

TYPE APPROVAL CERTIFICATE

Certificate no.:
TAP00001DV
Revision No:
3

This is to certify:
that the Pipe Couplings

with type designation(s)
Victaulic fittings no: 10, 11, 12, 13, 20, 25, 30, 45, 50, 51, 60, FireLock 001, 002, 003, 006

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-0185 – Type approval – Mechanical joints

Application:

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Type:	Temperature range:	Max. working press.:	Sizes:
Victaulic fittings no: 10, 11, 12, 13, 20, 25, 30, 45, 50, 51, 60	0° C to 350° C, see on page 2	16 bar	3/4" (26.9 mm) to 12" (323.9 mm)
FireLock 001, 002, 003, 006	0° C to 350° C, see on page 2	16 bar	2" (60.3 mm) to 8" (219.1 mm)

Issued at **Hamburg** on **2025-01-29**

This Certificate is valid until **2030-01-28**.

DNV local unit: **New York**

Approval Engineer: **Jörg Hille**

for **DNV**



Digitally Signed By:
Sven Klinger
Location: **DNV Hamburg, Germany**

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 USD 300 000.

Product description

The Victaulic® Grooved End Fittings no: 10, 11, 12, 13, 20, 25, 30, 45, 50, 51, 60 and FireLock 001, 002, 003, 006 are cast fittings.

They connect pipe, provides change in direction and adapts sizes or components.

Exclusively for use with couplings, valves, accessories and pipe which feature ends formed with the Victaulic® OGS groove profile.

Sizes

Style No.	Type	Size (inch)
10	90° Elbow	¾, 1, 1 ¼, 1 ½, 2, 2 ½, 3, 3 ½, 4, 5, 6, 8, 10, 12
11	45° elbow	
12	22,5° elbow	
13	11,25° elbow	
20	Tee	
25	Reducing Tee	1 x 1 x ¾, 1 ¼ x 1 ¼ x 1, 1 ½ x 1 ½ x ¾, 1 ½ x 1 ½ x 1, 1 ½ x 1 ½ x 1 ¼, 2 x 2 x ¾, 2 x 2 x 1, 2 x 2 x 1 ¼, 2 x 2 x 1 ½, 2 ½ x 2 ½ x ¾, 2 ½ x 2 ½ x 1, 2 ½ x 2 ½ x 1 ¼, 2 ½ x 2 ½ x 1 ½, 2 ½ x 2 ½ x 2, 3 x 3 x ¾, 3 x 3 x 1, 3 x 3 x 1 ¼, 3 x 3 x 1 ½, 3 x 3 x 2, 3 x 3 x 2 ½, 4 x 4 x ¾, 4 x 4 x 1, 4 x 4 x 1 ¼, 4 x 4 x 1 ½, 4 x 4 x 2, 4 x 4 x 2 ½, 4 x 4 x 3, 5 x 5 x 1, 5 x 5 x 1 ½, 5 x 5 x 2, 5 x 5 x 2 ½, 5 x 5 x 3, 5 x 5 x 4, 6 x 6 x 1, 6 x 6 x 1 ½, 6 x 6 x 2, 6 x 6 x 2 ½, 6 x 6 x 3, 6 x 6 x 4, 6 x 6 x 5, 6 ½ x 6 ½ x 3, 6 ½ x 6 ½ x 4, 8 x 8 x 1 ½, 8 x 8 x 2, 8 x 8 x 2 ½, 8 x 8 x 3, 8 x 8 x 4, 8 x 8 x 5, 8 x 8 x 6, 8 x 8 x 165.1, 10 x 10 x 1 ½, 10 x 10 x 2, 10 x 10 x 2 ½, 10 x 10 x 3, 10 x 10 x 4, 10 x 10 x 5, 10 x 10 x 6, 10 x 10 x 8, 12 x 12 x 1, 12 x 12 x 2, 12 x 12 x 2 ½, 12 x 12 x 3, 12 x 12 x 4, 12 x 12 x 5, 12 x 12 x 6, 12 x 12 x 8, 12 x 12 x 10
30	45° Lateral	3, 4
45	Raised face Flat face	1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 6, 8, 10, 12 2, 2 1/2, 3, 4, 6, 8, 10, 12
50	Eccentric Reducer	1 ¼ x ¾, 1 ¼ x 1, 1 ½ x ¾, 1 ½ x 1, 1 ½ x 1 ¼, 2 x ¾, 2 x 1, 2 x 1 ¼, 2 x 1 ½, 2 ½ x ¾, 2 ½ x 1, 2 ½ x 1 ¼, 2 ½ x 1 ½, 2 ½ x 2, 3 x ¾, 3 x 1, 3 x 1 ¼, 3 x 1 ½, 3 x 2, 3 x 2 ½, 3 ½ x 3, 4 x 1, 4 x 1 ¼, 4 x 1 ½, 4 x 2, 4 x 2 ½, 4 x 3, 4 x 3 ½, 5 x 2, 5 x 2 ½, 5 x 3, 5 x 4, 6 x 1, 6 x 1 ½, 6 x 2, 6 x 2 ½, 6 x 3, 6 x 4, 6 x 5, 8 x 2 ½, 8 x 3, 8 x 4, 8 x 5, 8 x 6, 10 x 4, 10 x 5, 10 x 6, 10 x 8, 12 x 4, 12 x 6, 12 x 8, 12 x 10
51	Concentric Reducer	
60	Cap	¾, 1, 1 ¼, 1 ½, 2, 2 ½, 3, 3 ½, 4, 5, 6, 8, 10, 12
001 FireLock	90° Elbow	2, 2 ½, 3, 4, 5, 6, 8
002 FireLock	Straight Tee	
003 FireLock	45° Elbow	
006 FireLock	Cap	1 ¼, 1 ½, 2, 2 ½, 3, 3 ½, 4, 5, 6, 8

