

## Type Approval Certificate Extension

*This is to certify* that Certificate No. 01/30074 (E3) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Winteb V.O.F. PO Box 156 9670 AD Winschoten The Netherlands
PLACE OF PRODUCTION	Parallelweg 1 9672 AW Winschoten The Netherlands
DESCRIPTION	Tank vent check valve (with or without screen)
TYPE	WIN 2000, Type 1, Type 1 Heated, Type 1-B, Type 1-B Heated Type BMW and Type LMV  WIKO 5000 Type 1-A, Type 1-A Heated and Type 1
APPLICATION	Automatic closing appliance for air and overflow pipes, for marine, offshore and industrial piping systems.
SPECIFIED STANDARDS	LR Rules and Regulations for the Classification of Ships LR Rules and Regulations for the Classification of Mobile Offshore Units LR Rules and Regulations for Fixed Offshore Installations  IACS Unified Requirements P3 ( 1991, Rev. 2, March 2004 )
Certificate No.	01/30074 (E4)
Issue Date	20 October 2011
Expiry Date	23 October 2016
Sheet	1 of 2

  
M.P. Breel  
Rotterdam Design Support Office  
Lloyd's Register EMEA

*Lloyd's Register EMEA  
P.O. Box 701, 3000 AS Rotterdam*

RATINGS	WIN 2000:	DN50, 65, 80, 100, 125, 150, 175, 200 , 250, 300, 350, 400 and 450 ( Type 1 ) DN50, 65, 80, 100, 125, 150, 175, 200 , 250, 300, 350, 400 and 450 ( Type BMW ) DN150, 200 and 250 ( Type LMV ) DN50, 65, 80, 100, 125 ( Type 1-B )
	WIKO 5000:	DN50, 65, 80, 100, 125, 150, 200, 250, 300, 350 and 400 ( Type 1-A ) DN300, 350, 400 ( Type 1 )

All other details remain as the previous Certificate No. 01/00074 (E3) to which this extension should be attached.

*"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."*

*The Design Appraisal Document No. RDS/ ENG/ 6247974 and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

Certificate No.	01/30074 (E4)
Issue Date	20 October 2011
Expiry Date	23 October 2016
Sheet	2 of 2

  
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# Marine Design Appraisal Document

## Lloyd's Register EMEA

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**Email:** Rot-planapp@lr.org

Date  
**20 October 2011**

Please quote the document number on all future communications

LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.  
Issued to: WINTEB V.O.F.  
for: TANK VENT CHECK VALVES - TYPES WIN 2000 & WIKO 5000  
TYPE APPROVAL CERTIFICATE No. 01 / 30074 (E4)

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

## MARKINGS

marked with:

- Manufacturer's name
- Type designation
- Size

## MATERIALS

Casing :	Seawater resistant aluminium ( in accordance with DIN 1725 standard ), Bronze, Stainless Steel
O-ring:	Nitrile Butadiene (NBR)
Screens:	Mesh 18 and 30 stainless steel
Ball:	Polyethylene ( PE )

## APPROVAL DOCUMENTATION:-

Manufacturers plans:-	WIN2000-01	Rev. I	WIN2000 General Drw.	DN50-450
	200-400-01-A	Rev. 00	WIKO5000 Type 1-A WIKO5000 Type 1	DN50-400 DN300-400
	50-150-01-A1	Rev. 00	WIKO5000 Type 1-A	DN50-150
	WIN2000HEATED-01	Rev. C	WIN2000 Heated General Drw.	
	WIKO HEATED-01	Rev. 0	WIKO Heated General Drw.	
	WIN2000BWM-02	Rev.C	WIN 2000 BWM General Drw.	
	Operating Manual for WIN 2000 BWM			
	LMV150-01	Rev. C	LMV 150 Assembly	
	LMV200-01	Rev. A	LMV 200 Assembly	
	LMV250-01	Rev. 0	LMV 250 Assembly	

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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**TEST REPORTS**

Test Report Hochschule Bremen, Type LMV, DN150-200-250, Tests on Tightness ..... dated 11-12-13.04.2011  
Test Report Hochschule Bremen, Type 1, DN300-35-400, Tests on Tightness .....dated 21-23.12.2009  
Test Report WINTeB, WIN 2000, Type BMW .....dated 21.01.2008, 25.01.2008  
Flow Rate Characteristics WIN2000 Type 1, DN300 ( no screen ) .....dated 27.11.2009  
Flow Rate Characteristics WIN2000 Type 1, DN300 ( mesh 18 ).....dated 01.12.2009  
Flow Rate Characteristics WIN2000 Type 1, DN300 ( mesh 30 ) .....dated 01.12.2009  
Flow Rate Characteristics WIN2000 Type 1, DN350 ( no screen ) .....dated 27.11.2009  
Flow Rate Characteristics WIN2000 Type 1, DN350 ( mesh 18 ).....dated 01.12.2009  
Flow Rate Characteristics WIN2000 Type 1, DN350 ( mesh 30 ) .....dated 01.12.2009  
Flow Rate Characteristics WIN2000 Type 1, DN400 ( no screen ) .....dated 27.11.2009  
Flow Rate Characteristics WIN2000 Type 1, DN400 ( mesh 18 ).....dated 01.12.2009  
Flow Rate Characteristics WIN2000 Type 1, DN400 ( mesh 30 ) .....dated 01.12.2009  
Flow Rate Characteristics WIN2000 Type LMV, DN150 ( no screen ) .....dated 29.03.2011  
Flow Rate Characteristics WIN2000 Type LMV, DN200 ( no screen ) .....dated 29.03.2011  
Flow Rate Characteristics WIN2000 Type LMV, DN250 ( no screen ) .....dated 28.03.2011

**SUPPORTING DOCUMENTATION:-**

Test Report No. WINTeB 2005/1, ..... dated 31.05.2005  
Annex 1 to Test Report WINTeB 2005/1, Results of Pressure Drop Tests : Plots, ..... dated 31.05.2005  
Annex 2 to Test Report WINTeB 2005/1, Results of Tightness Tests, ..... dated 31.05.2005  
Annex 3 to Test Report WINTeB 2005/1, Results of Pressure Drop Tests : Tables, ..... dated 31.05.2005  
LR Groningen Report of Inspection and Surveillance of Production Facilities, .....dated 12.07.2011

**REMARKS**

1. The tank vent check valve - pressure drop / flow characteristic curves of the manufacturer are to be taken into consideration.
2. Powder-coated aluminium vent heads may be accepted on tankers classed by the Society, as ballast tank air pipe closing appliances within the range of the cargo tanks, provided they comply with the remaining requirements of the Rules and are installed to the Surveyor's satisfaction.
3. The WIN2000 BWB-type tank vent check valve is acceptable only on ships, which comply with the 'International Convention for the Control and Management of Ships' Ballast Water and Sediments'.
4. Opening and closing of the WIN2000 BWB-type tank vent check valve for ballast water exchange operations to be in accordance with the manufacturer's operating manual.
5. Vent check valves, "WIN2000 Heated" and "WIKO500 Type 1-A Heated", can be delivered with heating arrangements and may be accepted on ships, classed by the Society, provided the valves and their electrical heating system and heating control system comply with the remaining requirements of the Rules, as applicable.
6. The electrical heating system and heating control system are not part of this Type Approval

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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**Supplementary Type Approval Terms and Conditions**

*Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.*

*Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.*

*Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.*

*Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.*



M.P. Breel  
Senior Surveyor  
Machinery Design Appraisal  
Rotterdam Design Support Office

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