



TYPE APPROVAL CERTIFICATE

Certificate No:
TAP0000154
Revision No:
1

This is to certify:

That the Check Valve

with type designation(s)
Storm Valves - Straight & Angle Type

Issued to

Dikkan Gemi ve Endustriyel Vana Sanayi Ticaret Anonim Sirketi
Izmir, Türkiye

is found to comply with

DNV class programme DNV-CP-0186 – Type approval – Valves
DNV rules for classification – Ships Pt.4 Ch.6 Piping systems

Application :

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

Temperature range: **0°C to 100°C**
Max. working press.: **4 bar(g)**
Sizes: **DN 50 to DN 150 (see page 2)**

Issued at **Høvik** on **2023-05-31**

for **DNV**

This Certificate is valid until **2028-01-01**.

DNV local unit: **Istanbul**

Approval Engineer: **Jane Lozanov**

Zeinab Sharifi
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.



Form code: TA 251

Revision: 2022-12

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Product description

Storm valves – straight & angle type constructed as per EN 12516-3 with the following data:

Valve size	Minimum wall thickness of valve body & bonnet/cover, mm	
	Straight type	Angle type
DN 50	6.5	6
DN 65	6.5	6
DN 80	7	6
DN 100	7.5	7
DN 125	8	7
DN 150	8	7

End flanges are in accordance with PN 10 from EN 1092-2.

Material of construction:

Valve component	Material grade	
	Straight type	Angle type
Body & bonnet	EN GJS-400-18-LT from EN 1563	
Stem and gland nut	CuZn39Pb3 from EN 12164	
Bonnet and disc gaskets	NBR	
Gland packing	Graphite	
Bolting	Grade 8.8 from ISO 898-1	
Disc carrier	EN GJS-400-18-LT from EN 1563	-
Plug	-	CuZn39Pb3 from EN 12164

Application/Limitation

Valves covered by this certificate may be used in general machinery service for class II and class III piping systems only.

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

Pressure temperature ratings shall follow Table 16 from EN 1092-2.

Valves covered by this certificate are not considered as fire-safe.

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

The valves may not be used as shut off or quick closing valve.

Production testing and Certification

Production Testing and Certification for the actual intended application shall follow the latest applicable edition of the Rules (as mentioned on the front page of this certificate).

Type Approval documentation

Storm valve drawing titled 'STORM VALVE ANG-STR.XLSX' dated 2017-12-28

Stem drawing nos. 00003246, 00003747, 00002885, 00003748, 00002816 and stud drawing for straight and angle type storm valves

Burst test calculation report as per EN 12516-3

Burst test report (with procedure) witnessed by DNV Surveyor dated 2017-05-12

Tests carried out

Burst tests as per EN 12516-3

Marking of product

Valves shall be marked at least with the following details:

- manufacturer's name or trade mark
- valve type designation and size
- maximum design pressure and temperature
- arrow to indicate direction of flow on one way flow valves



Job Id: **262.1-022199-5**
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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 approval are complied with. Reference is made to DNV-CP-0338.