



## Confirmation of Product Type Approval

**Company Name:** DK LOK CORPORATION

**Address:** 7 GOLDEN ROOT-RO129 BEON-GILJUCHON-MYEON Korea, Republic of

**Product:** Valve

**Model(s):** V81, V82, V83, V86, VH86, V23, V15, V16, V46, V56, V96, V103, V33, VP33, VA33, VH36, VL36, V73, V76, V63, V66, VB16

<b>Certificate Type</b>	<b>Certificate Number</b>	<b>Issue Date</b>	<b>Expiry Date</b>
Product Design Assessment (PDA)	20-2016538-PDA	30-JUL-2020	29-JUL-2025
Manufacturing Assessment (MA)	18-BK3549841	11-SEP-2018	29-SEP-2023
Product Quality Assurance (PQA)	NA	NA	NA

**Tier**

3

**Intended Service**

Saturated Steam, Compressed air, Hydraulic oil, Lubricating oil, Fuel oil, Fresh water, Sea water

**Description**

1. V81

1) Nominal Diameter : As per the attached manufacturer's document

2) Body : Stainless Steel/Brass

2. V82

1) Nominal Diameter : As per the attached manufacturer's document

2) Body : Stainless Steel/Brass

3. V83

1) Nominal Diameter : As per the attached manufacturer's document

2) Body : Stainless Steel/Carbon Steel

4. V86

1) Nominal Diameter : As per the attached manufacturer's document

2) Body : Stainless Steel

5. VH86

1) Nominal Diameter : As per the attached manufacturer's document

2) Body : Stainless Steel

6. V23

1) Nominal Diameter : As per the attached manufacturer's document

2) Body : Stainless Steel/Brass

7. V15

1) Nominal Diameter : As per the attached manufacturer's document

2) Body : Stainless Steel/Brass/Alloy 400

8. V16

1) Nominal Diameter : As per the attached manufacturer's document

2) Body : Stainless Steel/Alloy20/Alloy C276

9. V46

1) Nominal Diameter : As per the attached manufacturer's document

2) Body : Stainless Steel/Carbon Steel

10. V56

1) Nominal Diameter : As per the attached manufacturer's document

2) Body : Stainless Steel/Carbon Steel

11. V96

1) Nominal Diameter : As per the attached manufacturer's document

2) Body : Stainless Steel

12. V103

1) Nominal Diameter : As per the attached manufacturer's document

2) Body : Stainless Steel/Brass

13. V33

1) Nominal Diameter : As per the attached manufacturer's document

2) Body : Stainless Steel/Brass

14. VP33

- 1) Nominal Diameter : As per the attached manufacturer's document
- 2) Body : Stainless Steel/Brass

15. VA33

- 1) Nominal Diameter : As per the attached manufacturer's document
- 2) Body : Stainless Steel/Brass

16. VH36

- 1) Nominal Diameter : As per the attached manufacturer's document
- 2) Body : Stainless Steel

17. VL36

- 1) Nominal Diameter : As per the attached manufacturer's document
- 2) Body : Stainless Steel

18. V73

- 1) Nominal Diameter : As per the attached manufacturer's document
- 2) Body : Stainless Steel/Brass

19. V76

- 1) Nominal Diameter : As per the attached manufacturer's document
- 2) Body : Stainless Steel/Brass

20. V63

- 1) Nominal Diameter : As per the attached manufacturer's document
- 2) Body : Stainless Steel

21. V66

- 1) Nominal Diameter : As per the attached manufacturer's document
- 2) Body : Stainless Steel

22. VB16

- 1) Nominal Diameter : As per the attached manufacturer's document
- 2) Body : Stainless Steel

