



CERTIFICATE NUMBER 23-2435566-PDA
EFFECTIVE DATE 16-Aug-2023
EXPIRY DATE 15-Aug-2028
ABS TECHNICAL OFFICE Houston ESD - Piping

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

SSP

located at

**8250 BOYLE PARKWAY, , TWINSBURG, OH, United States, 44087-
2200**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Instrumentation Tube Fittings
Model: 1. Duolok
2. Unilok
3. Griplok
Endorsements:
Tier: 3 - Type Approved, unit certification not required

This Product Design Assessment (PDA) Certificate remains valid until 15/Aug/2028 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping


Jingdong Sheng, Sr. Managing Principal Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

SSP

8250 BOYLE PARKWAY

TWINSBURG OH

United States 44087-2200

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Web: www.myssp.com

Tier: 3 - Type Approved, unit certification not required

Product: Instrumentation Tube Fittings**Model:**
1. Duolok
2. Unilok
3. Griplik**Endorsements:****Intended Service:**

Marine & Offshore Applications - Hydraulic/Pneumatic Instrumentation Fittings & Tubing.

Description:

1. Tube to Male Pipe
2. Tube to Female Pipe
3. Tube to Tube Union
4. Tube Stub Connectors/Adapters
5. Tube to Weld, Tube to 37° Flare (AN)
6. Tube to O-Ring Seal
7. Tube to Straight Thread
8. Cap & Plug Component.

*See Manufacturers Catalogue for Tube Fitting Selection Guide Listing.

Rating:

Tube Sizes

Duolok 1/16" - 2", 3mm - 25mm;

Unilok 1/16" - 1";

Griplik 1/16" - 1"

*See attached "pdf" for Duolok, Unilok & Griplik Selection Guide for Maximum Allowable Working Pressure, Temperature Ratings, etc.

Service Restriction:

1. Unit Certification is not required for this product.
2. Not to be used if fittings are required to be approved fire resistant in accordance with Marine Vessels Rules 4-6-2/Table 10
3. To be used in compliance with Marine Vessels Rules 4-6-2/5.5.5
4. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. For your ready reference find here the link to SSP online resources, <http://www.myssp.com> then select 'Product Information' for Catalogs and other Literature.

Notes/Drawing/Documentation:

Previous PDA 18-HS1775300-PDA Document List

Dwg. No. GRIPIK, Title: TUBE FITTINGS (BOOK) Rev. -, Sheet: 1

Dwg. No. UNILOK, Title: UNILOK TUBE FITTINGS (BOOK) Rev. -, Sheet: 1

Dwg. No. TRUFIT HOSE, Title: HOSE ASSEMBLIES CONNECTORS ADAPTERS AND ACCESORIES(BOOK) Rev. -, Sheet: 1

Dwg. No. TRUFIT, Title: PIPE WELD AND ADAPTER FITTINGS (BOOK) Rev. -, Sheet: 1

Dwg. No. M SWM SWMP SWPP, Title: DRAWINGS Rev. -, Sheet: 1

Dwg. No. INSTRUMENTATION, Title: INSTRUMENTATION FITTINGS ANSI ASME Rev. -, Sheet: 1

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Dwg. No. INDUSTRIAL, Title: INDUSTRIAL FITTING ANSI ASME B 31.3 CODE RATINGS Rev. -, Sheet: 1
Dwg. No. FORMULAS, Title: FORMULAS Rev. -, Sheet: 1
Dwg. No. FLOLOK, Title: FLOLOK VALVES Rev. -, Sheet: 1
Dwg. No. DUOLOK, Title: DUOLOK TUBE FITTINGS Rev. -, Sheet: 1
Dwg. No. CODE CALCS, Title: FITTINGS AND DIMENSIONS AND PRESSURE RATINGS Rev. -, Sheet: 1
Dwg. No. CATALOG, Title: SSP PRODUCT CATALOG AND DESIGN HANDBOOK Rev. -, Sheet: 1
Dwg. No. 9 ILLUS, Title: FITTING AND ILLUSTRATIONS Rev. -, Sheet: 1
Dwg. No. 8 THDS, Title: LIST OF THREADS USED ON INDUSTRIAL FITTINGS Rev. -, Sheet: 1
Dwg. No. 7 NPT DIMS, Title: NPT PIPE THREAD DIMENSIONS Rev. -, Sheet: 1
Dwg. No. 5 FORGING, Title: TABLE DATA SOURCE REST 035-03 Rev. -, Sheet: 1
Dwg. No. 30 CONST, Title: CONVERSION FACTOR FROM MM TO IN Rev. -, Sheet: 1
Dwg. No. 3 TRUFIT, Title: INDUSTRIAL FITTING RATINGS AND BASIC Rev. -, Sheet: 1
Dwg. No. 29 WPB-S-TB, Title: WPB WPS WTB WTS SOCKET WELD (PIPE AND TUBE) AND BUTT WELD ENDS Rev. -, Sheet: 1
Dwg. No. 22 SWJP--PRINTED, Title: WWJP AN SAE 37 FLARED PIN SWIVEL FITTING NASA KC 137 Rev. -, Sheet: 1
Dwg. No. 18 P, Title: P FITTING END Rev. -, Sheet: 1
Dwg. No. 17 OM-SC, Title: OMS OSC FITTING END DIMENSIONAL ANALYSIS Rev. -, Sheet: 1
Dwg. No. 15 KU, Title: KONCENTRIC UNION FITTING END Rev. -, Sheet: 1
Dwg. No. 14 J, Title: SAE 37 FLARED END Rev. -, Sheet: 1
Dwg. No. 13 GF, Title: FIGURE 1 SAE J1926/ 1 PORT Rev. -, Sheet: 1
Dwg. No. 12 GB-GBA, Title: CONFORM TO SAE J 1453 Rev. -, Sheet: 1
Dwg. No. 11 G-GA, Title: DIMENSION CONFORM TO SAE J 1453 FIGS 9,11, TABLE 6 Rev. -, Sheet: 1
Dwg. No. 10 MTL, Title: MATERIALS AND MECHANICAL PROPERTIES Rev. -, Sheet: 1

Terms of Validity:

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STANDARDS

ABS Rules:

2023 Rules for Conditions of Classification, 1-1-4/7.7, 1-1-A3,1-1-A4, which covers the following:
2023 Rules for Building and Classing Marine Vessels: 4-6-2/5.9, 4-6-2/5.15, 4-6-2/5.17;

2023 Rules for Conditions of Classification, Offshore Units and Structures, 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2023 Rules for Building and Classing Mobile Offshore Units:4-2-1/11.13, 4-2-2/1.3, 4-2-2/11, 4-2-2/13, 4-2-2/17, 4-2-5/1.3

National:

2022 ANSI/ASME B31.1, B31.3

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International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA