

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Safety Valve

with type designation(s)
30 BG I [30.1; 30.2; 30.7], 31 BG I [31.1; 31.2; 31.7]

Issued to

Niezugodka GmbH
HAMBURG, Germany

is found to comply with

DNV rules for classification – Ships Pt.4 Ch.6 Piping systems
DNV rules for classification – Ships Pt.4 Ch.7 Pressure equipment
DNV GL class programme DNVGL-CP-0186 – Type approval – Valves

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Type:	K. factor:
30 BG I [30.1; 30.2; 30.7]	see certificate
31 BG I [31.1; 31.2; 31.7]	see certificate

Issued at **Hamburg** on **2021-09-09**

This Certificate is valid until **2026-09-08**.

for **DNV**

DNV local station: **Hamburg – CMC North/East**

Approval Engineer: **Ana Cristina Do Carmo Insfran**

Olaf Drews
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Safety valves type: 30 BG I [30.1; 30.2; 30.7] and type 31 BG I [31.1; 31.2; 31.7] for relief of steam and non - flammable gas and non - boiling liquids.

Technical Data:

Safety valve type	Working temperature [°C]	Set pressure [bar]
30.1 and 31.1	-10°C to + 280°C	0,1 to 40
30.2 and 31.2	-60°C to + 280°C	
30.7 and 31.7	-200°C to + 280°C	

Type 30 BG I:

Nominal Dimensions DN Inlet/ DN Outlet	Nominal pressures PN [DIN/ANSI]	Coefficients
DN 15 / DN 15	16 -63 / 150-600	0,45 (D/G); 0,32 (F) *
DN 20 / DN 20		0,45 (D/G); 0,32 (F) *
DN 25 / DN 25		0,38 (D/G); 0,29 (F) *
DN 25 / DN 25		0,38 (D/G); 0,22 (F) *

Type 31 BG I:

Nominal Dimensions DN Inlet/ DN Outlet	Nominal pressures PN [DIN/ANSI]	Coefficients
DN 15 / DN 20	16 -63 / 150-600	0,45 (D/G); 0,32 (F) *
DN 20 / DN 25		0,38 (D/G); 0,29 (F) *
DN 20 / DN 25		0,28 (D/G); 0,22 (F) *

* [D/G: Service for steam and non - flammable gas; F: Service for non - boiling liquid]

Materials¹:

Type 30 BG I	Type 31 BG I	Inlet body	Outlet body
30.1	31.1	1.0460	5.3103
30.2	31.2	1.4571	1.4581
30.7	31.7	1.4571	1.4308

Application

The safety valve type: 30 BG I [30.1; 30.2; 30.7] and type 31 BG I [31.1; 31.2; 31.7] are type approved for applications in piping systems and on pressure vessels as specified in the applicable DNV Rules on the first page of this certificate. Operating media: Air, steam, non - flammable gas and non - boiling liquids.

Limitation

The safety valves may not be used for operating media specified as dangerous and toxic fluids as well as cryogenic and flammable gases subjected to ship systems covered by the IGC Code and DNV Rules Part 5, Chapter 7 - "Liquefied gas tankers" as well as IGF Code and DNV Rules Pt.6 Ch.2, Section 5 - "Gas fuelled ship installations".

The selection of the safety valves for the corresponding service and operation conditions as well as right installation under consideration of the used materials and media to be discharged have to be in compliance with the instructions of the manufacturer.

For safety valves fabricated of grey cast iron and nodular cast iron the requirements provided in DNV GL Rules Pt. 4 Ch.6 - Piping systems, Section 2 - Materials are to be observed.

The selections of the safety valves are to be adjusted by the manufacturer.

The manufacturer's instructions for cleaning and maintenance of the safety valves are to be observed. Safety valves details, e.g., discharge coefficient, flow capacities, etc., are to be taken from the manufacturer's data sheets.

Requirements concerning safety valve installations are to be taken from the manufacturer's operations manuals.

Note ¹

It shall be noted that the selection of the materials considers the applicable service condition with respect to type of media, flow velocity, media temperature and installation area of the piping system or pressure vessel.

In particular, the resistance to corrosion, erosion, oxidation and other deterioration during projected service life are to be considered.

Reference is made to DNVGL Rules Pt.4, Ch.6 – Section 2 – Materials.

Type Approval documentation

Marking of product

For traceability to this type approval certificate each safety valve is to be provided with a name plate with at least the following data:

- Manufacturer's mark or symbol
- Safety valve type
- Application (D/G: Service for Steam/Gas), (F: Service for non-boiling liquid)
- Set pressure
- Discharge coefficient

Production Place

Niezugodka GmbH
Bargkoppelweg 73
22145 - Hamburg

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the Type Approval are complied with. Refer to DNVGL-CP-0338, Sec.4.

- The certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

END OF CERTIFICATE