



Certificate No:  
**TAS000041Y**

# TYPE APPROVAL CERTIFICATE

**This is to certify:**

**That the Weathertight Door**

with type designation(s)  
**N19/34.173**

Issued to

**Fabryka Sprzetu Okretowego MEBLOMOR S.A.**  
**CZARNKOW, Poland**

is found to comply with

**DNV rules for classification – Ships**

**DNV rules for classification – High speed and light craft**

**Application :**

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

Issued at **Høvik** on **2024-06-06**

This Certificate is valid until **2029-06-05**.

DNV local unit: **Gdansk CMC**

for **DNV**

Approval Engineer: **Grzegorz Wolski**

.....  
**Thomas Revheim**  
**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

N19/34.173

Is single leaf, steel door with below models:

Model 3V1

Single leaf, steel door, made of 6.0 mm or 8.0 mm plate, see table below for details:

| Light opening (H) [mm] | Light opening (B) [mm] | Leaf cover [mm] | Toggle (T) | Hinge (H) | Gasket Rim [mm] | Window Max. size (W x H) [mm] | Porthole Max diameter [mm] | Pressure for 6 mm plate [kN/m <sup>2</sup> ] | Pressure for 8 mm plate [kN/m <sup>2</sup> ] |
|------------------------|------------------------|-----------------|------------|-----------|-----------------|-------------------------------|----------------------------|----------------------------------------------|----------------------------------------------|
| 1650                   | 800                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 850                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 900                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 950                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 1000                   | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1700                   | 800                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 850                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 900                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 950                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 1000                   | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1750                   | 800                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 850                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 900                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 950                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 1000                   | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1800                   | 800                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 850                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 900                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 950                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 1000                   | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1850                   | 800                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 850                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 900                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 950                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 1000                   | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1900                   | 800                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 850                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 900                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 950                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 1000                   | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |

| Light opening (H) [mm] | Light opening (B) [mm] | Leaf cover [mm] | Toggle (T) | Hinge (H) | Gasket Rim [mm] | Window Max. size (W x H) [mm] | Porthole Max diameter [mm] | Pressure for 6 mm plate [kN/m <sup>2</sup> ] | Pressure for 8 mm plate [kN/m <sup>2</sup> ] |
|------------------------|------------------------|-----------------|------------|-----------|-----------------|-------------------------------|----------------------------|----------------------------------------------|----------------------------------------------|
| 1950                   | 800                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 850                    | 6 or 8          | 5          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 900                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 950                    | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 1000                   | 6 or 8          | 5          | 3         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |

#### Model 3III

Single leaf, steel door, made of 6.0 mm or 8.0 mm plate, see table below for details:

| Light opening (H) [mm] | Light opening (B) [mm] | Leaf cover [mm] | Toggle (T) | Hinge (H) | Gasket Rim [mm] | Window Max. size (W x H) [mm] | Porthole Max diameter [mm] | Pressure for 6 mm plate [kN/m <sup>2</sup> ] | Pressure for 8 mm plate [kN/m <sup>2</sup> ] |
|------------------------|------------------------|-----------------|------------|-----------|-----------------|-------------------------------|----------------------------|----------------------------------------------|----------------------------------------------|
| 1650                   | 600                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 650                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 700                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 750                    | 6 or 8          | 3          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1700                   | 600                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 650                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 700                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 750                    | 6 or 8          | 3          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1750                   | 600                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 650                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 700                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 750                    | 6 or 8          | 3          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1800                   | 600                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 650                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 700                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 750                    | 6 or 8          | 3          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1850                   | 600                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 650                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 700                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 750                    | 6 or 8          | 3          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1900                   | 600                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 650                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 700                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 750                    | 6 or 8          | 3          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |

| Light opening (H) [mm] | Light opening (B) [mm] | Leaf cover [mm] | Toggle (T) | Hinge (H) | Gasket Rim [mm] | Window Max. size (W x H) [mm] | Porthole Max diameter [mm] | Pressure for 6 mm plate [kN/m <sup>2</sup> ] | Pressure for 8 mm plate [kN/m <sup>2</sup> ] |
|------------------------|------------------------|-----------------|------------|-----------|-----------------|-------------------------------|----------------------------|----------------------------------------------|----------------------------------------------|
| 1950                   | 600                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 650                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 700                    | 6 or 8          | 3          | 3         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 750                    | 6 or 8          | 3          | 3         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |

