



**TYPE APPROVAL CERTIFICATE**  
No. **MAC059522XG**

**This is to certify** that the product identified below is in compliance with the regulations herewith specified.

<i>Description</i>	<b>AIR PIPE AUTOMATIC CLOSING DEVICES</b>
<i>Type</i>	<b>WIN2000 and WIKO5000</b>
<i>Applicant</i>	<b>WINTEB B.V. PARALLELWEG 1 9672 AW WINSCHOTEN NETHERLANDS</b>
<i>Manufacturer</i>	<b>WINTEB B.V.</b>
<i>Place of manufacture</i>	<b>PARALLELWEG 1 9672 AW WINSCHOTEN NETHERLANDS</b>
<i>Reference standards</i>	<b>-Par 9.1, Sec 10, Ch 1, Pt C of RINA Rules for the Classification of Ships.; -RINA Rules for the Type Approval and Testing of Air Pipe Automatic Closing Devices, ed 2009.; -Requirements of the equivalent arrangement for air pipe openings on dry cargo ships IMO in circular letter 3573*.; (*) Refers only to specific models/dimensions as per remarks section in enclosure pag. 2/2</b>
<i>Reference documents</i>	<b>RINA TYPE APPROVAL SYSTEM</b>

Issued in **HAMBURG** on **April 15, 2022**. This Certificate is valid until **April 14, 2027**

  
RINA Services S.p.A.  
**Giuseppe Russo**

This certificate consists of this page and 1 enclosure



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WIN2000 and WIKO5000

### Reference documents:

- Manufacturer's brochure WIN2000 , WIN2000 HEATED and WIN2000HIAS technical data sheets.

### Manufacturer's drawings:

- WIN2000 and WIKO5000 series Assembly Drawings Booklet approved with no. HMMC-2156 on 22 June 2011.
- HIAS Assembly Drawing Approved with HMMC 5639 on 24 June 2015.

### as amended as below:

- WIN2000-01\_W General Drawing HIAS - approved with HMMC 16846 on 26 April 2020.
- WIKO5000 Type1-A General drawing rev.B - approved with HMMC 16845 on 26 April 2020.

### Test reports:

- Complete documentation for IMO Circular letter NO.3573 Enclosed in HMMC-2156.
- Hochschule Bremen-Test report no. Winteb 2005/1, dated 31.05.2005.
- Pentair Nijhuis Test report 4145336, dated 12/05/2014.
- Hochschule Bremen-Test report no. Winteb 2014/IR1, dated 18/06/2014.
- Hochschule Bremen-Test report no. Winteb 2014/3, dated 13/04/2015.
- Technische Universität Dresden : Experimental Investigation on Aluminium Valves WIN 2000 HIAS.
- Annex 1 to Test report no. Winteb 2005/1, Results of pressure drop test: Plots, dated 31.05.2005.
- Annex 2 to Test report no. Winteb 2005/1, Results of tightness tests, dated 31.05.2005.
- Annex 3 to Test report no. WINTEB 2005/1, Results of pressure drop tests: Tables, dated 31.05.2005.
- MPA NRW test report nos. 22 0440 5 96-01, -02 and -03 dated 26 April 1996 (Impact and compression test on ball floats).
- RINA Test certificate N. 06/XN/1452 issued on 15/11/2006 for air vent heads installed on NB 818 RI 82338 of WIN2000 type1: sizes: DN50/DN65/DN100/DN125 (screen) and DN80/DN150/DN200.
- RINA reports of water tightness test performed on 5/08/2008, 21/10/2008, 30/10/2008 and 28/05/2013.
- Flow Curves Test Reports of WIN2000 DN300, DN350, DN400 DN450 dated 27.11.2009, 1.12.2009 and 18.10.2012.
- Technical data: Intertec EX\_Proof Heating Element H1760378\_SL CylTherm D.A, 18-07-2018.
- ATEX certificate: PTB 02 ATEX 1116 X.
- Type Examination Presafe 20 ATEX 61677X.

### Materials/Components

- As per the above mentioned approved drawings.



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RINA

## TYPE APPROVAL CERTIFICATE

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WIN2000 and WIKO5000

### Technical characteristics

- Air vent heads with Polyethylene (PE) ball floats.

- WIN2000	Type 1	DN50, 65, 80, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
	Type 1-B	DN50, 65, 80, 100, 125
- WIN 2000 HIAS		DN50, 65, 80, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
- WIKO5000	Type 1-A	DN50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400
	Type 1	DN300, 350, 400
	Gooseneck	DN50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400
- Water tightness design draught:	1 bar	WIN2000 DN50 up to DN250, WIKO5000 DN50 up to DN400
- Gooseneck Type 1 is without lower connecting flange while type 1-B is with lower connecting flange.

The vent heads can be delivered with heating mechanisms:

1. "WIN2000 HIAS HEATED" & "WIN2000 HEATED" & WIKO50001A HEATED"  
WIN2000 HEATED & WIN2000 HIAS HEATED sizes DN50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500.  
WIKO5000 type 1-A sizes DN50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400.
2. "WIN2000 HIAS HEATED with control box" & "WIN2000 HEATED with control box" & WIKO50001A HEATED with control box"
3. "WIN2000 HIAS EX-proof HEATED" sizes DN50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500 and "WIKO5000 Type 1-A EX-Proof HEATED" sizes DN50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400.

### Limitations of use

- The air pipe closing devices are not to be used for ventilation of tanker cargo tanks.
- The air pipe closing devices are to be fitted with manufacturer's specified flame screens when used in air pipes for fuel oil and flammable oil tanks.
- The requirements regarding the actual arrangements on board as stated in Paragraphs 9.1.9 and 9.1.10, including Table 24, of Part C Chapter 1, Section 10 of the RINA Rules are to be fully complied with. These requirements apply to strength checks of air pipes and their closing devices located within the forward quarter length of the ship, for ships of length L 80 m or greater, where the height of the exposed deck in way of the item is less than 0.1L or 22 m above the summer load waterline, whichever is the lesser.
- The requirements in Paragraph 9.1.10 are additional to those specified in Paragraphs 9.1.6 a), in 20.2.2 and 9.1.8 a) of the a.m. RINA Rules.
- The Air pipe heads EX Proof are certified for hazardous areas use.

### Remarks

- Verification of marking for identification and proper installation on board are to be to the satisfaction of the RINA Surveyor.
- The models WIN2000 Type 1 DN 300-350-450-500 / WIN2000 Type 1-B DN50-65-80-100-125 / WIN2000HIAS DN 450-500 / WIKO5000 TYPE 1 DN300-350-400 / Gooseneck DN50-65-80-100-125-150-200-250-300-350-400 are not Type Approved in Compliance with IMO in circular letter 3573.
- This Certificate replaces the previous one n° MAC107420XG/002 issued on 26.04.2020.

HAMBURG April 15, 2022



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A handwritten signature in black ink, appearing to read 'Sergio Pini', is written over a large, semi-transparent RINA logo in the bottom right corner of the page.