 18	315																				
L	22 - 42	160																				
S	6 - 14	630																				
S	16 - 30	400																				
S	38	315																				



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Brass tube fittings:

Series	Tube O.D (mm)	Nominal pressure ratings (bar)
LL	4 - 8	100
L	6 - 15	250
L	18 - 22	160
L	24 - 42	100
S	6 - 14	630
S	16 - 25	400
S	30 - 38	315

Pressure-temperature ratings : see the producer's catalogue

Other Conditions

- 1) The fittings are to be installed in accordance with the manufacturer's instructions.
- 2) Attention is drawn to Section 3.6 of IMO MSC/Circular. 851-Guidelines on Engine-Room Oil Fuel Systems which describes that compression couplings require careful attention to tightening procedures and torques to avoid leaks or damage to the pipe when subjected to overtightening and they should not be used in the fuel supply line of the (oil engine) injection pumps and spill system.

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 Asia of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: 16/40082(E3)

The Design Appraisal Document LR2294540TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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