

CERTIFICATE NUMBER EFFECTIVE DATE **EXPIRY DATE** ABS TECHNICAL OFFICE 21-2102711-PDA 09-Apr-2021 08-Apr-2026 Rio de Janeiro Engineering -Machinery

CERTIFICATE OF

Product Design Assessment

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

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: Piping System, Fittings and Valves

SSP FloLok Valves, Quick Couplings and Filters product families Model:

Endorsements:

Tier: 3 - Type Approved, unit certification not required

This Product Design Assessment (PDA) Certificate remains valid until 08/Apr/2026 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.

John Vincent Ulsp for Yongjin Lee, Engineer/Consultant

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 Telephone: 330-425-4250/235

Fax: 330-425-8106

Email: customer.inquiries@myssp.com

Web: www.myssp.com

Tier: 3 - Type Approved, unit certification not required

Product: Piping System, Fittings and Valves

Model: SSP FloLok Valves, Quick Couplings and Filters product families

Endorsements:

Intended Service:

Valves, Quick Couplings and Filters for Marine and Offshore tube / pipe systems: Hydraulic, Pneumatic and Instrumentation Applications.

Description:

Products: Series:

Needle Valves LN - Body: 316 SS - End Connections: 1/8 to 1 in. TF, NPT, BSPT, SAE, SW

Needle Valves 100, 600 - Body: 316 SS, Brass - End Connections: 1/8 to 1/2 in. TF

500 - Body: 316 SS, Brass - End Connections: 1/8 to 1/2 in. TF, NPT, BSPT Metering Valves

300 - Body: 316 SS, Brass - End Connections: 1/8 to 3/4 in. TF, NPT EB - Body: 316 SS, Brass - End Connections: 1/16 to 3/4 in. TF, NPT, BSPT FB - Body: 316 SS - End Connections: 1/4 to 1 in. TF, NPT, BSPT, ORFS Ball Valves Ball Valves

Ball Valves Ball Valves TB - Body: 316 SS - End Connections: 1/8 to 1/2 in. TF, FNPT, BSPT, SAE LP - Body: 316 SS - End Connections: 1/4, 1/2, 3/4 in. inlet; 1/4 & 1/2 in outlet NPT Rising Plug Valves

Rotary Plug Valves PV - Body: 316 SS, Brass - End Connections: 1/8 to 1/2 in. TF, NPT, BSPT Ball Check Valves 4000 - Body: 316 SS, Brass - End Connections: 1/8 to 1/2 in. TF, NPT, BSPT

CH - Body: 316 SS - End Connections: 1/8 to 1 in. TF, NPT, BSPT Poppet Check Valves

Purge Valves 4900 - Body: 316 SS, Brass - End Connections: 1/8 to 1/2 in. TF, TS, NPT, BSP, SAE

Bleed Valves BV - Body: 316 SS - End Connections: 1/8 to 1/2 in. Male NPT and BSPT

Toggle Valves 200 - Body: 316 SS, Brass - End Connections: 1/8 to 3/8 in.

Relief Valves RL3, RL4, RH3, RH4 - Body: 316 SS - End Connections: > Sizes: 1/4 & 1/2 in. TF

Tee Filters 3000 - Body: 316 SS, Brass - End Connections: 1/8 to 1/2 in. TF, NPT 3100 - Body: 316 SS, Brass - End Connections: 1/8 to 1/2 in. TF, NPT **Inline Filters**

QF - Body: 316 SS, Brass - End Connections: 1/4 to 1 in. TF, NPT, BSPT, BSPP **Quick Couplings**

Rating:

Please see attached file for all models ratings.

Service Restriction:

- 1. Unit Certification is not required for this product.
- 2. 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.
- 3. Brass valves, fittings and filters are not to be used in oil systems.

Comments:

- 1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

 2. Where indicated as 'permanent' in 4-6-1/7.1.4 TABLE 2, the piping component is to bear permanent identification, such as manufacturer's name or trademark, standard of compliance, material identity, pressure rating, etc., as required by the standard of compliance or the manufacturer's specification. Such markings may be cast or forged integral with, stamped on, or securely affixed by nameplate on the component, and are to serve as a permanent means of identification of the component throughout its service life.

Notes/Drawing/Documentation:

As of 09/Apr/2021

Drawing No. SSP ABS Approvals Listing, Revision: -,

Technical Report No. ILETR111130-002, Rev. -. Total Pages: 13, 100, 400, 500, 600 Series Needle, Metering, Lower Packing Valve

Technical Report No. ILETR111130-001, Rev. -, Total Pages: 13, 300 Series Ball Valve

Technical Report No. ILETR111130-003, Revision: 0, Total Pages: 13, 3100 Series Inline Filter Valve Technical Report No. ILETR111130-004, Revision: 0, Total Pages: 13, 4000 Series Check Valve

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Technical Report No. ILDTR110721, Revision: 0, Pages: 15, BV Bleed Valve

Technical Report No. ILDTR111221-001, Revision: -, Total Pages: 20, CH Series Check Valve

Technical Report No. ILDTR150519, Revision: A, Total Pages: 20, FB Series Ball Valve Technical Report No. ILDTR150603, Revision: A, Total Pages: 20, LN Series Needle Valve

Technical Report No. ILETR-111130-005, Revision: 0, Total Pages: 13, PV Series Medium Pressure Rotary Plug

Technical Report No. ILDTR110711, Revision: 0, Total Pages: 28, QF Series Quick Connect High Pressure

Couplings

Technical Report No. ILETR110929, Revision: 0, Total Pages: 78, FloLok Valves & SSP Valves TA Luft

Certification

Technical Report No. ILDTR180515, Revision: C, Total Pages: 19, SSP R Series Relief Valve Certificate No.: DS1107484, TA LUFT/VDI 2440:2002 ATTESTATION_TUV SUD America Set of Drawings 001-072, Valves Construction Drawings

Dimensional Calculation: P-001-13B-100- Valves, ANSI ASME B 31.3 Code Pressure Rating 160419

Document: SSP Valves - WEB listing by PN 141111

Document: ABS Terms and Conditions - with signature - SSP Instrumentation Valves 150422

ISO 17025 Lab (2016)

Terms of Validity:

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STANDARDS

ABS Rules:

The Rules for Conditions of Classification, 2021 Marine Vessel Rules 1-1-4/7.7, 1-1-A3,1-1-A4, which covers the following:

2021 Rules for Building and Classing Marine Vessels: 4-6-1/7.5.2, Table 2, 4-6-2/5.9, 5.11, 5.13 & 5.15.

The Rules for Conditions of Classification, Offshore Units and Structures, 2021 Mobile Offshore Units 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2021 Rules for Building and Classing Mobile Offshore Units: 4-2-2/1.3, 9, 11, 13 & 17, and 4-2-5/1.3 & 3.9.

National:

NA

International:

ASME B31.1-2020, Power Piping

ASME B31.3-2018, Process Piping

ISO 15500-2:2016, Road vehicles - Compressed natural gas (CNG) fuel system components - Part 2: Performance and general test methods

ISO 15500-3:2020, Road vehicles - Compressed natural gas (CNG) fuel system components - Part 3: Check valve ISO 15500-4:2020, Road vehicles - Compressed natural gas (CNG) fuel system components - Part 4: Manual valve

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Government:

NA

EUMED:

NA

OTHERS:

TA LUFT/VDI 2440:2002 for the following tests: Helium Leak Test under vacuum; Helium Leak Test under pressure; High/Low Temperature Helium Leak Test under pressure; Hydrostatic Hold Test; and Burst Test. (by TÜD SÜD America)