



Work Order: WO0257828
Product Design Assessment (PDA)
"Valve, Butterfly"
PDA No. 25-0257828-PDA

Attention: Mr. Chang-Hyun Lee, GOMOTEC CO., LTD. (WCN : 488472)

The documents shown in the attached list are reviewed in accordance with the applicable requirements indicated in the PDA along with the service restrictions and comments.

We recommend that you monitor the ABS Rules, Guides and other standards used in the Assessment. These Rules, Guides and standards often change on an annual basis, and you must comply with the new Rules, Guides and standards in order for the product to be used on an ABS classed vessel or facility contracted under the new Rules, Guides or specifications.

Additionally, we acknowledge the PDA request form warranting that the materials used in the product are free from asbestos.

For any clarifications, please contact Mr. Hyun-Dae Lee at +82-51-460-4131, (hdlee@eagle.org).

Very truly yours,

Yun-Hak(Ford) Baek
Director, Engineering

Electronically Signed by: Seong-Ju Kang

Documents List

Drawing No.	Rev. No.	Title	Status
-	8	Valve, Butterfly	Approved

Electronic copies of the documents, appropriately stamped, are available in the ABS Client Portal.

Include: PDA Certificate



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

25-0257828-PDA
07-Apr-2025
06-Apr-2030
Busan Engineering Services

CERTIFICATE OF Product Design Assessment

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

GOMOTEC CO., LTD

located at

**279, MIEUMSANDAN-RO, GANGSEO-GU, , BUSAN, Korea,
Republic of**

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.

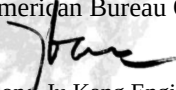
Product: Valve, Butterfly
Model: Concentric, High Performance (Double)
Endorsements:
Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 06/Apr/2030 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


Seong-Ju Kang, 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)

GOMOTEC CO., LTD

279, MIEUMSANDAN-RO, GANGSEO-GU

BUSAN

Korea, Republic of

Telephone: 82-55-345-9790

Fax: 82-55-345-9793

Email: chlee@gomotec.com

Web:

Tier: 2 - PDA Issued

Product: Valve, Butterfly
Model: Concentric, High Performance (Double)
Endorsements:

Intended Service:

Cargo Oil, Bilge, Ballast, Sea Water, Fresh Water, Air Venting, Inert Gas, Heavy Fuel Oil, Diesel Oil, Lube Oil, Tank Cleaning, Cooling Water

Description:

Concentric, High Performance (Double)

1. Body

Concentric: Grey cast iron/Carbon steel casting/Stainless steel/Aluminum bronze

Double Offset: Ductile cast iron/ Carbon steel casting/Stainless steel/Aluminum bronze

2. Disc: Stainless steel/Aluminum bronze**3. Stem: Stainless steel**

A276 304, A276 316, A276 316L, A276 410, A564 630, MONEL K-500, UNS S32750, UNS S31803

4. Seat

Concentric Type: EPDM, NBR, HNBR, VITON

Double Offset Type: TEFLON (RTFE or PTFE), EPDM, NBR, HNBR, VITON, TEFLON (RTFE or PTFE) + METAL

Rating:

Concentric:

2inch, 2-1/2inch, 3inch, 4inch, 5inch, 6inch, 8inch, 10inch, 12inch, 14inch, 16inch, 18inch, 20inch, 24inch, 26inch, 28inch, 30inch, 32inch, 34inch

Design Pressure: 16.0 bar

Design Temperature: 0 to 120 degree C

Double Offset:

2inch, 2-1/2inch, 3inch, 4inch, 5inch, 6inch, 8inch, 10inch, 12inch, 14inch, 16inch, 18inch, 20inch, 24inch

Design Pressure: 16.0 bar

Design Temperature: 0 to 120 degree C

Service Restriction:

1. 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.

2. Materials are to be suitable for intended service at the valve's pressure-temperature rating.

3. This product is not to be used as a component of any fire-fighting piping system since a fire test is not conducted.

4. Ferrous materials used in piping systems operating at lower than -18 deg.C (0 deg.F) are to have adequate notch toughness properties in accordance with 4-6-2/3.1.6 of the MVR.

5. Wafer type butterfly valves are not acceptable to be used as shell valves in accordance with 4-6-2/9.13.2 of the MVR

6. Rubber expansion joints with beaded end flange are not to be installed next to wafer type check or butterfly valves in accordance with 4-6-2/9.5 vi) of the MVR.

7. Cast iron is to be used in accordance with 4-6-2/3.1.3 of the MVR.

8. For shell valves, the valve assembly is to be subjected to a hydrostatic seat leakage test. The test is to be performed with closed valve with the other end open to atmosphere. The pressure is to be applied independently on each side.

Test pressure is not to be less than 5 bar (5.1 kgf/cm², 72.5 psi). Holding time is 5 minutes for all sizes in accordance

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with 4-6-2/7.3.2 of the MVR.

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. Wafer-type butterfly valves or valves of body material of gray cast iron are not to be used for shell valve and are not to be used as stop valves fitted on fuel oil tank which will be subject to static head of oil from the tank.
3. Butterfly valves with lugs may be accepted for shell valves.
4. The materials for body, disc stem and seat are to be suitable for intended service.
5. Maximum service pressure and temperature are not to exceed those specified by the manufacturer.
6. 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 in accordance with 4-6-2/7.3.2 of the MVR.
7. Power operated valves are to be arranged for manual operation in the event of a failure of the power supply.
8. Flange pressure rating of the butterfly valves is to be suitable for the piping system to be applied.

Notes/Drawing/Documentation:

Drawing Name : Design Specification, Revision: 0

Drawing Name : Valve Assembly Drawing, Revision: 0

Drawing Name : Appendix Document, Revision: 0

Test Report: The burst test was carried out in the presence of ABS Surveyor.

- Report No. BK2395382 for Burst Test dated 10 July 2013

Terms of Validity:

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STANDARDS**ABS Rules:**

2025 Marine Vessel Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-6-2/3.1, 4-6-2/5.11, 4-6-2/7.3.2, 4-6-2/9.13.2

National:

NA

International:

NA

Government:

NA

EUMED:

NA

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OTHERS:

NA