Marine & Offshore

Certificate number: 42434/C0 BV
File number: RSP 755/6
Product code: 1240I

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Roth Hydraulics GmbH

Biedenkopf - GERMANY

for the type of product

HYDRAULIC ACCUMULATORS

BLADDER ACCUMULATORS, type: BLAK 10L - 50L

Requirements:
BUREAU VERITAS Rules for the Classification of Steel Ships
BUREAU VERITAS Rules for the Classification of Offshore Units

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 24 Jul 2030

For Bureau Veritas Marine & Offshore,
At BV HAMBURG, on 24 Jul 2025,
Heiko Lange

This certificate was created electronically and is valid without signature

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Bladder accumulator types: BLAK 10-298-22, BLAK 20-298-22, BLAK 24.5-298-22, BLAK 32-298-22, BLAK 42-298-22 and BLAK 50-298-22

Medium: hydraulic oil / nitrogen

Identification and technical data:

File no.	Type	Max. working pressure [bar]	Working temperature [°C]	Test pressure [bar]	Capacity [L]	Pressure vessel classification
RSP 755/6	BLAK 10-298-22	298	-40 / +80	402	10	1
RSP 755/6	BLAK 20-298-22	298	-40 / +80	402	20	1
RSP 755/6	BLAK 24.5-298-22	298	-40 / +80	402	24.5	1
RSP 755/6	BLAK 32-298-22	298	-40 / +80	402	32	1
RSP 755/6	BLAK 42-298-22	298	-40 / +80	402	42	1
RSP 755/6	BLAK 50-298-22	298	-40 / +80	402	50	1

2. DOCUMENTS AND DRAWINGS:

According to the following drawing:

Drawing no.	Rev.	Designation
3_10X2229-02	2	Drawing of approval Piston accumulator

3. TEST REPORTS:

Not applicable.

4. APPLICATION / LIMITATION:

4.1 The bladder accumulators reviewed as class 1 pressure vessel according BUREAU VERITAS Rules.

4.2 On board installation and maintenance requirements have to be in accordance with the BUREAU VERITAS Rules requirements and the manufacturer’s recommendations.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 The bladder accumulators are to be supplied by **Roth Hydraulics GmbH** in compliance with the type and the requirements described in this certificate.

5.2 This type of product is within the category IBV of BUREAU VERITAS Rule Note NR320.

5.3 BUREAU VERITAS product certificate is required.

5.4 For information, **Roth Hydraulics GmbH** has declared to BUREAU VERITAS the following production site:
Roth Hydraulics GmbH, Biedenkopf / GERMANY

5.5 Material certificates: class certificate according BUREAU VERITAS Rules.

5.6 Each bladder accumulator is to be hydraulic pressure tested according to the test pressure mentioned under item 1 of this certificate under witnessing of a Society’s Surveyor.

6. MARKING OF PRODUCT:

Each bladder accumulator should be marked with:
- Manufacturer's name or trademark
- Serial number
- Oil capacity
- Max. working pressure
- Test pressure
- BUREAU VERITAS' marks

7. OTHERS:

7.1 It is **Roth Hydraulics GmbH**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 This certificate supersedes the Type Approval Certificate N° 42434/B0 BV issued on 23 Jul 2020 by the Society.

***** END OF CERTIFICATE *****