



Certificate number: 02076/I0 BV

File number: ACM 141/0107/001

Product code: 3715H

This certificate is not valid when presented without the full attached schedule composed of 7 sections. Full certificate is to be requested to the manufacturer

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

AUTEXIER

CHAUNY - FRANCE

for the type of product

LEVEL GAUGE - GLASS TYPE

Cylindrical Gauge Glasses Type: 149, 150, 184, 186, 249, 250, 449, 450, 3184, A2184 & 2276

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships
Bureau Veritas Rules for the Classification of Offshore Units
Bureau Veritas Rules for the Classification of Naval Ships

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: 15 Sep 2031

For Bureau Veritas Marine & Offshore,
At BV VALENCIENNES, on 15 Sep 2026,
Philippe Calbet

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.

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This certificate consists of 4 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

Cylindrical Gauge Glasses Type: 149, 150, 184, 186, 249, 250, 449, 450, 3184, A2184 & 2276

1.1 - Design

- The gauges consist of a tubular borosilicate heat resistant Pyrex glass with a front protector of brass
- The gauges may be alternatively fitted with self-closing push buttons, parallel actuation system - lever type and a drain device

Type	DN (mm)	Design pressure (bar)	Temperature range (°C)	End connections
149	15 / 20	30	- 20 / + 200	Threaded
150	15 / 20	30	- 20 / + 200	Flanged
184	15 / 20	16	- 30 / + 100	Threaded
186	12 / 15 / 20	16	- 30 / + 100	Threaded
249	15 / 20	30	- 20 / + 200	Threaded
250	15 / 20	30	- 20 / + 200	Flanged
449	15 / 20	30	- 20 / + 200	Threaded
450	15 / 20	30	- 20 / + 200	Flanged
2276	15	16	- 20 / + 200	Flanged
2276 PSØP	15	16	- 20 / + 200	Flanged
3184	15 / 20	10	- 15 / + 200	Threaded
3184 PI/PSØN	15 / 20	10	- 15 / + 200	Threaded
A2184 PI/PS	15	6	- 0 / + 90	Threaded
184 PI/PSØEP	15 / 20	16	- 30 / + 100	Threaded

1.2 - Materials

Part	Materials
Tubular	Borosilicate
Protector	CW614N EN 12164
Lower body	CC491K EN 1982
Upper body	CC491K EN 1982
Joint	FPM, NBR or PTFE
Packing	FPM, graphite fibre or PTFE

2. DOCUMENTS AND DRAWINGS

2.1 - Drawings:

Drawing N°	Rev	Date
149PIØ	07	15/03/2021
149PSØ	07	15/03/2021
150PIØ	08	15/03/2021
150PSØ	07	15/03/2021
184PIØ	08	18/05/2021
184PSØ	08	18/05/2021
184PIØEP	05	18/05/2021
184PSØEP	05	18/05/2021
186PIØ	06	27/10/2016
186PSØ	06	27/10/2016
249PIØ	00	16/03/2021
249PSØ	00	16/03/2021
250PIØ	00	16/03/2021
250PSØ	00	16/03/2021

Drawing N°	Rev	Date
449PIØ	06	15/03/2021
449PSØ	06	15/03/2021
450PIØ	06	15/03/2021
450PSØ	06	15/03/2021
2276PIØ	04	12/06/2024
2276PSØ	02	12/06/2024
2276PSØP	02	12/06/2024
3184PIØ	03	18/05/2021
3184PSØ	03	18/05/2021
3184PIØN	00	04/11/2024
3184PSØN	00	04/11/2024
A2184PIØ	01	30/12/2002
A2184PSØ	01	30/12/2002

2.2 - Documentation

- General procedure PG824-6 Version 5 dated 04/11/2008.
- Application 824-6 DA13 Version 10 dated 01/02/2023.
- Application 824-6 DA14 Version 10 dated 31/01/2023.
- Instruction 0904 DA140 version 07 dated 03/02/2025.
- Instruction 0904 DA141 version 06 dated 03/02/2025.
- Material certificate CC491K Bronze N°0630- N° BME0214 dated 19/01/2015.
- ENR 53 Version 1 dated 06/04/2016.

No departure from the above documents shall be made without the prior consent of the Society. The manufacturer must inform the Society of any modification or changes to these documents and drawings.

3. TEST REPORTS

3.1 - No type test required.

3.2 - Additional test performed:

- Burst test type 149/150 report N° 2014 E251 dated 13/01/2014.
- Burst test type 184 report N° 2013 E216 dated 26/07/2013.
- Burst test type 3184 dated 26/07/2013.
- Type 184 pressure and tightness tests report N° 2015 E 004 dated 19/01/2015.
- Type 186 pressure and tightness tests report N° 2014 E 002 dated 16/01/2014.
- Type 3184 pressure and tightness tests report N° 2016 E 099 dated 11/03/2016.

4. APPLICATION / LIMITATION

4.1 - Level gauges are to be used for tanks intended for water, oil fuel and other flammable oils according to requirements NR467 Pt C, Ch 1, Sec 10 [2.9.2] and corresponding requirements in NR 445 and NR 483.

4.2 - In passenger ships, level gauges are not to require penetration below the top of the tank and their failure or overfilling of the tanks is not to permit release of flammable oil.

4.3 - In cargo ships, level gauges failure or overfilling of the tank is not to permit release of flammable oil into the space. The use of cylindrical gauges is prohibited. Bureau Veritas may permit the use of oil-level gauges with flat glasses and self-closing valves between the gauges and flammable oil tanks.

4.4 - On cargo ships of less than 500 gross tonnage and non-propelled ships: cylindrical gauges may be used provided they are fitted with self-closing valves at their lower end as well as at their upper end if the latter is below the maximum liquid level.

4.5 - The fitting of the level gauges is to be in accordance with the manufacturer's instructions as well as the Rules applicable to the ship.

4.6 - The cylindrical gauge glasses are to be adequately supported with intermediate support brackets at every one meter intervals.

4.7 - The level gauges are to be installed according to manufacturer's instructions and Bureau Veritas Rules.

4.8 - Each level gauge is to be supplied with its manuals for installation, use and maintenance.

5. PRODUCTION SURVEY REQUIREMENTS

5.1 - The products are to be supplied by **AUTEXIER** in compliance with the type and the requirements described in this certificate.

5.2 - This type of product certificate is within the category HBV of Bureau Veritas Rule Note NR 320 and as such Bureau Veritas product certificate is not required.

5.3 - **AUTEXIER** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR 320 for HBV products.

5.4 - For information, **AUTEXIER** has declared to Bureau Veritas the following production site:

AUTEXIER:
93 rue Louis Blanc
F-02 300 CHAUNY
FRANCE

6. MARKING OF PRODUCT

Each cylindrical gauge glass shall be marked with at least:

- Manufacturer's name or logo
- Type designation
- Operational data

7. OTHERS

It is **AUTEXIER**'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.

This certificate supersedes the Type Approval Certificate N° 02076/H0 BV issued by the Society.

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