



# Type Approval Certificate

[ Safety Relief Valve ]

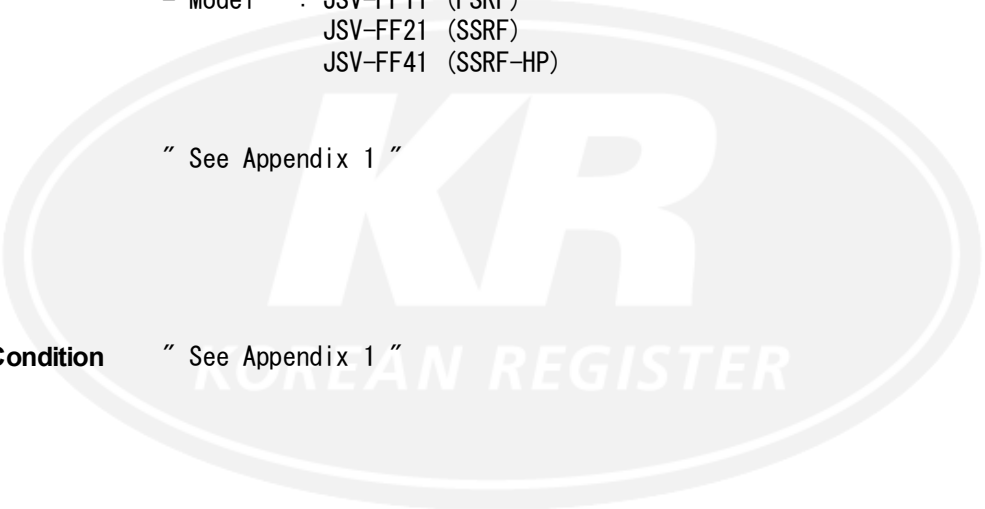
**Initial Approval**      20 April 1989  
**Manufacturer**        Jokwang I.L.I Co., Ltd.  
 37, Sanmakgongdanbuk 10-gil, Yangsan-si, Gyeongsangnam-do, Korea

**Product Description**    Safety Relief Valves for Boiler

- Type        : Full Bore Type
- Model      : JSV-FF11 (FSRF)  
                   JSV-FF21 (SSRF)  
                   JSV-FF41 (SSRF-HP)

“ See Appendix 1 ”

**Approval Condition**    “ See Appendix 1 ”



**THIS IS TO CERTIFY** that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt. 5, Ch. 5, Art. 123 of the Rules for Classification of Steel Ships.

This Certificate is valid until 19 April 2028  
 Issued at Busan, Korea on 17 August 2023



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME23035214532) and certificate No.(BSN02491-VV003).



**KOREAN REGISTER**

*General Manager of  
 Marine & Ocean Equipment Team*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
  2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
  3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
  4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

## Product Description and/or Approval Condition

Date of Issue : 17 August 2023

### 1. Product Descriptions :

- 1) Model : JSV-FF11 (FSRF)
  - Kd value : 3.34
  - Design Press. : 1.0 MPa
  - Design Temp. : 220 °C
  - Fluid : Steam
  - Nominal Inlet diameters : 20 ~ 100A
  - Nominal Flange ratings : JIS B 2210 10K RF (Inlet)
  - Body Materials
    - . Body, Bonnet : JIS G5501 FC200
    - . Seat : ASTM A276 304 (20 ~ 25A), JIS G5121 SCS 13 (32 ~ 100A)
    - . Disc : ASTM A276 304
- 2) Model : JSV-FF21 (SSRF)
  - Kd value : 3.34
  - Design Press. : 2.0 MPa
  - Design Temp. : 250 °C
  - Fluid : Steam
  - Nominal Inlet diameters : 15 ~ 200A
  - Nominal Flange ratings : JIS B 2210 20K RF / JIS B 8210 20K RF (Inlet)
  - Body Materials
    - . Body, Bonnet : JIS G5101 SC 480 / ASTM A216 WCB
    - . Seat : 304 SS, 316 SS, 316L SS
    - . Disc : 304 SS, 316 SS, 316L SS
- 3) Model : JSV-FF41 (SSRF-HP)
  - Kd value : 3.34
  - Design Press. : 3.0 MPa
  - Design Temp. : 400 °C
  - Fluid : Steam
  - Nominal Inlet diameters : 15 ~ 100A
  - Nominal Flange ratings : JIS B 2210 30K RF (Inlet)
  - Body Materials
    - . Body, Bonnet : JIS G5101 SC480 / ASTM A216 WCB
    - . Seat : JIS G5121 SCS 13, SCS 14, SCS 16 / ASTM A351 CF8, CF8M, CF3M
    - . Disc : ASTM A276 304, 316, 316L

### 2. Approved drawings :

JKS-F1311002 Rev. 1, JKS-S1321011 Rev. 2, JKS-S1321003 Rev. 2, JKS-S1321004 Rev. 2,  
JKS-S1321002 Rev. 2, JKS-S1321001 Rev. 2, JKS-S1321010 Rev. 1, JKS-S1381001 Rev. 1

### 3. Approval Conditions :

- 1) This approval is granted on the basis of design assessment and prototype test.
- 2) Materials for main components are to be supplied by the approved manufacturers and are to be certified by this Society or to be satisfactory to the Surveyor
- 3) Individual Product Certification is required.

&lt; End of Certificate &gt;