

# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAP000012D**  
Revision No:  
**1**

## This is to certify:

That the **Butterfly Valves**

with type designation(s)  
**Vic-300 Masterseal Series 761**

Issued to

**Victaulic Company**  
**Easton, PA, USA**

is found to comply with

**DNV rules for classification – Ships Pt.4 Ch.6 Piping systems**  
**DNV-OS-D101 – Marine and machinery systems and equipment, Edition July 2021**  
**DNV class programme DNV-CP-0186 – Type approval – Valves**

## Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Temperature range: **See certificate**  
Max. working press.: **232 psi (16 bar)**  
Sizes: **See certificate**

Issued at **Hamburg** on **2022-07-13**

This Certificate is valid until **2027-07-12**.

DNV local station: **New York**

Approval Engineer: **Ana Cristina Do Carmo Insfran**



for **DNV**

Digitally Signed By: Drews, Olaf  
Location: DNV GL SE Hamburg, Germany  
Signing Date: 2022-07-13

**Olaf Drews**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



## Product description

Butterfly valves type VIC®-300 MasterSeal™ Series 761 with grooved ends for use with grooved pipe couplings, and with standard ISO mounting flange to accept most gear and power actuators.

Sizes: 2" (DN50), 2½" (DN65), 76.1 mm, 3" (DN80), 108.0 mm, 4" (DN100), 133.0 mm, 139.7 mm, 5" (DN125), 159.0 mm, 165.1 mm, 6" (DN150), 8" (DN200), 10" (DN250), 12" (DN300)

### Materials:

Body	ASTM A536 65-45-12 (ferritic/pearlitic nodular cast iron)
Disc	ASTM A536 65-45-12 with nickel coating to ASTM B-733, Ni-Al bronze Alloy C95500, ASTM A-351 CF8M
Stem	ASTM A582 416, ASTM A564 17-4PH
Seat	EPDM, Nitrile, Fluorelastomer

## Application/Limitation

The approval is valid for ship, machinery & cargo piping systems onboard DNV classed ships and mobile offshore units.

Design temperatures depending on seat materials:

EPDM/Fluorelastomer: 0°C to +120°C  
Nitrile: 0°C to +82°C

Valves covered by this certificate shall not be used in:

- Class I and II piping systems, except in hydraulic piping systems where failure would not render the system inoperative or introduce a fire risk
- Piping subject to pressure shock, excessive strains and vibration
- Ship's side or bottom and on sea chest
- Collision bulkheads
- Under static head fitted on external wall of tanks for fuel and flammable oils
- Ballast lines to forward tanks through cargo oil tanks
- Bilge and ballast piping in tunnels in double bottom
- Seawater applications
- Media having temperature below 0°C and above 120 °C
- As shut off or quick closing valves

Valves covered by this certificate with non-metallic seats are not to be considered fire safe and shall not be installed in systems where fire safe applications are required.

The approval does not include any operating gear for remote control of the valves.

This certificate does not cover valves installed in LNG/LPG applications.

## Type Approval documentation

Type Approval Application dated on 2020-03-23

Type Approval Assessment Report - Periodical + Renewal dated on 2022-07-03

Calculation sheet EN12516 Tables for S761 S716

Drawings Nr.:

V-020-761-312 Rev. W; P-761-761-303 Rev. B; P-060-761-303 Rev. D; P-050-761-303 Rev. B; P-040-761-303 Rev. G  
P-030-761-303 Rev. C; P-020-761-303 Rev. D; P-024-761-303 Rev. D; P-165-761-303 Rev. D; P-159-761-303 Rev. E  
P-139-761-303 Rev. C; P-133-761-303 Rev. D; P-108-761-303 Rev. D; P-761-761-302 Rev. B; P-060-761-302 Rev. C  
P-050-761-302 Rev. B; P-040-761-302 Rev. B; P-030-761-302 Rev. B; P-020-761-302 Rev. D; P-024-761-302 Rev. B  
P-165-761-302 Rev. B; P-159-761-302 Rev. D; P-139-761-302 Rev. B; P-133-761-302 Rev. D; P-108-761-302 Rev. D;  
H-080-761-301 Rev. I; H-761-761-301 Rev. I; H-060-761-301 Rev. R; H-050-761-301 Rev. K; H-040-761-301 Rev. K;  
H-030-761-301 Rev. K; H-024-761-301 Rev. K; H-020-761-301 Rev. G; H-165-761-301 Rev. J; H-159-761-301 Rev. I;  
H-139-761-301 Rev. H; H-133-761-301 Rev. H; H-120-761-301 Rev. H; H-108-761-301 Rev. H; H-100-761-301 Rev. I;  
H-080-761-300 Rev. K; H-761-761-300 Rev. E; H-060-761-300 Rev. J; H-050-761-300 Rev. G; H-040-761-300 Rev. G;  
H-030-761-300 Rev. F; H-024-761-300 Rev. F; H-020-761-300 Rev. G; H-165-761-300 Rev. E; H-159-761-300 Rev. E;  
H-139-761-300 Rev. E; H-133-761-300 Rev. E; H-120-761-300 Rev. H; H-108-761-300 Rev. E; H-100-761-300 Rev. F;  
V-020-761-335 Rev. E.

## Production Testing

Each valve body shall be subjected to a hydrostatic pressure test at 1.5 times the maximum allowable working pressure at room temperature.

In addition each valve shall be subjected to seat leakage testing at 1.1 times maximum allowable working pressure at closed position.

Testing shall follow procedures and acceptance criteria in EN12266-1 (leakage rate A).

Production testing for valves that require DNV product certificate shall be witnessed by DNV surveyor.

## Certification

DNV product certificate is required for valves with DN>100 mm and design pressure  $\geq$  16 bar. Otherwise, manufacturer's product certificate may be accepted.

Material certificates for valve bodies shall be according to DNV Pt.4 Ch.6 Sec.2 Table 3.

## Manufacturing Locations

### Victaulic Easton Facility

4901 Kesslersville Road  
Easton, PA 18040 – USA

### Victaulic Polska Facility

STR Niepodleglosci 8  
66-530 Drezdenko  
Prov. Gorzow, Poland

### Dalian Bingshan Metal Technology Co., Ltd (DBMT)

No 9 Northeast 7<sup>th</sup> Street  
Dalian Economy & Technology Developing Zone  
Dalian 116600 China

### Victaulic Piping Products (Dalian) Co. Ltd. (VPP)

No. 13 Tie Shan Dong 2 Road  
Dalian Development Area  
Dalian 116630 China

## Marking of product

For traceability to this type approval, the couplings are at least to be marked with:

- Manufacturer's name or trademark
- Type designation
- Size

## Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the Type Approval are complied with Refer to DNV-CP-0338, Sec.4.

The certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

## Ende of Certificate