Components and materials

Component	Material
Fittings	Grade 65-45-12 Ductile iron per ASTM A536

Temperature range

The applicable temperature range of the operating media for the fitting depends on the selected material.

Fitting

Grade 65-45-12 Ductile iron per ASTM A536	0° C to 350° C
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Manufacturing locations

- Victaulic Company, 4901 Kesslersville Road, Easton, PA 18040 USA
- Dalian Bingshan Metal Technology Co., Ltd., No.9 Northeastern 7th Street Economic and Technology Development Zone, Dalian, Liaoning, 116600, China
- Victaulic Polska Sp. z o.o. ul. Niepodległości 8, 66-530 Drezdenko, Poland

Responsibility

Victaulic Company, located in Easton, PA, USA, is responsible for the design and the production procedures with relation to ensuring continued consistent production of the type approved products.
 Reference DNV CP-0338 Type approval scheme, Section 4.

Application

The fittings are approved to be used in piping systems of class II and III with the following DNV type approved couplings:

Coupling type	Coupling type approval certificate
Style 75 and 750	TAP00001E7
Style 07	TAP00001EE
Style 77	TAP0000029

Limitation

The limitations stated in the above-mentioned certificates are applicable.

Materials chosen for the specific system shall be suitable for the intended medium and environmental conditions.

Type Approval documentation

TAP00001DV rev. 3

Work scope: Renewal

Test reports

- Burst pressure tests witnessed by DNV: Style 07, 2inch and 8inch at Victaulic Easton, USA, dated 11.11.24

Documents

- Installation Guide I-100, Rev. H, dated 03/2023
- Victaulic General Catalogue, G-103, Rev. E 2020
- DNV Assessment report production site Victaulic Easton, USA, dated 10.07.2023
- Manufacturer's product catalogue no. 07.01 "Victaulic® Grooved End Fittings", rev. AM
- Manufacturer's product catalogue no. 10.03 "Victaulic® FireLock™ Fittings", rev. R

Tests carried out

Burst pressure test.

Refer to the Class Programme DNV CP-0185.

Marking of product

Each fitting shall bear legible and durable marking on the body.

Scope of marking shall be at least as follows:

Marking scope	Example
Manufacturer's name or Trademark	"Victaulic" or "V"
Model number	001 FireLock
Size inch / mm	2"/60,3mm
Traceability	Foundry symbol, Date Code

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment to verify that the conditions for the Type Approval are complied with. Refer to the Class Programme DNV-CP-0338, Section 4.

In addition, burst pressure testing on selected sizes to be carried out in the course of renewal of the certificate.
 To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

--- END OF CERTIFICATE ---