

Safety devices

Certificate N°: BAM/ZBF/009/12 4th Revised version

Hereby it is confirmed by the BAM Certification Body that the

Safety devices with the designations and terms of application listed in the Annex to this Certificate

of the certificate holder

Wilhelmsen Ships AS Strandvn 20, Lysaker NO_1324 LYSAKER NORWAY

meet the requirements of those paragraphs named in the annex to this certificate of the following standards:

ISO 5175-1:2017

Gas welding equipment – Safety devices – Part 1: Devices incorporating a flame (flashback) arrestor

ISO 5175-2:2017 Gas welding equipment – Safety devices – Part 2: Devices not incorporating a flame (flashback) arrestor

The contract No. **BAM-ZBF-0008-2012-UNITOR** forms the basis for this certification. The terms and conditions for monitoring of the products are also stipulated in this contract.

The products certified by BAM may be labelled with the BAM certification mark "BAM Geprüft und überwacht" and/or "BAM Certified and under surveillance" together with the certificate number.

The certificate is valid until 23th May, 2024.

for Bundesanstalt für Materialforschung und –prüfung (BAM) Unter den Eichen 87,12205 Berlin, **2019-05-24**

Dr. R. Schmidt BAM Certification Body

Distribution list: <u>1st Certificate holder</u>



Dr. R. Grätz BAM Assessor

2nd BAM Certification Body

This certificate may only be published in full wording and without any additions. A revocable written consent shall be obtained from BAM beforehand for any amended reproduction or the publication of any excerpts. The German version is legally binding, except an English version is issued exclusively. Place of jurisdiction is Berlin.



Materialforschung und -prüfung

12200 Berlin, Germany T: +49 30 8104-0 F: +49 30 8104-7 2222 Products of Company Wilhelmsen Ships Service AS within the scope of Certificate No. BAM/ZBF/009/12, 4th Revised version

Safety devices according to ISO 5175-1:2017 paragraphs 5 to 9 as well as safety devices with additional relief valve (only UNITOR W-66 S) also according to ISO 5175-2:2017, paragraphs 5 to 8

The safety devices listed below comply with the requirements set out in the paragraphs of the above cited standards for the respective gases, maximum working overpressures and max. connectable inner tube/hose diameter.

Type series "Super"

Type and/or	max.	BAM test	Product number	WITT drawing number	max. working overpressure in MPa (labelled)						
design	connectable inner tube/hose diameter in mm	report			acetylene	propane	methane	O₂ / compressed air	H ₂	ethylene	
Unitor S-55		ll-3940/2003 dated 2003-12-01;	708537	146 025, Index 001	0.15	0.5	0.5		0.3		
Unitor S-55	10	II-1099/2006 I dated 2006-05-16; BZS- GS/116/16 dated	708545 dated 2011-09-12	146 026 dated 2011-09-12		· · · · ·		1.5			
Unitor W-66 S		2017-06-06 12025/86; 4-4040 dated 1987-03-31;	183970	125 002, Index G	0.2	0.5	0.5		0.5		
Unitor W-66 S	10	II-5127/99 dated 2000-03-01; GS/116/16 dated 2017-06-06	302976	125 007, Index E				1.0	talt fur Ma	BAN	

Type series "85-10"

Type and/or	max.	BAM test report	Product number WITT drawing number max. working overpressure in MPa (labelled)							к< Sp 2
design	connectable inner tube/hose				acetylene	propane	methane	ethylene	$O_2/$	H ₂
	diameter in mm	18 - 2 ¹		2				, , , , , , , , , , , , , , , , , , ,	compressed	
		÷	× .		-			2	air	11 - 11 - 11 - 11 - 11 - 11 - 11 - 11
Unitor W-85-10	4	14146/84;	585372	143 002, Index 014	0.15	0.5	0.5	. e		0.4
		4-5145 dated	× .						1 × *	
	· · · ·	1985-04-17;		1 1	3 - ¹	-				
		6018/87;			× * .		•			
Unitor W-85-10	10	4-2125 dated	682427	143 016, Index 011			× .		2.5	
		1987-09-07;	00212		a.	× .		· · .	2.5	
a	1 1 N N	11-5172/99 dated					-			· ·
		2000-03-14;	· · ·					· · · ·	· · · · ·	
a 1 4	1 No. 19	11-2000/2006	2						1. 1. 1. 1.	
		dated		н. 	6					
		2006-07-25;				(* 1 ²				
		GS/116/16			* * y			·		
		dated			· · · ·	* 2				- V
		2017-06-06	×	e						

Berlin, 2019-05-24

place, date

rialforsch Signature BAM Certification Body

2 of 2