#### Model 2IV1

Single leaf, steel door, made of 6.0 mm or 8.0 mm plate, see table below for details:

| Light opening (H) [mm] | Light opening (B) [mm] | Leaf cover [mm] | Toggle (T) | Hinge (H) | Gasket Rim [mm] | Window Max. size (W x H) [mm] | Porthole Max diameter [mm] | Pressure for 6 mm plate [kN/m <sup>2</sup> ] | Pressure for 8 mm plate [kN/m <sup>2</sup> ] |
|------------------------|------------------------|-----------------|------------|-----------|-----------------|-------------------------------|----------------------------|----------------------------------------------|----------------------------------------------|
| 1400                   | 800                    | 6 or 8          | 4          | 2         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 850                    | 6 or 8          | 4          | 2         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 900                    | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 950                    | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 1000                   | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1450                   | 800                    | 6 or 8          | 4          | 2         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 850                    | 6 or 8          | 4          | 2         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 900                    | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 950                    | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 1000                   | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1500                   | 800                    | 6 or 8          | 4          | 2         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 850                    | 6 or 8          | 4          | 2         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 900                    | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 950                    | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 1000                   | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1550                   | 800                    | 6 or 8          | 4          | 2         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 850                    | 6 or 8          | 4          | 2         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 900                    | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 950                    | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 1000                   | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        |                        |                 |            |           |                 |                               |                            |                                              |                                              |
| 1600                   | 800                    | 6 or 8          | 4          | 2         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 850                    | 6 or 8          | 4          | 2         | 72x20x3         | 300x560                       | Ø300                       | 25                                           | 40                                           |
|                        | 900                    | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 950                    | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |
|                        | 1000                   | 6 or 8          | 4          | 2         | 72x20x3         | 400x560                       | Ø400                       | 25                                           | 40                                           |

# Model 2II

Single leaf, steel door, made of 6.0 mm or 8.0 mm plate, see table below for details:

| Light opening (H) [mm] | Light opening (B) [mm] | Leaf cover [mm] | Toggle (T) | Hinge (H) | Gasket Rim [mm] | Window Max. size (W x H) [mm] | Porthole Max diameter [mm] | Pressure for 6 mm plate [kN/m <sup>2</sup> ] | Pressure for 8 mm plate [kN/m <sup>2</sup> ] |
|------------------------|------------------------|-----------------|------------|-----------|-----------------|-------------------------------|----------------------------|----------------------------------------------|----------------------------------------------|
| 1400                   | 600                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 650                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 700                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 750                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | Ø300                       | 25                                           | 40                                           |
| 1450                   | 600                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 650                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 700                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 750                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | Ø300                       | 25                                           | 40                                           |
| 1500                   | 600                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 650                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 700                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 750                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | Ø300                       | 25                                           | 40                                           |
| 1550                   | 600                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 650                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 700                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 750                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | Ø300                       | 25                                           | 40                                           |
| 1500                   | 600                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 650                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 700                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | N/A                        | 25                                           | 40                                           |
|                        | 750                    | 6 or 8          | 2          | 2         | 72x20x3         | 200x560                       | Ø300                       | 25                                           | 40                                           |

## Application/Limitation

The weathertight doors are found to comply with DNV-RU-SHIP January 2023 Pt.3 Ch.12 Sec.2 [4] for Weathertight doors and Sec. 6 for doors with installed windows or side scuttles.

Doors without windows are approved for the maximum design pressures as specified in the table above.

The window, with toughened safety glass, is approved for a max design pressure of 40 kN/m<sup>2</sup>.

The doors have been Type Approved with respect to weathertightness only, i.e. fire integrity has not been considered.

The door may not be fitted in a bulkhead where the design pressure is higher than indicated in the table above.

Dimensions of the light opening of the doors can be smaller than shown on the drawings, provided that scantlings, maximum distance between the cleats and fabrication method and material are maintained.

Particular consideration shall be given if located in highly stressed areas or in areas critical to fatigue from global hull loads.

The complete installation shall be function and leak tested according to DNV-RU-SHIP-Pt.2 Ch.4 Sec.8 July 2023.

A door with window may not protect openings into enclosed superstructures or below freeboard deck.

A door with side scuttle/window is to be fitted with a dead light if located in a position where dead light is required for windows and side scuttles.

The side scuttle Ø300 mm with dead light as indicated on the drawing may be fitted on any of the doors without imposing any additional limitations to the use of the door.

The door frame may be welded or bolted to the bulkhead.

### **Type Approval documentation**

Drawing no. N19/34.173 dated 31 Aug 2022 from manufacturer.

### **Tests carried out**

As per rule requirements.

### **Marking of product**

The product is to be marked with the following info:

- Manufacturer's name or brand
- DNV Type Approval Certificate No. TAS000041Y
- The specific type designation

### **Periodical assessment**

DNV surveyor has the permission to perform Certification Retention Survey at any time during the validity period of this certificate. Periodical assessment will be required 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.