**Ratings**

1. Model : V81
  - a. Design Pressure : 68.9bar @38 deg.C
  - b. Design Temperature : -18 ~ 204 deg.C
  
2. Model : V82
  - a. Design Pressure : 172bar @38 deg.C
  - b. Design Temperature : 10 ~ 65 deg.C
  
3. Model : V83
  - a. Design Pressure : 151bar @38 deg.C
  - b. Design Temperature : -18 ~ 232 deg.C
  
4. Model : V86
  - a. Design Pressure : 413bar @38 deg.C
  - b. Design Temperature : -18 ~ 130 deg.C
  
5. Model : VH86
  - a. Design Pressure : 413bar @38 deg.C
  - b. Design Temperature : -18 ~ 180 deg.C
  
6. Model : V23
  - a. Design Pressure : 206bar @38 deg.C
  - b. Design Temperature : -18 ~ 204 deg.C
  
7. Model : V15
  - a. Design Pressure : 345bar @38 deg.C
  - b. Design Temperature : -18 ~ 232 deg.C
  
8. Model : V16
  - a. Design Pressure : 413bar @38 deg.C
  - b. Design Temperature : -18 ~ 232 deg.C
  
9. Model : V46
  - a. Design Pressure : 413bar @38 deg.C
  - b. Design Temperature : -18 ~ 232 deg.C
  
10. Model : V56

- a. Design Pressure : 413bar @38 deg.C
- b. Design Temperature : -18 ~ 232 deg.C

11. Model : V96

- a. Design Pressure : 413bar @38 deg.C
- b. Design Temperature : -18 ~ 121 deg.C

12. Model : V103

- a. Design Pressure : 20.6bar @38 deg.C
- b. Design Temperature : -18 ~ 93 deg.C

13. Model : V33

- a. Design Pressure : 206bar @21 deg.C
- b. Design Temperature : -18 ~ 190 deg.C

14. Model : VP33

- a. Design Pressure : 206bar @21 deg.C
- b. Design Temperature : -18 ~ 190 deg.C

15. Model : VA33

- a. Design Pressure : 206bar @21 deg.C
- b. Design Temperature : -18 ~ 190 deg.C

16. Model : VH36

- a. Design Pressure : 413bar @21 deg.C
- b. Design Temperature : -18 ~ 190 deg.C

17. Model : VL36

- a. Design Pressure : 413bar @38 deg.C
- b. Design Temperature : -18 ~ 482 deg.C

18. Model : V73

- a. Design Pressure : 206bar @38 deg.C
- b. Design Temperature : -18 ~ 482 deg.C

19. Model : V76

- a. Design Pressure : 413bar @38 deg.C

b. Design Temperature : -18 ~ 482 deg.C

20. Model : V63

a. Design Pressure : 20.6bar @20 deg.C

b. Design Temperature : -12 ~ 135 deg.C

21. Model : V66

a. Design Pressure : 413bar @20 deg.C

b. Design Temperature : -12 ~ 135 deg.C

22. Model : VB16

a. Design Pressure : 413bar @38 deg.C

b. Design Temperature : -18 ~ 232 deg.C

### **Service Restrictions**

Unit Certification is not required for this product. If the manufacturer or purchaser requests 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. The materials for body, disc stem and seat are to be suitable for intended service.
3. Maximum service pressure and temperature are not to exceed those specified by the manufacturer.
4. All valves intended for installation on the side shell, including valves at the sea chests, are to be hydrostatically tested, before installation, to a pressure of at least 5 bar, in the presence of the Surveyor.
5. All valves are to bear permanent identification, such as the manufacturer's name or trademark, material identify, pressure rating, etc. at which the manufacturer guarantees the valves to meet the requirements of the manufacturer's standards. 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 in accordance with 4-6-1/7.1.3 and 4-6-1/7.1.4 of Marine Vessels Rules.

### **Notes, Drawings and Documentation**

Drawing No. DKD-20200701-L01, Valves

### **Term of Validity**

This Product Design Assessment (PDA) Certificate remains valid until 29/Jul/2025 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.

### ABS Rules

2020 Marine Vessel Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-6-2/5.11, 4-6-2/5.15

### International Standards

NA

### EU-MED Standards

NA

### National Standards

NA

### Government Standards

NA

### Other Standards

NA



Corporate ABS Programs  
American Bureau of Shipping  
Print Date and Time: 11-Aug-2020 3:39

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

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 prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.